

1. Legal Ad

Documents: [PB LEGAL AD 11-10-15.DOCX](#)

2. Agenda

Documents: [PB AGENDA 11-10-15.PDF](#)

3. Rand Road

3.I. Memo

Documents: [RAND RD. \(MEMO\).PDF](#)

3.II. Memo Attachments

Documents: [RAND RD. \(MEMO ATTACHMENTS\).PDF](#)

3.III. Applicants Submittal

Documents: [RAND RD. \(APPLICANTS SUBMITTAL\).PDF](#)

3.IV. Plans (1 Of 2)

Documents: [RAND RD. \(PLANS\) 1 OF 2.PDF](#)

3.V. Plans (2 Of 2)

Documents: [RAND RD. \(PLANS\) 2 OF 2.PDF](#)

4. 158 Fore Street

4.I. Memo

Documents: [FORE ST. - 158 \(MEMO\).PDF](#)

4.II. Memo Attachments

Documents: [FORE ST. - 158 \(MEMO ATTACHMENTS\).PDF](#)

4.III. Applicants Submittal

Documents: [FORE ST. - 158 \(APPLICANTS SUBMITTAL\).PDF](#)

4.IV. Plans

Documents: [FORE ST. - 158 \(PLANS\).PDF](#)

5. 1021 Westbrook Street

5.I. Report

Documents: [WESTBROOK ST. - 1021 \(REPORT\).PDF](#)

5.II. Report Attachments

Documents: [WESTBROOK ST. - 1021 \(REPORT ATTACHMENTS\).PDF](#)

5.III. Applicants Submittal

Documents: [WESTBROOK ST. - 1021 \(APPLICANTS SUBMITTAL\).PDF](#)

5.IV. Plans

Documents: [WESTBROOK ST. - 1021 \(PLANS\).PDF](#)

6. 3 Pleasant Avenue

6.I. Report

Documents: [PLEASANT AVE. - 3 \(REPORT\).PDF](#)

6.II. Report Attachments

Documents: [PLEASANT AVE. - 3 \(REPORT ATTACHMENTS\).PDF](#)

6.III. Applicants Submittal

Documents: [PLEASANT AVE. - 3 \(APPLICANTS SUBMITTAL\).PDF](#)

6.IV. Public Comment

Documents: [PLEASANT AVE. - 3 \(PUBLIC COMMENT\).PDF](#)

6.V. Plans

Documents: [PLEASANT AVE. - 3 \(PLANS\).PDF](#)

7. Housing Replacement Amendments

7.I. Report

Documents: [HOUSING REPLACEMENT REPORT.PDF](#)

**LEGAL ADVERTISEMENT
PORTLAND PLANNING BOARD MEETING**

The Portland Planning Board will hold a meeting on Tuesday, November 10, 2015, Council Chambers, 2nd Floor, City Hall, 389 Congress Street. **Public comments will be taken at this meeting.**

Workshop – 4:30 p.m.

- i. Level III Subdivision Amendment, City of Portland, Applicant, and Level III Site Plan; Portland Technology Park; Rand Road; Patrons Oxford Insurance Co., Applicant.
(4:30 - 5:30 p.m. estimated time) The Board will hold a workshop on a proposed amended plat for the Portland Technology Park to modify the layout of the street right-of-way, revise Unitil gas line easement and adjust property boundaries for sites (#5, 6 and 7). The Board will also consider a 2 story office building on limited common area (#4) with a total floor area of 19,000 sq. ft. Site improvements include extending the roadway and utilities, creating parking for 70 vehicles and installing a stormwater water management system.
- ii. Level III Subdivision and Site Plan, 158 Fore Street; Ara Aftandilian of Portland Norwich Group, Applicant. (5:30 - 6:30 p.m. estimated time) The Board will hold a workshop on a proposal to subdivide the 1.39 acre site into 2 parcels. Lot 1 is proposed with a 6 story building containing a 150 room hotel, 16 residential condominiums and commercial space on the 1st floor. A shared driveway with a turn-around is proposed from Fore Street to serve the hotel and parking will be provided at the Ocean Gateway garage.

Public Hearing – 7:00 p.m.

- i. Level III Site Plan; 1021 Westbrook Street; Northeast Air, Applicant.
(7:00 - 7:45 p.m. estimated time) The Board will hold a public hearing to consider a proposal to include a new 2 story addition with a building footprint of 6,750 sq. ft. and a 1 story addition of 3,500 sq. ft. The parking will be reconfigured and the impervious surface area reduced to serve 45 parking spaces.
- ii. Level III Subdivision and Site Plan, 3 Pleasant Avenue, Hardy Pond Development Co, LLC, Applicant. (7:45- 8:30 p.m. estimated time) The Planning Board will hold a public hearing on a proposal is to convert the former Pleasant Avenue Church at 3 Pleasant Avenue into 25 market rate apartment units. The proposal includes subdividing the parcel into two lots and converting the vestry building into a single family home. The proposal also includes 23 parking spaces in an existing parking lot across from the site, 2 handicapped spaces on site, and two spaces for the single family home.
- iii. Amendment to Division 29 Housing Replacement Amendments, City of Portland, Applicant.
(8:30 - 9:00 p.m. estimated time) The Board will hold a public hearing on changes that are proposed to Section 14-483 of the Code of Ordinances (Housing Preservation and Replacement) that would require that any replacement units provided be in the same U.S. Census Block Group as the units removed, and also require that replacement units be completed within three years.

ELIZABETH BOEPPLE, CHAIR - PORTLAND PLANNING BOARD

Elizabeth Boepple, Chair
Sean Dundon, Vice Chair
Bill Hall
Carol Morrisette
Jack Soley
David Eaton

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PUBLIC HEARING – 7:00 p.m.

1. ROLL CALL AND DECLARATION OF QUORUM

2. COMMUNICATIONS AND REPORTS

3. REPORT OF ATTENDANCE AT THE MEETING HELD ON OCTOBER 27, 2015:

Workshop: Boepple, Dundon, Eaton, Hall, Morrisette and Soley present; Hall absent.

Public Hearing: Boepple, Dundon, Eaton, Hall, Morrisette and Soley (left at 10:15 p.m.) present, Hall absent.

4. REPORT OF DECISIONS AT THE MEETING HELD ON OCTOBER 27, 2015:

- i. Recommendation by Historic Preservation Board to Designate the Portland Company Complex; 58 Fore Street; City of Portland, Applicant. Dundon moved and Morrisette seconded the motion to find the proposed designation, as amended, is consistent with the criteria for designation in the Historic Preservation Ordinance (Section 14-610 (a) and (b), Section 14-611) and is consistent with the Comprehensive Plan, and recommends the designation of Portland Company Complex at 58 Fore Street as a Historic District to the City Council. Vote: 5-0, Hall absent.

- ii. Level III Site Plan and Subdivision; 667 Congress Street; Redfern Properties, Applicant.
Dundon moved and Morrisette seconded the motion to grant a waiver to allow 26 compact spaces. Vote: 4-0, Hall and Soley absent. Dundon moved and Morrisette seconded the motion to grant the driveway width to 18 feet on Avon Street. Vote: 4-0, Hall and Soley absent. Dundon moved and Morrisette seconded the motion to grant a waiver from the street tree requirement with a contribution of \$6,200 due to the provision of granite tree wells and edging. Vote: 4-0, Hall and Soley absent. Dundon moved and Morrisette seconded the motion to grant a waiver of the sidewalk along the Avon Street frontage, subject to the applicant being responsible for installing an ADA compliant sidewalk on the opposite side of Avon Street. Vote: 4-0, Hall and Soley absent. Dundon moved and Morrisette seconded the motion to grant a waiver of a sidewalk along Vernon Place beyond the garage opening. Vote: 4-0, Hall and Soley absent. Dundon moved and Morrisette seconded the motion to approve the subdivision plan with five conditions of approval. Vote: 4-0, Hall and Soley absent. Dundon moved and Morrisette seconded the motion to approve the site plan with ten conditions of approval. Vote: 4-0, Hall and Soley absent.
- iii. Level III Subdivision; 415 Cumberland Avenue; Patrick Ducas, Applicant.
Dundon moved and Morrisette seconded the motion to grant the street tree waiver with a \$1,200 contribution to the tree fund. Vote: 4-0, Hall and Soley absent. Dundon moved and Morrisette seconded the motion to approve the subdivision plan with two conditions of approval. Vote: 4-0, Hall and Soley absent. Dundon moved and Morrisette seconded the motion to approve the site plan with six conditions of approval. Vote: 4-0, Hall and Soley absent.

5. NEW BUSINESS

- i. Level III Site Plan; 1021 Westbrook Street; Northeast Air, Applicant.
(7:00 - 7:45 p.m. estimated time) The Board will hold a public hearing to consider a proposal to include a new 2 story addition with a building footprint of 6,750 sq. ft. and a 1 story addition of 3,500 sq. ft. The parking will be reconfigured and the impervious surface area reduced to serve 45 parking spaces.
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Memorandum

Planning and Urban Development Department

Planning Division



To: Beth Boepple, Chair and Members of the Portland Planning Board

From: Jean Fraser, Planner

Date: November 5th, 2015

Re: Amendment to Subdivision Plat, City of Portland Economic Development Department, Applicant
Site Plan for LCE (lot) #4 for Patrons Oxford Insurance Building Rand Road, Patrons Oxford Insurance Company, Applicant

Project #: 2015-172 (Subdivision Amendment) and 2015-171 (Site Plan)

CBL: 249-A-001-001

Meeting Date: November 10th, 2015

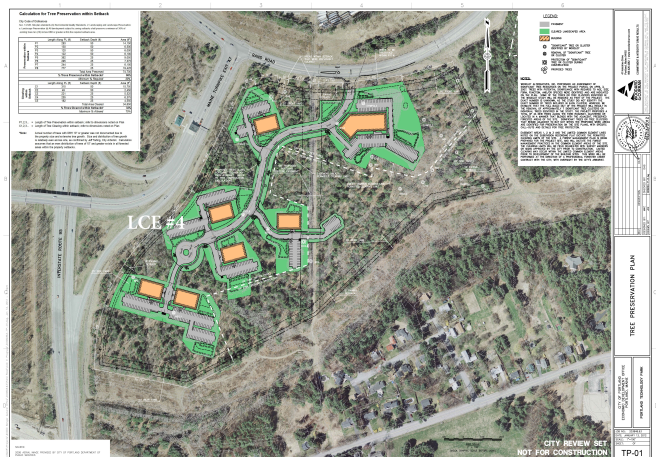
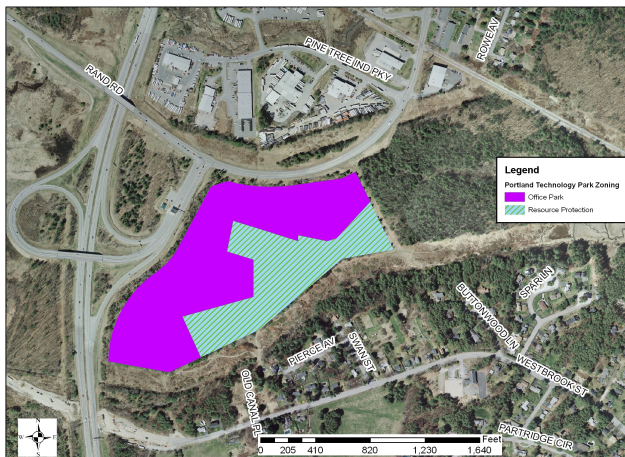
I. INTRODUCTION

The Portland Technology Park is a City Office Park that was approved by the Planning Board in January 2012. The Park included 7 development parcels accessed by a new drive from Rand Road, and the first phase of the access drive was completed in 2013.

This Memorandum relates to the applications for the first building to be constructed in the Portland Technology Park. The proposal is for a two-story office building with associated parking, utilities and stormwater infrastructure for the Patrons Oxford Insurance headquarters to be located on Limited Common Elements (LCE) #4. The project also includes the realignment and construction of a small section of the phase 2 access drive, with minor adjustments to three LCEs and gravel wetlands in the vicinity.

The proposals involve the following:

- Amendment to the approved Plat to reflect minor adjustments to three LCE boundaries and the alignment of the access drive: application from City of Portland
- Amendment to the approved overall site plan, and revised detailed Site Plan proposals for the LCE #4: application from Patrons Oxford Insurance Company



Required reviews:

The focus of the review is guided by the conditions included in the 2012 Planning Board approval ([Attachment 2](#)), as extracted below:

(Subdivision) That the development of limited common element areas is subject to review and approval by the City of Portland Planning Authority for conformance with the Portland Technology Park Design Guidelines and City of Portland Code of Ordinances, Chapter 14 Land Use, Article v. Site Plan for building architecture, site landscaping, site pedestrian circulation, bicycle parking, lamp specifications and signage and any changes or alterations to approved traffic, parking, access, utility, exterior lighting, tree preservation and stormwater features; and

(Site Plan) That when individual units are proposed for site plan review the applicants should submit detailed specifications for snow storage management/protection of gravel wetlands, exterior lamp fixtures (including wall mounted), and consider the opportunity for trail links with the wider trail network on the RPZ open space part of the site; and

(Site Plan) That the site plans for individual units shall be brought before the Planning Board for review and approval, and the Board reserves the right to review individual units under the standards of the site plan ordinance.

The project is also being reviewed by the MDEP and ACOE regarding the amendments to the wetland fill (NRPA) and stormwater management (SLOD).

A total of 61 notices of this workshop were sent to property owners within 500 feet and to interested citizens and a notice was published in the November 2nd and 3rd, 2015 editions of the *Portland Press Herald*. A Neighborhood Meeting was held on October 26, 2015 and there were no members of the public in attendance (see [Attachment E](#)). The Planning office has been contacted by Jaime Parker of Portland Trails and he has confirmed they do not have comments. One other e-mail (no address given) noted that an insurance office is not “Technology” but this development is in an area zoned “Office Park”.

II. PROJECT DATA:

SUBJECT	DATA APPROVED OVERALL PARK	DATA AMENDED OVERALL PARK	DATA LCE#4 AS APPROVED	DATA LCE#4 AS REVISED
Existing Zoning	Office Park			
Existing Use	No building construction to date except access drive and stormwater infrastructure			
Proposed Use	Construction of new building for offices with associated infrastructure			
Parcel Size	OP: 26.2 acres	OP: 26.2 acres	LCE #4: 1.46 acres	LCE#4: 2.28 acres
Impervious Surface Area** --Existing - Proposed --Net Change	9.1 acres	9.31 acres	0 sq. ft. 51,700 sq. ft. 51,700 sq. ft. (1.19 acre)	7,200 sq. ft. 60,400 sq. ft. 67,600 sq. ft. (1.55 acre)
Total Disturbed Area	13.0 acres	13.7 acres	73,500 sq. ft.	94,900 sq. ft.
Total Building Footprint	81,000 sq. ft.	80,500 sq. ft.	10,000 sq. ft.	9,500 sq. ft.
Total Building Floor Area	122,000 sq. ft. (4 @10,000, 2@20,000, and 1 at 42,000 sq. ft.)	121,000 sq. ft. (4@10,000, 1@19,000, 1@20,000, and 1@42,000 sq. ft.)	20,000 sq. ft.	19,000 sq. ft.
Parking Spaces(#handicapped)	436 spaces	428 spaces	78 spaces	70 spaces (3)
Bicycle parking Spaces Proposed	N/A	N/A	N/A	10
Estimated cost of the prj.	N/A	N/A	N/A	\$5 million

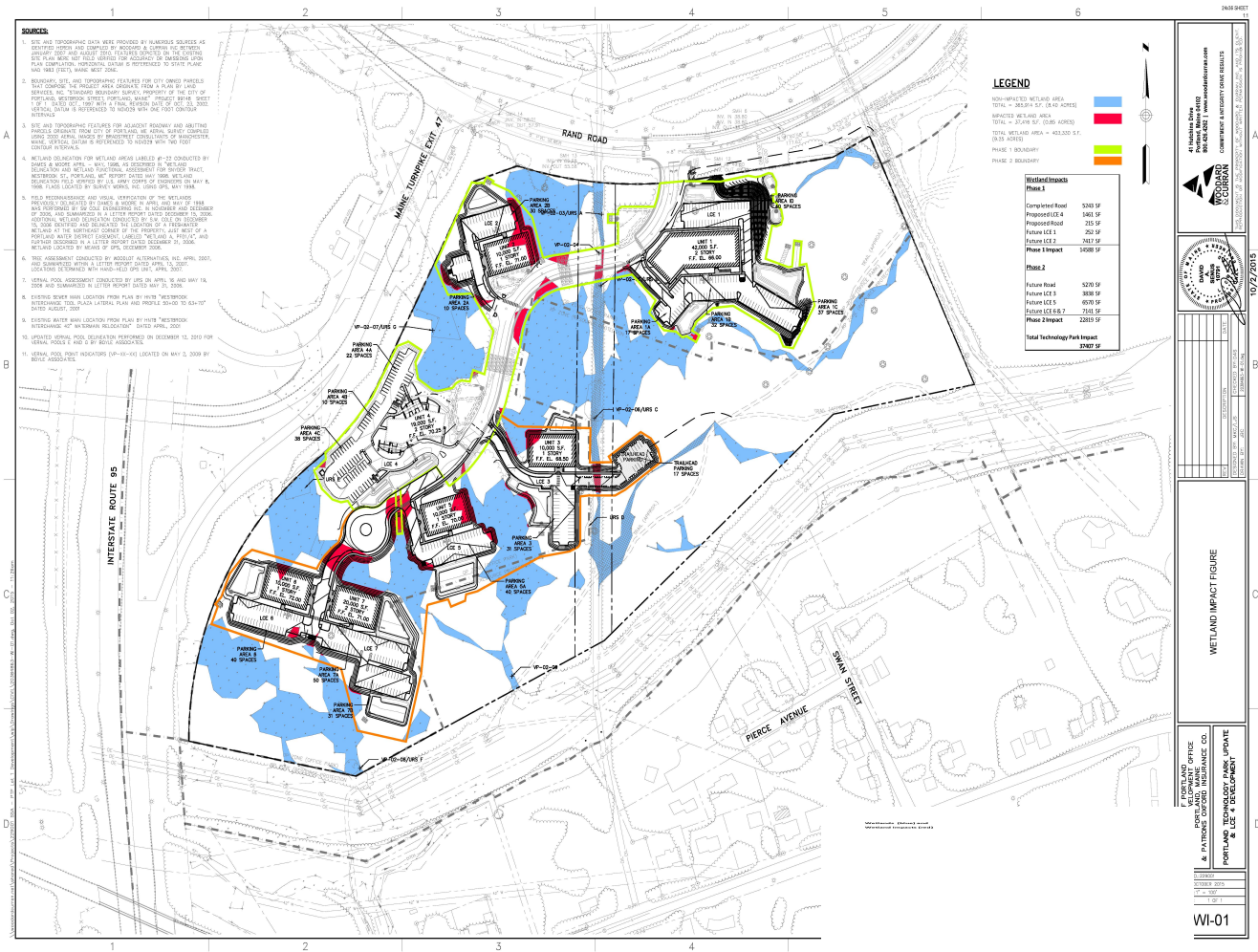
*This shows an increase of 0.36 acres, vs. the total technology park increase of 0.21 acres. There was a decrease in impervious surface in LCE 5 (shortened driveway, and an eliminated gravel wetland) that counters the increase in LCE 4.

** These figures include gravel wetlands as impervious as this is how the MDEP views them.

III. BACKGROUND AND EXISTING CONDITIONS

The Portland Technology Park is a 7 unit office park, developed as Planned Unit Development (condominium), which is currently owned by the City of Portland with no buildings constructed yet. It is located near the Maine Turnpike Exit 47 between Rand Road and Westbrook Street. It was developed by the City with the aim of providing a location for emerging high technology businesses, including but not limited to biotechnology and information technology companies. The background to its development is included in [Attachment 1](#).

The City completed the first phase of the access drive and associated stormwater management and treatment measures in 2013 and a gas line was installed early in 2015. The park is currently being marketed.



The layout of the 26 acre office park was constrained by the extent of wetland areas, as shown in blue in the plan above; the red shows how the proposed buildings impact wetlands. LCE#4 does not directly impact wetlands, but the proximity of wetlands is a key factor in the layout of the building and parking and the design of the stormwater management system.

The office park is associated with a 13 acre conservation area abutting the office park along the south boundaries of LCEs 1, 3, 5 and 7. This is also owned by the City of Portland and managed by Portland Trails through an agreement with the City and Condominium Association that is managing the office park area. A trailhead with parking was constructed as part of the completed first phase.

In 2012 the project was reviewed for conformance with Subdivision, OP zoning and Site Plan standards. There are a number of key issues that frame the consideration of the amendments and the specific proposals for LCE#4:

The office park is governed by an approved Design Guide (Attachment 3);

- A Tree Preservation Plan was one of the approved plans (Plan P5);
- A waiver was given for the size of the parking spaces (8' 2" X 18 instead of 9' by 18') throughout the park in order to minimize the area of impervious surface;
- A waiver was granted for providing sidewalk on one side of Rand Road;
- A waiver was granted to allow landscaping details to be deferred to the review for each site;
- Condominium bylaws include conservation easement for area abutting the office park;
- A TDM was required.

IV. PROPOSED DEVELOPMENT

The proposed development is to provide a headquarters building for the Patrons Oxford Insurance Company and Attachment F includes an explanation of how this site was selected and the philosophy that guided the design of the building, its amenities and the site layout. LCE#4 was originally envisaged to be part of phase 2 and the existing access drive does not reach this lot. In order to develop it, the project has included the extension of the access drive along a relocated route to enable the revised layout of the proposed building and parking on LCE#4. The modifications to the access drive also entail modifications to the stormwater system (gravel wetlands), and therefore the development of the LCE has also triggered amendments to the overall subdivision plat and site plan as summarized below.

A. SUMMARY OF AMENDMENTS TO SUBDIVISION PLAT AND OVERALL SITE PLAN

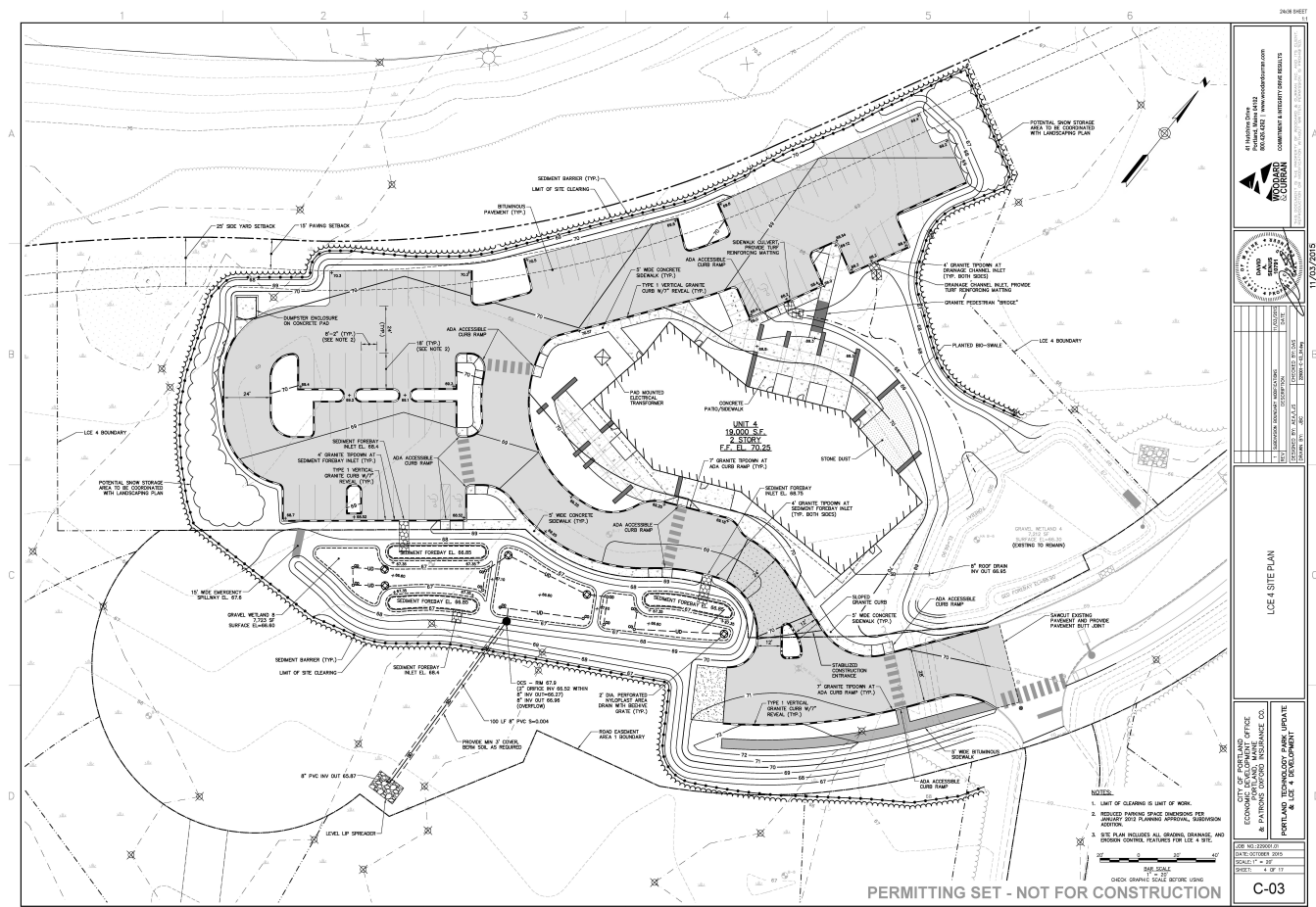
The amendments to the Subdivision Plat and Overall Site Plan (see Attachments A and B for applications) comprise the expansion of the northern boundary of LCE#4 and the minor adjustment of the location of the access drive and the boundaries of abutting LCE 5 and LCE6, along with a modification of the gas line where it nears the turning circle and the removal of one of the proposed gravel wetlands. The underlying detailed revisions can be seen on the Overall Revised Site Plan (Plan P13). The draft plat would need to be revised to document the MDEP/ACOE approvals and any revised or additional conditions of approval prior to signature by the Planning Board.

B. SUMMARY OF PROPOSALS ON LCE #4

The proposal details are found in Attachments F, G and I and Plans P12 to P20. The two story office building (19,000 sq. ft. total floor space) is designed with a main entrance from the south and an employee's entrance with patio on the north. The parking area for 70 vehicles is linked to the building with crosswalks and sidewalks and extensive planting is shown on the Planting Plans (Plans P16 and P17). Two gravel wetlands are located along the east side of the site to drain and treat stormwater.

The LCE boundary has been enlarged by the relocation of the access drive to allow for possible future expansion. The proposal under review is 1000 sq ft less than included in the 2012 site plan with 8 fewer parking spaces, although the impervious surface has increased because the access drive between the parking and the main access drive is longer (the impervious surfaces on LCE#5 have been reduced).

PROPOSED SITE PLAN (ALSO SEE PLAN P14)



V. STAFF REVIEW

The staff review has focused on the subdivision and site plan issues that were referenced in the approval of the project in 2012 (see above). At that time a comprehensive review was undertaken in respect of the Office park Zoning requirements, and the ordinance requirements under Subdivision and Site Plan.

The proposals are relatively minor amendments to the Subdivision and Overall Site Plan, although within LCE#4 the revisions are more substantial. Such changes were anticipated in the 2012 conditions of approval (above and in Attachment 2) and the following review has been structured to address these conditions:

- A. (Subdivision) That the development of limited common element areas is subject to review and approval by the City of Portland Planning Authority for conformance with the Portland Technology Park Design Guidelines and City of Portland Code of Ordinances, Chapter 14 Land Use, Article v. Site Plan for building architecture, site landscaping, site pedestrian circulation, bicycle parking, lamp specifications and signage and any changes or alterations to approved traffic, parking, access, utility, exterior lighting, tree preservation and stormwater features; and

• Architecture

Scott Simons Architects have designed the proposed building and this is the same firm that prepared the approved PTP Design Guidance. The underlying design philosophy and objectives are outlined in Attachments Fi, Fvi, and I.



The submitted architectural information was reviewed by staff on 10.30.2015 and the preliminary comments requested clarification on architectural elements such as materials, windows, entrances, and signage. The applicant annotated the preliminary comments with further information ([Attachment I](#)) and provided updated graphics ([Plans P18, P19 and P20](#)). Updated Design Review comments are included in [Attachment 4](#) and confirm that the PTP Design Guidelines have been met, except regarding signage where the concepts appear to meet the Guidelines but further detail is needed for a final review (see below).

- **Site Landscaping**

The applicant has submitted Planting and Material Plans ([Plan P16](#)) which have been reviewed by the City Arborist, Jeff Tarling. Mr. Tarling's comments confirm that the proposals are very good ([Attachment 5](#)).

- **Site Pedestrian circulation**

The Site Plan for LCE#4 ([Plan P14](#)) shows crosswalks across the parking aisles and some sidewalks between the parking areas and the entrances, and the City's Traffic Engineering reviewer Tom Errico has noted ([Attachment 7](#)):

The site plan should account for likely origin/destination patterns of pedestrians when walking between the main parking lot and the entry. I would suggest a more direct pedestrian facility be provided.

- **Bicycle parking**

The submissions indicate that 10 bicycle parking spaces are proposed at the employee's entrance ([Attachment B data sheet](#) and Materials Plan in [Plan P16](#)) and a detail is included in the plans. The ordinance requirement for this project would be 14 spaces and in the Design Narrative ([Attachment Fvi](#)) the applicant states they intend to provide 14 spaces. Staff suggests some of the bicycle parking be located at the front of the building for visitors. The bicycle parking should also be shown on the site plan as part of the final submission.

- **Signage**

The applicant has submitted preliminary sign concepts in [Plan P20](#) and [Attachment I](#) confirms that the signage will be metal lettering (images suggest these are mounted on a wood background) and lit by wall or site mounted light fixtures. Staff understands that these are preliminary at this stage and the logo is likely to be revised.

The approved Design Guidance includes a section on signage ([Attachment 3](#), page 9) which states:

“Development proposals shall identify all proposed signage. Signs shall be designed in proportion and constructed of permanent materials and shall be coordinated with the building and landscaping design through the use of appropriate materials and

finishes. Well-designed signage is encouraged in the Development, both in front of the building and on the building, as allowed by the City's existing ordinances. The use of raised metal letters, individual metal letters, and etched masonry or wood is encouraged; surface mounted plastic letters and interior –lit box signs are not allowed. Signs should be illuminated at night either from behind the raised lettering or with focused floodlights.”

The Urban Design comments ([Attachment 4](#)) notes that the concept signage generally addresses the design guidance in terms of materials, but that further information is needed (placement of the monument sign; dimensions; lighting) in order to complete the review. Staff also notes that the large building sign could potentially be placed higher on the façade and that the lighting would need to meet the Technical Standards regarding site lighting.

The Planning Board should note that in light of the PTP Design Guidelines and the earlier approvals for the Portland Technology Park, the Board will be requested to approve the signage in principle.

- **Traffic and revisions**

The 2012 approval included approval to a Traffic Movement Permit (TMP) for the entire Office Park ([Attachment 2](#)). The applicant has submitted a Traffic Summary ([Attachment Fii](#)) to show how the trip generation from the proposed office development relates to the TMP, and the City's Traffic Engineering reviewer Tom Errico has confirmed that the proposed project complies with the TMP and that a further traffic study is not required ([Attachment 7](#)).

- **Parking revisions**

The 2012 approval included a blanket waiver for the entire Office Park for parking spaces to be 8'2" wide and 18' long. This was partly to minimize the impervious surface, and partly to allow a higher parking ratio as the anticipated occupants were likely to be more car-oriented because of the location of this site near I-95. The total number of parking spaces allowed was therefore more than we would typically allow, and a further condition required that each LCE developer had to justify the parking provision at the site plan stage ([Attachment 2](#)).

The proposals include 70 parking spaces as compared to the 78 parking spaces that were proposed for the LCE#4 in the original approved site plan (for a 20,000 sq. ft. building). The applicant has submitted a Parking Analysis ([Attachment Fii](#)) to justify the need for the 70 spaces and the City's Traffic Engineering reviewer Tom Errico has confirmed that the parking is acceptable ([Attachment 7](#)).

It should be noted that the original approval required a TDM Plan and the applicant has indicated that one will be submitted as part of the final submission.

- **Access revisions**

The revised LCE#4 boundary has been enlarged to the east so that the distance to the main access drive is modified to include a longer internal drive with a channel separation (edged by a mountable curb so it's acceptable to the Fire Department) where it meets the main drive ([Plan P14](#)). The City's Traffic Engineering reviewer Tom Errico has requested the applicant to “provide supporting documentation on the need for the channelization island at the driveway intersection with the main entry roadway.” Mr Errico has also commented that “the vehicle turnaround at the end of the parking lot can be modified to reduce pavement area”. ([Attachment 7](#))

- **Utility revisions**

The applicant has submitted a number of revised utility plans for the entire Office Park area that have not yet been reviewed in detail ([Plan P13](#)). The proposals for the new building and revised

layout include revised utility connections as shown on Plan P15 and the Design Narrative (Attachment Fv.) notes that the sewer and water capacities as approved in 2012 are adequate as the building is reduced in size.

The Department of Public Services have provided detailed comments regarding the sewer connections (Attachment 8) and the applicant has indicated they will address these as part of the final submission.

- **Exterior Lighting**

The proposals are described in Attachment Fv and a Photometric Plan is attached to that Narrative. The overall approach and photometric information are acceptable, but the fixture specifications (including for the bollard lamps) should be included in the final submissions.

- **Tree Preservation**

The expansion of LCE#4 has extended the boundary of the LCE area northwards into an area that was previously shown to be a tree preservation area- compare Plan P5 (Approved Tree Preservation Plan) and Plan P6 (Revised Tree Preservation Plan). This area did not include any trees that were specifically identified for preservation in the previous Tree Survey and associated Plan (Plan P5). However, Jeff Tarling, the City Arborist, would like to review the area to confirm that clearance for the extended parking lot would be acceptable (Attachment 7).

- **Stormwater**

Overall Office Park

The applicant has included an extensive explanation of how the revised layout for LCE#4 (and relocated main drive) has resulted in the need to modify the overall number and location of gravel wetlands, and the project has also been reanalyzed in terms of the recent MDEP stormwater guidance (Stormwater Report (Attachment Fiii)). The amended overall stormwater management is subject to MDEP review under SLOD and an amended NRPA permit in relation to wetland impacts. The Stormwater Report (Attachment Fiv) along with Plans P7, P8, P9 and P10 show the revised stormwater management proposals (note that the hydrocad calculations were submitted but are not attached). As these are being reviewed by the MDEP and ACOE and would meet City standards, the focus of this review has been on the proposals for LCE#4.

LCE#4 is the first of the lots to be developed and staff is concerned that as other sites are developed, probably with similar revisions to impervious surfaces, that the cumulative impacts would need to be trackable and consistent with the original stormwater management regime. The applicant has confirmed (Stormwater Report in Attachment Fiv) that as each lot is developed there would need to be a similar overall review, by the MDEP and City. The expectation is that if a proposed development increased the impervious surface that it would need to revise the stormwater management and treatment accordingly within its own LCE.

LCE#4

The MDEP review is looking at the overall Office Park and how the Stormwater Management proposals for the entire site meet Chapter 500 and NRPA standards. For LCE#4 there are no wetland impacts and the Peer Engineering review has been focused on the LCE to determine that it meets the City standards (Chapter 500) in respect of the LCE area itself. The construction details and management were also of concern, as the soils in this area require some special methods of stabilization (see submitted Geotechnical Report in Attachment H).

The City's Peer Engineer for this project is Jim Seymour of Sebago Technics, as Dave Senus of Woodard and Curran is the representative for the applicant Patrons Oxford. The applicant's

engineers have met with Mr Seymour and many of the issues have been fully resolved; Mr Seymour has provided a helpful summary of the key areas where he would like further information and some revisions as part of the final submissions ([Attachment 6](#)); an extract is below:

Geotechnical/Saturated Soils:

Due to the site's known presence of poor soils consisting of marine clays and high groundwater tables, we had concerns about the impact the building design, parking, and pedestrian areas would be subject to, from a structural stability standpoint. (More so from both a settlement concern and frost thaw environment). The engineers have submitted a late geotechnical report which we have not reviewed, but are confident with recommendation for light weight concrete, careful structural analysis inclusion into base soil designs, that the building will promote practices to limit or prevent any substantial settlement or movement. Also the design teams are working with the geotechnical engineers to assess construction details and plans to address concerns of other surface applications such as parking and pedestrian accesses to prevent groundwater impacts and freeze thaw due to susceptible soils to promote stable structural integrity and to reduce impacts from frost heaves or settlement resulting from freeze cycles during soil saturation. We feel that by integrating the geotechnical studies and recommendations that these can be handled by site specific design details during the final plan review period.

Stormwater Treatment:

The Maine DEP and City of Portland uses the same Stormwater BMPs which require that the engineering design consider infiltration or filtration of runoff through the use of measures such as gravel wetponds. The current design does incorporate treatment of the parking and building area's runoff impacts by use of gravel wetlands. A concern we have raised is that during large rain events that the modelling has consistently shown that, (again due to the limitations of flat topography, and poor wet soils) that there is little drainage relief across the site. The site will experience temporary flooding which in larger events will back flows up or near parking areas or pedestrian access areas. We are not opposed to the design as long as considerations are made to address the saturation of soils and flooding elevations with the design to improve site base materials. Again the overall project will be reviewed by the Maine DEP, and the site has provided acceptable treatment from impervious areas through use of gravel wetlands (labelled pond 4 and 8). We have requested that either tables specific to the design of Unit #4 be added to the plans or in separate submission such that we can track and follow the impacts on a lot basis. We do feel that Woodard and Curran will be able to provide the documentation and improve the designs to assess, or revise the details, to account for this worst case scenario following winter melts and or flooding events.

Construction Management Plan:

We have asked for more details regarding the type of construction activities that will be required to prepare the building foundation base and parking areas, as they deal with high groundwater tables during excavation. Dewatering or standard pumping of groundwater will be necessary to construct foundations. The impact is that this creates dirty sediment filled discharges. Thereby it will be imperative that we have a site specific construction management plans to assess all environmental impacts that could be raised during this project's site construction. Items will need to include dewatering measures, discharge locations, specific erosion and sedimentation measures, excavated soil stockpiling locations, and include efforts for maintaining cleared streets by sweeping during construction activities (truck tracking).

General Site Plan Revisions:

Given a site plan dealing with near level grading, and the joint stormwater treatment measures being shared with the overall development as part of a larger Maine DEP development, we will be suggesting some minor revisions or surface grading and adding notes for clarity of tracking responsibilities, and to assess Unit #4 independently. We have discussed a few areas of grading problems with the applicant and they will incorporate these minor revisions by small plan or grade changes, or by adding additional notes for clarity. In particular, we will be looking at pedestrian access elevations, general grading, and inclusion of any Maine DEP conditions of approval which could impact its lots design. (such items could include limitations on tree clearing, drainage restrictions, etc)

Summary:

We understand the projects intent, incorporation of drainage treatment measures to improve water quality impacts from paved surfaces. Overall we feel the design is acceptable for the proposed use. We have discussed some of the concerns of the treatment design, groundwater impacts, and geotechnical concerns with the engineers from Woodard and Curran and feel those can be corrected immediately by coordination with the geotechnical soils engineering recommendations. We feel all the discussed items can be incorporated into the final design which will be required to be submitted, reviewed by the City staff and engineers, prior to any final Planning Board approval. (Att. 6)

- B.** *(Site Plan) That when individual units are proposed for site plan review the applicants should submit detailed specifications for snow storage management/protection of gravel wetlands, exterior lamp fixtures (including wall mounted), and consider the opportunity for trail links with the wider trail network on the RPZ open space part of the site; and*

(Site Plan) That the site plans for individual units shall be brought before the Planning Board for review and approval, and the Board reserves the right to review individual units under the standards of the site plan ordinance.

- **Snow storage management/protection of gravel wetlands**

The submitted Site Plan (Plan P14) identifies snow storage areas but some of these overlap with landscaped areas and will need to be adjusted as part of the final submission.

- **Exterior light fixtures**

See above.

- **Trail links**

The LCE#4 is on the opposite side of the overall site from the Conservation Area and trail head, and a direct trail access is not possible. An “inter-lot” trail system has not been developed and the extent of wetlands would be a challenge in any case. The applicant has indicated in the Project Description (Attachment Fi) that the creation of pedestrian links to trails outside the site would be a future intention once nearby lots are developed. The Board may wish to consider whether a condition of approval should document the applicant’s intention.

- **Other site plan standards**

The site plan application for LCE#4 is comprehensive and addresses all of the ordinance site plan and zoning standards in the narratives in Attachment F. Other aspects that have been addressed in the narrative include significant natural features; solid waste disposal; and crime prevention through environmental design.

VI NEXT STEPS

The following need to be addressed as part of the final submissions for consideration at a Planning Board hearing:

- Address the Traffic Engineer, Peer Engineer and DPS review comments
- Add bicycle parking (14 spaces) to site plan
- Further clarification of signage proposals
- Confirm with the City Arborist re tree preservation in the extended LCE area
- Revise snow storage areas
- Provide specifications for site and exterior building lights, and sign lighting
- Submit a TDM plan for LCE#4
- Address any comments of the Planning Board.

ATTACHMENTS:

Memo attachments

1. Background to PTP
2. 2012 Planning Board approval letter
3. PTP Design Guidelines August 2012
4. Urban Design Review comments 11.4.2015
5. City Arborist comments 11.4.2015
6. Peer Engineering Reviewer J Seymour Sebago Technics 1.5.2015
7. Traffic Engineering Reviewer Tom Errico
8. Department of Public Services comments

Public Comments

None

Applicants submittal

- A. Cover letter & Subdivision Amend. Application
- B. Site Plan Application
- C. P&S Agreement
- D. Letter of financial capacity
- E. Neighborhood Meeting Certificate
- F. Site Plan Subject Narratives including:
 - i. Project Description incl Schematic Design
 - ii. Traffic
 - iii. Significant Natural Features
 - iv. Stormwater Report
 - v. Design Narrative including photometric
 - vi. Other narratives
- G. Additional Information re Site Plan
- H. Geotechnical Report
- I. Written response to Design Review comments

Overall Plans

- P1. Survey
- P2. Existing conditions
- P3. Most recent approved plat
- P4. Draft revised subdivision plat
- P5. Approved Tree Preservation Plan
- P6. Revised Tree Preservation Plan
- P7. Wetland Impact Figures
- P8. Pre-development & Post Development Drainage Area maps
- P9. Post development Subcatchment area map
- P10. Post development Stormwater treatment overall plan

Site Plans

- P11. Overall approved site Plan
- P12. Overall revised site plan
- P13. Overall revised Tech Park Civil Plans
- P14. Proposed LCE#4 Site Plan
- P15. Proposed LCE#4 Grading and Drainage Plan & Utility Plan
- P16. LCE#4 Landscape Plans
- P17. Floor Plans
- P18. Building elevations
- P19. Building renderings
- P20. Preliminary signage concepts

POLICY BACKGROUND TO PTP

Industry and Commerce Plan- 1994

As part of the comprehensive planning initiative to examine industrial areas, a portion of the residentially zoned area between the Oxford Canal and the Pine Tree Industrial Subdivision was recommended for a moderate impact industrial zone. The area was rezoned pursuant to that recommendation.

Rand Road Interchange and Proposed Post Office Distribution Center:

The Maine Turnpike Authority proposed a new interchange and the extension of Rand Road to the Westbrook Connector in the mid-1990's. As the Turnpike was undergoing review for the interchange, the U.S. Post Office considered the entire 50 acre site as a distribution facility adjoining the interchange. The post office proposal was required to do an alternatives analysis for its Environmental Assessment and determined that a site in Scarborough was more appropriate. The City of Portland purchased the 50 acre site at that time.

Brighton Avenue Corridor Study and Outer Brighton Avenue Task Force Report -2002

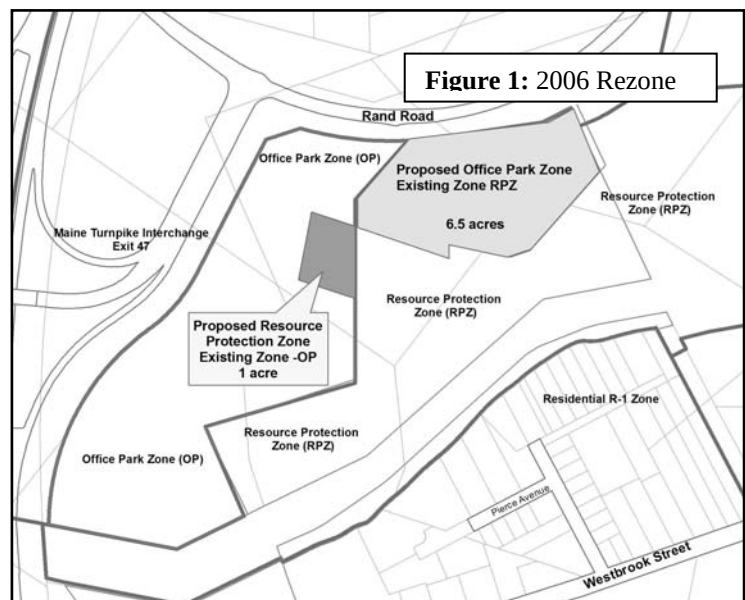
In response to the proposed interchange and the potential for new development, Portland and Westbrook received a planning grant from PACTS to analyze the land use patterns, traffic impacts and streetscape for the Brighton Avenue Corridor, which included the area surrounding the proposed interchange. The Brighton Avenue/Main Street Corridor Traffic and Streetscape Study and the Outer Brighton Avenue Task Force Report were adopted as part of the City's comprehensive plan in 2001. The Task Force report recommended that roughly half of the site be rezoned to Office Park and the remainder be rezoned to Resource Protection, in order to preserve the wetlands and open space. The purpose statement for OP states it is to provide "substantial areas for integrated development of professional offices in a park- or campus-like setting which are of the highest quality, are well designed and maintained and are compatible with their natural surroundings." Due to the sensitive natural environment and size of the parcel, the task force determined that the OP zone was a more suitable zone than an industrial designation. The City Council rezoned approximately 25 acres to OP and the remainder to RPZ. A portion of the adjoining property and the utility right-of way were included in the RPZ designation at that time.

After the above rezoning was adopted, Maine Audubon approached the City with a proposal to rezone the remaining land to RPZ that lays between the newly designated RPZ land and the RPZ land of the Fore River Sanctuary. Maine Audubon owned the Fore River Sanctuary of which a portion of their land was zoned RPZ and more recent acquisitions were zoned residential. The other parcels were owned by either Portland Trails or the City. The City Council rezoned this area to RPZ, which protected over 200 acres of wetlands and open space between the Fore River and Office Park land near the interchange.

2006 Rezone from Resource Protection Zone (RPZ) to Office Park (OP):

In 2006, the Economic Development Department sponsored a zone change for the site and a zoning text amendment to the Office Park Zone District. Both proposals were intended to accommodate the future development of the site for clean high tech industrial uses and to preserve open space including the retention of land to serve as a trail head for Portland Trails. The zone change and text amendments were ultimately adopted by the City Council.

Source: 5/18/06 PB Report #30



CITY OF PORTLAND, MAINE

PLANNING BOARD

Carol Morrisette, Chair
 Stuart G. O'Brien, Vice Chair
 Joe Lewis
 Lee Lowry, III
 Michael J. Patterson
 David Silk
 Bill Hall

February 3rd, 2012

Gregory Mitchell
 City of Portland Economic Development Dept.
 City of Portland
 389 Congress Street
 Portland, Maine 04101

David Senus, PE
 Project Manager
 Woodard & Curran
 41 Hutchins Drive
 Portland Maine 04102

Project Name: Portland Technology Park
Project ID: 10-99700005
Project Address: 300 Rand Road (aka 1581 Westbrook Street)
CBL: 249 A001 & A002; 250 A001; 251 A005& A009; 255 A002
Applicant: City of Portland Economic Development Department
Planner: Jean Fraser

Dear Mr Mitchell and Mr Senus:

On January 24th, 2012 the Portland Planning Board considered and approved a Level III Final Site Plan and Subdivision proposal to construct an Office Park Planned Unit Development comprising 7 units, with a total of 122,000 sq ft, on a 26.2 acre parcel at 300 Rand Road. The proposal includes the provision of a 1400 linear foot long roadway and the creation of a separate but associated Conservation Easement on the abutting 13.8 acre woodlands. The Planning Board reviewed the proposal for conformance with the standards of the Traffic Movement Permit, Subdivision Ordinance and Site Plan Ordinance.

The building architecture, site landscaping, site pedestrian circulation, bicycle parking, lamp specifications and signage within the limited common element areas of each unit will be subject to review and approval by the Planning Board for conformance with the Portland Technology Park Design Guidelines and City of Portland Code of Ordinances, Chapter 14 Land Use, Article v. Site Plan.

The Planning Board approved the application with the following motions, waivers and conditions as presented below.

On the basis of the application, plans, reports and other information submitted by the applicant, findings and recommendations contained in Planning Board Report # 04 -12 for the Portland Technology Park, Rand Road relevant to the Site Plan and Subdivision reviews and other regulations, and the testimony presented at the Planning Board hearing, the Planning Board finds the following:

SIDEWALK WAIVER

The Planning Board voted 5-1 (Lowry recused; Lewis opposed) that the following criteria do apply, and therefore waives the requirement for a sidewalk along the frontage of the Portland Technology Park site with Rand Road, subject to the provision of the internal sidewalk and crosswalk to the opposite side of Rand Road being constructed as part of phase 1 of the development:

- C) A safe alternative-walking route is reasonably available, for example, by way of a sidewalk on the other side of the street.
- F) Strict adherence to the sidewalk requirement would result in the loss of significant site features related to landscaping or topography that are deemed to be of a greater public value.

TRAFFIC MOVEMENT PERMIT

The Planning Board voted 6-0 (Lowry recused) that the plan is in conformance with 23 MRSA 704-A and Chapter 305 Rules and Regulations pertaining to Traffic Movement Permits.

SUBDIVISION:

The Planning Board voted 6-0 (Lowry recused) that the plan is in conformance with the subdivision standards of the Land Use Code, subject to the following eleven (11) conditions of approval:

- i. That the Subdivision Plat shall be finalized to the satisfaction of the Planning Authority and Corporation Counsel and include revisions to the phasing references, easements (including that to Portland Trails), the Condominium Association documents and relevant conditions; and
- ii. That the Condominium Association documents, including references to the Stormwater Management Inspection and maintenance requirements, shall be finalized to the satisfaction of the Corporation Counsel prior to the recording of the Subdivision Plat; and
- iii. That the applicant shall submit for review and approval by Corporation Counsel, and show on the Subdivision Plat, all final documents containing easements and encumbrances as represented in the application and on the plans; and
- iv. This approval entitles the applicant and future developers of the office park units to develop the maximum number and size of parking spaces as shown on the Subdivision Plat and Overall Site Plan subject to providing confirmation of the need for these spaces and space dimensions (via a parking analysis) at the time that the unit is under site plan review; and
- v. That the condominium association shall develop and manage a Transportation Demand Management (TDM) plan acceptable to the Planning Authority, reviewed as part of the initial and subsequent site plan approvals for each building unit within the limited common element areas; and
- vi. That the development of limited common element areas is subject to review and approval by the City of Portland Planning Authority for conformance with the Portland Technology Park Design Guidelines and City of Portland Code of Ordinances, Chapter 14 Land Use, Article v. Site Plan for building architecture, site landscaping, site pedestrian circulation, bicycle parking, lamp specifications and signage and any changes or alterations to approved traffic, parking, access, utility, exterior lighting, tree preservation and stormwater features; and
- vii. The clearing limits shall be restricted to Limited Common Element (LEC) areas, Easement Area 1 associated with the site roadway; Easement Area 2 associated with access to the trail head parking, and Easement Area 3 associated with the trail head parking; and
- viii. That the applicant and all assigns shall comply with the conditions of Chapter 32 Stormwater including Article III, Post-Construction Storm Water Management, which specifies the annual inspections and reporting requirements. The developer/contractor/subcontractor must comply with conditions of the construction stormwater management plan and sediment & erosion control plan based on City standards and state guidelines; and
- ix. That the applicant shall submit large scale Tree Preservation Plan and Forest Management Plan within three months of this approval. The Forest Management Plan would contain existing conditions and management recommendations that the condominium owners and easement holders would follow in sustainable forestry management with goals of protecting habitat, forest health and recreation; and
- x. That the proposed Limited Common Elements, shown as "LCE" on the plan, be marked with permanent markers such as FENO markers in the field prior to any work on the site to ensure that the limits of clearance and tree preservation areas are clear on the site; and
- xi. That the RPZ Zone line, trailhead parking area, significant tree areas and particular tree saves (as identified on the Tree Preservation Plan) be marked or located in the field prior to any site work.

SITE PLAN REVIEW

The Planning Board voted 5-1 (Lowry recused; Lewis opposed) that the plan is in conformance with the site plan standards of the Land Use Code, subject to the following four (4) conditions of approval:

- i. That the applicant receives and submits all required State and Federal permits prior to the issuance of a building permit; and
- ii. That the applicant shall submit revised plans/documents that address the 1.19.2012 comments from Tom Errico, Traffic Engineering Reviewer, regarding the four items under “ Additional Comments” for review and approval by the Planning Authority prior to the issuance of a building permit; and
- iii. That when individual units are proposed for site plan review the applicants should submit detailed specifications for snow storage management/protection of gravel wetlands, exterior lamp fixtures (including wall mounted), and consider the opportunity for trail links with the wider trail network on the RPZ open space part of the site; and
- iv. That the site plans for individual units shall be brought before the Planning Board for review and approval, and the Board reserves the right to review individual units under the standards of the site plan ordinance.

STANDARD CONDITIONS OF APPROVAL

Please note the following standard conditions of approval and requirements for all approved site plans:

1. **Develop Site According to Plan:** The site shall be developed and maintained as depicted on the subdivision plat and site plan and in the written submission of the applicant. Modification of any approved site plan or alteration of a parcel which was the subject of site plan approval after May 20, 1974, shall require the prior approval of a revised site plan by the Planning Board or Planning Authority pursuant to the terms of Chapter 14, Land Use, of the Portland City Code. Modification of an approved subdivision plan requires the prior review and approval of an amended subdivision plan by the Planning Board or Planning Authority.
2. **Separate Building Permits Are Required:** This approval does not constitute approval of any associated building or road plans, which must be reviewed and approved by the City of Portland's Inspection Division.
3. **Recording of Waivers:** Pursuant to 30-A MRSA section 4406(B)(1), any waiver must be specified on the subdivision plan or outlined in a notice. The plan or notice must be recorded in the Cumberland County Registry of Deeds within 90 days of the final subdivision approval.
4. **Mylar Recording Plat:** The final revised and approved subdivision recording plat must be signed by the Planning Board prior to recording in the Cumberland County Registry of Deeds. A mylar copy and 5 paper copies of the recorded plat (with dates and details of the recording) must be submitted to the Planning Division prior to the release of any associated building permit.
5. **Final Plan Meeting Conditions of Approval:** Seven (7) final sets of plans must be submitted to and approved by the Planning Division prior to the release of a building permit, street opening permit or certificate of occupancy for site plans. If you need to make any modifications to the approved plans, you must submit a revised site plan/subdivision application for prior review and approval by the Planning Authority or Planning Board.
6. **Expiration of Approvals:** The site plan approval will be deemed to have expired unless work has commenced within one (1) year of the approval. Requests to extend approvals must be received before the one (1) year expiration date. The subdivision approval is valid for three (3) years.
7. **Inspection Fee:** An Inspection Fee of \$300 is required for the site inspections conducted by the Planning Division, unless waived by the City Manager.
8. **Preconstruction Meeting:** Prior to construction, a pre-construction meeting shall be held at the project site. This meeting will be held with the contractor, Development Review Coordinator, Public Service's

representative and owner to review the construction schedule and critical aspects of the site work. At that time, the Development Review Coordinator will confirm that the contractor is working from the approved plans. The site/building contractor shall provide three (3) copies of a detailed construction schedule to the attending City representatives. It shall be the contractor's responsibility to arrange a mutually agreeable time for the pre-construction meeting.

9. **Department of Public Services Permits:** If work will occur within the public right-of-way such as utilities, curb, sidewalk and driveway construction, a street opening permit(s) is required for your site. Please contact Carol Merritt at 874-8300, ext. 8828. (Only excavators licensed by the City of Portland are eligible.)
10. **As-Built Final Plans:** Final sets of as-built plans shall be submitted digitally to the Planning Division, on a CD or DVD, in AutoCAD format (*.dwg), release AutoCAD 2005 or greater.

The Development Review Coordinator must be notified five (5) working days prior to the date required for final site inspection. The Development Review Coordinator can be reached at the Planning Division at 874-8632. All site plan requirements must be completed and approved by the Development Review Coordinator prior to issuance of a Certificate of Occupancy. Please schedule any property closing with these requirements in mind.

If there are any questions, please contact Jean Fraser at (207) 874- 8728.

Sincerely,

Carol Morrisette, Chair
Portland Planning Board

Attachments:

1. 1.19.2012 Tom Errico, Traffic Engineering Reviewer comments
2. Planning Board Report #04-12

Electronic Distribution:

Gregory A Mitchell, Acting Director of Planning and Urban Development
Alexander Jaegerman, Planning Division Director
Barbara Barhydt, Development Review Services Manager
Jean Fraser, Planner
Philip DiPierro, Development Review Coordinator
Marge Schmuckal, Zoning Administrator
Tammy Munson, Inspections Division Director
Danielle West-Chuhta, Associate Corporation Counsel
Gayle Guertin, Inspections Division
Lannie Dobson, Inspections Division
Michael Bobinsky, Public Services Director
Hard Copy: Project File

Kathi Earley, Public Services
Bill Clark, Public Services
David Margolis-Pineo, Deputy City Engineer
Greg Vining, Public Services
John Low, Public Services
Jane Ward, Public Services
Chris Pirone, Fire Department
Jeff Tarling, City Arborist
Tom Errico, TY Lin
Nelle Hanig, Economic Development Department
Assessor's Office
Approval Letter File

Attachment 1

From: Tom Errico <thomas.errico@tylin.com>
To: Jean Fraser <JF@portlandmaine.gov>
CC: Katherine Earley <KAS@portlandmaine.gov>, David Margolis-Pineo <DMP@portlandmaine.gov>, Jeff Tarling <JST@portlandmaine.gov>
Date: 1/19/2012 6:22 PM
Subject: Portland Technology Park

Jean - I have reviewed the Site Plan Application dated December 31, 2011 prepared by Woodard & Curran and offer final comments.

* The project meets requirements for a Traffic Movement Permit (TMP). The Applicant has submitted a TMP Application and I have determined that it is complete. Accordingly, a Traffic Movement Permit Scoping meeting has been scheduled for November 29th at 3:00pm in the Planning Conference Room. I would note that specific traffic study comments will be issued upon completion of the traffic study following the Scoping Meeting.

Status: A traffic impact study has been submitted by the applicant and I find the methods and conclusions to be acceptable. In general, I agree with the conclusion that a traffic signal is not warranted at the site drive and the proposed improvements provide reasonable accommodations for site traffic.

January 19, 2012 Status: No comment necessary.

* The applicant should provide information supporting a waiver for the provision of a sidewalk on Rand Road along their property frontage. Related to this issue will be the appropriate provision of how pedestrians will safely walk between the site and the sidewalk on the north side of Rand Road.

Status: The applicant has provided supporting information for a sidewalk waiver. I do not support item 1, that there is no reasonable expectation for pedestrian usage coming from, going to and traversing the site. I do support criteria 3 as noted in their letter. Jeff Tarling should provide expertise on whether criteria 6 is satisfied.

January 19, 2012 Status: It is my understanding that this issue has been resolved and a sidewalk waiver is supported by DPS.

* The applicant should provide information that supports the parking supply provided. Upon receipt of this information I will render a decision on issuing a waiver from the City's Technical Standards for parking stall size.

Status: I would suggest that additional supporting technical information be provided that supports the parking supply being proposed. One possible approach, if supporting documentation is not available, would be to design and permit the project for the assumed full parking supply as requested by the applicant. Only parking spaces that meet zoning requirements will be displayed on the plans for construction. Future expansion parking areas will be illustrated and can be constructed if tenant characteristics required the additional parking spaces.

January 19, 2012 Status: I support the condition of approval drafted by the Planning Department noting an upset limited on parking supply with final totals to be determined during site plan review.

* The applicant should provide information justifying the traffic circle on the project driveway. It does not seem to serve any traffic control purpose and requires addition pavement area that seems to run counter to project sustainability goals. If it is to remain, adjustments to the design may be required.

Status: The applicant has appropriately responded to this comment and I have no further comment.

January 19, 2012 Status: No comment necessary.

* The driveway approach to Rand Road indicates two approach lanes. I would note that the design criteria (storage length) for these lanes will be a function of analyses performed in conjunction with the traffic impact study, which has yet to be provided.

Status: The traffic study indicates the 95th% storage of the egress lane to be 80 feet and the left-turn ingress lane to be 70 feet. The proposed design provides in excess of the noted requirement and therefore I find the design to be acceptable.

January 19, 2012 Status: No comment necessary.

* I have an expectation that large tractor trailers will make occasional deliveries to individual building sites. The applicant should provide information on where these deliveries will occur and their ability to maneuver on-site without leaving the pavement.

Status: The applicant has provided turning template graphics that display adequate space for maneuvering and therefore I have no further comment.

January 19, 2012 Status: No comment necessary.

* The parking aisle near Building 6 and the motorcycle parking spaces is only 20 feet wide and does not meet City Technical Standards.

Status: The plan has been revised and I have no further comment.

January 19, 2012 Status: No comment necessary.

* The Layout plans illustrate "block" style crosswalks, but the details provide information for parallel line crosswalks. The detail should be revised.

January 19, 2012 Status: The detail has been added and I have no further comment.

* The location of the crosswalk nearest Rand Road concerns me. I need to evaluate this further before providing some guidance to the applicant.

January 19, 2012 Status: The revised crosswalk location is acceptable and I have no further comment.

* Further details on the layout of the trailhead parking lot should be provided. Specifically, what is the intended parking layout for an area that is proposed to be 58 feet wide by 60 feet long.

January 19, 2012 Status: The plans clearly note the parking lot details and I find them to be acceptable. I have no further comment.

* Coordination with the Maine Turnpike Authority is still outstanding and will need to be conducted. I will contact them as it relates to any potential traffic impact fee contribution.

January 19, 2012 Status: No action by the Maine Turnpike Authority is required for this project.

* The Design Guidelines document suggests providing parking spaces that are 8'-2" x 18' in size and therefore do not meet City standards. I would suggest that the project incorporate a combination of standard (9'x18') and compact (7.5'x15') sized parking spaces that will minimize pavement area and avoid the requirement of a technical waiver.

January 19, 2012 Status: I support the condition of approval drafted by the Planning Department that the reduced size parking stall will be permitted, but a final decision will be determined during site plan review when specific tenant needs are known.

* The provision of the a sidewalk on one side of the site driveway is based upon the assumption that it is private and does not need to following City standards for providing sidewalks on all property frontages, unless waiver criteria can be met. Corporation council should confirm that in fact the City ownership of the road does not require the City's sidewalk provision standards to be applied.

January 19, 2012 Status: It is my understanding that this issue has been addressed by Corporation Council.

****Additional Comments****

* **Through pavement arrows are not required on Rand Road and should be deleted.**

* **The applicant should confirm that adequate illumination will be provided at the proposed crosswalk on Rand Road.**

* **Signage at nose of island on Rand Road should be provided.**

* **A lane assignment sign for proposed left-turn lane on Rand Road shall be installed.**

If you have any questions, please contact me.

Best regards,

Thomas A. Errico, PE, Senior Associate
Traffic Engineering Director
T.Y. Lin International
12 Northbrook Drive
Falmouth, ME 04105
207.347.4354 direct
207.400.0719 mobile
207.781.4753 fax
thomas.errico@tylin.com<mailto:thomas.errico@tylin.com>



DESIGN GUIDELINES

for

PORTLAND TECHNOLOGY PARK

City of Portland, Maine

08.08.2012

Prepared By:
Scott Simons Architects and
Woodard & Curran, Inc.

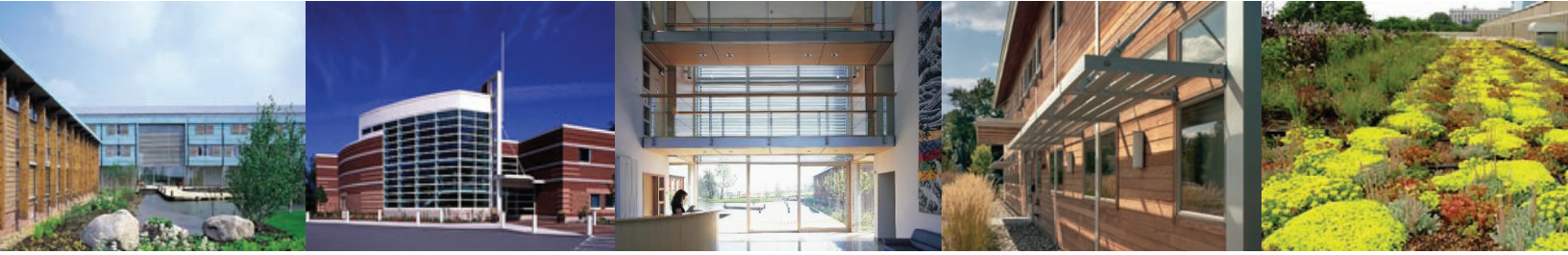


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Landscape design plays a vital role in a well designed office park by providing sun shading and in an eye pleasing humane environment.

INTRODUCTION

The development of the Portland Technology Park Development (PTPD) offers an opportunity to create a quality working environment expressing its own unique identity while, at the same time, becoming a model of environmental sustainability and a vital and integral part of the City of Portland. In general the achievement of these two goals requires:

Adherence to a code of design standards specifically identified for the building and open space.

Adherence to energy and environmental codes equal to or better than those required in the City of Portland Green Building Code.

The use of an architectural language that reflects the regional culture and the use of the building.

It is the intention of these guidelines to ensure a cohesive physical environment fitted properly to its site and its community. The guidelines are not meant to restrict the creative interpretation of Architects working at the Portland Technology Park Development in future years, but should be viewed as an opportunity to participate in the creative process of developing a timeless, sustainable and beautiful Technology Park Campus



A rendering of the proposed development from the North with the Rt 95 on-ramp shown to the right. Buildings shown are only examples which meet the intent of the Design Guidelines, they are not actual proposed designs. Rendering by Scott Simons Architects.



Buildings should be situated appropriately in the landscape with the long side facing south for passive solar opportunities. Solar shading devices in this building at USM Gorham prevent overheating in the summer while allowing for the sun to enter in the winter.
-University of Southern Maine Childcare by TFH Architects, Gorham, ME

DEVELOPMENT GOALS

The City's goal for the PTPD property is to create a forward thinking, low impact, environmentally friendly Technology Park development. The City reserves the right to review all development proposals for compliance with the Design and Energy/Environmental Standards listed below and to request changes and/or revisions to bring the design into conformance with the PTPD standards and goals.

Design Quality

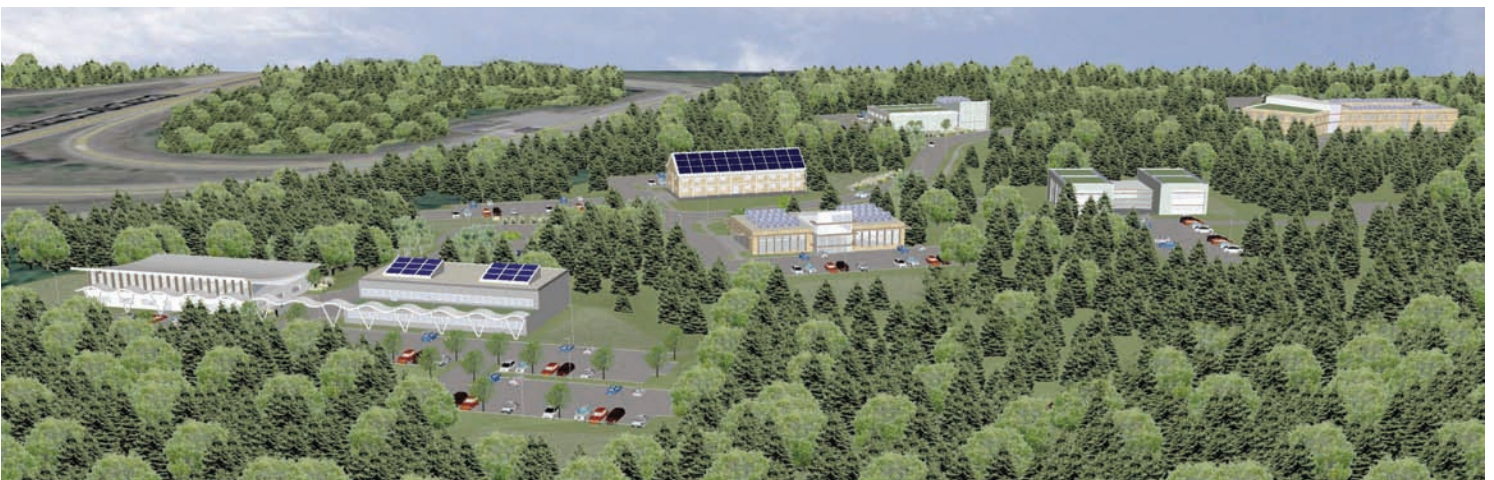
To achieve the City's goal they encourage proposals that are developed by innovative, well respected design professionals. All proposals for the PTPD unit areas shall be designed by an architect licensed to practice in the State of Maine. They shall include a complete set of drawings showing all exterior elements of the building, a colored rendering of the buildings exterior, and a sample board of the proposed exterior materials.

Durability

Development proposals for the PTPD unit areas shall be designed to last a minimum of 50 years without major repair or replacement. Materials shall be selected that have proven track record of performance in climates similar to that of Maine, that are attractive, durable, and easy to maintain.

Energy/Environmental Performance

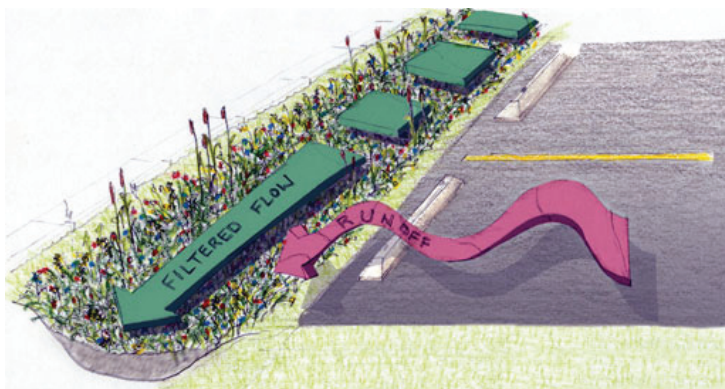
Development proposals for the PTPD unit areas shall be designed to achieve a minimum performance level that is consistent with the City's Green Building Code. Specific recommendations for performance are also outlined under Design Standards, below.



Rendering of the proposed development from the South with Rt 95 shown to the left. Buildings shown are only examples which meet the intent of the Design Guidelines, they are not actual proposed designs. Rendering by Scott Simons Architects.



Horizontal sunshading reduces solar gain and planting softens and cools the hard surfaces of the pedestrian walkways and parking.



Parking lots will slope to gravel wetlands with open drainage channels. Image Courtesy of New York MTA.



Rendering of the PTPD looking south towards building unit area 4 and gravel wetlands on the right.

SITE DESIGN

Design Relationship to Site

Individual building developments shall demonstrate a reasonably unified design relative to other building developments and common areas within the park. Compatibility of design shall include such elements as building architecture and layout (see Building Design Standards), pedestrian and vehicular circulation plans, design of open spaces, drainage, topography, vegetation and preservation of natural features. Integration of open spaces and natural features may be achieved by incorporation of outdoor amenities for the benefit of users of the site, such as outdoor seating areas, trash and recycling receptacles, and interconnectivity with adjacent trail networks.

Stormwater Management and Site Design

Low impact stormwater management and site design shall seek to mimic the existing site hydrology by limiting piped infrastructure, limiting increases to the steepness of site grades, and maximizing surface stormwater conveyance and treatment through the use of gravel wetlands. Stormwater management design shall seek to maintain the natural wetland hydrology of the site through the addition of constructed gravel wetlands, underdrained soil filters, pervious roadway base (rock sandwich), and drainage channel protections. Stormwater management design shall consist of curb cuts with surface flow to sediment forebays, followed by gravel wetlands or underdrained soil filters in place of traditional closed drainage systems.

Stormwater management and site design shall limit disruption of natural hydrology by reducing impervious cover and managing stormwater runoff through a stormwater management plan focused on maintaining natural hydrology, treatment of the water quality volume (as defined by Maine DEP), and stream channel protection. Stormwater management design shall manage runoff rate from storm events which contribute to stream channel erosion, such as the 1 and 2 year, 24 hr rainfall events. The post development runoff rate will match the pre-development rate.

Site design, good housekeeping plans and site maintenance plans should consider reducing or eliminating sources of contaminants and reducing pollutants from stormwater runoff. Site design may seek to maintain surface hydrology through means of pervious layers below roadways, driveways or parking lots in lieu of traditional, closed pipe culverts, which channelize flow. Site design shall seek to avoid or minimize impacts to the natural, wooded wetlands that encompass much of the site. Site design should seek to implement pervious surfaces, be it by reducing paved areas or by utilizing pervious hardscape technologies (pervious pavements, pervious pavers).



Planted gravel wetlands along the road edge will serve to capture and filter runoff and the native trees and landscape will be largely preserved.



Stormwater treatment wetland, Photo Courtesy of Stormwater Magazine.



Constructed wetland for stormwater treatment; Town of Acton, MA; design by Woodard & Curran Inc.

Materials or Wastes

No materials or wastes shall be deposited on any area of the site in such form or manner that they may be transferred beyond the lot boundaries by natural causes or forces. All stumps and debris generated by site clearing activities shall be utilized on site for temporary erosion control measures or immediately removed and reused offsite to the maximum possible extent. Building construction contractors shall develop a construction debris sorting and recycling plan. Building construction debris shall be recycled to the maximum extent practical.

Building tenants shall develop or implement existing recycling programs, and shall be responsible for contracting with a waste management service that provides recycling programs for paper, metal and plastic waste streams.

Building tenants shall develop and implement pollution prevention programs. Pollution prevention activities should include sweeping of paved areas (minimum of twice per year), minimization or elimination of the use of fertilizers, pesticides or herbicides on landscaped areas, strategic winter deicer use, and safe and sheltered outdoor material storage.

All material which might cause fumes or dust, or constitute a fire hazard if stored out-of-doors, shall be stored in enclosed containers.

Soil Erosion and Sediment Control

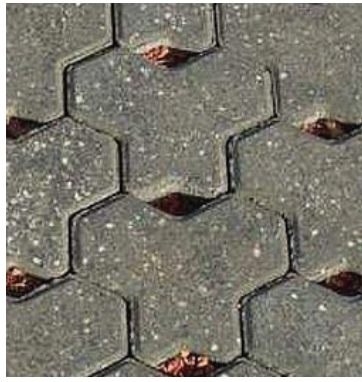
Reduce pollution from construction activities by controlling soil erosion, waterway sedimentation and airborne dust generation. This should be accomplished by following the erosion and sedimentation control plan developed for the overall site, in addition to the latest Maine DEP approved erosion and sediment control measures. Frequent, documented inspection of erosion and sediment control measures during construction shall be required in accordance with local and state regulations.

Traffic

Development proposals shall identify all proposed traffic controls (signage and striping), traffic-related pedestrian features, parking areas, and interior traffic circulation for each building site if the layout of the site differs from the permitted PTPD plan. A Traffic Movement Permit exists for the PTPD, and was based on an anticipated traffic generation for the full build-out of the permitted PTPD site. Development proposals shall modify the overall PTPD Traffic Movement Permit if the anticipated traffic generation numbers for any individual development site exceed the anticipated pro-rata share of the traffic forecast for the full site in the Traffic Movement Permit.



Examples of pervious pavers.



Parking Lots

Parking lots should be carefully integrated into the Development with respect to site access, building access and landscape qualities. Parking spaces should be designed to reduce impervious surface area as much as possible, and provide, where possible, preferred parking for low-emitting and fuel-efficient vehicles for 5% of the total vehicle parking capacity of the site. Confirmation via a parking analysis is required to justify the development of the maximum number and associated size (ranging from 8'-2" x 18' to 9' x 18') of parking spaces as approved and shown in the subdivision plat and overall site plan, which is different for each building unit but generally between 3-4 spaces/1,000 square feet of building area.

Reduce heat islands to minimize impact on microclimate and human and wildlife habitat. Consider providing any combination of the following strategies for 50% of the site hardscape (including roads, sidewalks, courtyards and parking lots): Shade (within 5 years of occupancy), paving materials with a solar reflective index (SRI) of at least 29 and/or open grid pavement system.

Sidewalks

Development proposals shall include internal sidewalks, illustrating the manner in which the developer will provide this amenity to take advantage of the topography and natural features of the site. Internal site sidewalks shall seek to limit impervious surface ratio while providing safe egress, maintaining appropriate desire line pathways, and enhancing building entrances, as applicable to each building development area. Design of sidewalks should consider use of pervious pavement products, such as pervious concrete or pervious pavers as they reduce sheet flow at the extremities of the parking lots by allowing rain to permeate the ground evenly across the walkway.



An example of acceptable light poles, furniture, sidewalks, and landscape design.



Rendering of the entry to the PTPD with building unit area 1 to the left, demonstrating the intent of the landscaping and sidewalks. The tall grasses and boulders to the right show the intended look of the proposed gravel wetlands. Rendering by Scott Simons Architects.



An example of subtle yet strong and beautiful lighting and signage.



Pedestrian walkways should be lit with bollard type fixtures (right) and parking areas should be lit with pole mounted down-lights (left).



Parking lot lighting should be pole mounted and shine in a downward direction.

Bicycle Racks

Encourage reduction in pollution and land development impacts from automobile use. It is required to provide bicycle parking in accordance with city standards. Shower and changing facilities in the building are encouraged.

EXTERIOR LIGHTING

Lighting strategies should seek to provide efficient, safe light levels, good color quality light, and minimal light pollution. Development proposals shall identify the location and style of lighting to be used in the development, and shall be accompanied by a lighting photometric plan in accordance with City Site Plan Review requirements. All roadway, driveway and parking areas shall be required to provide a light fixture of the same make, model, pole type and base design as the fixture chosen for the main access roadway (not selected at this time). Sizes can vary to accommodate specific use requirements.

All lighting fixtures shall be hooded or shielded so that the light shines downward. Efforts shall be made to minimize light trespass from the building and site, reduce sky-glow to increase night sky access, improve nighttime visibility through glare reduction and reduce development impact on nocturnal environments. The use of low energy or LED fixtures is encouraged. Light color should be uniform. The use of high pressure sodium lights is not allowed. All exterior lighting shall conform to the Site Lighting Standards of the City of Portland Technical Manual.

Light fixtures associated with the building and walkways should be of a style and height that enhance the architectural character of the buildings. Illumination of parking lots with large flood lights mounted on the building is not allowed; small, pole mounted fixtures along the edges of the lots are encouraged, and taller pole mounted fixtures will be allowed provided they meet the applicable standards of the City of Portland's Technical Manual. The objective is to provide a more even illumination, less glare, more security, and be more in scale with the desired character of the PTP Campus.

Pedestrian pathways should be illuminated with lamp post or bollard type light fixtures, of a scale and character in keeping with the size of the pathways they are serving.

Entrance way lighting should develop in a hierarchical way, with primary entrances receiving higher quality and quantity of illumination, to reflect their relative importance.

Landscape lighting can be developed to supplement other lighting, and can enhance the character of the PTP Campus. Overall, the exterior lighting should enhance the architecture and the landscaped environment, be placed in an orderly way throughout the Development to reinforce the building and pathway patterns, and harmonize with other signage and site furniture to contribute



Examples of acceptable signage.



An example of a parking lot which is integrated into the landscape. The use of grass lawns is discouraged, however.



Rendering of the PTPD looking towards building unit areas 6 and 7 with gravel wetlands in the foreground. Rendering by Scott Simons Architects.

to the desired appearance of the PTP campus. It should help attain a safe, attractively illuminated nighttime environment that complements the appeal of the daytime environment.

SIGNAGE

Development proposals shall identify all proposed signage. Signs shall be designed in proportion and constructed of permanent materials and shall be coordinated with the building and landscaping design through the use of appropriate materials and finishes. Well-designed signage is encouraged in the Development, both in front of the building and on the building, as allowed by the City's existing ordinances. The use of raised metal letters, individual metal letters, and etched masonry or wood is encouraged; surface mounted plastic letters and interior-lit box signs are not allowed. Signs should be illuminated at night either from behind the raised lettering or with focused floodlights.

LANDSCAPING

Development proposals shall include a landscaping plan and maintenance program developed by a licensed Landscape Architect in the State of Maine. The landscaping plan shall be developed in conformance with the landscaping and landscape preservation standards outlined in the City's Technical Manual and Land Use Ordinance. All developed land areas not covered by structures, parking areas or circulation facilities shall be landscaped and maintained. In order to soften the visual impact of large expanses of pavement in parking lots, vegetation shall be planted or retained where feasible on islands or planting strips. Each building development is encouraged to provide vegetation within the developed areas of their site matching to and blending with the natural woodland features of the adjacent, undeveloped areas.

Maintained lawn areas and non-native tree and plant species are discouraged. Mulched and planted areas, wildflower and conservation mix grasses and native plant and tree species are encouraged. The use of low water demand plantings is encouraged, so far as they are sited properly and can thrive in the soils and site conditions of the property. Further, each parking area shall be required to provide landscaping as outlined the City of Portland's Code of Ordinances.

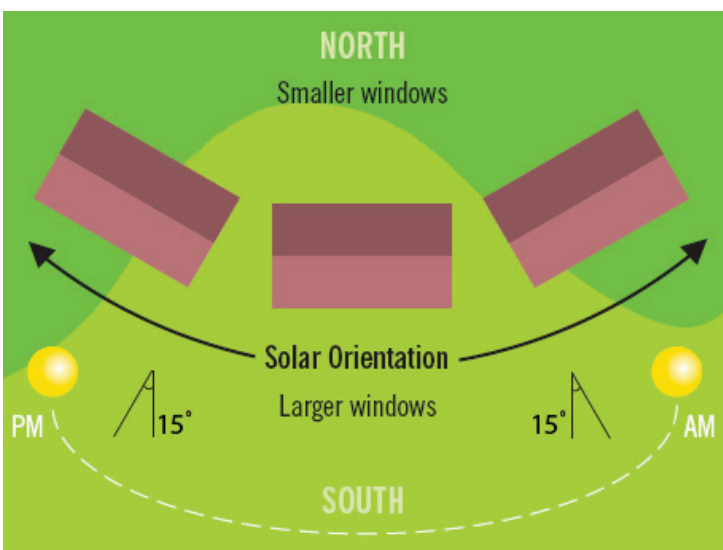
If maintained lawn areas are desired, these areas should be managed in a way to maximize soil and turf health. Lawn management should follow the guidance of the Maine Yardscaping partnership (<http://www.yardscaping.org/>).



Cascon Headquarters by Scott Simons Architects in Yarmouth, ME



This type of office building is discouraged in the modern PTPD. It is a poor reference to classical architectural forms and motifs which have little to do with the function of the building or contemporary architecture.



Proper solar orientation with the long side of the building facing south allows for solar gain in the winter months and opportunities for sun-shading on the south side in the summer.

BUILDING DESIGN STANDARDS

Building Massing and Form

The Master Plan envisions a series of one story and two story buildings developed along a curving roadway, as illustrated in the Site Plan, with natural, open space between them. All buildings should be oriented within 15 degrees of true south, to maximize their solar orientation. Rectangular footprints are encouraged, with the long sides of the rectangle facing south to maximize the opportunities for solar shading and passive solar heat gain.

Simple building forms of a contemporary style are envisioned, that sit calmly on their sites that will foster a cohesive setting for the campus. Natural colors and materials are encouraged as in the above example of the Cascon Headquarters which has a vernacular form with modern fenestration and details. It is a simple, strong volume with thoughtful detailing to control water, snow and sun. Tacked on architectural features used to mimic an architectural style such as the example to the left is discouraged. It is a poor reference to classical architectural forms and motifs which have little to do with the function of the building or to contemporary architecture.

Zoning Standards

Each building site shall meet the zoning requirements as identified within the Office Park Zone, Chapter 14 – Land Use, in the City of Portland City Code of Ordinance. Buildings shall not be greater than 55 feet in height; front yard (50'), side yard (25') and rear yard (50') setbacks between a building structure and the property line of the overall site parcel shall be maintained; pavement setbacks (15') between paved surfaces and the property line of the overall site parcel shall be maintained; a minimum number of parking spaces of 2.5/1,000 sf of building space shall be provided. The parking requirement may be waived upon review and approval by the planning authority if the building tenant can demonstrate that an alternate parking demand is anticipated for a particular building use. Reduction of paved parking areas is encouraged. See Parking Lots section of this document for further information.



The Chestnut Street Lofts in Portland by TFH Architects blends corrugated metal cladding with rich masonry for a high quality exterior envelope. Careful detailing is essential to make this successful. Note calm and cohesive color palette.



The use of split face CMU such as in this generic building is not allowed. Note lack of relationship to the local climate and built environment.



JSA Architects' entrance to the Maine Med building successfully attracts visitors to its entrance and allows you to experience the interior from the sidewalk. Patterning within the masonry and a blend of metal and glass give the modern entry distinction.

BUILDING ENVELOPE

Exterior Siding

A wide variety of exterior siding materials is acceptable within the development. The goal of the Master Plan is to achieve an overall sense of continuity, quality, and durability, as well as innovation. The use of modern and "high tech" materials is encouraged, provided they are well designed and detailed. Exterior wall assemblies must meet or exceed the Maine Uniform Building and Energy Code.

Brick is a classic exterior building material in New England and can be used for the buildings in the PTP Development. Other masonry products in contrasting or non-contrasting colors or textures, such as precast concrete, granite, terra cotta tiles, etc. may also be used either in conjunction with brick or as the primary exterior material. Exposed concrete block and split faced concrete block is not allowed.

Metal (Alucabond, Alpollic or equivalent) and synthetic (Trespa or equivalent) wall Panels and fiber cement siding (Hardiplank, Cemiplank or equivalent) are acceptable for the exterior siding material, provided they meet the durability goals of the Development. These materials are frequently used as a "rain screen", which is encouraged in the Development. Corrugated metal panels (PacClad or equivalent) are also acceptable, provided they are used in a way that does not make the buildings appear to be "industrial". Metal trim, copings, fascias, etc. are acceptable, provided the character and colors are compatible with the exterior siding material(s) and in keeping with the intent of the Master Plan.

The use of wood siding is acceptable provided it is properly treated for long-term durability. The use of painted wood siding is discouraged, because of its maintenance requirements. Vinyl siding may not be used.

High performance glass "curtainwalls" and/or "storefront" systems can be used as an exterior siding material, provided they exceed the Maine Uniform Building and Energy Code by 10%.

Windows

Minimum standards include double glazed high performance windows, with an all-window R-value which meets or exceeds the Energy Code (current code is 0.35 U-factor). High performance, double glass wall construction is encouraged, as are other innovative ways of using glass that achieve these performance goals.

Exterior window finishes can be aluminum, fiberglass, natural wood (provided they have a durable finish), and painted steel. Window frames shall be thermally broken for increased R value. Solid vinyl windows are not allowed. Highly reflective or mirrored glass may not be used. Visible Light Transmittance is encouraged to be 72% or better.



Natural wood siding can provide a great sense of warmth in combination with metal roofs, structure and sun shades. A dynamic and beautiful landscape grounds the building and enlivens the pedestrian edge.
-Cascon Headquarters in Yarmouth, ME by Scott Simons Architects

Horizontal sunshades or overhangs are recommended to cover 75% of the windows on the south exposure of the building. The exterior sun control devices should prevent direct sun penetration at noon during July and August. Vertical sunshades are encouraged on the west exposure to control solar heat gain during July and August. Properly designed shading devices will allow the sun to enter during the winter months and block the sun during the hottest months.

Entrances

Entrances must be visible from the street or entrance drive to the property. Covered entrances are required to provide a transition into the building from the rain, snow and wind. Roof canopies, roof projections, and/or recessed doors are encouraged; vestibules with inner and outer sets of doors are strongly recommended, to manage heat loss at the entrance. Walk-off mats or grills are recommended in the vestibule to reduce the amount of dirt and moisture brought into the building.

Roofs

Roofs may be sloped or flat. Flat roofs should be single ply membrane type with a minimum pitch of 1/4 inch per foot. Pitched roofs must be minimum 25 year, "architectural grade" fiberglass shingles, or a standing seam metal roof or another equally durable material which meets the design goals of the Development.

As a means to reduce the "heat island effect" and reduce cooling loads, roofing material is encouraged to have a Solar Reflective Index (SRI) of minimum 29 where the pitch is greater than 2:12. Where the roof is less than or equal to a 2:12 pitch, it is encouraged to be SRI 78 or better. "Green roofs" are encouraged, to help manage stormwater run-off from the roof and reduce "heat island effect".

Exterior Trim and Detailing

Exterior trim shall be designed to complement the exterior siding of the building. Masonry, metal, wood and synthetic materials may be used provided they are well detailed, durable, and appropriate for the development. Drip edges, copings, flashings, and other metal trim pieces associated with the roofs should be the same finish and color as the metal roofing material so as to appear as a cohesive element.



The Design Guidelines encourage green roofs such as these examples in Portland. Left: Bayside Apartment Building. Right: East End School by Stephen Blatt Architects.



Flashing and trim details should have clean lines and carefully articulated edges. -Waynflete School Arts Center by Scott Simons Architects.



Photovoltaics at Portland's East End School. -Stephen Blatt Architects

ENERGY & ENVIRONMENTAL STANDARDS

The goal for the Development is to encourage innovation, high quality, and high performance in all the buildings built in the PTP Campus. To achieve their energy objectives, the City has established a Green Building Code. They also encourage innovative proposals that will help make the campus a leader in sustainable development.

Building Materials

The use of environmentally friendly products in the design and construction of all buildings in the Development is encouraged. Building materials shall be selected to insure the use of products with the lowest environmental impact, wherever possible. Life cycle cost data, highest possible recycled material content, readily renewable resources (bamboo, wheat board, etc.), locally sourced materials, lowest VOC rating, highest energy efficiency, and other factors shall be analyzed in all recommendations for the selection of materials and systems for all buildings in the Development. Materials shall conform to the standards set forth in the Maine Uniform Building and Energy Code.



Spray foam insulation creates a tight thermal envelope with minimal air leakage.



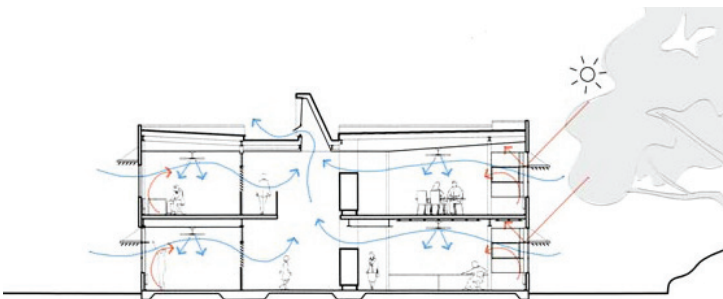
Waterless urinals significantly reduce water use.

Exterior Envelope Thermal Performance

Wall and roof assemblies shall meet or exceed the Maine Uniform Building and Energy Code. It is recommended that roof assemblies be a minimum of R-49 (Code: R-38) and wall assemblies be R-30 (Code: R-21) or greater.

Water Conservation

The use of dual flush toilets, ultra low flow or waterless urinals, motion sensors for all faucets, and other water saving features are recommended. The use of graywater and rain water harvesting for irrigation and toilet flushing is encouraged. This will reduce the long term utility costs to the owner and the impact on the public water and sewer systems.



Shading Devices and Ventilation

Solar shading devices are encouraged on a minimum of 75% of south facing windows. See section "Windows" on pages 11 and 12 for further requirements. Solar shading devices and operable windows allow views and natural ventilation while keeping the sun's heat at bay. Providing a way for built-up hot air to escape at the top of the building allows for a "stack effect" to occur, bringing in fresh air from the windows and allowing the heated air to flow upwards and out the vent or operable window. These techniques foster a healthy and comfortable work environment with minimal heating and cooling loads. See adjacent diagram and examples.



An office building example in Auckland, NZ by Architectus uses operable windows and solar shading devices to naturally control the indoor air quality.



*Appropriate natural daylighting significantly reduces the need for lighting and its associated energy consumption which lowers operational costs.
-Rare Headquarters in England by Feilden Clegg Bradley Studios*



Rooftop photovoltaics can offset the building's energy consumption and put energy back into the grid. -NASA Sustainability Base by McDonough + Partners

Lighting

Lighting electrical loads account for approximately 25% of the energy use of commercial buildings. Careful attention to reducing the watts/SF of development will go a long way towards reducing overall energy consumption. Appropriate use of natural daylighting and occupancy sensors can significantly reduce electrical loads.

The use of energy efficient LED and/or florescent light fixtures is highly recommended, not only to meet the State's energy code but to meet the goals of the PTP Campus.

Mechanical Systems

The mechanical systems shall be designed to minimize energy consumption and maximize human comfort throughout the range of operating conditions. While the most important part of energy conservation comes in a well insulated and tightly sealed building envelope, the design of the HVAC system is critical to meeting these goals and the City's Green Building Code.

Alternative Energy

Renewable energy use is encouraged as a means to decrease the use of fossil fuels and the release of harmful gasses and toxins into the environment. Many systems have a short pay-back time line and will significantly decrease the annual operating budget of the building. The use of photo-voltaic cell arrays to power the building is encouraged, both on the building and remotely located from the building as site constraints allow. The use of solar hot water roof panels is also encouraged, to generate hot water for use in the building. Rooftop mounted panels are acceptable.

CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN PRINCIPLES

Development proposals shall be designed incorporating Crime Prevention Through Environmental Design (CPTED) principles, as outlined in the City's Technical Manual. Development proposals shall create formal and informal natural surveillance networks on the site to increase on-site visibility and the safety of legitimate users and to deter potential offenders.

Physical Features

The placement and design of physical features shall maximize visibility to allow for surveillance opportunities to and from site features such as entrances and exits, walkways, assembly areas, corridors, stairways, windows, parking lots, landscaping, fences or walls, and any other physical attributes.

Lighting

The lighting of the site and building shall meet the lighting guidelines of this document, the City's technical standards for site lighting, and shall enable users to observe movement and activities on the site during the day and at night. Motion sensor activated lighting is permitted to provide adequate illumination of the site at night while still complying with applicable lighting curfew standards. Specifically, the lighting plan should satisfy the following criteria:

Create nighttime illumination of pedestrian travel paths and gathering areas, entrances and exits, and parking lots by achieving the following:

- Provide a clear view of an area from a distance and enable anyone moving in or immediately around it to be easily seen.
- Deny potential hiding spaces adjacent to existing and proposed pedestrian travel routes.
- Permit facial identification at a distance of at least 30' and create the perception of being identified.

Mechanical Surveillance Systems

If necessary, mechanical surveillance systems such as CCTV may be installed to monitor areas not easily observed such as parking lots and garages.

Access Management

Development proposals shall be designed to provide visible pathways and to offer proper guidance for legitimate users to access the site and to discourage unauthorized use of the site.

Orientation and Wayfinding

Development proposals shall be designed so that the layout, features and/or signage clearly guide the movement of vehicles and pedestrians along safe and predictable paths both during the daytime and nighttime. Specifically, the development proposals shall satisfy the following criteria:

- Placement of signage, lighting fixtures, landmarks, and landscape design features shall clearly guide users to and from the facility.
- Site features shall be designed to avoid the creation of entrapment zones that afford users no opportunity to escape or retreat from an approaching hazard.

Mechanical Access Control

If necessary, mechanical access control systems may be implemented such as assigning personnel at key building entry points or establishing other procedures such as mechanical auto closing devices, key cards, gates and other locking devices.

Territorial Reinforcement

Proposed developments shall be designed to clearly delineate private, semi-private, and public space.

Planning and Urban Development Department Planning Division



Subject: PTP Design Review – Patrons Oxford

Written by: Caitlin Cameron, Urban Designer

Date of Review: Friday, October 30, 2015 updated 11.4.2015

The proposed new construction of a commercial office in the Portland Technology Park was reviewed according to the *Portland Technology Park Design Guidelines*. The project was reviewed by Caitlin Cameron, Urban Designer, Jean Fraser, Planner, and Shukria Wiar, Planner.

Findings of the Design Review:

The Technology Park Guidelines expresses the following goals for new development projects:

- Design Quality
- Durability
- Energy/Environmental Performance

The proposal for Patrons Oxford Offices is a contemporary design that conveys an identity of innovation and technology. Several energy and environmental performance strategies are integrated with the building design including roof forms to maximize photovoltaics, building orientation for passive solar, low-e windows, and a light colored roof to reduce heat island effect. The project meets the overall goals of the Portland Technology Park Design Guidelines but there are some outstanding items below regarding specific standards.

Design Review Comments (*red text denotes standards that are not met or additional information needed*):

PTP Portland Technology Park- Site Design Standards

Signage – Met, **more information needed** – The sign master plan shows three signs as part of the project. The letters will be metal as recommended in the standards and will be lit either from behind or with side lights. Exact placement of the monument and building sign is not currently indicated. It appears the large building sign will be visible to the drive approach. The review panel questions whether the large building sign could potentially be placed higher on the façade. **Signs do not include dimensional information and cannot be reviewed according to the Sign Ordinance requirements at this time – this information will be needed at time of sign permit application.**

PTP Portland Technology Park- Building Design Standards

Building Massing and Form – Met – The proposed building is two stories with the long dimension oriented South. The form is a modified rectangle and the overall design is

contemporary in style. Architecture provides an integrated design. Wood screens are incorporated to address the preference for natural colors and materials. The roof line is varied and will potentially provide visual interest to the highway approach.

Zoning Standards – Met – Building is proposed to be two stories with pavement setbacks.

Building Envelope

- **Exterior Siding** – Met – The proposed materials meet the standard for continuity, quality, and durability and convey a “high tech” quality. Materials include Fiber cement board, storefront, metal siding, and wood siding. No vinyl or masonry block is proposed. The review panel expressed the desire to see the vertical wood screen elements be integrated down to the ground floor if possible to provide a cohesive design element. The storefront system exceeds MUBEC by 17% in performance (10% is required).
- **Windows** – Met – Exterior window finishes appear to meet the standard.
 - Window Transparency – Met – glass will not be reflective and will meet the requested level of transparency at VLT 70.
 - Passive Solar - Sun shades are recommended to cover 75% of the windows on the South exposure. There is an overhang on the ground level to provide the exterior shading, but no shades or overhangs proposed on the second floor. The second floor will control solar exposure through the combination of high performance glass and
- **Entrances** – Met – The entrance faces the entry drive and includes a vestibule as recommended by the standard. A covered entrance is required to provide a transition into the building and is provided with a 10’ overhang. The entrance is also demarcated by three columns.
- **Roofs** – Met – flat and sloped roofs are permitted. The project uses a light-colored roof to reduce Heat Island Effect as required by the standard.
- **Exterior Trim and Detailing** – Met – Metal trim details proposed to match siding finish. Wood screens are proposed as a natural material detail.

From: Jeff Tarling
To: Jean Fraser
Date: 11/4/2015 4:09 PM
Subject: TECH PARK

Jean -

In review of the Oxford offices at the Portland Tech Park the overall landscape plan or theme appears to be exactly as envisioned in the original guidelines. Good use of native plants, thoughtful layout of building, drives & parking (circulation). The landscape plan deserves an "A" for integrating the Tech Park design concepts matching the challenges of nearby wetlands and natural areas.

"Tree Save" areas - field inspection is needed to better comment on Parking Lot #1 area. Additional 'tree save' comment will be forwarded for this section.

Thanks,

Jeff Tarling

Review Memorandum

TO: Jean Fraser –City of Portland -Planner

FROM: James Seymour, P.E.
Development Engineering Review Consultant
Sebago Technics, Inc.

DATE: November 5, 2015

RE: Preliminary Site Plan Review –
Proposed Patrons Oxford Insurance Building
Unit 4-Technology Park, Portland Maine

We have reviewed the submitted Site Development Plan for the Proposed Patrons Oxford planned on a commercial lot located off Technology Park Drive. The site is located in the O-P Office Park Zone as part of a Planned Unit Development originally approved in 2012. We have been requested to review the plan and application to assess whether it has met the City of Portland site plan requirements for the Development Unit #4, for the proposed 19,000 SF Patron Oxford insurance building and associated parking. Based on discussion with Planning Staff this is part of a larger Site Location of Development Application being concurrently reviewed by the Maine Department of Environmental Protection (Maine DEP). The overall site plan has had some recently relatively minor adjustments and revisions to the road and stormwater treatment areas, but we feel that this are best handled by the DEP as a separate amendment and as part of the grand view of the entire office park application, and our focus will be on the Unit 4 development itself.

We received a copy of the proposed Site Development Plans, stormwater management report and calculations, and various site application narratives from Woodard and Curran. Following our initial review comments of the site plan, we have met with the design engineering team of Woodard and Curran, and have since reduced our inquiries down to a few basic items. Most of our comments for final design review will be focused on engineering details, added note requests, and tables to assist the City and future reviewers to understand the stormwater treatment components assigned for each lot, as well as assurances that each development stands independent but at the same time is in general conformance with the overall plans for the entire Office Park.

We have a few additional concerns with the parking/grading design and have offered comments and suggestions. Following our meeting with Woodard and Curran on November 4, we feel that many of the concerns will be addressed by future submissions. To assist the Planning Board during the workshop review, we have isolated the topics down to a few of the outstanding concerns raised:

Geotechnical/Saturated Soils:

Due to the site's known presence of poor soils consisting of marine clays and high groundwater tables, we had concerns about the impact the building design, parking, and pedestrian areas would be subject to, from a structural stability standpoint. (More so from both a settlement concern and frost thaw environment). The engineers have submitted a late geotechnical report which we have not reviewed, but are confident with recommendation for light weight concrete, careful structural analysis inclusion into base soil designs, that the building will promote practices to limit or prevent any substantial settlement or movement. Also the design teams are working with the geotechnical engineers to assess construction details and plans to address concerns of other surface applications such as parking and pedestrian accesses to prevent groundwater impacts and freeze thaw due to susceptible soils to promote stable structural integrity and to reduce impacts from frost heaves or settlement resulting from freeze cycles during soil saturation. We feel that by integrating the geotechnical studies and recommendations that these can be handled by site specific design details during the final plan review period.

Stormwater Treatment:

The Maine DEP and City of Portland uses the same Stormwater BMPs which require that the engineering design consider infiltration or filtration of runoff through the use of measures such as gravel wetponds. The current design does incorporate treatment of the parking and building area's runoff impacts by use of gravel wetlands. A concern we have raised is that during large rain events that the modelling has consistently shown that, (again due to the limitations of flat topography, and poor wet soils) that there is little drainage relief across the site. The site will experience temporary flooding which in larger events will back flows up or near parking areas or pedestrian access areas. We are not opposed to the design as long as considerations are made to address the saturation of soils and flooding elevations with the design to improve site base materials. Again the overall project will be reviewed by the Maine DEP, and the site has provided acceptable treatment from impervious areas through use of gravel wetlands (labelled pond 4 and 8). We have requested that either tables specific to the design of Unit #4 be added to the plans or in separate submission such that we can track and follow the impacts on a lot basis. We do feel that Woodard and Curran will be able to provide the documentation and improve the designs to assess, or revise the details, to account for this worst case scenario following winter melts and or flooding events.

Construction Management Plan:

We have asked for more details regarding the type of construction activities that will be required to prepare the building foundation base and parking areas, as they deal with high groundwater tables during excavation. Dewatering or standard pumping of groundwater will be necessary to construct foundations. The impact is that this creates dirty sediment filled discharges. Thereby it will be imperative that we have a site specific construction management plans to assess all environmental impacts that could be raised during this project's site construction. Items will need to include dewatering measures, discharge

locations, specific erosion and sedimentation measures, excavated soil stockpiling locations, and include efforts for maintaining cleared streets by sweeping during construction activities (truck tracking).

General Site Plan Revisions:

Given a site plan dealing with near level grading, and the joint stormwater treatment measures being shared with the overall development as part of a larger Maine DEP development, we will be suggestion some minor revisions or surface grading and adding notes for clarity of tracking responsibilities, and to asses Unit #4 independently. We have discussed a few areas of grading problems with the applicant and they will incorporate these minor revisions by small plan or grade changes, or by adding additional notes for clarity. In particular we will be looking at pedestrian access elevations, general grading, and inclusion of any Maine DEP conditions of approval which could impact tis lots design. (such items could include limitations on tree clearing, drainage restrictions, etc)

Summary:

We understand the projects intent, incorporation of drainage treatment measures to improve water quality impacts from paved surfaces. Overall we feel the design is acceptable for the proposed use. We have discussed some of the concerns of the treatment design, groundwater impacts, and geotechnical concerns with the engineers from Woodard and Curran and feel those can be corrected immediately by coordination with the geotechnical soils engineering recommendations. We feel all the discussed items can be incorporated into the final design which will be required to be submitted, reviewed by the City staff and engineers, prior to any final Planning Board approval.

Please feel free to contact me if you or the design-professional have questions with our comments or concerns. We will be available to assist you and the applicant, if warranted, to address any further questions. We look forward to assisting the City and applicant to work through the final design issues associated with this important community project development within the City of Portland's Technology Park..

Sincerely;

James R. Seymour P.E
Consulting Review Engineer

JRS:jrs

Att. 7

From: Tom Errico <thomas.errico@tylin.com>
To: Jean Fraser <JF@portlandmaine.gov>
CC: David Margolis-Pineo <DMP@portlandmaine.gov>, Jeremiah Bartlett <JBartle...
Date: 11/5/2015 11:38 AM
Subject: Portland Technology Park LCE 4 - Preliminary Traffic Comments

Jean - I have reviewed the application materials and offer the following preliminary traffic comments.

- * I have reviewed the trip generation analysis conducted by Gorrill-Palmer and concur that the proposed project complies with the Traffic Movement Permit and a traffic study is not required.
- * I have reviewed the parking study and find it to be acceptable. Given employee information and data from the ITE Parking Generation Manual, a sufficient parking supply will be provided.
- * The site plan should account for likely origin/destination patterns of pedestrians when walking between the main parking lot and the entry. I would suggest a more direct pedestrian facility be provided.
- * The applicant should provide supporting documentation on the need for the channelization island at the driveway intersection with the main entry roadway.
- * The vehicle turnaround at the end of the parking lot can be modified to reduce pavement area.

If you have any questions, please contact me.

Best regards,

Thomas A. Errico, PE
Senior Associate
Traffic Engineering Director
[T.Y. Lin International]T.Y. Lin International
12 Northbrook Drive
Falmouth, ME 04105
207.781.4721 (main)
207.347.4354 (direct)
207.400.0719 (mobile)
207.781.4753 (fax)
thomas.errico@tylin.com<mailto:thomas.errico@tylin.com>
Visit us online at www.tylin.com<http://www.tylin.com>
Twitter | Facebook | LinkedIn | YouTube

"One Vision, One Company"

Please consider the environment before printing.

Att. 8

From: David Margolis-Pineo
To: Jean Fraser
Date: 11/3/2015 4:39 PM
Subject: Review Comments Lot 4 Tech Park
Attachments: David Margolis-Pineo.vcf

November 3, 2015

Memo To: Jean Fraser
Barbara Barhydt
From: David Margolis-Pineo
Re: Development Review Comments for the Portland Technology Park – Lot 4

The Department of Public Services has the following Preliminary Review Comments:

1. The applicant will need to submit a Wastewater Capacity Application for review and approval. The project application states the new building will house approximately 60 to 65 persons. Please include allowances for any food preparation facilities. Please be aware that a grease capturing device may be required in the food prep area.
2. Add to Note 21 on Sheet G-01 that "Under no circumstances shall top soil be removed from the boundaries of the Portland Technical Park. If a surplus of top soil exist, the contractor shall coordinate with the City representative to find a location to stockpile, seed and mulch.
3. Sheet C-09 shall be modified to show the proposed 8" sanitary sewer between smh #7 and smh #8 to be install with a straight line and grade or show a new manhole on the stub extending from smh #7. If the stub is re-installed, the road shall be repaved to the point of disturbance.
4. Also, please superimpose smh #9 (by others) on Sheet C-04 showing the proposed location, and elevations of rim and inverts. The intent is to avoid comment 3 above in the future.

This Department has no further comments at this time.

David Margolis-Pineo
Deputy City Engineer
Department of Public Services
55 Portland St.
Portland, ME 04101
Office 207-874-8850
Fax 207-874-8852
Cell 207-400-6695
dmp@portlandmaine.gov



October 5, 2015

Jean Fraser, Planner
City of Portland Planning Office
389 Congress Street
Portland, ME 04101

Re: Portland Technology Park
Subdivision Amendment

Dear Jean:

On behalf of the City of Portland, we are submitting an application for an amendment to the Subdivision Plat for the Portland Technology Park Condominium located on Rand Road in Portland Maine. It is our understanding that the fee for this amendment is \$500, however as the applicant is the City of Portland, the fee is waived. This application includes the amended plat. For all other materials in support of the associated changes, please see the Level III Site Plan application that has been submitted separately.

The Plat for the Technology Park was first approved on January 24, 2012, recorded on October 10, 2012, and the first amendment was approved on March 10, 2015. This amendment added a 20-foot wide Unitil gas line easement through a portion of the Technology Park. A copy of this most recent amended plat is attached for reference. At this time, the only portion of the Technology Park that has been constructed is approximately 950 linear feet of roadway.

A Purchase and Sale Agreement has been executed between the City of Portland and Patrons Oxford Insurance for Limited Common Element (LCE) 4 within the Technology Park. Patrons Oxford Insurance is proposing to develop Unit 4 and LCE 4, and a Level III Site Plan application is being submitted concurrently for this work. The development of LCE 4 will also include the construction of a short section of roadway to extend access to the proposed driveway of LCE 4.

Modifications to some of the original LCE and road easement boundaries will be required to accommodate the proposed LCE 4 development. The road has been shifted, resulting in some minor changes to the adjacent LCE 5, 6, and 7 lots. The Unitil gas line easement will also be shortened to end at the new road easement boundary. The enclosed draft Subdivision Plat shows the proposed new boundaries.

The Phase boundaries have not yet been updated on the Subdivision Plat. As part of the Maine Department of Environmental Protection (DEP) and Army Corps permitting process for the overall technology park, a Phase plan for wetland impacts was developed. A Minor Revision to the Natural Resource Protection Act (NRPA) has been submitted to the Maine DEP and Army Corps, and as part of this submission, a revision to the wetland impact phasing has been proposed. The enclosed wetland impact figure shows two phases as outlined below:

- Phase 1 – 1,120 linear feet of road including road that has already been built and road that is being proposed for construction as part of this project, LCE 1, LCE 2, and LCE 4.
- Phase 2 – 270 linear feet of remaining road, LCE 3, LCE 5 (including trailhead access and parking), LCE 6, & LCE 7.



Pending approval from the Maine DEP and the Army Corps of Engineers of the wetland phasing we propose an adjustment to the Subdivision Plat Phase boundaries to match with the wetland phasing. We are happy to discuss this proposed phasing change with you further.

Please do not hesitate to contact me at (207)558-3763 or by email at lswett@woodardcurran.com if you have any questions or require additional information.

Sincerely,

WOODARD & CURRAN INC.

Lauren Swett, PE
Project Engineer

Enclosures: 2015.05.05 Recorded First Amended Subdivision Plat
 DRAFT Second Amended Subdivision Plat
 Wetland Impact Plan

cc: Nelle Hanig; Business Dev. Rep., Economic Development Division, City of Portland



Executive Department
Jon P. Jennings, City Manager

September 23, 2015

Re: Portland Technology Park Site 4 – Agent Authorization

To Whom It May Concern:

Woodard and Curran will be acting as the City of Portland's agent for all local, state, and federal permitting associated with the Portland Technology Park, Site 4 development project, located off of Rand Road in Portland, Maine.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jon P. Jennings", is written over a faint, larger version of the same signature.

Jon P. Jennings
City Manager



Jeff Levine, AICP, Director
Planning & Urban Development Department

Electronic Signature and Fee Payment Confirmation

Notice: Your electronic signature is considered a legal signature per state law.

By digitally signing the attached document(s), you are signifying your understanding this is a legal document and your electronic signature is considered a **legal signature** per Maine state law. You are also signifying your intent on paying your fees by the opportunities below.

I, the undersigned, intend and acknowledge that no Site Plan or Historic Preservation Applications can be reviewed until payment of appropriate application fees are **paid in full** to the Inspections Office, City of Portland Maine by method noted below:

- ☐ Within 24-48 hours, once my complete application and corresponding paperwork has been electronically delivered, I intend to **call the Inspections Office** at 207-874-8703 and speak to an administrative representative and provide a credit/debit card over the phone.
- ☐ Within 24-48 hours, once my application and corresponding paperwork has been electronically delivered, I intend to **call the Inspections Office** at 207-874-8703 and speak to an administrative representative and provide a credit/debit card over the phone.
- ☐ I intend to deliver a payment method through the U.S. Postal Service mail once my application paperwork has been electronically delivered.

**It is our understanding that, as the City of Portland is the Applicant, fees are waived.*

Lauren Swett

Applicant Signature:

Lauren Swett

I have provided digital copies and sent them on:

10/5/15

Date:

10/5/15

Date:

NOTE:

All electronic paperwork must be delivered to buildinginspections@portlandmaine.gov or by physical means i.e. a thumb drive or CD to the Inspections Office, City Hall, 3rd Floor, Room 315.



Level III – Preliminary and Final Site Plans Development Review Application Portland, Maine

Planning and Urban Development Department
Planning Division

Portland's Planning and Urban Development Department coordinates the development review process for site plan, subdivision and other applications under the City's Land Use Code. Attached is the application form for a Level III: Preliminary or Final Site Plan. Please note that Portland has delegated review from the State of Maine for reviews under the Site Location of Development Act, Chapter 500 Stormwater Permits, and Traffic Movement Permits.

Level III: Site Plan Development includes:

- New structures with a total floor area of 10,000 sq. ft. or more except in Industrial Zones.
- New structures with a total floor area of 20,000 sq. ft. or more in Industrial Zones.
- New temporary or permanent parking area(s) or paving of existing unpaved parking areas for more than 75 vehicles.
- Building addition(s) with a total floor area of 10,000 sq. ft. or more (cumulatively within a 3 year period) except in Industrial Zones.
- Building addition(s) with a total floor area of 20,000 sq. ft. or more in Industrial Zones.
- A change in the use of a total floor area of 20,000 sq. ft. or more in any existing building (cumulatively within a 3 year period).
- Multiple family development (3 or more dwelling units) or the addition of any additional dwelling unit if subject to subdivision review.
- Any new major or minor auto business in the B-2 or B-5 Zone, or the construction of any new major or minor auto business greater than 10,000 sq. ft. of building area in any other permitted zone.
- Correctional prerelease facilities.
- Park improvements: New structures greater than 10,000 sq. ft. and/or facilities encompassing 20,000 sq. ft. or more (excludes rehabilitation or replacement of existing facilities); new nighttime outdoor lighting of sports, athletic or recreation facilities not previously illuminated.
- Land disturbance of 3 acres or more (includes stripping, grading, grubbing, filling or excavation).

Portland's development review process and requirements are outlined in the Land Use Code (Chapter 14) which is available on our website:

Land Use Code: <http://me-portland.civicplus.com/DocumentCenter/Home/View/1080>

Design Manual: <http://me-portland.civicplus.com/DocumentCenter/View/2355>

Technical Manual: <http://me-portland.civicplus.com/DocumentCenter/View/2356>

Planning Division
Fourth Floor, City Hall
389 Congress Street
(207) 874-8719

Office Hours
Monday thru Friday
8:00 a.m. – 4:30 p.m.

PROJECT NAME: Portland Technology Park

PROPOSED DEVELOPMENT ADDRESS:

0 Rand Road

PROJECT DESCRIPTION:

Project also includes the re-alignment of the access road and the remaining lots within the previously approved Portland Technology Park Subdivision, which are owned by the City of Portland, to accomodate the development of Limited Common Element (LCE) 4 and associated infrastructure for the Patrons-Oxford Insurance headquarters, including utilities and stormwater management system.

CHART/BLOCK/LOT: 249 A001001

PRELIMINARY PLAN _____ (date)

FINAL PLAN 10/5/15 (date)

***Original Submission for Portland Technology Park: 11/5/10**

CONTACT INFORMATION:

Applicant – must be owner, Lessee or Buyer Name: City of Portland - Economic Development Department, c/o Gregory Mitchell Business Name, if applicable: Address: 389 Congress Street City/State : Portland/ME Zip Code: 04101	Applicant Contact Information Work # 207-874-8945 Home# Cell # Fax# 207-756-8217 e-mail: gmitchell@portlandmaine.gov
Owner – (if different from Applicant) Name: Address: City/State : Zip Code:	Owner Contact Information Work # Home# Cell # Fax# e-mail:
Agent/ Representative Name: Woodard & Curran, c/o Lauren Swett, PE Address: 41 Hutchins Drive City/State : Portland/ME Zip Code: 04102	Agent/Representative Contact information Work # 207-774-2112 Cell # e-mail: lswett@woodardcurran.com
Billing Information Name: City of Portland - Economic Development Department, c/o Gregory Mitchell Address: 389 Congress Street City/State : Portland/ME Zip Code: 04101	Billing Information Work # 207-874-8945 Cell # Fax# 207-756-8217 e-mail: gmitchell@portlandmaine.gov

Engineer *See Agent/Representative* Name: Address: City/State : Zip Code:	Engineer Contact Information Work # Cell # Fax# e-mail:
Surveyor Name: SGC Engineering, LLC c/o Scot MacDonald Address: 501 County Road City/State : Westbrook/ME Zip Code: 04092	Surveyor Contact Information Work # (207)347-8100 Cell # Fax# e-mail:
Architect Name: Scott Simons Architects, c/o Austin Smith Address: 75 York Street City/State : Portland/ME Zip Code: 04101	Architect Contact Information Work # 207-772-4656 Cell # Fax# e-mail: austin@simonsarchitects.com
Attorney Name: Ann Freeman Address: 389 Congress Street City/State : Portland/ME Zip Code: 04101	Attorney Contact Information Work # 207-874-8480 Cell # Fax# 207-874-8497 e-mail: amf@portlandmaine.gov

APPLICATION FEES:

Check all reviews that apply. (Payment may be made by Credit Card, Cash or Check payable to the City of Portland.)

Level III Development (check applicable reviews) ___ Less than 50,000 sq. ft. (\$500.00) ___ 50,000 - 100,000 sq. ft. (\$1,000) ___ 100,000 – 200,000 sq. ft. (\$2,000) ___ 200,000 – 300,000 sq. ft. (\$3,000) ___ over \$300,00 sq. ft. (\$5,000) ___ Parking lots over 11 spaces (\$1,000) ___ After-the-fact Review (\$1,000.00 plus applicable application fee) Plan Amendments (check applicable reviews) ___ Planning Staff Review (\$250) <u>X*</u> Planning Board Review (\$500) The City invoices separately for the following: • Notices (\$.75 each) • Legal Ad (% of total Ad) • Planning Review (\$40.00 hour) • Legal Review (\$75.00 hour) Third party review fees are assessed separately. Any outside reviews or analysis requested from the Applicant as part of the development review, are the responsibility of the Applicant and are separate from any application or invoice fees.	Other Reviews (check applicable reviews) ___ Traffic Movement (\$1,000) ___ Stormwater Quality (\$250) ___ Subdivisions (\$500 + \$25/lot) # of Lots ___ x \$25/lot = _____ ___ Site Location (\$3,000, except for residential projects which shall be \$200/lot) # of Lots ___ x \$200/lot = _____ ___ Other _____ ___ Change of Use ___ Flood Plain ___ Shoreland ___ Design Review ___ Housing Replacement ___ Historic Preservation
--	---

***It is our understanding that, as the City of Portland is the Applicant, fees are waived.**

APPLICATION SUBMISSION:

1. All site plans and written application materials must be submitted electronically on a CD or thumb drive with each plan submitted as separate files, with individual file which can be found on the **Electronic Plan and Document Submittal** page of the City's website at <http://me-portland.civicplus.com/764/Electronic-Plan-and-Document-Submittal>
2. In addition, one (1) paper set of the plans (full size), one (1) paper set of plans (11 x 17), paper copy of written materials, and the application fee must be submitted to the Building Inspections Office to start the review process.

The application must be complete, including but not limited to the contact information, project data, application checklists, wastewater capacity, plan for fire department review, and applicant signature. The submissions shall include one (1) paper packet with folded plans containing the following materials:

1. One (1) full size site plans that must be folded.
2. One (1) copy of all written materials or as follows, unless otherwise noted:
 - a. Application form that is completed and signed.
 - b. Cover letter stating the nature of the project.
 - c. All Written Submittals (Sec. 14-525 2. (c), including evidence of right, title and interest.
3. A stamped standard boundary survey prepared by a registered land surveyor at a scale not less than one inch to 50 feet.
4. Plans and maps based upon the boundary survey and containing the information found in the attached sample plan checklist.
5. One (1) set of plans reduced to 11 x 17.

Please refer to the application checklist (attached) for a detailed list of submission requirements.

APPLICANT SIGNATURE:

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Planning Authority and Code Enforcement's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

This application is for a Level III Site Plan review. It is not a permit to begin construction. An approved site plan, a Performance Guarantee, Inspection Fee, Building Permit, and associated fees will be required prior to construction. Other Federal, State or local permits may be required prior to construction, which are the responsibility of the applicant to obtain.

Signature of Applicant: 	Date: 
--	--

PROJECT DATA

The following information is required where applicable, in order to complete the application.

Total Area of Site	1,741,700	sq. ft.
Proposed Total Disturbed Area of the Site	595,465	sq. ft.
If the proposed disturbance is greater than one acre, then the applicant shall apply for a Maine Construction General Permit (MCGP) with DEP and a Stormwater Management Permit, Chapter 500, with the City of Portland.		
Impervious Surface Area		
Impervious Area (Total Existing)	0	sq. ft.
Impervious Area (Total Proposed)	405,979	sq. ft.
Building Ground Floor Area and Total Floor Area		
Building Footprint (Total Existing)	0	sq. ft.
Building Footprint (Total Proposed)	80,500	sq. ft.
Building Floor Area (Total Existing)	0	sq. ft.
Building Floor Area (Total Proposed)	121,000	sq. ft.
Zoning		
Existing	OP & RP	
Proposed, if applicable	N/A	
Land Use		
Existing	Technology Business Park	
Proposed	N/A	
Residential, If applicable		
# of Residential Units (Total Existing)	N/A	
# of Residential Units (Total Proposed)		
# of Lots (Total Proposed)		
# of Affordable Housing Units (Total Proposed)		
Proposed Bedroom Mix		
# of Efficiency Units (Total Proposed)	N/A	
# of One-Bedroom Units (Total Proposed)		
# of Two-Bedroom Units (Total Proposed)		
# of Three-Bedroom Units (Total Proposed)		
Parking Spaces		
# of Parking Spaces (Total Existing)		
# of Parking Spaces (Total Proposed)		
# of Handicapped Spaces (Total Proposed)		
Bicycle Parking Spaces		
# of Bicycle Spaces (Total Existing)		
# of Bicycle Spaces (Total Proposed)		
Estimated Cost of Project		

PRELIMINARY PLAN (Optional) - Level III Site Plan			
Applicant Checklist	Planner Checklist	# of Copies	GENERAL WRITTEN SUBMISSIONS CHECKLIST
		1	Completed Application form
		1	Application fees
		1	Written description of project
		1	Evidence of right, title and interest
		1	Evidence of state and/or federal approvals, if applicable
		1	Written assessment of proposed project's compliance with applicable zoning requirements
		1	Summary of existing and/or proposed easement, covenants, public or private rights-of-way, or other burdens on the site
		1	Written requests for waivers from site plan or technical standards, if applicable.
		1	Evidence of financial and technical capacity
		1	Traffic Analysis (may be preliminary, in nature, during the preliminary plan phase)
Applicant Checklist	Planner Checklist	# of Copies	SITE PLAN SUBMISSIONS CHECKLIST
		1	Boundary Survey meeting the requirements of Section 13 of the City of Portland's Technical Manual
		1	Preliminary Site Plan including the following: (information provided may be preliminary in nature during preliminary plan phase)
			Proposed grading and contours;
			Existing structures with distances from property line;
			Proposed site layout and dimensions for all proposed structures (including piers, docks or wharves in Shoreland Zone), paved areas, and pedestrian and vehicle access ways;
			Preliminary design of proposed stormwater management system in accordance with Section 5 of the Technical Manual (note that Portland has a separate applicability section);
			Preliminary infrastructure improvements;
			Preliminary Landscape Plan in accordance with Section 4 of the Technical Manual;
			Location of significant natural features (including wetlands, ponds, watercourses, floodplains, significant wildlife habitats and fisheries or other important natural features) located on the site as defined in Section 14-526 (b) (1);
			Proposed buffers and preservation measures for significant natural features, as defined in Section 14-526 (b) (1);
			Location , dimensions and ownership of easements, public or private rights of way, both existing and proposed;
			Exterior building elevations.

FINAL PLAN - Level III Site Plan			
Applicant Checklist	Planner Checklist	# of Copies	GENERAL WRITTEN SUBMISSIONS CHECKLIST (* If applicant chooses to submit a Preliminary Plan, then the * items were submitted for that phase and only updates are required)
X		1	* Completed Application form
N/A*		1	* Application fees
X		1	* Written description of project
X		1	* Evidence of right, title and interest
X		1	* Evidence of state and/or federal permits
X		1	* Written assessment of proposed project's specific compliance with applicable Zoning requirements
X		1	* Summary of existing and/or proposed easements, covenants, public or private rights-of-way, or other burdens on the site
X		1	* Evidence of financial and technical capacity
X		1	Construction Management Plan
X		1	A traffic study and other applicable transportation plans in accordance with Section 1 of the technical Manual, where applicable.
X		1	Written summary of significant natural features located on the site (Section 14-526 (b) (a))
X		1	Stormwater management plan and stormwater calculations
X		1	Written summary of project's consistency with related city master plans
X		1	Evidence of utility capacity to serve
X		1	Written summary of solid waste generation and proposed management of solid waste
X		1	A code summary referencing NFPA 1 and all Fire Department technical standards
X		1	Where applicable, an assessment of the development's consistency with any applicable design standards contained in Section 14-526 and in City of Portland Design Manual
X		1	Manufacturer's verification that all proposed HVAC and manufacturing equipment meets applicable state and federal emissions requirements.

***It is our understanding that, as the City of Portland is the Applicant, fees are waived.**

All application materials, except for amended plat, submitted as part of Level III Site Plan Application, submitted under separate cover.

Applicant Checklist	Planner Checklist	# of Copies	SITE PLAN SUBMISSIONS CHECKLIST (* If applicant chooses to submit a Preliminary Plan, then the * items were submitted for that phase and only updates are required)
x		1	* Boundary Survey meeting the requirements of Section 13 of the City of Portland's Technical Manual
		1	Final Site Plans including the following:
x			Existing and proposed structures, as applicable, and distance from property line (including location of proposed piers, docks or wharves if in Shoreland Zone);
x			Existing and proposed structures on parcels abutting site;
x			All streets and intersections adjacent to the site and any proposed geometric modifications to those streets or intersections;
x			Location, dimensions and materials of all existing and proposed driveways, vehicle and pedestrian access ways, and bicycle access ways, with corresponding curb lines;
x			Engineered construction specifications and cross-sectional drawings for all proposed driveways, paved areas, sidewalks;
x			Location and dimensions of all proposed loading areas including turning templates for applicable design delivery vehicles;
x			Existing and proposed public transit infrastructure with applicable dimensions and engineering specifications;
x			Location of existing and proposed vehicle and bicycle parking spaces with applicable dimensional and engineering information;
x			Location of all snow storage areas and/or a snow removal plan;
x			A traffic control plan as detailed in Section 1 of the Technical Manual;
x			Proposed buffers and preservation measures for significant natural features, where applicable, as defined in Section 14-526(b)(1);
x			Location and proposed alteration to any watercourse;
x			A delineation of wetlands boundaries prepared by a qualified professional as detailed in Section 8 of the Technical Manual;
x			Proposed buffers and preservation measures for wetlands;
x			Existing soil conditions and location of test pits and test borings;
x			Existing vegetation to be preserved, proposed site landscaping, screening and proposed street trees, as applicable;
x			A stormwater management and drainage plan, in accordance with Section 5 of the Technical Manual;
x			Grading plan;
x			Ground water protection measures;
x			Existing and proposed sewer mains and connections;

All application materials, except for amended plat, submitted as part of Level III Site Plan Application, submitted under separate cover.

- Continued on next page -

X		Location of all existing and proposed fire hydrants and a life safety plan in accordance with Section 3 of the Technical Manual;
X		Location, sizing, and directional flows of all existing and proposed utilities within the project site and on all abutting streets;
X		Location and dimensions of off-premises public or publicly accessible infrastructure immediately adjacent to the site;
X		Location and size of all on site solid waste receptacles, including on site storage containers for recyclable materials for any commercial or industrial property;
X		Plans showing the location, ground floor area, floor plans and grade elevations for all buildings;
X		A shadow analysis as described in Section 11 of the Technical Manual, if applicable;
N/A		A note on the plan identifying the Historic Preservation designation and a copy of the Application for Certificate of Appropriateness, if applicable, as specified in Section Article IX, the Historic Preservation Ordinance;
X		Location and dimensions of all existing and proposed HVAC and mechanical equipment and all proposed screening, where applicable;
X		An exterior lighting plan in accordance with Section 12 of the Technical Manual;
X		A signage plan showing the location, dimensions, height and setback of all existing and proposed signs;
X		Location, dimensions and ownership of easements, public or private rights of way, both existing and proposed.

All application materials, except for amended plat, submitted as part of Level III Site Plan Application, submitted under separate cover.



**PORTLAND FIRE DEPARTMENT
SITE REVIEW
FIRE DEPARTMENT CHECKLIST**

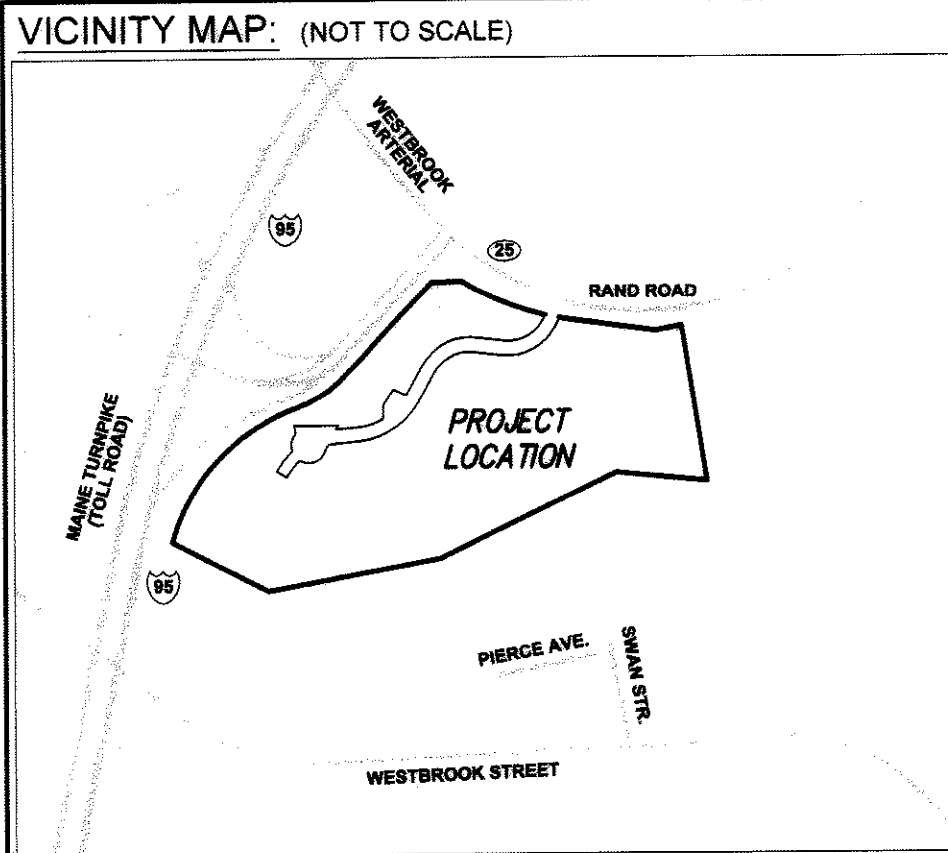


A separate drawing[s] shall be provided as part of the site plan application for the Portland Fire Department's review.

1. Name, address, telephone number of applicant
- 2.
3. Name address, telephone number of architect
4. Proposed uses of any structures [NFPA and IBC classification]
- 5.
6. Square footage of all structures [total and per story]
7. Elevation of all structures
8. Proposed fire protection of all structures
 - **As of September 16, 2010 all new construction of one and two family homes are required to be sprinkled in compliance with NFPA 13D. This is required by City Code. (NFPA 101 2009 ed.)**
9. Hydrant locations
10. Water main[s] size and location
11. Access to all structures [min. 2 sides]
12. A code summary shall be included referencing NFPA 1 and all fire department. Technical standards.

Some structures may require Fire flows using annex H of NFPA 1

All application materials, except for amended plat, submitted as part of Level III Site Plan Application, submitted under separate cover.



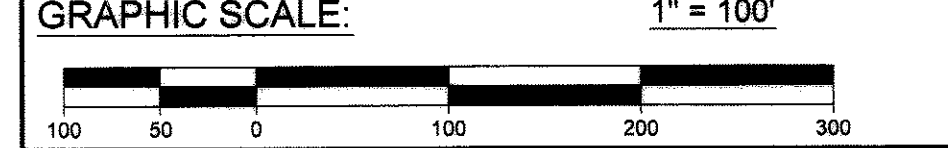
GENERAL NOTES:

- THIS PLAN AND ALL WORK ASSOCIATED WITH IT WAS PERFORMED BY SGC ENGINEERING, LLC PURSUANT TO A PROFESSIONAL SERVICES CONTRACT BETWEEN SGC ENGINEERING, LLC AND THE CITY OF PORTLAND, ME, DATED SEPTEMBER 8, 2010 AND SIGNED MARCH 14, 2011.
- REFERENCE DEED FOR THE LOCUS PARCEL IS SIMON A. SNYDER, JASON A. SNYDER, RONALD A. BARRIS, TRUSTEES OF THE THERESA BARRIS MARITAL TRUST, CYNTHIA B. BAKER, TRUSTEES OF THE THERESA BARRIS MARITAL TRUST, RONALD A. BARRIS AND CYNTHIA B. BAKER, CO-TRUSTEES OF THE BARRIS FAMILY TRUST TO THE CITY OF PORTLAND, DATED DECEMBER 7, 1999 AND RECORDED IN DEED BOOK 15211, PAGE 031 AT THE CUMBERLAND COUNTY REGISTRY OF DEEDS.
- THE BEARINGS SHOWN HEREON ARE REFER TO GRID NORTH AND ARE BASED ON PLAN REFERRED TO UNDER MAP REFERENCES, NOTE 1.
- THE LOCUS PARCEL IS DEPICTED AS LOTS 1 & 2 IN BLOCK A ASSESSORS MAP 249 ABUTTING PROPERTY OWNER INFORMATION REFERENCED HEREON WAS TAKEN FROM THE CUMBERLAND COUNTY REGISTRY OF DEEDS AS OF THE DATE OF THIS PLAN.
- RAND ROAD IS A PUBLIC HIGHWAY. THE SIDELINE LOCATIONS ARE BASED ON THE PLAN REFERENCED UNDER NOTE 1 OF MAP REFERENCES BELOW AND MAINE TURNPIKE AUTHORITY PLANS ON FILE AT THE OFFICES FOR THE MAINE TURNPIKE AUTHORITY.
- NO SUBSURFACE INVESTIGATION HAS BEEN PERFORMED BY SGC ENGINEERING, LLC. DIG-SAFE SHOULD BE CONTACTED PRIOR TO COMMENCING ANY EXCAVATION (888-344-7233).
- THE BOUNDARY INFORMATION ON THIS PLAN IS BASED ON THE PLAN REFERENCED UNDER NOTE 1 OF MAP REFERENCES. SGC ENGINEERING FIELD CREWS COMPLETED A SURVEY OF THE PIPELINE LOCATIONS WITHIN THE PORTLAND PIPELINE COMPANY EASEMENT AND EXISTING MONUMENTATION FOUND AND SET BY PREVIOUS SURVEY COMPLETED BY LAND SERVICES, INC. FOR THE PURPOSE OF VERIFYING THEIR EXISTENCE AND TO OVERLAY DESIGN INFORMATION WITHIN BOUNDARIES DETERMINED BY LAND SERVICES, INC. SGC ENGINEERING DID NOT CONFIRM PERIMETER BOUNDARIES BEYOND LOCATION OF MONUMENTATION.
- REFERENCE IS HEREBY MADE TO THE PORTLAND TECHNOLOGY PARK CONDOMINIUM DECLARATION OF CONDOMINIUM, INCLUSIVE OF BYLAWS, TO BE RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS AT BOOK _____ PAGE _____.
- ELEVATIONS ARE BASED ON NAVD 1988 DATUM.
- CLEARING LIMITS SHALL BE RESTRICTED TO LIMITED COMMON ELEMENT AREAS. EASEMENT AREA 1 ASSOCIATED WITH THE SITE ROADWAY, EASEMENT AREA 2 ASSOCIATED WITH ACCESS TO THE TRAIL HEAD PARKING, AND EASEMENT AREA 3 ASSOCIATED WITH THE TRAIL HEAD PARKING AND 20 FT WIDE EASEMENT AREA FOR THE GAS LINE TO EASEMENT AREA 1. NEAR LCE 5 & 7. MANAGEMENT OF THE FORESTED COMMON AREAS OUTSIDE OF THE CLEARING LIMITS SHALL BE PERFORMED IN ACCORDANCE WITH A FOREST MANAGEMENT PLAN PREPARED FOR THE CITY OF PORTLAND AND APPROVED BY THE CITY ARBORIST. MONUMENTATION OF THE CLEARING LIMIT BOUNDARIES SHALL OCCUR PRIOR TO THE START OF CONSTRUCTION.
- PHASE 1 INCLUDES CONSTRUCTION OF ALL PROPOSED RIGHT-OF-WAY IMPROVEMENTS IN RAND ROAD, 880 LF OF PARK ROADWAY WITHIN EASEMENT AREA 1; TEMPORARY GRAVEL TRAIL HEAD PARKING AREA WITHIN EASEMENT AREA 2; TRAIL HEAD PARKING AREA WITHIN EASEMENT AREA 3; LIMITED COMMON ELEMENT AREAS 1, 2 AND 3. PHASE 2 INCLUDES CONSTRUCTION OF REMAINING 450 LF OF PARK ROADWAY WITHIN EASEMENT AREA 1 AND LIMITED COMMON ELEMENT AREAS 4, 5, AND 7.
- PROJECT IS SUBJECT TO THE CONDITIONS SET FORTH IN CITY OF PORTLAND SITE PLAN APPROVAL, SUBDIVISION APPROVAL, AND TRAFFIC MOVEMENT PERMIT; MAINE DEP, NATURAL RESOURCES PROTECTION ACT AND SITE LOCATION OF DEVELOPMENT ACT DEPARTMENT ORDER, AND US ARMY CORPS OF ENGINEERS MAINE GENERAL PERMIT AUTHORIZATION. COPIES OF THESE DOCUMENTS ARE AVAILABLE THROUGH THE CITY OF PORTLAND ECONOMIC DEVELOPMENT OFFICE.
- PROJECT IS SUBJECT TO THE PLANS APPROVED UNDER SITE PLAN REVIEW BY THE CITY OF PORTLAND PLANNING AUTHORITY. COPIES OF THESE DOCUMENTS ARE AVAILABLE THROUGH THE CITY OF PORTLAND ECONOMIC DEVELOPMENT OFFICE.
- RESPONSIBILITIES FOR STORMWATER MANAGEMENT SYSTEM INSPECTIONS AND MAINTENANCE ARE IDENTIFIED WITHIN THE DECLARATION OF CONDOMINIUM. STORMWATER MANAGEMENT SYSTEM INSPECTION AND MAINTENANCE REQUIREMENTS ARE IDENTIFIED IN A STORMWATER MANAGEMENT PLAN AVAILABLE THROUGH THE CITY OF PORTLAND ECONOMIC DEVELOPMENT OFFICE.

MAP REFERENCES:

- A PLAN ENTITLED "PLAN OF STANDARD BOUNDARY SURVEY, PROPERTY OF THE CITY OF PORTLAND, WESTBROOK STREET, PORTLAND, MAINE" DATED OCT. 1997 AND LAST REVISED OCT. 23, 2002, PREPARED BY LAND SERVICES INC.

LEGEND: LINETYPES & HATCH PATTERN	
ADJACENT LOT LINE	_____
ADJACENT R.O.W. LINE	_____
LOCUS BOUNDARY LINE	_____
OLD TRACT LINE	_____
EASEMENT LINE	_____
CONTROLLED ACCESS	_____
OVERHEAD ELECTRIC LINE	_____
SANITARY SEWER LINE	_____
LIMITED COMMON ELEMENT YARD LIMIT	_____
UNIT	_____
LEGEND: POINT TYPES & SYMBOLS	
CONCRETE BOUND	■
GRANITE BOUND TO BE SET	□
PIPE	—○—
REBAR	—●—
SOLID SMOOTH ROD	—●—
RAILROAD SPIKE	—●—
HANDICAPPED SYMBOL	—●—
UTILITY POLE	—●—
SQUARE CATCH BASIN	—●—
ROUND CATCH BASIN	—●—
DRAIN MANHOLE	—●—
LIMITED COMMON ELEMENT	L.C.E.
SINGLE POST SIGN	■
ELECTRIC MANHOLE	□
LIGHT POST	—○—
GAS VALVE	—●—
GAS VENT PIPE	—●—
SEWER MANHOLE	—●—
HYDRANT	—●—
WATER MANHOLE	—●—
WATER SHUT-OFF	—●—
WATER VALVE	—●—
DECIDUOUS TREE	—●—



EASEMENT AREA 1			
CURVE	RADIUS	LENGTH	BEARING
C1	250.00	30.49	S65°16'16"W
C2	74.58	64.22	N39°39'58"W
C3	170.00	58.12	N41°13'38"E
C4	1180.00	60.59	N85°30'52"E

EASEMENT AREA 2			
CURVE	RADIUS	LENGTH	BEARING
C5	76.54	37.59	S43°48'45"E
C6	74.00	77.50	S59°44'51"E
C7	114.00	119.39	N59°44'51"W
C8	210.00	8.26	N41°34'58"W

LINE TABLE	
LINE	BEARING
L1	20.87
L2	35.12
L3	19.39
L4	2.94
L5	23.23

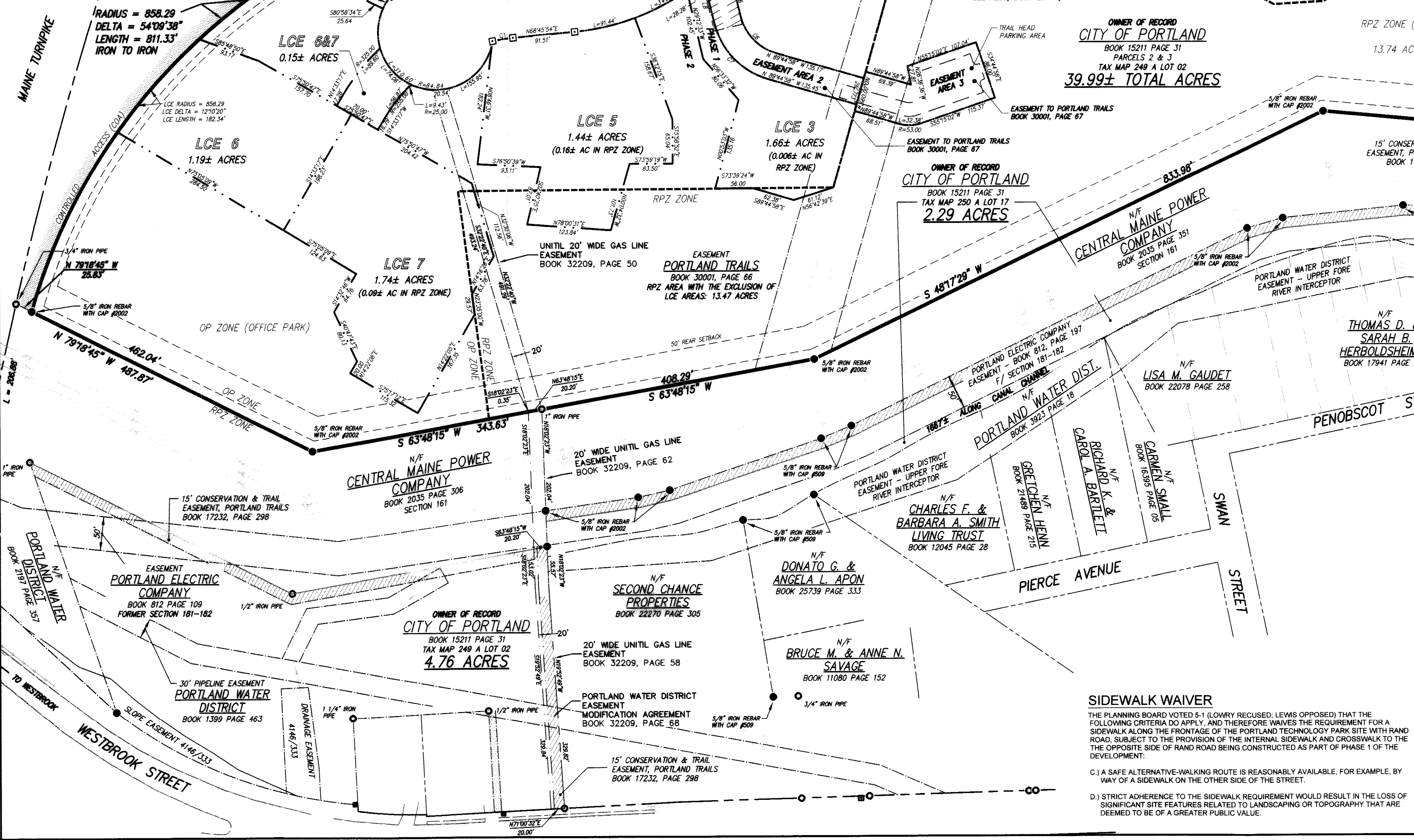
LINE TABLE	
LINE	BEARING
L6	48.58
L7	40.00
L8	59.04

CERTAIN PLANNING BOARD CONDITIONS OF SUBDIVISION APPROVAL

- THIS APPROVAL ENTITLES THE APPLICANT AND FUTURE DEVELOPERS OF THE OFFICE PARK UNITS TO DEVELOP THE MAXIMUM NUMBER AND SIZE OF PARKING SPACES AS SHOWN ON THE SUBDIVISION PLAT AND OVERALL SITE PLAN SUBJECT TO PROVIDING CONFIRMATION OF THE NEED FOR THESE SPACES AND SPACE DIMENSIONS (VIA A PARKING ANALYSIS) AT THE TIME THAT THE UNIT IS UNDER SITE PLAN REVIEW; AND
- THAT THE CONDOMINIUM ASSOCIATION SHALL DEVELOP AND MANAGE A TRANSPORTATION DEMAND MANAGEMENT (TDM) PLAN ACCEPTABLE TO THE PLANNING AUTHORITY, REVIEWED AS PART OF THE INITIAL AND SUBSEQUENT SITE PLAN APPROVALS FOR EACH BUILDING UNIT WITHIN THE LIMITED COMMON ELEMENT AREAS; AND
- THAT THE DEVELOPMENT OF LIMITED COMMON ELEMENT AREAS AND UNITS IS SUBJECT TO REVIEW AND APPROVAL BY THE CITY OF PORTLAND PLANNING AUTHORITY FOR CONFORMANCE WITH THE PORTLAND TECHNOLOGY PARK DESIGN GUIDELINES AND CITY OF PORTLAND CODE OF ORDINANCES, CHAPTER 14 AND USE, ARTICLE V. SITE PLAN FOR BUILDING ARCHITECTURE, SITE LANDSCAPING, SITE PEDESTRIAN CIRCULATION, BICYCLE PARKING, LAMP SPECIFICATIONS AND SIGNAGE AND ANY CHANGES OR ALTERATIONS TO APPROVED TRAFFIC, PARKING, ACCESS, UTILITY, EXTERIOR LIGHTING, TREE PRESERVATION AND STORMWATER FEATURES; AND
- THAT THE CLEARING LIMITS SHALL BE RESTRICTED TO LIMITED COMMON ELEMENT (LCE) AREAS, EASEMENT AREA 1 ASSOCIATED WITH THE SITE ROADWAY, EASEMENT AREA 2 ASSOCIATED WITH ACCESS TO THE TRAIL HEAD PARKING, AND EASEMENT AREA 3 ASSOCIATED WITH THE TRAIL HEAD PARKING, AND THE 20 FT WIDE EASEMENT AREA FOR THE GAS LINE (TO EASEMENT AREA 1 NEAR LCE 5 & 7); AND
- THAT THE APPLICANT AND ALL ASSIGNS SHALL COMPLY WITH THE CONDITIONS OF CHAPTER 32 STORMWATER INCLUDING ARTICLE III. POST-CONSTRUCTION STORM WATER MANAGEMENT, WHICH SPECIFIES THE ANNUAL INSPECTIONS AND REPORTING REQUIREMENTS. THE DEVELOPER/CONTRACTOR/SUBCONTRACTOR MUST COMPLY WITH CONDITIONS OF THE CONSTRUCTION STORMWATER MANAGEMENT PLAN AND SEDIMENT & EROSION CONTROL PLAN BASED ON CITY STANDARDS AND STATE GUIDELINES; AND
- THAT THE PROPOSED LIMITED COMMON ELEMENTS, SHOWN AS "LCE" ON THE PLAN, BE MARKED WITH PERMANENT MARKERS SUCH AS FEND MARKERS IN THE FIELD PRIOR TO ANY WORK ON THE SITE TO ENSURE THAT THE LIMITS OF CLEARANCE AND TREE PRESERVATION AREAS ARE CLEAR ON THE SITE; AND
- THAT THE RPZ ZONE LINE, TRAILHEAD PARKING AREA, SIGNIFICANT TREE AREAS AND PARTICULAR TREE SAVES (AS IDENTIFIED ON THE TREE PRESERVATION PLAN) BE MARKED OR LOCATED IN THE FIELD PRIOR TO ANY SITE WORK.

CERTAIN PLANNING BOARD CONDITIONS OF SITE PLAN APPROVAL

- THAT WHEN INDIVIDUAL UNITS ARE PROPOSED FOR SITE PLAN REVIEW THE APPLICANTS SHOULD SUBMIT DETAILED SPECIFICATIONS FOR SNOW STORAGE, MANAGEMENT/PROTECTION OF GRAVEL WETLANDS, EXTERIOR LAMP FIXTURES (INCLUDING WALL MOUNTED), AND CONSIDER THE OPPORTUNITY FOR TRAIL LINKS WITH THE WIDER TRAIL NETWORK ON THE RPZ OPEN SPACE PART OF THE SITE; AND
- THAT THE SITE PLANS FOR THE INDIVIDUAL UNITS SHALL BE BROUGHT BEFORE THE PLANNING BOARD FOR REVIEW AND APPROVAL, AND THE BOARD RESERVES THE RIGHT TO REVIEW INDIVIDUAL UNITS UNDER THE STANDARDS OF THE SITE PLAN ORDINANCE.



APPROVED BY CITY OF PORTLAND PLANNING BOARD

THIS SUBDIVISION PLAT AMENDS THE SUBDIVISION PLAT APPROVED ON JANUARY 24, 2012 AND RECORDED ON OCTOBER 10, 2012 IN PLAN BOOK 212 PAGE 324, TO IDENTIFY THE LOCATION OF THE NEW GAS LINE EASEMENT (RUNNING FROM THE SOUTH TO EASEMENT AREA 1 NEAR LCE 5 & 7) SERVING THE OFFICE PARK

NAME _____ DATE _____

March 10, 2015

RECORD OWNER: _____

CITY OF PORTLAND - DECLARANT

CUMBERLAND COUNTY REGISTRY OF DEEDS

Received: June 19, 2015

Filed in Plan Book: 215 Page: 250

ATTEST: _____

REVISIONS:

NO.	DATE	DESCRIPTION
1	9-30-2011	SUBMITTAL FOR CONCEPTUAL REVIEW
2	10-17-2011	SECOND SUBMISSION FOR REVIEW
3	1-17-2012	THIRD SUBMISSION FOR REVIEW
4	7-17-2012	REVISED PER CITY OF PORTLAND AND CUMBERLAND COUNTY REGISTRY OF DEEDS
5	9-25-2012	REVISED PER CITY OF PORTLAND AND CUMBERLAND COUNTY REGISTRY OF DEEDS
6	2-16-2015	REVISED PER PLANNING BOARD HEARING
7	5-1-2015	REVISED PER PLANNING BOARD HEARING

ONLY VALID WITH ORIGINAL STAMP

SGC ENGINEERING, LLC

- Civil Design & Survey Engineering
- Environmental & Regulatory Permitting
- Electrical Power Systems Engineering

SEAL

DATE: 09-29-11

SCALE: 1" = 100'

SHEET 1 OF 1

PORTLAND TECHNOLOGY PARK CONDOMINIUM

RAND ROAD, PORTLAND, MAINE

CITY OF PORTLAND - DECLARANT

389 CONGRESS STREET, PORTLAND, MAINE

SOURCES:

1. SITE AND TOPOGRAPHIC DATA WERE PROVIDED BY NUMEROUS SOURCES AS IDENTIFIED HEREIN AND COMPILED BY WOODARD & CURRAN INC. BETWEEN JANUARY 2007 AND AUGUST 2010. FEATURES DEPICTED ON THE EXISTING SITE PLAN WERE NOT FIELD VERIFIED FOR ACCURACY OR OMISSIONS UPON PLAN COMPILATION. HORIZONTAL DATUM IS REFERENCED TO STATE PLANE NAD 1983 (FEET), MAINE WEST ZONE.
2. BOUNDARY, SITE, AND TOPOGRAPHIC FEATURES FOR CITY OWNED PARCELS THAT COMPOSE THE PROJECT AREA ORIGINATE FROM A PLAN BY LAND SERVICES, INC. "STANDARD BOUNDARY SURVEY, PROPERTY OF THE CITY OF PORTLAND, WESTBROOK STREET, PORTLAND, MAINE" PROJECT 99148 SHEET 1 OF 1 DATED OCT. 1997 WITH A FINAL REVISION DATE OF OCT. 23, 2002. VERTICAL DATUM IS REFERENCED TO NAVD29 WITH ONE FOOT CONTOUR INTERVALS.
3. SITE AND TOPOGRAPHIC FEATURES FOR ADJACENT ROADWAY AND ABUTTING PARCELS ORIGINATE FROM CITY OF PORTLAND, ME AERIAL SURVEY COMPILED USING 2000 AERIAL IMAGES BY BRADSTREET CONSULTANTS OF MANCHESTER, MAINE. VERTICAL DATUM IS REFERENCED TO NAVD29 WITH TWO FOOT CONTOUR INTERVALS.
4. WETLAND DELINEATION FOR WETLAND AREAS LABELED #1-22 CONDUCTED BY DAMES & MOORE APRIL - MAY, 1998, AS DESCRIBED IN "WETLAND DELINEATION AND WETLAND FUNCTIONAL ASSESSMENT FOR SNYDER TRACT, WESTBROOK ST., PORTLAND, ME" REPORT DATED MAY 1998. WETLAND DELINEATION FIELD VERIFIED BY U.S. ARMY CORPS OF ENGINEERS ON MAY 8, 1998. FLAGS LOCATED BY SURVEY WORKS, INC. USING GPS, MAY 1998.
5. FIELD RECONNAISSANCE AND VISUAL VERIFICATION OF THE WETLANDS PREVIOUSLY DELINEATED BY DAMES & MOORE IN APRIL AND MAY OF 1998 WAS PERFORMED BY SW COLE ENGINEERING INC. IN NOVEMBER AND DECEMBER OF 2006, AND SUMMARIZED IN A LETTER REPORT DATED DECEMBER 15, 2006. ADDITIONAL WETLAND DELINEATION CONDUCTED BY S.W. COLE ON DECEMBER 15, 2006 IDENTIFIED AND DELINEATED THE LOCATION OF A FRESHWATER WETLAND AT THE NORTHEAST CORNER OF THE PROPERTY, JUST WEST OF A PORTLAND WATER DISTRICT EASEMENT, LABELED "WETLAND A, PP01/4", AND FURTHER DESCRIBED IN A LETTER REPORT DATED DECEMBER 21, 2006. WETLAND LOCATED BY MEANS OF GPS, DECEMBER 2006.
6. TREE ASSESSMENT CONDUCTED BY WOODLOT ALTERNATIVES, INC. APRIL 2007, AND SUMMARIZED WITHIN A LETTER REPORT DATED APRIL 13, 2007. LOCATIONS DETERMINED WITH HAND-HELD GPS UNIT, APRIL 2007.
7. VERNAL POOL ASSESSMENT CONDUCTED BY URS ON APRIL 16 AND MAY 19, 2006 AND SUMMARIZED IN LETTER REPORT DATED MAY 31, 2006.
8. EXISTING SEWER MAIN LOCATION FROM PLAN BY HNTB "WESTBROOK INTERCHANGE TOOL PLAZA LATERAL PLAN AND PROFILE 50+00 TO 63+70" DATED AUGUST, 2001
9. EXISTING WATER MAIN LOCATION FROM PLAN BY HNTB "WESTBROOK INTERCHANGE 42" WATERMAIN RELOCATION" DATED APRIL, 2001
10. UPDATED VERNAL POOL DELINEATION PERFORMED ON DECEMBER 12, 2010 FOR VERNAL POOLS E AND G BY BOYLE ASSOCIATES.
11. VERNAL POOL POINT INDICATORS (VP-XX-XX) LOCATED ON MAY 2, 2009 BY BOYLE ASSOCIATES.

LEGEND

NON-IMPACTED WETLAND AREA
TOTAL = 365,914 S.F. (8.40 ACRES)

IMPACTED WETLAND AREA
TOTAL = 37,416 S.F. (0.85 ACRES)

TOTAL WETLAND AREA = 403,330 S.F.
(9.25 ACRES)

PHASE 1 BOUNDARY

PHASE 2 BOUNDARY

Wetland Impacts

Phase 1

Completed Road	5243 SF
Proposed LCE 4	1461 SF
Proposed Road	215 SF
Future LCE 1	252 SF
Future LCE 2	7417 SF
Phase 1 Impact	14588 SF

Phase 2

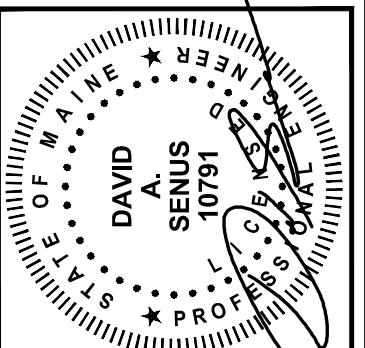
Future Road	5270 SF
Future LCE 3	3838 SF
Future LCE 5	6570 SF
Future LCE 6 & 7	7141 SF
Phase 2 Impact	22819 SF

Total Technology Park Impact	37407 SF
------------------------------	----------

41 Hutchins Drive
Portland, Maine 04102
800.426.4262 | www.woodardcurran.com



COMMITMENT & INTEGRITY DRIVE RESULTS



10/2/2015

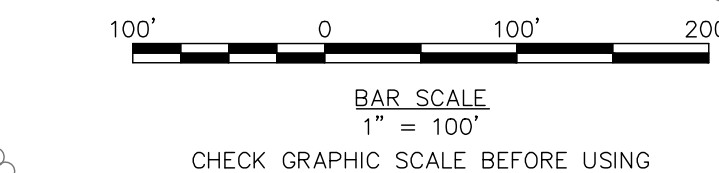
WETLAND IMPACT FIGURE

CITY OF PORTLAND
ECONOMIC DEVELOPMENT OFFICE
PORTLAND, MAINE
& PATRONS OXFORD INSURANCE CO.

PORTLAND TECHNOLOGY PARK UPDATE
& LCE 4 DEVELOPMENT

JOB NO.: 229001
DATE: OCTOBER 2015
SCALE: 1" = 100'
SHEET: 1 OF 1

WI-01



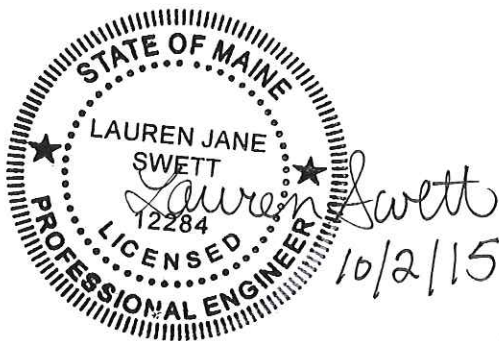
PERMITTING SET - NOT FOR CONSTRUCTION

Att. B

LEVEL III SITE PLAN APPLICATION

Portland Technology
Park - LCE 4
Development

VOLUME 1
REPORT



woodardcurran.com
COMMITMENT & INTEGRITY DRIVE RESULTS

41 Hutchins Drive, Portland, Maine 04102
Tel. (207) 774-2112 Fax (207) 774-6635

229001
**Patrons-Oxford Insurance
Company**
October 2015

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1. APPLICATION FORM



Jeff Levine, AICP, Director
Planning & Urban Development Department

Electronic Signature and Fee Payment Confirmation

Notice: Your electronic signature is considered a legal signature per state law.

By digitally signing the attached document(s), you are signifying your understanding this is a legal document and your electronic signature is considered a **legal signature** per Maine state law. You are also signifying your intent on paying your fees by the opportunities below.

I, the undersigned, intend and acknowledge that no Site Plan or Historic Preservation Applications can be reviewed until payment of appropriate application fees are ***paid in full*** to the Inspections Office, City of Portland Maine by method noted below:

- ☐ Within 24-48 hours, once my complete application and corresponding paperwork has been electronically delivered, I intend to **call the Inspections Office** at 207-874-8703 and speak to an administrative representative and provide a credit/debit card over the phone.
- ☐ Within 24-48 hours, once my application and corresponding paperwork has been electronically delivered, I intend to **call the Inspections Office** at 207-874-8703 and speak to an administrative representative and provide a credit/debit card over the phone.
- ☐ I intend to deliver a payment method through the U.S. Postal Service mail once my application paperwork has been electronically delivered.

*Check for payment of fee will be hand-delivered upon submission application.

Lauren Swett

Applicant Signature:

Lauren Swett

I have provided digital copies and sent them on: *10/2/15*

10/2/15

Date:

10/2/15

Date:

NOTE: All electronic paperwork must be delivered to buildinginspections@portlandmaine.gov or by physical means i.e. a thumb drive or CD to the Inspections Office, City Hall, 3rd Floor, Room 315.



Level III – Preliminary and Final Site Plans Development Review Application Portland, Maine

Planning and Urban Development Department
Planning Division

Portland's Planning and Urban Development Department coordinates the development review process for site plan, subdivision and other applications under the City's Land Use Code. Attached is the application form for a Level III: Preliminary or Final Site Plan. Please note that Portland has delegated review from the State of Maine for reviews under the Site Location of Development Act, Chapter 500 Stormwater Permits, and Traffic Movement Permits.

Level III: Site Plan Development includes:

- New structures with a total floor area of 10,000 sq. ft. or more except in Industrial Zones.
- New structures with a total floor area of 20,000 sq. ft. or more in Industrial Zones.
- New temporary or permanent parking area(s) or paving of existing unpaved parking areas for more than 75 vehicles.
- Building addition(s) with a total floor area of 10,000 sq. ft. or more (cumulatively within a 3 year period) except in Industrial Zones.
- Building addition(s) with a total floor area of 20,000 sq. ft. or more in Industrial Zones.
- A change in the use of a total floor area of 20,000 sq. ft. or more in any existing building (cumulatively within a 3 year period).
- Multiple family development (3 or more dwelling units) or the addition of any additional dwelling unit if subject to subdivision review.
- Any new major or minor auto business in the B-2 or B-5 Zone, or the construction of any new major or minor auto business greater than 10,000 sq. ft. of building area in any other permitted zone.
- Correctional prerelease facilities.
- Park improvements: New structures greater than 10,000 sq. ft. and/or facilities encompassing 20,000 sq. ft. or more (excludes rehabilitation or replacement of existing facilities); new nighttime outdoor lighting of sports, athletic or recreation facilities not previously illuminated.
- Land disturbance of 3 acres or more (includes stripping, grading, grubbing, filling or excavation).

Portland's development review process and requirements are outlined in the Land Use Code (Chapter 14) which is available on our website:

Land Use Code: <http://me-portland.civicplus.com/DocumentCenter/Home/View/1080>

Design Manual: <http://me-portland.civicplus.com/DocumentCenter/View/2355>

Technical Manual: <http://me-portland.civicplus.com/DocumentCenter/View/2356>

Planning Division
Fourth Floor, City Hall
389 Congress Street
(207) 874-8719

Office Hours
Monday thru Friday
8:00 a.m. – 4:30 p.m.

PROJECT NAME: Portland Technology Park LCE 4

PROPOSED DEVELOPMENT ADDRESS:

0 Rand Road

PROJECT DESCRIPTION:

Development of Limited Common Element (LCE) 4 of previously approved Portland Technology Park Subdivision and associated infrastructure, including construction of a two-story, office building, parking, utilities, and stormwater management system for the Patrons-Oxford Insurance headquarters. Project also includes the re-alignment of the access road and the remaining lots within the subdivision, which are owned by the City of Portland; a Subdivision Amendment Application is being submitted for this work under separate cover.

CHART/BLOCK/LOT: 249 A001001

PRELIMINARY PLAN _____ (date)

FINAL PLAN 10/2/15 (date)

***Original Submission for Portland Technology Park: 11/5/10**

CONTACT INFORMATION:

Applicant – must be owner, Lessee or Buyer Name: Patrons-Oxford Insurance Company Business Name, if applicable: Address: PO Box 1960 City/State : Auburn/ME Zip Code: 04211	Applicant Contact Information Work # 207-783-225 Home# Cell # Fax# 207-783-7507 e-mail: mpettingill@patrons.com
Owner – (if different from Applicant) Name: Address: City/State : Zip Code:	Owner Contact Information Work # Home# Cell # Fax# e-mail:
Agent/ Representative Name: Woodard & Curran, c/o Lauren Swett, PE Address: 41 Hutchins Drive City/State : Portland/ME Zip Code: 04102	Agent/Representative Contact information Work # 207-774-2112 Cell # e-mail: lswett@woodardcurran.com
Billing Information *See Applicant* Name: Address: City/State : Zip Code:	Billing Information Work # Cell # Fax# e-mail:

Engineer *See Agent/Representative* Name: Address: City/State : Zip Code:	Engineer Contact Information Work # Cell # Fax# e-mail:
Surveyor Name: Land Services, Inc. Address: 1288 Roosevelt Trail, PO Box 975 City/State : Raymond/ME Zip Code: 04071	Surveyor Contact Information Work # Cell # Fax# e-mail:
Architect Name: Scott Simons Architects, c/o Austin Smith Address: 75 York Street City/State : Portland/ME Zip Code: 04101	Architect Contact Information Work # 207-772-4656 Cell # Fax# e-mail: austin@simonsarchitects.com
Attorney Name: Ann Freeman Address: 389 Congress Street City/State : Portland/ME Zip Code: 04101	Attorney Contact Information Work # 207-874-8480 Cell # Fax# 207-874-8497 e-mail: amf@portlandmaine.gov

APPLICATION FEES:

Check all reviews that apply. (Payment may be made by Credit Card, Cash or Check payable to the City of Portland.)

Level III Development (check applicable reviews) ☒ Less than 50,000 sq. ft. (\$500.00) ☐ 50,000 - 100,000 sq. ft. (\$1,000) ☐ 100,000 – 200,000 sq. ft. (\$2,000) ☐ 200,000 – 300,000 sq. ft. (\$3,000) ☐ over \$300,00 sq. ft. (\$5,000) ☐ Parking lots over 11 spaces (\$1,000) ☐ After-the-fact Review (\$1,000.00 plus applicable application fee) Plan Amendments (check applicable reviews) ☐ Planning Staff Review (\$250) ☒ Planning Board Review (\$500) The City invoices separately for the following: • Notices (\$.75 each) • Legal Ad (% of total Ad) • Planning Review (\$40.00 hour) • Legal Review (\$75.00 hour) Third party review fees are assessed separately. Any outside reviews or analysis requested from the Applicant as part of the development review, are the responsibility of the Applicant and are separate from any application or invoice fees.	Other Reviews (check applicable reviews) ☐ Traffic Movement (\$1,000) ☐ Stormwater Quality (\$250) ☐ Subdivisions (\$500 + \$25/lot) # of Lots ___ x \$25/lot = ____ ☐ Site Location (\$3,000, except for residential projects which shall be \$200/lot) # of Lots ___ x \$200/lot = ____ ☐ Other _____ ☐ Change of Use ☐ Flood Plain ☐ Shoreland ☐ Design Review ☐ Housing Replacement ☐ Historic Preservation
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APPLICATION SUBMISSION:

1. All site plans and written application materials must be submitted electronically on a CD or thumb drive with each plan submitted as separate files, with individual file which can be found on the **Electronic Plan and Document Submittal** page of the City's website at <http://me-portland.civicplus.com/764/Electronic-Plan-and-Document-Submittal>
2. In addition, one (1) paper set of the plans (full size), one (1) paper set of plans (11 x 17), paper copy of written materials, and the application fee must be submitted to the Building Inspections Office to start the review process.

The application must be complete, including but not limited to the contact information, project data, application checklists, wastewater capacity, plan for fire department review, and applicant signature. The submissions shall include one (1) paper packet with folded plans containing the following materials:

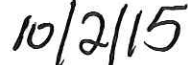
1. One (1) full size site plans that must be folded.
2. One (1) copy of all written materials or as follows, unless otherwise noted:
 - a. Application form that is completed and signed.
 - b. Cover letter stating the nature of the project.
 - c. All Written Submittals (Sec. 14-525 2. (c), including evidence of right, title and interest.
3. A stamped standard boundary survey prepared by a registered land surveyor at a scale not less than one inch to 50 feet.
4. Plans and maps based upon the boundary survey and containing the information found in the attached sample plan checklist.
5. One (1) set of plans reduced to 11 x 17.

Please refer to the application checklist (attached) for a detailed list of submission requirements.

APPLICANT SIGNATURE:

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Planning Authority and Code Enforcement's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

This application is for a Level III Site Plan review. It is not a permit to begin construction. An approved site plan, a Performance Guarantee, Inspection Fee, Building Permit, and associated fees will be required prior to construction. Other Federal, State or local permits may be required prior to construction, which are the responsibility of the applicant to obtain.

Signature of Applicant: 	Date: 
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PROJECT DATA

The following information is required where applicable, in order to complete the application.

Total Area of Site		sq. ft.
Proposed Total Disturbed Area of the Site	87,120	sq. ft.
If the proposed disturbance is greater than one acre, then the applicant shall apply for a Maine Construction General Permit (MCGP) with DEP and a Stormwater Management Permit, Chapter 500, with the City of Portland.		
Impervious Surface Area		
Impervious Area (Total Existing)	7,212 (Water in Gravel Wetland #4)	sq. ft.
Impervious Area (Total Proposed)	70,797 (includes extension of access road)	sq. ft.
Building Ground Floor Area and Total Floor Area		
Building Footprint (Total Existing)	0	sq. ft.
Building Footprint (Total Proposed)	9,500	sq. ft.
Building Floor Area (Total Existing)	0	sq. ft.
Building Floor Area (Total Proposed)	19,000	sq. ft.
Zoning		
Existing	OP	
Proposed, if applicable	N/A	
Land Use		
Existing	Technology Business Park	
Proposed	N/A	
Residential, If applicable	N/A	
# of Residential Units (Total Existing)		
# of Residential Units (Total Proposed)		
# of Lots (Total Proposed)		
# of Affordable Housing Units (Total Proposed)		
Proposed Bedroom Mix	N/A	
# of Efficiency Units (Total Proposed)		
# of One-Bedroom Units (Total Proposed)		
# of Two-Bedroom Units (Total Proposed)		
# of Three-Bedroom Units (Total Proposed)		
Parking Spaces		
# of Parking Spaces (Total Existing)	0	
# of Parking Spaces (Total Proposed)	70	
# of Handicapped Spaces (Total Proposed)	3	
Bicycle Parking Spaces		
# of Bicycle Spaces (Total Existing)	0	
# of Bicycle Spaces (Total Proposed)	10	
Estimated Cost of Project	\$5 Million	

PRELIMINARY PLAN (Optional) - Level III Site Plan			
Applicant Checklist	Planner Checklist	# of Copies	GENERAL WRITTEN SUBMISSIONS CHECKLIST
		1	Completed Application form
		1	Application fees
		1	Written description of project
		1	Evidence of right, title and interest
		1	Evidence of state and/or federal approvals, if applicable
		1	Written assessment of proposed project's compliance with applicable zoning requirements
		1	Summary of existing and/or proposed easement, covenants, public or private rights-of-way, or other burdens on the site
		1	Written requests for waivers from site plan or technical standards, if applicable.
		1	Evidence of financial and technical capacity
		1	Traffic Analysis (may be preliminary, in nature, during the preliminary plan phase)
Applicant Checklist	Planner Checklist	# of Copies	SITE PLAN SUBMISSIONS CHECKLIST
		1	Boundary Survey meeting the requirements of Section 13 of the City of Portland's Technical Manual
		1	Preliminary Site Plan including the following: (information provided may be preliminary in nature during preliminary plan phase)
			Proposed grading and contours;
			Existing structures with distances from property line;
			Proposed site layout and dimensions for all proposed structures (including piers, docks or wharves in Shoreland Zone), paved areas, and pedestrian and vehicle access ways;
			Preliminary design of proposed stormwater management system in accordance with Section 5 of the Technical Manual (note that Portland has a separate applicability section);
			Preliminary infrastructure improvements;
			Preliminary Landscape Plan in accordance with Section 4 of the Technical Manual;
			Location of significant natural features (including wetlands, ponds, watercourses, floodplains, significant wildlife habitats and fisheries or other important natural features) located on the site as defined in Section 14-526 (b) (1);
			Proposed buffers and preservation measures for significant natural features, as defined in Section 14-526 (b) (1);
			Location , dimensions and ownership of easements, public or private rights of way, both existing and proposed;
			Exterior building elevations.

FINAL PLAN - Level III Site Plan			
Applicant Checklist	Planner Checklist	# of Copies	GENERAL WRITTEN SUBMISSIONS CHECKLIST (* If applicant chooses to submit a Preliminary Plan, then the * items were submitted for that phase and only updates are required)
X		1	* Completed Application form
X		1	* Application fees
X		1	* Written description of project
X		1	* Evidence of right, title and interest
X		1	* Evidence of state and/or federal permits
X		1	* Written assessment of proposed project's specific compliance with applicable Zoning requirements
X		1	* Summary of existing and/or proposed easements, covenants, public or private rights-of-way, or other burdens on the site
X		1	* Evidence of financial and technical capacity
X		1	Construction Management Plan
X		1	A traffic study and other applicable transportation plans in accordance with Section 1 of the technical Manual, where applicable.
X		1	Written summary of significant natural features located on the site (Section 14-526 (b) (a))
X		1	Stormwater management plan and stormwater calculations
X		1	Written summary of project's consistency with related city master plans
X		1	Evidence of utility capacity to serve
X		1	Written summary of solid waste generation and proposed management of solid waste
X		1	A code summary referencing NFPA 1 and all Fire Department technical standards
X		1	Where applicable, an assessment of the development's consistency with any applicable design standards contained in Section 14-526 and in City of Portland Design Manual
X		1	Manufacturer's verification that all proposed HVAC and manufacturing equipment meets applicable state and federal emissions requirements.

Applicant Checklist	Planner Checklist	# of Copies	SITE PLAN SUBMISSIONS CHECKLIST (* If applicant chooses to submit a Preliminary Plan, then the * items were submitted for that phase and only updates are required)
x		1	* Boundary Survey meeting the requirements of Section 13 of the City of Portland's Technical Manual
		1	Final Site Plans including the following:
x			Existing and proposed structures, as applicable, and distance from property line (including location of proposed piers, docks or wharves if in Shoreland Zone);
x			Existing and proposed structures on parcels abutting site;
x			All streets and intersections adjacent to the site and any proposed geometric modifications to those streets or intersections;
x			Location, dimensions and materials of all existing and proposed driveways, vehicle and pedestrian access ways, and bicycle access ways, with corresponding curb lines;
x			Engineered construction specifications and cross-sectional drawings for all proposed driveways, paved areas, sidewalks;
x			Location and dimensions of all proposed loading areas including turning templates for applicable design delivery vehicles;
x			Existing and proposed public transit infrastructure with applicable dimensions and engineering specifications;
x			Location of existing and proposed vehicle and bicycle parking spaces with applicable dimensional and engineering information;
x			Location of all snow storage areas and/or a snow removal plan;
x			A traffic control plan as detailed in Section 1 of the Technical Manual;
x			Proposed buffers and preservation measures for significant natural features, where applicable, as defined in Section 14-526(b)(1);
x			Location and proposed alteration to any watercourse;
x			A delineation of wetlands boundaries prepared by a qualified professional as detailed in Section 8 of the Technical Manual;
x			Proposed buffers and preservation measures for wetlands;
x			Existing soil conditions and location of test pits and test borings;
x			Existing vegetation to be preserved, proposed site landscaping, screening and proposed street trees, as applicable;
x			A stormwater management and drainage plan, in accordance with Section 5 of the Technical Manual;
x			Grading plan;
x			Ground water protection measures;
x			Existing and proposed sewer mains and connections;

- Continued on next page -

X		Location of all existing and proposed fire hydrants and a life safety plan in accordance with Section 3 of the Technical Manual;
X		Location, sizing, and directional flows of all existing and proposed utilities within the project site and on all abutting streets;
X		Location and dimensions of off-premises public or publicly accessible infrastructure immediately adjacent to the site;
X		Location and size of all on site solid waste receptacles, including on site storage containers for recyclable materials for any commercial or industrial property;
X		Plans showing the location, ground floor area, floor plans and grade elevations for all buildings;
X		A shadow analysis as described in Section 11 of the Technical Manual, if applicable;
N/A		A note on the plan identifying the Historic Preservation designation and a copy of the Application for Certificate of Appropriateness, if applicable, as specified in Section Article IX, the Historic Preservation Ordinance;
X		Location and dimensions of all existing and proposed HVAC and mechanical equipment and all proposed screening, where applicable;
X		An exterior lighting plan in accordance with Section 12 of the Technical Manual;
X		A signage plan showing the location, dimensions, height and setback of all existing and proposed signs;
X		Location, dimensions and ownership of easements, public or private rights of way, both existing and proposed.



**PORTLAND FIRE DEPARTMENT
SITE REVIEW
FIRE DEPARTMENT CHECKLIST**



A separate drawing[s] shall be provided as part of the site plan application for the Portland Fire Department's review.

1. Name, address, telephone number of applicant
- 2.
3. Name address, telephone number of architect
4. Proposed uses of any structures [NFPA and IBC classification]
- 5.
6. Square footage of all structures [total and per story]
7. Elevation of all structures
8. Proposed fire protection of all structures
 - **As of September 16, 2010 all new construction of one and two family homes are required to be sprinkled in compliance with NFPA 13D. This is required by City Code. (NFPA 101 2009 ed.)**
9. Hydrant locations
10. Water main[s] size and location
11. Access to all structures [min. 2 sides]
12. A code summary shall be included referencing NFPA 1 and all fire department. Technical standards.

Some structures may require Fire flows using annex H of NFPA 1



PATRONS
INSURANCE

For all the things you value.

September 18, 2015

Re: Portland Technology Park Lot 4 – Agent Authorization

To Whom it May Concern:

Woodard & Curran will be acting as our agent for all local, state, and federal permitting associated with the Portland Technology Park, Lot 4 development project located off of Rand Road in Portland, Maine.

Sincerely,

Mark A. Pettingill
President & CEO



4. EVIDENCE OF RIGHT, TITLE AND INTEREST

The City of Portland currently owns the 40-acre Technology Park site. Title, right, or interest documentation was provided as part of the original permit application and can be provided again upon request.

A purchase & sale agreement has been executed between Patrons-Oxford Insurance Company and the City of Portland for Limited Common Element (LCE) 4. A copy of the original purchase and sale agreement, and a subsequent amendment between Patrons-Oxford Insurance and the City of Portland is attached to this Section. Note that extensions for the agreement will be issued as necessary until closing occurs.

4.1 ATTACHMENTS

- Purchase & Sale Agreement
- Addendum to Purchase & Sale Agreement

PURCHASE AND SALE AGREEMENT

THIS AGREEMENT for the purchase and sale of real estate made this 17th day of March, 2015 by and between the **CITY OF PORTLAND**, a body politic and corporate located in Cumberland County, Maine (hereinafter referred to as "Seller"), and **PATRONS OXFORD INSURANCE COMPANY**, a Maine insurance corporation, having its principal place of business at Auburn, Maine (hereinafter referred to as "Buyer").

WITNESSETH:

WHEREAS, Seller owns an approximately 3.47 acre parcel of land located at the Portland Technology Park, City of Portland, County of Cumberland, State of Maine, being known as Unit 1 and LCE #1 on that certain Subdivision Plat of Portland Technology Park Condominium, Rand Road, Portland, Maine dated September 29, 2011 and last revised on September 25, 2012, prepared by SGC Engineering, LLC for the City of Portland – Declarant, approved by the City of Portland Planning Board on January 24, 2012 and recorded in the Cumberland County Registry of Deeds on October 10, 2012 in Book 212, Page 324 (the "Plan," a copy of which is attached hereto as Exhibit A) and being further described as Unit 1 of the condominium known as the Portland Technology Park Condominium of which the Seller is the declarant as described in that certain Declaration of Condominium for the Portland Technology Park to be recorded in the Cumberland County Registry of Deeds (the "Declaration of Condominium"), together with all improvements, fixtures and rights appurtenant thereto, all as more particularly shown and depicted as the cross-hatched lot on the condominium plat shown on Exhibit B attached hereto and made part hereof (the "Property"). Title reference is made to a deed from Simon A. Snyder et alia to the City of Portland dated December 7, 1999 and recorded in the Cumberland County Registry of Deeds, Book 15211, Page 31; and

WHEREAS, Seller intends to sell and Buyer desires to acquire the Property.

NOW, THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties, intending to be legally bound, hereby agree as follows:

1. SALE.

Seller agrees to sell the Property, and Buyer agrees to purchase the Property in accordance with the provisions hereof. It is hereby agreed and acknowledged that the actual description of the Property shall be determined based on the title and related due diligence work to be completed by Buyer pursuant to this Agreement and that such description shall be subject to Buyer's and Seller's final review and approval before including the same in the Deed (as that term is defined below) to be delivered by Seller to Buyer as set forth and described below.

2. CONSIDERATION.

The consideration for the property shall be Six Hundred Twenty-Five Thousand

Dollars (\$625,000.00) payable as follows:

- (a) A deposit of Twenty Thousand Dollars (\$20,000.00) to be paid by Buyer within two (2) business days of the Effective Date and held by Buyer's agent, Andrew Ingalls of CBRE The Boulos Company, until closing and applied to the Purchase Price (or, if applicable, until returned to Buyer pursuant to this Agreement) (the "Deposit"); and
- (b) The Purchase Price, less the Deposit, to be paid by Buyer to Seller at closing by wire transfer, certified check or bank cashier's check, subject to the adjustments provided for in this Agreement.

This is a cash purchase and no financing is required.

3. TITLE.

Seller shall convey the Property to Buyer at the closing in fee simple with good and marketable title or insurable title, subject to: (a) easements, privileges, restrictions, conditions, development rights, special declarant rights, and agreements created by or referred to in the Declaration of Condominium, as well as the matters shown or disclosed on the Plan, as may be amended; (b) provisions of (i) the Maine Condominium Act, and all amendments thereto; and (ii) the Declaration of Condominium, the bylaws and the plats and plans for The Portland Technology Park Condominium Association and all amendments or modification thereto; (iii) building, zoning and land use ordinances; (c) all restrictions required because the roadway serving the Portland Technology Park Condominium (including the Property), which roadway will continue to be owned by the Seller, was improved, in part, with funding from the United States Economic Development Administration (EDA), United States Department of Commerce, a copy of which restrictions is attached hereto as Exhibit C; and (d) such taxes and assessments, including common expenses allocable to the Property, if any, as are due and payable on the date of delivery of the Deed. At the closing, Seller shall execute and deliver to Buyer, against payment of the balance of the purchase price, a Municipal Quitclaim Deed without Covenant (the "Deed"). In the event that Seller is unable to convey title as aforesaid, Seller shall be given a reasonable period of time, not to exceed sixty (60) days, in which to remedy any title defects. In the event that said defects cannot be corrected or remedied or in the event that Seller elects not to remedy same, then the Deposit shall be returned to Buyer and this Agreement, and Seller's and Buyer's obligations hereunder, will terminate. Buyer may, at Buyer's option elect to close notwithstanding such defects as may exist. Seller and Buyer understand and agree that any mortgages and liens on the Property shall not be considered title defects provided that the same shall be discharged at or prior to closing at Seller's expense. Seller may use purchase money proceeds for this purpose. The Property shall be sold and conveyed strictly on an "as is", "where is" and "with all defects" basis, and, except as set forth below, without representation, warranty or covenant, express, implied or statutory, of any kind whatsoever, including, without limitation, representation, warranty or covenant as to condition, past or present use, tax ramifications or consequences, compliance with law, merchantability or fitness or suitability for any purpose, all of which are hereby expressly disclaimed.

4. POSSESSION.

Full possession of the Property will be delivered to Buyer at the transfer of title free and clear of all tenancies or occupancies by any person or entity.

5. REAL ESTATE TAXES, PRORATIONS AND TRANSFER TAX.

Buyer shall be liable for all real estate taxes beginning, as of the closing date, with fiscal year 2015-16 and continuing thereafter. Because the Property is currently owned by the City of Portland, which is exempt from real estate taxes, no taxes were assessed for fiscal year 2014-15 and no taxes will be prorated at the closing, provided, however, that any assessments and utilities for the Property shall be prorated as of the closing. The Maine real estate transfer tax shall be paid for by Buyer in accordance with 36 M.R.S.A. § 4641-A. Seller is exempt from paying the transfer tax pursuant to 36 M.R.S.A. § 4641-C.

6. RISK OF LOSS.

The risk of loss or damage to the Property by fire or otherwise, until transfer of title hereunder, is assumed by the Seller. The Property is to be delivered in substantially the same condition as of the date of this Agreement unless otherwise stated. In the event Seller is not able to deliver the Property as stated, Buyer may terminate this Agreement and receive a refund of the Deposit.

7. INSPECTIONS AND SELLER REPRESENTATIONS AND WARRANTIES.

Buyer may enter into any part of the Property at all reasonable times prior to the closing in order to inspect the Property, conduct surveys, test borings and engineering studies and to do such other things as are reasonably necessary with respect to the acquisition and development of the Property. Buyer agrees to return the Property as nearly as possible to its original condition after the completion of all of such tests and inspections. In the event that the inspection reveals defects or conditions which are unacceptable to Buyer, Buyer may terminate this Agreement and receive back the Deposit.

Subject to all matters disclosed in any document delivered to Buyer by Seller or on any exhibit attached hereto, and subject to any information discovered by Buyer or other information disclosed to Buyer by Seller in writing or any other person after the date hereof and prior to the closing, Seller represents and warrants to Buyer that to Seller's actual knowledge, the following are true as of the date of this Agreement and will be true as of the closing:

- (a) Except as set forth in the Plan, as may be amended, there are no outstanding pending or threatened liens, claims, rights of first refusal, licenses or encumbrances against or affecting the Property.
- (b) All outstanding bills and/or accounts payable concerning the Property are either paid or will be paid prior to or at the time of closing.
- (c) There are no outstanding claims, losses or demands against Seller by any person respecting Seller's ownership, use or occupancy of the Property.

(d) The Property has not been used for any dumping of waste materials or landfilling and are free of special wastes, underground storage tanks, radon, asbestos, lead substances, and any hazardous, biomedical, radioactive or toxic, substances, materials or wastes. The terms used in the foregoing sentence shall include, without limitation, all substances, materials, etc., designated by such terms under any laws, ordinances or regulations, whether federal, state or local.

(e) Seller has no knowledge of any boundary disputes or encroachments affecting the Property.

(f) There are rights of ingress and egress in perpetuity from the Property to public highways and roads for vehicular and pedestrian traffic and utilities, except that Seller is currently in the process of obtaining required easements to connect natural gas service to the Portland Technology Park Condominium.

(g) There are no endangered or threatened wildlife or plant habitats and no rivers, streams, great ponds, other bodies of water or wetlands or coastal sand dunes on or adjacent to the Property which, under applicable law would prohibit, limit or restrict Buyer's intended use of the Property.

(h) Seller has received no notices of violation from any Federal or State agency alleging a violation of any environmental law, rule or regulation with respect to the Property;

(i) Seller will have absolute right to sell, assign or transfer the Property to Buyer, after the Portland City Council has approved the sale under the terms herein stated.

All representations and warranties made by Seller herein are made based on Seller's actual knowledge and shall survive the closing of this transaction. Except as set forth herein, Buyer acknowledges that Seller makes no other representations or warranties regarding the Property.

8. CLOSING.

The closing of this transaction shall take place on that date which is sixty (60) days after the Effective Date, at the offices of Bernstein Shur, 100 Middle Street, Portland, Maine. Time is of the essence of this Agreement.

9. DEFAULT AND REMEDIES.

- (a) In the event of Buyer's default under any of the terms, covenants or conditions of this Agreement, Seller shall have the right to retain the Deposit and any interest accrued thereon as aforesaid as liquidated damages for the breach and not as a penalty therefor. The Buyer and Seller acknowledge and agree that (i) it is not feasible to determine accurately the measure of damages that will be

caused to Seller by the Buyer's breach because the uniqueness of the Property at its location preclude the utility of comparable figures to determine the extent of damages and (ii) that the amount stated as liquidated damages is agreed to reasonably forecast the amount necessary to compensate Seller for its loss in the light of the circumstances stated in clause (i) and the attendant uncertainties in marketing the Property to another purchaser.

- (b) In the event that Seller fails to close hereunder for a reason other than the default of Buyer, Buyer may, as its sole remedy therefor, and subject to the terms of this paragraph, either (i) enforce specific performance of this Agreement against Seller, or (ii) terminate this Agreement and receive the Deposit, plus all interest earned or accrued thereon, except that in the case of any breach of a covenant, representation or warranty of Seller, Buyer shall be entitled, as its sole remedy, to recover its actual damages therefor. Buyer agrees that any recovery against Seller for any breach of Seller's covenants, representations, or warranties hereunder or under any other document delivered by Seller to Buyer or under any law applicable to the Property or this transaction, shall be limited to Buyer's actual damages and that in no event shall Buyer be entitled to seek or obtain any other damages of any kind, including, without limitation, consequential, indirect or punitive damages.

10. CONDITIONS PRECEDENT TO BUYER'S OBLIGATION TO CLOSE.

The obligation of Buyer to close is subject to the satisfaction at or before the closing of all of the following conditions:

- (a) All representations and warranties of Seller contained in this Agreement shall be true as of the closing.
- (b) Seller shall, at its sole cost and expense, complete any and all additional work necessary to finalize the Declaration of Condominium in order to convey the Property and to delineate the boundaries of the same, which conveyance and delineation shall ensure that the Property is a conforming and approved lot under the City of Portland's zoning and land use laws, ordinances and regulations and not in violation of the State of Maine's subdivision laws, including, but not limited to, M.R.S.A. 30-A § 4401.
- (c) Buyer shall determine, in its sole and absolute discretion, that the Property may be used for the construction and operation of a two (2) story, 30,000 square foot, professional office building and that it is satisfied with all local, state and federal zoning and land use laws, ordinances and regulations affecting the Property, including, but not limited to, setback, lot coverage, traffic and parking requirements and, if necessary, the Buyer's ability to construct and install a local, state and federal approved curb cut into the Property from the right of way shown and identified as Easement Area 1 on the Plan.
- (d) Buyer shall determine, in its sole and absolute discretion, that it is satisfied with the terms and conditions of the Declaration of Condominium and the bylaws,

plats and plans of said Portland Technology Park Condominium, it being hereby agreed and acknowledged that Seller shall deliver copies of the same to Buyer for review within five (5) days of the Effective Date and that to the extent any modifications are made to said documents pursuant to subsection (b) above, Seller shall promptly notify Buyer of the same.

- (e) In the event that any of the foregoing conditions is not satisfied, as determined by Buyer in its sole and absolute discretion, Buyer shall have the option of terminating this Agreement and receiving back the Deposit, except that should any of Seller's representations or warranties prove untrue, then Buyer shall have the right to require Seller, at Seller's expense, to make the Property conform thereto.

11. BINDING EFFECT.

This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective heirs, administrators, successors and assigns.

12. ENTIRE AGREEMENT.

This Agreement represents the entire and complete Agreement and understanding between the parties and supersedes any prior agreement or understanding, written or oral, between the parties with respect to the acquisition or exchange of the Property hereunder. This Agreement cannot be amended except by written instrument executed by Seller and Buyer.

13. HEADINGS AND CAPTIONS.

The headings and captions appearing herein are for the convenience of reference only and shall not in any way affect the substantive provisions hereof.

14. GOVERNING LAW.

This Agreement shall be governed by and construed and enforced in accordance with the laws of the State of Maine.

15. NOTICE.

Any notice required or permitted under this Agreement shall be deemed sufficient if mailed with first class postage affixed or delivered in person to:

FOR THE SELLER: City of Portland
 Attention: City Manager
 389 Congress Street
 Portland, ME 04101

FOR THE BUYER: Patrons Oxford Insurance Company
 P.O. Box 1960
 Auburn, Maine 04210
 Attn: Mark A. Pettingill, President

Either party may change his address for purposes of this paragraph by giving the other party notice of the new address in the manner described herein.

16. SIGNATURES; MULTIPLE COUNTERPARTS.

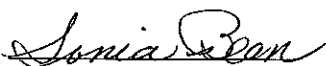
This Agreement may be executed in any number of counterparts and by different parties in separate counterparts. Each counterpart when so executed shall be deemed to be an original and all of which together shall constitute one and the same agreement. A signature in a faxed, pdf or other reproduced or electronic document shall be considered the equivalent of an original signature.

17. BROKERS.

Seller and Buyer each represents and warrants that neither has dealt with a real estate broker in connection with this transaction, other than Andrew Ingalls of CBRE The Boulos Company ("CBRE"), whose commission will be paid by Seller pursuant to the terms of a separate agreement to be negotiated between Seller and CBRE. Buyer agrees to indemnify and hold harmless Seller from any claims made by any broker should Buyer's representation in this paragraph be false. Seller agrees to indemnify and hold harmless Buyer from any claims made by any broker should Seller's representation in this paragraph be false. The foregoing indemnities shall include all legal fees and costs incurred in defense against any such claim, and shall survive closing.

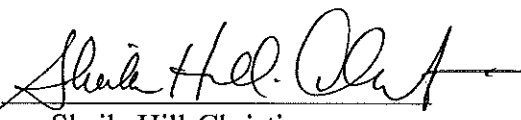
IN WITNESS WHEREOF, the parties have hereunto set their hands and seals on the day and year first above written.

CITY OF PORTLAND

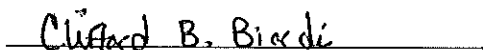

WITNESS

APPROVED AS TO FORM.

CORPORATION COUNSEL'S OFFICE

By: 
Sheila Hill-Christian
Its Acting City Manager

**PATRONS OXFORD INSURANCE
COMPANY**


WITNESS

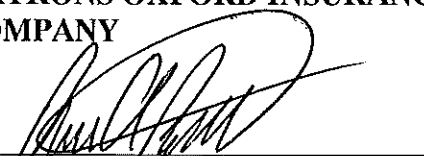
By: 
Mark A. Pettingill
Its President

Exhibit A

[See Attached Subdivision Plat of Portland Technology Park Condominium]

[illegible]

MADE REFERENCES:

1. A. L. ANDERSON, "POLYMER STIMULUS SOLID-STATE REACTIONS: MECHANISM OF CRYSTALLINITY AND MOLECULAR WEIGHT EFFECTS," *MACROMOL. REV.*, **12**, 209 (1978); *PREPARED BY L. ANDERSON*
MOC

[illegible]

1/25/2008				
	Time	Temp	Humidity	Wind
1	10:00	65.0	75.0	10.0
2	10:15	65.0	75.0	10.0
3	10:30	65.0	75.0	10.0
4	10:45	65.0	75.0	10.0
5	11:00	65.0	75.0	10.0
6	11:15	65.0	75.0	10.0
7	11:30	65.0	75.0	10.0
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72	03:45	65.0	75.0	10.

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CHARTERED RD

RTE 1

RTE 2

RTE 3

LAKES 1

LAKES 2

LAKES 3

GENERAL NOTE 3

S

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SUBDIVISION PLAT
OF
PORTLAND TECHNOLOGY PARK
CONDOMINIUM
RAND ROAD, PORTLAND, MAINE
RECORD OWNER
CITY OF PORTLAND - DECLARANT
381 CONGRESS STREET, PORTLAND, MAINE



SGC ENGINEERING, LLC

- Civil Design & Survey Engineering
- Environmental & Regulatory Permitting
- Electrical Power Systems Engineering

SERVING OUR CLIENTS IN THE U.S.A. & CANADA

NY South Side 800 3rd Street Suite 200 Long Beach, NY 11560 Tel: 516-327-8123 Fax: 516-327-8124	Orange/Valley Stream 1000 Valley Stream Road Suite 200 Valley Stream, NY 11580 Tel: 516-327-8123 Fax: 516-327-8124	NY West Side 100 West 17th Street Suite 200 New York, NY 10011 Tel: 212-512-2774 Fax: 212-512-2775
--	---	---

DATE: 05-29-11

CALC: J. HOFF

DRAWN: DE

PROJECT: PALMISTO

SHEET: 1 OF 1

[illegible]

CINGERLAND COUNTY, ss. REGISTRY OF DEEDS
 Entered: October 10, 2012
 s. 3 s. 62 s. P. N. ss.
 Filed for Book 212 p. 324
 [Signature]

Exhibit B

[See Attached Plan Depicting Property]

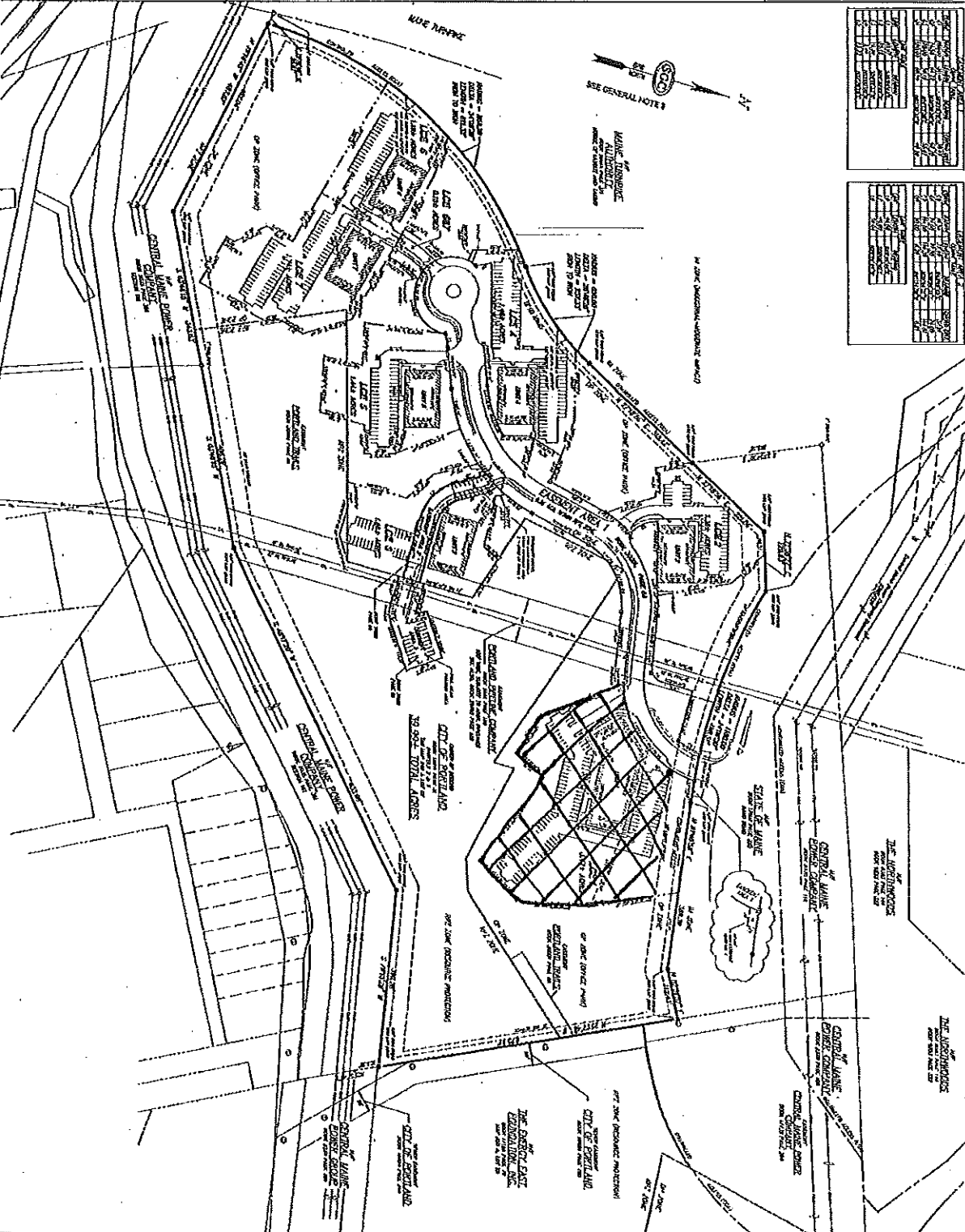
[illegible]

Exhibit C

COMPLIANCE WITH EDA RESTRICTIVE COVENANTS

The Seller and Buyer acknowledge that the Property was improved, in part, with funding from the United States Economic Development Administration (EDA), United States Department of Commerce, EDA Project Number 01-01-08630 and is subject to the terms and conditions of the EDA financial assistance award. Consequently, all recipients or owners and/or their successors and assigns, agree as follows:

Real Property or tangible Personal Property improved with EDA Investment Assistance must be used in a manner that is consistent with the authorized general and specific purposes of the Award, in this case, commercial purposes and EDA policies concerning adequate consideration and environmental compliance; and any applicable provisions of 13 CFR §314. It may not be used in violation of the nondiscrimination requirements set forth in 13 C.F.R. §302.20 or for inherently religious activities prohibited by applicable federal law.

Buyer agrees to provide Seller and/or EDA with any document, evidence or report required to assure compliance with federal and state law, including, but not limited to, applicable federal and state environmental laws.

The use of the Property, (improved with EDA assistance), for any purpose other than the authorized purpose of the EDA grant, which in this case is commercial uses, is prohibited. This covenant shall remain in effect for a period of twenty (20) years.

Patrons Oxford Insurance Company

P.O. Box 1960 Auburn, ME 04211-1960

CHECK NO. 8003231

INVOICE DATE	DESCRIPTION	NET CHECK AMOUNT
3/16/2015	000000133545 DEPOSIT FOR LAND PARCEL	\$20,000.00
	CHECK TOTAL	\$20,000.00

THIS DOCUMENT CONTAINS A WATERMARK ON BACK

**Patrons Oxford Insurance Company**

P.O. Box 1960 Auburn, ME 04211-1960

Bangor Savings Bank
Bangor, Maine52-7438
2112**8003231**

VENDOR ID	DATE ISSUED
BOUCOM	3/16/2015

PAY: Twenty thousand and 00/100 Dollars

PAY \$*****20,000.00

Void if not cashed within 180 days

TO THE BOULOS COMPANY
ORDER OF:
AUTHORIZED SIGNATURE

⑈8003231⑈ ⑆211274382⑆ 4020350582⑈

Addendum 1 to Purchase and Sale Agreement

This Addendum 1 to Purchase and Sale Agreement ("Addendum 1") dated as of July 30, 2015, supplements and amends that certain Purchase and Sale Agreement dated March 19, 2015 by and between Patrons Oxford Insurance Company, as Buyer, and the City of Portland, as Seller, as amended by that certain Extension to Purchase and Sale Agreement dated April 29, 2015 and that certain Second Extension to Purchase and Sale Agreement dated June 7, 2015 (collectively, the "Agreement") to which Agreement this Addendum 1 is attached and incorporated therein by reference. In the event that any provision in this Addendum 1 shall conflict in whole or in part with any of the terms contained in the Agreement, the provisions of this Addendum 1 shall control and any conflicting terms of the Agreement are hereby considered amended and revised hereby:

- 1) The first two recitals in the main body of the Agreement are hereby deleted in their entirety and replaced with the following:

WHEREAS, Seller owns a parcel of land located at the Portland Technology Park, City of Portland, County of Cumberland, State of Maine, being known as Unit 4 and LCE #4 on that certain Subdivision Plat of Portland Technology Park Condominium, Rand Road, Portland, Maine dated September 29, 2011 and last revised on May 1, 2015, prepared by SGC Engineering, LLC for the City of Portland – Declarant, approved by the City of Portland Planning Board on March 10, 2015 and recorded in the Cumberland County Registry of Deeds on June 19, 2015 in Book 215, Page 250 (the "Plan," a copy of which is attached hereto as Exhibit A) and being further described as Unit 4 of the condominium known as the Portland Technology Park Condominium of which the Seller is the declarant as described in that certain Declaration of Condominium for the Portland Technology Park to be recorded in the Cumberland County Registry of Deeds (the "Declaration of Condominium"), together with all improvements, fixtures and rights appurtenant thereto, all as more particularly shown and depicted as the cross-hatched lot on the Condominium Plat of Portland Technology Park Condominium dated September 29, 2011 and last revised on March 17, 2014, prepared by SGC Engineering, LLC for the City of Portland – Declarant shown on Exhibit B attached hereto and made part hereof (the "Condominium Plat"). Title reference is made to a deed from Simon A. Snyder et alia to the City of Portland dated December 7, 1999 and recorded in the Cumberland County Registry of Deeds, Book 15211, Page 31; and

WHEREAS, at Buyer's request, and subject to approval by the Portland Planning Board, Seller intends to make amendments to the Plan and the Condominium Plat including adjusting the boundaries of Unit #4, LCE #4, and Easement Area 1 as generally depicted on the Proposed Site Plan, which is attached hereto as Exhibit C and made a part hereof, in order to accommodate Buyer's planned development of Unit #4 and LCE #4 (Unit #4 and LCE #4 as amended and generally depicted on Exhibit C are referred to collectively as the "Property"); and

WHEREAS, subject to approval by the Portland Planning Board of amendments to the Plan and the Condominium Plat adjusting the boundaries of Unit #4, LCE #4, and Easement Area 1 in substantially the manner depicted on Exhibit C, Seller intends to sell and Buyer desires to acquire the Property.

It is therefore the intent hereof that all previous references in the Agreement to Unit 1 and LCE #1 are hereby deleted and replaced with references to Unit 4 and LCE #4. It is further the intent hereof that the new Exhibit A and Exhibit B attached hereto shall replace the original such Exhibits attached to the main body of the Agreement.

- 2) Section 2 of the main body of the Agreement is hereby deleted in its entirety and replaced with the following:

The consideration for the property shall be One Hundred Fifty Thousand Dollars (\$150,000.00) (the "Purchase Price") payable as follows:

- (a) A deposit of Twenty Thousand Dollars (\$20,000.00) has been paid by Buyer and will continue to be held by Buyer's agent, Andrew Ingalls of CBRE The Boulos Company, until closing and applied to the Purchase Price (or, if applicable, until returned to Buyer pursuant to this Agreement) (the "Deposit"); and
- (b) The Purchase Price, less the Deposit, to be paid by Buyer to Seller at closing by wire transfer, certified check or bank cashier's check, subject to the adjustments provided for in this Agreement.

This is a cash purchase and no financing is required.

- 3) Section 8 of the main body of the Agreement is hereby deleted in its entirety and replaced with the following:

The sale price of \$150,000 has been discounted by a fixed amount of \$215,000, which represents the Buyer's cost of extending to the Property the public road and utilities located in Easement Area 1, per Section 4 of this Addendum. The closing of this transaction shall take place on or before that date which is ninety (90) days after the date of full execution of this Addendum 1, at the offices of Bernstein Shur, 100 Middle Street, Portland, Maine. Time is of the essence of this Agreement.

- 4) Section 10(b) of the main body of the Agreement is hereby deleted in its entirety and replaced with the following:

Seller shall, at its sole cost and expense, complete any and all additional work necessary to finalize the Declaration of Condominium in order to convey the Property and to delineate the boundaries of the same, which conveyance and delineation shall ensure that the Property is a conforming and approved lot under the City of Portland's zoning and land use laws, ordinances and regulations and not in violation of the State of Maine's subdivision laws, including, but not limited to, M.R.S.A. 30-A § 4401. In addition, Seller shall, at its sole cost and expense, obtain final, unappealable approval from the Portland Planning Department or Board, as may be required, for the amendments to the Plan and the Condominium Plat including adjustments to the boundaries of Unit #4, LCE #4, and Easement Area 1 as generally depicted on said Exhibit C, in order to accommodate Buyer's planned development of the Property.

5) The following new Section 18 is hereby added to the Agreement:

18. **Extension of Right-of-Way and Utilities.** Upon Buyer's closing on the purchase of the Property pursuant to this Agreement, the Seller hereby agrees and acknowledges that Buyer shall have the obligation, at its sole cost and expense, to design and construct an extension of the existing right-of-way and utilities (including water, sewer, electricity, and telecommunications) within the Condominium (which right-of-way is known as Easement Area 1 and is shown on the Plan) from its current terminus at the end of the so-called "Phase 1" (as shown on the Plan) for an additional one hundred feet (100') to the first entrance to the Property, all as generally depicted and described on Exhibit C (the 100' section of said right-of-way and the associated utility facilities are referred to herein collectively as the "New Road"). Prior to commencing its construction of the New Road, Buyer shall first obtain Seller's written approval for the final plans and specifications for such improvements, which approval shall not be unreasonably withheld, conditioned or delayed. The construction of the New Road shall be completed by Buyer's contractors in a good workmanlike manner and in accordance with all applicable federal, state, and local laws, rules, regulations, and ordinances. In order to ensure that Buyer is able to complete such construction and extension of the New Road pursuant to this Section 18, Seller hereby agrees to cooperate with Buyer at all times and to deliver, and if applicable and where appropriate, to assign, to Buyer and Buyer's contractor any information, reports, permits, approvals, or other due diligence materials in its possession which will reasonably assist Buyer and Buyer's contractors in the completion of the work described in this Section 18. In addition, if and when required, the Seller shall grant to Buyer any necessary easements or licenses which may be required by Buyer in order complete such construction and extension of said right-of-way and/or obtain the necessary permits and approvals in connection with the same. Any such easements and licenses shall be in a form satisfactory to the Seller. The terms and conditions of this Section 18 shall expressly survive the closing on the purchase of the Property pursuant to this Agreement.

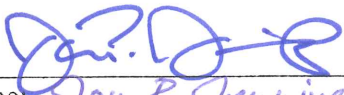
6) The following new Section 19 is hereby added to the Agreement:

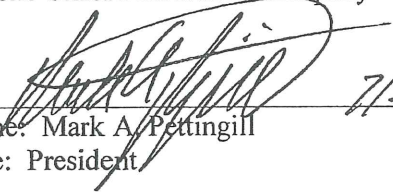
19. **Right of Seller to Repurchase Property.** If construction of the New Road is not completed, pursuant to the terms and conditions of this Agreement, within 18 months after the closing date, the Seller shall have the right, but not the obligation to repurchase the Property at the Purchase Price. This option to repurchase shall survive the closing on the purchase of the Property pursuant to this Agreement, shall be included in Seller's deed to Buyer, and shall run with the land.

7) Except as specifically modified hereby, all other terms and conditions of the Agreement remain in full force and effect.

SELLER
City of Portland

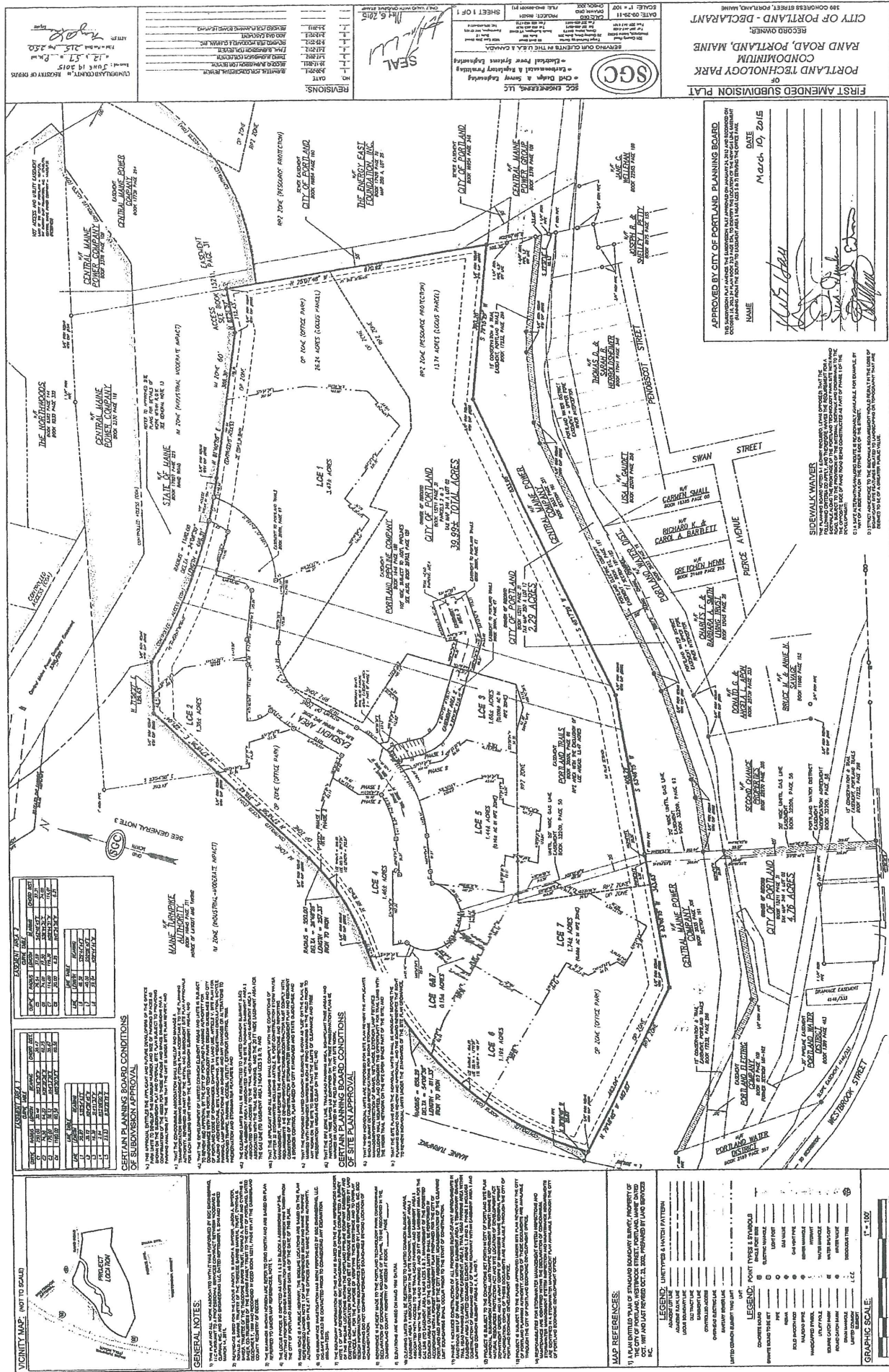
BUYER
Patrons Oxford Insurance Company

By: 
Name: Jon P. Jennings Date 7/30/15
Title: City Manager

By: 
Name: Mark A. Pettingill Date 7/30/15
Title: President

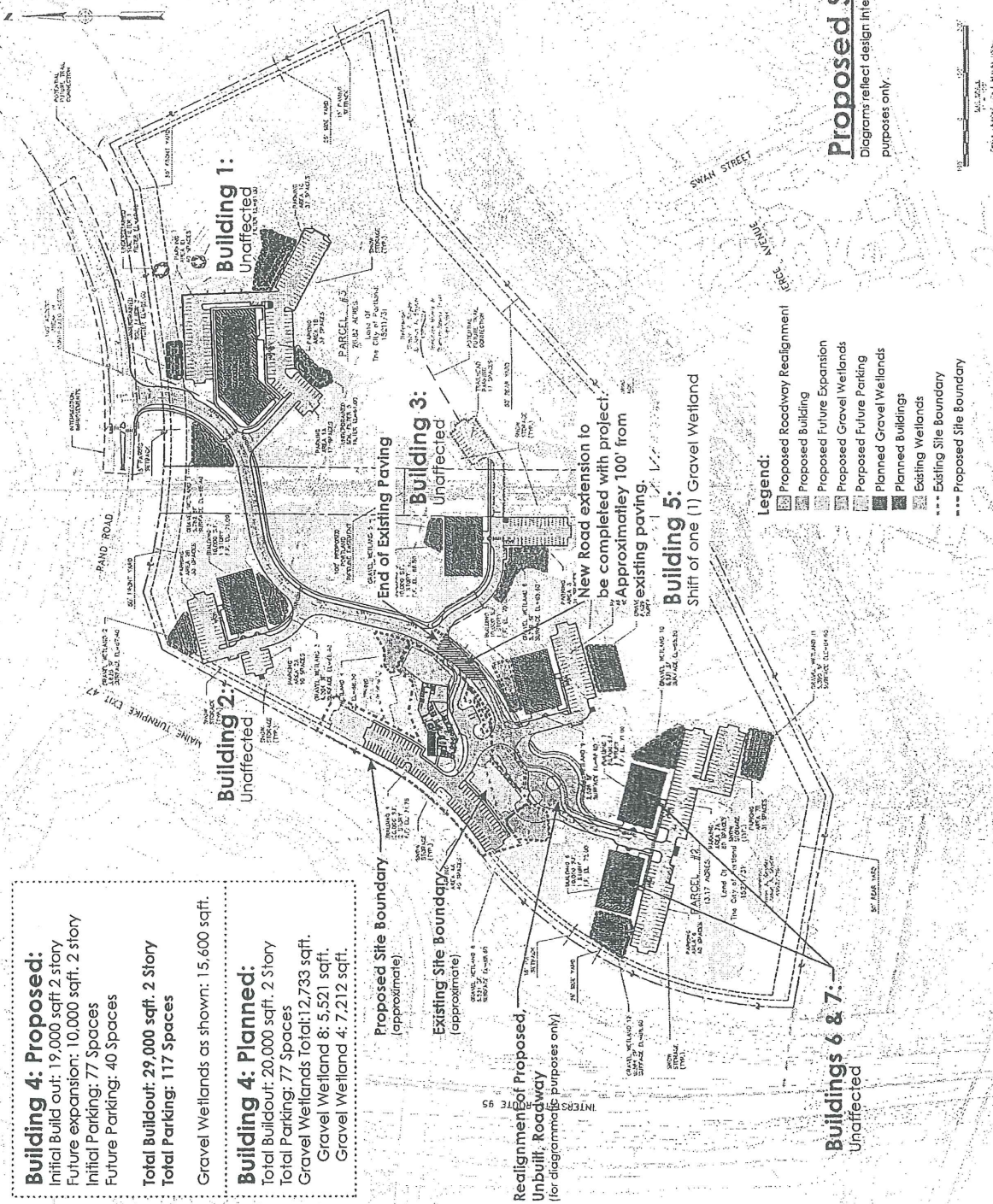
APPROVED AS TO FORM:

CORPORATION COUNSEL'S OFFICE



[illegible]

OFFICE PARK (OP) ZONE REQUIREMENTS		REMARKS	APPROX.
FRONT YARD SETBACK	50 FT.	525 FT.	
REAR YARD SETBACK	JA FT.	89 FT.	
REAR YARD SETBACK	50 FT.	545 FT.	
PAVEMENT SETBACK	15 FT.	15 FT.	
MINIMUM DRIVEWAY WIDTH	500 M2.	272	
LOT SIZE	1.5 ACRES MIN.	26 ACRES	
SINGLE HOUSE	100 FT. MIN.	1,428 FT.	
LOT WIDTH	100 FT. MIN.	275 FT.	
PARKING SPACES	42 SPACES	434	





8. EVIDENCE OF FINANCIAL & TECHNICAL CAPACITY

8.1 FINANCIAL CAPACITY

LCE 4 of the Portland Technology Park will be funded by the Patrons Oxford Insurance Company, which has executed a purchase and sale agreement for the property with the City of Portland. Patrons Oxford Insurance Company is a wholly owned stock subsidiary of Quincy Mutual Fire Insurance Company (QMFIC); QMFIC has the financial capacity to finance the purchase and construction costs associated with the proposed project without resorting to external funding sources, as demonstrated by the letter attached to this Section. LCE 4 of the Portland Technology Park project has an estimated project cost of \$5 million.

8.2 TECHNICAL CAPACITY

Scott Simons Architects is the architect for the project and Woodard & Curran is the civil engineering firm completing the site design and permitting for the project. Woodard & Curran completed the original design and permitting for the Technology Park, and worked with Scott Simons Architects to develop the "Design Guidelines for Portland Technology Park," which are being used as the basis for this project. Both Woodard & Curran and Scott Simons Architects have significant experience completing similar types of development projects in Maine, and specifically in Portland. Richardson & Associates is the Landscape Architect on the project, and they have experience with similar types of development as well.

Resumes or additional company information for Woodard & Curran, other consultants referenced within this application, or key personnel involved in preparing this application can be provided upon request.

8.3 ATTACHMENTS

- Financial Capacity Letter



September 18, 2015

Planning Board of the
City of Portland
389 Congress Street
Portland, Maine 04101

*Re: Purchase and proposed development of Site 4 in Portland Technology
Park by Patrons Oxford Insurance Company*

Dear Chairperson:

Patrons Oxford Insurance Company ("Patrons Oxford") has executed a purchase and sale agreement for Site 4 within the Portland Technology Park project in Portland, Maine, and soon expects to file development plans to construct its home office on that lot.

Patrons Oxford is a wholly owned stock subsidiary of Quincy Mutual Fire Insurance Company ("QMFIC"). As of December 31, 2014, the policyholder surplus (i.e., net worth) of QMFIC was in excess of \$994 Million.

We believe this project is quite economically feasible for Patrons Oxford to undertake. As a member of the Quincy Mutual Group, Patrons Oxford clearly has the financial and business capability to close on the purchase of Site 4 and thereafter to successfully complete this building project. QMFIC currently intends to finance the purchase and construction costs for Site 4 without resort to external funding sources.

We appreciate the Planning Board's speedy review and consideration of the development plans of Patrons Oxford for Site 4. Should you have any questions I would be happy to discuss this matter further. Please do not hesitate to call me directly at (617) 770-5199 anytime.

Sincerely,

James J. Moran, Jr.
Executive Vice President, Secretary
& General Counsel

JJM/sec

MEMORANDUM



TO: Jean Fraser, City of Portland Planner
FROM: Portland Technology Park Team
DATE: November 4, 2015
RE: Portland Technology Park LCE 4 Development – Neighborhood Meeting Certification

Woodard & Curran hereby certifies that a neighborhood meeting was held on October 26, 2015 at Hall Elementary School, 23 Orono Road, Portland, Maine at 7:00 PM. The meeting was attended only by representatives of Scott Simons Architects (Ryan Kanteres and Blaise Maccarrone) and Woodard & Curran (Dave Senus and Lauren Swett)

We also certify that on October 16, 2015, 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 and residents on an “interested parties” list that was provided. The invitation was also sent via digital copy to the Planning Department.

Signed,

WOODARD & CURRAN INC.

Lauren Swett, PE
Project Engineer

Attached to this certification are:

1. Copy of the invitation sent
2. Sign-in Sheet
3. Copy of presentation



October 16, 2015

Dear Neighbor:

On behalf of Patrons Oxford Insurance (Applicant), please join us for a neighborhood meeting to discuss our plans for the proposed development of Limited Common Element (LCE or lot) 4 in the Portland Technology Park located at the southeast corner of Rand Road and Exit #47 of the Maine Turnpike in Portland. A Level III Site Plan Application for the LCE 4 development has been filed with the City of Portland Planning Division on behalf of the Applicant, Patrons Oxford Insurance. A Subdivision Amendment for changes to the Technology Park layout has been filed concurrently on behalf of the Applicant City of Portland.

Meeting Location: Hall School, 23 Orono Road, Portland, Maine

Meeting Date: Monday, October 26, 2015

Meeting Time: 7:00PM

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.

The Portland Technology Park is a previously approved Office Park Planned Unit Development (OP-PUD), near the I-95 interchange (Exit #47) in the City of Portland, Maine. The City of Portland owns the approximately 40-acre site, and received Planning Board Approval for the Portland Technology Park in January 2012. Construction of the first phase of the roadway has been completed. Patrons-Oxford Insurance Company is proposing the development of LCE 4 of the Portland Technology Park. A purchase & sale agreement has been executed between Patrons-Oxford Insurance Company and the City of Portland. LCE 4 will be the first developed lot within the Portland Technology Park.

Patrons-Oxford Insurance Company is proposing to develop LCE 4 with a 2-story, 19,000 square foot office building. The project will include the construction of associated parking areas, stormwater management systems, utility infrastructure, and landscaping features around the building. Construction is anticipated to occur in 2016.

If you should have any questions, please contact Lauren Swett at (207) 558-3763 or via email at lswett@woodardcurran.com.

Sincerely,

WOODARD & CURRAN INC.

Lauren Swett, PE
Project Engineer

Note: Under Section 14-524(a)3.c., of the City Code of Ordinances, an applicant for a Level III Site Plan is required to hold a neighborhood meeting upon filing an application with the City of Portland.

MEMORANDUM



TO: City of Portland Planning Department
FROM: Portland Technology Park Team
DATE: October 26, 2015
RE: Portland Technology Park LCE 4 Development Neighborhood Meeting Sign-in Sheet

Dear Neighbors,

Thank you for attending tonight's public Neighborhood Meeting on the Portland Technology Park LCE 4 Development project. Please sign in below.

Thank you,
Portland Technology Park LCE 4 Development Project Team

Name

Address

Ryan Kanteris

136 CLARK ST

PORTLAND, ME

Blaise Maccarrone

116 Clark St, Pld, ME

DAVE SENUS

WOODARD & CURRAN INC

Lauren Swett

Woodard & Curran



PORTLAND TECHNOLOGY PARK

Level III Site Plan Applicant:



Subdivision Amendment Applicant:



LIMITED COMMON ELEMENT 4

Neighborhood Meeting Presentation

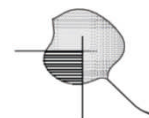
Monday, October 26, 2015



Woodard & Curran:
Site Design &
Permitting



Scott Simons Architects:
Building Architecture

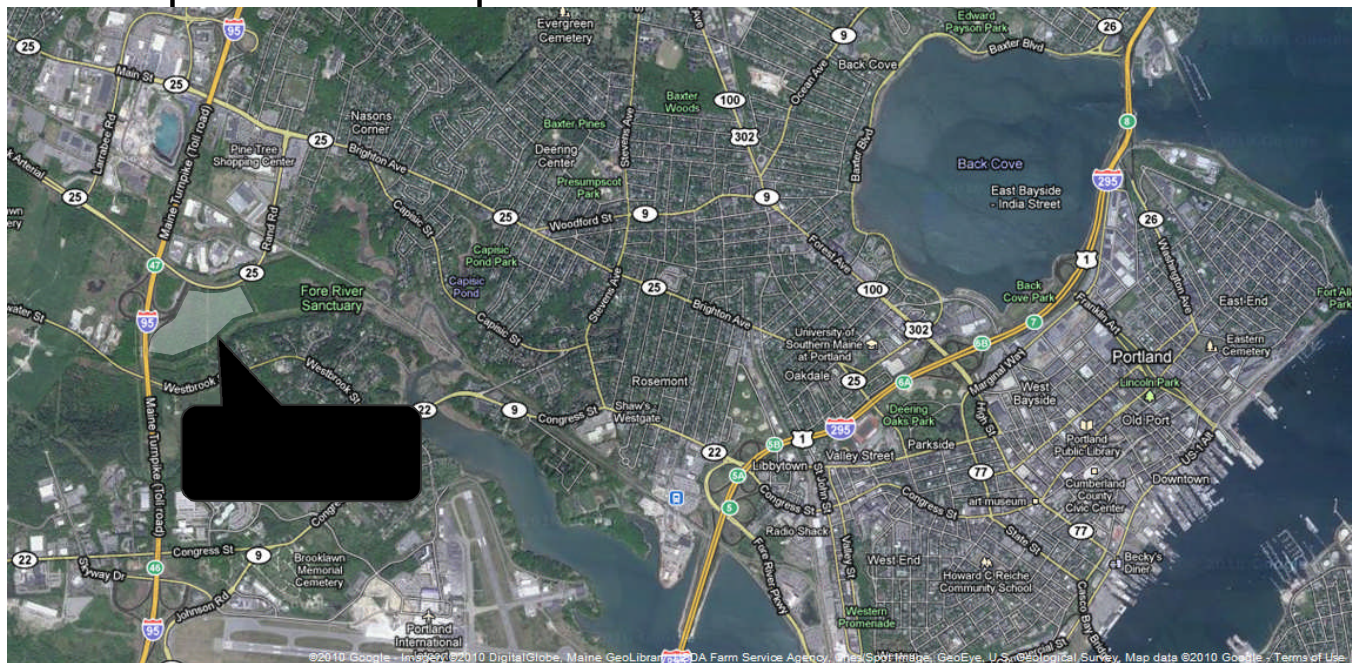


Richardson & Associates:
Landscape Architecture

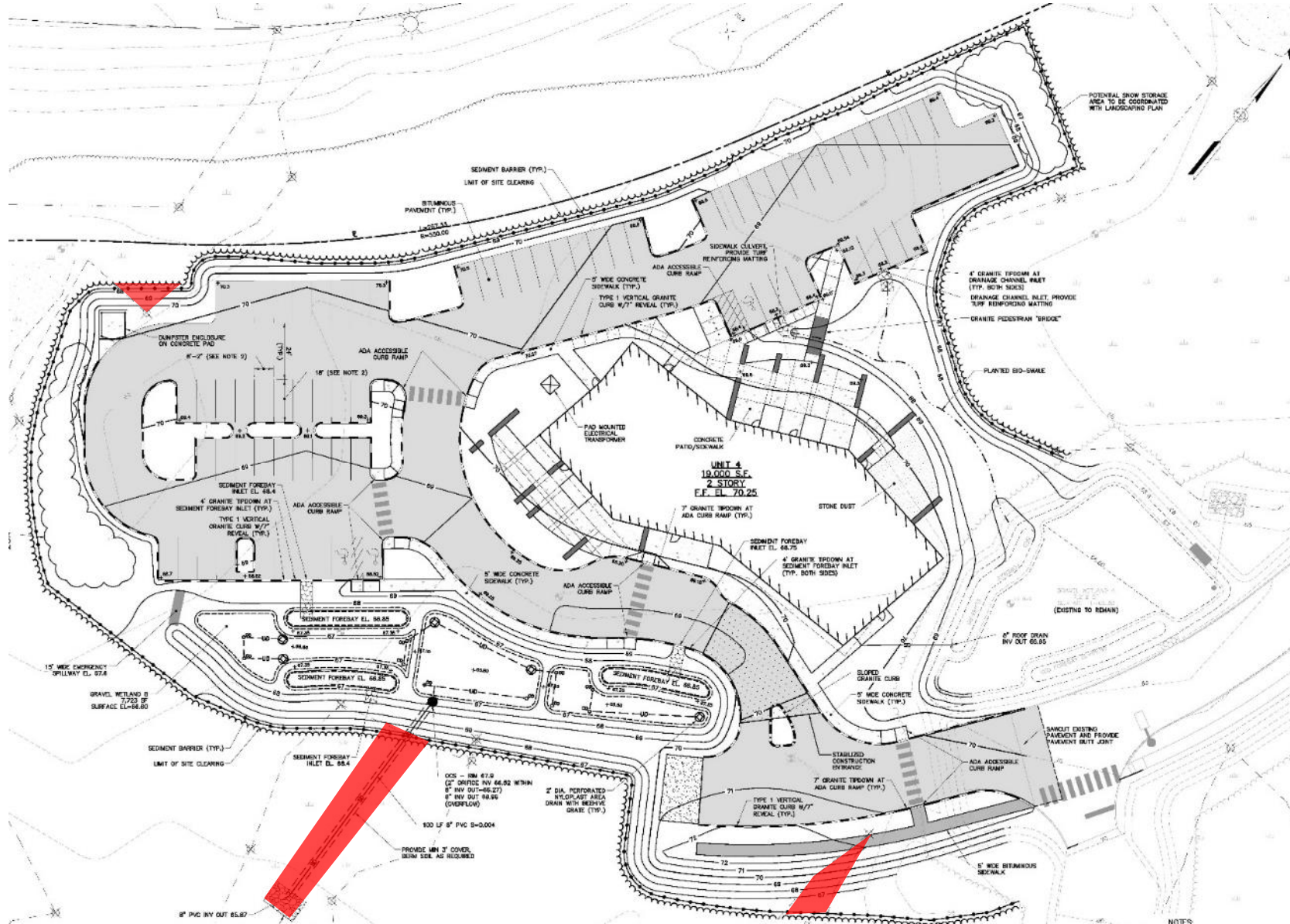
COMMITMENT & INTEGRITY DRIVE RESULTS

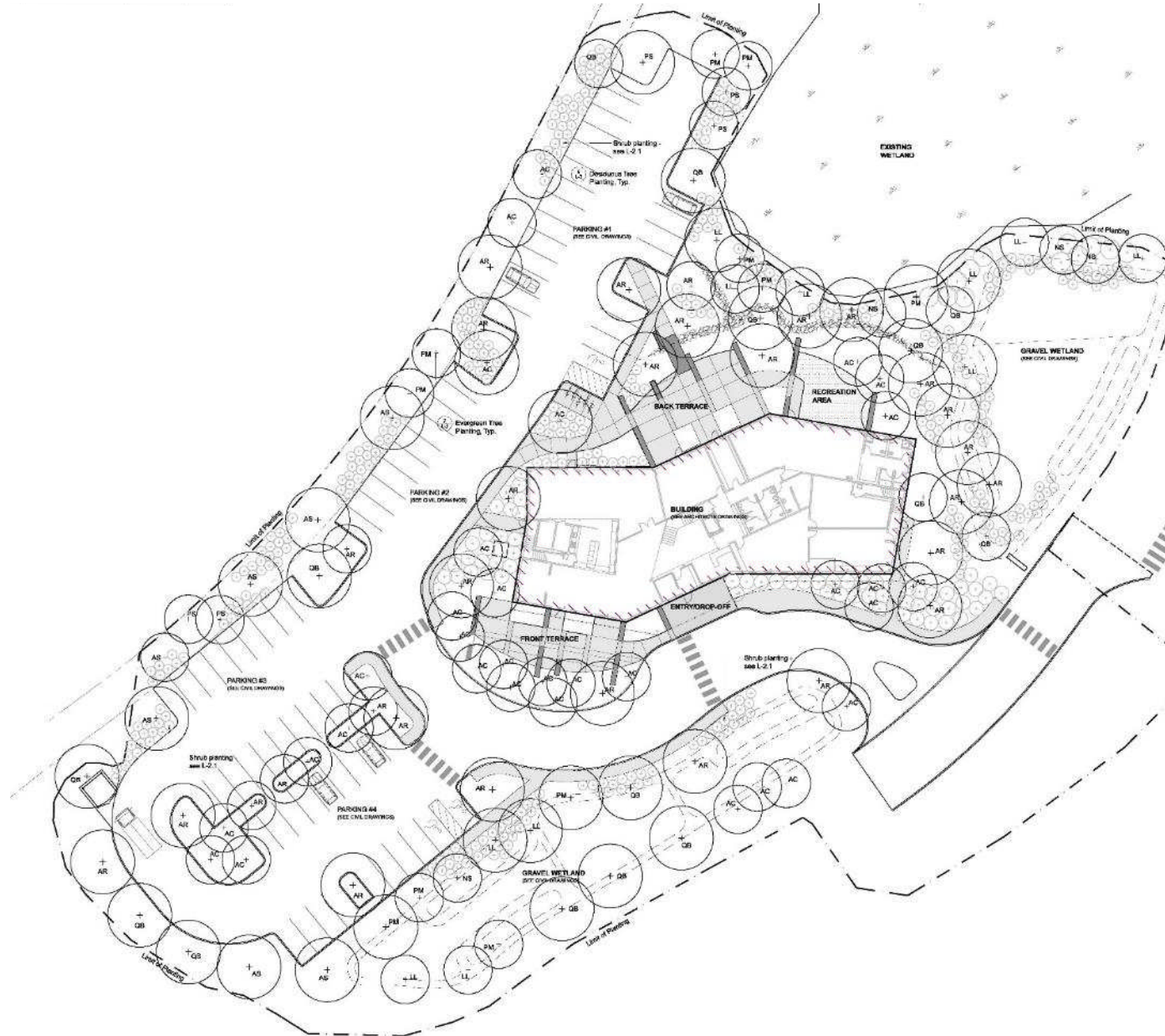
Portland Technology Park – LCE 4

- Portland Technology Park History
 - Prior Approvals
- Limited Common Element (LCE or Lot) 4
 - Proposed Development











COMMITMENT & INTEGRITY DRIVE RESULTS



THANK YOU!
QUESTIONS?





3. PROJECT DESCRIPTION

3.1 INTRODUCTION

The Portland Technology Park is a previously approved Office Park Planned Unit Development (OP-PUD), near the I-95 interchange (Exit #47) in the City of Portland, Maine. The attached map shows the project location. The property is located within the Office-Park (OP) Zone and the Resource Protection (RP) Zone. The City of Portland owns the approximately 40-acre site, and received Planning Board Approval for the Portland Technology Park in January 2012. Construction of the first phase of the roadway, approximately 975 linear feet of road to the Building 3 entrance, has been completed.

Patrons-Oxford Insurance Company is proposing the development of Limited Common Element (LCE) 4 of the Portland Technology Park. A purchase & sale agreement has been executed between Patrons-Oxford Insurance Company and the City of Portland and will be referred to as part of the discussion on title, right, or interest later in this report.

The original site plan application for the Portland Technology Park was submitted by the City of Portland Economic Development Office on November 5, 2010. This new Level III Site Plan Application is being submitted by Patrons-Oxford Insurance Company for the Development of LCE 4. The proposed lot layout for LCE 4 differs from the plans submitted with the original application, and some minor changes to the roadway alignment and adjacent lots are required to accommodate the new lot layout. This application includes plans that show all of those changes. A concurrent application by the City of Portland for a Subdivision Amendment to address the road and LCE boundary modifications is also being submitted. Once the Subdivision Amendment has been reviewed by the City, we will update the boundary linework on the LCE 4 plans.

3.2 PREVIOUS APPROVALS AND CONDITIONS

On January 24, 2012, the Portland Planning Board approved a Level III Final Site Plan and Subdivision application for the Portland Technology Park. At that time, they also approved a Traffic Movement Permit as well as a sidewalk waiver for the frontage of the Portland Technology Park along Rand Road. The following Subdivision and Site Plan conditions of approval are pertinent to the Level III Site Plan application being submitted for the proposed LCE 4 development.

3.2.1 Subdivision

- Condition iv. This approval entitles the applicant and future developers of the office park units to develop the maximum number and size of parking spaces as shown on the Subdivision Plat and Overall Site Plan subject to providing confirmation of the need for these spaces and space dimensions (via a parking analysis) at the time that the unit is under site plan review.
 - The proposed parking lots for LCE 4 include 8 fewer spaces than originally proposed for the property, reflecting the reduction of building footprint from 20,000 square feet to 19,000 square feet. The parking space size of 18' x 8'2" shown on the approved Technology Park plans is being proposed for the LCE 4 parking lots. A parking analysis addressing the parking space count and size is included as part of this application.
- Condition v. That the condominium association shall develop and manage a Transportation Demand Management (TDM) plan acceptable to the Planning Authority, reviewed as part of the initial and subsequent site plan approvals for each building unit within the limited common element areas.
 - A TDM is currently being developed by Gorrill Palmer and will be submitted under separate cover.

- Condition vi. That the development of limited common element areas is subject to review and approval by the City of Portland Planning Authority for conformance with the Portland Technology Park Design Guidelines and City of Portland Code of Ordinances, Chapter 14 Land Use, Article v. Site Plan for building architecture, site landscaping, site pedestrian circulation, bicycle parking, lamp specifications, and signage and any changes or alterations to approved traffic, parking, access, utility, exterior lighting, tree preservation and stormwater features.
 - This application for Level III Site Plan Approval is being submitted to comply with this Subdivision Condition.

3.2.2 Site Plan

- Condition iii. That when individual units are proposed for site plan review the applicants should submit detailed specifications for snow storage management/protection of gravel wetlands, exterior lamp fixtures (including wall mounted), and consider the opportunity for trail links with the wider trail network on the RPZ open space part of the site.
 - Locations of possible snow storage areas, away from gravel wetlands, have been identified on the site plan. These areas are currently being reviewed, and will be coordinated with the landscaping plan as required. When final snow management and snow storage considerations have been made, updated plans will be provided.

Site lighting has been reviewed, and a photometric plan has been provided with this application. Lighting fixtures will be addressed later in this report.

The LCE 4 lot is not in the RPZ zone, and is not located such that trails could be incorporated directly into the site. Sidewalks and crosswalks from the site will be connected with future lot development to allow for easy access to the trail system from LCE 4. Many informal trails exist on the overall Technology Park property, including on lots across from LCE 4. Informal connections to these trails are likely to develop over time.
- Condition iv. That the site plans for individual units shall be brought before the Planning Board for review and approval, and the Board reserves the right to review individual units under the standards of the site plan ordinance.
 - This application for Level III Site Plan Approval for LCE 4 is being submitted to comply with this Site Plan Condition.

3.3 PROJECT PURPOSE AND NEED

The building size/location/orientation, parking demand, parking layout, utility connections, stormwater management systems and other site amenities will need to be modified from the previously permitted design to meet the needs of Patrons-Oxford Insurance. The revised orientation of the building and associated site amenities will require a slight shift of the roadway alignment to the east, in addition to a modification of the layout of several of the adjacent lots within the Portland Technology Park, which are owned by the City of Portland.

3.4 EXISTING CONDITIONS

The Existing Conditions Plan, included in the drawings submitted with this application, depicts the existing conditions of the Portland Technology Park (the Site) including LCE 4. No portion of the development is within the 100-year flood plain; a FEMA flood zone map was provided as part of the original application. Refer to the original application dated November 5, 2010, for additional information.

The Site is currently undeveloped, except for the portion of the roadway that has been constructed. Topography is relatively flat in the areas of proposed development. Several areas of forested wetlands border the perimeter of the Site; a wetland delineation and functional assessment was first conducted by Dames and Moore for the site in May 1998. The City followed up with a wetland reconnaissance in December 2006 by S.W. Cole and hired URS to perform a vernal pool assessment in April and May 2006; copies of these reports were provided as part of the original application.

Boyle Associates completed an evaluation of the wetlands and vernal pools as part of a City-wide Wetland Compensation Opportunities Assessment in July 2009. Boyle Associates then revisited the site in early December 2010 to collect additional information and complete the Vernal Pool Assessment forms to file with Maine Department of Environmental Protection (MDEP) & the Department of Inland Fisheries and Wildlife (IF&W). None of the potential vernal pools identified by URS and Boyle Associates have the criteria necessary to be classified as “significant vernal pools” by the NRPA rules and none of the wetlands in the area of the proposed Site are classified as “wetlands of special significance”.

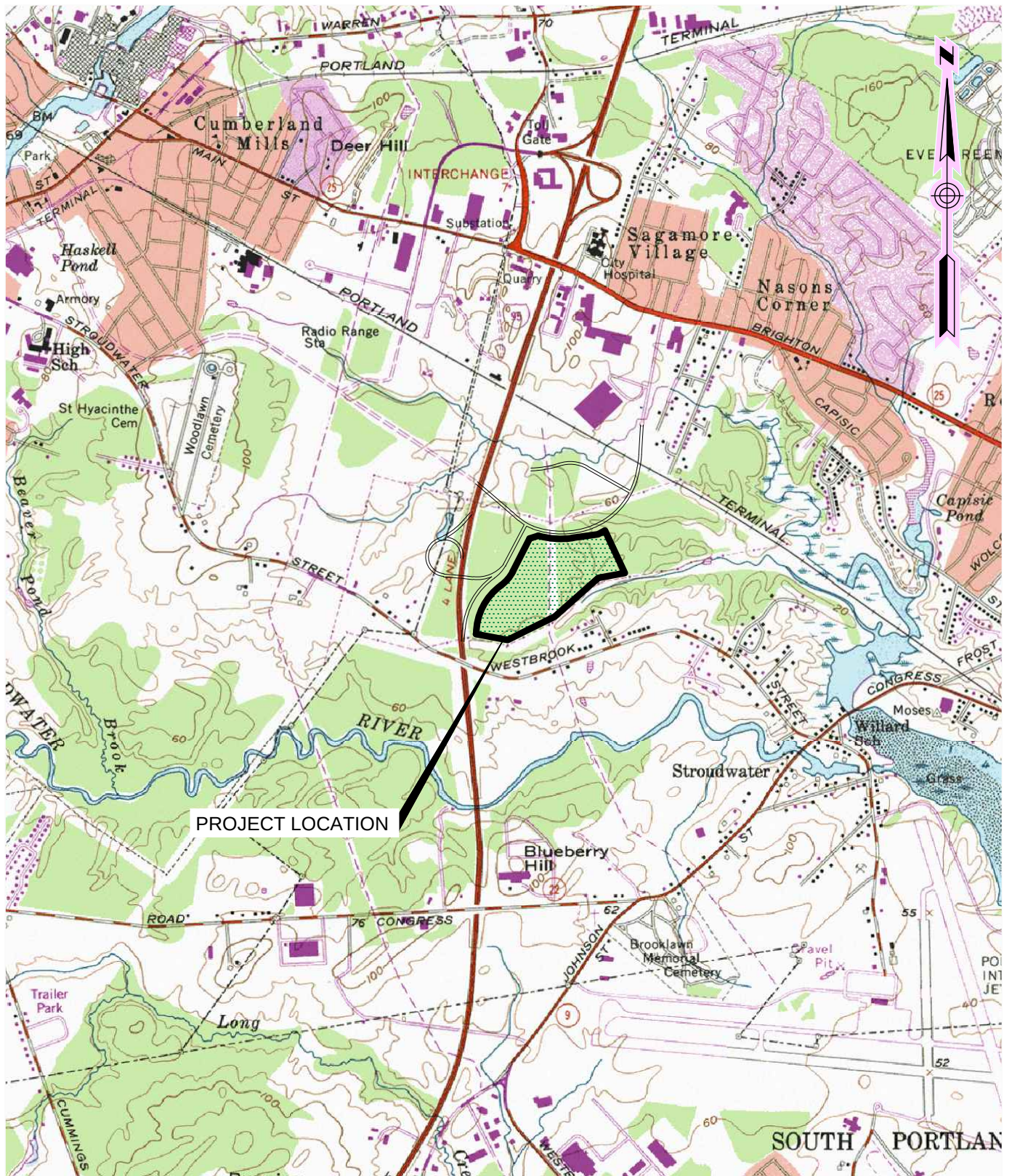
3.5 PROPOSED DEVELOPMENT

The proposed Site Plan, included in the drawings attached to this Section, depicts the proposed conditions for the Site. In addition, a Schematic Design Narrative from Scott Simons Architects describes some of the basis for the proposed project.

The project involves the construction of a two-story office building on LCE 4 with associated parking, utilities, and stormwater management systems. The project also includes the re-alignment of the access road and grading adjustments to the LCEs 5, 6, and 7 within the Portland Technology Park Subdivision. These three lots, along with unchanged LCEs 1, 2, and 3 will remain owned by the City of Portland until development occurs in the future.

3.6 ATTACHMENTS

- Location Plan
- Schematic Design Narrative
- Design Plans (Bound Separately)



PROJECT LOCATION

2000' 0 2000' 4000'



BAR SCALE

1" = 2000'

CHECK GRAPHIC SCALE BEFORE USING

SOURCE:

U.S.G.S. TOPOGRAPHIC QUARANGLE PORTLAND WEST, MAINE
DATED 1978 AT 1:24,000



41 Hutchins Drive
Portland, Maine 04102
800.426.4262 | www.woodardcurran.com

COMMITMENT & INTEGRITY DRIVE RESULTS

LOCATION PLAN

DESIGNED BY: MKC
DRAWN BY: JDE

CHECKED BY: DAS
20384863-SLOD-U1-1.dwg

CITY OF PORTLAND
ECONOMIC DEVELOPMENT CENTER
PORTLAND, MAINE

SITE LOCATION OF DEVELOPMENT
PORTLAND TECHNOLOGY PARK

JOB NO: 222849.63
DATE: MAY 2011
SCALE: AS NOTED

FIG 3-1

SCHEMATIC DESIGN NARRATIVE

Patrons Oxford Philosophy

The philosophy today is the same as it was when the company was formed 125 years ago, to provide protection and service at an affordable cost and still have moderate growth.

Patrons Oxford Insurance Company was established in 1876. Today the company is a personal insurance company offering a wide variety of products to the industry. Located in Auburn, Maine, recent growth has strained their existing facility such that it no longer meets their current or future needs for growth. The desire to attract and retain a younger workforce, to create a more modern, flexible, and sustainable work environment, and to plan for future growth led the company to decide to relocate from Auburn to Portland. The plan was to design a 20,000 SF modern office building in the Portland Technology Park that would support the company's mission and long-term goals. The ability to expand an additional 10,000 SF in the future was also desired.

Patrons Oxford hired Scott Simons Architects in the spring of 2015 to design a facility that would meet their objectives, and that would be ready for occupancy by the fall of 2016. Working closely with the Patrons Oxford management team, SSA has helped select a suitable site for the building, and designed an environmentally sensitive and sustainable two-story office building that will accommodate the needs of the growing company.

The Patrons Oxford Office Building will be the first tenant of the Portland Technology Park, located off the Rand Road exit of the Maine Turnpike in a naturally wooded setting adjacent to several hundred acres of forested lands and trails. The original site selected for the building was Site #1, at the entrance to the Technology Park. After reviewing the findings of the geotechnical survey and the structural engineer's assessment, Site #1 was deemed unsuitable for the new office building due to clay soils that proved to be unable to support the weight of a new building without a complicated and expensive foundation system. The design team then examined the other available sites in the Technology Park, and recommended that Patrons Oxford move their office building to Lot#4, which had more stable sub-surface conditions and would meet the building's site, environmental, parking, and future expansion requirements. Working with the City of Portland, Patrons is now in the process of purchasing Lot #4.

BUILDING DESCRIPTION

The office building is based on the basic geometry and arrangement of the primary work areas upstairs, shifting slightly to respond to the site conditions and the desire to make the shape and form more modern and expressive of Patrons Oxford's long-term goals. The second floor is articulated as a separate form, floating above the ground floor spaces. The rhythm and spacing of the windows and treated wood panels reflect the desire to create an active, visually stimulating façade while also providing generous amounts of natural daylight for the interior work environment. The lower floor has a similar rhythm of windows and wood panels for the larger, common spaces, and in contrast more solid, stone-like panels for the less occupied spaces like the stairs, mechanical rooms, server room, and storage spaces.

On the inside, the building is designed to have a feeling of spaciousness and connectivity. Upon entry, there is a welcoming area with an open view to the second floor and a colorful wall displaying the Patrons Oxford's history and brand. The floor plan layouts reflect an open work environment, with the more collaborative public spaces on the first floor and the offices and work stations on the second floor. The public entrance is located on the south side of the building. The entry area includes a glass enclosed meeting room that can be utilized for sensitive meetings without a member of the public gaining access to the inner, secured part of the building. The employee entrance is in the rear of the building closer to the parking lots. The hallway along the employee entrance has a coat room, access to restrooms, and direct access to the fitness area.

SCHEMATIC DESIGN NARRATIVE

Inside, the two floors are connected by an open stairway and clerestory bringing daylight into the center of the building. On one side an open café and collaboration space will create the setting for informal team meetings, and gatherings of the staff around meals. Directly ahead, the space will open into a large meeting/presentation room for upwards of 60 people, where workshops and all staff meetings can be held.

FIRST FLOOR LAYOUT

Along the front of the building is the “Collab Café” and kitchen that will function as a break room and lunchroom, but will also serve as informal meeting spaces throughout the day. One corner of the Collab Café is designed so it can be closed off for a private meeting. Along the north side of the building is a large multi-purpose room, capable of seating over 60 people at tables for presentation and workshops. It is connected through the kitchen to the Collab Café to provide greater flexibility for larger gatherings. The multi-purpose room can be configured for lectures, web-based training, industry meetings, and company events. The first floor also has a meeting room large enough to accommodate board meetings, as well as a small huddle room off the Collab Café.

Along the back of the building is a large fitness room, an impressive expression of Patron’s commitment to wellness and health. This space will provide a pleasant place to exercise with generous views to the outside landscape. Fitness equipment will occupy over half of the space, with an open area for exercising, stretching, and yoga-type activities occupying the rest. Connected to the fitness area are two full bathrooms, with showers, toilets and sinks, plus an additional two shower rooms. There are also two unisex toilets plus a wellness room with toilet on the ground floor, as well as the IT/server room, and space for storage, mail and recycling.

SECOND FLOOR LAYOUT

The second floor is designed to be an open office environment with individual work stations interspersed with smaller work rooms and meeting rooms for increase flexibility. The open work area is designed to foster greater company collaboration and to create a strong learning environment. Four glass-walled offices flank each end of the building, for a total of eight private offices. There are small rooms called “Solo Rooms” that can be used for a private phone call or to concentrate on a complicated task, and “Huddle Rooms” that can be used for collaborative meetings or conversations for two or more. A small meeting room is provided that can accommodate a larger meeting of 4-6 people. All around the second floor, tall windows provide ample natural daylight and views to the natural setting outside.

MATERIALS

The building is conceived as a wood-framed structure with glue lam beams and columns, cross-laminated timber floors (CLT), and some structural steel reinforcements. The roof will be predominantly flat, but with the southwest and northeast corners tipped up slightly to address the entrance and view from the highway. Exterior materials include stone-like cementitious panels in a rain-screen application for the ground floor walls, treated wood panels and aluminum-framed window panels for the ground and second floor walls, and standing seam metal panels above and below the windows on the second floor. The roof will be a lightly colored membrane roof, to reflect sunlight, and the flashing materials will be zinc-coated copper or a material similar to the standing seam metal panels on the walls.

TECHNOLOGY

The building is conceived of as a high-tech, twenty-first century work environment, and is being designed to support the company’s long-term technology needs. Employees will be able to work at their desks or elsewhere in the building, and they will have the ability to work remotely.

SCHEMATIC DESIGN NARRATIVE

GRAPHIC DESIGN/BRANDING

The Patrons Oxford Company is in a process of transformation. The building is the external reflection of an internal process that has been occurring for some time. The new building will provide an opportunity to celebrate Patrons Oxford's excellent reputation within the insurance industry, and the 139 year path from its founding to today, with a timeline and other graphic representation. A Patrons Oxford Story wall is envisioned along a primary wall in the entrance area, to share this story with the staff and everyone that enters the building. There is also space within the new building to create other ways to celebrate the company and to enhance a corporate culture that matches the company mission with graphic design and branding.

When the new office building is completed, it is our hope that Patrons Oxford will have a modern, sustainable office building with appealing amenities to attract and retain the younger, educated, and motivated workforce it needs to continue to grow. This new building will provide the Patrons Oxford community with an opportunity to work together in new ways in a space that supports its mission, its commitment to excellence, customer service, and community engagement.



10. TRAFFIC ANALYSIS

Parking and traffic analyses were completed for the overall Technology Park in 2011. With the proposed development of LCE 4, parking and traffic have been re-evaluated to ensure that the development will remain within the standards that were originally considered. In general, the individual lot demand for parking and traffic has been decreased, as the size of the proposed building is 19,000 square feet instead of 20,000 square feet. This is the first development in the Technology Park, so the traffic will be significantly less than the total amount anticipated for the fully built-out Technology Park.

10.1 TRAFFIC MOVEMENT PERMIT

Gorrill Palmer developed a Traffic Impact Study in 2011 for the overall Technology Park. The City of Portland Planning Board approved a Traffic Movement Permit based on that study in January 2012. Gorrill Palmer has re-evaluated the trip generation calculations for LCE 4 and has determined that the anticipated traffic demand will be equal to or less than the permitted traffic levels. This new evaluation was based on the reduced building footprint and the anticipated number of employees, and is summarized in the attached memo. The proposed development will be in conformance with the issued Traffic Movement Permit.

10.2 PARKING

A total of 70 parking spaces are being provided within LCE 4. Six spaces will be designated for visitor parking including two handicapped spaces with a van-accessible lane. An accessible route will exist between these visitor spaces and the front building entrance. A third van-accessible handicapped space is also being provided behind the building with an accessible route to the back employee entrance.

The plan currently shows space for parking 10 bicycles. We understand that based on City of Portland Code requirements, a total of 14 bicycle parking spaces are required (2 per 100 parking spaces). We will be adjusting our plan to show the total required 14 spaces, and will provide an updated plan.

One of the conditions of the previous Subdivision approval stated the maximum number and size of parking spaces approved at that time could be developed given that a parking analysis be completed with each development project. The original plan for the entire Technology Park included an overall parking ratio of 3.7 spaces per 1,000 square feet of building. The original plan for LCE 4 included a 20,000 square foot building with 78 parking spaces, for a ratio of 3.9. With the proposed 19,000 square foot building, a parking lot with 70 spaces is proposed, for a ratio of 3.7, matching the overall approved Technology Park parking ratio. Gorrill Palmer has evaluated the parking needs for Patrons Oxford, and the attached memo documents that a 70-space parking lot is appropriate for the development.

The parking space size of 18'x8'2" matches the size that was used on the previously approved plans. This reduced size will allow for the required quantity of parking with less impacts to wetlands, as well as less impervious surface. The smaller parking space size fits with the intent of low impact development for the technology park.

10.3 ATTACHMENTS

- Gorrill Palmer Memo

MEMORANDUM

Date: October 2, 2015
Subject: Parking Demand and Trip Generation Summary
Portland Technology Park – Portland, Maine
To: Ryan Kanteres, Scott Simons Architects
From: Randy Dunton, Gorrill Palmer (JN 3078)

Introduction:

Gorrill Palmer (GP) has evaluated the potential parking demand and trip generation for the proposed office space to be located on Lot 4 of the recently permitted Portland Technology Park development located off the Rand Road in Portland, Maine. The Portland Technology Park is located in the O-P Office Park Zone. The proposed building will have 19,000 square feet of office space and 60-65 employees. The parking evaluation is based on the City of Portland Ordinance for this use and the trip generation is based on the Institute of Transportation Engineers' publication *Trip Generation*, Seventh Edition.

Parking Analysis:

Vehicular Parking:

The parking evaluation considers the City of Portland Ordinance for an office building as well as the previously approved parking ratio, and expected numbers of employees and visitors. The City of Portland Ordinance requires a minimum of one off street parking space for every 400 square feet of floor area. Since the proposed office building has 19,000 square feet of floor area, a minimum of 48 parking spaces are required. However, the proposed use is expected to have 65 employees as well as designating 6 parking spaces for visitors only, and is therefore proposing a total of 70 parking spaces. Providing 70 parking spaces yields a parking ratio of 3.7 per 1,000 sf, which is consistent with the parking ratio that was previously approved for the subdivision.

Bicycle Parking:

Per City Ordinance, non-residential structures are required to provide bicycle accommodations in proportion to vehicular parking. For non-residential structures 2 bicycle parking spaces are required for every 14 vehicle parking spaces. Based on the Ordinance this project would require 14 bicycle parking spaces.



Trip Generation:

Permitted Trip Generation

The Portland Technology Park was issued a Traffic Movement Permit by the City of Portland (who has delegated review authority from MaineDOT) that approved 163 trip ends during the AM peak hour and 153 trip ends during the PM peak hour for the entire development. This approved trip generation was based on the Institute of Transportation Engineers' publication *Trip Generation*, Seventh Edition, Land Use Code (LUC) 760 – Research and Development Center. The original approval included a 20,000 sf building for Lot 4. Since the trip generation was for the entire site and is not broken down by individual buildings, we have calculated just the 20,000 sf building using the same Land Use Code as the original approval. The trip generation calculations assuming 20,000 sf of research and development are attached and summarized as follows:

- AM Peak Hour: 34 trip ends
- PM Peak Hour: 35 trip ends

Proposed Development:

The proposed building on Lot 4 is 19,000 square feet and is proposed to have 60-65 employees. The Institute of Transportation Engineers' publication *Trip Generation*, Seventh Edition, Land Use Code (LUC) 710 – General Office Building and LUC 715 – Single Tenant Office Building were utilized to forecast the trip generation. The following table summarizes the trip generation for both LUC 710 and LUC 715 with calculations attached.

Trip Generation Summary

	Based on 19,000 sf		Based on 65 Employees	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
General Office Building	29	28	31	30
Single Tenant Office Building	34	33	34	33

Both land uses (using floor area and employees) are equal to or less than the equivalent of a 20,000 sf research and development building.

Conclusion:

Lot 4 of the Portland Technology Park development is estimated to require approximately 70 vehicular parking spaces and 14 bicycle parking spaces. The vehicular parking needed would be expected to potentially decrease as the park is built out and the TDM plan is implemented to a greater degree; however that could be several years. The proposed development is forecast to generate the same amount or fewer trip ends during a peak hour than the equivalent permitted trip ends for Lot 4.



11. SIGNIFICANT NATURAL FEATURES

11.1 UNUSUAL NATURAL AREAS

In support of the original permit application for the Technology Park, Woodard & Curran contacted the Maine Department of Conservation in May 2010 regarding the existence of rare or endangered botanical features within the area of the proposed Technology Park. A response was received from the Maine Natural Areas Program in May 2010. The response letter stated that no rare botanical features were documented within the project area. The development of LCE within the Technology Park will not affect any unusual natural areas. A copy of the correspondence was provided as part of the original application dated November 5, 2010, and can be provided again if required.

11.2 WILDLIFE AND FISHERIES

In support of the original permit application, Woodard & Curran contacted the Maine Department of Inland Fisheries and Wildlife (IF&W) in May 2010 for review of any known areas of significant wildlife habitats within the area of the proposed site. A response was received from IF&W in June 2010. The response letter stated that there were no known threatened/endangered fish species or habitat in the vicinity of the proposed project. In addition, there were also no known fisheries resources within the proposed project area.

Since that time, it is our understanding that the Northern Long Eared Bat has been listed as a threatened species in the state of Maine. A request for an official species list was made through the U.S. Fish & Wildlife's online Information for Planning and Conservation program. This list is attached, and confirms that the Northern Long Eared Bat habitat includes our project area; however, there are no critical habitat areas located within our project area.

It is our understanding based on a review of U.S. Fish & Wildlife information that this species of bats typically lives in caves during the winter months, and in trees larger than 3 inches in diameter (DBH) during the summer, with migration between these two habitats in the spring in the fall. The clearing of trees greater than 3 inches will be required for the completion of the project; however, project construction, beginning with tree clearing, is anticipated to begin in the winter of 2016. Tree clearing will not occur at a time when bats are utilizing the trees as habitat. In addition, a tree assessment was completed for the entire Technology Park and submitted as part of the original application. Stands of significant trees have been identified to be maintained, helping to maintain some summer bat habitat in place on the property.

It is not anticipated that this project will have a significant impact on the Northern Long Eared Bat Species. The project will be reviewed by U.S. Fish & Wildlife as part of the Army Corps of Engineers review process.

11.3 SIGNIFICANT TREE ASSESSMENT

A tree assessment of significant tree resources was completed on April 3, 2007 by Woodlot Alternatives, Inc. Trees with potential significance with regards to age, size, form, function, and/or species were identified in support of the original permit application. This included trees that appeared to belong to an older-than-average age class for the forested area, trees with an unusual height, crown size, and/or girth (measured in diameter at breast height or DBH), trees located in or adjacent to wetland resources, and trees in exceptional health for the species. There were approximately 12 individual trees and 12 tree clusters that were identified to be significant. A copy of the Woodlot report was provided as part of the original application dated November 5, 2010.

Care has been taken to preserve significant trees to the extent possible. An updated Tree Preservation Plan with the new LCE 4 layout is attached. Clearing has increased slightly within the setbacks, but is still well below the limits defined in the City's Code of Ordinances.

11.4 WETLANDS

Several areas of forested wetlands border the perimeter of the Site; a wetland delineation and functional assessment was first conducted by Dames and Moore for the site in May 1998. The City followed up with a wetland reconnaissance

in December 2006 by S.W. Cole and hired URS to perform a vernal pool assessment in April and May 2006; copies of these reports were provided as part of the original application.

Boyle Associates completed an evaluation of the wetlands and vernal pools as part of a City-wide Wetland Compensation Opportunities Assessment in July 2009. Boyle Associates then revisited the site in early December 2010 to collect additional information and complete the Vernal Pool Assessment forms to file with Maine Department of Environmental Protection (MDEP) & the Department of Inland Fisheries and Wildlife (IF&W). None of the potential vernal pools identified by URS and Boyle Associates have the criteria necessary to be classified as “significant vernal pools” by the NRPA rules and none of the wetlands in the area of the proposed Site are classified as “wetlands of special significance”. Wetland delineation reports that were submitted with the previous permit application for the Technology Park have not been attached to this application, but can be provided as required.

The Portland Technology Park was originally permitted for a total wetland impact of 37,416 square feet. With the proposed changes to LCE 4, and the associated realignment of the access road and adjacent lots, wetland impacts have changed. The total wetland impact is now 37,409 square feet, and the locations of some of the impacts have changed.

Approximately 5,243 square feet of wetland impacts have already occurred at the site with the construction of the roadway. Approximately 1,676 square feet of wetland impacts will occur as a result of the LCE 4 development, including both lot and new road impacts. Following the completion of the LCE 4 work, the total wetland impacts will have reached 6,919 square feet (road and LCE 4).

The wetland impacts anticipated for the LCE property include a small area of wetland impacts in the northwest corner of the lot, near a proposed dumpster enclosure. This area of impact is reduced from the previous design, and eliminates direct impact to a nearby vernal pool. The remainder of the impacts are associated with the outlet for Gravel Wetland 8. Much of the outlet impact overlaps with the location of the future roadway; however the impact is counted as part of the LCE 4 development that will occur before the road is constructed.

The project was originally divided into two phases for wetland impacts. Phase 1 included the entire road and LCEs 1 and 2, with a wetland impact of 14,669 square feet. This phasing was approved by the Maine DEP and the Army Corps of Engineers as part of the Technology Park permitting process with the understanding that following completion of Phase 1, an in lieu fee for wetland compensation would be paid to the State. As part of our permit applications to Maine DEP And the Army Corps, we are requesting to adjust the phasing such that the first phase will include LCE 1, LCE 2, LCE 4, the portion of the road completed to date, and the portion of the road to be constructed with LCE 4. The total wetland impact for Phase 1 will then be 14,588 square feet. Wetland impact figure WI-01 is attached, and shows the wetland impact areas along with proposed (revised) wetland phasing boundaries. Wetland impacts and phasing boundaries will be reviewed as required with the development of each lot.

11.5 HISTORIC SITES

A narrative on the historic sites in the vicinity of the Portland Technology Park and potential impacts was provided as part of the original application; no impacts to significant historical and cultural resources within the vicinity to the project area are anticipated to result from the proposed development. Refer to the original application dated November 5, 2010, for additional information.

A similar request for review was submitted in 2014 associated with Maine DEP and Army Corps permit revisions for gas service installation in the Technology Park. Maine Historic Preservation confirmed in December 2014 that the proposed gas line work would have no adverse effect on historic properties. This latest response is attached for your reference.

The project area has not changed since either of the two Maine Historic Preservation Reviews have been completed, and no impacts to significant historical and cultural resources within the vicinity to the project area are anticipated to result from the proposed development.

11.6 ATTACHMENTS

- Official Species List
- Tree Plan
- Wetland Impact Figure
- 2015 Maine Historic Preservation Commission Response



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Maine Ecological Services Field Office

17 GODFREY DRIVE, SUITE 2

ORONO, ME 04473

PHONE: (207)866-3344 FAX: (207)866-3351

URL: www.fws.gov/mainefieldoffice/index.html

Consultation Code: 05E1ME00-2015-SLI-0413

September 25, 2015

Event Code: 05E1ME00-2015-E-00573

Project Name: Portland Technology Park

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies the threatened, endangered, candidate, and proposed species and designated or proposed critical habitat that may occur within the boundary of your proposed project or may be affected by your proposed project. This species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC Web site at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the Endangered Species Consultation Handbook at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

This species list also identifies candidate species under review for listing and those species that the Service considers species of concern. Candidate species have no protection under the Act but are included for consideration because they could be listed prior to completion of your project. Species of concern are those taxa whose conservation status is of concern to the Service (i.e., species previously known as Category 2 candidates), but for which further information is needed.

If a proposed project may affect only candidate species or species of concern, you are not required to prepare a Biological Assessment or biological evaluation or to consult with the Service. However, the Service recommends minimizing effects to these species to prevent future conflicts. Therefore, if early evaluation indicates that a project will affect a candidate species or species of concern, you may wish to request technical assistance from this office to identify appropriate minimization measures.

Please be aware that bald and golden eagles are not protected under the Endangered Species Act but are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.). Projects affecting these species may require development of an eagle conservation plan:

http://www.fws.gov/windenergy/eagle_guidance.html Information on the location of bald eagle nests in Maine can be found on the Maine Field Office Web site:

<http://www.fws.gov/mainefieldoffice/Project%20review4.html>

Additionally, wind energy projects should follow the wind energy guidelines:

<http://www.fws.gov/windenergy/> for minimizing impacts to migratory birds and bats. Projects may require development of an avian and bat protection plan.

Migratory birds are also a Service trust resource. Under the Migratory Bird Treaty Act, construction activities in grassland, wetland, stream, woodland, and other habitats that would result in the take of migratory birds, eggs, young, or active nests should be avoided. Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at:

<http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm> and at:

<http://www.towerkill.com>; and at:
<http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment



United States Department of Interior
Fish and Wildlife Service

Project name: Portland Technology Park

Official Species List

Provided by:

Maine Ecological Services Field Office

17 GODFREY DRIVE, SUITE 2

ORONO, ME 04473

(207) 866-3344

<http://www.fws.gov/mainefieldoffice/index.html>

Consultation Code: 05E1ME00-2015-SLI-0413

Event Code: 05E1ME00-2015-E-00573

Project Type: DEVELOPMENT

Project Name: Portland Technology Park

Project Description: Development of a lot within a previously permitted technology park in Portland, Maine in 2016.

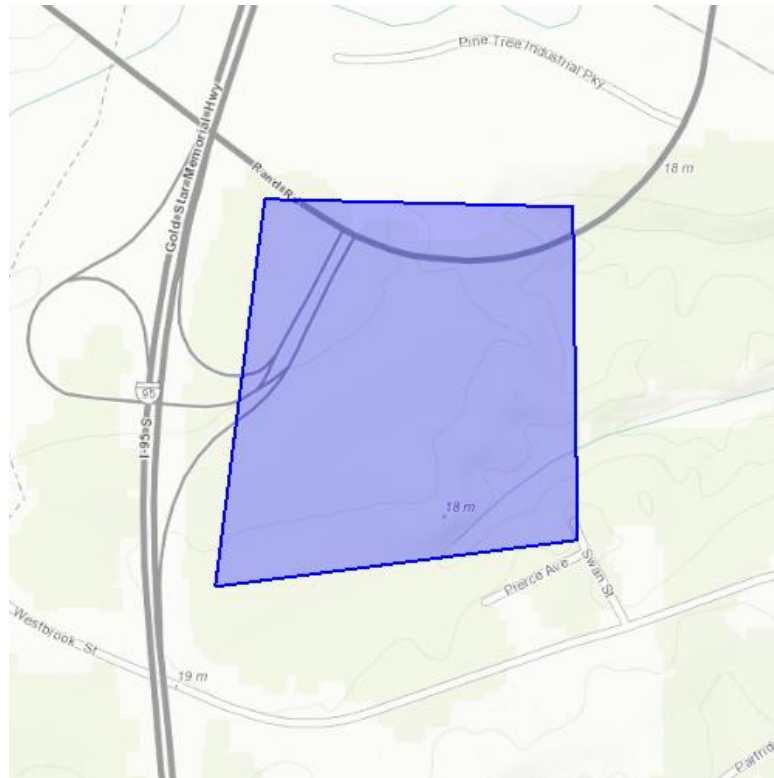
Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: Portland Technology Park

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-70.33015966415405 43.6665988334234, -70.32492399215698 43.666490180504134, -70.32484889030457 43.66240779260367, -70.3309965133667 43.66184120352345, -70.33015966415405 43.6665988334234)))

Project Counties: Cumberland, ME



United States Department of Interior
Fish and Wildlife Service

Project name: Portland Technology Park

Endangered Species Act Species List

There are a total of 1 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Mammals	Status	Has Critical Habitat	Condition(s)
Northern long-eared Bat (<i>Myotis septentrionalis</i>)	Threatened		

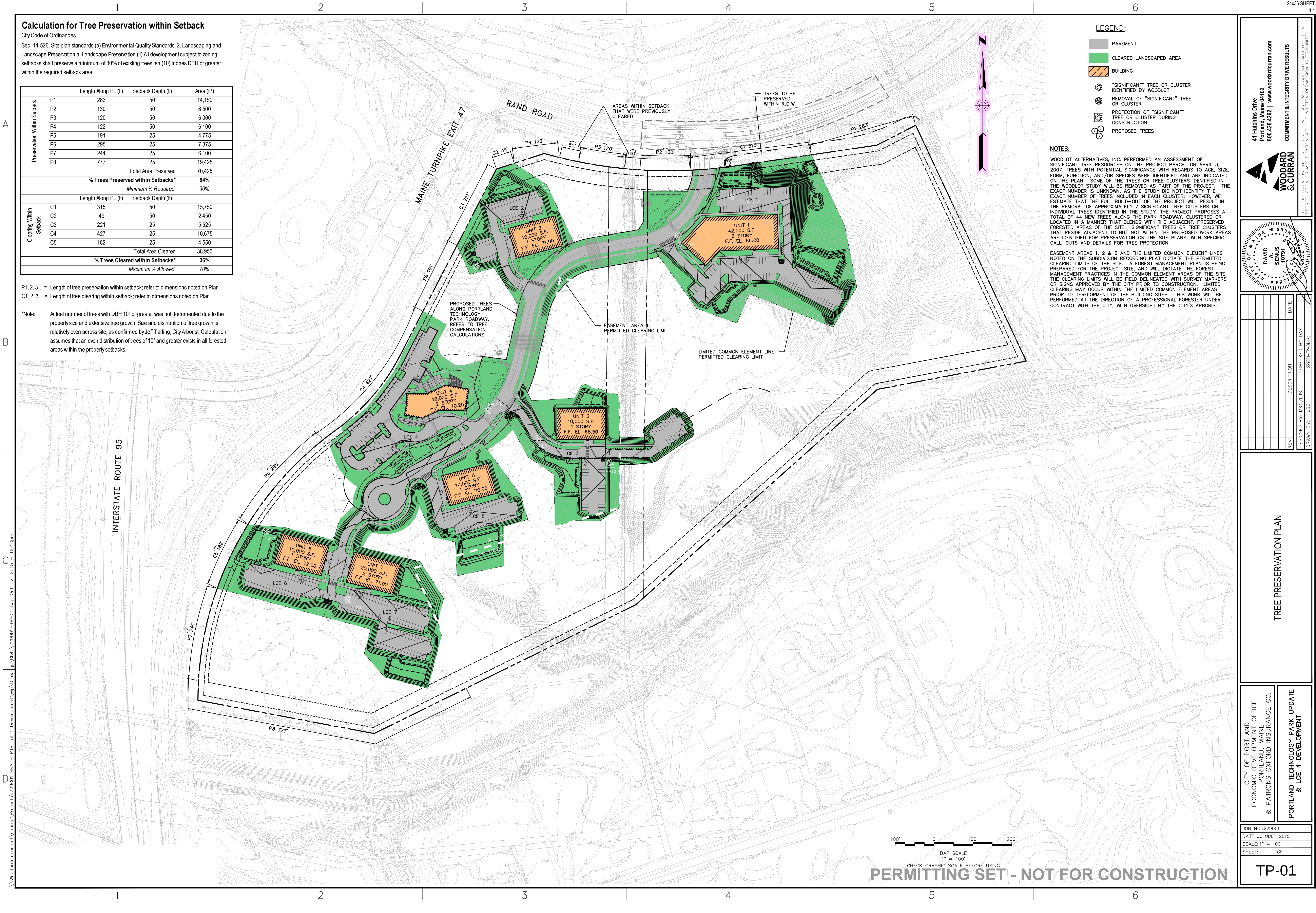


United States Department of Interior
Fish and Wildlife Service

Project name: Portland Technology Park

Critical habitats that lie within your project area

There are no critical habitats within your project area.



Calculation for Tree Preservation within Setback

City Code of Ordinances

Sec. 14-526. Site plan standards (b) Environmental Quality Standards. 2. Landscaping and Landscape Preservation a. Landscape Preservation (ii) All development subject to zoning setbacks shall preserve a minimum of 30% of existing trees ten (10) inches DBH or greater within the required setback area.

Preservation Within Setback		Length Along PL (ft)	Setback Depth (ft)	Area (ft ²)
	P1	283	50	14,150
	P2	130	50	6,500
	P3	120	50	6,000
	P4	122	50	6,100
	P5	191	25	4,775
	P6	295	25	7,375
	P7	244	25	6,100
	P8	777	25	19,425
Total Area Preserved			70,425	
% Trees Preserved within Setbacks*			64%	
Minimum % Required			30%	
Clearing Within Setback		Length Along PL (ft)	Setback Depth (ft)	
	C1	315	50	15,750
	C2	49	50	2,450
	C3	221	25	5,525
	C4	427	25	10,675
	C5	182	25	4,550
Total Area Cleared			38,950	
% Trees Cleared within Setbacks*			36%	
Maximum % Allowed			70%	

P1, 2, 3... = Length of tree preservation within setback; refer to dimensions noted on Plan
C1, 2, 3... = Length of tree clearing within setback; refer to dimensions noted on Plan

*Note:

Actual number of trees with DBH 10" or greater was not documented due to the property size and extensive tree growth. Size and distribution of tree growth is relatively even across site, as confirmed by Jeff T. Talling, City Arborist. Calculation assumes that an even distribution of trees of 10" and greater exists in all forested areas within the property setbacks.

LEGEND:

- PAVEMENT
- CLEARED LANDSCAPED AREA
- BUILDING
- "SIGNIFICANT" TREE OR CLUSTER IDENTIFIED BY WOODLOT
- REMOVAL OF "SIGNIFICANT" TREE OR CLUSTER
- PROTECTION OF "SIGNIFICANT" TREE OR CLUSTER DURING CONSTRUCTION
- PROPOSED TREES

NOTES:

WOODLOT ALTERNATIVES, INC. PERFORMED AN ASSESSMENT OF SIGNIFICANT TREE RESOURCES ON THE PROJECT PARCEL ON APRIL 3, 2007. TREES WITH POTENTIAL SIGNIFICANCE WITH REGARDS TO AGE, SIZE, FORM, FUNCTION, AND/OR SPECIES WERE IDENTIFIED AND ARE INDICATED ON THE PLAN. SOME OF THE TREES OR TREE CLUSTERS IDENTIFIED IN THE WOODLOT STUDY WILL BE REMOVED AS PART OF THE PROJECT. THE EXACT NUMBER IS UNKNOWN, AS THE STUDY DID NOT IDENTIFY THE EXACT NUMBER OF TREES INCLUDED IN EACH CLUSTER; HOWEVER, WE ESTIMATE THAT THE FULL BUILD-OUT OF THE PROJECT WILL RESULT IN THE REMOVAL OF APPROXIMATELY 7 SIGNIFICANT TREE CLUSTERS OR INDIVIDUAL TREES IDENTIFIED IN THE STUDY. THE PROJECT PROPOSES A TOTAL OF 44 NEW TREES ALONG THE PARK ROADWAY, CLUSTERED OR LOCATED IN A MANNER THAT BLENDS WITH THE ADJACENT, PRESERVED FORESTED AREAS OF THE SITE. SIGNIFICANT TREES OR TREE CLUSTERS THAT RESIDE ADJACENT TO BUT NOT WITHIN THE PROPOSED WORK AREAS ARE IDENTIFIED FOR PRESERVATION ON THE SITE PLANS, WITH SPECIFIC CALL-OUTS AND DETAILS FOR TREE PROTECTION.

EASEMENT AREAS 1, 2 & 3 AND THE LIMITED COMMON ELEMENT LINES NOTED ON THE SUBDIVISION RECORDING PLAT DICTATE THE PERMITTED CLEARING LIMITS OF THE SITE. A FOREST MANAGEMENT PLAN IS BEING PREPARED FOR THE PROJECT SITE, AND WILL DICTATE THE FOREST MANAGEMENT PRACTICES IN THE COMMON ELEMENT AREAS OF THE SITE. THE CLEARING LIMITS WILL BE FIELD DELINEATED WITH SURVEY MARKERS OR SIGNS APPROVED BY THE CITY PRIOR TO CONSTRUCTION. LIMITED CLEARING MAY OCCUR WITHIN THE LIMITED COMMON ELEMENT AREAS PRIOR TO DEVELOPMENT OF THE BUILDING SITES. THIS WORK WILL BE PERFORMED AT THE DIRECTION OF A PROFESSIONAL FORESTER UNDER CONTRACT WITH THE CITY, WITH OVERSIGHT BY THE CITY'S ARBORIST.

41 Hutchins Drive
Portland, Maine 04102
800.426.4262 | www.woodardcurran.com

WOODARD & CURRAN

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10/2/2015

DAVID SENUS
10791

REV

DATE

CHECKED BY: DAS

DESIGNED BY: MKC/JUS

DRAWN BY: JBC

DESCRIPTION

TREE PRESERVATION PLAN

CITY OF PORTLAND
ECONOMIC DEVELOPMENT OFFICE
PORTLAND, MAINE
& PATRONS OXFORD INSURANCE CO.

PORTLAND TECHNOLOGY PARK UPDATE
& LCE 4 DEVELOPMENT

JOB NO.: 229901

DATE: OCTOBER 2015

SCALE: 1" = 100'

SHEET: OF

TP-01

SOURCES:

1. SITE AND TOPOGRAPHIC DATA WERE PROVIDED BY NUMEROUS SOURCES AS IDENTIFIED HEREIN AND COMPILED BY WOODARD & CURRAN INC. BETWEEN JANUARY 2007 AND AUGUST 2010. FEATURES DEPICTED ON THE EXISTING SITE PLAN WERE NOT FIELD VERIFIED FOR ACCURACY OR OMISSIONS UPON PLAN COMPILATION. HORIZONTAL DATUM IS REFERENCED TO STATE PLANE NAD 1983 (FEET), MAINE WEST ZONE.
2. BOUNDARY, SITE, AND TOPOGRAPHIC FEATURES FOR CITY OWNED PARCELS THAT COMPOSE THE PROJECT AREA ORIGINATE FROM A PLAN BY LAND SERVICES, INC. "STANDARD BOUNDARY SURVEY, PROPERTY OF THE CITY OF PORTLAND, WESTBROOK STREET, PORTLAND, MAINE" PROJECT 99148 SHEET 1 OF 1 DATED OCT. 1997 WITH A FINAL REVISION DATE OF OCT. 23, 2002. VERTICAL DATUM IS REFERENCED TO NGVD29 WITH ONE FOOT CONTOUR INTERVALS.
3. SITE AND TOPOGRAPHIC FEATURES FOR ADJACENT ROADWAY AND ABUTTING PARCELS ORIGINATE FROM CITY OF PORTLAND, ME AERIAL SURVEY COMPILED USING 2000 AERIAL IMAGES BY BRADSTREET CONSULTANTS OF MANCHESTER, MAINE. VERTICAL DATUM IS REFERENCED TO NGVD29 WITH TWO FOOT CONTOUR INTERVALS.
4. WETLAND DELINEATION FOR WETLAND AREAS LABELED #1-22 CONDUCTED BY DAMES & MOORE APRIL - MAY, 1998, AS DESCRIBED IN "WETLAND DELINEATION AND WETLAND FUNCTIONAL ASSESSMENT FOR SNYDER TRACT, WESTBROOK ST., PORTLAND, ME" REPORT DATED MAY 1998. WETLAND DELINEATION FIELD VERIFIED BY U.S. ARMY CORPS OF ENGINEERS ON MAY 8, 1998. FLAGS LOCATED BY SURVEY WORKS, INC. USING GPS, MAY 1998.
5. FIELD RECONNAISSANCE AND VISUAL VERIFICATION OF THE WETLANDS PREVIOUSLY DELINEATED BY DAMES & MOORE IN APRIL AND MAY OF 1998 WAS PERFORMED BY SW COLE ENGINEERING INC. IN NOVEMBER AND DECEMBER OF 2006, AND SUMMARIZED IN A LETTER REPORT DATED DECEMBER 15, 2006. ADDITIONAL WETLAND DELINEATION CONDUCTED BY S.W. COLE ON DECEMBER 15, 2006 IDENTIFIED AND DELINEATED THE LOCATION OF A FRESHWATER WETLAND AT THE NORTHEAST CORNER OF THE PROPERTY, JUST WEST OF A PORTLAND WATER DISTRICT EASEMENT, LABELED "WETLAND A, PP01/4", AND FURTHER DESCRIBED IN A LETTER REPORT DATED DECEMBER 21, 2006. WETLAND LOCATED BY MEANS OF GPS, DECEMBER 2006.
6. TREE ASSESSMENT CONDUCTED BY WOODLOT ALTERNATIVES, INC. APRIL 2007, AND SUMMARIZED WITHIN A LETTER REPORT DATED APRIL 13, 2007. LOCATIONS DETERMINED WITH HAND-HELD GPS UNIT, APRIL 2007.
7. VERNAL POOL ASSESSMENT CONDUCTED BY URS ON APRIL 16 AND MAY 19, 2006 AND SUMMARIZED IN LETTER REPORT DATED MAY 31, 2006.
8. EXISTING SEWER MAIN LOCATION FROM PLAN BY HNTB "WESTBROOK INTERCHANGE TOOL PLAZA LATERAL PLAN AND PROFILE 50+00 TO 63+70" DATED AUGUST, 2001
9. EXISTING WATER MAIN LOCATION FROM PLAN BY HNTB "WESTBROOK INTERCHANGE 42" WATERMAIN RELOCATION" DATED APRIL, 2001
10. UPDATED VERNAL POOL DELINEATION PERFORMED ON DECEMBER 12, 2010 FOR VERNAL POOLS E AND G BY BOYLE ASSOCIATES.
11. VERNAL POOL POINT INDICATORS (VP-XX-XX) LOCATED ON MAY 2, 2009 BY BOYLE ASSOCIATES.

LEGEND

NON-IMPACTED WETLAND AREA
TOTAL = 365,914 S.F. (8.40 ACRES)

IMPACTED WETLAND AREA
TOTAL = 37,416 S.F. (0.85 ACRES)

TOTAL WETLAND AREA = 403,330 S.F.
(9.25 ACRES)

PHASE 1 BOUNDARY

PHASE 2 BOUNDARY

Wetland Impacts

Phase 1

Completed Road	5243 SF
Proposed LCE 4	1461 SF
Proposed Road	215 SF
Future LCE 1	252 SF
Future LCE 2	7417 SF
Phase 1 Impact	14588 SF

Phase 2

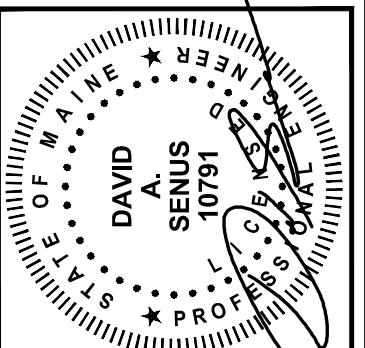
Future Road	5270 SF
Future LCE 3	3838 SF
Future LCE 5	6570 SF
Future LCE 6 & 7	7141 SF
Phase 2 Impact	22819 SF

Total Technology Park Impact	37407 SF
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41 Hutchins Drive
Portland, Maine 04102
800.426.4262 | www.woodardcurran.com



COMMITMENT & INTEGRITY DRIVE RESULTS



10/2/2015

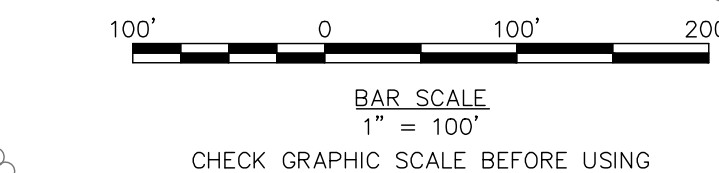
WETLAND IMPACT FIGURE

CITY OF PORTLAND
ECONOMIC DEVELOPMENT OFFICE
PORTLAND, MAINE
& PATRONS OXFORD INSURANCE CO.

PORTLAND TECHNOLOGY PARK UPDATE
& LCE 4 DEVELOPMENT

JOB NO.: 229001
DATE: OCTOBER 2015
SCALE: 1" = 100'
SHEET: 1 OF 1

WI-01



PERMITTING SET - NOT FOR CONSTRUCTION



MAINE HISTORIC PRESERVATION COMMISSION
55 CAPITOL STREET
65 STATE HOUSE STATION
AUGUSTA, MAINE
04333

PAUL R. LEPAGE
GOVERNOR

EARLE G. SHETTLEWORTH, JR.
DIRECTOR

December 19, 2014

Ms. Maggie Connolly
Woodard & Curran
41 Hutchins Drive
Portland, ME 04102

Project: MHPC # 1867-14 - Portland Technology Park; gas service
Town: Portland, ME

Dear Ms. Connolly:

In response to your recent request, I have reviewed the information received December 11, 2014 to initiate consultation on the above referenced project in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA).

Based on the information submitted, I have concluded that this undertaking will have **no adverse effect** upon historic properties.

However, our finding is *conditional* upon the following requirements:

1. The original configuration of the C&O Canal bed and banks will be maintained by landscape restoration after the pipeline installation. Please confirm in writing that our recommendation will be incorporated into the plans for this project and send our office plans which clearly indicate that this work will be conducted.

Please contact Robin Reed of our staff if we can be of further assistance in this matter.

Sincerely,

Kirk F. Mohney
Deputy State Historic Preservation Officer

12. STORMWATER MANAGEMENT PLAN & CALCULATIONS

12.1 PROJECT BACKGROUND

A detailed stormwater management design was submitted as part of the original application for the Portland Technology Park. The site was anticipated to include a total of seven buildings, collectively totaling 122,000 square feet of gross floor space. Each building would have associated paved parking areas, and a paved access road and utility corridor would extend through the site. A system of gravel wetlands and underdrained soil filters were designed to provide stormwater treatment and flooding control to manage stormwater for the entire site.

A portion of the roadway and three gravel wetlands have been constructed. This permit application is addressing the development of one lot within the Technology Park, LCE 4. This lot will take advantage of stormwater treatment from one of the already completed gravel wetlands (Gravel Wetland 4) and one additional gravel wetland to be constructed (Gravel Wetland 8). In addition, with required site grading changes, a gravel wetland has been eliminated from the original design (Gravel Wetland 9).

The proposed LCE 4 layout differs from the layout as defined in the original application drawings. The building shape has changed and the footprint has been reduced from 10,000 SF (20,000 SF in two stories) to 9,500 SF (19,000 SF in two stories). Parking layouts have been modified, and 8 fewer spaces are being proposed.

Existing drainage patterns and features are shown on Figure 12-1, Pre-Development Drainage Area Map. The figure from the original application has been utilized for this new application, as the same undeveloped pre-development condition is being considered. The Technology Park site is relatively flat, with the exception being an area of significant relief in the northeast corner and along the southern edge (forested drainage channels), and contains approximately ten acres of forested wetlands. The plan delineates the site into seven distinct drainage areas, two of which (Subcatchments 1 and 2) discharge to adjacent land to the east of the site noted to be owned by Energy East Foundation, conservation land that falls within the Resource Protection Zone. Drainage from this land flows into the tidal Fore River Estuary System. The remaining five subcatchments (Subcatchments 3 through 7) discharge through forested drainage channels to a CMP power distribution Right-of-Way (ROW) south of the site, where they flow into the former Oxford-Cumberland Canal, which is now a forested stream channel along the southern edge of the CMP ROW. This stream channel/canal ultimately discharges into the tidal Fore River Estuary System.

The proposed drainage structures and features are shown on Figure 12-2, Post-Development Drainage Area Map. This figure has been updated to show the changes proposed for LCE 4. This plan identifies proposed grades, proposed surface features, and stormwater management systems, including gravel wetlands and underdrained soil filter systems, to treat and detain stormwater runoff. The total proposed impervious area for the site at full build-out is 9.31 acres. Total disturbed and developed area for the site at full build-out is 13.7 acres.

Adequate provisions have been made to collect, treat and detain the required amount of stormwater runoff generated from the developed area of the site. Eleven proposed gravel wetlands and five proposed underdrained soil filters, dispersed throughout the site, have been designed with outlet structures to store and treat stormwater volumes generated onsite from the 2-year, 10-year and 25-year, 24-hour storm events. The proposed stormwater management strategy for the site manages and discharges stormwater close to the source in an attempt to maintain the pre-development hydrology of the site. Further, rock sandwiches are proposed beneath portions of the road to reduce channelized flow where drainage crosses the roadway, and to better mimic the natural pre-development site hydrology.

The HydroCAD model has been updated to reflect the changes for LCE 4. The drainage areas for Gravel Wetlands 4 and 8 have changes, and Gravel Wetland 8 has been completely redesigned. Gravel Wetland 9 was eliminated and drainage will be re-directed to Gravel Wetland 7. In addition, the new Chapter 500 Stormwater regulations, adopted in August 2015, define new standard rainfall amounts for the 2-year, 10-year and 25-year, 24-hour storm events. Both the pre and post HydroCAD stormwater models have been updated to reflect these new rainfall amounts, and the resulting changes in flow are reported in the following section.

12.2 APPLICABLE REGULATIONS

Applicable regulations that govern stormwater management on this site include the State of Maine Department of Environmental Protection (MaineDEP) Chapter 500 Stormwater Management Law, MaineDEP Site Law Standards, Section 5 of the City of Portland Technical Standards, Chapter 32 of the City of Portland Code of Ordinances, and the Maine Stormwater Best Management Practices (BMP) Manual. The project will disturb more than one acre of area and will result in more than one acre of new impervious area. In addition, the project is being reviewed under MaineDEP Site Law regulations, which require conformance with Chapter 500 Basic Standards, General Standards, and Flooding Standards. The project will be required to meet the standards for the management of stormwater discharging to freshwater or coastal wetlands. The Fore River Estuary System is not listed as an urban impaired stream in Chapter 502 of the MaineDEP Stormwater Regulations; therefore, the project is not required to meet the urban impaired stream standard.

12.3 BASIC STANDARDS (SOIL EROSION AND SEDIMENTATION CONTROL)

According to the MaineDEP Chapter 500 Stormwater Regulations, “a project disturbing one acre or more must meet the basic standards”. In addition, the project is subject to Site Law, which requires conformance with the Basic Standards. These standards address erosion and sedimentation control, inspection and maintenance, and good housekeeping practices. The application includes erosion and sediment control plans, details and notes. These notes cover good housekeeping practices. The Erosion and Sediment Control Plan for the proposed project is provided within Section 12.7 of this Report.

12.4 GENERAL STANDARDS (WATER QUALITY)

In addition to meeting the basic standards, the project must also meet the general standards. The MaineDEP Chapter 500 Stormwater Regulations require that at least 80% of the site be treated through the use of wetponds, filtration, infiltration, or buffers. Further, the 80% of the site that is treated must include at least 95% of the site’s impervious area. MaineDEP regulations allow for a linear portion of a site to meet a reduced rate of treatment. Linear portions are required to treat at least 50% of the developed area and 75% of the impervious area. These requirements have been met through the use of eleven gravel wetlands and five underdrained soil filters located on the site. This stormwater management approach was approved as part of the original permit issued in 2012. Gravel wetlands are proven to provide excellent water quality treatment in similar applications, as researched and reported by the University of New Hampshire’s Stormwater Center. The project site conditions lend well to the use of gravel wetland systems, considering the forested wetland hydrology, low permeability soils and high groundwater table. Table 12-1 below outlines the treated areas and calculated percentages demonstrating conformance with the MaineDEP Chapter 500 standards. Figure 12-4 gives a visual representation of treatment areas for the entire site.

Table 12-1: Portland Technology Park Water Quality Treatment Percentages

Water Quality Treatment Percentages					
		Total Area (Acres)	Area Treated (Acres)	Percent Treated	Percent Required
Non-Linear Portion	Impervious Area	7.95	7.72	97%	95%
	Developed Area	11.3	9.13	81%	80%
Linear Portion	Impervious Area	1.37	1.24	91%	75%
	Developed Area	2.37	1.65	69%	50%

The new LCE 4 layout has resulted in some minor modifications to the impervious, developed, and treated areas within the Technology Park. The total impervious area has been increased from 9.1 acres of impervious areas as originally permitted to 9.31 acres. This impervious area includes the surface areas of the gravel wetlands. Gravel Wetland 8 increased in size, Gravel Wetland 9 was eliminated, and the impervious surface on the site (pavement, roof, etc.) was

increased, resulting in a net increase in impervious surface. Developed area within the Technology Park has increased from 13.0 acres to 13.7 acres due to the expansion of the LCE 4 site. Required levels of treatment will continue to be exceeded for all impervious and developed areas. It is noted, that as the layout changed for LCE 4, the same will occur for each of the subsequent developed lots. Impervious areas, developed areas, and treatment levels will be reviewed at each stage of development to ensure compliance with the standards.

12.4.1 Gravel Wetland 4

A portion of the LCE 4 site will be directed to the previously constructed Gravel Wetland 4. The building's roof will drain to this wetland, as will the northern building terraces, landscaping areas, and parking areas. A shallow swale has been graded between the building and the wetland, and the area will be landscaped and will serve as a vegetated swale to direct stormwater from the parking lot and terraces back to Gravel Wetland 4. This vegetated swale area will provide some pre-treatment for the stormwater prior to it entering the gravel wetland, and this area has been incorporated into the available storage volume at the Gravel Wetland.

The sizing of this gravel wetland to meet minimum surface area, volume, and sediment forebay requirements with the new site layout has been confirmed, and is summarized in Tables 12-2, 3, and 4 below. The gravel wetland continues to meet length to width ratio requirements as summarized in Table 12-5.

The top of berm elevation within Gravel Wetland 4 is 68.8 feet. Based on the updated HydroCAD model, the peak stormwater elevation due to a 25-year storm event will be 68.01. Approximately 9.48 inches of freeboard is provided at the road. The elevation of the parking lot at the northern end of the vegetated swale is 68.2, providing only 2.28 inches of freeboard; however, drainage back into the parking lot in a significant storm event will not be an issue. The finish floor elevation of the building is 70.25, approximately 2.24 feet higher than the peak elevation in the 25-year storm event. Site flooding during a 25-year storm event due to overflow of Gravel Wetland 4 will not be a concern.

12.4.2 Gravel Wetland 8

This gravel wetland has been designed to meet minimum surface area, volume, and sediment forebay requirements, as summarized in Tables 12-2, 3, and 4 below. The gravel wetland also meets length to width ratio requirements as summarized in Table 12-5.

The top of berm elevation has been designed at 66.6 feet. The 25-year storm peak stormwater elevation is 65.83 feet, as calculated by the HydroCAD model. Approximately 9.24 inches of freeboard will be provided.

12.4.3 Gravel Wetland 7

With the elimination of Gravel Wetland 9, Gravel Wetland 7 will now receive greater flows. The surface area, volume, sediment forebay, and length to width ratio calculations have all be reconfirmed and are summarized in the tables below. The top of berm elevation remains at 68.4 feet, with a new 25-year storm peak stormwater elevation of 67.9 inches. The gravel wetland design provides for 6 inches of freeboard.

12.4.4 Gravel Wetland Summary

All gravel wetlands have been designed based on the most recent University of New Hampshire specifications. Freeboard during the 25-year storm event will provide for adequate protection for each of the three modified gravel wetlands. The following tables summarize the sizing for the three modified gravel wetlands described above.

Table 12-2: Gravel Wetland Surface Area Calculations

Gravel Wetland	Total Drainage Area (acre)	% Impervious	Impervious Area (acre)	Pervious Area (acre)	Surface Area Required** (acre)	Surface Area Required (SF)	Surface Area Provided (SF)
4	1.30	0.64	0.84	0.46	0.05	2225	4633
7	0.60	0.65	0.39	0.21	0.02	1029	4339
8	1.40	0.76	1.07	0.33	0.06	2619	3229

***Required Surface Area includes 5% Impervious area plus 2% Pervious area.*

Table 12-3: Gravel Wetland Volume Calculations

Gravel Wetland	Total Drainage Area (acre)	% Impervious	Impervious Area (acre)	Pervious Area (acre)	Volume Required** (acre-feet)	Volume Required (CF)	Actual Volume (CF)
4	1.30	0.64	0.84	0.46	0.09	3708	11053
7	0.60	0.65	0.39	0.21	0.04	1715	7129
8	1.40	0.76	1.07	0.33	0.10	4365	4916

***Required Volume includes 1" over Impervious area plus 0.4" over Pervious area.*

Table 12-4: Gravel Wetland Forebay Calculations

Gravel Wetland	Forebay Required** (CF)	Actual Forebay (CF)
4	371	723
7	171	691
8	437	525

***Required Forebay is 10% of Total Volume Required.*

Table 12-5: Gravel Wetland Length-to-Width Ratio

Gravel Wetland	Cell #	Length (ft) (min 15)	Width (ft)	Ratio (min 0.5)
4	1	40	45	0.89
4	2	60	30	2.00
7	1	90	20	4.50
7	2	90	20	4.50
8	1	55	15	3.67
8	2	50	30	1.67
8	3	65	15	4.33

12.5 FLOODING STANDARD

In addition to meeting the basic and general standards, the project is required to meet the flooding standard. The MaineDEP Chapter 500 Stormwater Regulations indicate that the stormwater management system must detain, retain, or result in the infiltration of the stormwater flows from the 24-hour storm of the 2-, 10- and 25-year frequencies such that peak flows from the post-development design of the site do not exceed those from the pre-development design.

Stormwater modeling was performed using HydroCAD Stormwater Modeling System software by Applied Microcomputer Systems. HydroCAD uses TR-20 runoff calculation methodology. The HydroCAD output from both the pre- and post-development models is attached for your reference.

The runoff curve numbers (CN) for the subcatchments (drainage areas) have been computed using the TR-55 methodology. The subcatchments were divided based on land use, and these acreage measurements were used to compute a weighted (composite) CN.

The time of concentration (Tc) paths for the subcatchments were selected to represent the most hydrologically remote point of the watershed. The Tc paths are shown on the attached Pre-Development and Post-Development Stormwater Plans, Figures 12-1 and 12-2 respectively. Note that the Tc computations contain time calculations using TR-55 sheet flow, shallow concentrated flow, and channel (pipe) flow equations.

Subcatchment areas and flowpath determinations were based on the survey and proposed contours. The property boundary was used as the most downstream point of the stormwater analysis in both the pre and post development calculations.

Post-Development subcatchment areas and Tc paths for a portion of the site have changed due to changes to LCE 4. In addition, the rainfall data used for modeling has been updated by the MaineDEP. The HydroCAD model has been updated to reflect these changes. All other conditions, including soil types and curve numbers, have remained the same as originally modeled and approved.

12.5.1 Pre-Development Conditions

Although a portion of the roadway has been constructed, the Pre-Developed condition considering no development, as previously submitted, will continue to be used. The rainfall events have been updated, and the HydroCAD model re-run, and the output of the model is attached. Results of the model are summarized later in this report.

12.5.2 Post-Development Conditions

The Post-Development condition remains primarily as previously defined, with some minor modifications to subcatchments to account for the proposed LCE 4 development which differs from the original submission.

The proposed overall Technology Park development includes construction of a new road and building sites with associated stormwater infrastructure and utilities. At full build out, the site will contain seven office buildings. The total impervious area for the site is 9.31 acres. Total developed area for the site is 13.7 acres. The post-development drainage system will operate as thirty-six distinct drainage areas (subcatchments). Table 6 describes how the post development subcatchments relate to the pre development subcatchment study points (SPs) and drainage areas. Table 12-7 describes the individual subcatchments for the post development model. Subcatchments that have changed in area since the previous submission are highlighted in gray. Figure 12-3 shows the locations of the post-development subcatchment areas.

Table 12-6: Post Development Subcatchment Routing

Study Point/Drainage Area	Subcatchments
1	0S, 1S, 2S, 3S, 4Sa, 4Sb, 4Sc, 5S, 6S, 8S
2	7S, 9S, 11S
3	17S
4	18S
5	10S, 12S, 13S, 14S, 15S, 16S, 19S, 20S, 21S, 23S, 29S
6	22S, 24S, 25S, 26S, 27S, 28S, 30S, 32S, 34S
7	31S, 33S, 35S, 36S

Table 12-7: Post Development Subcatchment Descriptions

Subcatchment	Discharge Point	Includes
0	Swale to SP1	Access road, grassed area
1	Swale to SP1	Access road, grassed area, undisturbed area
2	Culvert under main entrance to SP1	Undisturbed area
3	Soil Filter 3 to SP1	Parking lot
4a	SP1	Undisturbed area, grassed area
4b	Soil Filter 1 to SP1	Undisturbed area, grassed area
4c	Soil Filter 2 to SP1	Undisturbed area, grassed area
5	Soil Filter 4 to SP1	Building 1
6	Soil Filter 4 to SP1	Parking lot, grassed area
7	Soil Filter 5 to SP2	Parking lot, sidewalk
8	Soil Filter 4 to SP1	Parking lot
9	Soil Filter 5 to SP2	Parking lot, driveway, sidewalk, grassed area
10	Gravel Wetland 1 to SP5	Access road, sidewalk
11	SP2	Undisturbed area, grassed area
12	Gravel Wetland 2 to SP5	Parking lot, sidewalk
13	Gravel Wetland 3 to SP5	Building 2
14	Gravel Wetland 3 to SP5	Access Road, parking lot, sidewalk, grassed area
15	SP5	Undisturbed area, grassed area
16	SP5	Undisturbed area, grassed area
17	SP3	Undisturbed area
18	SP4	Undisturbed area, pervious paver area

Subcatchment	Discharge Point	Includes
19	SP5	Undisturbed area, sidewalk, grassed area, pervious paver area
20	Gravel Wetland 4 to SP5	Building 4
21	Gravel Wetland 5 to SP5	Building 3
22	Gravel Wetland 8 to SP6	Parking lot, sidewalk, access road
23	Gravel Wetland 4 to SP5	Access road, parking lot, grassed area, sidewalk
24	SP6	Undisturbed area, grassed area
25	Gravel Wetland 8 to SP6	Access road, sidewalk
26	Gravel Wetland 7 to SP6	Building 5
27	Gravel Wetland 7 to SP6	Parking lot, sidewalk, grassed area
28	Gravel Wetland 6 to SP6	Parking lot, driveway, grassed area
29	SP5	Undisturbed area, grassed area, pervious paver area
30	SP6	Undisturbed area, grassed area
31	Gravel Wetland 12 to SP7	Building 6
32	Gravel Wetland 10 to SP6	Building 7
33	Gravel Wetland 12 to SP7	Parking lot, sidewalk, grassed area
34	Gravel Wetland 10 to SP6	Driveway, parking lot, grassed area, sidewalk
35	Gravel Wetland 11 to SP7	Parking lot, grassed area
36	SP7	Undisturbed area, grassed area

Note: Subcatchments that have changed from the previous submission are highlighted above in gray

Adequate provisions have been made to collect and discharge all stormwater generated from the developed area of the site. Eleven gravel wetlands and five underdrained soil filters have been designed to store and treat stormwater volumes generated onsite from the 2-year, 10-year, and 25-year, 24-hour storm event. These rainfall amounts have increased from the previous submittal to reflect the newly approved Chapter 500 stormwater management rules.

The detention time of the water quality volume for each of the gravel wetlands and underdrained soil filters was evaluated for compliance with the MaineDEP required 24-48 hour detention time, as shown in Table 12-8 below. Where necessary, an orifice was added to the outlet to slow down flow to achieve the required detention time. The table lists the detention times calculated based on the HydroCAD outputs for the 1-inch 24-hour storm event.

Table 12-8: Treatment Detention Times

TREATMENT SYSTEM	START DETENTION HOUR	STOP DETENTION HOUR	DETENTION TIME (HOURS)
Gravel Wetland #1	6	32	26
Gravel Wetland #2	8	38	30
Gravel Wetland #3	6	42	36
Gravel Wetland #4	6	56	50*
Gravel Wetland #5	6	32	26
Gravel Wetland #6	6	34	28
Gravel Wetland #7	6	40	34
Gravel Wetland #8	8	34	26
Gravel Wetland #9	Eliminated		
Gravel Wetland #10	6	40	34
Gravel Wetland #11	8	36	28
Gravel Wetland #12	6	32	26
Underdrained Soil Filter #1	12	24	12*
Underdrained Soil Filter #2	12	20	8*
Underdrained Soil Filter #3	10	40	30
Underdrained Soil Filter #4	6	34	28
Underdrained Soil Filter #5	8	38	30

Stormwater systems listed above with an asterisk next to their detention time value do not meet the required 24-48 hour timing requirement. Underdrained Soil Filter's 1 and 2 as modeled did not meet the required time limit when previously approved, and continue to have shorter detention times. Both filters have been designed to just exceed the minimum surface area required and as such even with a very small orifice; the filters do not detain the water quality volumes for at least 24 hours. This is due to the very small contributing area, which is all pervious. A waiver from this requirement for these specific soil filters was requested as part of the original application. We request that this waiver be maintained.

Gravel Wetland 4 exceeds the maximum 48 hour detention time by two hours. This gravel wetland is already constructed. It will be receiving a larger drainage area, and will have greater flow, requiring longer detention time. The gravel wetland is larger and has been designed to assist with flood control. The original design for Gravel Wetland 4 had a detention time of 46 hours, and has increased to 50 hours. We request a waiver from this requirement for this Gravel Wetland.

Gravel Wetland 9 has been eliminated. Drainage that would have been directed to Gravel Wetland 9 will be directed to Gravel Wetland 7.

The stormwater outlet control structures are sized to attenuate the flow and therefore provide flood control so that the rate of runoff after construction of the proposed project is no greater than the pre-development rate of runoff in the design storm conditions.

HydroCAD was used to model stormwater flows from the site based on the modeling assumptions described above. Table 12-9 below provides a summary of the peak flow rates for the 24-hour, 2-, 10- and 25-year Type-III storm events. As shown below, there is a net decrease in the post-development rate of runoff during all storms at the modeled point of interest.

Table 12-9: Stormwater Summary of Results

STUDY POINTS	RETURN PERIOD (24-HR STORM) 2-YEAR STORM EVENT		RETURN PERIOD (24-HR STORM) 10-YEAR STORM EVENT		RETURN PERIOD (24-HR STORM) 25-YEAR STORM EVENT	
	PEAK RUNOFF RATE (CFS)	RUNOFF VOLUME (ACRE-FEET)	PEAK RUNOFF RATE (CFS)	RUNOFF VOLUME (ACRE-FEET)	PEAK RUNOFF RATE (CFS)	RUNOFF VOLUME (ACRE-FEET)
Pre-Development SP1	2.30	0.32	4.93	0.65	7.28	0.95
Pre-Development SP2	4.15	0.65	8.62	1.32	12.49	1.91
Energy East Subtotal	5.69	0.97	12.11	1.97	17.68	2.86
Pre-Development SP3	0.60	0.07	1.28	0.14	1.87	0.20
Pre-Development SP4	1.58	0.235	3.20	0.47	4.59	0.68
Pre-Development SP5	5.89	1.31	11.19	2.49	15.62	3.49
Pre-Development SP6	8.29	1.23	15.63	2.32	21.74	3.26
Pre-Development SP7	3.92	0.54	7.38	1.03	10.27	1.44
Canal Subtotal	17.52	3.39	33.54	6.44	47.00	9.07
Pre Total	23.17	4.35	45.54	8.41	64.50	11.93
Post-Development SP1	2.14	0.60	4.67	1.03	6.79	1.38
Post-Development SP2	3.71	0.65	8.40	1.27	12.65	1.82
Energy East Subtotal	5.32	1.25	11.53	2.30	17.74	3.20
Post-Development SP3	0.60	0.07	1.28	0.15	1.87	0.21
Post-Development SP4	1.51	0.25	3.13	0.51	4.54	0.73
Post-Development SP5	5.40	1.76	10.94	3.11	15.94	4.25
Post-Development SP6	5.79	1.62	12.12	2.81	18.52	3.82
Post-Development SP7	2.77	0.67	5.42	1.18	7.84	1.64
Canal Subtotal	15.59	4.38	32.22	7.76	47.68	10.65
Post Total	20.18	5.57	42.62	9.92	63.65	13.70

The post-development peak runoff rates for study points 2 and 5 for the 25-year storm exceed pre-development rates, as they did when previously approved. These values are highlighted in gray in the table above. Prior to previous approval, both the Energy East and CMP property owners were contacted and waivers authorizing the increase at these study points were granted. However, the total post-development rates for the overall areas and project are all either at or below their respective pre-development rates.

The watershed routing diagrams and model outputs from HydroCAD for both the Pre-and Post-Development conditions are attached. Upon completion of the project, the condominium association will assume responsibility for overseeing the property, including inspection and maintenance of the sites, stormwater drainage system, and treatment measures. The proposed stormwater management systems have been designed to maintain predevelopment runoff conditions to the maximum extent possible, to decrease peak flow rates, and to improve water quality and thermal impacts to the Fore River Estuary System. The flow from the seven study points ultimately discharges into the Fore River Estuary System by way of existing drainage across Energy East Foundation conservation land and the CMP ROW. Finally, as the site's total discharge rate has been reduced, there will be no adverse effects, including flooding and erosion, to abutting properties or the Fore River Estuary System as a result of the project.

12.5.3 Discharge to Freshwater Wetlands Standard

We propose maintaining many of the hydrologic features that exist on the site in the pre-development condition, including large areas of forested freshwater wetlands. The project will result in stormwater discharges to these forested freshwater wetland systems. Per MaineDEP stormwater regulations, discharge of runoff to the wetlands due to a 2-year storm may not increase the mean storage depth within a wetland more than two inches above pre-development levels for more than 24-hours from the end of the storm event. Each of the discharge locations from the site are modeled by a study point. In order to evaluate the change in depth to a wetland due to stormwater discharge, the pre-development runoff volume was compared to the post-development runoff volume for a 2-year 24-hour storm. As shown in Table 9, the post-development runoff volumes increased by approximately 1.22 Acre-Foot (AF). The total non-disturbed wetland area is approximately 8.39 acres. Therefore, the total increase in volume across the on-site wetland areas is approximately 0.15 feet, or approximately 1.74 inches, which is less than the 2-inch threshold.

12.6 INSPECTION AND MAINTENANCE OF STORMWATER SYSTEMS

Schedule D of the Condominium Documents includes the language addressing inspection and maintenance of stormwater systems, as it was approved as part of the original application. A copy of Schedule D is attached. In addition, checklists for stormwater inspections and a recommended list of maintenance tasks and a schedule follow this section.

12.7 EROSION AND SEDIMENTATION CONTROL PLAN

The overall goal of the Soil Erosion and Sedimentation Plan is to restrict the potential for erosion and sedimentation at the site and down-gradient of the site, particularly adjacent to protected natural resources such as wetlands, as shown on the drawings attached to Section 19 of this Report. A variety of erosion control techniques will be implemented to achieve this goal. During construction, these include:

- Positive grades throughout the construction site to direct flow to sediment control barriers;
- Diversion barriers to keep upslope runoff from flowing through the construction site;
- Preserving and maintaining vegetated areas to the maximum extent possible;
- Installation and maintenance of sedimentation barriers adjacent to the project;
- Installation and maintenance of construction entrances at the travelled interface between stabilized and non-stabilized portions of the project site;
- Permanent seeding and mulching applied as soon as areas are at final grades; and
- Inspection of all in-place measures after every significant rainfall until permanent measures are in place.

Structural measures will be installed where shown on the Soil Erosion and Sedimentation Control Plan, which is included in the drawings attached to Section 19 of this Report; details for the proposed measures are also included in the drawings. All measures will be implemented in accordance with the "Maine Erosion and Sedimentation Handbook

for Construction: Best Management Practices”; they will be installed prior to any earth disturbing activities. All temporary measures will be removed after the areas are permanently stabilized.

Permanent erosion control measures for the business park will include vegetation and pavement. Areas of concentrated flow will be protected from erosion by establishing vegetation and riprap. All measures will be maintained in effective operating condition. The Contractor will be responsible for implementing and maintaining all erosion and sediment control measures and will use the attached maintenance inspection form or equivalent.

12.8 ATTACHMENTS

- Stormwater Erosion & Sedimentation Control Inspection Report Form
- Stormwater Inspection Checklist
- Stormwater Management Maintenance Tasks and Recommended Schedule
- Figure 12.1 Pre-Development Drainage Area Plan
- Figure 12.2 Post-Development Drainage Area Plan
- Figure 12.3 Post-Development Subcatchment Plan
- Pre-Development HydroCAD output (bound separately)
- Post-Development HydroCAD output (bound separately)
- Figure 12.4 Treatment Area Plan
- Condominium Document Schedule D Inspection and Maintenance

**STORMWATER EROSION & SEDIMENTATION CONTROL
INSPECTION REPORT FORM**

Inspectors:

Date: ____ / ____ / ____

_____ of _____ (Project Owner)

_____ of _____ (Contractor)

_____ of _____

_____ of _____

Storm Event? ☐ Yes ☐ No Rainfall Amount _____ Storm Duration _____ hours

Visual Observations of Activity and Site Conditions:

Disturbed Soil Areas:

Storage Of Soils:

Sediment & Erosion Control Measures:

Construction Site Entrance:

Surface Stabilization:

Corrective Actions Taken

Attachments (if any):

Signature:

Representing:

Representing:



STORMWATER INSPECTION CHECKLIST

Inspection by: _____

Date: _____

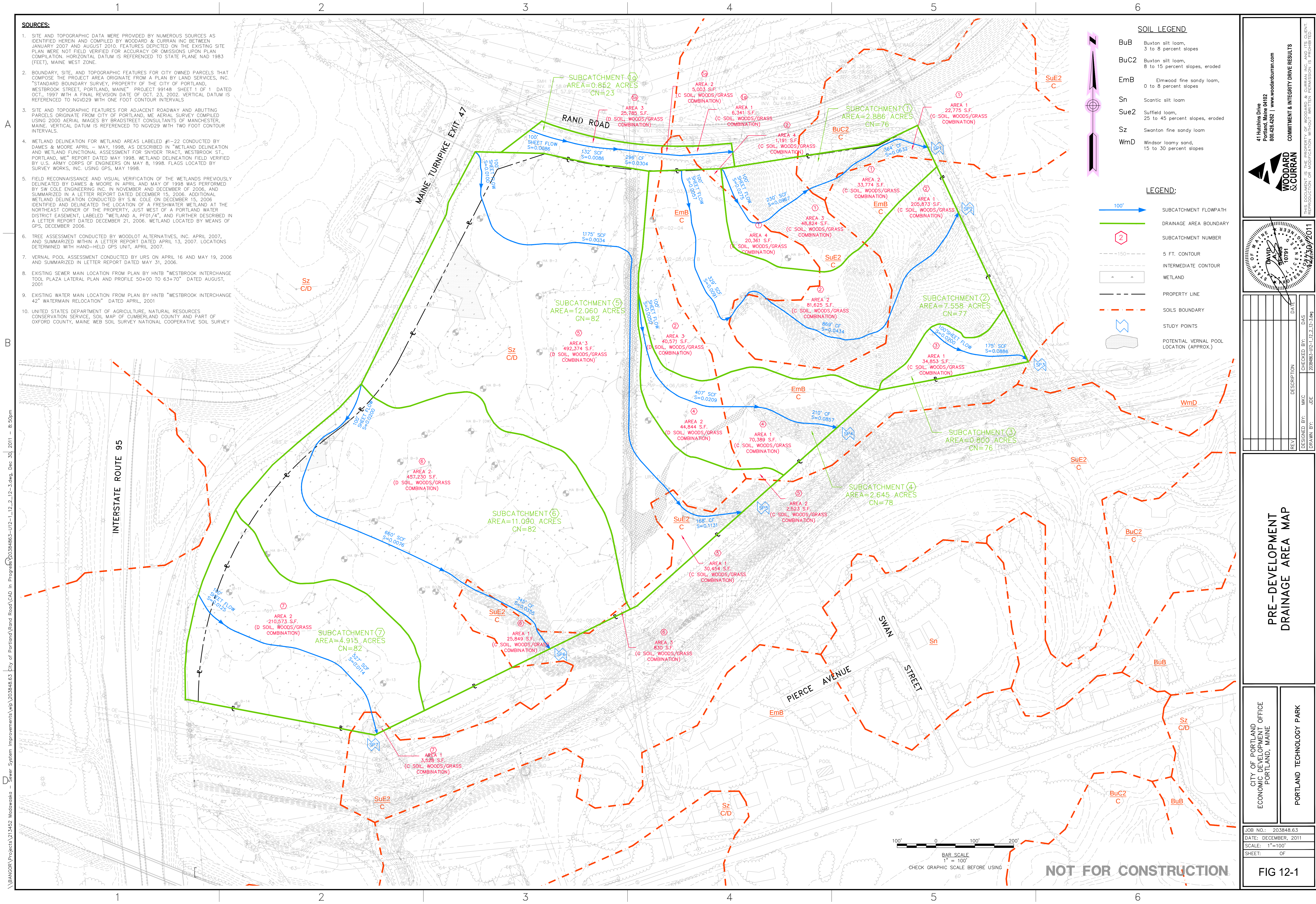
Stormwater Management Feature	Condition						Comments
Vegetative cover on slopes	no bare spots, no evidence of rill erosion		some bare spots, some rill erosion		large bare areas, extensive erosion		
Drainage channels/Ditches	no erosion, channels clear		some erosion and siltation		major erosion, channels clogged		
Gravel Wetlands	no siltation		some siltation		heavily silted in		
Gravel Wetlands	sideslopes free of erosion		some erosion on sideslopes		sideslopes heavily eroded		
Gravel Wetlands	inlet free of erosion		some erosion at inlet		inlet heavily eroded		
Gravel Wetlands	inlet / outlet clear		some debris		completely blocked		
Gravel Wetlands	no erosion on outlet weir		some rutting or erosion		deeply rutted and washed out		

Recommended Actions: _____

Actions Completed: _____ Date: _____ Mgr. Approval: _____

STORMWATER MANAGEMENT MAINTENANCE TASKS AND RECOMMENDED SCHEDULE

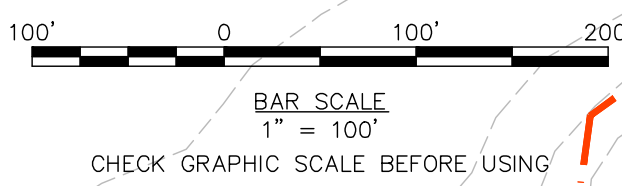
TASKS	OUTLET CONTROL STRUCTURES	GRAVEL WETLANDS	CULVERTS	SCHEDULE
Inspect for sediment accumulation	X	X	X	Annually
Remove sediment accumulation	X	X	X	As needed
Clean debris	X	X	X	Early spring, fall and after major storm
Inspect for Erosion	X	X		As needed
Reestablish vegetation in erosion areas	X	X		Early spring
Rake out dead vegetation		X		Early spring, fall
Replace stone rip-rap	X	X	X	Every 3 – 5 years as needed
Inspect structural elements during wet weather and compare to as-built plans	X	X		Annually
Make adjustments or replacements as determined by wet weather observations		X		As needed
Keep records of all inspections and maintenance activities	X	X	X	Annually
Have a professional engineer perform emergency inspections upon identification of severe problems	X	X	X	As needed



- B

300

Da

[illegible]

PERMITTING SET - NOT FOR CONSTRUCTION

BuB	Buxton silt loam, 3 to 8 percent slopes
BuC2	Buxton silt loam, 8 to 15 percent slopes, eroded
EmB	Elmwood fine sandy loam, 0 to 8 percent slopes
Sn	Scantic silt loam
Sue2	Suffield loam, 25 to 45 percent slopes, eroded
Sz	Swanton fine sandy loam
WmD	Windsor loamy sand, 15 to 30 percent slopes

	SUBCATCHMENT FLOWPATH
	DRAINAGE AREA BOUNDARY
	DRAINAGE NUMBER
	5 FT. CONTOUR
	INTERMEDIATE CONTOUR
	WETLAND
	PROPERTY LINE
	SOILS BOUNDARY
	STUDY PONTS
	POTENTIAL VERNAL POOL LOCATION (APPROX.)



WOODWARD
& CURRAN

COMMITMENT & INTEGRITY DRIVE RESULTS

10791

10/2/2015

	REV	DESCRIPTION	D
DESIGNED BY: MKC/AEA			CHECKED BY: DAS
DRAWN BY: JDA			000000-110-1-10-A-10-7

POST-DEVELOPMENT DRAINAGE AREA MAP

CITY OF PORTLAND
ECONOMIC DEVELOPMENT OFFICE
PORTLAND, MAINE
& PATRONS OXFORD INSURANCE CO.

PORTLAND TECHNOLOGY PARK UPDATE

JOB NO.:229001
DATE: OCTOBER 2015
SCALE: 1" = 100'
SHEET: OF

FIG 12-2

1. SITE AND TOPOGRAPHIC DATA WERE PROVIDED BY NUMEROUS SOURCES AS IDENTIFIED HEREIN AND COMPILED BY WOODARD & CURRAN INC. BETWEEN JANUARY 2007 AND AUGUST 2010. FEATURES DEPICTED ON THE EXISTING SITE PLAN WERE NOT FIELD VERIFIED FOR ACCURACY OR OMISSIONS UPON PLAN COMPIRATION. HORIZONTAL DATUM IS REFERENCED TO STATE PLANE NAD 1983 (FEET), MAINE WEST ZONE.
2. BOUNDARY, SITE, AND TOPOGRAPHIC FEATURES FOR CITY OWNED PARCELS THAT COMPOSE THE PROJECT AREA ORIGINATE FROM A PLAN BY LAND SERVICES, INC. "STANDARD BOUNDARY SURVEY, PROPERTY OF THE CITY OF PORTLAND, WESTBROOK STREET, PORTLAND, MAINE" PROJECT 99148 SHEET 1 OF 1 DATED MAY 1998. WITH A FINAL REVISION DATE OF OCT 23, 2002. VERTICAL DATUM IS REFERENCED TO NGVD29 WITH ONE FOOT CONTOUR INTERVALS.
3. SITE AND TOPOGRAPHIC FEATURES FOR ADJACENT ROADWAY AND ABUTTING PARCELS ORIGINATE FROM CITY OF PORTLAND, ME AERIAL SURVEY COMPILED USING 2000 AERIAL IMAGES BY BRADSTREET CONSULTANTS OF MANCHESTER, MAINE. VERTICAL DATUM IS REFERENCED TO NGVD29 WITH TWO FOOT CONTOUR INTERVALS.
4. WETLAND DELINEATION FOR WETLAND AREAS LABELED #1-22 CONDUCTED BY DAMES & MOORE APRIL - MAY, 1998, AS DESCRIBED IN "WETLAND DELINEATION AND WETLAND FUNCTIONAL ASSESSMENT FOR SNYDER TRACT, WESTBROOK ST., PORTLAND, ME" REPORT DATED MAY 1998. WETLAND DELINEATION FIELD VERIFIED BY U.S. ARMY CORPS OF ENGINEERS ON MAY 8, 1998. FLAGS LOCATED BY SURVEY WORKS, INC. USING GPS, MAY 1998.
5. FIELD RECONNAISSANCE AND VISUAL VERIFICATION OF THE WETLANDS PREVIOUSLY DELINEATED BY DAMES & MOORE IN APRIL AND MAY OF 1998 WAS PERFORMED BY SW COLE ENGINEERING INC. IN NOVEMBER AND DECEMBER OF 2006, AND SUMMARIZED IN A LETTER REPORT DATED DECEMBER 15, 2006. ADDITIONAL WETLAND DELINEATION CONDUCTED BY S.W. COLE ON DECEMBER 15, 2006. IDENTIFIED AND DELINEATED THE LOCATION OF A FRESHWATER WETLAND AT THE NORTHEAST CORNER OF THE FRAGMENT OF A PORTLAND WATER DISTRICT EASEMENT, LABELED "WETLAND A, PF01/4", AND FURTHER DESCRIBED IN A LETTER REPORT DATED DECEMBER 21, 2006. WETLAND LOCATED BY MEANS OF GPS, DECEMBER 2006.
6. TREE ASSESSMENT CONDUCTED BY WOODLOT ALTERNATIVES, INC. APRIL 2007, AND SUMMARIZED WITHIN A LETTER REPORT DATED APRIL 13, 2007. LOCATIONS DETERMINED WITH HAND-HELD GPS UNIT, APRIL 2007.
7. VERNAL POOL ASSESSMENT CONDUCTED BY URS ON APRIL 16 AND MAY 19, 2006 AND SUMMARIZED IN LETTER REPORT DATED MAY 31, 2006.
8. EXISTING SEWER MAIN LOCATION FROM PLAN BY HNTB "WESTBROOK INTERCHANGE TOOL PLAZA LATERAL PLAN AND PROFILE 50+00 TO 63+70" DATED 08/01
9. EXISTING WATER MAIN LOCATION FROM PLAN BY HNTB "WESTBROOK INTERCHANGE 42" WATERMAIN RELOCATION" DATED 04/2001
10. LOCATION OF GEOTECHNICAL BORING, SEE REPORT "WETLAND DELINEATION AND WETLAND FUNCTIONAL ASSESSMENT FOR SNYDER TRACT, WESTBROOK ST., PORTLAND, ME" DATED MAY 1998 BY DAMES & MOORE
11. ADDITIONAL BORINGS BY HALEY & ALDRICH DATED AUGUST 17, 2010

GRAVEL WETLAND 1
6,384 SF
SURFACE EL=68.60

RAND ROAD

100' 0 100'

BAR SCALE
1" = 100'

CHECK GRAPHIC SCALE BEFORE USING

CHECK GRAPHIC SCALE BEFORE USING

PERMITTING SET - NOT FOR CONSTRUCTION

BuB	Buxton silt loam, 3 to 8 percent slopes
BuC2	Buxton silt loam, 8 to 15 percent slopes, eroded
EmB	Elmwood fine sandy loam, 0 to 8 percent slopes
Sn	Scotic silt loam
Sue2	Suffield loam, 25 to 45 percent slopes, eroded
Sz	Swanton fine sandy loam
WmD	Windsor loamy sand, 15 to 30 percent slopes

	SUBCATCHMENT FLOWPATH
	DRAINAGE AREA BOUNDARY
	SUBCATCHMENT NUMBER
	5 FT. CONTOUR
	INTERMEDIATE CONTOUR
	WETLAND
	PROPERTY LINE
	SOILS BOUNDARY
	STUDY POINTS
	POTENTIAL VERNAL POOL LOCATION (APPROX.)

41 Hutchins Drive
Portland, Maine 04102
800.426.4262 | www.woodardcurran.com



**WOODWARD
& CLYBURN**

10/2/2015

POST-DEVELOPMENT SUB-CATCHMENT AREA MAP

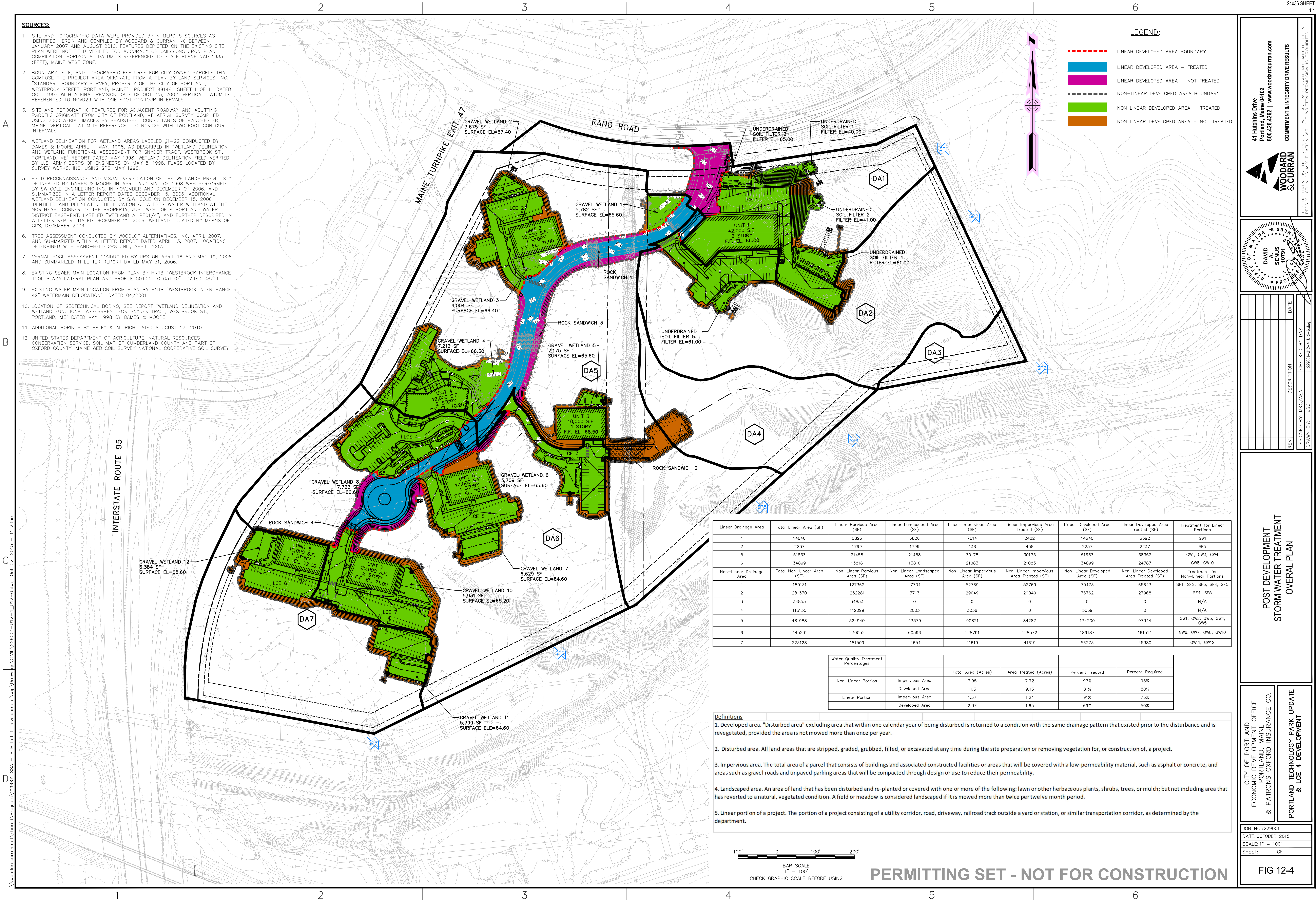
CITY OF PORTLAND
ECONOMIC DEVELOPMENT OFFICE
PORTLAND, MAINE
& PATRONS OXFORD INSURANCE CO.

PORTLAND TECHNOLOGY PARK UPDATE & LIFE 4 DEVELOPMENT

JOB NO.:229001
DATE:OCTOBER 201
SCALE: 1" = 100'
SHEET: OF

FIG 12-3

HydroCAD Output Filed in Separate Volume



- SOURCES:**
- SITE AND TOPOGRAPHIC DATA WERE PROVIDED BY NUMEROUS SOURCES AS IDENTIFIED HEREIN AND COMPILED BY WOODARD & CURRAN INC. BETWEEN JANUARY 2007 AND AUGUST 2010. FEATURES DEPICTED ON THE EXISTING SITE PLAN WERE NOT FIELD VERIFIED FOR ACCURACY OR OMISSIONS UPON PLAN COMPILED. HORIZONTAL DATUM IS REFERENCED TO STATE PLANE NAD 1983 (FEET), MAINE WEST ZONE.
 - BOUNDARY, SITE, AND TOPOGRAPHIC FEATURES FOR CITY OWNED PARCELS THAT COMPOSE THE PROJECT AREA ORIGINATE FROM A PLAN BY LAND SERVICES, INC. "STANDARD BOUNDARY SURVEY, PROPERTY OF THE CITY OF PORTLAND, WESTBROOK STREET, PORTLAND, MAINE" PROJECT 99148 SHEET 1 OF 1 DATED OCT., 1997 WITH A FINAL REVISION DATE OF OCT. 23, 2002. VERTICAL DATUM IS REFERENCED TO NGVD29 WITH ONE FOOT CONTOUR INTERVALS.
 - SITE AND TOPOGRAPHIC FEATURES FOR ADJACENT ROADWAY AND ABUTTING PARCELS ORIGINATE FROM CITY OF PORTLAND, ME AERIAL SURVEY COMPILED USING 2000 AERIAL IMAGES BY BRADSTREET CONSULTANTS OF MANCHESTER, MAINE. VERTICAL DATUM IS REFERENCED TO NGVD29 WITH TWO FOOT CONTOUR INTERVALS.
 - WETLAND DELINEATION FOR WETLAND AREAS LABELED #1-22 CONDUCTED BY DAMES & MOORE APRIL - MAY, 1998, AS DESCRIBED IN "WETLAND DELINEATION AND WETLAND FUNCTIONAL ASSESSMENT FOR SNYDER TRACT, WESTBROOK ST., PORTLAND, ME" REPORT DATED MAY 1998. WETLAND DELINEATION FIELD VERIFIED BY U.S. ARMY CORPS OF ENGINEERS ON MAY 8, 1998. FLAGS LOCATED BY SURVEY WORKS, INC. USING GPS, MAY 1998.
 - FIELD RECONNAISSANCE AND VISUAL VERIFICATION OF THE WETLANDS PREVIOUSLY DELINEATED BY DAMES & MOORE IN APRIL AND MAY OF 1998 WAS PERFORMED BY SW COLE ENGINEERING INC. IN NOVEMBER AND DECEMBER OF 2006, AND SUMMARIZED IN A LETTER REPORT DATED DECEMBER 15, 2006. ADDITIONAL WETLAND DELINEATION CONDUCTED BY S.W. COLE ON DECEMBER 15, 2006 IDENTIFIED AND DELINEATED THE LOCATION OF A FRESHWATER WETLAND AT THE NORTHEAST CORNER OF THE PROPERTY, JUST WEST OF A PORTLAND WATER DISTRICT EASEMENT, LABELED "WETLAND A, PFO1/4", AND FURTHER DESCRIBED IN A LETTER REPORT DATED DECEMBER 21, 2006. WETLAND LOCATED BY MEANS OF GPS, DECEMBER 2006.
 - TREE ASSESSMENT CONDUCTED BY WOODLOT ALTERNATIVES, INC. APRIL 2007, AND SUMMARIZED WITHIN A LETTER REPORT DATED APRIL 13, 2007. LOCATIONS DETERMINED WITH HAND-HELD GPS UNIT, APRIL 2007.
 - VERNAL POOL ASSESSMENT CONDUCTED BY URS ON APRIL 16 AND MAY 19, 2006 AND SUMMARIZED IN LETTER REPORT DATED MAY 31, 2006.
 - EXISTING SEWER MAIN LOCATION FROM PLAN BY HNTB "WESTBROOK INTERCHANGE TOOL PLAZA LATERAL PLAN AND PROFILE 50+00 TO 63+70" DATED 08/01
 - EXISTING WATER MAIN LOCATION FROM PLAN BY HNTB "WESTBROOK INTERCHANGE 42" WATERMAIN RELOCATION" DATED 04/2001
 - LOCATION OF GEOTECHNICAL BORING, SEE REPORT "WETLAND DELINEATION AND WETLAND FUNCTIONAL ASSESSMENT FOR SNYDER TRACT, WESTBROOK ST., PORTLAND, ME" DATED MAY 1998 BY DAMES & MOORE
 - ADDITIONAL BORINGS BY HALEY & ALDRICH DATED AUGUST 17, 2010
 - UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, SOIL MAP OF CUMBERLAND COUNTY AND PART OF OXFORD COUNTY, MAINE WEB SOIL SURVEY NATIONAL COOPERATIVE SOIL SURVEY

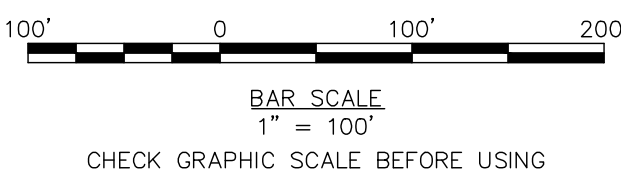
LEGEND:

- LINEAR DEVELOPED AREA BOUNDARY
- LINEAR DEVELOPED AREA - TREATED
- LINEAR DEVELOPED AREA - NOT TREATED
- NON-LINEAR DEVELOPED AREA BOUNDARY
- NON LINEAR DEVELOPED AREA - TREATED
- NON LINEAR DEVELOPED AREA - NOT TREATED

Linear Drainage Area	Total Linear Area (SF)	Linear Pervious Area (SF)	Linear Landscaped Area (SF)	Linear Impervious Area (SF)	Linear Impervious Area Treated (SF)	Linear Developed Area (SF)	Linear Developed Area Treated (SF)	Treatment for Linear Portions
1	14640	6826	6826	7814	2422	14640	6392	GW1
2	2237	1799	1799	438	438	2237	2237	SF5
5	51633	21458	21458	30175	30175	51633	38352	GW1, GW3, GW4
6	34899	13816	13816	21083	21083	34899	24787	GW8, GW10
Non-Linear Drainage Area	Total Non-Linear Area (SF)	Non-Linear Pervious Area (SF)	Non-Linear Landscaped Area (SF)	Non-Linear Impervious Area (SF)	Non-Linear Impervious Area Treated (SF)	Non-Linear Developed Area (SF)	Non-Linear Developed Area Treated (SF)	Treatment for Non-Linear Portions
1	180131	127362	17704	52769	52769	70473	65623	SF1, SF2, SF3, SF4, SF5
2	281330	252281	7713	29049	29049	36762	27968	SF4, SF5
3	34853	34853	0	0	0	0	0	N/A
4	115135	112099	2003	3036	0	5039	0	N/A
5	481988	324940	43379	90821	84287	134200	97344	GW1, GW2, GW3, GW4, GW5
6	445231	230052	60396	128791	128572	189187	161514	GW6, GW7, GW8, GW10
7	223128	181509	14654	41619	41619	56273	45380	GW11, GW12

Water Quality Treatment Percentages		Total Area (Acres)	Area Treated (Acres)	Percent Treated	Percent Required
Non-Linear Portion	Impervious Area	7.95	7.72	97%	95%
	Developed Area	11.3	9.13	81%	80%
Linear Portion	Impervious Area	1.37	1.24	91%	75%
	Developed Area	2.37	1.65	69%	50%

- Definitions**
- Developed area. "Disturbed area" excluding area that within one calendar year of being disturbed is returned to a condition with the same drainage pattern that existed prior to the disturbance and is revegetated, provided the area is not mowed more than once per year.
 - Disturbed area. All land areas that are stripped, graded, grubbed, filled, or excavated at any time during the site preparation or removing vegetation for, or construction of, a project.
 - Impervious area. The total area of a parcel that consists of buildings and associated constructed facilities or areas that will be covered with a low-permeability material, such as asphalt or concrete, and areas such as gravel roads and unpaved parking areas that will be compacted through design or use to reduce their permeability.
 - Landscaped area. An area of land that has been disturbed and re-planted or covered with one or more of the following: lawn or other herbaceous plants, shrubs, trees, or mulch; but not including area that has reverted to a natural, vegetated condition. A field or meadow is considered landscaped if it is mowed more than twice per twelve month period.
 - Linear portion of a project. The portion of a project consisting of a utility corridor, road, driveway, railroad track outside a yard or station, or similar transportation corridor, as determined by the department.



PERMITTING SET - NOT FOR CONSTRUCTION

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10/2/2015

DAVID SENUS 10791

REV	DESCRIPTION	DATE

DESIGNED BY: MKC/AEA
CHECKED BY: DAS
DRAWN BY: JBC
22001-07-4-07-6-04

**POST DEVELOPMENT
STORM WATER TREATMENT
OVERALL PLAN**

CITY OF PORTLAND
ECONOMIC DEVELOPMENT OFFICE
PORTLAND, MAINE
& PATRONS OXFORD INSURANCE CO.

PORTLAND TECHNOLOGY PARK UPDATE
& LCE 4 DEVELOPMENT

JOB NO.: 2299001
DATE: OCTOBER 2015
SCALE: 1" = 100'
SHEET: OF

FIG 12-4

**Declaration of Condominium
Portland Technology Park Condominium**

SCHEDULE D

Inspection and Maintenance Requirements

General inspection and maintenance during and after construction must take place in accordance with the requirements outlined in Chapter 500, Stormwater Management, Appendix B, Inspection and Maintenance, and Stormwater Management, Maine Department of Environmental Protection publication No. DEPLW0738. The condominium association will be responsible for implementing maintenance and inspection requirements for the stormwater management systems associated with the development. During the period that the City of Portland is the only member or one among other members of the condominium association, the contact person under responsible charge for this, until such time as this responsibility is transferred (as noted below), is:

John Emerson
Wastewater Facilities Coordinator
55 Portland Street
Portland, Maine 04101
Phone: (207) 874-8468

Upon development of the building sites, additional members will join the condominium association. These documents outline the maintenance and inspection responsibilities of the individual building tenants and the condominium association.

The responsible party will ensure that stormwater management facilities are properly maintained and inspected. Specifically, the underdrained soil filters, stormwater gravel wetlands, outlet structures, outlet pipes, culverts, roadways and parking lots will be inspected and maintained per the guidance outlined herein.

Inspection and Maintenance of Stormwater Systems

Upon completion of the project, the condominium association (association) will assume responsibility for overseeing the property, including the inspection and maintenance of the site's stormwater drainage system and treatment measures. The inspection and maintenance outlined in Chapter 500 Stormwater Regulations, and in the Maine Department of Environmental Protection's Stormwater BMP Manual, will be followed. Inspection and maintenance activities subject to the Post-Construction Stormwater Management Plan will be carried out in conformance with Chapter 32 of the City of Portland Code of Ordinances as follows.

A person with knowledge of stormwater management and erosion and sediment control, including municipal and state regulations and the standards and conditions in the permit, shall conduct the inspections and perform maintenance of the facilities at least annually. The association is responsible for maintaining records of all inspection and maintenance activities, to be submitted in the annual report to the City Department of Public Services (DPS) on or by June 30th of each year, certifying the successful inspection of all BMPs and that noted deficiencies in the stormwater management facilities have been

repaired. The association shall include the DPS filing fee with the annual report.

Specifically, the condominium association will assume inspection and maintenance responsibility for the underdrained soil filters and gravel wetlands.

The condominium association will also be required to submit a certification of the following to the Maine Department of Environmental Protection within three months of the expiration of each five-year interval from the date of issuance of the permit.

- a) Identification and repair of erosion problems. All areas of the project site have been inspected for areas of erosion, and appropriate steps have been taken to permanently stabilize these areas.
- b) Inspection and repair of stormwater control system. All aspects of the stormwater control system have been inspected for damage, wear, and malfunction, and appropriate steps have been taken to repair or replace the system, or portions of the system.
- c) Maintenance. The erosion and stormwater maintenance plan for the site is being implemented as written, or modifications to the plan have been submitted to and approved by the department, and the maintenance log is being maintained.

Pavement and Drainage Structures

All proposed drainage structures located on site, such as culverts, basins and piping, shall be inspected annually to ensure they are being well maintained and are adequate in carrying stormwater flows throughout the site. Parking and paved areas, such as the access road, will be inspected annually each spring. Visual inspections will enable site roads and parking areas to be kept clean and clear through periodic sweeping (at minimum annually) and winter plowing as required. The inspections will also ensure pavement markings are repainted as needed to maintain proper traffic circulation and parking space delineation. Paved areas will be plowed and sanded as often as necessary to maintain safety. Periodic sweeping of pavement (at minimum annually) will keep the parking areas clean and will reduce the amount of sediment available to enter the stormwater management systems, in turn reducing the need to clean these systems.

Gravel Wetland Systems

Gravel Wetlands maintain a saturated gravel bed and provide treatment of stormwater through physical chemical and biological processes within the plants and gravels/soils of the system. Gravel Wetlands are well suited for poorly draining sub-soils due to the limited hydraulic head requirement (difference in elevation between what flows in and what flows out) and lack of required separation from the groundwater table. Because infiltration is not designed to occur, separation from groundwater is not required and the systems are sited much like stormwater ponds.

Monitoring and maintenance is critical for the proper operation of gravel wetland systems. First year post-construction monitoring differs primarily by its increased frequency to assure proper vegetative establishment and system functioning. Post-construction routine monitoring is based on USEPA requirements for good housekeeping practices.

Unlike other filtration systems, a subsurface gravel wetland is a subsurface, horizontal filtration system and does not rely upon the surface soils for treatment. As such, surface infiltration rates are

expected to be low and are not used for the criteria for cleaning/maintenance. Rather, stormwater conveyance into the subsurface gravel layer is the critical hydraulic performance measure.

1st Year Post-Construction: Inspection frequency should be after every major storm in the first year following construction.

- ☐ Ensure system drains within 24-72 hrs (within the design period, but also not so quickly as to minimize stormwater treatment).
- ☐ Water plants as necessary during the first growing season
- ☐ Re-vegetate poorly established areas as necessary
- ☐ Treat diseased vegetation as necessary
- ☐ Quarterly inspection of side slopes, earthen embankments, forebays and inlets; repair eroded areas, especially on slopes
- ☐ Check inlets, outlets, and overflow spillway for blockage, structural integrity, and evidence of erosion.

Post-Construction: Inspection frequency should be at least every 6 months thereafter. Inspection frequency can be reduced to annually following 2 years of monitoring that indicates the rate of sediment accumulation is less than the cleaning criteria listed herein. Inspections should focus on:

- ☐ Check the filter surface for dense, complete, root mat establishment across the wetland surface. Thorough vegetation with grasses, forbs, and shrubs is necessary.
- ☐ Check the gravel wetland surface for standing water or other evidence of riser clogging, such as discolored or accumulated sediments. More detail in section below.
- ☐ Check the sedimentation forebay for sediment accumulation, trash, and debris.
- ☐ Ensure system drains within 24 to 72 hrs.
- ☐ Check inlets, outlets, valves, weir walls, orifice structures, and overflow spillway for blockage, structural integrity, and evidence of erosion.
- ☐ Check side slopes and earthen embankments; repair eroded areas, especially on slopes.
- ☐ Remove decaying vegetation, litter, and debris.

Gravel Wetland Maintenance

Cleaning Criteria for Sedimentation Forebay: Sediment should be removed from the sedimentation chamber (forebay) on an annual basis. Sediment can be removed with hand tools or hand operated power equipment (power brooms, vac equipment, etc.). If larger equipment is necessary, this equipment should not track on the wetland surface. Disturbed areas should be revegetated as necessary. Removed sediments should be dewatered (if necessary) and disposed of in accordance with state solid waste guidance.

Cleaning Criteria for Gravel Wetland Treatment Area: Sediment should be removed from the gravel wetland surface when it accumulates to a depth of several inches across the wetland surface. Sediment should be removed with hand tools or hand operated power equipment (power brooms, vac

equipment, etc) rather than heavy construction equipment to avoid compaction of the gravel wetland surface. If larger equipment is necessary, this equipment should work adjacent to the gravel wetland and should not track on the wetland surface. Removed sediments should be dewatered (if necessary) and disposed of in accordance with state solid waste guidance.

Draining and Flushing Gravel Wetland Treatment Area: For maintenance it may be necessary to drain or flush the treatment cells. Flushing of the risers and horizontal subdrains is most effective with the entire system drained. Flushed water and sediment should be collected and properly disposed.

Inlets: Inlets to each stormwater treatment area should be kept open and in good working condition. This is particularly important around curb breaks and/or sidewalk culverts. These locations should be marked on the roadway at the completion of construction to allow for winter snow removal. All eroded areas should be repaired.

Initial Turf Maintenance (when applicable): Sod or seeded areas at inlets or along gravel wetland embankments should ideally be mowed no lower than 3" for optimum grass health and to minimize erosion.

Large Debris: Large debris within the ponding area should be removed.

Weeds in the Gravel Wetland Area: Periodic weeding of the gravel wetland areas and forebays may be necessary, particularly in the landscaped portions of the stormwater management system. Hand weeding is required as the use of herbicides is not recommended.

Surface Mulch Layer (when applicable): Areas devoid of mulch should be remulched by hand. Every year, in the spring, a fresh layer of mulch should be added to the soil filter area as needed.

Sedimentation (or Apparent Clogging) of Wetland Surface Area: To correct a standing water problem, the following remedial actions are recommended:

1. Check adjacent groundwater levels. High seasonal groundwater may influence system drain-down. Inspect system outlet for inundation or debris blockages.
2. Evaluate the drainage area to the treatment area to identify any potential sources of sediment, such as an erosive condition, that may be contributing to the clogging of the device. If a source is identified, it is recommended that that source be eliminated to the fullest extent practicable before proceeding with the remaining recommendations provided below.
3. Flush the subdrains. Use cleanouts to flush the subdrains. Sediment in the drains may be preventing the system from draining. Make sure to provide a way to capture any flushed sediment before it enters the stream environment or storm drain system downstream of the device. If, after flushing the subdrains, the device continues to hold water, the wetland soil may be contaminated. As such, following the guidelines provided below is recommended.
4. Gauge the extent of soil contamination. To do this, it is recommended that one or more test pits be dug with a shovel and that the soil layer be evaluated for contamination. Once the levels of contamination have been determined (for example, the top 4" of soil appears to be contaminated), it is recommended that you proceed with the remaining remedial actions.
5. Harvest the plants (when applicable). Care should be taken in the removal and temporary storage of the plants so that as many as possible can be harvested for replanting in the wetland area once the functioning of the device has been restored sufficiently.
6. Remove the top few inches of contaminated soil plus an additional 2-inch of soil, and replace the removed soil with a clean soil mix in accordance with the soil mix specification.
7. Monitor the function of the system during the next two to three rain events. If the device appears to be draining as intended (e.g., there is no standing water 72 hours following a rain event), proceed with the remaining remedial actions. If the area continues to hold

standing water, then the entire soil mix and the subdrains may need to be removed and replaced. Reuse of any undamaged subdrains may be possible once they have been cleaned thoroughly.

8. Replant the harvested plants, and replace any plants that were rendered unusable during or following their removal from the soil filter area.
9. Water the plants in the soil filter for the next two or more weeks unless there is sufficient rainfall. This will help the plants to reestablish.

In addition to the inspection and maintenance of stormwater systems, parking and paved areas, such as the access road, will be inspected annually each spring. Visual inspections will enable site roads and parking areas to be kept clean and clear through contracting periodic sweeping and winter plowing as required. The inspections will also ensure pavement markings are repainted as needed to maintain proper traffic circulation and parking space delineation. Paved areas will be plowed and sanded as often as necessary to maintain public safety. Periodic sweeping of pavement will keep the parking areas clean and will reduce the amount of sediment available to enter the gravel wetlands, in turn reducing the need to clean these devices.

Stormwater inspection and maintenance requirements are summarized in more detail in the following Stormwater Inspection Checklist and Stormwater Management Maintenance Tasks and Recommended Schedule.

Underdrained Soil Filter Systems

The underdrained soil filters will be inspected semi-annually in spring and fall. Additionally, for the first six months, each filter will be inspected following major storm events. These inspections will ensure that there is no erosion in the soil filter, the filter remains capable of filtering runoff within two days, and sediment does not build up. Should the soil filter to drain within 72 hours, the top several inches of the filter media will be removed and replaced with fresh material. Attachment 12.8 includes an inspection form to be used during all soil filter inspections.

Maine DEP recommends mowing at least twice each year to allow visual inspection and to prevent the growth of woody plants. Sediment will be removed annually. Any eroding areas will be repaired immediately. Should a basin or swale fail to filter the runoff from a storm within two days, the soil filter layer may need to be retilled. No basin or swale will be used for snow storage or for any activities that involve heavy foot traffic. Vehicle traffic within the filter basin will not be allowed.

**GRAVEL WETLAND/UNDERDRAIN SOIL FILTER
VISUAL INSPECTION RECORD**

____ **INITIAL STORM INSPECTION:** For the first six months perform inspections after each major storm.

____ **SEMIANNUAL INSPECTION:** Following the first six months, inspect twice annually, in the spring and the fall.

Date: _____ Time: _____

Location: _____

Last Date and Approximate rainfall amount (in): _____

Estimated depth of undrained water in soil filter (in): _____

Characteristics of Soil Filter:

Vegetation Condition: _____

Sedimentation Present (Y/N): _____ Amount (depth over filter): _____

Filter Media / Wetland Soil Condition (i.e. erosion, rilling, etc.): _____

Outlet Control Structure Condition: _____

Oil Sheen (Y/N): _____ Trash (Y/N): _____ Amount: _____

Other observances: _____

Maintenance:

Task	Completed Since Last Inspection (Y/N)*	Needs to be Completed (Y/N)
Annual sediment removal		
Semiannual mowing		
Debris clean-out at beehive grate		
Woody vegetation control mowing/cutting		

** If yes, list date (month, year) when maintenance activity was performed.*

Observations of drainage area during visual monitoring: _____

Follow-up actions required following inspection (i.e. removal and replacement of top layer of material):

Signature of person conducting visual monitoring:

Name

Date

17. CONSISTENCY WITH PORTLAND TECHNOLOGY PARK DESIGN GUIDELINES

A set of Design Guidelines was developed for Portland Technology Park in 2012. These guidelines were prepared for the City of Portland by Scott Simons Architects and Woodard & Curran. The goal of the Design Guidelines was to establish a set of standards associated with buildings and architecture, open space, energy and environmental requirements to create a cohesive physical environment within the Technology Park. The drawings included with this report include site plans, landscaping plans, and architectural plans that show the proposed LCE 4 development. Also attached to this sections are renderings showing a representation of the proposed building and site. The proposed development of LCE 4 will follow the Design Guidelines as follows.

17.1 DEVELOPMENT GOALS

The City of Portland has identified that the goal of the Portland Technology Park is to create a “forward thinking, low impact, and environmentally friendly Technology Park development.” The proposed development will meet this goal as outlined herein by exemplifying innovative design, durable materials, and high performance building principals.

17.1.1 Design Quality

Scott Simons Architects has a long track record of designing innovative buildings, with projects regularly winning awards for both design and performance. The success of our design process has been refined over twenty years by consciously listening to clients and closely involving them in a collaborative approach with the whole design team.

17.1.2 Durability

The materials to be used in this project include metal panel, cementitious panels, and thermally treated wood. All materials are essentially maintenance free with the exception of the thermally treated wood. The thermal treatment improves the stability of the wood and enhances the decay resistance and longevity of its lifespan.

17.1.3 Energy/Environmental Performance

The project is designed to significantly outperform energy code requirements, as well as meet or exceed the goals of the Portland Technology Park for energy use for heating, cooling, and lighting.

17.2 SITE DESIGN

17.2.1 Design Relationship to Site

As demonstrated throughout this Section, the proposed project is compatible with the following components of the Portland Technology Park Design Guidelines and will therefore be unified relative to other building developments and common areas within the park:

- Building Design Standards;
- pedestrian and vehicular circulation plans;
- design of open spaces;
- drainage;
- topography;
- vegetation; and
- preservation of natural features.

Integration of open spaces and natural features have been achieved by incorporating outdoor amenities for the benefit of users of the site, such as outdoor seating areas and trash and recycling receptacles.

17.2.2 Stormwater Management and Site Design

The Stormwater Management and Site Design utilizes low impact development (LID) strategies to mimic the existing site hydrology by limiting piped infrastructure, limiting increases to the steepness of site grades, and maximizing surface stormwater conveyance and treatment through the use of gravel wetlands. The design consists of curb cuts with surface flow to sediment forebays leading into gravel wetlands in place of traditional closed drainage systems. Impervious cover will be reduced by utilizing reduced parking dimensions (8 feet, 2 inches x 18 feet). The proposed gravel wetlands have also been designed to manage post-development runoff rates, as described in Section 12 of this Report.

A Tier 2 NRPA Permit Application was submitted on May 11, 2011, and approval was granted in April of 2012 for the Portland Technology Park; a minor revision to this application has been submitted for the proposed work associated with LCE 4. The proposed Site has been designed to minimize impacts to wetlands. The total wetland impact anticipated for the entire Technology Park has not been increased by the layout changes required for the proposed LCE 4 development.

17.2.3 Materials or Wastes

There will be both a designated trash dumpster and recycling dumpster in an enclosed area away from the building and the Technology Park road. Access to the dumpster will be via the parking lots. No materials or wastes shall be deposited on any area of the site in such form or manner that they may be transferred beyond the lot boundaries by natural causes or forces. The Patrons-Oxford Insurance Company will contract with a waste management service to collect and remove waste and recyclables. All materials will be transported and disposed of by a licensed processing or disposal facility in accordance with applicable laws and regulations. Patrons-Oxford Insurance Company will also implement a pollution prevention program, including sweeping of paved areas.

As with any construction project, the proposed construction will generate construction, demolition, and land-clearing debris. The contractor(s) for the construction work will be fully responsible for handling all waste generated by the project and for managing and disposing of it in accordance with Maine Solid Waste Management Regulations - 06-096 CMR 400-409. The contractor(s) will be bound by contract to dispose of all materials in full accordance with applicable Maine regulations and approval of the City of Portland. All efforts will be made during construction to minimize waste and to recycle.

Construction debris will be transported to a waste management facility licensed to accept the waste materials. Trees cleared will either be harvested and sold, ground down to create erosion control mix for onsite applications, or disposed of at an approved facility. Stumps will be disposed of at an approved facility and no stumps, refuse vegetation or other debris created by clearing or construction operations will be disposed of onsite. All material which might cause fumes or dust, or constitute a fire hazard if stored out-of-doors, shall be stored in enclosed containers.

17.2.4 Soil Erosion and Sediment Control

An erosion and sedimentation control plan has been developed for the Site, which includes the latest Maine DEP approved erosion and sediment control measures to reduce pollution from construction activities. Frequent, documented inspection of erosion and sediment control measures during construction shall be required in accordance with local and state regulations. This is described in more detail in Section 12.

17.2.5 Traffic

LCE 4 has been designed with a smaller footprint and smaller parking lot than originally identified as part of the Technology Park design, resulting in traffic that is equal to or less than the originally approved design. Further discussion of traffic can be found in Section 12 of this report.

17.2.6 Parking Lots

Patrons Oxford anticipates 60-65 permanent employees, with a small provision of transient employees from the parent company. The proposed parking lots have been designed with respect to site access, building access, and landscape qualities. Parking spaces have been designed to reduce impervious surface by utilizing reduced parking dimensions (8 feet, 2 inches x 18 feet). Shade will be provided via landscaping to reduce heat islands and minimize impact on microclimate. Further discussion of parking can be found in Section 12 of this report.

17.2.7 Sidewalks

The proposed project includes internal site sidewalks along portions of the driveway and parking lots that transition to larger terrace areas around major building entrances. These sidewalks have been designed to provide safe egress and enhance the building entrance. Handicap accessible ramps have been provided at crossings and at the designated handicap parking spaces to provide ADA accessibility.

17.2.8 Bicycle Racks

Bicycle parking has been provided in accordance with City Standards to encourage reduction in pollution and land development impacts from automobile use. A total of 7 bicycle racks, each providing space for two bicycles will be provided in the rear of the building near the anticipated employee entrance area.

17.3 EXTERIOR LIGHTING

The exterior lighting strategy is in accordance with the Design guidelines. The lighting fixture used for the roadway and parking areas is the same fixture associated with the design of the Technology Park. Wall-mounted light fixtures will be installed on the back wall of the building and at entrance doors on end walls. Additional lighting at the entrance of the building is recessed in the building's overhang to illuminate the entrance as well as eliminate any light trespass to the sky or outward to the site. Additional site lighting is limited to certain occupied areas and pathways with bollard type fixtures that illuminate downwards and out with a short throw to limit the impact on nocturnal environments. A photometric plan showing that the proposed site lighting will not have significant impact on the surrounding environment is attached.

17.4 SIGNAGE

Signage will be located both in the front of the building, as well as the west side of the building visible from the highway. Material choice will be in line with the building's exterior materials. Branding and signage design is currently ongoing, and permit applications for signage will be filed separately.

17.5 LANDSCAPING

The landscape plan for LCE 4 has been developed in response to the existing site condition and the proposed architecture. The existing site is currently wooded with wetlands throughout it. This landscape plan uses predominately native plant species to re-naturalize the project area and seamlessly stitches the new building into this wooded environment. The landscape architect has met with Jeff Tarling, the City of Portland's Arborist to discuss the proposed landscaping for the site.

The landscape plan can be divided into distinct zones; a building zone, parking area zone, gravel wetland zone, and rain garden zone. While these zones have distinct functions, the plant material within each of the zones overlaps to unify the parts of the project area into a complete whole. To add to this unification effort, a native conservation seed mix is carried throughout the project area.

Within the building zone there is a front and back terrace and front arrival/drop-off area that includes native trees and shrubs, and perennials for accent. The parking lot zone includes various trees in the parking islands and shrubs and

ornamental grasses as an understory to minimize the visual impact of the parking areas. The gravel wetland and the rain garden zones utilize wet-loving plants to naturalize these elements.

17.6 BUILDING DESIGN STANDARDS

The proposed building conforms to the building standards set forth in the Portland Technology Park Design Guidelines as outlined below.

17.6.1 Building Massing and Form

The Building Massing and form is a subtle shift of the rectangular footprint to better utilize its southward orientation for day-lighting purposes. The roof clerestory of the building filters natural light into the central double height volume in the building.

17.6.2 Zoning Standards

A narrative discussing the zoning standards associated with the proposed project is provided in Section 6 of this Report. The project will conform to all applicable standards, except as noted in Section 6.

17.7 BUILDING ENVELOPE

17.7.1 Exterior Siding

Exterior siding will consist of Thermally Treated Wood, Metal Panels, and Cementitious Wall Panels.

17.7.2 Windows

Windows will consist of thermally broken aluminum storefront system that meets or exceeds the Design Guidelines.

17.7.3 Entrances

The primary entrance is located on the street-side of the building under an overhang for protection against the elements. Vestibules with inner and outer sets of doors are used at the primary entrances.

17.7.4 Roofs

The building has both flat and sloped roofs. Roofs are pitched a minimum of ¼-inch per foot and covered with single-ply membrane. Membrane roofing SRI values are being reviewed against current best practice recommendations.

17.7.5 Exterior Trim and Detailing

All Trims and details will be executed to match and/or enhance the exterior materials.

17.8 ENERGY & ENVIRONMENTAL STANDARDS

17.8.1 Building Materials

The proposed building is designed to utilize renewable resources and minimize embodied energy by use of a heavy braced wood frame for the primary structural system.

17.8.2 Exterior Envelope Thermal Performance

The thermal performance of the exterior envelope is designed to exceed the standards set forth in the Design Guidelines.

17.8.3 Water Conservation

Low flow plumbing fixtures will be used throughout. All stormwater runoff, including roof runoff, will be diverted into new and existing gravel wetlands on site.

17.8.4 Shading Devices and Ventilation

Excessive solar gains will primarily be managed through the specification of high SHGC glazing, and highly efficient mechanical ventilation systems with energy recovery will be utilized for fresh air delivery.

17.8.5 Lighting

LED fixtures will be used throughout the building.

17.8.6 Mechanical Systems

Mechanical systems are designed to meet or exceed the standards set forth in the design guidelines.

17.8.7 Alternative Energy

If budget allows, solar photovoltaic panels are proposed on the south-facing roof.

17.9 CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN PRINCIPLES

The layout of the site has been designed to provide a safe environment for employees who use the site on a daily basis as well as occasional visitors.

17.9.1 Physical Features

Walkways and exterior patios provide greater visibility and surveillance opportunities throughout the site.

17.9.2 Lighting

Exterior Lighting meets or exceeds standards set forth in the Design Guidelines and has been designed with perceptual quality and safety in mind.

17.9.3 Mechanical Surveillance Systems

Surveillance systems will be present at the primary building entries; further extents are still under review.

17.9.4 Access Management

Site access is routed by the building's primary entrance to both facilitate way-finding and to help provide for site oversight and control. The single driveway entering the property passes by the main entrance, allowing for a visual of all vehicles entering and exiting the property.

17.9.5 Orientation and Wayfinding

Other than the primary signage at the entrance of the building site, the site organization and building form convey a clear and distinct entry sequence to the building by focusing on the two main building entrances. Parking will be assigned and a reserved set of visitor parking spots will be labeled. Internal way-finding will be facilitated by clear views to the central double height space as well as room signage.

17.9.6 Mechanical Access Control

Keycard access will be utilized at all doors in effect 24 hours a day, seven days a week. Access for the public will be granted through a video/intercom communication system to a designated individual within the building.

17.9.7 Territorial Reinforcement

The single site entrance, building siting, and the location of the public entrances and parking work together to define public, semi-public, and private spaces in the site development. Public and private spaces are further clarified through the delineation of the site design and use of materials.

17.10 ATTACHMENTS

- Architectural Renderings
- Lighting Photometric Plan

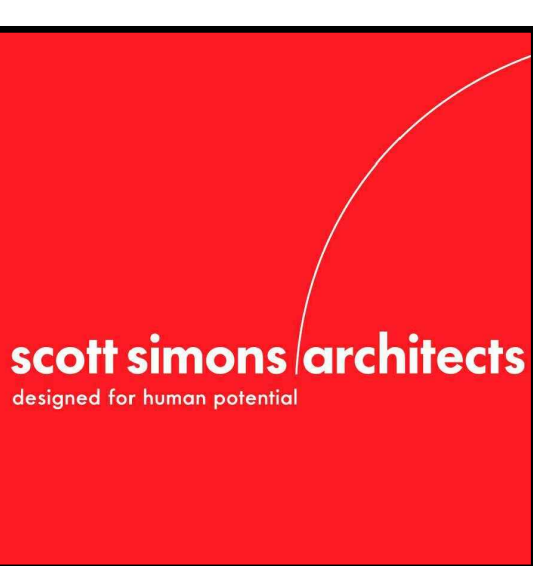
N:\Projects\2015\15023 - Patrons Oxford Insurance Building\00 Drawing\00 Electrical Site Plan.dwg Oct 02, 2015 - 12:37pm



LUMINAIRE SCHEDULE								
TYPE	DESCRIPTION	MFR	CATALOG SERIES NUMBER SEE NOTE 1	MOUNTING	VOLTS	LAMP		KEY NOTES
						WATTS	TYPE	
SL-1	POLE LIGHT	HOLOPHANE	LEDG-120-35-L2	30' POLE	120		LED ARRAY 3500K	
SL-2	POLE LIGHT	HOLOPHANE	LED-120-35-L3	30' POLE	120		LED ARRAY 3500K	
SL-3	43" HIGH BOLLARD	LOUIS POULSEN	FLINDT-B	GROUND	120	15	LED ARRAY 3000K	
SL-4	DECORATIVE BOLLARD	HUNZA LIGHTING	TG/L-RU-3	GROUND	120	7	LED ARRAY 3000K	
WP-1	LED WALLPACK	LUMARK	XTOR5A-N	20'-0" AFG	120	84	LED ARRAY 3500K	
R3	RECESSED LED WITH FROSTED GLASS	SHAPER	340-4-DL-LED835/1/25HO-CYF-DMR7	RECESSED	120	24.9	LED ARRAY 3500K	
R4A	4" SQUARE LED DOWNLIGHT	IRIS	P406TAT-RA4X4-MH4LED-15-V935	RECESSED	120	14.4	LED ARRAY 3500K	
NOTES								
1	NOTE THAT THESE NUMBERS ARE NOT COMPLETE CATALOG #S. PROVIDE ALL REQUIREMENTS ON SCHEDULE,NOTES, SPECS, AND DRAWINGS COMBINED.							

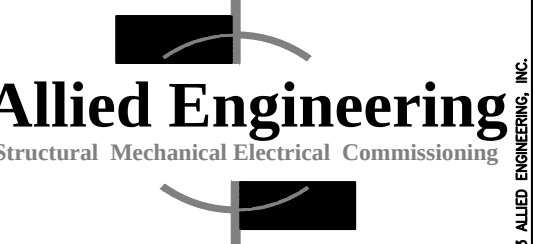
PARK & DRIVE ILLUMINATION STATISTICS				
AVERAGE	MAXIMUM	MINIMUM	AVG/MIN RATIO	MAX/MIN RATIO
1.24 FC	3.1 FC	0.2 FC	6.20	15.50

A1	PROPOSED SITE LIGHTING
1"=30'-0"	



scott simons architects
designed for human potential

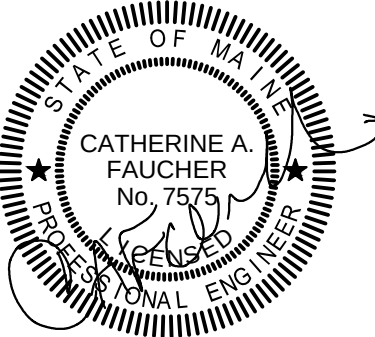
Scott Simons Architects
75 York Street, Portland, Maine 04101
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Allied Engineering
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Allied Project No: 15-023
Cad File: 14023_ES-100.dwg



PROJECT NAME:
**PATRONS OXFORD
OFFICES**

PORTLAND TECHNOLOGY PARK
RAND ROAD, PORTLAND, ME

SEAL:

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1	DATE
2	DATE
3	DATE
4	DATE
5	DATE
6	DATE

DATE OF ISSUE: Oct 02, 2015
PROJECT NUMBER: 2105-0100 Patrons Oxford
STATUS: Issued for permitting
NOT FOR CONSTRUCTION

**PROPOSED
SITE LIGHTING
PLAN**

ESL-100

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5. EVIDENCE OF STATE AND/OR FEDERAL APPROVALS

In addition to the City's Level III Site Plan Review, the following State permits are required:

- A Maine Department of Environmental Protection (DEP) Site Location of Development (SLOD) Permit Application and a Tier 2 Natural Resources Protection Act (NRPA) was submitted on May 11, 2011, and approval was granted in April of 2012; amendments to these applications have been submitted for the proposed work associated with LCE 4. The applicant and its consultant team are actively working with the Maine DEP at this time. A copy of the full application to the Maine DEP is on file with the City of Portland Clerk's office for public review. An electronic copy of the application has been provided with this Site Plan application for your reference.
- Approval from the US Army Corps of Engineers (ACOE) was also obtained in March of 2012; a request for a revision to this permit authorization was also submitted for the proposed work associated with LCE 4. The applicant and its consultant team are actively working with the ACOE at this time.

Any revisions resulting from the review of these other permit applications will also be addressed with the City, and copies of approvals will be provided when they are received.

6. ASSESSMENT OF ZONING

6.1 ZONING HISTORY

The City purchased the 46-acre Snyder Tree Farm property in 1999. The property had been zoned for residential use until 1994, when the majority of it was rezoned to Moderate Impact Industrial (I-M), as recommended by the Portland Industry and Commerce Plan. The US Postal Service proposed a regional distribution facility for the site, which met with significant neighborhood opposition. The City Council then appointed a task force to prepare a neighborhood plan, which became the Outer Brighton Avenue Task Force Report. The Council enacted the report's recommendation to rezone a portion of the City's Rand Road property to Office Park zone (OP) in 2001 as a means of promoting high-quality office uses that are compatible with surrounding residences and environmentally-sensitive land.

Twenty-five (25) acres were rezoned to OP and the remaining 20 acres of City-owned land as well as the adjoining parcels held by Union Water Power and CMP (28.81 acres) were rezoned to Resource Protection zone (RPZ). The developable areas in OP were then reduced again as the Maine Turnpike Authority needed an additional 5.45 acres for the new interchange. This left about 20 acres of the City-owned property in OP. The City's Economic Development Division was focused on developing a business park on OP-zoned property. It determined that the 20 acres, of which a substantial proportion was wetlands, were not sufficient in size for a viable business park. Therefore, it sought to have 6.5 acres of RPZ rezoned to OP, and 1 acre in OP that was wetland rezoned to RPZ. The Council approved this rezoning request in 2006, with a net gain to OP of 5.5 acres. This brought the City-owned OP property to the current size of approximately 26 acres. A total of 208 acres is zoned RPZ in the vicinity of the Fore River Marsh and Rand Road.

As part of the prior approval process for the Technology Park, a set of design guidelines was developed as a basis for the development of the Limited Common Elements (LCEs) within the Park. LCE 4, the lot proposed for development at this time, is located entirely within the OP Zone. The proposed development aligns with the zone's central purpose of providing a "campus-like" office complex that is compatible with the natural surroundings, and has been designed to follow the established design guidelines. The buildings, parking, stormwater management, and access drives are designed to conform to the natural features of the land, thereby minimizing the impact on wetlands and preserving the natural landscape to the maximum extent possible.

6.2 OFFICE PARK PLANNED UNIT DEVELOPMENT (OP-PUD)

The purpose of the OP Zone is to provide substantial areas for integrated development of professional offices in a park- or campus-like setting which are of the highest quality, are well designed and maintained and are compatible with their natural surroundings. A Planned Unit Development (PUD) is a development located on one lot consisting of one or more buildings and with driveways or open areas to be owned and maintained in common. This project will be developed as part of an OP-PUD (the previously approved Portland Technology Park).

A condominium association will govern all areas of the Portland Technology Park, including the main access roadway and associated roadway infrastructure, as well as maintain all parking areas, driveways and stormwater management outside of the individual buildings, which will be maintained by their individual owners. Additional information regarding the condominium development was provided in support of the original application, including the condominium documents that will govern the development.

6.3 DIMENSIONAL REQUIREMENTS

Per Sections 14-230.14 and 14-230.15, the dimensional requirements for the Technology Park as a whole are outlined in Table 6-1, below:

Table 6-1: O-P Zone Dimensional Requirements

	REQUIRED	PROVIDED
Front Yard Setback	50 FT	123 FT
Side Yard Setback	25 FT	87 FT
Rear Yard Setback	50 FT	299 FT
Pavement Setback	15 FT	15 FT
Impervious Surface Ratio	60% MAX	27%
Lot Size	1.5 ACRES MIN	26 ACRES
Street Frontage	100 FT MIN	> 1,000 FT
Lot Width	150 FT MIN	270 FT
Parking Spaces	2.5/1000 SF or 303	445* (includes trailhead parking)

*The parking ratio and total space count in excess of the current zoning was accepted with the original approval, pending individual lots provide a parking analysis to prove need. Please refer to Section 10 of this application for additional parking information specific to LCE 4 and Patrons Oxford Insurance.

The total building area, accounting for the 1,000 square foot reduction of area for Unit 4 on LCE 4 ,is now 121,000 square feet.

The individual Limited Common Elements are located within the overall Technology Park setbacks defined above. There are no dimensional requirements for the individual LCEs.

7. EASEMENTS AND OTHER BURDENS

The revised Subdivision Plat being submitted concurrently with this application shows easements located within the Technology Park. There are no existing or proposed easements or burdens associated with LCE 4.

9. CONSTRUCTION MANAGEMENT PLAN

The proposed LCE 4 development will be constructed in a single phase. On-site work for this project is anticipated to begin in January of 2016 and is estimated to last approximately ten months (completion to be October of 2016). All erosion and sediment control measures will be installed prior to any soil disturbance. The project contractor will be required to submit a detailed construction management plan prior to the start of construction.

13. CONSISTENCY WITH MASTER PLAN

Narrative describing consistency with the City's Master Plan for the Portland Technology Park was provided as part of the original application; refer to the original application dated November 5, 2010, for additional information. The development of LCE 4 will follow the approved Design Guidelines for the Technology Park as outlined later in this report.

14. UTILITY CAPACITY TO SERVE

Utilities within the Portland Technology Park roadway include an eight inch sanitary sewer main, 12-inch water main, natural gas main (with a planned connection to Westbrook Street), underground electrical duct bank with below grade vaults, and underground telecommunications duct bank with below grade vaults. As part of this project, the roadway will be extended to LCE 4, and these utilities will be extended and connected to the proposed development.

The Patrons-Oxford office building will be the first business in the park. The proposed building footprint is smaller than what was previously proposed and approved for the unit in LCE 4, and the utility supply needs are less than what was previously anticipated and accepted by Portland Water District and the Department of Public Services. "Ability to Serve" letters for the Portland Technology Park were provided as part of the original application. Copies can be provided again if required.

The anticipated demand for just Unit 4 based on the approved LCE4 unit size of 20,000 square feet was 1,600 GPD for sewer (equal to 4 employees per 1,000 square foot of building space, and 20 GPD per employee) and 1,760 GPD for domestic water (equal to 110% of sewer demand), with additional water service required for fire suppression. This was calculated as part of an overall Technology Park demand of 28,960 GPD for sewer and 31,856 GPD for domestic water, which accounted for the total building area anticipated for the Technology Park and an assumed laboratory space. The proposed office use for LCE4 Unit 4 will not require any laboratory space.

Based on the new building area of 19,000 square feet, the demand will be 1,520 GPD for sewer and 1,672 GPD for water. With a smaller building in a location similar to previously proposed, fire suppression needs have not increased. As the utility demands are less than proposed and approved under the original approval, we do not anticipate the need to re-verify capacity to serve with Portland Water District or Department of Public Services for this project.

15. SOLID WASTE

15.1 COMMERCIAL SOLID WASTE

The Patrons-Oxford Insurance Company will contract with a waste management service to collect and remove waste and recyclables. All materials will be transported and disposed of by a licensed processing or disposal facility in accordance with applicable laws and regulations. Based on square footage of building area, intended use, and published solid waste generation rates, total waste generated from the developed site has been estimated at 15.1 tons of general solid waste per year and 9.6 tons of recycles per year.

Correspondence with ecomaine confirming they have capacity to accept solid waste from the Portland Technology Park was provided as part of the original application; refer to the original application dated May 11, 2011, for additional information. The ecomaine solid waste facility would have more than adequate capacity to handle waste from the Patrons-Oxford office building, as it is only the first development in the Technology Park; however, waste management contracts have not yet been completed, and Patrons-Oxford may select a different option. They will select a solid waste management option that provides adequate services for their facility.

15.2 CONSTRUCTION & LAND CLEARING DEBRIS

As with any construction project, the proposed construction will generate construction, demolition, and land-clearing debris. The contractor(s) for the construction work will be fully responsible for handling all waste generated by the project and for managing and disposing of it in accordance with Maine Solid Waste Management Regulations - 06-096 CMR 400-409. The contractor(s) will be bound by contract to dispose of all materials in full accordance with applicable Maine regulations and approval of the City of Portland. All efforts will be made during construction to minimize waste and to recycle.

Construction debris will be transported to a waste management facility licensed to accept the waste materials. Trees cleared will either be harvested and sold, ground down to create erosion control mix for onsite applications, or disposed of at an approved facility. Stumps will be disposed of at an approved facility and no stumps, refuse vegetation or other debris created by clearing or construction operations will be disposed of onsite.

Based on square footage of building area and industry standards for waste generation rates, total construction and land clearing debris to be generated from the proposed project has been estimated at 19 tons and 528 cubic yards, respectively.

15.3 SPECIAL & HAZARDOUS WASTE

The proposed development will not produce any special or hazardous waste.

15.4 FINDINGS

Adequate provisions for solid waste disposal have been made. General solid waste, construction, demolition, and land-clearing debris will be managed in full accordance with all applicable laws and will not cause a deleterious effect on the environment.

16. SUMMARY OF FIRE CODES

A Fire Plan (FP-01) was created for the Technology Park as part of the initial permitting effort. This plan has been updated to include the proposed Limited Common Element (LCE) 4 Development. In addition, a Life Safety Plan and Code Summary (G-002) has been created for the proposed Unit 4 building. Both of these plans are attached and address the items in the Portland Fire Department Site Review Checklist as follows:

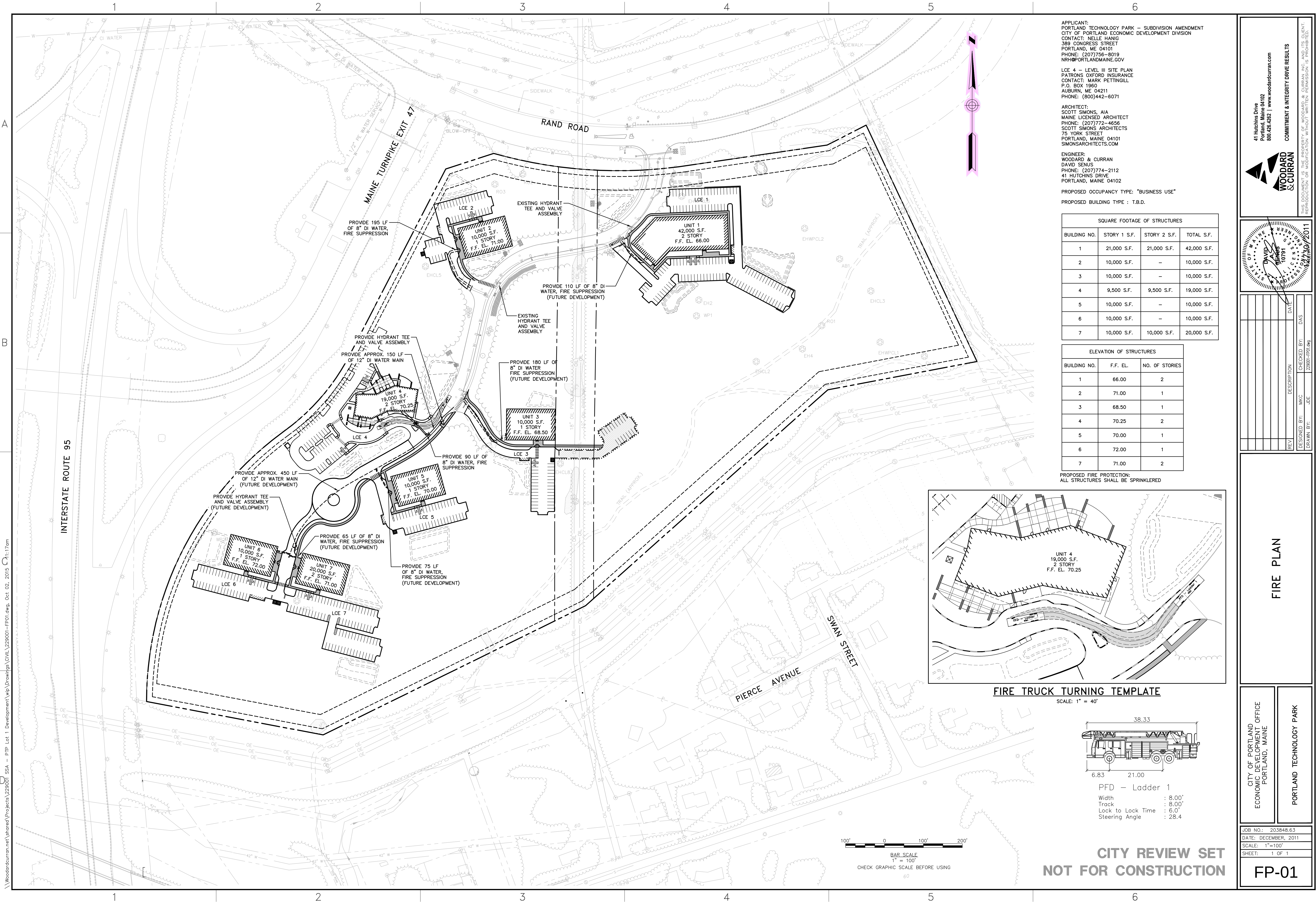
- Name, address, telephone number of applicant
 - This information is provided on sheet FP-01. It now includes both the City of Portland as the contact for the Technology Park and Patrons Oxford Insurance as the contact for LCE 4.
- Name, address, telephone number of architect
 - This information is provided on sheet FP-01.
- Proposed uses of any structures [NFPA and IBC classification]
 - General discussion for the Technology Park is provided on FP-01. Specific LCE 4 structure uses are defined on sheet G-002. Unit 4 will be classified as Mixed Use and Occupancy, Business, B-2, and Assembly, A-3.
- Square footage of all structures [total and per story].
 - This information is provided on sheet FP-01. Areas are conceptual for LCEs 1, 2, 3, 5, 6, and 7. LCE 4 information is as designed.
- Elevations of all structures
 - This information is provided on sheet FP-01. Elevations are conceptual for LCEs 1, 2, 3, 5, 6, and 7. LCE 4 information is as designed.
- Proposed fire protection of all structures
 - All structures shall be sprinkled as noted on both sheet FP-01 and G-002.
- Hydrant locations
 - Existing and proposed hydrant locations are shown on sheet FP-01. One hydrant will be constructed as part of this project.
- Water main size and location
 - The water main is 12 inches in diameter and is shown on sheet FP-01.
- Access to all structures [min. 2 sides]
 - Sheet FP-01 shows the location of all proposed future Technology Park buildings, with access to at least two sides. In addition, the plan shows fire truck access verification for the current proposed LCE 4 development. The fire truck turning template shows that the truck will drive over the curb on the driveway island. This curb will be sloped, granite, mountable curb, ensuring that fire truck access will be possible.
- A code summary shall be included referencing NFPA 1 and all fire department technical standards.
 - The development of LCE 4 will be in conformance with all NFPA and City of Portland Fire Department Standards.
 - Sheet G-002 provides a code review for the proposed LCE 4 building. Building fire protection will be provided by a sprinkler system and all materials will provide adequate fire resistance.

- Sheet FP-01 shows the Technology Park's compliance with all Public Safety Technical Standards for fire hydrants and site access. No hazardous materials will be stored on the site. Blasting or open burning will not be required for construction.

The full plan set, the Fire Plan FP-01, and the Code Review Plan G-002 have been provided to the Fire Department Reviewer along with a cover letter including the above information.

16.1 ATTACHMENTS

- Fire Plan
- Life Safety and Code Summary Plan



APPLICANT:
PORTLAND TECHNOLOGY PARK - SUBDIVISION AMENDMENT
CITY OF PORTLAND ECONOMIC DEVELOPMENT DIVISION
CONTACT: NELLE HANIG
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PHONE: (207)756-6019
NRH@PORTLANDMAINE.GOV

LCE 4 - LEVEL III SITE PLAN
PATRONS OXFORD INSURANCE
CONTACT: MARK PETTINGILL
P.O. BOX 1960
AUBURN, ME 04211
PHONE: (800)442-6071

ARCHITECT:
SCOTT SIMONS, AIA
MAINE LICENSED ARCHITECT
PHONE: (207)772-4656
SCOTT SIMONS ARCHITECTS
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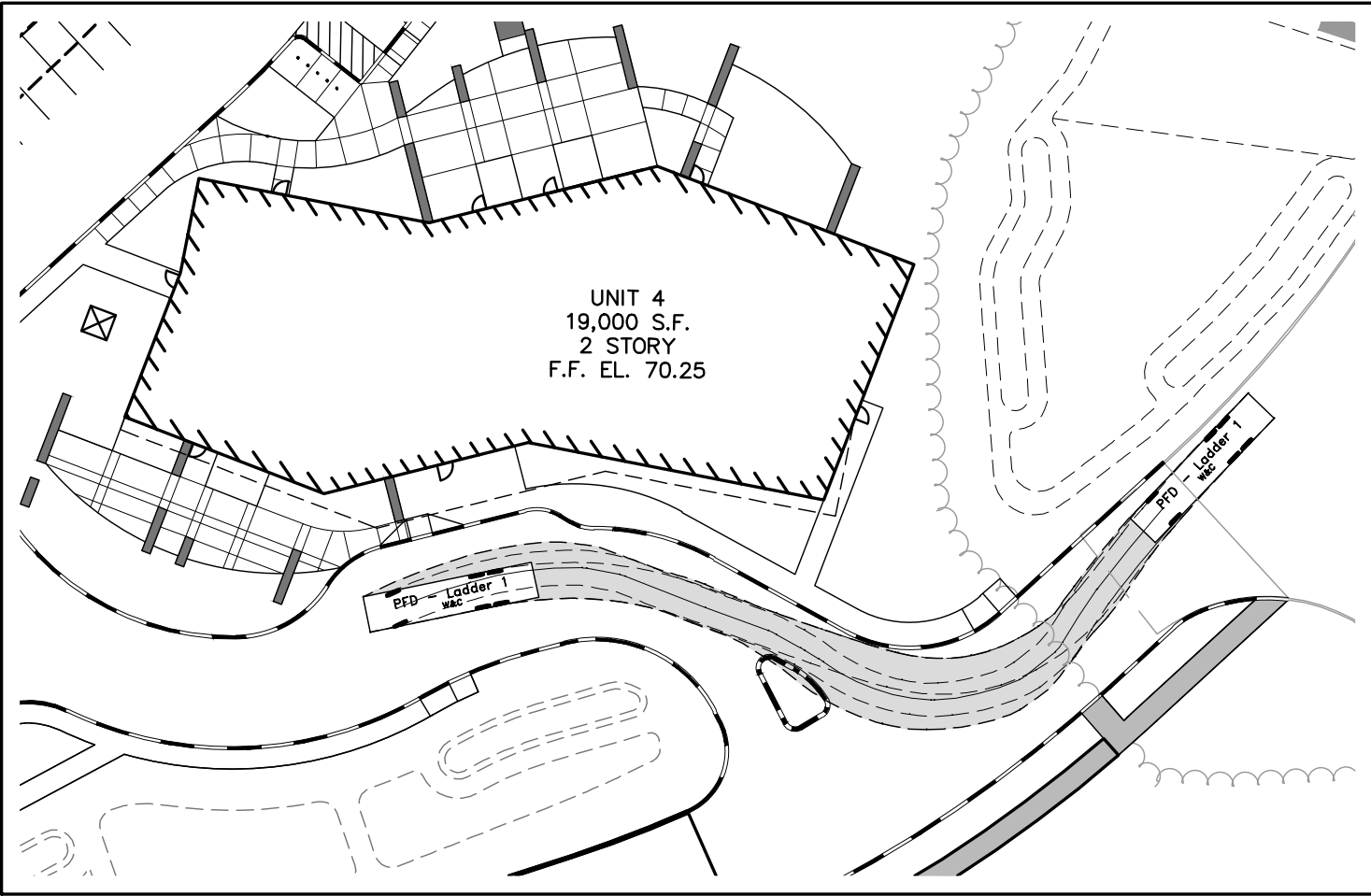
ENGINEER:
WOODARD & CURRAN
DAVID SENSU
PHONE: (207)774-2112
41 HUTCHINS DRIVE
PORTLAND, MAINE 04102

PROPOSED OCCUPANCY TYPE: "BUSINESS USE"
PROPOSED BUILDING TYPE : T.B.D.

SQUARE FOOTAGE OF STRUCTURES			
BUILDING NO.	STORY 1 S.F.	STORY 2 S.F.	TOTAL S.F.
1	21,000 S.F.	21,000 S.F.	42,000 S.F.
2	10,000 S.F.	-	10,000 S.F.
3	10,000 S.F.	-	10,000 S.F.
4	9,500 S.F.	9,500 S.F.	19,000 S.F.
5	10,000 S.F.	-	10,000 S.F.
6	10,000 S.F.	-	10,000 S.F.
7	10,000 S.F.	10,000 S.F.	20,000 S.F.

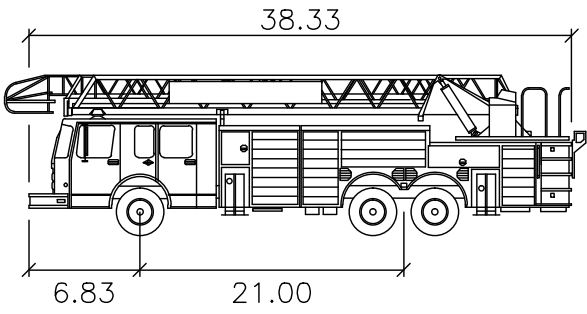
ELEVATION OF STRUCTURES		
BUILDING NO.	F.F. EL.	NO. OF STORIES
1	66.00	2
2	71.00	1
3	68.50	1
4	70.25	2
5	70.00	1
6	72.00	1
7	71.00	2

PROPOSED FIRE PROTECTION:
ALL STRUCTURES SHALL BE SPRINKLERED

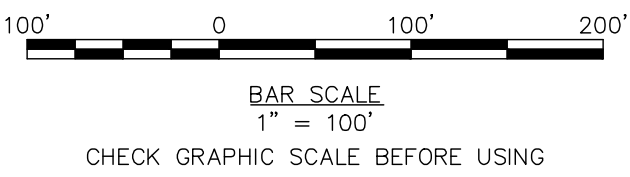


FIRE TRUCK TURNING TEMPLATE

SCALE: 1" = 40'



PFD - Ladder 1
Width : 8.00'
Track : 8.00'
Lock to Lock Time : 6.0'
Steering Angle : 28.4



CITY REVIEW SET
NOT FOR CONSTRUCTION

41 Hutchins Drive
Portland, Maine 04102
800.426.4262 | www.woodardcurran.com

WOODARD & CURRAN

COMMITMENT & INTEGRITY DRIVE RESULTS

DATE: 12/15/2011
DRAWN BY: JDE
CHECKED BY: MKC
DESIGNED BY: MKC
REV: 1

CITY OF PORTLAND
ECONOMIC DEVELOPMENT OFFICE
PORTLAND, MAINE

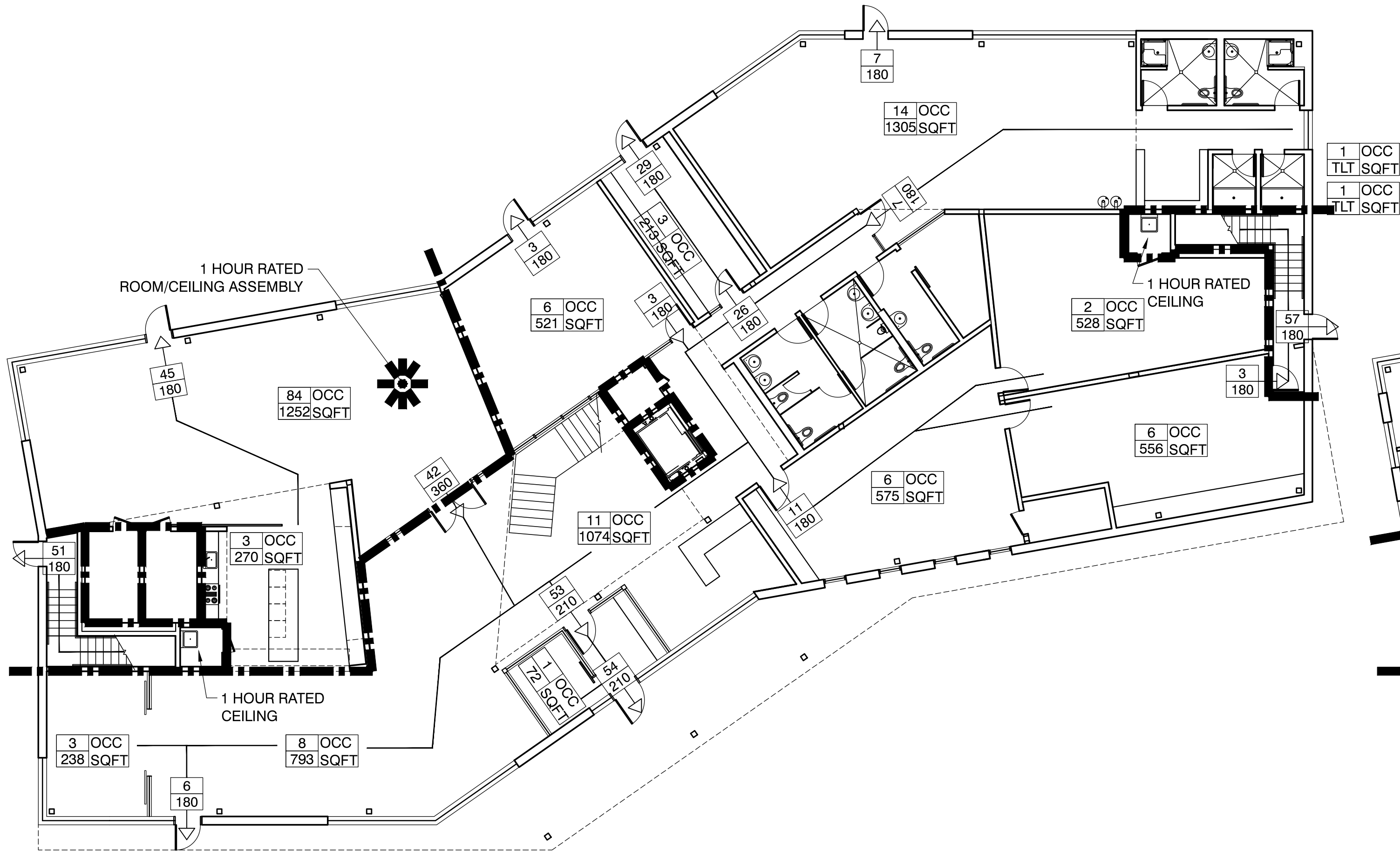
PORTLAND TECHNOLOGY PARK

JOB NO.: 203848.63
DATE: DECEMBER, 2011
SCALE: 1"=100'
SHEET: 1 OF 1

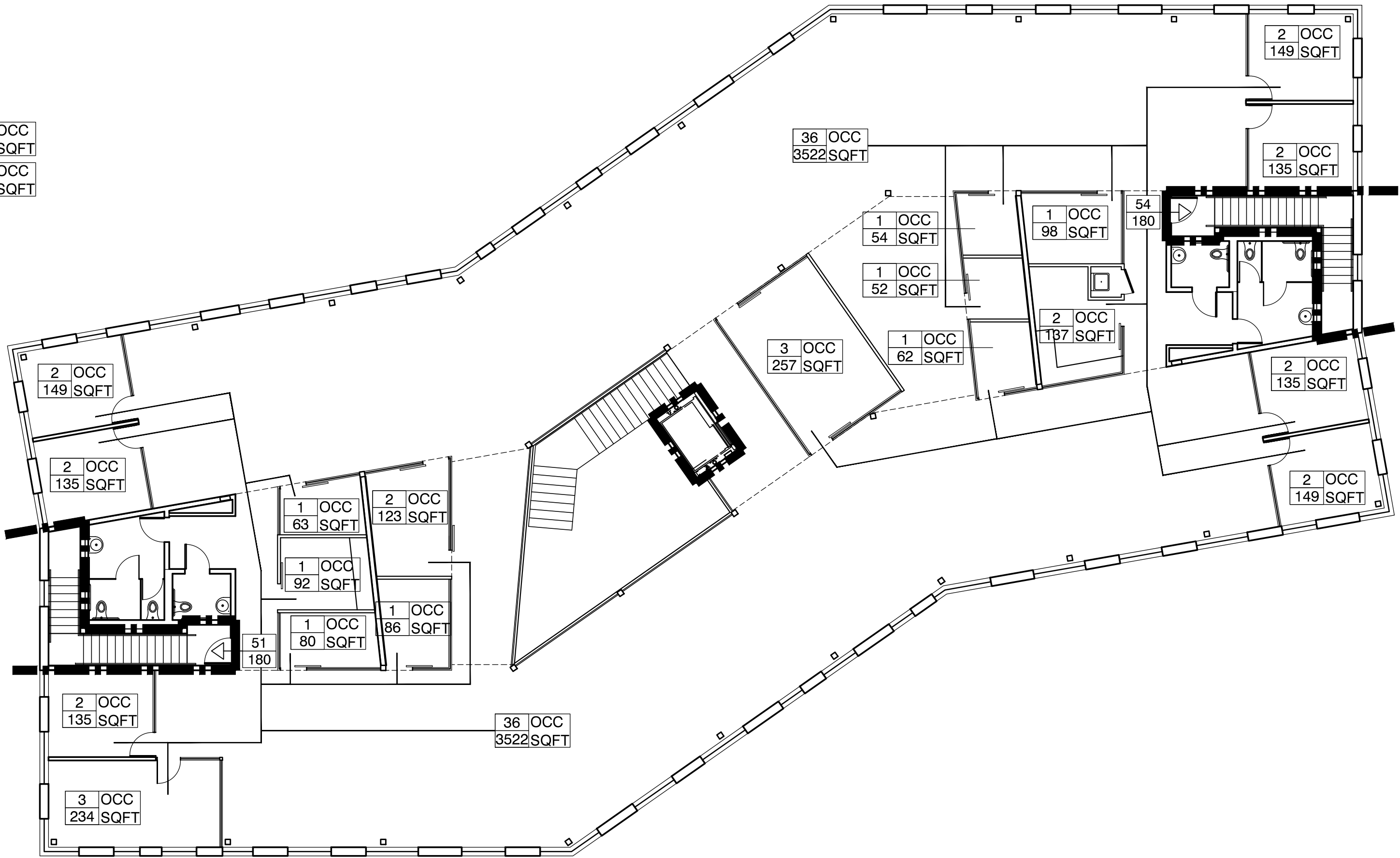
FP-01



75 York Street
Portland, Maine 04101
simonsarchitects.com
207.772.4656



1 FIRST FLOOR CODE PLAN
SCALE: 3/32" = 1'-0"



2 SECOND FLOOR CODE PLAN
SCALE: 3/32" = 1'-0"

FIRE RATINGS LEGEND

1-HOUR FIRE RATED SEPARATION WITH 1 HOUR OPENINGS



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CODE SUMMARY

date: Friday, July 23, 2015
project: Patrons Oxford Insurance, Patrons Oxford, 2015-0100
subject: Schematic Design Code Review
prepared by: Philip Chaney PC Scott Simons Architects SSA

APPLICABLE CODES

Maine Uniform Building and Energy Code "MUBEC"
Consists of the following applicable codes:
2009 International Building Code (IBC)
2009 International Energy Conservation Code (IECC)
2007 ASHRAE 62.1 (Ventilation for Acceptable Indoor Air Quality)
2007 ASHRAE 90.1 - (Energy Standard for Buildings except Low-Rise Residential Buildings) editions without addenda
E-1485-2006, Standard Practice for Radon Control Options for the Design and Construction of New Low-Rise Residential Buildings
Maine State Internal Plumbing Code based on the 2009 Uniform Plumbing Code
State of Maine Subsurface Wastewater Disposal Rules Version dated: Jan 18, 2011
2011 National Electrical Code (NEC)

Fire/ Life Safety

NFPA Life Safety Code as adopted by the State of Maine
Including but not limited to:

2009 NFPA 101: Life Safety Code
2007 NFPA 13: Installation of Sprinkler Systems, [2010 Edition through Equivalency]

Accessibility

2010 ADA Standards for Accessible Design

NOTE: All Codes shall include changes/amendments by the State of Maine

OCCUPANCY CLASSIFICATION

Mixed Use and Occupancy
Business, B-2
Assembly, A-3
(IBC Sec 302, 303, 304)
(NFPA)

AUTOMATIC SUPPRESSION SYSTEM

Fully Coverage
(NFPA 13)

GENERAL BUILDING INFORMATION AND

project: Patrons Oxford Insurance Office
file: 2015-0100 Patrons-Code analysis.docx
date: 9/21/15
Page 1 of 2

ALLOWABLE BUILDING HEIGHTS AND AREA

(IBC Chapter 5, Table 503)
(NFPA)

Building Height (To mid-height of the roof) - 2 Stories

Allowable Building Area

Occupancy (per IBC chapter 3)
Con. Type (per IBC chapter 6)
Allowable Area (IBC Table 503 modified per IBC 506)
Actual Area

Lower Floor Level
B-2 VB 9,000 Tabular, per floor 14,400 Allowable 9,481 sf

Upper Floor Level
B-2 VB 9,000 Tabular, per floor 14,400 Allowable 10,372 sf

Total
19,853 sf

Building Area Modifications

(IBC Sec 506.1, 506.2, 506.3)

60% Total Increase taken

General Equation:
 $A_B = A_U + [A_U \times I(F)] + [A_U \times I(e)]$

Where:

A_B = 9,000 sf

A_U =

$I(F)$ =

$I(e)$ =

Frontage Increase (IBC 506.2)

$I(F)$ of 60% taken

450' Building Perimeter total

378' Building Perimeter >30' clear

$I(F) = F/P = 0.25W/30$

$I(F) = (378/443 - .25)/30 = .59$

Where:

$I(F)$ = Area increase due to frontage

F = Building perimeter fronting public way or open space

P = Total building perimeter

W = Width of public way or open space

Automatic Sprinkler Increase (IBC 506.3)

Not taken. Area increase not taken. Approved automatic sprinkler system used to substitute for 1-hour fire resistance rated construction and reflected on Fire Resistive Rating Table below.

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TYPES OF CONSTRUCTION

(IBC Table 601, Sec 602)
(NFPA 220)

Type VB

FIRE RESISTIVE RATINGS

(IBC Table 601)
(NFPA Table A.8.2.1.2)

Structural Frame
Bearing Walls, Exterior
Bearing Walls, Interior
Non-Bearing Walls and Partitions, Exterior
Non-Bearing Walls and Partitions, Interior
Floor Construction and Secondary Members
Roof Construction and Secondary Members
Type VB (with sprinklers)
0
0
0
0
0
0
0

OCCUPANCY LOAD by Table 1004.1.1 (IBC)

Business Areas - 100 Gross Sq ft per Occupant 15,700 sf + 100sf per occupant = 157 occupants
Accessory Storage Areas, Mechanical Rooms 2,901 sf + 300 sf per occupant = 10 occupants
Assembly Without fixed seats, Unconcentrated 1,252 sf + 15 sf per occupant = 84 occupants
251 total occupants

OCCUPANCY LOAD by Table 7.3.1.2 (NFPA)

Business Use 15,700 sf + 100 sf per occupant = 157 occupants
Storage Use in other than storage + mercantile use 2,901 sf + 500 sf per occupant = 6 occupants
Assembly, less concentrated, w/o fixed seats 1,252 sf + 15 sf per occupant = 84 occupants
247 total occupants

PROJECT NAME:

PATRONS OXFORD OFFICES

PORTLAND TECHNOLOGY PARK
RAND ROAD, PORTLAND, ME

SEAL:

THIS DRAWING IS THE PROPERTY OF SCOTT SIMONS ARCHITECTS (SSA) AND IS NOT TO BE COPIED OR REPRODUCED IN PART OR WHOLE 2015 © SCOTT SIMONS ARCHITECTS, LLC

REVISION:

1	DATE
2	DATE
3	DATE
4	DATE
5	DATE
6	DATE

DATE OF ISSUE: September 21, 2015
PROJECT NUMBER: 2105-0100 Patrons Oxford
STATUS: 100% Design Development

LIFESAFETY PLAN + CODE SUMMARY

G002

18. HVAC & MANUFACTURING EQUIPMENT VERIFICATION

All HVAC equipment utilized within the building will meet state and federal emissions requirements, and will meet the standards as set in the Portland Technology Park Design Guidelines. Additional information can be provided as required. HVAC design is currently in progress.

There is no manufacturing equipment proposed as part of the development of LCE 4.

Att. G

November 3, 2015



Jean Fraser, Planner
City of Portland Planning Office
389 Congress Street
Portland, ME 04101

Re: Portland Technology Park LCE 4
Level III Site Plan & Subdivision Amendment – Additional Information

Dear Jean:

On behalf of the Patrons-Oxford Insurance Company and the City of Portland, we are submitting the enclosed additional information for the Planning Board review of the Level III Site Plan Application and Subdivision Amendment for the Portland Technology Park Limited Common Element (LCE) 4 project.

Geotechnical Report

The geotechnical report has been finalized, and is enclosed. The structural and site design components impacted by the geotechnical conditions of the site are being finalized based on this report.

Stormwater Management

We have received the preliminary comments (via email October 27, 2015) from Jim Seymour, and will be meeting with you and Jim on November 4, 2015. Following this meeting, we will provide a response to his comments for inclusion with the Planning Board memo.

Signage

Patrons Oxford is currently undergoing a rebranding effort, and will be changing their logo prior to the project. Draft sign concepts and a description of signage intent will be provided under separate cover by the architect.

Updated Plat

The plat has been updated to show the buildings and some of the site features, reflecting the level of information presented on the originally approved plat. An updated plat is enclosed. The Technology Park Site Plan (C-02) and the LCE 4 Site Plan (C-03) have both been updated to show the correct subdivision boundaries, and are enclosed.

Design Review

We have received your design review comments (via email November 2, 2015), and are currently working to address these comments. Responses will be provided under separate cover by the architect.

Additional Information

We understand that there was concern with the amount of additional pavement beyond the parking spaces at the northern end of the parking lot. This pavement area has been reduced. Additional cleared space has been kept for snow storage; however the clearing line has been pulled in by about 10 feet.



The project is currently being reviewed by the Maine Department of Environmental Protection (DEP) for a Minor Revision to the Natural Resource Protection Act permit and a Minor Amendment to the Site Location of Development Permit. We received some comments for the Maine DEP that resulted in minor changes to details. Updated detail sheets C-11 and C-12 are enclosed. A detail for an emergency spillway has been added to sheet C-12 and the details for gravel wetlands and underdrained soil filters on sheet C-11 have been updated to reference the emergency spillway detail. No other design changes have resulted from the comments received from the Maine DEP.

The project is also being reviewed by the Army Corps of Engineers for a revision to the previously issued permit. Comments received so far are related primarily to clearing and construction procedures that will be evaluated for impacts to threatened species of bats. It is not anticipated that any design changes will result from these comments.

If you have any additional comments or questions, please do not hesitate to reach out to me. Thank you for your help in coordinating the review of this project.

Sincerely,

WOODARD & CURRAN

Lauren Swett, P.E.
Project Engineer

Enclosures: Geotechnical Report
Updated Plat
Updated Plan Sheets C-02, C-03, C-11, and C-12

PN: 229001



R.W. Gillespie & Associates, Inc.

Geotechnical Engineering • Environmental Consulting • Materials Testing Services

06 October 2015

Mark Pettingill, CIC, President and CEO
Patrons Oxford Insurance Company
P.O. Box 1960
Auburn, ME 04210-1960

Subject: Geotechnical Engineering Services
Proposed Patrons Oxford Insurance Company Office Building
Portland, Maine
RWG&A Project No. 1518-002

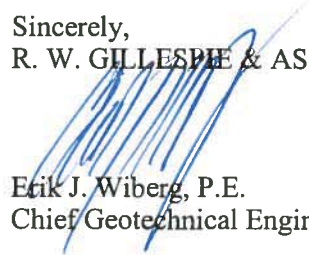
Dear Mr. Pettingill:

R. W. Gillespie & Associates, Inc., (RWG&A) is pleased to provide this geotechnical evaluation in connection with Patrons Oxford Insurance Company's two-story office building to be built on Lot 4 at the west side of the access drive in Portland Technology Park in Portland, Maine. The purpose of this evaluation was to obtain information regarding subsurface conditions and soil properties on which to base geotechnical recommendations for design and construction of building foundations, ground floor slabs, pavement sections, site improvements, and determine seismic site characteristics. The services were performed in general accordance with RWG&A Proposal No. P-9075.GI dated 25 June 2015, and Modification No. 1 to Geotechnical Engineering Services dated 09 September 2015.

The primary geotechnical considerations for design and construction of the building is compressibility of silty clay deposits under additional loads. With appropriate site preparation including use of low density, controlled low strength material to reduce building settlements, the proposed building may be supported on spread and continuous footings with slab-on-grade ground floors. Perimeter foundation drainage is recommended.

Results of our geotechnical evaluations and engineering recommendations are provided in the attached report. RWG&A has enjoyed working with Patrons Oxford Insurance Company, Scott Simons Architects, LLC, and Becker Structural Engineers, Inc. on this project. Please contact us if you have any questions or if we may be of further service.

Sincerely,
R. W. GILLESPIE & ASSOCIATES, INC.


Erik J. Wiberg, P.E.
Chief Geotechnical Engineer


Charles R. Nickerson, P.E.
Principal Reviewer

EJW:md
In duplicate

Copy: Ryan E. Kanteres, AIA, Scott Simons Architects, LLC (via email)
Christopher G. Williams, P.E., S.E., Becker Structural Engineers, Inc. (via email)

G:\PROJECTS\1500\1518\1518-002\REPORTS\2015-10-06 GI REPORT 1518-002.DOCX

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44 Wood Avenue, Suite I • Mansfield, MA 02048 • 508-623-0101
www.rwgillespie.com

**Report
of
GEOTECHNICAL ENGINEERING SERVICES
for
PROPOSED PATRONS OXFORD INSURANCE COMPANY OFFICE BUILDING
PORTLAND, MAINE**

**Prepared
for
PATRONS OXFORD INSURANCE COMPANY
AUBURN, MAINE**

**Prepared
by
R. W. GILLESPIE & ASSOCIATES, INC.
SACO, MAINE**



**Erik J. Wiberg
Maine P.E. Serial No. 9178**

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FIGURES

- Figure 1, Locus Map
- Figure 2, Exploration Location Plan

APPENDIXES

- Appendix A, Limitations
- Appendix B, Exploration Logs
- Appendix C, 2010 Exploration Logs
- Appendix D, Laboratory Test Results
- Appendix E. Report of Crosshole Seismic Testing by Hager-Richter Geoscience, Inc.

R.W. Gillespie & Associates, Inc.

1.0 INTRODUCTION

1.01 Background

Patrons Oxford Insurance Company proposes to construct an office building and associated parking lots and drive way on Lot 4 of the Portland Technology Park in Portland, Maine. The Portland Technology Park is located off of Rand Road near its intersection with the Interstate 95 Exit 47 interchange. The approximate site location is shown on Figure 1, *Locus Map*.

The overall plan dimensions of the proposed office building are about 180 feet by 70 feet with the building's geometry containing several skews. Employee and visitor parking would be provided west of the building with a two-bay handicap parking at the east side (front) of the building. Finished ground floor level will be between elevation 70.0 and 70.25 feet, which ranges from 2 to 3 feet above current ground surface. Proposed site grades in developed areas outside the building range from about elevation 69.9 feet adjacent to the building to 68 feet.

R.W. Gillespie & Associates, Inc.'s (RWG&A's) understanding of the proposed project is based on site visits, communications with Scott Simons Architects, LLC (SSA) and Becker Structural Engineers, Inc., (BSE) and review of the following documents provided to RWG&A:

- Untitled plan showing proposed site layout with requested boring locations dated 23 June 2015 (A- SP01-BORING LOCATIONS 11x17.pdf).
- Letter from BSE to SSA dated 13 July 2015 providing a narrative of structural engineering concepts for the building.
- Plan set prepared by Scott Simons Architects, Inc. titled *Patrons Oxford Offices, Patrons Oxford Insurance, Portland Technology Park, Rand Road, Portland, Maine, 04102*, marked *100% Design Development*, date of issued: 09.21.1015.
- Plan set prepared by Woodard & Curran, Inc. titled *City of Portland Economic Development Office, Portland, Maine & Patrons Oxford Insurance Company, Portland Technology Park Update & LCE 4 Development*, marked *Permitting Plans*, and dated September 2015

1.02 Scope of Services

This geotechnical evaluation was performed to obtain information regarding subsurface soil conditions and properties on which to base recommendations suitable for design of foundations and ground floors, and to determine seismic site characteristics. Services were performed in general accordance with RWG&A Proposal No. P-9075GI dated 25 June 2015. Refer to Appendix A for use and limitations of this report. As performed, RWG&A's scope of services included the following items:

- Reviewed project information and readily available published geologic mapping.
- Prepared a subsurface exploration and sampling program to obtain soil, bedrock, and groundwater information for use in geotechnical evaluations.

- Marked test boring locations in the field and contacted DigSafe and OK-TO-DIG registered utility entities to locate public utilities.
- Arranged to have the soil borings made by a drilling contractor as a subcontractor to RWG&A. Provided technical monitoring of the exploration activities so that depth, location, and sampling methods could be modified in response to subsurface conditions encountered.
- Arranged to have a cross-hole geophysical shear wave velocity test performed to evaluate shear wave velocity in subsurface materials and determine seismic site class in accordance with building code requirements.
- Performed laboratory tests on soil samples recovered from the subsurface explorations to aid in soil description, and for determination of engineering properties needed for foundation design and site development analyses.
- Conducted engineering analyses of the geotechnical aspects of foundation design and slope stability. The engineering analyses included settlement and its control, allowable foundation loads, evaluation of seismic parameters, foundation drainage, and earthwork construction considerations.
- Prepared this report of geotechnical evaluation presenting RWG&A's findings, conclusions, and recommendations.

Elevations used in this report were obtained or interpolated from the above referenced background documents. It is understood the elevations presented on the plan are in units of feet relative to the North American Vertical Datum of 1988 (NAVD88).

2.0 SUBSURFACE EXPLORATION

The subsurface exploration program consisted of twelve test borings, designated B-1 through B-10, and GB-101 and GB-102. Test borings B-1 through B-10 were drilled on 20 and 21 July 2015 by Northern Test Boring, Inc. of Gorham, Maine for soil sampling purposes. Additional test borings GB-101 and GB-102 were drilled on 17 and 18 September 2015 by Great Works Pump & Test Boring, Inc. of Rollinsford, New Hampshire for use in geophysical testing. The approximate locations of the explorations are shown on Figure 2, *Exploration Location Plan*.

Boring locations were measured in the field by tape survey methods using features shown on Google Earth aerial imagery and GPS coordinates of planned boring locations provided by Scott Simons Architects, LLC. Ground surface elevations on the boring logs were interpolated from topographic survey information provided on the background documents. The boring locations and elevations should be considered accurate only to the degree implied by the methods used to determine them. RWG&A marked the as-drilled boring locations with stakes for survey by the project surveyor.

Exploration activities were coordinated and monitored by an RWG&A representative who prepared the exploration logs. The soils were described in general accordance with *ASTM D2488*,

Standard Practice for Description and Identification of Soils (Visual-Manual Procedure). Logs of the explorations are included in Appendix B. Stratification lines shown on the exploration logs represent the estimated boundaries between the different soil types encountered and approximate refusal depths; the soil transitions and refusal depths will be more gradual and vary over short distances. Subsurface information should only be considered representative of subsurface conditions encountered within the vertical reach of the explorations on the date the explorations were made.

In general, borings advanced to depths less than about 27 feet below ground surface were advanced with solid-stem and hollow-stem augers, and deeper borings were advanced using cased hole with rotary wash drilling methods. Split-barrel sampling with standard penetration testing (*ASTM D1586, Standard Test Method for Penetration Test and Split-Barrel Sampling of Soils*) was performed at about 5-foot intervals in Borings B-1 through B-10. Field vane tests (*ASTM D2573, Standard Test Method for Field Vane Shear Test in Cohesive Soil*) and/or thin-walled tube sampling (*ASTM D1587, Standard Practice for Thin-Walled Tube Geotechnical Sampling of Soils*) were performed in medium stiff to soft cohesive soils encountered in borings B-4, B-5, B-8, B-9, and GB-102.

Borings were advanced 12 to 72 feet below local ground surface. Refusal to advancement of a roller cone drill bit was encountered at depths of 56 to 62 feet in borings B-8, B-9, GB-101, and GB-102. Rock drilling was not performed to determine the nature of refusal surfaces except at borings GB-101 and GB-102. Refusal in borings B-8 and B-9 might have occurred on cobbles, boulders, or on bedrock.

Three-inch diameter, solid, Schedule 40 PVC casing set in cement-bentonite grout was installed to a depth of about 72 feet below local ground surface in the completed boreholes for GB-101 and GB-102. The casings were installed to conduct cross-hole geophysical shear wave velocity tests. The cross-hole tests were performed by Hager-Richter Geoscience, Inc., of Salem, New Hampshire, on 24 and 25 September 2015.

2010 Explorations: Maine Test Borings, Inc. conducted three soil borings near the proposed building site in August 2010. The approximate locations are shown on Figure 2 and exploration logs are provided in Appendix C for informational purposes only. RWG&A is unable to ensure the accuracy or completeness of the information provided, either because doing so is impossible, or because of errors or omissions others may have committed when assembling the information. RWG&A does not take accept responsibility for use of, interpretation of, or accuracy of information provided by others.

3.0 LABORATORY TESTING

Laboratory testing was performed to assist in soil description and estimation of engineering properties of encountered soils. The laboratory testing program included 9 moisture content determinations, 2 grain-size analyses, 2 one-dimensional consolidation tests, 2 sets of undrained shear strength using Geonor vane apparatus, and 1 plastic Atterberg limits test. The tests were performed in general accordance with the following methods and procedures:

- ASTM D2216, Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass

- ASTM D422, Standard Test Method for Particle-Size Analyses of Soils
- ASTM D2435, Standard Test Method for One-Dimensional Consolidation Properties of Soils
- ASTM D4318, Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils.

The laboratory Geonor vane shear tests were performed in accordance with the manufacturer's recommended procedures. Moisture content test results are presented on the soil boring logs. Results of the other laboratory tests are presented in Appendix D, *Laboratory Test Results*. All tests were conducted at the RWG&A soil and materials testing laboratory in Saco, Maine, which is accredited by the American Association of State Highway and Transportation Officials (AASHTO) for the tests performed.

4.0 SUBSURFACE CONDITIONS

4.01 Subsurface Soils

The subsurface explorations encountered consisted of five primary soil units identified herein as topsoil with organic matter, fill, silty sand, silty clay (glaciomarine), and silty sand with gravel (glacial till). Some of the soil units were locally absent. Logs of the explorations should be referenced for information at specific locations and depths. Subsurface soils and encountered thicknesses are summarized below.

Description	Encountered Thickness (feet)	Generalized Description
Topsoil and Organic Matter	0.25 to 0.6	Occurs as bark mulch fill at boring B-9.
Fill	2.8 to 4	Encountered at borings B-2 and B-9. Sand with silt to silty sand. Boring B-2 drilled within stormwater management basin and B-9 drilled through berm.
Silty Sand	1.4 to 11.2+	Generally very loose to medium dense, moist to wet, fine sand with some silt. Occurs locally with interbedded silty clay to sandy silt layers.
Silty Clay	36 to 42.5*	Silty clay with trace to few sand, moist to wet. Consistency ranged from stiff to very soft in the upper 5 to 10 feet of the deposits, and became very soft to soft with increasing depth.
Silty sand with gravel	10 to 18	Silty fine to coarse sand with gravel, loose to medium dense, wet.
*Where penetrated.		

4.02 Groundwater

Free water was observed at depths ranging from about 4 to 8 feet below ground surface. Water levels observed were influenced by the exploration methods (e.g., slow groundwater response due to low soil permeability) and are not considered representative of stabilized groundwater levels. Groundwater levels at the site will fluctuate due to season, temperature, rainfall, nearby underground utilities, and construction activity in the area; therefore, water levels during and

following construction will vary from those observed in the explorations. Seasonal high groundwater would occur at or near ground surface.

4.03 Bedrock

The drill rigs used roller cone drill bits to drill to refusal surfaces at borings B-8 and B-9, and to drill about 15 feet into refusal surfaces at GB-101 and GB-102; refusal surfaces were interpreted to be on bedrock at GB-101, and GB-102. Refusal to hydraulic pushing of a rod probe occurred at a depth of 51 feet in boring B-4. However, the refusal surfaces at borings B-4, B-8, and B-9 might have been on dense sand or boulder(s), or on bedrock. Maine Geologic Survey mapping indicates bedrock underlying the site is metamorphosed slate and shale.

4.04 Crosshole Seismic Survey

Hager-Richter Geoscience, Inc., (Hager-Richter) performed crosshole seismic testing in a two borehole array comprised of casing installed in completed boreholes GB-101 and GB-102. The purpose of the testing was to evaluate the shear wave velocity of materials in the upper 100 feet and assess Site Class for seismic design in accordance with 2009 International Building Code[®]. The average value of the velocity of shear waves determined for the depth interval of 0 to 100 feet is approximately 800 feet per second, corresponding to Site Class D; see Appendix E for report of Crosshole Seismic Testing.

5.0 ENGINEERING EVALUATIONS

5.01 General

Engineering evaluations for this project are based on the subsurface explorations, laboratory testing data, and preliminary design information available to RWG&A when this report was prepared. This report addresses settlement with finished ground floor level at or below elevation 70.25 feet.

Actual ground surface elevations can vary from elevations developed by aerial and similar approximate topographic mapping methods. Evaluation of settlement for fills and excavations is sensitive to fill thicknesses and/or excavation depths. The engineering evaluations that follow should be reviewed by RWG&A to confirm their continued applicability if existing and proposed site grades, finished floor elevations, structural loads and settlement tolerances, site layout, current or constructed ground surface elevations will vary from those used in RWG&A's evaluations.

5.02 Proposed Construction

The proposed construction consists of a two-story office building with no below-grade spaces except those needed for an elevator pit. Structural framing will be comprised mostly of engineered wood and timber elements. A combination timber and steel framing will be used to resist lateral forces. Becker Structural Engineers, Inc. indicated that column loads would range from 10 to 60 kips with a corresponding average distributed structural load over the building plan area of about 150 pounds per square foot excluding ground floor slabs. Recommended tolerable total and differential settlements provided by the project structural engineer are 1 inch.

Two parking fields are proposed adjacent to the west property boundary between the building and off ramp for Interstate 95 Exit 47. Handicap parking stalls and driveway off of the technology park road are proposed at the east side of the office building.

Existing ground at the site is relatively level with surface elevations ranging from about 67 to 68 feet (NAVD88) within the planned building area and from about 68 to 69 feet (NAVD88) in the planned parking lots. The building site is about 750 feet west of natural slopes that pitch down from about elevation 62 to 30 feet. The upper part of the slopes pitch down at about 2.5 units horizontal to 1 unit vertical. Locally, the slopes may pitch more or less steeper.

5.03 Foundation and Ground Floor Slabs Settlement Evaluations

The silty clay deposits beneath the site will compress under proposed fill weight and building loads. Estimated total post construction settlement for anticipated column loads bearing at 3 to 4 feet below current ground surface, an allowable bearing pressure of 1,500 pounds per square foot, and less than 1 foot in site grade raise as measured from finished floor level to current ground surface elevation would be about 1 inch. For the proposed grade changes of about 3 feet above current ground surface, the total and differential post construction settlement is estimated to be about 2 inches and about 1 to 1.5 inches, respectively, which greater than the tolerable amounts.

Alternatives to reduce post-construction settlements include:

- Use of low density, controlled low strength material (LD-CLSM) as lightweight fill below the building, which would allow the building to be supported on isolated and continuous spread footings,
- Support the building on a mat foundation and use a crawlspace under the ground floor to reduce the weight of fill, and
- Supporting the building and ground floor on slab end-bearing piles.

Reportedly pile foundations and the use of crawl space with mat foundation are uneconomical compared to the use of LD-CLSM fill. RWG&A can further evaluate and provide recommendations for the use of piles and below-grade space with mat foundations, if requested.

LD-CLSM Fill: The purpose of the LD-CLSM fill would be to compensate for additional stresses that would otherwise be placed on compressible soil deposits due to increases in site grade and building loads. Prior experience indicates unit weights of cellular material in the range of about 35 to 40 pounds per cubic foot with 28-day compressive strengths of 80 to 150 pounds per square inch are available from local concrete suppliers.

Based on a proposed finished floor level of 70.25 feet, a 1-foot thick ground floor slab base layer of compacted sand, and the structural load information provided, RWG&A recommends 3 feet of soil below the planned building area be removed and replaced with LD-CLSM, and that LD-CLSM also be used as fill above current ground surface. Estimated total LD-CLSM thickness is about 5 feet. Footings would be located within the LD-CLSM fill. For footings bearing on a minimum three feet of LD-CLSM, estimated total and differential settlements are about 1-inch.

Ground Floor Slab Base Material: Slab-on-grade ground floors are appropriate for the proposed construction. It is understood that a layer of granular material is desirable below the ground floor slab to facilitate installation of subslab utilities. Due to its lower unit weight, which would reduce post-construction settlements compared to structural fill, RWG&A recommends a layer of compacted sand be used as fill between the LD-CLSM and ground floor slab.

5.04 Global Slope Stability

Method of Analysis: Stability analyses were performed based on failure surfaces extend below the building and the slope east of the site. Analyses were performed with the computer software ReSSA® Version 3.0. Rotational arc stability calculations use the Simplified Bishop method of slices. The analyzed profile was taken through the planned building area and slope about 700 feet east of the site. In general, the lowest factors of safety for embankments on natural slopes occur where the total height, measured from the crest of the embankment to the toe of the natural slope, is greatest. The factor of safety is defined as the ratio of the resisting forces to the driving forces causing failure. When the driving and resisting forces are the same, the factor of safety is equal to 1.0, and a landslide is considered imminent. When resisting forces are greater than driving forces, the factor of safety is greater than 1.

Depending upon the type of structure and loading conditions, permanent slopes are generally considered stable if the factor of safety is greater than 1.5 for static conditions and greater than 1.0 for seismic conditions. Depending on structure and loading conditions, current engineering practice considers a factor of safety of 1.3 to be acceptable for temporary conditions such as stockpiles, or if a landslide would result in non-structural property damage only. Based on the sensitive behavior of silty clay deposits at the site, slope stability analyses used drained and undrained shear strength of the cohesive soil deposits.

It should be noted that slope instability might occur even with a calculated factor of safety greater than 1; in general, the likelihood of a landslide occurring becomes lower with increasing factors of safety. Short-term variations in factor of safety may occur due to seasonal variations such as groundwater levels, surface water levels, and soil erosion and deposition. Longer term trends may reflect the influences of weathering, geomorphologic processes, or longer term changes in ground-water conditions. Human activity such as excavating, filling, irrigation, draining, or altering vegetative cover can also influence stability. It is important to note that landslide (and slope instability in general) might not be attributable to a single causal factor.

Shear Strength Parameters: Based on the sensitive behavior of silty clay deposits of the Presumpscot Formation, it is accepted engineering practice to evaluate the stability of natural and man-made slopes using undrained shear strength of cohesive soil deposits. Although the natural slopes have likely been in more-or-less the same configuration for many years, load conditions could develop where undrained shear strengths would control stability (e.g., erosive undercutting in or near drainage channels, and during floods or earthquakes).

Undrained shear strengths were based on shear vane test results from soil borings and *Stress History and Normalized Soil Engineering Parameters* (SHANSEP) relationships for silty clay deposits. Shear strengths were adjusted to account for shear plane orientation of the modeled failure plane (i.e. low angle direct simple shear) relative to vertical oriented shear surfaces in field vane shear strength tests.

Drained analyses were also conducted for failure through the silty clay deposits under static conditions. Drained analyses were not conducted for seismic conditions since undrained shear strengths control under severe dynamic loads. An internal angle of friction angle of 35 degrees was used for silty clay deposits based on values published in *Maine Department of Conservation, Maine Geological Survey Open File No. 90-24, Stability of Natural Slopes in the Presumpscot Formation*.

Assessment of Potential Hazards from Earthquake Motions: Pseudo-static method of slices was used in seismic stability evaluations. Based on currently available subsurface information, thickness, and undrained shear strength of the silty clay deposits, the International Building Code Seismic Site Class is D. Seismic Site Class affects peak ground acceleration used in building design and ground motion evaluations.

Building code ground accelerations are based on 2 percent probability of exceedance in 50 years (return period of 2,500 years). Based on Seismic Site Classes D, an equivalent horizontal destabilizing seismic ground accelerations of 0.08 was used in the model.

Summary of Stability Evaluations: Stability analyses indicates that the factors of safety against a landslide through the building and slope for static and seismic conditions are adequate under existing and proposed conditions. A summary of the results is provided in the table below.

Description	Factor of Safety		
	Static		Seismic
	Undrained	Drained	Site Class D
Calculated Factor of Safety	>3.0	>3.0	1.2
Minimum Acceptable Factor of Safety	≥ 1.5		≥ 1.0

5.05 Pavement Evaluations

Bituminous pavement evaluations for the access drive and heavy-duty areas were based on the following traffic lane information provided by Woodard & Curran, Inc.: 3 single unit (SU30) trucks per day, 1 tractor-trailer truck per week, and 300 passenger automobiles trips per day.

Bituminous concrete pavement section evaluations were based on a 20-year serviceability life for the heavy duty and light duty sections. The terminal serviceability corresponds to 85 percent of drivers/passengers rating the pavement and ride condition as unacceptable. The actual service life will depend on variables such as actual traffic loads, surface water runoff conditions, and maintenance and performance of the asphaltic concrete layer.

Full depth frost protection of pavements would require a total pavement section of about 48 inches which would be cost prohibitive and not consistent with practice in New England. Thinner pavement sections are considered more frost-susceptible than thicker sections built with the same not-frost susceptible materials. It is typical practice in the New England region to provide partial depth frost protection for pavements with the expectation that some frost heaving will occur.

5.06 Construction Considerations

Construction Dewatering: The on-site naturally deposited soils are sensitive to disturbance when wet. To reduce disturbance of exposed subgrade soils, it will be important to divert runoff, provide positive grading to shed seepage and runoff from flat areas, and compact exposed soils to reduce rutting, ponding, and surface water infiltration. Excavations in natural soil deposits below groundwater are expected to be susceptible to sloughing due to groundwater inflow. Excavations extending more than about 1 foot below groundwater will be susceptible to sloughing and instability. RWG&A anticipates that where groundwater is encountered during construction then groundwater control can be accomplished through the use of ditches, sumps, and open pumping techniques.

LD-CLSM is buoyant and will float if exposed to inundation and/or excessive groundwater pore pressures. The Contractor, who is responsible for means and methods of construction, should anticipate the need to provide temporary groundwater water control measures such as a crushed stone drainage layer below the LD-CLSM that outlets to a free draining locations or sumps and pumps.

Use of On-site Soils: The naturally deposited subsurface soils within the anticipated depth of excavation generally consist of sand with silt, silty sand, and silty clay and are considered unsuitable for use as structural fill, or for pavement section base and subbase materials, but might be used as common fill. If the on-site soils are proposed for uses other than common fill in landscaped areas or embankment fill below pavement sections, then the soils should be stockpiled separately and tested to determine if they meet specification requirements for the intended uses.

6.0 GEOTECHNICAL RECOMMENDATIONS

The recommendations presented below are provided for use in design of proposed building foundations, ground floor slabs, and pavement sections. Foundation design and site work construction will be greatly influenced by subsurface conditions at the project site. RWG&A recommends foundation design and construction be in compliance with the requirements of all applicable ordinances, regulations, and rules. When this report was prepared, the applicable building code in Portland, Maine was the Maine Uniform Building and Energy Code which adopts 2009 International Building Code® by reference.

The following is predicated on the following construction sequence:

- Removing unsuitable materials from areas of proposed construction,
- Removing existing soil to a minimum of three feet below current ground surface below the building area, and replacing with LD-CLSM,
- Constructing foundation spread footings to bear on the LD-CLSM surface,
- Placing approximately 2 additional feet of LD-CLSM up to the design subgrade for the ground floor slab base layer,
- Placing and compacting ground floor slab base material and install underslab utilities,

- Constructing the ground floor slab.

6.01 Site Preparation

1. All topsoil, peat, organic material, debris, rubbish, frozen soils, muck, loose, or disturbed soils and other unsuitable materials should be removed from the area of new construction. Topsoil may be stockpiled outside the construction area for reuse in landscaped areas. Unsuitable materials include uncontrolled fills (i.e., fills placed without systematic densification and moisture control to an acceptable percent compaction), asphaltic pavement, and deleterious substances.

Topsoil should be stockpiled outside of the construction area for reuse. Topsoil may be used as fill in landscaped areas but not as common fill below pavements or as fill below proposed building. On-site soils proposed for use in the construction should be stockpiled and tested for compatibility with its intended use.

2. Stripped subgrades beneath planned building and paved area and composed of granular soil should be proof-rolled with a minimum of two passes of a 10-ton roller in each of two perpendicular directions to improve the density of suitable soils. Silty clay to sandy silt subgrades should not be proof-rolled. Rolling of subgrades should be observed for areas of soil rutting or weaving indicative of unsuitable underlying materials. Unsuitable fill and/or soft, loose, and/or disturbed native soil materials should be excavated and replaced with structural fill. If high groundwater is present during subgrade preparation, the vibratory roller should be operated in the “static” mode to avoid liquefying the soil.
3. Site grading should provide positive drainage away from constructed facilities both during and after construction.
4. It should be practicable to accomplish construction dewatering within excavations by open pumping methods. Sand below groundwater might be susceptible to sloughing into excavations. Excavations deeper than 1-foot below groundwater may require the use of side trenches within or adjacent to excavations, or other dewatering methods. Surface runoff and infiltration of groundwater should be controlled so that excavation, filling, and foundation construction can be completed in-the-dry. Dewatering should be continuous until the permanent foundation drainage system is installed, and foundations are built and backfilled. A layer of crushed stone underlain with geotextile might be needed to protect subgrades from disturbance during construction.

6.02 Site Filling

5. Structural fill is recommended for use as fill below ground floor slabs and as backfill within 4 feet of footings and foundation walls only where they are located outside the limits of low-density, LD-CLSM. Structural fill should be a well-graded sand and gravel mixture meeting the following gradation requirements:

Screen or Sieve Size	Percent Passing
6 inches	100
3 inches	70 - 100
No. 4	35-70
No. 40	5-35
No. 200	0-5

(Note: Maximum particle size should be limited to 3 inches within 2 feet of foundation walls, footings, and floor slabs.)

6. In open areas, structural fill should be placed in level, uniform lifts not exceeding 9 inches in uncompacted thickness. In confined areas, within 4 feet of foundation walls, and areas where self-propelled compaction equipment should not be used based on vibration considerations, structural fill should be placed in lifts not exceeding 6 inches in uncompacted thickness and be compacted with hand-operated compaction equipment. All fill placed for footing and slab support should be structural fill compacted to at least 95 percent of the maximum dry density as determined by *ASTM Standard D 1557 Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft³ (2,700 kN-m/m³))*.
7. Minimum compaction requirements for granular fill materials are as follows:

Location or Area	Standard Proctor Density ASTM D698	Modified Proctor Density ASTM D1557
Structures and Walkways	95%	92%
Pavements below 18 inches of Subgrade	95%	92%
Trenches	95%	92%
Lawns or Unimproved Areas	92%	90%
Building and Pavement Subgrades (Top 18 inches)	100%	95%

In-place density tests should be performed at the following frequencies to determine whether compaction requirements are met:

Location or Area	Testing Frequency One Test per Lift per
Structures and Walkways	2,000 square feet
Pavements below 18 inches of Subgrade	5,000 square feet
Trenches	150 lineal feet
Lawn or Unimproved Areas	20,000 square feet
Building and Pavement Subgrades (Top 18 inches)	1,000 square feet

8. Existing fill and naturally deposited soils below the proposed building should be removed and replaced with LD-CLSM to a depth of 3 feet below pre-development ground surface or elevation 64 feet, whichever is lower. LD-CLSM should be used as fill from current ground surface up to the bottom of the ground floor slab base layer. The LD-CLSM should

be used below exterior slabs sensitive to differential movement between the slab and building. LD-CLSM should extend laterally a minimum of three feet outside the bottom outside edge of perimeter footings. LD- CLSM should only be placed over approved subgrade and should not be placed on frozen ground, snow, or ice.

9. LD-CLSM fill should be Controlled Low-Strength Materials using preformed foam as described in *American Concrete Institutes (ACI's) Report on Controlled Low-Strength Materials, Document 229R-13*. The in-service unit weight should be between 36 and 42 pounds per cubic foot, and minimum recommended compressive strength is 80 pounds per square inch.
10. Maximum recommended lift-thickness for LD-CLSM is 3 feet, unless data substantiating that thicker lifts using material of the same mix design and similar environmental conditions (e.g., air and ground temperature) are technically feasible, is approved by the designer. Additional lifts and concrete should not be placed on top of in-place LD-CLSM until it has a minimum unconfined compressive strength of 20 pounds per square inch.
11. Minimum recommended air and material temperature at the time of placement is 40 degrees. LD-CLSM should be protected from freezing temperatures in accordance with American Concrete Institute's cold-weather concreting procedures, except that LD-CLSM temperature shall be maintained at 50 degrees Fahrenheit or above for a minimum period of 24-hours after placement.
12. Unit weight of LD-CLSM should be determined in the field during placement in general accordance with *ASTM D6023, Standard Test Method for Unit Weight, Yield, Cement Content, and Air Content (Gravimetric) of Controlled Low-Strength Material (CLSM)*. A minimum of one unit weight test should be conducted per 50 cubic yards, or one test per placement per day, whichever is greater.
13. LD-CLSM should be sampled and tested for unconfined compressive strength. Sampling and testing should be conducted in general accordance with *ASTM D4832, Standard Test Method for Preparation and Testing of Controlled Low-Strength Material (CLSM) Test Cylinders*. A minimum of one set of six test cylinders should be made per 50 cubic yards, or one set per placement per day, whichever is greater. Three test cylinders should be tested at 7-days and three test cylinders should be tested at 28-days.
14. LD-CLSM should be protected from freezing temperatures. Rigid insulation should be placed at the top and sides of LD-CLSM exposed to freezing temperatures. Rigid insulation should be extended vertically to an insulated exterior wall to create a continuous layer of insulation and down a minimum of 4 feet below surfaces exposed to freezing temperatures. Rigid insulation should be Type IV extruded polystyrene insulation and a minimum 2 inches thick.

6.03 Foundations

15. Foundations should be designed to withstand lateral, uplift, and overturning forces due to wind and earthquake. The in-place soils encountered in the explorations are not considered susceptible to liquefaction. In accordance with the 2009 *International Building Code®* the soil profile at the site is classified as Site Class D.

16. With proper site preparation, the building may be supported on spread footings bearing on LD-CLSM. Footings may be proportioned using an allowable bearing pressure of 3,000 pounds per square foot. The above allowable bearing pressure is based on footings bearing on a minimum of 3 feet of LD-CLSM.

Minimum footing width should be in accordance with concrete design and building code requirements, and not less than 2 feet. For footings having a least lateral dimension less than 3 feet, the above allowable pressure should be taken as 1/3 of the above value times the least dimension in feet. Post-construction total settlements of less than 1-inch are estimated for the above subgrade improvement measures and contact pressure.

17. Excavation of footing and floor slab bearing surfaces in soil or fill should be performed by earthwork equipment fitted with smooth-edged buckets. Any loose, softened, or disturbed material due to construction traffic should be removed prior to placement of concrete.
18. It is recommended that design bottom of footing level for exterior footings bearing on LD-CLSM be 2 feet below lowest adjacent ground surface exposed to freezing temperatures. Interior and exterior footings should bear on LD-CLSM at the same elevation.
19. The integrity of natural soils and structural fill must be maintained during cold weather conditions. Soil subgrades should not be allowed to freeze. Freezing of subgrade soils beneath footings and floor slabs may result in frost heaving and post-construction settlement. The Contractor should make every effort to prevent freezing of subgrade soils. In the event frost penetration occurs, structural fill or naturally deposited soils should be removed and replaced to the depth of the frozen soils. At no time should frozen material be placed as fill.
20. Lateral loads from wind and earthquake may be resisted by friction between the bottom of the footings and LD-CLSM. A friction coefficient of 0.35 at the interfaces is recommended for use in design. A lateral bearing pressure of 150 lbs. per square foot per foot below grade are recommended.

6.04 Ground Floor Slabs

21. Interior ground floor may be slab-on-ground construction and designed based on a subgrade modulus of 150 pounds per cubic inch. The slab should be underlain by a minimum of 12 inches of compacted sand meeting the following gradation.

Sieve Size	Percent Passing
3/8 inch	100
No. 4	95 - 100
No. 8	80 - 100
No. 16	50 - 85
No. 30	25 - 60
No. 50	10 - 30
No. 100	2 - 10

The sand should be placed in compacted to at least 92 percent of the maximum dry density as determined by ASTM D 1557.

22. As a minimum, a vapor retarder should be provided below the floor slab to reduce moisture infiltration. Concrete slab-on-grade floors, regardless of their design or construction, are prone to cracking. The use of control joints is a method to reduce random patterned cracking in slabs on grade. However, even with the control joints, uncontrolled cracking should be expected.

It is anticipated design and construction details of the floor slab, including concrete thickness, reinforcing, bedding, control joint depth and spacing, and the vapor retarder type or waterproofing and thickness, will be provided by the project Structural Engineer and/or Architect with considerations for the moisture sensitivity of floor finishes.

Exterior slabs at entrances and at other locations where ground floor slabs might be exposed to freezing temperatures and where frost heaving and/or settlement would be problematic should be underlain by a minimum of 4 feet of underdrain stone. Underdrain stone should consist of *State of Maine Department of Transportation Standard Specifications*, 703.22 Underdrain Backfill Material Type C. The surrounding area should be pitched to drain away in order to reduce available moisture for ice and frost lense generation. The underdrain stone should be completely wrapped in a filter fabric to prevent the migration of fines from surrounding soils. Drains should be provided to outlet water that collects in the drainage stone.

23. Walkways and exterior slabs at locations where about 1 to 2 inches of settlement and some frost heaving would be tolerable should be underlain by a minimum of 24 inches of crushed stone completely wrapped in a filter fabric or structural fill to provide limited protection against heave. Surrounding grade should slope away from the structure to reduce available moisture for frost lens generation, and the drainage stone should be provided with a drainage pipe to outlet collected water.

6.05 Foundation Drainage

24. Perimeter footing drains should be installed around the building. The drains should be installed outside and adjacent to LD-CLSM and a minimum of 4 feet below surfaces exposed to freezing temperatures. The drains should consist of perforated pipe bedded in 2 cubic feet of underdrain stone per linear foot. The underdrain stone should be completely wrapped in a filter fabric such as Mirafi 160N.
25. Flow from the foundation and underslab drains should be conveyed by gravity to a surface drainage feature or storm drain that will be free flowing at all times and under all conditions. Multiple outlets should be provided so as not to be dependent on a single flow path.

Surface water drainage systems including roof drains should not be connected to the perimeter foundation drains and/or underslab drains unless measures are provided to prevent the rise of water above the lowest underdrain/foundation drain invert level at all times and under all conditions. Surface water drainage features including roof drains, pipes, catch basins, manholes, drip edges, infiltration trenches and basins, should direct

water away from underslab and foundation drainage at all times and locations. Existing and new roof drains should not be connected to the foundation drains.

6.06 Cast-in-Place Concrete Foundation Walls

26. Structural fill should be used as backfill next to retaining walls. Only vibratory plate compactors and/or walk behind rollers should be used to compact backfill within 4 feet of retaining and foundation walls.
27. All fully drained foundation walls with unbalanced earth pressures acting upon them should be designed to withstand an at-rest equivalent fluid unit weight of 65 pounds per square foot ($K_o = 0.5$). Any retaining walls that cannot be allowed to move or are otherwise restrained, such as ones attached to building foundations, should be designed for at-rest conditions as well. Lateral load from vehicle surcharge can be accounted for by applying a uniform vertical pressure equal to 250 pounds per square foot multiplied by the at-rest earth pressure coefficient.
28. The above equivalent fluid unit weights assume provisions are made to prevent the rise of water above the bottom of wall (i.e., footing drains) and that the walls are backfilled with structural fill.
29. It is also recommended that retaining walls be designed with the resultant load within the middle third of the footing and that a maximum contact pressure at the toe of wall be no greater than 1,500 pounds per square foot.

6.07 Pavement Sections

30. It is recommended the pavement section subgrade be compacted by several passes with a smooth drum vibratory roller and a thorough evaluation of the paved area subgrade be undertaken. The evaluation should include proof-rolling with a loaded tandem axle dump truck weighing not less than 25 tons to aid in identifying soft pockets and areas of excess yielding. Wet or saturated subgrades should not be proof-rolled. Soft spots, unsatisfactory soils, areas of excessive pumping, or rutting in excess of 1 inch in depth should be excavated and replaced with suitable compacted fill. If high groundwater is present during subgrade preparation, the vibratory roller should be operated in the “static” mode to avoid liquefying the soil.

Prior to the start of paving and as described above for pavement section subgrade, the surface of the pavement section base course material should be proof-rolled. Areas with any visually discernable pumping and/or rutting should be excavated and replaced with suitable compacted material.

31. The paved parking and drive areas should be constructed with the following pavement sections. Materials and placement methods should meet the requirements of current Maine Department of Transportation Standard Specifications (November 2014 edition).

Component	Thickness in Inches	
	Light Duty	Heavy Duty
Surface Course (Maine DOT Type 12.5 mm)	1-1/2	1-1/2
Binder Course (Maine DOT Type 19 mm)	2	2-1/2
Gravel Base (Maine DOT 703.06 Type A)	3	3
Subbase (Maine DOT 703.06 Type D)	<u>18</u>	<u>21</u>
Totals	<u>25</u>	<u>28</u>

Perimeter pavement underdrains or a free-draining ditch should be provided at the perimeter of paved areas. The invert of the drain or ditch should be a minimum of 1 foot below the pavement section. Underdrains spaced 40-feet on center should be provided below planned paved areas where pavement sections are in cuts.

Light duty pavement sections should be provided where traffic is limited to automobiles only, and heavy-duty pavement sections should be provided where large truck and tractor trailer traffic is anticipated.

32. Underdrains should consist of 2 cubic feet of MDOT Underdrain Backfill Material Type C per linear foot, wrapped in a filter fabric, and located a minimum of 1 foot beneath the pavement section. The trench above the geotextile wrapped underdrain stone should be backfilled with MDOT Underdrain Backfill Material Type B. The top of the underdrain trench backfill should be in direct contact with the pavement subbase.
33. Each pavement underdrain pipe should be provided with multiple outlet pipes so as not to be reliant upon a single flow path. Drains should be outletted by gravity to surface drainage features or storm drains that will be free flowing under all conditions.
34. The pavement sections are designed to support post-construction traffic loads. The sections are not designed to support construction traffic loading. Construction means and methods are the responsibility of the Contractor and the Contractor should anticipate the need to evaluate and employ methods to prevent subgrade softening, rutting, or impairment of overlaying fill materials as a result of construction traffic. Measures that should be considered by the Contractor include, but are not limited to, use of lower weight equipment, dispersion of construction traffic, constructing haul roads and construction traffic paths designed to support construction vehicles and equipment, and the use of geotextiles.

6.08 Utilities

35. Utilities may be earth-supported but must be designed to accommodate settlements of 2 to 3 inches outside the building limits. Flexible connections are recommended at building envelope penetrations. Bedding placed between the utility and subgrade should meet the utility and manufacturer requirements for the type of conduit or pipe being installed. Filter fabric should be placed beneath and along the sides of crushed stone bedding. Trench

backfill beneath slabs and pavements should be systematically compacted in lifts to reduce post-construction ground surface settlement and cracking of pavements and walkways.

36. It is difficult to properly place and compact trench backfill material where a trench box or excavation shield is used. There is a tendency to remove the trench box after the pipe is installed and then end-dump backfill material with little or no compactive effort applied. The usual result of the above construction practice is post-construction settlement of the ground surface along the trench alignment. This settlement may be tolerable for cross-country alignments; however, under paved areas this usually means having to re-level the surface years after the construction is complete. If this situation is not acceptable, a systematic compaction effort must be applied to the trench backfill below pavements.

6.09 Temporary Excavations

37. Soils at this site, encountered within the anticipated depths of excavations, consist of silty sand, sandy silt, and silty clay. It is anticipated that foundation and utility excavations can be accomplished using sloped, open-cut techniques where these excavations are outside the influence zone of existing foundations or other structural elements. It is also anticipated that dewatering can be accomplished using sumps and open pumping methods.

The Contractor should be aware that slope height, slope inclination, and excavation depths (including utility trench excavations) should in no case exceed those specified in local, state, or federal safety regulations (e.g., OSHA Health and Safety Standards for Excavations, 29 CFR Part 1926, or successor regulations). Such regulations are strictly enforced and, if they are not followed, the Owner, Contractor, and/or earthwork and utility subcontractors could be liable for substantial penalties.

As a safety measure, it is recommended all vehicles and spoil piles be kept a minimum lateral distance from the top of excavations equal to no less than 100 percent of the slope height. Exposed slope faces should be protected against the elements.

6.10 Geotechnical Observation

Geotechnical recommendations provided as the basis for design of this project were developed based on conceptual design information and limited numbers of soil borings and tests. The Owner should be sensitive to the potential need for adjustment during final design and construction. It is recommended that the Owner retain RWG&A to observe geotechnical construction aspects of the project.

As part of the project's construction phase, it is recommended that the Owner retain RWG&A to observe geotechnical construction aspects of the project. If RWG&A is not retained to provide geotechnical observation and associated testing services, RWG&A would not have the opportunity to verify site work is completed in accordance with RWG&A's recommendations. Post-construction performance of the building and site work features would necessarily be based on the interpretations and judgement of others.

Construction services should include observing general compliance with the design concepts, specifications and recommendations, and assisting in development of design changes should

subsurface conditions differ from those anticipated prior to the start of construction. Observation improves the likelihood that the design intent will be carried out during construction. For this project, geotechnical observation and testing of the following aspects is recommended:

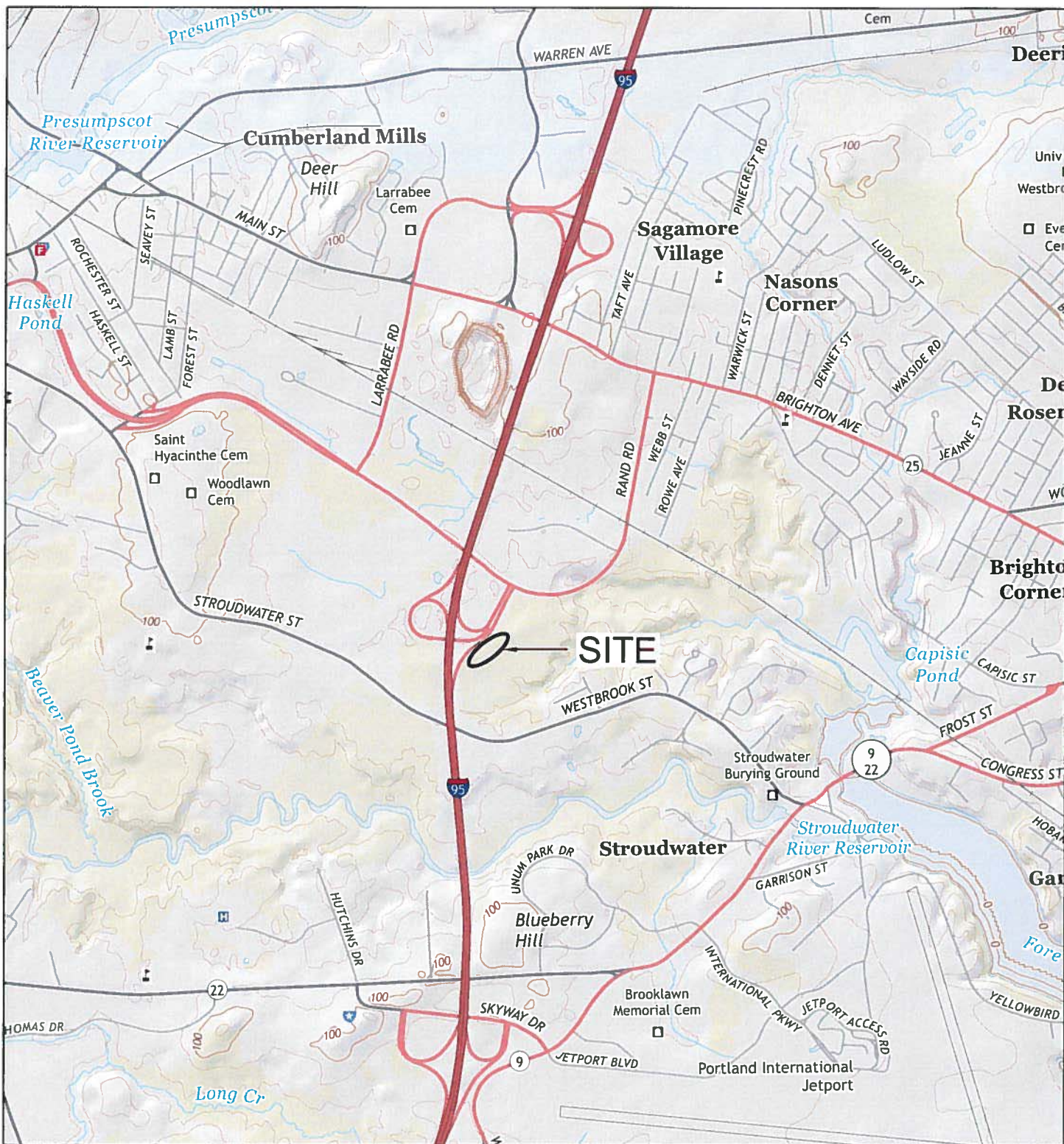
- Review geotechnical aspects of site work submittals,
- Observe site stripping and proof-rolling of subgrade soils,
- Assess suitability of exposed LD-CLSM, spread footing, and slab-on-grade subgrades,
- Field sampling and testing of LD-CLSM,
- Laboratory testing LD-CLSM, and
- Perform laboratory and field testing of structural and other compacted fills. Testing would include grain-size distribution, moisture-density testing, and in-place density testing to determine percent relative compaction and total unit weights.

In addition to geotechnical observation, RWG&A can provide construction inspection and materials testing services. This would include soils, portland cement and asphaltic concrete, masonry, fire proofing, destructive and non-destructive testing, and special inspection services in fulfillment of building code requirements. Soil and materials testing would be performed at the RWG&A's soil testing laboratory in Saco, Maine, which is a full service laboratory accredited by the American Association of State Highway and Transportation Officials (AASHTO) for the testing of soils, steel, concrete, masonry and asphalt.

7.0 CLOSURE

This report has been prepared for specific application to the Patrons Oxford Insurance Company building to be built on Lot 4 of Portland Technology Park in Portland, Maine, and for the exclusive use of Patrons Oxford Insurance Company. This work has been completed in accordance with generally accepted soil and foundation engineering practices. No other warranty, expressed or implied, is made. In the event that any changes are made in the nature, design, or location of proposed buildings, the conclusions and recommendations of this report should be reviewed by RWG&A.

The recommendations presented are based on the results of widely spaced explorations. The nature of variations between explorations may not become evident until construction. If variations are encountered, it will be necessary for RWG&A to re-evaluate the recommendations presented in this report. RWG&A should be retained to review design and specifications to verify that geotechnical evaluations and recommendations provided in this report have been interpreted in the manner they were intended.



0 2000 3000 4000

SCALE, FEET

SOURCE:
USGS 7.5-MINUTE TOPOGRAPHIC QUADRANGLE OF
PORTLAND WEST, ME, DATED 2014.

**FIGURE 1
LOCUS MAP
PROPOSED PATRONS OXFORD INSURANCE
OFFICE BUILDING
PORTLAND, MAINE**

OCTOBER 2015

PROJECT NO. 1518-002



R.W. Gillespie & Associates, Inc.

Geotechnical Engineering • Environmental Consulting • Materials Testing Services
Quality Services • Timely Advice • Sensible Solutions
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LEGEND:

B-1  APPROXIMATE LOCATION OF SOIL BORING PERFORMED BY RWG&A JULY AND SEPTEMBER 2015.

HA10-6  APPROXIMATE LOCATION OF SOIL BORING PERFORMED BY OTHERS AUGUST 2010.

SOURCE:
DRAWING C-03, TITLED "ICE 4 SITE GRADING, DRAINAGE, AND EROSION CONTROL PLAN", BY WOODARD & CURRAN, DATED SEPTEMBER 2015.

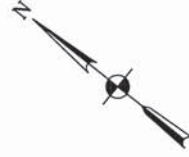


FIGURE 2
EXPLORATION LOCATION PLAN
PROPOSED PATRONS OXFORD INSURANCE
OFFICE BUILDING
PORTLAND, MAINE

OCTOBER 2015 PROJECT NO. 1518-002



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PERMITTING SET - NOT FOR CONSTRUCTION

APPENDIX A
LIMITATIONS

Geotechnical Engineering Services
Proposed Patrons Oxford Insurance Company Office Building
Portland, Maine

LIMITATIONS

This geotechnical evaluation has been limited to consideration of the soil and foundation aspects of the proposed building and site development. The primary purpose of RWG&A's services was to explore subsurface conditions and to provide geotechnical parameters for design and construction. This report identifies construction considerations intended to solely assist engineers that will design the project and monitor its construction, and not to the benefit of others including, but not limited to, the Contractor.

This geotechnical evaluation report might also aid the Contractor responsible for construction, but reliance is not extended to the Contractor for the purposes of bidding and/or building the project. The recommendations and comments provided herein are not intended to be instructions or directives to the project Contractor. The project Contractor must evaluate construction issues encountered in the work on the basis of their experience with similar projects taking into account their own methods and procedures.

This report has not considered the construction from a worker safety perspective. Construction safety is the responsibility of the project Contractor, who is also solely responsible for the means, methods, and sequencing of construction operations. RWG&A is providing this information as a service to Patrons Oxford Insurance Company. Under no circumstances should this information be interpreted to mean that RWG&A and/or Patrons Oxford Insurance Company are assuming responsibility for construction site safety or the Contractor's activities; such responsibility is not being implied and should not be inferred.

RWG&A's scope of services did not include an environmental site assessment relative to oil and hazardous materials or evidence of a potential release or threat of oil or hazardous materials on, below, or around the site. Any statement in this report, or on the exploration logs, regarding odors or unusual or suspicious conditions is for informational purposes only and is not intended to constitute an environmental assessment. RWG&A's scope of services also excluded any service to investigate or detect the presence of mold or other biological contaminants, or any service that was designed or intended to prevent or lower the risk of the occurrence of an infestation of mold or other biological contaminants (MOBC infestation).

APPENDIX B
EXPLORATION LOGS

Geotechnical Engineering Services
Proposed Patrons Oxford Insurance Company Office Building
Portland, Maine

RWG&A, Inc. soil descriptions are based on the following criteria. Descriptive terminology is used to denote the grain size and percentage of each component. The soil descriptions are based on visual-manual classification procedures, Standard Penetration Test results, and the results of laboratory testing on selected soil samples, where available. The Unified Soil Classification Group Symbol will be indicated in capital letters.

COMPONENT DEFINITIONS BY GRADATION SIEVE LIMITS

Materials	Definitions	Fractions	Upper	Lower
Boulders	Material too large to pass through an opening 12 in. square.			
Cobbles	Material passing through a 12 in. opening and retained on the 3 in. sieve.			
Gravel	Material passing the 3 in. sieve and retained on 1/4" (No. 4 sieve).	Coarse Fine	3 in. 3/4 in.	3/4 in. 1/4 in.
Sand	Material passing the No. 4 sieve and retained on the No. 200 sieve.	Coarse Medium Fine	No. 4 (1/4") No. 10 (1/8") No. 40 (1/32")	No. 10 (1/8") No. 40 (1/32") No. 200
Silt	Material passing the No. 200 sieve which is usually non-plastic in character and exhibits little or no strength when air dried.		No. 200	
Clay	Material passing the No. 200 sieve which can also be made to exhibit plasticity within a certain range of moisture contents and which exhibits considerable strength when air dried.		No. 200	

SOIL DESCRIPTION

General

Soils are described as to the Unified Soil Classification Systems Group Symbol, density or consistency, color, grain size distribution and other pertinent properties such as plasticity and dry strength. The RWG&A order of descriptors is as follows:

1. USCS Group Name and Symbol, or Fill
2. Density or Consistency
3. Moisture
4. Grain Size & Constituent percentages
5. Other pertinent descriptors
6. Color

DESCRIPTIVE TERMINOLOGY DENOTING COMPONENT PROPORTIONS

Descriptive Terms	Range of Proportions
Noun (major component)	> 50%
Adjective (secondary component)	20 - 50%
Some (third component)	25 - 45%
Little (second or third component)	15 - 25%
Few (second or third component)	5 - 15%
Trace	0 - 5%
With	Amount of component not determined. Used as a conjunction only. Does not indicate component percentile

OTHER DESCRIPTIVE TERMS

Where appropriate, geological classifications are also used (Glacial Till, etc.)

TYPICAL DESCRIPTIONS

SAND WITH SILT (SP-SM): Medium dense, moist, coarse to medium sand, few silt, brown.

FILL: Loose, dry, fine sand, some gravel and silt, with brick and concrete fragments, dark brown.

SILTY CLAY (CL): Very stiff, moist, silty clay, olive-brown.

DENSITY OR CONSISTENCY OF SOILS

COHESIVE SOILS

Consistency of Cohesive Soils	Standard Penetration Test (Blows Per Foot) (N)	Undrained Shear Strength (TSF)
Very Soft	0 - 2	Below 0.13 (250 psf)
Soft	2 - 4	0.13 to 0.25 (to 500 psf)
Medium	4 - 8	0.25 to 0.5 (to 1,000 psf)
Stiff	8 - 15	0.5 to 1.0 (to 2,000 psf)
Very Stiff	15 - 30	1.0 to 2.0 (to 4,000 psf)
Hard	Over 30	over 2.0 (over 4,000 psf)

Consistency of cohesive soils is based upon field vane shear, torvane, or pocket penetrometer, or laboratory vane shear or Unconsolidated-Undrained Triaxial Compression tests. Consistency of cohesive soils is based upon the Standard Penetration test when no other data is available.

COHESIONLESS SOILS

Density of Cohesionless Soils	Standard Penetration Test (Blows per Foot) (in)
Very Loose	0 - 4
Loose	4 - 10
Medium Dense	10 - 30
Dense	30 - 50
Very Dense	over 50

PENETRATION RESISTANCE

STANDARD PENETRATION TEST (ASTM D1586) - a 2.0-inch diameter, 1-3/8 inch inside diameter split barrel sample is driven into soil by means of a 140-pound weight falling freely through a vertical distance of 30 inches. The total number of blows required for penetration from 6 to 18 inches is the Standard Penetration Resistance (N).

COBBLES AND BOULDERS

The percentage of cobbles and boulders is estimated visually where possible.

Descriptive Term	Estimated Percentage
Very Few	0 - 10%
Few	10 - 25%
Common	25 - 40%
Numerous	40 - 50%

If the percentage cannot be determined, as in a typical test boring, then use "with" to indicate the presence of cobbles and/or boulders. (i.e., gravelly sand with cobbles and boulders).

FILLS

The following terminology is used to denote size range of man-made materials within fill deposits:

Size Range	Comparative Soil Terms
<No. 200 Sieve	Silt - size
No. 200 to 1/4 in.	Sand - size
1/4 in. to 3 in.	Gravel - size
3 in. to 12 in.	Cobble - size
>12 in.	Boulder - size

SUPPLEMENTAL SOIL DESCRIPTION TERMINOLOGY

Term	Example
Seam	Typically 1/16 to 1/2 inch thick
Layer	Greater than 1/2 inch thick
Occasional	One or less per foot of thickness
Frequent	More than one per foot of thickness
Interbedded	Alternating soil layers of different composition
Varved	Alternating thin seams of silt and clay
Mottled	Variations in color

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Boring Log: B-1

Total Depth (ft): 12

Sheet 1 of 1

Project Name: Prop. Patrons Oxford Ins. Office Bldg.

RWG&A Project No. 1518-002

Location: Portland, Maine

Client: Patrons Oxford Insurance

RWG&A Representative: C. Morrell

Boring Location: See Exploration Location Plan

Boring Abandonment Method: Backfilled with cuttings

Observed Water Depth: 7'

Drilling Contractor: Northern Test Boring

Drill Rig: Diedrich D50

Driller Rep.: Mike Nadeau

Date Started: 07/20/2015

Date Completed: 07/20/2015

Surface Elevation: 67 (Feet)

Drilling Method: SSA

Casing Type: N/A

DEPTH, FT.	SYMBOL SAMPLES	SAMPLE NUMBER	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT %	LAB TESTS
0		S-1	TOPSOIL AND ORGANIC MATERIAL (3 inches).	20	2 2 4 7	6		
5		S-2	SILTY SAND (SM); Loose, moist, fine sand, some silt, trace root matter, gray with brown mottling.	20	2 4 4 5	8		
10		S-3	SILTY CLAY (CL); Very soft, wet, silty clay, gray.	23	WOH/ 24"	WOH		
15			Bottom of Exploration at 12'; Not Refusal.					
20								
25								

Notes:

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Boring Log: B-2

Total Depth (ft): 12

Sheet 1 of 1

Project Name: Prop. Patrons Oxford Ins. Office Bldg.

RWG&A Project No. 1518-002

Location: Portland, Maine

Client: Patrons Oxford Insurance

RWG&A Representative: C. Morrell

Boring Location: See Exploration Location Plan

Boring Abandonment Method: Backfilled with cuttings

Observed Water Depth: 4'

Drilling Contractor: Northern Test Boring

Drill Rig: Diedrich D50

Driller Rep.: Mike Nadeau

Date Started: 07/20/2015

Date Completed: 07/20/2015

Surface Elevation: 67 (Feet)

Drilling Method: SSA

Casing Type: N/A

DEPTH, FT.	SYMBOL SAMPLES	SAMPLE NUMBER	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT %	LAB TESTS
0		S-1	FILL; Sand with silt, very loose, moist, fine to medium sand, little silt, few gravel from 1.5' - 3', dark brown.	6	1 1 3 2	4		
5		S-2	SILTY SAND WITH CLAY (SM); Loose, wet, fine sand, some silt, little clay from 5' - 5.5', grayish brown.	17	3 2 5 4	7		
10		S-3	SILTY CLAY (CL); Soft, wet, silty clay, gray.	6	2 1 1 1	2		
			Bottom of Exploration at 12'; Not Refusal.					
15								
20								
25								

Notes:



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Boring Log: B-3

Total Depth (ft): 12

Sheet 1 of 1

Project Name: Prop. Patrons Oxford Ins. Office Bldg.
RWG&A Project No. 1518-002
Location: Portland, Maine
Client: Patrons Oxford Insurance
RWG&A Representative: C. Morrell
Boring Location: See Exploration Location Plan
Boring Abandonment Method: Backfilled with cuttings
Observed Water Depth: 5'

Drilling Contractor: Northern Test Boring
Drill Rig: Diedrich D50
Driller Rep.: Mike Nadeau
Date Started: 07/20/2015
Date Completed: 07/20/2015
Surface Elevation: 69 (Feet)
Drilling Method: SSA
Casing Type: N/A

DEPTH, FT.	SYMBOL SAMPLES	SAMPLE NUMBER	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT %	LAB TESTS
0		S-1	TOPSOIL AND ORGANIC MATERIAL (10 inches).	24	1 1 3 5	4		
5		S-2	SILTY SAND (SM); Very loose, moist to wet, fine sand, some silt, light brown to grayish brown.	22	5 5 6 5	11	24.5	MC GS
10		S-3	SANDY SILT (ML); Loose to medium dense, silt with some sand, wet, grayish brown.	23	3 3 3 1	6		
			Bottom of Exploration at 12'; Not Refusal.					
15								
20								
25								

Notes:

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Boring Log: B-4

Total Depth (ft): 51

Sheet 1 of 2

Project Name: Prop. Patrons Oxford Ins. Office Bldg.
RWG&A Project No. 1518-002
Location: Portland, Maine
Client: Patrons Oxford Insurance
RWG&A Representative: C. Morrell
Boring Location: See Exploration Location Plan
Boring Abandonment Method: Backfilled with cuttings
Observed Water Depth: 4'

Drilling Contractor: Northern Test Boring
Drill Rig: Diedrich D50
Driller Rep.: Mike Nadeau
Date Started: 07/21/2015
Date Completed: 07/21/2015
Surface Elevation: 67.5 (Feet)
Drilling Method: Drive and wash
Casing Type: 4" Steel

DEPTH, FT.	SYMBOL SAMPLES	SAMPLE NUMBER	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT %	LAB TESTS
0		S-1	TOPSOIL AND ORGANIC MATERIAL (6 inches). SILTY SAND (SM): Very loose to loose, moist to wet, fine sand, some silt, grayish brown.	12	1 1 2 6	3		
5		S-2	Seams of silty clay from 5' - 7'.	20	3 3 5 6	8		
10		FV	SILTY CLAY (CL); Very soft, wet, silty clay, gray. Field Vane: Undrained Shear Strength=530 psf; residual=80 psf.					
15		FV FV	Field Vane: Undrained Shear Strength=490 psf; residual=50 psf. Field Vane: Undrained Shear Strength=410 psf; residual=50 psf.					
20		FV FV	Field Vane: Undrained Shear Strength=330 psf; residual=0 psf. Field Vane: Undrained Shear Strength=340 psf; residual=0 psf.					
25		FV FV	Field Vane: Undrained Shear Strength=380 psf; residual=0 psf. Field Vane: Undrained Shear Strength=410 psf; residual=0 psf. Hydraulic push probe with "a" rod from 26' - 51'.					

Notes: Used 3 5/8x9" Acker field vane. Unable to push vane to 10.8', possible sand seam.



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Boring Log: B-4

Total Depth: 51

Sheet 2 of 2

Project Name: Prop. Patrons Oxford Ins. Office Bldg.

Location: Portland Maine

Client: Patrons Oxford Insurance

Observed Water Depth: 4'

RWG&A Project No. 1518-002

Surface Elevation: 67.5 (Feet)

Casing Type: 4" Steel

DEPTH, FT.	SYMBOL SAMPLES	SAMPLE NUMBER	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT %	LAB TESTS
30								
35								
40								
45								
50								
55			Bottom of Exploration at 51'; Push probe refusal, probable Glacial Till.					

Notes: Used 3 5/8x9" Acker field vane. Unable to push vane to 10.8', possible sand seam.

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Boring Log: B-5

Total Depth (ft): 26.6

Sheet 1 of 1

Project Name: Prop. Patrons Oxford Ins. Office Bldg.
RWG&A Project No. 1518-002
Location: Portland, Maine
Client: Patrons Oxford Insurance
RWG&A Representative: C. Morrell
Boring Location: See Exploration Location Plan
Boring Abandonment Method: Backfilled with cuttings
Observed Water Depth: 4'

Drilling Contractor: Northern Test Boring
Drill Rig: Diedrich D50
Driller Rep.: Mike Nadeau
Date Started: 07/21/2015
Date Completed: 07/21/2015
Surface Elevation: 67 (Feet)
Drilling Method: Drive and wash
Casing Type: 4" Steel

DEPTH, FT.	SYMBOL SAMPLES	SAMPLE NUMBER	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT %	LAB TESTS
0		S-1	TOPSOIL AND ORGANIC MATERIAL (5 inches). SILTY SAND (SM): Very loose to loose, moist to wet, fine sand, some silt, grayish brown.	14	1 1 2 3	3		
5		S-2	Silty clay layers from 5' - 7'. SILTY CLAY (CL)	22	3 5 4 4	9		
10		FV	Field Vane: Undrained Shear Strength=820 psf; residual=50 psf.					
15		FV FV	Field Vane: Undrained Shear Strength=440 psf; residual=80 psf. Field Vane: Undrained Shear Strength=380 psf; residual=80 psf.					
20		FV FV	Field Vane: Undrained Shear Strength=440 psf; residual=70 psf. Field Vane: Undrained Shear Strength=360 psf; residual=50 psf.					
25		FV FV	Field Vane: Undrained Shear Strength=440 psf; residual=30 psf. Field Vane: Undrained Shear Strength=440 psf; residual=40 psf.					
			Bottom of Exploration at 26.6'; Not Refusal.					

Notes: Used 3 5/8x9" Acker field vane. Unable to push vane to 10.8', possible sand seam.



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Boring Log: B-6

Total Depth (ft): 27

Sheet 1 of 1

Project Name: Prop. Patrons Oxford Ins. Office Bldg.
RWG&A Project No. 1518-002
Location: Portland, Maine
Client: Patrons Oxford Insurance
RWG&A Representative: C. Morrell
Boring Location: See Exploration Location Plan
Boring Abandonment Method: Backfilled with cuttings
Observed Water Depth: 5'

Drilling Contractor: Northern Test Boring
Drill Rig: Diedrich D50
Driller Rep.: Mike Nadeau
Date Started: 07/21/2015
Date Completed: 07/21/2015
Surface Elevation: 67 (Feet)
Drilling Method: 2 1/4 HSA
Casing Type: NA

DEPTH, FT.	SYMBOL SAMPLES	SAMPLE NUMBER	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT %	LAB TESTS
0		S-1	TOPSOIL AND ORGANIC MATERIAL (6 inches). SANDY SILT (ML); Loose, moist, silt, some fine sand, grayish brown. SILTY SAND (SM); Loose, moist to wet, fine sand, some silt, grayish brown.	16	1 2 3 6	5		
5		S-2	SANDY SILT (ML); Loose, wet, silt with some sand, grayish brown.	12	4 4 4 4	8	27.6	MC GS
10		S-3	SILTY CLAY (CL); Soft to very soft, wet, silty clay, gray.	14	2 1 1 1	2	36.6	MC
15		S-4		23	WOH/ 24"	WOH	41.8	MC
20		S-5		24	WOH/ 24"	WOH	46.2	MC
25		S-6		2	WOR/ 24"	WOR		
			Bottom of Exploration at 27'; Not Refusal.					

Notes:

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Boring Log: B-7

Total Depth (ft): 27

Sheet 1 of 1

Project Name: Prop. Patrons Oxford Ins. Office Bldg.

RWG&A Project No. 1518-002

Location: Portland, Maine

Client: Patrons Oxford Insurance

RWG&A Representative: C. Morrell

Boring Location: See Exploration Location Plan

Boring Abandonment Method: Backfilled with cuttings

Observed Water Depth: 7'

Drilling Contractor: Northern Test Boring

Drill Rig: Diedrich D50

Driller Rep.: Mike Nadeau

Date Started: 07/20/2015

Date Completed: 07/20/2015

Surface Elevation: 67.5 (Feet)

Drilling Method: 2 1/4 HSA

Casing Type: N/A

DEPTH, FT.	SYMBOL	SAMPLES	SAMPLE NUMBER	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT %	LAB TESTS
0			S-1	TOPSOIL AND ORGANIC MATERIAL (6 inches). SILTY SAND (SM); Loose, moist, fine sand, some silt, grayish brown than orangish brown.	7	1 1 7 6	8		
5			S-2	SILTY CLAY (CL); Stiff to very soft, moist to wet, silty clay, trace fine sand, gray. Pocket Penetrometer: Undrained Shear Strength: Su=2.5 ksf	19	3 5 5 5	10		
10			S-3		4	1 2 1 1	3	30.9	MC
15			S-4		17	1 1 0 1	1		
20			S-5		16	WOH/ 24"	WOH		
25			S-6		19	WOH/ 24"	WOH		
				Bottom of Exploration at 27'; Not Refusal.					

Notes:

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Boring Log: B-8

Total Depth (ft): 56

Sheet 1 of 2

Project Name: Prop. Patrons Oxford Ins. Office Bldg.

RWG&A Project No. 1518-002

Location: Portland, Maine

Client: Patrons Oxford Insurance

RWG&A Representative: C. Morrell

Boring Location: See Exploration Location Plan

Boring Abandonment Method: Backfilled with cuttings

Observed Water Depth: 8'

Drilling Contractor: Northern Test Boring

Drill Rig: Diedrich D50

Driller Rep.: Mike Nadeau

Date Started: 07/21/2015

Date Completed: 07/21/2015

Surface Elevation: 67.5 (Feet)

Drilling Method: Drive and wash

Casing Type: N/A

DEPTH, FT.	SYMBOL SAMPLES	SAMPLE NUMBER	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT %	LAB TESTS
0		S-1	TOPSOIL AND ORGANIC MATERIAL (7 inches). SILTY SAND (SM): Loose, moist, fine sand, some silt, dark brown to grayish brown. SILTY CLAY (CL); Stiff to very soft, moist to wet, silty clay, trace fine sand from 2' - 7', grayish brown to gray.	16	1 2 4 5	6		
5		S-2	Pocket Penetrometer: Undrained Shear Strength: Su=3,000 psf.	18	3 3 5 4	8		
10		S-3		24	WOH/ 24"	WOH	46.5	MC
15		U-1					46	MC C LV
20		FV FV	Field Vane: Undrained Shear Strength=550 psf; residual=50 psf. Field Vane: Undrained Shear Strength=490 psf; residual=70 psf.					
25		FV FV	Field Vane: Undrained Shear Strength=600 psf; residual=80 psf. Field Vane: Undrained Shear Strength=600 psf; residual=80 psf.					

Notes: Used 3 5/8x9" Acker field vane. Unable to sample below 40' due to cave-in.



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Boring Log: B-8

Total Depth: 56

Sheet 2 of 2

Project Name: Prop. Patrons Oxford Ins. Office Bldg.

Location: Portland Maine

Client: Patrons Oxford Insurance

Observed Water Depth: 8'

RWG&A Project No. 1518-002

Surface Elevation: 67.5 (Feet)

Casing Type: N/A

DEPTH, FT.	SYMBOL SAMPLES	SAMPLE NUMBER	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT %	LAB TESTS
30		U-2					45	MC C LV
35		FV FV	Field Vane: Undrained Shear Strength=570 psf; residual=50 psf. Field Vane: Undrained Shear Strength=600 psf; residual=30 psf.					
40		S-4	SILTY SAND WITH GRAVEL (SM); Loose, wet, fine to coarse sand, some silt, little gravel, gray.	7	4 4 5 4	9		
45								
50								
55			Increased drilling resistance from 55' - 56'.					
			Bottom of Exploration at 56'; Roller cone refusal, possible bedrock or boulder.					

Notes: Used 3 5/8x9" Acker field vane. Unable to sample below 40' due to cave-in.

**R.W. Gillespie & Associates, Inc.**

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Boring Log: B-9

Total Depth (ft): 62

Sheet 1 of 3

Project Name: Prop. Patrons Oxford Ins. Office Bldg.

RWG&A Project No. 1518-002

Location: Portland, Maine

Client: Patrons Oxford Insurance

RWG&A Representative: C. Morrell

Boring Location: See Exploration Location Plan

Boring Abandonment Method: Backfilled with cuttings

Observed Water Depth: 6'

Drilling Contractor: Northern Test Boring

Drill Rig: Diedrich D50

Driller Rep.: Mike Nadeau

Date Started: 07/21/2015

Date Completed: 07/21/2015

Surface Elevation: 67 (Feet)

Drilling Method: Drive and wash

Casing Type: 4" Steel

DEPTH, FT.	SYMBOL SAMPLES	SAMPLE NUMBER	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT %	LAB TESTS
0		S-1	FILL; Bark Mulch (3 inches).	14	1	2		
			FILL; Silty sand, very loose, moist, fine sand, some silt, trace medium sand, bluish gray.		1			
					1			
					1			
5		S-2	SILTY SAND (SM); Medium dense, moist to wet, fine sand, some silt, grayish brown.	17	4	10		
					5			
					5			
					3			
10		FV FV	SILTY CLAY (CL); Medium stiff to soft, wet, silty clay, gray. Field Vane: Undrained Shear Strength=650 psf; residual=80 psf. Field Vane: Undrained Shear Strength=600 psf; residual=80 psf.					
15		FV FV	Field Vane: Undrained Shear Strength=440 psf; residual=70 psf. Field Vane: Undrained Shear Strength=390 psf; residual=50 psf.					
20		FV FV	Field Vane: Undrained Shear Strength=410 psf; residual=70 psf. Field Vane: Undrained Shear Strength=400 psf; residual=50 psf.					
25		FV FV	Field Vane: Undrained Shear Strength=380 psf; residual=0 psf. Field Vane: Undrained Shear Strength=380 psf; residual=0 psf. Began roller cone wash probe.					

Notes: Used 3 5/8x9" Acker field vane.



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Boring Log: B-9

Total Depth: 62

Sheet 2 of 3

Project Name: Prop. Patrons Oxford Ins. Office Bldg.

Location: Portland Maine

Client: Patrons Oxford Insurance

Observed Water Depth: 6'

RWG&A Project No. 1518-002

Surface Elevation: 67 (Feet)

Casing Type: 4" Steel

DEPTH, FT.	SYMBOL SAMPLES	SAMPLE NUMBER	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT %	LAB TESTS
30								
35								
40								
45								
50								
55			Increased drilling resistance, probable granular soil from 52' - 62'.					

Notes: Used 3 5/8x9" Acker field vane.



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Boring Log: B-9

Total Depth: 62

Sheet 3 of 3

Project Name: Prop. Patrons Oxford Ins. Office Bldg.

Location: Portland Maine

Client: Patrons Oxford Insurance

Observed Water Depth: 6'

RWG&A Project No. 1518-002

Surface Elevation: 67 (Feet)

Casing Type: 4" Steel

DEPTH, FT.	SYMBOL SAMPLES	SAMPLE NUMBER	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT %	LAB TESTS
60								
65								
70								
75								
80								
85								

Bottom of Exploration at 62'; Roller cone refusal, possible bedrock or boulder.

Notes: Used 3 5/8x9" Acker field vane.

**R.W. Gillespie & Associates, Inc.**

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Boring Log: B-10

Total Depth (ft): 12

Sheet 1 of 1

Project Name: Prop. Patrons Oxford Ins. Office Bldg.

RWG&A Project No. 1518-002

Location: Portland, Maine

Client: Patrons Oxford Insurance

RWG&A Representative: C. Morrell

Boring Location: See Exploration Location Plan

Boring Abandonment Method: Backfilled with cuttings

Observed Water Depth: 5'

Drilling Contractor: Northern Test Boring

Drill Rig: Diedrich D50

Driller Rep.: Mike Nadeau

Date Started: 07/20/2015

Date Completed: 07/20/2015

Surface Elevation: ()

Drilling Method: SSA

Casing Type: 4" Steel

DEPTH, FT.	SYMBOL SAMPLES	SAMPLE NUMBER	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT %	LAB TESTS
0		S-1	TOPSOIL AND ORGANIC MATERIAL (3 inches). SILTY SAND (SM); Very loose to medium dense, moist to wet, fine sand, some silt, orangish brown to grayish brown.	18	1 2 2 5	4		
5		S-2	SILTY CLAY (CL); Stiff than soft, wet, silty clay, gray.	20	5 6 7 7	13		
10		S-3	SILTY SAND (SM); Very loose, wet, fine sand, some silt, gray. Bottom of Exploration at 12'; Not Refusal.	16	1 1 2 4	3		
15								
20								
25								

Notes:

**R.W. Gillespie & Associates, Inc.**

Geotechnical Engineering • Geohydrology • Materials Testing Services

Boring Log: GB-101

Total Depth (ft): 72

Sheet 1 of 3

Project Name: Prop. Patrons Oxford Ins. Office Bldg.
RWG&A Project No. 1518-002
Location: Portland, Maine
Client: Patrons Oxford Insurance
RWG&A Representative: C. Morrell
Boring Location: See Exploration Location Plan
Boring Abandonment Method: Installed Solid Casing
Observed Water Depth: 7'

Drilling Contractor: Great Works Test Boring
Drill Rig: CME850
Driller Rep.: Jeff Lee
Date Started: 09/17/2015
Date Completed: 09/17/2015
Surface Elevation: 67 (Feet)
Drilling Method: Drive and Wash
Casing Type: 4" Steel

DEPTH, FT.	SYMBOL SAMPLES	SAMPLE NUMBER	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT %	LAB TESTS
0			FILL; BARK MULCH (3 inches).					
			FILL, Silty sand, moist, fine sand, some silt, trace medium sand, bluish gray					
			SILTY SAND (SM); Moist to wet, fine sand, some silt, grayish brown.					
5								
10			SILTY CLAY (CL); Silty clay, gray.					
15								
20								
25								

Notes: Installed 3-inch inside diameter, close ended, Schedule 40 PVC casing in completed borehole. Casing was grouted into place using a cement-bentonite mixture. Casing filled with potable water.



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Boring Log: GB-101

Total Depth: 72

Sheet 2 of 3

Project Name: Prop. Patrons Oxford Ins. Office Bldg.

Location: Portland Maine

Client: Patrons Oxford Insurance

Observed Water Depth: 7'

RWG&A Project No. 1518-002

Surface Elevation: 67 (Feet)

Casing Type: 4" Steel

DEPTH, FT.	SYMBOL SAMPLES	SAMPLE NUMBER	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT %	LAB TESTS
30								
35								
40								
45								
50		S-1	SILTY SAND (SM); Medium dense, wet, fine to medium sand, some silt, few gravel and coarse sand, gray.	11	4 7 4 3	11		
55			Bedrock encountered at 57', roller cone drilled to 72'.					

Notes: Installed 3-inch inside diameter, close ended, Schedule 40 PVC casing in completed borehole. Casing was grouted into place using a cement-bentonite mixture. Casing filled with potable water.



R.W. Gillespie & Associates, Inc.
Geotechnical Engineering • Geohydrology • Materials Testing Services

Boring Log: GB-101

Total Depth: 72

Sheet 3 of 3

Project Name: Prop. Patrons Oxford Ins. Office Bldg.

Location: Portland Maine

Client: Patrons Oxford Insurance

Observed Water Depth: 7'

RWG&A Project No. 1518-002

Surface Elevation: 67 (Feet)

Casing Type: 4" Steel

DEPTH, FT.	SYMBOL SAMPLES	SAMPLE NUMBER	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT %	LAB TESTS
60			Bedrock.					
65								
70								
75			Bottom of Exploration at 72'; Terminated boring 15' into rock.					
80								
85								

Notes: Installed 3-inch inside diameter, close ended, Schedule 40 PVC casing in completed borehole. Casing was grouted into place using a cement-bentonite mixture. Casing filled with potable water.

**R.W. Gillespie & Associates, Inc.**

Geotechnical Engineering • Geohydrology • Materials Testing Services

Boring Log: GB-102

Total Depth (ft): 72

Sheet 1 of 3

Project Name: Prop. Patrons Oxford Ins. Office Bldg.
RWG&A Project No. 1518-002
Location: Portland, Maine
Client: Patrons Oxford Insurance
RWG&A Representative: C. Morrell
Boring Location: See Exploration Location Plan
Boring Abandonment Method: Installed Solid Casing.
Observed Water Depth: 7'

Drilling Contractor: Great Works Test Boring
Drill Rig: CME850
Driller Rep.: Jeff Lee
Date Started: 09/18/2015
Date Completed: 09/18/2015
Surface Elevation: 67 (Feet)
Drilling Method: Drive and Wash
Casing Type: 4" Steel

DEPTH, FT.	SYMBOL SAMPLES	SAMPLE NUMBER	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT %	LAB TESTS
0			TOPSOIL AND ORGANIC MATERIAL (4 inches). SILTY SAND (SM); Moist, fine sand, some silt, grayish brown.					
5								
10			SILTY CLAY (CL); Medium stiff to soft, silty clay, gray.					
15								
20		FV FV	Field Vane: Undrained Shear Strength: Su=480 psf, residual 50 psf. Field Vane: Undrained Shear Strength: Su=490 psf, residual 40 psf.					
25								

Notes: 1. Used 3 5/8"x9" Acker field vane for shear strength testing.
2. Installed 3-inch inside diameter, close ended, Schedule 40 PVC casing in completed borehole. Casing was grouted into place using a cement-bentonite mixture. Casing filled with potable water.



R.W. Gillespie & Associates, Inc.
Geotechnical Engineering • Geohydrology • Materials Testing Services

Boring Log: GB-102

Total Depth: 72

Sheet 2 of 3

Project Name: Prop. Patrons Oxford Ins. Office Bldg.

Location: Portland Maine

Client: Patrons Oxford Insurance

Observed Water Depth: 7'

RWG&A Project No. 1518-002

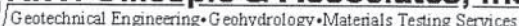
Surface Elevation: 67 (Feet)

Casing Type: 4" Steel

DEPTH, FT.	SYMBOL SAMPLES	SAMPLE NUMBER	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT %	LAB TESTS
30		FV	Field Vane: Undrained Shear Strength: Su=490 psf, residual 50 psf.					
		FV	Field Vane: Undrained Shear Strength: Su=550 psf, residual 40 psf.					
35								
40		FV	Field Vane: Undrained Shear Strength: Su=640 psf, residual 20 psf.					
		FV	Field Vane: Undrained Shear Strength: Su=520 psf, residual 0 psf.					
45			SILTY SAND (SM); Fine to medium sand, some silt, few gravel and coarse sand, gray.					
50								
55								
			Bedrock encountered at 57.5 feet, roller cone drilled to 72'.					

Notes: 1. Used 3 5/8"x9" Acker field vane for shear strength testing.

2. Installed 3-inch inside diameter, close ended, Schedule 40 PVC casing in completed borehole. Casing was grouted into place using a cement-bentonite mixture. Casing filled with potable water.



Sheet 3 of 3

Casing Type: 4" Steel

Notes: 1. Used 3 5/8"x9" Acker field vane for shear strength testing.
2. Installed 3-inch inside diameter, close ended, Schedule 40 PVC casing in completed borehole. Casing was grouted into place using a cement-bentonite mixture. Casing filled with potable water.

APPENDIX C

2010 EXPLORATION LOGS

Geotechnical Engineering Services
Proposed Patrons Oxford Insurance Company Office Building
Portland, Maine

TEST BORING REPORT

Boring No. HA10-6

Project Rand Road Office Park Planned Unit Development, Portland, Maine
 Client Woodard & Curran
 Contractor Maine Test Borings

File No. 34981-000
 Sheet No. 1 of 1
 Start 9 August 2010
 Finish 9 August 2010
 Driller R. Leonard
 H&A Rep. M. Snow

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	SSA	S	--	Rig Make & Model: Mobile B-53
Inside Diameter (in.)	--	1.375	--	Bit Type: Cutting Head
Hammer Weight (lb)	--	140	-	Drill Mud: None
Hammer Fall (in.)	--	30	-	Casing: SSA to 10.0 ft
				Hoist/Hammer: Winch / Safety Hammer
				PID Make & Model: NA

Elevation 66.5 (approx.)
 Datum NGVD 29

Location
 N 302,826.0
 E 2,909,875.0

Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Density/consistency, color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel					Sand					Field Test			
							% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength				
0	2	S1	0.0	0.3	OL/OH	-FOREST MAT-														
	3	14	2.0		SM	Medium dense, gray and brown, silty SAND (SM), mps 0.42 mm, no odor, dry						85	15							
	8			1.5	CL	Medium stiff, gray-brown, lean CLAY (CL) with organic matter, mps 0.075 mm, no odor, dry						100								
	9	S2	2.0	2.0	SM	Medium dense, brown, mottled, silty SAND (SM) with organics, mps 0.42 mm, no odor, moist						85	15							
	16	22	4.0			Note: Water encountered at approximately 4.0 ft.														
	13				SM	Medium dense, brown, mottled, silty SAND (SM) with organics, with occasional gray-brown, mottled, lean clay layers, mps 0.42 mm, no odor, wet						85	15							
	7	S3	4.0	6.0		-MARINE DEPOSIT-														
5	5	17	6.0		SM	Medium dense, brown, mottled, silty SAND (SM), mps 0.42 mm, no odor, wet						85	15							
	8																			
	7	S4	6.0	8.0	SM	Medium dense, brown, mottled, silty SAND (SM), mps 0.42 mm, no odor, wet						85	15							
	12	19	8.0																	
	9	S5	8.0	8.0	CL	Very stiff, gray-brown, mottled, lean CLAY (CL) with organics, mps <1 mm, no odor, wet						100								
	2	24	10.0		SM	Very loose, brown-gray, mottled, silty SAND (SM), mps 0.42 mm, no odor, wet						85	15							
	2																			
	2				CL	Soft, gray, mottled, lean CLAY (CL), mps <1 mm, no odor, wet						100								
10				10.0		Bottom of Exploration at 10.0 ft														
						Note: No refusal.														

Water Level Data						Sample ID		Well Diagram		Summary	
Date	Time	Elapsed Time (hr.)	Depth (ft) to:			O - Open End Rod T - Thin Wall Tube U - Undisturbed Sample S - Split Spoon Sample		 Riser Pipe  Screen  Filter Sand  Cuttings  Grout  Concrete  Bentonite Seal		Overburden (ft) 10.0 Rock Cored (ft) 0.0 Samples 5S	Boring No. HA10-6
			Bottom of Casing	Bottom of Hole	Water						

Field Tests: Dilatancy: R - Rapid S - Slow N - None Plasticity: N - Nonplastic L - Low M - Medium H - High
 Toughness: L - Low M - Medium H - High Dry Strength: N - None L - Low M - Medium H - High V - Very High

*Note: Maximum particle size is determined by direct observation within the limitations of sampler size.

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Project	Rand Road Office Park Planned Unit Development, Portland, Maine
Client	Woodard & Curran
Contractor	Maine Test Borings

File No. 34981-000
Sheet No. 1 of 3
Start 10 August 2010
Finish 11 August 2010
Driller R. Leonard

H&A Rep. M. Snow

Elevation	66.5 (approx.)
Datum	NGVD 29

Location	N 302,717.0
	E 2,909.844.0

[illegible]

Water Level Data						Sample ID	Well Diagram	Summary
Date	Time	Elapsed Time (hr.)	Depth (ft) to:		Water	O - Open End Rod T - Thin Wall Tube U - Undisturbed Sample S - Split Spoon Sample	Riser Pipe Screen Filter Sand Cuttings Grout Concrete Bentonite Seal	Overburden (ft) 52.0 Rock Cored (ft) 0.0 Samples 13S
			Bottom of Casing	Bottom of Hole				Boring No. HA10-7(OW)
8/10/10	12:10	0	In Well	13.0	0.8			

Field Tests:	Dilatancy: R - Rapid S - Slow N - None	Plasticity: N - Nonplastic L - Low M - Medium H - High
	Toughness: L - Low M - Medium H - High	Dry Strength: N - None L - Low M - Medium H - High V - Very High

*Note: Maximum particle size is determined by direct observation within the limitations of sampler size.

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

TEST BORING REPORT

Boring No. HA10-7(OW)

File No. 34981-000

Sheet No. 2 of 3

Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	Well Diagram	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Density/consistency, color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel		Sand		% Fines	Field Test			
								% Coarse	% Fine	% Coarse	% Medium		% Fine	Dilatancy	Toughness	Plasticity
15	WOR WOR WOM WOM	S6 24	15.0 17.0			CL	Soft to medium stiff, gray, lean CLAY (CL), mps < 1 mm, no odor, wet FV1, 15.4 to 16.0 ft: Raw torque=14/0 ft-lbs, Su=520/0 psf FV2, 16.4 to 17.0 ft: Raw torque=11/1 ft-lbs, Su=410/40 psf					100				
20	WOM WOM WOM WOM	S7 24	20.0 22.0			CL	Soft to medium stiff, gray, lean CLAY (CL) with black streaks, mps < 1 mm, no odor wet -MARINE DEPOSIT-					100				
25	WOR WOR WOR WOR	S8 22	25.0 27.0			CL	Very soft to soft, gray, lean CLAY (CL) with black streaks, mps < 1 mm, no odor, wet FV3, 25.4 to 26.0 ft: Raw torque=3/1 ft-lbs, Su=110/40 psf FV4, 26.4 to 27.0 ft: Raw torque=10/1 ft-lbs, Su=370/40 psf					100				
30	WOR WOR WOR WOR	S9 24	30.0 32.0			CL	Very soft to soft, gray, lean CLAY (CL) with black streaks, mps < 1 mm, no odor, wet -MARINE DEPOSIT-					100				
35	WOR WOR WOR WOR	S10 24	35.0 37.0			CL	Soft to medium stiff, gray, lean CLAY (CL) with black streaks, mps < 1 mm, no odor, wet FV5, 35.4 to 36.0 ft: Raw torque=15/1 ft-lbs, Su=560/40 psf FV6, 36.4 to 37.0 ft: Raw torque=10/1 ft-lbs, Su=370/40 psf					100				

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. HA10-7(OW)

TEST BORING REPORT

Boring No. HA10-7(OW)

File No. 34981-000

Sheet No. 3 of 3

Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	Well Diagram	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Density/consistency, color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel		Sand		Fines		Field Test			
								% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength
40	WOR WOR WOM WOM	S11 18	40.0 42.0			CL	Soft to medium stiff, gray, lean CLAY (CL) with black streaks, mps < 1 mm, no odor, wet -MARINE DEPOSIT-						100				
45	WOR WOR WOM 1	S12 18	45.0 47.0			CL	Medium stiff, gray, lean CLAY (CL) with black streaks, mps < 1 mm, no odor, wet, gray fine sand layer at 46.8 ft FV7, 45.4 to 46.0 ft: Raw torque=23/1 ft-lbs, Su=850/40 psf FV8, 46.0 to 46.8 ft: Raw torque=23/6 ft-lbs, Su=850/220 psf Note: Vane would not push past 46.8 ft. Drill action indicates probable sand layers from 47.0 to 50.0 ft.					5	95				
50	2 5 11 17	S13 20	50.0 52.0		50.7	CL	Very stiff, gray, lean CLAY (CL), mps 2.0 mm, no odor, wet				5	5	90				
					52.0	SM	Medium dense, gray, silty SAND (SM) with gravel, mps 0.50 in., well bonded, no odor, wet -GLACIAL TILL-	15	10	35	25	15					
							Bottom of Exploration at 52.0 ft Observation well installed in completed borehole. See Observation Well Installation Report for details. Note: FV indicates 2"x7" in-situ field vane shear test performed at depth interval shown.										

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. HA10-7(OW)

TEST BORING REPORT

Boring No. HA10-9

Project Rand Road Office Park Planned Unit Development, Portland, Maine
 Client Woodard & Curran
 Contractor Maine Test Borings

File No. 34981-000
 Sheet No. 1 of 1
 Start 10 August 2010
 Finish 10 August 2010
 Driller R. Leonard
 H&A Rep. M. Snow

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	SSA	S	--	Rig Make & Model: Mobile B-53
Inside Diameter (in.)	--	1.375	--	Bit Type: Cutting Head
Hammer Weight (lb)	--	140	-	Drill Mud: None
Hammer Fall (in.)	--	30	-	Casing: SSA to 10.0 ft
				Hoist/Hammer: Winch / Safety Hammer
				PID Make & Model: NA

Elevation 67.0 (approx.)
 Datum NGVD 29

Location
 N 302,638.0
 E 2,909,662.0

Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Density/consistency, color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel		Sand		Fines		Field Test			
							% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength
0	1	S1	0.0	0.3	OL/	-FOREST MAT-										
	1	18	2.0		OH	Soft, gray-brown to dark brown, sandy SILT (ML) with roots, mps 0.42 mm, no odor, moist					40	60				
	3			1.0	ML											
	3				SM	-TOPSOIL-					85	15				
						Very loose, brown-gray, silty SAND (SM) with occasional organics, mps 0.42 mm, no odor, moist										
	5	S2	2.0			Similar to above except medium dense										
	6	18	4.0													
	7															
	12			3.4	ML/	Stiff, gray-brown, mottled SILT (ML) to lean CLAY (CL), mps 0.42 mm, no odor, moist to wet					5	95				
				4.0	CL											
	4	S3	4.0		SP-SM	Medium dense, brown-gray, mottled, poorly graded SAND with silt (SP-SM), occasional gray lean clay lenses, mps 0.42 mm, no odor, wet					90	10				
	10	19	6.0		SM											
	10					Note: Water encountered at approximately 4.0 ft.										
5						-MARINE DEPOSIT-										
	4	S4	6.0	6.5	ML/	Stiff, brown-gray, sandy SILT (ML) to loose, silty SAND (SM) with occasional gray, mottled, lean clay layers, mps 0.42 mm, no odor, wet					40	60				
	3	21	8.0		SM											
	7															
	4															
	1	S5	8.0	8.3	CL	Very soft, gray, lean CLAY (CL), mps <1 mm, no odor, wet					100					
	1	24	10.0													
	1					-MARINE DEPOSIT-										
	1															
10				10.0		Bottom of Exploration at 10.0 ft										
						Note: No refusal.										

Water Level Data						Sample ID		Well Diagram		Summary	
Date	Time	Elapsed Time (hr.)	Depth (ft) to:			O - Open End Rod T - Thin Wall Tube U - Undisturbed Sample S - Split Spoon Sample		 Riser Pipe  Screen  Filter Sand  Cuttings  Grout  Concrete  Bentonite Seal		Overburden (ft) 10.0 Rock Cored (ft) 0.0 Samples 5S	Boring No. HA10-9
			Bottom of Casing	Bottom of Hole	Water						

Field Tests: Dilatancy: R - Rapid S - Slow N - None Plasticity: N - Nonplastic L - Low M - Medium H - High
 Toughness: L - Low M - Medium H - High Dry Strength: N - None L - Low M - Medium H - High V - Very High

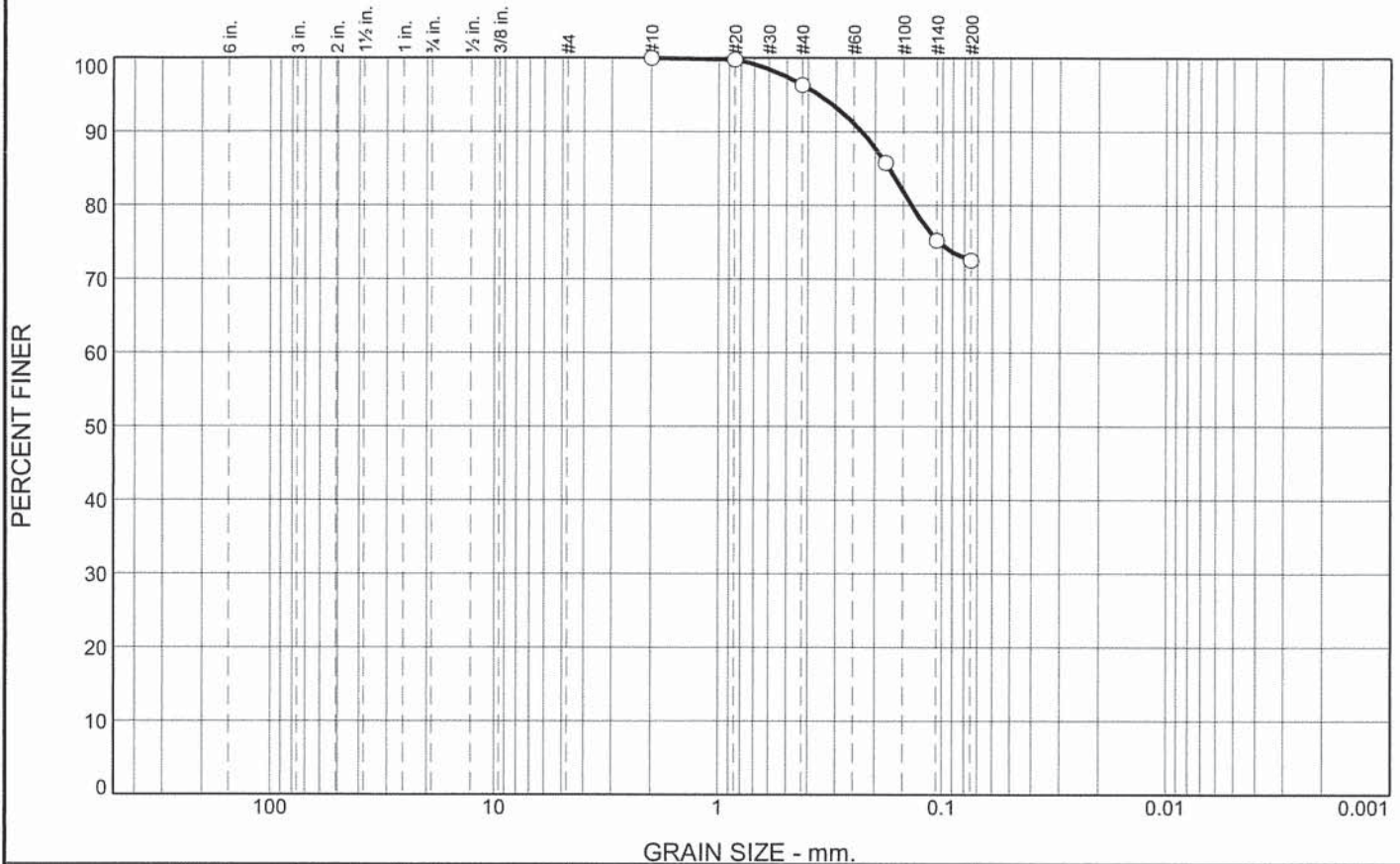
*Note: Maximum particle size is determined by direct observation within the limitations of sampler size.

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

APPENDIX D
LABORATORY TEST RESULTS

Geotechnical Engineering Services
Proposed Patrons Oxford Insurance Company Office Building
Portland, Maine

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	3.6	23.9	72.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#20	99.8		
#40	96.4		
#80	85.8		
#140	75.3		
#200	72.5		

* (no specification provided)

Sample No.: S-2
Location: Portland, ME

Source of Sample: B-3

Date: 8/24/15
Elev./Depth: 5'-7'

**R.W. Gillespie
& Associates, Inc.
Saco, Maine**

Client: Patrons Oxford Insurance Inc.
Project: Proposed Patrons Oxford Insurance Building

Project No: 1518-002

Lab No. 13687a

Soil Description

silt with sand

Atterberg Limits

PL=

LL=

PI=

Coefficients

D₈₅= 0.1731

D₆₀=

D₅₀=

D₃₀=

D₁₅=

D₁₀=

C_u=

C_c=

Classification

USCS= ML

AASHTO= A-4(0)

Remarks

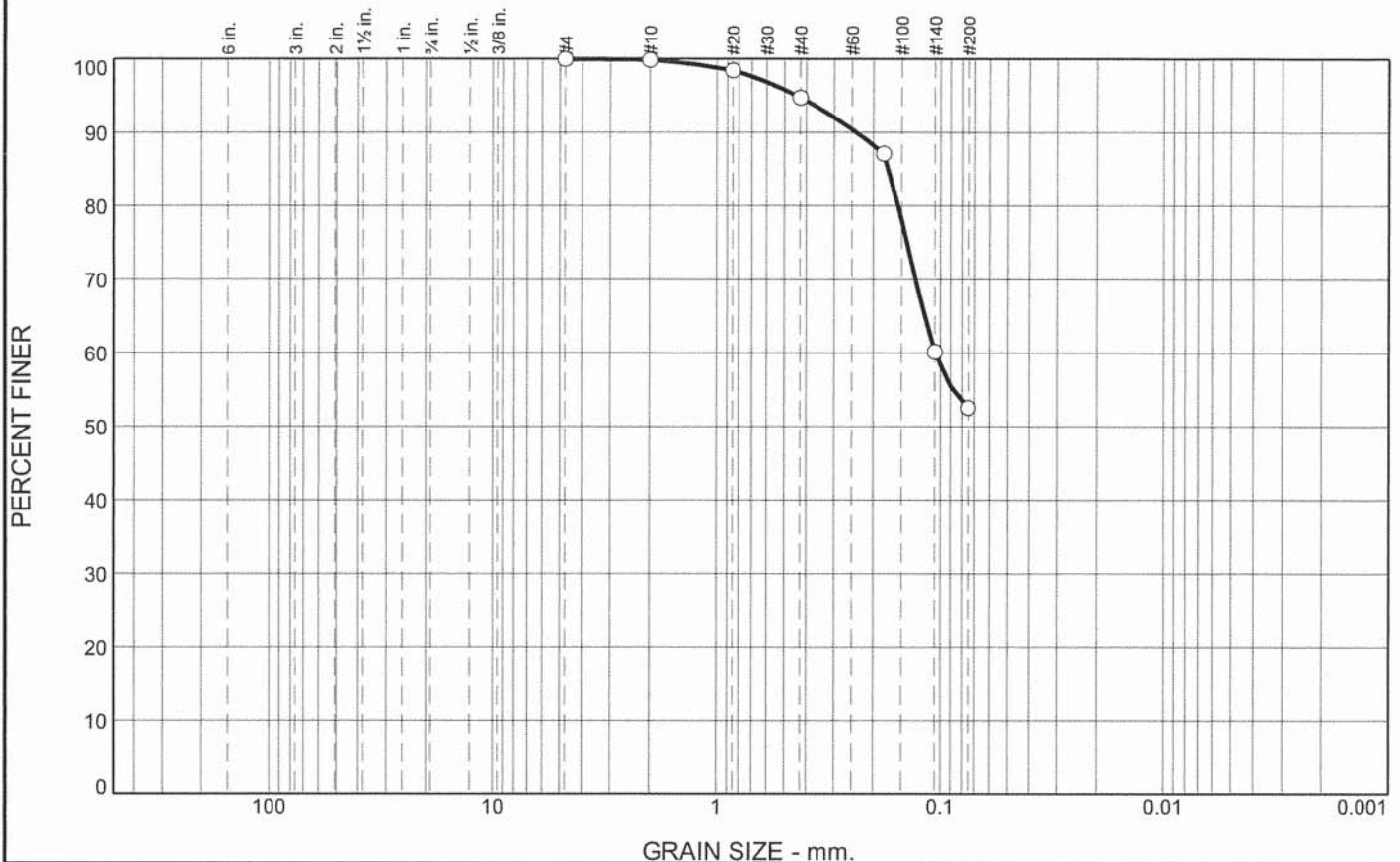
Moisture Content: 24.5%

Tested By: JMB

Checked By: MTG

MP

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.1	5.1	42.3	52.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#20	98.4		
#40	94.8		
#80	87.1		
#140	60.2		
#200	52.5		

* (no specification provided)

Soil Description
sandy silt

Atterberg Limits
PL= LL= PI=

Coefficients
D₈₅= 0.1714 D₆₀= 0.1056 D₅₀=
D₃₀= D₁₅= D₁₀=
C_u= C_c=

Classification
USCS= ML AASHTO= A-4(0)

Remarks
Moisture Content: 27.6%

Sample No.: S-2
Location: Portland, ME

Source of Sample: B-6

Date: 8/24/15
Elev./Depth: 5'-7'

**R.W. Gillespie
& Associates, Inc.
Saco, Maine**

Client: Patrons Oxford Insurance Inc.
Project: Proposed Patrons Oxford Insurance Building

Project No: 1518-002

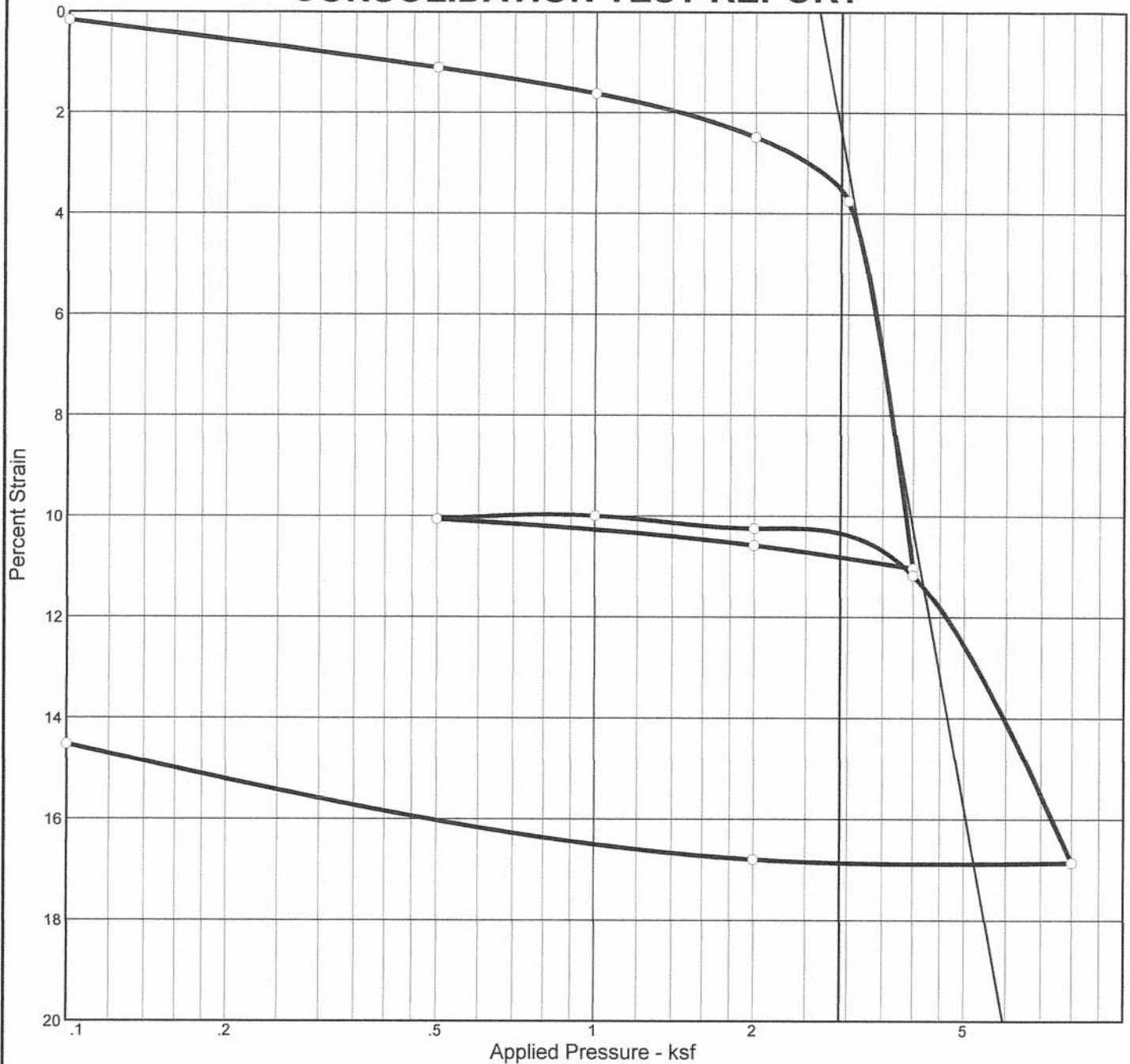
Lab No. 13687b

Tested By: JMB

Checked By: MTG

MTG

CONSOLIDATION TEST REPORT



Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (ksf)	P_c (ksf)	C_c	C_r	Initial Void Ratio
Saturation	Moisture									
96.5 %	46.5 %	73.9			2.76		3.06	1.32	0.03	1.331

MATERIAL DESCRIPTION								USCS	AASHTO
Silty Clay									

Project No. 1518-002 Client: Patrons Oxford Insurance Inc.			Remarks: Tested By: JMB
Project: Proposed Patrons Oxford Insurance Building			
Source: B-8	Sample No.: U-1	Elev./Depth: 15-17'	
R.W. Gillespie & Associates, Inc. Saco, Maine			
			Lab No. 13662

Laboratory Vane Shear Test Results

ASTM D4648 Standard Test Method for Laboratory Miniature Vane Shear Test for Saturated Fine-Grained Clayey Soil

Project: Proposed Patrons Oxford Insurance Building
Client: Patrons Oxford Insurance
Project No.: 1518-002

Location: Portland, ME
Date: 7/27/2015
Test Depth: 15 to 17

Boring/Sample No.		B-8, U-1			Lab No.	13662	
Test No.	Test Depth (ft)	Vane Size	Max. Torque (Undisturbed) (kg-cm)	Max. Torque (Remolded) (kg-cm)	Undrained Shear Strength (psf)	Undrained Shear Strength (psf)	Moisture Content
1	15.1	L	34	0	355	0	47%
2	15.35	L	38	0	397	0	46%
3	16.3	L	30	0	313	0	47%
4	16.55	L	32	0	334	0	46%

Vane Size	
	(mm)
S	16 x 32
M	20 x 40
L	24.5 x 50.8

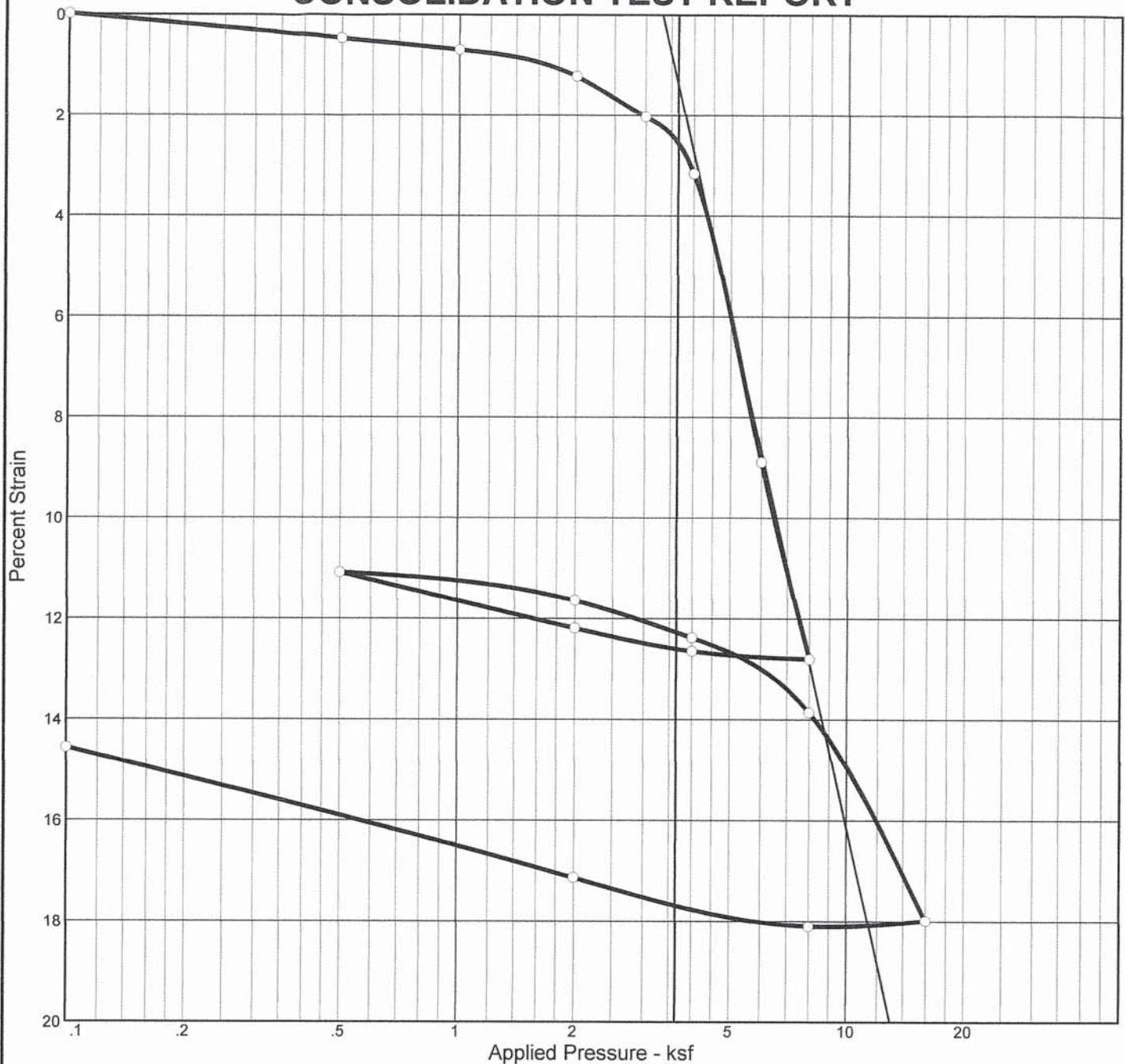
Tested By: JMB

Checked By: MTG



R.W. Gillespie & Associates

CONSOLIDATION TEST REPORT



Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (ksf)	P _c (ksf)	C _c	C _r	Initial Void Ratio
Saturation	Moisture									
101.1 %	47.3 %	75.2			2.76		4.01	0.77	0.04	1.291

MATERIAL DESCRIPTION								USCS	AASHTO
Silty Clay									

Project No. 1518-002			Client: Patrons Oxford Insurance Inc.			Remarks: Tested By: JMB
Project: Proposed Patrons Oxford Insurance Building						
Source: B-8		Sample No.: U-2		Elev./Depth: 30-32'		
R.W. Gillespie & Associates, Inc. Saco, Maine						
						Lab No. 13663

Laboratory Vane Shear Test Results

ASTM D4648 Standard Test Method for Laboratory Miniature Vane Shear Test for Saturated Fine-Grained Clayey Soil

Project: Proposed Patrons Oxford Insurance Building	Location: Portland, ME
Client: Patrons Oxford Insurance	Date: 7/27/2015
Project No.: 1518-002	Test Depth: 30' to 32'

Boring/Sample No.		B-8, U-2			Lab No.	13663	
Test No.	Test Depth (ft)	Vane Size	Max. Torque (Undisturbed) (kg-cm)	Max. Torque (Remolded) (kg-cm)	Undrained Shear Strength (psf)	Undrained Shear Strength (psf)	Moisture Content
1	30.2	L	48	0	501	0	47%
2	30.45	L	46	0	480	0	45%
3	31.2	L	48	0	501	0	44%
4	31.45	L	32	0	334	0	45%

Vane Size	
	(mm)
S	16 x 32
M	20 x 40
L	24.5 x 50.8

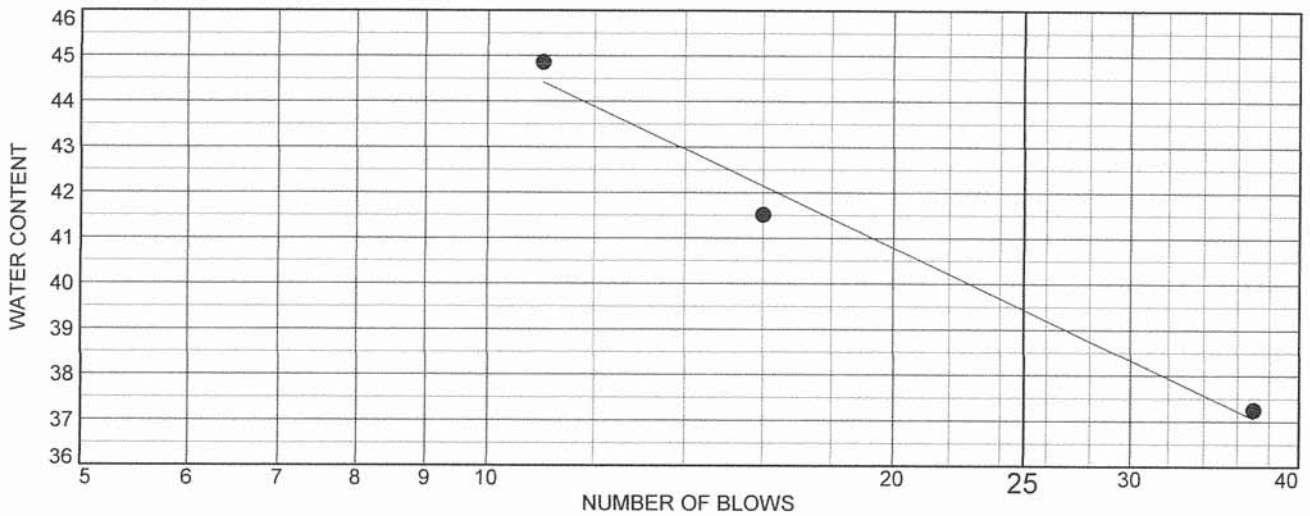
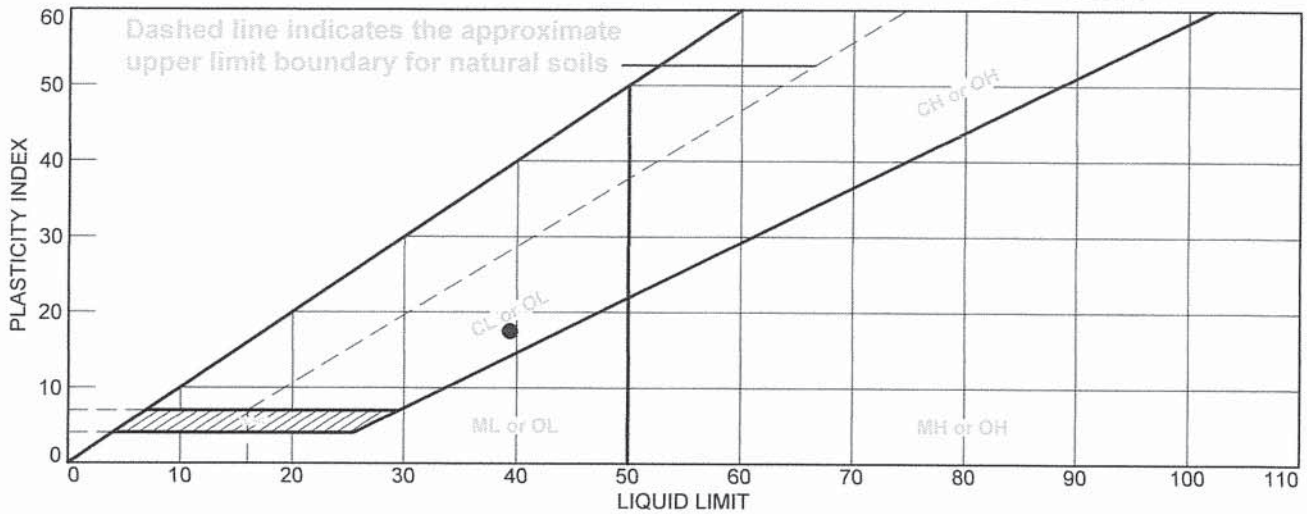
Tested By: JMB

Checked By: MTG



R.W. Gillespie & Associates

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Silty Clay	39.4	21.9	17.5			

Project No. 1518-002 Client: Patrons Oxford Insurance Inc.

Project: Proposed Patrons Oxford Insurance Building

● Source of Sample: B-8 Depth: 15-17' Sample Number: U-1

R.W. Gillespie & Associates, Inc.

Saco, Maine

Remarks:

Lab No. 13736

Tested By: JMB

Checked By: MTG

APPENDIX E

**REPORT OF CROSSHOLE SEISMIC TESTING BY
HAGER-RICHTER GEOSCIENCE, INC.**

Geotechnical Engineering Services
Proposed Patrons Oxford Insurance Company Office Building
Portland, Maine

**CROSSHOLE SEISMIC TESTING
LOT 4 - PORTLAND TECHNOLOGY PARK
PORTLAND, MAINE**

Prepared for:

R.W. Gillespie & Associates, Inc.
86 Industrial Park Road, Suite 4
Saco, Maine 04072

Prepared by:

Hager-Richter Geoscience, Inc.
8 Industrial Way, D10
Salem, New Hampshire 03079

File 15J69
October, 2015

0. EXECUTIVE SUMMARY

Hager-Richter Geoscience, Inc. (Hager-Richter) conducted crosshole seismic testing in one two-borehole array at the Lot 4 site located at the Portland Technology Park in Portland, Maine for R.W. Gillespie & Associates, Inc. (RWG) in September, 2015. The crosshole seismic testing is part of geotechnical investigations for future development. The testing was conducted in accordance with ASTM D4428/D4428 M-07 "Standard Test Methods for Crosshole Seismic Testing."

The objective of the crosshole seismic testing was to determine shear wave velocity (V_s) as a function of depth at the specified location for the determination of seismic site class.

On the basis of the crosshole seismic testing conducted in a two-borehole array at the Lot 4 site located at the Portland Technology Park in Portland, Maine we conclude that the velocity of shear waves, (V_s) varies with depth, Z , as tabulated in Table 1, and as follows:

Z (ft)	V_s (ft/s)	Comments
2.5 - 8.5	$15.362 * Z + 540.32$	$N = 3, r^2 = .99$
8.5 - 57	$8.0266 * Z + 241.03$	$N = 16, r^2 = 0.94$
57- 68.5	5264	$N = 6, \text{Std } 85 \text{ ft/s, } 1.6\% \text{ mean}$

The average velocity of shear waves for the upper 100 ft, assuming bedrock velocity to 100 ft depth is the same as the model value determined for the interval 57 - 68.4 ft, was determined to be 804 ft/s, and corresponds to Seismic Site Class D based solely on the on average shear wave velocity table in the IBC.

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7. Composite Seismograms
8. Model Vs

APPENDICES

- 1 Boring Logs for B-101A and B-101B
- 2 Deviation Data

1. INTRODUCTION

Hager-Richter Geoscience, Inc. (Hager-Richter) conducted crosshole seismic testing in one two-borehole array at the Lot 4 site located at the Portland Technology Park in Portland, Maine for R.W. Gillespie & Associates, Inc. (RWG) of Saco, Maine, in September, 2015. The crosshole seismic testing is part of geotechnical investigations for future development. The project site is located southeast of the Interstate 95 - State Route 25 Interchange on an unnamed access road. The general location of the Site is shown in Figure 1. The testing was conducted in accordance with ASTM D4428/D4428 M-07 "Standard Test Methods for Crosshole Seismic Testing."

The two boreholes were designated by RWG as GB-101 and GB-102, and both were terminated in bedrock at 72 feet below ground surface. Bedrock at this location is mapped as the Vassalboro Formation according to the Bedrock Geologic Map of Maine. The approximate locations of the boreholes are shown in Figure 2. The boring logs are included in Appendix 1, and report the stratigraphy penetrated by the borings from surface downward as follows:

GB-101

2 feet of fill
7 feet of silty sand
38 feet of silty clay
10 feet of silty sand
bedrock of the Vassalboro Fm,
encountered at 57 feet

GB-101

4 inches of soil
8.5 feet of silty sand
36 feet of silty clay
10.5 feet of silty sand
bedrock of the Vassalboro Fm,
encountered at 57.5 feet

The objective of the crosshole seismic testing was to determine the velocity of shear waves as a function of depth and for the determination of seismic site class.

The crosshole seismic testing was conducted on September 24, 2015 by Michael Howley, P.G., and Bryan Carnahan of Hager-Richter. The project was coordinated with Mr. Chris Morrell, of RWG, who was present for the duration of the field work. Field work and subsequent data processing were performed in accordance with ASTM D4428/D4428 M-07 "Standard Test Methods for Crosshole Seismic Testing." The project records will be kept for a minimum of three years.

2. CROSSHOLE SEISMIC TESTING

2.1 General

As noted in the Introduction, the testing was performed in substantial conformance with ASTM D4428/D4428 M-07 "Standard Test Methods for Crosshole Seismic Testing."

2.2 Field Procedures

The two-borehole method was used. The ASTM document specifies the construction details of the boreholes, including a requirement for grouting the casing from bottom to top. The grout provides a path for the elastic signals from the source to the borehole wall in one borehole and from the borehole wall to the geophone in one or more other boreholes. The displacement of each borehole from its location on the surface was measured with a deviation probe, providing the data necessary to calculate the distance between the boreholes.

The geometry of the testing system is shown in Figure 3. The source and geophone are positioned at the same elevation. The source generates a seismic signal that travels as an elastic wave to the geophones, where it is converted to an electric signal, sent to the seismograph via cable, and amplified, filtered, and recorded by the seismograph. Figure 4 is a photograph that shows the physical setup for the testing in the field.

The seismograph is a 24-channel seismograph (Geometrics Geode), coupled to a downhole geophone assembly. The downhole geophone assembly includes a Mark Products triaxial geophone and a mechanical clamping mechanism to secure the assembly to the inside of the casing. The vertical axis of the geophone is oriented vertically (because it is constrained by the borehole), and the horizontal axes are oriented such that one axis is parallel to the direction source-to-receiver and the other axis is perpendicular to that direction. The seismograph records data digitally and the records are available immediately to verify the quality of the data.

The source is a downhole hammer that produces primarily a vertically polarized shear wave but also a compressional wave. The direction of first motion of the shear wave can be reversed, thereby facilitating recognition of the onset of the shear waves at the geophone(s). The number of stacks per shot depth/direction is variable, and the quality of the stacked seismic signal for each shot depth/direction is verified in the field.

The deviation probe is a Mount Sopris downhole tool 2DVA-1000 that was operated with a Mount Sopris MGX-2 portable logger. The downhole tool includes a 3-axis magnetometer and three accelerometers. The manufacturer's stated accuracy is Azimuth $\pm 1^\circ$ and Inclination

±0.3°. Additional specifications and the manual for the deviation probe are available on the website www.mountsopris.com.

2.3 Data Analysis

2.3.1 Velocity. The seismic data are analyzed using the digital data and commercially available software. The arrival times for the shear and compressional waves at each geophone are determined from the digital seismic data. The *apparent*¹ velocities are calculated for each depth from the arrival times and the distances between the boreholes as follows:

$$V_s (S-R) = L (S-R) / \Delta T_s (S-R) \quad \text{Eq 2.3-1}$$

$$V_p (S-R) = L (S-R) / \Delta T_p (S-R) \quad \text{Eq 2.3-2}$$

where:

V is the velocity, with subscripts S and P indicating shear and compressional waves, respectively,

L (S-R) is the distance between borings containing the Source and Receiver;

ΔT (S-R) is the time of transit of elastic energy from the Source to Receiver, averaged for source up and down, and with subscripts as defined for V.

The assumptions inherent in Equations 1 and 2 are that the medium is isotropic and homogeneous within layers, the interface between layers is horizontal, and the displacements are small.

The velocities determined with Equations 1 and 2 are *apparent* velocities. The actual velocities would be determined by correcting for the effects of refraction, if refraction is present, using Snell's Law, which for any two layers is given by

$$\sin \alpha_1 / \sin \alpha_2 = V_1 / V_2 \quad \text{Eq 2.3-3}$$

where

α_1 is the angle of incidence,

α_2 is the angle of the refracted wave, and

V_1 and V_2 are the velocities of layers 1 and 2, respectively.

¹ Apparent velocity is the distance between the source and the receiver divided by the time required for the seismic signal to travel from the source to the receiver.

2.4 Determination of Average Shear Wave Velocity for Building Code Purposes.

The Building Code uses the average shear wave velocity averaged over the upper 100 ft as one method to determine Seismic Site Class. The average velocity V_{avg} is defined as follows:

$$V_{avg} = \left(\sum_{i=1}^N d_i \right) / \sum_{i=1}^N d_i / V_i \quad \text{Eq. 2.4 -1}$$

where V_{avg} is average shear wave velocity
 d_i is thickness of the i^{th} layer
 V_i is the shear wave velocity of the i^{th} layer
 N is the number of layers

Equation 2.4-1 assumes that the velocity is constant in each layer. Such, however, is not always the case, and a function of the form $Y = a * X + b$ often fits the observed data well. For sections in which the velocity varies as $Y = a * X + b$, the denominator of Eq 2.4-1 can be replaced with the following integral:

$$\int_{Z_1}^{Z_2} dZ / (aZ + b) = [Ln(aZ_2 + b) - Ln(aZ_1 + b)] / a$$

where Z_1 and Z_2 are the depths of top and bottom of the layer
in which the velocity varies as $Y = a * X + b$.

The Site Class, based on average shear wave velocity, is defined as follows:

Site Class	Soil Profile Name	Soil Shear Wave Velocity (ft/s)
A	Hard rock	$v_s > 5000$
B	Rock	$2500 < v_s \leq 5000$
C	Very dense soil and soft rock	$1200 < v_s \leq 2500$
D	Stiff soil profile	$600 \leq v_s \leq 1200$
E	Soft soil profile	$v_s < 600$

Although the IBC provides other methods to determine the Site Class, such as standard penetration resistance (blow counts) and soil undrained shear strength, this report uses only the method based on shear wave velocity. Furthermore, there is no consideration of other factors that may affect a site such as liquefaction. The final determination of seismic site class should be made by the project engineer.

2.5 Limitations of the Method

Like all geophysical methods, the crosshole seismic method is based on the assumption that the local geology is uncomplicated, and that rock and soil interfaces are planar. For those tests in which the signals are generated in a single boring only, the interfaces are assumed to be horizontal, and this assumption is inherent in correcting for refraction.

Thin units with velocities that are lower than the velocity of adjacent materials may not be detectable with the geometry of a particular installation. (The details important to this limitation are the velocities of adjacent materials, thickness of the units, and the distances as functions of depth between arrays.)

If deviation measurements are not available, then the distance between boreholes is *assumed* to be constant from the surface to the bottom of the boreholes. Although ASTM D4428 does not require deviation measurements to be made for borings with depths less than 50 ft, we have measured departures from vertical of several feet in borings that were only 30 ft deep.

If the casing in each borehole is not grouted in accordance with ASTM D4428, or the grout is not continuous, then the signal may be significantly degraded for at least some depths. The practical result is that the velocity determined under such conditions is less accurate at best, and in some cases may not be determinable. The acoustic noise in the subsurface can be a significant problem, particularly at active construction sites, and may interfere with the signals generated in the crosshole seismic testing. Drilling, pile driving, and the activity of heavy construction equipment have been especially troublesome at some sites.

2.6 Site Specific

The borings were reportedly constructed in accordance with the recommendations of ASTM D4428/D4428 M-07 "Standard Test Methods for Crosshole Seismic Testing." A deviation survey was performed by Hager-Richter in the two borings, and the data are given in Appendix 3. The distances between the boreholes for the crosshole testing were determined as a function of depth from the surface, and are reported in Table 1 and shown in Figure 5.

The maximum changes in separation of source and receiver boreholes was 1.4 feet, corresponding to 10.7 % of the distance between the boreholes on the surface (13.08 feet).

Crosshole seismic data were obtained at intervals of 2.5 feet from 2.5 to 67.5 feet depth, with an additional measurement at 68.5 feet depth. No more than 10 stacks of the seismic signals were required to increase the signal-to-noise ratio to an acceptable value.

3. RESULTS AND DISCUSSION

3.1 General

As discussed above, the measured seismic velocities are *apparent* velocities. The distances between borings and the apparent shear wave velocities are reported in Table 1 and are plotted as functions of depth in Figures 5 and 6, respectively.

As noted above, the boreholes were designated by RWG as GB-101 and GB-102, and both were terminated at 72 feet below ground surface. The approximate locations of the boreholes are shown in Figure 2 and Figure 4 is a photograph showing the test setup. The boring logs are included in Appendix 2, and report the stratigraphy penetrated by the borings from surface downward as follows:

GB-101

2 feet of fill
7 feet of silty sand
38 feet of silty clay
10 feet of silty sand
bedrock,
encountered at 57 feet

GB-101

4 inches of soil
8.5 feet of silty sand
36 feet of silty clay
10.5 feet of silty sand
bedrock,
encountered at 57.5 feet

The total depth available for the crosshole seismic testing was 72.0 feet.

3.2 Data Quality

The quality of seismic data is evaluated on the basis of the signal-to-noise (S/N) ratio and the ease with which the onset of the signal can be recognized visually. Only the initial arrival times are used in crosshole seismic testing. The noise for the shear wave (S-wave) includes not only ambient noise but noise due to the P-wave, which always arrives before the S-wave and its wave train continues for a finite time after the arrival of the S-wave. Recognition of the onset of the shear wave is improved significantly by recording and superimposing shear waves that are oppositely polarized.

The quality of seismic data acquired for this project is judged to be good to excellent with the exception of the data for the interval near and in bedrock, 55 - 68.5 ft, where the quality is judged to be poor-fair. The composite plot of the shear wave seismograms is shown in Figure 7. Reversed shear wave arrivals, generated by stacking the downhole source in opposing directions

at each depth, are evident in the seismogram, and are especially well developed in the overburden section between about 25 and 40 feet bgs.

3.3 Refraction Effects

As noted in section 2.3, the velocity obtained by dividing the distance between borings by the time required for the signal to travel between the borings, called *apparent* velocity, may not be the true velocity, especially where the source and receiver are located at a depth near an interface between two materials with different velocities and/or the distance between borings is large. The difference between apparent and true velocity is due to refraction. At some sites, even in the presence of refraction, the direct wave can be recognized and its time used to determine the velocity of the material with the slower velocity.

Examination of the apparent shear wave velocity data in Table 1 shows large velocity changes at the interface between the upper silty sand and silty clay between depths of 7.5 and 12.5 feet and at the interface between the silty sand and bedrock between depths of 50 and 57.5 feet. Based on modeling of the data using the measured velocities above and below the interfaces, we have determined that the apparent velocities at depths 10 feet, 52.5 feet, and 55 feet are due to refractions and are so noted on Table 1.

3.4 Results

As noted above, the distances between borings and the apparent shear wave velocities are reported in Table 1 and are plotted as functions of depth in Figures 5 and 6, respectively.

Our models of the velocities of shear (V_s) waves consist of two simple functions: (1) $Y = C$, where C is a constant determined by averaging, and (2) $Y = A \cdot X + B$, where A and B are constants determined by least squares for individual segments. The model for shear wave velocities is given in Table 2. The shear wave model is shown graphically in Figure 9.

Using the model velocities of shear waves as given in Table 2 – and assuming the bedrock velocity to 100 ft depth is the same as the model value determined for the interval 57 - 68.5 ft – and Eq. 2.4 -1 of Section 2.4, the average velocity of shear waves for the upper 100 ft, V_{s100} , was determined to be 804 ft/s, and corresponds to Seismic Site Class D based solely on the average shear wave velocity table in the IBC.

4. CONCLUSIONS

On the basis of the crosshole seismic testing conducted in a two-borehole array at the Lot 4 site located at the Portland Technology Park in Portland, Maine we conclude that the velocity of shear waves, (V_s) varies with depth, Z , as tabulated in Table 1, and as follows:

Z (ft)	V_s (ft/s)	Comments
2.5 - 8.5	$15.362 * Z + 540.32$	$N = 3, r^2 = .99$
8.5 - 57	$8.0266 * Z + 241.03$	$N = 16, r^2 = 0.94$
57- 68.5	5264	$N = 6$, Std 85 ft/s, 1.6% mean

The average velocity of shear waves for the upper 100 ft, assuming bedrock velocity to 100 ft depth is the same as the model value determined for the interval 57 - 68.4 ft, was determined to be 804 ft/s, and corresponds to Seismic Site Class D based solely on the on average shear wave velocity table in the IBC.

5. LIMITATIONS

This report was prepared for the exclusive use of R.W. Gillespie & Associates, Inc. and its client. Any use by any third party of this Report or any information, documents, records, data, interpretations, advice or opinions given to the Client by Hager-Richter Geoscience, Inc. in the performance of its work shall be at such third party's own risk and without any liability to Hager-Richter Geoscience, Inc.

Hager-Richter Geoscience, Inc. has performed its professional services, obtained its findings, and made its conclusions in accordance with generally accepted and customary principles and practices in the field of geophysics. No other warranty, either expressed or implied, is made. Hager-Richter Geoscience, Inc. is not responsible for the independent conclusions, opinions, or recommendations made by others based on the information, geophysical data, and interpretations presented in this report.

This geophysical testing included a limited set of data obtained at the project Site and was conducted with limited knowledge of the Site and its subsurface conditions. Hager-Richter Geoscience, Inc. does not assume responsibility for the accuracy of information that was provided to us by others about the Site and its subsurface conditions. The findings provided by Hager-Richter Geoscience, Inc. are based solely on the information described in this document. The conclusions drawn from this investigation are considered reliable; however, there may exist localized variations in subsurface conditions that have not been completely defined at this time. It should be noted that our conclusions might be modified if subsurface conditions were better delineated with additional subsurface exploration including, but not limited to, coring and laboratory testing.

TABLE 1
DISTANCE BETWEEN BOREHOLES AND
APPARENT VELOCITIES

Depth (ft)	Source-Receiver Distance (ft)	Shear Wave Travel Time (ms)	Apparent Shear Wave Velocity (ft/s)
2.5	13.08	22.50	581
5	13.10	21.41	612
7.5	13.11	19.93	658
10	13.13	23.52	558*
12.5	13.16	34.99	376
15	13.20	36.44	362
17.5	13.24	37.56	352
20	13.28	35.82	371
22.5	13.32	32.33	412
25	13.37	30.49	438
27.5	13.42	28.56	470
30	13.46	27.36	492
32.5	13.52	26.64	507
35	13.57	25.80	526
37.5	13.62	25.08	543
40	13.67	24.71	553
42.5	13.73	22.32	615
45	13.78	21.77	633
47.5	13.83	21.85	633
50	13.88	23.70	586
52.5	13.94	18.92	737*
55	14.00	10.04	1394*
57.5	14.07	2.68	5258
60	14.14	2.71	5219
62.5	14.22	2.69	5293
65	14.32	2.73	5238
67.5	14.44	2.67	5413
68.5	14.48	2.81	5162

*Apparent velocity due to refraction effects.

TABLE 2
MODEL VELOCITIES

Z (ft)	V_s (ft/s)	Comments
2.5 - 8.5	$15.362 * Z + 540.32$	$N = 3, r^2 = .99$
8.5 - 57	$8.0266 * Z + 241.03$	$N = 16, r^2 = 0.94$
57- 68.5	5264	$N = 6, \text{Std } 85 \text{ ft/s}, 1.6\% \text{ mean}$

Abbreviations:

N = Number of data points used
 r^2 = Coefficient of determination
Std = Standard Deviation



APPROXIMATE SCALE (feet)

0 1000 2000



Figure 1
General Site Location
Lot 4 – Portland Technology Park
Portland, Maine

File 15J69	October, 2015
HAGER-RICHTER GEOSCIENCE, INC. Salem, New Hampshire	

NOTE:

Modified from Google Earth Pro aerial photograph.

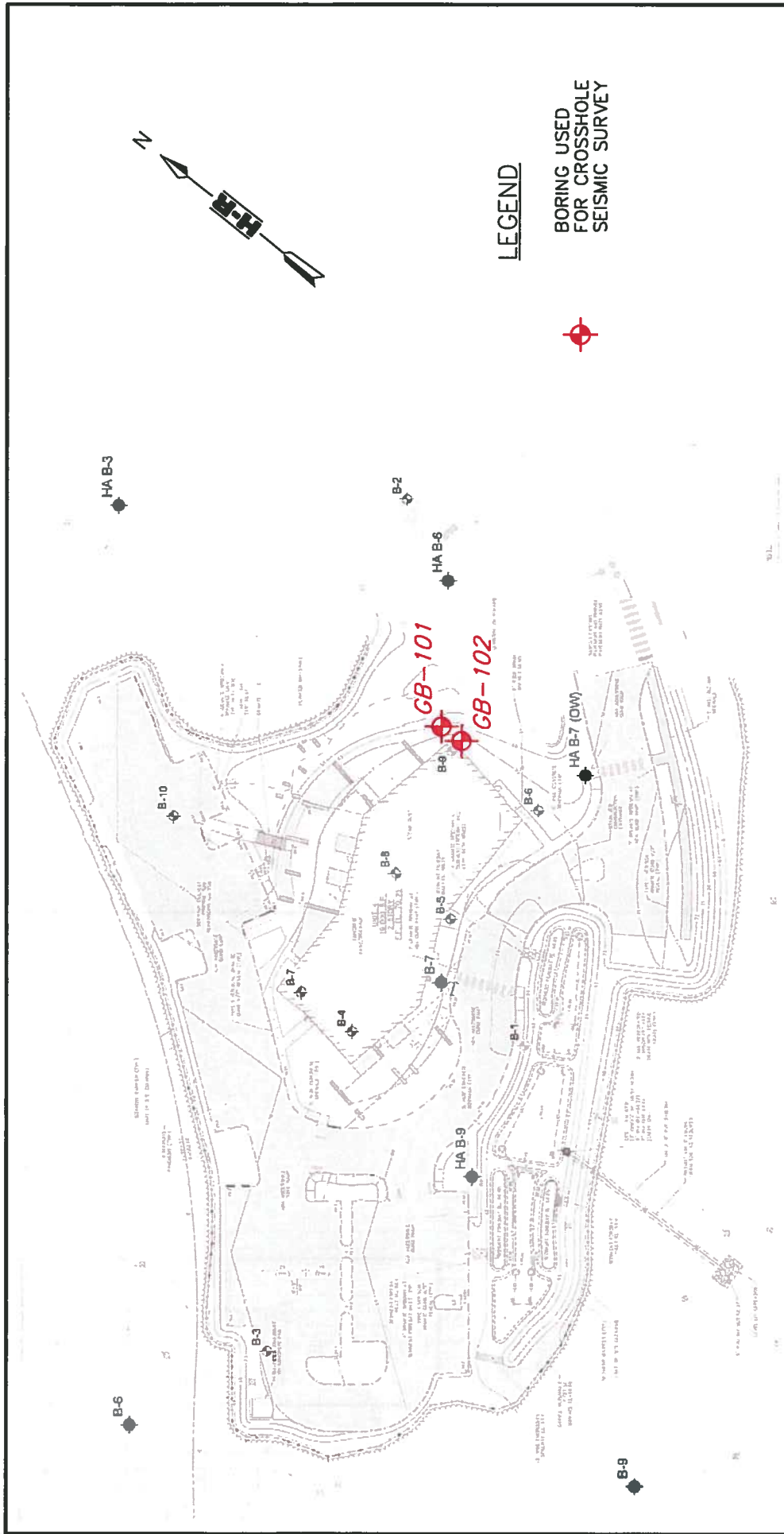
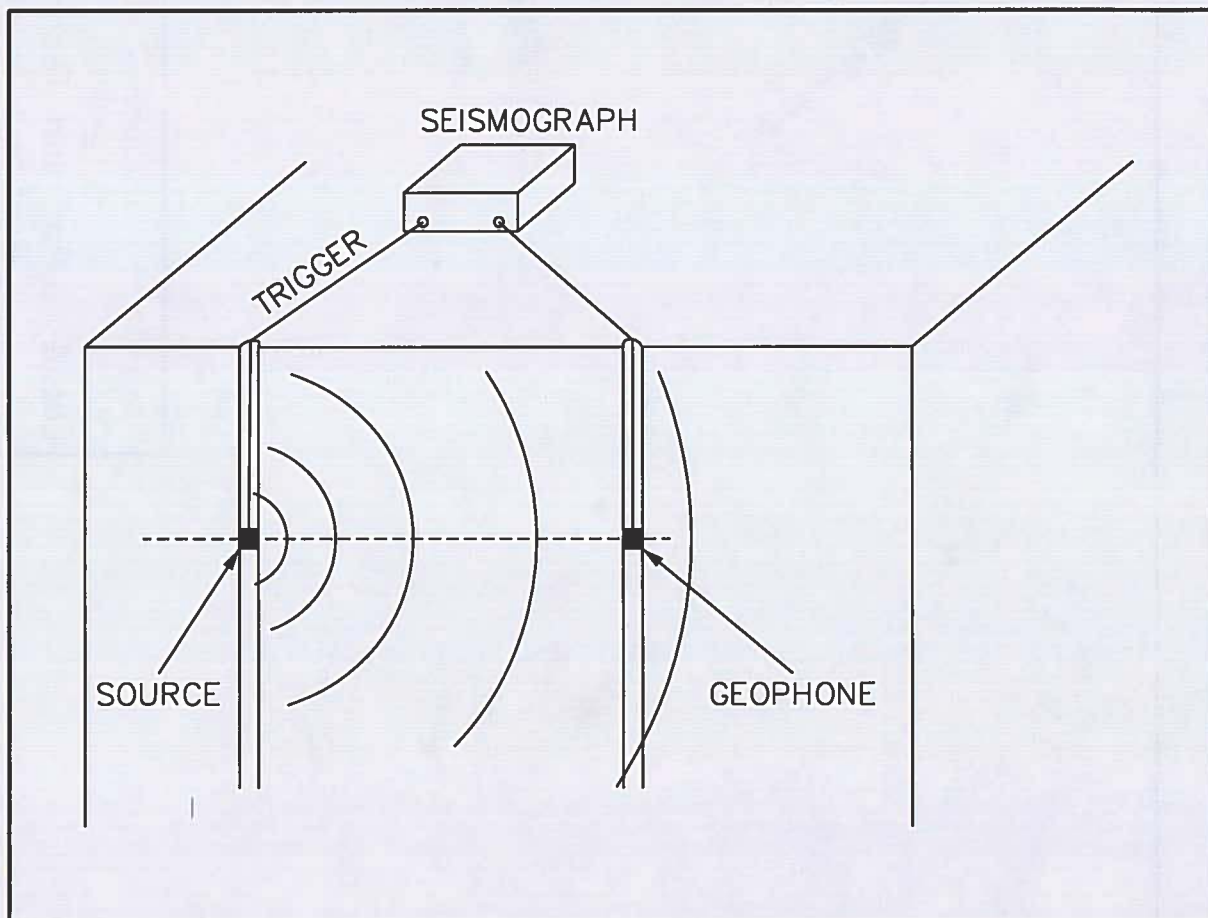


Figure 2 Site Plan	
Lot 4 - Portland Technology Park Portland, Maine	
File 15J69	October, 2015
HAGER-RICHTER GEOSCIENCE, INC. Salem, New Hampshire	



NOT TO SCALE

NOTE:

The source and receiver are placed at the same depths in different borings. A horizontally polarized shear wave is generated by the source, radiates in all directions, travels at the speed determined by the elastic properties and density of the soils, and is detected by the geophone in the receiver boring. When the wave is initiated, a signal is transmitted to the seismograph to start a timing clock, and the wave is recorded as a function of time in the seismograph.

Figure 3
Survey Geometry
Lot 4 – Portland Technology Park
Portland, Maine

File 15J69

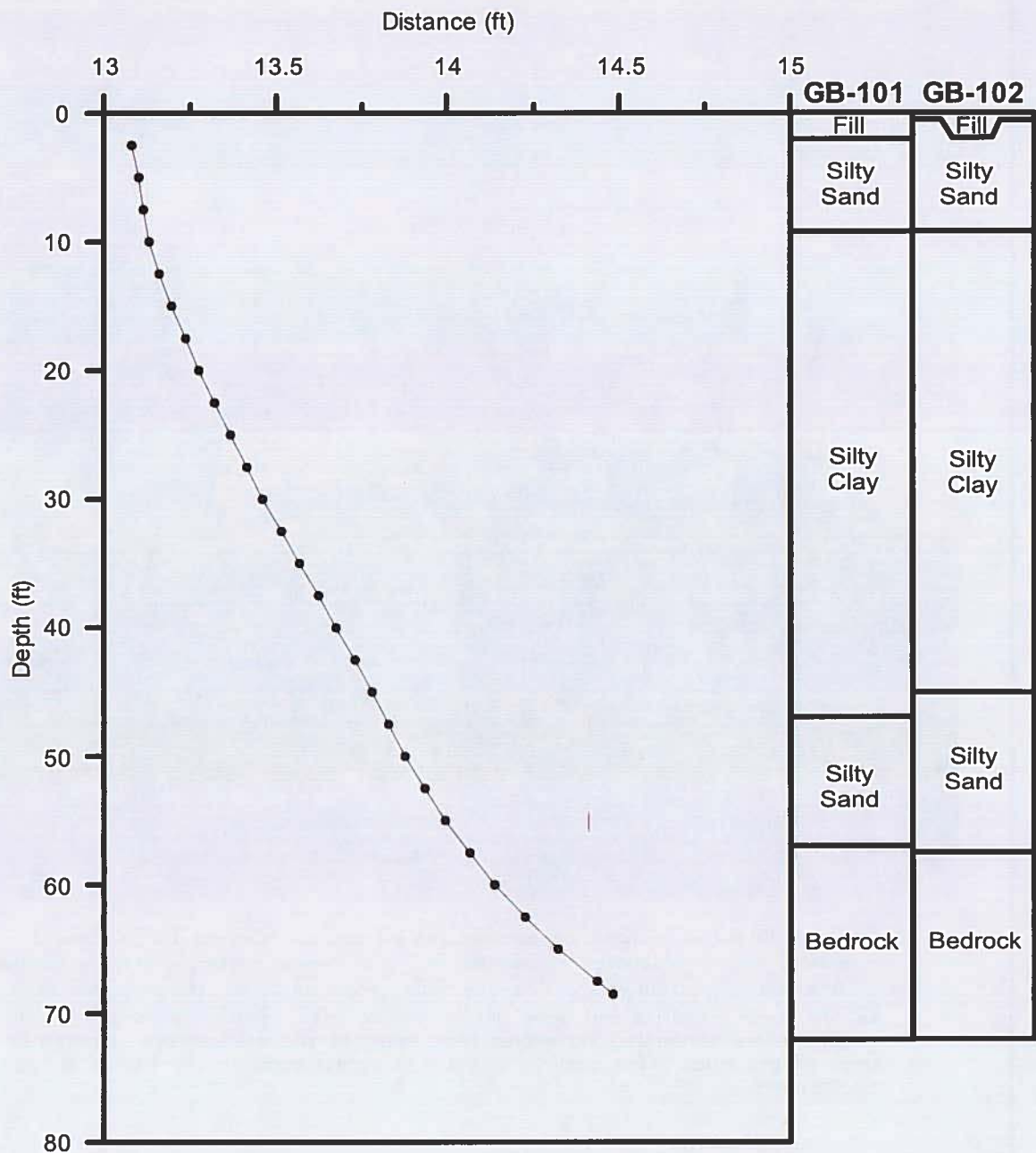
October, 2015

HAGER-RICHTER GEOSCIENCE, INC.
Salem, New Hampshire



Photograph showing crosshole seismic testing setup. View to the northeast. The downhole source is located in borehole GB-102 (white casting with blue air hose in foreground, bottom left). The downhole geophone is located in borehole GB-101 (white casting with pink ribbon, center left). Both seismic source and geophone are connected via cables (not seen) to the seismograph, located in the back of the truck. The partially completed access road to the site is in the background.

Figure 4 Site Photo Lot 4 – Portland Technology Park Portland, Maine	
File 15J69	October, 2015
HAGER-RICHTER GEOSCIENCE, INC. Salem, New Hampshire	



NOTE:

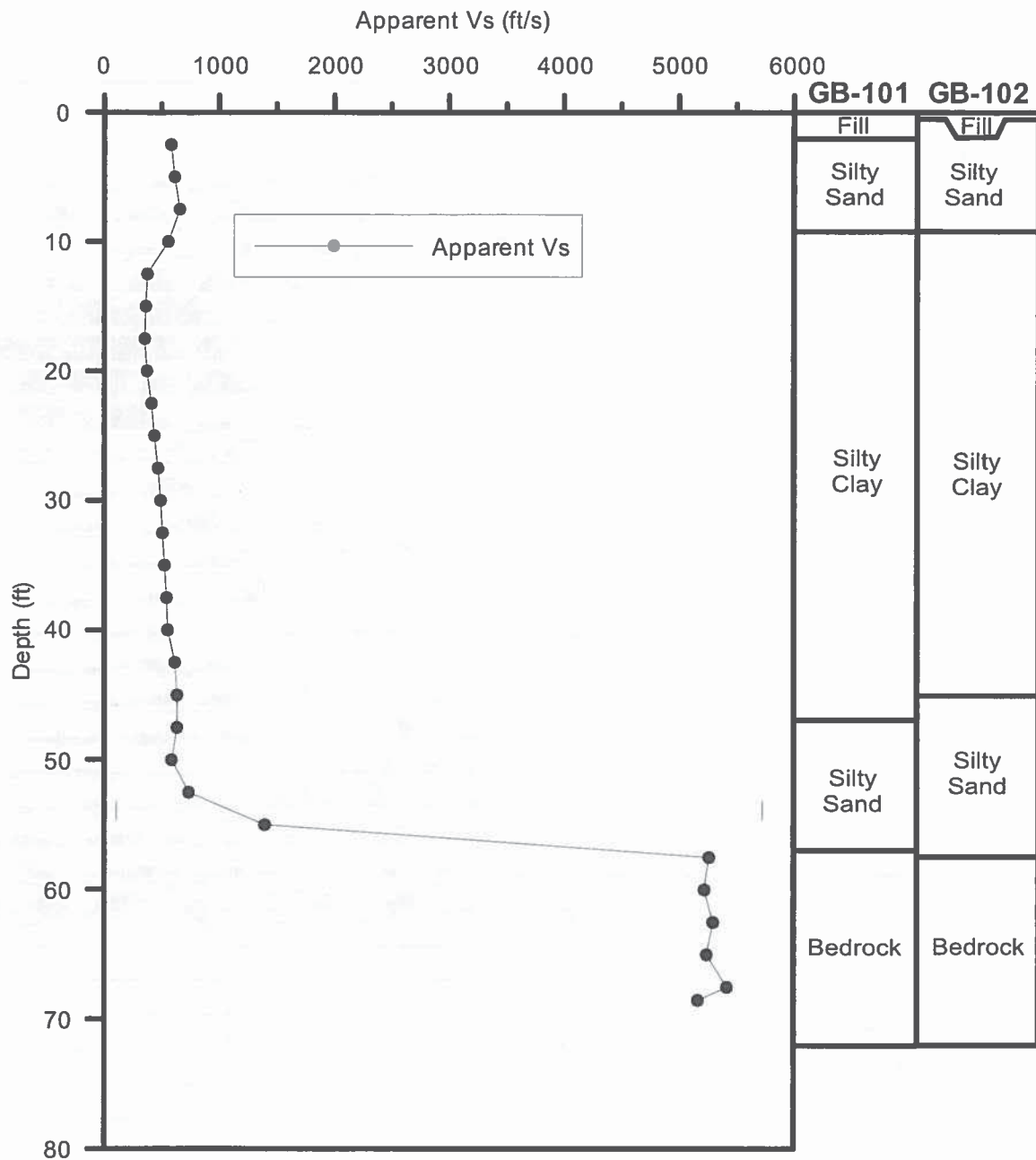
The general geologic log taken from log for boreholes GB-101 & GB-102, provided by R.W. Gillespie & Associates,

Figure 5
Distance Between Boreholes
Lot 4 – Portland Technology Park
Portland, Maine

File 15J69

October, 2015

HAGER-RICHTER GEOSCIENCE, INC.
Salem, New Hampshire



NOTE:

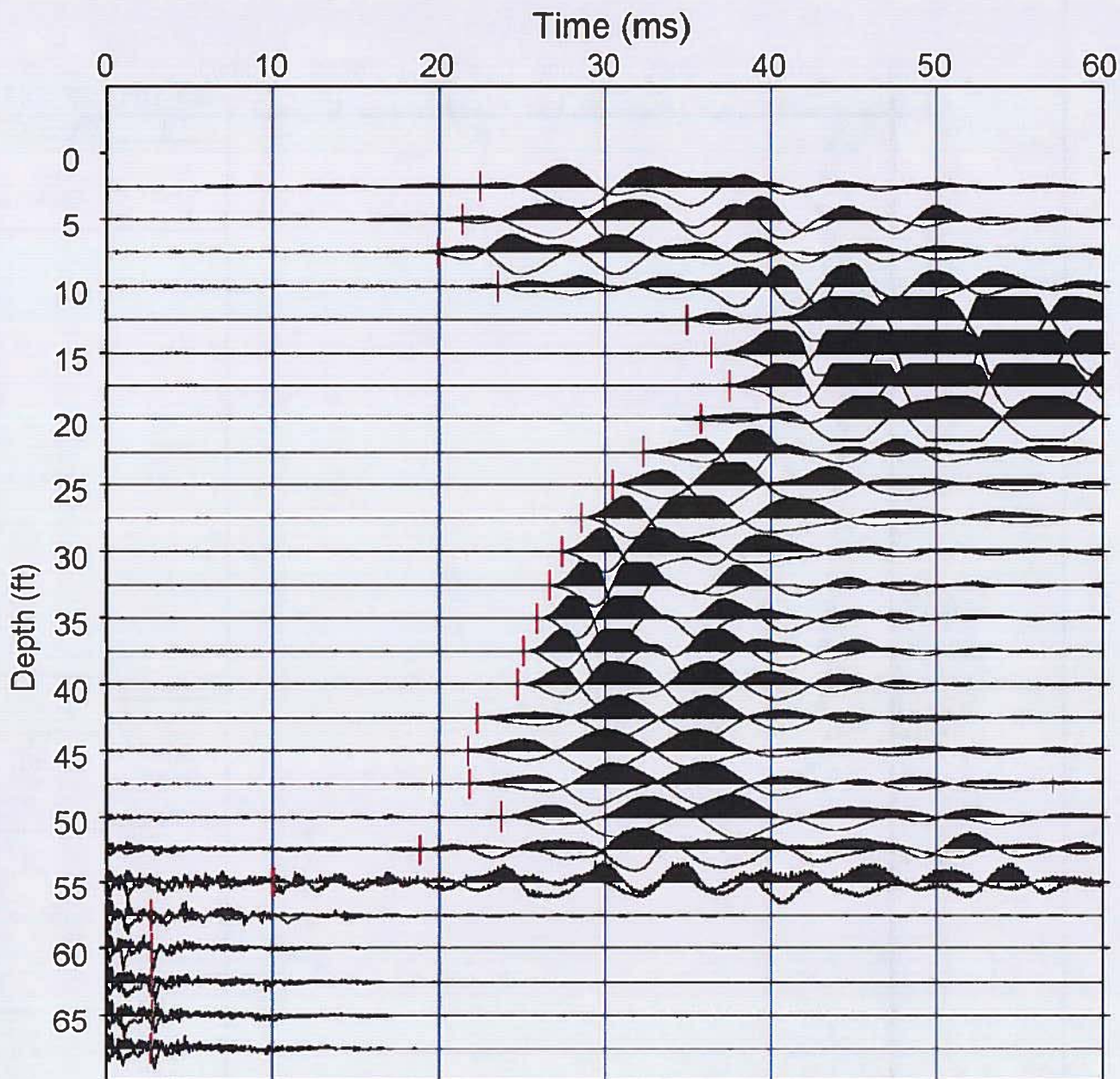
The general geologic log taken from log for boreholes GB-101 & GB-102, provided by R.W. Gillespie & Associates,

Figure 6
Apparent Velocity of Shear Waves
Lot 4 – Portland Technology Park
Portland, Maine

File 15J69

October, 2015

HAGER-RICHTER GEOSCIENCE, INC.
Salem, New Hampshire



NOTES:

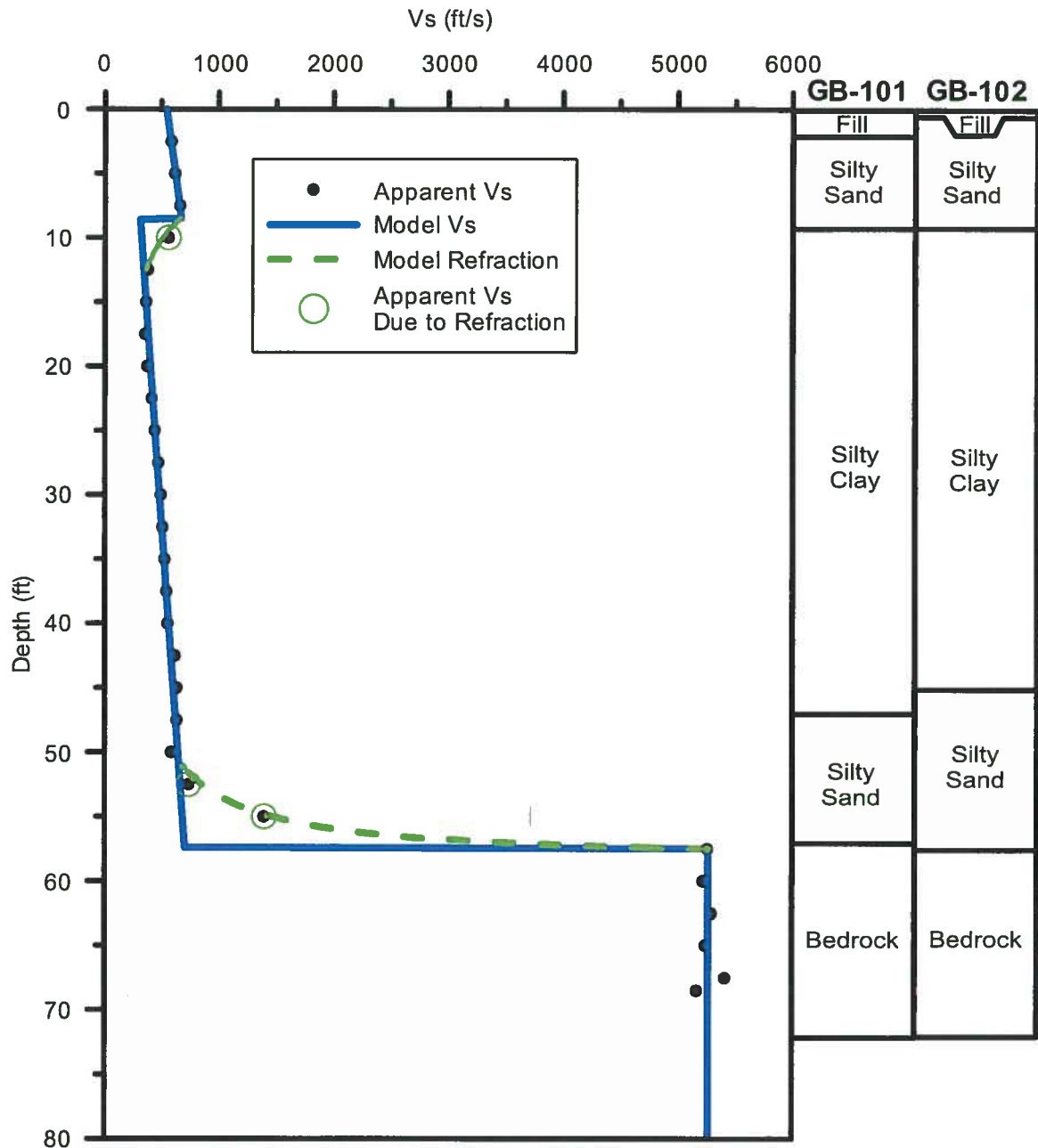
1. Seismic signal generated with a downhole hammer source.
2. Seismic signal detected with a downhole triaxial geophone receiver.
3. Downhole source and receiver positioned at same depth for each seismogram.
4. Superimposed seismograms for each depth represent opposite stacking polarity.
5. Composite seismograms assembled from horizontal component of triaxial geophone.
6. The short red lines mark the initial arrivals of shear waves.

Figure 7
Composite Seismogram
Lot 4 – Portland Technology Park
Portland, Maine

File 15J69

October, 2015

HAGER-RICHTER GEOSCIENCE, INC.
Salem, New Hampshire



NOTES:

1. The parameters for the model velocity line are reported in Table 2.
2. Bedrock depth reported in boring logs was used.
3. The general geologic log taken from log for boreholes GB-101 & GB-102, provided by R.W. Gillespie & Associates,

Figure 8
Model Velocity of Shear Waves
Lot 4 – Portland Technology Park
Portland, Maine

File 15J69

October, 2015

HAGER-RICHTER GEOSCIENCE, INC.
Salem, New Hampshire

Crosshole Seismic Testing
Lot 4 - Portland Technology Park
Portland, Maine
File 15J69 October, 2015

HAGER-RICHTER
GEOSCIENCE, INC.

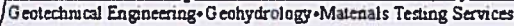
APPENDICES

Crosshole Seismic Testing
Lot 4 - Portland Technology Park
Portland, Maine
File 15J69 October, 2015

HAGER-RICHTER
GEOSCIENCE, INC.

APPENDIX 1

BORING LOGS
GB-101 and GB-102



Sheet 1 of 3

Drilling Contractor: Great Works Test Boring
Drill Rig: CME850
Driller Rep.: Jeff Lee
Date Started: 09/17/2015
Date Completed: 09/17/2015
Surface Elevation: 67 (Feet)
Drilling Method: Drive and Wash
Casing Type: 4" Steel

Notes: Installed 3-inch inside diameter, close ended, Schedule 40 PVC casing in completed borehole. Casing was grouted into place using a cement-bentonite mixture. Casing filled with potable water.

Notes: Installed 3-inch inside diameter, close ended, Schedule 40 PVC casing in completed borehole. Casing was grouted into place using a cement-bentonite mixture. Casing filled with potable water.



R.W. Gillespie & Associates, Inc.
Geotechnical Engineering • Geohydrology • Materials Testing Services

Boring Log: GB-101

Total Depth: 72

Sheet 2 of 3

Project Name: Prop. Patrons Oxford Ins. Office Bldg.

Location: Portland Maine

Client: Patrons Oxford Insurance

Observed Water Depth: 7'

RWG&A Project No. 1518-002

Surface Elevation: 67 (Feet)

Casing Type: 4" Steel

DEPTH, FT.	SYMBOL	SAMPLES	SAMPLE NUMBER	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT %	LAB TESTS
30									
35									
40									
45									
50			S-1	SILTY SAND (SM); Medium dense, wet, fine to medium sand, some silt, few gravel and coarse sand, gray.	11	4 7 4 3	11		
55				Bedrock encountered at 57', roller cone drilled to 72'.					

Notes: Installed 3-inch inside diameter, close ended, Schedule 40 PVC casing in completed borehole. Casing was grouted into place using a cement-bentonite mixture. Casing filled with potable water.



R.W. Gillespie & Associates, Inc.
Geotechnical Engineering • Geohydrology • Materials Testing Services

Boring Log: GB-101

Total Depth: 72

Sheet 3 of 3

Project Name: Prop. Patrons Oxford Ins. Office Bldg.

Location: Portland Maine

Client: Patrons Oxford Insurance

Observed Water Depth: 7'

RWG&A Project No. 1518-002

Surface Elevation: 67 (Feet)

Casing Type: 4" Steel

DEPTH, FT.	SYMBOL	SAMPLES	SAMPLE NUMBER	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT %	LAB TESTS
60				Bedrock.					
65									
70									
75				Bottom of Exploration at 72'; Terminated boring 15' into rock.					
80									
85									

Notes: Installed 3-inch inside diameter, close ended, Schedule 40 PVC casing in completed borehole. Casing was grouted into place using a cement-bentonite mixture. Casing filled with potable water.



R.W. Gillespie & Associates, Inc.
Geotechnical Engineering • Geohydrology • Materials Testing Services

Boring Log: GB-102

Total Depth (ft): 72

Sheet 1 of 3

Project Name: Prop. Patrons Oxford Ins. Office Bldg.
RWG&A Project No. 1518-002
Location: Portland, Maine
Client: Patrons Oxford Insurance
RWG&A Representative: C. Morrell
Boring Location: See Exploration Location Plan
Boring Abandonment Method: Installed Solid Casing.
Observed Water Depth: 7'

Drilling Contractor: Great Works Test Boring
Drill Rig: CME850
Driller Rep.: Jeff Lee
Date Started: 09/18/2015
Date Completed: 09/18/2015
Surface Elevation: 67 (Feet)
Drilling Method: Drive and Wash
Casing Type: 4" Steel

DEPTH, FT.	SYMBOL SAMPLES	SAMPLE NUMBER	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT %	LAB TESTS
0	***		TOPSOIL AND ORGANIC MATERIAL (4 inches). SILTY SAND (SM); Moist, fine sand, some silt, grayish brown.					
5								
10			SILTY CLAY (CL); Medium stiff to soft, silty clay, gray.					
15								
20		FV	Field Vane: Undrained Shear Strength: Su=480 psf, residual 50 psf.					
		FV	Field Vane: Undrained Shear Strength: Su=490 psf, residual 40 psf.					
25								

Notes: 1. Used 3 5/8"x9" Acker field vane for shear strength testing.
2. Installed 3-inch inside diameter, close ended, Schedule 40 PVC casing in completed borehole. Casing was grouted into place using a cement-bentonite mixture. Casing filled with potable water.



R.W. Gillespie & Associates, Inc.
Geotechnical Engineering • Geohydrology • Materials Testing Services

Boring Log: GB-102

Total Depth: 72

Sheet 2 of 3

Project Name: Prop. Patrons Oxford Ins. Office Bldg.

Location: Portland Maine

Client: Patrons Oxford Insurance

Observed Water Depth: 7'

RWG&A Project No. 1518-002

Surface Elevation: 67 (Feet)

Casing Type: 4" Steel

DEPTH, FT.	SYMBOL	SAMPLES	SAMPLE NUMBER	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT %	LAB TESTS
30			FV	Field Vane: Undrained Shear Strength: Su=490 psf, residual 50 psf.					
			FV	Field Vane: Undrained Shear Strength: Su=550 psf, residual 40 psf.					
35									
40			FV	Field Vane: Undrained Shear Strength: Su=640 psf, residual 20 psf.					
			FV	Field Vane: Undrained Shear Strength: Su=520 psf, residual 0 psf.					
45				SILTY SAND (SM); Fine to medium sand, some silt, few gravel and coarse sand, gray.					
50									
55									
				Bedrock encountered at 57.5 feet, roller cone drilled to 72'.					

Notes: 1. Used 3 5/8"x9" Acker field vane for shear strength testing.

2. Installed 3-inch inside diameter, close ended, Schedule 40 PVC casing in completed borehole. Casing was grouted into place using a cement-bentonite mixture. Casing filled with potable water.



R.W. Gillespie & Associates, Inc.
Geotechnical Engineering • Geohydrology • Materials Testing Services

Boring Log: GB-102

Total Depth: 72

Sheet 3 of 3

Project Name: Prop. Patrons Oxford Ins. Office Bldg.

Location: Portland Maine

Client: Patrons Oxford Insurance

Observed Water Depth: 7'

RWG&A Project No. 1518-002

Surface Elevation: 67 (Feet)

Casing Type: 4" Steel

DEPTH, FT.	SYMBOL SAMPLES	SAMPLE NUMBER	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT %	LAB TESTS
60			Bedrock.					
65								
70								
75								
80								
85			Bottom of Exploration at 72'; Terminated boring 14.5' into rock.					

Notes: 1. Used 3 5/8"x9" Acker field vane for shear strength testing.

2. Installed 3-inch inside diameter, close ended, Schedule 40 PVC casing in completed borehole. Casing was grouted into place using a cement-bentonite mixture. Casing filled with potable water.

APPENDIX 2
DEVIATION DATA

HAGER-RICHTER GEOSCIENCE, INC.

8 Industrial Way - D10
Salem, NH 03079
Phone: 603-893-9944
Fax: 603-893-8313

BOREHOLE DEVIATION LOGS

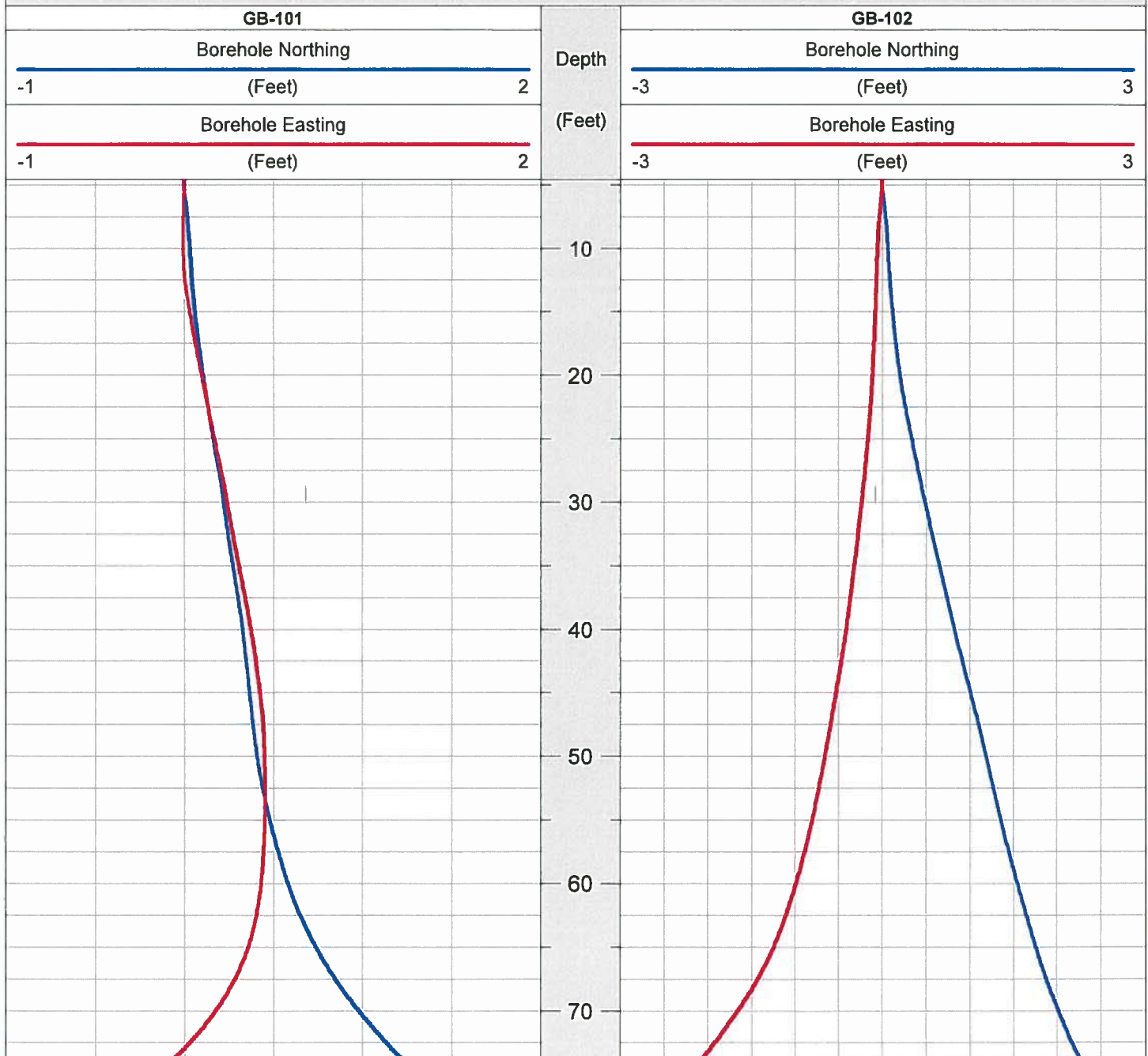
DATE LOGGED:

September 24, 2015

CLIENT: RW Gillespie and Associates, INC
PROJECT: Lot 4 - Portland Technology Park
LOCATION: Portland Technology Park
CITY, STATE: Portland, Maine

H-R FILE: 15J69
LOG DATUM: Ground Surface
ORIENTATION REFERENCE: Magnetic North
LOGGING GEOPHYSICISTS: Michael Howley

Borehole Deviation Logs



APPLICANT'S 11.3.2015 REPONSES IN BLUE



Planning and Urban Development Department Planning Division

Subject: PTP Design Review – Patrons Oxford

Written by: Caitlin Cameron, Urban Designer

Date of Review: Friday, October 30, 2015

The proposed new construction of a commercial office in the Portland Technology Park was reviewed according to the *Portland Technology Park Design Guidelines*. The project was reviewed by Caitlin Cameron, Urban Designer, Jean Fraser, Planner, and Shukria Wiar, Planner.

Findings of the Design Review:

The Technology Park Guidelines expresses the following goals for new development projects:

- Design Quality
- Durability
- Energy/Environmental Performance

The proposal for Patrons Oxford Offices is a contemporary design that conveys an identity of innovation and technology. Several energy and environmental performance strategies are integrated with the building design including roof forms to maximize photovoltaics, building orientation for passive solar, low-e windows, and a light colored roof to reduce heat island effect. The project meets the overall goals of the Portland Technology Park Design Guidelines but there are some outstanding items below regarding specific standards.

Design Review Comments (*red text denotes standards that are not met or additional information needed*):

PTP Portland Technology Park- Site Design Standards

Signage – **More information requested** – A sign master plan has not been submitted at the time of this review. How will signs be placed on the building? How will visibility be addressed? Building signage will consist of metal lettering mounted on stand-offs, this technique will also be utilized on the free-standing sign by the site entrance. Both free standing and building signs will be illuminated from wall or site mounted light fixtures.

Please see attached images (1,2) for more information Also, please note the logo is representative and does not reflect new branding currently under development.

PTP Portland Technology Park- Building Design Standards

Building Massing and Form – Met – The proposed building is two stories with the long dimension oriented South. The form is a modified rectangle and the overall design is contemporary in style. Architecture provides an integrated design. Wood screens are incorporated to address the preference for natural colors and materials. The roof line is varied and will potentially provide visual interest to the highway approach.

Zoning Standards – Met – Building is proposed to be two stories with pavement setbacks.

Building Envelope

- **Exterior Siding** – **Additional information requested** – The proposed materials meet the standard for continuity, quality, and durability and convey a “high tech” quality. Materials include Fiber cement board, storefront, metal siding, and wood siding. No vinyl or masonry block is proposed. **However, the renderings and elevations differ in the placement of the wood screens – please indicate whether the screens will extend to the ground level and what finish they will have for long-term durability. The standards also require that storefront systems must exceed the MUBEC by 10%.**

The elevations are current; wood will not be brought to the ground. See Images 3, 4, 5, 6. Wood screens will be constructed from wood with a thermally treated finish, and/or will be constructed from decay-resistant species. The project requires a minimum performance requirement for all window systems. (For reference specified insulated glazing exceeds min u-value by approximately 17%)

- **Windows** – **More information requested** – Exterior window finishes appear to meet the standard.
 - o Window Transparency - **The rendering shows reflectivity in the glass which is not permitted – please provide information about the glazing specified (visual transmittance, tint, etc.).**

Specified clear insulated glass is not reflective, and will provide excellent values for this application. The specified solar control glass provides a 0.39 SHGC while maintaining VLT values of 70 and U values of 0.29

- o Passive Solar - Sun shades are recommended to cover 75% of the windows on the South exposure. It appears there is a small overhang on the ground level, but no shades or overhangs proposed on the second floor.

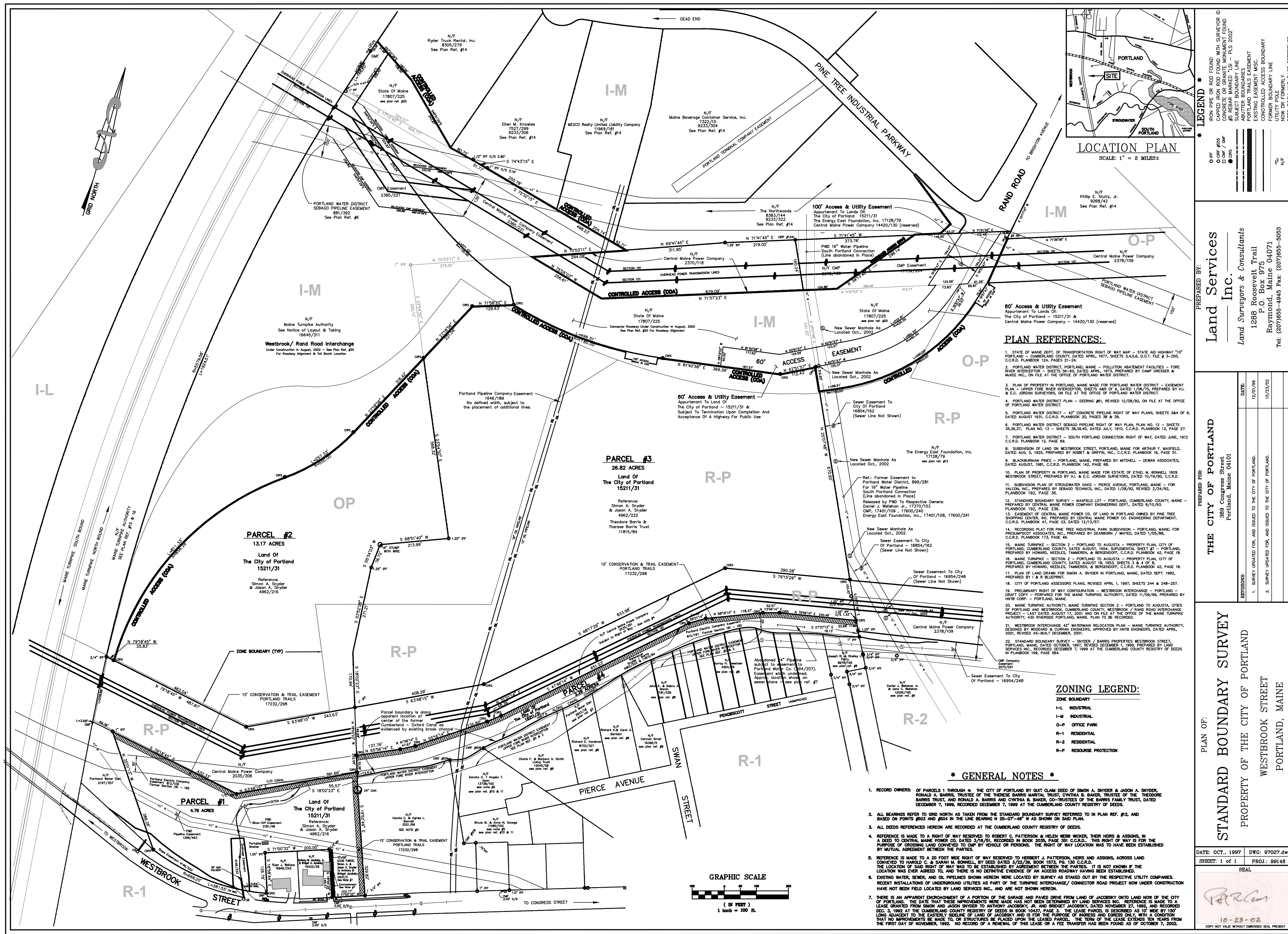
The building form provides overhangs above the first floor ranging from 4'-0" to 10'-6" along the whole south elevation. In addition to this the depth of the exterior jamb will be a factor in shading the second floor windows. The primary means of controlling southern solar exposure however is the specification of a high performance glazing that incorporates coatings which are capable of blocking 62% of the solar energy

- **Entrances** – **Not Met** – The entrance faces the entry drive and includes a vestibule as recommended by the standard. **However, a covered entrance is required to provide a transition into the building and is currently not provided. Modifying the design to**

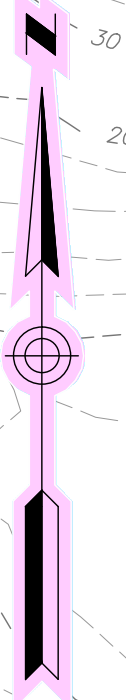
include a covered entry will also increase the visibility and emphasis on the main access point.

The building form provides an integrated covered entrance and serves to highlight the entrance. This overhang exceeds 10'-0" in the area of the entrance, and covers an area of more than 30'-0" wide. See image 7, 8 for more information.

- **Roofs** – Met – flat and sloped roofs are permitted. The project uses a light-colored roof to reduce Heat Island Effect as required by the standard.
- **Exterior Trim and Detailing** – Met – Metal trim details proposed to match siding finish. Wood screens are proposed as a natural material detail.



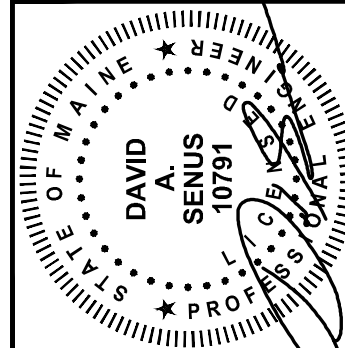
4. SITE AND TOPOGRAPHIC DATA WERE PROVIDED BY NUMEROUS SOURCES AS IDENTIFIED HEREIN AND COMPILED BY WOODARD & CURRAN INC. BETWEEN JANUARY 2007 AND AUGUST 2010. FEATURES DEPICTED ON THE EXISTING SITE PLAN WERE NOT FIELD VERIFIED FOR ACCURACY OR OMISSIONS UPON PLAN COMPIRATION. HORIZONTAL DATUM IS REFERENCED TO STATE PLANE NAD 1983 (FEET), MAINE WEST ZONE.
5. PROPERTY LINE, LIMITED COMMON ELEMENT YARD LIMIT, AND EASEMENT LINES ARE FROM A PLAN BY SGC ENGINEERING, LLC, TITLED CONDOMINIUM PLAT OF PORTLAND TECHNOLOGY PARK CONDOMINIUM, RAND ROAD, PORTLAND, MAINE, DATED 9-29-11 AND REVISED 3-17-14.
6. EXISTING SEWER AND STORMDRAIN UTILITY INFRASTRUCTURE WITHIN THE PORTLAND TECHNOLOGY PARK IS BASED ON AN AS-BUILT DRAWING BY RJ GRONDIS & SONS DATED 03-03-14.
7. SITE AND TOPOGRAPHIC FEATURES FOR ADJACENT ROADWAY AND ABUTTING PARCELS ORIGINATE FROM CITY OF PORTLAND, ME. AERIAL SURVEY COMPILED IN 2002 AND ADJACENT WAREHOUSE STREET CONSULTANTS OF WAMCHESTER, MAINE. VERTICAL DATUM IS REFERENCED TO NGVD29 WITH TWO FOOT CONTOUR INTERVALS.
8. WETLAND DELINEATION FOR WETLAND AREAS LABELED #1-22 CONDUCTED BY DAMES & MOORE APRIL - MAY, 1998, AS DESCRIBED IN "WETLAND DELINEATION AND WETLAND FUNCTIONAL ASSESSMENT FOR SNYDER TRACT, WESTBROOK ST., PORTLAND, ME" REPORT DATED MAY 1998. WETLAND DELINEATION FIELD VERIFIED IN MAY 2006. MAY 2006 CONDUCTED BY S.W. COLE ON DECEMBER 15, 1998. FLAGS LOCATED BY SURVEY WORKS, INC. USING GPS, MAY 1998.
9. FIELD RECONNAISSANCE AND VISUAL VERIFICATION OF THE WETLANDS PREVIOUSLY DELINEATED BY DAMES & MOORE IN APRIL AND MAY OF 1998 WAS PERFORMED BY SW COLE ENGINEERING INC. IN NOVEMBER AND DECEMBER OF 2006, AND SUMMARIZED IN A LETTER REPORT DATED DECEMBER 15, 2006. ADDITIONAL FIELD RECONNAISSANCE AND DELINEATION CONDUCTED BY S.W. COLE ON DECEMBER 15, 2006 IDENTIFIED AND DELINEATED THE LOCATION OF A FRESHWATER WETLAND AT THE NORTHEAST CORNER OF THE PROPERTY, JUST WEST OF A PORTLAND WATER DISTRICT EASEMENT, LABELED "WETLAND A, PF01/4", AND FURTHER DESCRIBED IN A LETTER REPORT DATED DECEMBER 21, 2006. WETLAND LOCATED BY MEANS OF GPS, DECEMBER 2006.
10. TREE ASSESSMENT CONDUCTED BY WOODLOT ALTERNATIVES, INC. APRIL 2007, AND SUMMARIZED WITHIN A LETTER REPORT DATED APRIL 13, 2007. LOCATIONS DETERMINED WITH HAND-HELD GPS UNIT, APRIL 2007.
11. VERNAL POOL ASSESSMENT CONDUCTED BY URS ON APRIL 16 AND MAY 1, 2006, AND SUMMARIZED IN LETTER REPORT DATED MAY 31, 2006.
12. EXISTING SEWER MAIN LOCATION FROM PLAN BY HNTB "WESTBROOK INTERCHANGE TOOL PLAZA LATERAL PLAN AND PROFILE 50+00 TO 63+70" DATED AUGUST, 2001
13. EXISTING WATER MAIN LOCATION FROM PLAN BY HNTB "WESTBROOK INTERCHANGE 42" WATERMAIN RELOCATION" DATED APRIL, 2001
14. UPDATED VERNAL POOL DELINEATION PERFORMED ON DECEMBER 12, 2010 FOR VERNAL POOLS E AND G BY BOYLE ASSOCIATES.
15. VERNAL POOL POINT INDICATORS (VP--XP--XX) LOCATED ON MAY 2, 2009 BY BOYLE ASSOCIATES.



41 Hutchins Drive
Portland, Maine 04102
800.426.4262 | www.woodardcurran.com



**WOODWARD
& CURRAN**



10/2/2015

[illegible]

EXISTING CONDITIONS PLAN

WETLAND AREA TABLE	
AREA NO. (SEE MAP)	WETLAND AREA (SQUARE FEET)
1	224
2	7,767
3	115,425
4	6,814
5	786
6	931
7	83,879
8	44,475
9	3,208
10	17,352
11	30,471
12	1,377
13**	27,785
14	1,465
15	5,347
16	639
17	52,414
18	59,073
19	33,058
20	142
21	46,881
22	3,575

**--NON--JURISDICTIONAL (PER ACOE
MAN-MADE WETLANDS

**--NON-JURISDICTIONAL (PER ACOE
MAN-MADE WETLANDS

100' 0 100' 200'

BAR SCALE
1" = 100'

CHECK GRAPHIC SCALE BEFORE USING

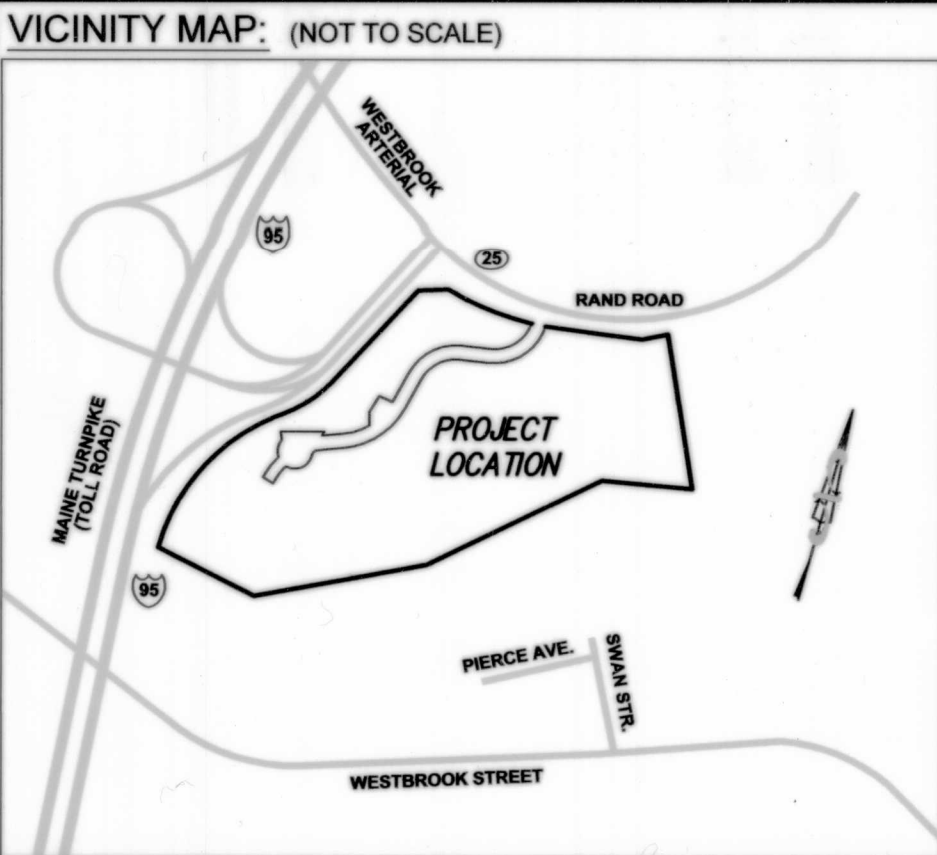
*SEE SHEET G-01 FOR GENERAL LEGEND

CITY OF PORTLAND
ECONOMIC DEVELOPMENT OFFICE
PORTLAND, MAINE
& PATRONS OXFORD INSURANCE CO

PORTLAND TECHNOLOGY PARK UPDATE & LCE 4 DEVELOPMENT

JOB NO.:229001.01
DATE:OCTOBER 2015
SCALE:1" = 100'
SHEET: 2 OF 17

C-01



GENERAL NOTES:

- THIS PLAN AND ALL WORK ASSOCIATED WITH IT WAS PERFORMED BY SGC ENGINEERING, LLC PURSUANT TO A PROFESSIONAL SERVICES CONTRACT BETWEEN WOODARD & CURRAN, INC. AND SGC ENGINEERING LLC, DATED SEPTEMBER 2, 2010 AND SIGNED MARCH 14, 2011.
- REFERENCE DEED FOR THE LOCUS PARCEL IS SIMON A. SNYDER, JASON A. SNYDER, RONALD A. BARRIS, TRUSTEES OF THE THEODORE BARRIS MARITAL TRUST, CYNTHIA B. BAKER, TRUSTEES OF THE THEODORE BARRIS TRUST, RONALD A. BARRIS AND CYNTHIA B. BAKER, TRUSTEES OF THE THEODORE BARRIS TRUST, DATED SEPTEMBER 2, 2010 AND RECORDED IN DEED BOOK 15211, PAGE 031 AT THE CUMBERLAND COUNTY REGISTRY OF DEEDS.
- THE BEARINGS SHOWN HEREON ARE REFER TO GRID NORTH AND ARE BASED ON PLAN REFERRED TO UNDER MAP REFERENCES, NOTE 1.
- THE LOCUS PARCEL IS DEPICTED AS LOTS 1 & 2 IN BLOCK A ASSESSORS MAP 249. ADJUTING PROPERTY OWNER INFORMATION REFERENCE HEREON WAS TAKEN FROM THE CITY OF PORTLAND ASSESSORS DATA AS OF THE DATE OF THIS PLAN.
- RAND ROAD IS A PUBLIC HIGHWAY. THE SIDE LINE LOCATIONS ARE BASED ON THE PLAN REFERENCED UNDER NOTE 1 OF MAP REFERENCES BELOW AND MAINE TURNPIKE AUTHORITY PLANS ON FILE AT THE OFFICES FOR THE MAINE TURNPIKE AUTHORITY.
- NO SUBSURFACE INVESTIGATION HAS BEEN PERFORMED BY SGC ENGINEERING, LLC. DIG-SAFE SHOULD BE CONTACTED PRIOR TO COMMENCING ANY EXCAVATION. (888-344-7233).
- THE BOUNDARY INFORMATION ON THIS PLAN IS BASED ON THE PLAN REFERENCED UNDER NOTE 1 OF MAP REFERENCES. SGC ENGINEERING FIELD CREWS COMPLETED A SURVEY OF THE PIPELINE LOCATIONS WITHIN THE PORTLAND PIPELINE COMPANY EASEMENT AND EXISTING MONUMENTATION FOUND AND SET BY PREVIOUS SURVEY COMPLETED BY LAND SERVICES, INC. FOR THE PURPOSE OF VERIFYING THEIR EXISTENCE AND TO OVERLAY DESIGN INFORMATION WITHIN BOUNDARIES DETERMINED BY LAND SERVICES, INC. SGC ENGINEERING DID NOT CONFIRM PERIMETER BOUNDARIES BEYOND LOCATION OF MONUMENTATION.
- REFERENCE IS HEREBY MADE TO THE PORTLAND TECHNOLOGY PARK CONDOMINIUM DECLARATION OF CONDOMINIUM, INCLUSIVE OF BYLAWS, TO BE RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS AT BOOK _____, PAGE ____.
- ELEVATIONS ARE BASED ON NAVD 1988 DATUM.
- CLEARING LIMITS SHALL BE RESTRICTED TO LIMITED COMMON ELEMENT AREAS, EASEMENT AREA 1 ASSOCIATED WITH THE TRAIL ROADWAY, EASEMENT AREA 2 ASSOCIATED WITH THE TRAIL HEAD PARKING, AND EASEMENT AREA 3 ASSOCIATED WITH THE TRAIL HEAD PARKING. MANAGEMENT OF THE FORESTED COMMON AREAS OUTSIDE OF THE CLEARING LIMITS SHALL BE PERFORMED IN ACCORDANCE WITH A FOREST MANAGEMENT PLAN PREPARED FOR THE CITY OF PORTLAND AND APPROVED BY THE CITY ARBORIST. MONUMENTATION OF THE CLEARING LIMIT BOUNDARIES SHALL OCCUR PRIOR TO THE START OF CONSTRUCTION.
- PHASE 1 INCLUDES CONSTRUCTION OF ALL PROPOSED RIGHT-OF-WAY IMPROVEMENTS IN RAND ROAD, 950 LF OF PARK ROADWAY WITHIN EASEMENT AREA 1; TEMPORARY GRAVEL TRAIL HEAD PARKING AREA WITHIN EASEMENT AREA 2; TRAIL HEAD PARKING WITHIN EASEMENT AREA 3; LIMITED COMMON ELEMENT AREAS 1, 2 AND 3. PHASE 2 INCLUDES CONSTRUCTION OF REMAINING 450 LF OF PARK ROADWAY WITHIN EASEMENT AREA 1 AND LIMITED COMMON ELEMENT AREAS 4, 5, 6, AND 7.
- PROJECT IS SUBJECT TO THE CONDITIONS SET FORTH IN CITY OF PORTLAND SITE PLAN APPROVAL, SUBDIVISION APPROVAL, AND TRAFFIC MOVEMENT PERMIT. MAINE DEP NATURAL RESOURCES PROTECTION ACT AND SITE LOCATION OF DEVELOPMENT ACT DEPARTMENT ORDER; AND US ARMY CORPS OF ENGINEERS MAINE GENERAL PERMIT AUTHORIZATION. COPIES OF THESE DOCUMENTS ARE AVAILABLE THROUGH THE CITY OF PORTLAND ECONOMIC DEVELOPMENT OFFICE.
- PROJECT IS SUBJECT TO THE PLANS APPROVED UNDER SITE PLAN REVIEW BY THE CITY OF PORTLAND PLANNING AUTHORITY. COPIES OF THESE DOCUMENTS ARE AVAILABLE THROUGH THE CITY OF PORTLAND ECONOMIC DEVELOPMENT OFFICE.
- RESPONSIBILITIES FOR STORMWATER MANAGEMENT SYSTEM INSPECTIONS AND MAINTENANCE ARE IDENTIFIED WITHIN THE DECLARATION OF CONDOMINIUM. STORMWATER MANAGEMENT SYSTEM INSPECTION AND MAINTENANCE REQUIREMENTS ARE IDENTIFIED IN A STORMWATER MANAGEMENT PLAN AVAILABLE THROUGH THE CITY OF PORTLAND ECONOMIC DEVELOPMENT OFFICE.

MAP REFERENCES:

- A PLAN ENTITLED "PLAN OF STANDARD BOUNDARY SURVEY, PROPERTY OF THE CITY OF PORTLAND, WESTBROOK STREET, PORTLAND, MAINE" DATED OCT. 1997 AND LAST REVISED OCT. 23, 2002, PREPARED BY LAND SERVICES INC.



EASEMENT AREA 1					EASEMENT AREA 2				
CURVE	RADIUS	LENGTH	BEARING	CHORD DIST.	CURVE	RADIUS	LENGTH	BEARING	CHORD DIST.
C1	250.00	30.49	S85°16'18"W	30.47	C5	76.54	37.59	S43°48'45"E	37.21
C2	74.58	64.22	N39°39'58"W	62.25	C6	74.00	77.50	S59°44'51"E	74.00
C3	170.00	56.12	N14°33'36"E	55.87	C7	114.00	119.39	N59°44'51"W	114.01
C4	1180.00	60.59	N85°30'52"W	60.58	C8	20.00	8.26	N41°34'56"W	8.21

LINE TABLE			LINE TABLE		
LINE	LENGTH	BEARING	LINE	LENGTH	BEARING
L1	20.97	S35°54'43"E	L6	48.58	S29°44'44"E
L2	35.12	N24°30'45"W	L7	40.00	S00°08'40"E
L3	19.39	S14°11'33"W	L8	59.04	N29°44'44"W
L4	2.04	N15°00'00"W			
L5	23.23	N32°26'19"E			

CERTAIN PLANNING BOARD CONDITIONS OF SUBDIVISION APPROVAL

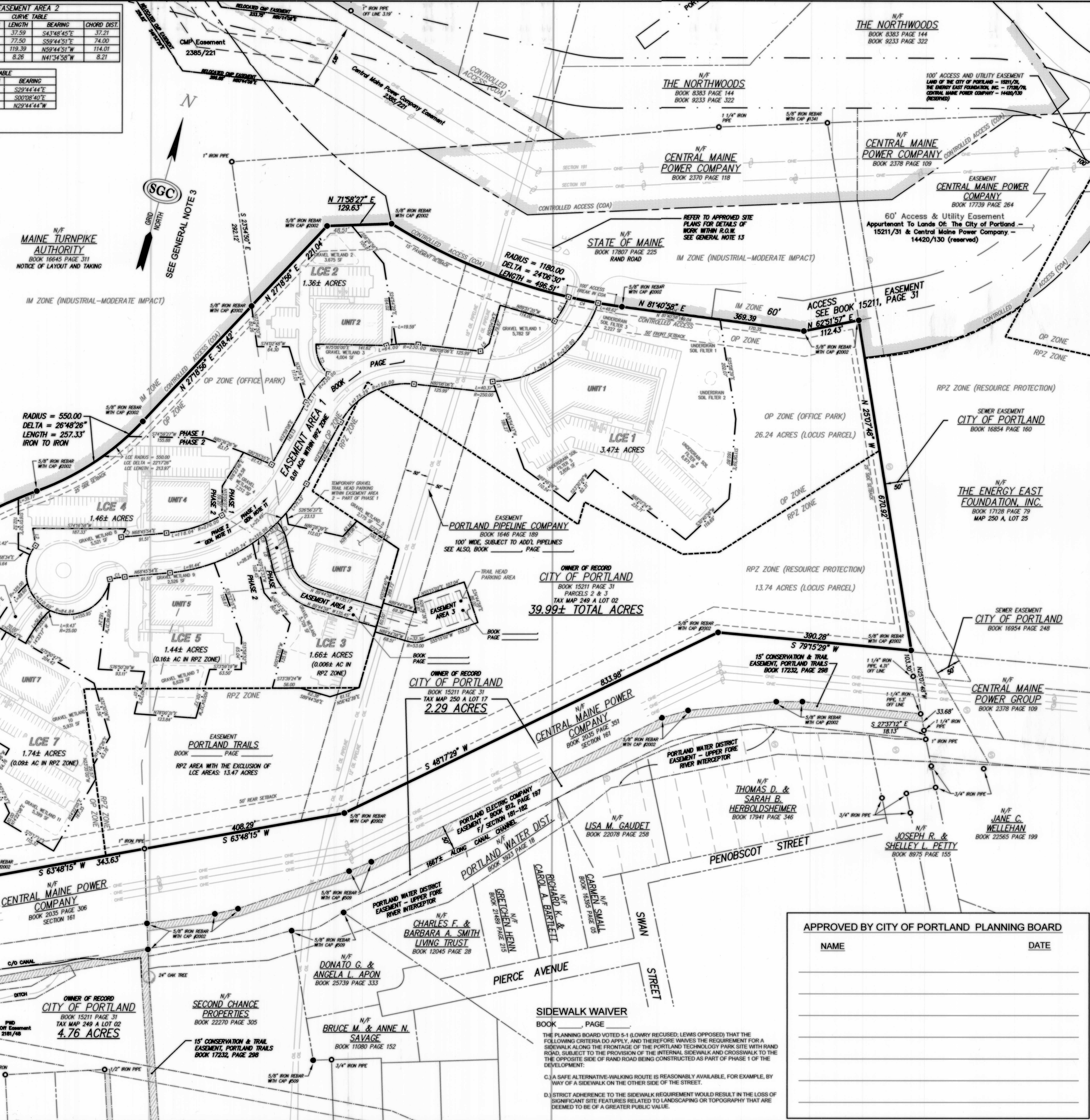
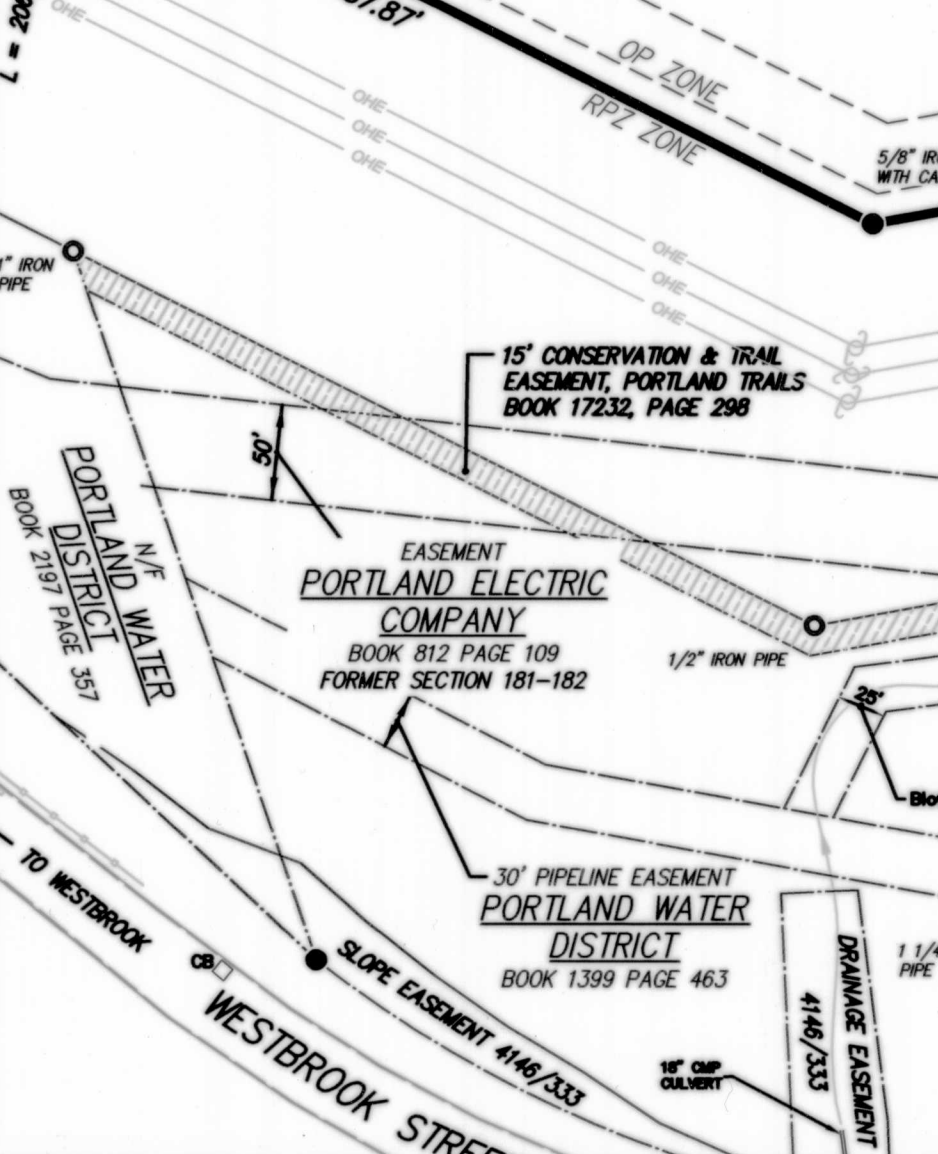
- THIS APPROVAL ENTITLES THE APPLICANT AND FUTURE DEVELOPERS OF THE OFFICE PARK UNITS TO DEVELOP THE MAXIMUM NUMBER AND SIZE OF PARKING SPACES AS SHOWN ON THE SUBDIVISION PLAT AND OVERALL SITE PLAN SUBJECT TO PROVIDING CONFORMANCE OF THE NEED FOR THESE SPACES AND SPACE DIMENSIONS (VIA A PARKING ANALYSIS) AT THE TIME THAT THE UNIT IS UNDER SITE PLAN REVIEW; AND
- THE CONDOMINIUM ASSOCIATION SHALL DEVELOP AND MANAGE A TRANSPORTATION DEMAND MANAGEMENT (TDM) PLAN ACCEPTABLE TO THE PLANNING AUTHORITY, REVIEWED AS PART OF THE INITIAL AND SUBSEQUENT SITE PLAN APPROVALS FOR EACH BUILDING UNIT WITHIN THE LIMITED COMMON ELEMENT AREAS; AND
- THE DEVELOPMENT OF LIMITED COMMON ELEMENT AREAS AND UNITS IS SUBJECT TO REVIEW AND APPROVAL BY THE CITY OF PORTLAND PLANNING AUTHORITY FOR CONFORMANCE WITH THE PORTLAND TECHNOLOGY PARK DESIGN GUIDELINES AND CITY OF PORTLAND CODE OF ORDINANCES, CHAPTER 14 LAND USE, ARTICLE V, SITE PLAN FOR BUILDING ARCHITECTURE, SITE LANDSCAPING, SITE PEDESTRIAN CIRCULATION, BICYCLE PARKING, LAMP SPECIFICATIONS AND SIGNAGE AND ANY CHANGES OR ALTERATIONS TO APPROVED TRAFFIC, PARKING, ACCESS, UTILITY, EXTERIOR LIGHTING, TREE PRESERVATION AND STORMWATER FEATURES; AND
- THE CLEARING LIMITS SHALL BE RESTRICTED TO LIMITED COMMON ELEMENT (LCE) AREAS, EASEMENT AREA 1 ASSOCIATED WITH THE TRAIL ROADWAY, EASEMENT AREA 2 ASSOCIATED WITH ACCESS TO THE TRAIL HEAD PARKING, AND EASEMENT AREA 3 ASSOCIATED WITH THE TRAIL HEAD PARKING; AND
- THE APPLICANT AND ALL ASSIGNS SHALL COMPLY WITH THE CONDITIONS OF CHAPTER 32 STORMWATER INCLUDING ARTICLE III, POST-CONSTRUCTION STORM WATER MANAGEMENT, WHICH SPECIFIES THE ANNUAL INSPECTIONS AND REPORTING REQUIREMENTS. THE DEVELOPER/CONTRACTOR/SUBCONTRACTOR MUST COMPLY WITH CONDITIONS OF THE CONSTRUCTION STORMWATER MANAGEMENT PLAN AND SEDIMENT & EROSION CONTROL PLAN BASED ON CITY STANDARDS AND STATE GUIDELINES; AND
- THE PROPOSED LIMITED COMMON ELEMENTS, SHOWN AS "LCE" ON THE PLAN, BE MARKED WITH PERMANENT MARKERS SUCH AS FENO MARKERS IN THE FIELD PRIOR TO ANY WORK ON THE SITE TO ENSURE THAT THE LIMITS OF CLEARANCE AND TREE PRESERVATION AREAS ARE CLEAR ON THE SITE; AND
- THE RPZ ZONE LINE, TRAILHEAD PARKING AREA, SIGNIFICANT TREE AREAS AND PARTICULAR TREE SAVES (AS IDENTIFIED ON THE TREE PRESERVATION PLAN) BE MARKED OR LOCATED IN THE FIELD PRIOR TO ANY SITE WORK.

CERTAIN PLANNING BOARD CONDITIONS OF SITE PLAN APPROVAL

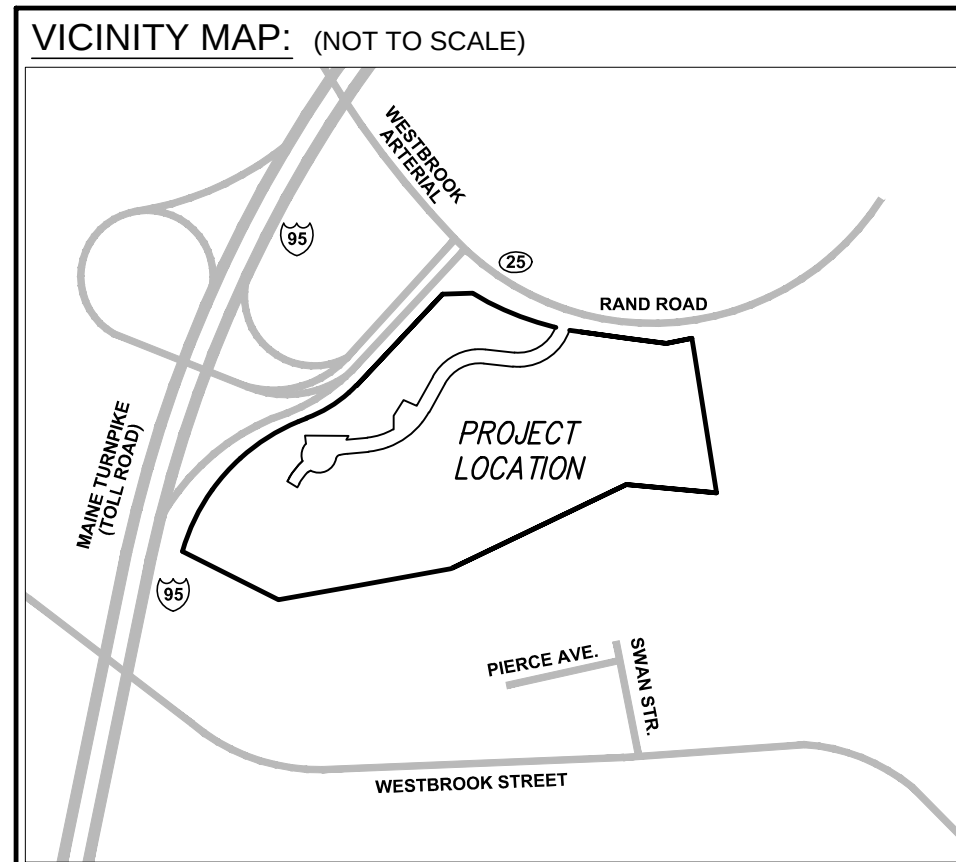
- THAT WHEN INDIVIDUAL UNITS ARE PROPOSED FOR SITE PLAN REVIEW THE APPLICANTS SHOULD SUBMIT DETAILED SPECIFICATIONS FOR SNOW STORAGE MANAGEMENT/PROTECTION OF GRAVEL, WETLANDS, EXTERIOR LAMP FIXTURES (INCLUDING WALL MOUNTED), AND CONSIDER THE OPPORTUNITY FOR TRAIL LINKS WITH THE WIDER TRAIL NETWORK ON THE RPZ OPEN SPACE PART OF THE SITE; AND
- THAT THE SITE PLANS FOR THE INDIVIDUAL UNITS SHALL BE BROUGHT BEFORE THE PLANNING BOARD FOR REVIEW AND APPROVAL, AND THE BOARD RESERVES THE RIGHT TO REVIEW INDIVIDUAL UNITS UNDER THE STANDARDS OF THE SITE PLAN ORDINANCE.

MAP REFERENCES:

- A PLAN ENTITLED "PLAN OF STANDARD BOUNDARY SURVEY, PROPERTY OF THE CITY OF PORTLAND, WESTBROOK STREET, PORTLAND, MAINE" DATED OCT. 1997 AND LAST REVISED OCT. 23, 2002, PREPARED BY LAND SERVICES INC.



FIRST AMENDED SUBDIVISION PLAN
 OF
 PORTLAND TECHNOLOGY PARK
 CONDOMINIUM
 RAND ROAD, PORTLAND, MAINE
 RECORD OWNER:
 CITY OF PORTLAND - DECLARANT
 388 CONGRESS STREET, PORTLAND, MAINE



GENERAL NOTES:

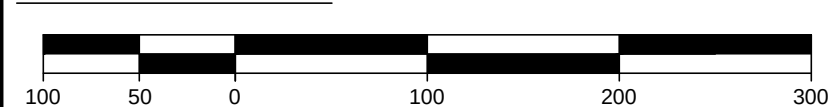
- 1) THIS PLAN AND ALL WORK ASSOCIATED WITH IT WAS PERFORMED BY SGC ENGINEERING, LLC PURSUANT TO A PROFESSIONAL SERVICES CONTRACT BETWEEN WOODARD & CURRIER, LLP AND SGC ENGINEERING, LLC, DATED SEPTEMBER 8, 2010 AND SIGNED MAY 14, 2011.
- 2) REFERENCE MADE FOR THE LOCUS PARCEL IS SIMON A. SNYDER, JASON A. SNYDER, RONALD A. BARRIS, TRUSTEE OF THE THERESE BARRIS MARITAL TRUST, CYNTHIA B. BAKER, TRUSTEES OF THE THEODORE BARRIS MARITAL TRUST, RONALD A. BARRIS AND CYNTHIA B. BAKER, CO-TRUSTEES OF THE BARRIS FAMILY TRUST TO THE CITY OF PORTLAND, DATED DECEMBER 7, 1998 AND RECORDED IN DEED BOOK 15211, PAGE 0316 (THE CUMBERLAND COUNTY REGISTRY OF DEEDS).
- 3) THE BEARINGS SHOWN HEREON ARE NOTE TO GRID NORTH AND ARE BASED ON PLAN REFERRED TO UNDER MAP REFERENCES, NOTE 1.
- 4) THE LOCUS PARCEL IS DEPICTED AS LOTS 1 & 2 IN BLOCK A ASSESSORS MAP 249. ALL BUTTING PROPERTY LINES REFERENCED HEREON WAS TAKEN FROM THE CITY OF PORTLAND ASSESSORS DATA AS OF THE DATE OF THIS PLAN.
- 5) RAND ROAD IS A PUBLIC HIGHWAY. THE SIDELINE LOCATIONS ARE BASED ON THE PLAN REFERENCED UNDER NOTE 1 OF MAP REFERENCES BELOW AND MAINE TURNPIKE AUTHORITY PLANS ON FILE AT THE OFFICES FOR THE MAINE TURNPIKE AUTHORITY.
- 6) NO SUBSURFACE INVESTIGATION HAS BEEN PERFORMED BY SGC ENGINEERING, LLC. DI-SAFE SHOULD BE CONTACTED PRIOR TO COMMENCING ANY EXCAVATION. (888-344-7333).
- 7) THE BOUNDARY INFORMATION ON THIS PLAN IS BASED ON THE PLAN REFERENCED UNDER NOTE 1 OF MAP REFERENCES. SGC ENGINEERING FIELD CREWS COMPLETED A SURVEY OF THE PIPELINE LOCATIONS WITHIN THE PORTLAND PIPELINE COMPANY EASEMENT AND EXISTING MONUMENTATION FOUND AND SET BY PREVIOUS SURVEY COMPLETED BY LAND SURVEYING, INC. FOR THE CITY OF PORTLAND. THE SURVEY DATA AND TO OVERLAY DESIGN INFORMATION WITH BOUNDARIES DETERMINED BY LAND SERVICES, INC. SGC ENGINEERING DID NOT CONFIRM PERIMETER BOUNDARIES BEYOND LOCATION OF MONUMENTATION.
- 8) REFERENCE IS HEREBY MADE TO THE PORTLAND TECHNOLOGY PARK CONDOMINIUM DECLARATION OF CONDOMINIUM, INCLUSIVE OF BYLAWS, TO BE RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS AT BOOK _____, PAGE _____.
- 9) ELEVATIONS ARE BASED ON NAVD 1988 DATUM.
- 10) CLEARING LIMITS SHALL BE RESTRICTED TO LIMITED COMMON ELEMENT AREAS, EASEMENT AREA 1 ASSOCIATED WITH THE SITE ROADWAY, EASEMENT AREA 2 ASSOCIATED WITH ACCESS TO THE TRAIL HEAD PARKING, AND EASEMENT AREA 3 ASSOCIATED WITH THE TRAIL HEAD PARKING, AND 20 FT WIDE EASEMENT AREA FOR THE GAS LINE TO EASEMENT AREA 1 NEAR LOTS 5 & 7. MANAGEMENT OF THE FORESTED COMMON AREAS OUTSIDE OF THE CLEARING LIMITS SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF PORTLAND CITY ARBORIST. THE CITY OF PORTLAND AND APPROVED BY THE CITY ARBORIST. MONUMENTATION OF THE CLEARING LIMIT BOUNDARIES SHALL OCCUR PRIOR TO THE START OF CONSTRUCTION.
- 11) PHASE 1 INCLUDES CONSTRUCTION OF ALL PROPOSED RIGHT-OF-WAY IMPROVEMENTS IN RAND ROAD.
- 12) PROJECT IS SUBJECT TO THE CONDITIONS SET FORTH IN CITY OF PORTLAND SITE PLAN APPROVAL, SUBDIVISION APPROVAL, AND TRAFFIC MOVEMENT PERMIT; MAINE DEP NATURAL RESOURCES PROTECTION ACT AND SITE LOCATION OF DEVELOPMENT ACT. SEPARATE PROPERTY RECORDS AND CITY OF PORTLAND ENGINEERING CENTER PERMIT AUTHORIZATION. COPIES OF THESE DOCUMENTS ARE AVAILABLE THROUGH THE CITY OF PORTLAND ECONOMIC DEVELOPMENT OFFICE.
- 13) PROJECT IS SUBJECT TO THE PLANS APPROVED UNDER SITE PLAN REVIEW BY THE CITY OF PORTLAND. COPIES OF THESE DOCUMENTS ARE AVAILABLE THROUGH THE CITY OF PORTLAND ECONOMIC DEVELOPMENT OFFICE.
- 14) RESPONSIBILITIES FOR STORMWATER MANAGEMENT SYSTEM INSPECTIONS AND MAINTENANCE ARE IDENTIFIED WITHIN THE DECLARATION OF CONDOMINIUM. STORMWATER MANAGEMENT SYSTEM INSPECTION AND MAINTENANCE REQUIREMENTS ARE IDENTIFIED IN A MAINTENANCE PLAN AVAILABLE THROUGH THE CITY OF PORTLAND ECONOMIC DEVELOPMENT OFFICE.

MAP REFERENCES

- 1) A PLAN ENTITLED "PLAN OF STANDARD BOUNDARY SURVEY, PROPERTY OF THE CITY OF PORTLAND, WESTBROOK STREET, PORTLAND, MAINE" DATED OCT. 1997 AND LAST REVISED OCT. 23, 2002, PREPARED BY LAND SERVICES INC.

LEGEND: LINETYPES & HATCH PATTERN	
ADJACENT LOT LINE	_____
ADJACENT R.O.W. LINE	_____
LOCUS BOUNDARY LINE	_____
OLD TRACT LINE	_____
EASEMENT LINE	_____
CONTROLLED ACCESS	_____
OVERHEAD ELECTRIC LINE	_____ ONE _____
SANITARY SEWER LINE	_____ S _____
LIMITED COMMON ELEMENT YARD LIMIT	_____ _____
UNIT	_____
LEGEND: POINT TYPES & SYMBOLS	
CONCRETE BOUND	⊞
GRANITE BOUND TO BE SET	⊞
PIPE	○
REBAR	●
SOLID SMOOTH ROD	⊙
RAILROAD SPIKE	⊙
HANDICAPPED SYMBOL	♿
UTILITY POLE	⌚
SQUARE CATCH BASIN	⊞
ROUND CATCH BASIN	⊙
RAIN MANHOLE	⊙
LIMITED COMMON ELEMENT	L.C.E.
SINGLE POST SIGN	⌚
ELECTRIC MANHOLE	⊙
LIGHT POST	⌚
GAS VALVE	⊙
GAS VENT PIPE	⊙ GVP
SEWER MANHOLE	⊙
HYDRANT	⊙
WATER MANHOLE	⊙
WATER SHUT-OFF	⊙
WATER VALVE	⊙
DECIDUOUS TREE	⊙

GRAPHIC SCALE:



EASEMENT AREA 1				
CURVE TABLE				
CURVE	RADIUS	LENGTH	BEARING	CHORD DIST.
C1	250.00	30.49	S65°16'18"W	30.47
C2	74.58	64.22	N39°39'58"W	62.25
C3	170.00	56.12	N14°13'36"E	55.87
C4	1180.00	60.59	N85°30'52"E	60.58
C9	350.00	25.49	S26°46'56"W	25.49

LINE TABLE		
LINE	LENGTH	BEARING
L1	20.97	S35°54'43"E
L3	8.11	N63°52'43"W
L4	2.94	N15°00'00"W
L5	23.23	N62°26'19"E
L6	5.88	N35°00'00"E

EASEMENT AREA 2				
CURVE TABLE				
CURVE	RADIUS	LENGTH	BEARING	CHORD DIST.
C5	76.54	37.59	S43°48'45"E	37.21
C6	74.00	77.50	S39°44'51"E	74.00
C7	114.00	119.39	N59°44'51"W	114.01
C8	20.00	8.26	N41°34'58"W	8.21

LINE TABLE		
LINE	LENGTH	BEARING
L6	48.58	S29°44'44"E
L7	40.00	S00°08'40"E
L8	59.04	N29°44'44"W

CERTAIN PLANNING BOARD CONDITIONS OF SUBDIVISION APPROVAL

- k.) THIS APPROVAL ENTITLES THE APPLICANT AND FUTURE DEVELOPERS OF THE OFFICE PARK ZONE TO DEVELOPE THE MAXIMUM NUMBER AND SIZE OF PARKING SPACES AS SHOWN ON THE SUBMITTED SITE PLAN, AND TO CONSIDER THE EFFECTS OF TRAFFIC CONCENTRATION OF THE NEED FOR THESE SPACES AND SPACE DIMENSIONS (VIA A PARKING ANALYSIS) AT THE TIME THAT THE SITE IS UNDER SITE PLAN REVIEW; AND
- l.) THAT THE CONDOMINIUM ASSOCIATION SHALL DEVELOP AND MANAGE A MAINTENANCE AND REPAIR SCHEDULE FOR THE TRAILHEAD PARKING AND PLANNING AUTHORITY, REVIEWED AS PART OF THE INITIAL AND SUBSEQUENT SITE PLAN APPROVALS FOR EACH BUILDING UNIT WITHIN THE LIMITED COMMON ELEMENT AREAS; AND
- m.) THAT THE DEVELOPMENT OF LIMITED COMMON ELEMENT AREAS AND UNITS IS SUBJECT TO REVIEW AND APPROVAL BY THE CITY OF PORTLAND PLANNING AUTHORITY FOR CONFORMANCE WITH THE CITY OF PORTLAND PLANNING DEPARTMENT AND CITY OF PORTLAND CODE OF ORDINANCES, CHAPTER 14 LAND USE, ARTICLE V, SITE PLAN FOR BUILDING, ARCHITECTURE, SITE LANDSCAPING, SITE PEDESTRIAN CIRCULATION, BICYCLE CIRCULATION, AND TRAILHEAD PARKING, AND THE CITY OF PORTLAND ORDINANCES TO APPROVED TRAILHEAD, PARKING, ACCESS, UTILITY, EXTERIOR LIGHTING, TREE PRESERVATION AND STORMWATER FEATURES; AND
- n.) THE CLEARING LIMITS SHALL BE RESTRICTED TO LIMITED COMMON ELEMENT (LCE) AREAS, INCLUDING THE TRAILHEAD PARKING, TRAILHEAD PARKWAY, EASEMENT AREA 2 ASSOCIATED WITH ACCESS TO THE TRAIL HEAD PARKING, AND EASEMENT AREA 3 ASSOCIATED WITH THE TRAIL HEAD PARKING, AND THE 20 FT WIDE EASEMENT AREA FOR THE TRAILHEAD EASEMENT AREA 1; AND
- o.) THAT THE APPLICANT AND ASSIGNS SHALL COMPLY WITH THE CONDITIONS OF CHAPTER 32 STORMWATER INCLUDING ARTICLE III, POST-CONSTRUCTION STORM WATER MANAGEMENT, WHICH SPECIFIES THE ANNUAL INSPECTIONS AND REPORTING REQUIREMENTS, AND THE APPLICANT SHALL COMPLY WITH THE CITY OF PORTLAND WITH CONDITIONS OF THE CONSTRUCTION STORMWATER MANAGEMENT PLAN AND SEDIMENT & EROSION CONTROL PLAN BASED ON CITY STANDARDS AND STATE GUIDELINES; AND
- p.) THAT THE PROPOSED LIMITED COMMON ELEMENTS, SHOWN AS "LCE" ON THE PLAN, BE MARKED WITH PERMANENT MARKERS SUCH AS FENOW MARKERS IN THE FIELD PRIOR TO THE START OF CONSTRUCTION OF THE TRAILHEAD PARKING, AND TREE PRESERVATION AREAS ARE CLEAR ON THE SITE; AND
- q.) THAT THE RPZ ZONE LINE, TRAILHEAD PARKING AREA, SIGNIFICANT TREE AREAS AND PARTICULAR TREE SAVES (AS IDENTIFIED ON THE TREE PRESERVATION PLAN) BE IDENTIFIED AND LOCATED ON THE TRAILHEAD PARKING AND TRAILHEAD PARKWAY

CERTAIN PLANNING BOARD CONDITIONS OF SITE PLAN APPROVAL

- iii.) THAT WHEN INDIVIDUAL UNITS ARE PROPOSED FOR SITE PLAN REVIEW THE APPLICANTS SHOULD SUBMIT DETAILED SPECIFICATIONS FOR SNOW STORAGE MANAGEMENT/PROTECTION OF GRAVEL WETLANDS, EXTERIOR LAMP FIXTURES (INCLUDING WALL MOUNTED), AND CONSIDER THE OPPORTUNITY FOR TRAIL LINKS WITH THE WIDER TRAIL NETWORK ON THE RPZ OPEN SPACE PART OF THE SITE; AND
- iv.) THAT THE SITE PLANS FOR THE INDIVIDUAL UNITS SHALL BE BROUGHT BEFORE THE PLANNING BOARD FOR REVIEW AND APPROVAL, AND THE BOARD RESERVES THE RIGHT TO REVIEW INDIVIDUAL UNITS UNDER THE STANDARDS OF THE SITE PLAN ORDINANCE.

-
- TURNPIKE
- RADIUS = 858.29
 DELTA = 54°09'38"
 LENGTH = 811.33'
 IRON TO IRON
- 158°46'00"
 93.17
- LCE 6&
 0.12+ ACRE

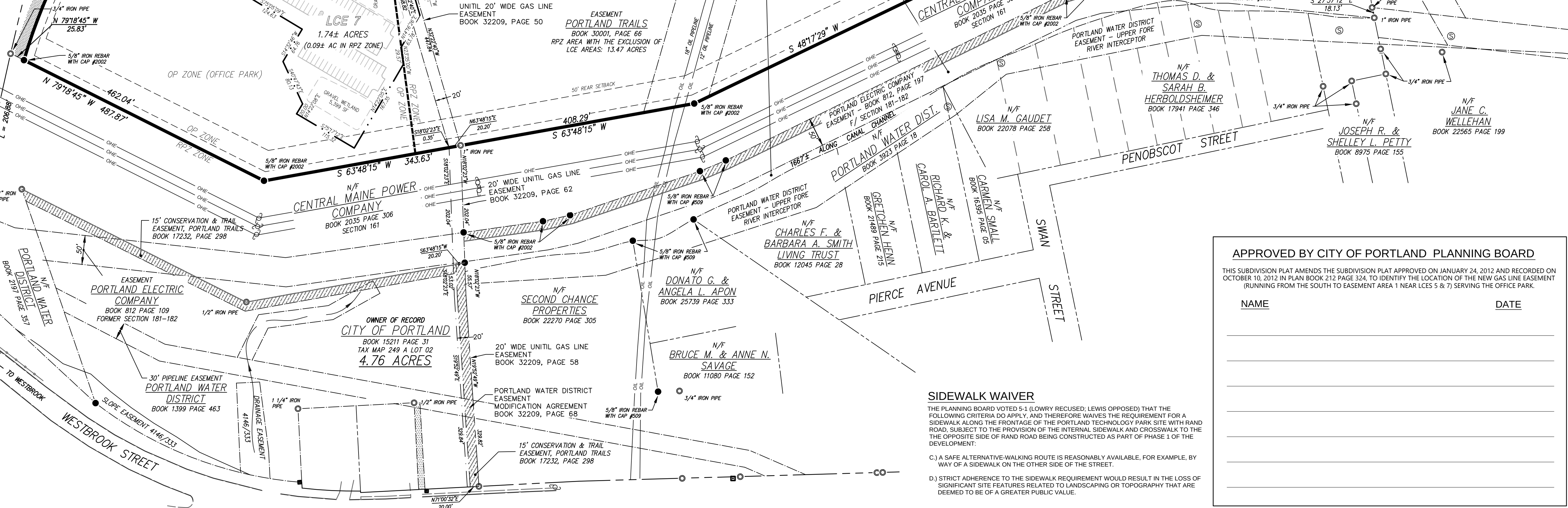
- GRAVE WET AND 12

- MA
1
CURVED FACE OF BACK - REF. 22
6,384 SF
157.70
47°

-

- 1.191 ACRES
N 75° 05' 10" W
284.50'

-



APPROVED BY CITY OF PORTLAND PLANNING BOARD

THIS SUBDIVISION PLAT AMENDS THE SUBDIVISION PLAT APPROVED ON JANUARY 24, 2012 AND RECORDED ON OCTOBER 10, 2012 IN PLAN BOOK 212 PAGE 324, TO IDENTIFY THE LOCATION OF THE NEW GAS LINE EASEMENT (RUNNING FROM THE SOUTH TO EASEMENT AREA 1 NEAR LCES 5 & 7) SERVING THE OFFICE PARK.

[illegible]

SIDEWALK WAIVER

THE PLANNING BOARD VOTED 5-1 (LOWRY RECUSED; LEWIS OPPOSED) THAT THE FOLLOWING CRITERIA DO APPLY, AND THEREFORE WAIVES THE REQUIREMENT FOR A SIDEWALK ALONG THE FRONTAGE OF THE PORTLAND TECHNOLOGY PARK SITE WITH RAND ROAD, SUBJECT TO THE PROVISION OF THE INTERNAL SIDEWALK AND CROSSWALK TO THE OPPOSITE SIDE OF RAND ROAD BEING CONSTRUCTED AS PART OF PHASE 1 OF THE DEVELOPMENT:

- C.) A SAFE ALTERNATIVE-WALKING ROUTE IS REASONABLY AVAILABLE, FOR EXAMPLE, BY WAY OF A SIDEWALK ON THE OTHER SIDE OF THE STREET.
- D.) STRICT ADHERENCE TO THE SIDEWALK REQUIREMENT WOULD RESULT IN THE LOSS OF SIGNIFICANT SITE FEATURES RELATED TO LANDSCAPING OR TOPOGRAPHY THAT ARE DEEMED TO BE OF A GREATER PUBLIC VALUE.

Received : _____
 at _____ h _____ m _____ M., and
 Filed in Plan Book _____ Page _____
 ATTEST : _____
 _____ Register

REVISIONS:	
NO.	DATE
1	9/26/2011
2	10/12/2011
3	11/17/2012
4	7/17/2012
5	9/25/2012
6	2/12/2015
7	5/1/2015
8	9/28/15

ONLY VALID WITH ORIGINAL STAMP

[illegible]

SCC ENGINEERING, LLC

- Civil Design & Survey Engineering
- Environmental & Regulatory Permitting
- Electrical Power Systems Engineering

OUR CLIENTS IN THE U.S.A. & CANADA

Technology Center
Transway Drive, Suite 200
St. Louis, MO 63143
Tel: 314-596-5571
Fax: 314-596-5571

49 South Street
Suite 305
South Burlington, VT 05403
Tel: 802-251-1836
Fax: 802-251-1836

1005 Elm Street
Suite 12
Farmington, NM 87401
Tel: 505-592-8974
Fax: 505-592-8974

DED
N. DEC
PROJECT: 695001
FILE: BND-695001 (1)

SHEET 1 OF 1



SERVING C

Target
20 Sec
On
Tel
Fax

501 County Road
Westborough, MA 01581
Tel: 207-347-8100
Fax: 207-347-8101

CALC: 09-29-11
DRAW: 09-29-11
CHECK: 09-29-11

DATE: 09-29-11
SCALE: 1" = 100'

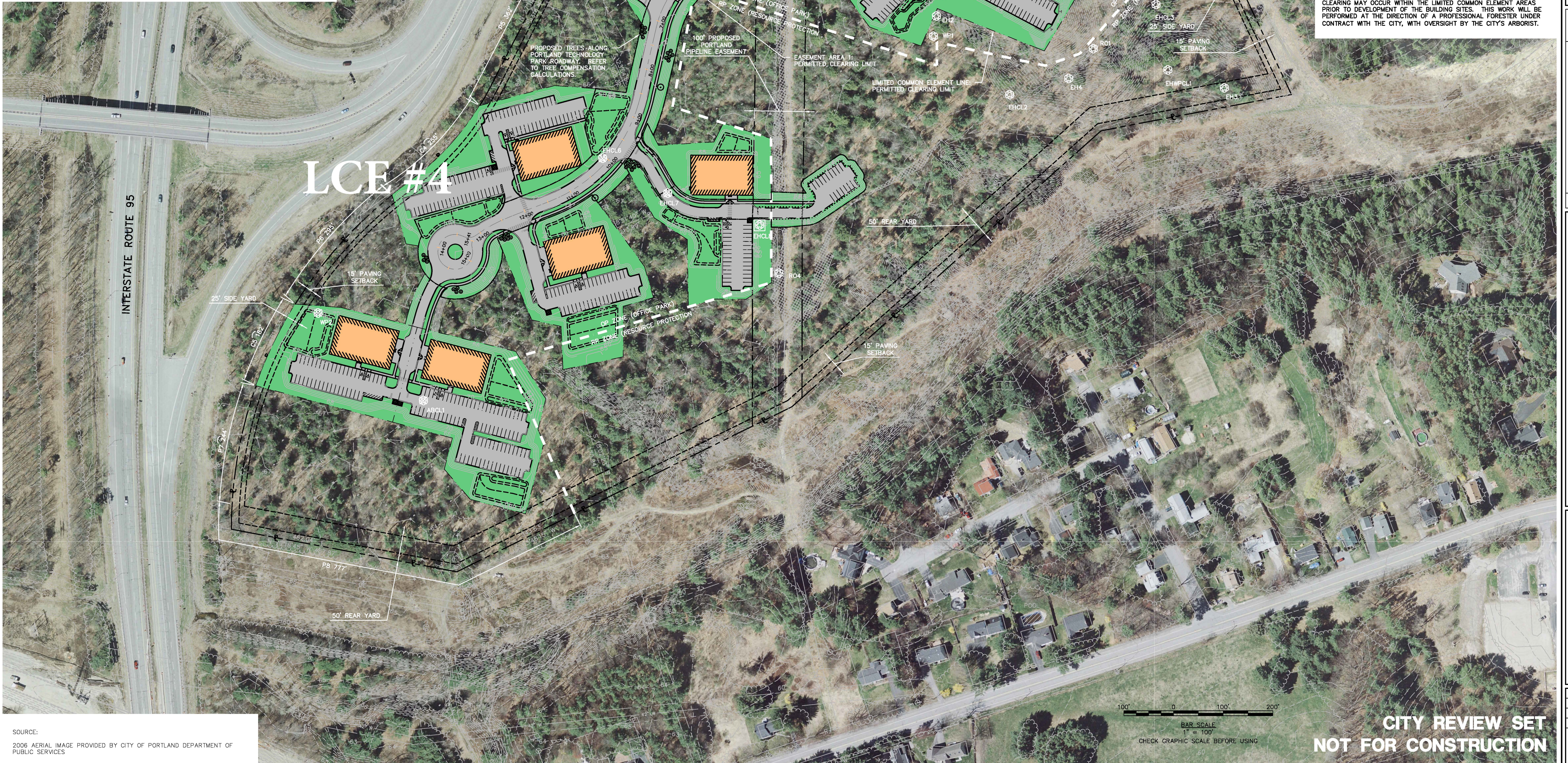
FIRST AMENDED SUBDIVISION PLAT
OF
*PORTLAND TECHNOLOGY PARK
CONDOMINIUM
RAND ROAD, PORTLAND, MAINE*
RECORD OWNER;
CITY OF PORTLAND - DECLARANT
389 CONGRESS STREET, PORTLAND, MAINE

a. Landscape Preservation (ii) All development subject to zoning setbacks shall preserve a minimum of 30% of existing trees ten (10) inches DBH or greater within the required setback area.

Preservation within Setback	Length Along PL (ft)		Setback Depth (ft)	Area (ft ²)
	P1	283	50	14,150
	P2	130	50	6,500
	P3	120	50	6,000
	P4	122	50	6,100
	P5	362	25	9,050
	P6	295	25	7,375
	P7	244	25	6,100
	P8	777	25	19,425
Total Area Preserved			74,700	
% Trees Preserved within Setbacks*			68%	
Minimum % Required			30%	
Clearing within Setback	Length Along PL (ft)		Setback Depth (ft)	Area (ft ²)
	C1	315	50	15,750
	C2	49	50	2,450
	C3	221	25	5,525
	C4	255	25	6,375
	C5	182	25	4,550
	Total Area Cleared			34,650
	% Trees Cleared within Setbacks*			32%
Maximum % Allowed			70%	

P1,2,3... = Length of Tree Preservation within setback; refer to dimensions noted on Plan
C1,2,3... = Length of Tree Clearing within setback; refer to dimensions noted on Plan

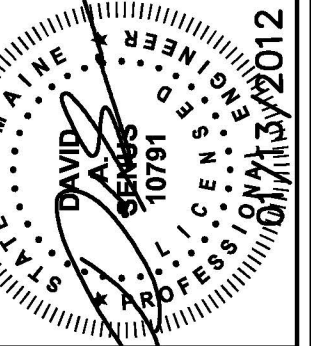
***Note:** Actual number of trees with DBH 10" or greater was not documented due to the property size and extensive tree growth. Size and distribution of tree growth is relatively even across site, as confirmed by Jeff Taring, City Arborist. Calculation assumes that an even distribution of trees of 10" and greater exists in all forested areas within the property setbacks.

 PROPOSED TREES

WOODLOT ALTERNATIVES, INC. PERFORMED AN ASSESSMENT OF SIGNIFICANT TREE RESOURCES ON THE PROJECT PARCEL ON APRIL 3, 2013. THE STUDY, IN CONJUNCTION WITH THE PARCEL MAP, SIZE, AGE, SIZE, FORM, FUNCTION, AND/OR SPECIES WERE IDENTIFIED AND ARE INDICATED ON THE PLAN. SOME OF THE TREES OR TREE CLUSTERS IDENTIFIED IN THE STUDY ARE NEW TO THE PROJECT. THE STUDY DID NOT IDENTIFY THE EXACT NUMBER OF TREES, AS THE STUDY DID NOT IDENTIFY THE EXACT NUMBER OF TREES INCLUDED IN EACH CLUSTER; HOWEVER, WE ESTIMATED THAT THERE ARE 10 SIGNIFICANT TREES OR TREE CLUSTERS. THE REMOVAL OF APPROXIMATELY 7 SIGNIFICANT TREE CLUSTERS OR INDIVIDUAL TREES IDENTIFIED IN THE STUDY, THE PROJECT PROPOSES A NEW CLUSTER OF NEW TREES TO BE PLANTED IN THE PARCEL. THE NEW TREES WOULD BE LOCATED IN A MANNER THAT BLENDS WITH THE ADJACENT, PRESERVED FORESTED AREAS OF THE SITE. SIGNIFICANT TREES OR TREE CLUSTERS THAT REMAIN IDENTIFIED AND NOT IN THE SIGNIFICANT TREES WORKSHEET ARE IDENTIFIED FOR PRESERVATION ON THE SITE PLANS, WITH SPECIFIC CALL-OUTS AND DETAILS FOR TREE PROTECTION.

ASSESSMENT AREAS 1, 2 & 3 AND THE LIMITED COMMON ELEMENT LINES NOTED ON THE SUBDIVISION RECORDING PLAT DICATE THE PERMITTED CLEARING LIMITS OF THE SITE. A FOREST MANAGEMENT PLAN IS BEING PREPARED FOR THE PROJECT SITE, AND WILL DICATE THE FOREST MANAGEMENT PRACTICES IN THE COMMON ELEMENT AREAS OF THE SITE. ALL CLEARING WILL BE LIMITED TO THE PERMITTED CLEARING WORKERS OR SIGNS APPROVED BY THE CITY PRIOR TO CONSTRUCTION. LIMITED CLEARING MAY OCCUR WITHIN THE LIMITED COMMON ELEMENT AREAS PRIOR TO DEVELOPMENT OF THE BUILDING SITES. THIS WORK WILL BE PERFORMED AT THE DIRECTION OF A PROFESSIONAL FORESTER UNDER CONTRACT WITH THE CITY, WITH OVERSIGHT BY THE CITY'S ARBORIST.

41 Hutchins Drive
Portland, Maine 04102
800.426.4262 | www.woodardcurran.com



REV	DESCRIPTION	DATE
	DESIGNED BY: MKC	CHECKED BY: DAS
	DRAWN BY: JDE	2023/06/15-TP-01.dwg

FREE PRESERVATION PLAN

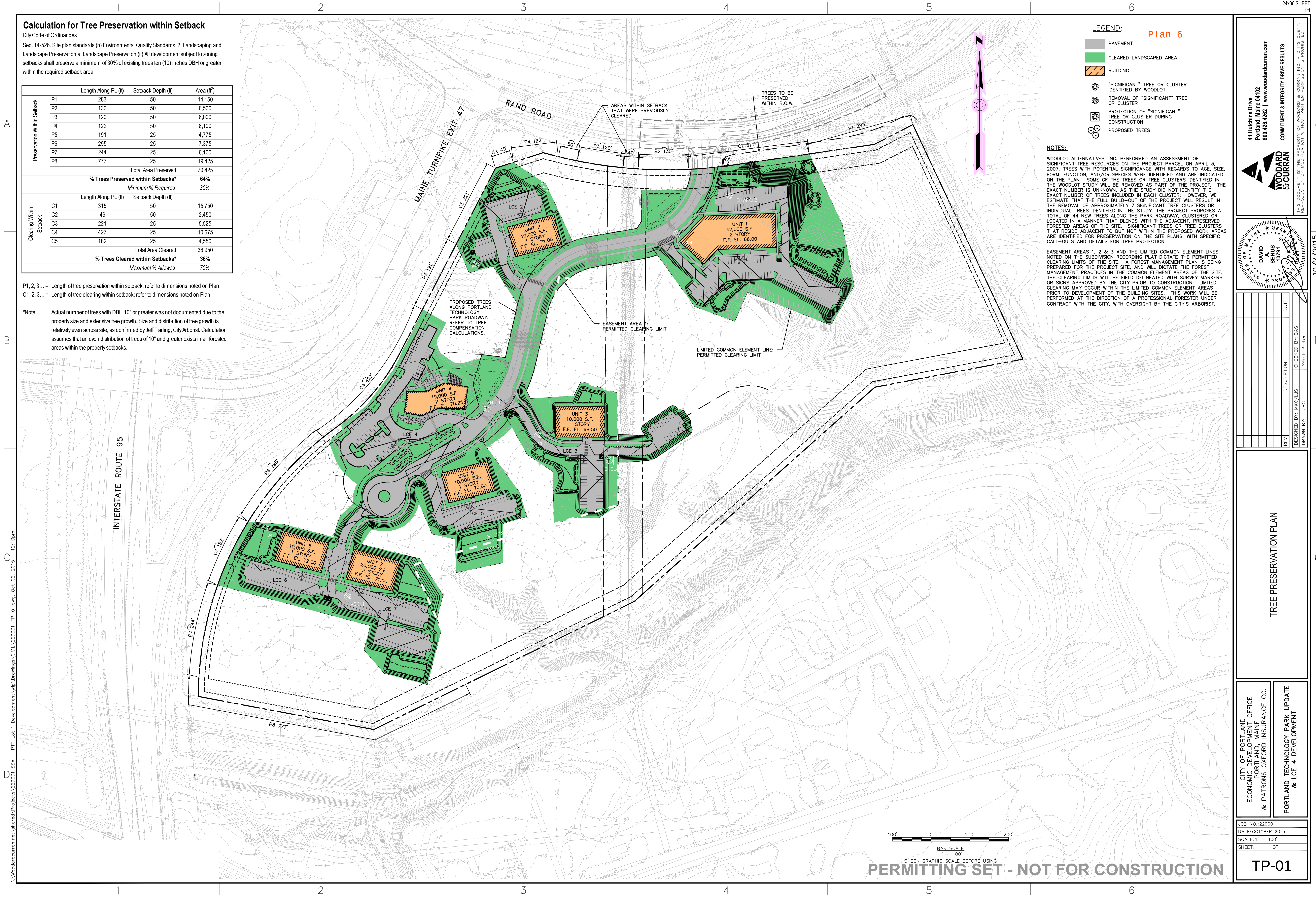
**ECONOMIC DEVELOPMENT OFFICE
PORTLAND, MAINE**

PORTLAND TECHNOLOGY PARK

NO.: 203848.63
E: JANUARY 13, 2012
LE: 1"=100'
ET: OF

TP-01

**CITY REVIEW SET
NOT FOR CONSTRUCTION**



Calculation for Tree Preservation within Setback

City Code of Ordinances

Sec. 14-526. Site plan standards (b) Environmental Quality Standards. 2. Landscaping and Landscape Preservation a. Landscape Preservation (ii) All development subject to zoning setbacks shall preserve a minimum of 30% of existing trees ten (10) inches DBH or greater within the required setback area.

Preservation Within Setback		Length Along PL (ft)	Setback Depth (ft)	Area (ft ²)
	P1	283	50	14,150
	P2	130	50	6,500
	P3	120	50	6,000
	P4	122	50	6,100
	P5	191	25	4,775
	P6	295	25	7,375
	P7	244	25	6,100
	P8	777	25	19,425
Total Area Preserved				70,425
% Trees Preserved within Setbacks*				64%
Minimum % Required				30%
Clearing Within Setback		Length Along PL (ft)	Setback Depth (ft)	Area (ft ²)
	C1	315	50	15,750
	C2	49	50	2,450
	C3	221	25	5,525
	C4	427	25	10,675
	C5	182	25	4,550
	Total Area Cleared			38,950
	% Trees Cleared within Setbacks*			36%
	Maximum % Allowed			70%

P1, 2, 3... = Length of tree preservation within setback; refer to dimensions noted on Plan
C1, 2, 3... = Length of tree clearing within setback; refer to dimensions noted on Plan

*Note:

Actual number of trees with DBH 10" or greater was not documented due to the property size and extensive tree growth. Size and distribution of tree growth is relatively even across site, as confirmed by Jeff Taring, City Arborist. Calculation assumes that an even distribution of trees of 10" and greater exists in all forested areas within the property setbacks.

LEGEND:

- PAVEMENT
- CLEARED LANDSCAPED AREA
- BUILDING
- "SIGNIFICANT" TREE OR CLUSTER IDENTIFIED BY WOODLOT
- REMOVAL OF "SIGNIFICANT" TREE OR CLUSTER
- PROTECTION OF "SIGNIFICANT" TREE OR CLUSTER DURING CONSTRUCTION
- PROPOSED TREES

Plan 6

NOTES:

WOODLOT ALTERNATIVES, INC. PERFORMED AN ASSESSMENT OF SIGNIFICANT TREE RESOURCES ON THE PROJECT PARCEL ON APRIL 3, 2007. TREES WITH POTENTIAL SIGNIFICANCE WITH REGARDS TO AGE, SIZE, FORM, FUNCTION, AND/OR SPECIES WERE IDENTIFIED AND ARE INDICATED ON THE PLAN. SOME OF THE TREES OR TREE CLUSTERS IDENTIFIED IN THE WOODLOT STUDY WILL BE REMOVED AS PART OF THE PROJECT. THE EXACT NUMBER IS UNKNOWN, AS THE STUDY DID NOT IDENTIFY THE EXACT NUMBER OF TREES INCLUDED IN EACH CLUSTER; HOWEVER, WE ESTIMATE THAT THE FULL BUILD-OUT OF THE PROJECT WILL RESULT IN THE REMOVAL OF APPROXIMATELY 7 SIGNIFICANT TREE CLUSTERS OR INDIVIDUAL TREES IDENTIFIED IN THE STUDY. THE PROJECT PROPOSES A TOTAL OF 44 NEW TREES ALONG THE PARK ROADWAY, CLUSTERED OR LOCATED IN A MANNER THAT BLENDS WITH THE ADJACENT, PRESERVED FORESTED AREAS OF THE SITE. SIGNIFICANT TREES OR TREE CLUSTERS THAT RESIDE ADJACENT TO BUT NOT WITHIN THE PROPOSED WORK AREAS ARE IDENTIFIED FOR PRESERVATION ON THE SITE PLANS, WITH SPECIFIC CALL-OUTS AND DETAILS FOR TREE PROTECTION.

EASEMENT AREAS 1, 2 & 3 AND THE LIMITED COMMON ELEMENT LINES NOTED ON THE SUBDIVISION RECORDING PLAT DICTATE THE PERMITTED CLEARING LIMITS OF THE SITE. A FOREST MANAGEMENT PLAN IS BEING PREPARED FOR THE PROJECT SITE, AND WILL DICTATE THE FOREST MANAGEMENT PRACTICES IN THE COMMON ELEMENT AREAS OF THE SITE. THE CLEARING LIMITS WILL BE FIELD DELINEATED WITH SURVEY MARKERS OR SIGNS APPROVED BY THE CITY PRIOR TO CONSTRUCTION. LIMITED CLEARING MAY OCCUR WITHIN THE LIMITED COMMON ELEMENT AREAS PRIOR TO DEVELOPMENT OF THE BUILDING SITES. THIS WORK WILL BE PERFORMED AT THE DIRECTION OF A PROFESSIONAL FORESTER UNDER CONTRACT WITH THE CITY, WITH OVERSIGHT BY THE CITY'S ARBORIST.

41 Hutchins Drive
Portland, Maine 04102
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WOODARD & CURRAN

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DAVID SENUS
10791
10/2/2015

DESIGNED BY: MKC/JUS
CHECKED BY: DAS
DRAWN BY: JBC

DATE
DESCRIPTION
REV

TREE PRESERVATION PLAN

CITY OF PORTLAND
ECONOMIC DEVELOPMENT OFFICE
PORTLAND, MAINE
& PATRONS OXFORD INSURANCE CO.

PORTLAND TECHNOLOGY PARK UPDATE
& LCE 4 DEVELOPMENT

JOB NO.: 229001
DATE: OCTOBER 2015
SCALE: 1" = 100'
SHEET: OF

TP-01

SOURCES:

1. SITE AND TOPOGRAPHIC DATA WERE PROVIDED BY NUMEROUS SOURCES AS IDENTIFIED HEREIN AND COMPILED BY WOODARD & CURRAN INC. BETWEEN JANUARY 2007 AND AUGUST 2010. FEATURES DEPICTED ON THE EXISTING SITE PLAN WERE NOT FIELD VERIFIED FOR ACCURACY OR OMISSIONS UPON PLAN COMPILATION. HORIZONTAL DATUM IS REFERENCED TO STATE PLANE NAD 1983 (FEET), MAINE WEST ZONE.
2. BOUNDARY, SITE, AND TOPOGRAPHIC FEATURES FOR CITY OWNED PARCELS THAT COMPOSE THE PROJECT AREA ORIGINATE FROM A PLAN BY LAND SERVICES, INC. "STANDARD BOUNDARY SURVEY, PROPERTY OF THE CITY OF PORTLAND, WESTBROOK STREET, PORTLAND, MAINE" PROJECT 99148 SHEET 1 OF 1 DATED OCT. 1997 WITH A FINAL REVISION DATE OF OCT. 23, 2002. VERTICAL DATUM IS REFERENCED TO NGVD29 WITH ONE FOOT CONTOUR INTERVALS.
3. SITE AND TOPOGRAPHIC FEATURES FOR ADJACENT ROADWAY AND ABUTTING PARCELS ORIGINATE FROM CITY OF PORTLAND, ME AERIAL SURVEY COMPILED USING 2000 AERIAL IMAGES BY BRADSTREET CONSULTANTS OF MANCHESTER, MAINE. VERTICAL DATUM IS REFERENCED TO NGVD29 WITH TWO FOOT CONTOUR INTERVALS.
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5. FIELD RECONNAISSANCE AND VISUAL VERIFICATION OF THE WETLANDS PREVIOUSLY DELINEATED BY DAMES & MOORE IN APRIL AND MAY OF 1998 WAS PERFORMED BY SW COLE ENGINEERING INC. IN NOVEMBER AND DECEMBER OF 2006, AND SUMMARIZED IN A LETTER REPORT DATED DECEMBER 15, 2006. ADDITIONAL WETLAND DELINEATION CONDUCTED BY S.W. COLE ON DECEMBER 15, 2006 IDENTIFIED AND DELINEATED THE LOCATION OF A FRESHWATER WETLAND AT THE NORTHEAST CORNER OF THE PROPERTY, JUST WEST OF A PORTLAND WATER DISTRICT EASEMENT, LABELED "WETLAND A, PF01/4", AND FURTHER DESCRIBED IN A LETTER REPORT DATED DECEMBER 21, 2006. WETLAND LOCATED BY MEANS OF GPS, DECEMBER 2006.
6. TREE ASSESSMENT CONDUCTED BY WOODLOT ALTERNATIVES, INC. APRIL 2007, AND SUMMARIZED WITHIN A LETTER REPORT DATED APRIL 13, 2007. LOCATIONS DETERMINED WITH HAND-HELD GPS UNIT, APRIL 2007.
7. VERNAL POOL ASSESSMENT CONDUCTED BY URS ON APRIL 16 AND MAY 19, 2006 AND SUMMARIZED IN LETTER REPORT DATED MAY 31, 2006.
8. EXISTING SEWER MAIN LOCATION FROM PLAN BY HNTB "WESTBROOK INTERCHANGE TOOL PLAZA LATERAL PLAN AND PROFILE 50+00 TO 63+70" DATED AUGUST, 2001
9. EXISTING WATER MAIN LOCATION FROM PLAN BY HNTB "WESTBROOK INTERCHANGE 42" WATERMAIN RELOCATION" DATED APRIL, 2001
10. UPDATED VERNAL POOL DELINEATION PERFORMED ON DECEMBER 12, 2010 FOR VERNAL POOLS E AND G BY BOYLE ASSOCIATES.
11. VERNAL POOL POINT INDICATORS (VP-XX-XX) LOCATED ON MAY 2, 2009 BY BOYLE ASSOCIATES.

Plan 7

LEGEND

- NON-IMPACTED WETLAND AREA
TOTAL = 365,914 S.F. (8.40 ACRES)
- IMPACTED WETLAND AREA
TOTAL = 37,416 S.F. (0.85 ACRES)
- TOTAL WETLAND AREA = 403,330 S.F. (9.25 ACRES)
- PHASE 1 BOUNDARY
- PHASE 2 BOUNDARY

Wetland Impacts

Phase 1

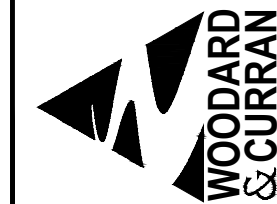
Completed Road	5243 SF
Proposed LCE 4	1461 SF
Proposed Road	215 SF
Future LCE 1	252 SF
Future LCE 2	7417 SF
Phase 1 Impact	14588 SF

Phase 2

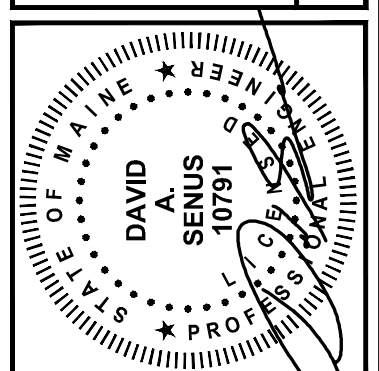
Future Road	5270 SF
Future LCE 3	3838 SF
Future LCE 5	6570 SF
Future LCE 6 & 7	7141 SF
Phase 2 Impact	22819 SF

Total Technology Park Impact	37407 SF
------------------------------	----------

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COMMITMENT & INTEGRITY DRIVE RESULTS



10/2/2015

WETLAND IMPACT FIGURE

CITY OF PORTLAND
ECONOMIC DEVELOPMENT OFFICE
PORTLAND, MAINE
& PATRONS OXFORD INSURANCE CO.

PORTLAND TECHNOLOGY PARK UPDATE
& LCE 4 DEVELOPMENT

JOB NO.:229001
DATE:OCTOBER 2015
SCALE:1" = 100'
SHEET: 1 OF 1

WI-01



PERMITTING SET - NOT FOR CONSTRUCTION

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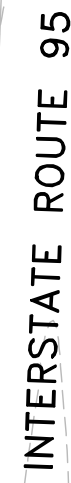
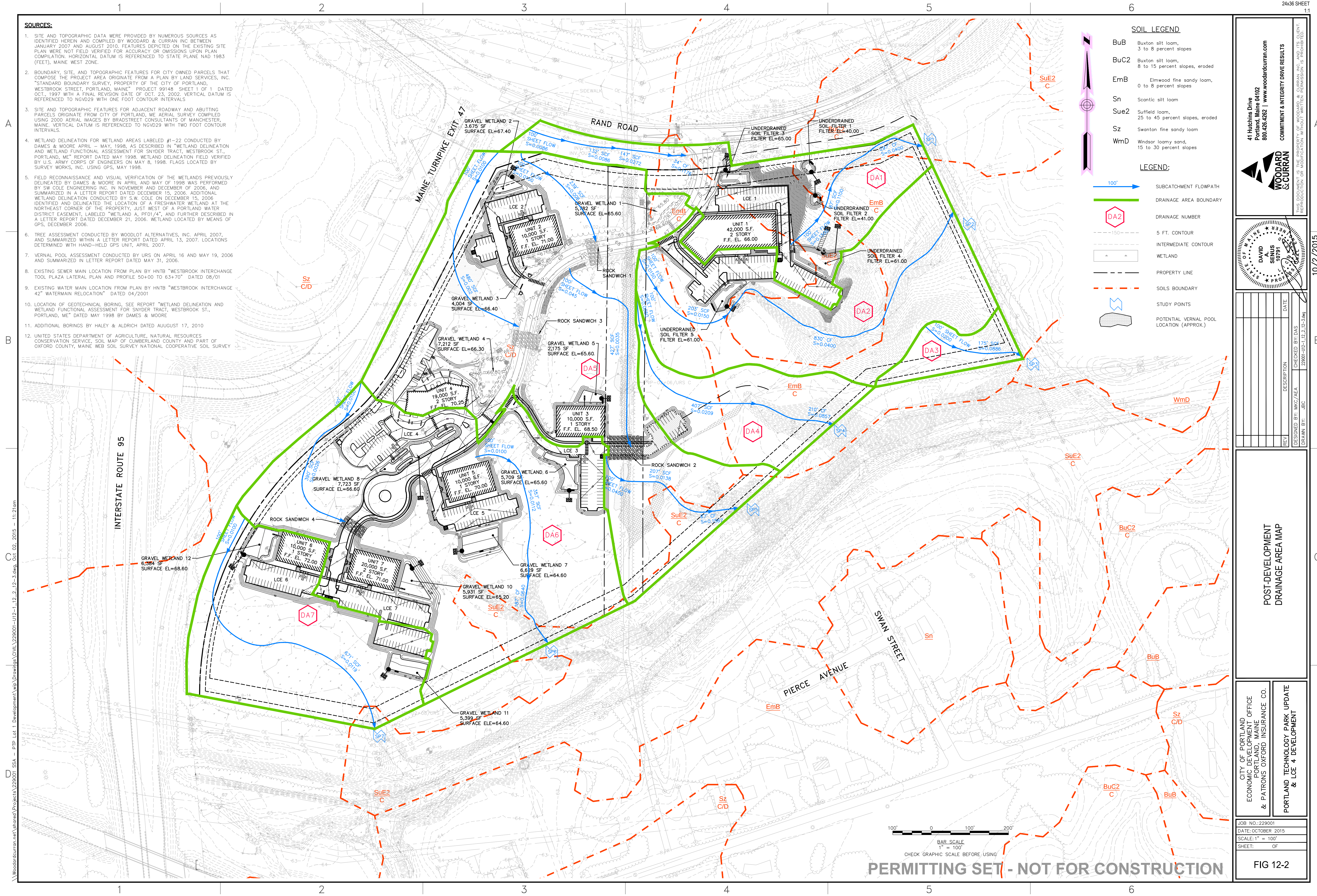


FIG 12-1

NOT FOR CONSTRUCTION



- SOURCES:**
1. SITE AND TOPOGRAPHIC DATA WERE PROVIDED BY NUMEROUS SOURCES AS IDENTIFIED HEREIN AND COMPILED BY WOODARD & CURRAN INC. BETWEEN JANUARY 2007 AND AUGUST 2010. FEATURES DEPICTED ON THE EXISTING SITE PLAN WERE NOT FIELD VERIFIED FOR ACCURACY OR OMISSIONS UPON PLAN COMPILED. HORIZONTAL DATUM IS REFERENCED TO STATE PLANE NAD 1983 (FEET), MAINE WEST ZONE.
 2. BOUNDARY, SITE, AND TOPOGRAPHIC FEATURES FOR CITY OWNED PARCELS THAT COMPOSE THE PROJECT AREA ORIGINATE FROM A PLAN BY LAND SERVICES, INC. "STANDARD BOUNDARY SURVEY, PROPERTY OF THE CITY OF PORTLAND, WESTBROOK STREET, PORTLAND, MAINE" PROJECT 99148 SHEET 1 OF 1 DATED OCT. 1997 WITH A FINAL REVISION DATE OF OCT. 23, 2002. VERTICAL DATUM IS REFERENCED TO NGVD29 WITH ONE FOOT CONTOUR INTERVALS.
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 11. ADDITIONAL BORINGS BY HALEY & ALDRICH DATED AUGUST 17, 2010
 12. UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, SOIL MAP OF CUMBERLAND COUNTY AND PART OF OXFORD COUNTY, MAINE WEB SOIL SURVEY NATIONAL COOPERATIVE SOIL SURVEY

- SOIL LEGEND**
- BuB Buxton silt loam, 3 to 8 percent slopes
 - BuC2 Buxton silt loam, 8 to 15 percent slopes, eroded
 - EmB Elmwood fine sandy loam, 0 to 8 percent slopes
 - Sn Scantic silt loam
 - Sue2 Suffield loam, 25 to 45 percent slopes, eroded
 - Sz Swanton fine sandy loam
 - WmD Windsor loamy sand, 15 to 30 percent slopes

- LEGEND:**
- SUBCATCHMENT FLOWPATH
 - DRAINAGE AREA BOUNDARY
 - DRAINAGE NUMBER
 - 5 FT. CONTOUR
 - INTERMEDIATE CONTOUR
 - WETLAND
 - PROPERTY LINE
 - SOILS BOUNDARY
 - STUDY POINTS
 - POTENTIAL VERNAL POOL LOCATION (APPROX.)

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WOODARD & CURRAN

COMMITMENT & INTEGRITY DRIVE RESULTS

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10/2/2015

REV	DESCRIPTION	DATE
1	CHECKED BY: DAS	
2	DESIGNED BY: MAC/AEA	
3	DRAWN BY: JBC	

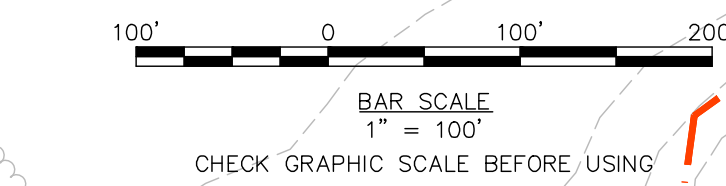
POST-DEVELOPMENT DRAINAGE AREA MAP

CITY OF PORTLAND
ECONOMIC DEVELOPMENT OFFICE
PORTLAND, MAINE
& PATRONS OXFORD INSURANCE CO.

PORTLAND TECHNOLOGY PARK UPDATE
& LCE 4 DEVELOPMENT

JOB NO.: 229001
DATE: OCTOBER 2015
SCALE: 1" = 100'
SHEET: OF

FIG 12-2



PERMITTING SET - NOT FOR CONSTRUCTION

1. SITE AND TOPOGRAPHIC DATA WERE PROVIDED BY NUMEROUS SOURCES AS IDENTIFIED HEREIN AND COMPILED BY WOODARD & CURRAN INC BETWEEN JANUARY 2007 AND AUGUST 2010. FEATURES DEPICTED ON THE EXISTING SITE PLAN HAVE NOT BEEN FIELD VERIFIED FOR ACCURACY OR OMISSIONS UPON PLAN COMPIRATION. HORIZONTAL DATUM IS REFERENCED TO STATE PLANE NAD 1983 (FTE2), MAINE WEST ZONE.
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BuB	Buxton silt loam, 3 to 8 percent slopes
BuC2	Buxton silt loam, 8 to 15 percent slopes, eroded
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Sue2	Suffield loam, 25 to 45 percent slopes, eroded
Sz	Swanton fine sandy loam
WmD	Windsor loamy sand, 15 to 30 percent slopes

	SUBCATCHMENT FLOWPATH
	DRAINAGE AREA BOUNDARY
	SUBCATCHMENT NUMBER
	5 FT. CONTOUR
	INTERMEDIATE CONTOUR
	WETLAND
	PROPERTY LINE
	SOILS BOUNDARY
	STUDY POINTS
	POTENTIAL VERNAL POOL LOCATION (APPROX.)



**WOODWARD
& CURRAN**

REV	DESCRIPTION	DATE
	DESIGNED BY: MKC/AEA	CHECKED BY: DAS
	DRAWN BY: JBC	22800-UI2-1, 12_2, 12_3.dwg

POST-DEVELOPMENT SUB-CATCHMENT AREA MAP

CITY OF PORTLAND
ECONOMIC DEVELOPMENT OFFICE
PORTLAND, MAINE
& PATRONS OXFORD INSURANCE CO.

PORTLAND TECHNOLOGY PARK UPDATE & LCE 4 DEVELOPMENT

JOB NO.: 229001
 DATE: OCTOBER 2015
 SCALE: 1" = 100'
 SHEET: OF

FIG 12-3

100' 0 100'

BAR SCALE
1" = 100'

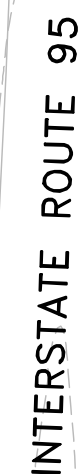
CHECK GRAPHIC SCALE BEFORE USING

CHECK GRAPHIC SCALE BEFORE USING

PERMITTING SET - NOT FOR CONSTRUCTION

1. SITE AND TOPOGRAPHIC DATA WERE PROVIDED BY NUMEROUS SOURCES AS IDENTIFIED HEREIN AND COMPILED BY WOODWARD & CURRAN INC BETWEEN JANUARY 2007 AND AUGUST 2010. FEATURES DEPICTED ON THE EXISTING SITE MAP DO NOT PROVIDE A FINAL REVISION DATE OF THE VERTICAL PLUM COMPIRATION. HORIZONTAL DATUM IS REFERENCED TO STATE PLANE NAD 83 (FEET), MAINE WEST ZONE.
2. BOUNDARY, SITE, AND TOPOGRAPHIC FEATURES FOR CITY OWNED PARCELS THAT COMPOSE THE PROJECT AREA ORIGINATE FROM A PLAN BY LAND SERVICES, INC. "STANDARD TOPOGRAPHIC SURVEY, PROPERTY OF THE CITY OF PORTLAND, WESTBROOK STREET, PORTLAND, ME. DATED 1951-48 SHEET 1 OF 1. DATUM IS REFERRED TO A FINAL REVISION DATE OF OCT. 23, 2002. VERTICAL PLUM IS COMPIRED TO NGVD29 WITH ONE FOOT CONTOUR INTERVALS
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11. ADDITIONAL BORINGS BY HALEY & ALDRICH DATED AUGUST 17, 2010
12. UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, SOIL MAP OF CUMBERLAND COUNTY AND PART OF OXFORD COUNTY, MAINE WEI SOIL SURVEY NATIONAL COOPERATIVE SOIL SURVEY

	LINEAR DEVELOPED AREA BOUNDARY
	LINEAR DEVELOPED AREA – TREATED
	LINEAR DEVELOPED AREA – NOT TREATED
	NON-LINEAR DEVELOPED AREA BOUNDARY
	NON LINEAR DEVELOPED AREA – TREATED
	NON LINEAR DEVELOPED AREA – NOT TREATED



Linear Drainage Area	Total Linear Area (SF)	Linear Pervious Area (SF)	Linear Landscaped Area (SF)	Linear Impervious Area (SF)	Linear Impervious Area Treated (SF)	Linear Developed Area (SF)	Linear Developed Area Treated (SF)	Treatment for Linear Portions
1	14640	6826	6826	7814	2422	14640	6392	GW1
2	2237	1799	1799	438	438	2237	2237	SF5
5	51633	21458	30175	30175	30175	51633	38352	GW1, GW3, GW4
6	34899	13816	13816	21083	21083	34899	24787	GW8, GW10
Non-Linear Drainage Area	Total Non-Linear Area (SF)	Non-Linear Pervious Area (SF)	Non-Linear Landscaped Area (SF)	Non-Linear Impervious Area (SF)	Non-Linear Impervious Area Treated (SF)	Non-Linear Developed Area (SF)	Non-Linear Developed Area Treated (SF)	Treatment for Non-Linear Portions
1	180131	127362	17704	52769	52769	70473	65623	SF1, SF2, SF3, SF4, SF5
2	281330	252281	7713	29049	29049	36762	27968	SF4, SF5
3	34853	34853	0	0	0	0	N/A	
4	115135	112099	2003	3036	0	5039	0	N/A
5	481988	324940	43379	90821	84287	134200	97344	GW1, GW2, GW3, GW4, GW5
6	445231	230052	60396	128791	128572	189187	161514	GW6, GW7, GW8, GW10
7	223128	181509	14654	41619	41619	56273	45380	GW11, GW12

Water Quality Treatment Percentages					
		Total Area (Acres)	Area Treated (Acres)	Percent Treated	Percent Required
Non-Linear Portion	Impervious Area	7.95	7.72	97%	95%
	Developed Area	11.3	9.13	81%	80%
Linear Portion	Impervious Area	1.37	1.24	91%	75%
	Developed Area	2.37	1.65	69%	50%

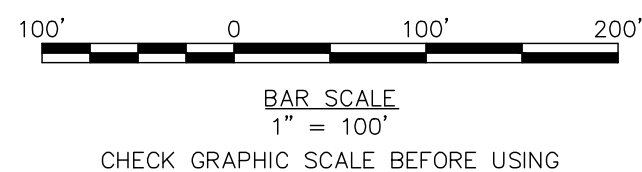
1. Developed area. "Disturbed area" excluding area that within one calendar year of being disturbed is returned to a condition with the same drainage pattern that existed prior to the disturbance and is revegetated, provided the area is not mowed more than once per year.

2. Disturbed area. All land areas that are stripped, graded, grubbed, filled, or excavated at any time during the site preparation or removing vegetation for, or construction of, a project

3. Impervious area. The total area of a parcel that consists of buildings and associated constructed facilities or areas that will be covered with a low-permeability material, such as asphalt or concrete, and areas such as gravel roads and unpaved parking areas that will be compacted through design or use to reduce their permeability.

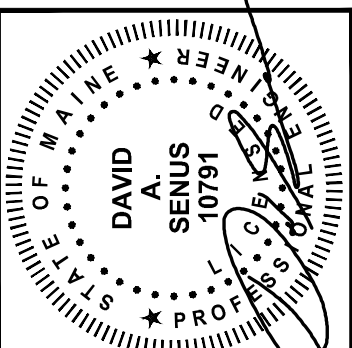
4. Landscaped area. An area of land that has been disturbed and re-planted or covered with one or more of the following: lawn or other herbaceous plants, shrubs, trees, or mulch; but not including area that has reverted to a natural, vegetated condition. A field or meadow is considered landscaped if it is mowed more than twice per twelve month period.

5. Linear portion of a project. The portion of a project consisting of a utility corridor, road, driveway, railroad track outside a yard or station, or similar transportation corridor, as determined by the department.



PERMITTING SET - NOT FOR CONSTRUCTION

41 Hutchins Drive
Portland, Maine 04102
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REV	DESCRIPTION	DATE
DESIGNED BY: MKC/AEA	CHECKED BY: DAS	
DRAWN BY: JBC	22900-012-4, 012-5.dwg	

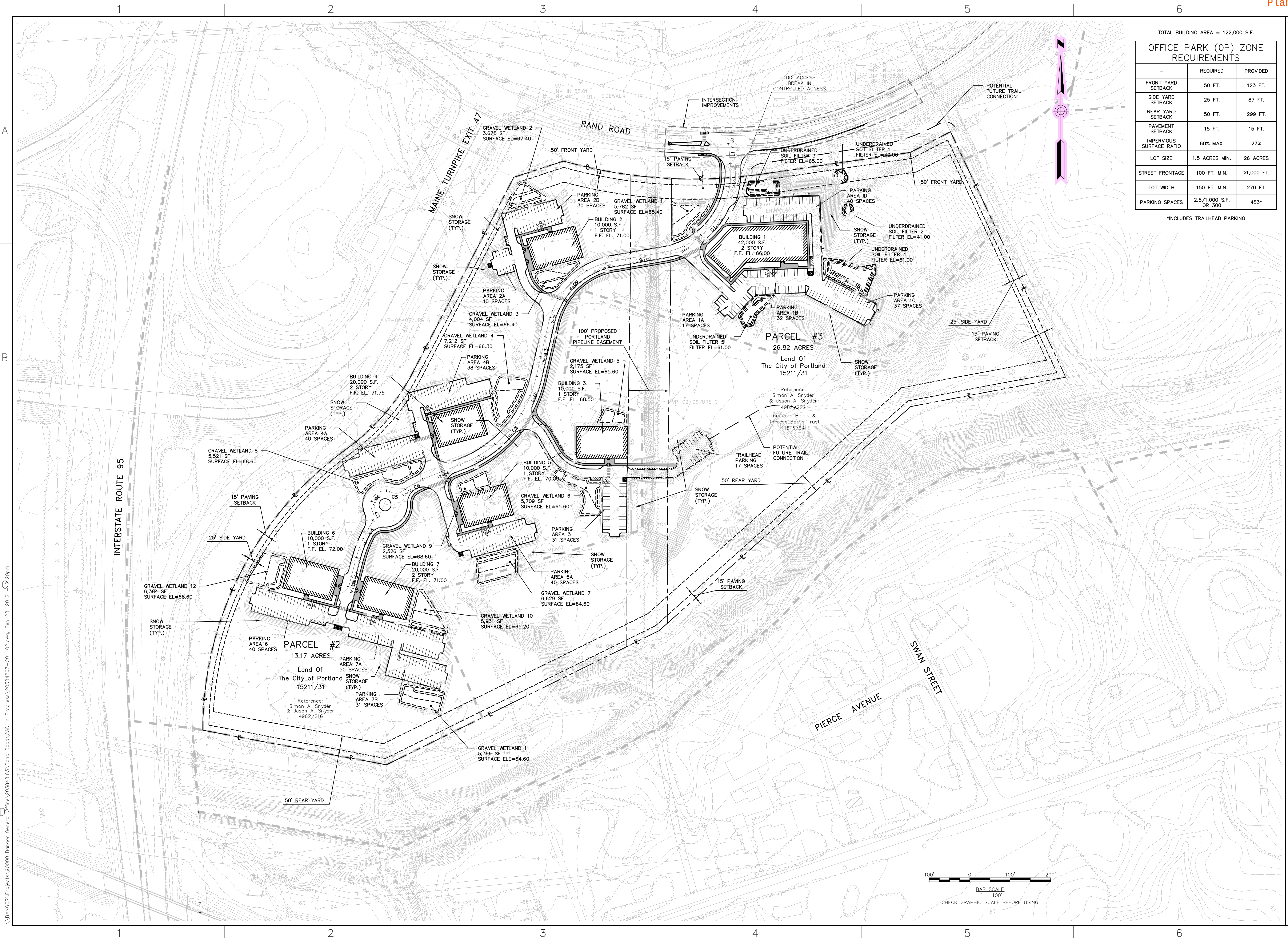
POST DEVELOPMENT STORM WATER TREATMENT OVERALL PLAN

CITY OF PORTLAND
ECONOMIC DEVELOPMENT OFFICE
PORTLAND, MAINE
& PATRONS OXFORD INSURANCE CO.

PORTLAND TECHNOLOGY PARK UPDATE & LCE 4 DEVELOPMENT

JOB NO.:229001
DATE: OCTOBER 201
SCALE: 1" = 100'
SHEET: OF

FIG 12-4



TOTAL BUILDING AREA = 122,000 S.F.

OFFICE PARK (OP) ZONE REQUIREMENTS		
	REQUIRED	PROVIDED
FRONT YARD SETBACK	50 FT.	123 FT.
SIDE YARD SETBACK	25 FT.	87 FT.
REAR YARD SETBACK	50 FT.	299 FT.
PAVEMENT SETBACK	15 FT.	15 FT.
IMPERVIOUS SURFACE RATIO	60% MAX.	27%
LOT SIZE	1.5 ACRES MIN.	26 ACRES
STREET FRONTAGE	100 FT. MIN.	>1,000 FT.
LOT WIDTH	150 FT. MIN.	270 FT.
PARKING SPACES	2.5/1,000 S.F. OR 300	453*

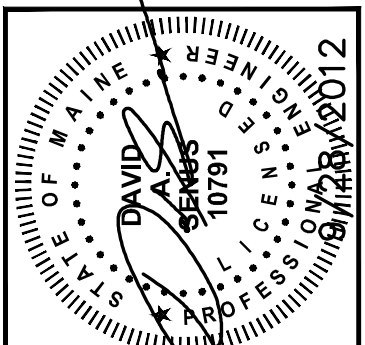
*INCLUDES TRAILHEAD PARKING

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Portland, Maine 04102
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COMMITMENT & INTEGRITY DRIVE RESULTS

WOODARD & CURRAN

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REV	DESCRIPTION	DATE	DWG
1	SITE PLAN CONDITION OF APPROVAL SUBMITTAL-FINAL PLANS	9/28/11	10791

DESIGNED BY: MKC
CHECKED BY: DAS
DRAWN BY: JDE
2012-09-28

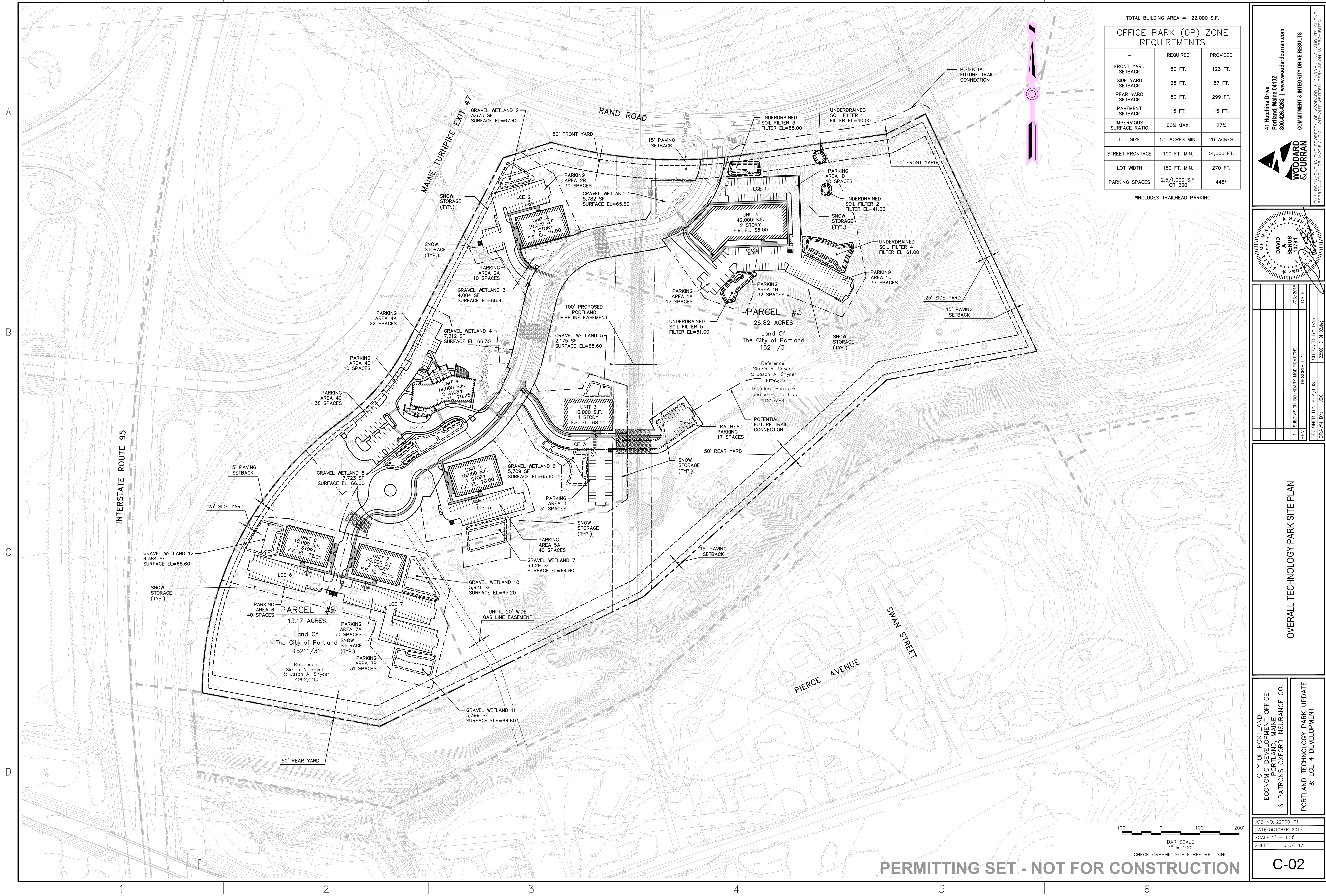
OVERALL SITE PLAN

CITY OF PORTLAND
ECONOMIC DEVELOPMENT OFFICE
PORTLAND, MAINE

PORTLAND TECHNOLOGY PARK

JOB NO.: 203848.63
DATE: DECEMBER, 2011
SCALE: 1"=100'
SHEET: 3 OF 26

C-02



TOTAL BUILDING AREA = 122,000 S.F.

OFFICE PARK (OP) ZONE REQUIREMENTS		
	REQUIRED	PROVIDED
FRONT YARD SETBACK	50 FT.	123 FT.
SIDE YARD SETBACK	25 FT.	87 FT.
REAR YARD SETBACK	50 FT.	299 FT.
PAVEMENT SETBACK	15 FT.	15 FT.
IMPERVIOUS SURFACE RATIO	60% MAX.	27%
LOT SIZE	1.5 ACRES MIN.	26 ACRES
STREET FRONTAGE	100 FT. MIN.	>1,000 FT.
LOT WIDTH	150 FT. MIN.	270 FT.
PARKING SPACES	2.5/1,000 S.F. OR 300	445*

*INCLUDES TRAILHEAD PARKING

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COMMITMENT & INTEGRITY DRIVE RESULTS

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DAVID SENUS
10791
11/03/2015

REV	DESCRIPTION	DATE
1	SUBDIVISION BOUNDARY MODIFICATIONS	11/03/2015

DESIGNED BY: AEA/JUS
CHECKED BY: DAS
DRAWN BY: JBC

OVERALL TECHNOLOGY PARK SITE PLAN

CITY OF PORTLAND
ECONOMIC DEVELOPMENT OFFICE
PORTLAND, MAINE
& PATRONS OXFORD INSURANCE CO.

PORTLAND TECHNOLOGY PARK UPDATE
& LCE 4 DEVELOPMENT

JOB NO.: 229901.01
DATE: OCTOBER 2015
SCALE: 1" = 100'
SHEET: 3 OF 17

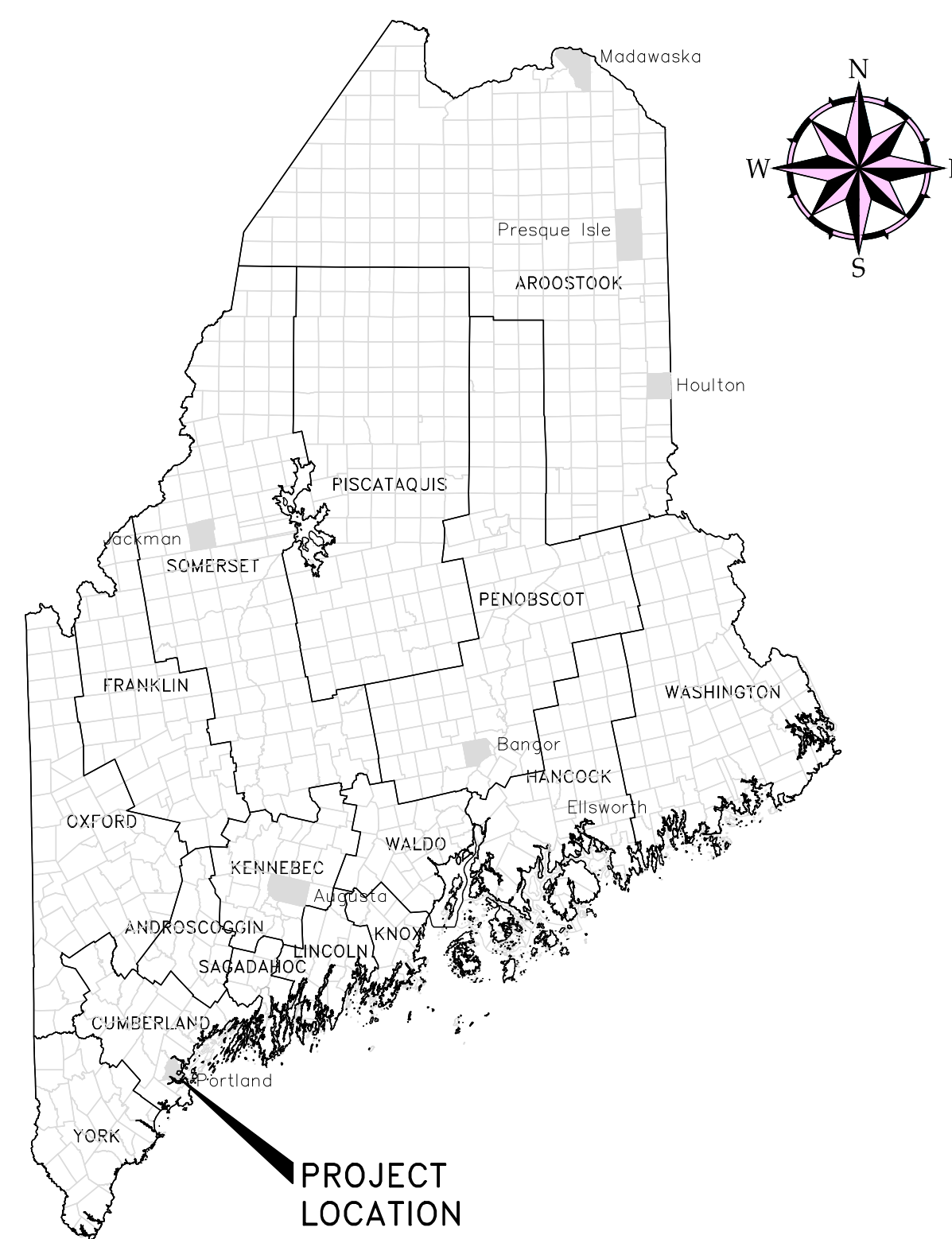
C-02

CITY OF PORTLAND ECONOMIC DEVELOPMENT OFFICE PORTLAND, MAINE & PATRONS OXFORD INSURANCE COMPANY PORTLAND TECHNOLOGY PARK UPDATE & LCE 4 DEVELOPMENT



PROJECT NO. 229001.00
OCTOBER 2015

PERMITTING PLANS



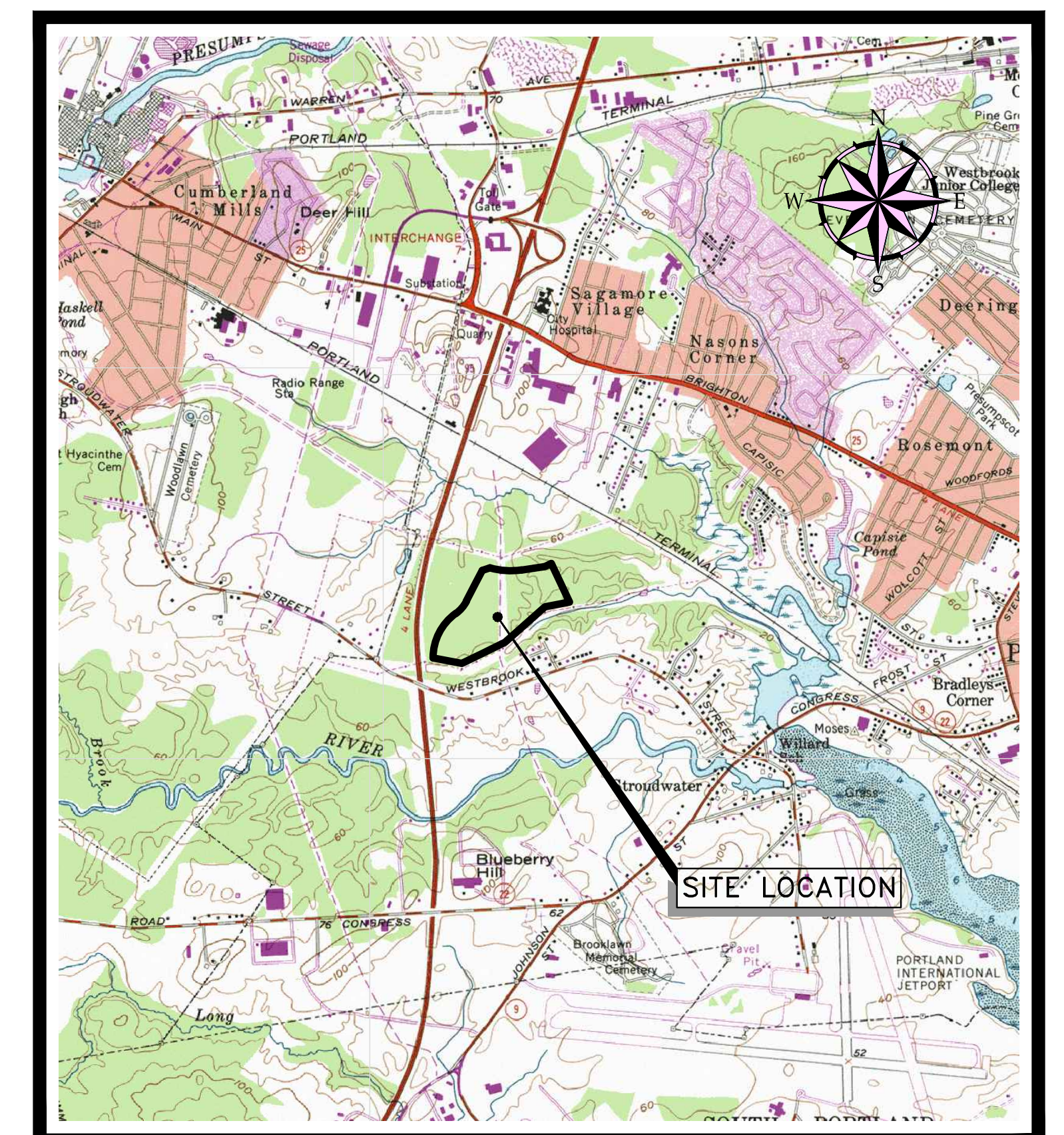
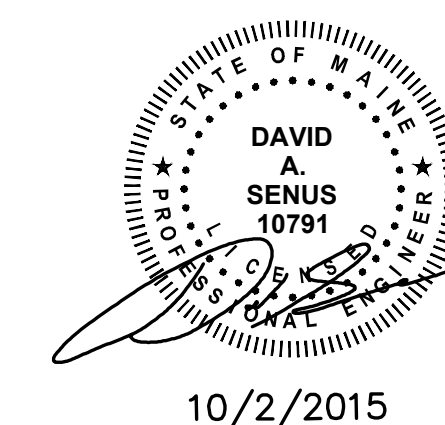
PROJECT LOCATION MAP

50 0 50 100
scale mile



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COMMITMENT & INTEGRITY DRIVE RESULTS



SOURCE: USGS TOPOGRAPHIC MAP
SITE LOCATION MAP
1 0 1
scale mile
2000 0 2000 4000
scale feet

LISTING

**THIS IS A GENERAL LEGEND. NOT ALL ITEMS APPEAR ON THESE DRAWINGS

GENERAL

G-00 COVER SHEET

G-01 LEGEND, SHEET INDEX, ABBREVIATIONS, AND GENERAL NOTES

CIVIL

- C-01 EXISTING CONDITIONS PLAN
- C-02 OVERALL TECHNOLOGY PARK SITE PLAN
- C-03 LCE 4 SITE GRADING, DRAINAGE, AND EROSION CONTROL PLAN
- C-04 LCE 4 SITE UTILITY PLAN
- C-05 TECHNOLOGY PARK GRADING AND DRAINAGE PLAN 1
- C-06 TECHNOLOGY PARK GRADING AND DRAINAGE PLAN 2
- C-07 TECHNOLOGY PARK UTILITY PLAN 1
- C-08 TECHNOLOGY PARK UTILITY PLAN 2
- C-09 ROADWAY PROFILE STA. 8+00 TO STA. 15+75
- C-10 SOIL EROSION AND SEDIMENT CONTROL DETAILS
- C-11 CIVIL DETAILS 1
- C-12 CIVIL DETAILS 2
- C-13 CIVIL DETAILS 3
- C-14 CIVIL DETAILS 4
- C-15 CIVIL DETAILS 5
- C-16 CIVIL DETAILS 6

LANDSCAPING

L-1 MATERIALS PLAN
L-2.0 PLANTING PLAN – TREES
L-2.1 PLANTING PLAN – SHRUBS & HERBACEOUS PLANTS
L-3 SITE DETAILS – LANDSCAPE

ARCHITECTURAL

A101	FIRST FLOOR PLAN
A102	SECOND FLOOR PLAN
A103	CLERESTORY AND ROOF PLAN
A201	BUILDING ELEVATIONS
A202	BUILDING ELEVATIONS

A.G. ALUM.	AND ABOVE GROUND ALUMINUM	NO. NR N.T.S.	NUMBER NO REFUSAL NOT TO SCALE
B BIT. BK BM	BORING BITUMINOUS BOOK BENCHMARK	O.C.E.W. O.D.	ON CENTER EACH WAY OUTSIDE DIAMETER OVERHEAD
CK. CMP CONC D.I. DES. DIA. DR.	CHECKED CENTRAL MAINE POWER CONCRETE DUCTILE IRON DESIGNED DIAMETER DRAWN	± CM PSIG PVC	PLUS OR MINUS PROFESSIONAL LAND SURVEYOR PER SQUARE INCH PER SQUARE INCH GAUGE PRESSURE POLYVINYL CHLORIDE
E E.L. ELEC. EMBED. EX.	EAST ELEVATION ELECTRICAL EMBEDDMENT EXISTING	R.O.W. R/W RCP REINF. REQ'D RETAINING	RIGHT-OF-WAY RIGHT-OF-WAY REINFORCED CONCRETE PIPE REINFORCED REQUIRED RETAINING
FF FIN. FL FT	FINISH FLOOR FINISH FLOOR FOOT/FEET	RLS RT RTE	REGISTERED LAND SURVEYOR ROUTE ROUTE
GALV. GRND	GALVANIZED GROUND	S S.S. SCH SDR STA.	SLOPE STAINLESS STEEL SCHEDULE STANDARD DIMENSION RATIO STATION
H HWY	HEIGHT HIGHWAY	TYP.	TYPICAL
IN INV.	INCH INVERT	UC	UNDERGROUND CABLE
LCE LF	LIMITED COMMON ELEMENT (LOT) LINEAR FEET	W W/ WY	WATER WEST WITH WATER VALVE
MAX. MDOT MH MIN. MJ MON MPH	MAXIMUM MAINE DEPARTMENT OF TRANSPORTATION MANHOLE MINIMUM MECHANICAL JOINT MONUMENT MILES PER HOUR		

- PROPERTY LINE, LIMITED COMMON ELEMENT YARD LIMIT, AND EASEMENT LINES ARE FROM A PLAN BY SCS ENGINEERING, LLC, TITLED CONDOMINIUM PLAT OF PORTLAND TECHNOLOGY PARK CONDOMINIUM, RAND ROAD, PORTLAND, MAINE, DATED 9-29--11 AND REVISED 3-17-14.
- VERTICAL DATUM IS REFERENCED TO NGVD29 WITH ONE FOOT AND TWO FOOT CONTOUR INTERVALS. HORIZONTAL DATUM IS REFERENCED TO STATE PLANE NAD 1983 (FEET), MAINE WEST ZONE.
- THE UTILITY LOCATIONS SHOWN IN PLAN AND PROFILE ARE APPROXIMATE AND REQUIRE FIELD VERIFICATION BY THE CONTRACTOR. CONTACT THE CITY IMMEDIATELY UPON DISCOVERING CONFLICTS WITH EXISTING AND PROPOSED UTILITY LOCATIONS. NOT ALL EXISTING UTILITIES ARE SHOWN ON PLANS.
- CLEAN AND/OR FLUSH ALL MANHOLES, CATCH BASINS, AND ASSOCIATED PIPING AFTER THE WORK HAS BEEN COMPLETED.
- COORDINATE CONSTRUCTION ACTIVITY WITH UTILITY COMPANIES, EMERGENCY SERVICES AND THE CITY OF PORTLAND. CONTACTS ARE LISTED ON SHEET G-001. NOTIFY UTILITY COMPANIES WITHIN 48 HOURS OF WORK ACTIVITY ADJACENT TO THOSE UTILITIES.
- CONTRACTOR SHALL NOTIFY ALL UTILITIES PRIOR TO COMMENCING WORK, ALLOWING SUFFICIENT TIME TO LOCATE AND MARK THE LOCATION OF BURIED UTILITIES. CONTRACTOR SHALL CONTACT "DIG SAFE", TELEPHONE 1-888-DIG SAFE (1-888-344-7233), PRIOR TO EXCAVATION.
- RESTORE ALL AREAS DISTURBED BY CONTRACTOR'S OPERATIONS TO ORIGINAL FINISH (GRAVEL, PAVEMENT, GRASS, ETC.). RESTORATION OF PAVED SURFACES, GRAVEL SURFACES, DRIVEWAYS, AND LAWNS DAMAGED BY CONSTRUCTION ACTIVITIES OUTSIDE OF LIMITS OF WORK INDICATED ON THE PLANS SHALL BE PERFORMED AT NO ADDITIONAL COST TO OWNER. ALL CURB NOT DESIGNATED TO BE RESET AND DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE REPLACED IN KIND AND SHALL CONFORM TO CITY OF PORTLAND AND MAINE DOT SPECIFICATIONS AT NO ADDITIONAL COST TO OWNER.
- PROPERLY PROTECT AND DO NOT DISTURB PROPERTY IRONS AND MONUMENTS NOT INDICATED ON THE DRAWINGS FOR REMOVAL. IF DISTURBED, THE PROPERTY MONUMENT SHALL BE RESET AT THE CONTRACTOR'S EXPENSE, BY A PROFESSIONAL LAND SURVEYOR APPROVED BY THE CITY.
- EXISTING FACILITIES (I.E. TREES, POLES, LIGHT POSTS, CATCH BASINS, ETC.) SHALL BE REMOVED AND PROTECTED DURING CONSTRUCTION. THE CITY OF PORTLAND RETAINS RIGHT TO KEEP ANY AND ALL REMOVED FACILITIES. CONTRACTOR TO DISPOSE OF ANY REMOVED FACILITY AT THE REQUEST OF CITY AT CONTRACTOR'S EXPENSE.
- ALL TREES AND VEGETATION WITHIN THE SITE NOT NOTED TO BE REMOVED OR RELOCATED PER THE CLEARING LIMITS OR NOTES SHALL BE PROTECTED DURING CONSTRUCTION.
- DO NOT PARK, IMPEDE ACCESS TO, OR STORE EQUIPMENT ON ADJACENT CITY OR PRIVATELY OWNED LOTS UNLESS PERMISSION HAS BEEN GRANTED IN WRITING BY CITY AND/OR LAND OWNER.
- COORDINATE DISRUPTION OF PRIVATE UTILITY SERVICES WITH LANDOWNERS AT LEAST TWO DAYS (48 HOURS) PRIOR TO DISRUPTION. ALL UTILITY COORDINATION IS RESPONSIBILITY OF CONTRACTOR.
- RESTRICT ACCESS TO SITE THROUGH USE OF APPROPRIATE SIGNAGE, BARRIERS, FENCES, ETC. SITE SHALL BE LEFT WITH APPROPRIATE SAFETY MEASURE IN PLACE DURING NON-WORKING HOURS. NO TRENCH SHALL BE LEFT OPEN DURING NON-WORKING HOURS. SITE SAFETY IS THE RESPONSIBILITY OF CONTRACTOR DURING BOTH WORKING AND NON-WORKING HOURS.
- ALL WORK ASSOCIATED WITH THE PROJECT SHALL BE COMPLETED IN ACCORDANCE WITH THE CITY OF PORTLAND CODE OF ORDINANCES AND TECHNICAL DESIGN STANDARDS AND GUIDELINES.
- ALL WORK ASSOCIATED WITH THE PROJECT SHALL BE COMPLETED IN ACCORDANCE WITH ARTICLES VI, VII, AND IX OF CHAPTER 25--STREETS, SIDEWALKS AND OTHER PUBLIC PLACES OF THE CITY OF PORTLAND CODE OF ORDINANCES.
- ALL SEWER CONSTRUCTION IN THE PUBLIC WAY SHALL BE COMPLETED IN ACCORDANCE WITH ARTICLES II OF CHAPTER 24--SEWERS OF THE CITY OF PORTLAND CODE OF ORDINANCES.
- THE CITY OF PORTLAND ENGINEERING DIVISION REQUIRES THAT UPON COMPLETION OF CONSTRUCTION, A COMPLETE SET OF "AS-BUILT" DRAWINGS THAT REFLECT ANY AND ALL MODIFICATIONS TO THE SANITARY SEWER SYSTEM, STORM SEWER SYSTEM, AND ANY OTHER UTILITY INSTALLATIONS OR ALTERATIONS WITHIN THE PROJECT LIMITS BE SUBMITTED TO THE DIVISION. THESE DRAWINGS SHALL BE SUBMITTED IN BOTH DIGITAL AND HARD COPY FORMAT AS DEFINED IN THE SPECIFICATIONS PRIOR TO PAYMENT OF FINAL RETAINAGE.
- GAS MAINS AND SERVICES SHALL BE FURNISHED AND INSTALLED BY UNTIL. CONTRACTOR SHALL EXCAVATE, BED, BACKFILL, AND RESTORE SURFACE IN ACCORDANCE WITH DETAILS. UNTIL SHALL PROVIDE PIPING, VALVES, AND FITTINGS. CONTRACTOR SHALL COORDINATE ALL WORK WITH UNTIL.
- CONTACT CITY OF PORTLAND ARBORIST AND ENGINEER PRIOR TO CUTTING ROOTS, TRIMMING BRANCHES, OR DISTURBING TREES THAT HAVE NOT BEEN NOTED FOR REMOVAL ON PLANS.
- PROVIDE 4" LOAM AND SEED IN ALL EXISTING AND PROPOSED LAWN AREAS DISTURBED BY CONTRACTOR'S OPERATIONS.
- IF CONTRACTOR PROPOSES TO TEMPORARILY STOCKPILE AND SURPLUS SOIL AND ROCK IN THE CITY OF PORTLAND, THE CONTRACTOR SHALL OBTAIN APPROVAL FOR EACH STOCKPILE LOCATION FROM THE ENGINEER. IF THE CONTRACTOR PROPOSES TO PERMANENTLY STOCKPILE ANY SURPLUS SOIL, AND ROCK ON PROPERTY IN THE CITY OF PORTLAND, THE CONTRACTOR MUST OBTAIN ANY SITE PLAN PERMITS REQUIRED FROM THE CITY PLANNING AUTHORITY OR ANY FILL PERMITS REQUIRED FROM MDEP OR U.S. ARMY CORPS OF ENGINEERS. BOTH TEMPORARY AND PERMANENT STOCKPILE LOCATIONS SHALL MEET THE APPLICABLE SETBACK REQUIREMENTS IN THE CITY LAND USE CODE.
- PIPE STUB LOCATIONS SHALL BE MARKED WITH EMBEDDED STAKE AS DESCRIBED ON PLANS AND A MINIMUM OF THREE TIES SHOULD BE RECORDED. LOCATION AND ELEVATION OF PIPE STUB SHALL BE PROVIDED TO THE CITY OF PORTLAND ENGINEERING OFFICE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY CONSTRUCTION PERMITS INCLUDING. PERMIT APPLICATIONS SHALL BE SUBMITTED WITH ADEQUATE TIME SO AS NOT TO DELAY CONSTRUCTION. THE CONTRACTOR WILL ALSO BE REQUIRED TO HAVE A CURRENT EXCAVATOR'S LICENSE IN THE CITY.
- ALL CONSTRUCTION REQUIREMENTS AND MATERIAL SPECIFICATIONS SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND DETAILS OF THE CITY OF PORTLAND, MDEP, AND MDOT, WHERE APPLICABLE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING TRENCH AT UTILITY CROSSINGS AT ROCK SANDWICH LOCATIONS TO MATCH DESIGN REQUIREMENTS FOR EACH SECTION OF AGGREGATE. UTILITY COMPANIES WILL NOT ALLOWED TO REPLACE THE TRENCH SECTION WITH SAND OR GRAVEL AT LOCATIONS REQUIRING CRUSHED STONE, UNLESS IT IS UTILIZED FOR THE IMMEDIATE BEDDING OF THE PIPE.

PERMITTING SET - NOT FOR CONSTRUCTION

LEGEND, SHEET INDEX,
ABBREVIATIONS, AND GENERAL NOTES

CITY OF PORTLAND
ECONOMIC DEVELOPMENT OFFICE
PORTLAND, MAINE
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ORTLAND TECHNOLOGY PARK UPDATE & LCE 4 DEVELOPMENT

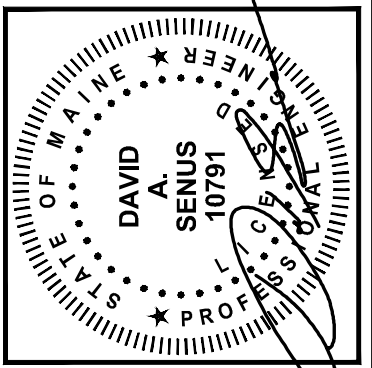
JOB NO.:229001.01
DATE: OCTOBER 2015
SCALE: NONE
SHEET: 1 OF 17

G-01

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WOODWARD
& CLYBURN



10/2/2015

3

110

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SOURCES:

1. SITE AND TOPOGRAPHIC DATA WERE PROVIDED BY NUMEROUS SOURCES AS IDENTIFIED HEREIN AND COMPILED BY WOODARD & CURRAN INC. BETWEEN JANUARY 2007 AND AUGUST 2010. FEATURES DEPICTED ON THE EXISTING SITE PLAN WERE NOT FIELD VERIFIED FOR ACCURACY OR OMISSIONS UPON PLAN COMPILED. HORIZONTAL DATUM IS REFERENCED TO STATE PLANE NAD 1983 (FEET), MAINE WEST ZONE.
2. PROPERTY LINE, LIMITED COMMON ELEMENT YARD LIMIT, AND EASEMENT LINES ARE FROM A PLAN BY SCS ENGINEERING, LLC, TITLED CONDOMINIUM PLAN OF PORTLAND TECHNOLOGY PARK CONDOMINIUM, RAND ROAD, PORTLAND, MAINE, DATED 9-29-11 AND REVISED 3-17-14.
3. EXISTING SEWER AND STORMDRAIN UTILITY INFRASTRUCTURE WITHIN THE PORTLAND TECHNOLOGY PARK IS BASED ON AN AS-BUILT DRAWING BY RJ GRONDI & SONS, DATED 03-03-14.
4. SITE AND TOPOGRAPHIC FEATURES FOR ADJACENT ROADWAY AND ABUTTING PARCELS ORIGINATE FROM CITY OF PORTLAND, ME AERIAL SURVEY COMPILED USING 2000 AERIAL IMAGES BY BRADSTREET CONSULTANTS OF MANCHESTER, MAINE. VERTICAL DATUM IS REFERENCED TO NGVD29 WITH TWO FOOT CONTOUR INTERVALS.
5. WETLAND DELINEATION FOR WETLAND AREAS LABELED #1-22 CONDUCTED BY DAMES & MOORE APRIL - MAY, 1998, AS DESCRIBED IN "WETLAND DELINEATION AND WETLAND FUNCTIONAL ASSESSMENT FOR SNYDER TRACT, WESTBROOK ST., PORTLAND, ME" REPORT DATED MAY 1998. WETLAND DELINEATION FIELD VERIFIED BY U.S. ARMY CORPS OF ENGINEERS ON MAY 8, 1998. FLAGS LOCATED BY SURVEY WORKS, INC. USING GPS, MAY 1998.
6. FIELD RECONNAISSANCE AND VISUAL VERIFICATION OF THE WETLANDS PREVIOUSLY DELINEATED BY DAMES & MOORE IN APRIL AND MAY OF 1998 WAS PERFORMED BY SW COLE ENGINEERING INC. IN NOVEMBER AND DECEMBER OF 2006, AND SUMMARIZED IN A LETTER REPORT DATED DECEMBER 15, 2006. ADDITIONAL WETLAND DELINEATION CONDUCTED BY S.W. COLE ON DECEMBER 15, 2006 IDENTIFIED AND DELINEATED THE LOCATION OF A FRESHWATER WETLAND AT THE NORTHEAST CORNER OF THE PROPERTY, JUST WEST OF A PORTLAND WATER DISTRICT EASEMENT, LABELED "WETLAND A, PF01/4", AND FURTHER DESCRIBED IN A LETTER REPORT DATED DECEMBER 21, 2006. WETLAND LOCATED BY MEANS OF GPS, DECEMBER 2006.
7. TREE ASSESSMENT CONDUCTED BY WOODLOT ALTERNATIVES, INC. APRIL 2007, AND SUMMARIZED WITHIN A LETTER REPORT DATED APRIL 13, 2007. LOCATIONS DETERMINED WITH HAND-HELD GPS UNIT, APRIL 2007.
8. VERNAL POOL ASSESSMENT CONDUCTED BY URS ON APRIL 16 AND MAY 19, 2006 AND SUMMARIZED IN LETTER REPORT DATED MAY 31, 2006.
9. EXISTING SEWER MAIN LOCATION FROM PLAN BY HNTB "WESTBROOK INTERCHANGE TOOL PLAZA LATERAL PLAN AND PROFILE 50+00 TO 63+70" DATED AUGUST, 2001
10. EXISTING WATER MAIN LOCATION FROM PLAN BY HNTB "WESTBROOK INTERCHANGE 42" WATERMAIN RELOCATION" DATED APRIL, 2001
11. UPDATED VERNAL POOL DELINEATION PERFORMED ON DECEMBER 12, 2010 FOR VERNAL POOLS E AND G BY BOYLE ASSOCIATES.
12. VERNAL POOL POINT INDICATORS (VP--XX--XX) LOCATED ON MAY 2, 2009 BY BOYLE ASSOCIATES.

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DAVID
SENIUS
10791

NEW HAMPSHIRE
REGISTERED PROFESSIONAL LAND SURVEYOR

REV	DESCRIPTION	DATE

DESIGNED BY: AEA/JUS
CHECKED BY: DAS
DRAWN BY: JBC
Z2007-C-0124ag

10/2/2015

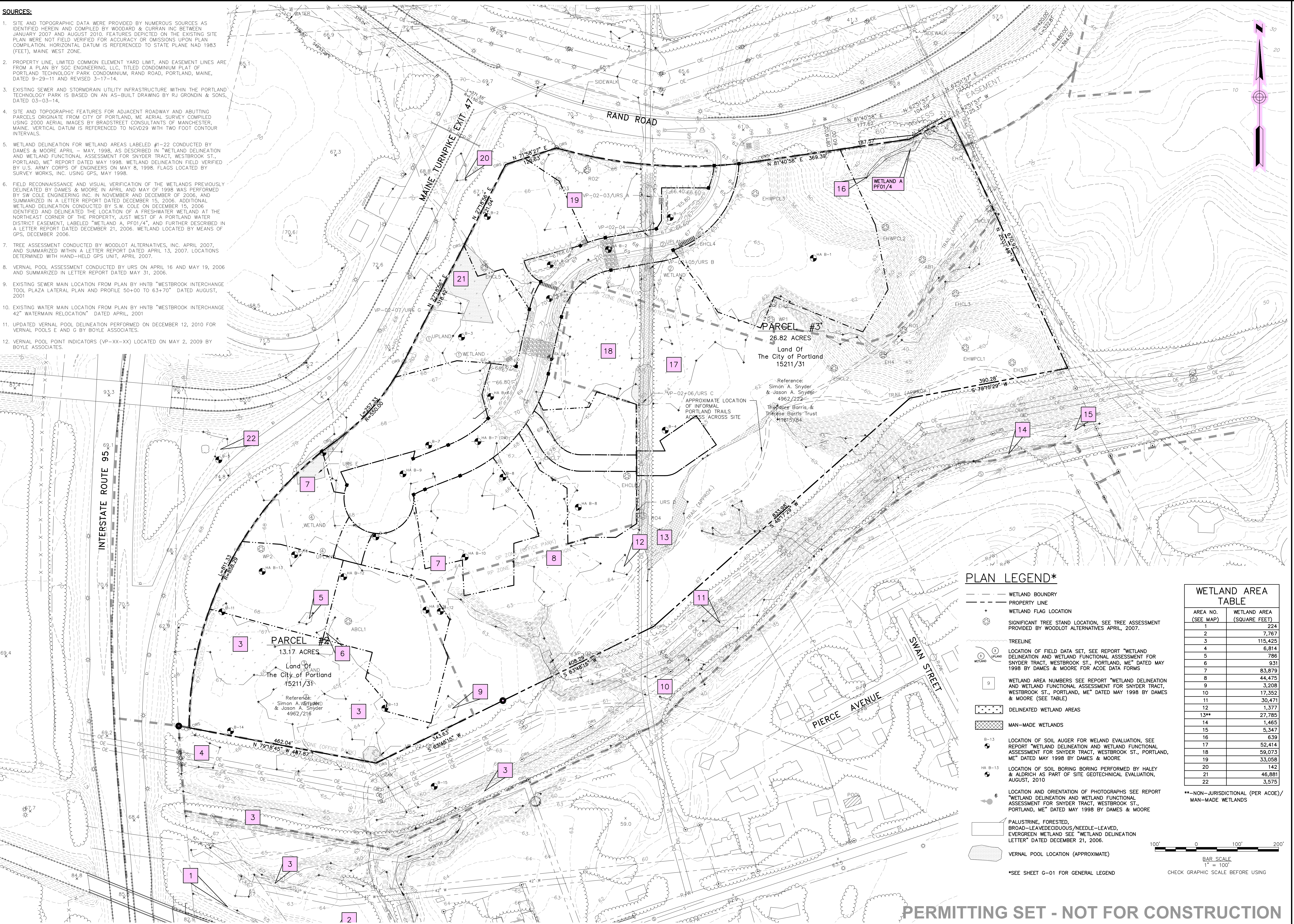
EXISTING CONDITIONS PLAN

CITY OF PORTLAND
ECONOMIC DEVELOPMENT OFFICE
PORTLAND, MAINE
& PATRONS OXFORD INSURANCE CO.

PORTLAND TECHNOLOGY PARK UPDATE
& LCE 4 DEVELOPMENT

JOB NO.: 229901.01
DATE: OCTOBER 2015
SCALE: 1" = 100'
SHEET: 2 OF 17

C-01

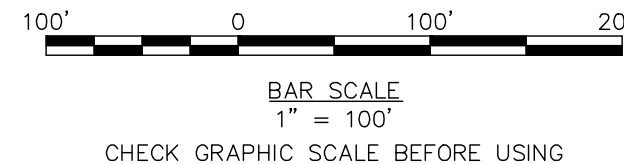


PLAN LEGEND*

- WETLAND BOUNDARY
- PROPERTY LINE
- WETLAND FLAG LOCATION
- SIGNIFICANT TREE STAND LOCATION, SEE TREE ASSESSMENT PROVIDED BY WOODLOT ALTERNATIVES APRIL, 2007.
- TREELINE
- LOCATION OF FIELD DATA SET, SEE REPORT "WETLAND DELINEATION AND WETLAND FUNCTIONAL ASSESSMENT FOR SNYDER TRACT, WESTBROOK ST., PORTLAND, ME" DATED MAY 1998 BY DAMES & MOORE FOR ACOE DATA FORMS
- WETLAND AREA NUMBERS SEE REPORT "WETLAND DELINEATION AND WETLAND FUNCTIONAL ASSESSMENT FOR SNYDER TRACT, WESTBROOK ST., PORTLAND, ME" DATED MAY 1998 BY DAMES & MOORE (SEE TABLE)
- DELINEATED WETLAND AREAS
- MAN-MADE WETLANDS
- LOCATION OF SOIL AUGER FOR WELAND EVALUATION, SEE REPORT "WETLAND DELINEATION AND WETLAND FUNCTIONAL ASSESSMENT FOR SNYDER TRACT, WESTBROOK ST., PORTLAND, ME" DATED MAY 1998 BY DAMES & MOORE
- LOCATION OF SOIL BORING BORING PERFORMED BY HALEY & ALDRICH AS PART OF SITE GEOTECHNICAL EVALUATION, AUGUST, 2010
- LOCATION AND ORIENTATION OF PHOTOGRAPHS SEE REPORT "WETLAND DELINEATION AND WETLAND FUNCTIONAL ASSESSMENT FOR SNYDER TRACT, WESTBROOK ST., PORTLAND, ME" DATED MAY 1998 BY DAMES & MOORE
- PALUSTRINE, FORESTED, BROAD-LEAVED/DECIDUOUS/NEEDLE-LEAVED, EVERGREEN WETLAND SEE "WETLAND DELINEATION LETTER" DATED DECEMBER 21, 2006.
- VERNAL POOL LOCATION (APPROXIMATE)

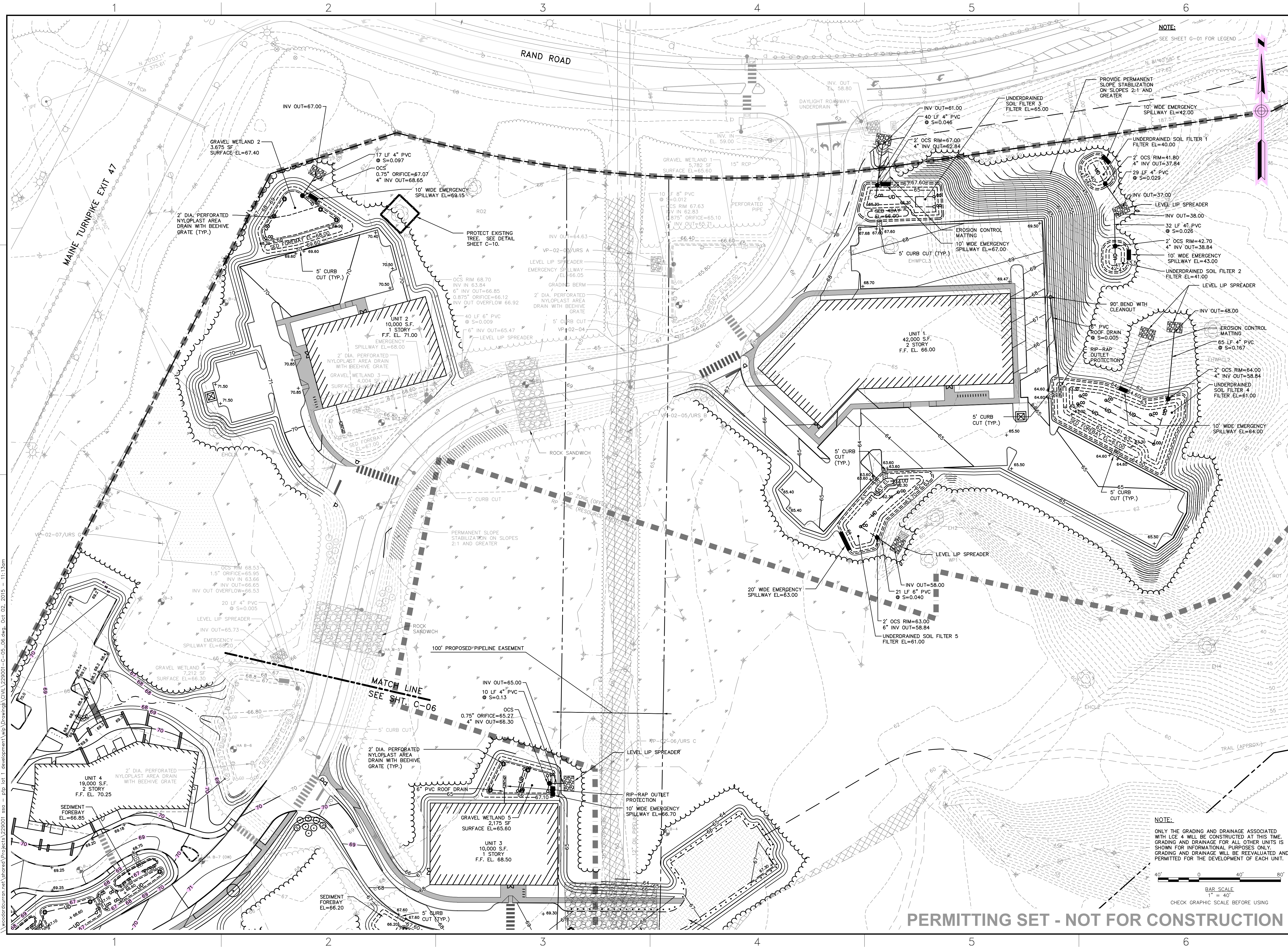
WETLAND AREA TABLE	
AREA NO. (SEE MAP)	WETLAND AREA (SQUARE FEET)
1	224
2	7,767
3	115,425
4	6,814
5	786
6	931
7	83,879
8	44,475
9	3,208
10	17,352
11	30,471
12	1,377
13**	27,785
14	1,465
15	5,347
16	639
17	52,414
18	59,073
19	33,058
20	142
21	46,881
22	3,575

**--NON-JURISDICTIONAL (PER ACOE)/MAN-MADE WETLANDS

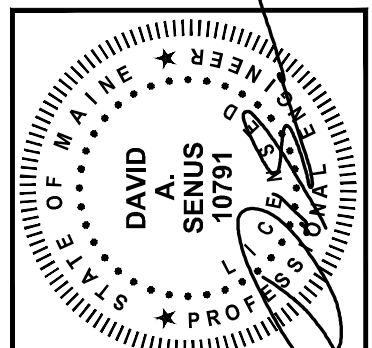
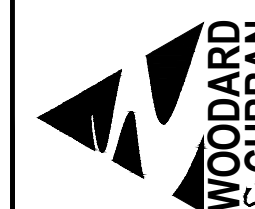


*SEE SHEET G-01 FOR GENERAL LEGEND

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10/2/2015

REV			DESCRIPTION		DATE
			DESIGNED BY:	AFA/LUS	CHECKED BY:DAS
			DRAWN BY:	JBC	25000-L-02_08.mwg

TECHNOLOGY PARK GRADING AND DRAINAGE PLAN 1

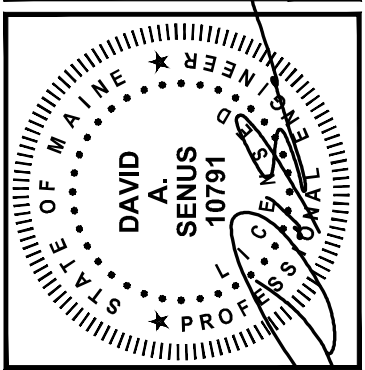
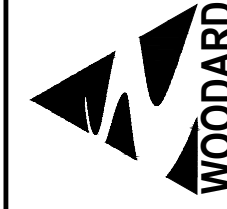
CITY OF PORTLAND
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PORTLAND TECHNOLOGY PARK UPDATE

JOB NO.:229001.01
DATE: OCTOBER 2015
SCALE: 1" = 40'
SHEET: 6 OF 17

C-05

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REV	DESCRIPTION	DATE

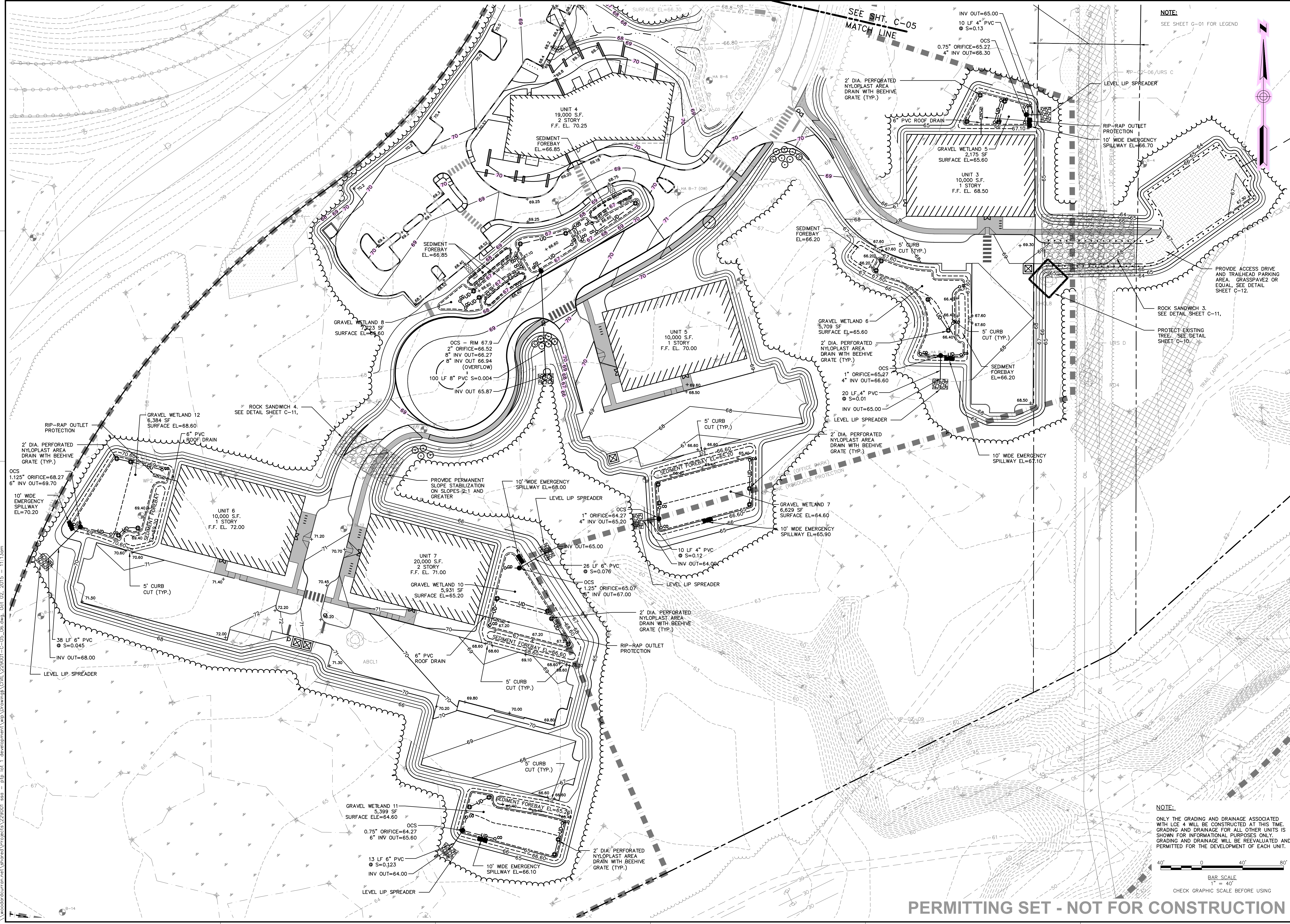
TECHNOLOGY PARK GRADING AND DRAINAGE PLAN 2

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PORTLAND, MAINE
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PORTLAND TECHNOLOGY PARK UPDATE
& LCE 4 DEVELOPMENT

JOB NO.: 229001.01
DATE: OCTOBER 2015
SCALE: 1" = 40'
SHEET: 7 OF 17

C-06



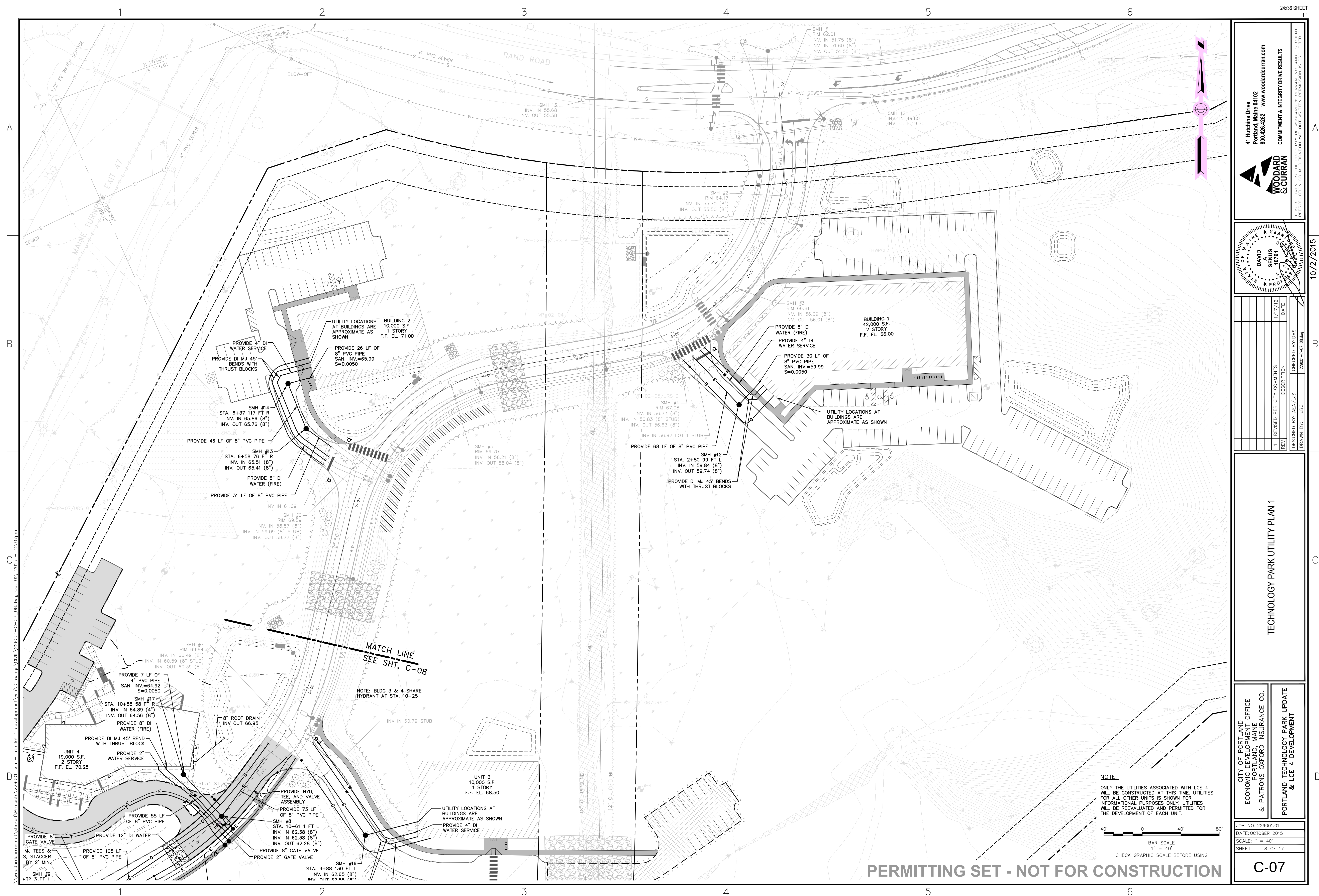
NOTE:
SEE SHEET G-01 FOR LEGEND

NOTE:
ONLY THE GRADING AND DRAINAGE ASSOCIATED WITH LCE 4 WILL BE CONSTRUCTED AT THIS TIME. GRADING AND DRAINAGE FOR ALL OTHER UNITS IS SHOWN FOR INFORMATIONAL PURPOSES ONLY. GRADING AND DRAINAGE WILL BE REEVALUATED AND PERMITTED FOR THE DEVELOPMENT OF EACH UNIT.

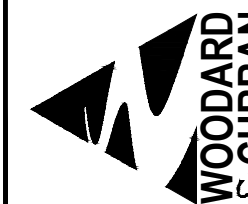
40' 0 40' 80'
BAR SCALE
1" = 40'
CHECK GRAPHIC SCALE BEFORE USING

PERMITTING SET - NOT FOR CONSTRUCTION

\\woodardcurran.net\shared\Projects\229001.sso - dtp lot 1 development\wp\Drawings\Civil\229001-C-06.dwg, Oct 02, 2015 - 11:13am

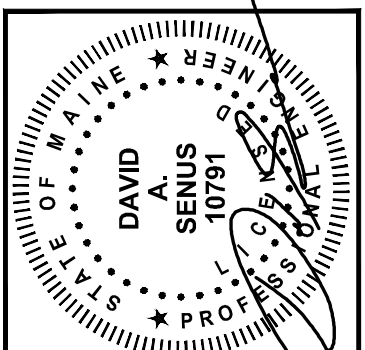


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**WOODWARD
& CURRAN**

COMMITMENT & INTEGRITY DRIVE RESULTS



10/2/2015

REV	REVISD PER CITY COMMENTS	DATE
1		1/17/12

DESIGNED BY: AEA/JUS

DRAWN BY: JBC

CHECKED BY: DAS

Z25001-C-07.06.dwg

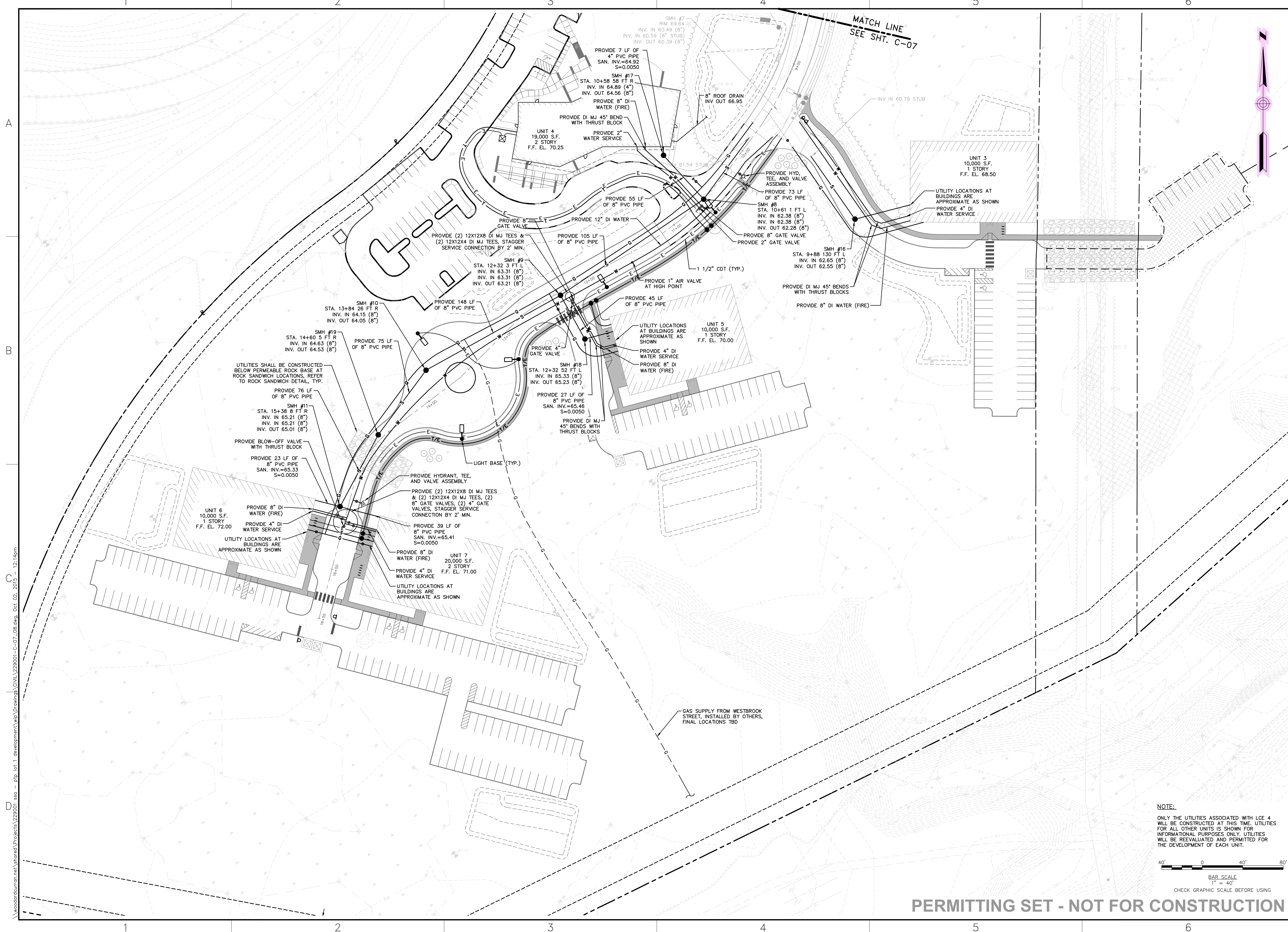
TECHNOLOGY PARK UTILITY PLAN 1

CITY OF PORTLAND
ECONOMIC DEVELOPMENT OFFICE
PORTLAND, MAINE
& PATRONS OXFORD INSURANCE CO.

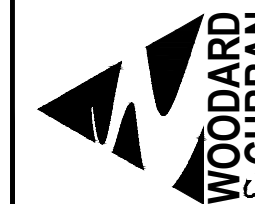
PORTLAND TECHNOLOGY PARK UPDATE

JOB NO.:229001.0
DATE:OCTOBER 20
SCALE: 1" = 40'
SHEET: 8 OF

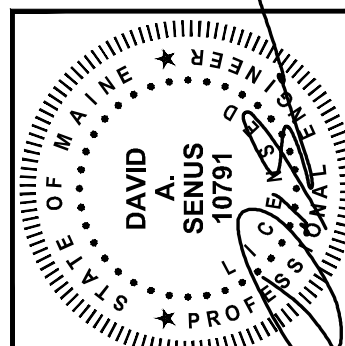
C-07



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WOODWARD COMMITMENT & INTEGRITY DRIVE RESULTS



10/2/2015

[illegible]

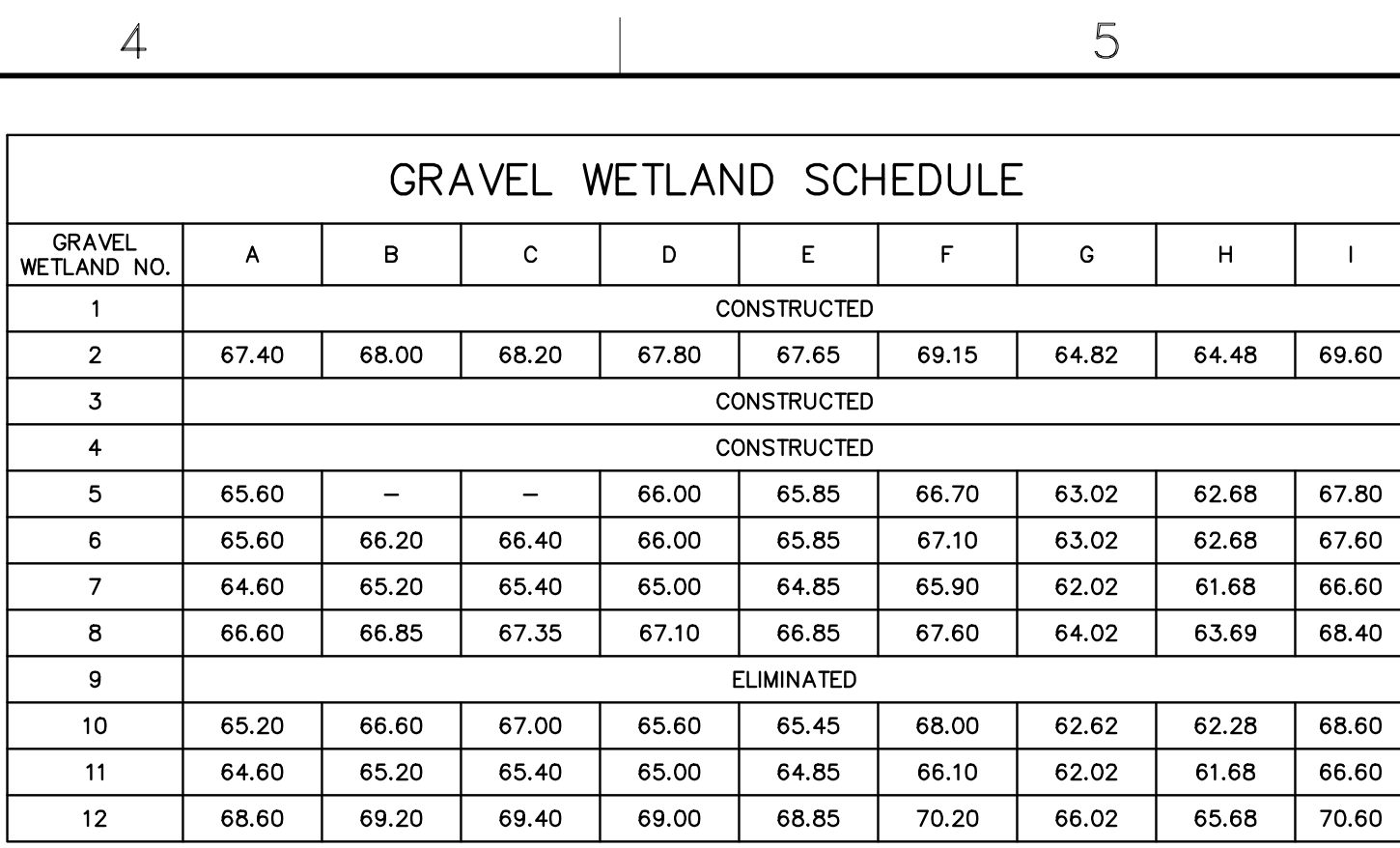
TECHNOLOGY PARK UTILITY PLAN 2

CITY OF PORTLAND
ECONOMIC DEVELOPMENT OFFICE
PORTLAND, MAINE
& PATRONS OXFORD INSURANCE CO.

PORTLAND TECHNOLOGY PARK UPDATE

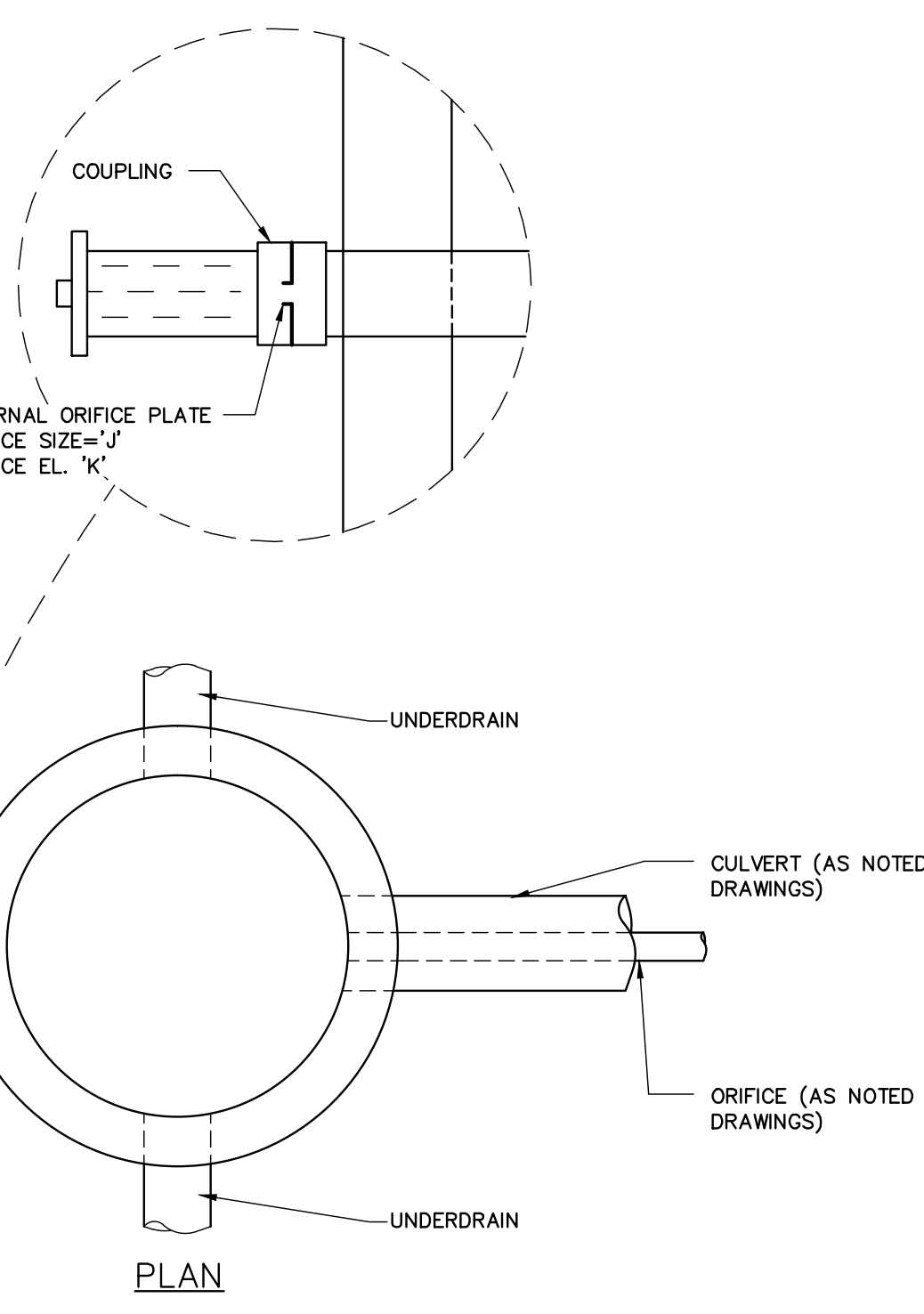
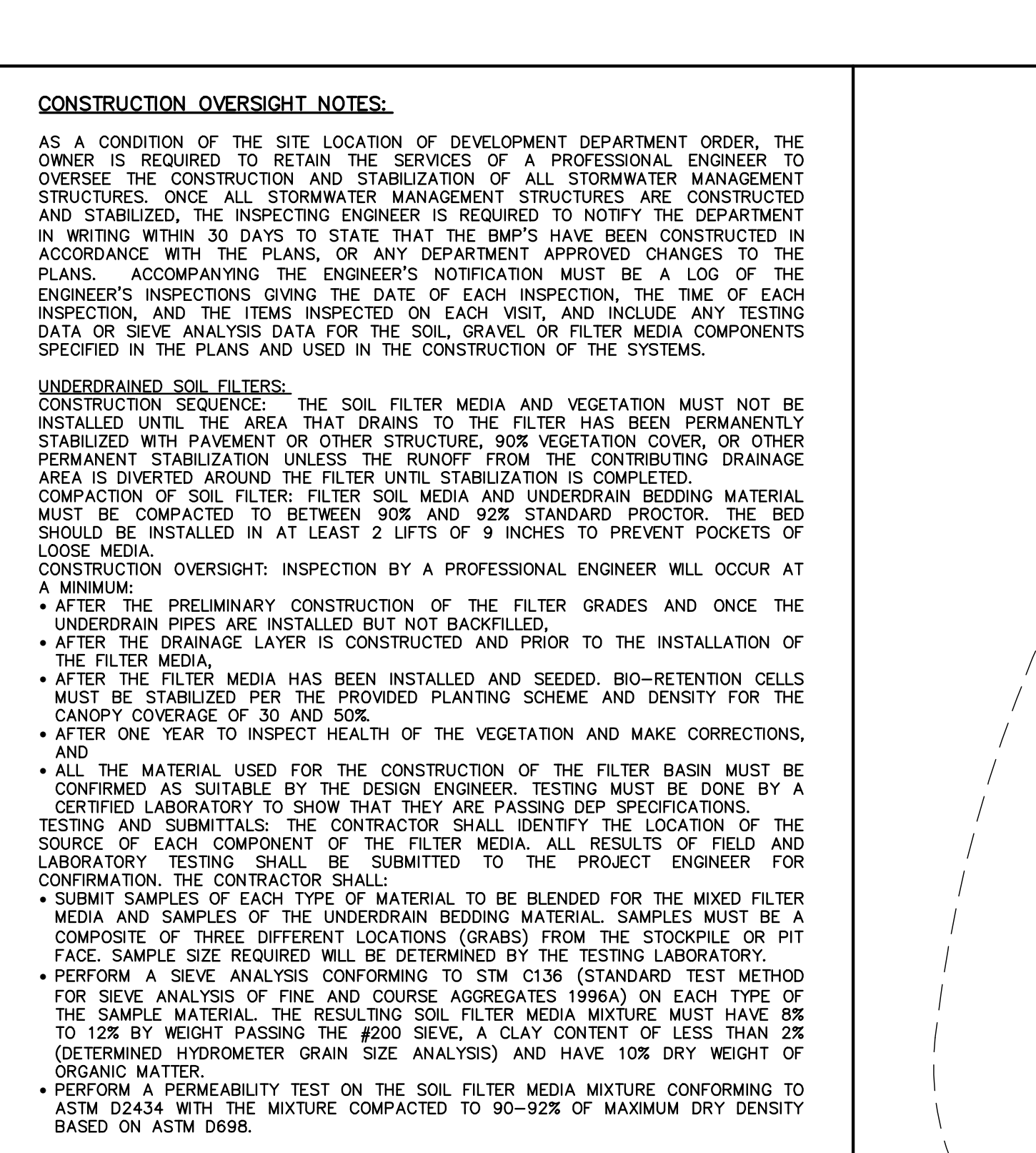
JOB NO.:229001.01
DATE:OCTOBER 201
SCALE: 1" = 40'
SHEET: 9 OF 1

C-08



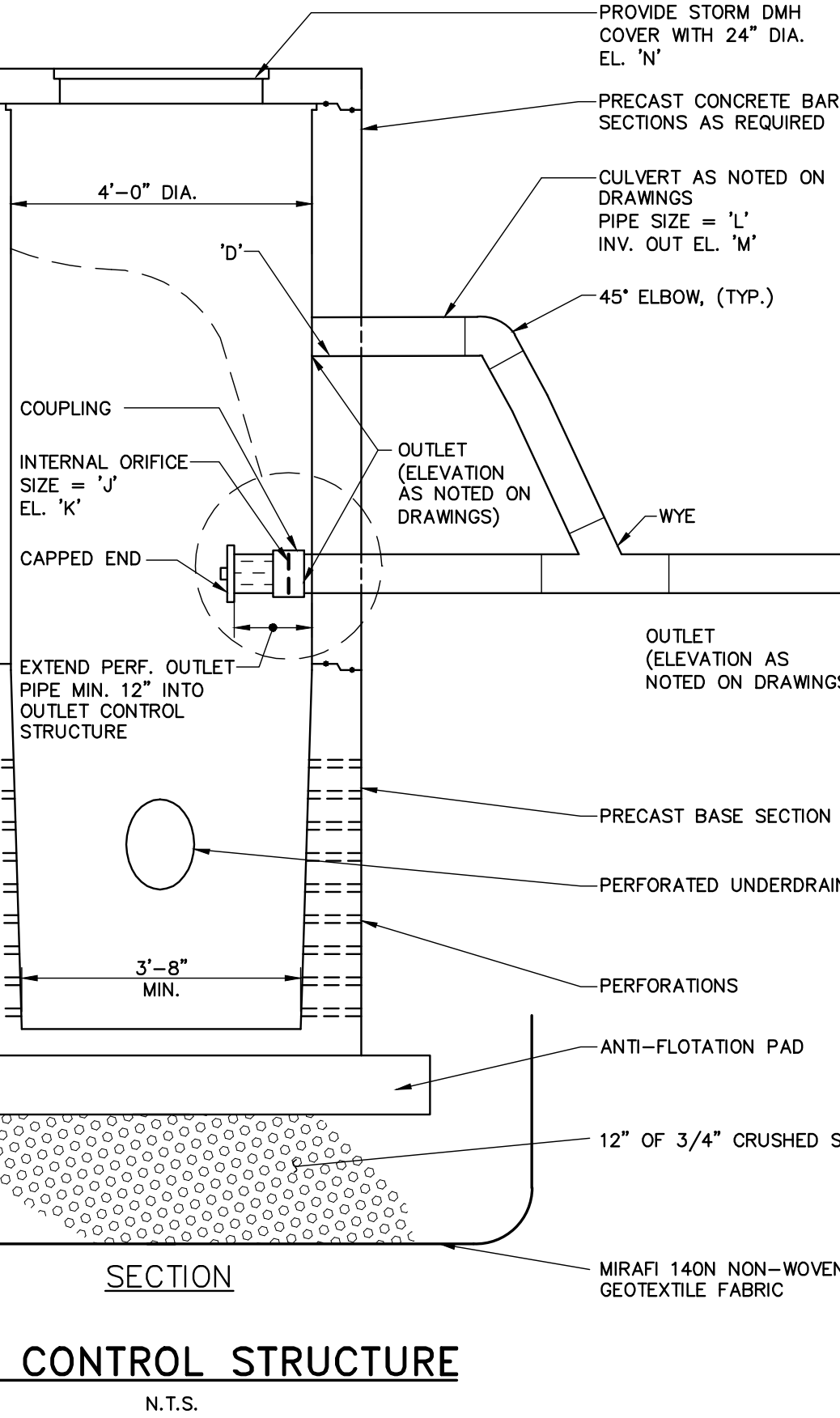
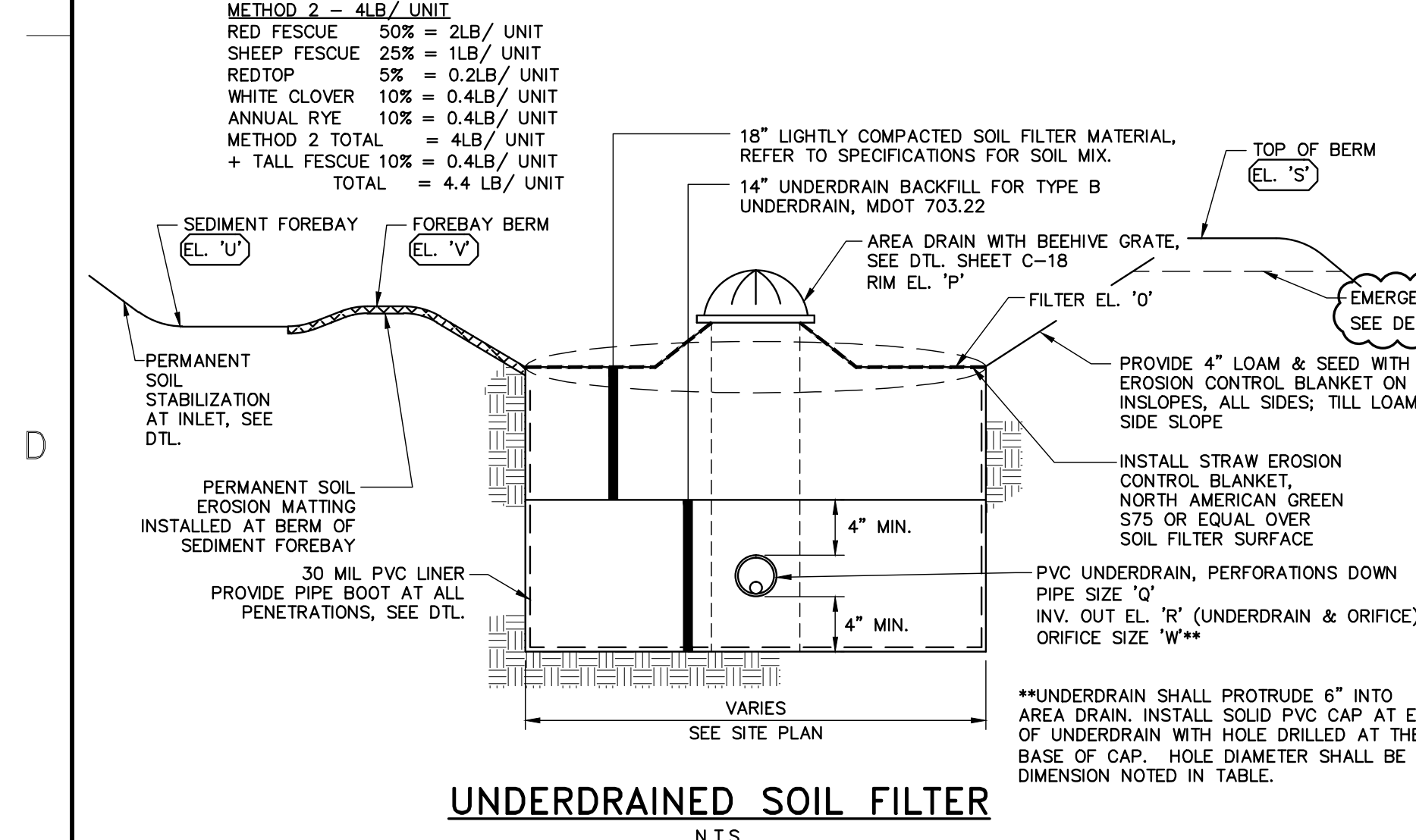
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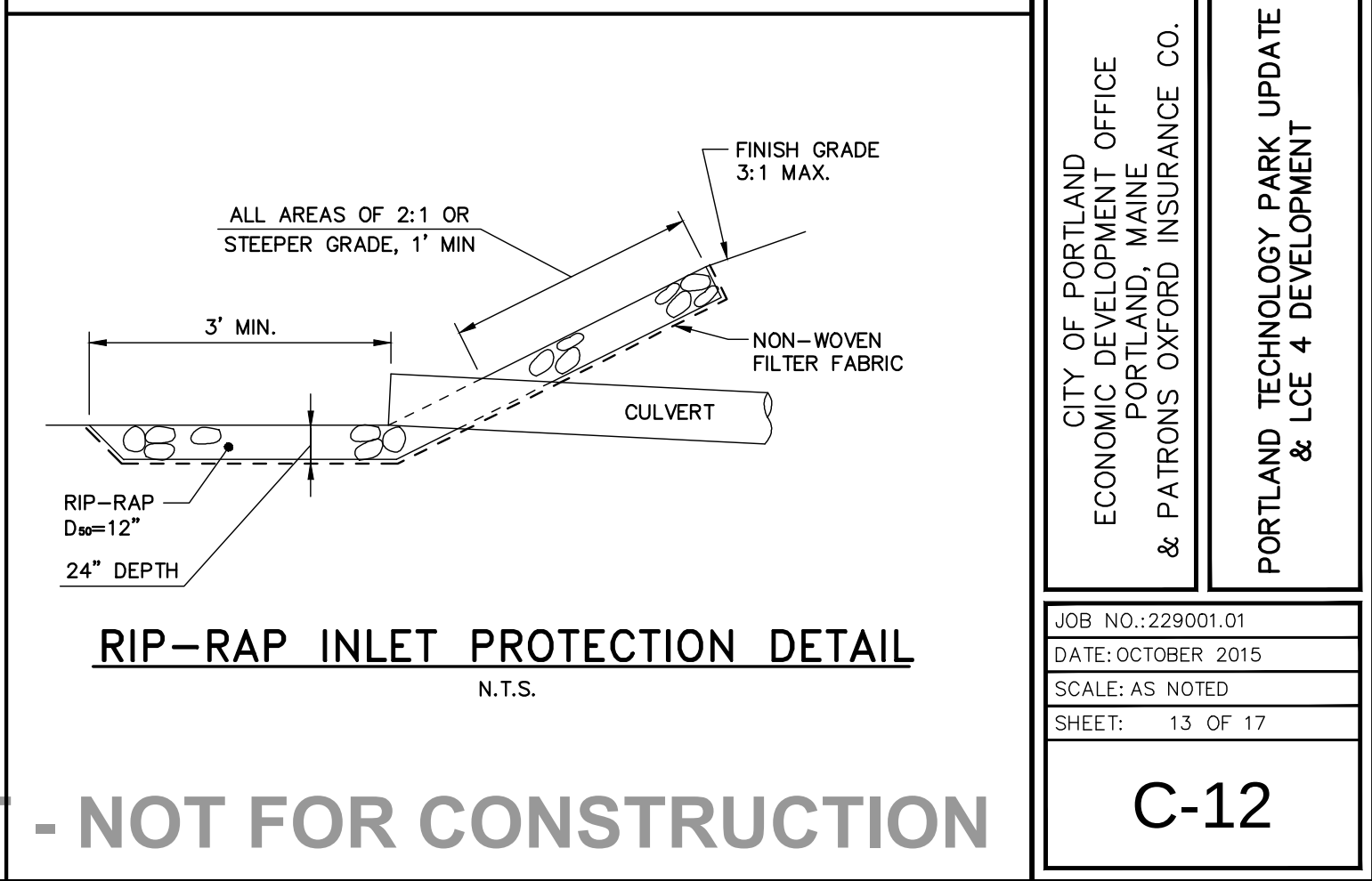
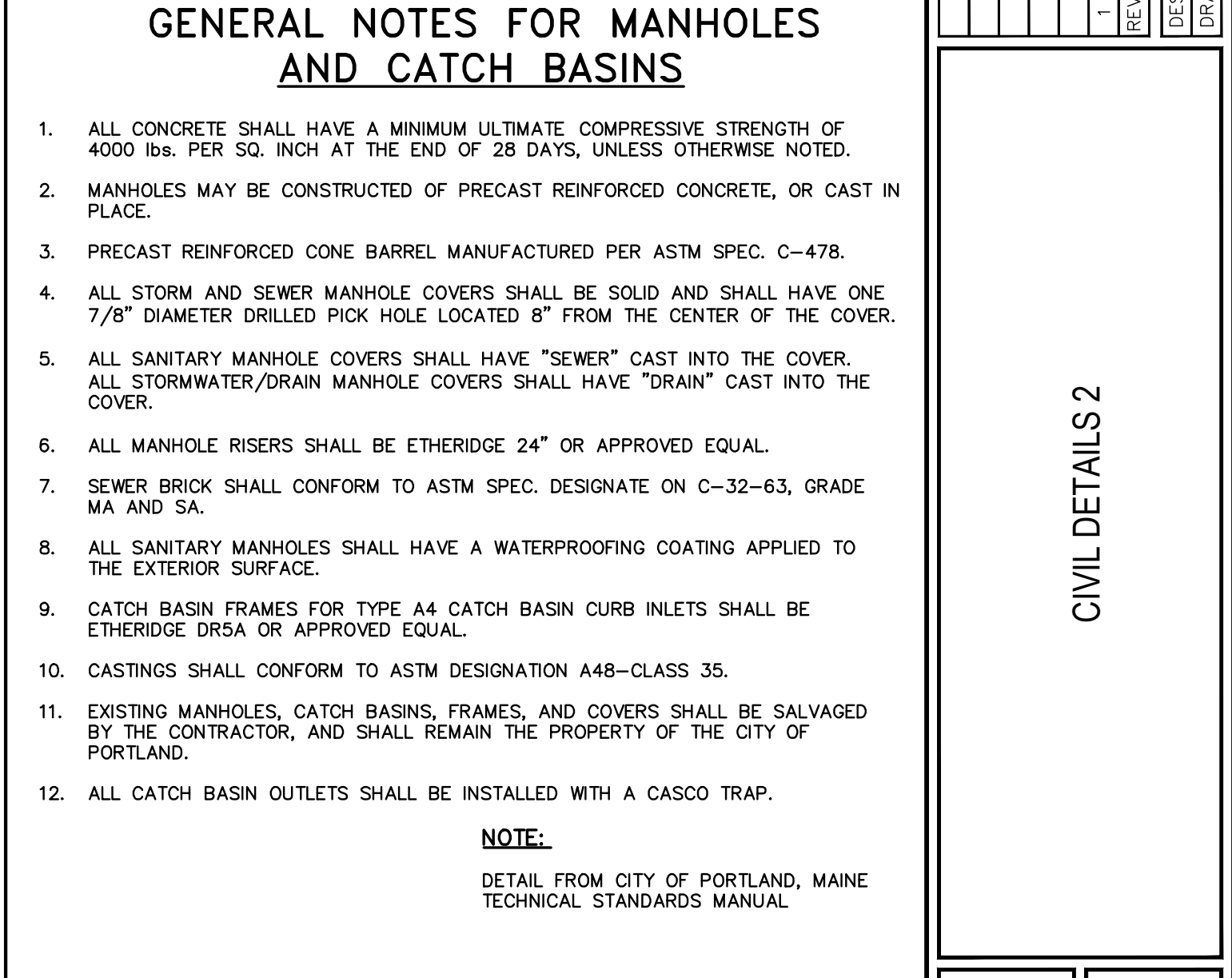
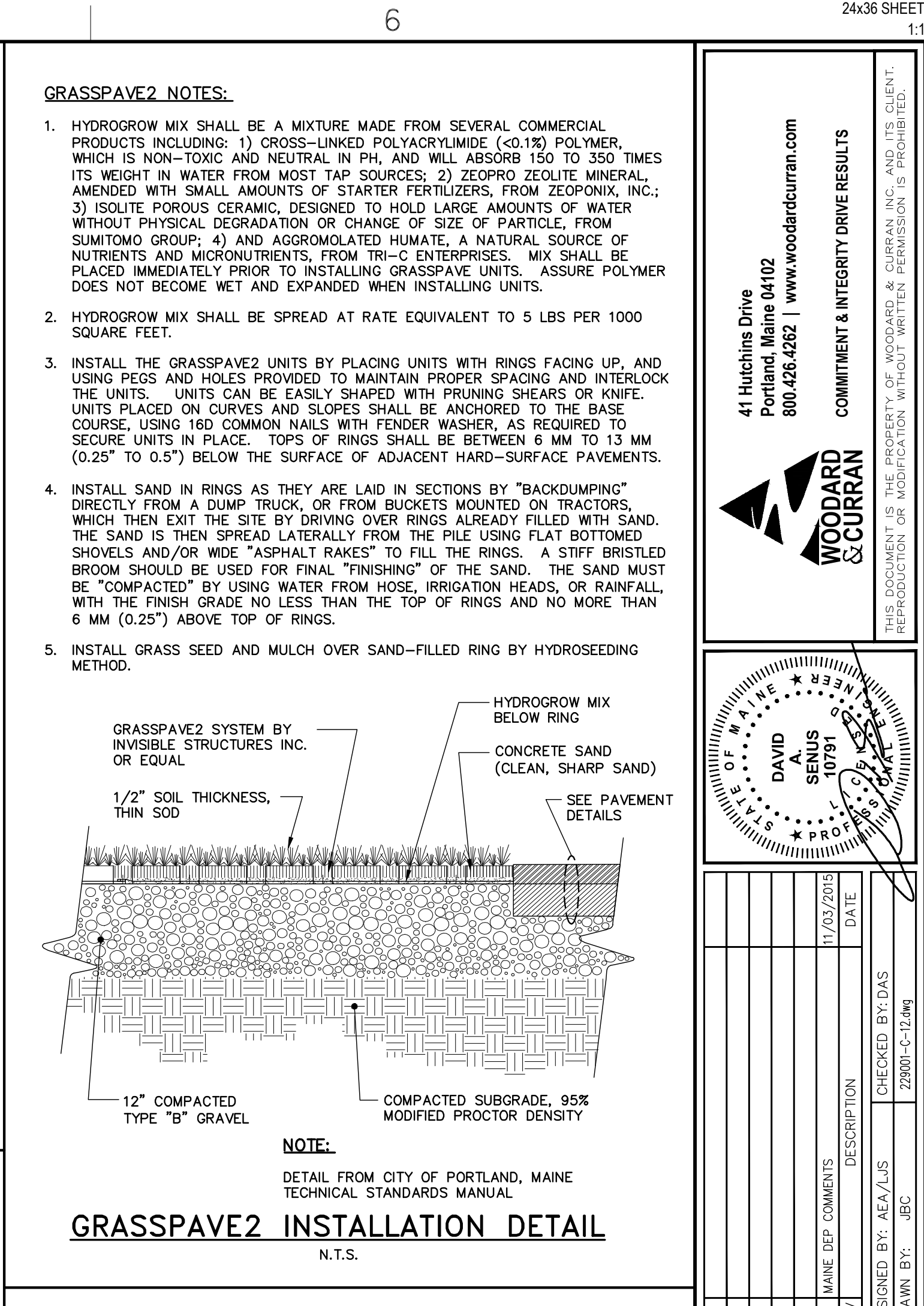
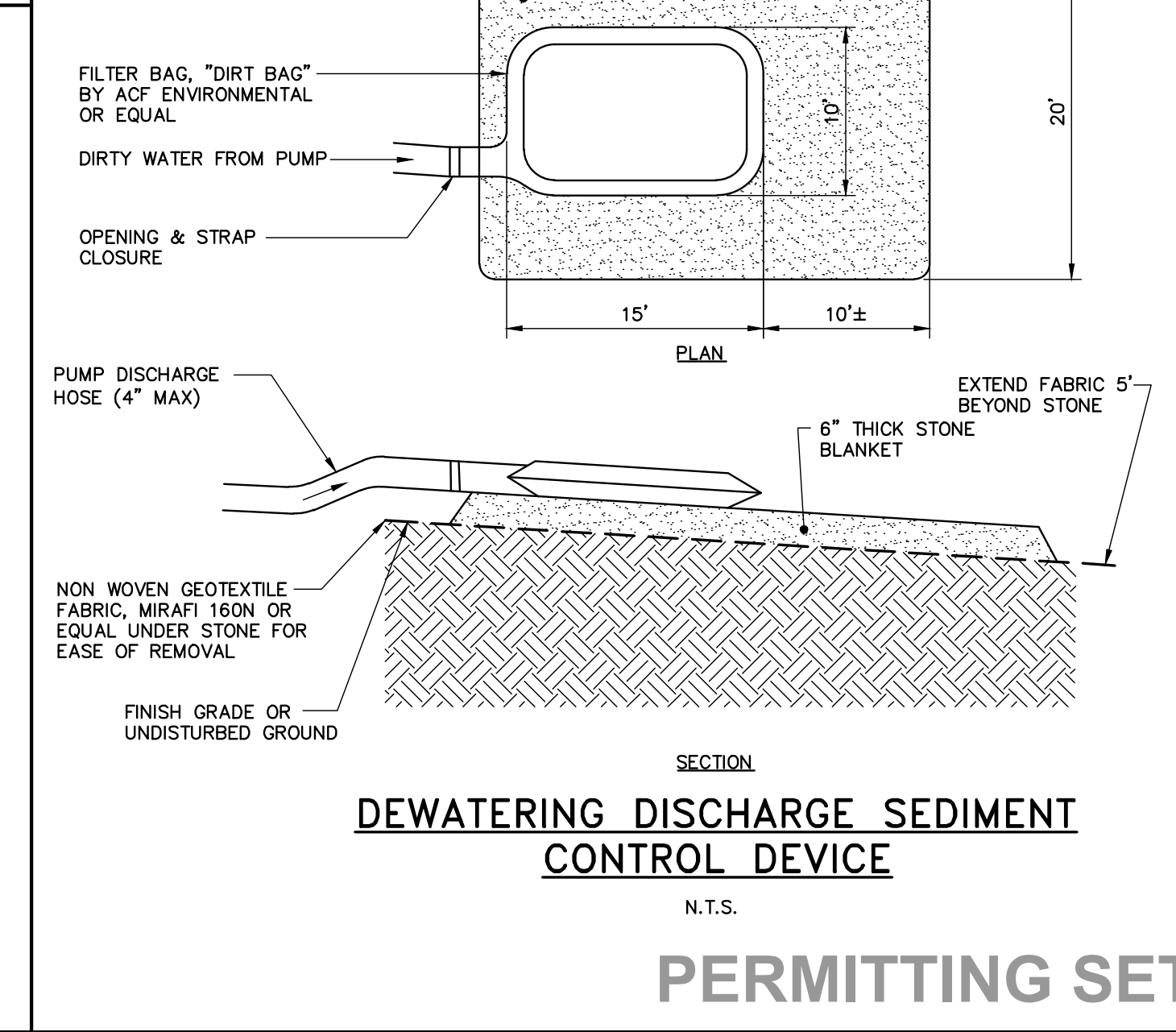
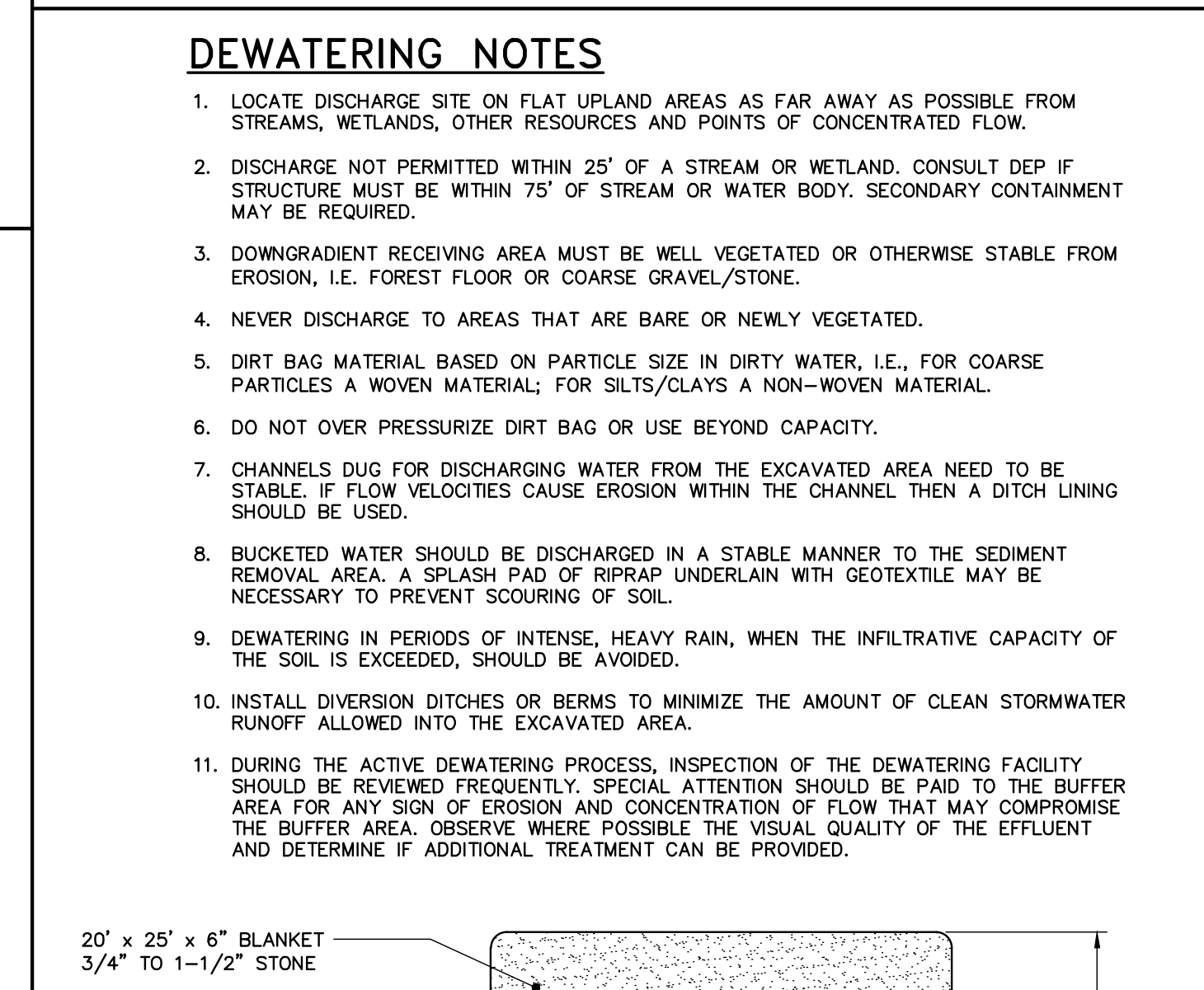
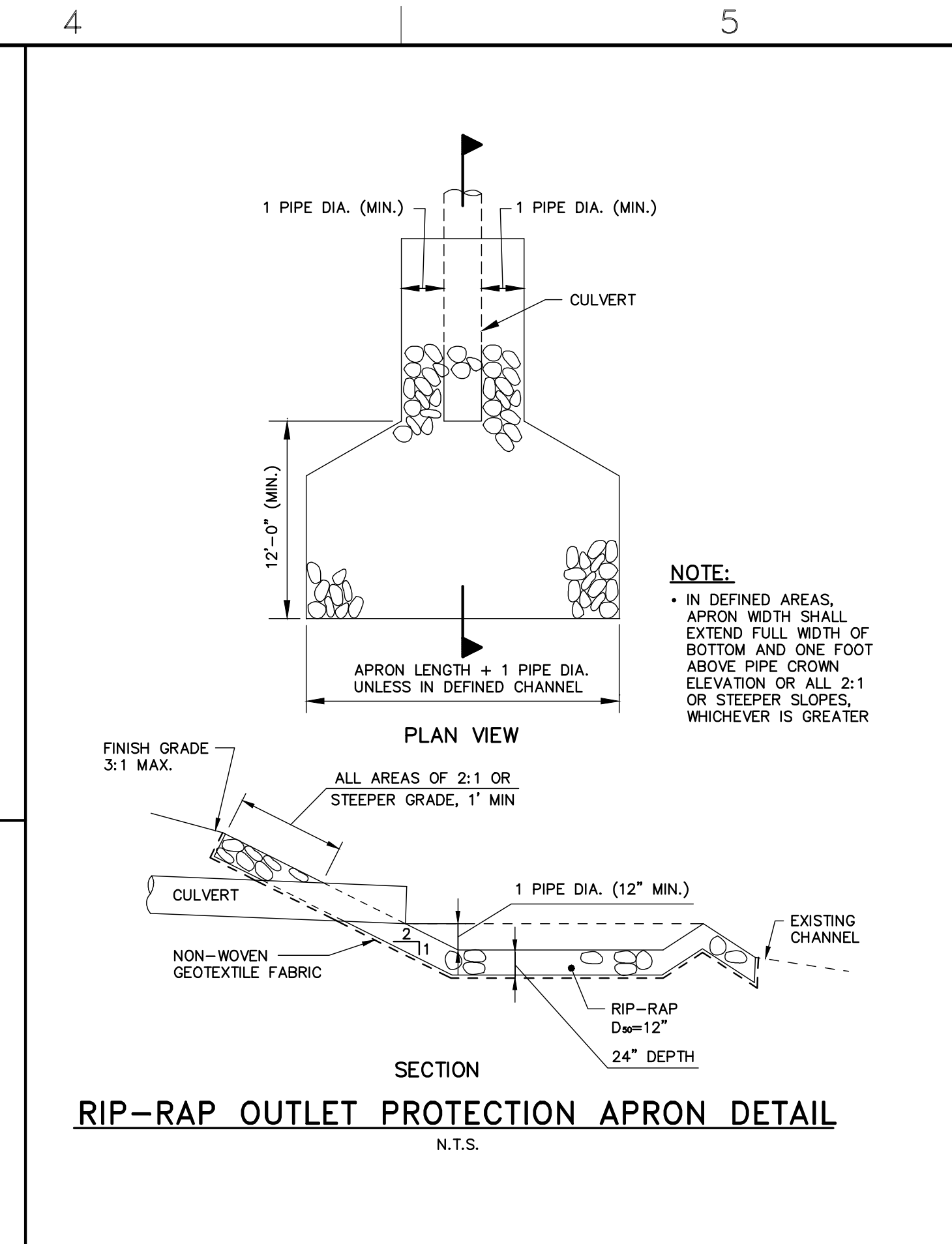
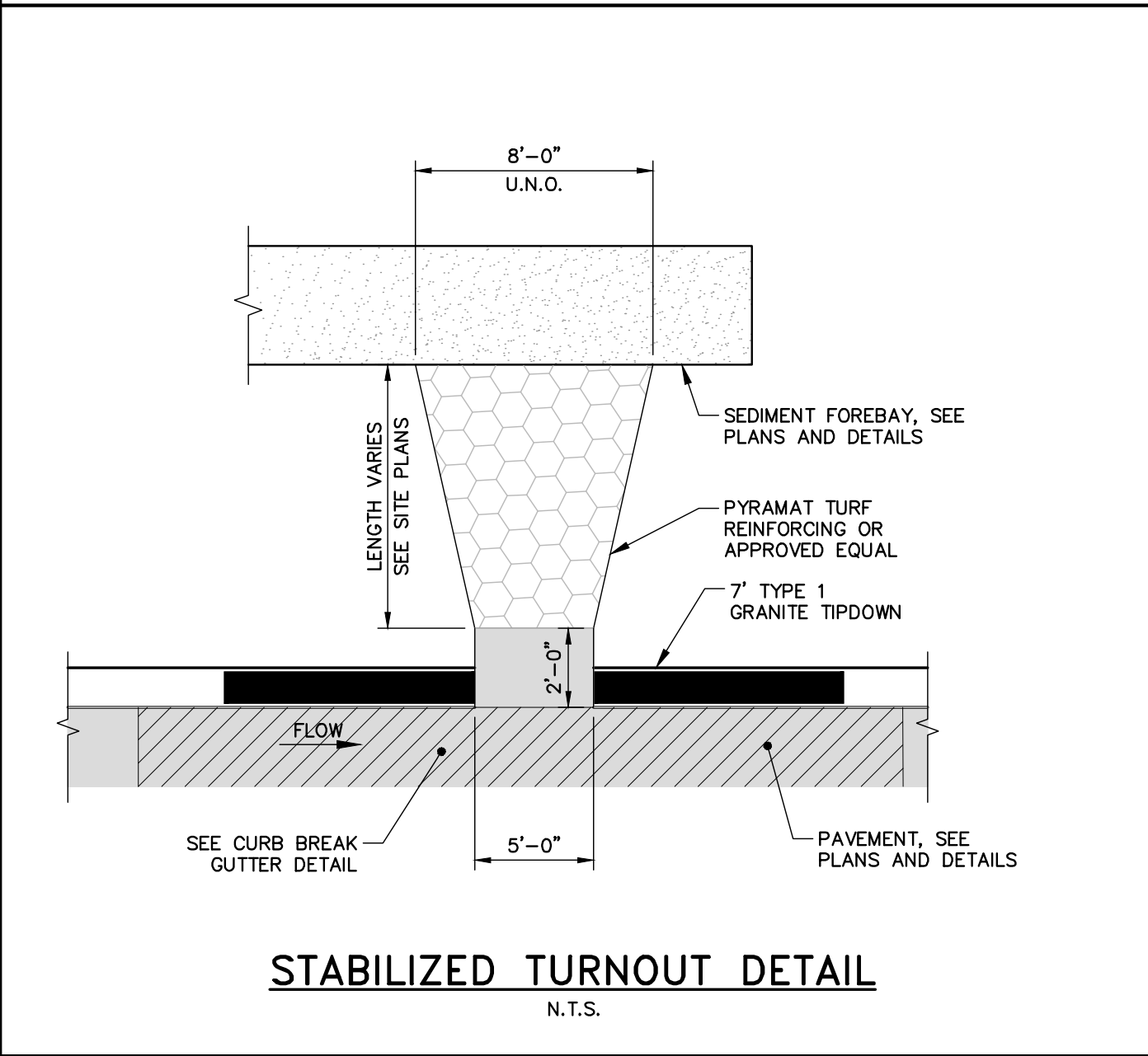
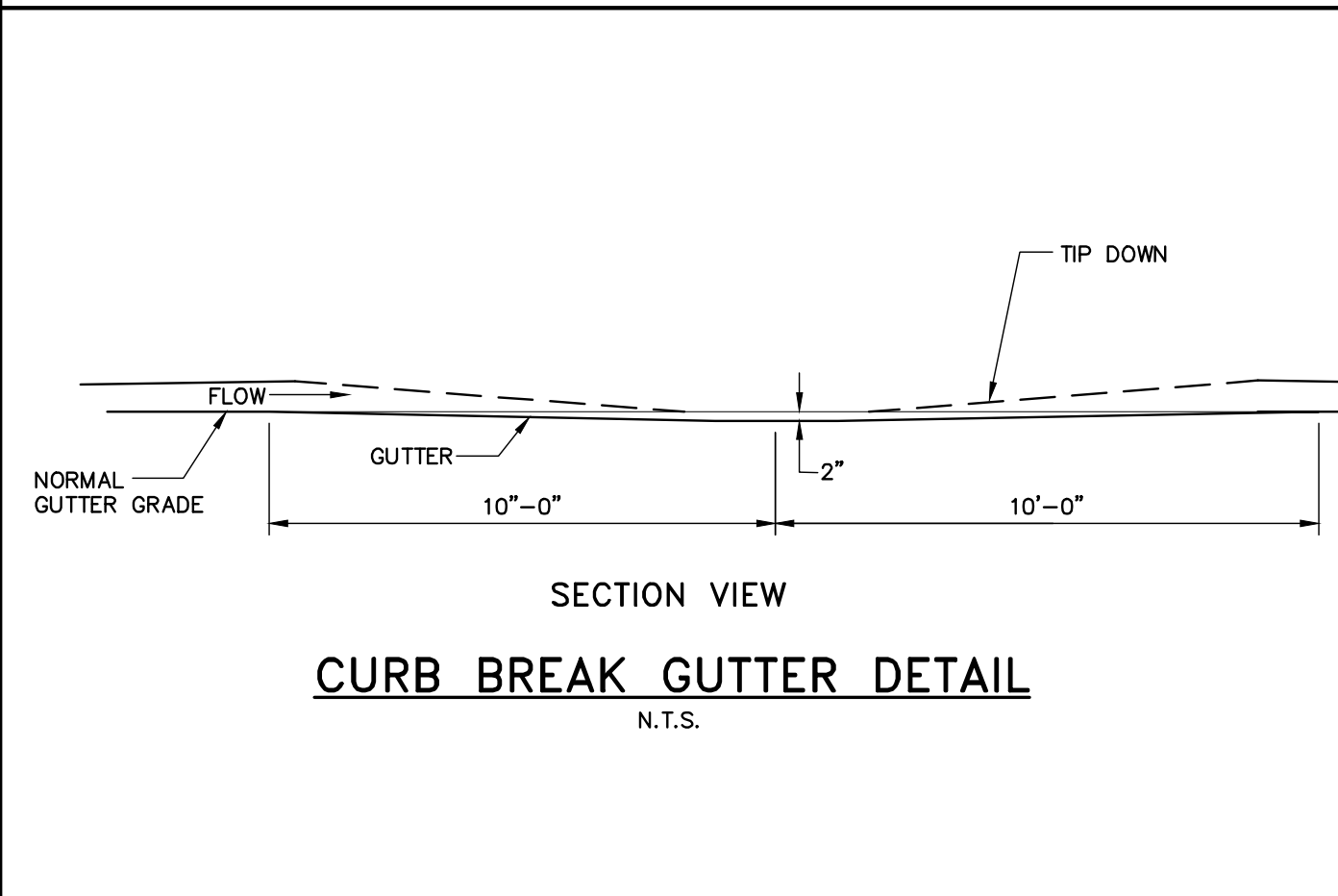
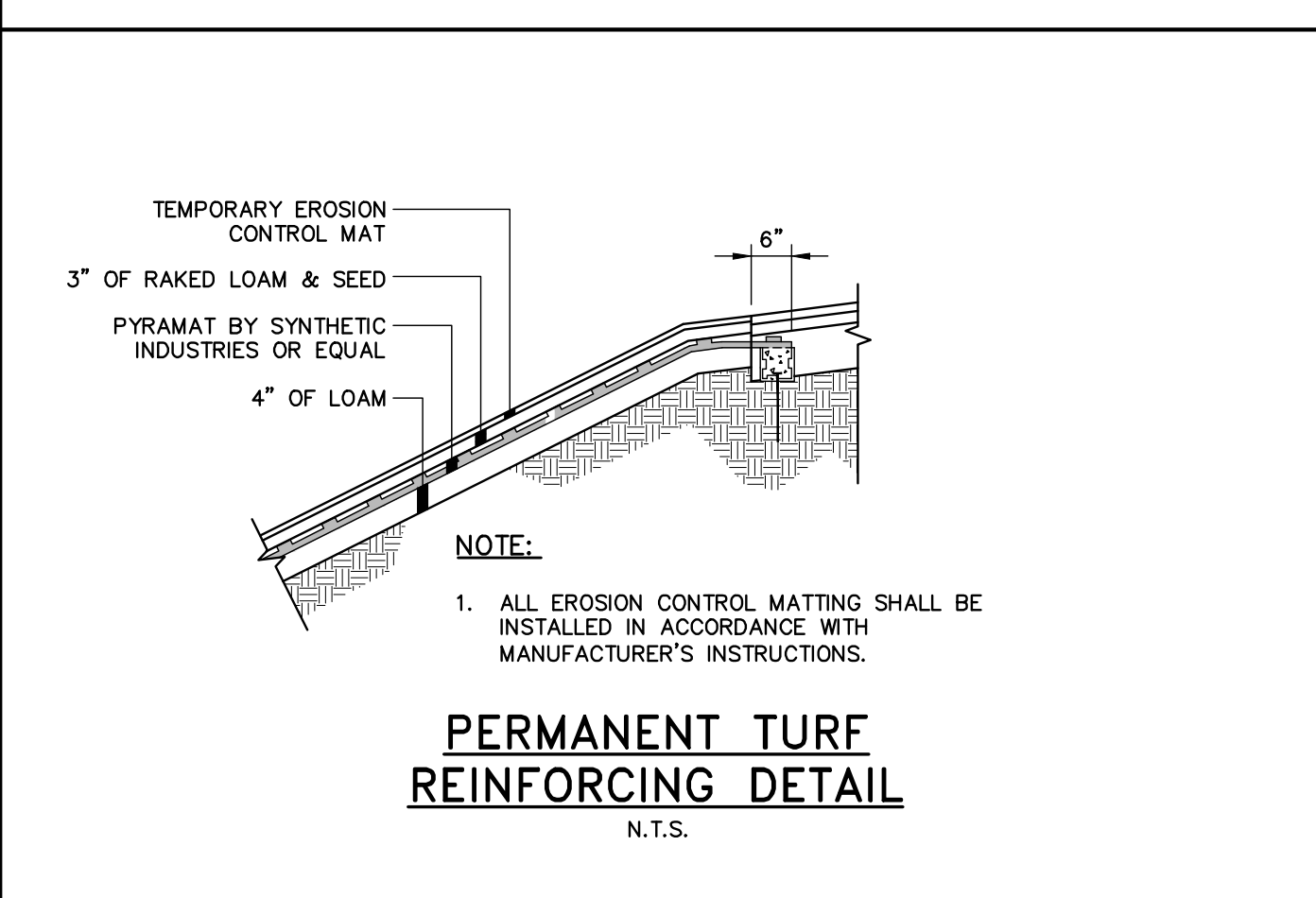
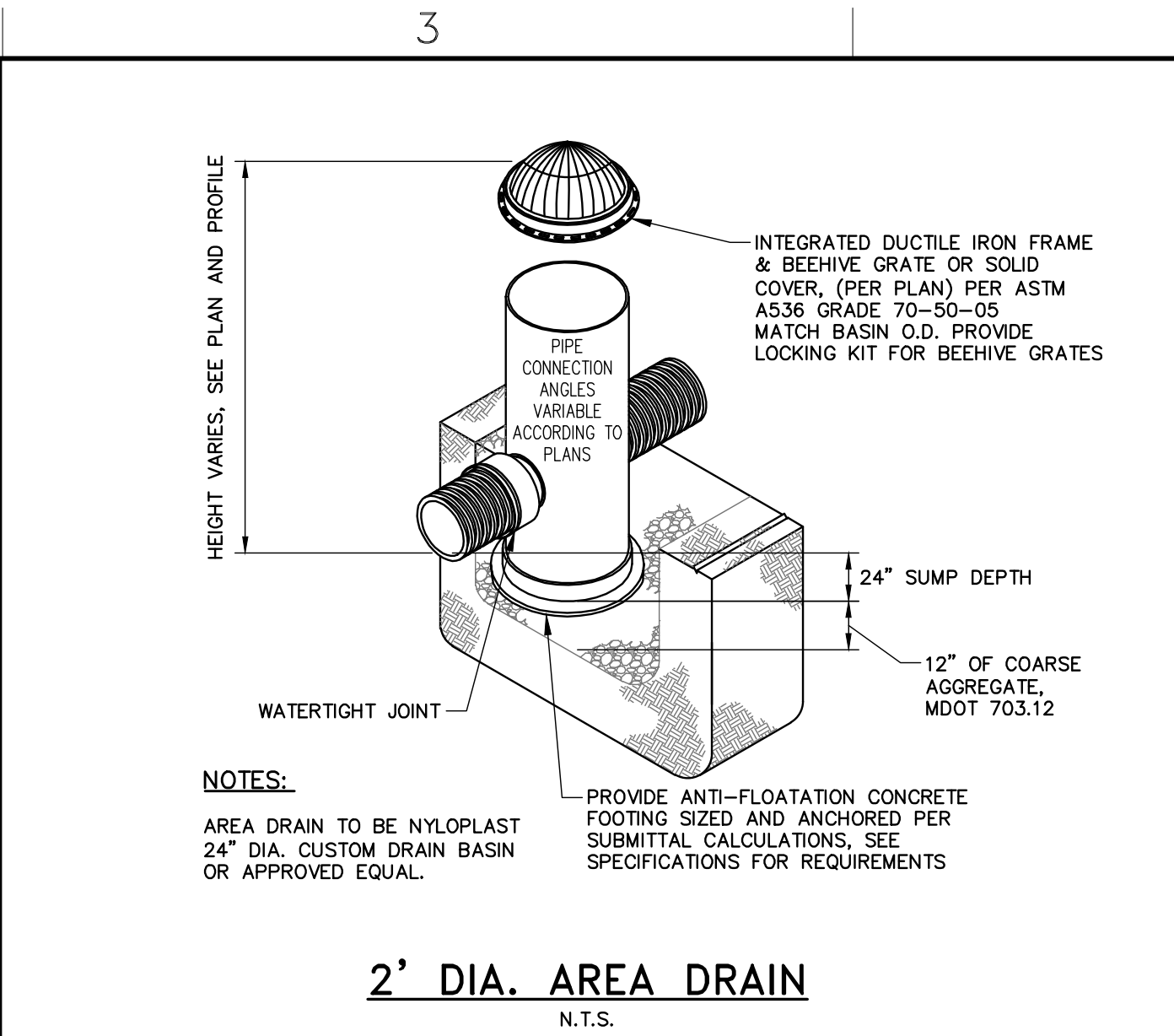
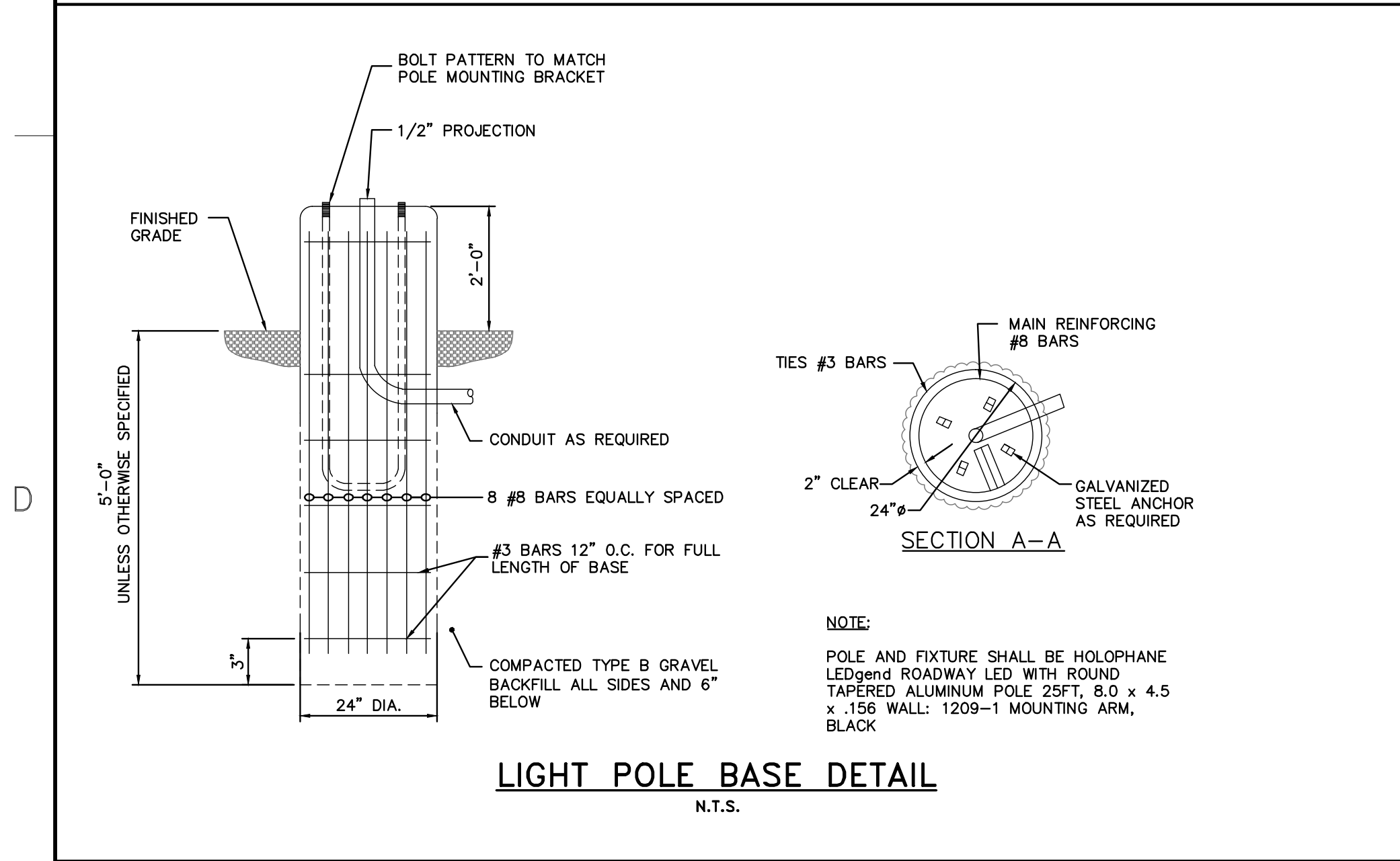
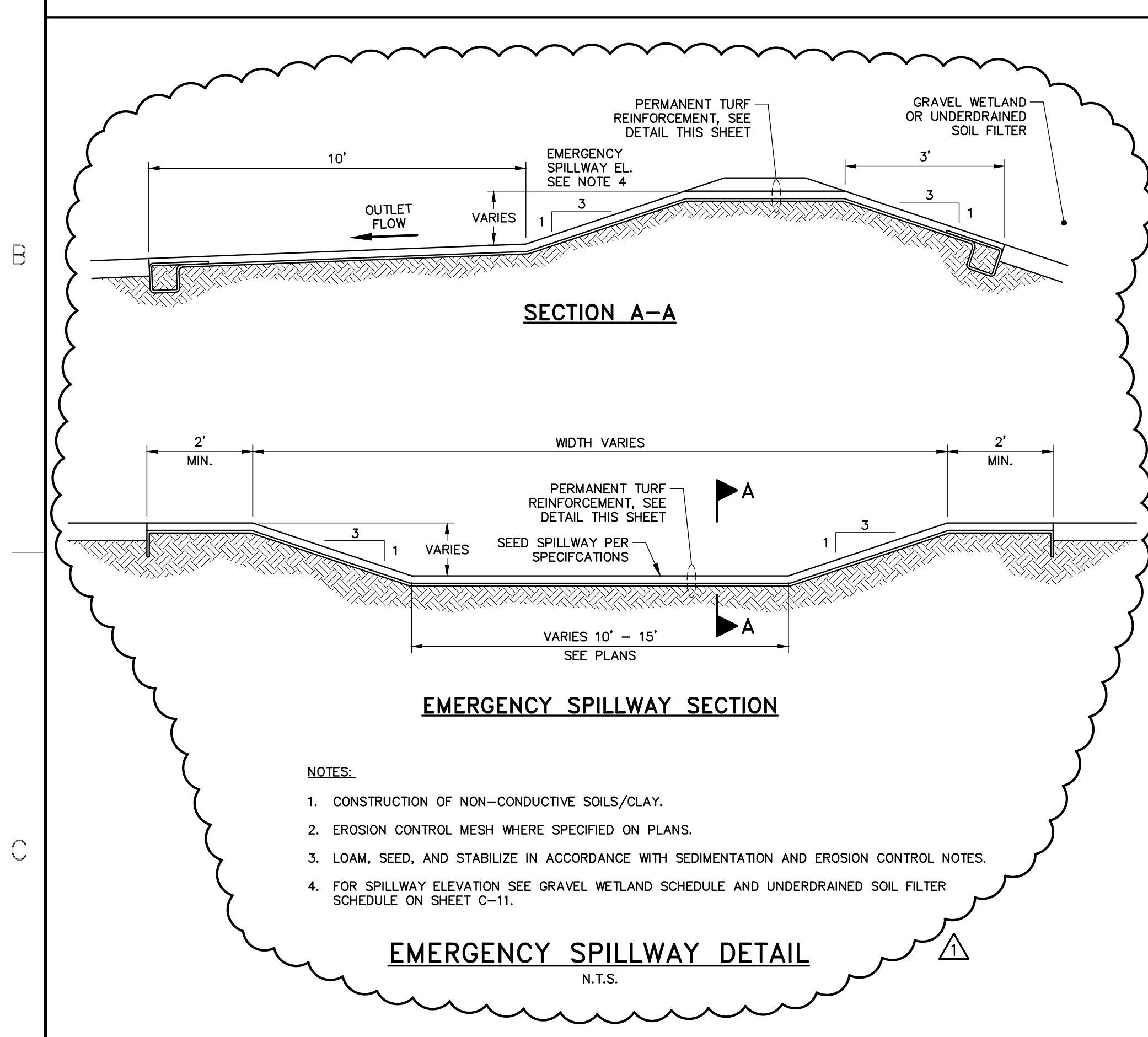
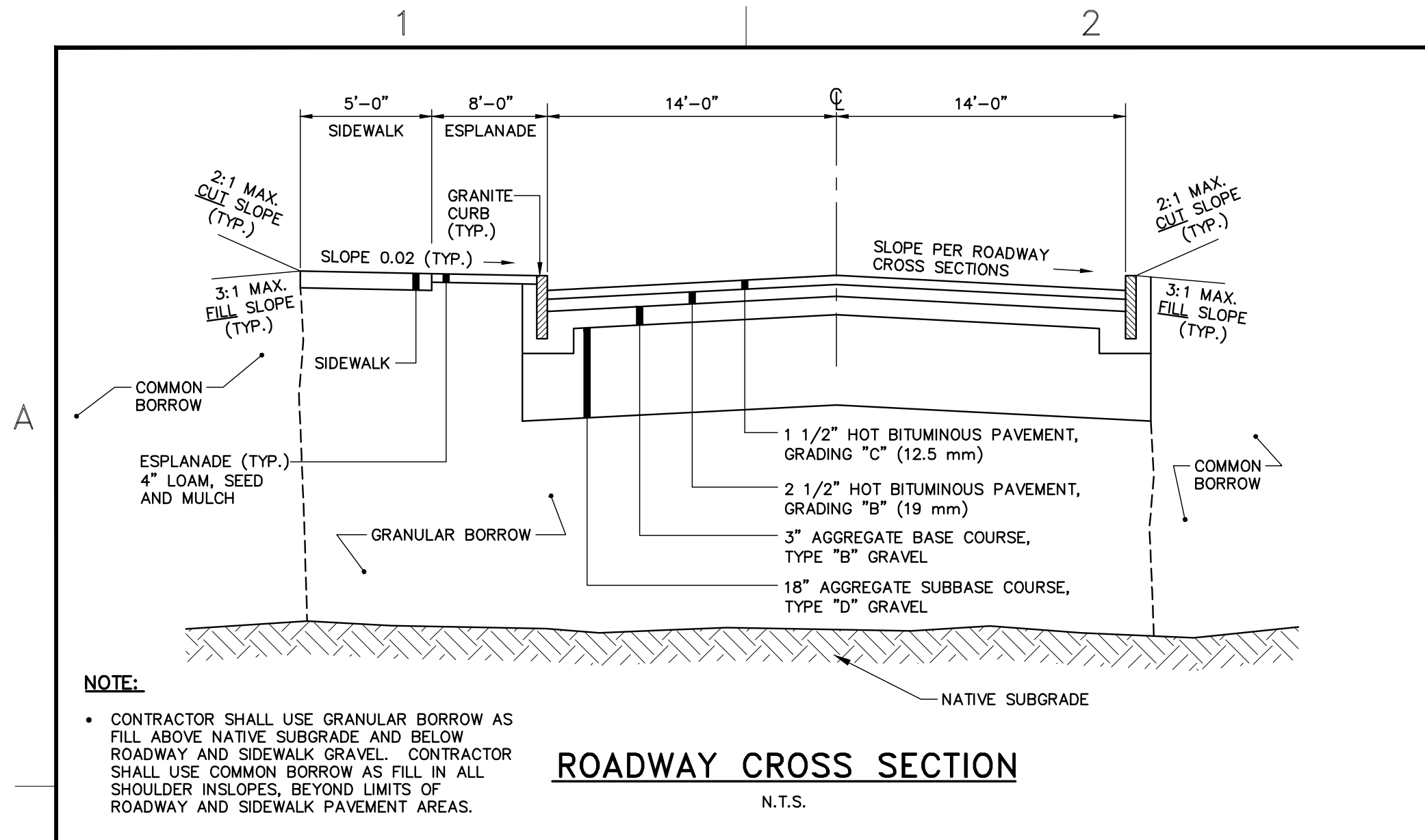
OUTLET CONTROL STRUCTURE SCHEDULE					
GRAVEL WETLAND NO.	J	K	L	M	N
1	CONSTRUCTED				
2	0.75"	67.07	4"	68.65	69.98
3	CONSTRUCTED				
4	CONSTRUCTED				
5	0.75"	65.27	4"	66.30	67.63
6	1"	65.27	4"	66.60	67.93
7	1"	64.27	4"	65.20	66.53
8	2"	66.52	8"	66.94	67.90
9	ELIMINATED				
10	1.25"	65.07	6"	67.00	68.50
11	0.75"	64.27	6"	65.60	67.10
12	1.125"	68.27	6"	69.70	71.20



-
- SOLID COVER BY NYLOPLAST OR APPROVED EQUAL
- SOLID COVER BY NYLOPLAST OR APPROVED EQUAL
- INLINE RISER BY NYLOPLAST OR APPROVED EQUAL
- TEE FOR INLINE RISER CONNECTION
- UNDERDRAIN
- 90° ELBOW AT START OF UNDERDRAIN LINE
- CLEAN-OUT DETAIL**
- N.T.S.

UNDERDRAINED SOIL FILTER SCHEDULE									
UNDERDRAINED SOIL FILTER NO.	O	P	Q	R	S	T	U	V	W
1	40.00	41.80	4"	37.84	42.50	42.00	N/A	N/A	1"
2	41.00	42.70	4"	38.84	43.50	43.00	N/A	N/A	1"
3	65.00	67.00	4"	62.84	67.60	67.00	66.00	66.30	0.4"
4	61.00	64.00	4"	58.84	64.60	64.00	63.00	63.30	0.9"
5	61.00	63.00	6"	58.84	63.70	63.00	62.00	62.30	0.6"





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11/03/2015

NO.	DATE	DESCRIPTION	CHECKED BY	DATE
1	11/03/2015	MAINE DEP COMMENTS	ACF/JLS	11/03/2015

DESIGNED BY: ACF/JLS
DRAWN BY: JBC
2200-C-12.dwg

CIVIL DETAILS 2

CITY OF PORTLAND
ECONOMIC DEVELOPMENT OFFICE
PORTLAND, MAINE
& PATRONS OXFORD INSURANCE CO.

PORTLAND TECHNOLOGY PARK UPDATE
& LCE 4 DEVELOPMENT

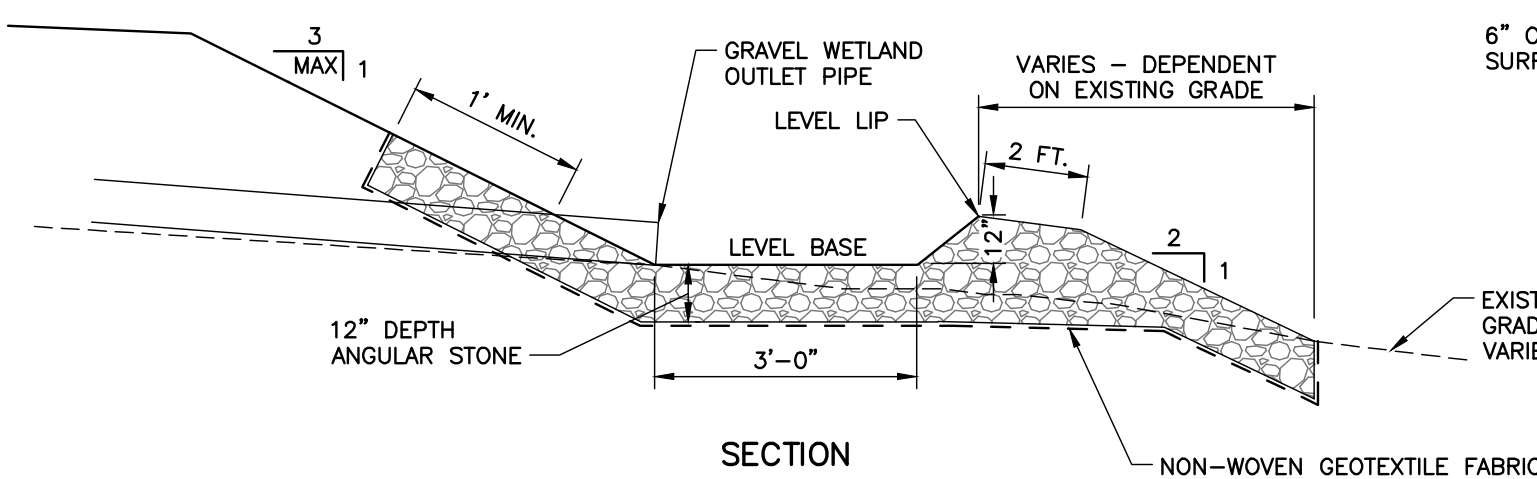
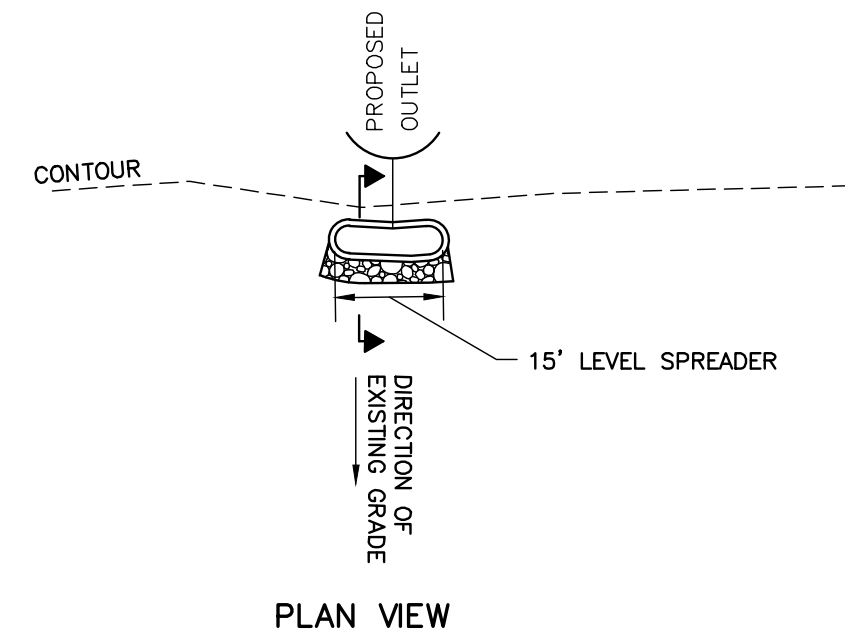
JOB NO.: 229001.01
DATE: OCTOBER 2015
SCALE: AS NOTED
SHEET: 13 OF 17

C-12

LEVEL SPREADER STONE SIZE*

Sieve Designation (metric)	Sieve Designation (U.S. Customary)	Percent by Weight Passing Square Mesh Sieve
300 mm	12 inch	100
150 mm	6 inch	84-100
75 mm	3 inch	68-83
25.4 mm	1 inch	42-55
4.75 mm	No. 4	8-12

*ALL STONE SHALL BE CRUSHED, ANGULAR STONE

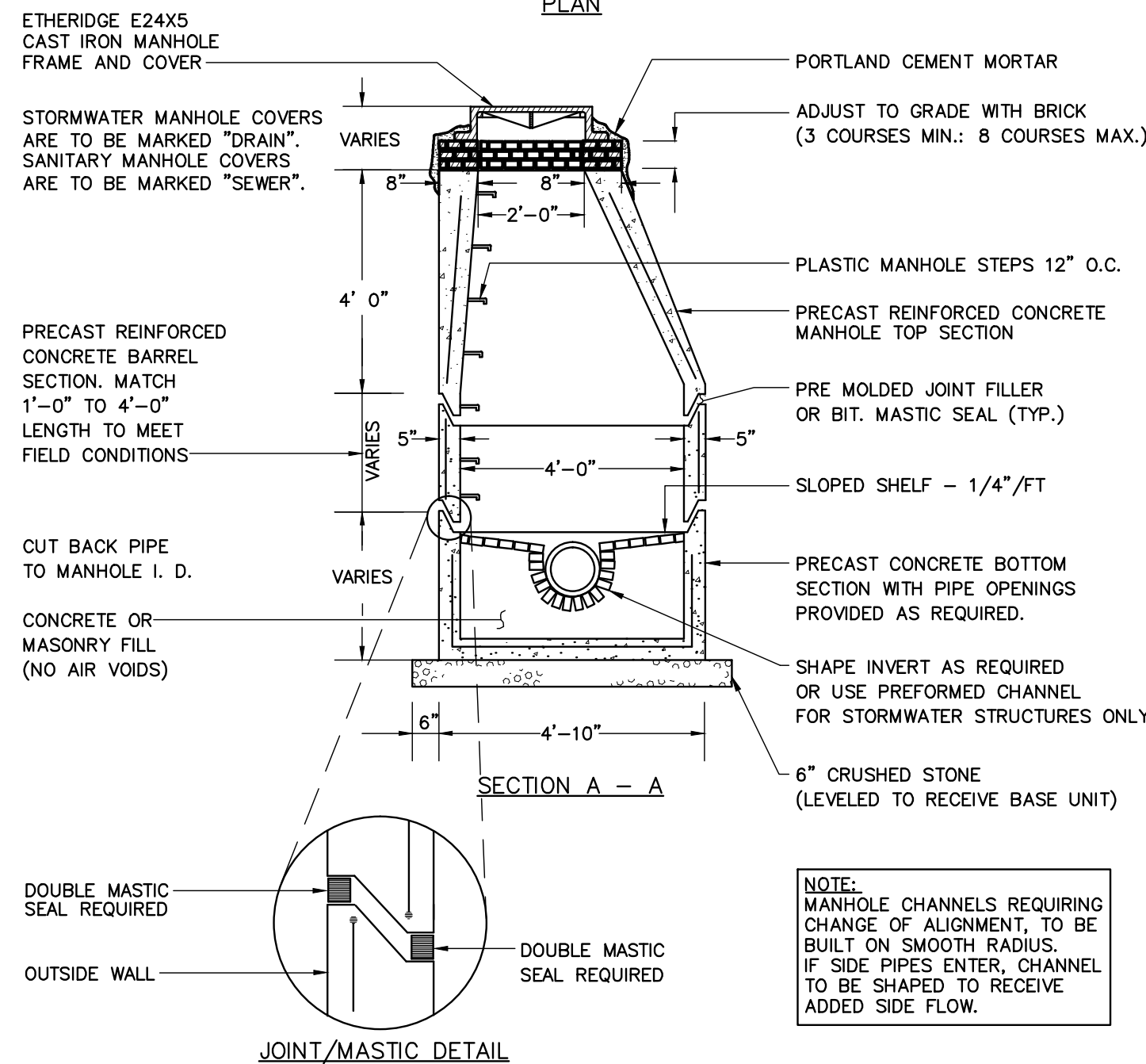
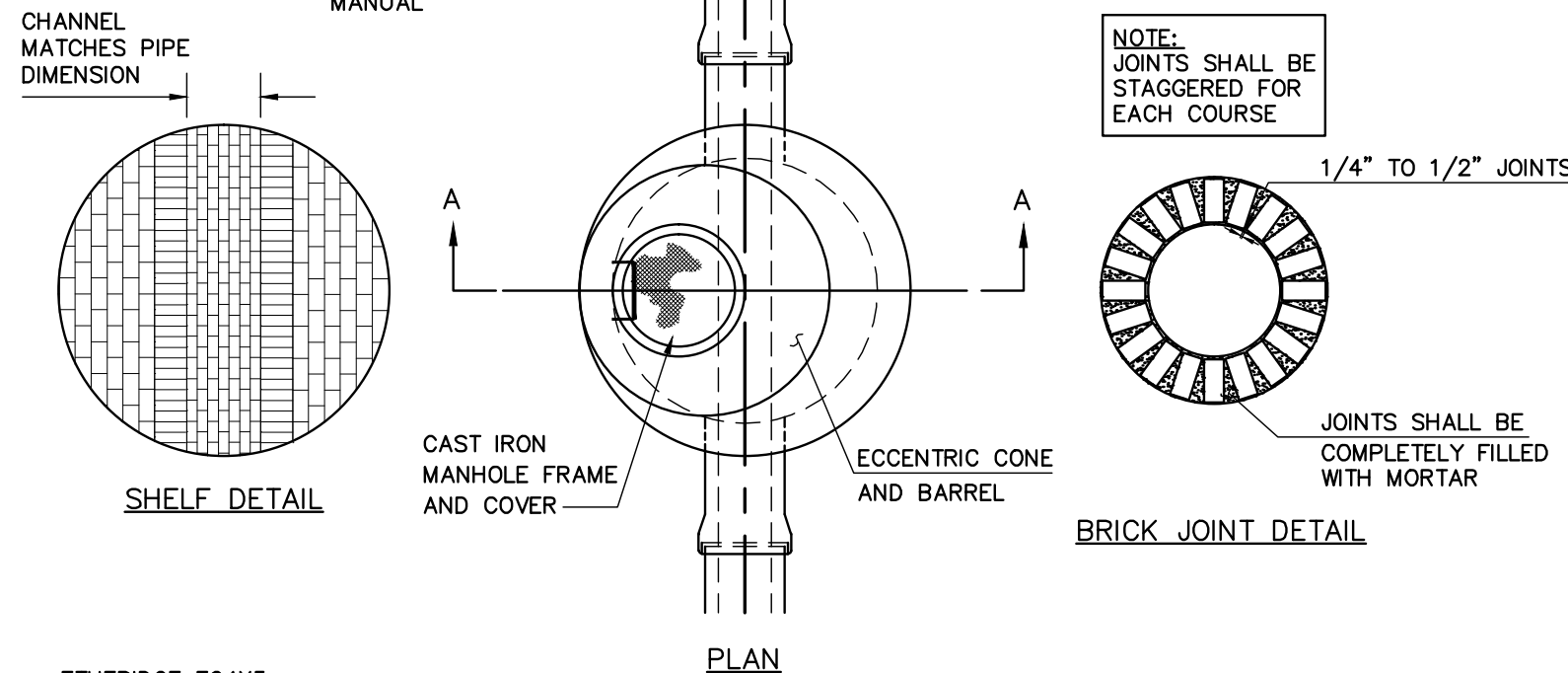


LEVEL LIP SPREADER DETAIL

N.T.S.

NOTE:

DETAIL FROM CITY OF PORTLAND, MAINE TECHNICAL STANDARDS MANUAL



PRECAST CONCRETE MANHOLE

N.T.S.

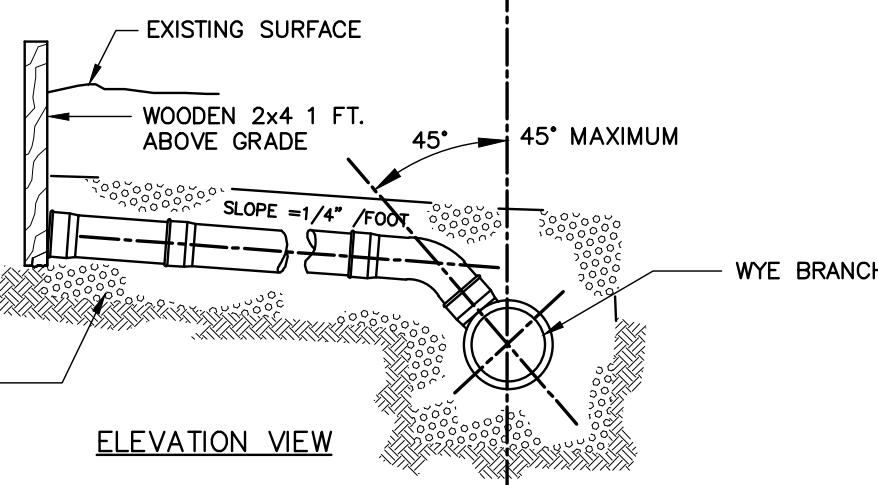
NOTE:
LOCATION / WARNING TAPE SHALL BE INSTALLED OVER CENTERLINE OF PIPE AT A MAXIMUM OF 24 INCHES BELOW FINISH GRADE.

EXTEND WOODEN 2x4 TO 1 FT. ABOVE GRADE TO DELINEATE END OF STUB. MARK 2x4 WITH THE DEPTH FROM GRADE TO PLUG.

NOTE:

DETAIL FROM CITY OF PORTLAND, MAINE TECHNICAL STANDARDS MANUAL

PLAN VIEW

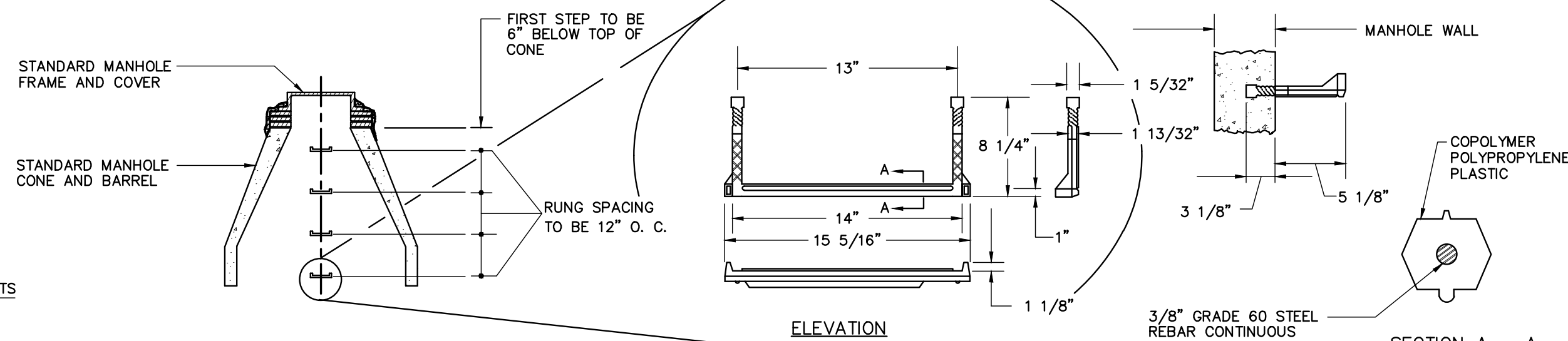


TYPICAL LATERAL TEE/WYE CONNECTION

N.T.S.

NOTE:

DETAIL FROM CITY OF PORTLAND, MAINE TECHNICAL STANDARDS MANUAL



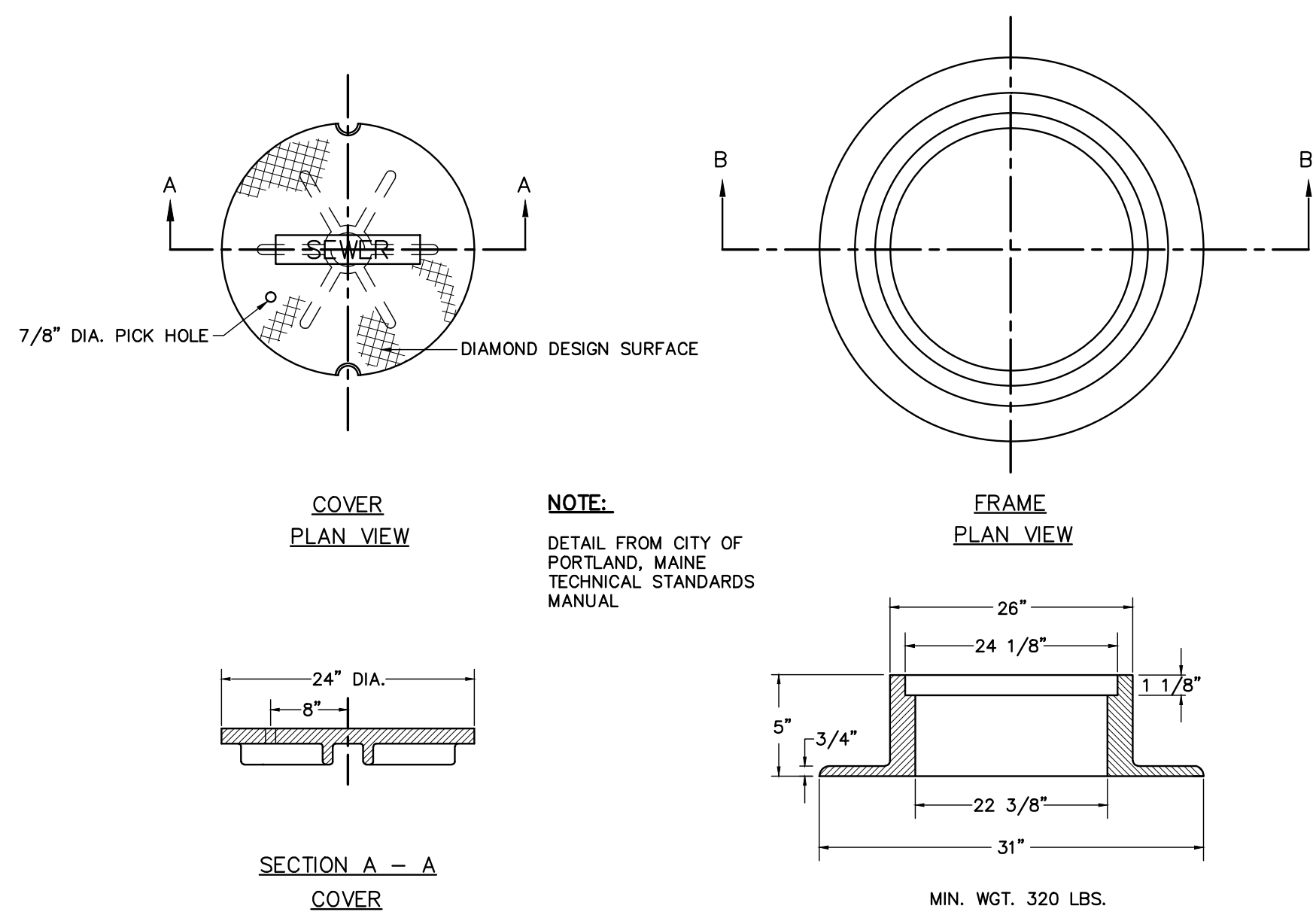
PLASTIC MANHOLE STEPS

N.T.S.

NOTE:

ALL MANHOLE COVERS SHALL BE SOLID AND SHALL HAVE ONE 7/8" DIAMETER DRILLED PICK HOLE, LOCATED 8" FROM THE CENTER OF THE COVER.

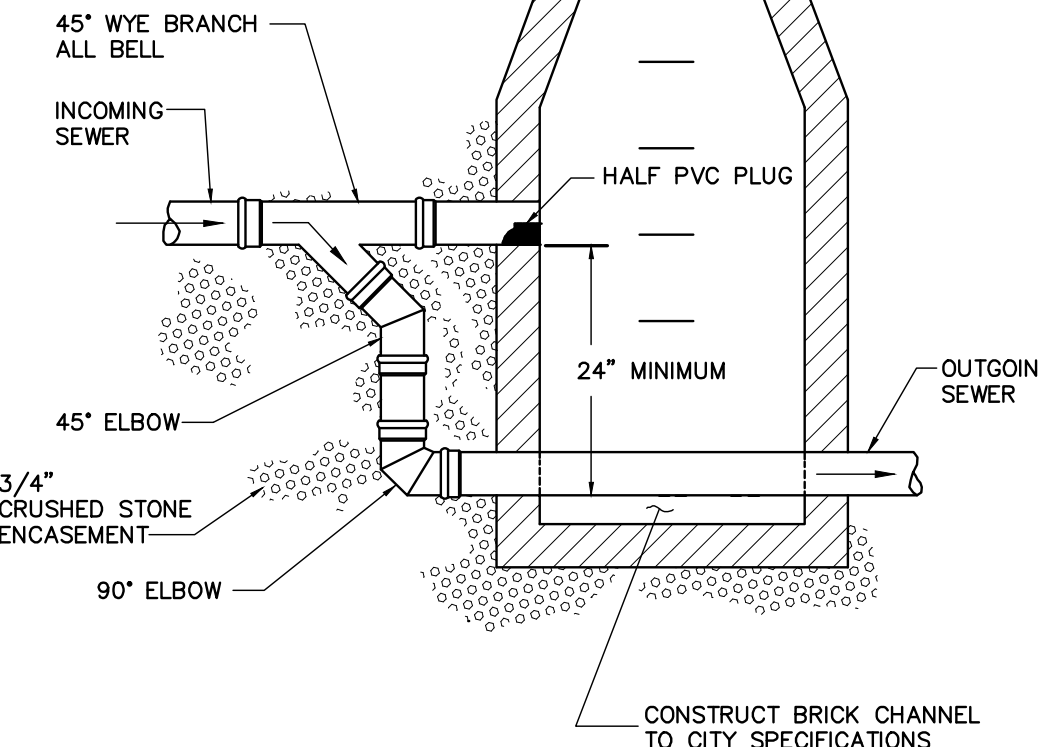
ALL SANITARY MANHOLE COVERS SHALL HAVE "SEWER" CAST INTO THE COVER. ALL STORMWATER/RAIN MANHOLE COVERS SHALL HAVE "RAIN" CAST INTO THE COVER.



CAST IRON MANHOLE COVER AND FRAME

N.T.S.

NOTE:
DROP MANHOLES ARE NOT REQUIRED FOR STORMWATER SYSTEMS.

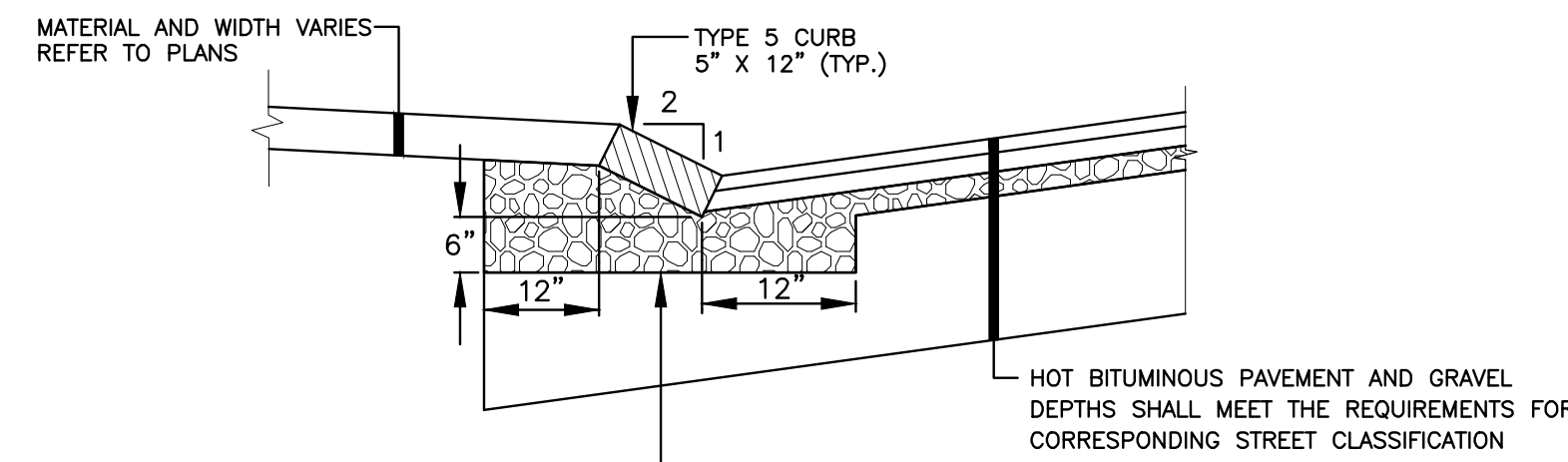


TYPICAL OUTSIDE DROP MANHOLE

N.T.S.

NOTE:

DETAIL FROM CITY OF PORTLAND, MAINE TECHNICAL STANDARDS MANUAL

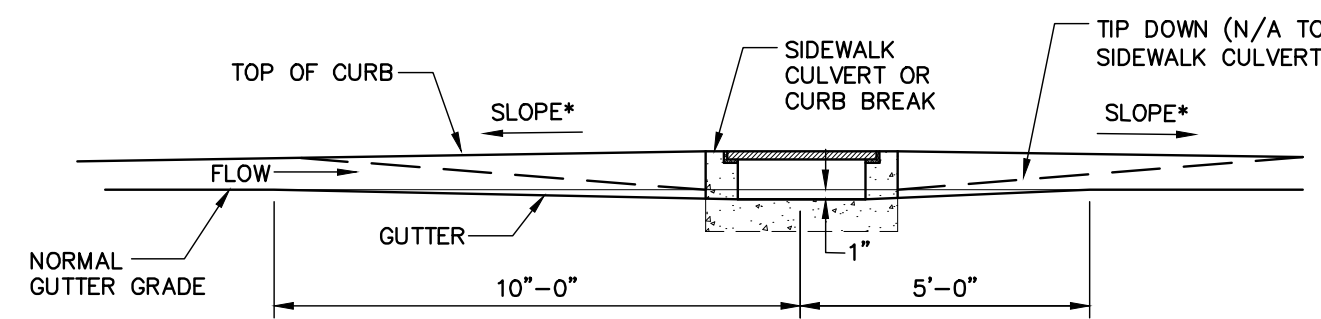


NOTE:

INDIVIDUAL PIECES OF CURB SHORTER THAN 4 L.F. ARE NOT ALLOWED, WITH THE EXCEPTION OF RADIAL CURB.

SLOPED GRANITE CURB DETAIL

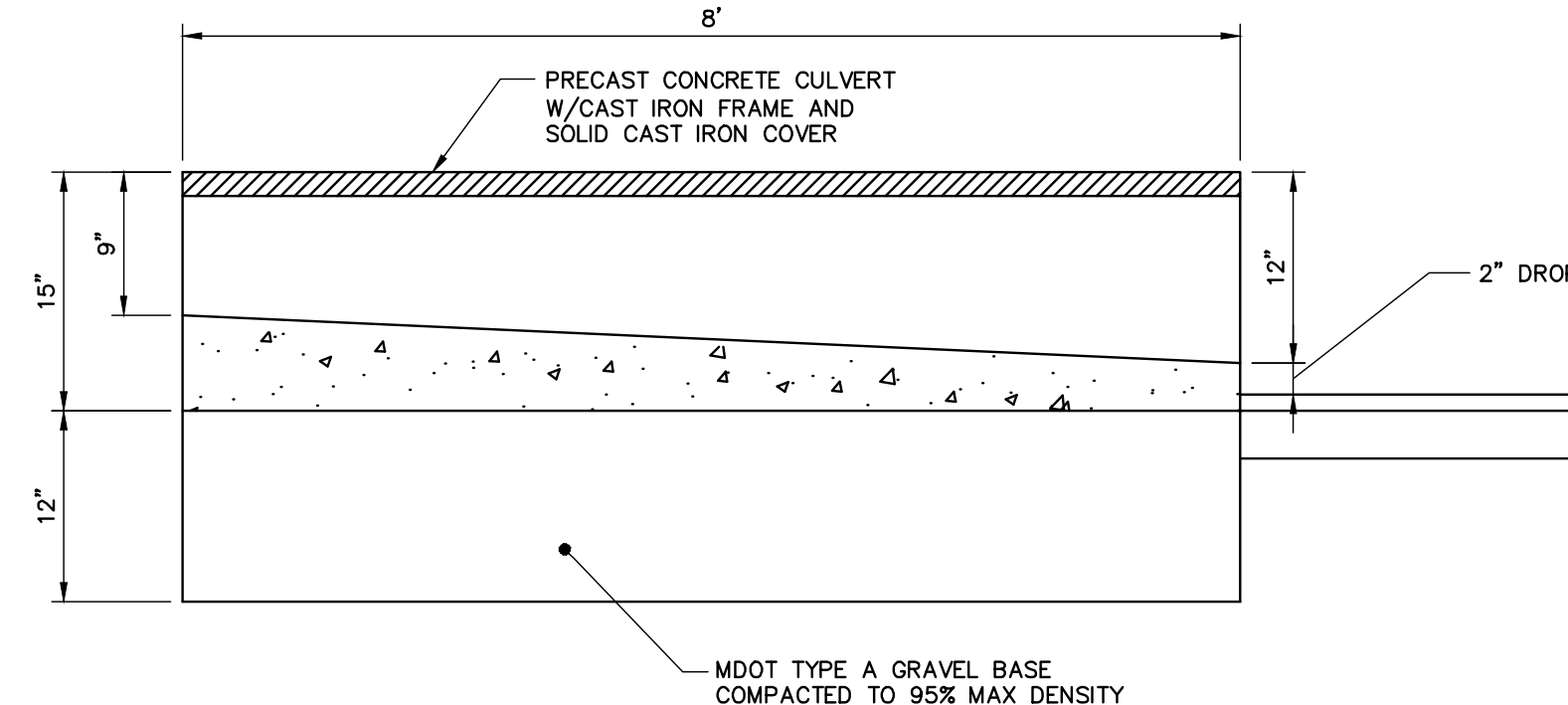
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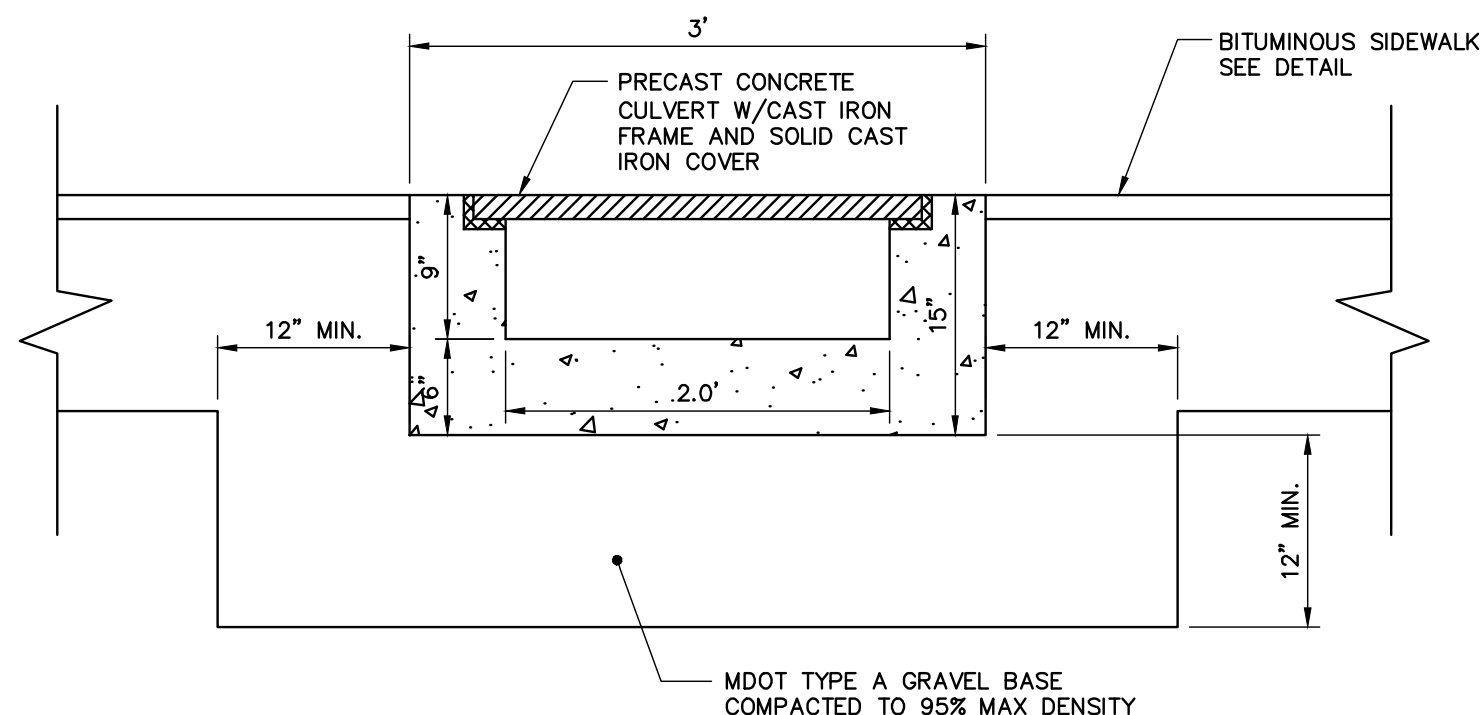
* TOP OF CURB AND SIDEWALK SLOPED TO MATCH TOP OF SIDEWALK CULVERT GRADE. N/A FOR CURB BREAKS AT STABILIZED TURNOUTS.

CULVERT/ CURB BREAK GUTTER DETAIL

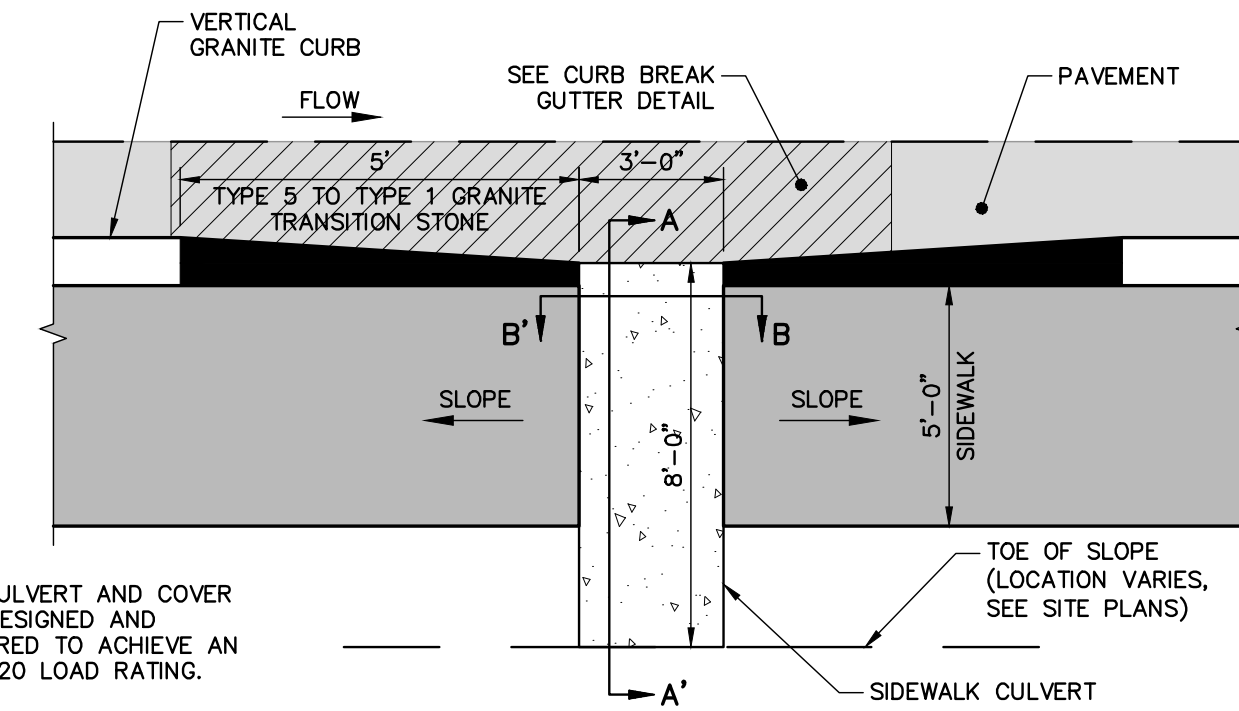
N.T.S.



SECTION A-A'



SECTION B-B'



PLAN

SIDEWALK CULVERT DETAIL

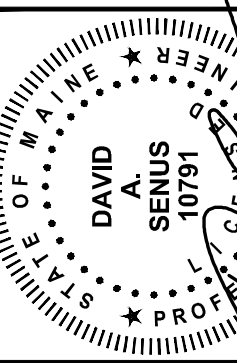
N.T.S.

NOTE:

1. SIDEWALK CULVERT AND COVER SHALL BE DESIGNED AND MANUFACTURED TO ACHIEVE AN AASHTO H-20 LOAD RATING.
2. ALL PRODUCTS SHALL BE MANUFACTURED IN THE UNITED STATES.
3. SIDEWALK CULVERTS BY GEORGE R. ROBERTS COMPANY OR APPROVED EQUAL.

PERMITTING SET - NOT FOR CONSTRUCTION

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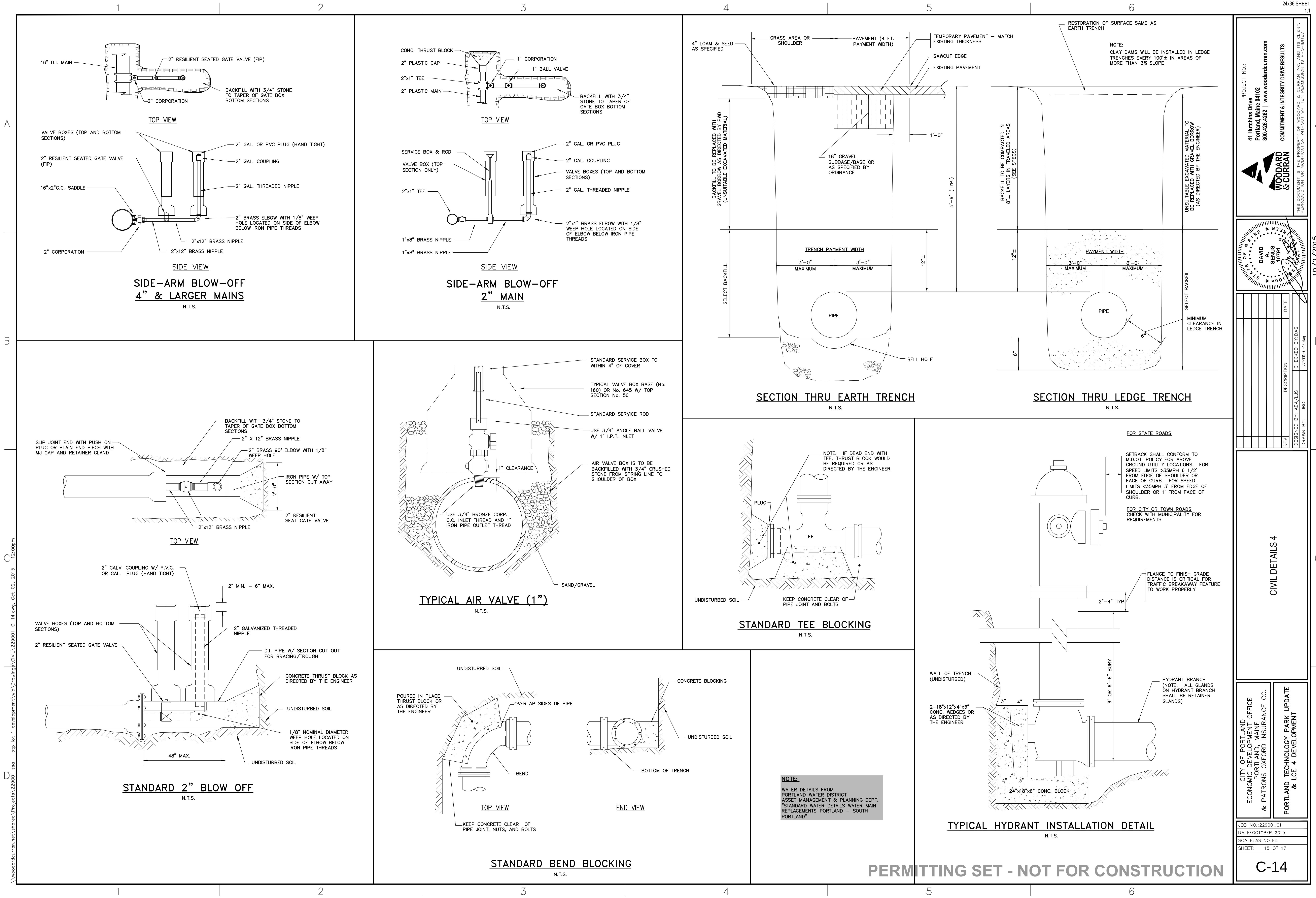
CIVIL DETAILS 3

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ECONOMIC DEVELOPMENT OFFICE
PORTLAND, MAINE
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PORTLAND TECHNOLOGY PARK UPDATE
& LCE 4 DEVELOPMENT

JOB NO.: 229001.01
DATE: OCTOBER 2015
SCALE: AS NOTED
SHEET: 14 OF 17

C-13



PROJECT NO.:
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WOODARD & CURRAN
COMMITMENT & INTEGRITY DRIVE RESULTS

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10/2/2015

DAVID SENUS
10791
PROFESSIONAL SEAL

DESIGNED BY: ACA/JUS
CHECKED BY: DAS
DRAWN BY: JBC
229001-C-14.dwg

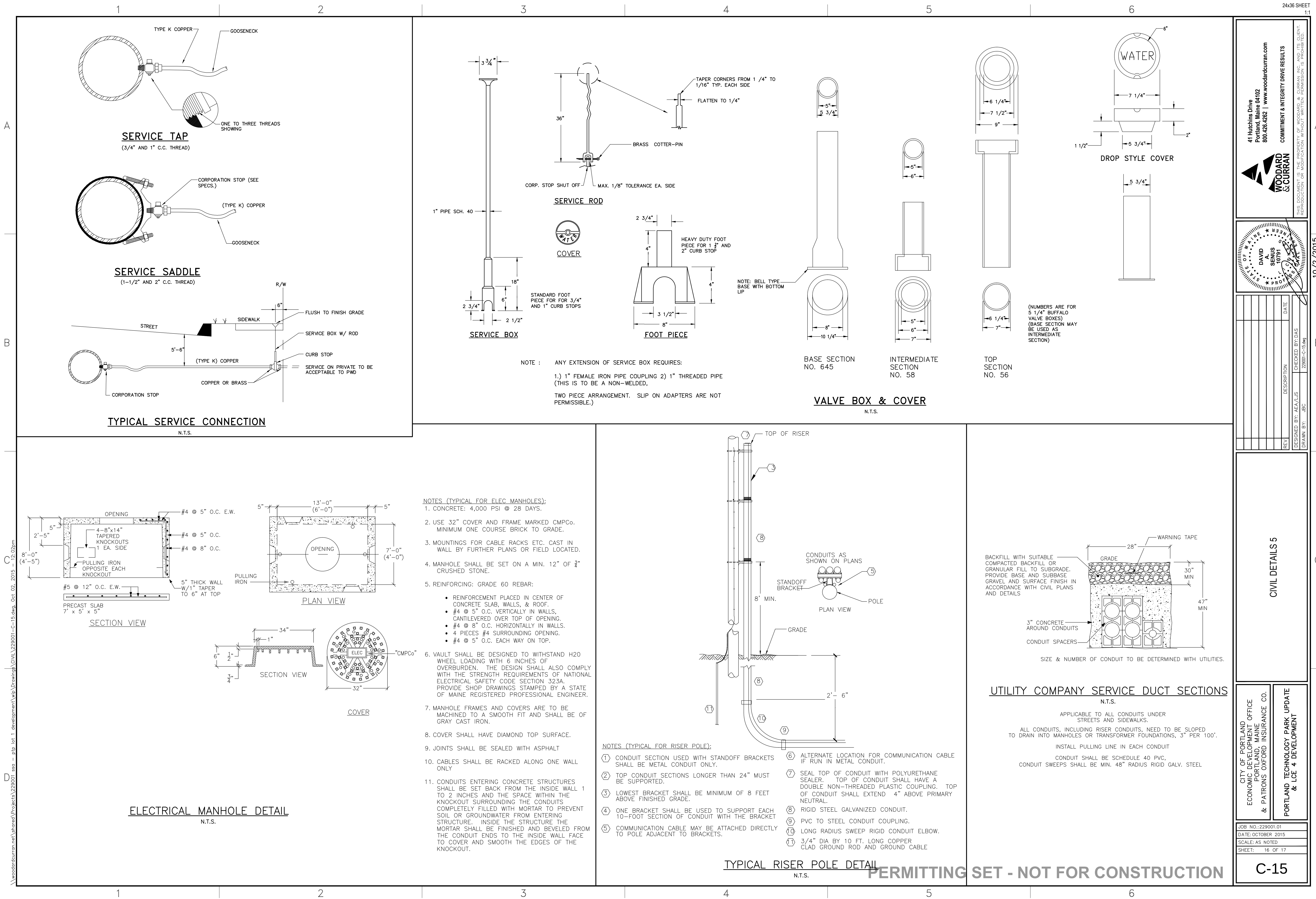
REV
DESCRIPTION
DATE

CIVIL DETAILS 4

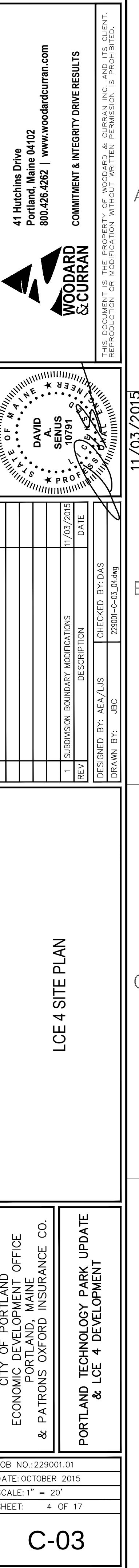
CITY OF PORTLAND
ECONOMIC DEVELOPMENT OFFICE
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PORTLAND TECHNOLOGY PARK UPDATE
& LCE 4 DEVELOPMENT

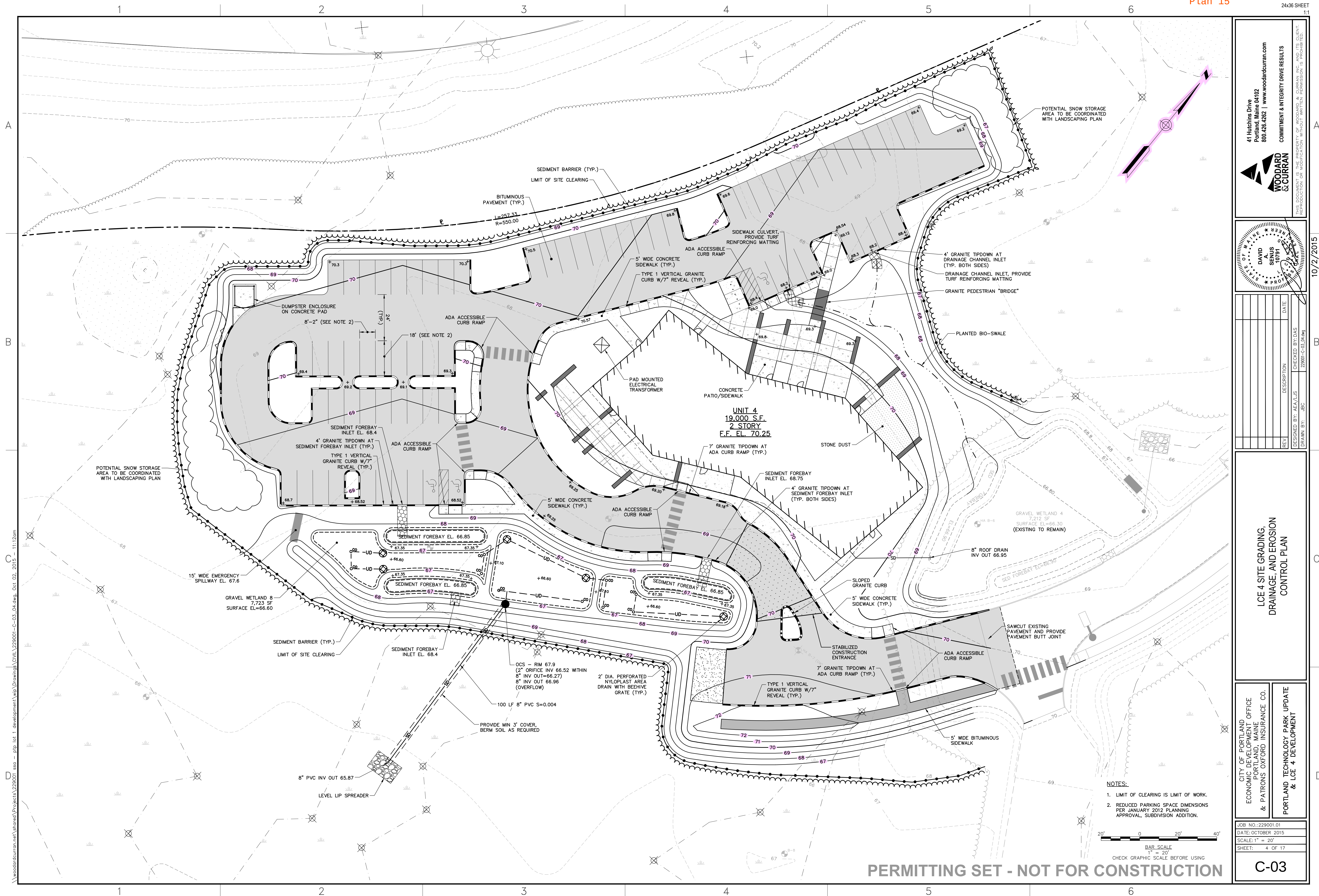
JOB NO.: 229001.01
DATE: OCTOBER 2015
SCALE: AS NOTED
SHEET: 15 OF 17

C-14





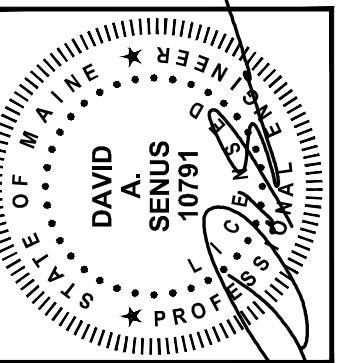




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COMMITMENT & INTEGRITY DRIVE RESULTS



10/2/2015

REV	DESCRIPTION	DATE
1	DESIGNED BY: ACA/JUS	CHECKED BY: DAS
2	DRAWN BY: JBC	2200-C-03.dwg

LCE 4 SITE GRADING,
DRAINAGE, AND EROSION
CONTROL PLAN

CITY OF PORTLAND
ECONOMIC DEVELOPMENT OFFICE
PORTLAND, MAINE
& PATRONS OXFORD INSURANCE CO.

PORTLAND TECHNOLOGY PARK UPDATE
& LCE 4 DEVELOPMENT

JOB NO.: 229001.01
DATE: OCTOBER 2015
SCALE: 1" = 20'
SHEET: 4 OF 17

C-03

NOTES:

1. LIMIT OF CLEARING IS LIMIT OF WORK.
2. REDUCED PARKING SPACE DIMENSIONS PER JANUARY 2012 PLANNING APPROVAL, SUBDIVISION ADDITION.

20' 0 20' 40'

BAR SCALE
1" = 20'

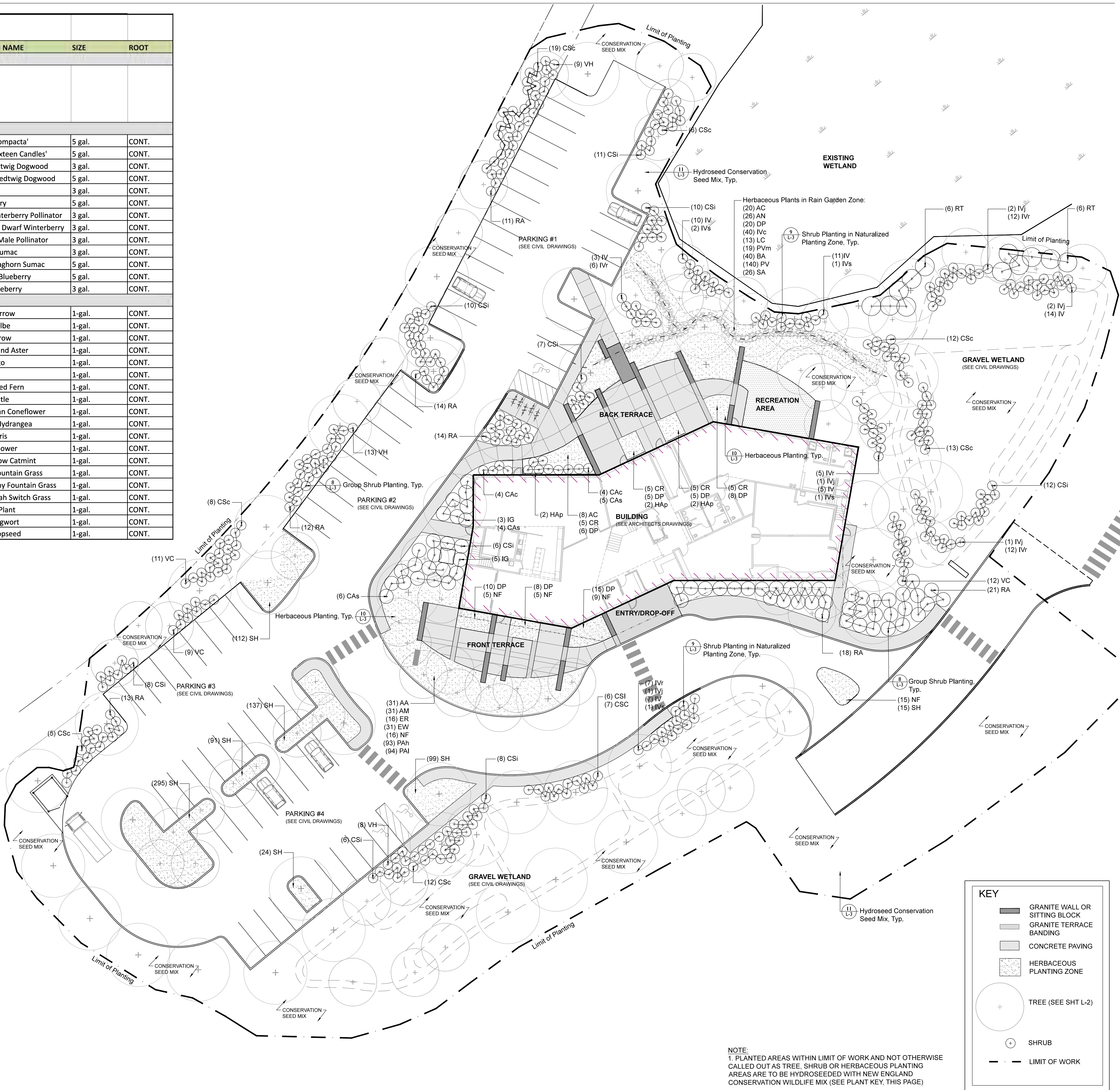
CHECK GRAPHIC SCALE BEFORE USING

PERMITTING SET - NOT FOR CONSTRUCTION

PATRONS OXFORD OFFICES - PLANTING SCHEDULE - SHRUBS & HERBACEOUS PLANTS						
TYPE	QUANTITY	KEY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT
Seed Mix						
			<i>New England Conservation Wildlife Mix.</i> Application rate: 25lbs/acre (apply 2x in first year: spring and fall). Source: New England Wetland Plants, Inc. / 820 West St. Amherst, MA 01002 / t. (413) 548-8000			
Shrubs						
	8	CAC	Clethra alnifolia 'Compacta'	Clethra 'Compacta'	5 gal.	CONT.
	15	CAS	Clethra alnifolia 'Sixteen Candles'	Clethra 'Sixteen Candles'	5 gal.	CONT.
	82	CSc	Cornus sericea 'Isanti'	Dwarf Redtwig Dogwood	3 gal.	CONT.
	84	CSi	Cornus sericea 'Cardinal'	Cardinal Redtwig Dogwood	5 gal.	CONT.
	8	IG	Ilex glabra	Inkberry	3 gal.	CONT.
	50	IV	Ilex verticillata	Winterberry	5 gal.	CONT.
	7	IVj	Ilex verticillata 'Jim Dandy'	Dwarf Winterberry Pollinator	3 gal.	CONT.
	42	IVr	Ilex verticillata 'Red Sprite'	Red Sprite Dwarf Winterberry	3 gal.	CONT.
	5	IVs	Ilex verticillata 'Southern Gentleman'	Standard Male Pollinator	3 gal.	CONT.
	103	RA	Rhus aromatica	Fragrant Sumac	3 gal.	CONT.
	12	RT	Rhus typhina 'Laciniata'	Cutleaf Staghorn Sumac	5 gal.	CONT.
	32	VC	Vaccinium corymbosum	Highbush Blueberry	5 gal.	CONT.
	30	VH	Vaccinium x hybrid	Hybrid Blueberry	3 gal.	CONT.
Perennials & Grasses						
	31	AA	Achillea 'Anthea'	Anthea Yarrow	1-gal.	CONT.
	28	AC	Astilbe chinensis 'Visions in White'	White Astilbe	1-gal.	CONT.
	31	AM	Achillea millefolium sp.	White Yarrow	1-gal.	CONT.
	26	AN	Aster novae-angliae	New England Aster	1-gal.	CONT.
	40	BA	Baptisia australis	False Indigo	1-gal.	CONT.
	20	CR	Cimicifuga racemosa 'Hillside Black Beauty'	Snakeroot	1-gal.	CONT.
	77	DP	Dennstaedtia punctilobula	Hay-Scented Fern	1-gal.	CONT.
	16	ER	Echinops ritro	Globe Thistle	1-gal.	CONT.
	31	EW	Echinacea 'White Swan'	White Swan Coneflower	1-gal.	CONT.
	6	HAp	Hydrangea anomala petiolaris	Climbing Hydrangea	1-gal.	CONT.
	40	IVc	Iris versicolor	Blue Flag Iris	1-gal.	CONT.
	13	LC	Lobelia cardinalis	Cardinal Flower	1-gal.	CONT.
	50	NF	Nepeta x faassenii 'Walkers Low'	Walkers Low Catmint	1-gal.	CONT.
	93	PAh	Pennistenum alopecuroides 'Hameln'	Hameln Fountain Grass	1-gal.	CONT.
	94	PAI	Pennistenum alopecuroides 'Little Bunny'	Little Bunny Fountain Grass	1-gal.	CONT.
	140	PV	Panicum virgatum 'Shenandoah'	Shenandoah Switch Grass	1-gal.	CONT.
	19	PVm	Physostegia virginiana 'Miss Manners'	Obedient Plant	1-gal.	CONT.
	26	SA	Senecio aureus	Golden Ragwort	1-gal.	CONT.
	773	SH	Sporobolus heterolepis	Prairie Dropseed	1-gal.	CONT.

GENERAL PLANTING PLAN NOTES:

- Contractor shall begin maintenance immediately after planting and shall continue until final acceptance. Contractor shall be responsible for all means and methods of watering and maintenance.
- The Landscape contractor shall supply all plant materials in quantities sufficient to complete all plantings shown on this drawing. Clarify any discrepancies with the landscape architect prior to ordering plant material.
- All materials shall conform to the guidelines established by the American Association of Nurserymen.
- All plants shall bear the same relationship to finish grade as the original grades before digging.
- the landscape contractor shall guarantee all plant materials for one(1) full year from date of substantial completion.
- All plant materials are subject to the approval of the landscape architect at the nursery and at the site.
- All areas of the site which have been disturbed and not otherwise developed shall be loamed with a minimum depth of 6" of topsoil and seeded as specified.
- Landscape contractor is encouraged to provide the landscape architect with concerns and/or suggestions with regard to proposed plant material selection prior to placing a purchase order.
- All trees located adjacent to walks and drives shall have 6' of clear height to first branching.
- Contractor shall verify all tree removals with landscape architect prior to start of construction.
- Contractor shall obtain approval for proposed lawn seed mix prior to installation.
- No plant shall be put into the ground before rough grading has been finished and approved by the project landscape architect.
- All plants shall be balled and wrapped or container grown as specified. No container grown stock will be accepted if it is root bound. All root wrapping material made of synthetics or plastics shall be removed at the time of planting.
- With container grown stock, the container shall be removed and the container ball shall be cut through the surface in two vertical locations.
- The location of trees, shrubs and bedlines shall be staked for approval by the landscape architect prior to installation. The contractor shall notify the landscape architect 48 hours prior to required site visit.
- All broad leaf evergreen plants shall be sprayed with an antidesiccant at the beginning of their first winter.
- All plants shall be installed as per details and the contract specifications. The landscape contractor shall refer to the contract specifications for additional requirements.
- All plants and stakes shall be set plumb unless otherwise specified.
- The landscape contractor shall provide loam fill as per the contract specifications.
- All plants shall be watered thoroughly twice during the first 24-hour period after planting. All plants shall then be watered by the contractor, as necessary to insure health until final acceptance.
- The landscape contractor shall refer to the plant list and planting specifications for seasonal requirements and other restrictions related to the time of planting.



scott simons architects
designed for human potential

75 York Street
Portland, Maine 04101
simonsarchitects.com
207.772.4656

Richardson & Associates,
Landscape Architects
11 Middle Street Saco, Maine 04072
richardsonassociates.com
t. 207.286.9291

PROJECT NAME:
**PATRONS OXFORD
OFFICES**
PORTLAND TECHNOLOGY PARK
RAND ROAD, PORTLAND, ME

SEAL:

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REVISION:
1 _____ DATE
2 _____ DATE
3 _____ DATE
4 _____ DATE
5 _____ DATE
6 _____ DATE

DATE OF ISSUE: September 25, 2015
PROJECT NUMBER:
STATUS: For Permit Only

Planting Plan -
Shrubs &
Herbaceous Plants

SCALE: 1" = 20'

L-2.1

PATRONS OXFORD OFFICES - PLANTING SCHEDULE - TREES						
TYPE	QUANTITY	KEY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT
Trees						
	32	AC	Amelanchier canadensis	Shadblow / Serviceberry	10-12' clump	B&B
	25	Arl	Acer rubrum (large)	Red Maple	3-3.5" cal.	B&B
	6	ARs	Acer rubrum (small)	Red Maple	2-2.5" cal.	B&B
	6	AS	Acer saccharum 'Legacy'	Legacy Sugar Maple	3-3.5" cal.	B&B
	11	LL	Larix laricina	American Larch	6-8'	B&B
	4	NS	Nyssa sylvatica	Black Tupelo	2.5" cal.	B&B
	4	PMI	Picea mariana (large)	Black Spruce	4-6'	B&B
	7	PMs	Picea mariana (small)	Black Spruce	8-10'	B&B
	5	PS	Pinus strobus	White Pine	10-12'	B&B
	15	QB	Quercus bicolor	Swamp White Oak	2-2.5" cal.	B&B

GENERAL PLANTING PLAN NOTES:

- Contractor shall begin maintenance immediately after planting and shall continue until final acceptance. Contractor shall be responsible for all means and methods of watering and maintenance.
- The Landscape contractor shall supply all plant materials in quantities sufficient to complete all plantings shown on this drawing. Clarify any discrepancies with the landscape architect prior to ordering plant material.
- All materials shall conform to the guidelines established by the American Association of Nurserymen.
- All plants shall bear the same relationship to finish grade as the original grades before digging.
- The landscape contractor shall guarantee all plant materials for one(1) full year from date of substantial completion.
- All plant materials are subject to the approval of the landscape architect at the nursery and at the site.
- All areas of the site which have been disturbed and not otherwise developed shall be loamed with a minimum depth of 6" of topsoil and seeded as specified.
- Landscape contractor is encouraged to provide the landscape architect with concerns and/or suggestions with regard to proposed plant material selection prior to placing a purchase order.
- All trees located adjacent to walks and drives shall have 6' of clear height to first branching.
- Contractor shall verify all tree removals with landscape architect prior to start of construction.
- Contractor shall obtain approval for proposed lawn seed mix prior to installation.
- No plant shall be put into the ground before rough grading has been finished and approved by the project landscape architect.
- All plants shall be balled and wrapped or container grown as specified. No container grown stock will be accepted if it is root bound. All root wrapping material made of synthetics or plastics shall be removed at the time of planting.
- With container grown stock, the container shall be removed and the container ball shall be cut through the surface in two vertical locations.
- The location of trees, shrubs and bedlines shall be staked for approval by the landscape architect prior to installation. The contractor shall notify the landscape architect 48 hours prior to required site visit.
- All broad leaf evergreen plants shall be sprayed with an antidessicant at the beginning of their first winter.
- All plants shall be installed as per details and the contract specifications. The landscape contractor shall refer to the contract specifications for additional requirements.
- All plants and stakes shall be set plumb unless otherwise specified.
- The landscape contractor shall provide loam fill as per the contract specifications.
- All plants shall be watered thoroughly twice during the first 24-hour period after planting. All plants shall then be watered by the contractor; as necessary to insure health until final acceptance.
- The landscape contractor shall refer to the plant list and planting specifications for seasonal requirements and other restrictions related to the time of planting.



75 York Street
Portland, Maine 04101
simonsarchitects.com
207.772.4656



PROJECT NAME:
PATRONS OXFORD OFFICES
PORTLAND TECHNOLOGY PARK
RAND ROAD, PORTLAND, ME

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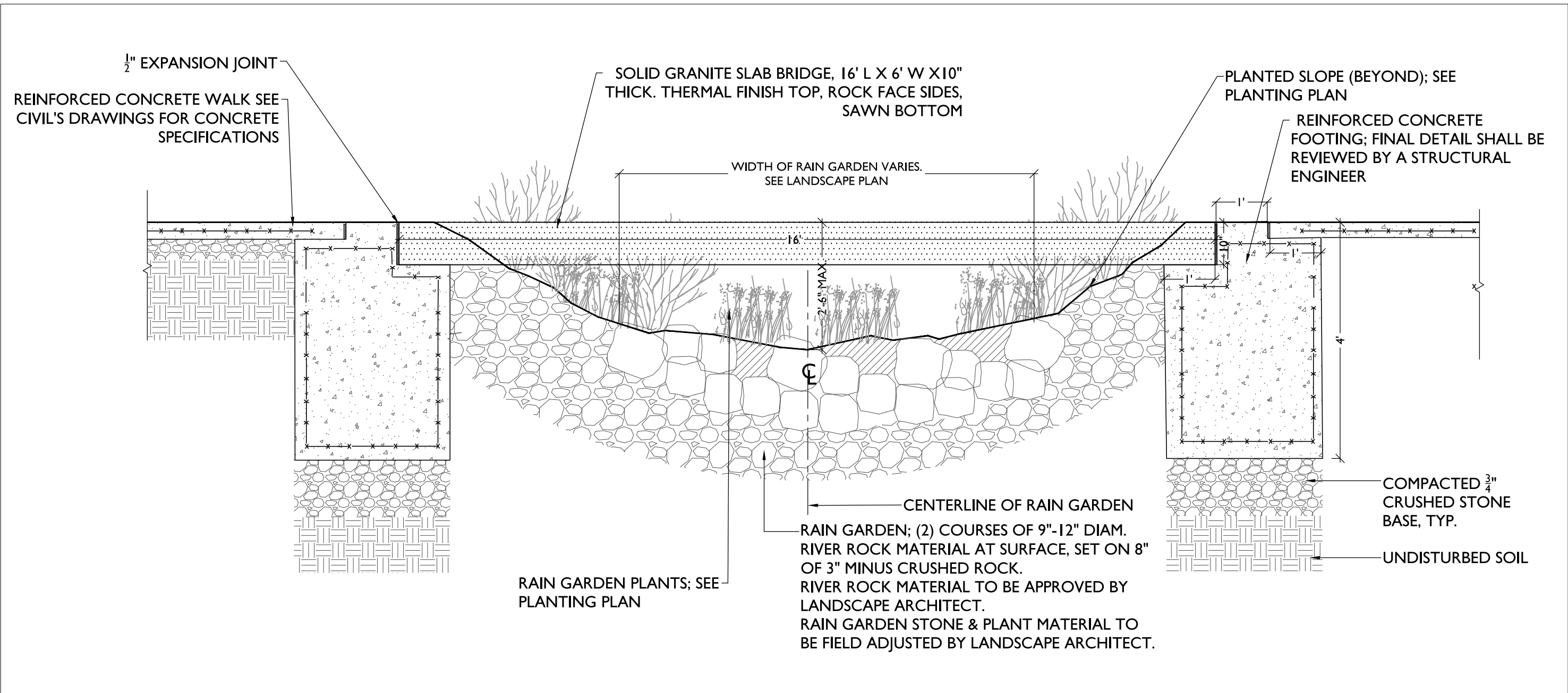
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DATE OF ISSUE: September 25, 2015
PROJECT NUMBER:
STATUS: For Permit Only

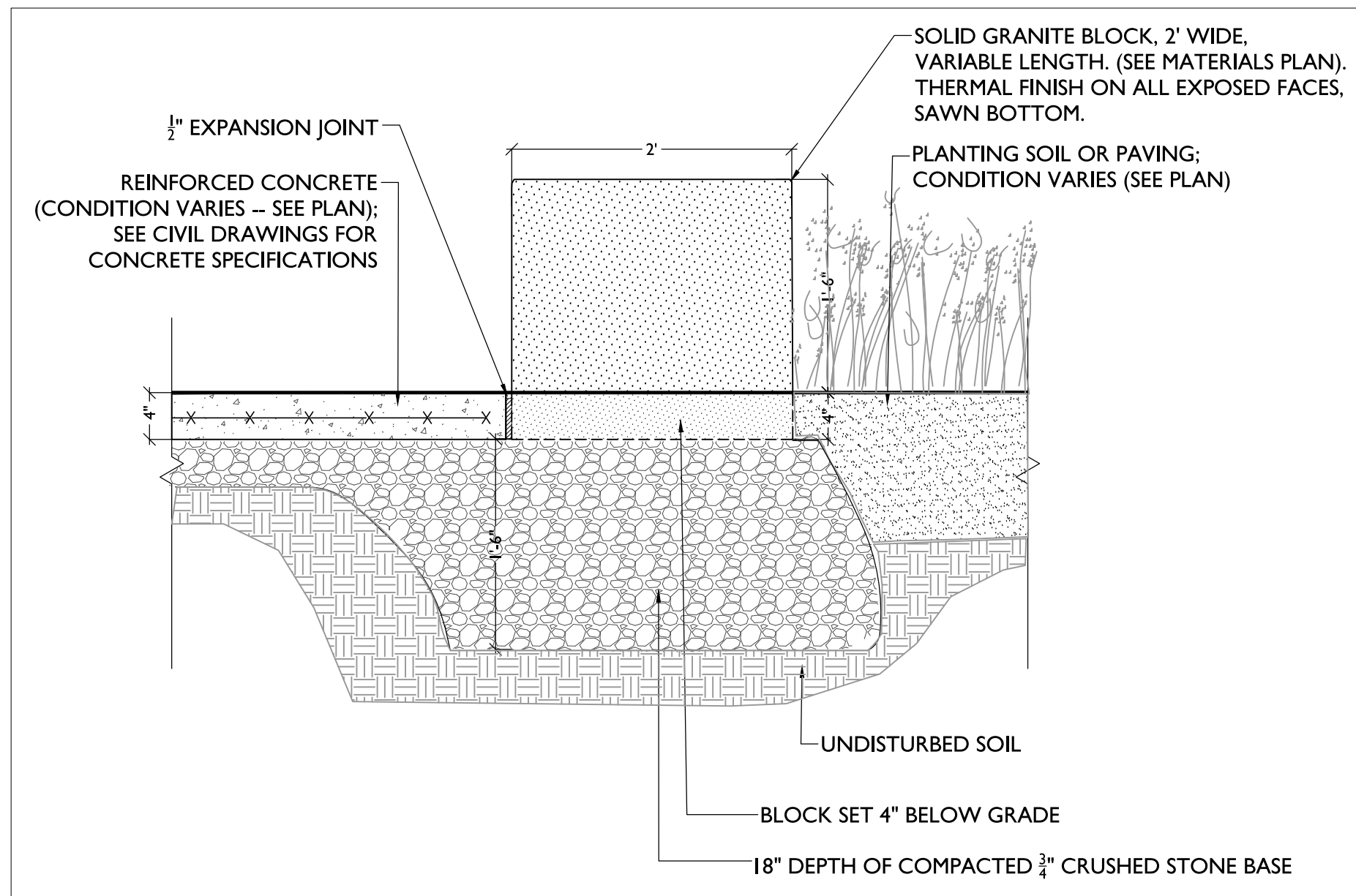
Planting Plan -Trees

SCALE: 1" = 20'

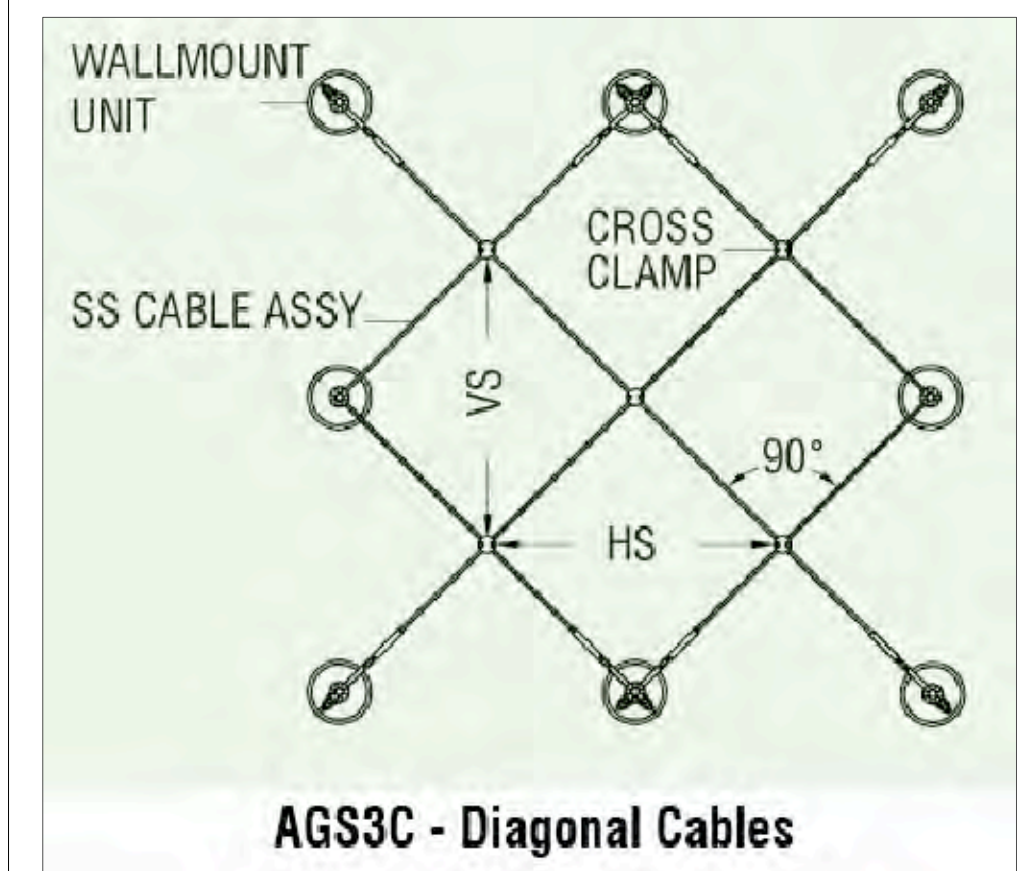
L-2.0



1 CROSSING AT RAIN GARDEN
Scale: NTS

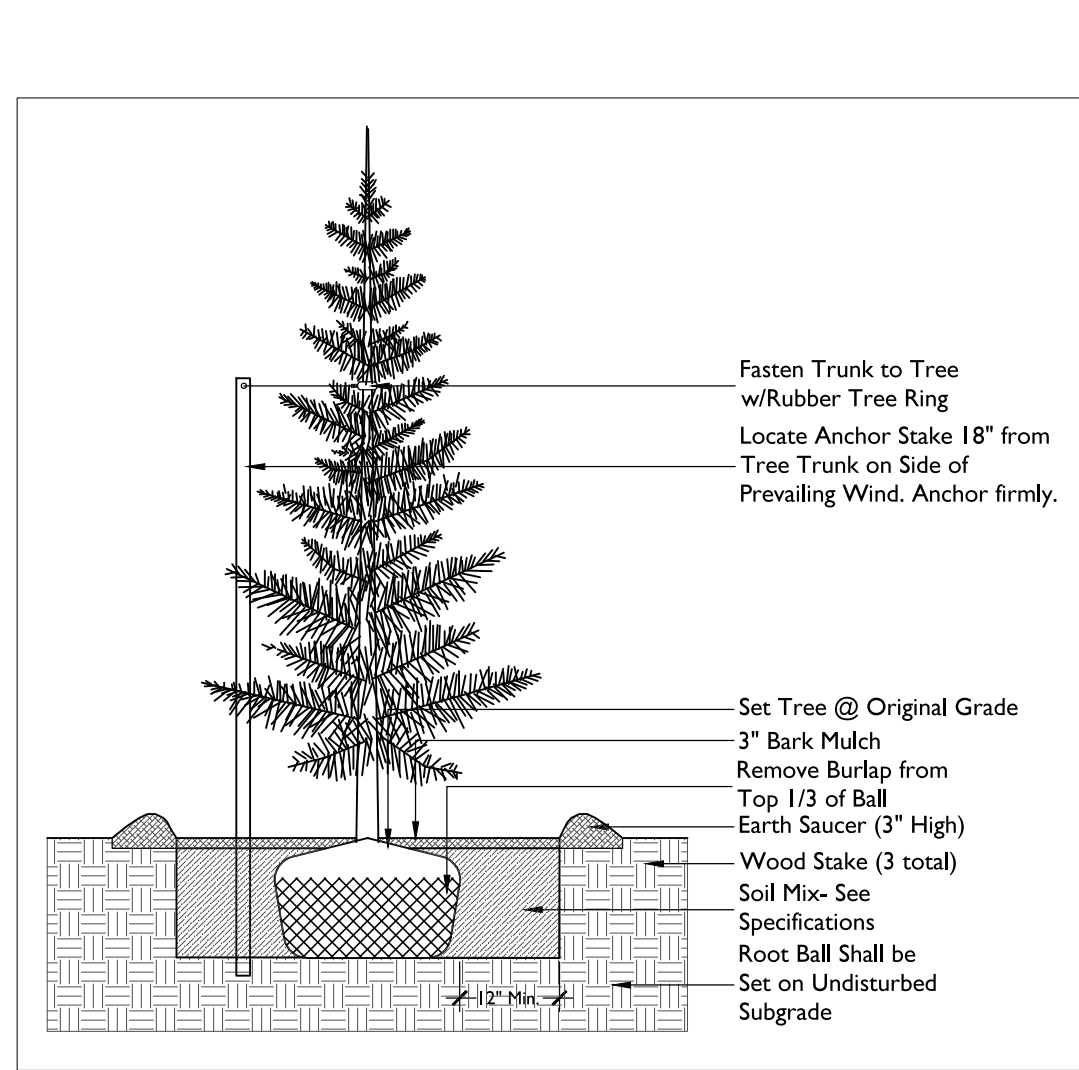


2 SEAT HEIGHT GRANITE BLOCK AT TERRACE
Scale: NTS

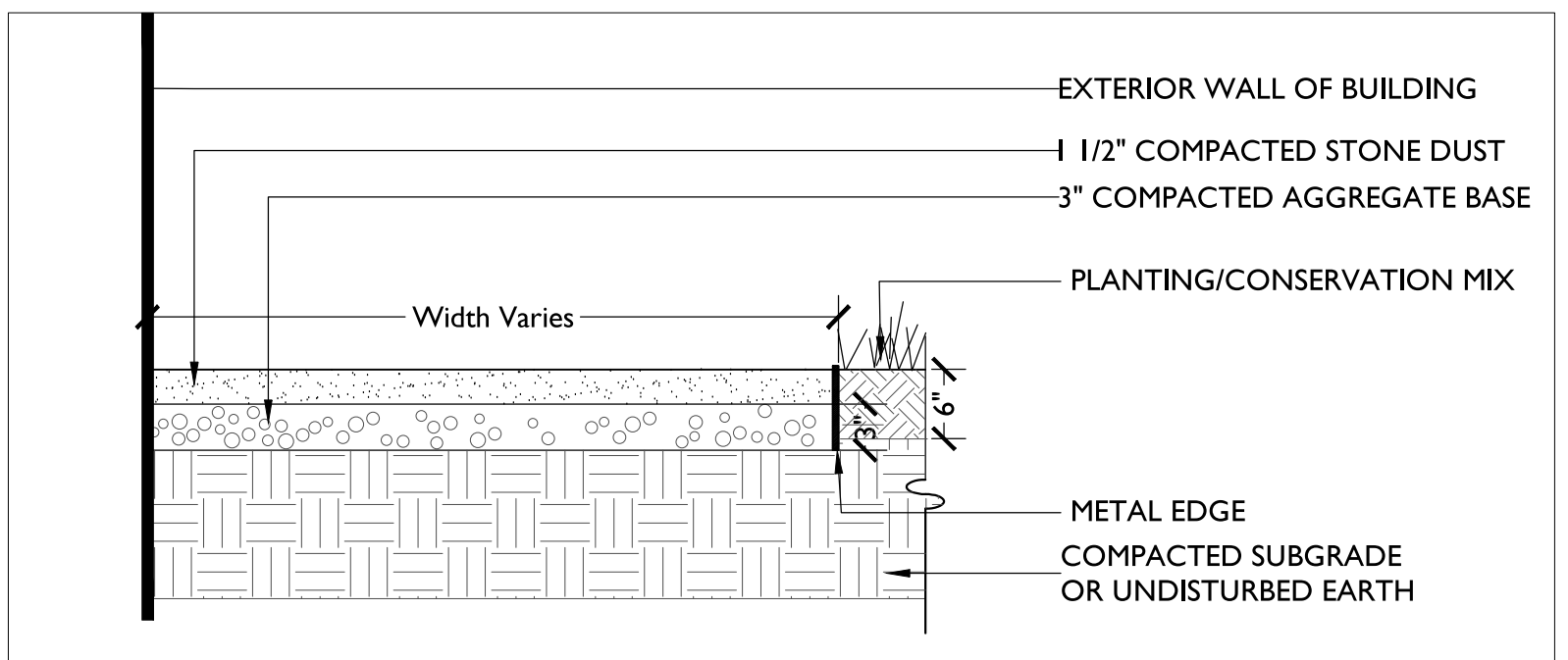


Ronstan Diagonal Cable-Cable Grid Style Trellis System.
VS & HS dimensions: 15"

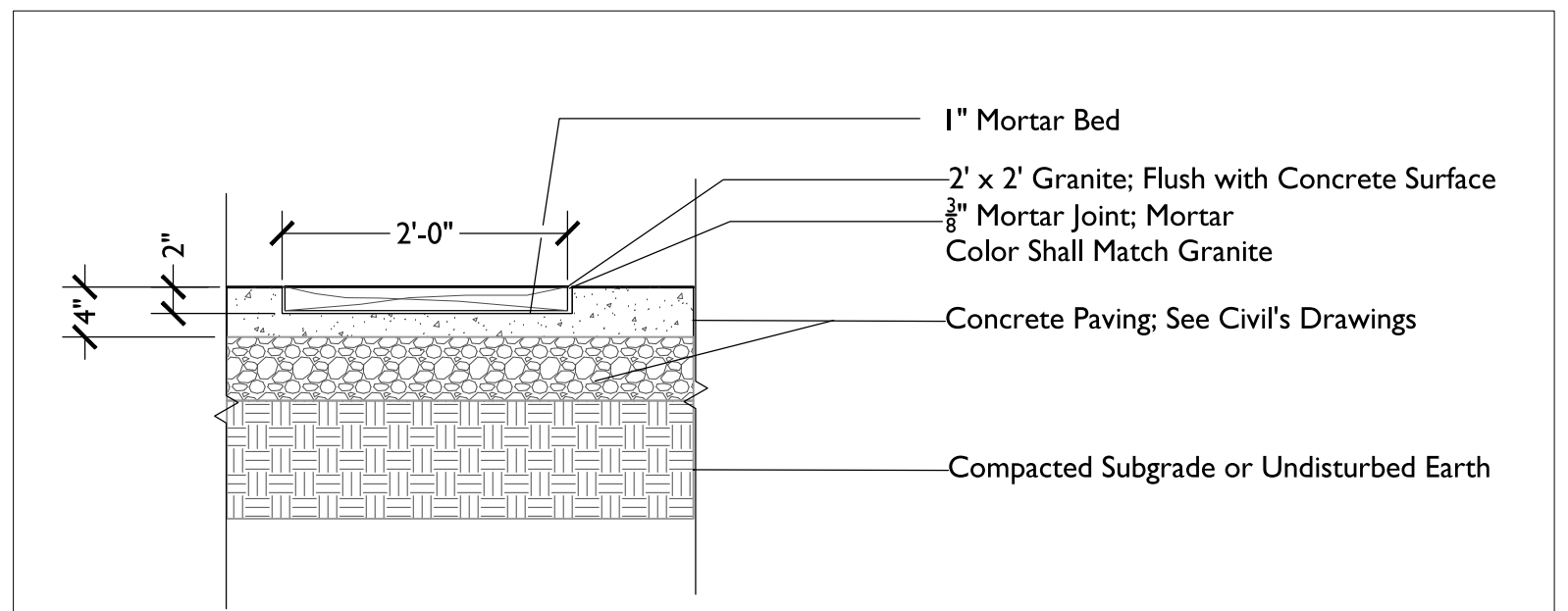
3 CABLE TRELLIS SYSTEM
Scale: NTS



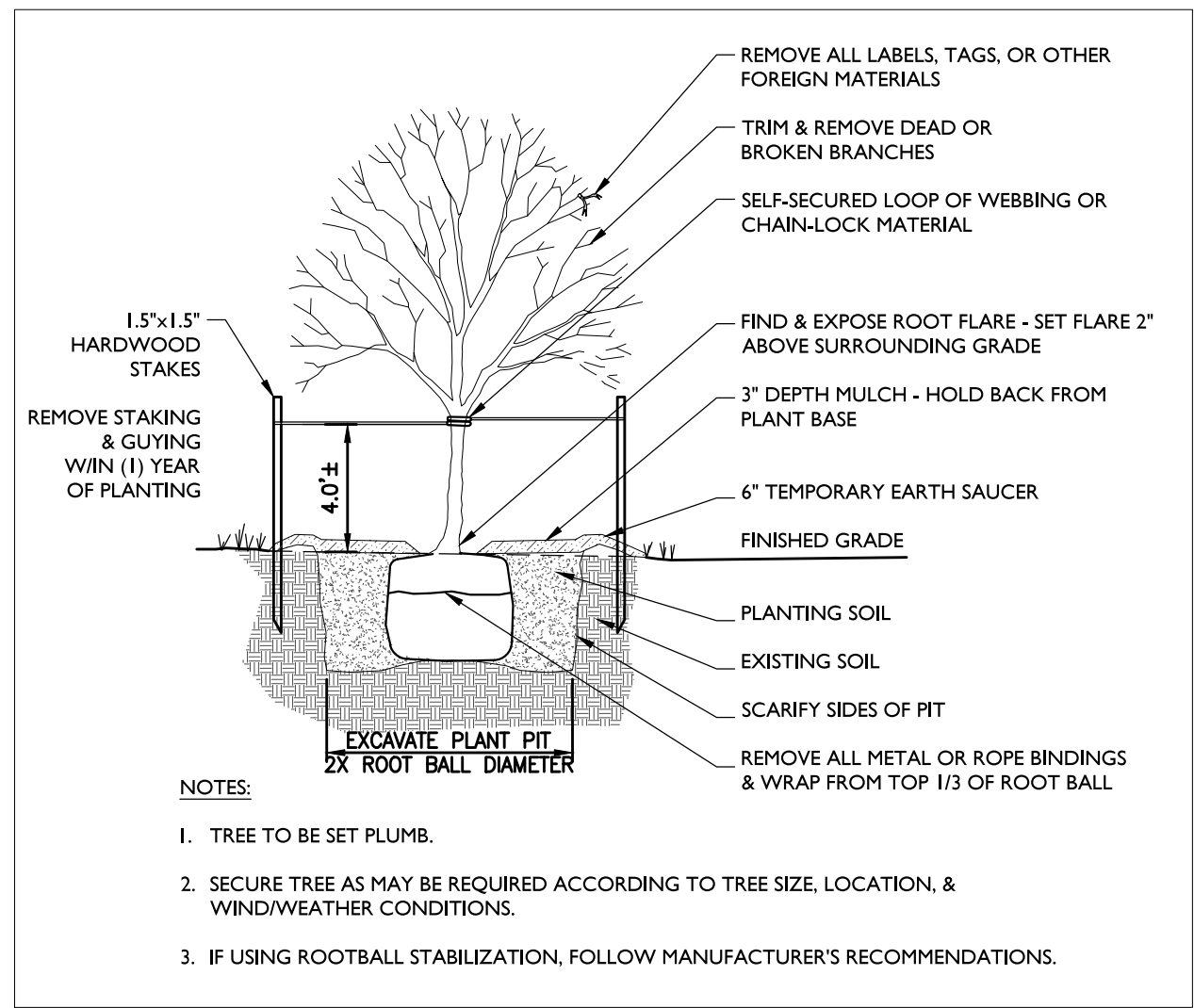
7 EVERGREEN TREE PLANTING DETAIL
Scale: NTS



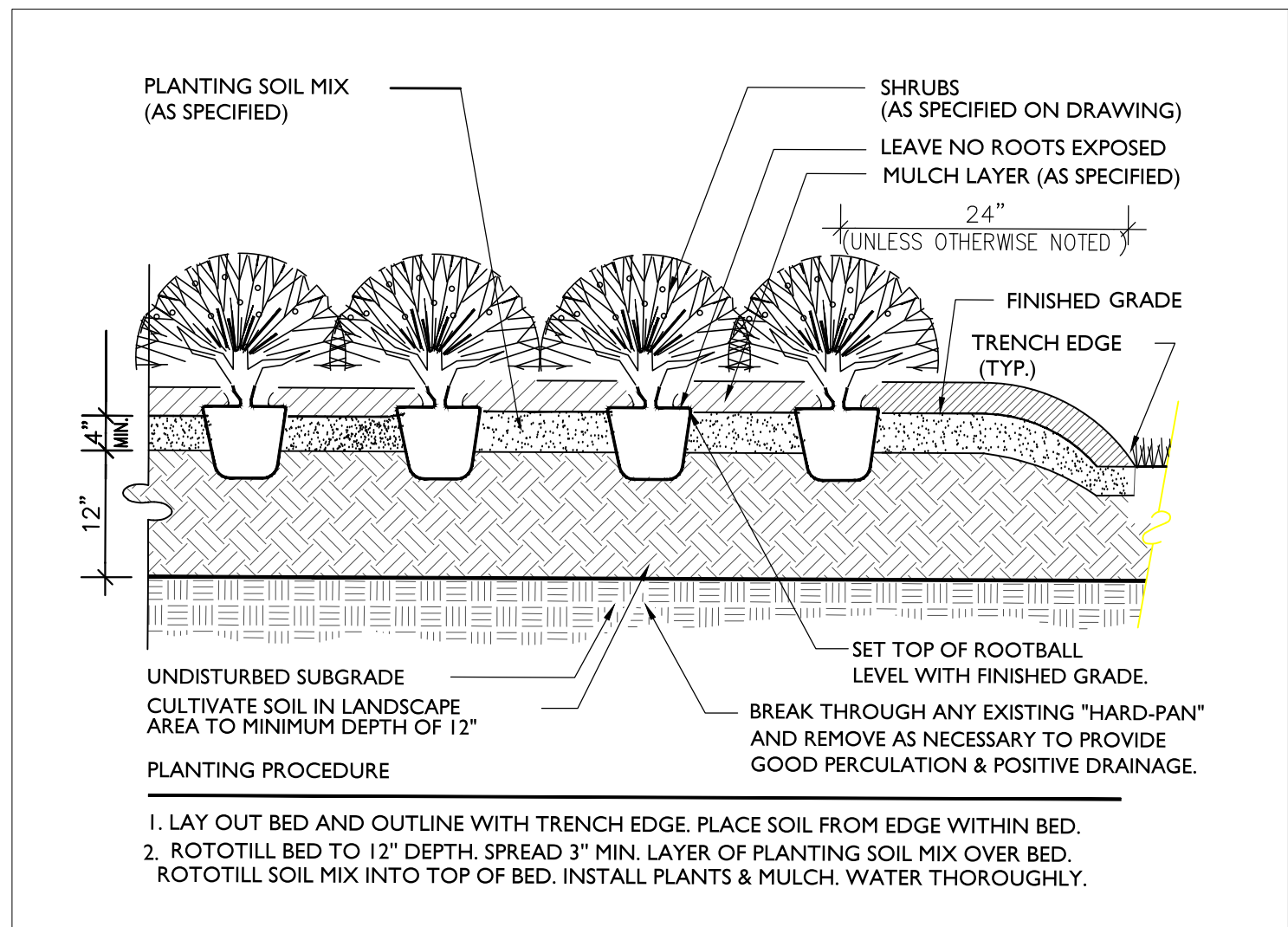
4 STONE DUST SURFACE AT OUTDOOR RECREATION SPACE
Scale: NTS



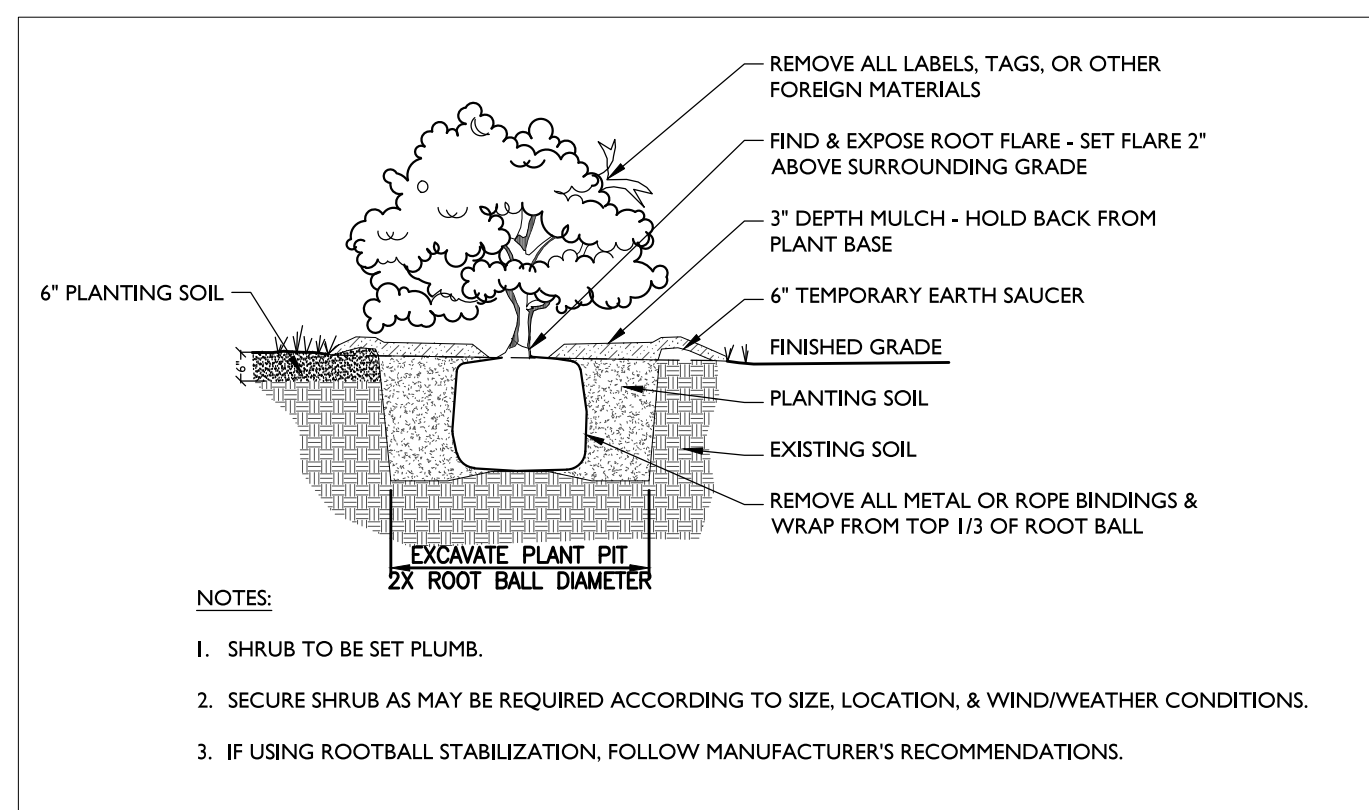
5 GRANITE BAND IN CONCRETE DETAIL
Scale: NTS



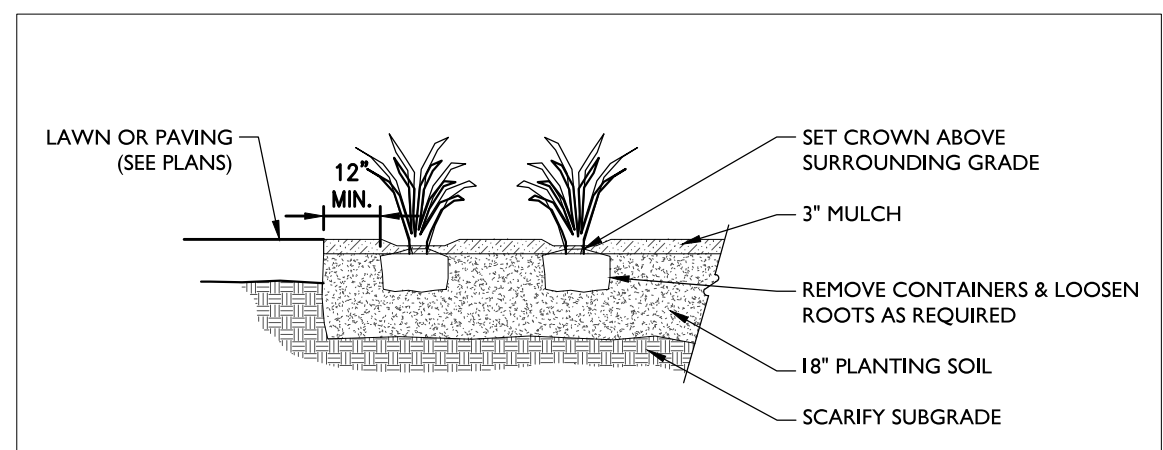
6 DECIDUOUS TREE PLANTING DETAIL
Scale: NTS



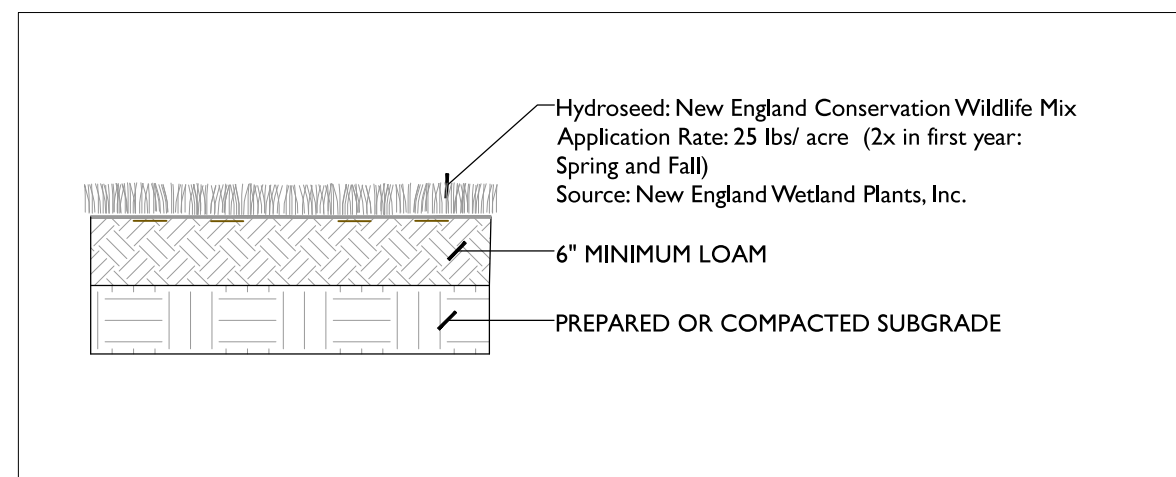
8 GROUP SHRUB PLANTING
Scale: NTS



9 SHRUB PLANTING DETAIL (NATURALIZED PLANTING ZONE)
Scale: NTS



10 HERBACEOUS PLANTING DETAIL
Scale: NTS



11 HYDROSEED DETAIL FOR CONSERVATION SEED MIX
Scale: NTS

REVISION:	DATE
1	
2	
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DATE OF ISSUE:	September 16, 2015
PROJECT NUMBER:	2105-0100 Patrons Oxford
STATUS:	100% Design Development

Site Details - Landscape



75 York Street
Portland, Maine 04101
simonsarchitects.com
207.772.4656

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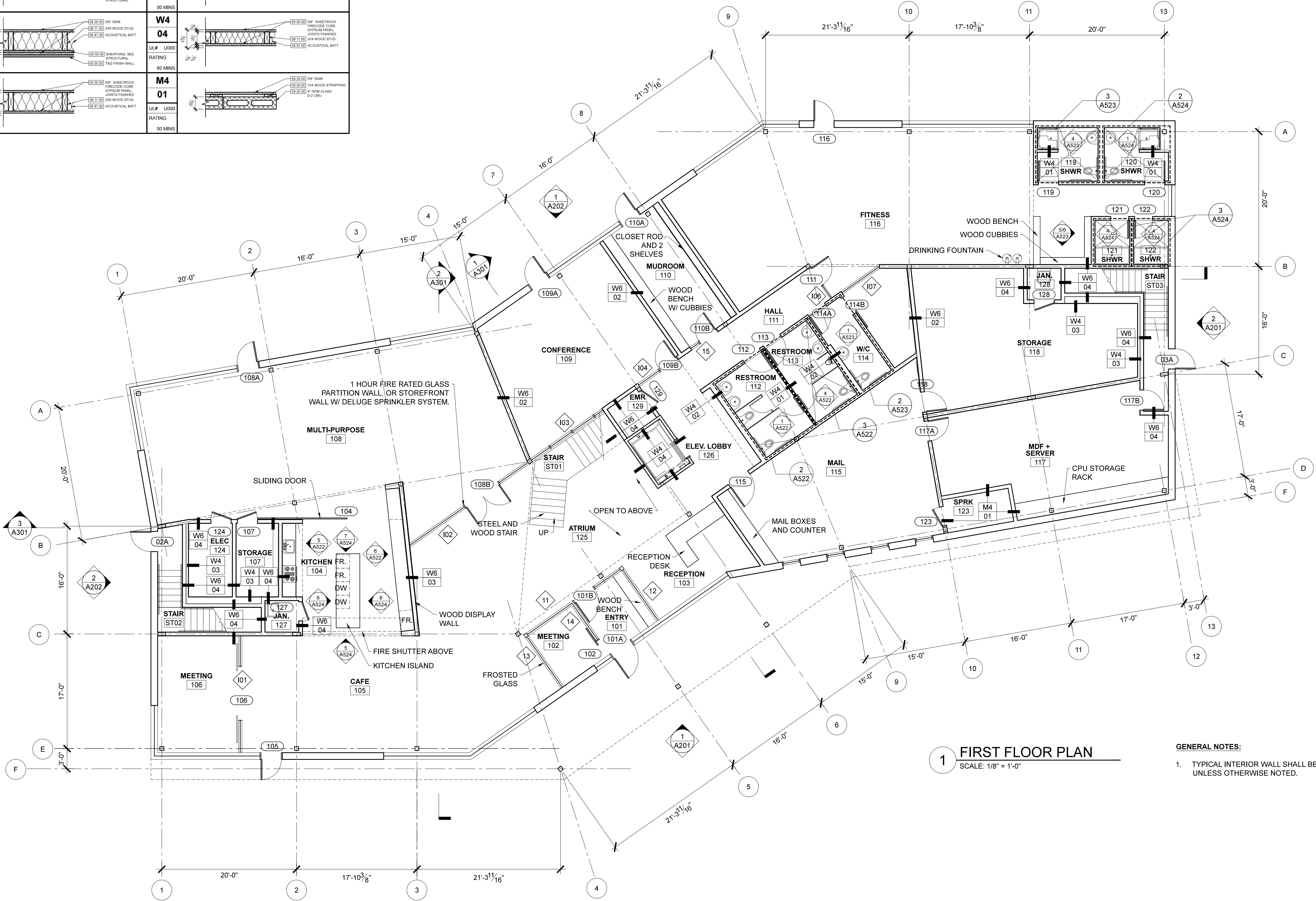
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DATE OF ISSUE: September 21, 2015
PROJECT NUMBER: 2105-0100 Patrons Oxford
STATUS: 100% Design Development

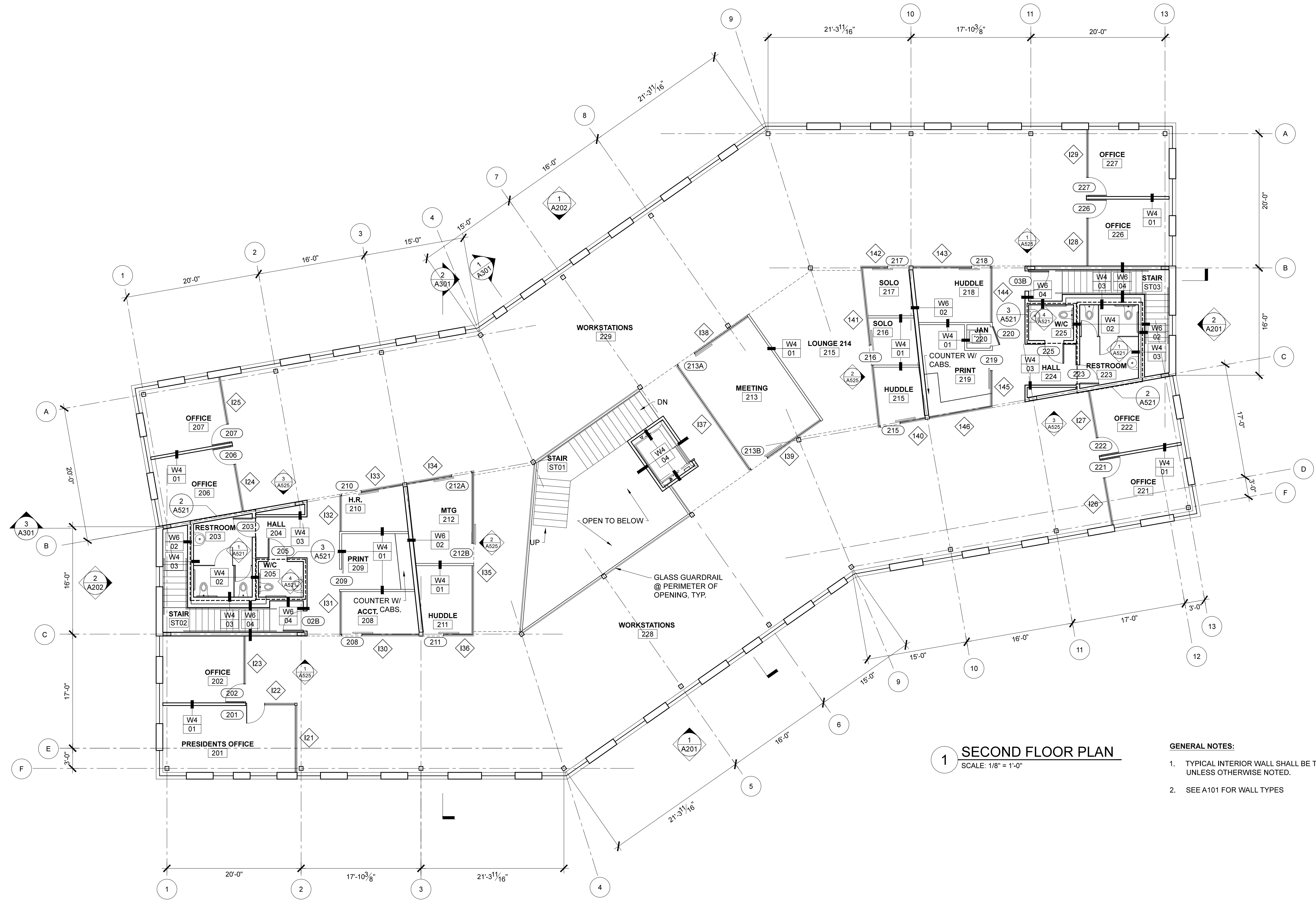
FIRST FLOOR PLAN

A101

PARTITION TYPES		SCALE 1/2" = 1'-0"	
SEE STRUCTURAL DRAWING FOR REINFORCEMENT AND GROUTING REQUIREMENTS. INTERIOR DOOR FRAMES CENTERED ON PARTITIONS UNLESS NOTED OTHERWISE. FOR FINISHES SEE FINISH SCHEDULE. USE MOISTURE RESISTANT GWB IN THE FOLLOWING ROOMS: * BATHS, BATHROOMS, TOILETS * BATHS, BATHROOMS, TOILETS * SHOWERS * TEACHERS KITCHEN (PLUMBING WALL ONLY) * TEACHERS KITCHEN (PLUMBING WALL ONLY)			
W6		W4	
01		01	
ULF: U000		ULF: U000	
RATING: 00 MINS		RATING: 00 MINS	
W6		W4	
02		02	
ULF: U000		ULF: U000	
RATING: 00 MINS		RATING: 00 MINS	
W6		W4	
03		03	
ULF: U000		ULF: U000	
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W6		W4	
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ULF: U000		ULF: U000	
RATING: 00 MINS		RATING: 00 MINS	
W6		M4	
04		01	
ULF: U000		ULF: U000	
RATING: 00 MINS		RATING: 00 MINS	



GENERAL NOTES:
1. TYPICAL INTERIOR WALL SHALL BE TYPE W6/01, UNLESS OTHERWISE NOTED.



1 SECOND FLOOR PLAN
SCALE: 1/8" = 1'-0"

- GENERAL NOTES:
1. TYPICAL INTERIOR WALL SHALL BE TYPE W6/01, UNLESS OTHERWISE NOTED.
 2. SEE A101 FOR WALL TYPES

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**PATRONS OXFORD
OFFICES**
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PROJECT NUMBER: 2105-0100 Patrons Oxford
STATUS: 100% Design Development

**SECOND FLOOR
PLAN**

A102

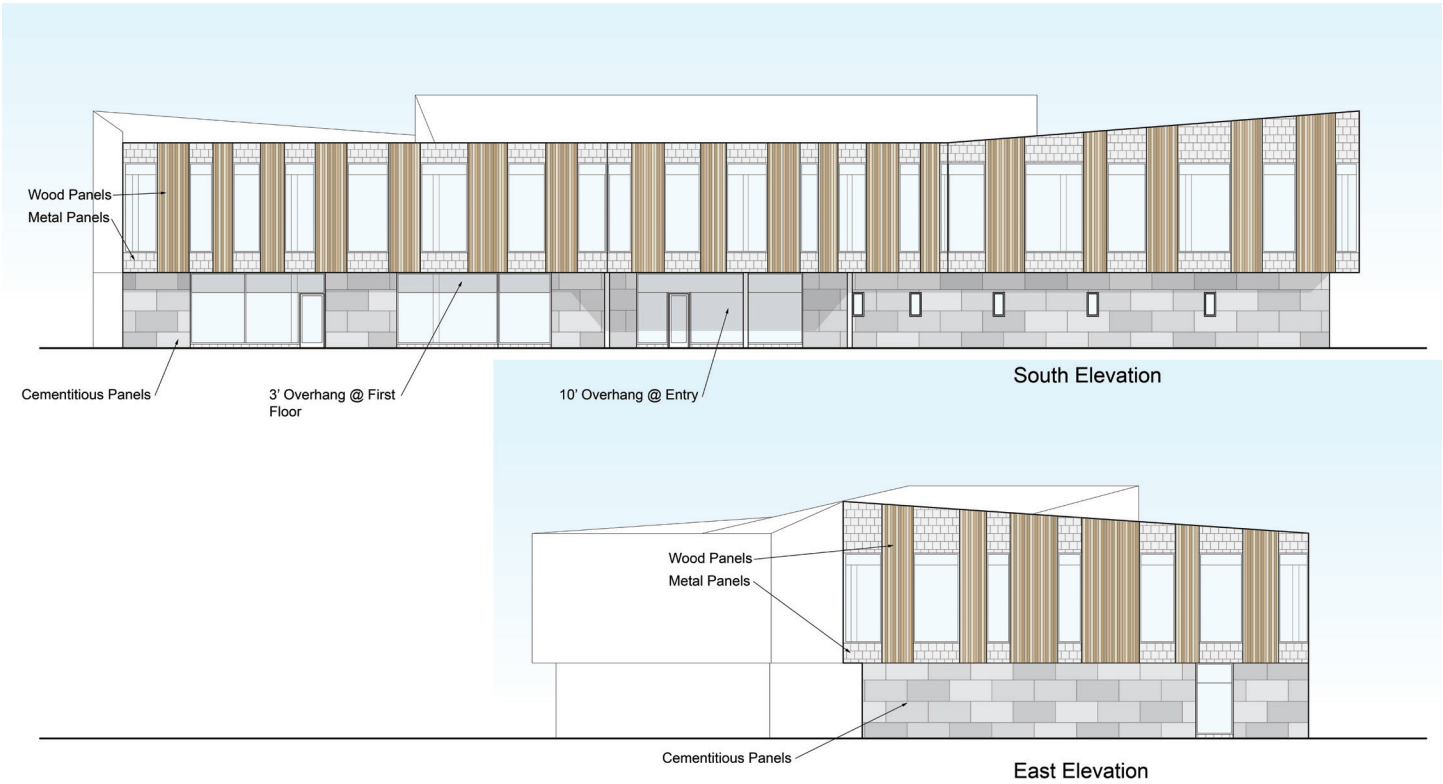


IMAGE 3

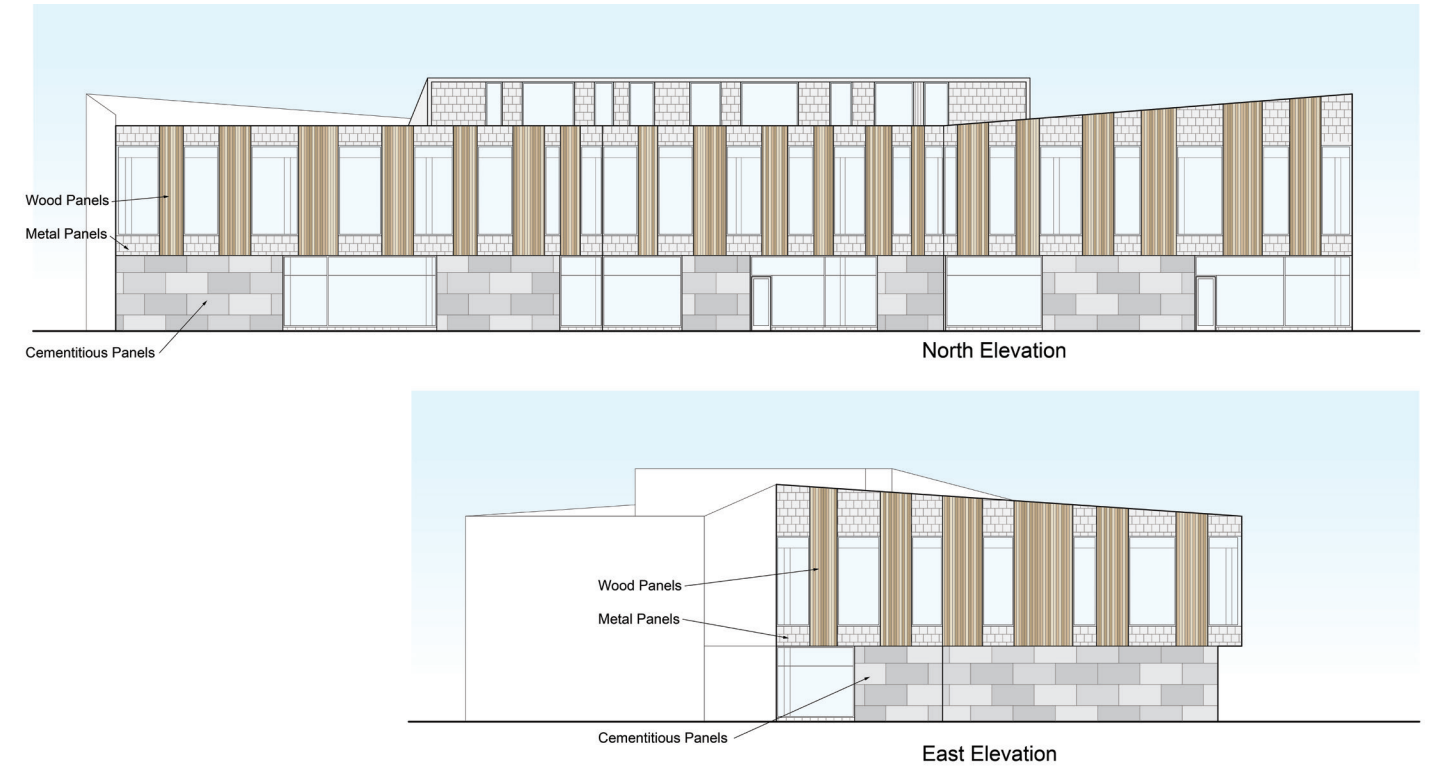
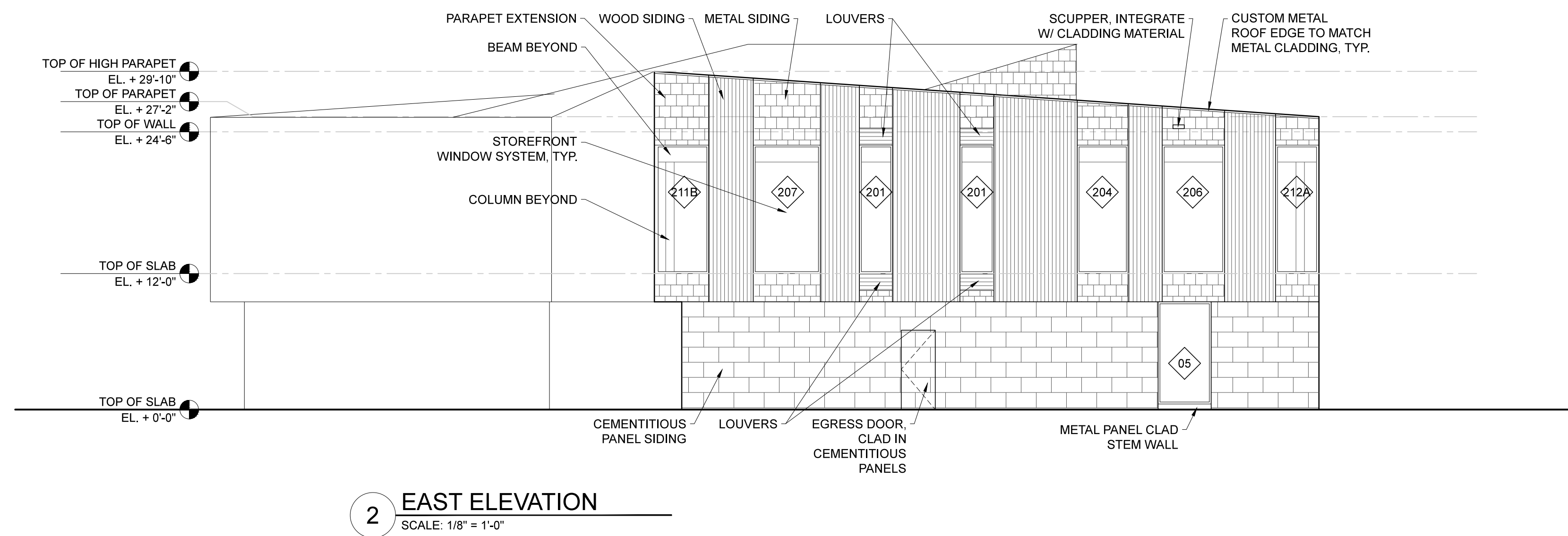
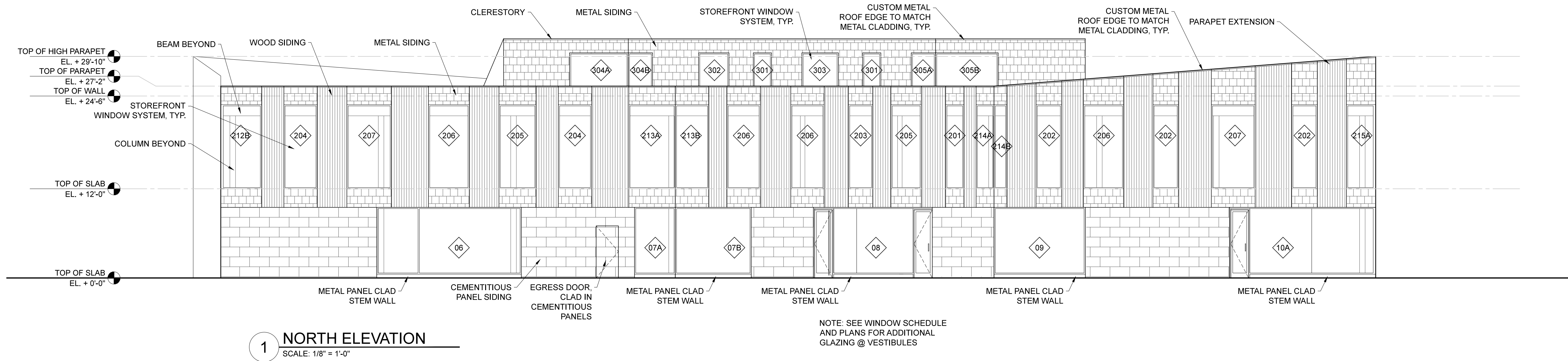


IMAGE 4



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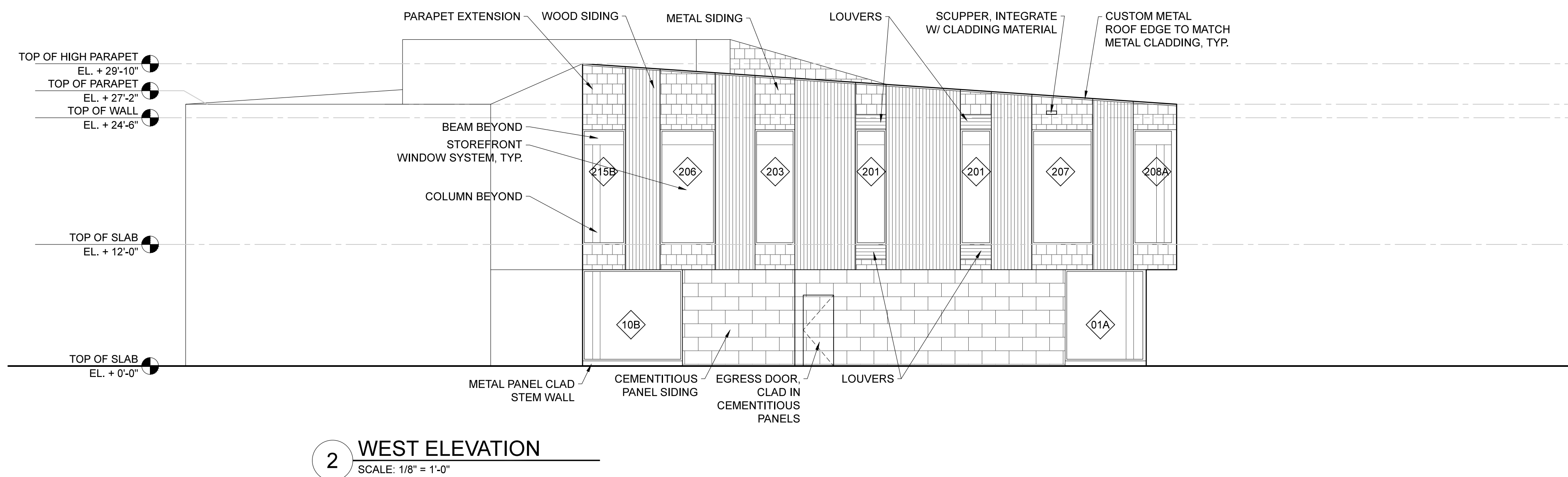
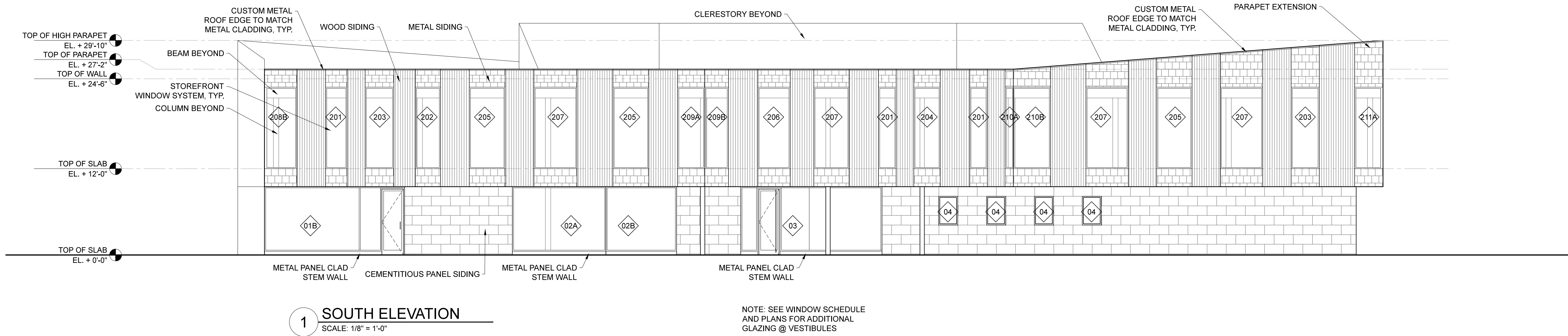
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DATE OF ISSUE: September 21, 2015
PROJECT NUMBER: 2105-0100 Patrons Oxford
STATUS: 100% Design Development

BUILDING
ELEVATIONS

A201



PROJECT NAME:

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PORTLAND TECHNOLOGY PARK
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4	DATE
5	DATE
6	DATE

DATE OF ISSUE: September 21, 2015
PROJECT NUMBER: 2105-0100 Patrons Oxford
STATUS: 100% Design Development

BUILDING
ELEVATIONS

A202



IMAGE 5



IMAGE 6



IMAGE 7



IMAGE 8

Patrons Oxford Insurance Portland Technology Park

PTD Design Review
Scott Simons Architects Response
November 3, 2015



IMAGE 1



IMAGE 2



IMAGE 2A



Memorandum

Planning and Urban Development Department

Planning Division

To: Beth Boepple, Chair, and Members of the Portland Planning Board
From: Nell Donaldson, Planner
Date: November 5, 2015
Re: AC Hotel, 158 Fore Street
Project #: 2015-169 **CBL:** 19-B-2
Meeting Date: November 10, 2015

I. INTRODUCTION

Portland Norwich Group has requested a preliminary Level III site plan and subdivision review for the development of a 6-story 120,760 SF building at 158 Fore Street in the Eastern Waterfront. The project includes a 150 room hotel, 16 residential condominium units, and 4,000 SF of ground floor retail, some of which may be fit up as restaurant space. The plans show enhancements to the Fore Street, Hancock Street, and Thames Street streetscapes, new vehicular and pedestrian circulation interior to the site, landscaping, and stormwater treatment.

This development is being referred to the planning board for compliance with the site plan and subdivision standards. The Planning Division sent a total of 159 notices to property owners within 500 feet of the site and a legal ad ran on November 2 and 3, 2015.

Applicant: Ara Aftandilian, Portland Norwich Group, LLC

Consultants: Pat Carroll, Carroll Associates; Stephen Bradstreet, Ransom Consulting; John Swan, Owen Haskell, Rob Festa, Group One Partners (architect)

II. REQUIRED REVIEWS

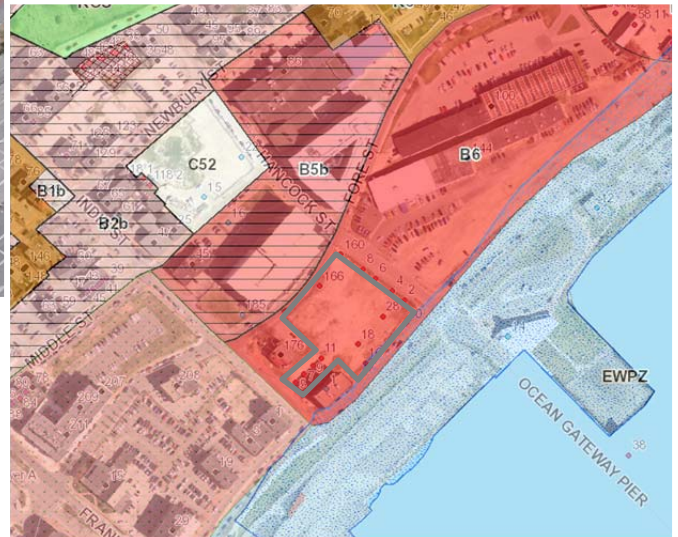
Waiver Requests	Applicable Standards
Street trees 16 trees required. 13 trees proposed on street frontage, six trees proposed on interior alley. Applicant requests that all trees be counted toward street tree requirement.	Site Plan Standard, <i>Section 14-526(b)2.b(iii)</i> and Technical Manual, <i>Section 4.6.1</i> . All multi-family development shall provide one street tree per unit. Waiver permitted where site constraints prevent it, with applicant contributing proportionate amount to Tree Fund.
Review	Applicable Standards
Site Plan	<i>Section 14-526</i>
Subdivision	<i>Section 14-497</i>

III. PROJECT DATA

Existing Zoning	B-6, with portion of site in Shoreland Zone
Existing Use	Vacant lot
Proposed Use	Residential, commercial
Proposed Development Program	16 residential condominiums units (8 1-br, 8 2-br) 150 room hotel 4,000 SF ground floor commercial (restaurant/retail)
Parcel Size	27,767 SF (to be split from larger 60,642 SF lot)

	<i>Existing</i>	<i>Proposed</i>	<i>Net Change</i>
Building Footprint	0 SF	20,385 SF	20,385 SF
Building Floor Area	0 SF	120,760 SF	120,760 SF
Impervious Surface Area	60,642 SF	59,868 SF	-774 SF
Parking Spaces	0	65 in Ocean Gateway*	0 on site
Bicycle Parking Spaces	0	4	4
Estimated Cost of Project	\$2,000,000		

* number to be confirmed at final plan review



Figures 1, 2, and 3: 158 Fore Street site showing proposed lot split (above); site from Thames/Hancock Streets (above right); existing zoning context.

IV. BACKGROUND & EXISTING CONDITIONS

The AC Hotel is proposed on a 60,000 SF site on the block bounded by India Street, Fore Street, Hancock Street, and Thames Street in the eastern waterfront (Figure 1). The site, which is currently vacant, shares the block with the historic Grand Trunk building as well as the Portland Water District's downtown pump station. The Ocean Gateway garage sits to the north, the Portland Company complex lies to the east, the Ocean Gateway Terminal lies to the south, and the retail and restaurants of Commercial Street lie to the west. The site is zoned B-6, the Eastern Waterfront zone. A small area of the site along Thames Street also falls into the Shoreland zone (Figure 3).

V. PROPOSED DEVELOPMENT

Under the applicant's plans, the eastern half of the site would be split off to create a separate 28,000 SF lot, depicted as Lot 1. This lot would be developed with a 150 room hotel, 16 top-floor residential condominium units, and 4,000 SF of ground floor commercial on Thames Street, some of which could potentially be developed as restaurant space (Figures 4 and 5). The applicant proposes to create a landscaped courtyard interior to the block on the western side of the hotel building. This courtyard would serve as the vehicular drop off and major entry to the hotel. It would also serve as the only entry to the 6th floor residential units. The hotel would have a secondary entrance from Hancock Street; commercial spaces would be accessed from Thames Street. New sidewalks, bumpouts, street lights, and street trees are proposed. All parking demand would be accommodated in the Ocean Gateway garage. Utility connections are proposed to Thames and Fore Streets. A filtered subsurface storage system would manage stormwater. The remainder of the site, depicted as Lot 2 on the plans, would be built out under future phases of development.

VI. PUBLIC COMMENT

The applicant hosted a neighborhood meeting on Wednesday, November 4. Meeting minutes were not available as of the writing of this memo. Staff received no comments on the preliminary plans.



VII. RIGHT, TITLE, & INTEREST

The applicant's submittal includes a purchase and sale agreement as evidence of right, title, and interest (*Attachment E*). This agreement also conveys rights to the Ocean Gateway garage to the applicant.

As proposed, the development would involve several easements or license agreements. These include agreements from the city for a canopy and grease trap which are proposed in the right-of-way, and a public access easement to the city for areas of sidewalk which would fall on private property.

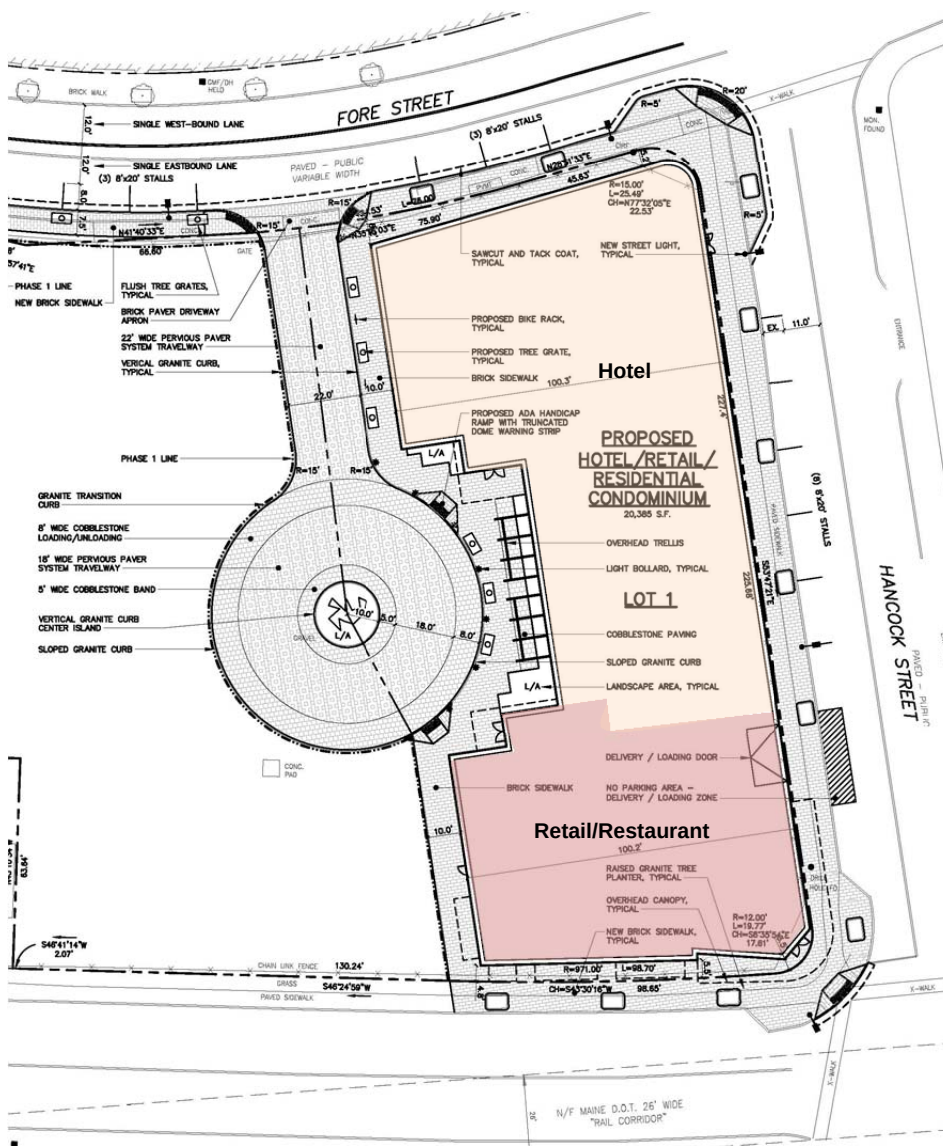
It should be noted that the site was previously party to a subdivision and condominium project which, per the applicant, has been extinguished. Staff is consulting with Corporation Counsel on right, title, and interest requirements with respect to a new plat under this application.

VIII. FINANCIAL & TECHNICAL CAPACITY

The estimated cost of the development is \$20 million. The applicant has submitted a letter from Citizens Bank indicating their intent to consider financing for the project (*Attachment J*). The applicant has also provided a list of consultants.

IX. ZONING ANALYSIS

Staff has requested that the applicant confirm several calculations related to the dimensional requirements of the B-6 zone, including proposed lot size, lot coverage, and building height. All other dimensional requirements of the B-6 zone appear to be met. It should be noted that, per the dimensional



Figures 4 and 5: Rendering of 158 Fore from Fore/Hancock Streets (top); preliminary site plan.

standards of the B-6 zone, buildings on the 158 Fore Street lot are required to build to key building envelopes depicted in the B-6 Building Height Overlay & Building Envelopes map, which is included in the city's *Design Manual*. Staff has confirmed that the proposed building complies with the map.

A portion of the project also falls within the Shoreland zone. However, none of the proposed structures would lie within 75 feet of the normal high water line. Per discussion with Ann Machado, the city's zoning administrator, the project complies with the city's Shoreland zoning ordinance. The Shoreland zone should be depicted on the revised survey and site plan.

X. SITE PLAN SUBMISSION REQUIREMENTS (Section 14-527) and SUBDIVISION PLAT AND RECORDING PLAT REQUIREMENTS (Section 14-496)

The following materials should be submitted at time of final review:

- Final site plan and subdivision submittal requirements as noted in *Sections 14-496 and 14-527(e) and (f)*, including a subdivision plat meeting the requirements of *Section 14-496*. The revised plat should show the building footprint, a table listing residential units and unit sizes, all proposed easements, any common elements which will be subject to condominium documents (e.g. stormwater treatment), and a signature block.
- A revised existing conditions plan showing existing utilities in adjacent roadways; and
- A revised site plan set including details for
 - Vertical Granite Curb;
 - Brick Sidewalk;
 - Brick Driveway Apron; and
 - ADA Pedestrian Ramps.

Related to construction, it should be noted that Fore Street from Atlantic Street to Franklin Street is on the city's street opening moratorium list through October of 2016. This will have implications for the construction sequencing on the site. Mike Farmer, of the city's Department of Public Services, writes,

Fore Street from Atlantic St. to Franklin St. is on the Street Opening Moratorium list. This section of Fore Street was paved on 10/21/2011, which means it will come off the moratorium list on 10/22/2016. When a street, such as Fore Street, is on the moratorium list, certain limits may apply; the street opening permit fee charged for excavating in the street is typically higher than the fee for the same excavation when the street is not on the moratorium list. Any party planning an excavation in a City street should contact the City Department of Public Services, before committing to dig the excavation, to learn about permit fees and requirements.

Staff has met with the applicant to discuss staging the work to address the moratorium issue.

XI. SUBDIVISION REVIEW (14-497(a). Review Criteria)

The proposed development has been reviewed by staff for conformance with the relevant review standards of the City of Portland's subdivision ordinance. Staff comments are below.

1. Water, Air Pollution

The development is not anticipated to have detrimental water or air impacts.

2 & 3. Adequacy of Water Supply

Evidence of capacity from the Portland Water District will be required at final plan review.

4. Soil Erosion

No unreasonable soil erosion or reduction in the capacity of the land to hold water is anticipated.

5. Impacts on Existing or Proposed Highways and Public Roads

The applicant has provided preliminary trip generation estimates which indicate some impact to adjacent roadways. The analysis of these impacts is discussed under site plan review below.

6. Sanitary Sewer/Stormwater Disposal

Impacts to sewer and stormwater infrastructure are discussed under site plan review below. The applicant has submitted a wastewater capacity application to the Department of Public Services. Verification of capacity will be required at the time of final plan.

7. Solid Waste

The applicant has proposed an interior common trash room, which would be accessed from Hancock Street. Staff has requested floor plans, which should clarify how this space will be used by all tenants of the building.

8. Scenic Beauty

This proposal is not deemed to have an adverse impact on the scenic beauty of the area.

9. Comprehensive Plan

The project would develop a long-vacant waterfront parcel and help to bridge the Eastern Waterfront with the Old Port. Further, the project will add 16 units of housing to the city's housing stock. The plans thus meet several objectives of the city's comprehensive plan.

10. Financial and Technical Capacity

The applicant has submitted a letter from Citizens Bank documenting the bank's intent to consider financing for the project (*Attachment J*).

11. Wetland/Water Body Impacts

There are no anticipated impacts to wetlands.

12. Groundwater Impacts

There are no anticipated impacts to groundwater supplies.

13. Flood-Prone Area

Per the city's existing flood maps, the site is not located in a flood zone.

XII. SITE PLAN REVIEW

The proposed development has been reviewed by staff for conformance with the relevant review standards of the City of Portland's site plan ordinance. Staff comments are below.

1. Transportation Standards**a. Impact on Surrounding Street Systems**

The applicant has provided a preliminary trip generation analysis completed by Gorrill-Palmer Consulting Engineers (*Attachment L*). This analysis estimates a total of 131 AM peak hour trips and 150 PM peak hour trips. Given these figures, a Traffic Movement Permit will be required. Tom Errico, the city's consulting traffic engineer, writes,

I find the trip generation analysis to be reasonable and accordingly the project requires a Traffic Movement Permit. The applicant shall submit a Traffic Movement Permit application for review and approval. A scoping meeting will be scheduled upon approval of the application.

The applicant has met with staff to discuss parameters for the traffic study associated with the Traffic Movement Permit.

b. *Access and Circulation*

The applicant has proposed modifications to the design of Fore Street to allow on-street parking with bumpouts at the Fore/Hancock Street intersection. Mr. Errico has reviewed this design and notes,

The application indicates that a Fore Street improvement plan will be provided. I will review the plan upon receipt.

I will coordinate with the Parking Division and DPS on Fore Street on-street parking regulations. Please note that the on-street parking stalls are not to include painted lines separating spaces. This should be noted on the plan.

In terms of circulation on the site, the preliminary plans show a 22' drive at the rear of the proposed hotel. This alley terminates in a one-way circle with a landscaped island at center, although the applicant has indicated the intent to carry this drive through to Thames Street under future phases of development. Vehicular access to the hotel would occur from this circle, as would vehicular access to the upper floor residences, as the major entries to both of these uses are proposed off the circle area. Vehicular access to parking would occur at the western end of the Ocean Gateway garage opposite Fore Street. Mr. Errico has reviewed the design and notes,

The driveway apron material does not meet City design standards and I will refer this issue to DPS.

Detectible warning panels are not required at the site driveway. I would suggest tip-down curbing for improved sidewalk slope conditions.

Mr. Errico has also asked for details on deliveries, which are proposed to occur at an overhead door on Hancock Street,

Specific details on deliveries shall be provided. The painted detail on Hancock Street should be eliminated. I will coordinate with the Parking Division on sign regulations.

Pedestrian access is proposed around the building via new brick sidewalks on the Fore Street, Hancock Street, and Thames Street frontages, and a brick sidewalk along the alley at the building's rear. Secondary hotel doors are proposed on the north end of the Hancock Street façade. Retail/restaurant doors are proposed on the Hancock/Thames corner. Pedestrian access to the garage occurs at both the east and west ends of the building.

Regarding pedestrian access, staff has requested that the applicant review the location of the hotel entrance on the north end of the building near the intersection of Fore and Hancock, as it seems inconsistent with the likely travel patterns to and from the site. Staff has also requested that the applicant document that ADA-compliant access to the building is proposed. On the topic of ADA access, Mr. Farmer notes,

The circular driveway plans show accessible sidewalk ramps adjacent to granite cobblestone pavement in the driveway. The granite cobblestones would look nice; but, I wonder if the cobblestone surface can be constructed smooth enough to meet ADA design standards.

Mr. Errico adds,

I need to further review the configuration of the corner handicapped ramps to ensure optimal compliance.

It should be noted that public pedestrian easements will be required on the Fore and Thames Street frontages where areas of sidewalk encroach on private property.

With respect to sidewalk details, Michael Farmer has noted,

All new (or reset) granite curb construction should be laid out so that mitered corners are not used on curb “bump outs,” or other areas, where they are exposed to possible plow damage. Circular curb should be used in these areas in lieu of mitered corners. The curb layout should be designed so no curb pieces shorter than 4 feet are required.

c. *Public Transit Access*

The site is not located along a public transit route. As such, no transit facilities are required.

d. *Parking*

Division 20 of the land use ordinance allows the planning board to establish the parking requirement for projects over 50,000 SF in size. The applicant has provided a parking analysis which relies on parking standards from the city’s land use code to arrive at an estimated parking demand. The analysis factors in a shared use reduction and an allowance for offset peak demand periods to arrive at a total projected parking demand of 65 spaces. All of these spaces are proposed in the 720-space Ocean Gateway garage, to which the applicant has rights. Off-site parking of this kind is permitted for uses in non-residential zones per Section 14-334 of the ordinance. Regarding the off-site parking in the Ocean Gateway garage, Mr. Errico notes,

I need to review the parking generation analysis in detail. The applicant should provide documentation of parking supply adequacy in the Ocean Gateway garage. The applicant should provide details on the valet parking program and how pedestrians will be routed between the garage and the site. Specifically the provision of safe facilities. A crosswalk may make sense at Hancock Street.

The preliminary plans include two bicycle racks on the alley and internal bicycle parking is referenced in the narrative. Staff has requested that the applicant show the location of interior bike storage and confirm the number of bicycle spaces required pending Mr. Errico’s review of the parking generation analysis. The total bicycle parking requirement, based upon the applicant’s preliminary numbers, is 18 spaces.

e. *Transportation Demand Management*

As a commercial development over 50,000 SF in total floor area, a TDM plan is required. A TDM plan should be provided in the revised submittal.

2. *Environmental Quality Standards*

a. *Preservation of Significant Natural Features*

There are no known significant natural features on the site.

b. *Landscaping and Landscape Preservation*

The applicant has provided a preliminary landscaping plan. The plan shows 13 street trees, including red maples and zelkovas along the Fore Street, Hancock Street, and Thames Street frontages, as well as six ginkgos and honey locusts on the alley. The applicant has requested that the six trees planned for the alley be counted toward the city’s street tree requirement. The plans also include various shrubs, including azaleas, bearberries, honeysuckles, hydrangeas, rhododendrons, bayberries, and sedge, on the interior courtyard. Miscanthus grass is planned for the center of the circle on the alley. Jeff Tarling, the city’s arborist, has not yet reviewed the landscaping plan. Mr. Tarling’s comments will be available at the time of final review.

Regarding Lot 2, which is slated for future development, David Senus, the city’s consulting civil engineer, has noted that some minimal landscaping treatment should be provided. He writes,

At this time, development and landscaping plans have been provided for Lot 1-1 of the subdivided Site; the Applicant should clarify the intent for the interim surface condition

of Lot 1-2 between completion of this project and development of a future project on that lot. At minimum this area should be cleared, loamed and seeded.

c. *Water Quality/Storm Water Management/Erosion Control*

The site generally slopes from south to north and currently drains into catch basins on Fore Street, Hancock Street, and Thames Street. The applicant has argued that the entire site is impervious in its existing condition. Under the proposed plans, the impervious surface on site would decrease by over 700 SF. As such, the applicant is not required to treat stormwater runoff from the site.

However, the applicant has proposed to install a pervious paver filter system with subsurface storage that would drain to the closed storm drain system in Thames Street. Roof drains would also outlet to the subsurface detention system. Regarding these plans, Mr. Senus writes,

Basic Standards: The Applicant has noted that erosion and sedimentation control measures are detailed within the design plans; however, it does not appear that appropriate plans, notes, and details have been provided at this time to address erosion and sediment control requirements, inspection and maintenance requirements, and good housekeeping practices in accordance with Appendix A, B, & C of MaineDEP Chapter 500 and Chapter 32 of the City of Portland Code of Ordinances. We anticipate that this information will be provided with a final application submittal, and we will review the project for conformance with the Basic Standards at that time.

General Standards: ...The project will not result in an increase in impervious area. As such, the project is not required to include any specific stormwater management features for stormwater quality control. However, the Applicant has proposed permeable pavers with a filter system to provide some level of treatment. The Applicant should address the following comments, per Chapter 7.7 of Volume III of the MaineDEP Stormwater BMP Manual:

- Infiltration rate should be confirmed with a double ring infiltrometer test to determine the soils ability to accept water.*
- Provide calculations demonstrating that the proposed filter system has been adequately sized.*
- Appropriate notes should be provided on the proposed detail specifying filter media and reservoir course.*

Flooding Standard: The project will not result in an increase in impervious area. As such, the project is not required to include any specific stormwater management features to control the rate or quantity of stormwater runoff from the site. However, the Applicant has proposed an R-Tank system below a portion of the permeable pavers filter system to provide storage for stormwater runoff. The Applicant has demonstrated that the proposed development will not result in an increase in the peak rate of runoff from the Site; however, it appears that a time of concentration of 0 was utilized in the Existing Conditions model, while a Time of Concentration of five minutes was utilized in the Proposed Conditions model. In addition, it appears the 2, 10 and 25 year, 24-hr storm depths utilized in the model do not reflect the most recent requirements of the updated Chapter 500 flooding standards.

The separated storm drain system in Hancock and Thames Streets has specific capacity considerations, as it routes through a stormwater treatment unit on the Ocean Gateway site that is regulated under a Site Location of Development permit granted to the City by the MaineDEP. In 2006, the City hired Woodard & Curran to provide an analysis of the contributing development parcels that abut and contribute drainage to Hancock Street. That analysis considered development on this parcel with a subsurface storage system to control the rate of runoff from the site (and to allow for additional input to the system

from uphill development). The subsurface storage system proposed by the applicant appears to result in similar discharge rates for the modeled storm events as the prior analysis conducted in 2006, and is therefore an acceptable approach for redevelopment of the site.

The Applicant should show the proposed storm drain pipes and structures on the plans, including connections into the public storm drain system.

The Applicant should show details for the proposed R-Tank System.

3. Public Infrastructure and Community Safety Standards

a. Consistency with Related Master Plans

As noted above, the project is generally deemed consistent with related master plans.

b. Public Safety and Fire Prevention

The applicant has provided a fire department checklist for review by the city's Fire Prevention Bureau (*Attachment B*). Assistant Fire Chief Keith Gautreau, of the Fire Prevention Bureau, has requested an analysis of existing fire hydrants in the immediate area (*Attachment 4*).

c. Availability and Capacity of Public Utilities

The preliminary plans show the majority of the site's utility connections in Thames Street. Water service would originate from the 10 inch main in Thames Street. Sewer would flow to the 12 inch main in Thames Street. Two grease traps are proposed, one on Hancock and one on Thames, with one of these serving the hotel and the other serving a potential restaurant use in the ground floor commercial space. As noted above, at the time of final site plan review, the applicant will need to present evidence that there is sufficient water and sewer capacity to serve all proposed uses on the site.

The preliminary plans show gas service from Thames Street. Electrical service would be from Fore Street and would run beneath the sidewalk on Hancock and Thames to a below grade transformer vault on private property in the alley. Mr. Farmer writes of the electrical service,

We recommend that the electric power supply for the project be extended from the existing underground electric power distribution system in Fore Street and other adjacent streets, not from the existing utility pole and overhead wires at the corner of Fore St. and Hancock St., as shown on the plans. The project plans should include removing the existing utility pole and overhead wires, if this can reasonably be done at a reasonable cost.

Underground electric power (and underground communication) conduits in the street right of way should be incorporated into concrete encased duct banks. The details on sheet C2.0 should be revised accordingly.

We would like to have a chance to review the electric utility service plans for the project after they have been approved by CMP Co. staff.

Staff has met with the applicant to discuss the location of the underground electrical service.

Regarding the grease traps, Mr. Farmer adds,

The plans show two grease traps, which would be privately owned and maintained, in the street right-of-way. We have allowed private grease traps in City streets in some retrofit situations where existing buildings and existing businesses had no practical alternatives. However, in projects such as this, which entail complete site development and new building construction from the foundation up, there would seem to be no good reasons

why an efficient and practical design that includes private grease traps on private property could not be created. We believe that public streets should be reserved for public purposes. For these reasons, we recommend that the design be revised to put the grease traps on private property. There should also be sanitary sewer manhole(s) on the grease trap discharge lines, so that the wastewater from the grease traps could be isolated and collected for analysis.

The grease trap details on sheet C2.0 should be revised as follows, if they are to be located in a public street or sidewalk. The grease traps should be H-20 load rated. The grease traps should be recessed below finish grade and the access ports should be provided with cast iron manhole frames and covers, set on three or more courses of brick and mortar (concrete grade rings might be used in some situations).

Staff has also met with the applicant to discuss the grease trap locations.

Mr. Senus has reviewed the utility plan as well. He writes,

Two existing catch basins are shown in the sidewalk (CB5 & 10) at the intersection of Hancock and Thames; however, no catch basins exist in the sidewalk in this area.

A catch basin exists at the apex of the radius (in the crosswalk) at the intersection of Hancock and Thames; however, this structure is not noted on the plans.

Three catch basins exist along the proposed reconstructed curb line in Fore Street, these structures should be reconstructed as part of the project.

Refer to memo from Mike Farmer, Project Engineer with the Department of Public Services dated October 19th for comments specific to the proposed electrical service. The 1,500 gallon grease trap in the Hancock Street roadway ROW appears to conflict with an existing electrical/communications duct bank.

Utility saw cuts/trench limits should be depicted on the plans.

Water services should be coordinated with the Portland Water District; we would anticipate that a domestic and fire protection service will be required with valves on each.

The “Below Grade Electrical Transformer Vault” is depicted on Lot 1-2 of the subdivision. There is no easement shown for this vault on the subdivision plan. The location of the vault may conflict with future development plans for this lot.

4. Site Design Standards

- a. *Massing, Ventilation, and Wind Impact*
No comments.
- b. *Shadows*
Not applicable.
- c. *Snow and Ice Loading*
Snow storage areas should be delineated on the revised plans.
- d. *View Corridors*
Not applicable.

e. *Historic Resources*

The site falls just within 100 feet of the Old Port Historic District, which encompasses and extends beyond the Grand Trunk building to the east. Deb Andrews, the city's Historic Preservation Manager, has reviewed preliminary plans as part of the city's design review (*Attachment 5*). She has noted that future phases of development along Thames Street and India Street will be subject to additional review as they relate directly to the Grand Trunk building and associated historic districts.

f. *Exterior Lighting*

A lighting plan, complete with photometrics, should be submitted at the time of final review. The plans should specify the street lights as Eastern Waterfront fixtures.

g. *Noise and Vibration*

Staff has requested that the applicant provide information related to the rooftop mechanical and, as possible, reduce the size of the screen for these functions.

h. *Signage and Wayfinding*

No signage or wayfinding is proposed at this time.

i. *Zoning-Related Design Standards*

Staff conducted a preliminary design review based on the multi-family design standards and the design guidelines for the Eastern Waterfront. Caitlin Cameron, the city's urban designer, writes,

Because there are not many buildings surrounding the site to provide an architectural context, the design aspects of the project we are most focused on include building orientation and circulation, as well as visual impact as a gateway along the waterfront.

Orientation of corner treatments: Emphasis and legibility of building entrances is a key principle of concern for any urban project. If the primary entrances to both the hotel and the residential units will be interior to the block, then the reviewers agree that emphasis and special treatment should be on the building corner on Fore Street interior to the block, rather than the Hancock/Fore corner. Emphasis and visual cues oriented to the building approaches (from Commercial Street and from downtown direction) provide legibility about where to enter the building.

Articulation: With such a large building, details will be important for facade articulation and visual interest. Please provide more information about details such as depth of window recesses, reveals, overhangs and projections, lintels and headers, etc.

Facades/Use: The facade design could potentially differentiate between residential and hotel uses more (difficult to evaluate without floor plans).

Ms. Cameron has requested floor plans in the final submittal.

XIII. NEXT STEPS

1. Final plan submission, including subdivision and site plan submittal requirements as included in 14-496(a) and (b) and 14-527(e) and (f) for review by the Planning Authority and Planning Board; and
2. Hold final Planning Board hearing.

XIV. ATTACHMENTS

PLANNING BOARD REPORT ATTACHMENTS

1. Department of Public Services review (memo from Mike Farmer, 10/19/15)
2. Traffic Engineer review (memo from Thomas Errico, 10/28/15)
3. Civil Engineer review (memo from David Senus, 10/27/15)

4. Fire Prevention Bureau review (memo from Keith Gautreau, 10/28/15)
5. Design review (memo from Caitlin Cameron, 10/26/15)

APPLICANT'S SUBMITTALS

- A. Cover Letter
- B. Level III Site Plan application
- C. Location Maps
- D. Description of Project
- E. Evidence of Right, Title, and Interest
- F. Evidence of State or Federal Permits
- G. Written Assessment of Zoning Compliance
- H. Summary of Easements
- I. Written Request for Waivers
- J. Evidence of Financial Capacity
- K. Evidence of Technical Capacity
- L. Trip Generation and Parking Demand Analysis
- M. Stormwater Management Narrative

PLANS

- Plan 1. Cover Sheet
- Plan 2. Boundary Survey
- Plan 3. Existing Condition Plan
- Plan 4. Subdivision Plat
- Plan 5. Site Plan
- Plan 6. Utility Plan
- Plan 7. Grading, Drainage, and Erosion Control Plan
- Plan 8. Construction Details
- Plan 9. Construction Details
- Plan 10. Landscape Plan
- Plan 11. Landscape Details
- Plan 12. Exterior Elevations

**ENGINEERING DIVISION
Portland Department of Public Services
55 Portland Street
Portland, ME 04101**

M E M O

TO: Helen Donaldson
FROM: Mike Farmer, Project Engineer
DATE: Oct. 19, 2015
Revised 10/21/2015 (Added comment 8)
RE: 158 Fore Street (Hotel)

I am submitting the following comments, on behalf of the Engineering Division, regarding the Site Plan for the proposed AC Hotel project at 158 Fore Street. These comments are based on review of the Utility Plan (9/29/2015), Site Plan (9/29/2015), and Construction Details sheet C2.0 (9/29/2015).

1. We recommend that the electric power supply for the project be extended from the existing underground electric power distribution system in Fore Street and other adjacent streets, not from the existing utility pole and overhead wires at the corner of Fore St. And Hancock St., as shown on the plans. The project plans should include removing the existing utility pole and overhead wires, if this can reasonably be done at a reasonable cost.
2. Underground electric power (and underground communication) conduits in the street right of way should be incorporated into concrete encased duct banks. The details on sheet C2.0 should be revised accordingly.
3. We would like to have a chance to review the electric utility service plans for the project after they have been approved by CMP Co. staff.
4. The plans show two grease traps, which would be privately owned and maintained, in the street right-of way. We have allowed private grease traps in City streets in some retrofit situations where existing buildings and existing businesses had no practical alternatives. However, in projects such as this, which entail complete site development and new building construction from the foundation up, there would seem to be no good reasons why an efficient and practical design that includes private grease traps on private property could not be created. We believe that public streets should be reserved for public purposes. For these reasons, we recommend that the design be revised to put the grease traps on private property. There should also be sanitary sewer manhole(s) on the grease trap discharge lines, so that the wastewater from the grease traps could be isolated and collected for analysis.
5. The grease trap details on sheet C2.0 should be revised as follows, if they are to be located in a public street or sidewalk. The grease traps should be H-20 load rated. The grease traps should be recessed below finish grade and the access ports should be provided with cast iron manhole frames and covers, set on three or more courses of brick and mortar (concrete grade rings might be used in some situations).

6. All new (or reset) granite curb construction should be laid out so that mitered corners are not used on curb “bump outs,” or other areas, where they are exposed to possible plow damage. Circular curb should be used in these areas in lieu of mitered corners. The curb layout should be designed so no curb pieces shorter than 4 feet are required.
7. The circular driveway plans show accessible sidewalk ramps adjacent to granite cobblestone pavement in the driveway. The granite cobblestones would look nice; but, I wonder if the cobblestone surface can be constructed smooth enough to meet ADA design standards.
8. Fore Street from Atlantic St. to Franklin St. is on the Street Opening Moratorium list. This section of Fore Street was paved on 10/21/2011, which means it will come off the moratorium list on 10/22/2016. When a street, such as Fore Street, is on the moratorium list, certain limits may apply; the street opening permit fee charged for excavating in the street is typically higher than the fee for the same excavation when the street is not on the moratorium list. Any party planning an excavation in a City street should contact the City Department of Public Services, before committing to dig the excavation, to learn about permit fees and requirements.

From: Tom Errico <thomas.errico@tylin.com>
To: Helen Donaldson <HCD@portlandmaine.gov>
CC: David Margolis-Pineo <DMP@portlandmaine.gov>, Katherine Earley <KAS@portlandmaine.gov>, Jeremiah Bartlett <JBartlett@portlandmaine.gov>, Jeff Tarling <JST@portlandmaine.gov>
Date: 10/28/2015 6:59 PM
Subject: 158 Fore Street - Preliminary Traffic Comments

Nell - I have reviewed the application materials and offer the following preliminary traffic comments.

- * I find the trip generation analysis to be reasonable and accordingly the project requires a Traffic Movement Permit. The applicant shall submit a Traffic Movement Permit application for review and approval. A scoping meeting will be scheduled upon approval of the application.
- * I need to review the parking generation analysis in detail. The applicant should provide documentation of parking supply adequacy in the Ocean Gateway garage. The applicant should provide details on the valet parking program and how pedestrians will be routed between the garage and the site. Specifically the provision of safe facilities. A crosswalk may make sense at Hancock Street.
- * Specific details on deliveries shall be provided. The painted detail on Hancock Street should be eliminated. I will coordinate with the Parking Division on sign regulations.
- * Detectable warning panels are not required at the site driveway. I would suggest tip-down curbing for improved sidewalk slope conditions.
- * The application indicates that a Fore Street improvement plan will be provided. I will review the plan upon receipt.
- * Please note that the on-street parking stalls are not to include painted lines separating spaces. This should be noted on the plan.
- * Pedestrian use easements will be required for the sidewalk on Fore Street.
- * I will coordinate with the Parking Division and DPS on Fore Street on-street parking regulations.
- * I need to further review the configuration of the corner handicapped ramps to ensure optimal compliance.
- * The driveway apron material does not meet City design standards and I will refer this issue to DPS.

If you have any questions, please contact me.

Best regards,

Thomas A. Errico, PE
 Senior Associate
 Traffic Engineering Director
 [T.Y. Lin International] T.Y. Lin International
 12 Northbrook Drive
 Falmouth, ME 04105
 207.781.4721 (main)
 207.347.4354 (direct)
 207.400.0719 (mobile)
 207.781.4753 (fax)
 thomas.errico@tylin.com <mailto:thomas.errico@tylin.com>
 Visit us online at www.tylin.com <http://www.tylin.com>
 Twitter | Facebook | LinkedIn | YouTube

"One Vision, One Company"

Please consider the environment before printing.

MEMORANDUM



TO: Nell Donaldson, Planner
FROM: David Senus, PE
DATE: October 27, 2015
RE: AC Hotel, Preliminary Level III Site Plan Application

Woodard & Curran has reviewed the Preliminary Level III Site Plan Application for the proposed hotel located at 158 Fore Street in Portland, Maine. The project involves the construction of a new building to provide hotel rooms, retail space, and residential condominiums.

Documents Reviewed by Woodard & Curran

- Preliminary Level III Site Plan Application and attachments, dated September 29, 2015, prepared by Carroll Associates, on behalf of Portland Norwich Group, LLC, & Essex North Hospitality, LLC.
- Engineering Plans, Sheets 1-10, dated September 29, 2015, prepared by Ransom Consulting Engineers & Scientists, on behalf of Portland Norwich Group, LLC, & Essex North Hospitality, LLC.

Comments

- 1) The application is preliminary. As such, additional documents will be required for the final application, including letters from utilities confirming capacity to serve the proposed development and a Construction Management Plan. Woodard & Curran will perform a review of the Final Application upon receipt of those documents.
- 2) In accordance with Section 5 of the City of Portland Technical Manual, a Level III development project is required to submit a stormwater management plan pursuant to the regulations of MaineDEP Chapter 500 Stormwater Management Rules, including conformance with the Basic, General, and Flooding Standards. We offer the following comments:
 - a) Basic Standards: The Applicant has noted that erosion and sedimentation control measures are detailed within the design plans; however, it does not appear that appropriate plans, notes, and details have been provided at this time to address erosion and sediment control requirements, inspection and maintenance requirements, and good housekeeping practices in accordance with Appendix A, B, & C of MaineDEP Chapter 500 and Chapter 32 of the City of Portland Code of Ordinances. We anticipate that this information will be provided with a final application submittal, and we will review the project for conformance with the Basic Standards at that time.
 - b) General Standards: The Applicant has noted that the entire parcel is considered impervious with concrete pads or gravel surfaces and that future development on the remaining property is anticipated to consist of multiple structures for retail/office/residential use, with landscaped areas and walking paths. With the addition of landscaped areas, it is anticipated that the proposed development will decrease the Site's overall impervious area. The project will not result in an increase in impervious area. As such, the project is not required to include any specific stormwater management features for stormwater quality control. However, the Applicant has proposed permeable pavers with a filter system to provide some level of treatment. The Applicant should address the following comments, per Chapter 7.7 of Volume III of the MaineDEP Stormwater BMP Manual:
 - Infiltration rate should be confirmed with a double ring infiltrometer test to determine the soils ability to accept water.
 - Provide calculations demonstrating that the proposed filter system has been adequately sized.
 - Appropriate notes should be provided on the proposed detail specifying filter media and reservoir course.
 - c) Flooding Standard: The project will not result in an increase in impervious area. As such, the project is not required to include any specific stormwater management features to control the rate or quantity of stormwater runoff from the site. However, the Applicant has proposed an R-Tank



system below a portion of the permeable pavers filter system to provide storage for stormwater runoff. The Applicant has demonstrated that the proposed development will not result in an increase in the peak rate of runoff from the Site; however, it appears that a time of concentration of 0 was utilized in the Existing Conditions model, while a Time of Concentration of five minutes was utilized in the Proposed Conditions model. In addition, it appears the 2, 10 and 25 year, 24-hr storm depths utilized in the model do not reflect the most recent requirements of the updated Chapter 500 flooding standards.

- 3) The separated storm drain system in Hancock and Thames Streets has specific capacity considerations, as it routes through a stormwater treatment unit on the Ocean Gateway site that is regulated under a Site Location of Development permit granted to the City by the MaineDEP. In 2006, the City hired Woodard & Curran to provide an analysis of the contributing development parcels that abut and contribute drainage to Hancock Street. That analysis considered development on this parcel with a subsurface storage system to control the rate of runoff from the site (and to allow for additional input to the system from uphill development). The subsurface storage system proposed by the applicant appears to result in similar discharge rates for the modeled storm events as the prior analysis conducted in 2006, and is therefore an acceptable approach for redevelopment of the site.
- 4) The Applicant should show the proposed storm drain pipes and structures on the plans, including connections into the public storm drain system.
- 5) The Applicant should show details for the proposed R-Tank System.
- 6) The plans should note locations for snow storage.
- 7) At this time, development and landscaping plans have been provided for Lot 1-1 of the subdivided Site; the Applicant should clarify the intent for the interim surface condition of Lot 1-2 between completion of this project and development of a future project on that lot. At minimum this area should be cleared, loamed and seeded.
- 8) The Applicant should provide the following details in accordance with the City of Portland Technical Manual for work within the City Right-of-Way:
 - a) Vertical Granite Curb;
 - b) Brick Sidewalk;
 - c) Brick Driveway Apron; and
 - d) ADA Pedestrian Ramps.
- 9) Sheet C-0.1 – Existing Conditions Plan – The existing conditions plan should show existing utilities in the adjacent roadways.
- 10) Sheet C-1.1 – Utility Plan
 - a) Two existing catch basins are shown in the sidewalk (CB5 & 10) at the intersection of Hancock and Thames; however, no catch basins exist in the sidewalk in this area.
 - b) A catch basin exists at the apex of the radius (in the crosswalk) at the intersection of Hancock and Thames; however, this structure is not noted on the plans.
 - c) Three catch basins exist along the proposed reconstructed curb line in Fore Street, these structures should be reconstructed as part of the project.
 - d) Refer to memo from Mike Farmer, Project Engineer with the Department of Public Services dated October 19th for comments specific to the proposed electrical service.
 - e) The 1,500 gallon grease trap in the Hancock Street roadway ROW appears to conflict with an existing electrical/communications duct bank.
 - f) Utility saw cuts/trench limits should be depicted on the plans.
 - g) Water services should be coordinated with the Portland Water District; we would anticipate that a domestic and fire protection service will be required with valves on each.
 - h) The “Below Grade Electrical Transformer Vault” is depicted on Lot 1-2 of the subdivision. There is no easement shown for this vault on the subdivision plan. The location of the vault may conflict with future development plans for this lot.

MEMORANDUM

To: FILE
From: Nell Donaldson
Subject: Application ID: 2015-169
Date: 10/28/2015

10/28/2015

A Life Safety Evacuation Plan shall be submitted with the Building Permit detailing the exiting and waiting area for occupants.

10/28/2015

Construction Management Plan

Streets must maintain a 20' width for Fire Department access at all times.

Fire Hydrants shall not be blocked or enclosed by fencing. A 3' foot clearance must be kept at all times around the fire hydrant.

If gates are locked, a Portland Fire Department Knox padlock must be purchased by the applicant to allow access for the Fire Department.

The Construction Company' emergency contact information shall be posted on the property in case of an after hours emergency.

All construction shall comply with 2009 NFPA 1 Chapter 16 Safeguards During Building Construction, Alteration, and Demolition Operations.

Any cutting and welding done will require a Hot Work Permit from Fire Department.

10/28/2015

Access looks great to 4 sides of the Hotel. Access off of Thames, Hancock and Fore are more than adequate in addition to use of the drive-up circle for the front of the structure.

10/28/2015

Would like to see an analysis of the existing hydrants in the immediate area.

2009 NFPA 1 18.3 Water Supplies and Fire Hydrants

Comments Submitted by: Keith Gautreau/Fire on 10/28/2015

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2009 NFPA 1 18.3 Water Supplies and Fire Hydrants

From: Caitlin Cameron
To: Donaldson, Helen
CC: Andrews, Deb
Date: 10/26/2015 5:46 PM
Subject: Proposed Hotel - preliminary design comments

Below are preliminary comments in reference to the Multiple-family Design Standards and Design Guidelines for the Eastern Waterfront. Floor plans would be helpful for further review.

- Because there are not many buildings surrounding the site to provide an architectural context, the design aspects of the project we are most focused on include building orientation and circulation, as well as visual impact as a gateway along the waterfront.
- Orientation of corner treatments: Emphasis and legibility of building entrances is a key principle of concern for any urban project. If the primary entrances to both the hotel and the residential units will be interior to the block, then the reviewers agree that emphasis and special treatment should be on the building corner on Fore Street interior to the block, rather than the Hancock/Fore corner. Emphasis and visual cues oriented to the building approaches (from Commercial Street and from downtown direction) provide legibility about where to enter the building.
- Articulation: With such a large building, details will be important for facade articulation and visual interest. Please provide more information about details such as depth of window recesses, reveals, overhangs and projections, lintels and headers, etc.
- Facades/Use: The facade design could potentially differentiate between residential and hotel uses more (difficult to evaluate without floor plans).

Caitlin Cameron, LEED AP, Associate AIA
Urban Designer | Planning & Urban Development Department
City of Portland, Maine
389 Congress Street, 4th Floor Portland, ME 04101
(207) 874-8901 | ccameron@portlandmaine.gov

AC Hotel



Level III Preliminary Site Plan and Subdivision Application

September 29, 2015

Submitted To:
CITY OF PORTLAND PLANNING DEPARTMENT

Applicant / Developer:
Portland Norwich Group, LLC
2330 Palm Ridge Road #305
Sanibel, FL 33957
and
Essex North Hospitality, LLC
PO Box 394
Topsfield, MA 01983

Prepared by:
Carroll Associates
217 Commercial Street, Portland, ME 04101
and
Ransom Consulting Engineers and Scientists
400 Commercial Street, Portland, ME 04101

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1. Cover Letter
2. Completed application form – Level III Preliminary Site Plan and Subdivision Application
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4. Description of project
5. Evidence of right, title, and interest
6. Evidence of state and/or federal permits
7. Written assessment of project's compliance with zoning requirements
8. Summary of ex. and prop. easements, covenants, public/private rights-of-way, or other burdens
9. Written request for waivers from site plan or technical standards
10. Evidence of financial capacity
11. Evidence of technical capacity
12. Trip Generation and Parking Demand Analysis
13. Stormwater Management Narrative

Drawings (Under Separate Cover)

<u>SHEET#</u>	<u>SHEET TITLE</u>	<u>SHEET # ON CD</u>
	COVER SHEET	G1
1	BOUNDARY SURVEY	C1
C0.1	EXISTING CONDITIONS PLAN	C2
C0.2	SUBDIVISION PLAN	C3
C1.0	SITE PLAN	C4
C1.1	UTILITY PLAN	C5
C1.2	GRADING DRAINAGE AND EROSION CONTROL PLAN	C6
C2.0	CONSTRUCTION DETAILS	C7
C2.1	CONSTRUCTION DETAILS	C8
L1.0	LANDSCAPE PLAN	L1
L2.0	LANDSCAPE DETAILS	L2
A1.0	EXTERIOR ELEVATIONS	A1

1. Cover Letter



September 29, 2015

Ms. Barbara Barhydt
City of Portland Planning Authority
4th Floor, City Hall
389 Congress Street
Portland, ME 04101

**RE: AC Hotel
Fore Street / Hancock Street / Thames Street
Hotel, Retail, and Residential Condominiums
Chart, Block, Lot: 19-B-20**

Dear Barbara,

On behalf of Portland Norwich Group LLC and Essex North Hospitality, LLC, we are pleased to submit this Level III Preliminary Site Plan and Subdivision Application along with supporting materials relating to the proposed hotel, ground floor retail or restaurant space, residential condominiums, and associated lot division.

The subject property, located in the B-6 Eastern Waterfront Mixed Zone, is a vacant, previously developed lot approximately 1.39 acres in size. The property is essentially void of vegetation except for sporadic grass and weed type vegetation. There are no significant natural features due to its intense level of past development. The entire lot slopes gently from southwest to northeast, from approx. elevation 18' down to 14'. The hotel portion of the site is moderately flat, limiting the need for significant earthwork. The parcel has recently been used as a gravel parking lot and historically as a portion of the Canadian National Railways Grand Trunk Railroad system. The main body of the lot is bound on three sides by streets; Fore to the west, Hancock to the north, and Thames (Commercial Street Extension) to the east. Other parcels on the block include an existing lot to the east (part of the City's Historic District) containing the former Grand Trunk Railroad office building and an existing lot to the west containing the Portland Water District Pump Station. Surrounding land uses include: a parking garage with ground floor retail space and a hotel to the west across Fore Street; commercial, office, and parking to the north across Hancock Street; and the Ocean Gateway Terminal to the east across Thames Street (Commercial Street Extension).

The proposed project will divide the existing parcel into two lots. Lot 1 (approx. 28,541 sf) will be developed as part of this application into a six (6) story building that fronts along the three adjacent streets, and will include a 150 room AC Hotel (by Marriott), 16 residential condominiums, and separate ground floor retail or restaurant space. An interior service area for the hotel and restaurant will be accessed from Hancock Street. The proposed site will have vehicular access from Fore Street by a shared two-way driveway that terminates in a formal cul-de-sac. New on street parking is proposed along Fore Street by a shift in the painted center line. Lot 2 (approx. 32,101 sf) will consist of the remaining land

and will remain undeveloped at this time. More details concerning the proposed development are available in the attached project description.

It is our hope to begin the review process with the City Staff and schedule a workshop with the Planning Board when appropriate at their next available meeting. Attached you will find one copy of the written documents (including application fee), one full size (24"x36") copy of the plans, one reduced size (11"x17") copy of the plans, and a CD with the entire application (written documents and plans).

We look forward to working with you, Planning Department staff, and the Planning Board in the review of this project. Please feel free to contact me to discuss any questions or concerns you may have regarding the attached application materials.

Sincerely,
CARROLL ASSOCIATES

A handwritten signature in black ink, appearing to read 'Patrick J. Carroll', with a long horizontal flourish extending to the right.

Patrick J. Carroll
Principal

Enc.

Cc: Ara Aftandilian, Essex North Hospitality, LLC
Maureen McGlone, Ransom Consulting Engineers

2. Application



Level III – Preliminary and Final Site Plans Development Review Application Portland, Maine

Planning and Urban Development Department
Planning Division

Portland's Planning and Urban Development Department coordinates the development review process for site plan, subdivision and other applications under the City's Land Use Code. Attached is the application form for a Level III: Preliminary or Final Site Plan. Please note that Portland has delegated review from the State of Maine for reviews under the Site Location of Development Act, Chapter 500 Stormwater Permits, and Traffic Movement Permits.

Level III: Site Plan Development includes:

- New structures with a total floor area of 10,000 sq. ft. or more except in Industrial Zones.
- New structures with a total floor area of 20,000 sq. ft. or more in Industrial Zones.
- New temporary or permanent parking area(s) or paving of existing unpaved parking areas for more than 75 vehicles.
- Building addition(s) with a total floor area of 10,000 sq. ft. or more (cumulatively within a 3 year period) except in Industrial Zones.
- Building addition(s) with a total floor area of 20,000 sq. ft. or more in Industrial Zones.
- A change in the use of a total floor area of 20,000 sq. ft. or more in any existing building (cumulatively within a 3 year period).
- Multiple family development (3 or more dwelling units) or the addition of any additional dwelling unit if subject to subdivision review.
- Any new major or minor auto business in the B-2 or B-5 Zone, or the construction of any new major or minor auto business greater than 10,000 sq. ft. of building area in any other permitted zone.
- Correctional prerelease facilities.
- Park improvements: New structures greater than 10,000 sq. ft. and/or facilities encompassing 20,000 sq. ft. or more (excludes rehabilitation or replacement of existing facilities); new nighttime outdoor lighting of sports, athletic or recreation facilities not previously illuminated.
- Land disturbance of 3 acres or more (includes stripping, grading, grubbing, filling or excavation).

Portland's development review process and requirements are outlined in the Land Use Code (Chapter 14) which is available on our website:

Land Use Code: <http://me-portland.civicplus.com/DocumentCenter/Home/View/1080>

Design Manual: <http://me-portland.civicplus.com/DocumentCenter/View/2355>

Technical Manual: <http://me-portland.civicplus.com/DocumentCenter/View/2356>

Planning Division
Fourth Floor, City Hall
389 Congress Street
(207) 874-8719

Office Hours
Monday thru Friday
8:00 a.m. – 4:30 p.m.

PROJECT NAME: PROPOSED AC HOTEL

PROPOSED DEVELOPMENT ADDRESS:

FORE, HANCOCK, AND THAMES STREET (COMMERCIAL STREET EXTENSION)

PROJECT DESCRIPTION:

HOTEL, RETAIL, AND RESIDENTIAL CONDOMINIUMS

CHART/BLOCK/LOT: 019-B-20

**PRELIMINARY PLAN
FINAL PLAN**

X SEPT 29, 2015

CONTACT INFORMATION:

Applicant – must be owner, Lessee or Buyer Name: ARA AFTANDILIAN Business Name, if applicable: PORTLAND NORWICH GROUP Address: 2330 PALM RIDGE ROAD City/State : SANIBEL, FL Zip Code: 33957	Applicant Contact Information Work # 978.887.3640 Home# Cell # 978.325.2900 Fax# e-mail: AA.SUMMIT@PRODIGY.NET
Owner – (if different from Applicant) Name: LRAR, LLC Address: 1270 SOLIDERS FIELD ROAD City/State : BOSTON, MA Zip Code: 02135	Owner Contact Information Work # Home# Cell # Fax# e-mail:
Agent/ Representative Name: PATRICK CARROLL CARROLL ASSOCIATES Address: 217 COMMERCIAL ST., SUITE 200 City/State : PORTLAND Zip Code: 04101	Agent/Representative Contact information Work # 207.772.1552 Cell # e-mail: PCARROLL@CARROLL-ASSOC.COM
Billing Information Name: NORWICH PARTNERS, LLC Address: 25 FOOTHILL STREET, SUITE 1A City/State : LEBANON, NH Zip Code: 03766	Billing Information Work # 603.643.2206 Cell # Fax# e-mail:

Engineer Name: STEPHEN BRADSTREET RANSOM CONSULTING ENGINEERS Address: 400 COMMERCIAL ST., SUITE 404 City/State : PORTLAND Zip Code: 04101	Engineer Contact Information Work # 207.772.2891 Cell # _____ Fax# _____ e-mail: STEPHEN.BRADSTREET@RANSOMENV.COM
Surveyor Name: JOHN SWAN OWEN HASKELL, INC. Address: 390 US ROUTE ONE City/State : FALMOUTH Zip Code: 04105	Surveyor Contact Information Work # 207.774.0424 Cell # _____ Fax# _____ e-mail: JSWAN@OWENHASKELL.COM
Architect Name: ROB FESTA GROUP ONE PARTNERS, INC. Address: 21 WEST THIRD STREET City/State : BOSTON, MA Zip Code: 02127	Architect Contact Information Work # 617.268.7000 Cell # _____ Fax# _____ e-mail: ROB@GROUPONEINC.COM
Attorney Name: LEE LOWRY JENSEN BAIRD GARDNER HENRY Address: 10 FREE STREET, PO BOX 4510 City/State : PORTLAND Zip Code: 04112-4510	Attorney Contact Information Work # 207.775.7271 Cell # _____ Fax# _____ e-mail: LLOWERY@JBGH.COM

APPLICATION FEES:

Check all reviews that apply. (Payment may be made by Credit Card, Cash or Check payable to the City of Portland.)

Level III Development (check applicable reviews) ___ Less than 50,000 sq. ft. (\$500.00) ___ 50,000 - 100,000 sq. ft. (\$1,000) <u>X</u> 100,000 – 200,000 sq. ft. (\$2,000) ___ 200,000 – 300,000 sq. ft. (\$3,000) ___ over \$300,00 sq. ft. (\$5,000) ___ Parking lots over 11 spaces (\$1,000) ___ After-the-fact Review (\$1,000.00 plus applicable application fee) Plan Amendments (check applicable reviews) ___ Planning Staff Review (\$250) ___ Planning Board Review (\$500) The City invoices separately for the following: • Notices (\$.75 each) • Legal Ad (% of total Ad) • Planning Review (\$40.00 hour) • Legal Review (\$75.00 hour) Third party review fees are assessed separately. Any outside reviews or analysis requested from the Applicant as part of the development review, are the responsibility of the Applicant and are separate from any application or invoice fees.	Other Reviews (check applicable reviews) ___ Traffic Movement (\$1,000) <u>X</u> Stormwater Quality (\$250) <u>X</u> Subdivisions (\$500 + \$25/lot) # of Lots 18 x \$25/lot = \$450 (16 residential condo units and 2 land lots) ___ Site Location (\$3,000, except for residential projects which shall be \$200/lot) # of Lots ___ x \$200/lot = _____ ___ Other _____ ___ Change of Use ___ Flood Plain ___ Shoreland ___ Design Review ___ Housing Replacement ___ Historic Preservation <u>Total fee: \$3200</u>
---	---

APPLICATION SUBMISSION:

1. All site plans and written application materials must be submitted electronically on a CD or thumb drive with each plan submitted as separate files, with individual file which can be found on the **Electronic Plan and Document Submittal** page of the City's website at <http://me-portland.civicplus.com/764/Electronic-Plan-and-Document-Submittal>
2. In addition, one (1) paper set of the plans (full size), one (1) paper set of plans (11 x 17), paper copy of written materials, and the application fee must be submitted to the Building Inspections Office to start the review process.

The application must be complete, including but not limited to the contact information, project data, application checklists, wastewater capacity, plan for fire department review, and applicant signature. The submissions shall include one (1) paper packet with folded plans containing the following materials:

1. One (1) full size site plans that must be folded.
2. One (1) copy of all written materials or as follows, unless otherwise noted:
 - a. Application form that is completed and signed.
 - b. Cover letter stating the nature of the project.
 - c. All Written Submittals (Sec. 14-525 2. (c), including evidence of right, title and interest.
3. A stamped standard boundary survey prepared by a registered land surveyor at a scale not less than one inch to 50 feet.
4. Plans and maps based upon the boundary survey and containing the information found in the attached sample plan checklist.
5. One (1) set of plans reduced to 11 x 17.

Please refer to the application checklist (attached) for a detailed list of submission requirements.

APPLICANT SIGNATURE:

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Planning Authority and Code Enforcement's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

This application is for a Level III Site Plan review. It is not a permit to begin construction. An approved site plan, a Performance Guarantee, Inspection Fee, Building Permit, and associated fees will be required prior to construction. Other Federal, State or local permits may be required prior to construction, which are the responsibility of the applicant to obtain.

Signature of Applicant: 	Date: SEPTEMBER 29, 2015
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PROJECT DATA

The following information is required where applicable, in order to complete the application.

Total Area of Site	60,642 sq. ft.
Proposed Total Disturbed Area of the Site	32,820 sq. ft.
If the proposed disturbance is greater than one acre, then the applicant shall apply for a Maine Construction General Permit (MCGP) with DEP and a Stormwater Management Permit, Chapter 500, with the City of Portland.	
Impervious Surface Area	
Impervious Area (Total Existing)	entire parcel 60,642 sq. ft.
Impervious Area (Total Proposed)	Lot 1 - 27,767 sq. ft.
	Lot 2 - 32,101
Building Ground Floor Area and Total Floor Area	
Building Footprint (Total Existing)	0 sq. ft.
Building Footprint (Total Proposed)	20,385 sq. ft.
Building Floor Area (Total Existing)	0 sq. ft.
Building Floor Area (Total Proposed)	120,760 sq. ft.
Zoning	
Existing	B-6 and SHORELAND ZONE
Proposed, if applicable	B-6 and SHORELAND ZONE
Land Use	
Existing	VACANT
Proposed	COMMERCIAL / RESIDENTIAL
Residential, If applicable	
# of Residential Units (Total Existing)	0
# of Residential Units (Total Proposed)	16
# of Lots (Total Proposed)	two (2) lots
# of Affordable Housing Units (Total Proposed)	0
Proposed Bedroom Mix	
# of Efficiency Units (Total Proposed)	N/A
# of One-Bedroom Units (Total Proposed)	8
# of Two-Bedroom Units (Total Proposed)	8
# of Three-Bedroom Units (Total Proposed)	N/A
Parking Spaces	
# of Parking Spaces (Total Existing)	0
# of Parking Spaces (Total Proposed)	0 ON SITE, ALL AT OCEAN GATEWAY PARKING GARAGE
# of Handicapped Spaces (Total Proposed)	0 ON SITE, ALL AT OCEAN GATEWAY PARKING GARAGE
Bicycle Parking Spaces	
# of Bicycle Spaces (Total Existing)	0
# of Bicycle Spaces (Total Proposed)	4 ON SITE, REMAINDER AT PARKING GARAGE OR IN HOTEL
Estimated Cost of Project	\$20,000,000

PRELIMINARY PLAN (Optional) - Level III Site Plan			
Applicant Checklist	Planner Checklist	# of Copies	GENERAL WRITTEN SUBMISSIONS CHECKLIST
X		1	Completed Application form
X		1	Application fees
X		1	Written description of project
X		1	Evidence of right, title and interest
X		1	Evidence of state and/or federal approvals, if applicable
X		1	Written assessment of proposed project's compliance with applicable zoning requirements
X		1	Summary of existing and/or proposed easement, covenants, public or private rights-of-way, or other burdens on the site
X		1	Written requests for waivers from site plan or technical standards, if applicable.
X		1	Evidence of financial and technical capacity
X		1	Traffic Analysis (may be preliminary, in nature, during the preliminary plan phase)
Applicant Checklist	Planner Checklist	# of Copies	SITE PLAN SUBMISSIONS CHECKLIST
X		1	Boundary Survey meeting the requirements of Section 13 of the City of Portland's Technical Manual
X		1	Preliminary Site Plan including the following: (information provided may be preliminary in nature during preliminary plan phase)
X			Proposed grading and contours;
X			Existing structures with distances from property line;
X			Proposed site layout and dimensions for all proposed structures (including piers, docks or wharves in Shoreland Zone), paved areas, and pedestrian and vehicle access ways;
X			Preliminary design of proposed stormwater management system in accordance with Section 5 of the Technical Manual (note that Portland has a separate applicability section);
X			Preliminary infrastructure improvements;
X			Preliminary Landscape Plan in accordance with Section 4 of the Technical Manual;
X			Location of significant natural features (including wetlands, ponds, watercourses, floodplains, significant wildlife habitats and fisheries or other important natural features) located on the site as defined in Section 14-526 (b) (1);
X			Proposed buffers and preservation measures for significant natural features, as defined in Section 14-526 (b) (1);
X			Location , dimensions and ownership of easements, public or private rights of way, both existing and proposed;
X			Exterior building elevations.



**PORTLAND FIRE DEPARTMENT
SITE REVIEW
FIRE DEPARTMENT CHECKLIST**



A separate drawing[s] shall be provided as part of the site plan application for the Portland Fire Department's review.

1. Name, address, telephone number of applicant **ARA AFTANDILIAN,**
2. **PORTLAND NORWICH GROUP, LLC.,**
3. Name address, telephone number of architect **PO BOX 394, TOPSFIELD MA 01983 978.887.3640**
4. **ROB FESTA, GROUP ONE PARTNERS, INC., 21 WEST 3RD ST., BOSTON, MA 02127, 617.268.7000**
5. Proposed uses of any structures [NFPA and IBC classification] **HOTEL, RESIDENTIAL CONDOS, AND RETAIL**
6. Square footage of all structures [total and per story] **FOOTPRINT = 20,385, TOTAL SF = 120,760 SF**
7. Elevation of all structures **ELEVATION = +/-16' + +/- 15'**
8. Proposed fire protection of all structures
 - **As of September 16, 2010 all new construction of one and two family homes are required to be sprinkled in compliance with NFPA 13D. This is required by City Code. (NFPA 101 2009 ed.)**
9. Hydrant locations **ACROSS FORE STREET AT OCEAN GATEWAY PARKING GARAGE, IN FRONT OF 144 FORE STREET, AND AT OCEAN GATEWAY TERMINAL**
10. Water main[s] size and location **12" MAIN IN FORE STREET AND 10" MAIN IN THAMES STREET**
11. Access to all structures [min. 2 sides] **YES, ACCESS TO ALL SIDES VIA STREETS AND DRIVEWAY**
12. A code summary shall be included referencing NFPA 1 and all fire department. Technical standards.

Some structures may require Fire flows using annex H of NFPA 1

CITY OF PORTLAND WASTEWATER CAPACITY APPLICATION

Department of Public Services,
55 Portland Street,
Portland, Maine 04101-2991



Mr. Frank J. Brancely,
Senior Engineering Technician,
Phone #: (207) 874-8832,
Fax #: (207) 874-8852,
E-mail: fjb@portlandmaine.gov

Date: **SEPTEMBER 29, 2015**

1. Please, Submit Utility, Site, and Locus Plans.

Site Address: **FORE, HANCOCK, AND THAMES STREET (COMMERCIAL STREET EXT.)**
Chart Block Lot Number: **019-B-20**

Proposed Use: **HOTEL, RESIDENTIAL CONDOS, RETAIL**
Previous Use: **VACANT**

Existing Sanitary Flows: **N/A** GPD
Existing Process Flows: **N/A** GPD

Description and location of City sewer that is to receive the proposed building sewer lateral.
12" LINE IN THAMES STREET

Site Category	
Commercial	X
Industrial (complete part 5 below)	
Governmental	
Residential	X
Other (specify)	X

HOTEL + RESTAURANT

(Clearly, indicate the proposed connections, on the submitted plans)

2. Please, Submit Contact Information.

City Planner's Name: **HELEN DONALDSON** Phone: **874.8723**

Owner/Developer Name: **VACANT**
Owner/Developer Address: **Commercial (see part 4 below)**

Phone: _____ Fax: _____ E-mail: _____

Engineering Consultant Name: **STEPHEN BRADSTREET, RANSOM CONSULTING ENGINEERS**
Engineering Consultant Address: **400 COMMERCIAL STREET, SUITE 404, PORTLAND, ME 04101**
Phone: **207.772.2891** Fax: _____ E-mail: **STEPHEN.BRADSTREET@RANSOMENV.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: **20,000** GPD
Peaking Factor/ Peak Times: **Included with above**

Specify the source of design guidelines: (i.e. **X** "Handbook of Subsurface Wastewater Disposal in Maine,"
___ "Plumbers and Pipe Fitters Calculation Manual," ___ Portland Water District Records, ___ Other (specify)

(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:

TBD

Size of External Grease Interceptor:

1,500 GAL.

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

0 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:

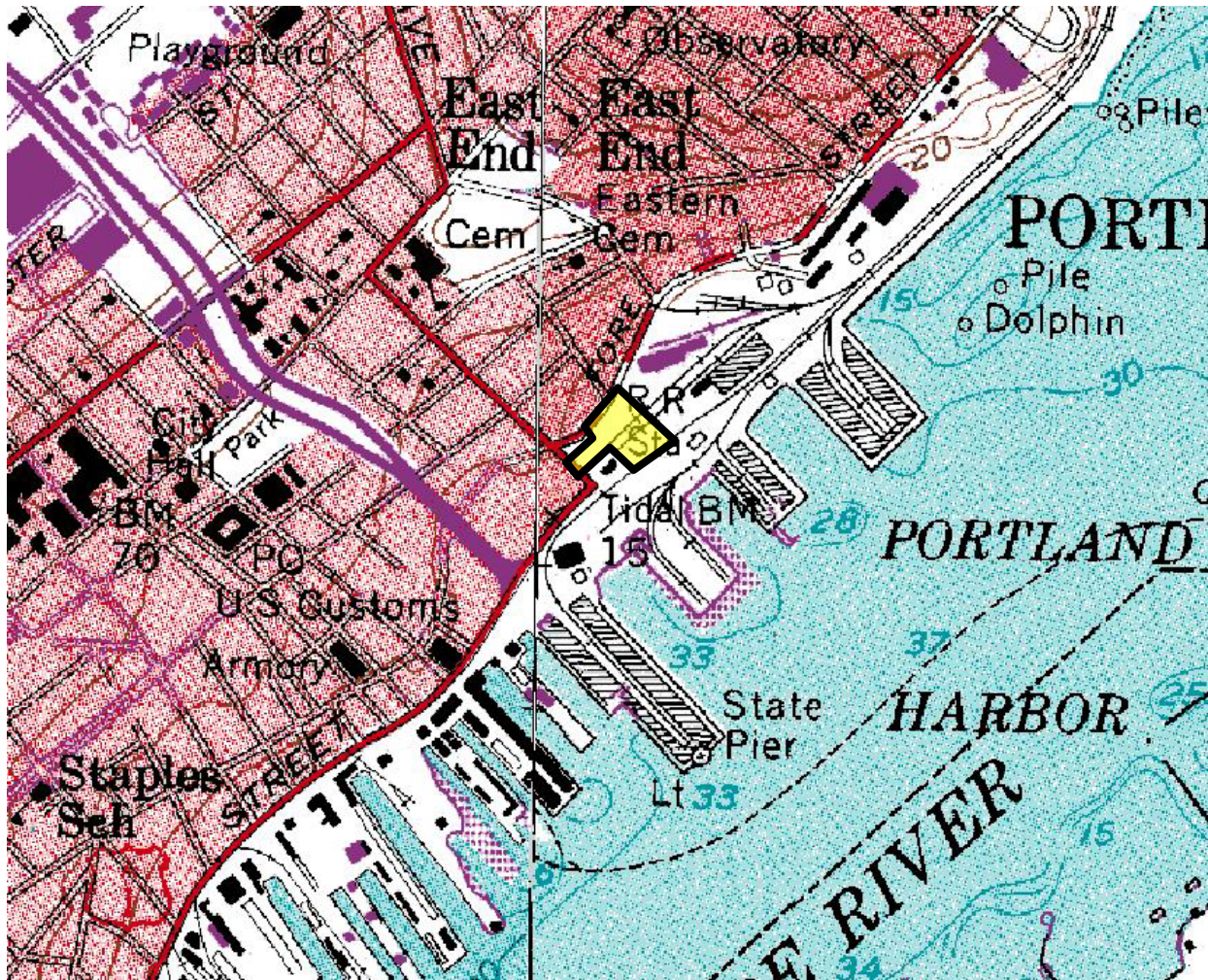
(Note: On the submitted plans, please show where the building's domestic sanitary sewer laterals, as well as the building's industrial-commercial process wastewater sewer laterals exits the facility. Also, show where these building sewer laterals enter the city's sewer. Finally, show the location of 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 below, or attached, as a separate sheet)

Notes, Comments or Calculation

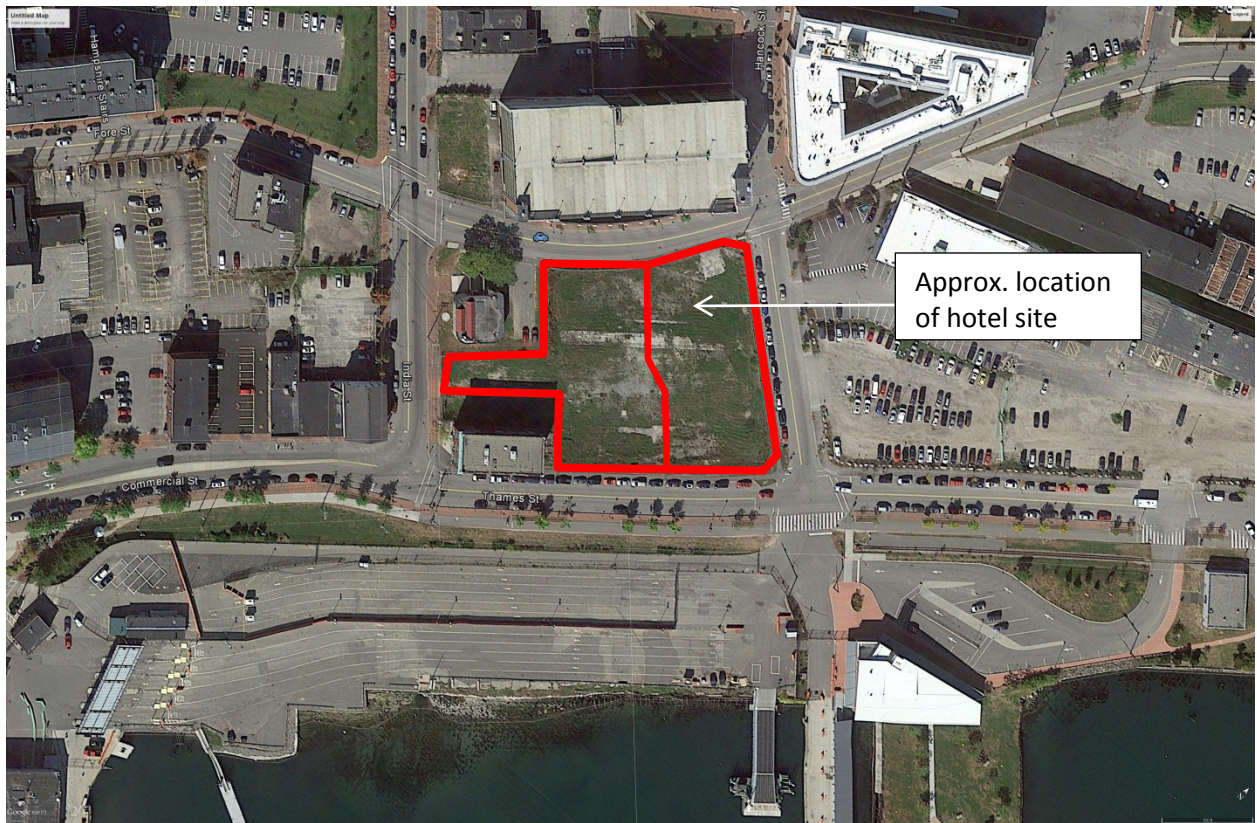
3. Location Maps

Location Map – USGS



USGS map of approximate subject property (outlined in black and filled with yellow).

Location Map – Aerial photograph



Aerial photograph of approximate vacant subject property (outlined in red).

4. Description of Project

Description of Project

Site: The proposed project will divide the existing parcel into two lots. Lot 1 (approx. 28,541 sf) will be developed as part of this application into a six (6) story building that fronts along the three abutting streets, and will include a 150 room AC Hotel (by Marriott), 16 residential condominiums, and separate ground floor retail or restaurant space. Lot 2 (approx. 32,101 sf) will consist of the remaining land and will remain undeveloped at this time.

New on-street parking (6 spaces), brick sidewalks, and other streetscape improvements are proposed along the existing property frontage on Fore Street, from the existing Portland Water District Pump Station lot north to the intersection with Hancock Street where a curb extension is proposed. By introducing on-street parking and a curb extension along Fore Street a section of lane and centerline restriping must occur, please see sheet C-1.0 - Site Plan (Gorrill-Palmer Traffic Engineers will be preparing more detailed street improvement plans at a later date). Hancock and Thames Streets are proposed to remain in their current lane configurations. New brick sidewalks, curb ramps, street trees, and lighting (updated and or relocated) will occur on all the three abutting streets.

The project will be accessed from Fore Street with a 22' driveway that terminates at a one-way cul-de-sac. The outermost portion of the cul-de-sac provides short term valet/drop-off/pick-up zone; the middle portion is an 18' one-way travel lane; and the inner most zone is a 10' radius raised island and 5' cobblestone buffer. This area has been designed for passenger and small delivery type vehicles. The driveway will provide access to one of the hotels entry/exit points, the residential condominiums main entry/exit, and an interior courtyard. The driveway, adjacent sidewalks, and courtyard will be paved with a combination of regular brick, pervious brick, and granite cobble stones.

It is proposed that long-term/permanent parking will occur across the street at the Ocean Gateway Parking Garage, which is under contract to purchase by the applicant. There is ample parking available in the garage with only 330 of 720 parking spaces currently subject to leases.

Landscaping: On the south side of the building, between the hotel and condominium entry/exit doors is a small, three season gathering space designed to take advantage of the southern exposure. It is defined by a building mounted steel trellis and flanked by landscaping which helps to soften edges and highlight the building access points with multi-season interest. The center island in the cul-de-sac will have space reserved for a piece of sculpture or art set in a bed of vegetation. All sidewalks will be planted with street trees either in flush tree grates or raised granite planters. The street trees will help

to reduce the mass of the building to a more pedestrian scale, define sidewalks, provide shade, and offer seasonal color/interest.

Utilities :

The majority of the utility connections for the hotel building will be made in Thames Street as the mechanical room and demarcation locations are on that end of the structure. With the hotel use (with kitchen) and the potential for a restaurant use in the retail space, it is estimated that water consumption could be on the order of 20,000 gallons per day. Water service connection will be made to the 10-inch water main in Thames Street and separated at the building for domestic and fire use. Sanitary discharge from the building will be into the 12-inch sanitary line in Thames Street. The potential restaurant kitchen and the hotel kitchen will have separate discharges to the system which include a grease trap. The discharge from the hotel kitchen can be made into the sanitary line in Hancock Street. Natural gas is available in Thames Street. Future development of the parcel will likely utilize service connections within Thames Street, but will consider a trunk line to the interior of the property and branch off to individual structures.

Three phase electric power is available in Fore Street. This project proposes to make a primary connection to the electric available in Fore Street, run it beneath the sidewalk on Hancock and Thames Street, and terminating in a subterranean transformer vault adjacent to the hotel. The secondary electric, along with telephone, data, and cable will enter the building at the mechanical room with the other utilities and terminate in an electrical room on the second floor. It is anticipated that the transformer and vault will be sized for future development.

Stormwater:

The existing site has been vacant for some time, but exists as a gravel site with several concrete pads at or close to the surface. The site was most recently used as a staging area for construction projects in the area completed within the last 10 years. The site is relatively flat with general grade sloping from south to north. Surface stormwater currently sheds off of the property and enters into the separated storm drain system within Hancock and Thames Street. This system discharges to the ocean adjacent to the Ocean Gateway terminal building. While Chapter 500 redevelopment standards would indicate that new development of the site would not specifically require treatment of stormwater, the developer has chosen to provide permeable pavers with a filter system within the driveway and drop-off area. Storage of the stormwater would be provided below the filter system (R-

Tank system is currently proposed). The hotel roof is not proposed to be treated; however, the roof drains will connect to the subsurface storage system and provide detention prior to discharge to the storm drain. The storage system has been oversized to include connection for buildings within the future development.

Architecture: The proposed building is a 6-story, 'C' shaped structure containing 5 levels of hotel and 1 level of residential, 120,760 gsf with 150 guestrooms and 16 residential units. Its longer axis fronts on Hancock Street and the two short legs front on Fore and Thames Streets.

The ground floor will be comprised of two uses: hotel and approximately 4,000 sf of retail or restaurant space. The hotel's lobby, reception, meeting room, lounge / bar, back of house areas, and two entry points (one at Hancock/Fore Street intersection and one from the interior courtyard) are all located on the ground floor. The retail or restaurant space is located on the east side facing Thames Street. The main access is from a door located at the intersection of Hancock and Thames Streets. There is a secondary door located on the south side which could serve as access for potential outdoor dining. Between the hotel and the separate retail/restaurant space there is a proposed interior, common receiving, delivery, and trash room. This service area will be accessed for service from Hancock Street.

The second floor would be comprised of 36 hotel rooms and a fitness room. Floors three through five would be comprised of 38 hotel rooms each. On the sixth (top) floor is where sixteen residential condominiums will be located. The breakdown of condominium units is 8-one bedroom units and 8-two bedroom units. The condominiums would have their own separate, private, entrance and lobby located off the inner courtyard.

Exterior façade materials on the ground floor will be precast concrete, aluminum storefront, metal and glass canopy at the tenant entry and glass vestibules at the hotel and residential entries. Other typical floors will use brick veneer, cast unit masonry, composite metal panel, metal shingle and punched aluminum "warehouse" style windows.

5. Evidence of Right, Title, or Interest

AGREEMENT FOR THE PURCHASE AND SALE OF REAL ESTATE

AGREEMENT made and entered into this 6th day of March, 2015 (the "Effective Date"),
by and between _____ with its principal place of business
in _____ and _____
_____ with its principal place of business in _____
_____ are sometimes each referred to herein as "Seller" and collectively referred
to herein as "Sellers") and _____
with its principal place of business in _____ or its assigns
("Buyer").

WITNESSETH AS FOLLOWS:

1. PURCHASE AND SALE.

(a) _____ agrees to sell, and Buyer agrees to buy, on the terms and conditions hereinafter set forth herein, certain real estate consisting of a development parcel of land approximately 1.34 acres in area, located across from the City of Portland's Ocean Gateway Marine Terminal in Portland, Maine on and between Fore Street, Hancock Street and Commercial Street Extension, as more particularly described in Exhibit A attached hereto and incorporated by reference herein and shown on the plan attached hereto as Exhibit A-1. The real estate to be conveyed pursuant to this Agreement by _____ is hereinafter referred to herein as the "Development Parcel." Sellers and the Buyer acknowledge that with respect to the Development Parcel, _____ has received approval to subdivide the land, of which a portion of the Development Parcel is now a part, that is subject to the Declaration of the Longfellow, a Condominium, dated September 29, 2006, and recorded in the Cumberland County Registry of Deeds in Book 24419, Page 122 (the "Condominium Declaration"), but has not yet recorded said approval. Final approval to subdivide the land consistent with the condominium plan attached hereto as Exhibit A-2 (the "Subdivision Approval") shall be recorded by Sellers, and the recording of same shall be a condition of the Closing hereunder. The description of the Development Parcel on Exhibit A is the contemplated description of the parcel to be conveyed by _____ as set forth in this Agreement. following recording of the Subdivision Approval as aforesaid. Following or simultaneously with the recording of the Subdivision Approval, _____ shall execute and record a First Amendment to Declaration of the Longfellow, a Condominium, in the form attached hereto as Exhibit J (the "Condominium Declaration Amendment"). The execution and recording by _____ of the Condominium Declaration Amendment shall be a condition of the Closing hereunder.

(b) _____ agrees to sell, and Buyer agrees to buy, on the terms and conditions set forth herein, certain real estate and the parking garage constructed thereon consisting of a parking garage with seven hundred twenty (720) spaces located on a parcel of land approximately thirty-seven thousand (37,000) square feet in area situated at 161 Fore Street, Portland, Maine, as more particularly described in Exhibit B attached hereto and incorporated by reference herein and shown on the plan attached hereto as Exhibit B-1. The real

estate to be conveyed pursuant to this Agreement by _____; hereinafter referred to herein as the "_____ Parcel or Garage Parcel."

(c) Sellers agree to sell, and Buyer agrees to buy the Development Parcel and the _____ Parcel together as a package on the terms and conditions set forth in this Agreement. The Development Parcel and the _____ Parcel are hereafter collectively referred to herein as the "Premises."

2. PURCHASE PRICE. Subject to any adjustments and prorations hereinafter described, Buyer agrees to pay for the Premises the sum of _____ (the "Purchase Price"), which shall be payable as follows:

(a) The sum of _____)) to be paid simultaneously with the execution of this Agreement, as earnest money deposit (the "Deposit"), by wire transfer pursuant to the wiring instructions attached as Exhibit C-1, which shall be held by _____ (the "Escrow Agent"), pursuant to an escrow agreement attached as Exhibit C and shall be credited towards the Purchase Price at Closing;

(b) Intentionally omitted;

(c) The balance of _____ to be paid in immediately available funds at Closing by wire transfer into escrow with the Escrow Agent to be paid to the Sellers pursuant to wire instructions provided by Sellers pursuant to the terms of this Agreement; and

(d) _____, and Buyer shall each have the right to allocate the Purchase Price as it relates to said party between the _____ Parcel and the Development Parcel as such party shall consider appropriate in its sole discretion.

3. REMOVAL OF USE RESTRICTIONS: VRAP/CANADIAN NATIONAL RESTRICTIONS.

(a) (i) Buyer acknowledges that the Development Parcel is subject to certain covenants benefiting _____ as set forth in a certain Declaration of Covenants and Restrictions by and between Canadian National and One India Street Associates acknowledged June 6, 1996 and recorded in the Cumberland County Registry of Deeds in Book 12565, Page 32, as affected by Declaration of One India Street Associates dated September 10, 1998 and recorded in the Cumberland County Registry of Deeds in Book 14151, Page 258 (collectively, the "Use Restrictions"). Sellers shall arrange, in coordination with Buyer and _____, for the issuance by the Maine Department of Environmental Protection (the "DEP") of a Certificate of Completion of Remedial Actions Under a Voluntary Response Action Plan ("India Street Certificate of Completion") for the One India Street parcel encumbered by the Use Restrictions; and Sellers shall obtain from _____ a Declaration of Environmental Covenant in statutory form and approved in advance by Buyer and _____ Development Parcel Covenant"), for the benefit of Buyer and _____ which Development Parcel Covenant shall be in recordable form and shall remove any provisions prohibiting the use of the Development

Parcel for residential purposes and any provisions prohibiting the excavation of the soil below one foot subsurface, provided that any prospective residential uses of the Development Parcel and any excavation of soil below one foot of subsurface on the Development Parcel shall remain subject to such terms and conditions as the DEP shall impose under the Development Parcel Covenant.

(ii) As a condition of the Closing hereunder, Sellers shall have arranged for the modification of the current VRAP application such that the DEP shall have issued a site-specific No Action Assurance Letter ("Assurance Letter") to Buyer for the Development Parcel separate from any other parcel. Buyer shall submit the application to effect this modification as soon as reasonably feasible. Sellers shall have the right to review the application, and the Buyer and the Sellers shall cooperate with each other in connection with this application.

(b) Garage Parcel Certificates. As a condition of the Closing, Sellers shall have obtained from the DEP a Certificate of Completion of Remedial Actions Under a Voluntary Response Action Plan for the Garage Parcel ("Garage Parcel Certificate of Completion") and an executed a site-specific Declaration of Environmental Covenant in a form consistent with the DEP Draft VRAP Environmental Covenant Template authorizing the current use and operation of the Garage Parcel ("Garage Parcel Covenant"), which Garage Parcel Covenant explicitly supersedes the State of Maine Department of Environmental Protection Maine Hazardous Waste Seepage and Solid Waste Management Act Findings of Fact and Order dated December 18, 1990 and recorded in the Cumberland County Registry of Deeds in Book 9936, Page 205 and the Declaration of Restrictive Covenant by Amdura Corporation dated March 9, 1992 and recorded in the Cumberland County Registry of Deeds in Book 9973, Page 122, as amended by Amended and Restated Declaration of Restrictive Covenant dated March 29, 2004 and recorded in the Cumberland County Registry of Deeds in Book 21111, Page 26.

(c) Cooperation by Sellers and Buyer. Sellers shall provide Buyer an opportunity to review and approve in advance all written submittals to the DEP and the opportunity to participate in all meetings and phone conferences with DEP relating to the matters addressed in subparagraph 3(b) of this Agreement.

4. TITLE. Sellers shall convey the Premises to Buyer at Closing in fee simple with good and marketable title, free and clear of all mortgages, liens, and encumbrances except for the following (collectively, the "Permitted Encumbrances"):

As to the Development Parcel:

(a) The matters set forth on Exhibit D annexed hereto and incorporated herein by reference.

As to the Parcel:

(a) The matters set forth on Exhibit E annexed hereto and incorporated herein by reference, as the same may be subject to any provision of this Agreement which provides for amendment or modification of any such matters.

Buyer has had the opportunity prior to the execution of this Agreement to review the title and survey for the Premises. Buyer is currently undertaking to have surveys of both the Development Parcel and the Garage Parcel (the "New Surveys") completed by , but the Buyer acknowledges that the existing surveys for each of the Development Parcel and the Garage Parcel identified on Exhibit F (the "Existing Surveys") are acceptable, subject to the adjustments required as a result of the subdivision of the Development Parcel. Buyer's obligation to close hereunder is subject to the Sellers' obligation to deliver the Garage Parcel and the Development Parcel with no additional matters being depicted on the New Surveys except for those matters contemplated by this Agreement.

Except as contemplated by the terms of this Agreement, Sellers agree that they shall not further encumber or permit to be encumbered the Premises by any liens, mortgages, attachments, covenants, restrictions or easements or other matters of record after the Effective Date.

5. DUE DILIGENCE.

(a) Buyer has had the opportunity to inspect the physical condition of the Development Parcel and the Garage Parcel including conducting tests, studies, appraisals, and examinations of the Development Parcel and the Garage Parcel and Buyer is accepting the Development Parcel and the Garage Parcel in their current "as is" condition as of the Effective Date. Notwithstanding the foregoing, Buyer shall have the right to enter upon the Development Parcel and the Garage Parcel for purposes of completing a so-called "Phase I Site Assessment" for each Parcel and for the purposes of completing the New Surveys as heretofore set forth. Such matters shall not extend or create any additional due diligence periods for the purposes of this Agreement, provided that the Sellers are obligated to deliver the Development Parcel and the Garage Parcel in conformance with the terms of this Agreement. Buyer shall not commence any ground water or soils testing, make any borings, install any monitoring wells or perform any other invasive testing without first obtaining the applicable Seller's written consent, which consent shall not be unreasonably withheld (collectively, the "Inspections"). Buyer may also seek to obtain, at its sole cost and expense, all zoning changes, site and subdivision approvals, variances, environmental and land use permits, and all other governmental licenses, permits and approvals that shall be desired for the use, operation, and development of the Garage Parcel and/or the Development Parcel by Buyer as Buyer deems necessary or desirable, in its sole judgment (collectively, the "Permits"). Buyer shall be solely responsible for the cost and expense of the Inspections and Permits.

Sellers shall deliver the Premises at the Closing in the condition as of the Effective Date, subject to reasonable wear and tear and any changes to the Premises as a result of the actions of the Buyer or those claiming under the Buyer, and further subject to the provisions of this Agreement.

(b) Buyer and its agents shall have a right of entry upon the Development Parcel and the Garage Parcel from and after the Effective Date until the Closing for purposes set forth herein, and agrees promptly to restore the Garage Parcel and/or the Development Parcel to the condition existing immediately prior to the entry. Buyer agrees to indemnify, defend and save the applicable Seller harmless from and against any and all claims, demands or causes of action or other liability, damage, cost or expense (including, without limitation, reasonable attorneys' fees) resulting from damage or injury to persons or property caused by Buyer, its agents, servants or its independent contractors while on the Garage Parcel and/or the Development Parcel, except to the extent resulting from the negligence or willful misconduct of the Sellers or either one of them. Upon request of the applicable Seller, Buyer shall furnish evidence that it (or its contractor) carries reasonable amounts of liability insurance before Buyer (or its contractor) enters the Garage Parcel or the Development Parcel. The provisions of this subparagraph 5(b) shall survive the Closing and/or the termination of this Agreement.

(c) Sellers acknowledge that the Buyer will be filing applications with the City of Portland in connection with Buyer's contemplated development of the Development Parcel. The Buyer shall provide the Sellers in advance of any filing with copies of all such application documents and the Sellers shall cooperate with the Buyer, at no cost to Sellers, in connection with such applications, including execution of all documents to be filed with the municipality or other governmental agencies as the "owner" of the Development Parcel; provided that any such filings shall not be binding upon the Sellers or the Development Parcel if the Closing does not occur.

6. CLOSING.

(a) The closing of the transaction contemplated by this Agreement (the "Closing") shall take place at the offices of:

on that date (the "Closing Date") which is the earlier of (i) the date which is sixty (60) days after the satisfaction of all conditions to Closing set forth in this Agreement, and (ii) Sellers shall provide notice of the satisfaction of such conditions to the Buyer, together with evidence of such satisfaction, as and when each such condition is satisfied. The Closing Date is subject to Buyer's right to extend under subparagraph 6(c) below.

(b) At Closing, Sellers shall execute and deliver to Buyer, against payment of the Purchase Price, Warranty Deeds conveying good clear record and marketable title to the Premises, in accordance with the Short Form Deeds Act, 33 M.R.S.A. §§ 761 *et seq.* (collectively, the "Deed"). Each Seller further agrees to execute (if and as applicable) and deliver to Buyer at Closing the following documents for each of the parcels of the Premises: (i) a Certificate of Non-Foreign Status (as required by Internal Revenue Service regulations); (ii) a title insurance "Seller's Affidavit" regarding mechanics liens and persons in possession; (iii) an affidavit regarding underground storage tanks (as required by Maine law); (iv) documents demonstrating Seller's authority to convey and good standing as evidenced by attested and/or certified copies of Seller's resolution(s) authorizing the transaction contemplated herein and a copy of the relevant portions of their respective Operating Agreements; (v) the Assignment and Assumption of Leases and Rents; (vi) the Estoppels; (vii) broker's lien waivers in customary form executed by the brokers identified in this Agreement; (viii) Maine REW forms evidencing Seller's residency for purposes of withholding tax as required by Maine law; and (ix) if not

previously provided to Buyer, an original (or, if recorded, a copy bearing evidence that such document was recorded), of each of the documents required under this Agreement to be obtained, executed, and/or recorded by Sellers, or either one of them, including, without limitation, the Subdivision Approval, the Condominium Declaration Amendment, the India Street Certificate of Completion, the Development Parcel Covenant, the Garage Parcel Certificate of Completion, the Garage Parcel Covenant, the Survival Agreement Termination, the Release, and the Standard Parking Termination. All leases related to the Parcel shall be delivered to the Buyer at the Closing, together with copies of all permits, records and documents related to the Premises in either Seller's possession and not previously delivered to the Buyer.

(c) Buyer shall have the one-time option to extend the time for Closing for up to an additional ninety (90) days to a date chosen by Buyer by notice to the Sellers and by making an additional deposit in the amount of

the "Closing Extension Deposit". To exercise such extension option, Buyer shall give Sellers written notice of the exercise of the option ("Closing Extension Notice"), and shall within one (1) business day after the delivery of the Closing Extension Notice deposit the Closing Extension Deposit with the Escrow Agent by wire transfer in accordance with the wire instructions included as Exhibit C-1. The Closing Extension Deposit once made shall be deemed part of the Deposit under this Agreement.

7. ASSIGNMENTS AND ASSUMPTIONS OF PARKING LEASES/DELIVERY OF ESTOPPELS. At Closing, Buyer and shall execute a Parking Lease Assignment and Assumption Agreement (the "Assignment and Assumption of Leases and Rents") in the form annexed hereto and incorporated herein as Exhibit G-1, whereby

shall assign and Buyer shall assume rights and obligations of under the parking leases set forth on Exhibit G. Sellers shall deliver at the Closing to the Buyer Estoppels (the "Estoppels") from each of the parking tenants identified in items 1 through 6 on Exhibit G, said Estoppels to be in the form attached hereto as Exhibit H, or in such other form as is reasonably approved by the Buyer, such approval not to be unreasonably withheld, delayed or conditioned. Buyer shall have the option to close notwithstanding the lack of receipt of all Estoppels. It is acknowledged by the parties that the East India Lease and the Eight Middle Lease (each as defined in Exhibit G) were executed in connection with certain abutters agreements applicable to the Garage Parcel and certain properties adjacent to the Garage Parcel and, although such leases have been executed and are in effect as of the Effective Date, no rights to "draw down" parking spaces thereunder have been exercised as of the Effective Date. The parties acknowledge that a parking lease by and between , as owner, and as tenant, is contemplated as of the Effective Date, and Buyer hereby consents to execution of such a parking lease in the form attached hereto as Exhibit I.

8. RISK OF LOSS, DAMAGE AND INSURANCE.

(a) All risk of loss to the Development Parcel and the Garage Parcel prior to the Closing Date shall be borne by Sellers. Sellers shall keep the Premises insured against fire and other extended coverage risks up to and including the Closing Date consistent with the present

insurance in place for each of said parcels and including full replacement cost for the Garage Parcel.

(b) In the event that the Development Parcel or the Garage Parcel are destroyed or damaged and are not restored prior to Closing, Buyer shall have the right to terminate this Agreement and to receive a refund of all Deposits, and in that case, Sellers shall be solely entitled to any insurance proceeds payable for or on account of any such destruction. In the event that Buyer should choose to close notwithstanding such damage or destruction, Buyer shall be entitled to any insurance proceeds payable for or on account of any such destruction provided that Sellers shall assign all such insurance to the Buyer at Closing.

(c) If, prior to the Closing, all or any material portion of the Premises shall be taken for any public use (other than minor takings for street widening) or access to or from the Premises shall be permanently taken or materially impaired, or any change(s) to public way(s) or the grade(s) thereof shall be made which materially and adversely affect or is likely to materially and adversely affect the Premises in Buyer's judgment for its anticipated development, or notice of any of the foregoing shall be made public or otherwise come to Buyer's attention (unless such action is terminated by the Closing), then, and in any of said events, by written notice to Sellers within ten (10) business days after Buyer receives notice of the same, Buyer shall either (i) terminate this Agreement, in which event this Agreement shall terminate, the Deposit, including the Closing Extension Deposit, if previously made, shall be refunded to Buyer, and the parties shall have no further liability or responsibility to each other, or (ii) elect to consummate the sale without reduction of the Purchase Price on account of same, in which event Sellers shall assign to Buyer all claims and rights, if any, on account of or arising out of any of the foregoing.

9. CONDITION OF THE PREMISES. Buyer agrees and acknowledges that Sellers make no representation concerning the condition or permitted uses of the Premises (other than as to title upon and subject to the terms and conditions set forth in Paragraph 4 of this Agreement) and that Buyer shall take the Premises at Closing in its "as is", "where is" and "with all faults" conditions as of the Effective Date, subject to the obligations of the Sellers for Closing as set forth in this Agreement.

10. POSSESSION OF THE PREMISES. Except as provided in Paragraph 7 above and Exhibit G referenced therein, the Premises shall be delivered to the Buyer at Closing free and clear of all tenancies or occupancies by any other person or entity.

11. ZONING AND DEVELOPMENT MATTERS. Upon Buyer's written request, Sellers shall provide Buyer with access to Sellers' applications for any permits or approvals relating to the Premises. Sellers make no warranty or representation to Buyer concerning the compliance of the Development Parcel or of the parcel with any federal, state or municipal land-use regulatory matters, including without limitation land-use statutes, zoning, permitted uses, conditional uses, environmental compliance or any similar matters. Sellers make no warranty or representation, express or implied or arising by operation of law, including, without limitation, any warranty of condition, habitability, merchantability, or fitness for a particular purpose in connection with the Premises, except as expressly set forth herein. Sellers shall not be liable for, or be bound by, any verbal or written statements, representations, real estate broker's "setups" or information pertaining to the Premises furnished by any real

estate broker, agent, employee, servant or any other person unless the same are specifically set forth in writing in this Agreement.

Sellers shall record prior to Closing and as a condition of Closing (i) a termination of the Survival Agreement recorded in the Cumberland County Registry of Deeds in Book 24420, Page 31 (the "Survival Agreement Termination") and (ii) a release of the City of Portland's right to repurchase the Development Parcel as set forth in Quitclaim Deed without Covenant from the City of Portland to LRAR LLC dated July 19, 2006, recorded with the Cumberland County Registry of Deeds in Book 24191, Page 218 (the "Release").

12. REPRESENTATIONS OF SELLERS. Sellers represent to the Buyer (as the sole representations made by Sellers or their respective members relating to the subject matter of this Agreement) the following as of the date hereof and which shall be true as of the date of the Closing hereunder:

(a) Sellers have received no written notice from the City of Portland or other governmental body of any alleged violation at the Premises respecting any zoning ordinances or other laws.

(b) All outstanding bills and/or accounts payable concerning the Premises are either paid or will be paid prior to or at Closing.

(c) Except as set forth on Exhibit G, there are no leases or other occupancy agreements affecting the Premises. The leases and/or occupancy agreements set forth in Exhibit G affect only the Garage Parcel, and there are no leases or other occupancy agreements affecting the Development Parcel.

(d) Other than as addressed in Paragraph 3 of this Agreement and in the Use Restrictions, Sellers have received no written notice from any governmental entity or agency of any special wastes, underground storage tanks, asbestos containing materials, waste oil, petroleum and any other hazardous substances, materials or wastes in or on the Premises. The terms used in the foregoing sentence shall include, without limitation, all substances, materials, etc., designated by such terms under any laws, ordinances or regulations, whether federal, state or local.

(e) There are no outstanding or pending liens, claims, rights of first refusal, or mortgages encumbering the Premises.

(f) Sellers have taken all corporate actions necessary to authorize the execution and delivery of this Agreement and to perform all of their respective obligations due to Buyer hereunder and they have the full right and power to consummate all of the transactions contemplated for it to be performed under this Agreement.

13. DEFAULT AND REMEDIES. If (a) Sellers shall refuse or fail to convey the Premises as herein provided for any reason other than (i) a default by Buyer and the expiration of any cure period; or (ii) the occurrence or application of any other provision of this Agreement or which permits Sellers to terminate this Agreement or which otherwise relieves Sellers of the

obligation to convey the Premises, or (b) either Seller otherwise fails to perform its obligations under this Agreement, provided that Buyer shall give Sellers seven (7) business days' notice of any such failure, then Buyer may elect either to (x) terminate this Agreement and recover the Deposit, including the Closing Extension Deposit, if previously made; or (y) enforce Sellers' obligations to convey the Premises by filing suit for specific performance within ninety (90) days of Buyer's actual knowledge of Sellers' default. Notwithstanding anything to the contrary, in the event the Premises, or any part thereof, is sold by Sellers or either one of them to a third party, and, as a result, the remedy of specific performance is not available to Buyer, then, in addition to the rights set forth in this Agreement, Buyer shall have the right to pursue damages against Sellers.

In the event that Buyer shall refuse or fail to close as required under this Agreement, Sellers shall retain the Deposit as liquidated damages for Buyer's failure to close and this shall be each Seller's sole remedy against Buyer at law and in equity. Sellers and Buyer acknowledge that the damages to Sellers for Buyer's failure to close as required under this Agreement is difficult to ascertain and Sellers and Buyer agree that the Deposit is a fair assessment of such damages.

14. CONDITIONS PRECEDENT TO BUYER'S OBLIGATION TO CLOSE. The Buyer's obligation to close is contingent upon all representations of Sellers contained in this Agreement being true as of the Closing and the Sellers having satisfied all of the obligations of the Sellers as a condition of the Closing as set forth herein. In the event the foregoing contingency is not satisfied and Buyer is not willing to waive the same, the Buyer shall have the right to pursue its remedies set forth in Paragraph 13 hereof. In the event the Buyer elects to terminate this Agreement, it shall do so by notifying Sellers in writing of the specific representations of Sellers or Closing conditions that are not true and/or have not been satisfied and by providing information to support the same at any time prior to or at the Closing. Upon such termination elected by the Buyer, the Deposit, including the Closing Extension Deposit, if previously made, shall be immediately returned to Buyer, and no party shall have any further obligations hereunder except for such obligations as shall survive the termination of this Agreement.

15. BROKERAGE. Sellers and the Buyer represent and warrant to each other that neither party has engaged the services of any real estate broker with respect to this transaction, except _____ . Sellers agree to indemnify and hold harmless Buyer for any claim made by _____ against Buyer for brokerage services. In addition, each party agrees to indemnify and hold harmless the other parties from any claim made by any broker other than _____ claiming by or through them. The foregoing indemnity shall include all legal fees and costs incurred in defending any claim therefor.

16. ADJUSTMENTS, PRORATIONS AND CLOSING COSTS.

(a) Real estate taxes, assessments, and charges shall be prorated as of the Closing Date.

(b) Metered utilities, such as water and sewer, shall be paid by Sellers through the date of Closing.

(c) The Maine real estate transfer tax shall be paid by Sellers and Buyer in accordance with 36 M.R.S.A. § 4641-A, which provides that each of the Buyer and Sellers shall pay a like amount.

(d) The recording fee for the Deeds will be paid by Buyer. All other recording fees shall be paid by Sellers.

(e) Rents under all leases and occupancy agreements and any security deposits under said leases and/or occupancy agreements.

(f) Maine withholding tax shall be deducted from Sellers' proceeds and remitted to the State of Maine as may be required.

(g) Commissions payable to real estate brokers involved in the transaction shall be paid in accordance with the agreements of such brokers.

17. GENERAL PROVISIONS.

(a) Time. Time is of the essence of this Agreement.

(b) Notices. Any notice or communication given pursuant to this Agreement by either of the parties to the other shall be in writing and delivered in person or mailed by overnight courier for next business day delivery, express mail via the United States Postal Service, postage prepaid, or sent via email communication followed with an overnight/next business day delivery or a hand delivery, as follows and all communications shall be deemed given as of the date of hand delivery, or as of the date of delivery to the overnight carrier or United States Postal Service for next business day delivery, or as of the date of transmission of the Email communication followed by overnight next day or hand delivery:

TO SELLERS:

WITH COPIES TO:

TO BUYER:

WITH COPIES TO:

Any party may change its address for the purposes of this subparagraph by giving the other parties notice of the new address in accordance with this Paragraph 17.

(a) Binding Effect. This Agreement will inure to the benefit of, and bind, the respective successors and assigns of Sellers and Buyer.

(b) Construction. As used in this Agreement, the singular number shall include the plural, the plural the singular, and the use of one gender shall be deemed applicable to all genders. This Agreement shall be governed by and construed in accordance with the laws of Maine. If any provision of this Agreement is determined to be invalid or unenforceable, it shall not affect the validity or enforcement of the remaining provisions hereof. It is hereby agreed that all representations set forth in this Agreement shall survive Closing.

(c) Counterparts/Facsimile Signatures. This Agreement may be simultaneously executed in any number of counterparts, each of which when so executed and delivered shall be an original, but such counterparts shall constitute one and the same instrument. This Agreement may be transmitted between the parties by facsimile and signatures appearing on such facsimile documents shall be treated as original signatures.

(d) Effective Date. The Effective Date of this Agreement shall be deemed to be the date first above written herein.

(e) Sellers' Management. Except as otherwise expressly provided herein, Sellers shall continue to manage, maintain and operate the Premises in their usual course of business until the Closing. All management agreements in effect at the time of the Closing shall be terminated by the Sellers effective as of the date of the Closing. At or before the Closing, Sellers shall provide the Buyer with a copy of the termination of the existing Management Agreement with _____ to be effective as of the Closing Date (the "Termination").

(f) Further Assurances. In addition to the actions recited herein and contemplated to be performed, executed and delivered by each party, each party shall perform, execute and deliver or cause to be performed, executed and delivered at the Closing or thereafter any and all further acts, deeds and assurances as the other party or the Escrow Agent may reasonably require to consummate or evidence the consummation of the transaction contemplated herein.

(g) Buyer's Nominee. Buyer may transfer all or a portion of its rights under this Agreement to an entity or the nominee which is controlled or under common control with _____. Buyer shall, however, remain jointly and severally liable with such transferee for all of the Buyer's obligations under this Agreement, and such transferee shall be required to assume joint and several liability for all such obligations. Buyer shall give Sellers prompt written notice of any such transfer, which notice shall include sufficient information to identify the transferee entity or nominee and certified copies of its organizational documents.

(h) Intentionally Omitted.

(i) No Waiver. The waiver by either party of the performance of any covenant, condition or promise shall not invalidate this Agreement, nor shall it be construed as a waiver of any other covenant, condition or promise herein. The waiver by any party of the time for performing any act shall not constitute a waiver of the time for performing any other act or any incidental act required to be performed at a later time. The delay or forbearance by either party in exercising any remedy or right, the time for the exercise of which is not specifically and expressly limited or specified in this Agreement shall not be considered a waiver of or an estoppel against the later exercise of such remedy or right.

[Signatures Located on Following Page]

IN WITNESS WHEREOF, Sellers and Buyer have executed this Agreement as of the Effective Date first above written.

SELLERS:

LRAR LLC

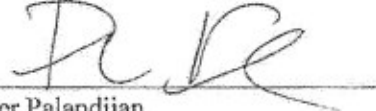
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Manager

By: Intercontinental Fund IV Ocean
Gateway LLC, Its Manager

By: Intercontinental Real Estate
Investment Fund IV, LLC,
Its Manager

By: Intercontinental Real Estate
Corporation, Its Manager


Witness

By: 
Peter Palandjian
Its President and Treasurer

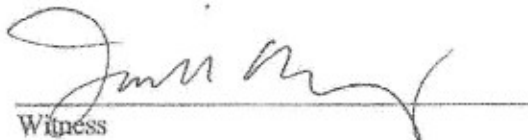
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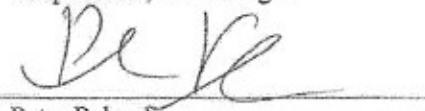
By: Riverwalk Venture LLC, Its
Manager

By: Intercontinental Fund IV Ocean
Gateway LLC, Its Manager

By: Intercontinental Real Estate
Investment Fund IV, LLC,
Its Manager

By: Intercontinental Real Estate
Corporation, Its Manager


Witness

By: 
Peter Palandjian
Its President and Treasurer

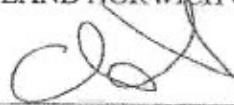


Witness

BUYER:

PORTLAND NORWICH GROUP LLC

By:



David Leatherwood
duly authorized

SCHEDULE OF EXHIBITS

Exhibit A	Development Parcel Legal Description
Exhibit A-1	Plan of Development Parcel
Exhibit A-2	Plan of Condominium Parcel
Exhibit B	Parcel Legal Description
Exhibit B-1	Plan of Parcel
Exhibit C	Title Insurance Escrow Agreement
Exhibit C-1	Wire Instructions
Exhibit D	Development Parcel Title Matters (Permitted Encumbrances)
Exhibit E	Title Matters (Permitted Encumbrances)
Exhibit F	Identification of Existing Surveys
Exhibit G	List of Parking Leases
Exhibit G-1	Form of Assignment and Assumption Agreement
Exhibit H	Form of Estoppel Certificate
Exhibit I	Form of Parking Lease
Exhibit J	Form of Condominium Declaration Amendment

6. Evidence State and/or Federal Permits

Evidence of State and/or Federal Permits

No State or Federal permits are anticipated as part of this project due to the City's delegated review authority over the stormwater component. See attached Stormwater Memo, exhibit #13.

No State or Federal permits are anticipated as part of this project due to the City's delegated review authority over traffic component. See attached Trip Generation and Parking Demand Analysis, exhibit #12.

7. Summary of Compliance with Zoning Requirements

Summary of Compliance with Zoning Requirements:

DIVISION 15.1

B-6 Eastern Waterfront Mixed Zone

Sec. 14-269. Permitted uses.

The following uses are permitted in the B-6 zone:

(a) Commercial:

1. Professional, business and general offices; **N/A**
2. Restaurants and other eating and drinking establishments, except that no drinking establishments as defined in section 14-47 that are located east of Waterville Street shall be permitted within fifty feet (50') of Fore Street, and provided that restaurants that are located east of Waterville Street and within fifty feet (50') of Fore Street must meet the following requirements:
 - a. The hours of operation shall be limited to between 5:00 a.m. and 11:00 p.m. each day; and
 - b. Food service and consumption are the primary function of the restaurant;
Applicable – restaurant space on 1st floor, fronting on Thames Street
3. Hotels and inns limited to no more than 150 rooms; **Applicable – floors 1 to 5 fronting on Fore & Hancock Streets**
4. Craft and specialty shops, including the on premises production of handcrafted goods; **N/A**
5. Retail and retail service establishments, excluding those with gas pumps;
6. Theatres; **N/A**
7. Banking services, excluding vehicular drive-up services; **N/A**
8. Cabinet and carpentry shops; **N/A**
9. Personal services; **N/A**
10. Business services; **N/A**
11. Offices of business trades people; **N/A**
12. Miscellaneous repair services, excluding all types of automotive repair except for automobile repair and service establishments; **N/A**
13. Telecommunication and broadcast and receiving facilities, except as prohibited in section 14-271 (prohibited uses); In addition, building mounted telecommunications antennas, discs, transmitting and receiving equipment and the like shall adhere to the following criteria. Such roof-mounted equipment shall be: **N/A**
 - a. No taller than 15 feet above the highest structural steel of the building roof; and
 - b. Set back no less than 15 feet from the building perimeter; and
 - c. Integrated into the architecture of the building in placement, form, color, and material so as to screen or camouflage such equipment from public view.
14. Brew pubs and microbreweries without associated bottling facilities; and brewpubs and microbreweries with associated bottling facilities limited to 5,000 bottles per year output, except that no brew pubs or microbreweries that are located east of Waterville Street shall be permitted within fifty feet (50') of Fore Street;
15. Electronic data storage; **N/A**
16. Marine products wholesaling and retailing; **N/A**
17. Harbor and marine supplies and services, chandlery and ship supply; **N/A**

18. *Underground marine fuel storage provided that fuel storage structures shall be used solely for the purpose of fueling vessels; N/A*

19. *Bakeries, coffee roasters, and commercial kitchens with building footprints limited to fifteen thousand (15,000) square feet of contiguous building space. Applicable, hotel kitchen*

20. *Printing establishments. N/A*

(b) Residential: Applicable – condominium units on 6th floor

1. *Attached dwellings including row houses, two-family and multifamily dwellings;*
2. *Handicapped family units;*
3. *Combined living/working spaces, including but not limited to artist residences w/ studio space;*
4. *Mixed use residential and commercial structures.*

(c) Public: N/A

1. *Utility substations, including sewage collection and pumping stations, water pumping stations, transformer stations, telephone electronic equipment enclosures and other similar structures;*
2. *Landscaped pedestrian parks, plazas and other similar outdoor pedestrian spaces;*
3. *Pedestrian and multi-use trails;*

(d) Other: N/A

1. *Studios for artists, photographers and craftspeople including but not limited to, painters, sculptors, dancers, graphic artists and musicians;*
2. *Accessory uses customarily incidental and subordinate to the location, function and operation of permitted uses, except that parking lots shall not be considered a permitted accessory use and such parking is subject to the conditional use section of the B-6 zone.*
3. *Health clubs, martial arts and meditation facilities.*
4. *Intermodal transportation facilities.*
5. *Nursery schools, kindergartens, and daycare facilities or home babysitting services.*
6. *Private clubs or nonprofit social and recreational facilities, as defined in 14-47.*
7. *Educational facilities.*
8. *Temporary events, provided that all such events on a lot do not exceed a combined total of (60) days per year and that the total floor area utilized for such uses does not exceed seventy thousand (70,000) square feet at any one (1) time.*
9. *Museums and art galleries.*

e) Wind energy systems, as defined and allowed in Article X, Alternative Energy. N/A

Sec. 14-270. Conditional uses.

(a) The following uses shall be permitted as conditional uses in the B-6 zone as provided in 14-474 (conditional uses), provided that, notwithstanding section 14-474(a) or any other provision of this code, the planning board shall be substituted for the board of appeals as the reviewing authority:

(1) Commercial: N/A

- a. *Meeting and exhibition facilities limited to a total of 20,000 gross square feet of interior floor area.*
- b. *Wholesaling, providing the wholesale operation is associated with an onsite retail establishment and that the wholesaling component of the facility occupies a building footprint of less than 15,000 square feet.*

(2) *Parking:*

a. All surface parking lots shall meet the applicable conditions outlined below. N/A

i. No surface parking lot shall be encumbered by lease or other use commitment exceeding a twenty-four month term.

ii. Any such parking shall in its lease stipulate that developer/owner reserves the right to relocate said parking (to a parking structure) or convert surface parking to structured parking as long as the replacement parking is located a reasonable distance from the associated use.

iii. Surface lots shall be laid out in a manner conducive to development of future buildings, and/or structured parking.

*b. All structured parking, including multi-level parking garages shall meet the applicable conditions outlined below. **Applicable – all required parking to be provided at Ocean Gateway Garage which is under contract to purchase by applicant.***

i. Parking garages shall incorporate first floor retail space or other mixed use (an active use other than parking) along all street frontages unless the applicant requests from the planning board a waiver of this provision subject to the following criteria:

ii. Waivers: the planning board may waive the requirement for first floor mixed use upon demonstration that the project meets one or more of the criteria listed under provisions a, b, and c below. Where the board allows a waiver of first floor mixed use, garages shall display architecture that enhances the pedestrian experience and disguises the parking use to the extent possible. Standards for waiving first floor mixed use:

a. That the applicant demonstrates that steepness of grade or the character of the adjacent street will not support retail or first-floor mixed use in the foreseeable future.

b. That the first floor of the garage is set back a minimum of 35 feet from the street right of way and its design does not provide an impediment for development of such space for mixed use in the future. Such space (between the garage and the street) shall, in the interim, not be used for surface parking.

c. Where the applicant can demonstrate to the satisfaction of the Planning Board that a market for first floor mixed uses currently does not exist, the Planning Board may grant a waiver of this condition, provided that the structure of the garage is designed to accommodate retail and or mixed uses in the future. The Planning Board will need to find that on the street level deck of a proposed parking garage a minimum of twenty (20) feet horizontal distance of depth from the street and nine (9) feet finished floor to finished ceiling clearance could in future house retail and or mixed use. The applicant will further need to demonstrate that the garage design anticipates the future development of utilities and circulation necessary for non-parking uses. Where a parking garage fronts on more than one public street and where there is a existing change in grade elevation of over 5% across the footprint of the garage, the nine foot floor to ceiling requirement of this section only applies to the primary (higher traffic volume) street.

Sec. 14-272. Dimensional requirements.

In addition to the provisions of article III, division 25 of City this Code, lots in the B-6 Eastern Waterfront Business Zone shall meet the following requirements:

(a) Minimum lot size: None. 60,642 sf (1.392 acres)

*(b) Minimum frontage: None. **Fore Street = +200'**
Hancock Street = +225'
Thames Street = +231'*

(c) Yard dimensions:

1. Minimum yards in the B-6 zone:

Front setback: None required except as provided in 3. below:

Fore Street: 5'

Hancock Street: <1'

Thames Street: 3.5'

*Side setback: None required. **N/A***

*Rear setback: None required. **10'***

2. Maximum building setback from street line except for parking garages, public transportation facilities and provided in 3. below: 10 feet.

Fore Street: 8'

Hancock Street: <1'

Thames Street: 4.8'

a. For lots fronting on more than one street, the setback can be increased more than ten (10) feet if all of the following conditions are met:

i. The increased setback occurs at the intersection of the streets;

ii. The increased setback area is the primary pedestrian entrance to the building;

iii. Seventy-five (75) percent of the total building wall length facing the abutting streets shall be setback no greater than ten (10) feet; and

iv. All building wall segments, which make up the increased setback shall be included in the calculation of the total building wall length noted in subsection iii above.

In addition, for any new construction on a lot abutting three or more streets, the maximum setback shall apply only to the two most major streets. (For purposes of this section, major street shall mean that street with the highest traffic volume or the greatest street width in comparison with the remaining streets).

3. View Corridors and Key Street Wall Development Notwithstanding sections 1. and 2. above, new structures located in the blocks located south of Fore Street and north of Commercial Street and its extension, shall build to the key building envelopes shown on the B6 Building Height Overlay & Building Envelopes map .Buildings located in the easternmost key building envelope, shall not have a maximum front setback, and shall not be required to build to the key building envelope perimeter. Parking structures and the buildings for public transportation facilities may, however, set back beyond the key building envelopes (toward the interior of blocks), but may not occupy the land between the key building envelope and the street right of way.

(d) Minimum length of building wall required to be located along street frontage of lot (except that buildings located in the easternmost key building envelope, as shown on the B6 Building Height Overlay & Building Envelopes map, shall not be subject to this requirement).

i. 70% of lot street frontage; or

ii. 25% of building perimeter,

iii. For buildings fronting on two or more streets, the minimum building wall on one street may be decreased so long as the frontage is proportionally increased on other streets in so far that the building wall on the secondary street is not reduced to less than 25 feet.

(e) Maximum lot coverage: One hundred (100) percent. **52.89%**

(f) Maximum building height: 65 feet, or as otherwise governed by a Building Height Overlay map (for example, in the Eastern Waterfront). Building Height Overlay maps are found in the Planning and Development Department Office. **65'**

(g) Minimum building height: No new construction of any building shall have less than three (3) floors of habitable space above the average adjacent grade within twenty five (25) feet of any public street (except that buildings located in the easternmost key building envelope, as shown on the B6 Building Height Overlay & Building Envelopes map, shall not be subject to a minimum building height). This provision shall not apply to: **N/A**

i. Parking attendant booths,

ii. Information kiosks and ticketing booths,

iii. Parking garages,

iv. Public transportation facilities,

v. Additions to buildings existing as of December 8, 2004 provided that the cumulative additions since December 8, 2004 does not exceed 25% of the building footprint on December 8, 2004 except that such restriction shall not apply to those portions of the building addition that are constructed closer to the street line than the building footprint existing as of December 8, 2004,

vi. Buildings or building additions of less than 2,000 square feet footprint, on lots or available building sites of less than 2,000 square feet, vii. Utility substations, including sewage collection and pumping stations, water pumping stations, transformer stations, telephone electronic equipment enclosures and other similar structures, and

viii. Additions to and/or relocations of designated historic structures. Ord. 184-14/15, 6-1-2015

Sec. 14-273 Performance standards.

All new development in the B-6 Eastern Waterfront Business Zone shall comply with the following standards:

(a) Storage: Any storage of new materials, finished products, or related equipment must be suitably screened from the public way and from abutting properties by a solid fence at least five (6) feet in height. All waste shall be stored in covered containers that do not leak or otherwise permit liquids or solids to escape from the container. All food processing waste shall be stored within a completely enclosed structure and if not refrigerated shall be removed from the site in an enclosed container within forty-eight (48) hours of its generation. All enclosed and exterior areas shall be cleaned and sanitized on a regular basis. Outdoor storage of refuse or debris shall be in an appropriate container or located within a designated, screened area. **Applicable - there is a proposed interior, common receiving, delivery, and trash room between the hotel and the tenant space. This service area will be accessed from Hancock Street.**

(b) Noise:

1. Definitions:

a. Tonal sounds are defined as sound waves usually perceived as a hum or whine because their instantaneous sound pressure varies essentially as a simple sinusoidal function of time.

b. Impulse sounds are defined as sound events characterized by brief excursions of sound pressure, each with duration of less than one (1) second.

2. Measurement: Sound levels shall be measured with a sound level meter with a frequency weighting network manufactured according to standards prescribed by the American National Standards Institute (ANSI) or its successor body. Measurements shall be made at all major lot lines of the site, at a height of at least four (4) feet above the ground surface. In measuring sound levels under this section, sounds with a continuous duration of less than sixty (60) seconds shall be measured by the maximum reading on a sound level meter set to the A weighted scale and the fast meter response (L maxfast). Sounds with a continuous duration of sixty (60) seconds or more shall be measured on the basis of the energy average sound level over a period of sixty (60) seconds (LEQ1).

3. Maximum permissible sound levels: The maximum permissible sound level of any continuous, regular or frequent source of sound produced by an activity shall be as follows:

a. Sixty (60) dBA between the hours of 7:00 a.m. and 10:00 p.m.

*b. Fifty (50) dBA between the hours of 10:00 p.m. and 7:00 a.m., as measured at or within the boundaries of any residential zone. In addition to the sound level standards established above, all uses located within this zone shall employ best practicable sound abatement techniques to prevent tonal sounds and impulse sounds or, if such tonal and impulse sounds cannot be prevented, to minimize the impact of such sounds in residential zones. **Applicable - all mechanical equipment will be located on the roof or underground in a vault. Cut sheets showing anticipated sound levels will be submitted once the equipment has been selected.***

4. Exemptions:

a. Noises created by construction and maintenance activities between 7:00 a.m. and 10:00 p.m. are exempt from the maximum permissible sound levels set forth in subsection (a)3 of this section. Construction activities on a site abutting any residential use between the hours of 10:00 p.m. of one (1) day and 7:00 a.m. of the following day shall not exceed fifty (50) dBA.

b. The following uses and activities shall also be exempt from the requirements of subsection (a) 3 of this section:

i. The noises of safety signals, warning devices, emergency pressure relief valves, and any other emergency devices.

ii. Traffic noise on public roads or noise created by airplanes and railroads.

iii. Noise created by refuse and solid waste collection, provided that the activity is conducted between 6:00 a.m. and 7:00 p.m.

iv. Emergency construction or repair work by public utilities, at any hour.

v. Noise created by any temporary activities which are permitted by law and for which a license or permit has been granted by the city, including but not limited to parades, sporting events, fireworks displays, festivals, events and concerts.

*(c) Vibration: Vibration inherently and recurrently generated shall be imperceptible without instruments at lot boundaries. **N/A***

*(d) Federal and state environmental regulations: All uses shall comply with federal and state environmental statutes and regulations regarding emissions into the air, except where provisions of this Code are more stringent. **All Federal and State environmental regulations will be met.***

(e) *Storage of vehicles: Outdoor storage of any unregistered automotive vehicle on the premises for more than ten (10) days, and outdoor storage of any used automotive tires on the premises shall not be permitted. N/A*

(f) *Off-street parking and loading: Off street parking is required as provided in division 20 (off-street parking) of this article. Division 21 (off-street loading) of this article shall not apply.*

Applicable – see Off Street Parking section following.

(g) *Shoreland and flood plain management regulations: Any lot or portion of a lot located in a shoreland zone as identified on the city shoreland zoning map or in a flood hazard zone shall be subject to the requirements of division 26 and/or division 26.5. Applicable – see Shoreland Zone section following.*

(h) *Glare, radiation or fumes: Glare, radiation or fumes shall not be emitted to an obnoxious or dangerous degree beyond lot boundaries. N/A*

(i) *Enclosure of uses: All uses shall be operated within a fully enclosed structure, except for those customarily operated in open air. N/A*

(j) *Materials or wastes: Any permitted outdoor storage of materials shall be done in such a manner as to prevent the breeding and harboring of insects or vermin, to prevent the transfer of such materials from the site by natural causes or forces and to contain fumes, dust, or other materials which constitute a fire hazard. This storage shall be accomplished within enclosed containers or by one (1) or more of the following methods: raising materials above ground, separating materials, preventing stagnant water, or by some other means. Any areas used for permitted outdoor storage of materials shall be screened from view of any adjoining properties and public rights-of-way. No outdoor storage shall be permitted between the front of any building on the site and the street. N/A*

(k) *Odor: Uses in the B-6 zone shall adhere to the odor regulations of the IL zone. N/A*

(l) *Smoke: Discharges of smoke shall not exceed opacity percentage of forty (40) percent or number 2 on the ringelman chart. N/A*

(m) *Discharge into sewers: No discharge shall be permitted at any point into any private sewage disposal system, or surface drain, or into the ground, of any materials in such a way or of such nature or temperature as to contaminate any water supply, or the harbor, or otherwise cause the emission of dangerous or objectionable elements, except in accordance with standards approved by the health authority or by the public works authority. Applicable – all discharges into public sewer will be legal, permitted, and approved by the City.*

(n) *Lighting: All lighting shall be designed and installed with cut-off fixtures to direct illumination onto the site and to prevent illumination from such fixtures on neighboring properties and as otherwise governed by the site lighting standards of the City of Portland Technical Manual.*

Applicable – all proposed interior property lighting will be full cut-off and meet City standards. All roadway lighting will be City approved lights for the various streets.

Sec. 14-274. Affordable Housing

Amendments to Division 30 related to affordable housing that are enacted prior to April 1, 2016 shall apply to any site plan review application on the Portland Company (58 Fore Street) portion of this zone received after April 1, 2015. N/A

DIVISION 20 OFF STREET PARKING

Section 14-332 Uses requiring off-street parking.

In all zones where off street parking is required the following minimum off-street parking requirements shall be provided. Except as provided in Section 14-332.1, 14-332.2 (exceptions) and 14-345 (fee in-lieu of parking) of this division, for the uses listed below the following minimum off-street parking requirements shall be provided and maintained in the case of new construction, alterations which increase the number of units, and changes of use:

(a) Residential structures:

1. For new construction, two, (2) parking spaces for each dwelling unit.

See attached Trip Generation and Parking Demand Analysis, exhibit #12.

(c) Hotels: One (1) parking space for each four (4) guest rooms.

See attached Trip Generation and Parking Demand Analysis, exhibit #12.

(h) Retail stores: One (1) parking space for each two hundred (200) square feet of first floor area in excess of two thousand (2,000) square feet not used for bulk storage and one (1) parking space for each seven hundred (700) square feet, or major fraction thereof, for each floor above the first floor not used for bulk storage. N/A

(i) Restaurants or establishments constructed and intended for the dispensing of food and drink as the principal activity: One (1) parking space for each one hundred fifty (150) square feet, or major fraction thereof, of floor area not used for bulk storage or food preparation.

See attached Trip Generation and Parking Demand Analysis, exhibit #12.

Section 14-332.1 Zone specific off-street parking exceptions and modifications.

The off street parking requirements established for uses are hereby modified for the following zones according to the revisions as described below.

(h) B-6 Eastern Waterfront Mixed Use Zone: Off-street parking for all projects regardless of size shall be governed by 14-332.2(c) of this article. See below.

Sec. 14-332.2. Categorical exceptions and modifications to off-street parking requirements.

Regardless of which zone a project of use is located, the following exceptions to the off-street parking requirements listed above in section 14-332 are additionally hereby established.

(c) 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 exception and modification applies to the proposed project. See attached Trip Generation and Parking Demand Analysis, exhibit #12.

Section 14-332.3 Uses requiring off-street bicycle parking.

In all zones where of-street motor vehicle parking is required, minimum off-street bicycle parking shall be provided and maintained.....as specified in Section 14 - 526(a) (2) (Site Plan Standards).

See attached Trip Generation and Parking Demand Analysis, exhibit #12. This project will not provide on-site vehicle parking as it will be provided at Ocean Gateway Garage, across Fore Street, which is under contract to purchase by applicant. Bicycle parking for at least four bikes will be provided on-site as part of this project and additional bike parking will be provided internally and at the Ocean Gateway Parking Garage. See Site Plan.

DIVISION 26 SHORELAND REGULATIONS
Section 14-449 Land Use Standards

(a) Principal and accessory structures: All principal and accessory structures shall be set back at least seventy-five (75) feet horizontal distance, from the normal high water line of water bodies..... except that in the following zones the setback shall be as indicated: W-PD Zone:

No setback required.

The project does not propose to locate any structures within the 75' of the normal high water line.

(b) Piers, docks, wharves, bridges and other structures and uses extending over below the normal high water line of a water body or within a wetland: New permanent structures, and expansions thereof, projecting into or over water bodies shall require a permit from the D.E.P.

N/A

(c) Clearing of vegetation.

The existing project site is completely void of any significant vegetation. It is only sparsely covered by grass and grass type weeds growing over a gravel surface.

(d) Erosion & Sedimentation Control:

Both temporary and permanent erosion and sedimentation control devices/application conforming to the current best management practices will be used. Please see attached sheet C-103 Grading, Drainage, and Erosion Control Plan.

(e) Soils:

According to the Soil Survey of Cumberland County, published by the United States Department of Agriculture (1974); the project soils are generally cut/fill over marine clay.

(f) Water Quality:

No pollutants will be deposited into State waters as a result of this project. As part of this project the proposed stormwater system will ultimately tie into an existing City owned stormwater outfall which discharges into the Fore River; only after it filters through a crushed stone filter layer and is detained in the proposed underground chamber system.

(g) Archaeological Sites:

The project site has been completely disturbed by its past uses and the hotel site is not within the City's Historic District. However, the adjacent property does contain a building from the Grand Trunk Railroad complex and we understand it is a historic building. We will be making contact with the City's Historic Preservation Board to review and provide an Advisory Review Opinion.

(h) Installation of Public Utility Service:

This is a pre-disturbed, vacant site that will require many new utility connections which are available to tie into in the adjacent streets. All applicable utility service companies will be contacted and worked with to install any necessary new services to both their and the City's standards. As part of this project it is proposed to tie the stormwater system into an existing City owned stormwater outfall that eventually discharges into the Fore River after going through a downstream defender and our private stormwater system.

(i) Essential Services:

This is a pre-disturbed, vacant site. All applicable essential service companies and the City will be contacted and worked with to install any necessary new services.

(j) Roads & Driveways:

Roads: The project does not propose any new roads; instead it uses the adjacent established road network. The project proposes some adjustments to the road lanes, striping, and curb line along Fore Street and some curb line adjustments along Hancock Streets. New on street parking is proposed for the portion of Fore Street from the Portland Water District Pump Station driveway to the intersection with Hancock Street. The street centerline will be shifted to the west to accommodate for the 8' on-street parking lane, single 12' outbound lane, and single 12' inbound lane. In conjunction to the lane shifting/restriping the project proposes to bump out the curb at the corner of Fore and Hancock Streets. This will provide a larger pedestrian space at the hotel entrance, provide definition and protection to cars parked on the street and makes the pedestrian crossing shorter and safer. All road improvements will occur outside the Shoreland Zone. All improvements will take place within the right-of-way or within the applicant's property.

Internal Driveway: The project calls for a single, 22' driveway which terminates at a one way cul-de-sac. The outermost portion of the loop is an 8' valet drop-off/pick-up zone; the middle portion is an 18' one-way, travel lane; and the inner most zone is a 10' radius landscaped island and 5' cobblestone buffer. This area has been designed for passenger and small delivery type vehicles. No portion of the drive or loop will be located within the Shoreland Zone.

(k) Parking Areas:

The project does not include any permanent or long term vehicle parking on-site, but it does include an area for short term valet drop-off/pick-up. No portion of the short term drop-off/pick-up will be located within the Shoreland Zone.

(l) Septic Waste Disposal:

New wastewater connections are a part of this project. New connections are proposed from the hotel and residential units (6" gravity sewer), from the Thames Street retail space (4" gravity sewer including a grease trap), and from the hotel kitchen space (4" gravity sewer including a grease trap). Part of this application includes a waste water analysis application to be reviewed by the City staff. We will work closely with the City to determine best methods of handling waste water.

(m) Stormwater runoff:

The existing project site is a gravel surface. The proposed condition will contain less impervious area than the current site does, thus a reduction in stormwater runoff. A large portion of the internal driveway has been designed with a pervious paver system for stormwater treatment and storage. As part of this project it is proposed to tie the stormwater system into an existing City owned stormwater outfall that eventually discharges into the Fore River after going through a downstream defender and our private stormwater system.

(n) Agriculture:

Not Applicable.

(o) General site plan features:

The applicant feels that the proposed project meets the intent of the Shoreland Zone regulations.

8. Summary of Existing and Proposed Easements

Summary of Proposed & Existing Easements

Existing easements, encumbrances, and other burdens: There are no known on the subject property.

Proposed easements: Access and Utility easements will be required for this project as part of the overall master plan for the property. These easements are to be formulated at a later date.

9. Written Requests for Waivers

Written Requests for Waivers

Waiver Request 1: Landscaping

Technical Manual Standard, Section 4.5.2 Screening and Buffers

Where required, buffer areas shall be comprised of existing trees and vegetation, new landscaping or a combination thereof to create a dense, mixed buffer City of Portland Technical Manual 124 Section 4 - Landscaping and Landscape Preservation Adopted 7/19/10. Rev. 6/17/11 incorporating both understory and tree canopy layers. While primarily of benefit from a ground level pedestrian viewpoint, such screening should also effectively provide screening when viewed from upper floors of surrounding properties, where applicable. New shrubs shall be approximately three (3) feet in mature height and shall be spaced 6-8 feet apart. Specification IV-3 provides an example of buffering between compatible uses. Buffers between contrasting land uses may incorporate earthen berms not exceeding 4:1 slope, opaque fencing, masonry wall or a combination thereof, in addition to landscape plantings. Where fencing or masonry wall is proposed as part of a buffer, less landscaping density is acceptable; however, buffers shall still include trees, shrubs and other vegetation. Landscaped buffers within the site shall complement and enhance and structures and site amenities, provide screening between structures, and buffer undesirable views from general public areas, from existing structures and from residents of proposed units. Accessory site elements such as parking and loading areas, utility structures, dumpsters, storage areas and other hardscaped or unvegetated areas, shall be located and screened from view from public areas and adjacent properties. Screening shall be accomplished with opaque fencing of high architectural quality, masonry wall and/or dense evergreen landscaping. Where fencing or masonry wall is proposed as part of a buffer, less landscaping density is acceptable; however, buffers shall still include trees, shrubs and other vegetation. Specification IV-7 provides an example of screening of accessory site elements.

The abutting land uses, office and public utility are compatible uses to the proposed hotel, commercial, top floor residential, and remaining land of Lot 2. In the future when Lot 2 is developed, due to the lack of zoning yard setbacks, buildings will be built adjacent to the property lines. Due to this it is requested that a waiver be granted for the screening/buffer requirement.

Technical Manual Standard, Section 4.6 Street Trees

4.6.1. Residential Development: Multi-family residential: Multi-family residential developments shall provide a minimum of one tree per unit, planted in the City right of way unless otherwise approved and spaced thirty (30) to forty five (45) on center.

There are 16 proposed condominium units in the building which would require 16 street trees. There is not enough road frontage to plant the required 16 trees with appropriate spacing. The project has proposed to plant 13 street trees to satisfy the commercial development component of the project. Six additional street trees are planting along the interior of the site along the driveway and turning circle. Due to this fact it is requested that a waiver be granted for the full requirement of 1 street tree per unit.

4.6.3. Commercial, industrial and institutional developments shall provide street trees thirty (30) to forty five (45) feet apart on center in the City right of way along all street frontages unless otherwise approved.

The Landscape Plan shows a total of 13 street trees spaced approximately 40' on center. The 13 trees do a good job of defining the street frontages. The 13 trees avoid utilities, building awnings, and other site encumbrances.

10. Evidence of Financial Capacity



September 24, 2015

David Leatherwood
CEO and Managing Member
Norwich Partners
25 Foothill Street, Suite 1A
Lebanon, NH 03766

Dear Mr. Leatherwood:

I am writing on behalf of Citizens Bank, N.A. ("Citizens") to express our interest in providing both construction and permanent financing for the proposed Portland Ocean Gateway AC Hotel to be developed by an affiliate of Norwich Partners. Based on information provided to date, we believe strongly in the location, the product, and the sponsorship and would look forward to continuing our successful working relationship with you in Portland. We understand that the loan amount would be in the range of \$30+/- million on total development costs of approximately \$46 million.

As you know, we recently financed the very successful Marriott Residence Inn Downtown Boston/Seaport project and the Envoy Hotel / Marriott Autograph Collection Seaport project with Norwich Partners. It would be a pleasure to continue our banking relationship in furtherance of this exciting project in Portland.

Yours very truly,

A handwritten signature in dark ink, appearing to read "Philip Wadleigh".

Philip Wadleigh
Senior Vice President

11. Evidence of Technical Capacity

Evidence of Technical Capacity

The applicant has assembled a highly qualified team of professionals for the preparation of this project. All members of this team have significant experience with this type of project and many have worked together on other similar projects. The project is being designed by a multi-disciplinary team of design professionals. All members of the design team have proven experience working on projects located in the city of Portland.

The applicant is the same development team as for the Residence Inn by Marriott on Fore Street that opened in 2009.

Portland Norwich Group, LLC **Applicant / Developer**
2330 Palm Ridge Road #305
Sanibel, FL 33957
Contact: Ara Aftandilian

Group One Partners, Inc. **Architect**
21 West Third Street
Boston, MA 02127
617-268-7000
Contact: Rob Festa

Carroll Associates **Landscape Architect**
217 Commercial Street, Suite 200
Portland, ME 04101
207-772-1552
Contact: Pat Carroll

Ransom Consulting Engineers **Consulting Engineer (Civil)**
400 Commercial Street, Suite 404
Portland, ME 04101
207-772-2891
Contact: Stephen Bradstreet

Gorrill-Palmer Consulting Engineers **Consulting Engineer (Traffic)**
15 Shaker Road
Gray Road, ME 04039
207-657-6910
Contact: Randy Dunton

Owen Haskell, Inc. **Surveyor**
390 US Route One, Unit 10
Falmouth, ME 04105
207-774-0424
Contact: John Swan

Jensen Baird Gardner Henry **Attorney**
10 Free Street
PO Box 4510
Portland, ME 04112-4510
207-775-7271
Contact: Lee Lowry

12. Trip Generation and Parking Demand Analysis

**Preliminary
Trip Generation and Parking Demands
Portland Gateway Hotel Project – Portland, ME
JN 2969**

Date: September 28, 2015
Subject: Trip Generation and Parking Demand Summary
Portland Gateway Hotel Project
To: Ara Aftandilian
From: Randy Dunton, Gorrill Palmer (JN 2969)

The following is a preliminary assessment of potential trip generation and parking demands for the proposed land uses in the Portland Gateway Hotel. The calculations are based on the Institute of Transportation Engineers' publication *Trip Generation*, Seventh Edition and the Portland City Ordinances. The assessment includes 16 Condominiums, 150 room Business Hotel, and 4,000 sf that can be retail or restaurant. For the purposes of this assessment, a restaurant has been assumed for the 4,000 sf. The following is a summary of assumptions, trip generations, and parking demands:

Trip Generation:

Assumptions:

Residential Condominium / Townhouse – Land Use Code (LUC) 230

- 16 Dwelling Units
- All Units Occupied

Business Hotel – LUC 312

- 150 Rooms
- All Rooms Occupied

High Turnover (Sit Down) Restaurant – LUC 932

- 4,000 SF

Trip Generation Summary

	AM Gen	AM Adj St	PM Gen	PM Adj St
Proposed				
Condos (16 units)	7	8	7	8
Hotel (150 rooms)	84	87	86	93
Restaurant (4,000 SF)	54	46	75	44
Proposed Total	145	141	168	145
Trip Generation Reductions				
Urban Reduction (5%)*	7	7	9	7
Shared-Use Reduction (5%)**	7	7	9	7
Reductions Total	14	14	18	14
Net Total	131	127	150	131

*Being in the downtown, there is a higher potential for alternate means of getting to the site (transit, walking, biking, etc.), so in our opinion a reduction can be made.

**Due to the mixed use and the compatibility of the different uses on the site, in our opinion a reduction can be made. For instance, it can be assumed that some people staying in the hotel would eat at the restaurant.

Based on this forecast trip generation, a MaineDOT Traffic Movement Permit will be required since the trip generation is greater than 99 trip ends during a peak hour. The City of Portland has delegated review authority from MaineDOT so they will be able to review the Traffic Movement Permit Application at the City level.

Parking Demand:

Parking Demand Summary

	Parking Variable	Ordinance Requirement	Required Parking per Ordinance	Shared Use Reduction (5%)	Offset Parking Peaks (5%)	Reduced Parking Demand
Proposed Uses						
Condos	16 Units	1 / Unit*	16 spaces	1 spaces	1 spaces	14 spaces
Hotel	150 Rooms	1 / 4 Rooms	38 spaces	2 spaces	2 spaces	34 spaces
Restaurant	2,800 SF	1 / 150 SF**	19 spaces	1 spaces	1 spaces	17 spaces
Proposed Total			73 spaces	4 spaces	4 spaces	65 spaces

*Condos - The City's standard requirement for residential units is 2 spaces per unit (Sec. 14-332 (a)). Under Sec. 14-332.2 (c): "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." The site is located in Zone B-6 and the proposed building has greater than 50,000 sf total floor area. For this analysis we used 1 parking space per unit.

**Restaurant - This requirement is per sf of "area not used for bulk storage or food preparation". For this parking estimate, we have assumed 30% of the sf will be used for this purpose, resulting in 2,800 sf for determining parking (4,000 – 1,200 = 2,800).

Bicycle Parking:

Per City Ordinance, non-residential structures are required to provide bicycle accommodations in proportion to the vehicular parking. For residential structures 2 bicycle parking spaces are required for every 5 dwelling units and for non-residential structures 2 bicycle parking spaces are required for every 10 vehicle parking spaces. Based on the ordinance, this project would require 10 (4 residential + 6 non-residential) bicycle parking spaces.

Conclusions:

Based on the “Net Total” trip generation results as summarized previously, this project will generate over 99 trip ends in a peak hour and will therefore require a MaineDOT Traffic Movement Permit. The Traffic Movement Permit Application can be reviewed and the permit issued by the City since they have delegated review authority. Based on the parking evaluation, this project is forecast to require approximately 65 vehicular parking spaces and 10 bicycle parking spaces to meet City ordinance.

It should be noted that this preliminary evaluation has not been reviewed by the City or their peer review engineer so is subject to change.

DRAFT

13. Stormwater Management Narrative

AC Hotels

Stormwater Management Narrative

Date: September 28, 2015
To: City of Portland
From: Maureen P. McGlone, P.E.
Peer Review: Stephen J. Bradstreet, P.E.
Location: Hancock and Fore Streets, Portland, Maine

List of Appendices:

Appendix A: Pre-and Post-Development Stormwater Plans
Appendix B: Pre Development Hydro CAD Calculations
Appendix C: Post Development Hydro CAD Calculations
Appendix D: Stormwater Inspection and Maintenance Report

Existing Conditions:

The site is a 60,654 SF (1.39 acres) acre parcel that is bordered by Fore Street, Hancock Street, Thames Street and India Street. The site's topography is generally flat and slopes from the south to the north and drains into catch basins on Fore Street, Hancock Street and Thames Street. The parcel is currently vacant, but has historical use as a rail yard for shipping and was most recently being utilized as a staging area for several construction projects completed in the surrounding area. The entire parcel is considered impervious with concrete pads or gravel surfaces.

Stormwater runoff from the existing parcel (Sub-catchment 1) flows in two directions. A portion flows toward the intersection of Fore Street and Hancock Street to a closed drainage system. The remaining area appears to flow to the intersection of Thames Street and Hancock Street to the same closed drainage system. The closed drainage system discharges to the ocean adjacent to the Ocean Gateway terminal building after first going through a Downstream Defender treatment system, which primarily removes suspended solids from the stormwater.

Proposed Development:

The applicant, Portland Norwich Group, LLC proposes to construct a 6 story hotel/retail/residential condominium building. The building will have hotel conference rooms and common areas as well as the retail space on the first floor along with kitchen area and storage. The second through fifth floors will house 150 hotel rooms, while the sixth floor is anticipated to house 16 condominium units. Future

City of Portland

development on the remaining property is anticipated to consist of multiple structures for retail/office/residential use, with landscaped areas and walking paths.

With the addition of landscaped areas, it is anticipated that the proposed development will decrease the site's overall impervious area. The non-impervious area will be a combination of landscaped planting areas or lawn.

Stormwater Management – Basic Standards:

Erosion and sedimentation control measures are detailed within the design plans. Good housekeeping practices will be in accordance with Maine DEP Best Management Practices. A post construction stormwater management plan is provided in Appendix A. Stormwater BMP inspection and maintenance requirements are provided in Appendix B.

Stormwater Management - Quality:

The existing site is currently all gravel and basically an impervious site. Per Chapter 500, there is no requirement for treatment for a redevelopment project on this parcel. However, the applicant has chosen to provide permeable pavers with a filter system for the treatment of surface runoff in the driveway and dropoff area. The discharge from the filter system will be collected in subsurface storage tanks (R-tank system currently proposed) which will subsequently enter the closed storm drainage system in Thames Street.

The site's impervious area will be reduced with the addition of landscaped areas, however with the proposed surface water treatment the stormwater quality would improve greatly over the existing condition. It is anticipated that this additional treatment provided will be used to provide water quality credits to offset the City's new stormwater fee.

Stormwater Management - Quantity:

The pervious paver filter system proposed included subsurface storage of treated surface water runoff. Additionally, it is anticipated that the roof drains from the proposed structures will be connected to the subsurface system to provide additional detention prior to discharge to the storm drain system within Thames Street. It is anticipated that this additional treatment provided will be used to provide water quantity credits to offset the City's new stormwater fee.

Hydraulic Analysis:

Stormwater runoff calculations for quantity were made using the HydroCAD 10.0 computer program, which is based on the Soil Conservation Service's TR-20 methodology. Runoff hydrographs are generated based on a standard Type III 24 hour storm.

Five storm events were modeled as follows:

City of Portland

1. 1" storm: The 1" storm event was analyzed to simulate a heavy weather event that would typically happen multiple times over a given year and may impact the CSO frequency and volume.
2. 1-year frequency flood event: 2.5" rainfall
3. 2-year frequency flood event: 3" rainfall
4. 10-year frequency flood event: 4.7" rainfall
5. 25-year frequency flood event: 5.5" rainfall

Runoff Curve numbers were determined based on land coverage and soil type based on a geotechnical report generated by Haley and Aldrich in May, 2007. Soils were typically urban fill underlain by organic material, sand and soft clays to rock. Due to the size of the lot and the land coverage, a minimum time of concentration (Tc) of 5 minutes was set in the HydroCAD model.

Peak runoff flow rates and runoff volumes are provided for a single analysis point, which represents the discharge to the closed system and are identified on the Pre and Post-Development plans. The analysis point shows a reduction in runoff rates and volumes.

Peak runoff rates and runoff volumes for the above analysis points and storm events are tabulated in the following tables. HydroCAD calculations can be found in Appendices C & D. Pre- and Post-Development plans (SWP1.0 and SWP2.0) can be found in the appendices.

Storm Event	PRE-Development Peak Runoff RATES cubic feet per second (CFS)
1" Storm	1.18
1 Year Frequency Storm	3.65
2 Year Frequency Storm	4.46
10 Year Frequency Storm	7.19
25 Year Frequency Storm	8.47

Storm Event	POST-Development Peak Runoff RATES cubic feet per second (CFS)
1" Storm	0.0
1 Year Frequency Storm	1.76
2 Year Frequency Storm	1.59
10 Year Frequency Storm	5.90
25 Year Frequency Storm	7.21

Storm Event	PRE-Development Peak Runoff VOLUME acre feet (AF) volume of water 1'deep over one acre
1" Storm	.07
1 Year Frequency Storm	0.23
2 Year Frequency Storm	0.28
10 Year Frequency Storm	0.46
25 Year Frequency Storm	0.55

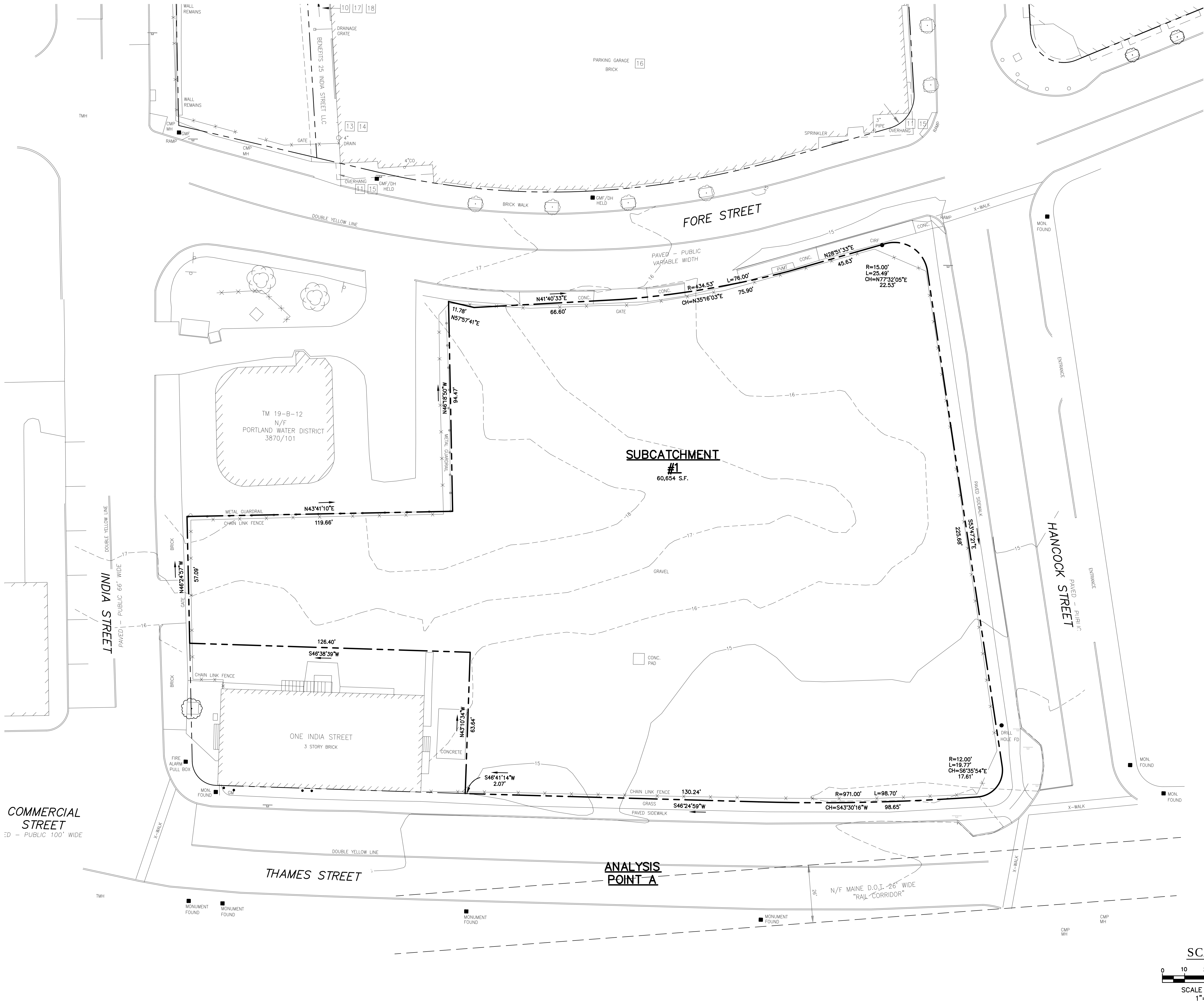
Storm Event	POST-Development Peak Runoff VOLUME acre feet (AF) volume of water 1'deep over one acre)
1" Storm	0.0
1 Year Frequency Storm	0.022
2 Year Frequency Storm	0.013
10 Year Frequency Storm	0.18
25 Year Frequency Storm	0.28

APPENDIX A

Pre- and Post- Development Stormwater Plans

City of Portland
Hancock/Thames/Fore Street
Portland, Maine

Ransom Consulting, Inc.
Project 151.06094



PROPOSED AC HOTEL

FORE STREET /
HANCOCK STREET /
THAMES STREET
PORTLAND, MAINE

Prepared for:

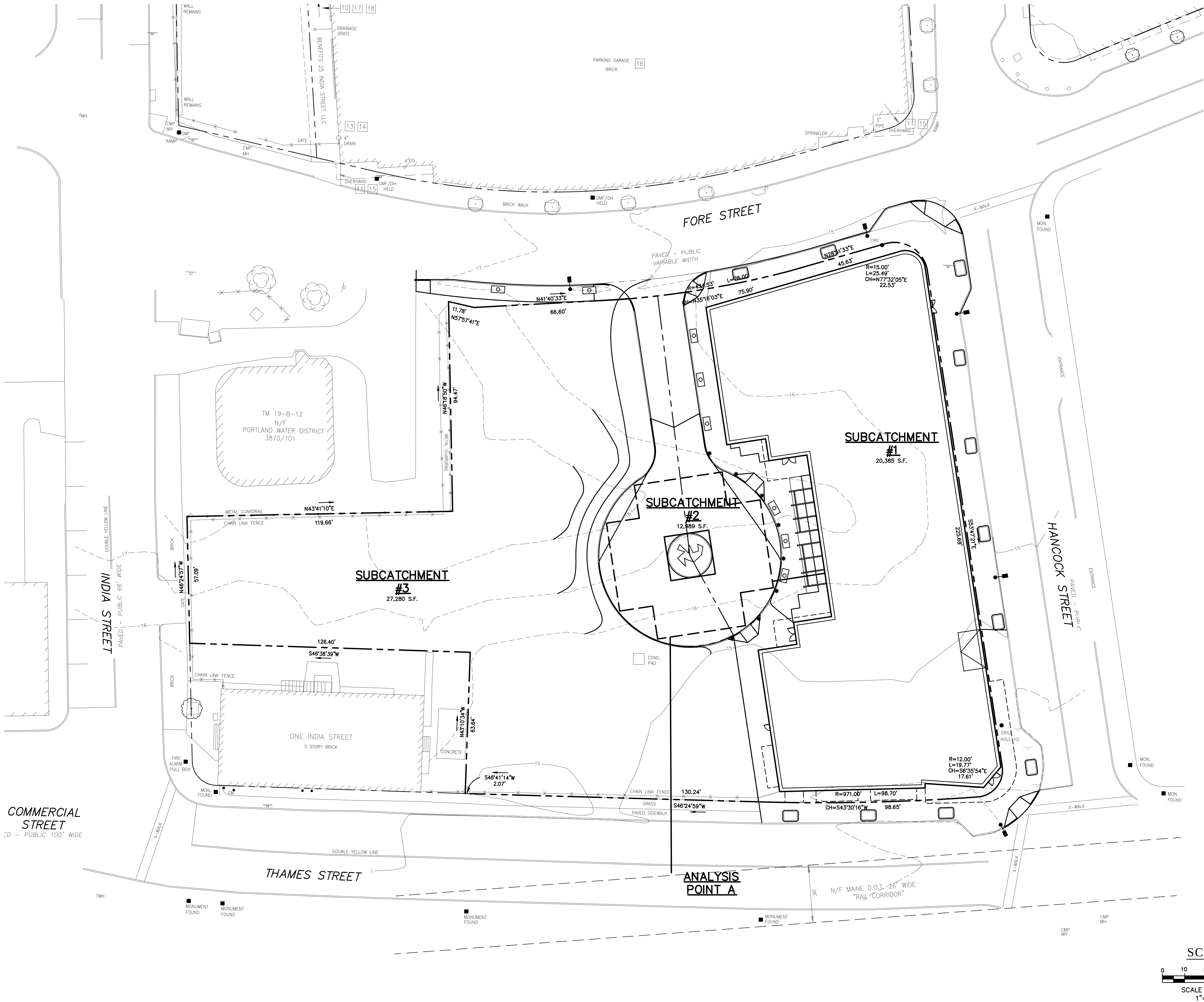
PORTLAND NORWICH
GROUP, LLC
2330 PALM RIDGE ROAD
#305
SANIBEL, FL 33957



400 Commercial Street, Suite 404
Portland, ME 04101
Tel. (207) 772-2891
Fax (207) 772-3248
www.ransomenv.com

PRE-DEVELOPMENT
PLAN

A	PRELIMINARY SUBMISSION	09/29/15
No.	Revision/Issue	Date
Design by:	MPM	Checked by: SJB
Drawn by:	JAR	Approved by: SJB
Project:	150.06094	Date: AUGUST 2015
Sheet No:	SWP1.0	
Sheet 1 of 2		



Site:

PROPOSED AC HOTEL

FORE STREET /
HANCOCK STREET /
THAMES STREET
PORTLAND, MAINE

Prepared for:

PORTLAND NORWICH
GROUP, LLC
2330 PALM RIDGE ROAD
#305
SANIBEL, FL 33957

RANSOM
Consulting
Engineers
and Scientists

400 Commercial Street, Suite 404
Portland, ME 04101
Tel. (207) 772-2891
Fax (207) 772-3248
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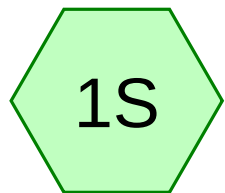
POST-DEVELOPMENT
PLAN

A	PRELIMINARY SUBMISSION	09/29/15
No.	Revision/Issue	Date
Design by:	MPM	Checked by: SJB
Drawn by:	JAR	Approved by: SJB
Project:	150.06094	Date: AUGUST 2015
Sheet No:	SWP2.0	
Sheet 2 of 2		

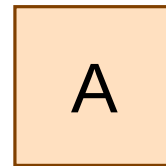
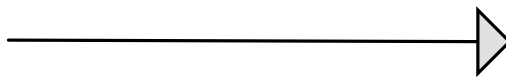
APPENDIX B

Pre Development Hydro CAD Calculations

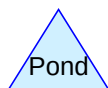
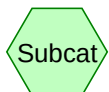
City of Portland
Hancock/Thames/Fore Street
Portland, Maine



existing full lot



outlet to System



Routing Diagram for existing site

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existing site

Prepared by {enter your company name here}

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Page 2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.392	96	Paved parking, HSG B (1S)
1.392	96	TOTAL AREA

existing site

Type III 24-hr 1-inch Rainfall=1.00"

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: existing full lot

Runoff Area=60,650 sf 0.00% Impervious Runoff Depth>0.59"

Tc=0.0 min CN=96 Runoff=1.18 cfs 0.069 af

Reach A: outlet to System

Inflow=1.18 cfs 0.069 af

Outflow=1.18 cfs 0.069 af

Total Runoff Area = 1.392 ac Runoff Volume = 0.069 af Average Runoff Depth = 0.59"
100.00% Pervious = 1.392 ac 0.00% Impervious = 0.000 ac

existing site

Type III 24-hr 1-inch Rainfall=1.00"

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Summary for Subcatchment 1S: existing full lot

[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 1.18 cfs @ 12.00 hrs, Volume= 0.069 af, Depth> 0.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-inch Rainfall=1.00"

	Area (sf)	CN	Description
*	60,650	96	Paved parking, HSG B
	60,650		100.00% Pervious Area

Summary for Reach A: outlet to System

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 1.392 ac, 0.00% Impervious, Inflow Depth > 0.59" for 1-inch event

Inflow = 1.18 cfs @ 12.00 hrs, Volume= 0.069 af

Outflow = 1.18 cfs @ 12.00 hrs, Volume= 0.069 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

existing site

Type III 24-hr 1-year Rainfall=2.50"

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: existing full lot

Runoff Area=60,650 sf 0.00% Impervious Runoff Depth>1.95"

Tc=0.0 min CN=96 Runoff=3.65 cfs 0.226 af

Reach A: outlet to System

Inflow=3.65 cfs 0.226 af

Outflow=3.65 cfs 0.226 af

Total Runoff Area = 1.392 ac Runoff Volume = 0.226 af Average Runoff Depth = 1.95"
100.00% Pervious = 1.392 ac 0.00% Impervious = 0.000 ac

existing site

Type III 24-hr 1-year Rainfall=2.50"

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Summary for Subcatchment 1S: existing full lot

[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 3.65 cfs @ 12.00 hrs, Volume= 0.226 af, Depth> 1.95"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-year Rainfall=2.50"

	Area (sf)	CN	Description
*	60,650	96	Paved parking, HSG B
	60,650		100.00% Pervious Area

Summary for Reach A: outlet to System

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 1.392 ac, 0.00% Impervious, Inflow Depth > 1.95" for 1-year event

Inflow = 3.65 cfs @ 12.00 hrs, Volume= 0.226 af

Outflow = 3.65 cfs @ 12.00 hrs, Volume= 0.226 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

existing site

Type III 24-hr 2-year Rainfall=3.00"

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: existing full lot

Runoff Area=60,650 sf 0.00% Impervious Runoff Depth>2.41"

Tc=0.0 min CN=96 Runoff=4.46 cfs 0.280 af

Reach A: outlet to System

Inflow=4.46 cfs 0.280 af

Outflow=4.46 cfs 0.280 af

Total Runoff Area = 1.392 ac Runoff Volume = 0.280 af Average Runoff Depth = 2.41"
100.00% Pervious = 1.392 ac 0.00% Impervious = 0.000 ac

existing site

Type III 24-hr 2-year Rainfall=3.00"

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Summary for Subcatchment 1S: existing full lot

[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 4.46 cfs @ 12.00 hrs, Volume= 0.280 af, Depth> 2.41"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=3.00"

	Area (sf)	CN	Description
*	60,650	96	Paved parking, HSG B
	60,650		100.00% Pervious Area

Summary for Reach A: outlet to System

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 1.392 ac, 0.00% Impervious, Inflow Depth > 2.41" for 2-year event

Inflow = 4.46 cfs @ 12.00 hrs, Volume= 0.280 af

Outflow = 4.46 cfs @ 12.00 hrs, Volume= 0.280 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

existing site

Type III 24-hr 10-year Rainfall=4.70"

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: existing full lot

Runoff Area=60,650 sf 0.00% Impervious Runoff Depth>3.98"

Tc=0.0 min CN=96 Runoff=7.19 cfs 0.462 af

Reach A: outlet to System

Inflow=7.19 cfs 0.462 af

Outflow=7.19 cfs 0.462 af

Total Runoff Area = 1.392 ac Runoff Volume = 0.462 af Average Runoff Depth = 3.98"
100.00% Pervious = 1.392 ac 0.00% Impervious = 0.000 ac

existing site

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Type III 24-hr 10-year Rainfall=4.70"

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Summary for Subcatchment 1S: existing full lot

[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 7.19 cfs @ 12.00 hrs, Volume= 0.462 af, Depth> 3.98"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Type III 24-hr 10-year Rainfall=4.70"

	Area (sf)	CN	Description
*	60,650	96	Paved parking, HSG B
	60,650		100.00% Pervious Area

Summary for Reach A: outlet to System

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 1.392 ac, 0.00% Impervious, Inflow Depth > 3.98" for 10-year event

Inflow = 7.19 cfs @ 12.00 hrs, Volume= 0.462 af

Outflow = 7.19 cfs @ 12.00 hrs, Volume= 0.462 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

existing site

Type III 24-hr 25-year Rainfall=5.50"

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: existing full lot

Runoff Area=60,650 sf 0.00% Impervious Runoff Depth>4.72"

Tc=0.0 min CN=96 Runoff=8.47 cfs 0.547 af

Reach A: outlet to System

Inflow=8.47 cfs 0.547 af

Outflow=8.47 cfs 0.547 af

Total Runoff Area = 1.392 ac Runoff Volume = 0.547 af Average Runoff Depth = 4.72"
100.00% Pervious = 1.392 ac 0.00% Impervious = 0.000 ac

existing site

Prepared by {enter your company name here}

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Type III 24-hr 25-year Rainfall=5.50"

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Page 12

Summary for Subcatchment 1S: existing full lot

[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 8.47 cfs @ 12.00 hrs, Volume= 0.547 af, Depth> 4.72"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=5.50"

	Area (sf)	CN	Description
*	60,650	96	Paved parking, HSG B
	60,650		100.00% Pervious Area

Summary for Reach A: outlet to System

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 1.392 ac, 0.00% Impervious, Inflow Depth > 4.72" for 25-year event

Inflow = 8.47 cfs @ 12.00 hrs, Volume= 0.547 af

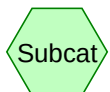
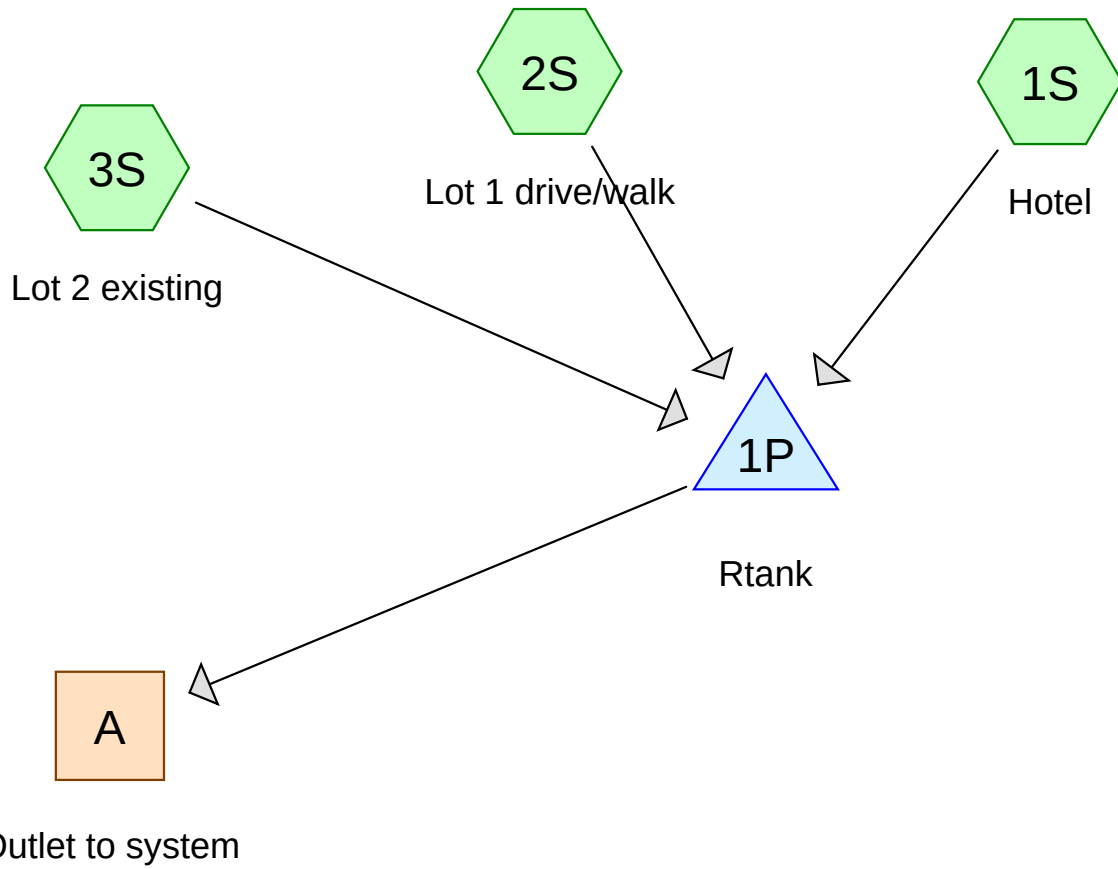
Outflow = 8.47 cfs @ 12.00 hrs, Volume= 0.547 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

APPENDIX C

Post Development Hydro CAD Calculations

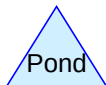
City of Portland
Hancock/Thames/Fore Street
Portland, Maine



Subcat



Reach



Pond



Link

Routing Diagram for proposed site

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Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.298	98	(2S)
0.626	96	(3S)
0.468	98	roof (1S)
1.392	97	TOTAL AREA

proposed site*Type III 24-hr 1-inch Rainfall=1.00"*

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Hotel

Runoff Area=20,385 sf 100.00% Impervious Runoff Depth>0.75"
Tc=5.0 min CN=98 Runoff=0.42 cfs 0.029 af

Subcatchment2S: Lot 1 drive/walk

Runoff Area=12,989 sf 100.00% Impervious Runoff Depth>0.75"
Tc=5.0 min CN=98 Runoff=0.27 cfs 0.019 af

Subcatchment3S: Lot 2 existing

Runoff Area=27,280 sf 0.00% Impervious Runoff Depth>0.59"
Tc=5.0 min CN=96 Runoff=0.46 cfs 0.031 af

Reach A: Outlet to system

Inflow=0.00 cfs 0.000 af
Outflow=0.00 cfs 0.000 af

Pond 1P: Rtank

Peak Elev=1.94' Storage=3,421 cf Inflow=1.15 cfs 0.079 af
8.0" Round Culvert n=0.010 L=100.0' S=0.0085 ' /' Outflow=0.00 cfs 0.000 af

Total Runoff Area = 1.392 ac Runoff Volume = 0.079 af Average Runoff Depth = 0.68"
44.98% Pervious = 0.626 ac 55.02% Impervious = 0.766 ac

proposed site

Type III 24-hr 1-inch Rainfall=1.00"

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Summary for Subcatchment 1S: Hotel

Runoff = 0.42 cfs @ 12.07 hrs, Volume= 0.029 af, Depth> 0.75"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-inch Rainfall=1.00"

	Area (sf)	CN	Description
*	20,385	98	roof
	20,385		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment 2S: Lot 1 drive/walk

Runoff = 0.27 cfs @ 12.07 hrs, Volume= 0.019 af, Depth> 0.75"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-inch Rainfall=1.00"

	Area (sf)	CN	Description
*	12,989	98	
	12,989		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment 3S: Lot 2 existing

Runoff = 0.46 cfs @ 12.08 hrs, Volume= 0.031 af, Depth> 0.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-inch Rainfall=1.00"

	Area (sf)	CN	Description
*	27,280	96	
	27,280		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

proposed site

Type III 24-hr 1-inch Rainfall=1.00"

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Summary for Reach A: Outlet to system

Inflow Area = 1.392 ac, 55.02% Impervious, Inflow Depth = 0.00" for 1-inch event
 Inflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
 Outflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Pond 1P: Rtank

Inflow Area = 1.392 ac, 55.02% Impervious, Inflow Depth > 0.68" for 1-inch event
 Inflow = 1.15 cfs @ 12.07 hrs, Volume= 0.079 af
 Outflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs / 4

Peak Elev= 1.94' @ 20.00 hrs Surf.Area= 2,208 sf Storage= 3,421 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)

Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1A	0.00'	1,417 cf	43.37'W x 50.92'L x 3.42'H Field A 7,542 cf Overall - 4,000 cf Embedded = 3,542 cf x 40.0% Voids
#2A	0.25'	3,800 cf	ACF R-Tank HD 1.5 x 600 Inside #1 Inside= 15.7"W x 26.0"H => 2.70 sf x 2.35'L = 6.3 cf Outside= 15.7"W x 26.0"H => 2.84 sf x 2.35'L = 6.7 cf 30 Rows of 20 Chambers
		5,217 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	8.85'	8.0" Round Culvert L= 100.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 8.85' / 8.00' S= 0.0085 '/ Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.35 sf

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=0.00' (Free Discharge)↑**1=Culvert** (Controls 0.00 cfs)

proposed site*Type III 24-hr 1-year Rainfall=2.50"*

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Hotel

Runoff Area=20,385 sf 100.00% Impervious Runoff Depth>2.13"
Tc=5.0 min CN=98 Runoff=1.13 cfs 0.083 af

Subcatchment2S: Lot 1 drive/walk

Runoff Area=12,989 sf 100.00% Impervious Runoff Depth>2.13"
Tc=5.0 min CN=98 Runoff=0.72 cfs 0.053 af

Subcatchment3S: Lot 2 existing

Runoff Area=27,280 sf 0.00% Impervious Runoff Depth>1.95"
Tc=5.0 min CN=96 Runoff=1.44 cfs 0.102 af

Reach A: Outlet to system

Inflow=1.76 cfs 0.022 af
Outflow=1.76 cfs 0.022 af

Pond 1P: Rtank

Peak Elev=11.47' Storage=5,217 cf Inflow=3.30 cfs 0.238 af
8.0" Round Culvert n=0.010 L=100.0' S=0.0085 ' Outflow=1.76 cfs 0.022 af

Total Runoff Area = 1.392 ac Runoff Volume = 0.238 af Average Runoff Depth = 2.05"
44.98% Pervious = 0.626 ac 55.02% Impervious = 0.766 ac

proposed site

Type III 24-hr 1-year Rainfall=2.50"

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Summary for Subcatchment 1S: Hotel

Runoff = 1.13 cfs @ 12.07 hrs, Volume= 0.083 af, Depth> 2.13"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-year Rainfall=2.50"

	Area (sf)	CN	Description
*	20,385	98	roof
	20,385		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment 2S: Lot 1 drive/walk

Runoff = 0.72 cfs @ 12.07 hrs, Volume= 0.053 af, Depth> 2.13"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-year Rainfall=2.50"

	Area (sf)	CN	Description
*	12,989	98	
	12,989		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment 3S: Lot 2 existing

Runoff = 1.44 cfs @ 12.07 hrs, Volume= 0.102 af, Depth> 1.95"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-year Rainfall=2.50"

	Area (sf)	CN	Description
*	27,280	96	
	27,280		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

proposed site

Type III 24-hr 1-year Rainfall=2.50"

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Summary for Reach A: Outlet to system

Inflow Area = 1.392 ac, 55.02% Impervious, Inflow Depth = 0.19" for 1-year event
 Inflow = 1.76 cfs @ 12.16 hrs, Volume= 0.022 af
 Outflow = 1.76 cfs @ 12.16 hrs, Volume= 0.022 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Pond 1P: Rtank

Inflow Area = 1.392 ac, 55.02% Impervious, Inflow Depth > 2.05" for 1-year event
 Inflow = 3.30 cfs @ 12.07 hrs, Volume= 0.238 af
 Outflow = 1.76 cfs @ 12.16 hrs, Volume= 0.022 af, Atten= 47%, Lag= 5.5 min
 Primary = 1.76 cfs @ 12.16 hrs, Volume= 0.022 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs / 4

Peak Elev= 11.47' @ 12.17 hrs Surf.Area= 2,208 sf Storage= 5,217 cf

Plug-Flow detention time= 251.7 min calculated for 0.022 af (9% of inflow)

Center-of-Mass det. time= (not calculated: outflow precedes inflow)

Volume	Invert	Avail.Storage	Storage Description
#1A	0.00'	1,417 cf	43.37'W x 50.92'L x 3.42'H Field A 7,542 cf Overall - 4,000 cf Embedded = 3,542 cf x 40.0% Voids
#2A	0.25'	3,800 cf	ACF R-Tank HD 1.5 x 600 Inside #1 Inside= 15.7"W x 26.0"H => 2.70 sf x 2.35'L = 6.3 cf Outside= 15.7"W x 26.0"H => 2.84 sf x 2.35'L = 6.7 cf 30 Rows of 20 Chambers
		5,217 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	8.85'	8.0" Round Culvert L= 100.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 8.85' / 8.00' S= 0.0085'/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.35 sf

Primary OutFlow Max=1.57 cfs @ 12.16 hrs HW=10.59' (Free Discharge)↑**1=Culvert** (Inlet Controls 1.57 cfs @ 4.51 fps)

proposed site*Type III 24-hr 2-year Rainfall=3.00"*

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Hotel

Runoff Area=20,385 sf 100.00% Impervious Runoff Depth>2.59"
Tc=5.0 min CN=98 Runoff=1.37 cfs 0.101 af

Subcatchment2S: Lot 1 drive/walk

Runoff Area=12,989 sf 100.00% Impervious Runoff Depth>2.59"
Tc=5.0 min CN=98 Runoff=0.87 cfs 0.064 af

Subcatchment3S: Lot 2 existing

Runoff Area=27,280 sf 0.00% Impervious Runoff Depth>2.41"
Tc=5.0 min CN=96 Runoff=1.76 cfs 0.126 af

Reach A: Outlet to system

Inflow=1.59 cfs 0.013 af
Outflow=1.59 cfs 0.013 af

Pond 1P: Rtank

Peak Elev=11.23' Storage=5,217 cf Inflow=4.00 cfs 0.291 af
8.0" Round Culvert n=0.010 L=100.0' S=0.0085 ' Outflow=1.59 cfs 0.013 af

Total Runoff Area = 1.392 ac Runoff Volume = 0.291 af Average Runoff Depth = 2.51"
44.98% Pervious = 0.626 ac 55.02% Impervious = 0.766 ac

proposed site

Type III 24-hr 2-year Rainfall=3.00"

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Summary for Subcatchment 1S: Hotel

Runoff = 1.37 cfs @ 12.07 hrs, Volume= 0.101 af, Depth> 2.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=3.00"

	Area (sf)	CN	Description
*	20,385	98	roof
	20,385		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment 2S: Lot 1 drive/walk

Runoff = 0.87 cfs @ 12.07 hrs, Volume= 0.064 af, Depth> 2.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=3.00"

	Area (sf)	CN	Description
*	12,989	98	
	12,989		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment 3S: Lot 2 existing

Runoff = 1.76 cfs @ 12.07 hrs, Volume= 0.126 af, Depth> 2.41"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=3.00"

	Area (sf)	CN	Description
*	27,280	96	
	27,280		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

proposed site

Type III 24-hr 2-year Rainfall=3.00"

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Summary for Reach A: Outlet to system

Inflow Area = 1.392 ac, 55.02% Impervious, Inflow Depth = 0.11" for 2-year event
 Inflow = 1.59 cfs @ 12.07 hrs, Volume= 0.013 af
 Outflow = 1.59 cfs @ 12.07 hrs, Volume= 0.013 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Pond 1P: Rtank

Inflow Area = 1.392 ac, 55.02% Impervious, Inflow Depth > 2.51" for 2-year event
 Inflow = 4.00 cfs @ 12.07 hrs, Volume= 0.291 af
 Outflow = 1.59 cfs @ 12.07 hrs, Volume= 0.013 af, Atten= 60%, Lag= 0.1 min
 Primary = 1.59 cfs @ 12.07 hrs, Volume= 0.013 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs / 4

Peak Elev= 11.23' @ 12.07 hrs Surf.Area= 2,208 sf Storage= 5,217 cf

Plug-Flow detention time= 317.4 min calculated for 0.013 af (4% of inflow)

Center-of-Mass det. time= (not calculated: outflow precedes inflow)

Volume	Invert	Avail.Storage	Storage Description
#1A	0.00'	1,417 cf	43.37'W x 50.92'L x 3.42'H Field A 7,542 cf Overall - 4,000 cf Embedded = 3,542 cf x 40.0% Voids
#2A	0.25'	3,800 cf	ACF R-Tank HD 1.5 x 600 Inside #1 Inside= 15.7"W x 26.0"H => 2.70 sf x 2.35'L = 6.3 cf Outside= 15.7"W x 26.0"H => 2.84 sf x 2.35'L = 6.7 cf 30 Rows of 20 Chambers
		5,217 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	8.85'	8.0" Round Culvert L= 100.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 8.85' / 8.00' S= 0.0085'/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.35 sf

Primary OutFlow Max=1.41 cfs @ 12.07 hrs HW=10.31' (Free Discharge)↑**1=Culvert** (Inlet Controls 1.41 cfs @ 4.03 fps)

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Type III 24-hr 10-year Rainfall=4.70"

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Hotel

Runoff Area=20,385 sf 100.00% Impervious Runoff Depth>4.15"
Tc=5.0 min CN=98 Runoff=2.16 cfs 0.162 af

Subcatchment2S: Lot 1 drive/walk

Runoff Area=12,989 sf 100.00% Impervious Runoff Depth>4.15"
Tc=5.0 min CN=98 Runoff=1.38 cfs 0.103 af

Subcatchment3S: Lot 2 existing

Runoff Area=27,280 sf 0.00% Impervious Runoff Depth>3.98"
Tc=5.0 min CN=96 Runoff=2.84 cfs 0.208 af

Reach A: Outlet to system

Inflow=5.90 cfs 0.181 af
Outflow=5.90 cfs 0.181 af

Pond 1P: Rtank

Peak Elev=31.01' Storage=5,217 cf Inflow=6.39 cfs 0.472 af
8.0" Round Culvert n=0.010 L=100.0' S=0.0085 ' Outflow=5.90 cfs 0.181 af

Total Runoff Area = 1.392 ac Runoff Volume = 0.472 af Average Runoff Depth = 4.07"
44.98% Pervious = 0.626 ac 55.02% Impervious = 0.766 ac

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Type III 24-hr 10-year Rainfall=4.70"

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Summary for Subcatchment 1S: Hotel

Runoff = 2.16 cfs @ 12.07 hrs, Volume= 0.162 af, Depth> 4.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=4.70"

	Area (sf)	CN	Description
*	20,385	98	roof
	20,385		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment 2S: Lot 1 drive/walk

Runoff = 1.38 cfs @ 12.07 hrs, Volume= 0.103 af, Depth> 4.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=4.70"

	Area (sf)	CN	Description
*	12,989	98	
	12,989		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment 3S: Lot 2 existing

Runoff = 2.84 cfs @ 12.07 hrs, Volume= 0.208 af, Depth> 3.98"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=4.70"

	Area (sf)	CN	Description
*	27,280	96	
	27,280		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

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Type III 24-hr 10-year Rainfall=4.70"

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Summary for Reach A: Outlet to system

Inflow Area = 1.392 ac, 55.02% Impervious, Inflow Depth = 1.56" for 10-year event
 Inflow = 5.90 cfs @ 12.07 hrs, Volume= 0.181 af
 Outflow = 5.90 cfs @ 12.07 hrs, Volume= 0.181 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Pond 1P: Rtank

Inflow Area = 1.392 ac, 55.02% Impervious, Inflow Depth > 4.07" for 10-year event
 Inflow = 6.39 cfs @ 12.07 hrs, Volume= 0.472 af
 Outflow = 5.90 cfs @ 12.07 hrs, Volume= 0.181 af, Atten= 8%, Lag= 0.0 min
 Primary = 5.90 cfs @ 12.07 hrs, Volume= 0.181 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs / 4

Peak Elev= 31.01' @ 12.07 hrs Surf.Area= 2,208 sf Storage= 5,217 cf

Plug-Flow detention time= 107.2 min calculated for 0.181 af (38% of inflow)

Center-of-Mass det. time= (not calculated: outflow precedes inflow)

Volume	Invert	Avail.Storage	Storage Description
#1A	0.00'	1,417 cf	43.37'W x 50.92'L x 3.42'H Field A 7,542 cf Overall - 4,000 cf Embedded = 3,542 cf x 40.0% Voids
#2A	0.25'	3,800 cf	ACF R-Tank HD 1.5 x 600 Inside #1 Inside= 15.7"W x 26.0"H => 2.70 sf x 2.35'L = 6.3 cf Outside= 15.7"W x 26.0"H => 2.84 sf x 2.35'L = 6.7 cf 30 Rows of 20 Chambers
		5,217 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	8.85'	8.0" Round Culvert L= 100.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 8.85' / 8.00' S= 0.0085'/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.35 sf

Primary OutFlow Max=5.67 cfs @ 12.07 hrs HW=29.51' (Free Discharge)↑**1=Culvert** (Barrel Controls 5.67 cfs @ 16.24 fps)

proposed site*Type III 24-hr 25-year Rainfall=5.50"*

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Hotel

Runoff Area=20,385 sf 100.00% Impervious Runoff Depth>4.87"
Tc=5.0 min CN=98 Runoff=2.54 cfs 0.190 af

Subcatchment2S: Lot 1 drive/walk

Runoff Area=12,989 sf 100.00% Impervious Runoff Depth>4.87"
Tc=5.0 min CN=98 Runoff=1.62 cfs 0.121 af

Subcatchment3S: Lot 2 existing

Runoff Area=27,280 sf 0.00% Impervious Runoff Depth>4.71"
Tc=5.0 min CN=96 Runoff=3.35 cfs 0.246 af

Reach A: Outlet to system

Inflow=7.21 cfs 0.280 af
Outflow=7.21 cfs 0.280 af

Pond 1P: Rtank

Peak Elev=42.00' Storage=5,217 cf Inflow=7.50 cfs 0.557 af
8.0" Round Culvert n=0.010 L=100.0' S=0.0085 '/' Outflow=7.21 cfs 0.280 af

Total Runoff Area = 1.392 ac Runoff Volume = 0.557 af Average Runoff Depth = 4.80"
44.98% Pervious = 0.626 ac 55.02% Impervious = 0.766 ac

proposed site

Prepared by {enter your company name here}

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Type III 24-hr 25-year Rainfall=5.50"

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Page 16

Summary for Subcatchment 1S: Hotel

Runoff = 2.54 cfs @ 12.07 hrs, Volume= 0.190 af, Depth> 4.87"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=5.50"

	Area (sf)	CN	Description
*	20,385	98	roof
	20,385		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment 2S: Lot 1 drive/walk

Runoff = 1.62 cfs @ 12.07 hrs, Volume= 0.121 af, Depth> 4.87"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=5.50"

	Area (sf)	CN	Description
*	12,989	98	
	12,989		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment 3S: Lot 2 existing

Runoff = 3.35 cfs @ 12.07 hrs, Volume= 0.246 af, Depth> 4.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=5.50"

	Area (sf)	CN	Description
*	27,280	96	
	27,280		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

proposed site

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Type III 24-hr 25-year Rainfall=5.50"

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Page 17

Summary for Reach A: Outlet to system

Inflow Area = 1.392 ac, 55.02% Impervious, Inflow Depth = 2.41" for 25-year event
 Inflow = 7.21 cfs @ 12.07 hrs, Volume= 0.280 af
 Outflow = 7.21 cfs @ 12.07 hrs, Volume= 0.280 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Pond 1P: Rtank

Inflow Area = 1.392 ac, 55.02% Impervious, Inflow Depth > 4.80" for 25-year event
 Inflow = 7.50 cfs @ 12.07 hrs, Volume= 0.557 af
 Outflow = 7.21 cfs @ 12.07 hrs, Volume= 0.280 af, Atten= 4%, Lag= 0.0 min
 Primary = 7.21 cfs @ 12.07 hrs, Volume= 0.280 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs / 4

Peak Elev= 42.00' @ 12.07 hrs Surf.Area= 2,208 sf Storage= 5,217 cf

Plug-Flow detention time= 89.8 min calculated for 0.280 af (50% of inflow)

Center-of-Mass det. time= (not calculated: outflow precedes inflow)

Volume	Invert	Avail.Storage	Storage Description
#1A	0.00'	1,417 cf	43.37'W x 50.92'L x 3.42'H Field A 7,542 cf Overall - 4,000 cf Embedded = 3,542 cf x 40.0% Voids
#2A	0.25'	3,800 cf	ACF R-Tank HD 1.5 x 600 Inside #1 Inside= 15.7"W x 26.0"H => 2.70 sf x 2.35'L = 6.3 cf Outside= 15.7"W x 26.0"H => 2.84 sf x 2.35'L = 6.7 cf 30 Rows of 20 Chambers
		5,217 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	8.85'	8.0" Round Culvert L= 100.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 8.85' / 8.00' S= 0.0085 '/ Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.35 sf

Primary OutFlow Max=6.93 cfs @ 12.07 hrs HW=39.83' (Free Discharge)↑**1=Culvert** (Barrel Controls 6.93 cfs @ 19.86 fps)

APPENDIX D

Stormwater Inspection and Maintenance Report

City of Portland
Hancock/Thames/Fore Street
Portland, Maine

Ransom Consulting, Inc.
Project 151.06094

AC Hotel Stormwater System Inspection and Maintenance Report

Inspection and Maintenance Contract:

Long-term inspection and maintenance by a DEP approved stormwater maintenance inspector shall be regularly provided under a five-year binding inspection and maintenance contract that must be renewed prior to contract expiration. A legal agreement shall be established with responsibility for inspection and maintenance and should list specific maintenance responsibilities (including timetables) as well as provide for funding for the long-term inspection and maintenance. Debris and sediment buildup shall be removed from the paver system as needed.

Inspection schedule:

During the first year of operation, filtration BMPs shall be inspected twice annually and following major storm events. Thereafter, the filter should be inspected every six months to ensure that it is draining within 48 hours following a 1-inch storm. Additionally, a storm that fills the system to overflow should be monitored to confirm it drains in no less than 36 hours and within 60 hours.

R-Tank Stormwater Detention:

Inspection and Maintenance of the R-Tank shall be in accordance with the manufacturer's recommended practices to provide the performance required by the design. The R-Tank system includes inspection ports and maintenance ports, each of which has a cover at the surface. A visual inspection of all ports should be used to determine the depth of sediments deposited in the R-Tank system. The system should be back-flushed once the sediment accumulation has reached the manufacturer's limits. Once removed, sediment-laden water must be disposed of properly.

Manmade Pervious Surfaces:

Long-term inspection and maintenance by a DEP approved stormwater maintenance inspector shall be regularly provided under a five-year binding inspection and maintenance contract that must be renewed prior to contract expiration. Maintenance criteria for manmade pervious surfaces are as follows:

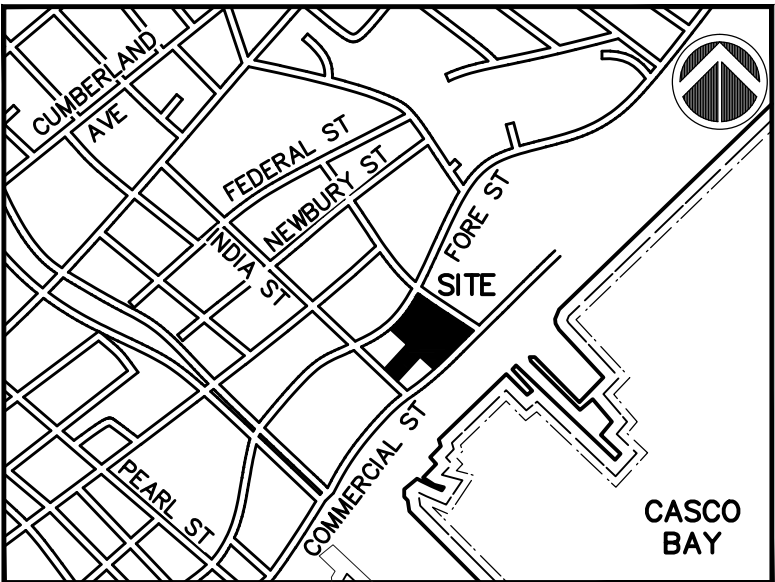
- Debris and sediment buildup shall be removed from the paver system using a vac truck as needed and shall be disposed properly.
- Remove sediment when the surface infiltration rates of more than 75% of the surface area fall below 10% of the post-installation verified surface infiltration rate.
- Remove sediment when surface ponding remains for more than 24 hours after the storm event in an area larger than 10 square feet.
- Restrain vehicles with muddy wheels from accessing pervious pavement areas.
- Limit salt use for deicing and do not use sand.
- Remove leaves and organic debris in the fall.
- Sweep, vacuum and/or pressure wash pavement twice annually at a minimum.

PROPOSED AC HOTEL

FORE STREET / HANCOCK STREET / THAMES STREET

PORTLAND, MAINE

Att. A



OWNER

Portland Norwich Group, LLC
2330 Palm Drive Road #300
Sanibel, FL 33907

DEVELOPER

Essex North Industrial, LLC
PO Box 394
Topsfield, ME 01983

ARCHITECT

Group One Partners, Incorporated

21 West Third Street
Boston, MA 02127
617.268.7000 ph
617.268.0209 f
www.grouponeinc.com

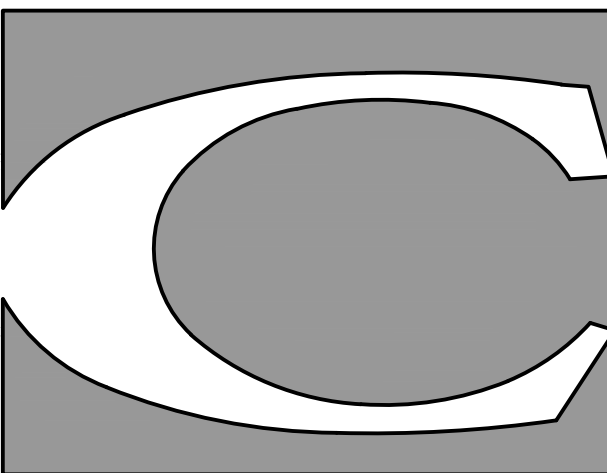


ENGINEER

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and Scientists

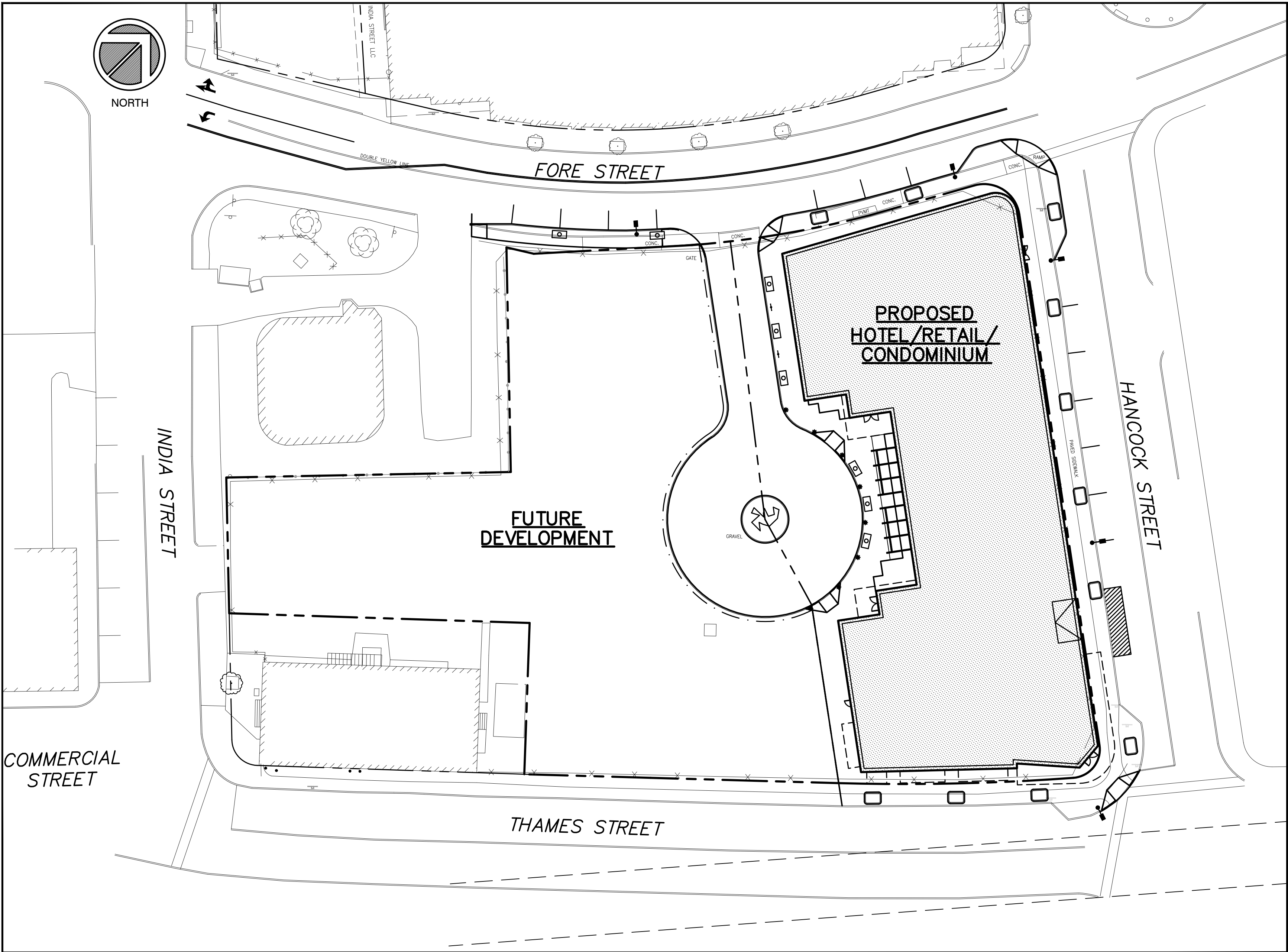
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Portland, ME 04101
Tel. (207) 772-2891
Fax (207) 772-3248
www.ransomenv.com

LANDSCAPE ARCHITECT PLANNER



CARROLL ASSOCIATES
LANDSCAPE ARCHITECTS

217 COMMERCIAL STREET, STE 200
PORTLAND, MAINE 04101
207.772.1552



SCALE 1" = 40'

SHEET INDEX

SHEET	DESCRIPTION
1	COVER SHEET
2	GENERAL NOTES
3	CONSTRUCTION CONDITIONS
4	CONSTRUCTION
5	CONSTRUCTION
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99	CONSTRUCTION
100	CONSTRUCTION

1. RECORDING PLAT, OCEAN GATEWAY, COMMERCIAL STREET AND FORE STREET, PORTLAND, MAINE MADE FOR CITY OF PORTLAND AND STATE OF MAINE DATED AUGUST 4, 2004 BY OWEN HASKELL, INC. RECORDED IN PLAN BOOK 204 PAGE 622.

2. LAND TITLE SURVEY AND SUBDIVISION PLAN IN PORTLAND, MAINE, USA MADE FOR THE TRUST FOR PUBLIC LAND, THE CITY OF PORTLAND, THE MAINE DEPARTMENT OF TRANSPORTATION, THE CANADIAN NATIONAL RAILWAY COMPANY DATED FEBRUARY 19, 1993 REVISED THROUGH 10-20-94 BY OWEN HASKELL, INC. RECORDED IN PLAN BOOK 193 PAGE 187.

3. SUBDIVISION RECORDING PLAT ON ONE INDIA STREET, PORTLAND, MAINE MADE FOR RIVERWALK LLC, 25 INDIA STREET LLC, HANCOCK & MIDDLE, LLC, AND OCEAN GATEWAY LLC DATED MARCH 22, 2006 REVISED 04-13-06 BY OWEN HASKELL, INC. RECORDED IN PLAN BOOK 207 PAGE 54.

4. CONDOMINIUM PLAT "THE LONGFELLOW A CONDOMINIUM" ONE INDIA STREET, PORTLAND, MAINE MADE FOR LRAR LLC, THE DECLARANT AND OWNER OF RECORD, DATED SEPT. 20, 2006 REVISED 9-26-09 BY OWEN HASKELL, INC. RECORDED IN PLAN BOOK 206 PAGE 618.

1. OWNER OF RECORD: LRAR LLC, 2 MARKET STREET, SUITE 500,
PORTLAND, MAINE, C.C.R.D. BOOK 24191 PAGE 217, BOOK 23525 PAGE
166, BOOK 24419 PAGE 118.

2. PARCEL IS SHOWN AS LOTS 1 AND 20, BLOCK B ON THE CITY OF
PORTLAND ASSESSORS MAP 19.

3. BEARINGS ARE GRID NORTH PER PLAN REFERENCE 1.

4. ELEVATIONS BASED ON NGVD 1929 DATUM.

5. TOPOGRAPHIC SURVEY PERFORMED UNDER WINTER CONDITIONS OF SNOW AND ICE.

TM 19-B-12
N/F
PORTLAND WATER DISTRICT
3870/101

LOT AREA =
60,642 S.F.
1.392 ACRES

COMMERCIAL ST.
PAVED - PUBLIC 100' WIDE

- IRON PIPE OR ROD FND
- GRANITE MONUMENT FND
- WATER VALVE
- ⊙ GAS VALVE
- ⊙ HYDRANT
- ⊙ UTILITY POLE
- ⊙ MANHOLE
- ⊙ CATCH BASIN
- ⊙ LIGHT POLE
- ⊙ ELEC. OR GAS METER

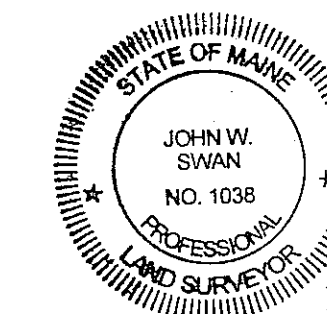
- CURB
- X — FENCE
- OHW — OVERHEAD WIRE
- UGE — UNDERGRD ELEC
- T — TELEPHONE LINE
- G — GAS LINE
- W — WATER LINE
- S — SANITARY SEWER
- SIGN

A horizontal graphic scale bar with alternating black and white segments. Below the bar, numerical labels indicate distances in feet: 0, 10', 20', 40', and 80. The bar is divided into four equal segments, each representing 20 feet, with intermediate markings at 10-foot intervals.

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE AT THE LOCATION INDICATED ALTHOUGH THE SURVEYOR BELIEVES THEM TO BE. THE SURVEYOR DOES NOT AND HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES BY CALLING, DIGGING, OR EXCAVATING. THE SURVEYOR MAKES NO GUARANTEE THAT THERE ARE NO UNLOCATED UTILITIES IN THE AREA. THE SURVEYOR HAS AT LEAST THREE BUSINESS DAYS BEFORE THE COMMENCEMENT OF ANY CONSTRUCTION, DUE TO THE UNCONFIRMED REQUIREMENTS, ALL INVERTS AND PIPE SIZES MUST BE VERIFIED PRIOR TO ANY CONSTRUCTION.

OWEN HASKELL, INC. CERTIFIES THAT THIS PLAN IS BASED ON, AND THE RESULT OF, AN ON THE GROUND FIELD SURVEY AND THAT TO THE BEST OF OUR KNOWLEDGE, INFORMATION AND BELIEF, IT CONFORMS TO THE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS CURRENT STANDARDS OF PRACTICE, WITH THE EXCEPTION OF MARKERS NOT SET AT ALL CORNERS.

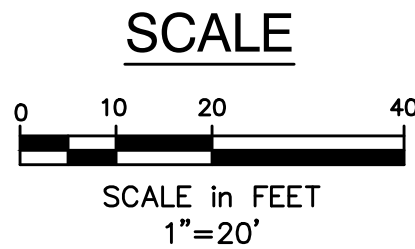
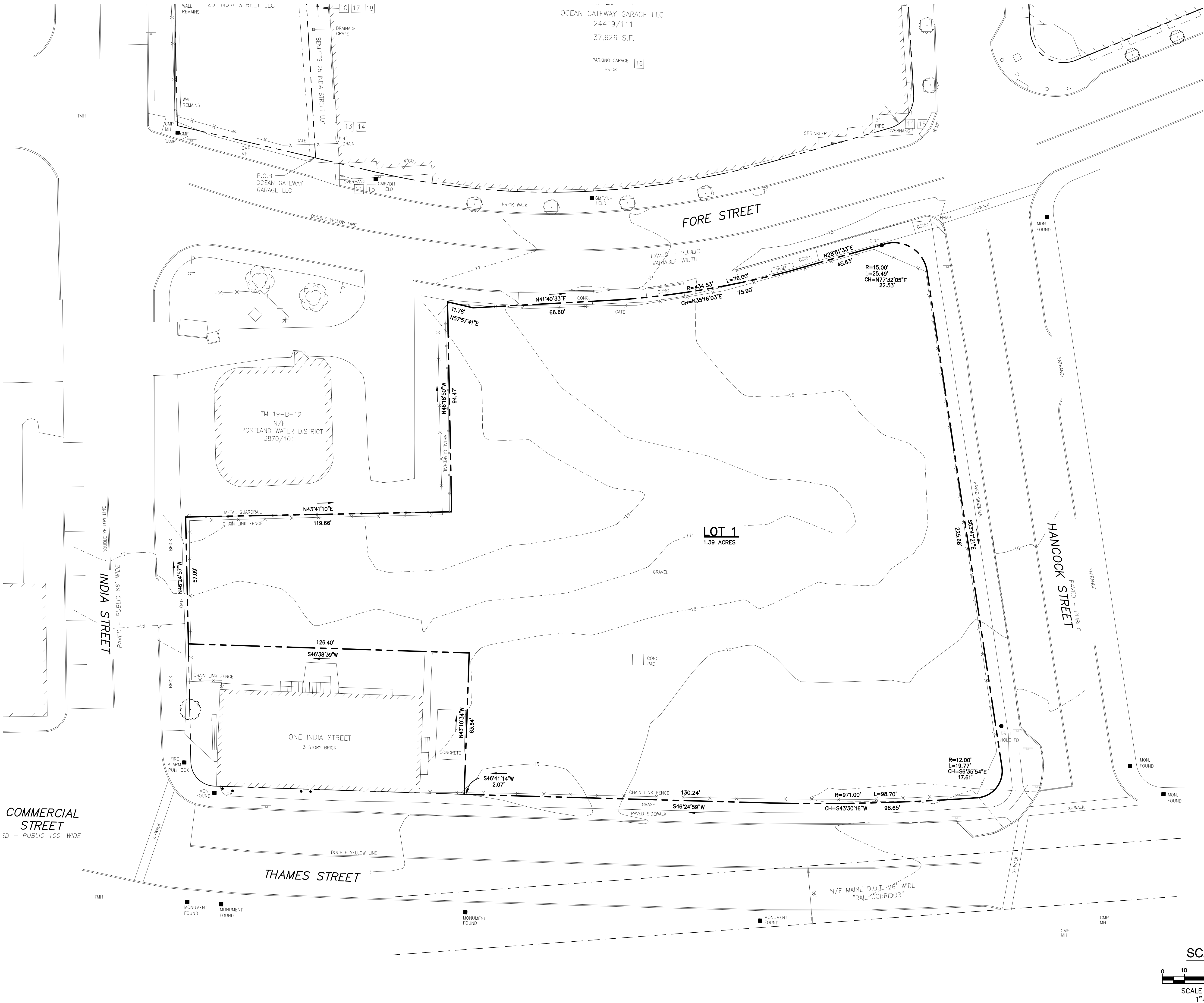

JOHN W. SWAN, PLS NO. 1038



AT
FORE STREET & INDIA STREET
PORTLAND, MAINE
MADE FOR

 **OWEN HASKELL, INC.**
390 U.S. ROUTE ONE, FALMOUTH, ME 04105 (207) 774-0424
PROFESSIONAL LAND SURVEYORS

Drwn By	RS	Date	Job No.
Trace By	JLW	APRIL 13, 2015	2015-021P
Check By	JWS	Scale	Drwg. No.
Book No.	1099	1" = 20'	1

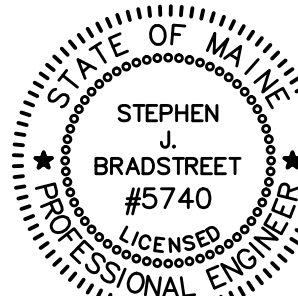


PROPOSED AC HOTEL

FORE STREET /
HANCOCK STREET /
THAMES STREET
PORTLAND, MAINE

Prepared for:

PORTLAND NORWICH
GROUP, LLC
2330 PALM RIDGE ROAD
#305
SANIBEL, FL 33957



CIVIL ENGINEER:

STEPHEN J. BRADSTREET, PE #5740
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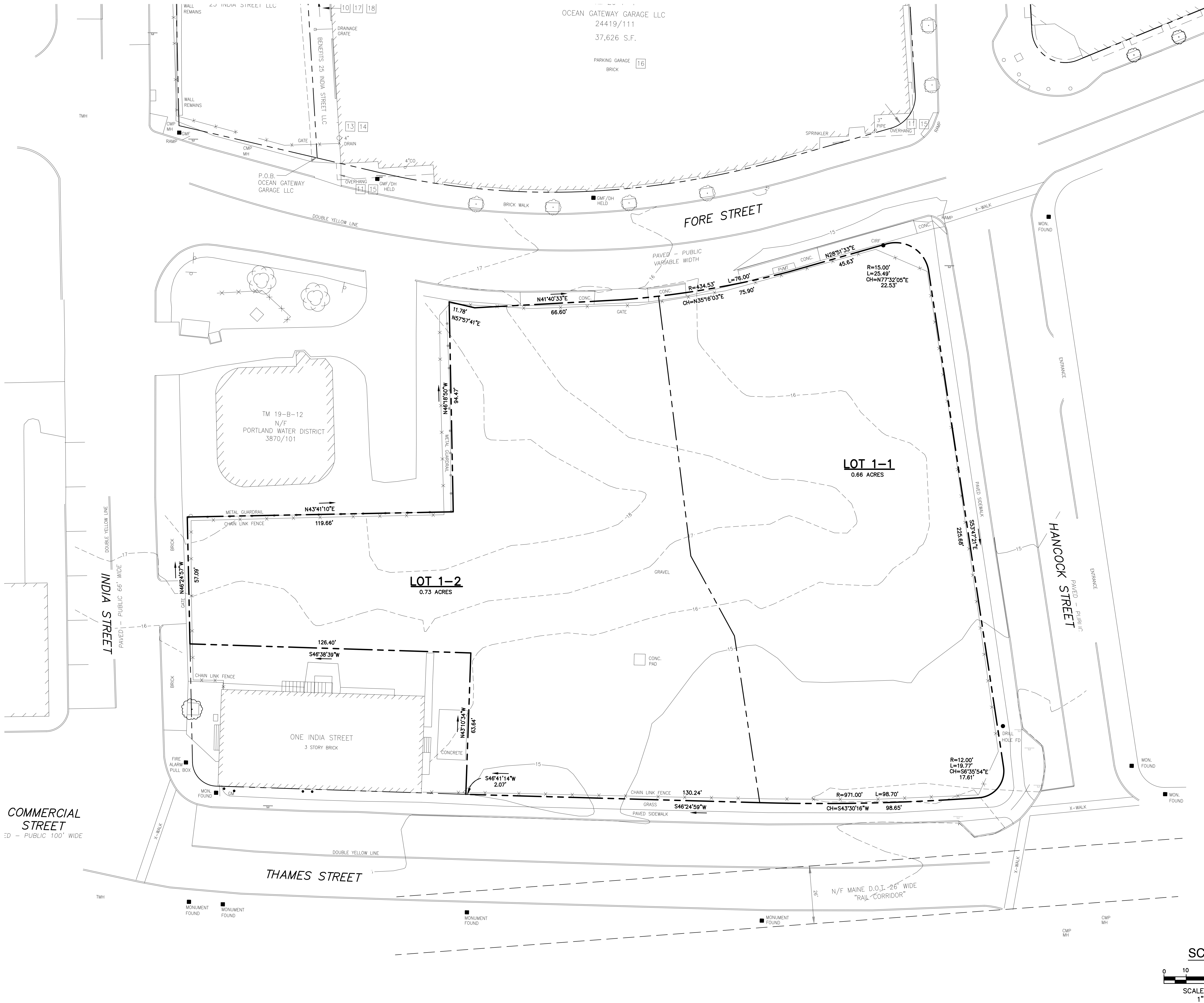
EXISTING
CONDITIONS PLAN

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A	CLIENT REVIEW	09/15/15
No.	Revision/Issue	Date
Design by:	MPM	Checked by: SUB
Drawn by:	JAR	Approved by: SUB
Project:	150.06094	Date: AUGUST 2015

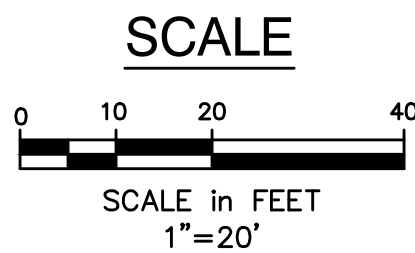
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Sheet 3 of 13



COMMERCIAL STREET
100' - PUBLIC 100' WIDE

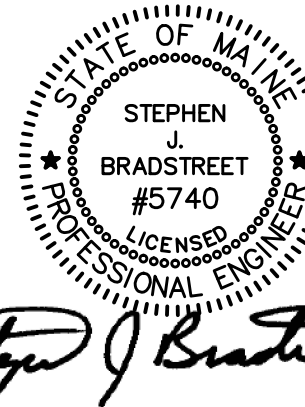


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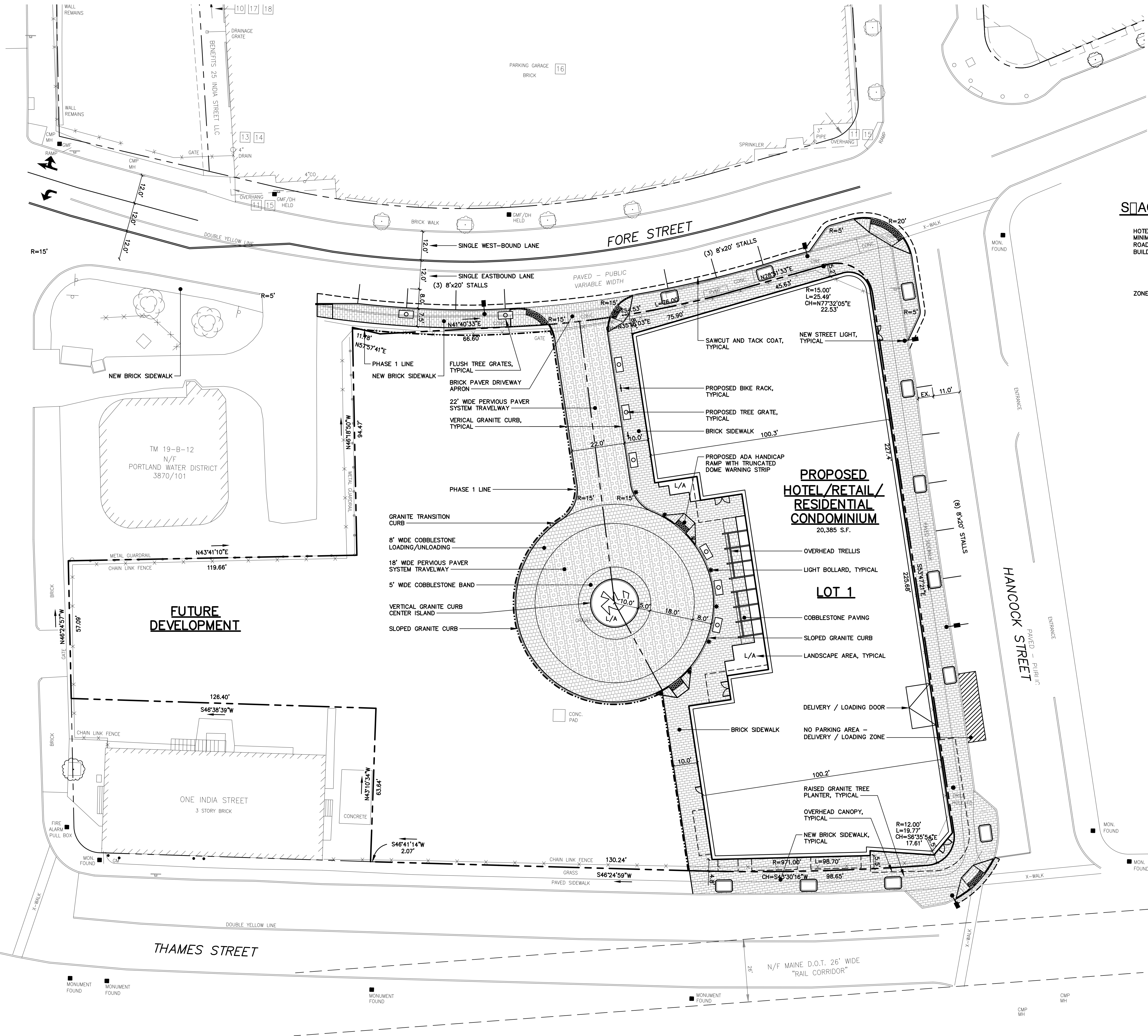
SUBDIVISION PLAN

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No.	Revision/Issue	Date
Design by:	MPM	Checked by: SJB
Drawn by:	JAR	Approved by: SJB
Project:	150.06094	Date: AUGUST 2015

Sheet No:

C0.2

Sheet 4 of 13



SPACE AND LOT STANDARDS

	REQUIRED	PROPOSED
HOTEL ROOMS	150	150
MINIMUM LOT SIZE	0 S.F.	28,632 S.F.
ROAD FRONTAGE	0'	>226'
BUILDING SETBACKS (MIN./MAX.)		
FRONT	0'/10'	<1
SIDE	0'/10'	<10
REAR	0'	--
BUILDING HEIGHT	65'	<65' (6 FLOORS)

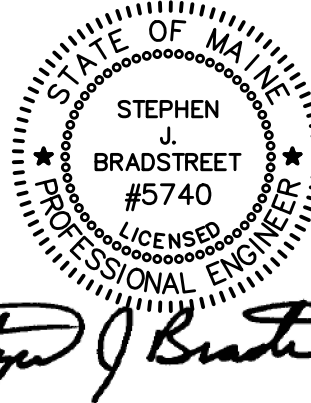
ZONE: B-6 EASTERN WATERFRONT MIXED ZONE

PROPOSED AC HOTEL

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Prepared for:

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SITE PLAN

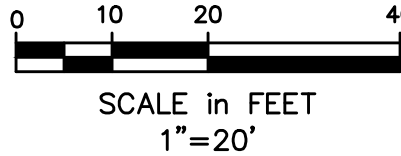
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No.	Revision/Issue	Date
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Project:	150.06094	Date: AUGUST 2015

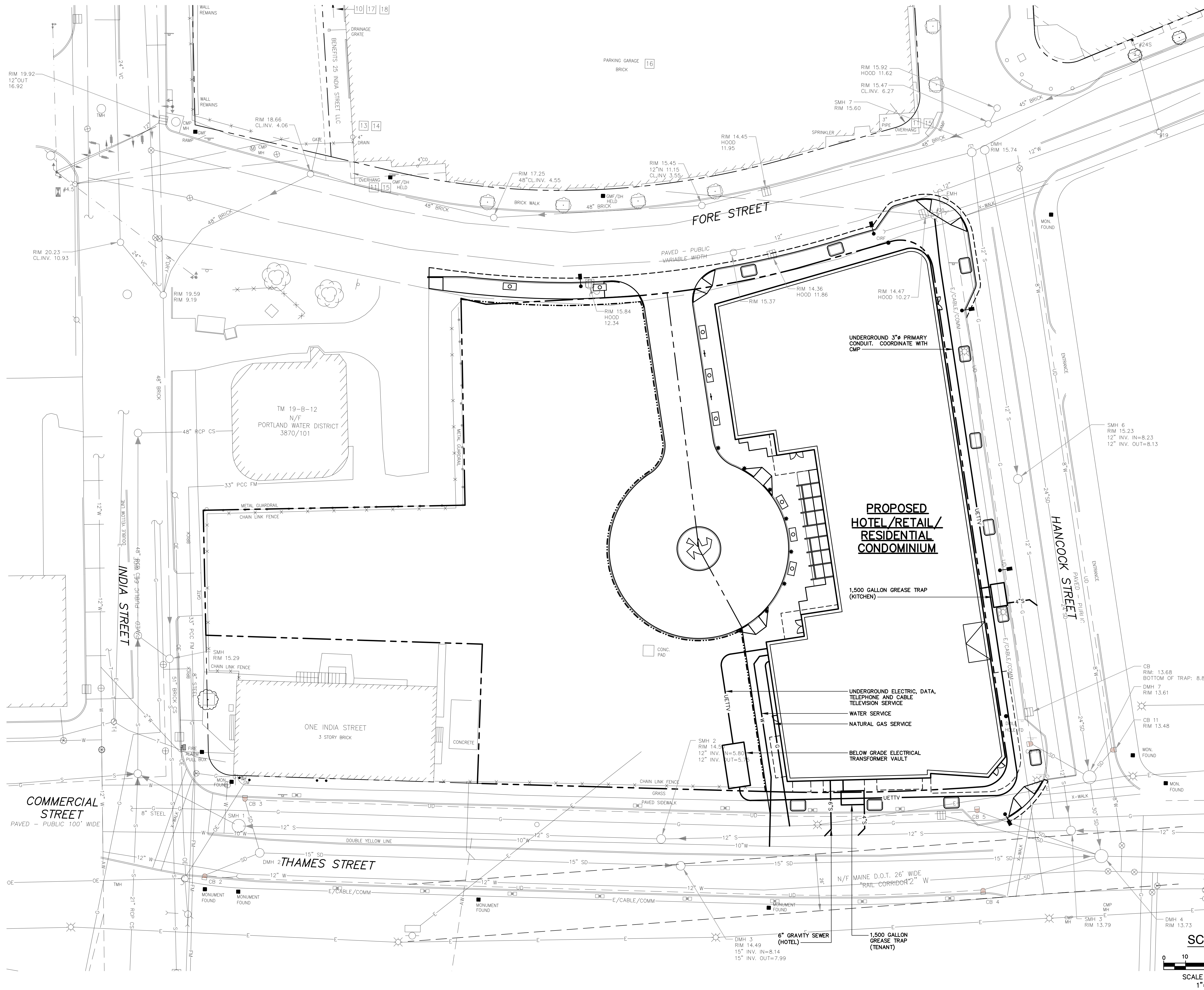
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SCALE



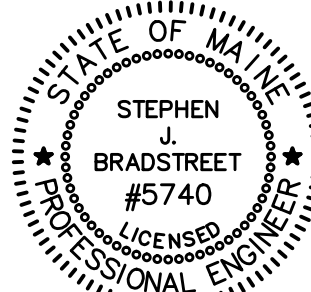


PROPOSED AC HOTEL

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Prepared for:

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2330 PALM RIDGE ROAD
#305
SANIBEL, FL 33957



Stephen J. Bradstreet

CIVIL ENGINEER:

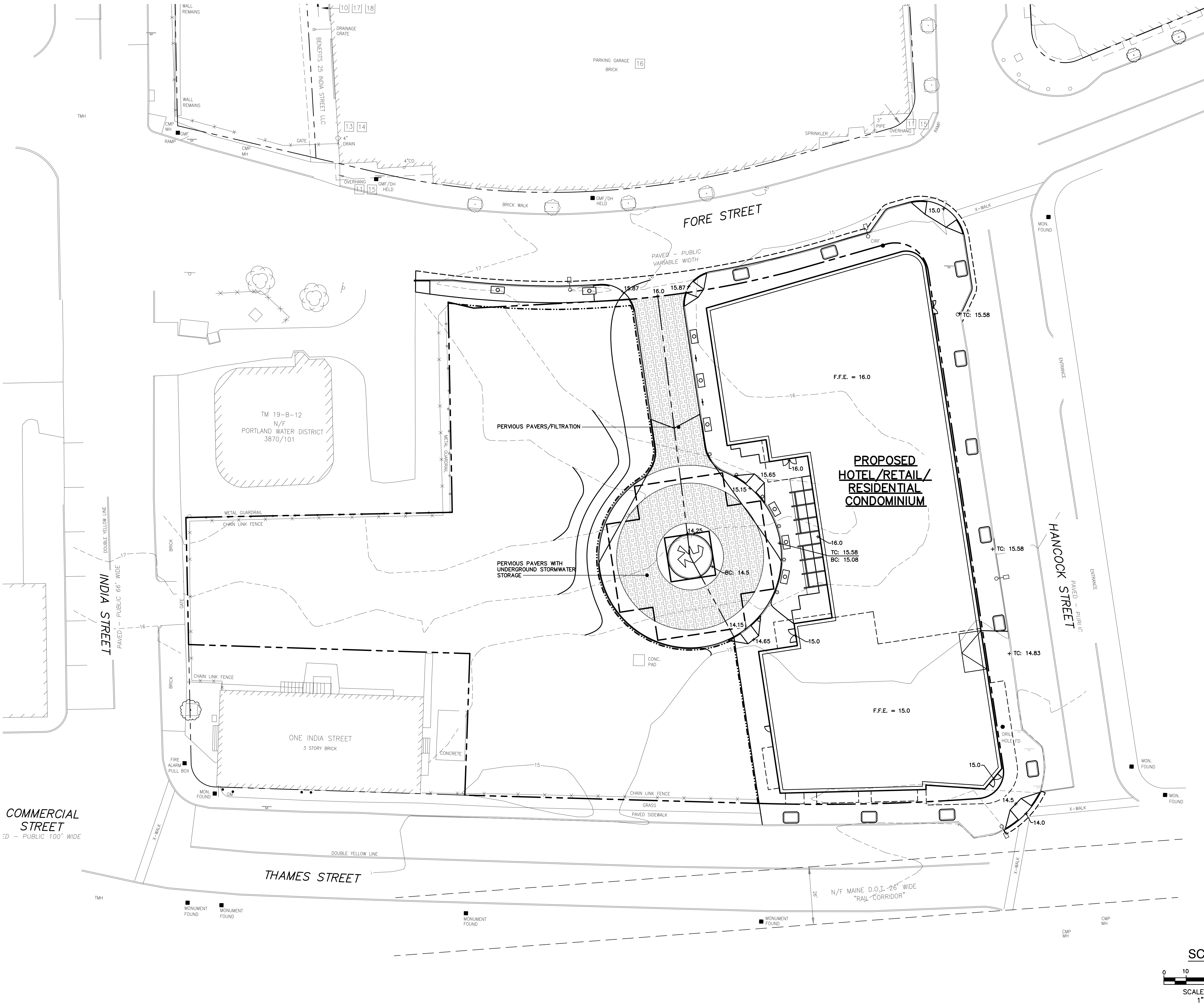
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UTILITY PLAN

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Drawn by:	JAR	Approved by: SJB
Project:	150.06094	Date: AUGUST 2015
Sheet No:	C1.1	

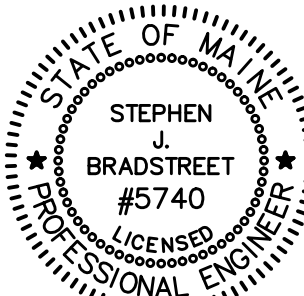


PROPOSED AC HOTEL

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HANCOCK STREET /
THAMES STREET
PORTLAND, MAINE

Prepared for:

PORTLAND NORWICH
GROUP, LLC
2330 PALM RIDGE ROAD
#305
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Portland, ME 04101
Tel. (207) 772-2891
Fax (207) 772-3248
www.ransomenv.com

GRADING, DRAINAGE
AND EROSION
CONTROL PLAN

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A	CLIENT REVIEW	09/15/15
No.	Revision/Issue	Date
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Drawn by:	JAR	Approved by: SJB
Project:	150.06094	Date: AUGUST 2015
Sheet No:	C1.2	
	Sheet 7 of 13	

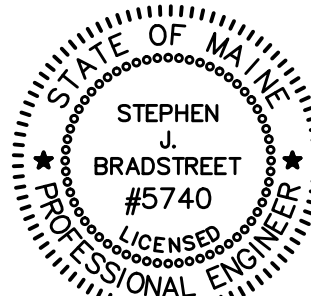
Site:

PROPOSED AC HOTEL

FORE STREET /
HANCOCK STREET /
THAMES STREET
PORTLAND, MAINE

Prepared for:

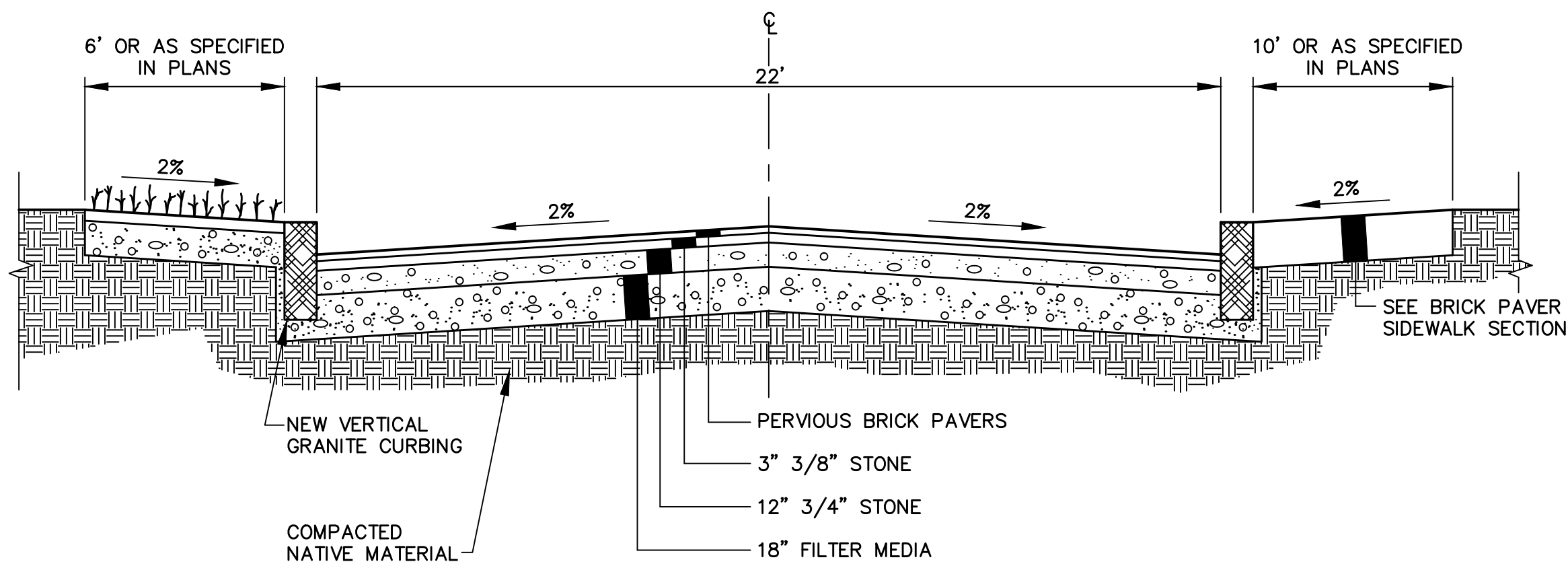
PORTLAND NORWICH
GROUP, LLC
2330 PALM RIDGE ROAD
#305
SANIBEL, FL 33957



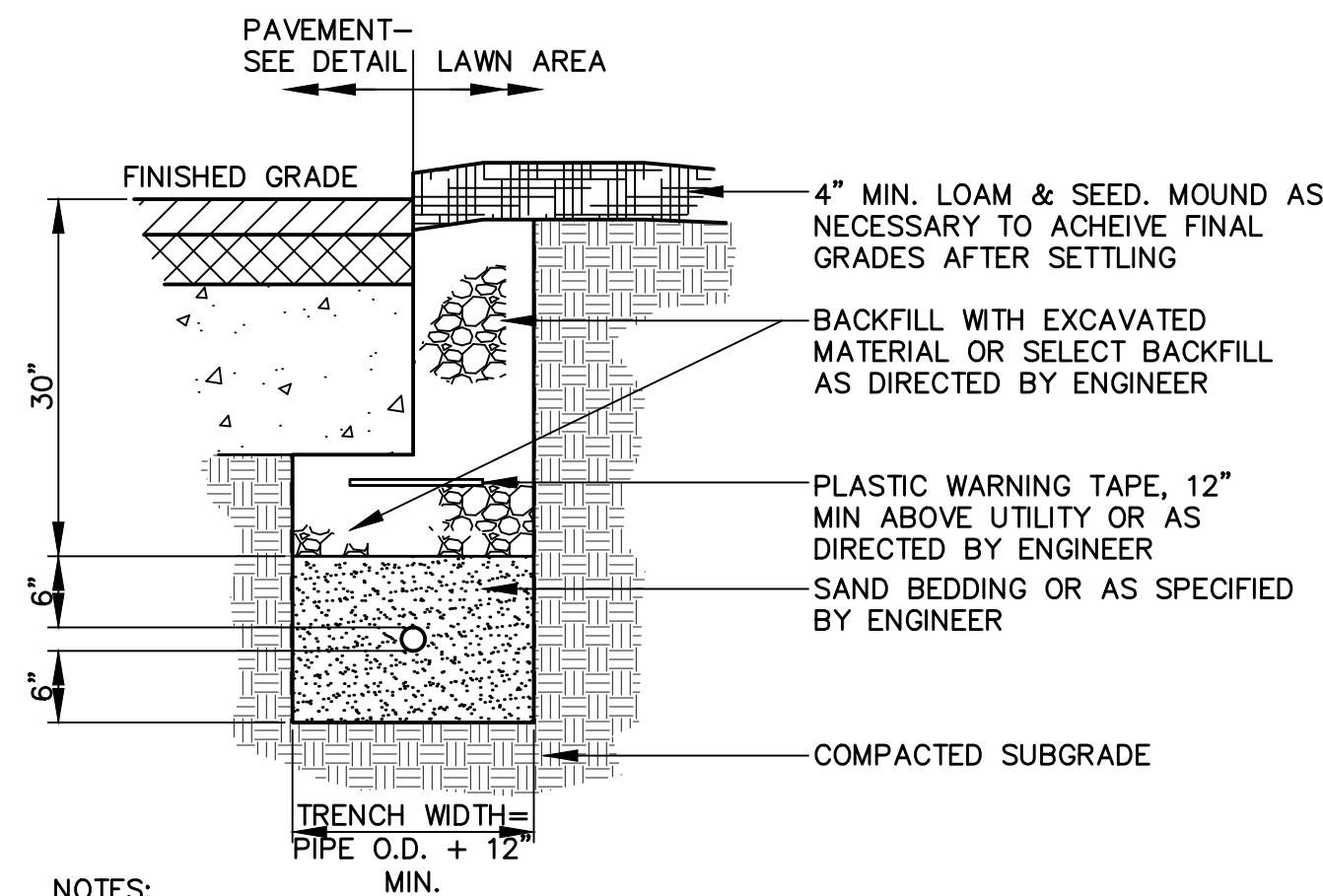
Stephen J. Bradstreet

CIVIL ENGINEER:

STEPHEN J. BRADSTREET, PE #5740
400 COMMERCIAL STREET, SUITE 404
PORTLAND, ME 04101
207-772-2891

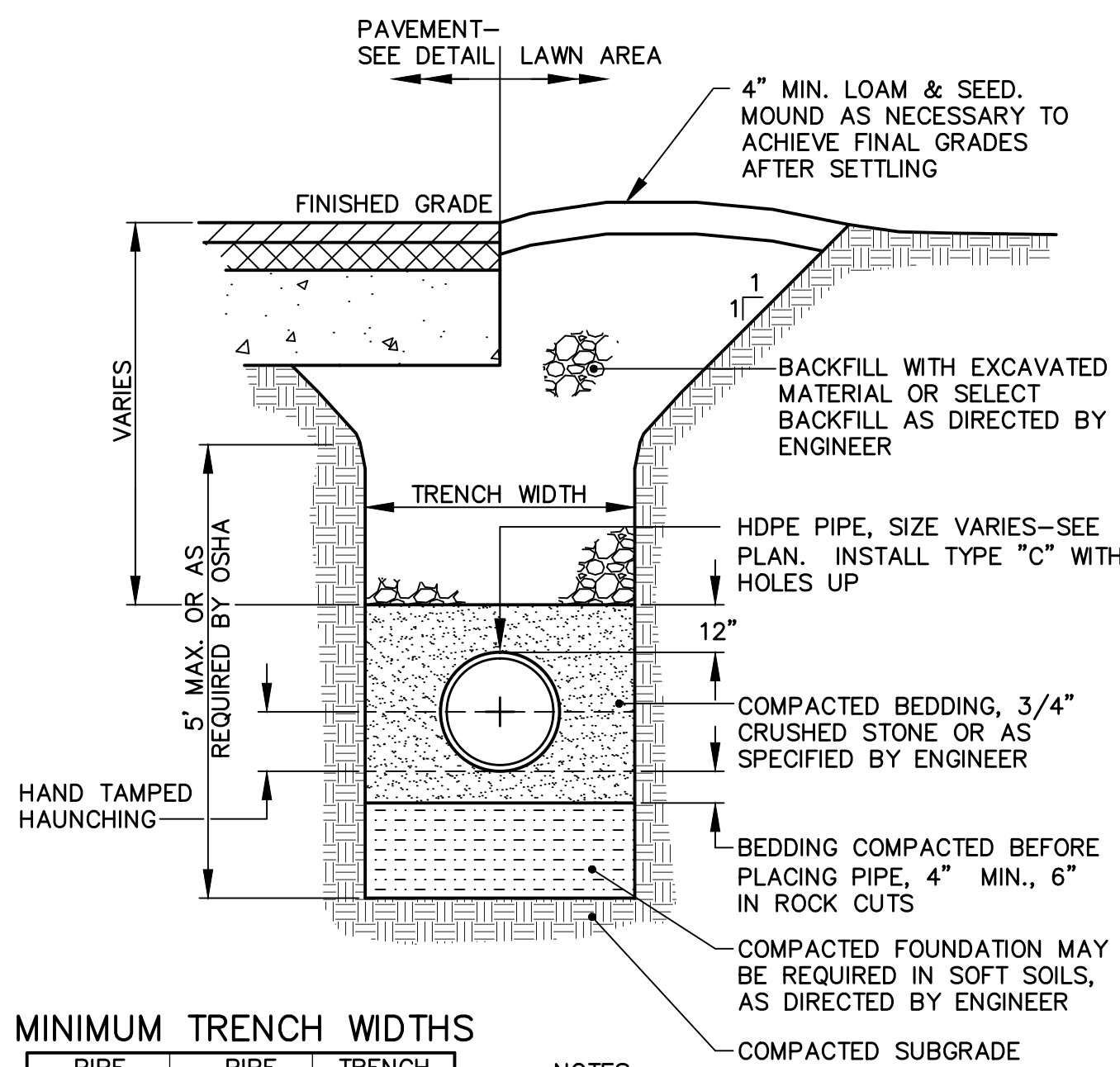


TOP OF STORMWATER TRENCH SECTION
NOT TO SCALE



- NOTES:
- ALL WORK TO COMPLY WITH UTILITY COMPANY STANDARDS.
 - CONTRACTOR TO PROVIDE 1/2" POLYPROPYLENE PULL ROPES IN ALL CONDUITS.

TOP OF ELECTRIC TRENCH SECTION
NOT TO SCALE

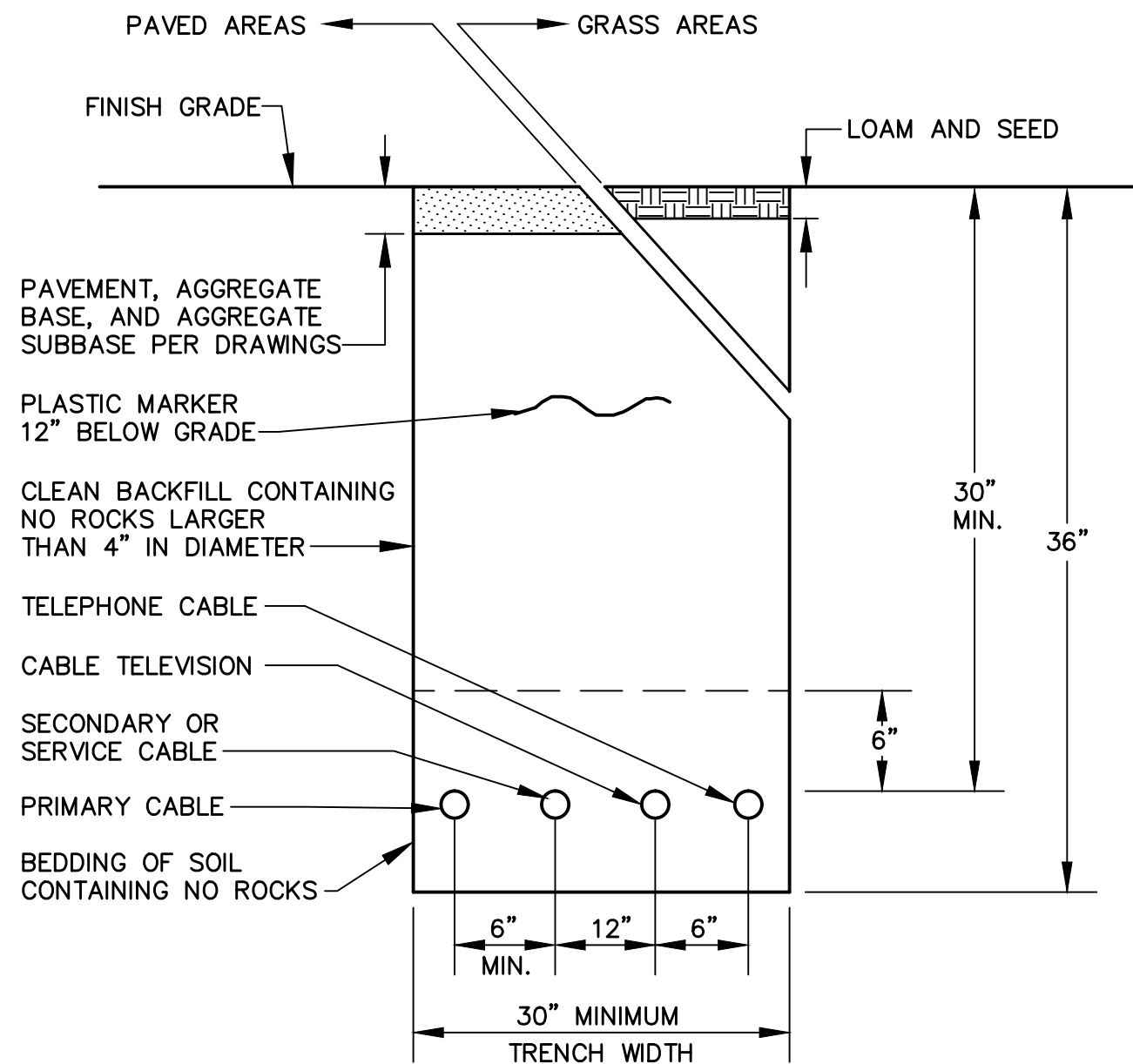


MINIMUM TRENCH WIDTHS

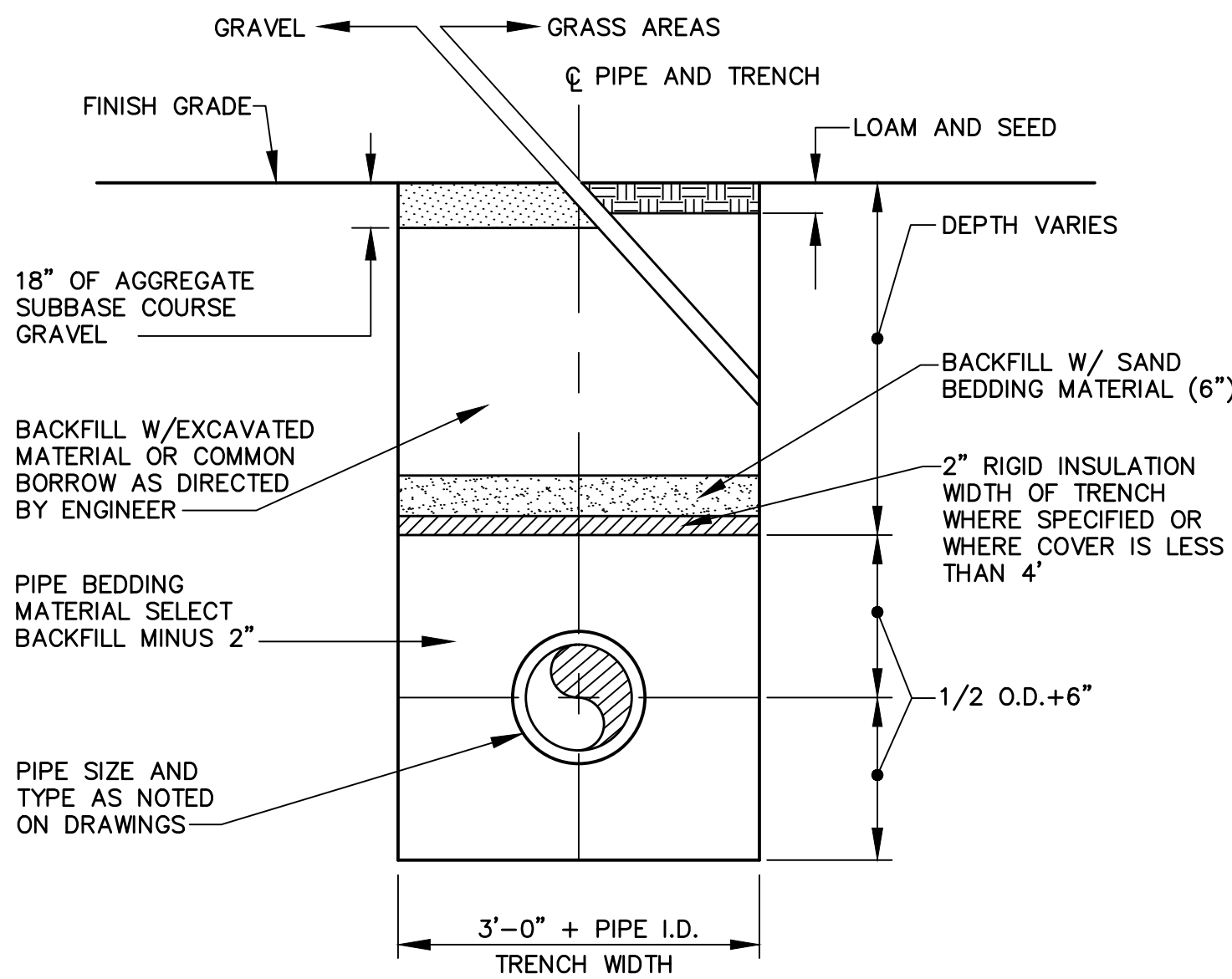
PIPE DIA.	PIPE O.D.	TRENCH WIDTH
12"	14.45"	31"
15"	17.65"	34"
18"	21.10"	39"
24"	28.30"	48"
30"	36.10"	66"
36"	42.25"	78"
42"	47.00"	83"
48"	53.00"	89"
60"	66.30"	102"

- NOTES:
- WHERE TRENCHES PENETRATE DETENTION BASIN EMBANKMENTS OR OTHER SUCH SPECIAL SECTIONS, BACKFILL SHALL CONFORM TO THE THEIR REQUIREMENTS.
 - INSTALL WATER STOPS EVERY 100' OR AS NECESSARY TO PREVENT FINES FROM MIGRATING.
 - TRENCH WIDTH SHALL BE WIDE ENOUGH TO ACCOMMODATE COMPACTION EQUIPMENT.

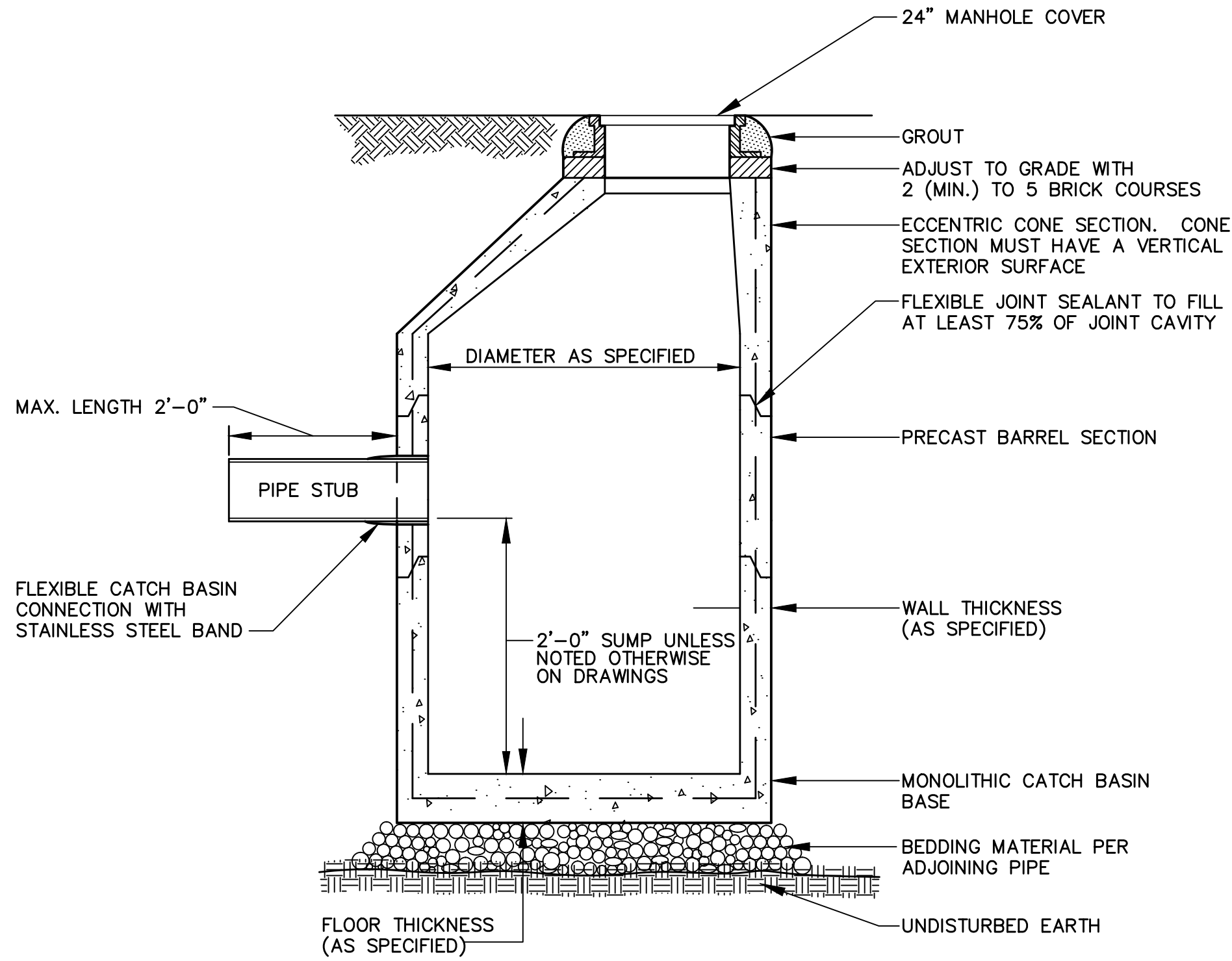
STORMWATER TRENCH
NOT TO SCALE



INTERIOR OF TRENCH SECTION
NOT TO SCALE

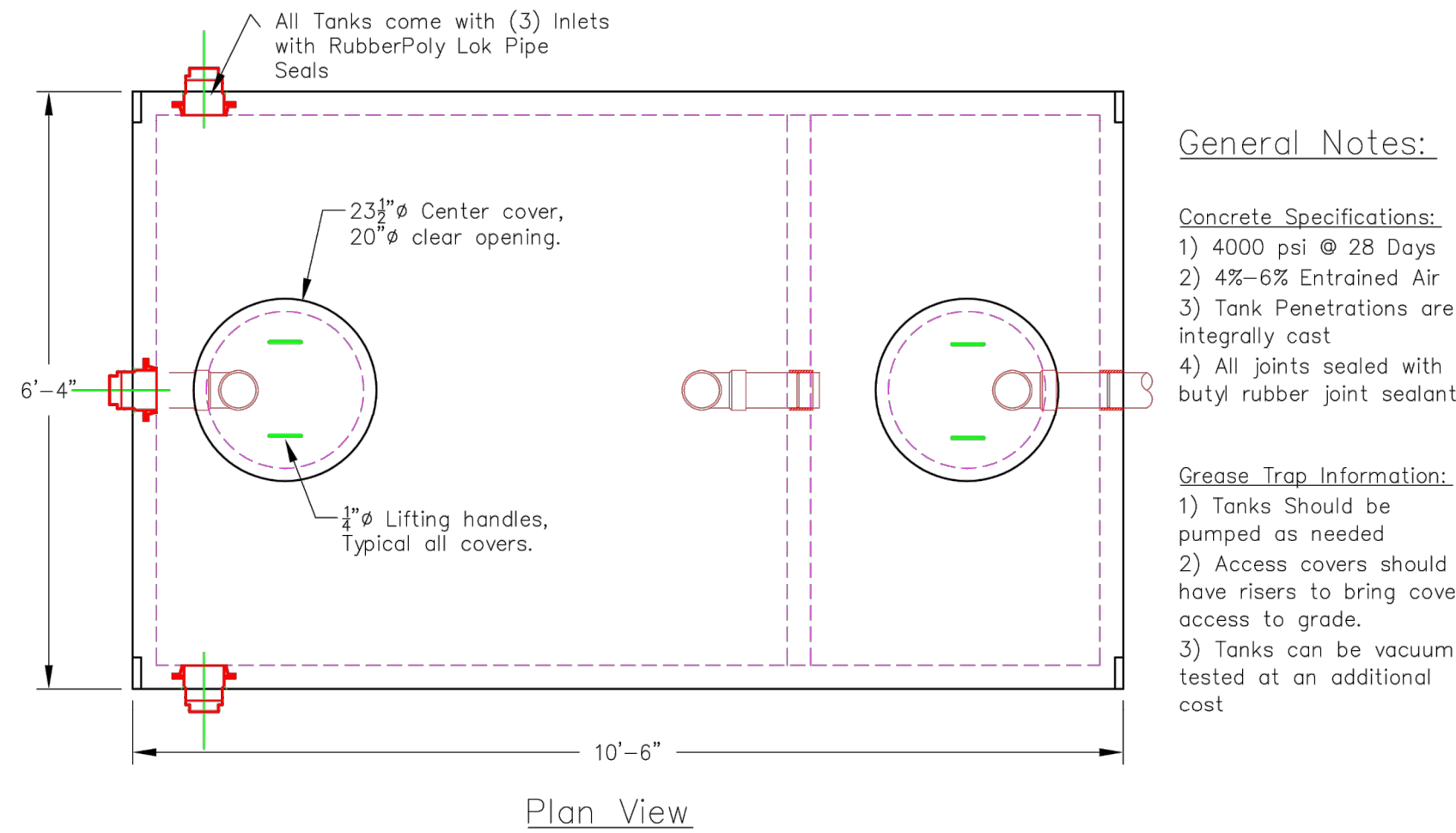


WATER TRENCH SECTION
NOT TO SCALE



I.D.	WALL WIDTH	FLOOR THICKNESS
4'-0"	5"	6"
5'-0"	6"	6"
6'-0"	7"	6"
8'-0"	8"	8"
10'-0"	10"	9"

PRECAST CONCRETE MANHOLE
NOT TO SCALE



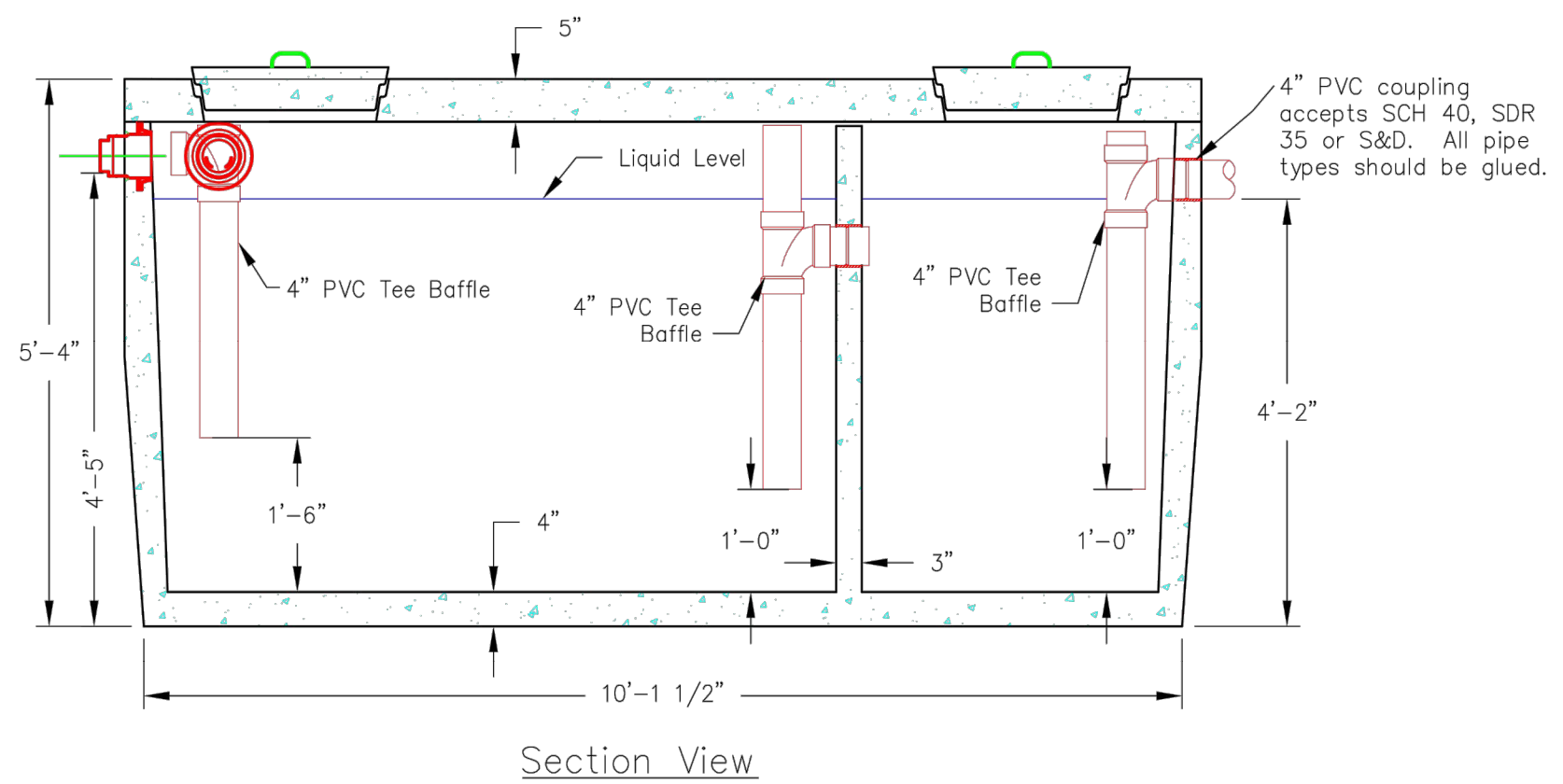
General Notes:

Concrete Specifications:

- 4000 psi @ 28 Days
- 4%-6% Entrained Air
- Tank Penetrations are integrally cast
- All joints sealed with butyl rubber joint sealant

Grease Trap Information:

- Tanks Should be pumped as needed
- Access covers should have risers to bring cover access to grade.
- Tanks can be vacuum tested at an additional cost



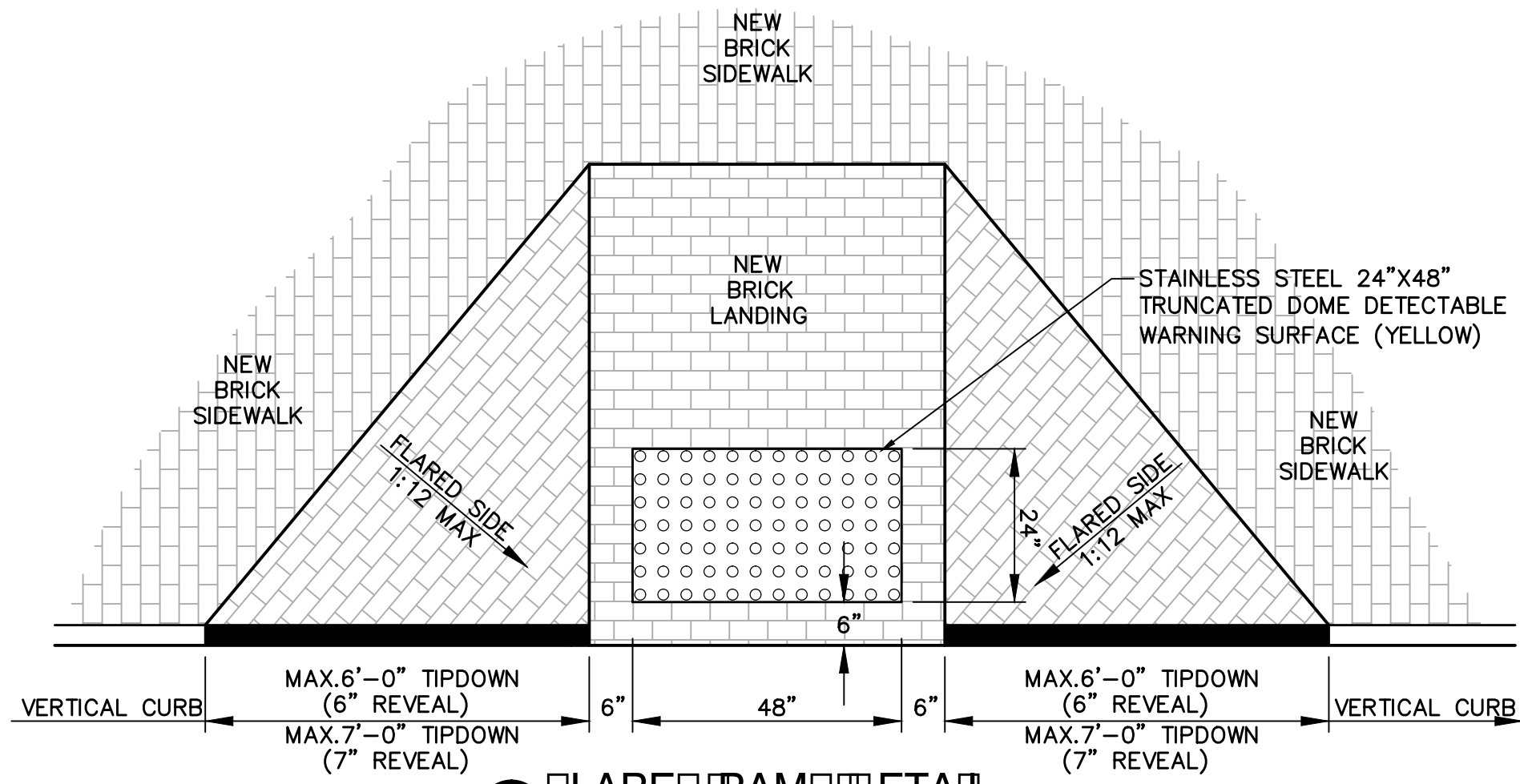
ALL ON REASE TRAP
NOT TO SCALE

RANSOM
Consulting
Engineers
and Scientists

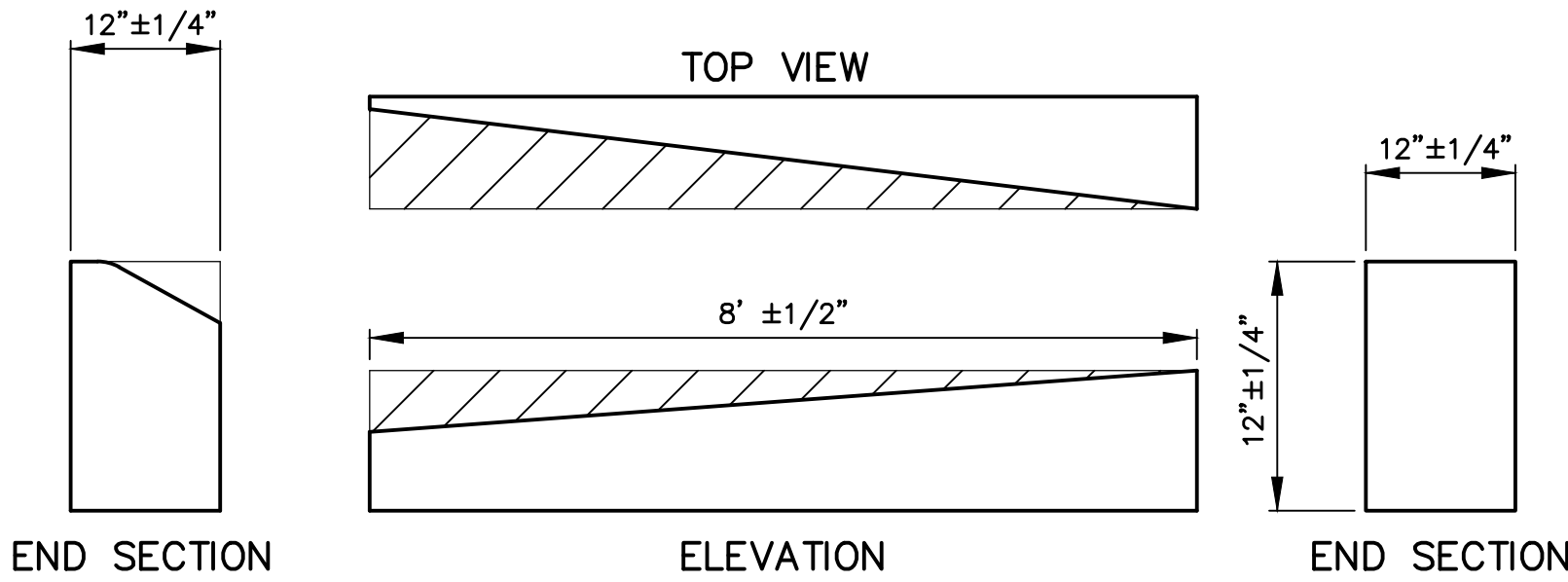
400 Commercial Street, Suite 404
Portland, ME 04101
Tel. (207) 772-2891
Fax (207) 772-3248
www.ransomenv.com

CONSTRUCTION
DETAILS

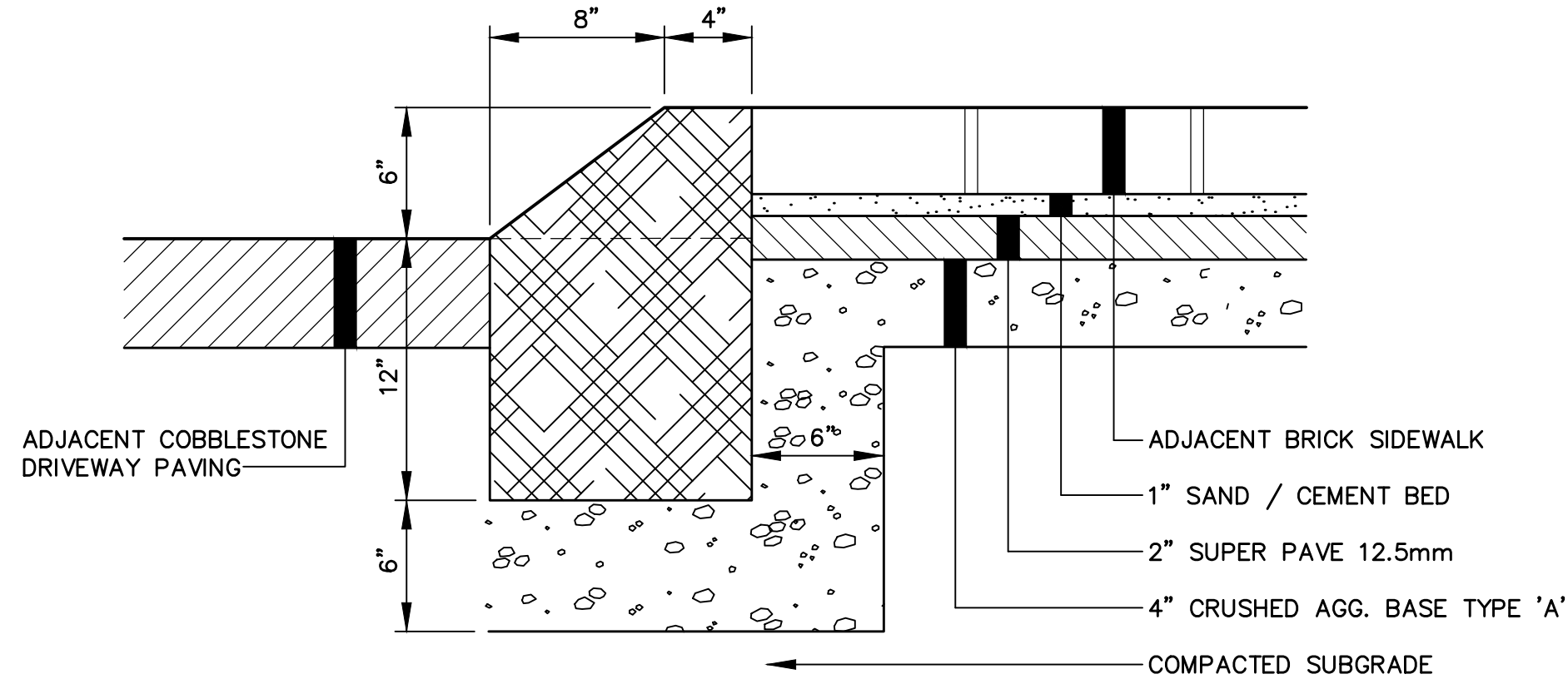
B	PRELIMINARY SUBMISSION	09/29/15
A	CLIENT REVIEW	09/15/15
No.	Revision/Issue	Date
Design by:	MPM	Checked by: SJB
Drawn by:	JAR	Approved by: SJB
Project:	150.06094	Date: AUGUST 2015
Sheet No:	C2.0	



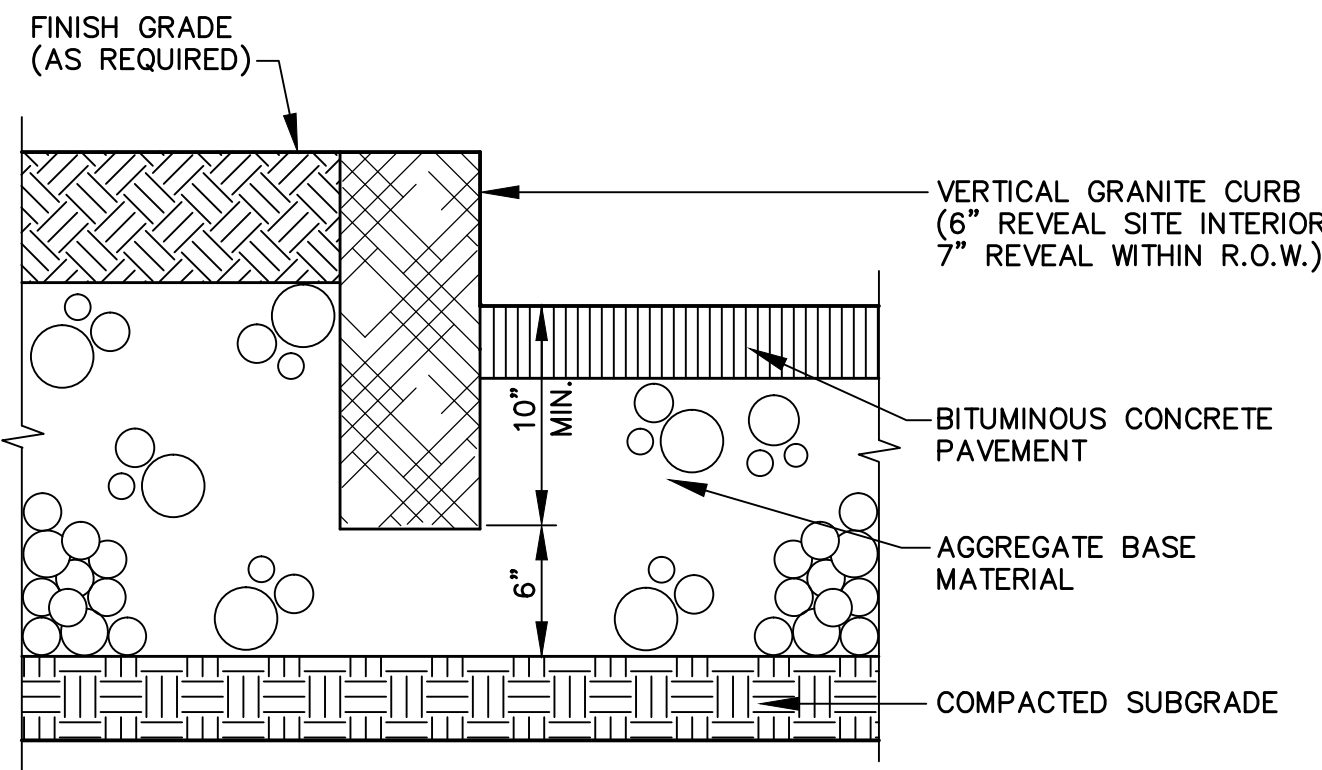
PLAN LANDING AND SIDEWALK
NOT TO SCALE



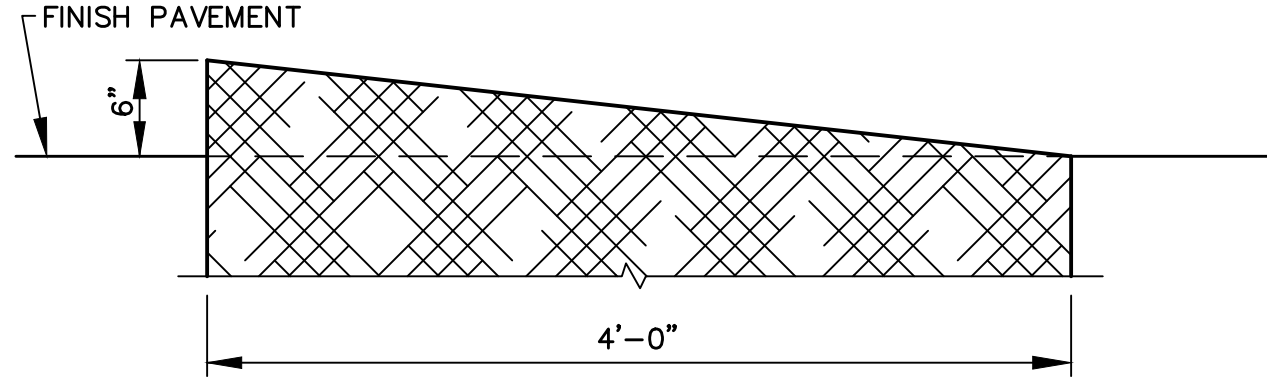
ELEVATION AND END SECTION
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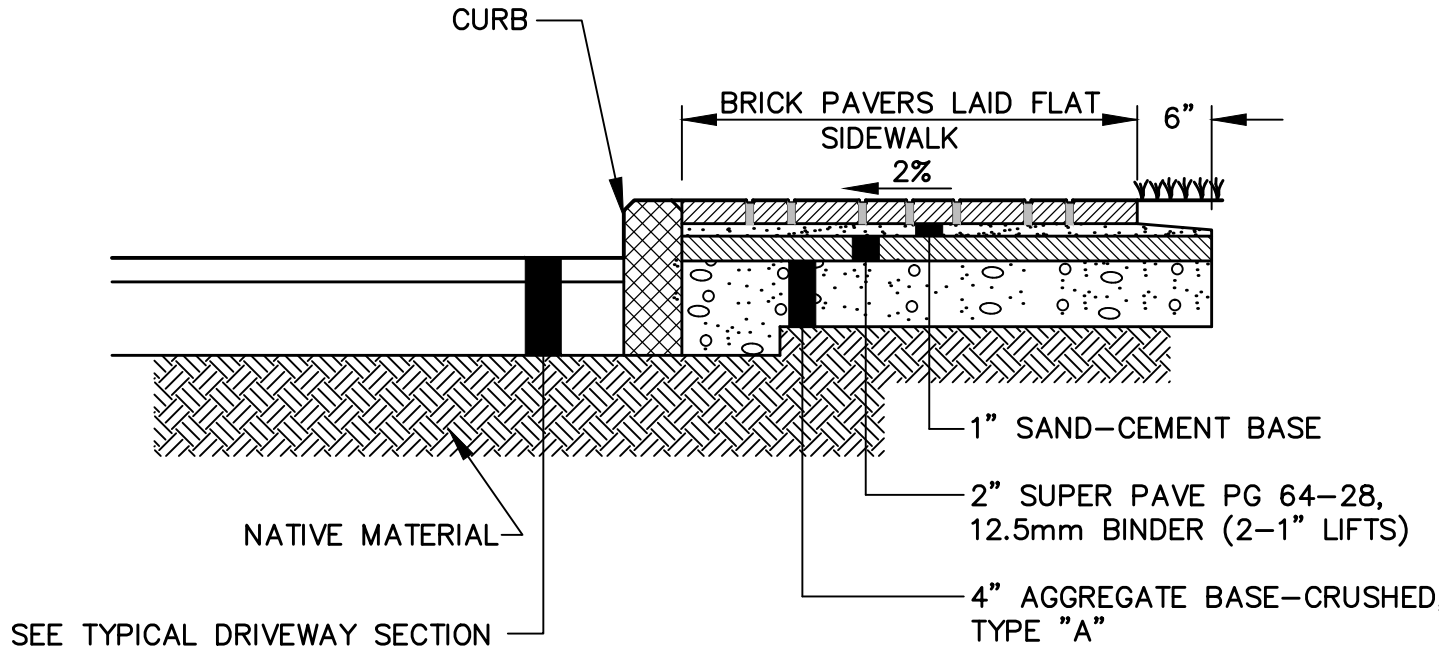
CROSS SECTION OF SLOPED BRICK LANDING
NOT TO SCALE



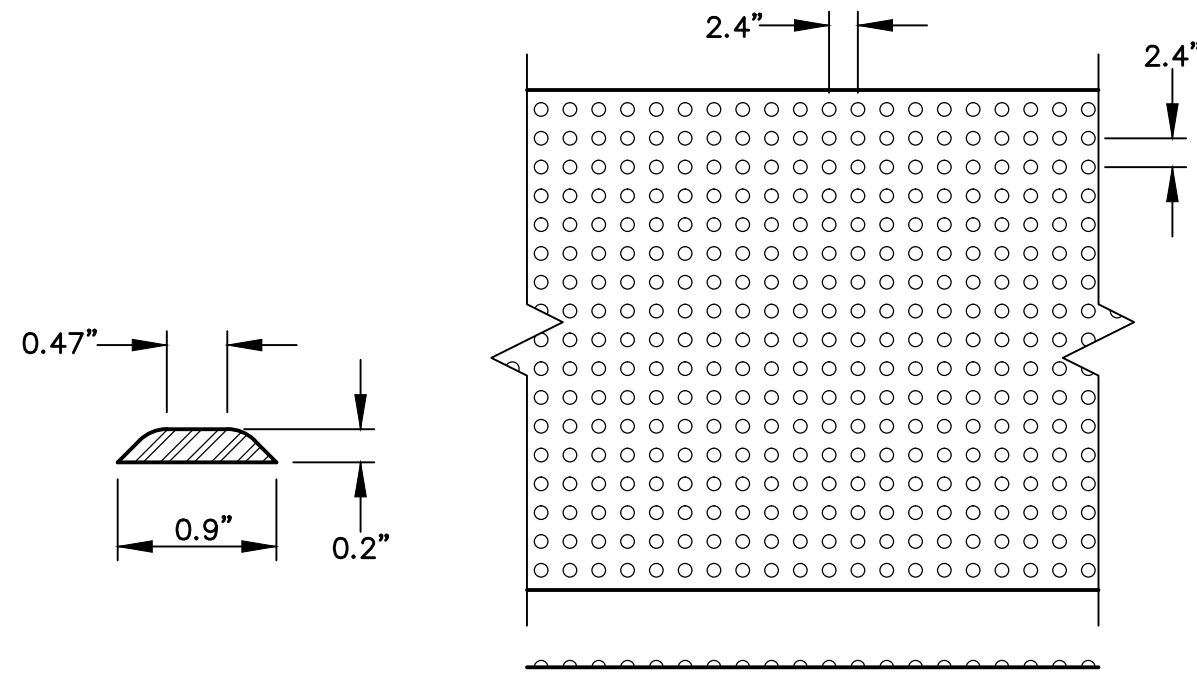
CROSS SECTION OF VERTICAL GRANITE CURB
NOT TO SCALE



CROSS SECTION OF CURB INSTALLATION
NOT TO SCALE



CROSS SECTION OF BRICK PAVEMENT
NOT TO SCALE



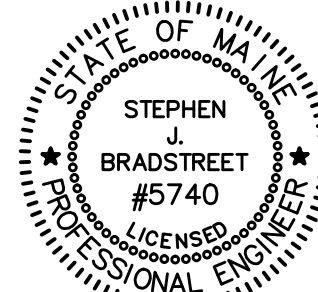
CROSS SECTION OF TRUNCATED DOME
NOT TO SCALE

PROPOSED AC HOTEL

FORE STREET /
HANCOCK STREET /
THAMES STREET
PORTLAND, MAINE

Prepared for:

PORTLAND NORWICH
GROUP, LLC
2330 PALM RIDGE ROAD
#305
SANIBEL, FL 33957



Stephen J. Bradstreet

CIVIL ENGINEER:

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PORTLAND, ME 04101
207-772-2891

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CONSTRUCTION
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Project:	150.06094	Date: AUGUST 2015

Sheet No:

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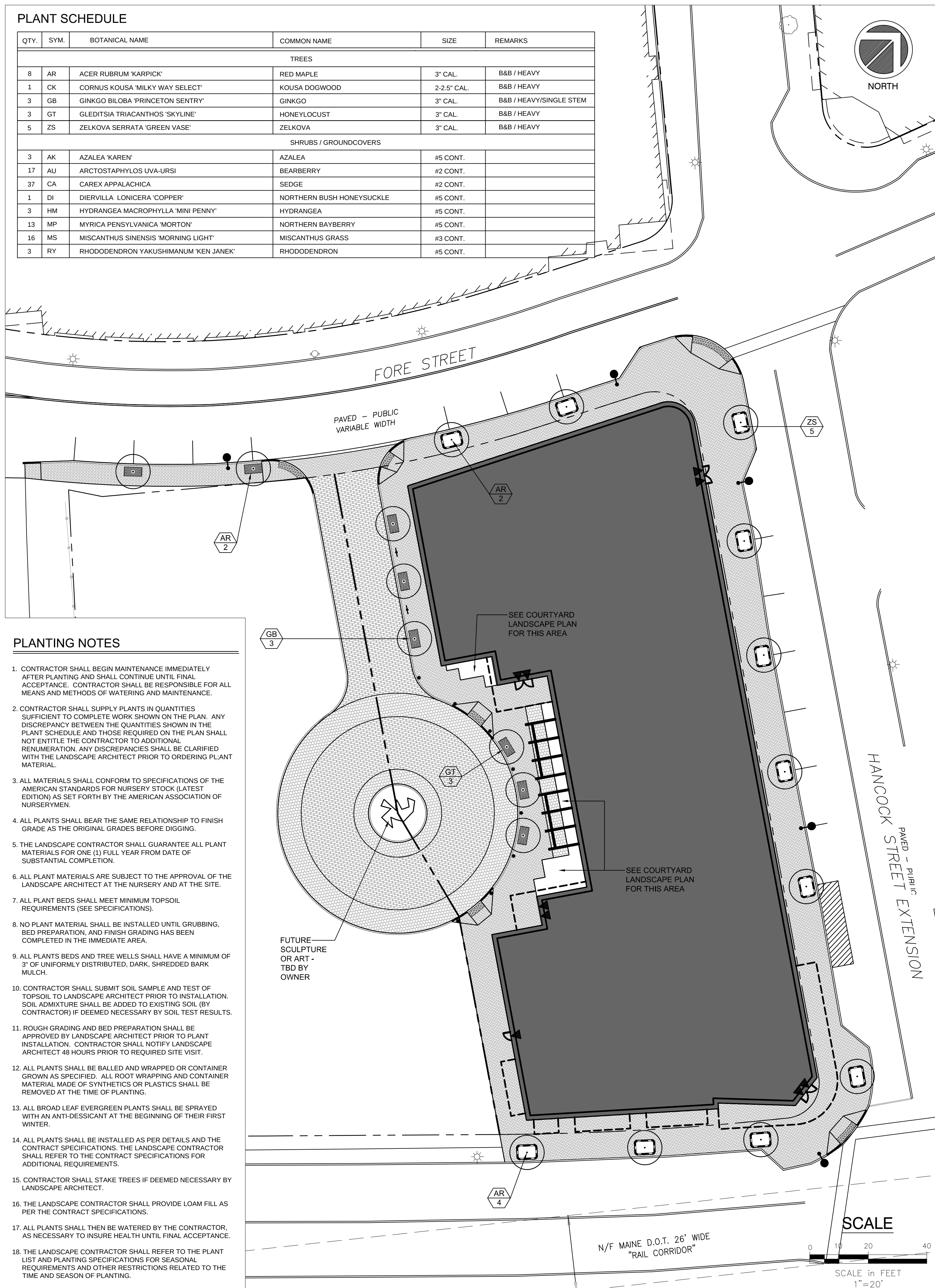
PLANT SCHEDULE

QTY.	SYM.	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
TREES					
8	AR	ACER RUBRUM 'KARPICK'	RED MAPLE	3" CAL.	B&B / HEAVY
1	CK	CORNUS KOUSA 'MILKY WAY SELECT'	KOUSA DOGWOOD	2-2.5" CAL.	B&B / HEAVY
3	GB	GINKGO BILOBA 'PRINCETON SENTRY'	GINKGO	3" CAL.	B&B / HEAVY/SINGLE STEM
3	GT	GLEDITSIA TRIACANTHOS 'SKYLINE'	HONEYLOCUST	3" CAL.	B&B / HEAVY
5	ZS	ZELKOVA SERRATA 'GREEN VASE'	ZELKOVA	3" CAL.	B&B / HEAVY
SHRUBS / GROUNDCOVERS					
3	AK	AZALEA 'KAREN'	AZALEA	#5 CONT.	
17	AU	ARCTOSTAPHYLOS UVA-URSI	BEARBERRY	#2 CONT.	
37	CA	CAREX APPALACHICA	SEDGE	#2 CONT.	
1	DI	DIERVILLA 'LONICERA 'COPPER'	NORTHERN BUSH HONEYSUCKLE	#5 CONT.	
3	HM	HYDRANGEA MACROPHYLLA 'MINI PENNY'	HYDRANGEA	#5 CONT.	
13	MP	MYRICA PENSYLVANICA 'MORTON'	NORTHERN BAYBERRY	#5 CONT.	
16	MS	MISCANTHUS SINENSIS 'MORNING LIGHT'	MISCANTHUS GRASS	#3 CONT.	
3	RY	RHOODENDRON YAKUSHIMANUM 'KEN JANEK'	RHOODENDRON	#5 CONT.	

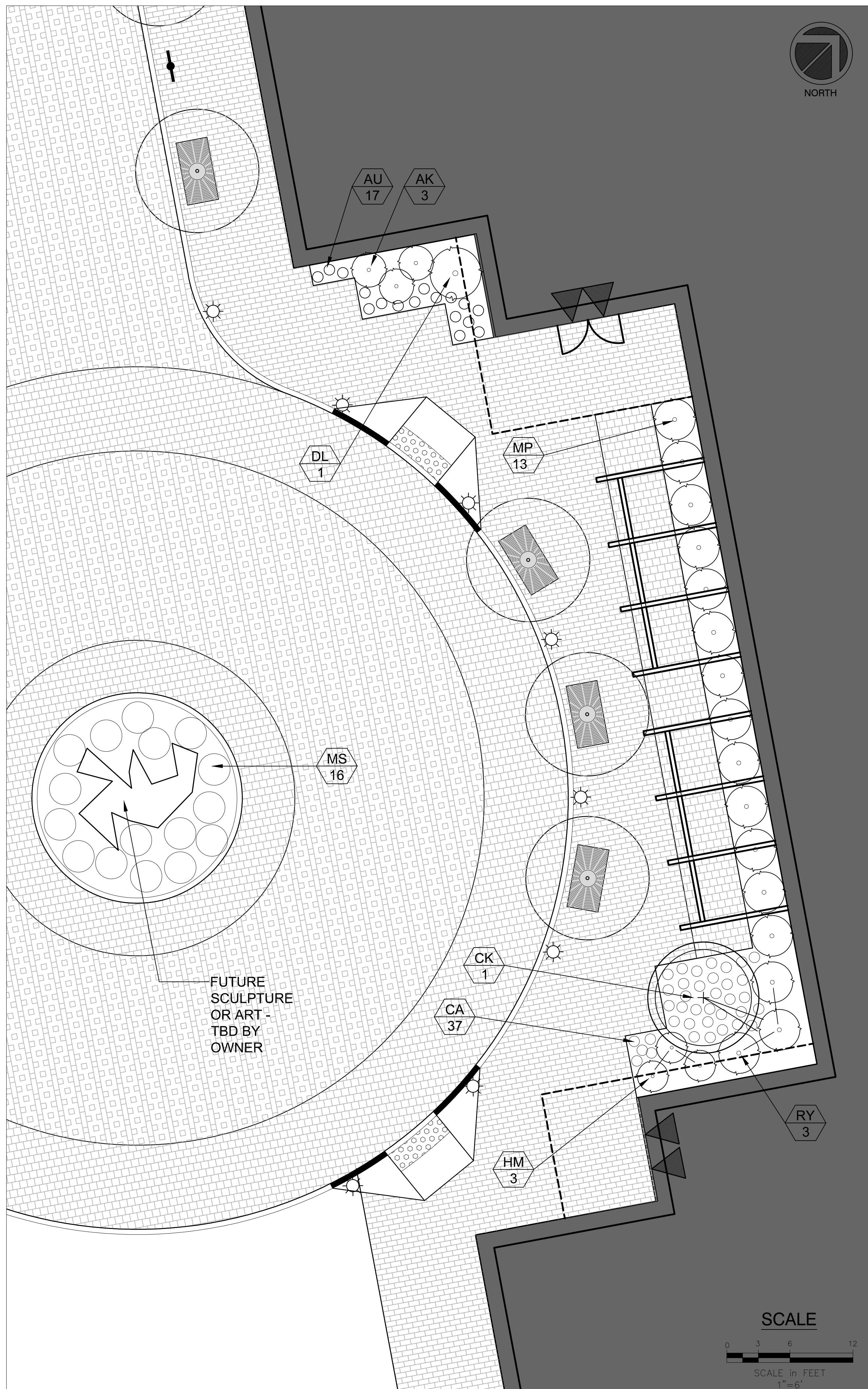
PLANTING NOTES

- CONTRACTOR SHALL BEGIN MAINTENANCE IMMEDIATELY AFTER PLANTING AND SHALL CONTINUE UNTIL FINAL ACCEPTANCE. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MEANS AND METHODS OF WATERING AND MAINTENANCE.
- CONTRACTOR SHALL SUPPLY PLANTS IN QUANTITIES SUFFICIENT TO COVER ANY SHORTAGE SHOWN ON THE PLAN. ANY DISCREPANCY BETWEEN THE QUANTITIES SHOWN IN THE PLANT SCHEDULE AND THOSE REQUIRED ON THE PLAN SHALL NOT ENTITLE THE CONTRACTOR TO ADDITIONAL REIMBURSEMENT. ANY DISCREPANCIES SHALL BE CLARIFIED WITH THE LANDSCAPE ARCHITECT PRIOR TO ORDERING PLANT MATERIAL.
- ALL MATERIALS SHALL CONFORM TO SPECIFICATIONS OF THE AMERICAN STANDARDS FOR NURSERY STOCK (LATEST EDITION) AS SET FORTH BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
- ALL PLANTS SHALL BEAR THE SAME RELATIONSHIP TO FINISH GRADE AS THE ORIGINAL GRADS BEFORE DIGGING.
- THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIALS FOR ONE (1) FULL YEAR FROM DATE OF SUBSTANTIAL COMPLETION.
- ALL PLANT MATERIALS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT AT THE NURSERY AND AT THE SITE.
- ALL PLANT BEDS SHALL MEET MINIMUM TOPSOIL REQUIREMENTS (SEE SPECIFICATIONS).
- NO PLANT MATERIAL SHALL BE INSTALLED UNTIL GRUBBING, BED PREPARATION, AND FINISH GRADING HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
- ALL PLANTS BEDS AND TREE WELLS SHALL HAVE A MINIMUM OF 3" OF UNIFORMLY DISTRIBUTED, DARK, SHREDED BARK MULCH.
- CONTRACTOR SHALL SUBMIT SOIL SAMPLE AND TEST OF TOPSOIL TO LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. SOILURE REPORT SHALL BE ADDED TO EXISTING SOIL (BY CONTRACTOR) IF DEEMED NECESSARY BY SOIL TEST RESULTS.
- ROUGH GRADING AND BED PREPARATION SHALL BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO PLANT INSTALLATION. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT 48 HOURS PRIOR TO REQUIRED SITE VISIT.
- ALL PLANTS SHALL BE BALLED AND WRAPPED OR CONTAINER GROWN AS SPECIFIED. ALL ROOT WRAPPING AND CONTAINER MATERIAL MADE OF SYNTHETICS OR PLASTICS SHALL BE REMOVED AT THE TIME OF PLANTING.
- ALL BROAD LEAF EVERGREEN PLANTS SHALL BE SPRAYED WITH AN ANTI-DEICANT AT THE BEGINNING OF THEIR FIRST WINTER.
- ALL PLANTS SHALL BE INSTALLED AS PER DETAILS AND THE CONTRACT SPECIFICATIONS. THE LANDSCAPE CONTRACTOR SHALL REFER TO THE CONTRACT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- CONTRACTOR SHALL STAKE TREES IF DEEMED NECESSARY BY LANDSCAPE ARCHITECT.
- THE LANDSCAPE CONTRACTOR SHALL PROVIDE LOAM FILL AS PER THE CONTRACT SPECIFICATIONS.
- ALL PLANTS SHALL THEN BE WATERED BY THE CONTRACTOR, AS NECESSARY TO INSURE HEALTH UNTIL FINAL ACCEPTANCE.
- THE LANDSCAPE CONTRACTOR SHALL REFER TO THE PLANT LIST AND PLANTING SPECIFICATIONS FOR SEASONAL REQUIREMENTS AND OTHER RESTRICTIONS RELATED TO THE TIME AND SEASON OF PLANTING.

1 STREET TREE PLANTING



2 COURTYARD LANDSCAPE PLAN

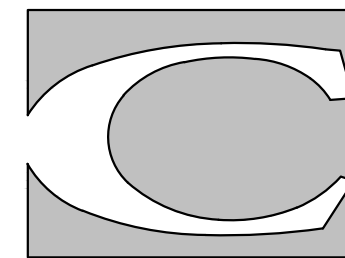


PROPOSED AC HOTEL

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PORTLAND, MAINE

Prepared for

PORTLAND NORWICH
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2330 PALM RIDGE ROAD
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SANIBEL, FL 33957



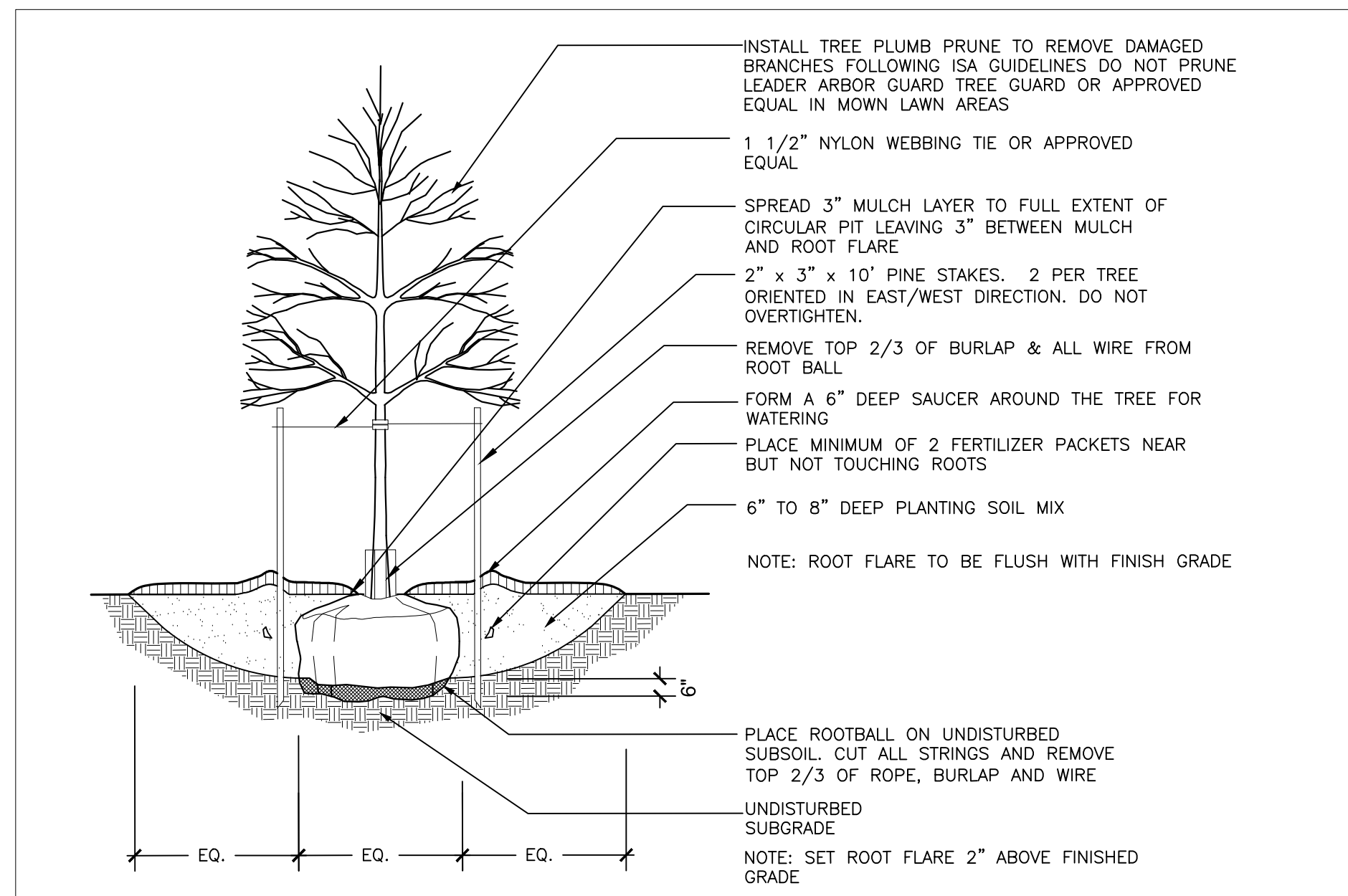
CARROLL ASSOCIATES
LANDSCAPE ARCHITECTS
217 COMMERCIAL STREET, STE 200
PORTLAND, MAINE 04101
207.772.1552



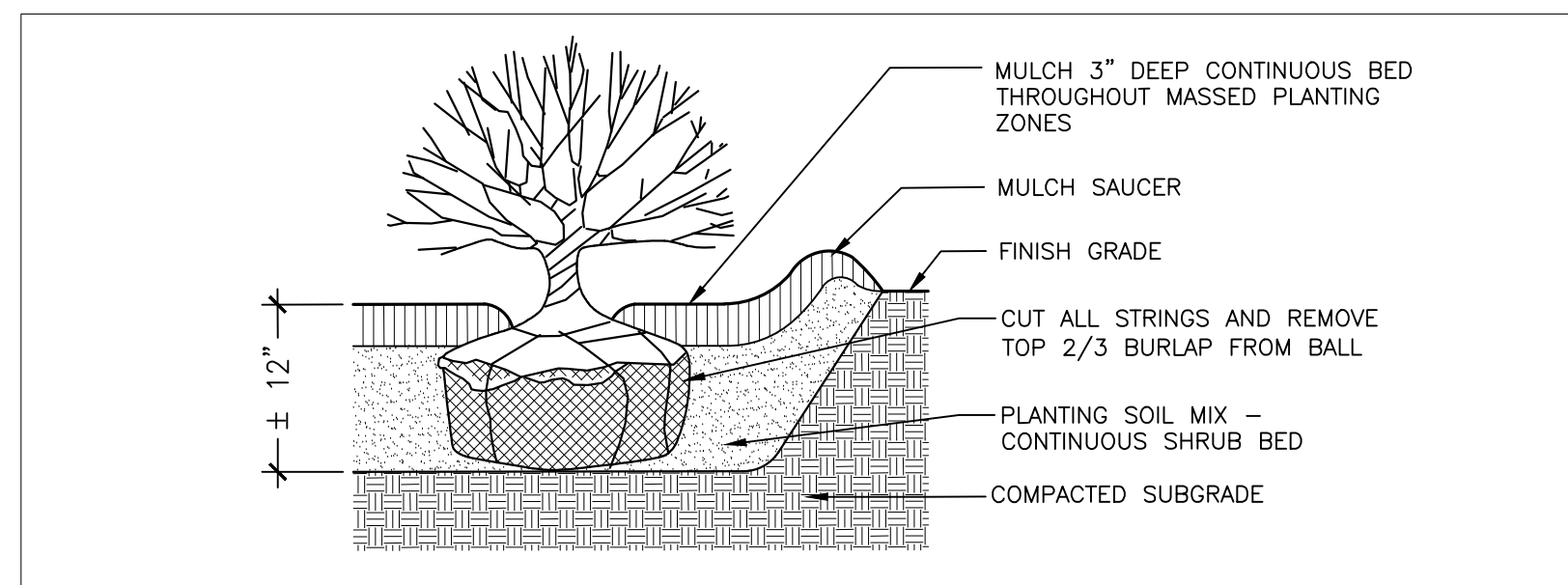
400 Commercial Street, Suite 400
Portland, ME 04101
Tel. (207) 772-2891
Fax (207) 772-3248
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LANDSCAPE PLAN

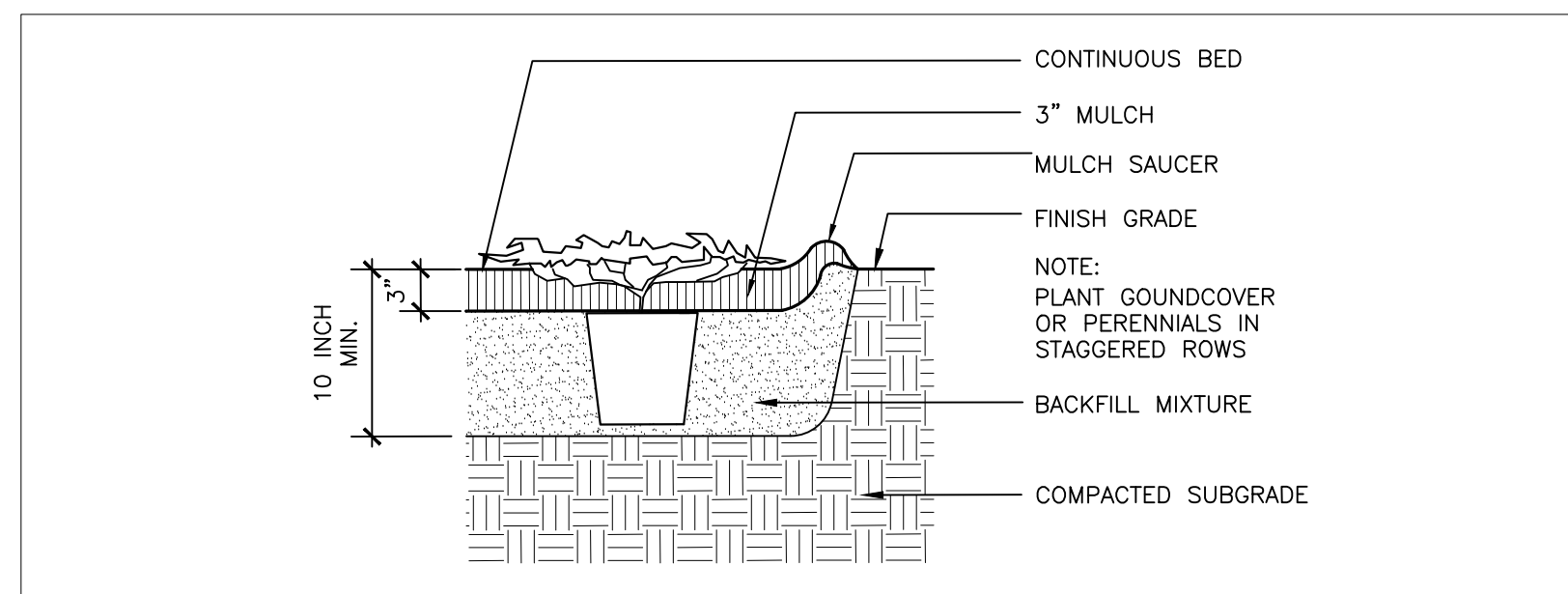
A	PRELIMINARY REVIEW	09/29/1
No.	Revision/Issue	Date
Design by: MAP/PC	Checked by: PC	
Drawn by: MAP	Approved by: PC	
Project: 150.06094	Date: SEPTEMBER 2015	
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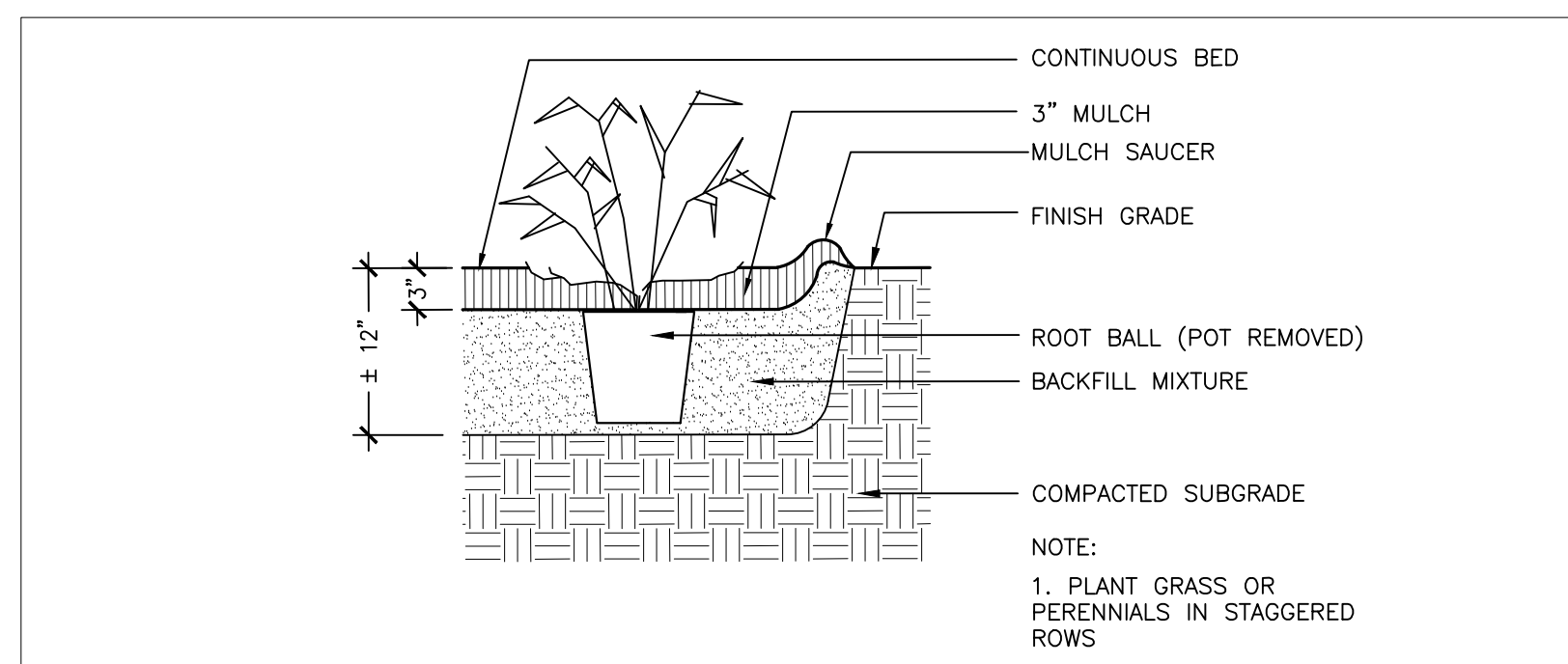
1 TYPICAL TREE PLANTING



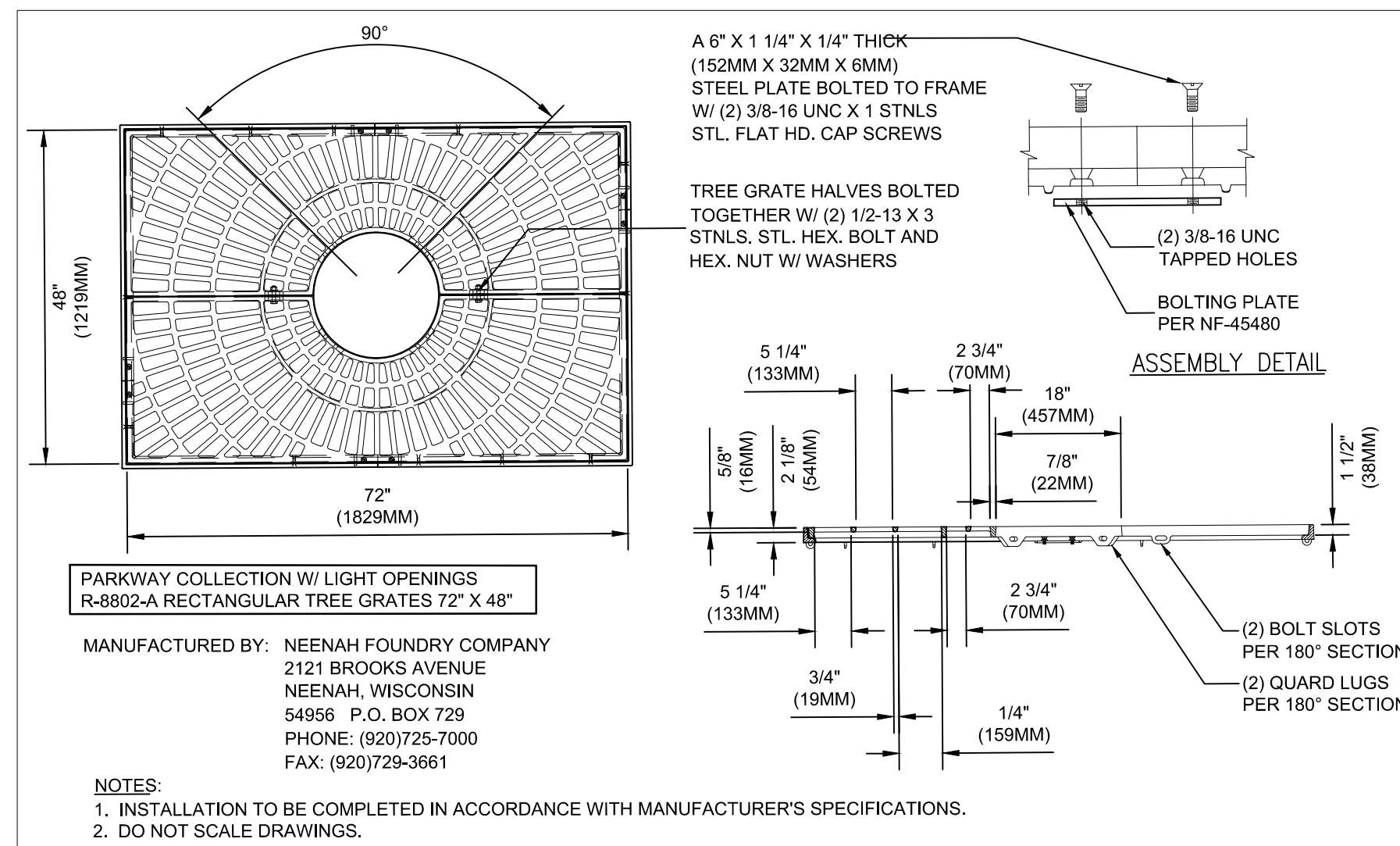
2 TYPICAL SHRUB PLANTING



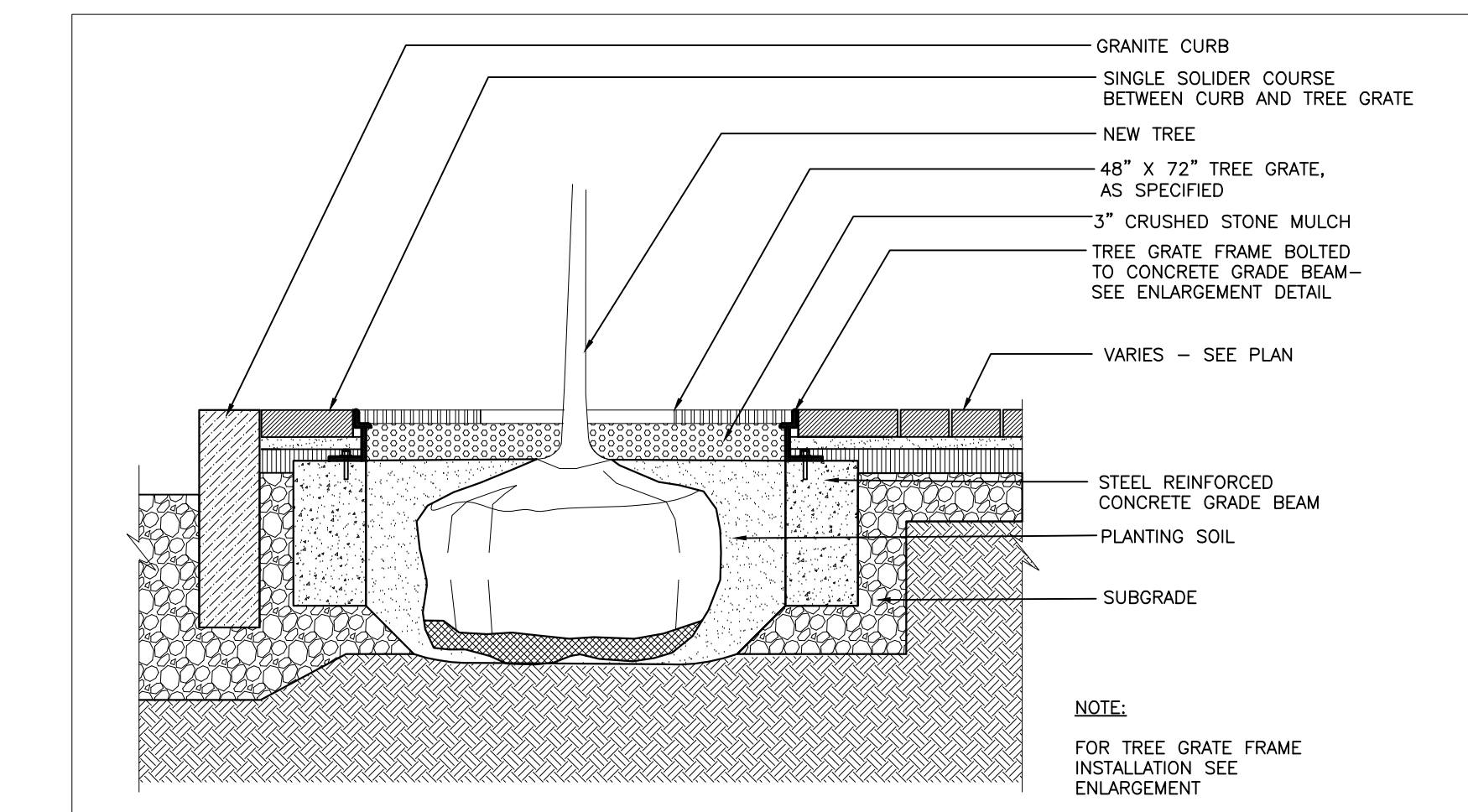
3 TYPICAL GROUNDCOVER PLANTING



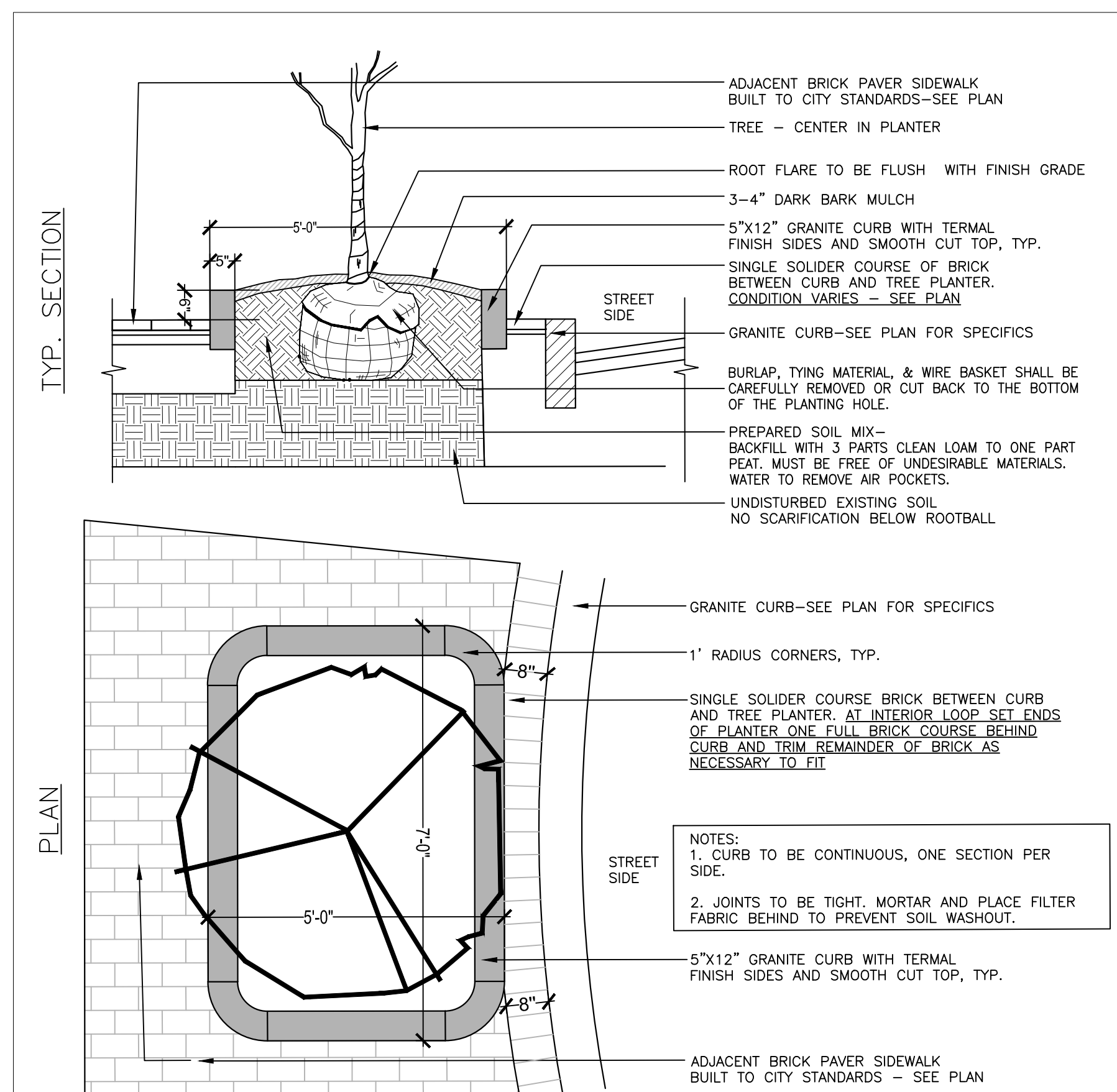
4 TYPICAL ORNAMENTAL GRASS PLANTING



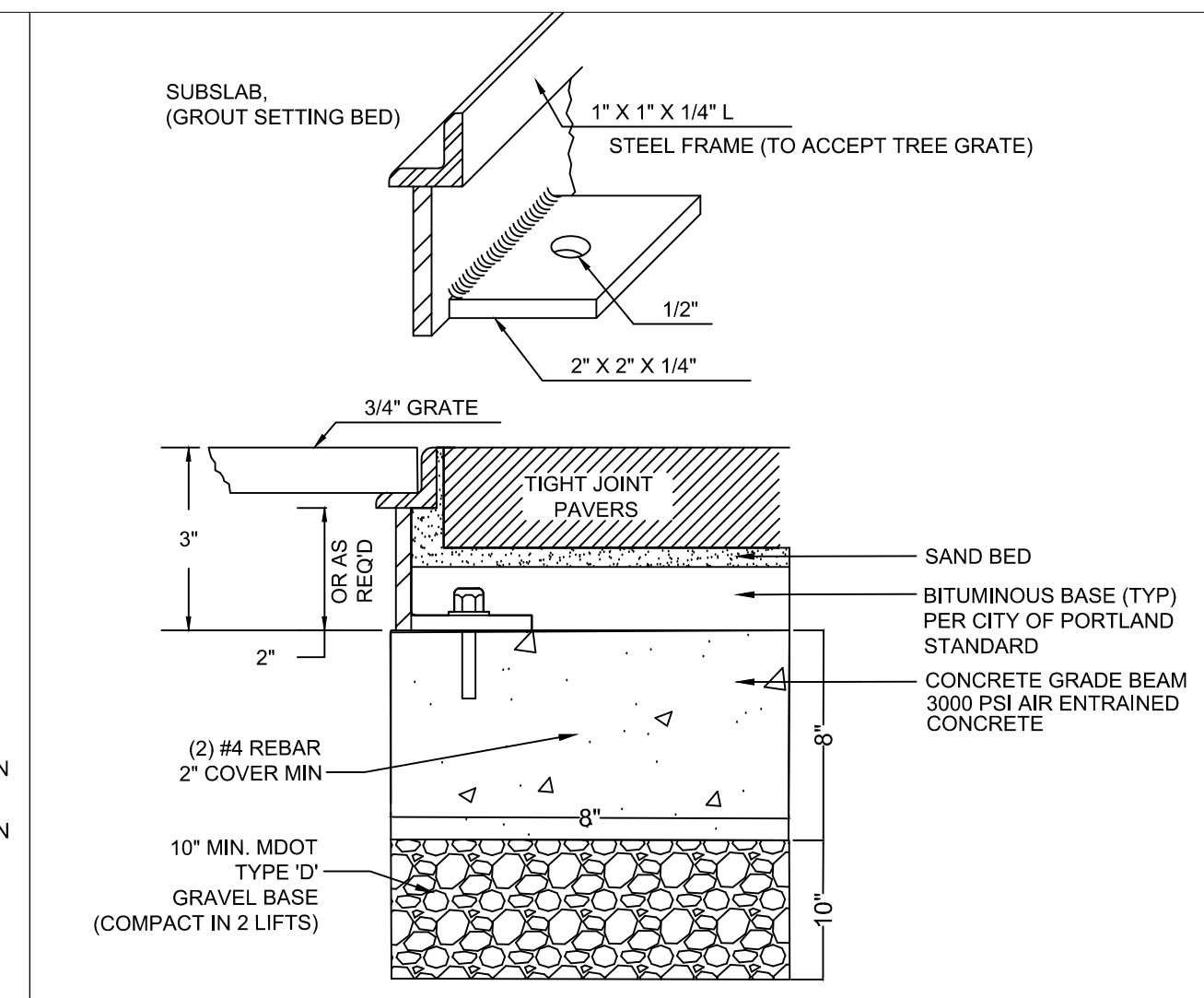
5 TREE GRATE AND FRAME ANCHORING



6 TREE GRATE AND PLANTING DETAIL



7 GRANITE TREE PLANTER AND PLANTING DETAIL

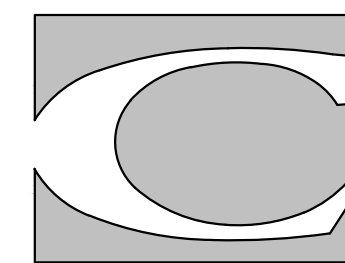


8 TYPICAL BRICK SIDEWALK PAVING PATTERNS

PROPOSED AC HOTEL

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A PRELIMINARY REVIEW 09/29/15

No. Revision/Issue Date

Design by: MAP/PC Checked by: PC

Drawn by: MAP Approved by: PC

Project: 150.06094 Date: SEPTEMBER 2015

Sheet No:

L2.0

Sheet 1 of 00





PLANNING BOARD REPORT PORTLAND, MAINE

NORTHEAST AIR
1021 WESTBROOK STREET
LEVEL III SITE PLAN
PROJECT ID# 2015-156
NORTHEAST AIR, APPLICANT

Submitted to: Portland Planning Board Public Hearing Date: November 10, 2015	Prepared by: Shukria Wiar, Planner Date: November 6, 2015
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I. INTRODUCTION

Northeast Air (NEA) is requesting a public hearing with the Planning Board for their project at 1011 Westbrook Street. The submission is a Level III site plan application. NEA is a long standing Fixed Base Operator (FBO) at the Portland International Jetport. As an FBO, Northeast Air provides vital services to the operations of commercial and private airport clients, which includes aircraft maintenance, aircraft re-fueling, de-icing, and charter services and aircraft management. These services are critical to successful operation of an airport.

The applicant is proposing to expand and improve the property they lease from the Portland Jetport at 1021 Westbrook Street. As part of the proposal, one of the existing buildings will be demolished and two new additions will be constructed to the main existing building: a new 2-story addition with a 6,750 sf footprint and a new 1-story addition of 3,500 sf. The site is located in the Airport Business Zone (AB) and is part of the jetport master plan. The applicant is also proposing to expand the pavement area on the site and increase surface parking lot to forty-three (43) spaces.

The proposed project will allow NEA to complete long overdue improvements to the existing terminal area to improve the current operations and provide an enhanced identity for NEA at this location. The new addition is planned for the relocation of the FAA from an existing building on the airfield and will also be used by NEA to address existing space needs.

Applicant Name	Northeast Air
Consultants	
Agent Representative	Owens McCullough, Sebago Technics, Inc.
Engineer	Owens McCullough, Sebago Technics, Inc.
Architect	Mike Hayes, Grant Hayes Associates

REQUESTS FOR WAIVERS (staff evaluation within review under standards)

Waiver Request	Applicable Standard
Boundary Survey Standards- Technical Design Standard Section 13 to allow partial survey	Technical Design Standard Section 13 Boundary Survey Standards - The following items shall be shown on boundary surveys for Level I (site alteration), Level II and Level III site plans to ensure compliance with City of Portland Planning

	Requirements, Engineering Technical and Design Standards, and accurate documents are on record for future planning, GIS mapping, and engineering needs (please refer to the section for the complete list)
<i>Bicycle Parking Spaces- Chapter 14-332.3. Uses requiring off-street bicycle parking to allow the partial of the required spaces be met.</i>	<i>Sec. 14-332.3. Uses requiring off-street bicycle parking.</i> In all zones where off-street motor vehicle parking is required, minimum off-street bicycle parking requirements shall be provided and maintained in the case of new construction, alterations and changes of use as specified in Section 14-526(a)(2) (Site Plan Standards).

II. PROJECT DATA

Proposed Use:	Airport Carrier Operations
Existing Zoning:	Airport Business Zone
Parcel Size:	70 AC (3,066,624 Sq ft)
Impervious Surface Area:	
Existing:	68, 716 sq ft
Proposed:	62,960 sq ft
Net Change:	-5,756 sq ft
Building Area:	
Existing Building Area:	33,620 sq ft
Proposed Building Area:	36,488 sq ft
Proposed Building Net Change:	+2,868 sq ft
Existing Building Footprint:	33,620 sq ft
Proposed Building Footprint:	33,019 sq ft
Parking Spaces:	
Existing:	31
Proposed:	45
Required:	Seven parking spaces for the new addition.
Number of Handicapped Spaces:	2
Bicycle Parking Spaces:	
Existing:	None
Proposed:	None; nine is required
Estimated Cost of Project:	To be determined
Uses in Vicinity:	Airport related uses across and adjacent to the property.

III. EXISTING CONDITIONS

The property is currently being utilized by Northeast Air as part of their day to day business. The site is part of the Jetport Master Plan which encompasses 70 acres of which this site is 1.25 acres. The site has two buildings with associated surface parking lot with thirty-one (31) spaces. There is a wide curb cut that is shared with an abutting business. This curb cut will be narrowed as part of the development.

IV. PROPOSED DEVELOPMENT

This site is currently located in the Airport Business Zone (AB). The site is accessed off of the Westbrook Street through the Jetport. The proposed development expands the current surface parking lot to accommodate forty-one (41) parking spaces. The overall change in impervious surface area will be net decrease of 5,756 sq. ft. The facility serves as the Northeast Air and Federal Aviation Administration (FAA) site and it is not open to the general public. One of the existing buildings will be demolished and new additions are proposed to the other

V. PUBLIC COMMENT

The notice for this project appeared in the Portland Press Herald on November 2, 2015 and November 3, 2015. A total of forty-five (45) notices were sent to area residents within 500 feet of the site and the interested party list.

VI. RIGHT, TITLE AND INTEREST AND FINANCIAL/TECHNICAL CAPACITY

a. The owner of the property is the City of Portland. The applicant has provided a copy of a lease between the City and LCL Associates (Northeast Air). The lease will be expiring on June 30, 2016 but the City is currently negotiating the new terms of the lease and will be reviewed by the City Council in late November.

b. The estimated cost of the development is noted as “to be determined” on the application. The applicant has submitted a letter from People’s United Bank, dated August 11, 2015, as demonstration of their financial and technical capacity to complete the proposed development.

VII. ZONING ASSESSMENT

A. ZONING REVIEW:

This project, which is located in an AB Airport Business Zone, allows “Airport carrier operations, including ground support and fueling” under 14-197(d). All dimensional requirements are being met. The 1 ½ to two story building addition is meeting the maximum allowable building height of 75 feet. The maximum allowable impervious surface of 70% is met.

The property is not in a Shoreland Zone or a Flood Plain Zone.

VIII. DEVELOPMENT REVIEW

A. SITE PLAN SUBMISSION REQUIREMENTS (Section 14-527)

The applicant has submitted a partial boundary survey. Technical Manual Section 13.4 Waiver of Boundary Survey Requirements allows for a waiver of a survey:

13.4.1. **Level I Site Alternation, Level II and Level III Site plans** - The Reviewing Authority may permit the submission of a partial survey depicting only the to-be developed portion of the improved lot of record if the development:

1. Is proposed on an already improved lot of record; and
2. Comprises less than one (1) acre of said improved lot of record.

Since the City is currently negotiating the new terms of the lease and will be reviewed by the City Council in late November, staff recommends that waiver.

B. SITE PLAN STANDARDS (Section 14-526)

The proposed development has been reviewed by staff for conformance with the relevant review standards of Portland’s site plan ordinance and applicable regulations. Staff comments are listed below.

1. Transportation Standards

a. Impact on Surrounding Street Systems

Access to the site is off of the Westbrook Street through the Jetport. The proposed use is not changing from the existing use (maintenance facility for the Jetport). According to the applicant, the expansion will not increase or change the number of employees or expand operations. The purpose of the expansion is to alleviate existing overcrowding, enhance the customer experience and improve efficiency and functionality. The new addition is planned for the relocation of the FAA from an

existing building on the airfield. There is no anticipated increase in traffic volumes.

b. Access and Circulation

The site is accessed from Westbrook Street by a twenty-four (24') foot driveway width (for two-way access) and a sixteen (16') foot driveway (for one-way access). The layout of the proposed parking lot is one-way circulation except the parking area closer to the street will be two-way traffic. The following is what the applicant stated about the one-way circulation:

Our site design provides for a one-way looped circulation with the exception of the larger general parking lot which was intended to allow for two way circulation. This approach was chosen to allow visitors to be able to access and egress the lot from either direction. It is expected that users of the parking will need to either exit the lot for pick-up or drop-off of people at the main building entrance through the Porte Cochere or exit the lot directly. As a result, we have provided two-way circulation in the lot with directional signage to accommodate these two conditions.

Tom Errico, Consultant Traffic Engineer has reviewed the plans and is satisfied with the proposed access and circulation.

c. Public Transit Access

The site is not located directly on a public transit route but a Metro bus (Metro Route 5- Maine Mall) does make stops at the Portland Jetport.

d. Parking

Currently there are thirty-one (31) parking spaces on the site. As part of the new addition the applicant is increasing the spaces to forty-five (45), which is an increase of fourteen (14) parking spaces. Per zoning, the parking requirement for the new additional area of 2,868 square feet is seven spaces which meets the one (1) parking space for each 400 square feet for office use required on site.

e. Bicycle Parking

The applicant is not proposing any bicycle parking as part of this project. Per zoning, the required number of bicycle parking spaces for non-residential structures is two bicycle parking spaces for every ten vehicle parking spaces for the first one hundred required vehicle parking spaces. Therefore, the requirement for this project is nine bicycle parking spaces. Mr. Errico recommends that the applicant install two to four bicycle racks somewhere near the entrance.

2. Environmental Quality Standards

a. Preservation of Significant Natural Features

There are no known significant natural features on the site.

b. Landscaping and Landscape Preservation

A landscaping plan has been submitted. Since the project is located in close proximity to the runways, no berry bearing trees or bushes that would attract birds are proposed on the site. Tall growing trees near the airport perimeter fence are not proposed due to the risk of people climbing them to get inside the fencing. The landscaping and tree planting is limited to the parking area and the building. According to the City Arborist, the proposed trees and shrubs will "help define circulation to the extent possible would be adequate for this site".

c. Water Quality, Storm Water Management and Erosion Control

The surface parking area and associated landscaping will be graded so surface runoff across the parking area to sheet flow to two tree filter systems and an underdrained soil filter. The underdrained soil filter is designed to provide temporary flood control as well as water quality treatment.

New building expansion areas will be drained by roof drains connecting into the proposed closed stormwater management system which goes southeast under runways and eventually discharges to the Fore River. Overall, the total amount of impervious area will decrease by 5,756 sq ft within the proposed development area of the project. David Senus, Consultant, has reviewed the project and states the following in regard to the stormwater management standards:

As such [net decrease of impervious area], the project is not required to include any specific stormwater management features for stormwater quality control. However, the Applicant has proposed two tree filters and an underdrained soil filter. These proposed measures will provide treatment in accordance with the General Standards for much of the proposed parking lot area; approximately 25,070 sq ft of impervious area.

Mr. Senus also requires that the plans be revised to identify the proposed locations for catch basin inlet protection measures and that storm drain pipe material be specified.

3. Public Infrastructure and Community Safety Standards

a. Consistency with Master Plans

Portland's comprehensive plan includes this area within a growth area and the future land use map retains the airport business designation for this site. The purpose statement for the A-B Airport Business Zone is:

To provide an area for the development of airport-related enterprises. Appropriate uses permitted in this district are those customarily associated with the operation of the airport terminal and individual airlines and accessory uses to provide for the comfort and convenience of the airport's patrons and employees.

The proposed development is consistent with the above purpose statement of the AB zone. Airport carrier operations, including ground support and fueling, are traditionally associated with airport terminals. The Northeast Air facility will provide convenient efficient and competitive service for the airport's patrons.

b. Public Safety and Fire Prevention

The Fire Department has reviewed and approved the proposed plans.

The Crime Prevention through Environmental Design (CPTED) standards in the site plan ordinance address the principles of natural surveillance, access control and territorial reinforcement so that the design of developments enhance the security of public and private spaces and reduce the potential for crime. The applicant is proposing lighting poles on site for the parking areas and at the entrance, therefore this standard is met.

c. Availability and Adequate Capacity of Public Utilities

The project will be served by the existing utility services located in Westbrook Street. The Applicant has contacted the Portland Water District and the City Department of Public Services requesting ability to serve water and sewer demand. Confirmation of ability to serve water from PWD has been provided but the sewer from DPS has not been submitted and should be forwarded to the Planning Authority upon receipt.

4. Site Design Standards

a. Snow and Ice Loading

The applicant is not showing on-site snow storage on the plans. Mr. Senus recommends plans should note a location for snow storage and that the snow storage location should be sited outside of existing and proposed drainage courses.

b. View Corridors

The site is not located within a designated view corridor.

c. Historic Resources

The site is just outside the 100 foot setback of the Stroudwater historic district, therefore the project does not have to be reviewed by Historic Preservation.

d. Exterior Lighting

A Lighting/Photometric Plan and catalogue cuts of the proposed lighting fixtures has been submitted for review. The lighting will consist of pole lightings for the parking areas and at the entrance. All fixtures will be fully shielded. The lighting plan meets the City standards.

e. Noise and Vibration

All heating, ventilation and air conditioning equipment (HVAC), air handling units (AHU), emergency generators, and similar equipment will have to be shown on the plans and meet state and federal emissions requirements. This information will have to be submitted for review.

f. Signage and Wayfinding

The applicant has not submitted a signage and wayfinding plan for review; the plan is not required since the site will be for employee use only and not open to the public.

g. Zoning Related Design Standards

Since there are no design guidelines in the Airport Business (AB) zone, this standard does not apply.

IX. SITE PLAN MOTIONS FOR THE PLANNING BOARD TO CONSIDER

Waiver

On the basis of the application plans, reports and other information submitted by the applicant, findings, recommendations, contained in the Planning Board Report for site plan (2015-174), including but not limited to Section VIII Technical Waivers, of the report and the staff reviews relevant to Portland's Technical and Design Standards and other regulations, as well as the Planning Board deliberations and the testimony presented at the Planning Board hearing, the Planning Board finds the following:

The Planning Board (**waives** or **does not waive**) the Technical Standard, Sections 13 Boundary Survey Standards, to allow a partial boundary survey since the site is included within the Jetport recorded plan of over 70 acres.

The Planning Board (**waives** or **does not waive**) the Zoning Ordinance Section 14.332.3- Uses requiring off-street bicycle parking, to allow partial of the required number of parking spaces to be four spaces.

Site Plan:

On the basis of the application, plans, reports and other information submitted by the applicant, findings and recommendations contained in the Planning Board Report for application #2015-156 relevant to the Site Plan Ordinance, and other regulations, and the testimony presented at the Planning Board hearing, the Planning Board finds that the plan [**is** or **is not**] in conformance with the site plan standards of the land use code, subject to the following conditions of approval:

1. Prior to the issuance of a building permit, the applicant shall provide to the satisfaction of Corporation Counsel a copy of a fully executed Amended and Restated Ground Lease Agreement between LCL Associates and the City of Portland that incorporates the land area on which the improvements herein

approved are located and that extends the term of the lease (which currently expires on June 30, 2016) by an additional 20 years.

2. Revised plans shall be submitted addressing David Senus' comments in his memorandum dated 11.03.2015 for review and approval by the Planning Authority prior to the issuance of a building permit:
 - a. The site plan shall identify the proposed locations for catch basin inlet protection measures.
 - b. Storm drain pipe material is not currently specified. Acceptable pipe materials are listed in Section 2.5.2 of the Technical Manual.
 - c. The plans shall note a location for snow storage. The snow storage location shall be sited outside of existing and proposed drainage courses.
3. The applicant shall incorporate four bicycle racks for bicycle parking near the entrance to the building on the revised site plan prior to the issuance of a building permit.
4. Confirmation of ability to serve letter for wastewater from DPS shall be submitted to the Planning Authority upon receipt.
5. The applicant shall provide revised site plan that shows two bicycle racks near the entrance of the building prior to the issuance of a building permit.
6. The ADA ramps at the sidewalks are not required by City standards and shall be removed on the revised plans.
7. The Construction Management Plan shall be submitted for review and approval by the Planning Authority and the Department of Public Services.

ATTACHMENTS

PLANNING BOARD REPORT ATTACHMENTS

1. Traffic Review, 10.13.2015 and 11.04.2015 (email from Tom Errico)
2. DPS Engineer Review, 10.15.2015 (email from Mike Farmer)
3. City Arborist Review, 10.15.2015 (email from Jeff Tarling)
4. Civic Engineer Review, 10.12.2015 and 11.03.2015 (email from Davis Senus)
5. Fire Department Review, 10.07.2015 (memo from Keith Gautreau)

APPLICANT'S SUBMITTAL

- A. Cover Letter, dated 09.03.2015
- B. Application Form & Checklist
- C. USGS Location Map
- D. City Assessor's Map
- E. Financial Capacity
- F. Right, Title or Interest
- G. Stormwater Management Plan & Calculations
- H. Evidence of Utility Capacity to Serve
- I. Lighting Specifications
- J. Response to Staff Comments, 11.02.2015 (email from Owens McCullough)
- K. PWD-Ability to Serve Determination
- L. Notice of Intent- General Permit

PLANS

Plan1 Cover Sheet

Plan2	Existing Conditions Plan
Plan3	Site Plan
Plan4	Grading and Utility Plan
Plan5	Landscape Plan
Plan6	Details
Plan7	Details
Plan8	Details
Plan9	Details
Plan10	Post Development Treatment Plan
Plan11	Exhibit A - 1-23-13 (Survey)
Plan12	Revised Photometric Plan 9-30-15
Plan13	Northeast Air Architectural a. Cover Sheet b. Phasing Floor Plan c. Floor Plans at New Terminal Addition d. Exterior Elevation e. Demolition Floor Plan f. Demolition Elevations
Plan14	NEA Phase I 3D Westbrook Street
Plan15	NEA Phase II Full 3D Westbrook Street

From: Tom Errico <thomas.errico@tylin.com>
To: SHUKRIAW@portlandmaine.gov
CC: JST@portlandmaine.gov; JBartlett@portlandmaine.gov; KAS@portlandmaine.gov; DMP@portlandmaine.gov; Mfarmer@portlandmaine.gov
Date: 10/13/2015 8:08 PM
Subject: Northeast Air

Hi Shukria - I have reviewed the site plan application and I generally find it to be acceptable with the following comments:

* The applicant should confirm that either the Jetport is compliant with their current Traffic Movement Permit or that the project does not need to conform to the permit.

* The circulation system seems to be based on a one-way system and it would seem beneficial if the two-way northerly drive be converted to a one-way egress only drive - with narrowing. I recognize that fueling trucks must enter the tarmac, but under the current plan trucks must access the tarmac via a wrong-way movement. The applicant should provide information in support of the proposed driveway condition.

If you have any questions, please contact me.

Best regards,

Thomas A. Errico, PE
Senior Associate
Traffic Engineering Director
[T.Y. Lin International]T.Y. Lin International
12 Northbrook Drive
Falmouth, ME 04105
207.781.4721 (main)
207.347.4354 (direct)
207.400.0719 (mobile)
207.781.4753 (fax)
thomas.errico@tylin.com<mailto:thomas.errico@tylin.com>
Visit us online at www.tylin.com<http://www.tylin.com>
Twitter | Facebook | LinkedIn | YouTube

"One Vision, One Company"

Please consider the environment before printing.

From: Tom Errico <thomas.errico@tylin.com>
To: Shukria Wiar <SHUKRIAW@portlandmaine.gov>
CC: David Margolis-Pineo <DMP@portlandmaine.gov>, Katherine Earley <KAS@portlandmaine.gov>, Jeremiah Bartlett <JBartlett@portlandmaine.gov>, Jeff Tarling <JST@portlandmaine.gov>
Date: 11/4/2015 2:46 PM
Subject: Northeast Air - Final Traffic Comments

Hi Shukria - The following is a status update on my previous comments and represent my final traffic comments.

* The applicant should confirm that either the Jetport is compliant with their current Traffic Movement Permit or that the project does not need to conform to the permit.

Status: The applicant has provided documentation that the Jetport is in compliance with their current Traffic Movement Permit and I have no further comment.

* The circulation system seems to be based on a one-way system and it would seem beneficial if the two-way northerly drive be converted to a one-way egress only drive - with narrowing. I recognize that fueling trucks must enter the tarmac, but under the current plan trucks must access the tarmac via a wrong-way movement. The applicant should provide information in support of the proposed driveway condition.

Status: The applicant noted the circulation benefits of the proposed access plan and I have no further comment.

If you have any questions, please contact me.

Best regards,

Thomas A. Errico, PE
Senior Associate
Traffic Engineering Director
[T.Y. Lin International]T.Y. Lin International
12 Northbrook Drive
Falmouth, ME 04105
207.781.4721 (main)
207.347.4354 (direct)
207.400.0719 (mobile)
207.781.4753 (fax)
thomas.errico@tylin.com<mailto:thomas.errico@tylin.com>
Visit us online at www.tylin.com<http://www.tylin.com>
Twitter | Facebook | LinkedIn | YouTube

"One Vision, One Company"

Please consider the environment before printing.

From: Michael Farmer
To: Wiar, Shukria
Date: 10/15/2015 12:08 PM
Subject: Fwd: 1011 Westbrook Street Project - Sewer Capacity letter

Did you get this?

Michael Farmer, Project Engineer
Portland Dept. of Public Services
55 Portland Street
Portland, ME 04101
phone: 207-874-8845
fax: 207-874-8852 >>> Michael Farmer 10/8/2015 10:42 AM >>>
Hi Christine:

I reviewed an August 17, 2015 letter, signed by Aaron Hunter of Sebago Technics, requesting a sewer capacity letter for the *Northeast Air* project at 1011 Westbrook Street. He stated, in that letter, *There is not expected to be a significant increase in usage*.

I think the information provided to us in the August 17th letter is insufficient to review the sewer system impacts of this project. We need quantitative information about the project for our review. In other words, we need a well reasoned wastewater flow estimate (typically in units of gallons per day) for the new development. Mr. Hunter's assessment that *usage is not expected to increase significantly* is not enough. While we may ultimately agree with that assessment, our analysis of wastewater impacts has to start with a numerical wastewater flow estimate. If unique process wastewater will be generated in the building expansion, the estimated flow and the wastewater characteristics should be estimated for the process wastewater and provided to us.

The applicant indicates that the project involves 17,000 square feet of new building floor area. This is a good place to start the wastewater flow estimate. The proposed building uses should be described and used as the basis of developing a reasonable flow estimate. For example, if part of the building will be used as office space, the number of employee that will ultimately use the office space could be used to calculate a wastewater flow estimate.

Michael Farmer, Project Engineer
Portland Dept. of Public Services
55 Portland Street
Portland, ME 04101
phone: 207-874-8845
fax: 207-874-8852

From: Jeff Tarling
To: Shukria Wiar
Date: 10/15/2015 12:53 PM
Subject: Northeast Air

Hi Shukria -

Northeast Air project landscape review: due to the location, landscape & tree planting is limited to the parking and driveway areas. Small non-fruiting trees and shrubs to help define circulation to the extent possible would be adequate for this site.

Thanks

Jeff Tarling
City Arborist

MEMORANDUM



TO: Shukria Wiar, Planner
FROM: David Senus, P.E.
DATE: October 12, 2015
RE: Northeast Air-Fixed Base Operator, Level III Site Plan Application

Woodard & Curran has reviewed the Level III Site Plan Application for the proposed project located at the Portland International Jetport in Portland, Maine. The project involves the construction of a new 2 story addition with a 6,750 SF footprint, a new 1 story addition of 3,500 SF, and an associated paved parking area.

Documents Reviewed by Woodard & Curran

- Level III Site Plan Application and attachments, dated September 3, 2015, prepared by Sebago Technics, on behalf of Northeast Air.
- Engineering Plans, Sheets 1-10, dated September 3, 2015, prepared by Sebago Technics, on behalf of Northeast Air.

Comments

- 1) In accordance with Section 5 of the City of Portland Technical Manual, a Level III development project is required to submit a stormwater management plan pursuant to the regulations of MaineDEP Chapter 500 Stormwater Management Rules, including conformance with the Basic, General, and Flooding Standards. We offer the following comments:
 - a) Basic Standards: Plans, notes, and details have been provided to address erosion and sediment control requirements, inspection and maintenance requirements, and good housekeeping practices in general accordance with Appendix A, B, & C of MaineDEP Chapter 500. In addition to the erosion control measures indicated on the plan, the site plan should identify the proposed locations for catch basin inlet protection measures.
 - b) General Standards: The project will result in a net decrease in impervious area of approximately 5,756 square feet. As such, the project is not required to include any specific stormwater management features for stormwater quality control. However, the Applicant has proposed two tree filters and an underdrained soil filter. These proposed measures will provide treatment in accordance with the General Standards for much of the proposed parking lot area; approximately 25,070 sq ft of impervious area.
 - c) Flooding Standard: The project will result in a net decrease in impervious area of approximately 5,756 square feet. As such, the project is not required to include any specific stormwater management features to control the rate of stormwater runoff from the site. The increase in pervious, landscaped area and the proposed stormwater BMP's will help to attenuate stormwater runoff; as such, we find that the project is in conformance with the Flooding Standard.
- 2) The project will disturb more than one acre of land, therefore, the Applicant is required to file a notice of intent to comply with the Maine Construction General Permit with the MaineDEP. A copy of this NOI should be forwarded to the City Planning Office.
- 3) Per Section 13 of the City's Technical Manual, the Applicant is required to submit a Boundary Survey that has been Stamped by a Maine Licensed Professional Surveyor. At this time, a stamped Boundary Survey has not been received.
- 4) It does not appear that a Construction Management Plan has been received at this time.
- 5) Letters from utilities confirming capacity to serve the development should be forwarded upon receipt.
- 6) The Applicant is proposing work within the City of Portland Right-of-Way; storm drain pipe material is not currently specified. Acceptable pipe materials are listed in Section 2.5.2 of the Technical Manual.
- 7) The plans should note a location for snow storage. The snow storage location should be sited outside of existing and proposed drainage courses.

From: David Senus <dsenus@woodardcurran.com>
To: Shukria Wiar <SHUKRIAW@portlandmaine.gov>, Thomas Errico <Thomas.errico@tylin.com>
Date: 11/3/2015 4:29 PM
Subject: RE: FW: Northeast Air Review (NEA)

Hi Shukria.

We would anticipate that several of our review comments would result in revisions / additions to the plans (albeit minor), but no plans appear to have been submitted with this email or on ePlan. Did Sebago submit revised plans? Are they planning on doing so?

Specifically, these comments include:

- The site plan should identify the proposed locations for catch basin inlet protection measures
- Storm drain pipe material is not currently specified. Acceptable pipe materials are listed in Section 2.5.2 of the Technical Manual.
- The plans should note a location for snow storage. The snow storage location should be sited outside of existing and proposed drainage courses.

Thanks
Dave

From: Shukria Wiar [mailto:SHUKRIAW@portlandmaine.gov]
Sent: Monday, November 02, 2015 9:36 AM
To: David Senus <dsenus@woodardcurran.com>; Thomas Errico <Thomas.errico@tylin.com>
Subject: Fwd: FW: Northeast Air Review (NEA)

Good Morning:

I received this last Wednesday so it did not make it on the Dev rev agenda. Could you please review what they sent and let me know if it meets your comments. The public hearing is next week and I am writing the report this week. I apologize for the short turnaround time.

Thank you.

Shukria

>>> Owens McCullough <omccullough@sebagotechnics.com<mailto:omccullough@sebagotechnics.com>> 11/2/2015 9:26 AM >>>
Hi Shukria,

This is the e-mail I had send back on October 28, 2015 responding the initial review comments. Thank you, Owens

From: Owens McCullough
Sent: Wednesday, October 28, 2015 9:40 AM
To: Shukria Wiar <SHUKRIAW@portlandmaine.gov<mailto:SHUKRIAW@portlandmaine.gov>>
Cc: Mike Hays <mike@granthays.com<mailto:mike@granthays.com>>; Mark Goodwin <markg@northeastair.com<mailto:markg@northeastair.com>>
Subject: Northeast Air Review (NEA)

Good Morning Shukria,

Thank you for sending along the review comments. We have prepared the following supplemental attachments and offer the following responses for consideration.

1. Access and Circulation: Our site design provides for a one-way looped circulation with the exception of the larger general parking lot which was intended to allow for two way circulation. This approach was choose to allow visitors to be able to access and egress the lot from either direction. It is expected that users of the parking will need to either exit the lot for pick-up or drop-off of people at the main building entrance through the Porte Cochere or exit the lot directly. As a result, we have provided two-way circulation in the lot with directional signage to accommodate these two conditions.

2. Curb line Parking: Concern was expressed about vehicles overhanging the curb at the sidewalks. The sidewalks within the site have been designed with a minimum width of 6 feet at the perpendicular parking (big lot) to accommodate this potential condition. The angled nature of the parking in the other locations prohibits geometrically the ability of vehicles to overhang the sidewalk.

3. Traffic. NEA's current facility is too small to accommodate existing operations and provide adequate space to meet the current operational demands of an FBO (Fixed Base Operator). The expansion will not increase or change the number of employees or expand operations. The purpose of the expansion is to alleviate existing overcrowding, enhance the customer experience and improve efficiency and functionality. The number of employees will not be changing. As an example, two offices in the existing building will be moving to the new location to alleviate overcrowding in the current office space. The new terminal area is intended to enhance the existing customer experience and be responsive to existing needs of the customers and flight crews. There are currently 3 customer service representatives (CSR's) that are employed by NEA. This will not change, only the space in which they work in and interact with customers. The additional space for the waiting areas is simply to address current deficiencies. As a result, no new employees or expanded operations will occur as part of the terminal expansion. The purpose is to address current space deficiencies and improve functionality of existing operations. The office (future phase) is intended to accommodate relocation of FAA Operations staff that already exist at the airport. They (FAA) are currently located on the east side of the airport and would relocate to this new office space. The FAA also currently occupies a portion of the NEA building so this would consolidate the operations. Based upon the development program, we anticipate negligible (if any) changes in trip generation due to the expansion. As a result, we don't see that this project would have any impact on the Jetport TMP.

We did obtain the Jetport's TMP and it appears Tom Errico had some involvement so we would defer to him as the City's traffic consultant for confirmation. In reviewing the TMP it appears that existing condition counts were completed along with traffic generation predictions through 2016 based upon enplanements for the entire airport. As a result, it appears the existing TMP did include the entire airport. Again, the NEA project is intended to address existing facility deficiencies and is not expected to increase traffic or business volume other than what is already anticipated through the jetports enplanement growth built into the TMP.

4. Construction Management Plan: NEA is working with construction management company for the actual construction of the project. We would request the construction management plan be stipulated as a condition the contractor will provide specific to the project prior to physical construction beginning.

5. Photometric: Attached is a photometric plan and catalogue cut sheets for the lighting as requested.

6. Combined Grading and Utility Plan: We have been asked to separate the plans. We do not recommend separating the plans since the grading and drainage plan comprise the almost all of what is shown on the plan and they are integral to each other. Separating the drainage system from the grading is not advisable due to the important relationship between the grading and drainage infrastructure.

7. Bicycle Parking: We have not indicated any bicycle parking on the plan. NEA has not experienced the need for bicycle parking given the commercial type use and demographics of their customers.

8. Survey: Attached is the Portland Jetport Exhibit A which is the FAA mandated property plan. As an airport governed by FAA requirements, the Exhibit A serves as the official property survey of the jetport. NEA is located on leased property located wholly Attached is the Exhibit A prepared by Deluca Hoffman Associates (the airport consultant). We request that the City accept this as meeting the survey requirements. If you need further information, please contact Paul Bradbury, P.E., Portland Jetport Airport Direction.

9. NEA Lease: We understand NEA is addressing this directly.

10. Wastewater Flow: As requested by Michael Farmer, P.E. of the DPS we are in the process of obtaining additional information and expect to respond within the next couple of days.

11. NOI: Attached is a copy of the NOI as requested by Dave Sinus. This NOI will be filed prior to construction.

12. Storm Drainage Material – Public ROW: The storm drainage material in the public right-of-way will be PVC SDR -35. Outside the public ROW the pipe material will be HDPE and Class V RCP.

Thank you and please let me know if you need additional information.

Owens A. McCullough, P.E., LEED A.P.

Vice President Engineering & Business Development

[logo small]

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South Portland, ME 04106-6963

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Direct Line: 207.200.2073
Mobile: 207.232.1649
Fax: 207.856.2206

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MEMORANDUM

To: FILE
From: Shukria Wiar
Subject: Application ID: 2015-156
Date: 11/5/2015

Comments Submitted by: Keith Gautreau/Fire on 10/7/2015

Access to the building from Westbrook Street is good. 24' on the north entrance and 16' on the south entrance. Access to the rear of the structure will be through the existing Fire Gates.,

Comments Submitted by: Keith Gautreau/Fire on 10/7/2015

Large numbers identifying the address and the name of the business will be helpful for emergency response.

Comments Submitted by: Keith Gautreau/Fire on 10/7/2015

There are hydrants on both the secured and unsecured side of the FAA fence.



LEVEL III SITE PLAN APPLICATION

To:

**City of Portland
Planning Board**

For:

Northeast Air-Fixed Base Operator

1011 Westbrook Street
Portland, Maine 04102

Prepared for:

Northeast Air

1011 Westbrook Street
Portland, Maine 04102

Prepared by:

Sebago Technics, Inc.

75 John Roberts Road, Suite 1A
South Portland, Maine 04106

September 3, 2015



September 3, 2015
15149

Ms. Barbara Barhydt
Development Review Services Manager
City of Portland
389 Congress Street
Portland, ME 04101

Application for Level III Site Plan Permit
Northeast Air-Fixed Base Operator

Dear Ms. Barhydt:

On behalf of the Northeast Air (NEA), we have prepared this Level III – Site Plan Application for improvements to the existing NEA operation of the Jetport. The project site is located in the Airport Business (A-B) Zone. NEA is long standing Fixed Base Operator (FBO) at the Portland International Jetport. As an FBO, Northeast Air provides vital services to the operations of both commercial and private airport clients to include aircraft maintenance, aircraft re-fueling, de-icing, charter services and aircraft management. This services are critical to successful operation of an airport.

The proposed project will allow NEA to complete long overdue improvements to the existing terminal area to enhance current operations and provide an improved identity at the NEA location. In addition, a new addition is planned for the probable relocation of the FAA from an existing building on the airfield or will be used by NEA to address existing space needs and possible some aviation related lease space.

Grant Hayes Architects has been retained by NEA to provide the building programming and design. Enclosed with this application are building elevations, floor plans and a building perspective.

Development Program:

As part of the jetports Masterplanning process, the existing General Aviation Building located off Westbrook Street across from the Parking Garage will be demolished. The demolition is planned for this coming fall to make room for the NEA improvement project as part of the Jetports overall Masterplan.

The new construction will include interior renovations, building construction and site improvements as follows:

1. A new 2-story addition at the Westbrook Street side of the building with a 6,750 sf footprint. The FAA wants this space as Class A finishes.
2. Construction of a new 1-story addition for the Line Crew will be 3,500 square feet.
3. A new 2-story terminal addition will be a full height "atrium" space. The existing 2nd floor FAA OPS office will overlook this space.

4. A 45 space paved parking lot, landscaping, improved pedestrian movement, executive parking and related site improvements.

NEA is hopeful to complete the permitting this fall to allow for construction in the late fall of 2015 and occupancy in 2016. The project will not require any airfield improvements and is limited to building renovation and new construction. Currently, the Jetport has initiated an apron rehabilitation project that is on-going this summer into the early fall that will improve the airfield side of the NEA apron. This work is part of the Jetports capital improvement program and funding through the FAA and is separate from the NEA project.

Zoning:

The project parcel is in the City's A-B Airport Business Zone that is intended to provide an area for the development of airport-related enterprises as identified in the City's Comprehensive Plan. Areas surrounding the parcel are also in the Airport Business (A-B) Zone.

Jetport Coordination:

The project is consistent with the Jetports Masterplan and has been coordinated with the Jetport Director and Operations staff. As part of the project, a temporary security fencing will be erected with a new permanent fence construction to Airport security requirements. A new gate will be installed with an "Intelikey System" along with an exit only security gate for late night charter arrival.

Hours of Operation:

The existing NEA is a 24-hour operation. The proposed improvements will not alter or impact the current operational times. Fueling, charters and de-icing are 24 hour a day activities that have existed and will continue as part of the FBO mandated operations.

Parking:

The demolition of the existing General Aviation building and site will provide an opportunity for NEA to reconfigure the site and provide for a more efficient parking lot with improved building and airfield access. The proposed parking will include building front parking, driveway access to a Porte Cochere, executive parking and tenant space parking. As and FBO, the operational demand requires close proximity parking to accommodate executives, charters, and operational staff. The proposed project will increase the parking from approximately 30 to 43 parking spaces. NEA also leases an adjacent parking area for its employees and tenants.

Stormwater Management Plan:

The paved parking area and associated landscaping will be graded to convey surface runoff across the parking area as sheet flow to two tree filter systems and an underdrained soil filter. The underdrained soil filter is designed to provide temporary flood control as well as water quality treatment, stormwater cooling, and downstream channel protection meeting Maine DEP Chapter 500 requirements. New building expansion areas will be drained by roof drains connecting into the proposed closed stormwater

management system which goes southeast under runway 18-36 and eventually discharges to the Fore River. Overall, within the proposed development area of the project, the total amount of impervious area will decrease by 5,756 sf.

Landscaping:

Due to the project location, we have proposed a site landscaping plan that will make for an attractive, yet functional site that is suitably landscaped for parking, surrounding uses and accessory site elements. No berry bearing trees or bushes that would attract birds are proposed on the site due to the project location being an operating jetport. We also do not propose any tall growing trees near the airport perimeter fence due to the risk of people climbing them to get inside the fencing.

Waivers:

At this time we do not anticipate waiver requests.

Closure:

On behalf of Northeast Air, we look forward to working with the staff and Planning Board to permit this project. As you consider the application, please contact us if you have any questions.

Sincerely,

SEBAGO TECHNICS, INC.



Owens A. McCullough, P.E.
Vice President Engineering & Project Development



Aaron C. Hunter, E.I.
Civil Engineer

ACH/OAM:llg
Enc.

Cc: Mike Hayes, RA
Mark Goodwin, NEA

Table of Contents

Exhibit 1	Application Form & Checklist
Exhibit 2	USGS Location Map
Exhibit 3	City Assessor's Map
Exhibit 4	Financial Capacity
Exhibit 5	Right, Title or Interest
Exhibit 6	Stormwater Management Plan & Calculations
Exhibit 7	Evidence of Utility Capacity to Serve
Exhibit 8	Lighting Specifications
Exhibit 9	Exterior Building Elevations and Floor Plans

Att. B

Exhibit 1

Application Form & Checklist



Jeff Levine, AICP, Director
Planning & Urban Development Department

Electronic Signature and Fee Payment Confirmation

Notice: Your electronic signature is considered a legal signature per state law.

By digitally signing the attached document(s), you are signifying your understanding this is a legal document and your electronic signature is considered a **legal signature** per Maine state law. You are also signifying your intent on paying your fees by the opportunities below.

I, the undersigned, intend and acknowledge that no Site Plan or Historic Preservation Applications can be reviewed until payment of appropriate application fees are **paid in full** to the Inspections Office, City of Portland Maine by method noted below:

- ☐ Within 24-48 hours, once my complete application and corresponding paperwork has been electronically delivered, I intend to **call the Inspections Office** at 207-874-8703 and speak to an administrative representative and provide a credit/debit card over the phone.
- ☐ Within 24-48 hours, once my application and corresponding paperwork has been electronically delivered, I intend to **call the Inspections Office** at 207-874-8703 and speak to an administrative representative and provide a credit/debit card over the phone.
- ☒ I intend to deliver a payment method through the U.S. Postal Service mail once my application paperwork has been electronically delivered.

Applicant Signature:

Date:

I have provided digital copies and sent them on:

Date:

NOTE: All electronic paperwork must be delivered to buildinginspections@portlandmaine.gov or by physical means i.e. a thumb drive or CD to the Inspections Office, City Hall, 3rd Floor, Room 315.



Level III – Preliminary and Final Site Plans Development Review Application Portland, Maine

Planning and Urban Development Department
Planning Division

Portland's Planning and Urban Development Department coordinates the development review process for site plan, subdivision and other applications under the City's Land Use Code. Attached is the application form for a Level III: Preliminary or Final Site Plan. Please note that Portland has delegated review from the State of Maine for reviews under the Site Location of Development Act, Chapter 500 Stormwater Permits, and Traffic Movement Permits.

Level III: Site Plan Development includes:

- New structures with a total floor area of 10,000 sq. ft. or more except in Industrial Zones.
- New structures with a total floor area of 20,000 sq. ft. or more in Industrial Zones.
- New temporary or permanent parking area(s) or paving of existing unpaved parking areas for more than 75 vehicles.
- Building addition(s) with a total floor area of 10,000 sq. ft. or more (cumulatively within a 3 year period) except in Industrial Zones.
- Building addition(s) with a total floor area of 20,000 sq. ft. or more in Industrial Zones.
- A change in the use of a total floor area of 20,000 sq. ft. or more in any existing building (cumulatively within a 3 year period).
- Multiple family development (3 or more dwelling units) or the addition of any additional dwelling unit if subject to subdivision review.
- Any new major or minor auto business in the B-2 or B-5 Zone, or the construction of any new major or minor auto business greater than 10,000 sq. ft. of building area in any other permitted zone.
- Correctional prerelease facilities.
- Park improvements: New structures greater than 10,000 sq. ft. and/or facilities encompassing 20,000 sq. ft. or more (excludes rehabilitation or replacement of existing facilities); new nighttime outdoor lighting of sports, athletic or recreation facilities not previously illuminated.
- Land disturbance of 3 acres or more (includes stripping, grading, grubbing, filling or excavation).

Portland's development review process and requirements are outlined in the Land Use Code (Chapter 14) which is available on our website:

Land Use Code: <http://me-portland.civicplus.com/DocumentCenter/Home/View/1080>

Design Manual: <http://me-portland.civicplus.com/DocumentCenter/View/2355>

Technical Manual: <http://me-portland.civicplus.com/DocumentCenter/View/2356>

Planning Division
Fourth Floor, City Hall
389 Congress Street
(207) 874-8719

Office Hours
Monday thru Friday
8:00 a.m. – 4:30 p.m.

PROJECT NAME: Northeast Air-Fixed Based Operator

PROPOSED DEVELOPMENT ADDRESS:

1011 Westbrook Street, Portland International Jetport, Portland, Maine 04102

PROJECT DESCRIPTION:

A new 2-story addition with a 6,750 sf footprint, a new 1-story addition of 3,500 sf,
and an associated paved parking area.

CHART/BLOCK/LOT: 205 A001

PRELIMINARY PLAN _____ (date)
FINAL PLAN _____ (date)

CONTACT INFORMATION:

Applicant – must be owner, Lessee or Buyer Name: Mark R. Goodwin Business Name, if applicable: Northeast Air Address: 1011 Westbrook Street City/State : Portland, ME Zip Code: 04102	Applicant Contact Information Work # (207) 774-6318 Home# N/A Cell # N/A Fax# N/A e-mail: markg@northeastair.com
Owner – (if different from Applicant) Name: See Applicant Address: City/State : Zip Code:	Owner Contact Information Work # Home# Cell # Fax# e-mail:
Agent/ Representative Name: Sebago Technics, Inc. Attn: Owens McCullough Address: 75 John Roberts Road, Suite 1A City/State : South Portland, ME Zip Code: 04106	Agent/Representative Contact information Work # (207) 200-2073 Cell # (207) 232-1649 e-mail: omccullough@sebagotechnics.com
Billing Information Name: See Applicant Address: City/State : Zip Code:	Billing Information Work # Cell # Fax# e-mail:

Engineer Name: Sebago Technincs, Inc. Attn: Owens, McCullough Address: 75 John Roberts Road, Suite 1A City/State : South Portland, ME Zip Code: 04106	Engineer Contact Information Work # (207) 200-2073 Cell # (207) 232-1649 Fax# (207) 856-2206 e-mail: omccullough@sebagotechnics.com
Surveyor Name: Sebago Technics, Inc Attn: Charles Brown Address: 75 John Roberts Road, Suite 1A City/State : South Portland, ME Zip Code: 04106	Surveyor Contact Information Work # (207) 200-2053 Cell # N/A Fax# (207) 856-2206 e-mail: cbrown@sebagotechnics.com
Architect Name: Grant Hayes Associates Attn: Mike Hayes Address: P.O. Box 6179 City/State : Falmouth, ME Zip Code: 04015	Architect Contact Information Work # (207) 871 - 5900 Cell # Fax# e-mail: mike@granthays.com
Attorney N/A Name: Address: City/State : Zip Code:	Attorney Contact Information N/A Work # Cell # Fax# e-mail:

APPLICATION FEES:

Check all reviews that apply. (Payment may be made by Credit Card, Cash or Check payable to the City of Portland.)

Level III Development (check applicable reviews) ☒ Less than 50,000 sq. ft. (\$500.00) ☐ 50,000 - 100,000 sq. ft. (\$1,000) ☐ 100,000 – 200,000 sq. ft. (\$2,000) ☐ 200,000 – 300,000 sq. ft. (\$3,000) ☐ over \$300,00 sq. ft. (\$5,000) ☒ Parking lots over 11 spaces (\$1,000) ☐ After-the-fact Review (\$1,000.00 plus applicable application fee) Plan Amendments (check applicable reviews) ☐ Planning Staff Review (\$250) ☐ Planning Board Review (\$500) The City invoices separately for the following: • Notices (\$.75 each) • Legal Ad (% of total Ad) • Planning Review (\$40.00 hour) • Legal Review (\$75.00 hour) Third party review fees are assessed separately. Any outside reviews or analysis requested from the Applicant as part of the development review, are the responsibility of the Applicant and are separate from any application or invoice fees.	Other Reviews (check applicable reviews) ☐ Traffic Movement (\$1,000) ☐ Stormwater Quality (\$250) ☐ Subdivisions (\$500 + \$25/lot) # of Lots ___ x \$25/lot = ____ ☐ Site Location (\$3,000, except for residential projects which shall be \$200/lot) # of Lots ___ x \$200/lot = ____ ☐ Other _____ ☐ Change of Use ☐ Flood Plain ☐ Shoreland ☒ Design Review ☐ Housing Replacement ☐ Historic Preservation
---	---



Jeff Levine, AICP, Director
Planning & Urban Development Department

Electronic Signature and Fee Payment Confirmation

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By digitally signing the attached document(s), you are signifying your understanding this is a legal document and your electronic signature is considered a **legal signature** per Maine state law. You are also signifying your intent on paying your fees by the opportunities below.

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- ☒ I intend to deliver a payment method through the U.S. Postal Service mail once my application paperwork has been electronically delivered.

Jackie A. Sordani
Applicant Signature:

9/9/15
Date:

I have provided digital copies and sent them on:

Date:

NOTE: All electronic paperwork must be delivered to buildinginspections@portlandmaine.gov or by physical means i.e. a thumb drive or CD to the Inspections Office, City Hall, 3rd Floor, Room 315.

APPLICATION SUBMISSION:

1. All site plans and written application materials must be submitted electronically on a CD or thumb drive with each plan submitted as separate files, with individual file which can be found on the **Electronic Plan and Document Submittal** page of the City's website at <http://me-portland.civicplus.com/764/Electronic-Plan-and-Document-Submittal>
2. In addition, one (1) paper set of the plans (full size), one (1) paper set of plans (11 x 17), paper copy of written materials, and the application fee must be submitted to the Building Inspections Office to start the review process.

The application must be complete, including but not limited to the contact information, project data, application checklists, wastewater capacity, plan for fire department review, and applicant signature. The submissions shall include one (1) paper packet with folded plans containing the following materials:

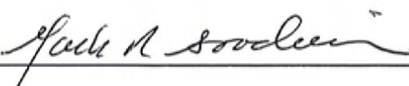
1. One (1) full size site plans that must be folded.
2. One (1) copy of all written materials or as follows, unless otherwise noted:
 - a. Application form that is completed and signed.
 - b. Cover letter stating the nature of the project.
 - c. All Written Submittals (Sec. 14-525 2. (c), including evidence of right, title and interest.
3. A stamped standard boundary survey prepared by a registered land surveyor at a scale not less than one inch to 50 feet.
4. Plans and maps based upon the boundary survey and containing the information found in the attached sample plan checklist.
5. One (1) set of plans reduced to 11 x 17.

Please refer to the application checklist (attached) for a detailed list of submission requirements.

APPLICANT SIGNATURE:

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Planning Authority and Code Enforcement's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

This application is for a Level III Site Plan review. It is not a permit to begin construction. An approved site plan, a Performance Guarantee, Inspection Fee, Building Permit, and associated fees will be required prior to construction. Other Federal, State or local permits may be required prior to construction, which are the responsibility of the applicant to obtain.

Signature of Applicant: 	Date: 9/9/15
---	------------------------

PROJECT DATA

The following information is required where applicable, in order to complete the application.

Total Area of Site	3,066,624	sq. ft.
Proposed Total Disturbed Area of the Site	54,669	sq. ft.
If the proposed disturbance is greater than one acre, then the applicant shall apply for a Maine Construction General Permit (MCGP) with DEP and a Stormwater Management Permit, Chapter 500, with the City of Portland.		
Impervious Surface Area		
Impervious Area (Total Existing)	68,716	sq. ft.
Impervious Area (Total Proposed)	62,960	sq. ft.
Building Ground Floor Area and Total Floor Area		
Building Footprint (Total Existing)	33,620	sq. ft.
Building Footprint (Total Proposed)	33,019	sq. ft.
Building Floor Area (Total Existing)	33,620	sq. ft.
Building Floor Area (Total Proposed)	36,488	sq. ft.
Zoning		
Existing	Airport Business	
Proposed, if applicable	N/A	
Land Use		
Existing	Fixed Based Operator	
Proposed	Fixed Based Operator	
Residential, If applicable		
# of Residential Units (Total Existing)	N/A	
# of Residential Units (Total Proposed)		
# of Lots (Total Proposed)		
# of Affordable Housing Units (Total Proposed)		
Proposed Bedroom Mix		
# of Efficiency Units (Total Proposed)	N/A	
# of One-Bedroom Units (Total Proposed)		
# of Two-Bedroom Units (Total Proposed)		
# of Three-Bedroom Units (Total Proposed)		
Parking Spaces		
# of Parking Spaces (Total Existing)	31	
# of Parking Spaces (Total Proposed)	45	
# of Handicapped Spaces (Total Proposed)	2	
Bicycle Parking Spaces		
# of Bicycle Spaces (Total Existing)	N/A	
# of Bicycle Spaces (Total Proposed)		
Estimated Cost of Project		
To be determined		

PRELIMINARY PLAN (Optional) - Level III Site Plan			
Applicant Checklist	Planner Checklist	# of Copies	GENERAL WRITTEN SUBMISSIONS CHECKLIST
X		1	Completed Application form
X		1	Application fees
X		1	Written description of project
X		1	Evidence of right, title and interest
N/A		1	Evidence of state and/or federal approvals, if applicable
X		1	Written assessment of proposed project's compliance with applicable zoning requirements
X		1	Summary of existing and/or proposed easement, covenants, public or private rights-of-way, or other burdens on the site
X		1	Written requests for waivers from site plan or technical standards, if applicable.
X		1	Evidence of financial and technical capacity
X		1	Traffic Analysis (may be preliminary, in nature, during the preliminary plan phase)
Applicant Checklist	Planner Checklist	# of Copies	SITE PLAN SUBMISSIONS CHECKLIST
X		1	Boundary Survey meeting the requirements of Section 13 of the City of Portland's Technical Manual
X		1	Preliminary Site Plan including the following: (information provided may be preliminary in nature during preliminary plan phase)
X			Proposed grading and contours;
X			Existing structures with distances from property line;
X			Proposed site layout and dimensions for all proposed structures (including piers, docks or wharves in Shoreland Zone), paved areas, and pedestrian and vehicle access ways;
X			Preliminary design of proposed stormwater management system in accordance with Section 5 of the Technical Manual (note that Portland has a separate applicability section);
X			Preliminary infrastructure improvements;
X			Preliminary Landscape Plan in accordance with Section 4 of the Technical Manual;
X			Location of significant natural features (including wetlands, ponds, watercourses, floodplains, significant wildlife habitats and fisheries or other important natural features) located on the site as defined in Section 14-526 (b) (1);
X			Proposed buffers and preservation measures for significant natural features, as defined in Section 14-526 (b) (1);
X			Location , dimensions and ownership of easements, public or private rights of way, both existing and proposed;
X			Exterior building elevations.

FINAL PLAN - Level III Site Plan			
Applicant Checklist	Planner Checklist	# of Copies	GENERAL WRITTEN SUBMISSIONS CHECKLIST (* If applicant chooses to submit a Preliminary Plan, then the * items were submitted for that phase and only updates are required)
X		1	* Completed Application form
X		1	* Application fees
X		1	* Written description of project
X		1	* Evidence of right, title and interest
N/A		1	* Evidence of state and/or federal permits
X		1	* Written assessment of proposed project's specific compliance with applicable Zoning requirements
X		1	* Summary of existing and/or proposed easements, covenants, public or private rights-of-way, or other burdens on the site
X		1	* Evidence of financial and technical capacity
X		1	Construction Management Plan
N/A		1	A traffic study and other applicable transportation plans in accordance with Section 1 of the technical Manual, where applicable.
X		1	Written summary of significant natural features located on the site (Section 14-526 (b) (a))
X		1	Stormwater management plan and stormwater calculations
X		1	Written summary of project's consistency with related city master plans
X		1	Evidence of utility capacity to serve
N/A		1	Written summary of solid waste generation and proposed management of solid waste
X		1	A code summary referencing NFPA 1 and all Fire Department technical standards
X		1	Where applicable, an assessment of the development's consistency with any applicable design standards contained in Section 14-526 and in City of Portland Design Manual
N/A		1	Manufacturer's verification that all proposed HVAC and manufacturing equipment meets applicable state and federal emissions requirements.

Applicant Checklist	Planner Checklist	# of Copies	SITE PLAN SUBMISSIONS CHECKLIST (* If applicant chooses to submit a Preliminary Plan, then the * items were submitted for that phase and only updates are required)
X		1	* Boundary Survey meeting the requirements of Section 13 of the City of Portland's Technical Manual
X		1	Final Site Plans including the following:
X			Existing and proposed structures, as applicable, and distance from property line (including location of proposed piers, docks or wharves if in Shoreland Zone);
X			Existing and proposed structures on parcels abutting site;
X			All streets and intersections adjacent to the site and any proposed geometric modifications to those streets or intersections;
X			Location, dimensions and materials of all existing and proposed driveways, vehicle and pedestrian access ways, and bicycle access ways, with corresponding curb lines;
X			Engineered construction specifications and cross-sectional drawings for all proposed driveways, paved areas, sidewalks;
N/A			Location and dimensions of all proposed loading areas including turning templates for applicable design delivery vehicles;
X			Existing and proposed public transit infrastructure with applicable dimensions and engineering specifications;
X			Location of existing and proposed vehicle and bicycle parking spaces with applicable dimensional and engineering information;
X			Location of all snow storage areas and/or a snow removal plan;
X			A traffic control plan as detailed in Section 1 of the Technical Manual;
X			Proposed buffers and preservation measures for significant natural features, where applicable, as defined in Section 14-526(b)(1);
N/A			Location and proposed alteration to any watercourse;
N/A			A delineation of wetlands boundaries prepared by a qualified professional as detailed in Section 8 of the Technical Manual;
N/A			Proposed buffers and preservation measures for wetlands;
X			Existing soil conditions and location of test pits and test borings;
X			Existing vegetation to be preserved, proposed site landscaping, screening and proposed street trees, as applicable;
X			A stormwater management and drainage plan, in accordance with Section 5 of the Technical Manual;
X			Grading plan;
N/A			Ground water protection measures;
X			Existing and proposed sewer mains and connections;

- Continued on next page -

X		Location of all existing and proposed fire hydrants and a life safety plan in accordance with Section 3 of the Technical Manual;
X		Location, sizing, and directional flows of all existing and proposed utilities within the project site and on all abutting streets;
X		Location and dimensions of off-premises public or publicly accessible infrastructure immediately adjacent to the site;
X		Location and size of all on site solid waste receptacles, including on site storage containers for recyclable materials for any commercial or industrial property;
X		Plans showing the location, ground floor area, floor plans and grade elevations for all buildings;
N/A		A shadow analysis as described in Section 11 of the Technical Manual, if applicable;
N/A		A note on the plan identifying the Historic Preservation designation and a copy of the Application for Certificate of Appropriateness, if applicable, as specified in Section Article IX, the Historic Preservation Ordinance;
X		Location and dimensions of all existing and proposed HVAC and mechanical equipment and all proposed screening, where applicable;
X		An exterior lighting plan in accordance with Section 12 of the Technical Manual;
X		A signage plan showing the location, dimensions, height and setback of all existing and proposed signs;
X		Location, dimensions and ownership of easements, public or private rights of way, both existing and proposed.



**PORTLAND FIRE DEPARTMENT
SITE REVIEW
FIRE DEPARTMENT CHECKLIST**



A separate drawing[s] shall be provided as part of the site plan application for the Portland Fire Department's review.

1. Name, address, telephone number of applicant
- 2.
3. Name address, telephone number of architect
4. Proposed uses of any structures [NFPA and IBC classification]
- 5.
6. Square footage of all structures [total and per story]
7. Elevation of all structures
8. Proposed fire protection of all structures
 - **As of September 16, 2010 all new construction of one and two family homes are required to be sprinkled in compliance with NFPA 13D. This is required by City Code. (NFPA 101 2009 ed.)**
9. Hydrant locations
10. Water main[s] size and location
11. Access to all structures [min. 2 sides]
12. A code summary shall be included referencing NFPA 1 and all fire department. Technical standards.

Some structures may require Fire flows using annex H of NFPA 1

CITY OF PORTLAND WASTEWATER CAPACITY APPLICATION

Department of Public Services,
55 Portland Street,
Portland, Maine 04101-2991



Mr. Frank J. Brancely,
Senior Engineering Technician,
Phone #: (207) 874-8832,
Fax #: (207) 874-8852,
E-mail: fjb@portlandmaine.gov

Date: 9-2-15

1. Please, Submit Utility, Site, and Locus Plans.

Site Address: 1011 Westbrook Street, Portland International Jetport, Portland, ME 04102
Chart Block Lot Number: 205 A001

Proposed Use: Fixed Based Operator
Previous Use: Fixed Based Operator

Existing Sanitary Flows: NOT KNOWN GPD
Existing Process Flows: None GPD

Description and location of City sewer that is to receive the proposed building sewer lateral.
Existing 8" City sewer in Westbrook Street to receive proposed additions 4" sewer lateral.

Site Category:

Commercial (see part 4 below)	☐
Industrial (complete part 5 below)	☐
Governmental	☐
Residential	☐
Other (specify)	☒

*Fixed Based Operator Terminal & Office

(Clearly, indicate the proposed connections, on the submitted plans)

2. Please, Submit Contact Information.

City Planner's Name: Barbara Barhydt Phone: (207) 874-8699
Owner/Developer Name: Mark R. Goodwin
Owner/Developer Address: 1011 Westbrook Street, Portland, ME 04102
Phone: (207) 774-6318 Fax: N/A E-mail: markg@northeastair.com
Engineering Consultant Name: Owens A. McCullough, Sebago Technics, Inc.
Engineering Consultant Address: 75 John Roberts Road, Suite 1A, South Portland, ME 04106
Phone: (207) 200-2073 Fax: (207) 856-2206 E-mail: omccullough@sebagotechnics.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: 850 gpd GPD
Peaking Factor/ Peak Times: _____
Specify the source of design guidelines: (i.e. X "Handbook of Subsurface Wastewater Disposal in Maine,"
Plumbers and Pipe Fitters Calculation Manual, Portland Water District Records, Other (specify)

(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: _____

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: _____

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)

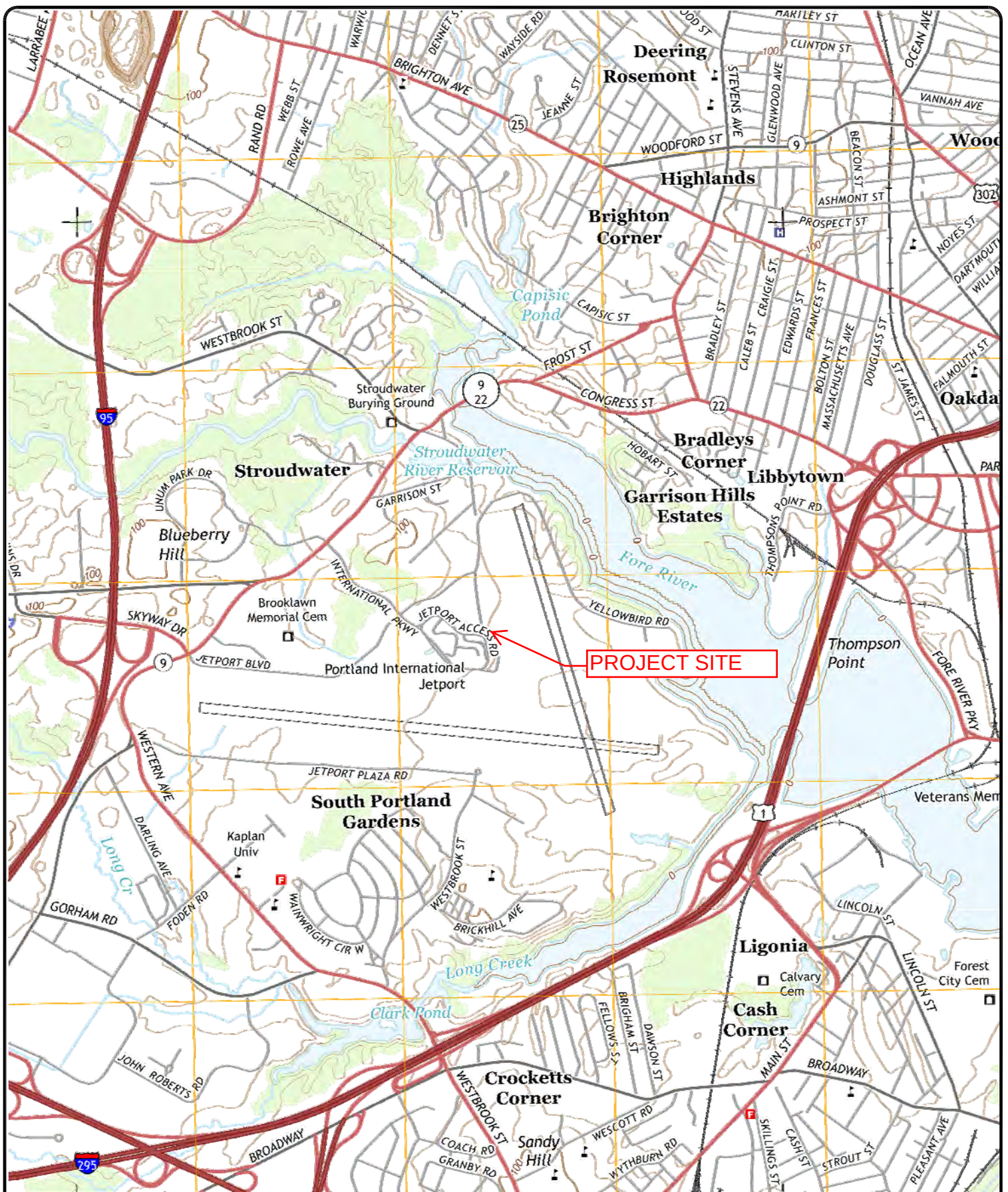
(Note: Please submit detailed calculations showing the derivation of your design flows, either in the space provided below, or attached, as a separate sheet)

Notes, Comments or Calculation

Att. C

Exhibit 2

USGS Location Map



SEBAGO
TECHNICS

WWW.SEBAGOTECHNICS.COM

75 John Roberts Rd. Suite 1A
South Portland, ME 04106
Tel. 207-200-2100

250 Goddard Rd. Suite B
Lewiston, ME 04240
Tel. 207-783-5656

LOCATION MAP OF NORTHEAST AIR-FIXED BASED OPERATOR

LOCATION:
PORTLAND INTERNATIONAL JETPORT
PORTLAND, MAINE 04102

FOR: NORTHEAST AIR
1011 WESTBROOK STREET
PORTLAND, MAINE 04102

SCALE: SCALE

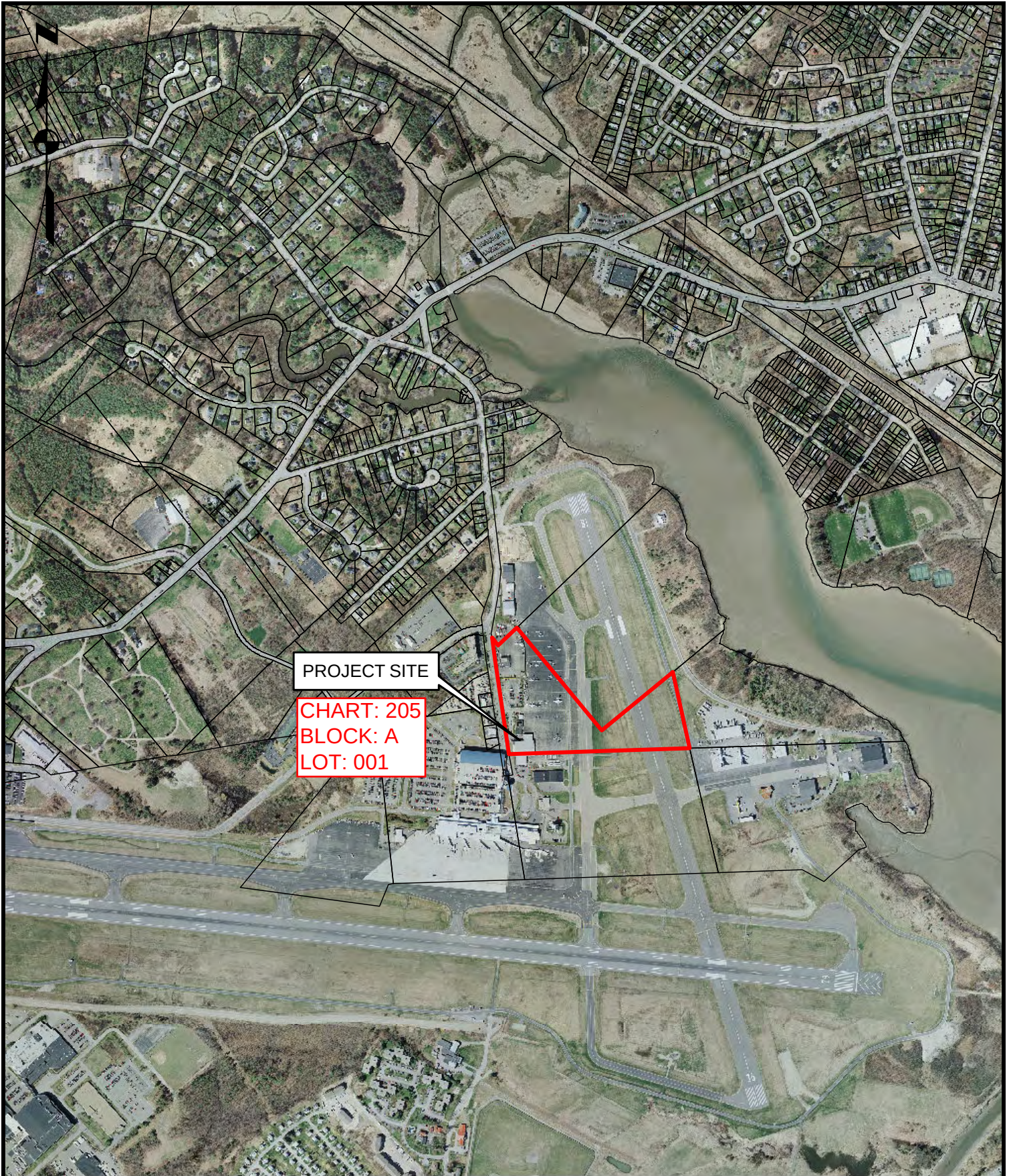
DATE: 08-14-15

SHEET:
1 OF 1

Att. D

Exhibit 3

City Assessor's Map



SEBAGO
TECHNICS

CIVIL ENGINEERING • SURVEYING • LANDSCAPE ARCHITECTURE
WWW.SEBAGOTECHNICS.COM

75 John Roberts Rd. - Suite 1A
South Portland, ME 04106
Tel. 207-200-2100

250 Goddard Rd. - Suite B
Lewiston, ME 04240
Tel. 207-783-5656

TAX MAP
NORTHEAST AIR-FIXED BASED OPERATOR

LOCATION:
PORTLAND INTERNATIONAL JETPORT
PORTLAND, MAINE 04102

INFORMATION:
IMAGERY ACQUIRED SPRING 2006
PARCEL DATA FROM CITY OF PORTLAND

SCALE: 1" = 1,000'

DATE: 08/14/15

Exhibit 4

Financial Capacity



August 11, 2015

Owens A. McCullough
Vice President, Engineering and Business Development
Sebago Technics
75 John Roberts Road – Suite 1A
South Portland, ME 04106-6963

RE: Northeast Air

Dear Mr. McCullough:

Northeast Air and Affiliates have a comprehensive banking relationship with People's United Bank. I have been doing business with the company and its related entities for over twenty years. All loans and deposits have been handled in a professional and satisfactory manner. My experience with the management team has been exemplary. Northeast Air has the financial wherewithal to complete the proposed project at the Portland Jetport based on its strong operating performance and solid balance sheet.

Should you have any comments or questions, please feel free to contact me at 207-828-3098.

Sincerely,

A handwritten signature in black ink, appearing to read "Patricia L. Camelio".

Patricia L. Camelio
Senior Vice President

Exhibit 5

Right, Title or Interest

BASIC LEASE DATA
LEASE BETWEEN LCL ASSOCIATES AND
CITY OF PORTLAND, MAINE

1. **Lease Term:** July 1, 1996 through June 30, 2016,
with an option to renew for an additional 20
years.
2. **Landlord:** City of Portland, Maine
Mailing Address: Airport Manager
Portland International Jetport
1001 Westbrook Street
Portland, Maine
(See §15.10 for Notices)
3. **Tenant:** LCL Associates
Mailing Address: c/o Northeast Air
Portland International Jetport
Portland, ME 04102
4. **Premises:** 45,160 square feet of land at the Portland
International Jetport as described on Exhibit A to
the Lease Agreement.
5. **Fixed Rent:** Sixteen Cents (\$.16) per square foot, subject
to CPI escalator beginning January 1, 1998.
6. **Percentage Rent:** Two Percent (2%) of gross receipts as
defined in Article 5.
7. **Renewal Rent:** To be negotiated beginning no less than 120
days prior to renewal of the Lease, subject to
binding arbitration.
8. **Permitted Uses:** Aircraft sales and maintenance; avionics
sales and maintenance; air charters; air
taxi service; air freight service up to
75,000 pound aircraft; sale of aircraft
parts and accessories; aircraft storage;
flight school; aircraft rental; ground
handling and de-icing in locations
approved by the Airport Manager; Ground
Service Equipment maintenance and
storage; and administrative offices
associated with the foregoing permitted
uses.

9. Approved Subtenants: Northeast Air
Jetport Hangar Associates Limited
Liability Company

10. Approved Sub-Subtenants to Jetport Hangar Associates Limited
Liability Company:

Maine Aviation
Maine Aircraft Sales

GROUND LEASE AGREEMENT

LCL ASSOCIATES

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GROUND LEASE AGREEMENT

LCL ASSOCIATES

THIS LEASE AGREEMENT made and entered into this 1st day of July, 1996, (hereinafter may be variously referred to as the "Lease Agreement", "Lease" or "Agreement") by and between the **CITY OF PORTLAND**, a municipal corporation, existing under and by virtue of the laws of the State of Maine, hereinafter called "**CITY**", and **LCL Associates**, a Maine corporation with a principal office located at 1001 Westbrook Street, Portland, Maine, hereinafter called "**TENANT**".

W I T N E S S E T H:

WHEREAS, **CITY** owns and operates the Portland International Jetport (hereinafter called "Airport"), located at 1001 Westbrook Street, Portland, Maine; and

WHEREAS, **TENANT** is a Fixed Base Operator at the Airport and wishes to expand its charter and ground service equipment operations; and

WHEREAS, **CITY** has all right, title and interest in and to the real property on the Airport, together with the facilities, easements, rights, licenses, and privileges hereinafter granted, and has full power and authority to enter into this Agreement in respect thereof;

NOW, THEREFORE in consideration of the mutual covenants and considerations herein contained, **CITY** lets and demises to **TENANT** and **TENANT** leases from **CITY** the following described Leased Premises, and all described rights incident thereto, subject to the following terms and conditions:

ARTICLE 1 - LEASED PREMISES

1.1. DESCRIPTION OF LEASED PREMISES

The term "Leased Premises" or "Premises" as used in this Lease Agreement, shall mean and include real estate located at Portland International Jetport in Cumberland County, State of Maine, consisting of approximately 45,160 square feet of ground space all as described on "Exhibit A", prepared by Sebago Technics, attached hereto and incorporated herein, including the right of ingress thereto and egress therefrom as provided in Section 7.2 below. A

final determination of the square footage shall be made upon completion of the project described in Article 3 below and said square footage shall be used to determine the amount of fixed rent due under Section 5.1 below.

1.2 "AS IS" CONDITION

TENANT takes the Premises in "as is" condition. Other than **CITY** ownership thereof, **CITY** makes no representation or warranty as to the physical condition of the Premises nor as to any other matter concerning the Premises, including but not limited to the presence of any environmental hazards thereon. **TENANT** has had the opportunity to fully inspect the Premises and is familiar with the condition thereof and is not relying upon any representations nor warranties of **CITY**. All **TENANT** improvements, additions and alterations at or to the Premises will be at **TENANT**'s sole cost and expense and **CITY** shall have no responsibility therefor; provided, however, **CITY** shall, at its cost and expense, remove or have removed the quonset hut located on the Premises prior to the execution of this Lease Agreement.

ARTICLE 2 - OBJECTIVES AND PURPOSES OF LEASE

2.1 PERMITTED USE OF LEASED PREMISES

2.1.1 **TENANT** shall use the Leased Premises for the following purposes:

Aircraft sales and maintenance; avionics sales and maintenance; air charters; air taxi service; air freight service up to 75,000 pound aircraft; sale of aircraft parts and accessories; aircraft storage; flight school; aircraft rental; ground handling and de-icing in locations approved by the Airport Manager; Ground Service Equipment maintenance and storage; and administrative offices associated with the foregoing permitted uses;

and for no other purposes.

2.1.2 Upon thirty (30) days prior written notice to **CITY**, **TENANT** may request permission for an expansion or change in use on the Premises, which permission shall not be unreasonably withheld by **CITY**. **TENANT** covenants that it shall not use nor permit the use of the Premises for any purpose other than those provided in 2.1.1 above without the prior written approval of the **CITY**.

2.2 PROHIBITED ACTIONS

TENANT shall not store fuel upon the Premises except to the extent permitted by the City Code and applicable state or other law or regulation, and shall not block a taxiway nor park any aircraft in such a location as to interfere with Airport operations, nor permit any other person to do so. No damaged aircraft shall be parked on the ramp at any time without the prior written approval of the Airport Manager, which approval may be granted for such storage up to a maximum of sixty (60) days. In the event of such approval, **TENANT** shall cover such damaged aircraft within twenty-four (24) hours of a request to do so by the Airport Manager, such cover to be in a manner as is reasonably approved by the Airport Manager. Aircraft ramp and service equipment may be stored on the Premises, but only in a manner and in such locations as the Airport Manager may reasonably authorize in writing in advance. All aircraft and equipment repairs except minor repairs shall be performed inside a structure and not on the aircraft apron. The Airport Manager shall be the sole judge of what constitutes minor repair. **TENANT** covenants that it shall not do any and shall not permit anyone to do any night-time engine runups. "Night-time" as used herein shall mean between the hours of 10:00 p.m. and 7:00 a.m. of each day.

ARTICLE 3 - TENANT'S CONSTRUCTION REQUIREMENTS

3.1 REQUIREMENT FOR IMPROVEMENTS ON LEASED PREMISES

TENANT shall, at its sole cost and expense, design, construct, fabricate, install and equip on the Leased Premises, or cause the same to be designed constructed, fabricated, installed and equipped, such buildings, structures, roadways, utility lines, additions and improvements as **TENANT** may desire in furtherance of the purposes set forth in Article 2, (hereinafter the "Project") and shall install thereon such equipment and facilities as **TENANT** may deem necessary or desirable, provided, however, that no building, structure, roadway, utility lines, addition, or improvement of any nature shall be made or installed by **TENANT** without the prior written consent of the **CITY** as herein provided.

3.2 CONSTRUCTION DATES

3.2.1 Construction of improvements shall begin not later than September 1, 1996, and shall be completed no later than December 31, 1997. **TENANT** shall proceed diligently with the Project; provided, however, that in the event of Force Majeure causing delay in the Project which is not the fault of **TENANT**, **TENANT** may request

an extension in the Project schedule from the Airport Manager, who shall not unreasonably withhold approval of such an extension.

3.2.2 Notwithstanding the foregoing and notwithstanding Section 15.16 below, in the event **TENANT** shall fail to begin construction by October 1, 1996, **CITY** shall have the right to terminate this Lease pursuant to the provisions of Article 12 herein.

3.2.3 **TENANT** shall comply with all applicable Airport Security requirements during construction of the Premises and **TENANT** shall be responsible for ensuring such compliance by all contractors, subcontractors or others working on construction of improvements at or on the Premises or in connection with such improvements. Airport security requirements are provided in Exhibit B attached hereto, but are subject to **CITY**'s right to modify or amend them to comply with applicable local, state or federal law or regulations.

3.3 APPROVAL OF PLANS

TENANT covenants and agrees that prior to the preparation of detailed construction plans, specifications and architectural renderings of any such building, structure, roadway, utility lines, addition or improvement, it shall first submit plans showing the general site plan, design and character of improvements and their locations, relative to the Leased Premises, including location of drainage utilities and roadways to the Airport Manager for review. **TENANT**'s plans shall meet **CITY**'s design standards for the type of development proposed. **TENANT** covenants and agrees that prior to the installation or construction of any such building, roadway, structure, addition or improvement on the Leased Premises, it shall first submit its plans and specifications to the **CITY** for approval pursuant to **CITY**'s Land Use Code and all construction will be in a good, workmanlike manner and in accordance with all **CITY**, State and Federal orders, laws and regulations.

3.4 GOVERNMENTAL PERMITS

All necessary approvals and permits from governmental agencies shall be obtained by **TENANT** at its sole cost and expense prior to constructing, fabricating, equipping or installing the Project. Upon completion of the Project, all required occupancy permits and approvals from governmental bodies authorizing occupancy and use of the Premises for the purposes contemplated shall also be obtained by **TENANT**.

3.5 EXTENSION OF UTILITIES OR SPECIAL FACILITIES

TENANT shall construct at its sole cost and expense all necessary utility lines required for **TENANT** to connect to the lines of existing service. **TENANT** shall construct, at its expense, the connecting roadways to the existing roadway system, if any are required. **TENANT** shall further be required to relocate, at its sole cost and expense, any utilities or underground lines which are located on the Premises and are required to be relocated as a result of **TENANT**'s Project, use of, or activities on the Premises.

3.6 COST OF CONSTRUCTION AND ALTERATIONS

The cost of the required initial improvements constructed and equipment installed in accordance with this Article, shall not be less than Six Hundred Thousand Dollars (\$600,000.00) and shall be substantiated to be no less than said amount by a third party reasonably acceptable to **CITY**.

3.7 AS-BUILT DRAWINGS

Within thirty (30) days following completion of the initial construction and any subsequent additions, alterations or improvements **TENANT** shall present to **CITY** a complete set of reproducible (mylar) "record" drawings including all amendments and changes issued during construction and including, but not limited to, specifications and shop drawings. In addition, the as-built drawings of the exterior site and utilities must be submitted on a computer diskette using the AutoCADD format.

3.8 MORTGAGE OF LEASEHOLD INTEREST

TENANT shall have the right to grant a First Mortgage upon the leasehold interest granted herein. Such mortgage may be granted only to a financial institution or other institutional lender reasonably acceptable to the City Manager, and may secure a principal amount (excluding advances made by the Mortgagee to protect its interest in the Leasehold) of not more than eighty percent (80%) of the cost of capital improvements thereon, and the terms and conditions of such mortgage loan shall be subject to the prior written approval of the City Manager and subject to all of the terms of this Agreement. Any such mortgagee shall attorn to the **CITY** as a condition of such approval.

ARTICLE 4 - TERM

4.1 INITIAL TERM

The Initial Term of this Lease is twenty (20) years, commencing upon the date of execution of this Lease Agreement, and ending at midnight on the same day and date in the year 2016.

4.2 RENEWAL TERM

TENANT shall have the option to renew this Lease for an additional twenty (20) years so long as TENANT has been and is continuing in full compliance with all of the terms and conditions herein, and subject to renegotiation of the rent as provided in Article 5 below. TENANT shall provide CITY with no less than One Hundred and Eighty (180) days notice of such renewal prior to expiration of the initial term of this Lease and such renewal shall be in writing signed by both parties.

TERM

4.3 HOLDING OVER

4.3.1 In the event TENANT shall continue to occupy the Leased Premises beyond the Lease term or any extension thereof without CITY's written renewal thereof, such holding over shall not constitute a renewal or extension of this Lease, but shall create a tenancy at sufferance which may be terminated at any time by CITY or TENANT by giving written notice to the other party. Any such tenancy at sufferance shall otherwise be on all of the terms and conditions of this Lease Agreement.

ARTICLE 5 - RENTALS, FEES AND RECORDS

5.1 FIXED RENT

5.1.1. Monthly rent per square foot. During the term hereof, TENANT shall pay to CITY a fixed monthly rental of Sixteen Cents (\$.16) per square foot for the Leased Premises, subject to Section 5.1.2 below. The initial annual rent is \$7,225.60 (45,160 s.f. x .16), or \$602.13 per month, subject to adjustment for the final square footage under Section 1.1 above.

5.1.2 Fixed rent increases. Beginning on the first day of January, 1998, and annually thereafter, the fixed rent will be adjusted, based on the increase in the prior year's Consumer Price Index of the U.S. Department of Labor, All Urban Consumers, all items (1982-84 = 100) for the Portland, Maine NECMA, or comparable

successor index.

5.2 PERCENTAGE RENT

5.2.1 In addition to the foregoing monthly rent, **TENANT** shall pay to **CITY** two percent (2%) of the gross receipts from all of **TENANT**'s operations on the entire Premises and operations of any subtenant or sub-subtenant; provided, however, the following shall not be subject to the percentage rental hereunder: 1) aircraft sales; 2) sales of aircraft parts and accessories; 3) "off-base" charters, defined as charters which do not takeoff nor land at the Airport with paying passengers; 4) fixed rent collected from the subtenants and sub-subtenants approved by the **CITY** of even date, up to the amount due to **CITY** under Section 5.1 above; 5) the 2% payment itself, whether paid by **TENANT** or by an approved subtenant; 6) any rent payable to **TENANT** from an entity owned entirely by Henry A. Laughlin III, provided that Henry A. Laughlin III owns the entire voting stock of **TENANT** and 7) any rent payable to **TENANT** by Northeast Air, Jetport Hangar Associates Limited Liability Company, Maine Aviation or Maine Aircraft Sales, so long as there is no change in the principals owning said subtenants and sub-subtenants. All other gross receipts shall be subject to the percentage rent.

5.2.2 "Gross receipts" shall mean and include all gross revenues received by any person and arising out of or resulting from any operations or activities from, at or on the Premises, but shall not include the amount of any tax on sales whether designated a sales tax or not and imposed by any federal, state or local governmental authority, either now or in the future.

5.2.3 **CITY** reserves the right to amend or modify the percentage rent payable, or the manner in which such rent, or any portion thereof, is calculated, under this Lease Agreement to the extent that such amendment or modification is applicable generally in a non-discriminatory manner to all persons providing similar services at the Airport and providing that such amendment, modification or increase is reasonably revenue neutral to **TENANT**. In such case, **CITY** shall provide **TENANT** with no less than thirty (30) days written notice prior to the effective date of such new rates or charges.

5.3 RENEWAL RENT

In the event **TENANT** renews this Lease as provided in Section 4.2 above, all rent, including without limitation fixed and percentage

rent, under this Lease Agreement during said renewal term shall be in the amount negotiated in good faith by the parties. Notice of intent to negotiate a new rent term shall be given no less than 120 days prior to renewal of the Lease; provided, however, failure to give such notice shall not diminish nor negate the parties obligation to negotiate a new rent hereunder. If the parties have been unable to agree upon a new rental within 45 days of such notice, the parties agree to submit the issue of rent only to binding arbitration pursuant to the Commercial Rules and Regulations of the American Arbitration Association. The arbitrator shall determine the rent based upon the fair market value of the Leased Premises, and shall provide an inflation adjustment for any portion of the rent which is a fixed amount. In the event the arbitrator determines that such rent should be increased, the increase will be effective, retroactive if necessary, as of the date of renewal of the Lease. The parties shall equally share all costs of arbitration and the arbitrator's fee, but each party shall be responsible for the costs and fees of their own attorneys and/or expert witnesses.

5.4 TIME AND PLACE OF PAYMENTS

5.4.1 The foregoing fixed rental of Section 5.1 shall be payable, without need for invoice, in equal monthly installments in advance on or before the first business day of each calendar month of the term, at the office of the Airport Manager, Portland International Jetport, 1001 Westbrook Street, Portland, Maine 04103, or such other place as the CITY may direct in writing from time to time.

5.4.2 The percentage of gross receipts shall be due and payable monthly, without need for invoice, at the office of the Airport Manager at the address above, on the fifteenth (15th) day of each month based upon the gross receipts of the previous calendar month, the first of which shall be due and payable on the fifteenth (15th) day of the month following the month on which **TENANT** begins operations on the Premises. A detailed monthly revenue statement of all revenues received by any person as a result of any transaction at or on the Premises, regardless of the location of the person receiving such revenue and regardless of where such revenue is paid, shall be kept on file at the Airport office of **TENANT** for review by the Airport Manager or his or her designee during regular business hours. The monthly revenue statement shall provide such detail as the Airport Manager may require, including without limitation, a description of each such transaction, to whom the money was paid and the location of such person, and the gross

amount of such money, showing the amount of the permitted deductions of sales taxes actually paid.

5.4.3 Within ninety (90) days of the close of **TENANT's** fiscal year, **TENANT**, at its sole cost and expense, shall have prepared a reviewed financial statement, prepared and signed by an independent accountant, of all operations conducted at or from the Leased Premises for the previous fiscal year and will keep a copy of such statement on file in its office located at the Airport for review during regular business hours by the **CITY**. **TENANT** will notify **CITY** when said financial statement is available for review. In the event such financial statement discloses any payment due to **CITY** which has not been paid, such payment of any unpaid balance shall be made immediately upon completion of such financial statement. **TENANT's** fiscal year is from January 1 to December 31 of each year and **TENANT** shall provide the Airport Manager with written notice of any change in said fiscal year. A late fee of Fifty Dollars (\$50.00) per day will be assessed for every day that the said financial statement is late in being made available to the **CITY** and said late fee shall be due and payable upon demand by **CITY**.

5.4.4 **CITY** reserves the right to conduct an audit of **TENANT's** records, upon reasonable notice and during regular business hours, to determine the accuracy of amounts paid hereunder. In the event such audit discloses an underpayment to **CITY** of more than Ten Percent (10%) in any year, **TENANT** shall pay to **CITY**, in addition to the amount owed and any applicable late charges, the reasonable cost to **CITY** of its audit. In the event said audit shows an overpayment by **TENANT**, said overpayment shall be deducted from **TENANT's** next due monthly percentage payment or payments.

5.4.5 **TENANT** shall make prompt and timely payment, without deduction or setoff, of all rentals, fees, assessments, taxes and other charges due hereunder as the same may from time to time come due.

5.5 DELINQUENT RENTALS

There shall be added to all sums which the **TENANT** is required to pay hereunder (whether as rental or otherwise) to **CITY** and which are unpaid, a late charge of one and one-half percent (1-1/2%) of the unpaid sum for each full calendar month of delinquency computed as simple interest on a daily basis, using thirty (30) days in the month for purposes of calculating the daily rate. Any late charge assessed shall be computed from the original due date of the unpaid sum. The rate of the late charge may be changed from time to time

pursuant to the Airport's Rules and Regulations. Any late charge hereunder shall be additional to any interest or other charge imposed by the CITY generally, including without limitation, interest on unpaid real or personal property taxes.

ARTICLE 6 - OBLIGATIONS OF TENANT

6.1 NET LEASE

The use and occupancy of the Leased Premises by TENANT will be without cost or expense to CITY and all rentals payable hereunder shall be net to the CITY. It shall be the sole responsibility of TENANT to maintain, repair and operate the entirety of the Leased Premises and any improvements and facilities constructed thereon at TENANT's sole cost and expense.

6.2 MAINTENANCE AND OPERATIONS

6.2.1 All repair and maintenance of the Leased Premises, including, but not limited to, landscaping shall be the responsibility of the TENANT. TENANT shall maintain the Leased Premises and all of their fixtures, equipment and personal property which may be located in or upon any part thereof in a reasonably neat, clean and sanitary condition. TENANT agrees that it shall be responsible for all snow and ice removal on the Leased Premises.

6.2.2 TENANT shall take good care of the Leased Premises; shall reasonably maintain the Leased Premises and the improvements, buildings and fixtures thereon in good condition at all times; shall make all repairs and replacements inside and outside, ordinary and extraordinary, structural or otherwise. Such repairs and replacements by TENANT shall be in quality and class not inferior to the original material and workmanship. TENANT shall pay promptly the costs and expenses of such repairs, replacements and maintenance, and maintain and repair all utility service lines located upon the Leased Premises to the extent they are used by TENANT, except to the extent such maintenance or repair is the obligation of the utility company providing such utility service.

6.2.3 TENANT shall paint, repair, replace or rebuild all or any part of the Leased Premises, interior or exterior, structural or non-structural, as provided above, which may be damaged or destroyed (subject to the provisions of Article 10 below). In such case, TENANT shall have the right to apply any available insurance proceeds to such purposes.

6.2.4 **TENANT** shall provide, at its sole cost and expense, the necessary receptacles and arrangements for adequate sanitary handling and disposal, away from the Airport, of all trash, garbage and other refuse which results from use of, or activities on, the Leased Premises. Unless otherwise agreed in writing by **CITY**, all such trash, garbage and other refuse shall be disposed of at Regional Waste System in Portland. **CITY** reserves the right to require **TENANT** to participate in any recycling program which may be imposed by Airport rules or by local, state or federal law or regulation. **TENANT** shall defend, indemnify and hold the **CITY** harmless from any cost, expense, claim, fine or liability, including without limitation attorney's fees and court costs, arising out of or resulting from **TENANT**'s storage, collection, transportation or disposal of any trash, garbage or other refuse hereunder. This obligation of defense and indemnification shall remain in full force and effect after termination or expiration of this Lease.

6.2.5 **TENANT** shall provide and use suitable covered metal receptacles for all such garbage, trash, and other refuse. Piling of boxes, cartons, barrels, pallets, debris, or similar items in an unattractive or unsafe manner, on or about the Leased Premises, shall not be permitted.

6.2.6 To the extent that **TENANT** does not undertake or pay for any of its obligations under this Subsection 6.2, **CITY** reserves the right to undertake such obligations or to pay such costs, in its sole discretion, and to charge all costs thereof to **TENANT**. Prior to such undertaking or payment, **CITY** shall provide **TENANT** with written notice of such failure to meet such obligations or to pay such costs to **TENANT**, and shall provide **TENANT** with ten (10) days from the date of such notice to undertake such obligation and proceed diligently to complete it, or to pay such cost. In the event **CITY** undertakes any such obligation or pays such cost hereunder, **TENANT** shall repay the **CITY** all such amounts immediately upon **CITY**'s demand therefor. Nothing herein shall prevent or prohibit the **CITY** from declaring a default hereunder and terminating the Lease as provided in Article 12 below.

6.3 **CITY'S CONSENT TO IMPROVEMENTS.**

TENANT shall not erect any structures, make any improvements, nor do any construction work (other than the Project) on the Leased Premises, or alter, modify or make additions to or replacements of the Project without the prior written approval of the **CITY**, which approval shall not be unreasonably withheld or delayed. The

requirement for CITY approval shall not apply to any improvements, repairs or replacements which are immediately necessary because of an emergency caused by no fault of TENANT or its subtenants.

6.4 CITY RIGHT TO INSPECT AND REPAIR

CITY, at its discretion, shall be the sole judge of the quality of maintenance; and TENANT, upon notice by CITY to TENANT shall be required to perform whatever maintenance CITY deems reasonably necessary. If said maintenance is not undertaken by TENANT within ten (10) days after receipt of written notice, CITY shall have the right to enter upon the Leased Premises and perform the necessary maintenance, the cost of which shall be borne by TENANT as additional rent to be paid to CITY immediately upon demand therefor. No waste shall be committed or damage done to the Premises, the buildings and equipment located thereon, nor to property of CITY.

6.5 UTILITIES

TENANT shall assume and pay for all construction, installation and periodic costs or charges for utility services furnished to TENANT during the term hereof; provided, however, that, consistent with applicable laws, regulations or permit requirements, TENANT shall have the right to connect to any and all storm and sanitary sewers and water and utility outlets at its own cost and expense; and TENANT shall pay for any and all service charges incurred therefrom.

6.6 PAYMENT OF TAXES AND OTHER ASSESSMENTS

6.6.1 TENANT agrees to pay promptly when due, and not to permit to become delinquent, levies, taxes, assessments, excises, permit fees, license fees, charges, impositions or burdens of whatsoever kind and nature, whether general or special, ordinary or extraordinary, foreseen or unforeseen, or for any public improvements or utility services (hereinafter "impositions") which, at any time during the term of this Lease Agreement, may be created, levied, assessed, imposed or charged upon or with respect to the Leased Premises or any part thereof, by any federal, state, county, municipal or other authority, which imposition would be valid and applicable to TENANT irrespective of this section. Nothing herein contained shall be construed as stopping or preventing TENANT from contesting in good faith, however, the validity or applicability to its operations hereunder of any such law, ordinance, rule, regulation, tax assessment, excise fee or

charge, including the exhaustion of all appeal rights, provided that the Leased Premises shall not be in danger of being forfeited nor the CITY exposed to any threat of fine, penalty or violation.

6.6.2 Notwithstanding the foregoing, TENANT acknowledges that CITY has the right from time to time to establish and impose reasonable charges and fees for users of the Airport or its facilities, provided that such charges and fees are charged in a uniform and non-discriminatory manner; and provided, further, that CITY shall provide TENANT with no less than thirty (30) days prior written notice prior to imposing any new fee or charge which directly or indirectly affects TENANT or any sub-tenant of TENANT.

6.7 NONDISCRIMINATION; AFFIRMATIVE ACTION

6.7.1 The TENANT, for itself, its successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree as a covenant running with this Lease of the Premises that:

(a) no person on the grounds of race, color, sex, disability, religion, national origin or sexual orientation shall be excluded from participation in, denied the benefits of, or be otherwise subject to, discrimination in the use of said facilities;

(b) that in the construction of any improvements on, over, or under such Premises and the furnishing of services thereon, no person on the grounds of race, color, sex, disability, religion, national origin, or sexual orientation shall be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination; and

(c) that the TENANT shall use the Premises in compliance with all other requirements imposed by or pursuant to Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Non-Discrimination in Federally Assisted Programs of the Department of Transportation-Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations may be amended; and

(d) that TENANT shall undertake an affirmative action program as required by 14 CFR Part 152, Sub E, to insure that no person shall on the grounds of race, creed, color, national origin, or sexual orientation be excluded from participating

in any employment activities covered in 14 CFR Part 152, Sub E.

6.7.2 **TENANT** agrees to furnish service on a fair, equal, and non discriminatory basis to all users thereof, and to charge fair, reasonable, and non discriminatory prices for each unit of service.

6.7.3 In the event of breach of any of the above non-discrimination covenants, the **CITY** shall have the right to terminate this Lease Agreement and to re-enter and re-possess said Premises and the facilities thereon.

6.8 OBSERVANCE OF STATUTES, ETC.

6.8.1 During the Term hereof and renewal term, **TENANT** shall, at its own cost and expense, promptly observe and comply with all existing and future applicable laws, ordinances, rules, regulations, licenses, permits, decisions and decrees of the Federal, State, County and **CITY** Governments (including Airport Rules, and including but not limited to any airport minimum standards applicable to all or a general class of airport operators), as well as those of any other government authority having jurisdiction over the Premises or any part thereof, whether the same are in force at the commencement of the term of this Agreement or should be enacted in the future.

6.8.2 Without limiting the foregoing, **TENANT** shall at all times comply with all minimum operating standards or requirements for all aeronautical endeavors and activities conducted by the **TENANT** as may from time to time be established by the **CITY**, the Airport Manager or any governmental body having jurisdiction over activities at the Portland International Jetport.

6.8.3 **TENANT** shall not make any use of the Leased Premises which is improper, offensive or contrary to any law or ordinance, nor to permit any act or thing to be done which shall constitute a nuisance or which may make void or voidable any insurance on the Leased Premises or the buildings or improvements thereon.

6.8.4 **TENANT** shall pay all fines, penalties, damages, expenses or costs, including reasonable counsel fees, which may in any manner arise out of or be imposed on **CITY** or Airport because of the failure of the **TENANT** to comply with the requirements of this Section 6.8.

6.8.5 **TENANT** shall have the right, but not the obligation, to

contest, without cost or expense to CITY, the validity or application of any law, ordinance, rule, regulation, or requirement of the type referred to in the preceding sub-section. If by the terms of any such provision, compliance may be legally delayed without risk of forfeiture or lien on the Premises or penalty to the CITY, pending resolution of the legal challenge, TENANT may delay compliance therewith until final determination of such proceeding.

6.8.6 CITY agrees to execute and deliver any appropriate papers or other instruments which may be reasonably necessary or proper to permit TENANT to contest the validity or application of any such provision.

6.9 ENVIRONMENTAL STATUTES

6.9.1 TENANT covenants and agrees to comply with all applicable environmental laws, including without limitation all laws governing hazardous substances and all requirements related to storm water discharges and permits, and to provide to CITY, immediately upon receipt, copies of any correspondence, Notice, Pleading, Citation, Indictment, Complaint, Order, Decree or other document from any source asserting or alleging a circumstance or condition which requires, or may require, a clean-up, removal, remedial action, or other response by or on the part of TENANT under environmental laws, or which seek civil, criminal or punitive penalties from TENANT for an alleged violation of environmental laws. TENANT further agrees to advise the CITY in writing as soon as TENANT becomes aware of any condition or circumstances which may result in a potential violation of any environmental laws. TENANT agrees, at its expense, and at the reasonable request of CITY, to permit an environmental audit solely for the benefit of CITY, to be conducted by CITY. This provision shall not relieve CITY from conducting its own environmental audits or taking any other steps necessary to comply with environmental laws. TENANT, as used in this Article, shall mean and include the named TENANT, its officers, agents, employees, invitee, customers, subcontractors, transferees, licensees, subtenants, vendors, suppliers or anyone for whose act TENANT may be legally liable.

6.9.2 Without limiting the foregoing, TENANT shall not dump, flush, or in any way introduce any hazardous materials or hazardous waste or any other toxic materials upon the Leased Premises nor shall it improperly store, or dispose of any hazardous materials or hazardous waste from any such property, except in full compliance with all applicable laws and regulations. For purposes of this

paragraph, the term hazardous materials shall mean inflammable, explosives, radioactive materials and hazardous substances defined as "hazardous substances," "hazardous materials" or "toxic substances" in the Comprehensive Environmental Response Compensation Liability Act of 1980, as amended, the Hazardous Conservation and Recovery Act, and the Resources Conservation and Recovery Act, or any similar federal, state or local law, or in any regulations promulgated pursuant thereto, or in any other applicable law. The term "hazardous materials" shall also include any other chemical, material or substance which is or may be regulated as toxic or hazardous or exposure to which is prohibited, limited or regulated by any federal, state or other governmental authority or agency or which, even if not so regulated, may or could pose a hazard to human health and safety.

6.9.3 If in the opinion of **CITY**, there exists any uncorrected violation by **TENANT** of an environmental law which requires, or may require, a cleanup, removal or any condition or other remedial action by **TENANT** under any environmental law, regulation, permit, license, judgment or decree, and such cleanup, removal or other remedial action is not completed, or commenced and diligently pursued, within thirty (30) days from the date of written notice from **CITY** to **TENANT**, the same shall, at the option of **CITY**, constitute an event of default hereunder.

6.9.4 For the purposes of this Article, the term "environmental law or laws" shall mean all Federal, State and Local laws including statutes, regulations, ordinances, codes, rules, permits, licenses, judgments, decrees, or other governmental restrictions and requirements relating to the environment or any hazardous substance, including but not limited to, the State of Maine environmental protection statutes, the Federal Solid Waste Disposal Act, the Federal Clean Air Act, the Federal Clean Water Act, the Research Conservation and Recovery Act of 1976, the Federal Comprehensive Environmental Responsibility, Cleanup and Liability Act of 1980 as amended by the Super Fund Amendments and Reauthorization Act of 1986, regulations of the Environmental Protection Agency, regulations of the Nuclear Regulatory Agency, and regulations of any State Department of Environmental Protection or successor agency now or anytime hereafter in effect.

6.9.5 **TENANT** shall defend, indemnify and hold the **CITY** harmless from and against and in respect of any and all damages, costs and expenses, including without limitation, fines, penalties, reasonable attorney's fees, consequential damages and remedial costs and other liabilities arising from claims based upon the

environmental condition of the Leased Premises and the surrounding property (including without limitation all facilities, improvements, structures and equipment thereon and soil and groundwater thereunder), resulting from (a) TENANT's use of the Leased Premises or operations thereon by or on behalf of TENANT; (b) claims arising out of, related to, or in connection with (i) the release by TENANT of any hazardous material into, onto or from the Leased Premises; or (ii) any arrangement by TENANT for the treatment, recycling, storage or disposal at any facility owned or operated by any person or entity of a hazardous material which is present on the Leased Premises or has been or may be deposited at, disposed on or released onto the Leased Premises; and (c) claims related to demolition, cleanup or other remedial measure with regard to environmental conditions on or around the Leased Premises by TENANT; or (d) claims resulting from any act or omission of TENANT in violation of any federal, state or local environmental laws or regulations with respect to TENANT's use of the Leased Premises.

6.9.6 CITY shall give to TENANT prompt and reasonable notice of any such claim or action, and TENANT shall have the right to investigate, compromise, and defend the same.

6.9.7 The Terms of this Section 6.10 shall expressly survive the expiration or earlier termination of this Lease Agreement, including without limitation the terms of Subsection 6.9.5.

6.10 HAZARD LIGHTS

TENANT shall, at its expense, provide and maintain hazard lights on any structure erected by TENANT on the Leased Premises, if required by CITY or Federal Aviation Administration regulations. Any hazard lights so required shall comply with the specifications and standards established for such installations by the FAA.

ARTICLE 7 - OBLIGATIONS OF CITY

7.1 OPERATION AS PUBLIC AIRPORT

CITY covenants and agrees that at all times during the term of this Lease it will operate and maintain the Airport as a public airport consistent with and pursuant to the Sponsor's Assurances given by CITY to the United States Government under the Federal Airport Act or any successor Assurances or Act.

7.2 INGRESS AND EGRESS

Upon paying the rental hereunder and performing the covenants of this Lease, **TENANT** shall have the right of ingress to and egress from the Leased Premises for the **TENANT**, its officers, employees, agents, servants, customers, vendors, suppliers, patrons, and invitee over the roadway provided by **CITY** serving the Leased Premises. **CITY**'s roadway shall be used jointly with other tenants on the Airport, and **TENANT** shall not interfere with the rights and privileges of other persons or firms using said facilities and shall be subject to such weight and type use restrictions as **CITY** deems necessary.

7.3 CONSTRUCTION BY CITY

There are no facilities to be constructed by **CITY** under this Agreement. All construction will be made by **TENANT** as provided in Article 3.

ARTICLE 8 - CITY'S RESERVATIONS

8.1 IMPROVEMENT, RELOCATION OR REMOVAL OF STRUCTURES

8.1.1 **CITY**, at its sole discretion, reserves the right to further develop or improve the aircraft operating area and other portions of the Airport, including the right to remove or relocate any structure on the Airport, as it sees fit, and to take any action it considers necessary to protect the instrument approaches of the Airport against obstructions, together with the right to prevent **TENANT** from erecting or permitting to be erected, any buildings or other structure on the Airport which, in the opinion of **CITY** would limit the usefulness of the Airport or constitute a hazard to aircraft.

8.1.2 In the event **CITY** requires the Leased Premises for expansion, improvements, development of the Airport, **CITY** reserves the right, on six (6) months notice, to relocate or replace **TENANT**'s improvements in substantially similar form at another generally comparable location on the Airport. Such relocation or replacement shall be at **CITY**'s sole cost and expense.

8.2 INSPECTION OF LEASED PREMISES

CITY, through its duly authorized agent, shall have at any reasonable time, the full and unrestricted right to enter the Leased Premises for the purpose of periodic inspection for fire protection, maintenance and to investigate compliance with the terms of this Lease Agreement.

8.3 WAR OR NATIONAL EMERGENCY

During any time of war or national emergency, CITY shall have the right to lease the Airport or any part thereof to the United States Government for military use, and if any such lease or agreement is executed, the provisions of this Lease Agreement insofar as they are inconsistent with the lease or agreement with the Government shall be suspended, and in that event, a just and proportionate part of the rent hereunder shall be abated.

ARTICLE 9 - INDEMNITY AND INSURANCE

9.1 INDEMNIFICATION

9.1.1 To the fullest extent permitted by law, TENANT agrees to defend, indemnify, and save forever harmless the CITY, its officers, agents and employees, from and against all claims and actions and all reasonable expenses incidental to the investigation and defense thereof, based on or arising out of claims for damages or injuries to any person or property, including wrongful death and loss of use of property, and arising, in whole or in part, out of TENANT's use or occupancy of the Leased Premises; CITY shall give to TENANT prompt and reasonable notice of any such claims or actions, and TENANT shall have the right to investigate, compromise and defend the same; and provided further, that TENANT shall not be liable for any claims, actions, injury, damages or losses to the extent they are occasioned by the negligent or intentional act of CITY, its officers, agents or employees. Notwithstanding the foregoing, TENANT shall defend the CITY from all such claims. "TENANT" as used throughout these Sections 9.1 and 9.2 shall mean and include the named TENANT, its officers, agents, employees, invitee, customers, subcontractors, subtenants, vendors, suppliers and anyone for whose act TENANT may be legally liable.

9.1.2 TENANT shall, at its own cost and expense defend any and all suits or actions, just or unjust, which may be brought against CITY or in which CITY may be impleaded with others upon any such above-mentioned matter, claim or claims, including claims of contractors, employees, laborers, materialmen, and suppliers. CITY shall have the right to participate in such suits and no action shall be settled without prior consent of the CITY. Such obligation of indemnity and defense shall not be construed to negate nor abridge any other right of indemnification or contribution running to the CITY which would otherwise exist. The extent of this indemnity provision shall not be limited by any requirement of insurance contained herein.

9.1.3 **TENANT** agrees to procure and maintain throughout the term of this Lease Agreement, an endorsement to its Workers Compensation coverage waiving any and all rights of subrogation against **CITY**. **TENANT** hereby, expressly and without reservation, waives any defense or immunity to which it might otherwise be entitled under Workers' Compensation laws, the general statutes of Maine or judicial decisions, disallowing or limiting such indemnification, and consents to a cause of action for indemnity. The **TENANT's** waiver and consent to indemnification is made without regard to, and it specifically waives, any defense which might otherwise be available to it, by statute or case law, such as, but not limited to, 39-A M.R.S.A. §104 and McGraw v. S.D. Warren v. Cianbro Corporation, 656 A. 2d 1222 (Me. 1995).

9.1.4 This indemnity and hold harmless provision of this Section 9.1 includes indemnity against all reasonable expenses, fees, costs and liabilities incurred in or in connection with any such claim or proceeding brought thereon, and the defense thereof with counsel reasonably acceptable to the **CITY**. The provisions of this Article 9 and the obligations of **TENANT** hereunder shall survive the termination or expiration of this Lease.

9.2 LIEN INDEMNIFICATION

Both during construction of the Leased Premises prior to the date of beneficial occupancy and throughout the term of this Lease, **TENANT** shall not cause nor permit any lien against the Leased Premises, any portion thereof or any **CITY** property wherever located, or any improvements thereto, to arise out of or accrue from any action or use thereof by **TENANT**. **TENANT** may in good faith, however, contest the validity of any alleged lien. **TENANT** shall defend and indemnify and hold the **CITY** harmless from any cost, expense, attorney's fees or other liability arising out of or resulting from any such lien or liens, and shall promptly discharge such lien or stay or prevent its foreclosure by bond or other appropriate legal procedure which is acceptable to the **CITY**. So long as **TENANT** defends **CITY** in any action concerning any such lien, **TENANT** shall not be required to post a bond with respect to such lien prior to the commencement of a foreclosure action against the **CITY**. This provision shall survive termination or expiration of this Lease Agreement. **CITY** may, at its sole discretion, pay any amounts secured by any such lien and in such case, **TENANT** shall repay all such payments to **CITY** immediately upon **CITY's** demand therefor.

9.3 PUBLIC LIABILITY INSURANCE

9.3.1 During construction of the Project, **TENANT** shall procure and maintain, or cause to be procured and maintained:

(a) Public Liability and Property Damage Insurance. The **TENANT** shall procure and maintain (or cause to be procured and maintained) during the Project, at its own cost, and show evidence to the **CITY** of Comprehensive General Liability and Property Damage Insurance, including special broad form property damage coverage, to protect the **CITY** and **TENANT** from claims and damages which may arise from operations upon the Premises or under this Lease, whether such operations shall be performed by the **TENANT** or by anyone directly or indirectly employed by it, in the types and minimum amounts set forth below:

<u>Description</u>	<u>Coverage</u>	<u>Each Occurrence</u>
(i) General Liability	B.I./Death	\$5,000,000.00
	P.D.	\$5,000,000.00
(ii) Vehicle Liability, including owned, hired or non-owned	B.I./Death	\$5,000,000.00
	P.D.	\$5,000,000.00
(iii) Worker's Compensation, Employer's Liability	B.I./Death	\$ 500,000.00

The **CITY** shall be named as an additional insured in all such policies. Item (iii) shall include an endorsement waiving all rights of subrogation against **CITY** as provided in Section 9.1.3 above.

(b) Special Hazards Insurance. The **TENANT** will also procure and maintain (or cause to be procured and maintained) special hazards insurance for all risks, including, but not limited to, coverage for damages resulting from explosion or blasting, collapse, or underground damage in the minimum amounts of One Million Dollars (\$1,000,000.00) for bodily injury and death and One Million Dollars (\$1,000,000.00) for property damage.

(c) Builder's Risk. The **TENANT** shall procure and maintain (or cause to be procured and maintained) Builder's Risk Insurance on the Project, naming the **CITY** and the **TENANT**, as their interests may appear, as insureds or additional insureds, for all risks, including, but not limited to, the perils of fire, extended coverage, vandalism, malicious

mischief, and sprinkler leakage on the Project in an amount equivalent to One Hundred Percent (100%) of the construction contract amount, and, to the extent possible, upon the standard forms for such coverage as promulgated by the insurance service office of Maine.

9.3.2 Upon the date of beneficial occupancy of the Project, **TENANT**, without expense to the **CITY**, and with no lapse in coverage, shall obtain and cause to be kept in force at all times during the term of this Agreement, General Liability Insurance, under policies no more restrictive than the standard form of Comprehensive General Liability policy in the following amounts:

<u>Description</u>	<u>Limit of Liability</u>
1) Airport/Premises Liability	
a) Bodily Injury	\$5,000,000 each occurrence
b) Property Damage	\$5,000,000 each occurrence
2) Vehicle Liability, including owned, hired or non-owned	\$1,000,000 per occurrence
3) Aircraft Rental/Flight Instruction	\$100,000 per seat \$500,000 per occurrence
4) Worker's Compensation, Employer's Liability Insurance (or Maine statutory amount, whichever is greater)	\$100,000 \$500,000

9.3.3 **TENANT** and the **CITY** understand and agree that the minimum limits of the insurance herein required may become inadequate during the term of this Agreement. **TENANT** agrees that it will increase such minimum limits by reasonable amounts upon receipt of notice in writing from the **CITY**. Such notices to change shall, in general, be issued no more often than every second (2) year of the lease term or renewal thereof. In no case shall such limits be less than the minimum amount set forth under the Maine Tort Claims Act, as amended.

9.3.4 **TENANT** shall procure and maintain, as of the date of beneficial occupancy of the Leased Premises, all risks fire and casualty insurance, in an amount no less than ninety percent(90%) of the replacement value of the Project and related fixtures, or in such maximum amount as is available if ninety percent (90%) is not available.

9.3.5 All policies of insurance required herein shall be in a form and issued by a company or companies satisfactory to the CITY, and approved to do insurance business in the State of Maine. Each such policy affecting the Leased Premises shall provide that such policy may not be changed, altered or canceled by the insurer during its term without first giving thirty (30) days' notice in writing to the Airport Manager. Each liability policy required to be obtained hereunder shall name the CITY as an additional insured thereunder and shall be on an occurrence basis. All policies required hereunder shall be primary to any insurance or self-insurance which CITY may maintain for its own benefit.

9.3.6 Certificates or other evidence of insurance coverages required of TENANT in this Article, in amounts no less than those stipulated herein or as may be in effect from time-to-time, shall be delivered to the CITY prior to the execution of this Lease Agreement and annually thereafter. TENANT shall at all times during the term of this Lease Agreement provide CITY with at least thirty (30) days prior written notice of any change or modification in insurance coverage or insurance carrier affecting the Leased Premises. Insurer shall provide no less than thirty (30) days written notice prior to cancellation, reduction in coverage or expiration of each policy required hereunder, said notice to be sent to the Airport Manager. It shall be TENANT's responsibility throughout the term of this Lease to provide or have provided to the Airport Manager renewal insurance certificates with no lapse in coverage prior to such renewal.

9.3.7 If at any time TENANT should fail either to obtain or to maintain in force the insurance required herein, the CITY shall notify TENANT of its intention to purchase such insurance for TENANT's account; and, if TENANT has not delivered evidence of insurance to the Airport Manager prior to the date on which the current insurance expires, the CITY may effect such insurance by taking out policies in companies satisfactory to the CITY. Such insurance shall be in amounts no greater than those stipulated herein or as may be in effect from time-to-time. The amount of the premiums for such insurance obtained by the CITY shall be payable by TENANT as additional rental immediately upon demand therefor by CITY.

9.4 LETTERS OF CREDIT

9.4.1 In the event TENANT is three (3) or more months in arrears in payment, in whole or in part, of any rent or tax due to CITY, and TENANT is still in possession of the Premises, TENANT

shall, in addition to becoming current on said arrearage or aerugos, provide CITY with a Letter of Credit in the minimum amount of four (4) months payment of said rent or tax which is in arrears, or both if applicable. Said letter of credit shall be made with a local financial institution and shall be conditioned on the faithful performance of all terms, conditions and covenants of this Lease Agreement for one full year from the date of said letter of credit. Said letter of credit shall be maintained in the full four(4) month minimum amount throughout its term, and in the event of any subsequent default in payment of rent or taxes due to CITY while the letter of credit hereunder is in effect, the term of said letter of credit shall be extended to be one (1) full year from the date of said subsequent default. The letter of credit shall terminate only upon the passage of one full year with no defaults in payments due hereunder. Said letter of credit shall be available upon notice from CITY to said institution to pay CITY any amounts owed by TENANT and unpaid, and to reimburse CITY any loss, costs or expenses it incurs in the event of any default hereunder by TENANT. Notwithstanding the foregoing, TENANT shall remain liable for any amounts due hereunder and unpaid, and any costs and expenses incurred by CITY in excess of the amount of said letter of credit.

9.4.2 Any successor, assignee, subtenant or other transferee of TENANT as tenant under this Lease shall be required, as a condition of CITY consent to such succession, assignment, sublease or transfer, to provide CITY with a letter of credit in the minimum amount of nine (9) months rent and nine (9) months taxes due to CITY hereunder, and said letter of credit shall be maintained in said minimum amount for one full year after its date of issuance, with no default in said payments to CITY. Any default in said payments when due shall require renewal of the term of said letter of credit to be for one (1) full year from the date of said default. Any such successor, assignee or transferee shall have the right to request a waiver, in whole or in part, of the foregoing letter of credit requirement, which waiver may be granted or denied in the sole discretion of the City Manager of the CITY. Without limiting the foregoing, in the event any approved subtenant becomes a direct tenant to CITY, such subtenant shall provide the CITY with the foregoing 9 month letter of credit as of the effective date of such direct tenancy, unless such letter of credit is waived, as provided herein.

9.4.3 Notwithstanding the reimbursement of CITY of any amounts owed through the letter of credit, CITY reserves the right to declare TENANT in default under the Lease for the underlying

failure of **TENANT** to pay any amounts or undertake any obligation required herein, which failure resulted in **CITY** drawing upon the letter of credit.

ARTICLE 10 - DESTRUCTION OF PREMISES

10.1 In the event the buildings and improvements on the Premises, or any substantial part thereof, should be damaged or destroyed by an insured casualty, such buildings or improvements shall be repaired or rebuilt by **TENANT** and paid for with the insurance proceeds; and, if such proceeds are insufficient for such purposes, the **TENANT** shall pay the deficiency, unless otherwise agreed as provided herein. If such proceeds should be in excess of the amount necessary for such purposes, any such excess shall be retained by **TENANT** and shall be used to pay any deficiency which might arise in the event of any future casualty. Repair or restoration of the buildings and improvements shall be in accordance with the original Plans and Specifications, together with alterations or modifications made or agreed upon prior to the casualty, unless the parties otherwise mutually agree to new or modified plans.

10.2 In the event the buildings and improvements on the Leased Premises, or a substantial part thereof, should be destroyed, and the insurance proceeds and any amounts left from prior casualties should be insufficient to repair or rebuild the Leased Premises in a manner to permit them to be used for the purposes herein, then **TENANT** may terminate this Agreement by written notice to **CITY** within ninety (90) days of the casualty.

10.3 If the building or buildings shall be damaged in such manner as to render them unusable in whole or in part during repair and restoration thereof, the fixed rental provided to be paid under the terms of this Lease Agreement shall be abated or reduced proportionately during the period from the date of such damage or destruction until the work of repairing, restoring or reconstructing said building or buildings is completed.

ARTICLE 11 - CONDEMNATION

11.1 **CITY** agrees to give prompt written notice to **TENANT** of any eminent domain, condemnation, compulsory acquisition or like proceedings by any competent authority which might result in a partial or full taking of the Leased Premises and of which **CITY** has actual notice. Each party may file and prosecute their respective claims for an award, but all awards and payments on account of a

taking shall be held in trust by the recipient to be distributed according to the respective interests of the parties, i.e., payments allocable to the value of the Leased Premises and the residual interest in the Leased Premises shall be paid to CITY and payments allocable to TENANT's leasehold interest shall be paid to TENANT.

11.2 In the case of a taking (other than for temporary use) of the fee of the entire Leased Premises, or so substantial a part of the Leased Premises that such taking materially impairs TENANT's conduct of its operations at or from the Premises, this Agreement shall terminate as of the effective date of such taking. In the case of a temporary taking, this Agreement shall be suspended during such time as TENANT is unable to use the Leasehold Premises for the uses provided herein. In the case of a temporary taking which does not permit TENANT to use the Premises as provided herein for a period of ninety (90) days or more, at the conclusion of said ninety (90) day period, TENANT shall give CITY a thirty (30) day notice of its intent to terminate the Lease Agreement, during which thirty (30) day period CITY may provide TENANT with comparable leased space from which to conduct its operations; and, in such event, this Lease will be amended to cover such alternative space and shall not terminate. In the event CITY does not provide such alternative space, this Lease shall terminate at the end of the thirty (30) day notice period, with no further obligation by either party. Nothing herein shall prevent or prohibit the CITY from providing alternative space to TENANT prior to receipt of the thirty (30) day notice of termination. TENANT's obligation to pay rent hereunder shall be suspended during any temporary taking during which TENANT is unable to conduct its operations at or from the Leased Premises; provided, however, to the extent TENANT is able to continue its operations hereunder from the Premises or from an alternative site, the TENANT shall continue to pay percentage rent on such operations and the fixed rent based upon the square footage then available to TENANT.

ARTICLE 12 - TERMINATION OF LEASE

12.1 CITY's Right to Terminate. The CITY, in addition to any other rights to which it may be entitled by law, acting by and through its City Manager, may declare this Agreement terminated in its entirety, subject to and in the manner provided herein, upon or after the happening of any one or more of the following events, and may exercise all rights of entry and re-entry, with or without process of law, upon the Premises:

(a) The filing by **TENANT** of a voluntary petition in bankruptcy or any assignment for benefit of creditors of all or any part of **TENANT's** assets;

(b) The entry of an order for relief against the **TENANT**, by a court of applicable jurisdiction, pursuant to any involuntary bankruptcy petition filed against the **TENANT**;

(c) The taking of jurisdiction by a court of competent jurisdiction of **TENANT** or its assets, pursuant to proceedings brought under the provisions of any Federal reorganization act;

(d) The appointment of a receiver or trustee of **TENANT's** assets by a court of competent jurisdiction or a voluntary agreement with **TENANT's** creditors;

(e) The voluntary abandonment by **TENANT** of the Leased Premises (and the failure to pay rent thereon) for a period in excess of thirty (30) days; or

(f) The material breach by **TENANT** of any of the covenants or agreements herein contained and the failure of **TENANT** to remedy such breach. A material breach shall include, but not be limited to, the failure of **TENANT** to pay any rental, fee, or charge required to be paid by the terms of this Lease Agreement when the same is due and payable.

12.2 TENANT's Right to Terminate. **TENANT**, in addition to any other right given to it herein or to which it may be entitled by law, may terminate this Agreement in its entirety, subject to and in the manner provided herein, upon or after the happening of any one of the following events:

(a) The issuance by any court of competent jurisdiction of an injunction which materially prevents or restrains the use of the Airport or the Leased Premises for the purposes permitted under this Lease Agreement and such injunction remaining in force for a period of at least ninety (90) days after the date of receipt of written notice of such injunction by **CITY**;

(b) Subject to **TENANT's** obligation to restore or repair the Premises under Article 10 above, the inability of **TENANT** to use said Leased Premises and Airport facilities due to war, earthquake or other casualty for a longer period than ninety (90) days after the date of receipt of written notice of such

inability from **TENANT**;

(c) Any action of any governmental authority, board, agency or officer having jurisdiction thereof preventing **TENANT** from conducting the activities permitted hereunder at or on the Leased Premises by a taking, directly or indirectly, in whole or a substantial part, of the Leased Premises for a period of at least ninety (90) days after receipt of written notice of such action by **CITY**;

(d) The taking, through the process of eminent domain, of all or a substantial part of the Premises leased by **TENANT**; or

(e) The material breach by **CITY** of any of the covenants or agreements herein contained and the failure of **CITY** to remedy such breach within a reasonable time after notice from **TENANT** to do so.

12.3 Default by **CITY**. In the event of any default by **CITY** of any of its obligations under this Lease Agreement, **TENANT** may declare the **CITY** in default by delivering by hand during regular business hours or sending by certified mail, return receipt requested, of written notice to **CITY**'s Airport Manager in the office of the Airport Administration, addressed and copied as provided in Section 15.10 below, specifying both the date upon which termination will take effect and also the cause for which this Lease Agreement is being terminated. No termination shall be effective until not less than thirty (30) days have elapsed after the date of delivery of notice by **TENANT** to **CITY**, and such default shall not have been cured during such thirty (30) day period by the **CITY**. If such default by its nature cannot be cured within such thirty (30) day period, no termination shall be effective if the **CITY** commences to correct such default within said thirty (30) days from the date of delivery of the notice of default, and continues with due diligence to correct the same as promptly as reasonably practicable.

12.4 Default by **TENANT**. In the event of any default by **TENANT** of any of its obligations under this Lease Agreement, **CITY** may declare the **TENANT** in default by delivering by hand during regular business hours or sending by certified mail, return receipt requested, of written notice to **TENANT** addressed as provided in Section 15.10 below, specifying both the date upon which termination will take effect and also the cause for which this Lease Agreement is being terminated. Except as provided otherwise in this Lease Agreement whereby no opportunity to cure is required, no termination shall be effective until not less than thirty (30) days have elapsed after

the date of delivery of notice by CITY to TENANT, and such default shall not have been cured during such thirty (30) day period by the TENANT. If such default by its nature cannot be cured within such thirty (30) day period, no termination shall be effective if the TENANT commences to correct such default within said thirty (30) days from the date of delivery of the notice of default, and continues with due diligence to correct the same as promptly as reasonably practicable. In the event TENANT knew or should have known of the default prior to receipt of CITY notice, said thirty (30) day period to cure shall be deemed to begin as of the date TENANT knew or should have known of said default. Notwithstanding the foregoing, if TENANT should fail to pay any sum, including without limitation any rental, tax, assessment or use fee or charge, as required hereunder, TENANT shall have five (5) days from receipt of CITY notice of default to cure said default, and if not so cured, termination of this Lease Agreement shall be effective as of the sixth day following said receipt of notice.

ARTICLE 13 - RIGHTS UPON TERMINATION

13.1 TENANT agrees that upon the expiration of the term of this Lease or sooner termination thereof, the Leased Premises will be delivered to CITY in good condition, reasonable wear and tear excepted, and all buildings, fixtures and personal property located on the Leased Premises shall remain on, or be removed from, the Leased Premises as provided herein. Upon the termination or expiration of this Lease Agreement, all rights of TENANT hereunder to possession of the Leased Premises shall immediately terminate.

13.2 Lease Expiration or Termination for CITY Default. Upon expiration of this Lease Agreement or termination for default by CITY, TENANT shall have the right, but not the obligation, upon notice to CITY prior to the effective date of such expiration or termination, to enter upon the Premises within thirty (30) days after the effective date of such expiration or termination and to remove all buildings, fixtures and personal property installed on the Premises, and to repair any damage to the Leased Premises caused by said removal and to restore the Premises to its original condition, all at TENANT's cost and expense. In the event TENANT does not provide such notice to CITY, title to all buildings, fixtures and personal property located thereon shall vest in the CITY as of the day following the effective date of expiration or termination of this Lease Agreement.

13.3 Termination for TENANT default.

13.3.1 Personal Property. If termination of this Lease Agreement is for default by **TENANT** hereunder, **TENANT** shall remove all personal property located on the Premises within thirty (30) days after the date of such termination. Title to and ownership of any personal property left on the Premises after the expiration of said thirty (30) day period shall immediately vest in **CITY** on the thirty-first (31) day following the effective date of such termination. Personal property as used hereunder shall not include any buildings or fixtures located on the Premises.

13.3.2 Buildings and Fixtures. If termination of this Lease Agreement is for default by **TENANT** hereunder, all buildings and fixtures on the Leased Premises shall become the property of **CITY** and title thereto shall vest in **CITY** on the thirty-first (31) day after the effective date of such termination; provided, however, upon written notice from **CITY** to **TENANT** prior to the date of termination of this Lease Agreement, **CITY** may require **TENANT** to remove all such buildings and fixtures within thirty (30) days after the date of such termination and to repair any damage to the Leased Premises caused by said removal and to restore the Premises to its original condition, all at **TENANT**'s cost and expense.

13.4 **TENANT** Failure to Remove. Upon vesting of title in **CITY** in any buildings, fixtures or personal property pursuant to the terms of this Article, **CITY** shall have the right to use, lease, sell, assign, remove or otherwise dispose of, or store such property, subject to the requirements of any then applicable laws for the disposition of abandoned property. **CITY** shall be entitled to all proceeds from any such use, lease, sale, assignment or other disposition; and in the event **TENANT** was required to remove such buildings, fixtures or personal property under the terms of this Article and failed to do so, **TENANT** shall be liable to **CITY** for all losses, fees, or costs incurred by **CITY** in such use, lease, sale, assignment, removal, storage or other disposition, including without limitation reasonable attorney's fees, and any costs or expenses incurred by **CITY** to repair any damage to the Leased Premises caused by said removal and to restore the Premises to its original condition.

ARTICLE 14 - NO ASSIGNMENT AND SUBLETTING

14.1 Except as provided in Section 3.8 above for granting of a first mortgage upon the leasehold interest, **TENANT** shall not assign this Lease Agreement nor any part thereof in any manner whatsoever or assign any of the privileges recited herein, except upon the prior written approval of the City Council of the **CITY**, which

approval shall not be unreasonably withheld.

14.2 The **TENANT** shall not rent, sublease, convey, mortgage, encumber or otherwise transfer in any manner all or any part of the Leased Premises or the improvements located thereon or any of the privileges granted to **TENANT** hereunder, without the prior written consent of the City Manager of the **CITY**, which approval shall not be unreasonably withheld, and **CITY** reserves the right, as a condition of sublease approval, to increase the fixed ground rental specified in this Lease, to **CITY**'s ground rental rate in effect at the time of approval of the sublease. **CITY** further reserves the right to place such reasonable conditions upon any such subleasing as it deems to be in the best interest of the **CITY**. In the event of any approved transfer, **TENANT** shall continue to be liable to **CITY** for all rent, fees, taxes and assessments for which it is liable hereunder. All approved transferees shall be required to conform to all of the terms and conditions of this Lease Agreement, including without limitation, all insurance requirements hereunder, other than those of Article 3 to the extent that the provisions of Article 3 relate solely to **TENANT**'s construction of improvements. No sub subleasing shall be permitted except upon the prior written approval of the City Manager of the **CITY**, which approval may be granted or withheld within the discretion of the City Manager.

14.3 **TENANT** explicitly understands and agrees that it will not permit the use of all or any portion of the Leased Premises, or any activity or operation of any entity upon the Leased Premises other than a subtenant whose subtenancy and operations are approved by the City Manager. **TENANT** further understands and agrees that all activities other than those approved hereunder from, at or on the Leased Premises can be undertaken only upon the prior written approval of the Airport Manager, which approval may be granted or withheld within the discretion of the Airport Manager.

14.4 Any violation of the terms of this Article by any person at or on the Premises, or conducting any activities from, at or on the Leased Premises, shall be deemed a breach of this Lease Agreement and, at **CITY** option, may result in termination of this Lease Agreement pursuant to Article 12.

14.5 Any sale or transfer, whether to one or more persons or entities and whether at one or more different times, of a total of fifty percent (50%) or more of the ownership interest in any corporation, partnership, limited liability company or other entity which is then the legal tenant under this Lease Agreement shall be deemed an assignment of this Lease Agreement within the meaning of

this Article 14.

14.6 Despite any permitted assignment, subletting or other transfer, **TENANT** shall not be relieved of its obligations under this Lease Agreement but shall continue to remain primarily liable hereunder and shall not be relieved of such liability by an extension of time or other indulgence granted by **CITY** to any transferee, assignee or sublessee or by failure of **TENANT** to receive notice thereof and **TENANT** hereby waives suretyship defenses.

ARTICLE 15 - MISCELLANEOUS PROVISIONS

15.1 NON-INTERFERENCE WITH OPERATION OF AIRPORT

15.1.1 **TENANT**, by accepting this Lease, expressly agrees for itself, its successors and assigns that it will not make use of the Leased Premises in any manner which might interfere with the landing and taking off of aircraft at **CITY**'s Airport or otherwise constitute a hazard. In the event the aforesaid covenant is breached, the **CITY** reserves the right to enter upon the Premises hereby leased and cause the abatement of such interference at the expense of the **TENANT**, and reimbursement for such **CITY** expense shall be paid by **TENANT** immediately upon **CITY**'s demand therefor.

15.2 QUIET ENJOYMENT

The **CITY** agrees that on payment of the rentals and use fees, as herein required, and subject to performance and compliance by **TENANT** of the covenants, conditions and agreement on its part to be performed and complied with herein, **TENANT** shall peaceably have and enjoy the rights, uses and privileges of the Airport, its appurtenances and facilities, and of the Leased Premises, to the extent granted herein. It is mutually agreed, however, that this Lease Agreement is made subject to the covenants, requirements and restrictions contained in the Deeds by which **CITY** obtained title to the Airport.

15.3 AGREEMENTS WITH FEDERAL GOVERNMENT

This Lease Agreement is subject and subordinate to the provisions of any agreements heretofore made between the **CITY** and the United States of America relative to the operation or maintenance of the Airport, the execution of which was required as a condition precedent to the transfer of Federal rights of property to the **CITY** for Airport purposes, or to the expenditure of Federal funds for

the extension, expansion, or development of the Airport, including the expenditure of Federal funds for the development of the Airport in accordance with the provisions of the Federal Aviation Act of 1958, as it has been amended from time to time.

15.4 TAXES

TENANT shall pay all taxes and fees levied upon its real estate and personal property located on the Premises. Unless otherwise agreed by **CITY**, in the event of any transfer of ownership of any portion of the real or personal property located on the Premises, or in the event of any subleasing of all or a portion of the Premises, **TENANT** agrees that it will make a payment equivalent to the amount owed in taxes, plus interest, due to **CITY**, said payment to be made within thirty (30) days of receipt of a notice from **CITY** that said taxes are owed to **CITY** and have not been paid by the record owner of the property. All buildings and fixtures on the Premises shall be deemed to be real estate for purposes of local property assessment and taxation.

15.5 LICENSE FEES AND PERMITS

TENANT shall obtain and pay for all licenses, permits, fees or other authorization or charges as required under Federal, State or local laws and regulations insofar as they are necessary to comply with the requirements of this Agreement and the privileges extended hereunder.

15.6 SECURITY AGREEMENT

TENANT, at its own cost and expense, shall be responsible for ensuring that all building entrances, gates, exits, and any access to the Leased Premises are in compliance with the Airport Security Program as required by FAA Regulations, FAR Part 107. **TENANT** must control and regulate any doors, openings or entrances to the Air Operations Area to prevent unauthorized access by persons and/or vehicles. It shall be **TENANT**'s responsibility, at its own cost and expense, to be in compliance with all existing and future security requirements of the Federal Aviation Administration, and **TENANT** shall hold the **CITY** harmless and shall pay any fines, penalties, cost or expenses incurred by **CITY** or by **TENANT** and arising out of any breach of said security requirements by **TENANT**, its officers, agents, employees, customers, invitee, subtenants, contractors, subcontractors or anyone for whose act **TENANT** may be liable.

15.7 PARAGRAPH HEADINGS

The paragraph headings contained herein are for convenience of reference and are not intended to define or limit the scope of any provision of the Lease.

15.8 INTERPRETATIONS

The laws of the State of Maine shall govern the validity, interpretation, performance and enforcement of this Agreement. Words of gender used in this Agreement shall be held and construed to include the other gender, and words in the singular shall be held to include the plural and vice versa unless the context otherwise requires. Unless the context specifically provides otherwise, "person" wherever used in this Lease shall include, without limitation, an individual, a sole proprietor, a corporation, a partnership or any legal entity authorized by law.

15.9 DISPUTE RESOLUTION

Except as provided in Section 5.3 above for binding arbitration of renewal rent, all disputes hereunder which are not mutually resolved shall be resolved by trial without a jury in the Courts of Cumberland County, State of Maine. Notwithstanding the foregoing, **TENANT** and **CITY** may mutually agree to submit any dispute hereunder to binding arbitration, subject to the following terms and conditions:

15.9.1 A request for arbitration shall be directed to the American Arbitration Association, under its commercial arbitration rules. The jurisdiction and authority of the arbitrator selected and the arbitrator's opinion and award shall be confined exclusively to the interpretation of the express provision or provisions of this Lease at issue between the parties and in accordance with the laws of the State of Maine. The arbitrator shall have no authority to add to, detract from, alter, amend or modify any provision of the Lease Agreement. The arbitrator shall not impose on either party hereto a limitation or obligation not expressly provided for in this Agreement.

15.9.2 The award shall be in writing and shall set forth the arbitrator's findings of fact and conclusions of law in a form sufficient to appraise the parties and any appellate court of the basis for the decision.

15.9.3 The award is subject to review by the Cumberland County Superior Court, sitting without a jury, which may affirm, modify or reverse the award pursuant to 14 M.R.S.A. Section 5927 et.seq. In

the event of any conflict between said statute and this Lease Agreement, this Lease Agreement shall prevail.

15.9.4 The review by the court shall be based upon the record of proceedings before the arbitrator, unless the court, by order, provides otherwise. The appellant shall have the responsibility to prepare the record of proceedings and its submission to the court; and, in so doing, shall observe the time periods and other responsibilities imposed on an appellant as though the review were a Maine Rules of Civil Procedure, Rule 80B appeal.

15.10 NOTICES

Except as otherwise provided in Article 12 for certified mail or hand delivery of notice of default, whenever any notice or payment is required by this Lease Agreement to be made, given or transmitted to the parties hereto, such notice or payment shall be enclosed in an envelope with sufficient postage attached to insure delivery and deposited in the United States Mail, addressed to, or hand-delivered to:

Airport Manager
Portland International Jetport
1001 Westbrook Street
Portland, Maine 04101
with a copy to:
Director of Waterfront & Transportation Facilities
CITY of Portland, Maine
Marine Trade Center Suite 307
2 Portland Fish Pier
Portland, Maine 04101

and notices, consents and approvals to **TENANT** addressed to, or hand delivered to:

Henry A. Lauglin III
c/o Northeast Air
Portland International Jetport
Portland, Maine 04102

or such place as either party shall by written directive designate in the manner herein provided.

15.11 ENTIRE AGREEMENT

This Lease Agreement, together with the exhibits attached hereto,

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basis for its undertakings herein contained:

(a) **TENANT** is a corporation duly organized under the laws of the State of Maine; it is wholly owned by Henry A. Laughlin III; it is in good standing under the laws of said State; has the power to enter into this Agreement; by proper corporate action has duly authorized the execution and delivery of this Agreement; and is in full compliance with all applicable Maine laws relating to the conduct of its business in Maine; and

(b) **TENANT** will occupy and possess the Leased Premises subject to the control and jurisdiction of the **CITY** in accordance with the terms hereof.

15.16 FORCE MAJEURE

Neither the **CITY** nor **TENANT** shall be deemed in violation of this Lease Agreement if either should be prevented from performing any of the obligations hereunder (other than any obligations to make payments) by reason of strikes, boycotts, labor disputes, embargoes, shortage of material, acts of God, acts of the public enemy, acts of superior governmental authority, weather conditions, riots, rebellion, sabotage, or any other circumstances for which it is not responsible or which is not within its control. The party claiming Force Majeure shall give prompt written notice to the other party of such event or events, and shall resume performance promptly upon the conclusion of the event or events preventing its performance.

15.17 PARTIAL INVALIDITY

If any term, covenant, condition, or provision of this Agreement or the application thereof to any person or circumstance shall at any time or to any extent, be held to be invalid or unenforceable by a court of competent jurisdiction, the remainder of this Lease Agreement, or the application of such term or provision to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected thereby, and each term, covenant, condition, and provision of this Lease Agreement shall be valid and be enforced to the fullest extent permitted by law. In the event of such invalid provision, there will be added to this Lease Agreement a provision as similar to such illegal, invalid, or unenforceable provision as may be possible and be legal, valid, and enforceable.

15.18 NON EXCLUSIVE RIGHTS

Nothing herein contained shall be deemed to grant to **TENANT** any exclusive right or privilege within the meaning of section 308 of the Federal Aviation Act for the conduct of any activity at the Airport.

15.19 APPROVALS

Unless otherwise specified herein, all approvals of **CITY** shall mean approval by the Portland City Council.

15.20 RECORDS

The **CITY**, upon reasonable notice, shall have the right to inspect and audit the books, records and other data of the **TENANT** relating to the provisions and requirements hereof. All records related to operations at or from the Leased Premises shall be maintained by **TENANT** for a minimum of six (6) years.

15.21 MEMORANDUM OF LEASE

Either party at the request of the other, shall execute, acknowledge and deliver for recording, a memorandum or short form lease prepared by the requesting party; provided, however, that the relations between **CITY** and **TENANT** shall be governed solely by the provisions of this Lease Agreement and not by any such memorandum or short form lease which may be executed, delivered and recorded.

15.22 SUCCESSORS AND ASSIGNS

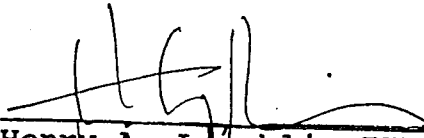
All of the terms, provisions, covenants, stipulations, conditions and considerations in this Lease Agreement shall extend to and bind the legal representatives, heirs, successors, and any permitted assigns of the respective parties hereto. Nothing herein shall be deemed to authorize or permit any assignment or other transfer, in whole or in part, of the interest of **TENANT** in violation of any other provisions contained in this Lease Agreement.

15.23 ASSIGNMENT TO CITY SUCCESSOR IN INTEREST

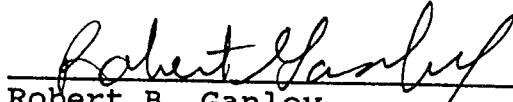
The **CITY** may assign or otherwise convey its interest, rights, duties and/or obligations hereunder to any airport authority or other successor in interest.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be executed by their duly authorized representatives as of the date first above mentioned at Portland, Maine.

LCL Associates


Henry A. Laughlin III
President

CITY OF PORTLAND, MAINE


Robert B. Ganley
City Manager

STATE OF MAINE
Cumberland, ss.

8/20, 1996

Personally appeared the above-named Robert B. Ganley, City Manager of the City of Portland, as aforesaid, and acknowledged the foregoing instrument to be his free act and deed in his said capacity, and the free act and deed of the municipal corporation.

Before me,


Notary Public/Attorney at Law
SONIA T. BEAN
NOTARY PUBLIC, MAINE
MY COMMISSION EXPIRES SEP. 10, 2002

STATE OF MAINE
Cumberland, ss.

July 29, 1996

Personally appeared the above-named Henry A. Laughlin III, President of LCL Associates as aforesaid, and acknowledged the foregoing instrument to be his free act and deed in his said capacity, and the free act and deed of the corporation.

Before me,

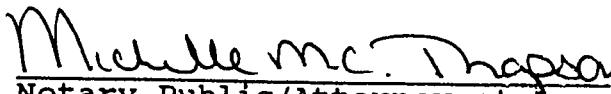

Notary Public/Attorney at Law

Exhibit 6

Stormwater Management Plan & Calculations



Stormwater Management Report

Northeast Air Fixed-Based Operator
1011 Westbrook Street
Portland, Maine 04102

General

The following Stormwater Management Plan has been prepared for Northeast Air to evaluate stormwater runoff and erosion control for the proposed parking lot and building expansion.

Project improvements will include a 45-space paved parking lot and expansion to the hangar building which includes a 2-story addition with a 6,750 sf footprint and a 1-story addition of 3,500 sf. Treating and controlling stormwater runoff from the site will be accomplished by a vegetated underdrained soil filter and two tree filters.

We designed this project in accordance with the General Standards of Maine Department of Environmental Protection's Stormwater Management Law, even though the proposed development size does not require a State of Maine DEP review or permit. The existing developments total impervious area is decreasing from 68,716 sf to 62,960 sf in the proposed development. Due to the decrease in impervious area, only stormwater treatment calculations have been done. As a result runoff has decreased and current pipe sizes will be maintained in the system downstream of the development.

Site Characteristics

The project site is located along Westbrook Street and Taxiway Charlie "C" at the Portland International Jetport. The site is identified as Lot 001 on Chart 205, Block A on the Portland tax map. The existing site is currently developed with a hangar and terminal facility. The existing terminal building will be razed and the hanger will be expanded. Proposed expansion to the hangar building includes a 2-story addition with a 6,750 sf footprint and a 1-story addition of 3,500 sf. A 45 space parking area and associated landscaped areas will be constructed in place of the existing terminal building facility. The existing topography generally slopes at a rate of 2-3% southeasterly across the site towards the taxiway "C". Runoff from the site drains into a closed stormwater management system which goes southeast under runway 18-36 and eventually discharges to the Fore River.

Stormwater Management

To mitigate peak runoff and treat stormwater we have proposed a vegetated underdrained soil filter along with two tree filter systems. The proposed underdrained soil filter has been designed in accordance with the latest MDEP Chapter 500 regulations and a sizing letter approved by the MDEP has been included for the Filterra tree filter systems. Stormwater runoff from the easterly portion of the proposed parking lot will be directed to the filter system by means of a 3' wide curb break. Stormwater will be detained within the soil filter's water quality volume (WQV) and slowly filtrate through the soil media filter where it will be conveyed via a 4" underdrain pipe to a catch basin which discharges directly into a proposed storm drain manhole (DMH-2). Stormwater runoff from a portion of the northerly parking area will be directed to tree filter system 2 to receive treatment and then be discharged by

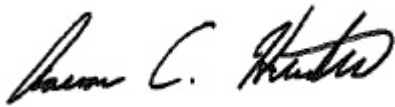
means of a 4" storm drain pipe into DMH-2. Stormwater runoff from the remainder of the parking area will be directed to tree filter system 1 to receive treatment and then be discharged by means of a 10" storm drain pipe into DMH-2. The proposed storm drain system continues from DMH-2 and eventually ties into the existing system at E-DMH1. The system then continues southeasterly under runway 18-36 and eventually discharges to the Fore River, as in the previous system.

Summary

The Northeast Air project will include a comprehensive grading, and post development treatment plan responsive to site characteristics, topographical conditions. We designed this project to meet the Maine Department of Environmental Protection's Stormwater Management Law. As presented in the analysis and depicted on the site plans, stormwater runoff discharging from the site will be collected and treated in combination with a vegetated underdrained soil filter and two tree filter systems. A site-specific erosion and sedimentation control plan is also proposed to address during and after construction conditions. Temporary erosion control measures will be implemented during the construction phase of the project as specified on the Erosion & Sedimentation Control Plan as provided on the site plans. Permanent erosion control measures have also been incorporated into the plan for long-term stabilization of the site.

Prepared by:

SEBAGO TECHNICS, INC.



Aaron C. Hunter, E.I.
Civil Engineer



Owens A. McCullough, P.E.
Vice President Engineering & Project Development

ACH/Ilg

SEBAGO TECHNICS, INC.
75 John Roberts Road, Suite 1A
South Portland, ME 04106
(207) 856-0277 FAX (207) 856-2206

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CHECKED BY	JRH		
FILE NAME	15149 Filterra	PRINT DATE	8/27/2015

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STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
COMMISSIONER

January 21, 2015

Stormwater Regulatory Manager
Filterra Bioretention Systems
Contech Engineered Solutions
11352 Virginia Precast Road
Ashland, VA 23005
ATTN: Chris French

Dear Mr. French:

The Filterra Bioretention System (FBS) was permitted for use by the Department of Environmental Protection (Department) on November 12, 2009, as part of a stormwater treatment train that included the use a StormTech Isolator Row following the structure as an approved alternative to the General Standards (Section 4.B.) of the Stormwater Management Rules (Chapter 500), and as described in Chapter 7.5 of Volume III of the Maine Stormwater Management BMP Manual.

Based on the testing data provided, the currently approved FBS provides sufficient treatment without the use of the StormTech Isolator Row. And pending establishment of an appropriate rainfall intensity rate that would allow for the full treatment of 90% of an average annual runoff volume, this letter is to inform you that the Department will review and approve, on a case-by-case basis, the interim use of the FBS when sized, installed and maintained in accordance with the following provisions:

1. The structure may be a standard concrete box or a soft shell system that is filled with the Filterra engineered filter media, provided it is sized to meet the requirements of the General Standards (Section 4.B.) and is installed, operated and maintained in accordance with the manufacturer's specifications.
2. The FBS must be sized in accordance with the manufacturer's standard New England testing results and revised sizing guidelines outlined in the following table to treat 90% of the annual runoff volume:

Filterra Model Number	Area in Acres
4'x6' or 6'x4'	Up to 0.17
4'x8' or 8'x4'	0.18 - 0.22
6'x6'	0.23 - 0.25
6'x8' or 8'x6'	0.26 - 0.33
6'x10' or 10'x6'	0.34 - 0.42
6'x12' or 12'x6'	0.43 - 0.50
7'x13' or 13'x7'	0.51 - 0.63

\$20,000

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688 FAX: (207) 287-7826

BANGOR
106 HOGAN ROAD, SUITE 6
BANGOR, MAINE 04401
(207) 941-4570 FAX: (207) 941-4584

PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04769
(207) 764-0477 FAX: (207) 760-3143

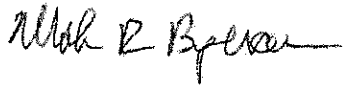
3. When designed with the standard curb inlet design, the FBS must be configured "off-line" with the surface elevation at the FBS unit being up gradient of an overflow inlet. When designed with the grated inlet design, the FBS must incorporate an internal bypass and will not require an overflow inlet. The applicant must demonstrate that the proposed design meets all the manufacturer's specifications prior to submission for Department approval. Review and approval of the proposed design by the manufacturer will be sufficient to demonstrate conformance with the manufacturer's specifications.
4. The treated flow and bypass flow must be combined and directed to a detention system/structure that will store the water quality/channel protection volume (WQv) consisting of the first 1.0 inch of runoff from impervious areas and 0.4 inch of runoff from lawns and landscaped areas. An external outlet control structure must control the flow out of the system and the WQv must be detained for a minimum of 24 hours and a maximum of 48 hours.
5. When a boxed structure is proposed, the FBS must be delivered to the site with the engineered filter media and plumbing fully installed. The concrete box must be sealed to prevent debris and sediment from entering the system during construction. The activation of the FBS and opening of the protective mesh cover, installation of plant(s) and mulch layers as necessary, can be performed only by the supplier (Americast or its authorized dealer). The activation process must not commence until the project site is fully stabilized and cleaned (i.e., full landscaping, grass cover, final paving and street sweeping completed), minimizing the risk of construction materials contaminating the FBS system.
6. When a soft shell structure is proposed, the FBS(s) must be built on site and must include all the components of a boxed structure. The FBS must be designed per the manufacturer's specifications and must be installed on-site by the manufacturer's representative.
7. A five-year binding inspection and maintenance contract must be provided prior to review and approval by the Department, and must be renewed before contract expiration. The first year's maintenance must be provided by the manufacturer to ensure that the system is operating according to the established specifications. Said contract will be with a professional with knowledge of erosion and stormwater control, including a detailed working knowledge of the proposed Best Management Practices.
8. The overall stormwater management design must meet all Department criteria and sizing specifications and shall be reviewed and approved by the Department prior to use.
9. This approval is conditional to on-the-ground experience confirming that the FBS's pollutant removal efficiency and sizing are appropriate. The "permit shield" provision (Section 14) of the Chapter 500 rules will apply, and the Department will not require the replacement of the system if pollutant removals do not satisfy the General Standard Best Management Practices.

We look forward to working with you as these stormwater management structures are installed on new projects. And, we hope that this stormwater BMP will be included in our manual in the near future.

Letter to Chris French
January 21, 2015
Page 3 of 3

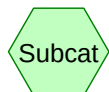
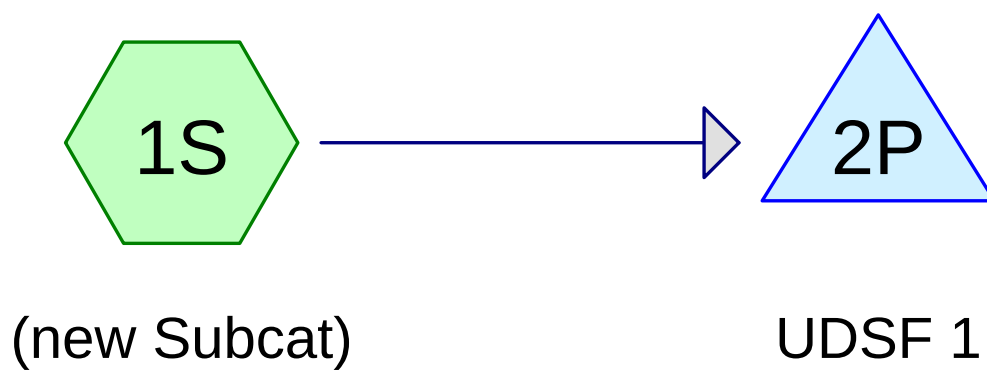
Questions concerning this decision should be directed to Marianne Hubert at (207) 215-6485 or Jeff Dennis at (207) 215-6376.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark R. Bergeron". The signature is fluid and cursive, with a long horizontal stroke at the end.

Mark Bergeron, P.E.
Director, Division of Land Resource Regulation
Bureau of Land & Water Quality

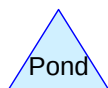
C: Don Witherill, Maine DEP



Subcat



Reach



Pond



Link

Routing Diagram for 15149 Drainage Model
Prepared by Sebago Technics, Printed 8/26/2015
HydroCAD® 10.00-15 s/n 01856 © 2015 HydroCAD Software Solutions LLC

15149 Drainage Model

Prepared by Sebago Technics

HydroCAD® 10.00-15 s/n 01856 © 2015 HydroCAD Software Solutions LLC

Type III 24-hr 25yr Rainfall=5.50"

Printed 8/26/2015

Page 2

Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: (new Subcat)

Runoff Area=13,476 sf 55.57% Impervious Runoff Depth=4.36"

Tc=5.0 min CN=90 Runoff=1.57 cfs 0.112 af

Pond 2P: UDSF 1

Peak Elev=56.40' Storage=1,382 cf Inflow=1.57 cfs 0.112 af

Outflow=1.51 cfs 0.085 af

15149 Drainage Model

Prepared by Sebago Technics

HydroCAD® 10.00-15 s/n 01856 © 2015 HydroCAD Software Solutions LLC

Type III 24-hr 25yr Rainfall=5.50"

Printed 8/26/2015

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Summary for Subcatchment 1S: (new Subcat)

Runoff = 1.57 cfs @ 12.07 hrs, Volume= 0.112 af, Depth= 4.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type III 24-hr 25yr Rainfall=5.50"

	Area (sf)	CN	Description
*	7,488	98	Paved parking, sidewalks
	5,988	80	>75% Grass cover, Good, HSG D
	13,476	90	Weighted Average
	5,988		44.43% Pervious Area
	7,488		55.57% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Pond 2P: UDSF 1

Inflow Area = 0.309 ac, 55.57% Impervious, Inflow Depth = 4.36" for 25yr event
 Inflow = 1.57 cfs @ 12.07 hrs, Volume= 0.112 af
 Outflow = 1.51 cfs @ 12.09 hrs, Volume= 0.085 af, Atten= 4%, Lag= 1.3 min
 Primary = 1.51 cfs @ 12.09 hrs, Volume= 0.085 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
 Peak Elev= 56.40' @ 12.09 hrs Surf.Area= 1,207 sf Storage= 1,382 cf
 Flood Elev= 57.75' Surf.Area= 1,878 sf Storage= 3,458 cf

Plug-Flow detention time= 141.1 min calculated for 0.085 af (75% of inflow)
 Center-of-Mass det. time= 57.2 min (843.9 - 786.6)

Volume	Invert	Avail.Storage	Storage Description
#1	54.75'	3,943 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
54.75	502	0	0
55.00	588	136	136
56.00	1,016	802	938
57.00	1,494	1,255	2,193
58.00	2,006	1,750	3,943

Device	Routing	Invert	Outlet Devices
#1	Primary	52.40'	12.0" Round Culvert L= 6.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 52.40' / 52.30' S= 0.0167 ' S= 0.0167 ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Device 1	56.25'	24.0" x 24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads

15149 Drainage Model

Prepared by Sebago Technics

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Type III 24-hr 25yr Rainfall=5.50"

Printed 8/26/2015

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Primary OutFlow Max=1.50 cfs @ 12.09 hrs HW=56.40' (Free Discharge)

└─**1=Culvert** (Passes 1.50 cfs of 7.07 cfs potential flow)

└─**2=Orifice/Grate** (Weir Controls 1.50 cfs @ 1.26 fps)

Hydrologic Soil Group—Cumberland County and Part of Oxford County, Maine



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Lines

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Points

 A
 A/D
 B
 B/D

 C
 C/D
 D
 Not rated or not available

Water Features

 Streams and Canals

Transportation

 Rails
 Interstate Highways
 US Routes
 Major Roads
 Local Roads

Background

 Aerial Photography

MAP INFORMATION

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

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Cumberland County and Part of Oxford County, Maine

Survey Area Data: Version 9, Sep 13, 2014

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

Date(s) aerial images were photographed: Jul 31, 2013—Aug 11, 2013

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

Hydrologic Soil Group

Hydrologic Soil Group— Summary by Map Unit — Cumberland County and Part of Oxford County, Maine (ME005)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BuB	Buxton silt loam, 3 to 8 percent slopes	D	0.2	2.4%
Sn	Scantic silt loam, 0 to 3 percent slopes	D	7.3	97.6%
Totals for Area of Interest			7.5	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

INSPECTION, MAINTENANCE, AND HOUSEKEEPING PLAN

**Northeast Air Fixed-Based Operator
1011 Westbrook Street
Portland, Maine 04102**

Introduction

The following plan outlines the anticipated inspection and maintenance procedures for the erosion and sedimentation control measures as well as stormwater management facilities for the project. This plan also outlines several housekeeping requirements that shall be followed during and after construction. These procedures shall be followed in order to ensure the intended function of the designed measures and to prevent unreasonably adverse impacts to the surrounding environment.

The procedures outlined in this Inspection, Maintenance and Housekeeping Plan are provided as an overview of the anticipated practices to be used on this site. In some instances, additional measures may be required due to unexpected conditions. For additional detail on any of the erosion and sedimentation control measures or stormwater management devices to be utilized on this project, refer to the most recently revised edition of the “Maine Erosion and Sedimentation Control BMP” manual and/or the “Stormwater Management for Maine: Best Management Practices” manual as published by the Maine Department of Environmental Protection (MDEP).

During Construction

1. **Inspection:** During the construction process, it is the Contractor’s responsibility to comply with the inspection and maintenance procedures outlined in this section. These responsibilities include inspecting disturbed and impervious areas, erosion control measures, materials storage areas that are exposed to precipitation, and locations where vehicles enter or exit the site. These areas shall be inspected at least once a week as well as before and after a storm event, and prior to completing permanent stabilization measures. A person with knowledge of erosion and stormwater control, including the standards and conditions in any applicable permits, shall conduct the inspections.
2. **Maintenance:** All measures shall be maintained in an effective operating condition until areas are permanently stabilized. If Best Management Practices (BMPs) need to be maintained or modified, additional BMPs are necessary, or other corrective action is needed, implementation must be completed within 7 calendar days and prior to any storm event (rainfall).
3. **Documentation:** A log summarizing the inspections and any corrective action taken must be maintained on-site. The log must include the name(s) and qualifications of the person making the inspections, the date(s) of the inspections, and major observations about the operation and maintenance of erosion and sedimentation controls, material storage areas, and vehicle access points to the site. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and locations where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken. The log must be made accessible to the appropriate regulatory agency upon request. The permittee shall retain a copy of the log for a period of at least three years from the completion of permanent

stabilization.

4. **Specific Inspection and Maintenance Tasks:** The following is a list of erosion control and stormwater management measures and the specific inspection and maintenance tasks to be performed during construction.

A. Sediment Barriers:

- Hay bale barriers, silt fences, and filter berms shall be inspected immediately after each rainfall and at least daily during prolonged rainfall.
- If the fabric on a silt fence or filter barrier should decompose or become ineffective prior to the end of the expected usable life and the barrier is still necessary, it shall be replaced.
- Sediment deposits should be removed after each storm event. They must be removed before deposits reach approximately one-half the height of the barrier.
- Filter berms shall be reshaped as needed.
- Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required should be dressed to conform to the existing grade, prepared, and seeded.

B. Riprap Materials:

- Once a riprap installation has been completed, it should require very little maintenance. It shall, however, be inspected periodically to determine if high flows have caused scour beneath the riprap or dislodged any of the stone.

C. Erosion Control Blankets:

- Inspect these reinforced areas semi-annually and after significant rainfall events for slumping, sliding, seepage, and scour. Pay close attention to unreinforced areas adjacent to the erosion control blankets, which may experience accelerated erosion.
- Review all applicable inspection and maintenance procedures recommended by the specific blanket manufacturer. These tasks shall be included in addition to the requirements of this plan.

D. Stabilized Construction Entrances/Exits:

- The exit shall be maintained in a condition that will prevent tracking of sediment onto public rights-of-way.
- When the control pad becomes ineffective, the stone shall be removed along with the collected soil material. The entrance should then be reconstructed.
- Areas that have received mud-tracking or sediment deposits shall be swept or washed. Washing shall be done on an area stabilized with aggregate, which drains into an approved sediment-trapping device (not into storm drains, ditches, or waterways).

E. Temporary Seed and Mulch:

- Mulched areas should be inspected after rain events to check for rill erosion.
- If less than 90% of the soil surface is covered by mulch, additional mulch shall be applied in bare areas.
- In applications where seeding and mulch have been applied in conjunction with erosion control blankets, the blankets must be inspected after rain events for dislocation or undercutting.
- Mulch shall continue to be reapplied until 95% of the soil surface has established temporary vegetative cover.

F. Stabilized Temporary Drainage Swales:

- Sediment accumulation in the swale shall be removed once the cross section of the swale is reduced by 25%.
- The swales shall be inspected after rainfall events. Any evidence of sloughing of the side slopes or channel erosion shall be repaired and corrective action should be taken to prevent reoccurrence of the problem.
- In addition to the stabilized lining of the channel (i.e. erosion control blankets), stone check dams may be needed to further reduce channel velocity.

5. **Housekeeping:** The following general performance standards apply to the proposed project.

- A. Spill prevention: Controls must be used to prevent pollutants from being discharged from materials on-site, including storage practices to minimize exposure of the materials to stormwater, and appropriate spill prevention, containment, and response planning and implementation.
- B. Groundwater protection: During construction, liquid petroleum products and other hazardous materials with the potential to contaminate groundwater may not be stored or handled in areas of the site draining to an infiltration area. An "infiltration area" is any area of the site that by design or as a result of soils, topography and other relevant factors, accumulates runoff that infiltrates into the soil. Dikes, berms, sumps, and other forms of secondary containment that prevent discharge to groundwater may be used to isolate portions of the site for the purposes of storage and handling of these materials.
- C. Fugitive sediment and dust: Actions must be taken to insure that activities do not result in noticeable erosion of soils or fugitive dust emissions during or after construction. Oil may not be used for dust control.
- D. Debris and other materials: Litter, construction debris, and chemicals exposed to stormwater must be prevented from becoming a pollutant source.
- E. Trench or foundation dewatering: Trench dewatering is the removal of water from trenches, foundations, cofferdams, ponds, and other areas within the construction area that retain water after excavation. In most cases, the collected water is heavily silted and hinders correct and safe construction practices. The collected water must be removed from the ponded area, either through gravity or pumping, and must be spread through natural wooded buffers or removed to areas that are specifically designed to collect the maximum amount of sediment possible, like a cofferdam sedimentation basin. Avoid allowing the water to flow over disturbed areas of the site. Equivalent

measures may be taken if approved.

Post-Construction

1. **Inspection:** After construction, it is the responsibility of the owner or assigned heirs to comply with the inspection and maintenance procedures outlined in this section. All measures must be maintained in effective operating condition. The owner or operator of a BMP shall hire a qualified post-construction stormwater inspector to at least annually, inspect the BMPs, including but not limited to any parking areas, catch basins, drainage swales, detention basins and ponds, pipes and related structures, in accordance with all municipal and state inspection, cleaning and maintenance requirements of the approved post-construction stormwater management plan.
2. **Specific Inspection and Maintenance Tasks:** The following is a list of permanent erosion control and stormwater management measures and the inspection and maintenance tasks to be performed after construction. If the BMP requires maintenance, repair or replacement to function as intended by the approved post-construction stormwater management plan, the owner or operator of the BMP shall take corrective action(s) to address the deficiency or deficiencies as soon as possible after the deficiency is discovered and shall provide a record of the deficiency and corrective action(s) to the department of public services ("DPS") in the annual report

A. Vegetated Areas:

- Inspect vegetated areas, particularly slopes and embankments, early in the growing season or after heavy rains to identify active or potential erosion problems.
- Replant bare areas or areas with sparse growth. Where rill erosion is evident, armor the area with an appropriate lining or divert the erosive flows to on-site areas able to withstand the concentrated flows.

B. Ditches, Swales and Other Open Channels:

- Inspect ditches, swales, level spreaders and other open stormwater channels in the spring, in the late fall, and after heavy rains to remove any obstructions to flow. Remove accumulated sediments and debris, remove woody vegetative growth that could obstruct flow, and repair any erosion of the ditch lining.
- Vegetated ditches must be mowed at least annually or otherwise maintained to control the growth of woody vegetation and maintain flow capacity.
- Any woody vegetation growing through riprap linings must also be removed. Repair any slumping side slopes as soon as practicable.
- If the ditch has a riprap lining, replace riprap in areas where any underlying filter fabric or underdrain gravel is showing through the stone or where stones have dislodged.

C. Culverts:

- Inspect culverts in the spring, in the late fall, and after heavy rains to remove

any obstructions to flow.

- Remove accumulated sediments and debris at the inlet, at the outlet, and within the conduit.
- Inspect and repair any erosion damage at the culvert's inlet and outlet.

D. Removal of Winter Sand:

- Clear accumulations of winter sand in parking lots and along roadways at least once a year, preferably in the spring.
- Accumulations on pavement may be removed by pavement sweeping.
- Accumulations of sand along road shoulders may be removed by grading excess sand to the pavement edge and removing it manually or by a front-end loader or other acceptable method.

E. Underdrained Soil Filter:

- During the first year, the basin shall be inspected semi-annually and following major storm events.
- Debris and sediment buildup shall be removed from the forebay and basin as needed. Mowing of a grassed basin can occur semiannually to a height no less than 6 inches. Any bare area or erosion rills shall be repaired with new filter media or sandy loam then seeded and mulched. Maintaining good grass cover will minimize clogging with fine sediments and if ponding exceeds 48 hours, the top of the filter bed must be rototilled to reestablish the soil's filtration capacity.
- The soil filter should be inspected after every major storm in the first year to be sure it is functioning properly. Thereafter, the filter should be inspected at least once every six months to ensure that it is draining within 48 hours following a one inch storm or greater. Following storms that fill the system and overflow is observed, the soil filter should drain in no less than 36 to 60 hours. If the system drains too fast, an orifice may need to be added on the underdrain outlet or, if already present, may need to be modified.
- Soil Filter Replacement: The top several inches of the filter shall be replaced with fresh material when water ponds on the surface of the bed for more than 72 hours. Removed sediments should be disposed of in an acceptable manner.
- Sediment Removal: Sediment and plant debris should be removed from the pretreatment structure at least annually.
- Mowing: If mowing is desired, only handheld string trimmers or push-mowers are allowed on the filter (no tractor) and the grass bed should be mowed no more than 2 times per growing season to maintain grass heights of no less than 6 inches.
- Fertilization: Fertilization of the underdrained filter area should be avoided unless absolutely necessary to establish vegetation.
- Harvesting and Weeding: Harvesting and pruning of excessive growth will need to be done occasionally. Weeding to control unwanted or invasive plants may also be necessary.

F. Tree Filter System

- Inspection of the system structure and media.
- Removal of trash and silt from the filter surface.

- Replacement of the surface mulch layer annually.
- Complete replacement of the soil media is generally required only as part of a spill clean-up.
- Pruning of vegetation. If the vegetation is in dead or in poor health, it will require replacement.
- Appropriate disposal of all refused items.

3. Documentation:

- A. The owner or operator of a BMP or a qualified post-construction stormwater inspector hired by that person, shall, on or by June 30 of each year, provide a completed and signed certification to DPS in a form provided by DPS, certifying that the person has inspected the BMP(s) and that they are adequately maintained and functioning as intended by the approved post-construction stormwater management plan, or that they required maintenance or repair, including the record of the deficiency and corrective action(s) taken.
- B. A log summarizing the inspections and any corrective action taken must be maintained. The log must include the name(s) and qualifications of the person making the inspections, the date(s) of the inspections, and major observations about the operation and maintenance of controls. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and locations where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken. The log must be made accessible to the appropriate regulatory agency upon request. A sample "Stormwater Inspection and Maintenance Form" has been included as Attachment 1 of this Inspection, Maintenance, and Housekeeping Plan.

4. **Duration of Maintenance:** Perform maintenance as described and required for any associated permits unless and until the system is formally accepted by a municipality or quasi-municipal district, or is placed under the jurisdiction of a legally created association that will be responsible for the maintenance of the system. If a municipality or quasi-municipal district chooses to accept a stormwater management system, or a component of a stormwater system, it must provide a letter to the MDEP stating that it assumes responsibility for the system. The letter must specify the components of the system for which the municipality or district will assume responsibility, and that the municipality or district agrees to maintain those components of the system in compliance with MDEP standards. Upon such assumption of responsibility, and approval by the MDEP, the municipality, quasi-municipal district, or association becomes a co-permittee for this purpose only and must comply with all terms and conditions of the permit.

Attachments

Attachment 1 – Sample Stormwater Inspection and Maintenance Log Form

ATTACHMENT 1 - STORMWATER INSPECTION AND MAINTENANCE LOG

**Northeast Air Fixed-Based Operator
1011 Westbrook Street
Portland, Maine 04102**

This log is intended to accompany the Inspection, Maintenance and Housekeeping Plan for the proposed building expansion and parking lot at 1011 Westbrook Street, Portland, Maine. The following items shall be checked, cleaned and maintained on a regular basis as specified in the Maintenance Plan and as described in the table below. This log shall be kept on file for a minimum of five (5) years and shall be available for review by the municipality. Qualified personnel familiar with drainage systems shall perform all inspections. Attached is a copy of the construction and post-construction maintenance logs.

	INSPECTOR NAME	DATE PERFORMED	SUGGESTED INTERVAL
Vegetated Areas			
Inspect all slopes and embankments			Annually
Replant bare areas or areas with sparse growth			Annually
Gravel Surfaces			
Clear accumulated winter sand			Annually
Remove sediment along edges and in pockets			Annually
Ditches & Swales			
Remove any obstructions and accumulated sediments and debris			Monthly
Repair any erosion of ditch lining			Annually
Mow vegetated ditches			Annually
Remove woody vegetation growing through riprap			Annually
Repair any slumping side slopes			Annually
Replace riprap where stones have dislodged			Annually
Culverts			
Remove accumulated sediments and debris at the inlet, outlet, within conduit			Annually
Repair any erosion at inlet and outlet			Annually
Sump Depth			Annually
Underdrained Soil Filter			
Remove sediment & debris			Monthly
Remove weeds			Monthly (during growing season)
Erosion (side slopes, embankment)			Monthly
Inspection after major storm to verify proper function			Bi-Annually
Mowed			As-needed
Tree Filter System			
Inspect system structure and media			Annually

	Remove trash and other debris			Annually
	Replace mulch layer and tree pruning			Annually

Exhibit 7

Evidence of Utility Capacity to Serve



August 17, 2015
15149

Frank Brancely
City of Portland, Public Services
55 Portland Street
Portland, ME 04101

Request for Sewer Capacity to Serve Letter
1011 Westbrook Street, Portland, Maine

Dear Mr. Brancely:

On behalf of Northeast Air, we respectfully request a letter of capacity to provide sewer for the proposed expansion to the existing Northeast Air operations facility in Portland, Maine. The project site is located along Westbrook Street and Taxiway Charlie "C". The site is identified as Lot 001 on Chart 205, Block A on the Portland tax map. A location map is attached for reference.

The existing site is comprised of a hangar and terminal facility. The existing terminal building will be razed and the hangar will be expanded. Proposed expansion to the hangar building includes a 2-story addition with a 6,750 sf footprint and a 1-story addition of 3,500 sf. Associated parking and landscaped areas will be added as well.

It is understood that there is currently a sewer pipe in Westbrook Street that has a 4" service lateral to the existing hangar building. We plan to continue to use this existing 4" sewer service to take care of the expanded building's needs. There is not expected to be a significant increase in usage.

We are hopeful that there is sufficient capacity to serve the proposed project and await your response. If there are any maps showing the current sewer infrastructure and service cards could you please attach them for us. In the interim, please call with any questions or if you require additional information. Thank you for your consideration.

Sincerely,

SEBAGO TECHNICS, INC.

A handwritten signature in black ink, appearing to read "Aaron C. Hunter".

Aaron Hunter
Civil Engineer, E.I.

ACH:llg
Enc.



August 17, 2015
15149

Glissen Havu
Portland Water District
225 Douglas Street, PO Box 353
Portland, ME 04104

Request for Water Capacity to Serve Letter
1011 Westbrook Street, Portland, Maine

Dear Ms. Havu:

On behalf of Northeast Air, we respectfully request a letter of capacity to provide water for the proposed expansion to the existing Northeast Air operations facility in Portland, Maine. The project site is located along Westbrook Street and Taxiway Charlie "C". The site is identified as Lot 001 on Chart 205, Block A on the Portland tax map. A location map is attached for reference.

The existing site is comprised of a hangar and terminal facility. The existing terminal building will be razed and the hangar will be expanded. Proposed expansion to the hangar building includes a 2-story addition with a 6,750 sf footprint and a 1-story addition of 3,500 sf. Associated parking and landscaped areas will be added as well.

It is understood that there is currently a 12" main in Westbrook Street that tee's off toward the existing hangar building with a 6" service that connects to the building's sprinkler riser. Off of the 6" service is a 2" service that provides domestic water. We plan to continue to use this existing 2" water service to supply the expanded building's needs. There is not expected to be a significant increase in water usage.

We are hopeful that there is sufficient capacity to serve the proposed project and await your response. If there are any maps showing the current water infrastructure and service cards could you please attach them for us. In the interim, please call with any questions or if you require additional information. Thank you for your consideration.

Sincerely,

SEBAGO TECHNICS, INC.

A handwritten signature in black ink, appearing to read "Aaron C. Hunter".

Aaron Hunter
Civil Engineer, E.I.

ACH:llg
Enc.

Exhibit 8

Lighting Specifications

Type: _____
Project Name: _____
Notes: _____

rev. 02.04.2015

VIPER - SMALL (LED)

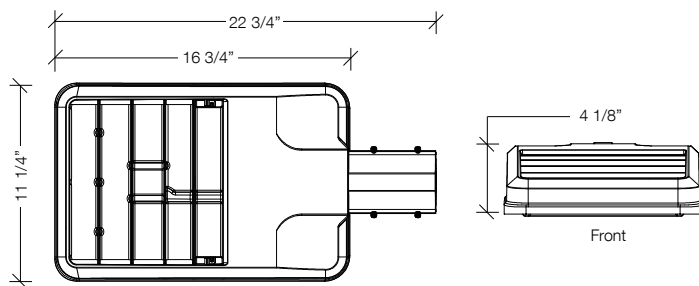
Small Viper Luminaire

Max Weight: 15.0 lbs

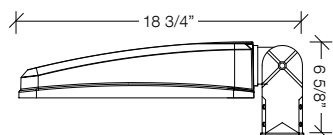
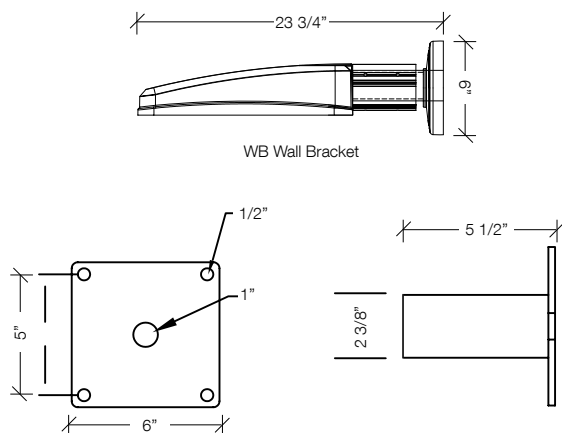
Max EPA: 0.67 sq ft

Sample	VP-S	30NB-90	5K	T5R	UNV	PCR-TL	SF2	GENIXX	BLC	RA	BBT
Ordering											
	A	B	C	D	E	F	G	H	I	J	K

DETAILS



MOUNTING OPTIONS



PK2 2-3/8" Adjustable Knuckle



SF2 2-3/8" OD Slip Fitter



RA Rectangular Arm

A. MODEL

VP-S Viper - Small

B. ENGINE-WATTS

22NB-50 50 Watts - LED Array

22NB-70 70 Watts - LED Array

30NB-70 70 Watts - LED Array

30NB-90 90 Watts - LED Array

C. CCT - COLOR TEMP

5K 5000K (std.)

4K 4000K

3K 3000K

D. OPTICS⁶

T1 type I

T2 type II

T3 type III

T4 type IV

T5R type V, rectangular

T5QM type V, square medium

T5W type V, round wide

FR front row auto optic

E. VOLTAGE

UNV 120-277V

347V 347V

480V 480V

F. ELECTRICAL OPTIONS

PCR-TL photocell, twist-lock

PCR-SC photocell, shorting cap

2PF dual power feed ^{1,2}

G. SENSOR OPTIONS

OCS occupancy sensor (on/off)

MDD motion dimming detector

H. CONTROL OPTIONS

GENI-XX Energeni⁵

I. HOUSE SIDE SHIELD OPTIONS

HSS-90 house side shield 90°

HSS-180 house side shield 180°

BLC backlight control⁴

J. MOUNTING OPTIONS

RA rectangular arm

SF2 2 3/8" OD slip-fitter

PK2 2 3/8" adjustable knuckle

WB wall bracket

K. COLOR

BBT basic black textured

BMT black matte textured

WHT white textured

MBT metallic bronze textured

BZT bronze textured

DBT dark bronze textured

GYS gray smooth

DPS dark platinum smooth

GNT green textured

MST metallic silver textured

MTT metallic titanium textured

OWI old world iron

RAL _____

CERTIFICATIONS/LISTINGS



Certification Data: UL/cUL Wet Location Listed, LM79/ LM80 Compliant, IDA Approved, 3G Vibration Rated, DesignLights Consortium® Qualified³

¹ not available with 64NB-135

² not available @ 347V or 480V input

³ DesignLights Consortium Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details.

⁴ T4 optic only

⁵ When ordering Energeni, specify the routine setting code (example GENI-04). See Energeni brochure and instructions for setting table and options. Not available with sensor options.

⁶ To rotate optics Left or right 90 degrees, specify L or R after the optical distribution example T4L.

VIPER - SMALL (LED)

Small Viper Luminaire

Max Weight: 15.0 lbs

Max EPA: 0.67 sq ft

General: The Beacon Viper luminaire is available in two sizes with a wide choice of different LED Wattage configurations and optical distributions designed to replace HID lighting up to 1000W MH or HPS and with 5 different mounting options for application in a wide variety of new and existing installations. Luminaires are suitable for wet locations.

Bezel Optic System: Each Viper luminaire is supplied with an one piece optical cartridge system consisting of an LED engine, LED lamps, optics, gasket and stainless steel bezel. The cartridge is held together with internal brass standoffs soldered to the board so that it can be field replaced as a one piece optical system. Two-piece silicone and micro-cellular polyurethane foam gasket ensures a weather-proof seal around each individual LED.

The optical cartridge is secured to the die cast housing with fasteners. The optics are held in place without the use of adhesives. The cartridge assembly is available in various lighting distributions using TIR designed acrylic optical lenses over each LED.

Lifesield™ Circuit: Thermal circuit shall protect the luminaire from excessive temperature by interfacing with the 0-10V dimmable drivers to reduce drive current as necessary. The factory-preset temperature limits shall be designed to ensure maximum hours of operation to assure L70 rated lumen maintenance. The device shall activate at a specific, factory-preset temperature, and progressively reduce power over a finite temperature range.

A luminaire equipped with the device may be reliably operated in any ambient temperature up to 55°C (131°F). The thermal circuit will allow higher maximum Wattages than would be permissible on an unregulated luminaire (if some variation in light output is permissible), without risk of premature LED failure or lumen depreciation. Operation shall be smooth and undetectable to the eye. Thermal circuit shall directly measure the temperature at the LED solder point. Thermal circuit shall consist of surface mounted components mounted on the LED engine (printed circuit board). For maximum simplicity and reliability, the device shall have no dedicated enclosure, circuit board, wiring harness, gaskets, or hardware. Device shall have no moving parts, and shall operate entirely at low voltage. The device shall be located in an area of the luminaire that is protected from the elements. Thermal circuit shall be designed to "fail on", allowing the luminaire to revert to full power in the event of an interruption of its power supply, or faulty wiring connection to the drivers.

Device shall be able to co-exist with other 0-10V control devices (occupancy sensors, external dimmers, etc.). The device will effectively control the solder point temperature as needed; otherwise it will allow the other control device(s) to function unimpeded.

Printed Circuit Board (PCB): Aluminum thermal clad board with 0.062" thick aluminum base layer, thermally conductive dielectric layer, 0.0014" thick copper circuit layer circuit layer designed with copper pours to minimize thermal impedance across dielectric. Board will be mounted to the heat sink using minimum 12 #4-40 screws to ensure contact with thermal pad and heat sink. Use of thermal grease will not be allowed.

Housing and LED Thermal Management: The Viper' monolithic housing design creates over 4.5 square feet (small Viper) or 7.7 square feet (large Viper) of heat-sinking surface area. Vertical fins, combined with flow-thru openings prevent sediment and moisture buildup on critical heat sinking surfaces without the need for grates, screens or other debris control tactics. The Viper housing, electrical compartment and fitter are made from die cast aluminum that is pre-treated and powder-coated to meet the most rugged industry standards. The finish is corrosion resistant to meet ASTM-B-117, resists cracking or loss of adhesion per ASTM D522, resists surface impacts of up to 160 inch-pound. All external hardware is corrosion resistant. The housing serves as a heat-sink for the LED bezel with a separate compartment for the drivers.

Electrical Assembly: The fixture electrical compartment shall contain all LED driver components and shall be provided with a push-button terminal block for AC power connections. The housing is designed for an optional twist lock photo control receptacle.

Accessibility: Although the Viper luminaire is designed to operate for many years without maintenance, accessibility is a key component in its design. The Drivers are mounted on a removable door that is secured with keyslotted screws and hinges down for convenient access. The drivers are field replaceable using quick disconnects.

Drivers: Luminaires are equipped with an LED driver that accepts 100V through 277V, 50 Hz to 60 Hz (UNIV), or a driver that accepts 347V or 480V input. Power factor is .92 at full load. All electrical components are rated at 50,000 hours at full load and 25°C ambient conditions per MIL- 217F Notice 2. Dimming drivers are standard, with connections for external dimming equipment available upon request. Component-to-component wiring within the luminaire may carry no more than 80% of rated load and is listed by UL for use at 600VAC at 50°C or higher. Plug disconnects are listed by UL for use at 600 VAC, 13A or higher. 13A rating applies to primary (AC) side only.

Surge Protector: The on-board surge protector shall be a UL recognized component for the United States and Canada and have a surge current rating of 20,000 Amps using the industry standard 8/20 pSec wave. The LSP shall have a clamping voltage of 825V and surge rating of 540J. The case shall be a high-temperature, flame resistant plastic enclosure.

Fasteners: All fasteners shall be stainless steel. When tamper resistant fasteners are required, spanner HD (snake eye) style shall be provided (special tool required, consult factory).

Color Rendering Index (CRI): Luminaire shall have a minimum CRI of 67 at 5000K.

Operating Environment: Shall be able to operate normally in ambient temperatures from -40°C to 40°C

Finish: Finish shall be a Beacote V polyester powder-coat electro-statically applied and thermocured. Beacote V finish shall consist of a five stage iron phosphate chemical pre-treatment regimen with a polymer primer sealer, oven dry off, and top coated with a thermoset super TGIC polyester powder coat finish. The finish shall meet the AAMA 605.2 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance and resists cracking or loss of adhesion per ASTM D522 and resists surface impacts of up to 160 inch-pound.

Agency Certification: The luminaire shall bear a CSA label and be marked suitable for wet locations. The Beacon Viper is approved by the International Dark-Sky association as a dark sky friendly fixture.

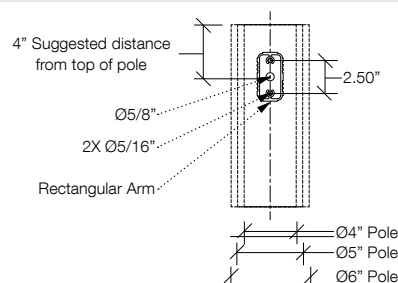
Warranty: Beacon luminaires feature a 5 year limited warranty. Beacon LED luminaires with LED arrays feature a 5 year limited warranty covering the LED arrays. LED drivers are covered by a 5 year limited warranty. PIR sensors carry a 5 year limited warranty from the sensor manufacturer. See Warranty Information on www.beaconproducts.com complete details and exclusions.

Power/Lumens & Distributions

Engine	Wattage	Delivered Lumens (varies by optic)	Delivered LPW	TM21 Calculated % Lumen Maint. at 100,000 hrs
22NB	50	4700-5020	93-103	96.19%
22NB	70	5780-6200	82-103	85.79%
30NB	70	6408-6850	91-103	95.02%
30NB	90	7700-8260	85-97	85.79%

TM21 is the framework for taking LM-80 data and making useful LED lifetime projections. Reported and Calculated Lifetimes shown are based on hours at the time of this printing. For current Reported and Calculated hours please contact factory or Beacon's web-site.

CCT (COLOR TEMP) Lumen Output Multipliers	CRI (Color Rendering)
5000K = 1.0	min 67 CRI
4000K = .92	min 70 CRI
3000K = .75	min 80 CRI

DRILL PATTERN


Due to our continued efforts to improve our products, product specifications are subject to change without notice.



PLAN VIEW

- NOTES:
- 1) EXACT MOUNTING DETAILS TO BE DETERMINED AT JOBSITE BY OTHERS.
 - 2) CALCULATIONS MAY SHOW THE EFFECT OF SHADOWING CAUSED BY BUILDINGS AND OBJECTS WITHIN THE CALCULATED SPACE OR IN THE SITE AREA.
 - 3) READINGS SHOWN ARE INITIAL HORIZONTAL FOOTCANDLES ON A FLAT SITE UNLESS OTHERWISE INDICATED.
 - 4) THIS CALCULATION IS BASED ON LIMITED INFORMATION SUPPLIED BY OTHERS TO SWANEY LIGHTING ASSOCIATES AND STANDARD ASSUMPTIONS OF THE SPACE AND/OR SITE.
 - 5) CONFORMANCE TO CODES AND OTHER LOCAL REQUIREMENTS AS DETERMINED BY THE AHJ ARE THE RESPONSIBILITY OF THE OWNER AND/OR THE OWNER'S REPRESENTATIVE.
 - 6) THIS LAYOUT DRAWING MUST BE COORDINATED WITH THE SITE LOCATION FOR CORRECT FIXTURE ORIENTATION.
 - 7) CHECK GRAPHIC SCALE. DOCUMENTS PRINTED OR PLOTTED FROM ELECTRONIC FILES MAY OCCUR AT OTHER THAN THE DESIRED OR ASSUMED GRAPHIC SCALES. IT IS THE RESPONSIBILITY OF THE RECIPIENT TO VERIFY THAT THE PRINTED OR PLOTTED-TO-SCALE DRAWING IS PRINTED TO SCALE.

Calculation Summary					
Label	Avg	Max	Min	Avg/Min	Max/Min
PARKING	1.11	2.8	0.2	5.55	14.00
SITE	0.52	2.6	0.0	N.A.	N.A.

Luminaire Schedule (note fixture catalogue numbers are not complete)						
Type	Symbol	Qty	Lum. Lumens	LLF	Lum. Watts	Description
VS5	☼	3	6714	0.900	70	30NB-70-T5QM
VS3B	☼	3	4852	0.900	70	VP-S_30NB-70_BLC_5K

Exhibit 9

Exterior Building Elevations and Floor Plans

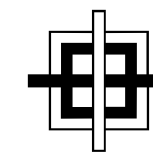
NEA

NORTHEAST AIR

PORTLAND INTERNATIONAL JETPORT

1011 WESTBROOK STREET

PORTLAND, MAINE 04102



GRANT HAYS

ASSOCIATES

ARCHITECTURE & INTERIOR DESIGN
P.O. BOX 6179 FALMOUTH MAINE 04105
207.871.5900 www.granthays.com

TITLE

REVISION

DRAWING NAME



SHEET

COVER SHEET

DATE
11 AUG '15

SCALE
NO SCALE

DRAWN
MFH/mgk

JOB NO.
150655

SHEET

AO

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ASSOCIATES IS PROHIBITED.

ABBREVIATIONS

AFF ALUM or AL AWP	ABOVE FINISH FLOOR ALUMINUM ACOUSTICAL WALL PANEL	HC HD WD HDR HDWE HM HORIZ HT	HANDICAP HARDWOOD HEADER HARDWARE HOLLOW METAL HORIZONTAL HEIGHT	S SAT	SOUTH SUSPENDED ACOUSTICAL TILE CEILING
BIT BM BOT BRG BRK	BITUMINOUS BENCH MARK BOTTOM BEARING BRICK	ID IF IN INSUL INT	INSIDE DIAMETER INSIDE FACE INCHES INSULATION INTERIOR	SCH SCHED SECT SGS	SHOWER CURTAIN SOAP DISPENSER SCHEDULE SECTION SUSPENDED GYPSUM BOARD CEILING
C CAB CCB CC	CARPET CABINET CHALK BOARD CENTER TO CENTER CONCRETE FLOOR WITH HARDENER CONTROL JOINT CENTER LINE CEILING CONCRETE MASONRY UNIT CONCRETE CONTINUOUS CONSTRUCTION CONTRACTOR CERAMIC TILE	JNT or JT KEC KF	JOINT KITCHEN EQUIPMENT CONSULTANT KICK PLATE	SHT SIM SND SPEC SQ STD STL STR SV	SHEET SIMILAR SANITARY NAPKIN DISPOSAL SPECIFICATIONS SQUARE SYNTHETIC SPORTS SURFACE STANDARD STEEL STRUCTURAL STRAIGHT VINYL BASE SHEET VINYL
DBL DC DIA DIM DNA DR DTL DWG	DOUBLE DOOR CLOSER DIAMETER DIMENSION DOES NOT APPLY DOOR DETAIL DRAWING	L LAB LNL LOC LS	LAVATORY LABEL (FIRE) LINTEL LOCATION LOCKSET	T TB TH THK TO TOB TOM TOW TYP	TEMPERED (GLASS) TACK BOARD THERMAL (INSULATED) THICKNESS TOP OF TOP OF BEAM TOP OF MASONRY TOP OF WALL TOILET PAPER DISPENSER TYPICAL
E EIA ELEV EMHO	EAST EACH EACH FACE EXPANSION JOINT ELEVATION ELECTRICAL ELEVATOR ELECTROMAGNETIC HOLD OPEN	M MAS MAX MB MECH MFCR MIN MISC MO MR MRGB	MARBLE MASONRY MAXIMUM MARKER BOARD MECHANICAL MANUFACTURER MINIMUM MISCELLANEOUS MASONRY OPENING NOT OPENING MOISTURE RESISTANT GYPSUM BOARD METAL	VB VCT VERT VWC	VAPOR BARRIER VINYL COMPOSITION TILE VERTICAL VINYL WALL COVERING
EQ EW EWC EXIST OF (E) EXP EXT	EACH WAY ELECTRIC WATER COOLER EXISTING EXPANSION EXTERIOR	MTL N NA NIC NO NOM NTS	METAL NORTH NOT APPLICABLE NOT IN CONTRACT NUMBER NOMINAL NOT TO SCALE	W WC WD WF WG WP	WEST WITH WATER CLOSET WOOD WATER FOUNTAIN WIRE GLASS WOOD PANELING
FCS FD FDN FE FFE FIN FIN FL or FF FIN GR FL FR FRMG FTV FWC	FLOOR COATING SYSTEM FLOOR DRAIN FOUNDATION FIRE EXTINGUISHER FINISH FLOOR ELEVATION FINISH FINISH FLOOR FINISH GRADE FLOOR FIRE RATING FRAMING FEET (FOOT) FIELD VERIFY FABRIC WALL COVERING	OA OC OD OPNG OPP	OVERALL ON CENTER OUTSIDE DIAMETER OUTSIDE FACE OPENING OPPOSITE	P PTD PB PL PLY WD PNL PS P.T. PT & D PTN	PAINT PAINTED PANIC BAR PLATE PLYWOOD PANEL PASSAGE LATCH SET PRESSURE TREATED PAPER TOWEL & WASTE DISPENSER PARTITION
G GA GALV GB GC GWB	GRANITE GAUGE GALVANIZED GRAB BARS GENERAL CONTRACTOR GYPSUM WALL BOARD	RD RE REF REINF REQD RM RO	ROOF DRAIN REFER REFRIGERATOR REINFORCED REQUIRED ROOM ROUGH OPENING		

GENERAL NOTES

1. ALL WORK SHALL CONFORM TO LOCAL AND STATE LAWS, ORDINANCES AND PREVAILING EDITIONS OF ADOPTED BUILDING CODES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE ALL PERMITS FOR WORK.
2. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO COMMENCING THE WORK AND REPORT ANY DISCREPANCIES TO THE ARCHITECT. CONTRACTOR SHALL PROCEED WITH THE WORK ONLY AFTER SUCH DISCREPANCIES HAVE BEEN RESOLVED BY THE ARCHITECT. CONTRACTOR SHALL ALLOW A 48 HOUR TIME FRAME FOR RESOLVING DISCREPANCIES ONCE THE ARCHITECT HAS ACKNOWLEDGED THE CONDITION.
3. THE CONTRACTOR SHALL REVIEW AND VERIFY ALL EXISTING CONDITIONS PRIOR TO STARTING THE WORK IN ANY GIVEN AREA.
4. WORK WITH GIVEN DIMENSIONS AND LARGE SCALE DETAILS. DO NOT SCALE THE DRAWINGS AS THE REPRODUCTIVE PROCESS TENDS TO DISTORT THE ACCURACY OF THE GRAPHIC SCALE INDICATED.
5. ALL CONSTRUCTION ACTIVITIES SHALL BE PERFORMED IN A NEAT, SAFE, AND CLEAN MANNER. ALL CONSTRUCTION WASTE SHALL BE REMOVED FROM THE BUILDING. SITE BURNING IS NOT ALLOWED. LEAVE WORK AREA IN A CLEAN, SAFE CONDITION AT THE END OF EACH WORK DAY.
6. ALL CONSTRUCTION DEBRIS SHALL BE DISPOSED OF AT AN APPROVED OFF-SITE FACILITY IN COMPLIANCE WITH ALL REGULATIONS.
7. ALL WOOD IN CONTACT WITH MASONRY OR CONCRETE SHALL BE PRESSURE TREATED.
8. ALL CEILINGS SHALL BE LEVEL TO TO A TOLERANCE OF 1/8" IN A 20'-0" RADIUS WHEN CHECKED WITH A 10' STRAIGHT EDGE.
9. INSTALL SOLID BLOCKING AT WALL FRAMING BEHIND ALL SURFACE MOUNTED FIXTURES, TRIM AND HANDRAILS.
10. ALL GRAB BARS AND HANDRAILS SHALL BE ABLE TO SUPPORT A DEAD WEIGHT OF 250 LBS. AT ANY POINT.
11. THESE ARCHITECTURAL DRAWINGS WERE PREPARED FOR THE GENERAL CONTRACTOR/OWNER AS PART OF AN ABBREVIATED SERVICES AGREEMENT, AND AS SUCH, DO NOT DELINEATE ALL ASPECTS OF THE WORK.
12. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF ALL ASPECTS OF THE WORK INCLUDING, BUT NOT LIMITED TO MECHANICAL AND ELECTRICAL DESIGN-BUILD ENGINEERING DISCIPLINES AND TRADES.
13. THE LOCATION OF ANY DOOR JAMBS NOT DIMENSIONED SHALL BE 6" FROM ADJACENT PERPENDICULAR WALL.
14. ALL WALL PARTITIONS SHALL EXTEND FLOOR TO STRUCTURE ABOVE, UNLESS OTHERWISE NOTED. PROVIDE DEFLECTION TRACK SYSTEM AT ROOF DECK LOCATIONS.
15. REFER TO THE ACCESSIBILITY DETAILS FOR AMERICANS WITH DISABILITIES ACT (ADA) AND MAINE HUMAN RIGHTS ACT (MHR) CONSTRUCTION CRITERIA.

MATERIALS

	CONCRETE
	CONCRETE MASONRY UNIT
	BRICK
	GRAVEL
	SOIL
	STUD PARTITION (EXISTING)
	STEEL
	WOOD FRAMING
	WOOD BLOCKING
	PLYWOOD
	GYPSUM BOARD
	SUSPENDED ACOUSTICAL TILE
	BATT INSULATION
	RIGID INSULATION
	FINISH WOOD
	ONE HOUR RATED PARTITION
	TWO HOUR RATED PARTITION
	EXISTING PARTITION (SCREENED)
	NEW PARTITION

SYMBOLS

	ROOM NUMBER
	DOOR NUMBER
	WINDOW NUMBER
	BUILDING SECTION
	WALL SECTION
	DETAIL SECTION
	CASEWORK ELEVATION
	INTERIOR ELEVATION
	VERTICAL ELEVATION
	PARTITION TYPE
	STRUCTURAL CENTERLINE

PROJECT TEAM

CIVIL/SITE DESIGN
SEBAGO TECHNIQS INC
75 JOHN ROBERTS ROAD, SUITE 1A
SOUTH PORTLAND, MAINE 04106
207.200.2100

STRUCTURAL/MECHANICAL/ELECTRICAL
ALLIED ENGINEERING INC
160 VERANDA STREET
PORTLAND, MAINE 04103
207.221.2260

CONTRACTOR
BENCHMARK CONSTRUCTION INC
34 THOMAS DRIVE
WESTBROOK, MAINE 04092
207.591.7600

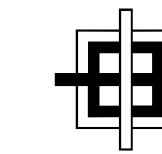
DRAWING INDEX

A0	COVER SHEET
A1	PHASING PLAN
AD1	DEMOLITION FLOOR PLAN
AD2	DEMOLITION ELEVATIONS
A2	NEW TERMINAL FLOOR PLAN
A3	FLOOR FINISHES PLAN
A4	REFLECTED CEILING PLAN
A5	FURNITURE PLAN
A6	ROOF PLAN
A7	EXTERIOR ELEVATIONS
A8	EXTERIOR ELEVATIONS
A9	CURTAIN WALL
A10	CURTAIN WALL
A11	BUILDING SECTION
A12	EXTERIOR WALL SECTIONS
A13	EXTERIOR WALL SECTIONS
A14	DOORS
A15	WINDOWS
A16	FINISHES
A17	PARTITION DETAILS
A18	PLAN DETAILS
A19	SECTION DETAILS
A20	INTERIOR ELEVATIONS
A21	INTERIOR ELEVATIONS
A22	INTERIOR ELEVATIONS
A23	ARCHITECTURAL MILLWORK
A24	ARCHITECTURAL MILLWORK
A25	ARCHITECTURAL MILLWORK
A26	ACCESSIBILITY DETAILS

% SUBMISSION
PRELIMINARY DESIGN PHASE

PHASING FLOOR PLAN

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



GRANT HAYS
ASSOCIATES

ARCHITECTURE & INTERIOR DESIGN
P.O. BOX 6179 FALMOUTH MAINE 04105
207.871.5900 www.granthays.com

DATE

REVISION

DRAWING NAME

NEA
NORTHEAST AIR
PORTLAND INTERNATIONAL AIRPORT

1011 WESTBROOK STREET
PORTLAND, MAINE 04102

SHEET

DEMOLITION
FLOOR
PLAN

DATE
11 AUG '15

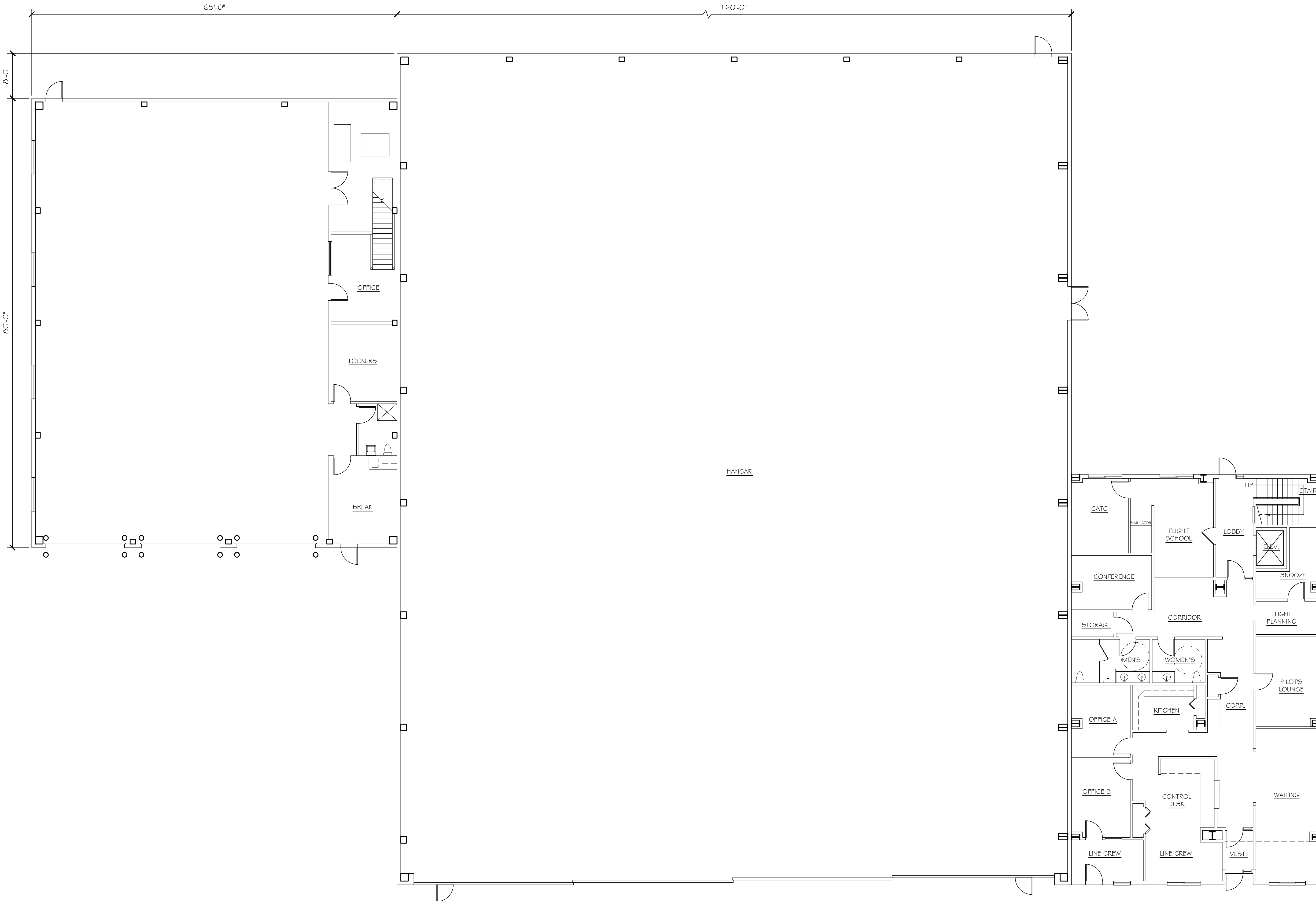
SCALE
1/8"=1'-0"

DRAWN
MFH/mgk

JOB NO.
150655

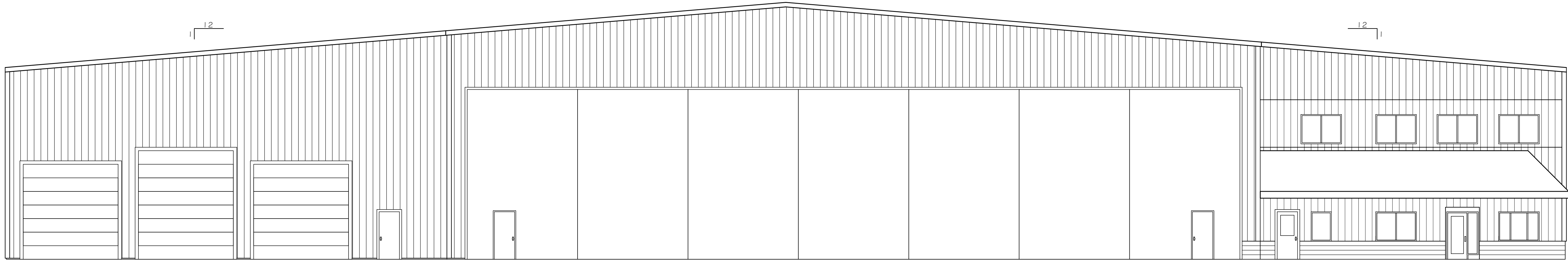
SHEET
AD1

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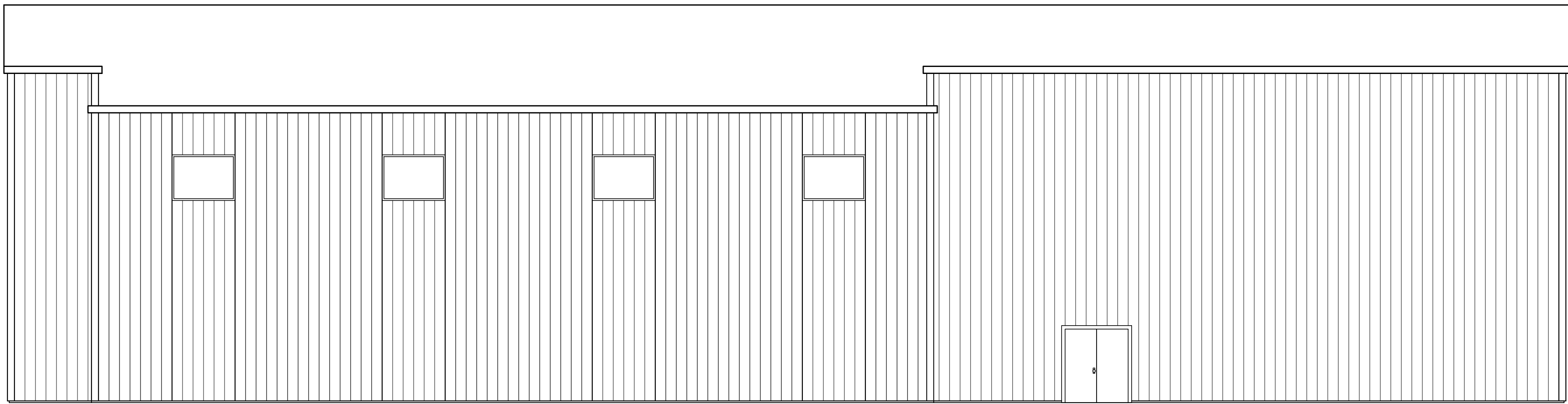


DEMOLITION FIRST FLOOR PLAN

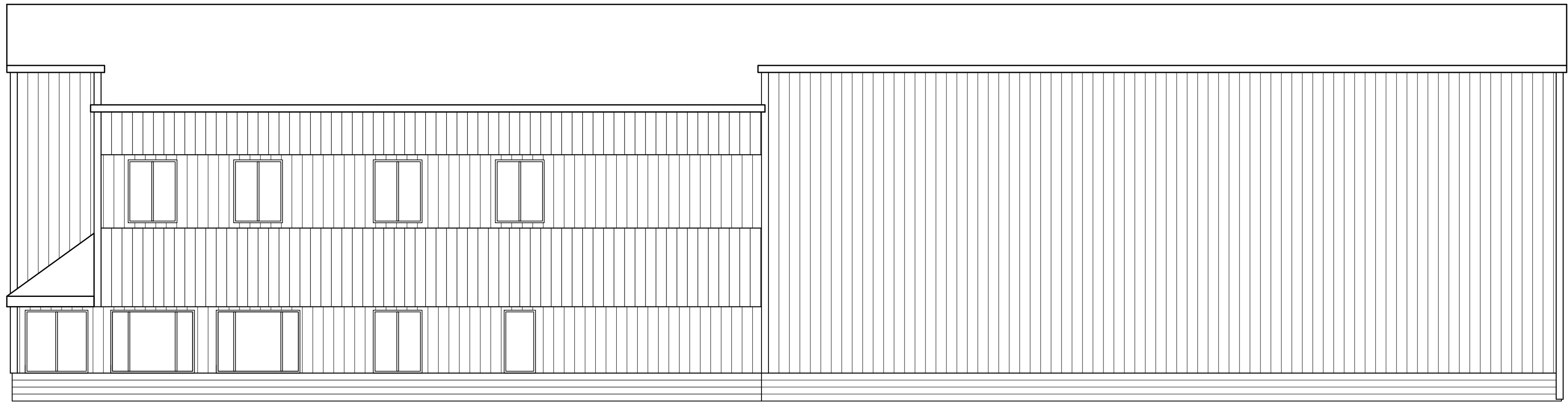
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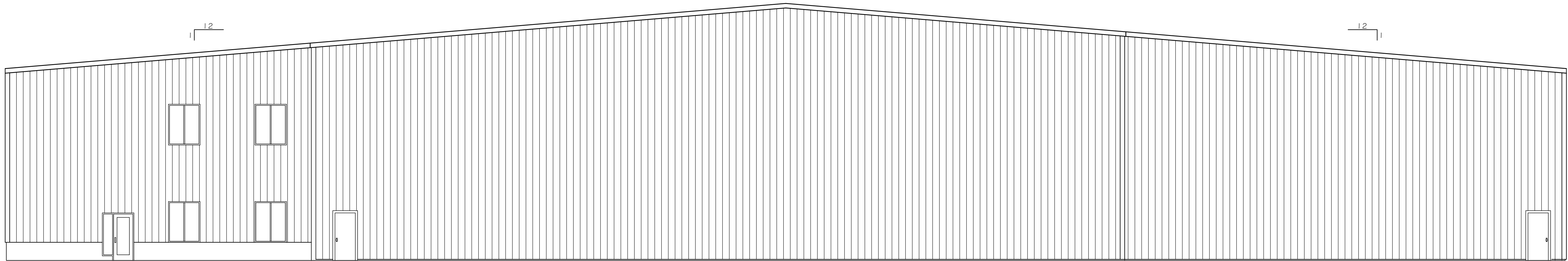
EAST ELEVATION
SCALE: 1/8" = 1'-0"



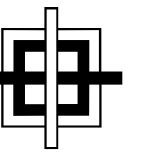
SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



NORTH ELEVATION
SCALE: 1/8" = 1'-0"



WEST ELEVATION
SCALE: 1/8" = 1'-0"



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NORTH EAST AIR
PORTLAND INTERNATIONAL AIRPORT

PORTLAND, MAINE 04102

1011 WESTBROOK STREET

SHEET

DEMOLITION
ELEVATIONS

DATE
11 AUG '15

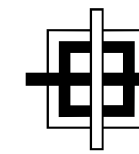
SCALE
1/8"=1'-0"

DRAWN
MFH/mgk

JOB NO.
150655

SHEET
AD2

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1/2"=1'-0"

REVISIONS

DRAWING NAME

NEA
NORTH EAST AIR
PORTLAND INTERNATIONAL JETPORT

PORTLAND, MAINE 04102

1011 WILTBROOK STREET

1/2"=1'-0"

PHASE I
CONCEPT PLAN
AT NEW TERMINAL
ADDITION

DATE: 11 AUG '15

SCALE: 3/16"=1'-0"

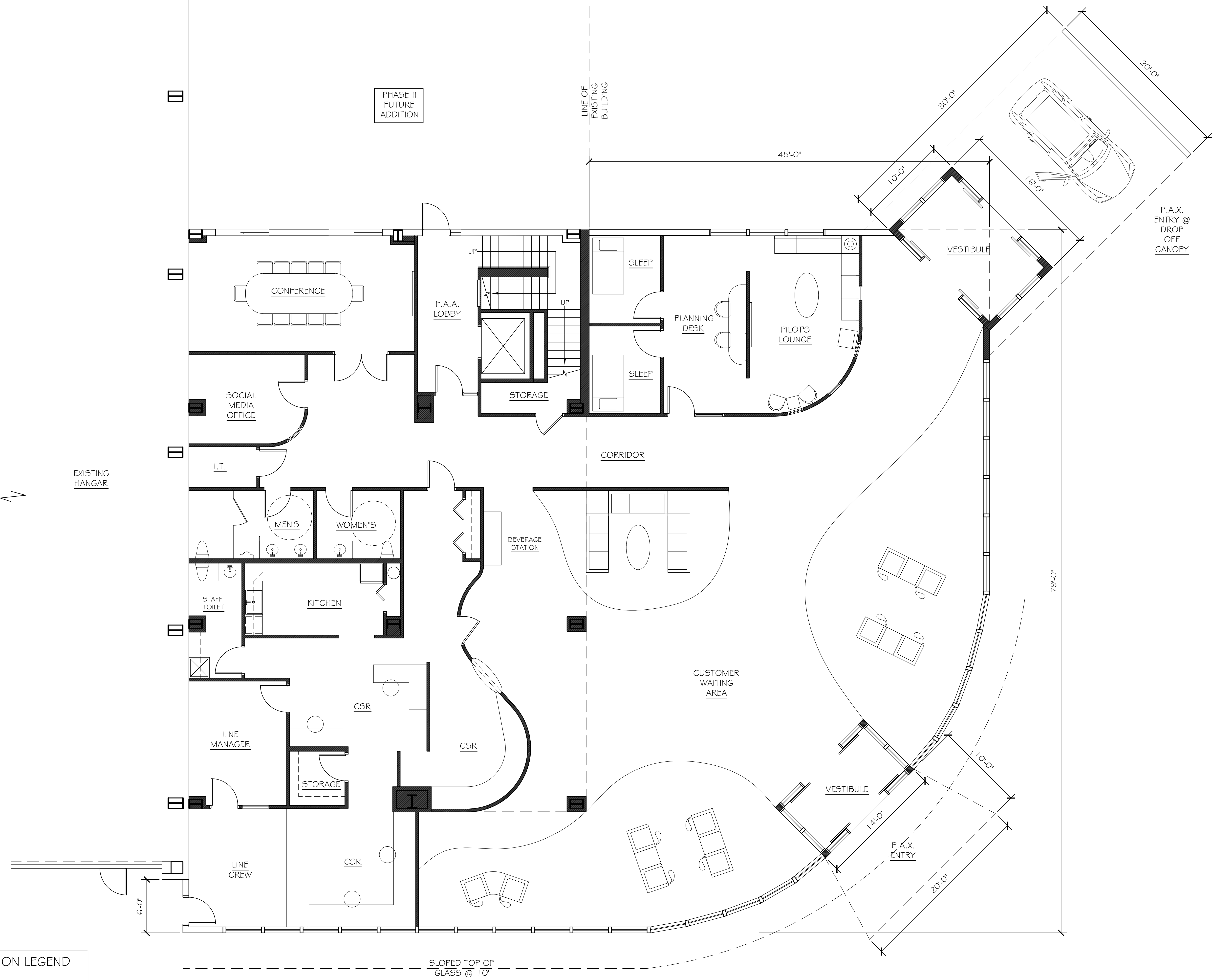
DRAWN: BGH/mgk

JOB NO. 150655

SHEET **A2**

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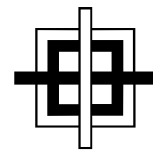
PARTITION LEGEND	
	EXISTING
	PHASE I



CONCEPT PLAN AT NEW TERMINAL ADDITION

SCALE: 3/16" = 1'-0"





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SCALE

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DRAWING NAME

NEA

NORTH EAST AIR
PORTLAND INTERNATIONAL AIRPORT

1011 WESTBROOK STREET

PORTLAND, MAINE 04102

SHEET

ACCESSIBILITY
DETAILS
& NOTES

DATE
11 AUG '15

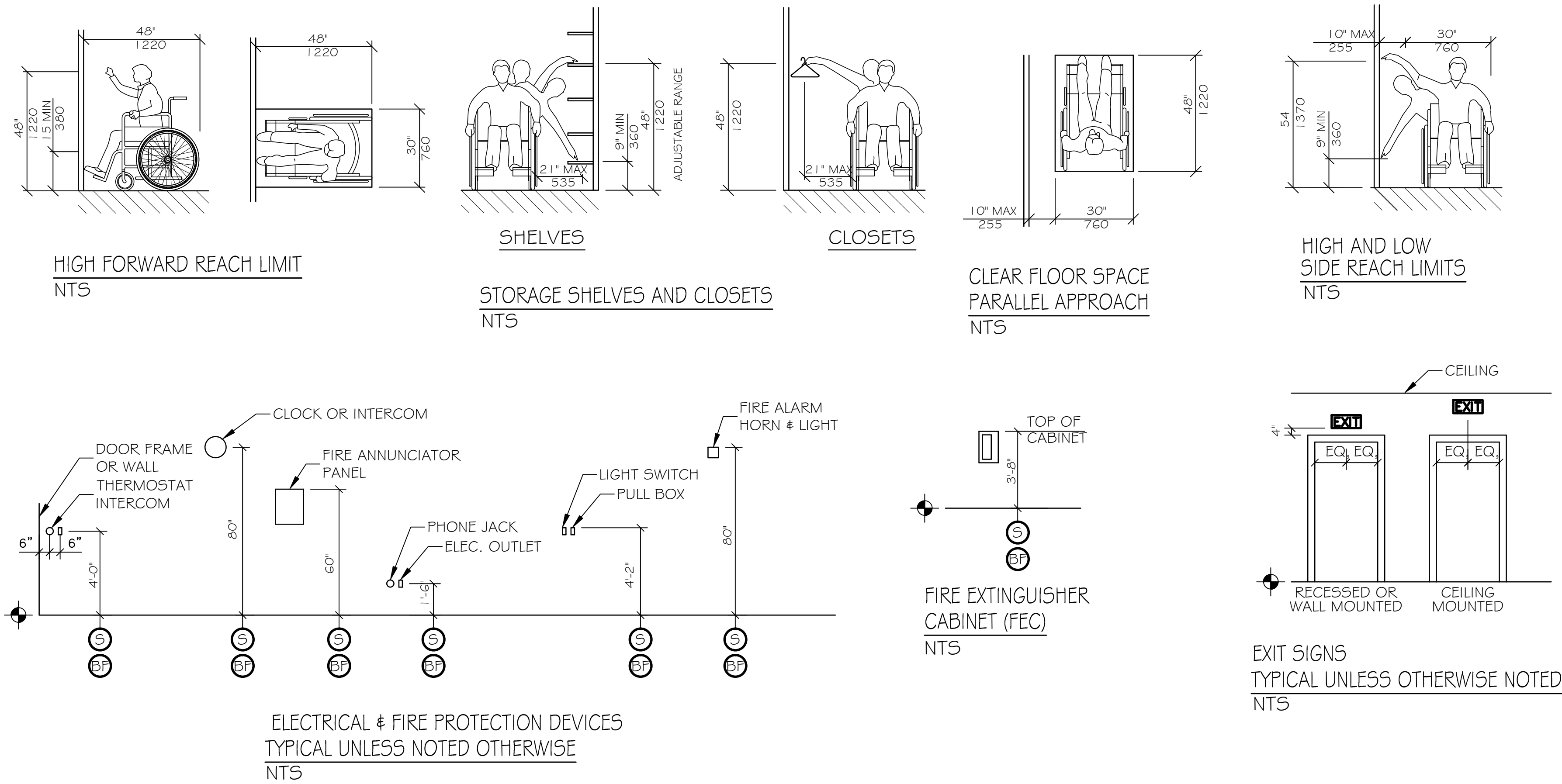
SCALE
NO SCALE

DRAWN
MFH/mgk

JOB NO.
150655

SHEET
A26

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LEGEND

- Ⓢ STANDARD MOUNTING HEIGHT
- ⓈF BARRIER FREE ADULT MOUNTING HEIGHT
- ⦿ FINISH FLOOR LINE

NOTE

MOUNT ALL FIXTURES AT STANDARD MOUNTING HEIGHT UNLESS INDICATED ON PLAN BY A ⦿ SYMBOL. A ⦿ SYMBOL AT ANY ROOM SHALL INCLUDE ONE OF ANY FIXTURE AND ACCESSORY WITHIN THE ROOM.

ACCESSIBILITY ACCESSORY MOUNTING HEIGHTS

SHELVES/STORAGE
ELECTRICAL SWITCHES/OUTLETS
COAT HOOKS/RODS
SIGNAGE (TO BRAILLE COMPONENT)

48" MAX
48" MAX
48" MAX
60" MAX

ACCESSIBILITY GENERAL NOTES

- DOORWAYS SHALL HAVE A MINIMUM CLEAR WIDTH OF 32" WITH THE DOOR OPEN 90 DEGREES. MEASURED BETWEEN THE FACE OF THE DOOR AND THE OPPOSITE STOP.
- ALL DOORS SHALL HAVE LEVER HANDLE HARDWARE, EXCEPT AT SECURED STORAGE ROOMS, MECHANICAL ROOMS, AND ELEVATOR MACHINE ROOMS.
- ALL CLOSERS SHALL BE 5LB PULL MAXIMUM AT DOORS EQUIPPED WITH LEVER HANDLE HARDWARE.
- ALL DOORS WITH CLOSERS SHALL HAVE 18" CLEAR DISTANCE FROM THE LATCHSIDE OF THE OPENING TO ANY ADJACENT WALL OR OBSTRUCTION ON THE PULL SIDE OF THE OPENING.
- ALL DOORS WITH CLOSERS SHALL HAVE 12" CLEAR DISTANCE FROM THE LATCHSIDE OF THE OPENING TO ANY ADJACENT WALL OR OBSTRUCTION ON THE PUSH SIDE OF THE OPENING.
- ALL SIGNAGE SHALL BE MOUNTED 60" AFF TO BRAILLE COMPONENT AT LATCH-SIDE WALL OF DOORS AND OPENINGS.
- COMPLY WITH 2010 EDITION OF THE AMERICANS WITH DISABILITIES ACT.

From: Owens McCullough <omccullough@sebagotechnics.com>
To: Shukria Wiar <SHUKRIAW@portlandmaine.gov>
CC: "Mike Hayes,RA, CSS (mhays@earthlink.net)" <mhays@earthlink.net>
Date: 11/2/2015 9:29 AM
Subject: FW: Northeast Air Review (NEA)
Attachments: PO - 1011 Westbrook Street -Ability to Serve Determination - 2015.pdf; 15149 revised photometric plan 9-30-15.pdf; lighting cut sheets.pdf; EXHIBIT A - 1-23-13.pdf; 15149 mcgp_noi.pdf

Hi Shukria,

This is the e-mail I had send back on October 28, 2015 responding the initial review comments. Thank you, Owens

From: Owens McCullough
 Sent: Wednesday, October 28, 2015 9:40 AM
 To: Shukria Wiar <SHUKRIAW@portlandmaine.gov>
 Cc: Mike Hays <mike@granthays.com>; Mark Goodwin <markg@northeastair.com>
 Subject: Northeast Air Review (NEA)

Good Morning Shukria,

Thank you for sending along the review comments. We have prepared the following supplemental attachments and offer the following responses for consideration.

1. Access and Circulation: Our site design provides for a one-way looped circulation with the exception of the larger general parking lot which was intended to allow for two way circulation. This approach was choose to allow visitors to be able to access and egress the lot from either direction. It is expected that users of the parking will need to either exit the lot for pick-up or drop-off of people at the main building entrance through the Porte Cochere or exit the lot directly. As a result, we have provided two-way circulation in the lot with directional signage to accommodate these two conditions.

2. Curb line Parking: Concern was expressed about vehicles overhanging the curb at the sidewalks. The sidewalks within the site have been designed with a minimum width of 6 feet at the perpendicular parking (big lot) to accommodate this potential condition. The angled nature of the parking in the other locations prohibits geometrically the ability of vehicles to overhang the sidewalk.

3. Traffic. NEA's current facility is too small to accommodate existing operations and provide adequate space to meet the current operational demands of an FBO (Fixed Base Operator). The expansion will not increase or change the number of employees or expand operations. The purpose of the expansion is to alleviate existing overcrowding, enhance the customer experience and improve efficiency and functionality. The number of employees will not be changing. As an example, two office I the existing building will be moving to the new location to alleviate overcrowding in the current office space. The new terminal area is intended to enhance the existing customer experience and be responsive to existing needs of the customers and flight crews. There are currently 3 customer service representatives (CSR's) that are employed by NEA. This will not change, only the space in which they work in and interact with customers. The additional space for the waiting areas is simply to address current deficiencies. As a result, no new employees or expanded operations will occur as part of the terminal expansion. The purpose is to address current space deficiencies and improve functionality of existing operations. The office (future phase) is intended to accommodate relocation of FAA Operations staff that already exist at the airport. They (FAA) are currently located on the east side of the airport and would relocate to this new office space. The FAA also currently occupies a portion of the NEA building so this would consolidate the operations. Based upon the development program, we anticipate negligible (if any) changes in trip generation due to the expansion. As a result, we don't see that this project would have any impact on the Jetport TMP.

We did obtain the Jetport's TMP and it appears Tom Errico had some involvement so we would defer to him as the City's traffic consultant for confirmation. In reviewing the TMP it appears that existing condition counts were completed along with traffic generation predictions through 2016 based upon enplanements for the entire airport. As a result, it appears the existing TMP did include the entire airport. Again, the NEA project is intended to address existing facility deficiencies and is not expected to increase traffic or business volume other than what is already anticipated through the jetports enplanement growth built into the TMP.

4. Construction Management Plan: NEA is working with construction management company for the actual construction of the project. We would request the construction management plan be stipulated as a condition the contractor will provide specific to the project prior to physical construction beginning.

5. Photometric: Attached is a photometric plan and catalogue cut sheets for the lighting as requested.

6. Combined Grading and Utility Plan: We have been asked to separate the plans. We do not recommend separating the plans since the grading and drainage plan comprise the almost all of what is shown on the plan and they are integral to each other. Separating the drainage system from the grading is not advisable due to the important relationship between the grading and drainage infrastructure.

7. Bicycle Parking: We have not indicated any bicycle parking on the plan. NEA has not experienced the need for bicycle parking given the commercial type use and demographics of their customers.

8. Survey: Attached is the Portland Jetport Exhibit A which is the FAA mandated property plan. As an airport governed by FAA requirements, the Exhibit A serves as the official property survey of the jetport. NEA is located on leased property located wholly Attached is the Exhibit A prepared by Deluca Hoffman Associates (the airport consultant). We request that the City accept this as meeting the survey requirements. If you need further information, please contact Paul Bradbury, P.E., Portland Jetport Airport Direction.

9. NEA Lease: We understand NEA is addressing this directly.

10. Wastewater Flow: As requested by Michael Farmer, P.E. of the DPS we are in the process of obtaining additional information and expect to respond within the next couple of days.

11. NOI: Attached is a copy of the NOI as requested by Dave Sinus. This NOI will be filed prior to construction.

12. Storm Drainage Material - Public ROW: The storm drainage material in the public right-of-way will be PVC SDR -35. Outside the public ROW the pipe material will be HDPE and Class V RCP.

Thank you and please let me know if you need additional information.

Owens A. McCullough, P.E., LEED A.P.
Vice President Engineering & Business Development

[logo small]

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Mobile: 207.232.1649
Fax: 207.856.2206



Portland Water District

FROM SEBAGO LAKE TO CASCO BAY

September 25, 2015

Sebago Technics
75 John Roberts Road Suite 1A
South Portland, ME 04106

Attn: Aaron Hunter
Re: 1011 Westbrook Street - Portland
Ability to Serve with PWD Water

Dear Mr. Hunter:

The Portland Water District has received your request for an Ability to Serve Determination for the noted site submitted on August 14, 2015. 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.

Conditions of Service

The following conditions of service apply:

- As the development is not expected to significantly increase water usage, the existing services at this site may be used by the proposed development as long as the project team determines that they will provide adequate flow and pressure for the proposed use. If any of the existing services will no longer be used as a result of the development then they must be retired per PWD standards. This includes shutting the corporation valve and cutting the pipe from the water main (for the 2-inch service) or removing the 6-inch gate valve and capping the tapping sleeve (for the 6-inch service).
- Water District approval of water infrastructure plans will be required for the project prior to construction. As your project progresses, we advise that you submit any preliminary design plans to MEANS for review of the water main and water service line configuration. We will work with you to ensure that the design meets our current standards.

Existing Site Service

According to District records, the project site does currently have existing water service. A 2-inch diameter copper water service line and a 6" ductile iron water service line, located as shown on the attached water service cards, provide water service to this site. Please refer to the "Conditions of Service" section of this letter for requirements related to the use of these services.



Water System Characteristics

According to District records, there is a 12-inch diameter cast iron water main on the west side of Westbrook Street and a public fire hydrant located across from the site. Recent flow data is not available in this area. The most recent static pressure reading was 88 psi on 8/27/2014

Public Fire Protection

It is not anticipated that this project will include the installation of new public hydrants to be accepted into the District water system. 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.

If the District can be of further assistance in this matter, please let us know.

Sincerely,
Portland Water District


Glissen Havu, E.I.
Design Engineer

NOTICE OF INTENT TO COMPLY WITH MAINE CONSTRUCTION GENERAL PERMIT

PLEASE TYPE OR PRINT IN BLACK INK ONLY

Name of Applicant (Owner):	Mark R. Goodwin, Northeast Air		Applicant Mailing Address:	1011 Westbrook Street		
Town/City:	Portland		State:	Maine	Zip Code:	04102
Daytime phone: (with area code)	(207) 774-6318	Email if available:	markg@northeastair.com		Name of Agent:	Sebago Technics, Inc.
Project Location: (Town/City):	Portland	UTM Northing: (if known)	4833737	UTM Easting: (if known)	394439	
Map #:	Chart 205, Block A	Lot #:	Lot 001	Size of disturbed area proposed:	77,912 sf	
Creating a common plan of development or sale?	Yes	No X	Part of a larger project?	Yes	No X	
Name of waterbody(ies) to which the disturbed area drains, or name municipality if drains to an MS4:	Fore River					
Does site drain to an Impaired Waterbody (C)? If so, give name:	N/A					
Detailed directions to site, including address if available:	1011 Westbrook Street, Portland International Jetport					
Description of project and its purpose:	Demolition of existing terminal building and expansion of hangar building. New 2-story addition with a 6,750 sf footprint, 1- story addition of 3,500 sf, 45 space paved parking area and associated landscaped areas.					

I am filing notice of my intent to carry out work which meets the requirements of the Construction General Permit (effective 3/10/03). I have a copy of the Construction General Permit. I have read and will comply with all of the standards. I have attached all the required submittals. *Notification forms cannot be accepted without the necessary attachments.*

- ☒ ALL: A check (non-refundable) made payable to: "Treasurer, State of Maine." **See DEP fee schedule for correct fee.** You must know # of acres being permitted to determine the fee.
- ☒ ALL: A U.S.G.S. topo map or Maine Atlas & Gazetteer map with the project site clearly marked.
- ☒ ALL: Drawing of the proposed activity (site plan).
- ☒ ALL: An ESC plan.
- ☒ IF this form is not being signed by the landowner or lessee of the property, attach documentation showing authorization to sign.
- ☒ IF any construction activity will occur in essential habitat, attach written approval from the Dept. of Inland Fisheries & Wildlife.

I authorize staff of the Departments of Environmental Protection to access the project site for the purpose of determining compliance with the general permit. I also understand that **this permit is not valid until approved by the Department or 14 days after receipt by the Department, whichever is less.**

Signature of Applicant:		Date:	
-------------------------	--	-------	--

Keep the bottom copy as a record of permit. Send the form with attachments via certified mail to the Maine Dept. of Environmental Protection at the appropriate regional office. The DEP will send a copy to the Town Office as evidence of the DEP's receipt of notification. No further authorization by DEP will be issued after receipt of notice. Check with DEP Staff to determine the expiration date on this permit. **Work carried out in violation of any standard is subject to enforcement action.**

OFFICE USE ONLY	Ck.#	Date	Staff	Staff	After Photos
NOI #	FP		Acc. Date	Def. Date	

NORTHEAST AIR-FIXED BASE OPERATOR

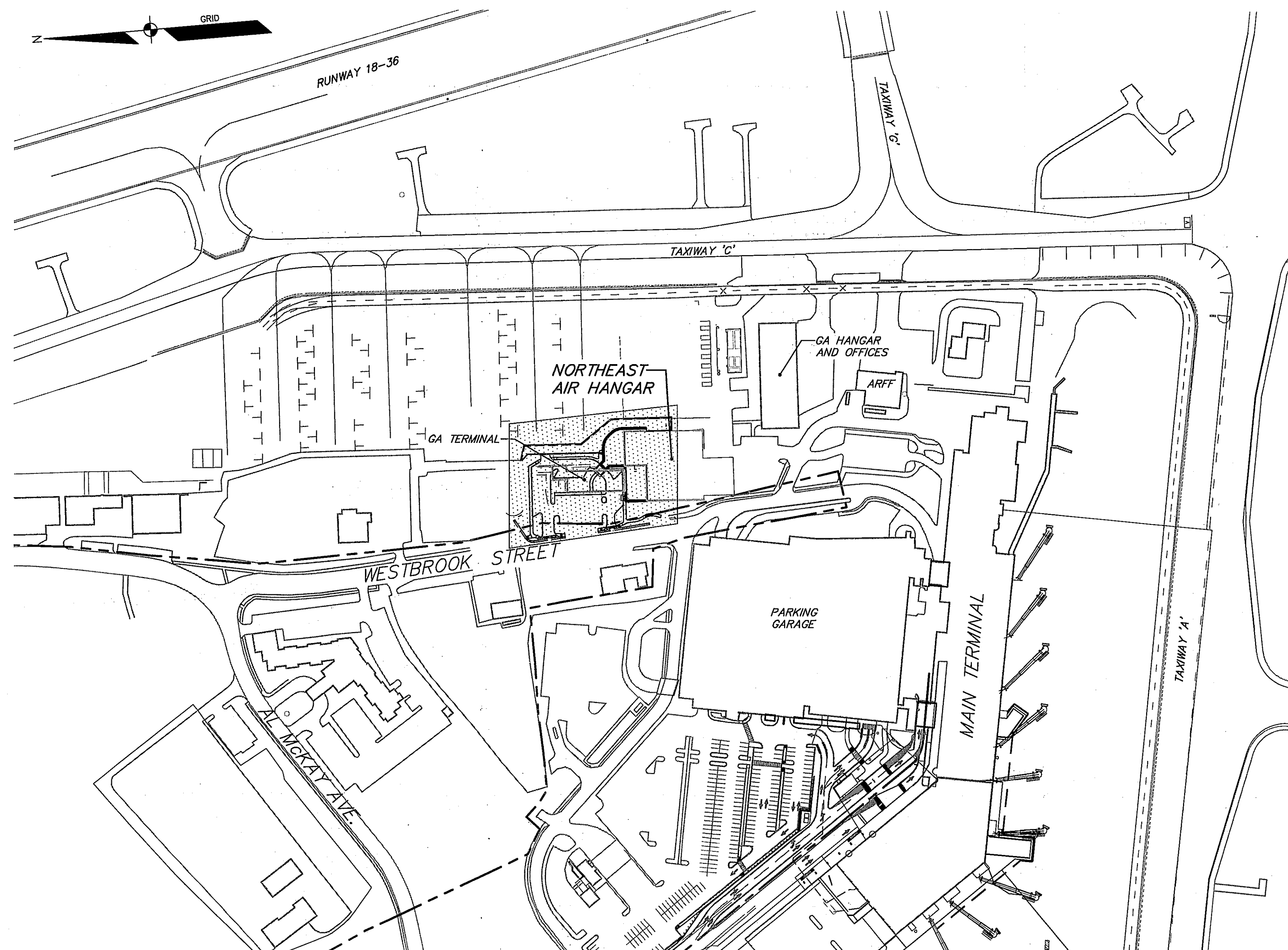
1011 WESTBROOK STREET
PORTLAND INTERNATIONAL JETPORT
PORTLAND, MAINE

APPLICANT:
NORTHEAST AIR
1011 WESTBROOK STREET
PORTLAND, MAINE 04102
TEL. 207-774-6318

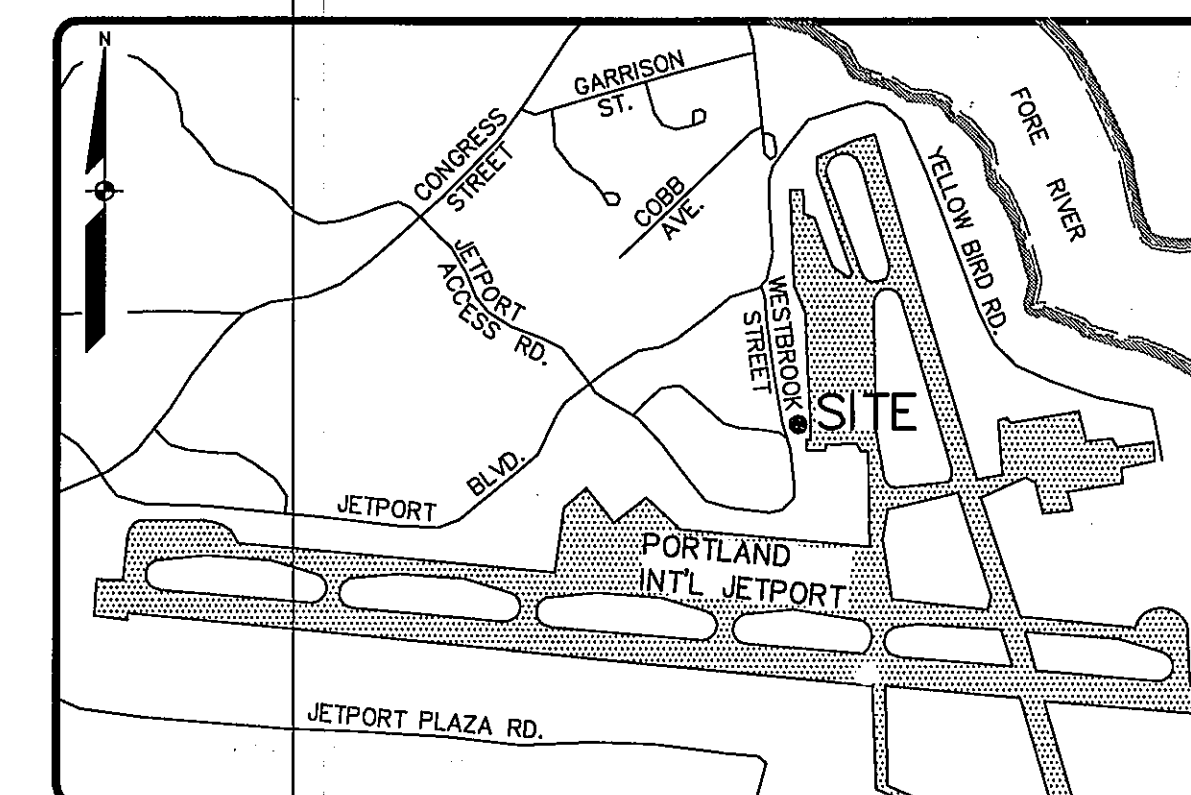
ENGINEER/SURVEYOR:

SEBAGO
TECHNICS
WWW.SEBAGOTECHNICS.COM

75 John Roberts Rd. Suite 1A South Portland, ME 04106 Tel. 207-200-2100
250 Goddard Rd. Suite B Lewiston, ME 04240 Tel. 207-783-5656



SCALE: 1" = 150'



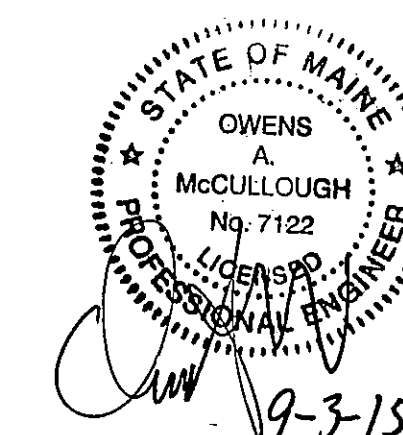
LOCATION MAP

NTS

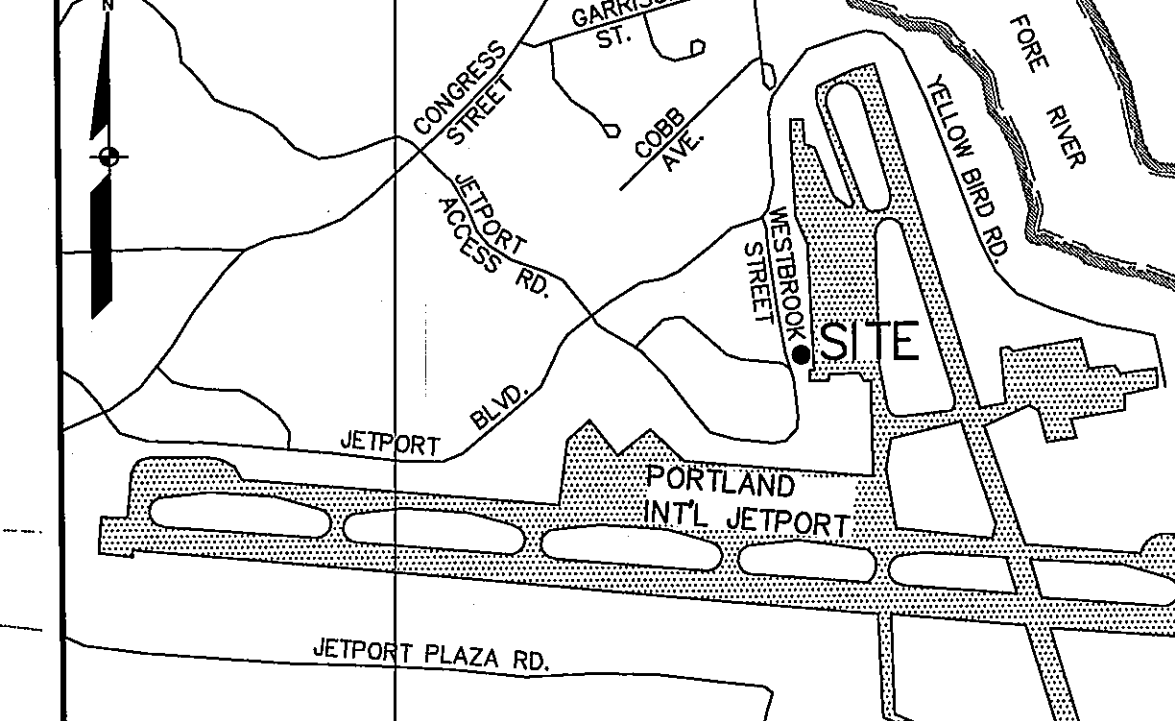
SHEET INDEX

SHEET TITLE

- | | |
|----|---------------------------------|
| 1 | COVER SHEET |
| 2 | EXISTING CONDITIONS PLAN |
| 3 | SITE PLAN |
| 4 | GRADING AND UTILITY PLAN |
| 5 | LANDSCAPE PLAN |
| 6 | DETAILS |
| 7 | DETAILS |
| 8 | DETAILS |
| 9 | DETAILS |
| 10 | POST DEVELOPMENT TREATMENT PLAN |



REVISED THROUGH 09-03-15



LOCATION MAP N.T.S.

[illegible]

GENERAL NOTES

- # GENERAL NOTES
1. THE RECORD OWNER OF THE LOT IS THE CITY OF PORTLAND BY DEED RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS.
 2. THE PROPERTY IS SHOWN ON THE CITY OF PORTLAND'S CHART BLOCK NO.199A001013.
 3. PLAN ORIENTATION IS BASED ON AN ASSUMED COORDINATE SYSTEM. TOPOGRAPHIC INFORMATION SHOWN IS REFERENCED TO THE NATIONAL VERTICAL GEODETIC DATUM OF 88 (NAVD 88), BASED ON USGS DISK J121 WITH A RECORD ELEVATION OF 62.87'.
 4. PROPERTY IS LOCATED IN THE AIRPORT BUSINESS ZONE

MIN. LOT SIZE:	20,000 S.F.
MIN. FRONTAGE:	50 FEET
MIN. FRONT YARD:	20 FEET
MIN. SIDE YARD:	NONE
 5. EXISTING AND INTENDED USE: GENERAL AVIATION FACILITY.
 6. ALL UTILITIES SHALL BE UNDERGROUND AND CONSTRUCTED TO THE CITY OF PORTLAND AND INDIVIDUAL UTILITY REQUIREMENTS.
 7. NORTHEAST AIR HAS A GROUND LEASE WITH THE CITY OF PORTLAND FOR THIS 45,180 SQUARED FOOT PARCEL AT THE PORTLAND INTERNATIONAL JETPORT - SHOWN AS PARCEL NO.7 ON THE ATTACHED EXHIBIT A.

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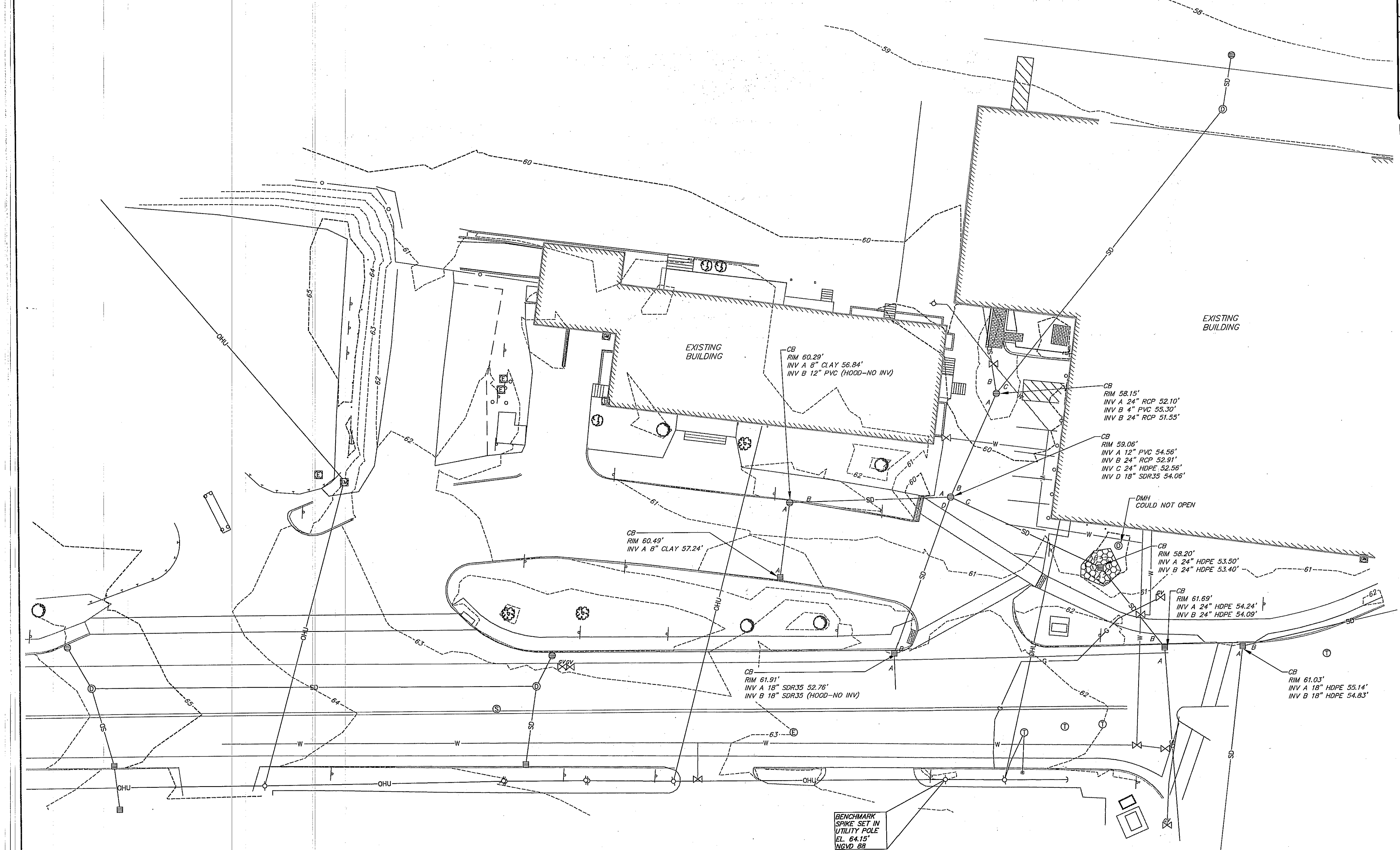
250 Goodard Rd.
Suite B
Lewiston, ME 04240
Tel.: 207-783-5656

EXISTING CONDITIONS PLAN
OF: NORTHEAST AIR-FIXED BASE OPERATOR
PORTLAND INTERNATIONAL JETPORT
PORTLAND, MAINE
FOR: NORTHEAST AIR
1011 WESTBROOK STREET
PORTLAND, MAINE 04102

PROJECT NO.	SCALE
15149	1" = 20'

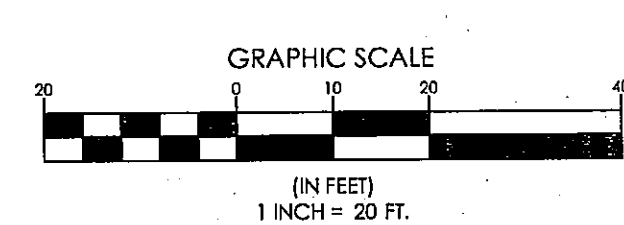
SHEET 2 OF 10

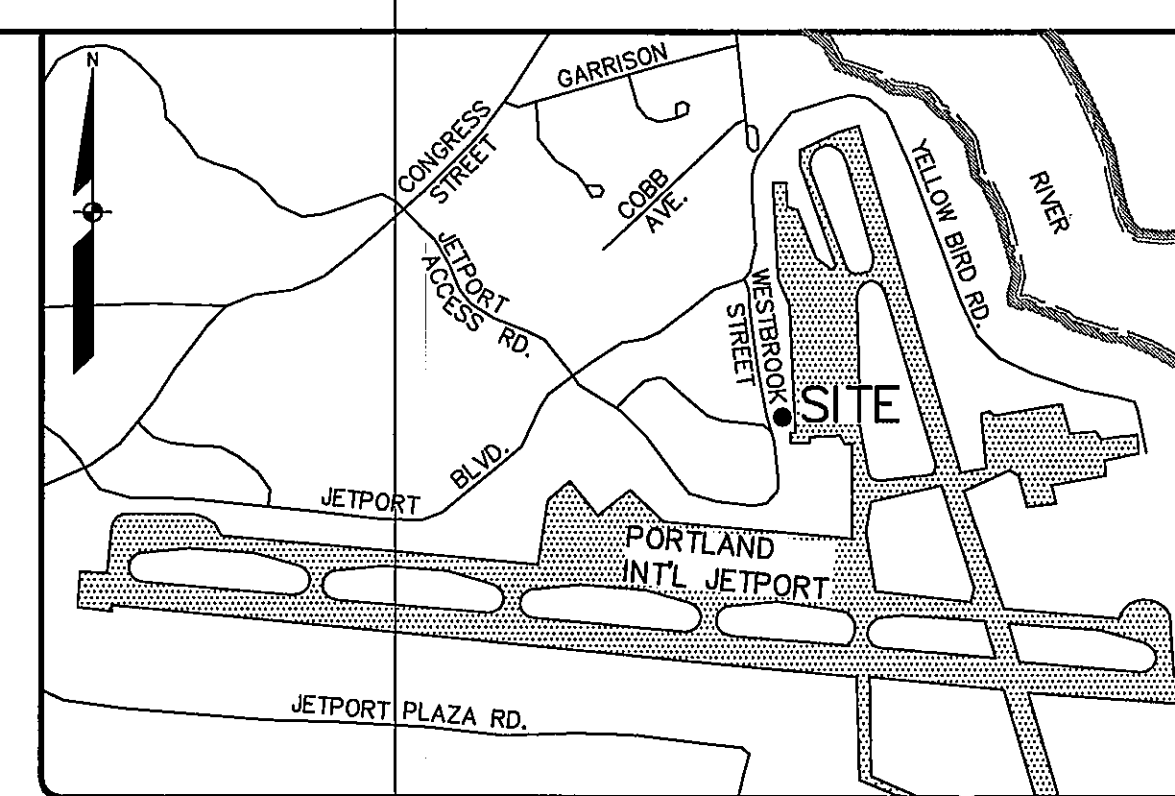
20'



LEGEND

LEGEND		EXISTING		EXISTING		EXISTING	
	PROPERTY LINE/R.O.W.		GUARD RAIL		ELECTRICAL MANHOLE		ELECTRICAL MANHOLE
	CENTERLINE		RETAINING WALL		TELEPHONE MANHOLE		TELEPHONE MANHOLE
	MONUMENT		DECIDUOUS TREE		UTILITY POLE		UTILITY POLE
	IRON PIPE/ROD		CONIFEROUS TREE		GUY WIRE		GUY WIRE
	BENCHMARK		SIGN		TRANSFORMER PAD		TRANSFORMER PAD
	BENCHMARK DESCRIPTION WITH ELEVATION		GAS		RIPRAP		RIPRAP
	BUILDING		GAS GATE VALVE				
	DECK/STEPS/OVERHANG		WATER				
	EDGE PAVEMENT		WATER GATE VALVE				
	EDGE CONCRETE		STORM DRAIN				
	PAVEMENT PAINT		DRAINAGE MANHOLE				
	CURB LINE		CATCH BASIN				
	CONTOURS		OVERHEAD UTILITY				
	CHAIN LINK FENCE		UNDERGROUND UTILITY				





N.T.S.

1. THE RECORD OWNER OF THE LOT IS THE CITY OF PORTLAND BY DEED RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS.
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3. PLAN ORIENTATION IS BASED ON AN ASSUMED COORDINATE SYSTEM. TOPOGRAPHIC INFORMATION FROM THIS IS REFERENCED TO THE NATIONAL VERTICAL GEODETIC DATUM OF 88 (NAVD 88), BASED ON USGS DIK J121 WITH A RECORD ELEVATION OF 62.87'.
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MIN. LOT SIZE: 20,000 S.F.
MIN. FRONTAGE: 50 FEET
MIN. FRONT YARD: 20 FEET
MIN. SIDE YARD: NONE
5. EXISTING AND INTENDED USE: GENERAL AVIATION FACILITY.
6. ALL UTILITIES SHALL BE UNDERGROUND AND CONSTRUCTED TO THE CITY OF PORTLAND AND INDIVIDUAL UTILITY REQUIREMENTS.
7. AN APPROVED SET OF PLANS AND ALL APPLICABLE PERMITS MUST BE AVAILABLE AT THE CONSTRUCTION SITE FOR DEVELOPER OR AN AUTHORIZED AGENT, MUST BE AVAILABLE AT ALL TIMES DURING CONSTRUCTION.
8. WARNING SIGNS, MARKERS, BARRICADES OR FLAGON, APPROPRIATE FOR THE TYPE OF CONSTRUCTION MUST BE EMPLOYED TO REGULATE TRAFFIC.
9. EXISTING STORM DRAIN SYSTEM MUST BE FLUSHED, SUGARS CLEANED AND DEBRIS REMOVED PRIOR TO CONSTRUCTION. ALL EXISTING UTILITY DITCHES OF THE CONSTRUCTION WITHIN THE PROJECT LIMITS AND ON AVIATION BOULEVARD.
10. PRIOR TO ANY SITE CONSTRUCTION ACTIVITIES THE CONTRACTOR SHALL CONTACT THE JETPORT OPERATIONS MANAGER AT 207-772-0466 AND ARRANGE FOR A PRE-CONSTRUCTION MEETING AT THE PROJECT SITE. THE CONTRACTOR SHALL HAVE A DETAILED SCHEDULE AND SHALL INCORPORATE ALL REQUIRED FENCE AND JUSTIFIED EXCEPTIONS TO THE SECURITY PROTOCOLS ARE MAINTAINED. THE CONTRACTOR OR CONTRACTOR'S PERSONAL AND EQUIPMENT ARE NOT ALLOWED WITHIN THE JETPORT SECURITY PERIMETER WITHOUT FIRST OBTAINING APPROPRIATE SECURITY CLEARANCE AND SUBMITTING A SECURITY PLAN AND A CONSTRUCTION WORK SCHEDULE THAT MUST BE APPROVED BY THE JETPORT OPERATIONS MANAGER.
11. ALL WORK REQUIRED BY PLAN NOTES AND NECESSARY TO COMPLETE THE PROJECT IN ITS ENTIRETY SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION WHEN NOT IDENTIFIED IN CONTRACT DOCUMENTS AND PAY ITEMS. NO EXTRA PAYMENT WILL BE MADE TO THE CONTRACTOR.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY SECURITY FENCING. THE CONTRACT DRAWINGS DEPICT PROPOSED LOCATIONS OF TEMPORARY AND PERMANENT SECURITY FENCING SUBJECT TO JETPORT AND TSA APPROVAL. PROPOSED TEMPORARY FENCING IS INTENDED TO BE IN ALL MOST, BUT NOT ALL WORK TO OCCUR OUTSIDE OF THE SECURE AREA. CONTRACTOR IS RESPONSIBLE FOR RELOCATING AND REMOVING FENCE AS NEEDED INCLUDING TEMPORARY AND PERMANENT SECURITY LOCATIONS. CONTRACTOR MUST OBTAIN JETPORT/TSA APPROVAL PRIOR TO ANY FENCE REMOVAL OR RELOCATION, AND MUST COORDINATE WORK WITH OWNER AND JETPORT OPERATIONS MANAGER.

[illegible]

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SITE PLAN
OF
NORTHEAST AIR-FIXED BASE OPERATOR
PORTLAND INTERNATIONAL JETPORT
PORTLAND, MAINE
FOR:
NORTHEAST AIR
1011 WESTBROOK STREET
PORTLAND, MAINE 04102

PROJECT NO.	SCALE
15149	1" = 20'

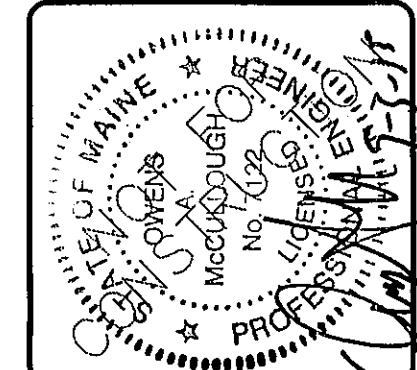
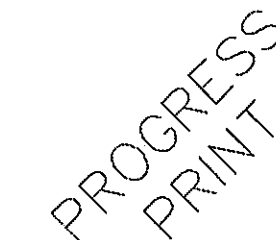
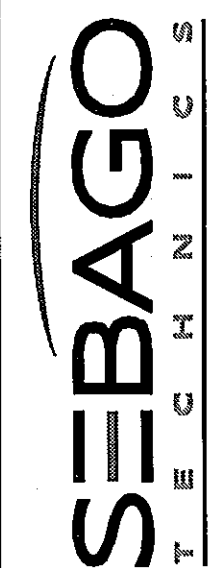
SHEET 3 OF 10

15149S.dwg, TAB:S



STORM DRAIN STRUCTURE DATA

LEGEND

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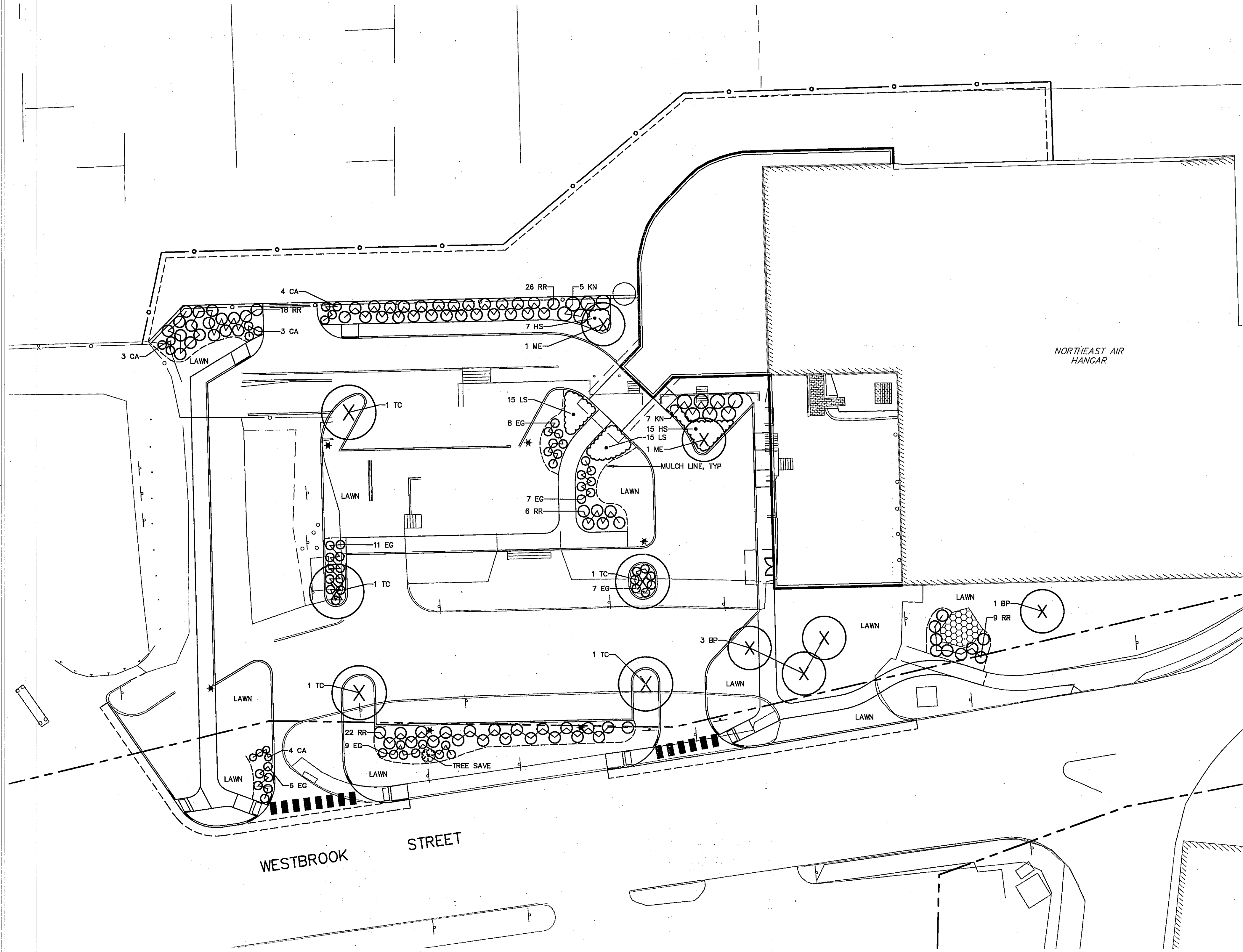
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GRADING AND UTILITY PLAN
OF: NORTHEAST AIR-FIXED BASE OPERATOR
PORTLAND INTERNATIONAL AIRPORT
PORTLAND, MAINE
FOR: NORTHEAST AIR
1011 WESTBROOK STREET
PORTLAND, MAINE 04102

PROJECT NO.	SCALE
15149	1" = 20'

TABLE 14-10 (continued)

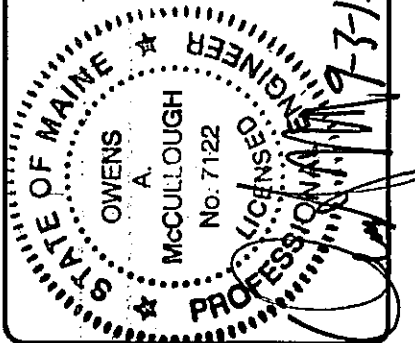
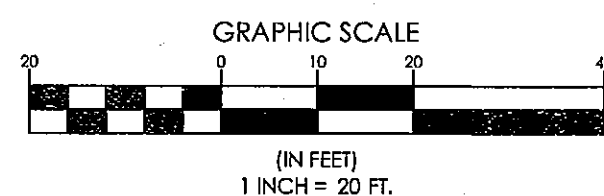


LEGEND

EXISTING	PROPOSED
PROPERTY LINE/R.O.W.	
BUILDING	
DECK/STEPS/OVERHANG	
EDGE PAVEMENT	
PAVEMENT SAWCUT	
EDGE CONCRETE	
CURB LINE	
CHAIN LINK FENCE	
GUARD RAIL	
RETAINING WALL	
DECIDUOUS TREE	
CONIFEROUS TREE	
MULCH LINE	
BOLLARD	
SIGN	
RIPRAP	

PLANT SCHEDULE:

KEY BOTANICAL NAME / COMMON NAME	SIZE / REMARKS
TC TILIA CORDATA / LINDEN	3 INCH CALIPER
ME MAGNOLIA X. ELIZABETH / YELLOW MAGNOLIA	6 FT. - 8 FT. MULTI
BP BETULA NIGRA 'HERITAGE' / HERITAGE BIRCH	8 FT. - 10 FT. MULTI
RR ROSA RUGOSA / SEA ROSE	NO. 5 CONTAINER
KN KALMIA X. 'NATHAN HALE' / MT. LAUREL	NO. 5 CONTAINER
EG EUONYMUS 'EMERALD GAIETY' / EUONYMUS	NO. 3 CONTAINER
GA CALAMAGROSTIS A. 'KARL FOERSTER' / REED GRASS	NO. 1 CONTAINER
HS HOSTA X. 'PATRIOT' / HOSTA	NO. 2 CONTAINER
LS LEUCANTHEMUM S. 'BECKY' / SHASTA DAISY	NO. 1 CONTAINER



DESIGNED	CHECKED
WTC	WTC
A. OAM 9/03/15 SUBMITTED TO CITY FOR SITE PLAN REVIEW	
REV: BY: DATE: STATUS:	
THIS PLAN HAS BEEN PREPARED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.	

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LANDSCAPE PLAN
OF
NORTHEAST AIR-FIXED BASE OPERATOR
PORTLAND INTERNATIONAL AIRPORT
PORTLAND, MAINE

FOR:
NORTHEAST AIR
101 WESTBROOK STREET
PORTLAND, MAINE 04102

PROJECT NO.	SCALE
15149	1" = 20'

EROSION AND SEDIMENTATION CONTROL NOTES

A. PRE-CONSTRUCTION PHASE

1. PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, FILTER FABRIC FENCING (SILT FENCE) WILL BE STAKED ACROSS THE SLOPE(S), ON THE CONTOUR AT OR JUST BELOW THE LIMITS OF CLEARING OR GRUBBING, AND/OR JUST ABOVE ANY ADJACENT PROPERTY LINE TO PREVENT EROSION AND TO PREVENT CONSTRUCTION RELATED EROSION. THE PLACEMENT OF SILT FENCES SHALL BE COMPLETED IN ACCORDANCE WITH GUIDELINES ESTABLISHED IN BEST MANAGEMENT PRACTICES AND IN ACCORDANCE WITH THE EROSION CONTROL PLAN AND DETAILS IN THE PLAN SET. THIS NETWORK IS TO BE MAINTAINED BY THE CONTRACTOR UNTIL ALL EXPOSED SLOPES HAVE AT LEAST 85%-90% VIGOROUS PERENNIAL VEGETATIVE COVER TO PREVENT EROSION.

2. PRIOR TO ANY CLEARING OR GRUBBING, A CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT THE INTERSECTION OF THE PROPOSED ROAD WITH WESTBROOK STREET TO AVOID TRACKING OF MUD, DUST AND DEBRIS FROM THE SITE.

3. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PREPARE A DETAILED SCHEDULE AND MARKED UP PLAN INDICATING AREAS AND COMPONENTS OF THE WORK AND KEY DATES SHOWING DATE OF DISTURBANCE, AND COMPLETION OF THE WORK. THE CONTRACTOR SHALL CONSTRUCTION MEETING WITH THE MUNICIPAL STAFF. THREE COPIES OF THE SCHEDULE AND MARKED UP PLAN SHALL BE PROVIDED TO THE MUNICIPALITY THREE DAYS PRIOR TO THE SCHEDULED PRE-CONSTRUCTION MEETING. SPECIAL ATTENTION SHALL BE GIVEN TO THE 14-DAY LIMIT OF DISTURBANCE IN THE SCHEDULE ADDRESSING TEMPORARY AND PERMANENT VEGETATION MEASURES.

B. CONSTRUCTION AND POST-CONSTRUCTION PHASE

1A. AREAS UNDERGOING ACTUAL CONSTRUCTION SHALL ONLY EXPOSE THAT AMOUNT OF MINERAL SOIL NECESSARY FOR PROGRESSIVE AND EFFICIENT CONSTRUCTION AND SHALL NOT EXCEED 14-DAYS. AREAS THAT WILL NOT BE COMPLETED (COVERED AND/OR FINISH GRADED) WITHIN FOURTEEN (14) DAYS OF DISTURBANCE SHALL BE ANCHORED WITH TEMPORARY EROSION CONTROL BLANKET OR MULCH AS DIRECTED BY THE INSPECTING ENGINEER AND AS SHOWN ON THE DESIGN PLANS. IF MULCH IS USED, HAY OR STRAW MULCH SHALL BE APPLIED SUCH THAT THE AREAS SHALL BE SUFFICIENTLY COVERED WITH MULCH TO AVOID ANY VISIBLE SOIL EXPOSURE. MULCH SHALL BE KEPT MOIST TO AVOID LOSS DUE TO WIND. EROSION CONTROL BLANKET SHALL BE APPLIED IN THE BASE OF ALL GRASSED WATERWAYS AND IN SLOPES WHICH EXCEED 15% AND ANY DISTURBED AREAS WITHIN 100' OF WETLANDS OR STREAMS. AREAS LOCATED WITHIN 100' OF STREAMS SHALL BE ANCHORED WITH TEMPORARY EROSION CONTROL WITHIN SEVEN (7) DAYS.

1B. IF DISTURBED AREAS DO NOT RECEIVE FINAL SEEDING BY SEPTEMBER 15TH OF THE YEAR OF CONSTRUCTION, THEN ALL DISTURBED AREAS SHALL BE SEED WITH A WINTER COVER CROP OF RYE AT THE RATE OF 3LBS./1,000 S.F. TO PROVIDE WINTER PROTECTION. WINTER SEEDINGS SHALL BE COVERED WITH MULCH SUCH THAT NO SOIL IS VISIBLE. EROSION CONTROL BLANKETS SHALL BE USED IN THE BASE OF ALL GRASSED WATERWAYS, ON SLOPES EQUAL TO OR GREATER THAN 15%, AND ANY DISTURBED AREAS WITHIN 100' OF WETLANDS OR STREAMS. EROSION CONTROL BLANKETS SHALL ALSO BE APPLIED FOR ADDITIONAL WINTER PROTECTION ALONG SIDE SLOPES OF GRASSED WATERWAYS AND IN ALL AREAS EQUAL TO OR GREATER THAN 8% SLOPE.

1C. DURING WINTER CONDITIONS, ALL APPLIED MULCHES SHALL BE ANCHORED WITH TEMPORARY EROSION CONTROL MEASURES. TEMPORARY EROSION CONTROLS SHALL CONSIST OF HAY OR STRAW MULCH APPLIED TO PROVIDE A MINIMUM UNIFORM MULCH DEPTH OF 4" OR IF BLOWN, APPLICATION AREA SHALL BE SUFFICIENTLY COVERED WITH MULCH TO AVOID ANY VISIBLE SOIL EXPOSURE.

2) ALL TOPSOIL SHALL BE COLLECTED, STOCKPILED, SEED WITH RYE AT 3LBS./1,000 S.F. AND MULCHED, AND RE-USED AS REQUIRED. SILTATION FENCING SHALL BE PLACED DOWN STOCKPILED LOAM. LOAM SHALL BE STOCKPILED AT LOCATIONS DESIGNATED BY THE OWNER AND INSPECTING ENGINEER.

3) ALL SILT FENCES AND/OR EROSION CONTROL MIX BERM SHALL BE INSTALLED ACCORDING TO THIS PLAN. THIS SHALL BE MAINTAINED DURING DEVELOPMENT TO REMOVE SEDIMENT FROM RUNOFF WATER. ALL THE SILT FENCES SHALL BE INSPECTED BEFORE AND AFTER ANY RAINFALL OR RUNOFF EVENT, MAINTAINED AND CLEANED UNTIL ALL AREAS HAVE AT LEAST 85%-90% VIGOROUS PERENNIAL VEGETATIVE COVER OF GRASSES.

4) A CONSTRUCTION ENTRANCE SHALL BE BUILT AT THE INTERSECTION OF THE EXISTING ROAD AND THE ACCESS DRIVE. ROADWAY AREAS SHALL BE PERIODICALLY WASHED TO AVOID TRACKING OF MUD, DUST OR DEBRIS FROM THE CONSTRUCTION AREA. DUST CONTROL DURING CONSTRUCTION SHALL BE ACHIEVED BY THE USE OF A WATERING TRUCK TO PERIODICALLY SPRINKLE THE EXPOSED ROADWAY AREAS AS NECESSARY TO REDUCE DUST DURING THE DRY MONTHS.

5) STONE CHECK DAMS MAY BE REMOVED ONLY AFTER THE ROADWAYS ARE PAVED AND THE VEGETATED SWALES ARE ESTABLISHED WITH AT LEAST 85%-90% OF VIGOROUS PERENNIAL GROWTH.

6) ALL AREAS SHALL BE SEEDDED AND STABILIZED IN ACCORDANCE WITH THE FOLLOWING VEGETATION PLAN.

C. VEGETATION PLAN

1. REVEGETATION MEASURES SHALL COMMENCE IMMEDIATELY UPON COMPLETION OF CONSTRUCTION OF THE ROADWAY IMPROVEMENTS. DISTURBED AREAS SHALL ALSO BE MULCHED AND ANCHORED PRIOR TO ANY STORM EVENT. SEE MULCHING REQUIREMENTS IN SECTION B (1A) ABOVE. FINAL SEEDING CANNOT BE ACCOMPLISHED BY SEPTEMBER 15TH, THEN ALL DISTURBED AREAS SHALL BE SEEDDED WITH A WINTER COVER CROP AT THE RATE OF 3LBS./1,000 S.F. TO PROVIDE WINTER PROTECTION. SEEDDED AREAS SHALL BE COVERED WITH EROSION CONTROL MESH. SEE WINTER PROTECTION REQUIREMENTS IN SECTION B (1B) ABOVE. REVEGETATION MEASURES SHALL CONSIST OF THE FOLLOWING:

a.) FOUR (4) INCHES OF LOAM WILL BE SPREAD OVER DISTURBED AREAS AND SMOOTHED TO A UNIFORM SURFACE. LOAM SHALL BE FREE OF SUBSOIL, CLAY LUMPS, STONES AND OTHER OBJECTS OVER 1" IN DIAMETER, AND WITHOUT WEEDS, ROOTS OR OTHER OBJECTIONABLE MATERIAL.

b.) SOILS TESTS SHALL BE TAKEN AT THE TIME OF SOIL STRIPPING TO DETERMINE FERTILIZATION REQUIREMENTS. SOILS TEST SHALL BE TAKEN PROMPTLY AS TO NOT INTERFERE WITH THE 14-DAY LIMIT ON SOIL EXPOSURE. BASED UPON TEST RESULTS, SOIL AMENDMENTS SHALL BE INCORPORATED INTO THE SOIL PRIOR TO FINAL SEEDING. IN LIEU OF SOIL TESTS, SOIL AMENDMENTS MAY BE APPLIED AS FOLLOWS:

ITEM	APPLICATION RATE
10-20-20 FERTILIZER (N-P205-K20 OR EQUAL)	18.4 LBS./1,000 S.F.
GROUND LIMESTONE (50% CALCIUM & MAGNESIUM OXIDE)	138 LBS./1,000 S.F.

c.) FOLLOWING SEED BED PREPARATION, SWALE AREAS, FILL AREAS AND BACK SLOPES SHALL BE SEEDDED AT A RATE OF 5 LBS./1,000 S.F. WITH A MIXTURE OF 35% CREEPING RED FESCUE, 6% RED TOP, 24% KENTUCKY BLUEGRASS, 10% PERENNIAL RYEGRASS, 20% ANNUAL RYEGRASS AND 5% WHITE DUTCH CLOVER.

d.) FOR 2:1 SLOPES, USE WILDFLOWER MIX. FOR ALL LAWN AREAS, USE LAWN MIX. BOTH SEED MIXES ARE PROVIDED IN THE PROJECT SPECIFICATIONS.

e.) EROSION CONTROL MESH SHALL BE APPLIED IN ACCORDANCE WITH THE PLANS OVER ALL FINISH-SEEDDED AREAS AS SPECIFIED ON THE DESIGN PLANS.

f.) ALL HAY BALE AND/OR FILTER FABRIC BARRIERS WILL REMAIN IN PLACE UNTIL SEEDINGS HAVE BECOME 85%-90% ESTABLISHED AND THEN REMOVED WITHIN 10 DAYS.

g.) THE INSPECTING ENGINEER AT HIS/HER DISCRETION MAY REQUIRE ADDITIONAL EROSION CONTROL MEASURES AND/OR SUPPLEMENTAL VEGETATIVE PROVISIONS TO MAINTAIN STABILITY OF EARTHWORKS AND FINISH-GRADED AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ANY SUPPLEMENTAL MEASURES AS DIRECTED BY THE INSPECTING ENGINEER. FAILURE TO COMPLY WITH THE ENGINEER'S DIRECTIONS WILL RESULT IN DISCONTINUATION OF CONSTRUCTION ACTIVITIES.

h.) VEGETATED SLOPES STEEPER THAN 2:1 WILL NOT BE PERMITTED ON THIS PROJECT.

D. CONSTRUCTION SCHEDULE

1. SITE IMPROVEMENTS WILL MOST LIKELY BEGIN IN FALL OF 2015 DEPENDING UPON FINAL AUTHORIZATION FROM OWNER. THE FOLLOWING SCHEDULE IS ANTICIPATED FOR THE CONSTRUCTION OF THE SITE IMPROVEMENTS.

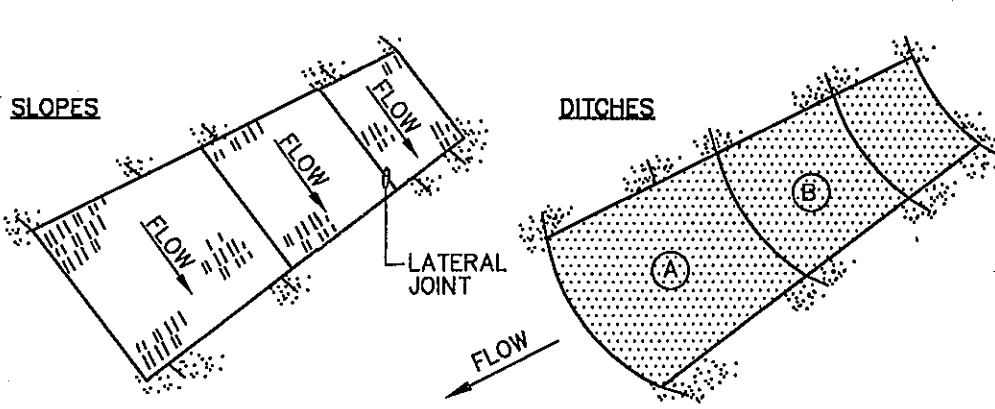
SCHEDULE	
1. ESTIMATED CONSTRUCTION TIME	6 MONTHS
2. EROSION CONTROL MEASURES PLACED	WEEK 1- WEEK 2
3. SITE CLEARING AND GRUBBING	WEEK 2 - WEEK 5
4. CONSTRUCTION OF ROAD SUBBASE FOR ACCESS	WEEK 5 - WEEK 13
5. UTILITY IMPROVEMENTS AND ROADWAY CONSTRUCTION	WEEK 7 - WEEK 24
6. MULCH SPREAD FOR WINTER EROSION CONTROL	OCT. 15 OF CONSTRUCTION YEAR
7. START FINAL SEEDINGS ON PREPARED AREAS	WEEK 6 (DURING GROWTH SEASON)
8. BIWEEKLY MONITORING OF VEGETATIVE GROWTH	WEEK 10
9. RE-SEEDING OF AREAS, IF NEEDED	WEEK 10
10. REMOVAL OF EROSION CONTROL DEVICES	UPON FINAL PROJECT COMPLETION

** DATES ARE SUBJECT TO CHANGE, DEPENDING ON CONSTRUCTION PROGRESS.

E. INSPECTIONS/MONITORING

1. MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION CYCLE. AFTER EACH RAINFALL, THE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES. THE CONTRACTOR SHALL PERFORM REPAIRS AS NEEDED TO ALLOW CONTINUED PROPER FUNCTIONING OF THE EROSION CONTROL MEASURE. THE CONTRACTOR SHALL PROVIDE THE MUNICIPALITY WITH WRITTEN DOCUMENTATION DESCRIBING DATES OF INSPECTIONS AND NECESSARY FOLLOW-UP WORK TO MAINTAIN EROSION CONTROL MEASURES MEETING THE REQUIREMENTS OF THIS PLAN.

2. FOLLOWING THE TEMPORARY AND/OR FINAL SEEDINGS, THE CONTRACTOR SHALL INSPECT THE WORK AREA SEMIMONTHLY UNTIL THE SEEDINGS HAVE BEEN ESTABLISHED. ESTABLISHED MEANS A MINIMUM OF 85%-90% OF AREAS VEGETATED WITH VIGOROUS GROWTH. RESEEDING SHALL BE CARRIED OUT BY THE CONTRACTOR WITH FOLLOW-UP INSPECTIONS IN THE EVENT OF ANY FAILURES UNTIL VEGETATION IS ADEQUATELY ESTABLISHED.

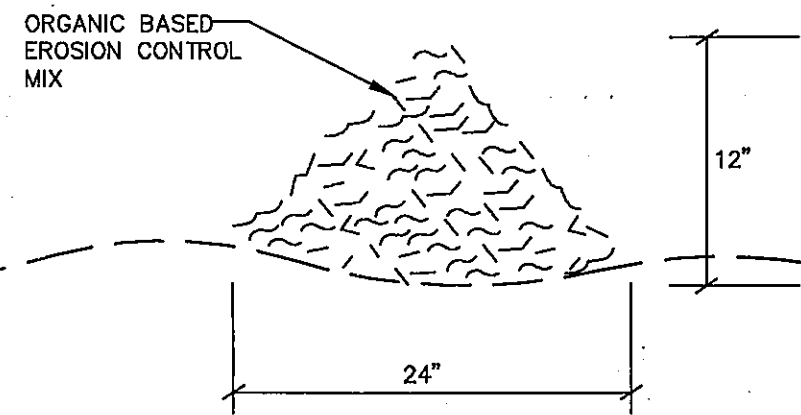


NOTES:

1. BURY THE TOP END OF THE MESH MATERIAL IN A 6" TRENCH AND BACKFILL AND TAMP TRENCHING SECURE END WITH STAPLES AT 6" SPACING, 4" DOWN FROM EXPOSED END.
2. FLOW DIRECTION JOINTS TO HAVE UPPER END OF LOWER STRIP BURIED WITH UPPER LAYERS OVERLAPPED 4" AND STAPLED. OVERLAP IS OVER A.
3. LATERAL JOINTS TO HAVE 4" OVERLAP OF STRIPS. STAPLE 18" ON CENTER.
4. STAPLE OUTSIDE LATERAL EDGE 2' ON CENTER.
5. WIRE STAPLES TO BE MIN. OF # 11 WIRE 6" LONG AND 1-1/2" WIDE.
6. USE NORTH AMERICAN GREEN DS 150 OR APPROVED EQUAL.

EROSION CONTROL BLANKET

NOT TO SCALE



COMPOSITION

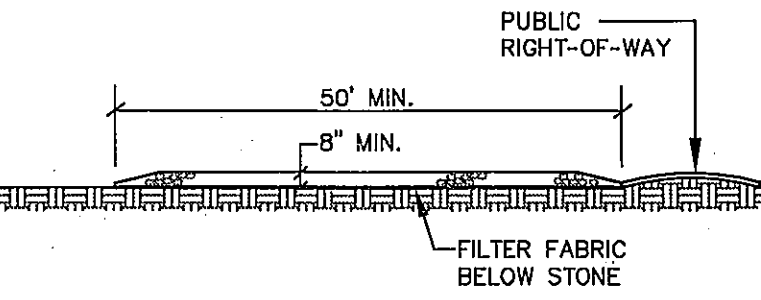
EROSION CONTROL MIX SHALL BE MANUFACTURED ON OR OFF THE PROJECT SITE SUCH THAT ITS COMPOSITION IS IN ACCORDANCE WITH THE MDEP MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL, LAST REVISED 3/2003 OR LATER. IT MUST CONSIST PRIMARILY OF ORGANIC MATERIAL, SEPARATED AT THE POINT OF GENERATION, AND MAY INCLUDE: SHREDDED BARK, STUMP GRINDINGS, COMPOSTED BARK, OR ACCEPTABLE MANUFACTURED PRODUCTS. WOOD AND BARK CHIPS, GROUND CONSTRUCTION DEBRIS OR REPROCESSED WOOD PRODUCTS WILL NOT BE ACCEPTABLE AS THE ORGANIC COMPONENT OF THE MIX.

INSTALLATION:

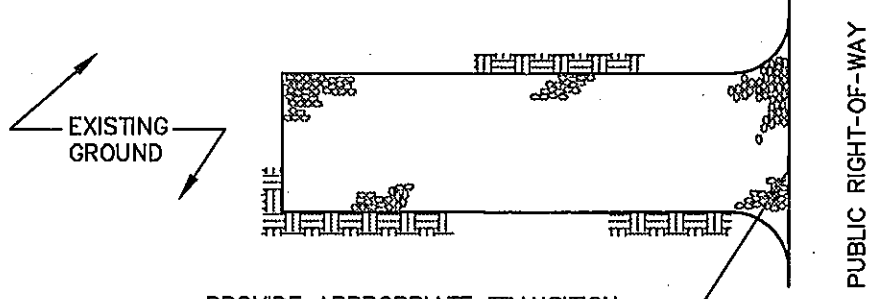
1. THE BARRIER MUST BE PLACED ACROSS THE SLOPE, ALONG THE CONTOUR.
2. EXISTING GROUND SHALL BE PREPARED SUCH THAT THE BARRIER MAY LIE NEARLY FLAT ALONG THE GROUND TO AVOID THE CREATION OF VOIDS AND BRIDGES IN ORDER TO MINIMIZE THE POTENTIAL OF WASH OUTS UNDER THE BARRIER.
3. THE BARRIER SHALL BE A MINIMUM OF 1 FOOT HIGH (AS MEASURED ON THE UPHILL SIDE) AND 2 FEET WIDE FOR SLOPES LESS THAN 5% IN GRADE AND SHALL BE WIDER TO ACCOMMODATE THE ADDITIONAL RUNOFF.
4. EROSION CONTROL MIX CAN BE INSTALLED WHERE SILT FENCE IS ILLUSTRATED ON THE DESIGN PLANS IN AREAS EXCEPT IN, BUT NOT LIMITED TO, THE FOLLOWING AREAS: WETLAND AREAS, AT POINTS OF CONCENTRATED FLOW, BELOW CULVERT OUTLET APRONS, AROUND CATCH BASINS AND CLOSED STORM SYSTEMS AND AT THE BOTTOM OF STEEP SLOPES THAT ARE MORE THAN 50 FEET FROM TOP TO BOTTOM.

EROSION CONTROL MIX BERM

NOT TO SCALE



PROFILE



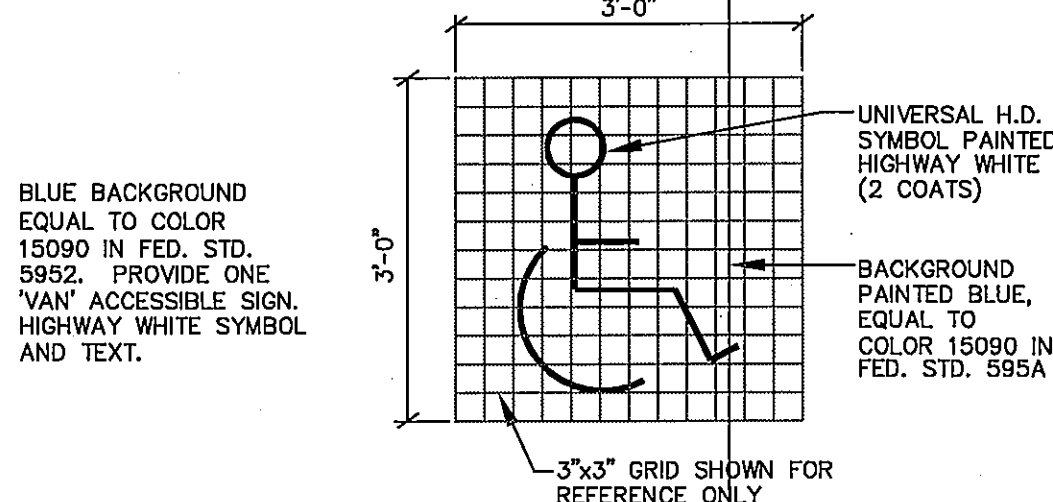
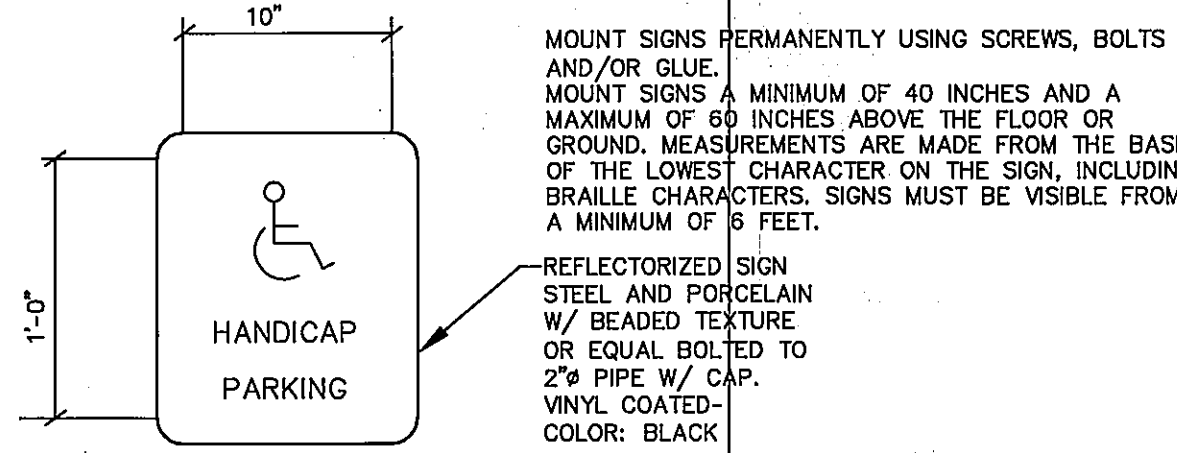
PLAN

NOTES:

1. STONE SIZE- AASHTO DESIGNATION M43, SIZE NO. 2 (2 1/2" TO 1 1/2"). USE CRUSHED STONE.
2. LENGTH- AS SHOWN ON PLANS, MIN. 50 FEET.
3. THICKNESS- NOT LESS THAN EIGHT (8) INCHES.
4. WIDTH- NOT LESS THAN FULL WIDTH OF ALL POINT OF INGRESS OR EGRESS.
5. MAINTENANCE- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.

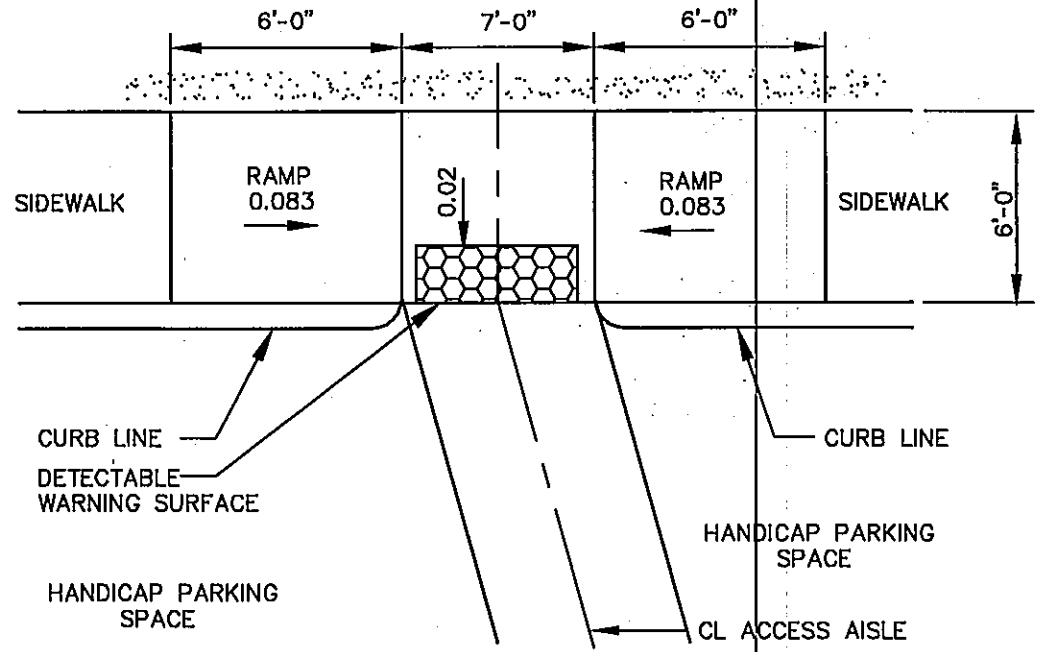
STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE



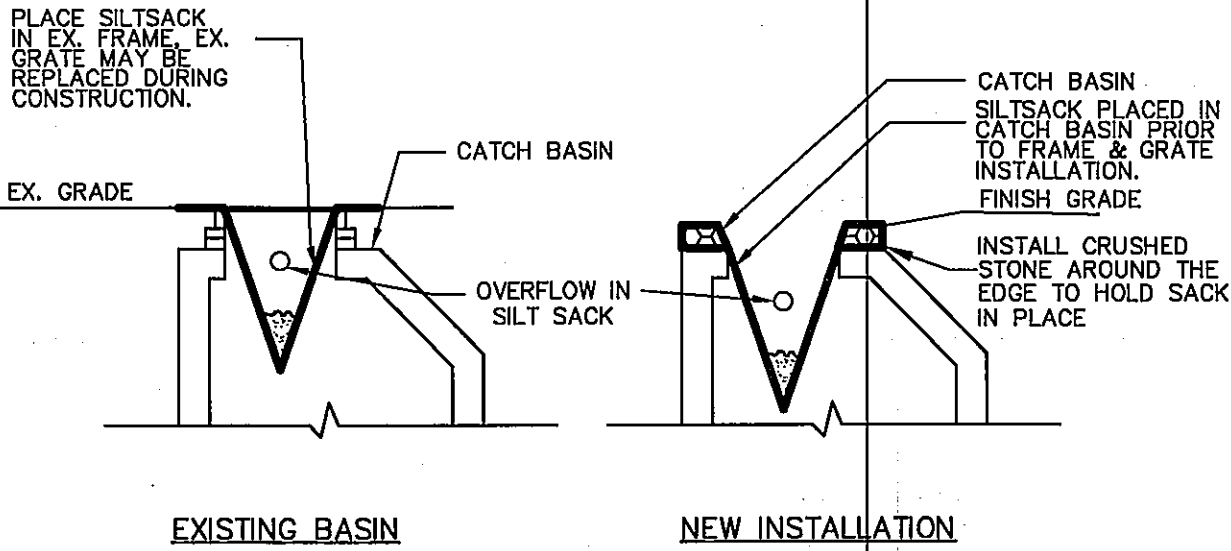
HANDICAP SIGNS

NOT TO SCALE



HANDICAP RAMP

NOT TO SCALE



NOTES:

PRIOR TO FINAL GRADING AND PAVING OPERATIONS BEGIN A CATCH BASIN INSERT (SUCH AS A SILT SACK OR A DANDY BAG) MUST BE INSTALLED IN EACH BASIN PER MANUFACTURES INSTRUCTIONS. HAY BALES SHOULD BE REMOVED ONCE INSERTS ARE INSTALLED.

CATCH BASIN PROTECTION DETAIL

NOT TO SCALE

MAINTENANCE PLAN OF STORMWATER MANAGEMENT FACILITIES

THE OWNER OR OPERATOR OF THE PROPOSED PROJECT WILL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL STORMWATER MANAGEMENT STRUCTURES. THE ESTABLISHMENT OF ANY CONTRACTOR'S SERVICES REQUIRED TO IMPLEMENT THE PROGRAM, AND THE KEEPING OF RECORDS AND MAINTENANCE LOG BOOK. RECORDS OF ALL INSPECTIONS AND MAINTENANCE WORK ACCOMPLISHED MUST BE KEPT ON FILE AND RETAINED FOR A MINIMUM 5 YEAR TIME SPAN. THE MAINTENANCE LOG BOOK WILL BE MADE AVAILABLE TO THE DEP UPON REQUEST. AT A MINIMUM, THE APPROPRIATE AND RELEVANT ACTIVITIES FOR EACH OF THE STORMWATER MANAGEMENT SYSTEMS WILL BE PERFORMED ON THE PRESCRIBED SCHEDULE.

A. SWEEPING

1. PAVED SURFACES SHALL BE SWEEPED OR VACUUMED AT LEAST TWICE ANNUALLY IN THE SPRING TO REMOVE ALL WINTER SAND, AND PERIODICALLY DURING THE YEAR ON AN AS-NEEDED BASIS TO MINIMIZE TRANSPORTATION OF SEDIMENT DURING RAINFALL EVENTS.

B. DITCHES, SWALES AND CULVERTS

1. OPEN SWALES AND DITCHES NEED TO BE INSPECTED ON A MONTHLY BASIS OR AFTER A MAJOR RAINFALL EVENT TO ASSURE THAT DEBRIS OR SEDIMENTS DO NOT REDUCE THE EFFECTIVENESS OF THE SYSTEM. DEBRIS NEEDS TO BE REMOVED AT THAT TIME. ANY SIGN OF EROSION OR BLOCKAGE SHALL BE IMMEDIATELY REPAIRED TO ASSURE A VIGOROUS GROWTH OF VEGETATION FOR THE STABILITY OF THE STRUCTURE AND PROPER FUNCTIONING.

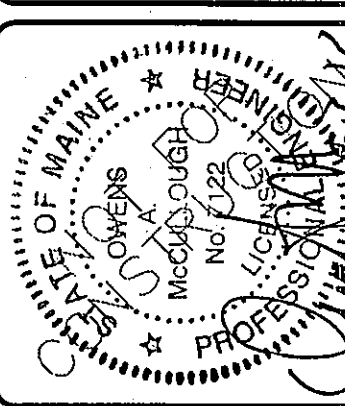
2. VEGETATED DITCHES SHOULD BE MOWED AT LEAST MONTHLY DURING THE GROWING SEASON. LARGER BRUSH OR TREES MUST NOT BE ALLOWED TO BECOME ESTABLISHED IN THE CHANNEL. ANY AREAS WHERE THE VEGETATION FAILS WILL BE SUBJECT TO EROSION AND SHOULD BE REPAIRED AND REVEGETATED.

3. RIPRAP DITCHES WHERE STONE IS DISPLACED SHOULD BE REPLACED AND CHINKED TO ASSURE STABILITY. WITH TIME, RIPRAP MAY NEED TO BE ADDED. VEGETATION GROWING THROUGH RIPRAP SHOULD BE REMOVED ON A YEARLY SCHEDULE.

NOTES

1. COMPLY WITH MDEP BMP'S FOR WINTER CONSTRUCTION.

PROGRESS PRINT



DESIGNED	CHECKED
OAM	OAM
SUBMITTED TO CITY FOR SITE PLAN REVIEW	
DATE:	STATUS:
9/03/15	DATE:
OAM	
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.	

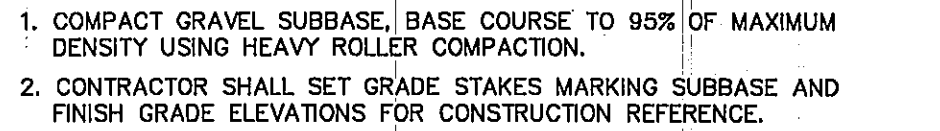
SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
South Portland, ME 04106
Tel. 207-200-2100

DETAILS OF:
NORTHEAST AIR-FIXED BASE OPERATOR
PORTLAND INTERNATIONAL JETPORT
PORTLAND, MAINE
FOR:
NORTHEAST AIR
1011 WESTBROOK STREET
PORTLAND, MAINE 04102

PROJECT NO.	SCALE
15149	NTS

SHEET 6 OF 10

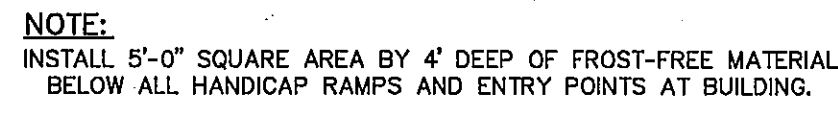
15148D.dwg, TAB:01



NOT TO SCALE



NOT TO SCALE

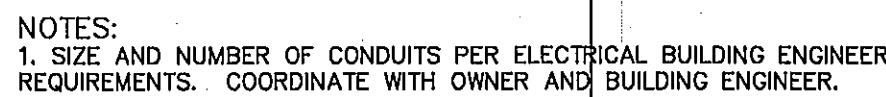


NOT TO SCALE



1. CONCRETE $f_c=4000$ psi. CONCRETE 3/4" AGG., 6 +/- 1% ENTRAINED AIR.
2. REINF. STEEL GRADE 60 NEW BARS.
3. PROVIDE 2 COATS BITUMINOUS DAMPROOFING FOR ALL CONCRETE BELOW GRADE.
4. INSTALL BASE 24" ABOVE FINISH GRADE.
5. LIGHT POLE TO BE 12' TALL CAST ALUMINUM (BLACK FINISH).
6. LIGHT FIXTURES SHALL BE EQUAL TO HUBBELL OUTDOOR LIGHTING LNC2 SERIES WITH 18 LED'S AND DIFFUSER.
7. CONTRACTOR SHALL SUPPLY OWNER WITH ONE (1) ADDITIONAL LIGHT POLE FOR STORAGE.

NOT TO SCALE



NOT TO SCALE



1. FRAME SHALL BE FOR 24" SQUARE GRATE- LEBARON TYPE "F" SQUARE FRAME (LF 245) 4 FLANGE OR ETHERIDGE SQUARE FRAME S24G. GRATE SHALL BE 24"x24" CAST IRON.
2. ENTIRE CATCH BASIN WITH EXCEPTION OF LEVELING BRICK FRAME AND GRATE TO BE PRECAST AS SINGLE PORTLAND CEMENT CONCRETE UNIT.

NOT TO SCALE

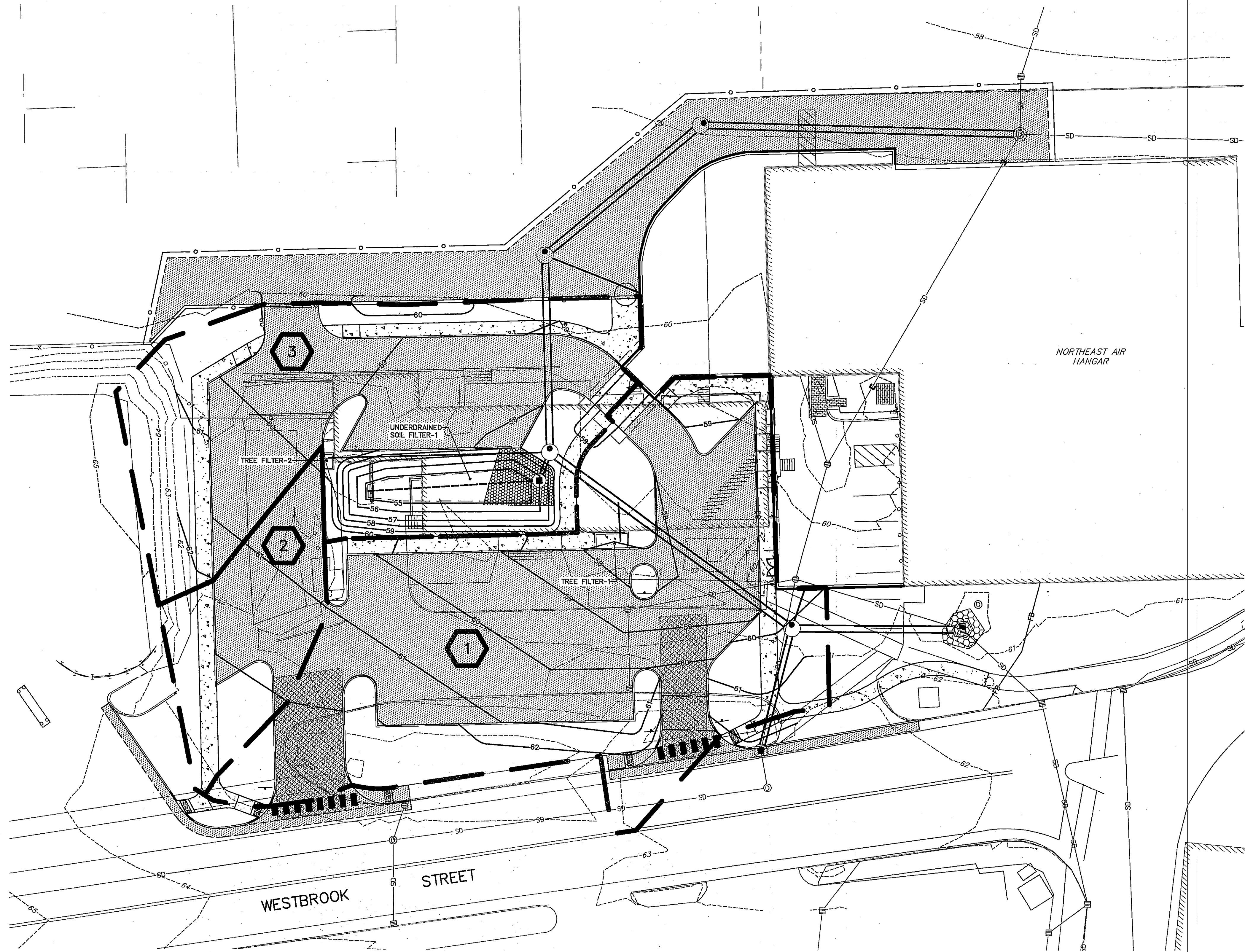


NOT TO SCALE



1. CONTRACTOR SHALL SUBMIT MOLD DIMENSIONS FOR APPROVAL BY ENGINEER PRIOR TO CONSTRUCTION.

NOT TO SCALE



1 AREA TREATED BY TREE BOX FILTER-1

2 AREA TREATED BY TREE BOX FILTER-2

3 AREA TREATED BY UNDERDRAINED SOIL FILTER-1

EXISTING	PROPOSED
— BUILDING	— BUILDING
— EDGE PAVEMENT	— EDGE PAVEMENT
— PAVEMENT SAWCUT	— PAVEMENT SAWCUT
— EDGE CONCRETE	— EDGE CONCRETE
— PAVEMENT PAINT	— PAVEMENT PAINT
— EDGE GRAVEL	— EDGE GRAVEL
— CURB LINE	— CURB LINE
---120--- ---118--- — CONTOURS	---120--- — CONTOURS
— CHAIN LINK FENCE	— CHAIN LINK FENCE
— SD — — STORM DRAIN — UNDER DRAIN	— SD — — STORM DRAIN — UNDER DRAIN
— DRAINAGE MANHOLE	— DRAINAGE MANHOLE
⊕ ⊗ ■ CATCH BASIN	⊕ ⊗ ■ CATCH BASIN
R/PRAP	R/PRAP

GRAPHIC SCALE

20 0 10 20

(IN FEET)
1 INCH = 20 FT.

FOR: **NORTHEAST AIR**
1011 WESTBROOK STREET
PORTLAND, MAINE 04102

SHEET10 OF10

SEBAGO
TECHNICS

WWW.SEBAGOTECHNICS.COM

75 John Roberts Rd.
Suite 1A
South Portland, ME 04106
Tel. 207-200-2100

250 Goddard Rd.
Suite B
Lewiston, ME 04240
Tel. 207-783-5856

[illegible]

DESIGNED	CHECKED
AGU	GAM

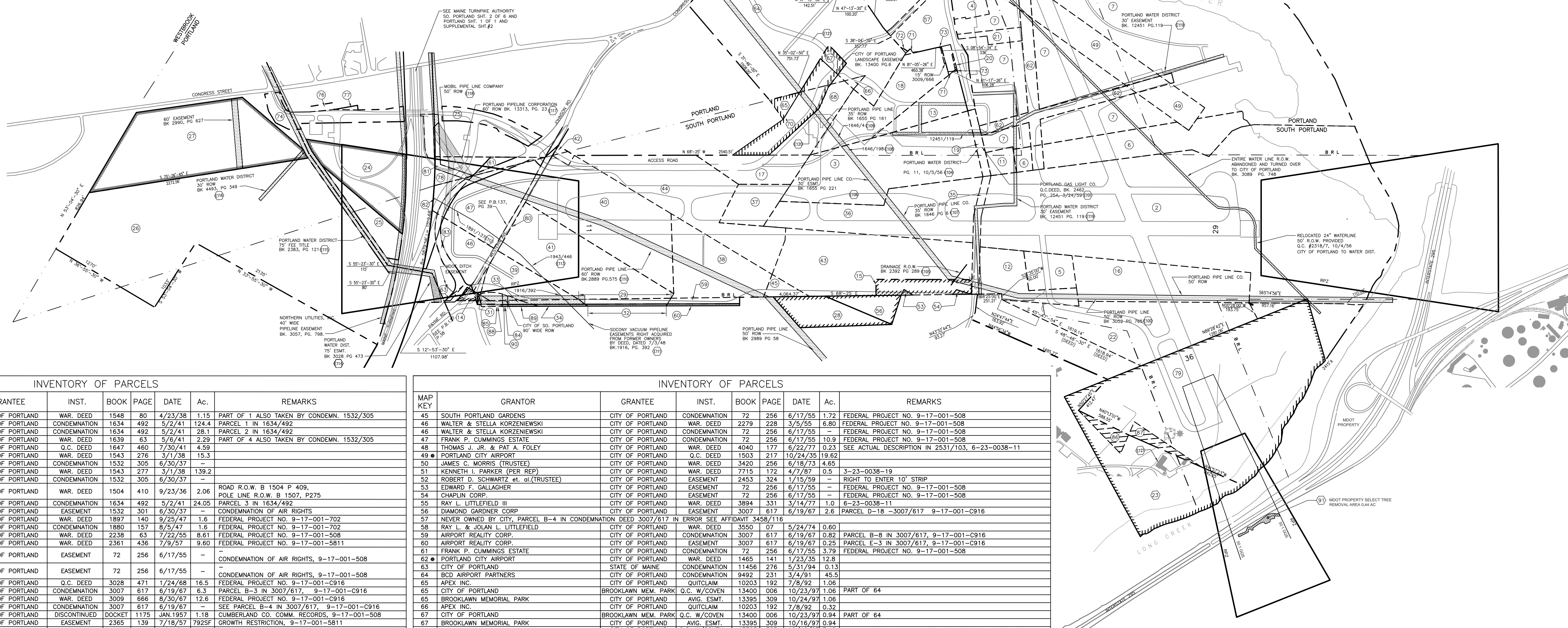
11

PROGRESS
PRINT

STATE OF MAINE
PROFESSIONAL ENGINEER
JAMES OWENS
McGOWAN
No. 122
LICENSED
5-31-12

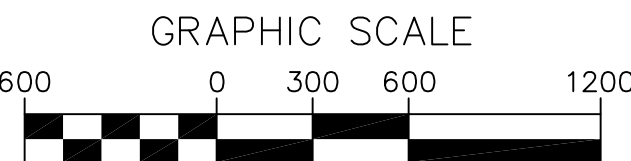
15149SWP.dwg, TAB: POST

LEGEND		
EXISTING	FUTURE	ITEM
		RUNWAY PROTECTION ZONE
		EASEMENT (AVIATIONAL)
		AIRPORT PROPERTY LINE
		CITY LINE
		BUILDING RESTRICTION LINE (BRL)
		WET LINES
		RIGHT OF WAY EASEMENTS-UTILITIES
		MEMORANDUM OF AGREEMENT (MOA) FOR ACCESS
		PROPERTY PARCEL
		EASEMENT PARCEL / MOA AREA

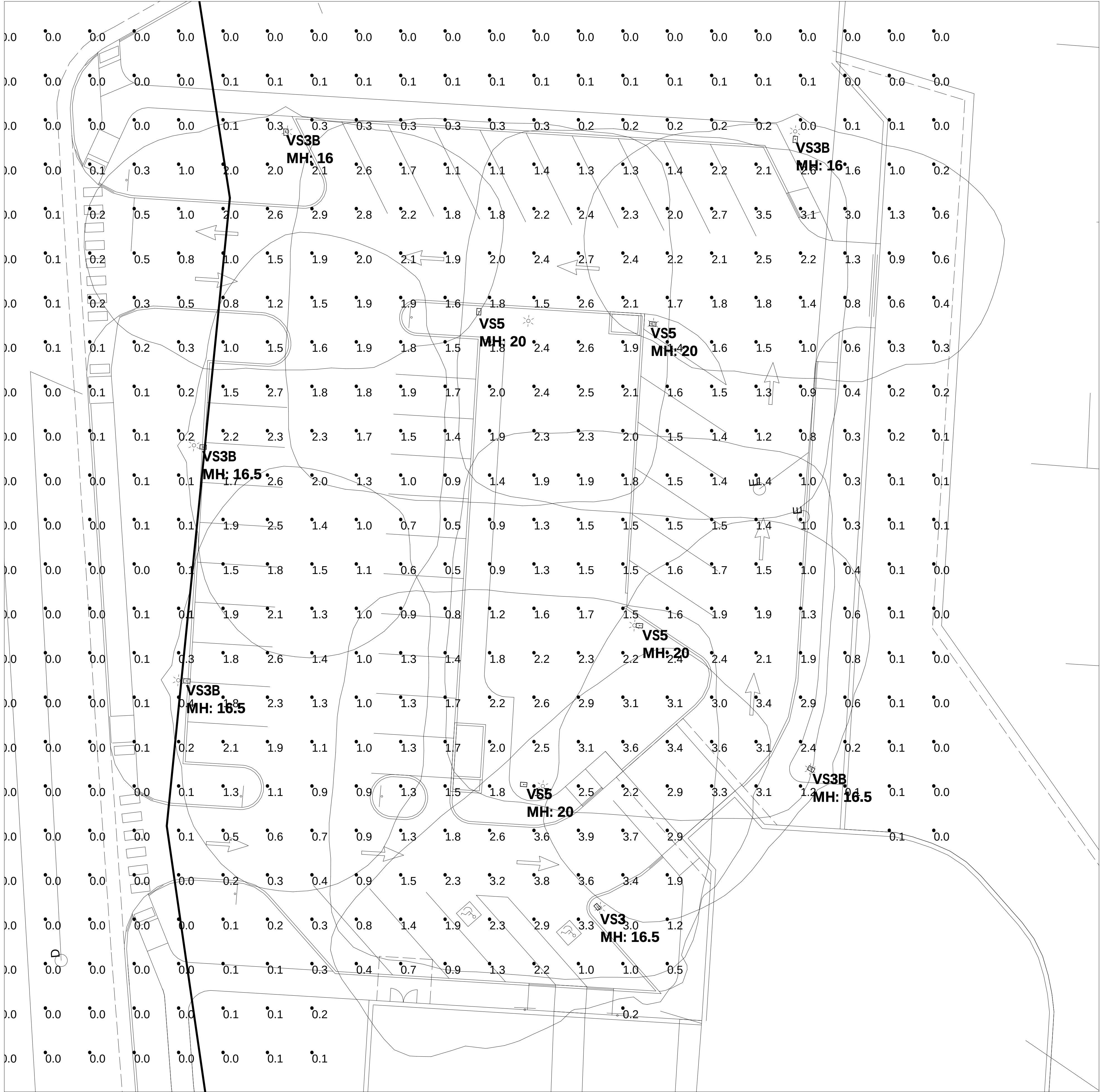


MAP KEY	GRANTOR	GRANTEE	INST.	BOOK	PAGE	DATE	Ac.	REMARKS
45	SOUTH PORTLAND GARDENS	CITY OF PORTLAND	CONDEMNATION	72	256	6/17/55	1.72	FEDERAL PROJECT NO. 9-17-001-508
46	WALTER & STELLA KORZENIEWSKI	CITY OF PORTLAND	WAR. DEED	2279	228	3/5/55	6.80	FEDERAL PROJECT NO. 9-17-001-508
46	WALTER & STELLA KORZENIEWSKI	CITY OF PORTLAND	CONDEMNATION	72	256	6/17/55	1.72	FEDERAL PROJECT NO. 9-17-001-508
47	FRANK P. CUMMINGS ESTATE	CITY OF PORTLAND	WAR. DEED	72	256	6/17/55	10.9	FEDERAL PROJECT NO. 9-17-001-508
47	FRANK P. CUMMINGS ESTATE	CITY OF PORTLAND	WAR. DEED	4040	331	1/22/77	0.23	SEE ACTUAL DESCRIPTION IN 2531/103, 8-23-0038-11
48	PORTLAND CITY AIRPORT	CITY OF PORTLAND	G.C. DEED	1503	217	10/24/35	19.62	
50	JAMES C. MORRIS (TRUSTEE)	CITY OF PORTLAND	WAR. DEED	3420	256	6/18/73	4.65	
51	KATHERINE L. PARKER (PER REP)	CITY OF PORTLAND	WAR. DEED	7715	172	4/8/77	0.82	3-23-0038-19
52	ROBERT D. SCHWARTZ #1 & 2 (TRUSTEE)	CITY OF PORTLAND	EASEMENT	2453	324	1/15/98	1.5	RIGHT TO ENTER 10' STRIP
53	EDWARD F. GALLAGHER	CITY OF PORTLAND	EASEMENT	72	256	6/17/55	1.72	FEDERAL PROJECT NO. 9-17-001-508
54	CHARLIN CORP.	CITY OF PORTLAND	EASEMENT	72	256	6/17/55	1.72	FEDERAL PROJECT NO. 9-17-001-508
55	RAY LITTLEFIELD III	CITY OF PORTLAND	WAR. DEED	3884	331	1/14/77	0.11	3-23-0038-11
56	DIAMOND GARDNER CORP.	CITY OF PORTLAND	EASEMENT	3007	617	1/9/67	2.6	PARCEL D-18 -3007/617 9-17-001-0916
57	NEVER OWNED BY CITY, PARCEL B-4 IN CONDEMNATION DEED 3007/617 IN ERROR SEE AFFIDAVIT 3458/116							
58	RAY L. & JOUAN L. LITTLEFIELD	CITY OF PORTLAND	WAR. DEED	3550	07	5/24/74	0.60	
59	REALITY CORP.	CITY OF PORTLAND	CONDEMNATION	3007	617	6/18/67	0.82	PARCEL B-8 IN 3007/617, 9-17-001-0916
60	REALITY CORP.	CITY OF PORTLAND	EASEMENT	3007	617	6/19/67	0.25	PARCEL E-3 IN 3007/617, 9-17-001-0916
61	FRANK P. CUMMINGS ESTATE	CITY OF PORTLAND	CONDEMNATION	72	256	6/17/55	3.79	FEDERAL PROJECT NO. 9-17-001-508
62	PORTLAND CITY AIRPORT	CITY OF PORTLAND	WAR. DEED	1465	141	1/23/35	12.8	
63	CITY OF PORTLAND	STATE OF MAINE	CONDEMNATION	11456	276	5/1/76	0.11	
63	BCD AIRPORT PARTNERS	CITY OF PORTLAND	CONDEMNATION	9492	231	3/4/91	45.5	
65	APEX INC.	CITY OF PORTLAND	QUITCLAIM	10203	192	7/8/92	1.06	
65	CITY OF PORTLAND	BROOKLAWN MEM. PARK	CITY OF PORTLAND	W.C/COVEN	13400	006	10/23/97	1.06
66	BROOKLAWN MEMORIAL PARK	CITY OF PORTLAND	AVG. ESMT.	13395	309	10/24/97	1.06	PART OF 64
66	APEX INC.	CITY OF PORTLAND	QUITCLAIM	10203	192	7/8/92	0.32	
67	CITY OF PORTLAND	BROOKLAWN MEM. PARK	CITY OF PORTLAND	W.C/COVEN	13400	006	10/23/97	0.94
67	BROOKLAWN MEMORIAL PARK	CITY OF PORTLAND	AVG. ESMT.	13395	309	10/16/97	0.94	PART OF 64
68	BROOKLAWN MEMORIAL PARK	CITY OF PORTLAND	CITY OF PORTLAND	W.C/COVEN	13395	305	10/17/97	0.94
68	THOMAS A. TOYE , III	CITY OF PORTLAND	CITY OF PORTLAND	W.C/COVEN	13434	266	10/16/97	1.28
70	BROOKLAWN MEMORIAL PARK	CITY OF PORTLAND	AVG. ESMT.	13395	309	10/24/97	6.23	
71	TOYE AIRPORT PARK LLC	CITY OF PORTLAND	WAR. DEED	16971	184	11/19/01	0.06	
71	TOYE AIRPORT PARK LLC	CITY OF PORTLAND	W.C/COVEN	16971	193	11/19/01	0.02	
71	TOYE AIRPORT PARK LLC	TOYE AIRPORT PARK LLC	QUITCLAIM	16971	193	11/19/01	0.02	
74	MAINE TURNPIKE AUTHORITY	CITY OF PORTLAND	CITY OF PORTLAND	W.C/COVEN	21040	64	3/31/04	0.14
74	MAINE TURNPIKE AUTHORITY	CITY OF PORTLAND	CITY OF PORTLAND	W.C/COVEN	21040	64	3/31/04	0.37
74	MAINE TURNPIKE AUTHORITY	CITY OF PORTLAND	CITY OF PORTLAND	W.C/COVEN	21040	74	3/31/04	0.54
74	MAINE TURNPIKE AUTHORITY	CITY OF PORTLAND	CITY OF PORTLAND	W.C/COVEN	21040	74	3/31/04	0.13
74	CITY OF PORTLAND	MAINE TURNPIKE AUTHORITY	CITY OF PORTLAND	W.C/COVEN	21040	60	3/31/04	4.95
74	STATE OF MAINE	CITY OF PORTLAND	RELEASE DEED	17126	328	12/26/01	17.04	ACQUIRED AIR 3-23-0038-54
79	STATE OF MAINE	CITY OF PORTLAND	AVG. ESMT.	17126	328	12/26/01	0.54	ACQUIRED AIR 3-23-0038-54
80	STATE OF MAINE	CITY OF PORTLAND	VACATION	19510	56	6/6/03		VACATION OF JOHNSON ROAD/WESTERN AVENUE, LAND SWAP
81	PORTLAND PIPE LINE CORPORATION	CITY OF PORTLAND	RELEASE	14138	238	10/24/98		RELEASE OF EASEMENT WITH COVENANT
83	MOORE PIPE LINE COMPANY	CITY OF PORTLAND	RELEASE	15081	274	10/01/99		RELEASE OF EASEMENT WITH COVENANT
83	CITY OF PORTLAND	STATE OF MAINE	CONDEMNATION	15801	296	10/24/90	5.91	JOHNSON ROAD/WESTERN AVENUE RELOCATION, LAND SWAP
84	CITY OF SOUTH PORTLAND	CITY OF PORTLAND	RELEASE	23141	42	8/01/05	2.32	ORIGINAL DEED 4940/8; A PORTION 4-23-82 MK 4947 PG.30
85	CITY OF SOUTH PORTLAND	CITY OF PORTLAND	CITY COUNCIL ORDER	23154	28	9/15/05		DISCONTINUANCE OF A PORTION OF JETPORT PLAZA ROAD (P29)
86	CITY OF SOUTH PORTLAND	STATE OF MAINE	CONDEMNATION	24337	300	9/05/06	1.14	LAND SWAP RUNWAY 36 APPROACH / FAA APPROVAL 3-1-07
87	STATE OF MAINE	CITY OF PORTLAND	CONDEMNATION	24337	300	9/05/06	1.14	LAND SWAP RUNWAY 36 APPROACH
88	JETPORT PROPERTIES, LLC	CITY OF PORTLAND	LEASE	25698	194	12/07/07	0.77	LEASE / FAA APPROVAL 6-11-08
89	JETPORT PROPERTIES, LLC	CITY OF PORTLAND	LEASE	25698	194	12/07/07	0.40	LEASE / FAA APPROVAL 6-11-08
90	CITY OF PORTLAND	CITY OF PORTLAND	EASEMENT	25698	194	12/07/07	0.18	RIGHT-OF-WAY
91	STATE OF MAINE	CITY OF PORTLAND	MOA			7/01/11	0.14	OBSTRUCTION REMOVAL MEMORANDUM OF AGREEMENT FOR ACCESS

1. THIS IS AN EXHIBIT A PROPERTY MAP, PART OF THE AIRPORT IMPROVEMENT PROGRAM FEDERAL GRANT APPLICATION. IT IS NOT A BOUNDARY SURVEY. THE PRIMARY INTENT IS TO IDENTIFY ALL LAND WHICH IS DESIGNATED AIRPORT PROPERTY AND TO PROVIDE AN INVENTORY OF ALL PARCELS WHICH MAKE UP THE AIRPORT. PHYSICAL SURVEY OF BOUNDARIES IS GENERALLY NOT REQUIRED. REFER TO AC 150/5100-17.
2. THE DESCRIPTION OF PARCEL NO. 10 INCLUDES OTHER AVIGATIONAL EASEMENTS WHICH WERE LATER DELETED WHEN THE PARCELS WERE ACQUIRED BY THE CITY OF PORTLAND.
3. PARCEL NO. 49 INCLUDES PORTIONS OF PARCEL NO. 62 WHICH HAD BEEN PREVIOUSLY CONVEYED.
4. "*" INDICATES PARCELS THAT COMPRISE LOTS OF AP-4 AFFECTED LAND (C.A.S. DOCKET NO. S-904-17-19).
5. PORTLANDS ACQUIRED UNDER CITY COUNCIL ORDER, DATED JUNE 20, 1955, RECORDED IN THE PORTLAND CITY CLERKS RECORDS IN VOLUME 72, PAGE 256, SEE AFFIDAVIT OF ELIZABETH L. BOYNTON, DATED AUGUST 4, 1997, RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 13265, PAGE 102.
6. REFERENCE IS MADE TO THE EXHIBIT "A" DOCUMENT FOR THE PORTLAND INTERNATIONAL JETPORT ON FILE AT THE TERMINAL AT THE AIRPORT MANAGER'S OFFICE, 1001 WESTBROOK STREET, PORTLAND MAINE 04102.



Sheet	12	of	12
D	AS TITLED		
Project No.	2900	PORTLAND INTERNATIONAL JETPORT	
Proj. Manager	MJD		
Proj. Designer	DDA		
Drawn By	PBF		
Checked By	DDA		
Scale	1"=500'		
Approved	DDA		
Date	01.23.13		
		PORTLAND	MAINE
		Rev.	Description
		1	DDA UPDATED INFO- 76, 84, 86, 88, 89
		2	DDA ADDED MOA 91 AND EASEMENTS E'20 & E'21
			DDA 1/23/13
			DDA 11/17/09
			Date



- NOTES:
- 1) EXACT MOUNTING DETAILS TO BE DETERMINED AT JOBSITE BY OTHERS.
 - 2) CALCULATIONS MAY SHOW THE EFFECT OF SHADOWING CAUSED BY BUILDINGS AND OBJECTS WITHIN THE CALCULATED SPACE OR IN THE SITE AREA.
 - 3) READINGS SHOWN ARE INITIAL HORIZONTAL FOOTCANDLES ON A FLAT SITE UNLESS OTHERWISE INDICATED.
 - 4) THIS CALCULATION IS BASED ON LIMITED INFORMATION SUPPLIED BY OTHERS TO SWANEY LIGHTING ASSOCIATES AND STANDARD ASSUMPTIONS OF THE SPACE AND/OR SITE.
 - 5) CONFORMANCE TO CODES AND OTHER LOCAL REQUIREMENTS AS DETERMINED BY THE AHJ ARE THE RESPONSIBILITY OF THE OWNER AND/OR THE OWNER'S REPRESENTATIVE.
 - 6) THIS LAYOUT DRAWING MUST BE COORDINATED WITH THE SITE LOCATION FOR CORRECT FIXTURE ORIENTATION.
 - 7) CHECK GRAPHIC SCALE. DOCUMENTS PRINTED OR PLOTTED FROM ELECTRONIC FILES MAY OCCUR AT OTHER THAN THE DESIRED OR ASSUMED GRAPHIC SCALES. IT IS THE RESPONSIBILITY OF THE RECIPIENT TO VERIFY THAT THE PRINTED OR PLOTTED-TO-SCALE DRAWING IS PRINTED TO SCALE.

Plan 12

Calculation Summary					
Label	Avg	Max	Min	Avg/Min	Max/Min
PARKING	1.69	4.0	0.3	5.63	13.33
SITE	0.84	3.9	0.0	N.A.	N.A.

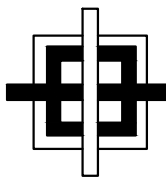
Luminaire Schedule (note fixture catalogue numbers are not complete)						
Type	Symbol	Qty	Lum. Lumens	LLF	Lum. Watts	Description
VS3	☐→	1	6422	0.900	70	30NB-70-T3-5K
VS5	☐→	4	6714	0.900	70	30NB-70-T5QM
VS3B	☐→	5	4852	0.900	70	VP-S_30NB-70_BLC_5K



N O R T H E A S T A I R

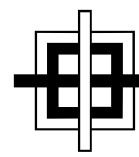
P O R T L A N D I N T E R N A T I O N A L J E T P O R T

1011 WESTBROOK STREET



PORTLAND, MAINE 04102

Plan 13



GRANT HAYS
ASSOCIATES

ARCHITECTURE & INTERIOR DESIGN
P.O. BOX 6179 FALMOUTH MAINE 04105
207.871.5900 www.granthays.com

DATE

REVISION

DRAWING NAME



ABBREVIATIONS

AFF ALUM or AL AWP	ABOVE FINISH FLOOR ALUMINUM ACOUSTICAL WALL PANEL	HC HD WD HDR HDWE HM HORIZ HT	HANDICAP HARDWOOD HEADER HARDWARE HOLLOW METAL HORIZONTAL HEIGHT	S SAT	SOUTH SUSPENDED ACOUSTICAL TILE CEILING
BIT BM BOT BRG BRK	BITUMINOUS BENCH MARK BOTTOM BEARING BRICK	ID IF IN INSUL INT	INSIDE DIAMETER INSIDE FACE INCHES INSULATION INTERIOR	SCH SCHED SECT SGS	SHOWER CURTAIN SOAP DISPENSER SCHEDULE SECTION SUSPENDED GYPSUM BOARD CEILING
C CAB CCB CCC CH	CARPET CABINET CHALK BOARD CENTER TO CENTER CONCRETE FLOOR WITH HARDENER CONTROL JOINT CENTER LINE CEILING CONCRETE MASONRY UNIT CONCRETE CONTINUOUS CONSTRUCTION CONTRACTOR CERAMIC TILE	JNT or JT KEC KF	JOINT KITCHEN EQUIPMENT CONSULTANT KICK PLATE	SGHT SGIM SGUND SGPEC SQ STD STL STRUT SV	SHEET SIMILAR SANITARY NAPKIN DISPOSAL SPECIFICATIONS SQUARE SYNTHETIC SPORTS SURFACE STANDARD STEEL STRUCTURAL STRAIGHT VINYL BASE SHEET VINYL
CL CMU CLG CONC CONT CONST CONTR CT	CL CMU CLG CONC CONT CONST CONTR CT	L LAB LNL LOC LS	LAVATORY LABEL (FIRE) LINTEL LOCATION LOCKSET	T TB TH THK TO TOB TOM TOW TF TYP	TEMPERED (GLASS) TACK BOARD THERMAL (INSULATED) THICKNESS TOP OF TOP OF BEAM TOP OF MASONRY TOP OF WALL TOILET PAPER DISPENSER TYPICAL
DBL DC DIA DIM DNA DR DTL DWG	DOUBLE DOOR CLOSER DIAMETER DIMENSION DOES NOT APPLY DOOR DETAIL DRAWING	M MAS MAX MB MECH MPCR MIN MISC MO MR MRGB	MARBLE MASONRY MAXIMUM MARKER BOARD MECHANICAL MANUFACTURER MINIMUM MISCELLANEOUS MASONRY OPENING NOT OPENING MOISTURE RESISTANT GYPSUM BOARD METAL	VB VCT VERT VWC	VAPOR BARRIER VINYL COMPOSITION TILE VERTICAL VINYL WALL COVERING
E EIA EJ ELEV ELEV EMHO	EAST EACH EACH FACE EXPANSION JOINT ELEVATION ELECTRICAL ELEVATOR ELECTROMAGNETIC HOLD OPEN	MTL	METAL	W WC WD WF WG WP	WEST WITH WATER CLOSET WOOD WATER FOUNTAIN WIRE GLASS WOOD PANELING
EQ EW EWC EXIST OF (E) EXP EXT	EACH WAY ELECTRIC WATER COOLER EXISTING EXPANSION EXTERIOR	OA OC OD OPNG OPP	OVERALL ON CENTER OUTSIDE DIAMETER OUTSIDE FACE OPENING OPPOSITE		
FCS FD FDN FE FFE FIN FIN FL or FF FIN GR FL FR FRMG FTV FWC	FLOOR COATING SYSTEM FLOOR DRAIN FOUNDATION FIRE EXTINGUISHER FINISH FLOOR ELEVATION FINISH FINISH FLOOR FINISH GRADE FLOOR FIRE RATING FRAMING FEET (FOOT) FIELD VERIFY FABRIC WALL COVERING	P PTD PB PL PLY WD PNL PS P.T. PT & D PTN	PAINT PAINTED PANIC BAR PLATE PLYWOOD PANEL PASSAGE LATCH SET PRESSURE TREATED PAPER TOWEL & WASTE DISPENSER PARTITION		
G GA GALV GB GC GWB	GRANITE GAUGE GALVANIZED GRAB BARS GENERAL CONTRACTOR GYPSUM WALL BOARD	RD RE REF REINF REQD RM RO	ROOF DRAIN REFER REFRIGERATOR REINFORCED REQUIRED ROOM ROUGH OPENING		

GENERAL NOTES

1. ALL WORK SHALL CONFORM TO LOCAL AND STATE LAWS, ORDINANCES AND PREVAILING EDITIONS OF ADOPTED BUILDING CODES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE ALL PERMITS FOR WORK.
2. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO COMMENCING THE WORK AND REPORT ANY DISCREPANCIES TO THE ARCHITECT. CONTRACTOR SHALL PROCEED WITH THE WORK ONLY AFTER SUCH DISCREPANCIES HAVE BEEN RESOLVED BY THE ARCHITECT. CONTRACTOR SHALL ALLOW A 48 HOUR TIME FRAME FOR RESOLVING DISCREPANCIES ONCE THE ARCHITECT HAS ACKNOWLEDGED THE CONDITION.
3. THE CONTRACTOR SHALL REVIEW AND VERIFY ALL EXISTING CONDITIONS PRIOR TO STARTING THE WORK IN ANY GIVEN AREA.
4. WORK WITH GIVEN DIMENSIONS AND LARGE SCALE DETAILS. DO NOT SCALE THE DRAWINGS AS THE REPRODUCTIVE PROCESS TENDS TO DISTORT THE ACCURACY OF THE GRAPHIC SCALE INDICATED.
5. ALL CONSTRUCTION ACTIVITIES SHALL BE PERFORMED IN A NEAT, SAFE, AND CLEAN MANNER. ALL CONSTRUCTION WASTE SHALL BE REMOVED FROM THE BUILDING. SITE BURNING IS NOT ALLOWED. LEAVE WORK AREA IN A CLEAN, SAFE CONDITION AT THE END OF EACH WORK DAY.
6. ALL CONSTRUCTION DEBRIS SHALL BE DISPOSED OF AT AN APPROVED OFF-SITE FACILITY IN COMPLIANCE WITH ALL REGULATIONS.
7. ALL WOOD IN CONTACT WITH MASONRY OR CONCRETE SHALL BE PRESSURE TREATED.
8. ALL CEILINGS SHALL BE LEVEL TO TO A TOLERANCE OF 1/8" IN A 20'-0" RADIUS WHEN CHECKED WITH A 10' STRAIGHT EDGE.
9. INSTALL SOLID BLOCKING AT WALL FRAMING BEHIND ALL SURFACE MOUNTED FIXTURES, TRIM AND HANDRAILS.
10. ALL GRAB BARS AND HANDRAILS SHALL BE ABLE TO SUPPORT A DEAD WEIGHT OF 250 LBS. AT ANY POINT.
11. THESE ARCHITECTURAL DRAWINGS WERE PREPARED FOR THE GENERAL CONTRACTOR/OWNER AS PART OF AN ABBREVIATED SERVICES AGREEMENT, AND AS SUCH, DO NOT DELINEATE ALL ASPECTS OF THE WORK.
12. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF ALL ASPECTS OF THE WORK INCLUDING, BUT NOT LIMITED TO MECHANICAL AND ELECTRICAL DESIGN-BUILD ENGINEERING DISCIPLINES AND TRADES.
13. THE LOCATION OF ANY DOOR JAMBS NOT DIMENSIONED SHALL BE 6" FROM ADJACENT PERPENDICULAR WALL.
14. ALL WALL PARTITIONS SHALL EXTEND FLOOR TO STRUCTURE ABOVE, UNLESS OTHERWISE NOTED. PROVIDE DEFLECTION TRACK SYSTEM AT ROOF DECK LOCATIONS.
15. REFER TO THE ACCESSIBILITY DETAILS FOR AMERICANS WITH DISABILITIES ACT (ADA) AND MAINE HUMAN RIGHTS ACT (MHR) CONSTRUCTION CRITERIA.

MATERIALS

	CONCRETE
	CONCRETE MASONRY UNIT
	BRICK
	GRAVEL
	SOIL
	STUD PARTITION (EXISTING)
	STEEL
	WOOD FRAMING
	WOOD BLOCKING
	PLYWOOD
	GYPSUM BOARD
	SUSPENDED ACOUSTICAL TILE
	BATT INSULATION
	RIGID INSULATION
	FINISH WOOD
	ONE HOUR RATED PARTITION
	TWO HOUR RATED PARTITION
	EXISTING PARTITION (SCREENED)
	NEW PARTITION

SYMBOLS

	ROOM NUMBER
	DOOR NUMBER
	WINDOW NUMBER
	BUILDING SECTION
	WALL SECTION
	DETAIL SECTION
	CASEWORK ELEVATION
	INTERIOR ELEVATION
	VERTICAL ELEVATION
	PARTITION TYPE
	STRUCTURAL CENTERLINE

PROJECT TEAM

CIVIL/SITE DESIGN
SEBAGO TECHNIQS INC
75 JOHN ROBERTS ROAD, SUITE 1A
SOUTH PORTLAND, MAINE 04106
207.200.2100

STRUCTURAL/MECHANICAL/ELECTRICAL
ALLIED ENGINEERING INC
160 VERANDA STREET
PORTLAND, MAINE 04103
207.221.2260

CONTRACTOR
BENCHMARK CONSTRUCTION INC
34 THOMAS DRIVE
WESTBROOK, MAINE 04092
207.591.7600

DRAWING INDEX

A0	COVER SHEET
A1	PHASING PLAN
AD1	DEMOLITION FLOOR PLAN
AD2	DEMOLITION ELEVATIONS
A2	NEW TERMINAL FLOOR PLAN
A3	FLOOR FINISHES PLAN
A4	REFLECTED CEILING PLAN
A5	FURNITURE PLAN
A6	ROOF PLAN
A7	EXTERIOR ELEVATIONS
A8	EXTERIOR ELEVATIONS
A9	CURTAIN WALL
A10	CURTAIN WALL
A11	BUILDING SECTION
A12	EXTERIOR WALL SECTIONS
A13	EXTERIOR WALL SECTIONS
A14	DOORS
A15	WINDOWS
A16	FINISHES
A17	PARTITION DETAILS
A18	PLAN DETAILS
A19	SECTION DETAILS
A20	INTERIOR ELEVATIONS
A21	INTERIOR ELEVATIONS
A22	INTERIOR ELEVATIONS
A23	ARCHITECTURAL MILLWORK
A24	ARCHITECTURAL MILLWORK
A25	ARCHITECTURAL MILLWORK
A26	ACCESSIBILITY DETAILS

% SUBMISSION
PRELIMINARY DESIGN PHASE

SHEET

COVER
SHEET

DATE

3 AUG '15

SCALE

NO SCALE

DRAWN

MFH/mgk

JOB NO.

150655

SHEET

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SEAL

REVISIONS

DRAWING NAME

PORTLAND, MAINE 04102

1011 WESTBROOK STREET

MEET

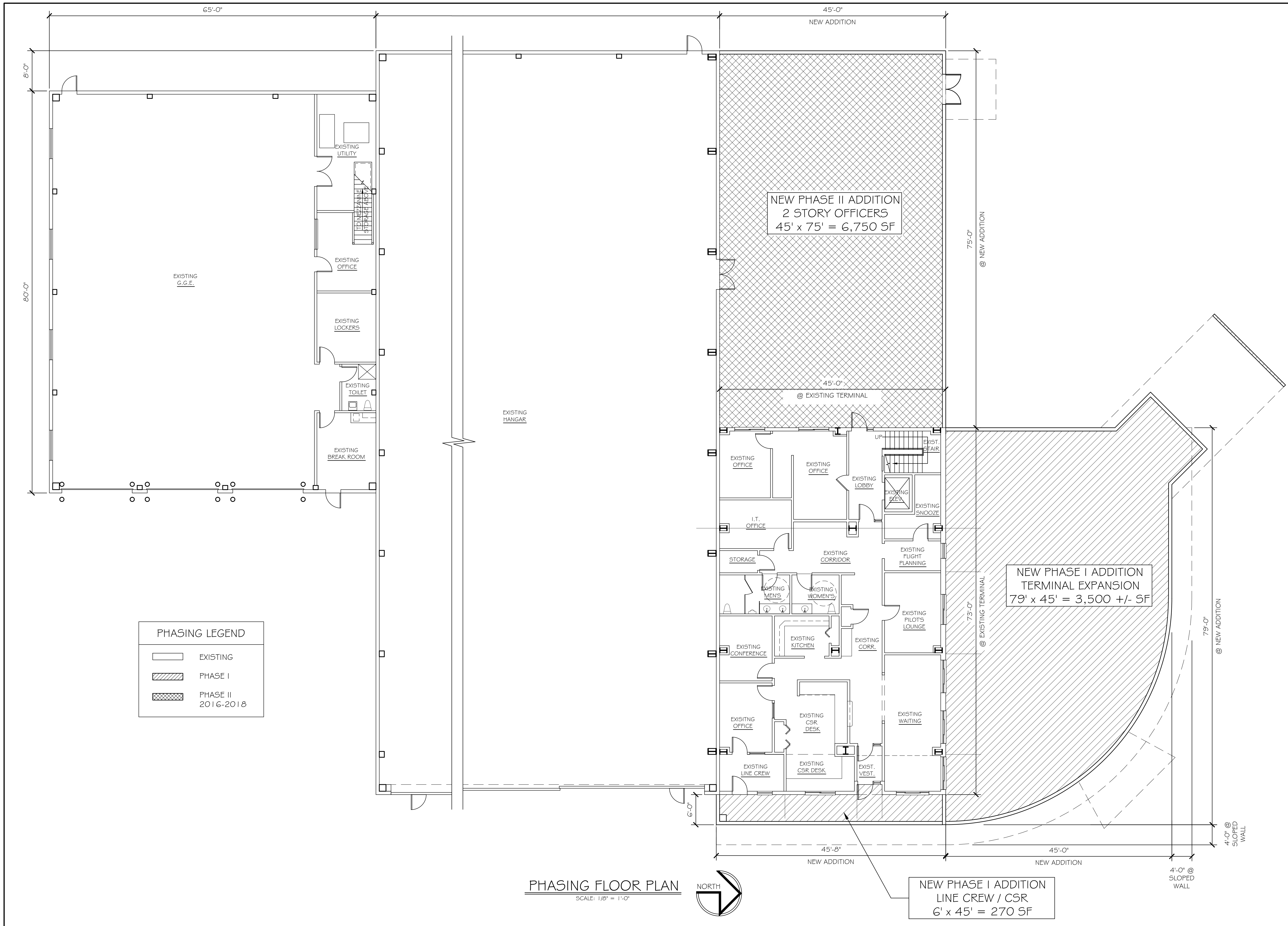
PHASING FLOOR PLAN

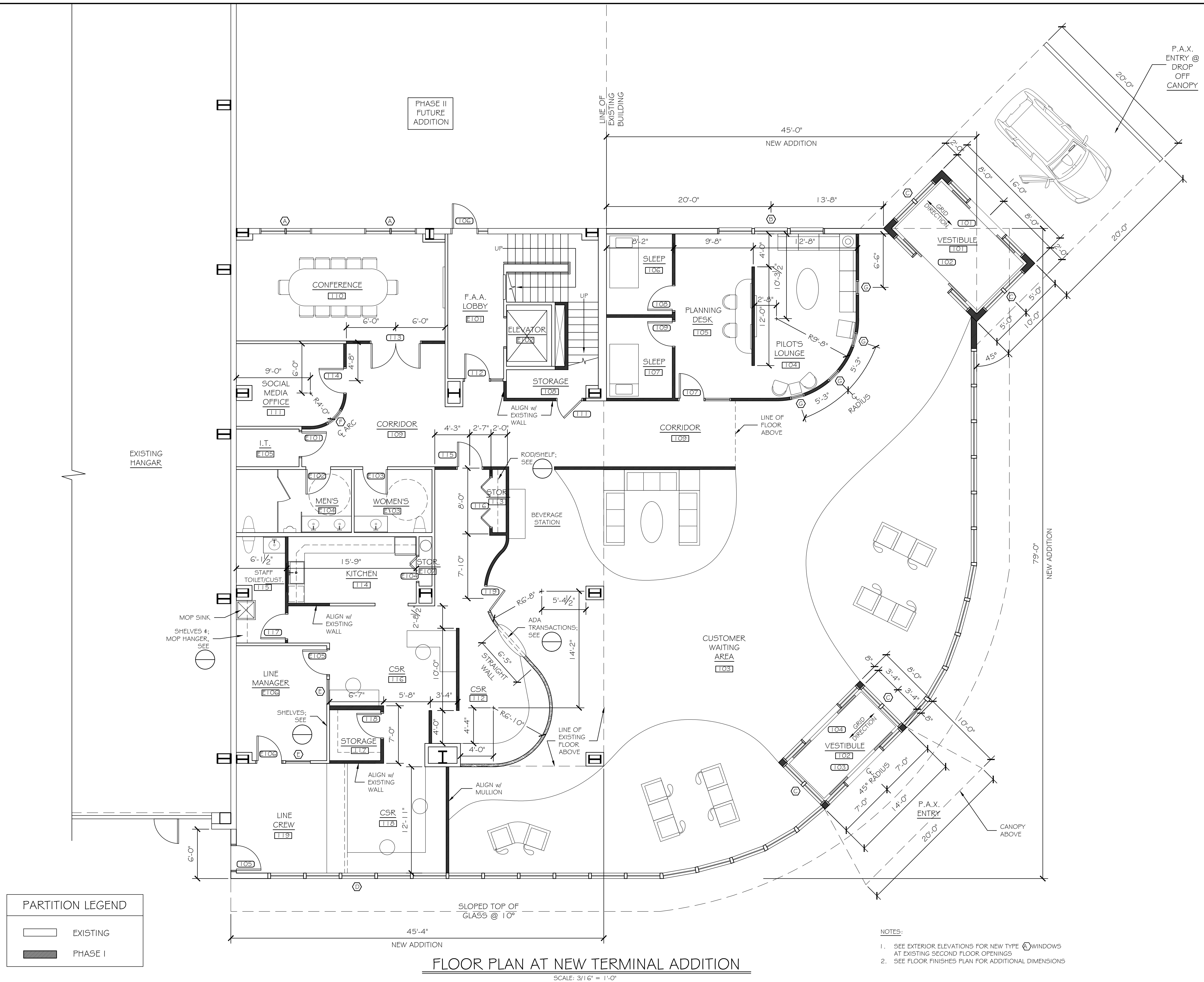
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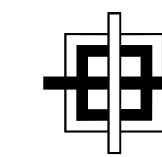
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ARCHITECTURE & INTERIOR DESIGN
P.O. BOX 6179 FALMOUTH MAINE 04105
207.871.5900 www.granthay.com

JCAL

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DRAWING NAME

NEA
NORTH EAST AIR
PORTLAND INTERNATIONAL AIRPORT

1011 WESTBROOK STREET
PORTLAND, MAINE 04102

SHEET

EXTERIOR
ELEVATIONS

DATE
4/EP '15

SCALE
AS NOTED

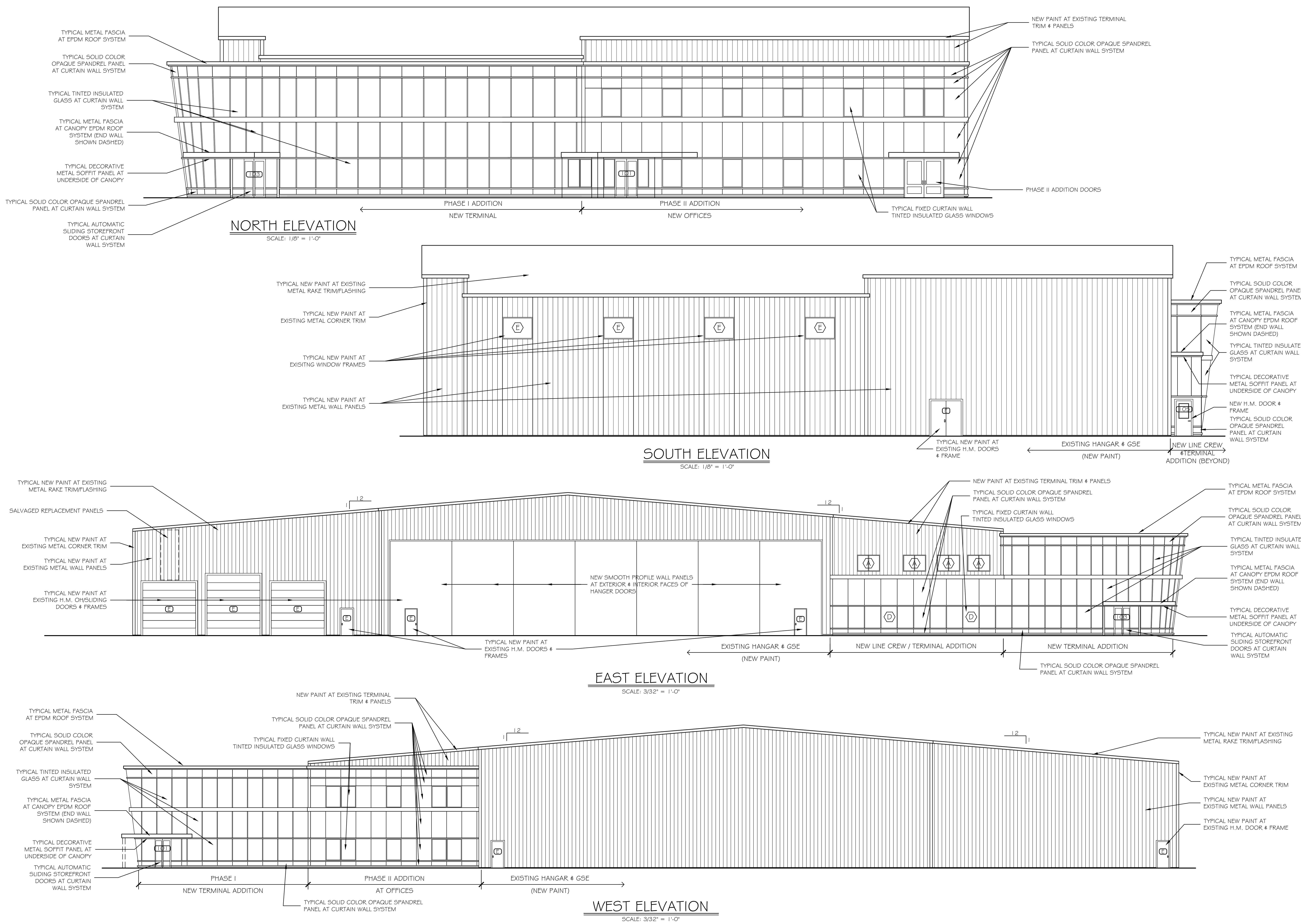
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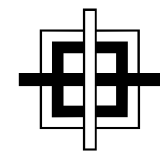
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NEA
NORTHEAST AIR
PORTLAND INTERNATIONAL AIRPORT

PORTLAND, MAINE 04102

1011 WESTBROOK STREET

SHEET

DEMOLITION
FLOOR
PLAN

DATE
31 AUG '15

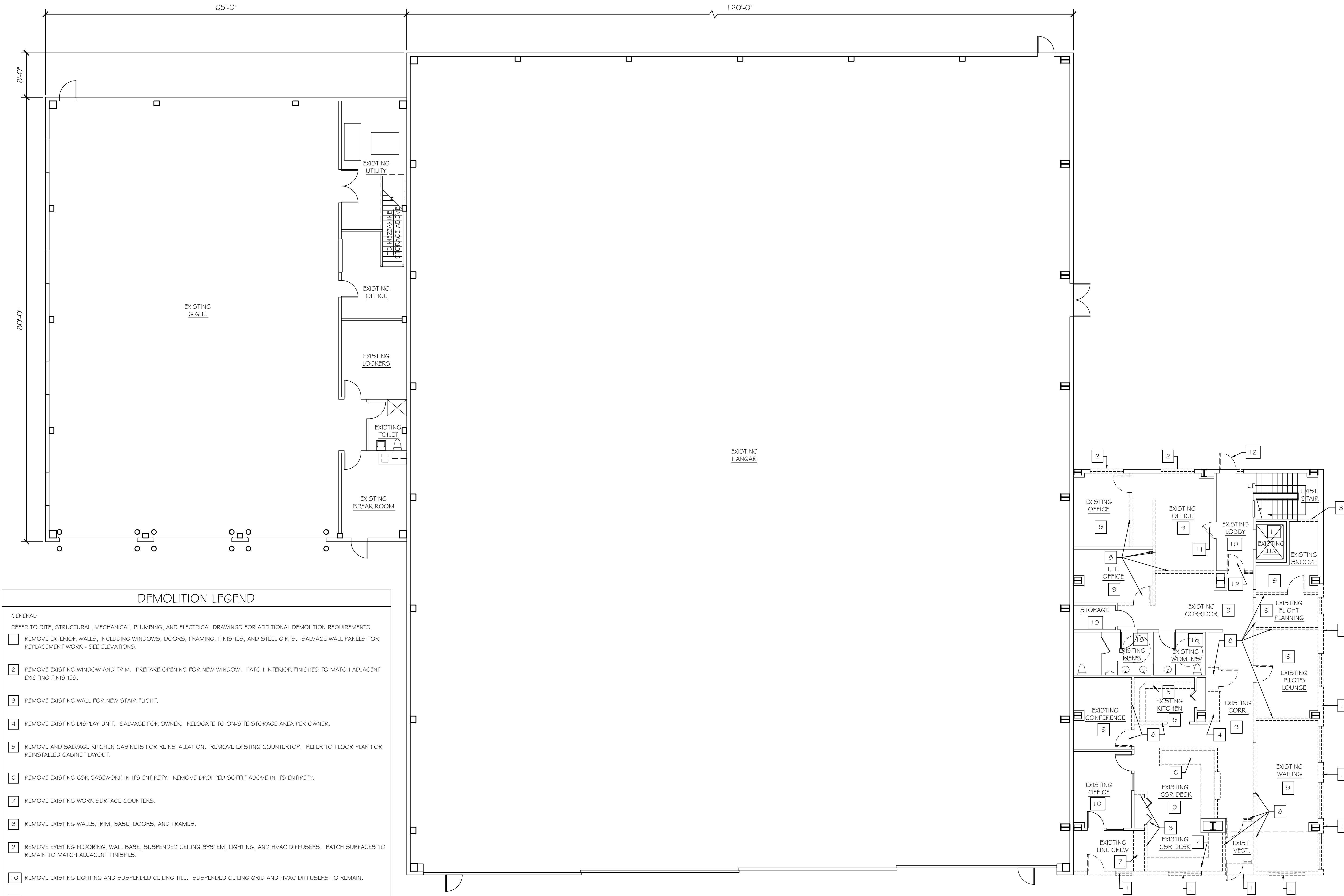
SCALE
1/8"=1'-0"

DRAWN
MFH/mgk

JOB NO.
150655

SHEET
AD1

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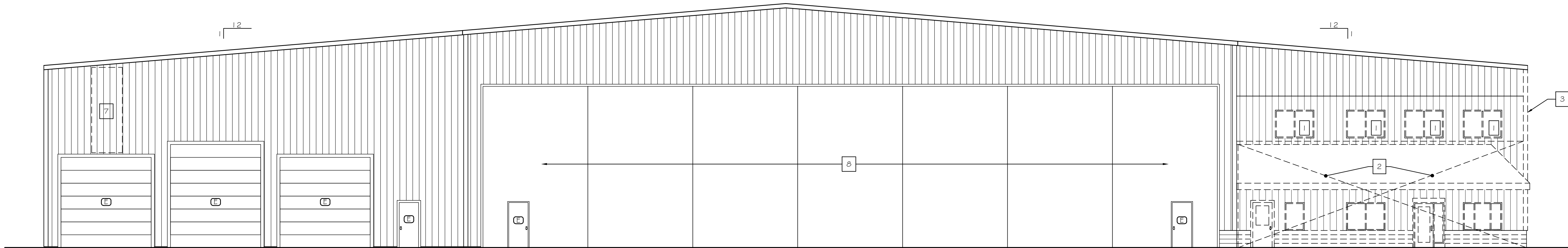
DEMOLITION FIRST FLOOR PLAN

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

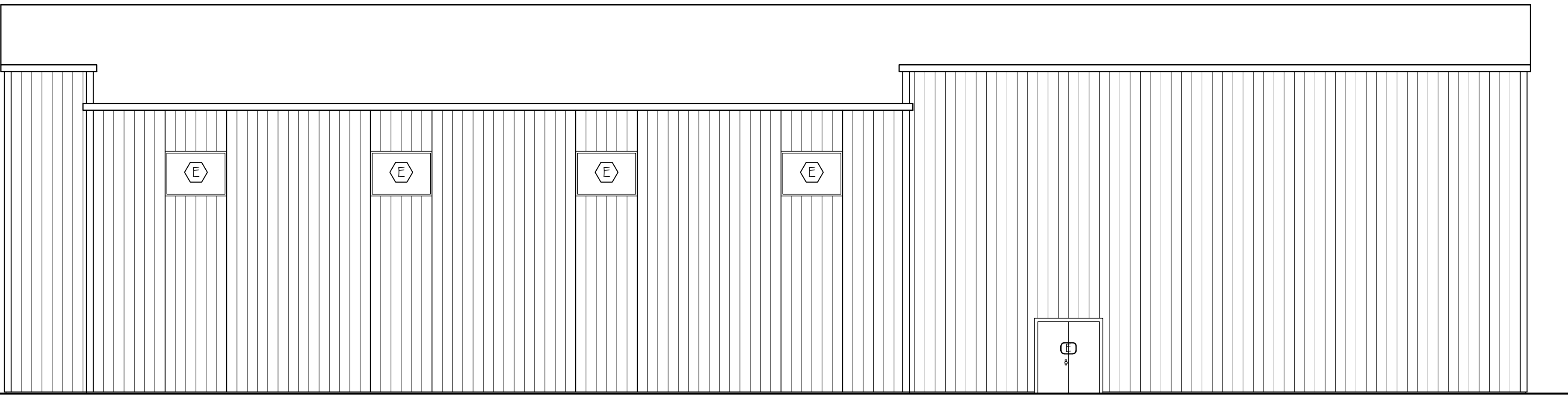
NOTE: SEE SHEET AD-2 DEMO ELEVATIONS FOR EXTERIOR WALL PANEL REPLACEMENT LOCATIONS.



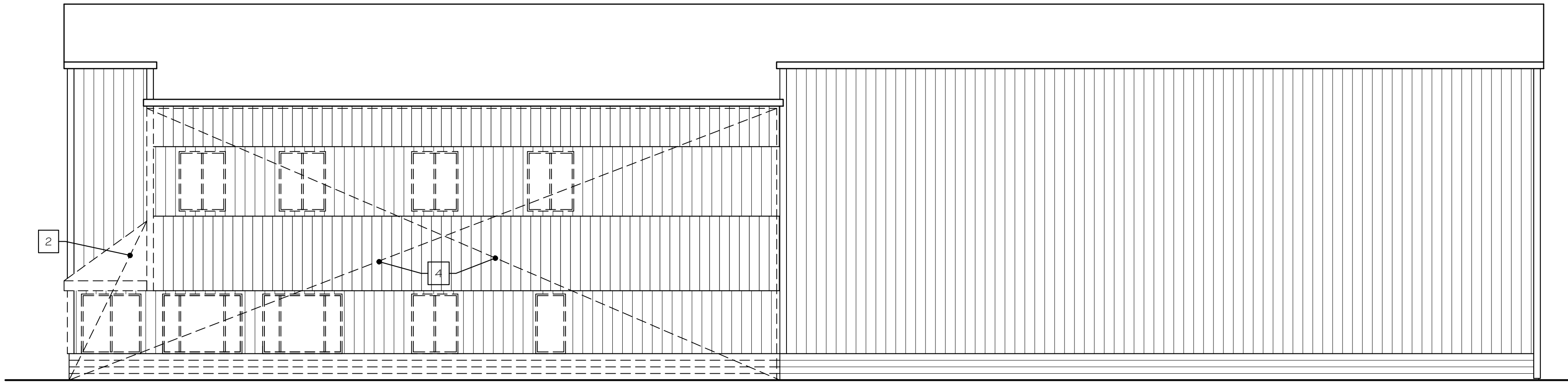
PARTITION LEGEND	
	EXISTING
	REMOVE



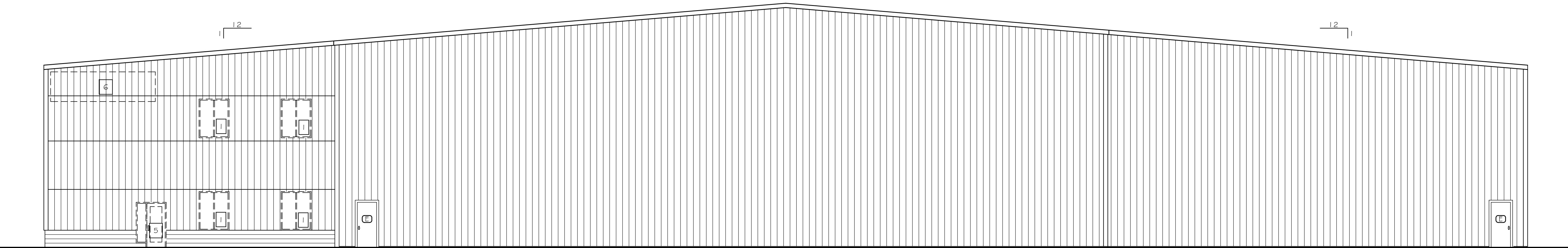
EAST ELEVATION
SCALE: 1/8" = 1'-0"



SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



NORTH ELEVATION
SCALE: 1/8" = 1'-0"



WEST ELEVATION
SCALE: 1/8" = 1'-0"

DEMOLITION LEGEND	
GENERAL: REFER TO SITE, STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR ADDITIONAL DEMOLITION REQUIREMENTS.	
1	REMOVE EXISTING WINDOWS AND TRIM. SALVAGE WINDOW UNITS FOR OWNER. STORE SALVAGED WINDOW UNITS IN LOCATION ON PREMISES AS DIRECTED BY OWNER.
2	REMOVE EXISTING LINE CREW AREA WALLS AND ROOF IN ITS ENTIRETY. REMOVE ALL STEEL GIRTS. SALVAGE WINDOW UNITS FOR OWNER & STORE IN LOCATION AS DIRECTED BY OWNER. SALVAGE EXTERIOR WALL PANELS IN UN-DAMAGED CONDITION FOR REUSE IN OTHER LOCATIONS ON THE EXISTING BUILDING - SEE ELEVATIONS.
3	REMOVE EXISTING CORNER TRIM AND WALL PANEL AS NECESSARY FOR NEW ADDITION WALL AND ROOF. REFER TO DETAILS FOR EXPANSION CONTROL/FLASHING CONDITIONS.
4	REMOVE EXISTING WALL PANELS, WINDOWS, GIRTS, LGMF, INSULATION, AND INTERIOR FINISHES IN THEIR ENTIRETY. SALVAGE EXISTING WINDOWS FOR OWNER & STORE IN LOCATION AS DIRECTED BY OWNER. SALVAGE EXTERIOR METAL WALL PANELS IN UN-DAMAGED CONDITION FOR REUSE IN OTHER LOCATIONS ON THE EXISTING BUILDING - SEE ELEVATIONS.
5	REMOVE EXISTING STOREFRONT DOOR & SIDELIGHT. PREP OPENING FOR NEW STOREFRONT DOOR & SIDELIGHT.
6	REMOVE EXISTING SIGNAGE. SEAL MOUNTING HOLE LOCATIONS w/ WHITE SEALANT.
7	REMOVE DAMAGED WALL PANELS. INFILL WITH SALVAGED PANELS.
8	REMOVE EXTERIOR & INTERIOR WALL PANELS AT DOORS. INSTALL WITH NEW SMOOTH PROFILE PANELS; SEE ELEVATIONS.







PLANNING BOARD REPORT PORTLAND, MAINE

Pleasant Avenue Church Redevelopment
3, 15, and 16 Pleasant Avenue
Level III Site Plan and Subdivision Review
2015-102
Peninsula Property Development

Submitted to: Portland Planning Board Date: November 5, 2015 Public Hearing Date: November 10, 2015	Prepared by: Nell Donaldson, Planner CBLs: 130-H-13, 130-I-12, 130-I-14 Project #: 2015-102
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I. INTRODUCTION

Hardypond Development Company has requested a final Level III site plan and subdivision review for the redevelopment of the former Clark Memorial Church site at 3 Pleasant Avenue in Deering Center. The project involves the creation of separate lots for the church and the associated rectory, the adaptive reuse of the church building for 25 market rate apartments, the development of the rectory as one additional residential unit, and easements on an existing lot across Pleasant Avenue for the purposes of off-street parking. Few site changes are proposed.

In the period since the public workshop, the applicant has minimized the amount of impervious surface on site to bring it under the threshold for stormwater treatment, modified the design of the single-family parking to ensure safe access, relocated trash and recycling containers to the rear of the renovated church building, moved an electrical transformer away from the Forest Avenue frontage, added street trees, and proposed landscaping for the parking area. Outstanding comments are discussed in this final report.

As a project resulting in 26 new residential units, this development is being referred to the planning board for compliance with the site plan and subdivision standards. The Planning Division sent a total of 142 notices to property owners within 500 feet of the site and a legal ad ran on October 19 and 20, 2015.

Applicant: Bob Gaudreau, Hardypond Development Company, LLC

Consultants: Andrew Johnston, FST; John Shields, Shields Architecture; John Swan, Owen Haskell

II. REQUIRED REVIEWS

<i>Waiver Requests</i>	<i>Applicable Standards</i>
Street trees <i>Single-family (15 Pleasant)</i> - 2 trees required. 2 existing trees. Meets standard. <i>Multi-family (3 Pleasant)</i> - 25 trees required. 2 existing trees, 6 proposed. Waiver with contribution for 17 additional trees (\$3,400).	Site Plan Standard, <i>Section 14-526(b)2.b(iii)</i> and Technical Manual, <i>Section 4.6.1</i> . All multi-family development shall provide one street tree per unit. Single-family developments shall provide two street trees per unit. Waiver permitted where site constraints prevent it, with applicant contributing proportionate amount to Tree Fund.
<i>Review</i>	<i>Applicable Standards</i>
Site Plan	<i>Section 14-526</i>
Subdivision	<i>Section 14-497</i>

III. PROJECT DATA

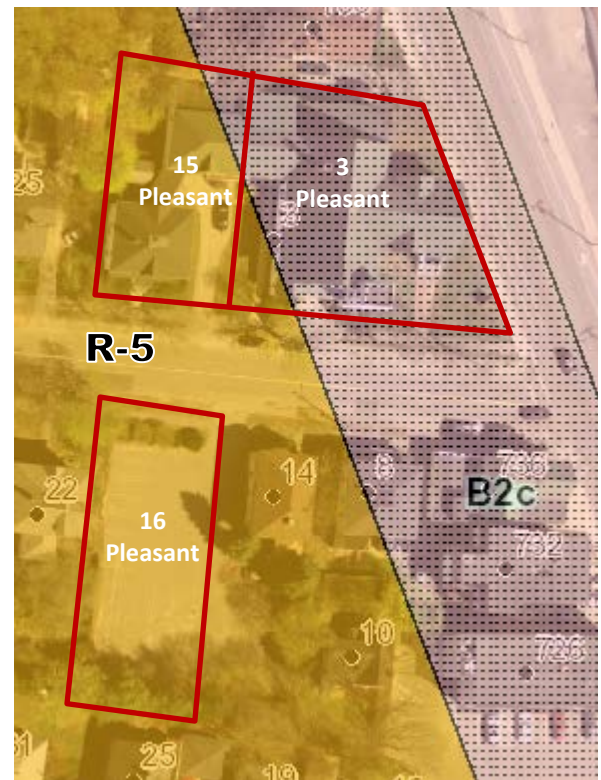
Existing Zoning	R-5 and B-2c
Existing Use	Church, rectory, and parking area
Proposed Use	Residential (conversion of church for multi-family, conversion of rectory for single-family) and parking
Proposed Development Program	25 units residential in church, 1 single-family in rectory
Parcel Sizes	15,741 (multi-family in church at 3 Pleasant Avenue) 6,797 SF (single family at 15 Pleasant Avenue) 10,132 (parking area at 16 Pleasant Avenue)

	<i>Existing</i>	<i>Proposed</i>	<i>Net Change</i>
Building Footprint (church)	8,995 SF	8,995 SF	0 SF
Building Floor Area (church)	17,582 SF	17,582 SF	0 SF

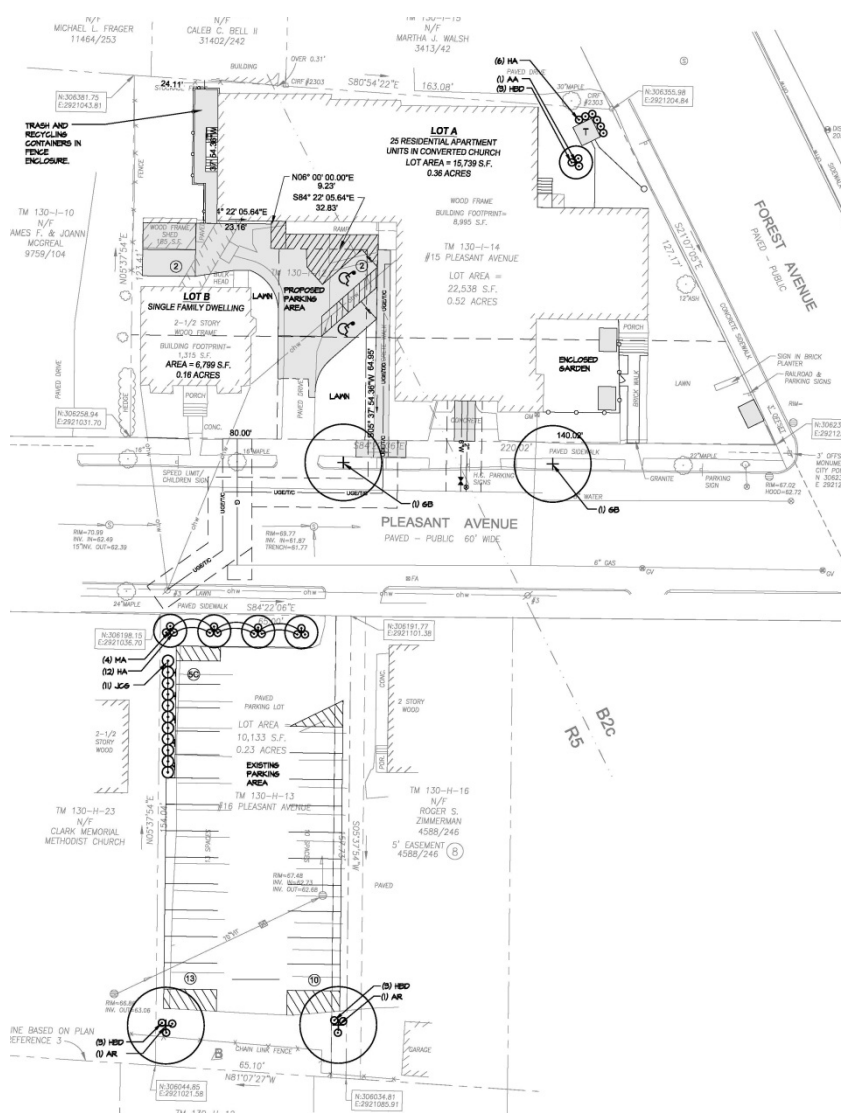
Building Footprint (single-family)	~1,315 SF	~1,315 SF	0 SF
Building Floor Area (single-family)	~2,630 SF	~2,630 SF	0 SF

Impervious Surface Area	20,875 SF	21,857 SF	982 SF
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Parking Spaces	23	27	4
Bicycle Parking Spaces	0	10	10
Estimated Cost of Project	\$2,000,000		



Figures 1, 2 and 3: existing church at 3 Pleasant Avenue from Forest Avenue (top left); existing rectory at 15 Pleasant Avenue (bottom left); existing zoning



Figures 4, 5, & 6: existing lots, church, and rectory building (left); proposed site plan, showing reuse of church and rectory buildings; proposed Pleasant Avenue elevation

IV. BACKGROUND & EXISTING CONDITIONS

The Pleasant Avenue Church redevelopment affects three parcels under common ownership near Woodfords Corner, two on the north side of Pleasant Avenue and one on the south (Figure 4). The Clark Memorial Church was built on the first of these parcels (3 Pleasant Avenue) and a portion of the second (15 Pleasant Avenue) between 1857 and 1882; the adjacent rectory building was added entirely on the second lot (15 Pleasant Avenue) in the early 20th century. A breezeway currently connects the southwest corner of the church with the northeast corner of the rectory. These two buildings share a driveway. Parking is located across Pleasant Avenue on the third lot (16 Pleasant Avenue), which currently consists entirely of surface parking and shares its driveway with an adjacent residential building.

The zoning on the site is split between Residential R-5 to the west and Community Business B-2C to the east (Figure 3). To the north, west, and south in the R-5 zone, the site is surrounded largely by single-family residential development, with some multi-family residential proximate to Forest Avenue. With respect to the B-2c zone, a hair salon occupies the site on Forest Avenue directly across Pleasant Avenue from the site; multi-family residential sits on Forest Avenue directly to the north.

V. PROPOSED DEVELOPMENT

The applicant proposes to:

- Adaptively reuse the existing church building at 3 Pleasant Avenue to develop 25 market rate studio, one-bedroom, and two-bedroom apartments on three floors. Laundry and storage space would also be included in the building. Minor site improvements are proposed in association with the redevelopment. The 3 Pleasant Avenue lot would be reconfigured such that the church building would be wholly contained on the site.
- Demolish the existing breezeway between the church and rectory buildings in order to separate these buildings and allow the rectory to function as a separate single-family residence. The 15 Pleasant Avenue lot would be reconfigured to house the rectory building only. Parking would be developed at the rear of this newly reconfigured lot.
- Use the existing surface parking at 16 Pleasant Avenue, with some minor site improvements, for the purposes of off-street parking for the church redevelopment.

VI. PUBLIC COMMENT

The applicant hosted a neighborhood meeting on Thursday, October 8 (*Attachment F*). Based on the meeting minutes, attendees' questions focused largely on the potential tenant population, plans for landscaping, traffic impacts, and noise. Staff also received public comments from several neighbors (*Attachments PC-1 to PC-6*). These neighbors raised concerns about the size of the development, as well as parking and traffic implications. No comments were received following the board workshop on this item.

VII. RIGHT, TITLE, & INTEREST

The applicant's submittal includes a deed as evidence of right, title, and interest (*Attachment D*). The development will involve parking and access easements on both the 15 Pleasant Avenue and 16 Pleasant Avenue sites, as well as an easement for a transit shelter at the site's southeast corner on Forest Avenue. These easements have been included as a condition of approval.

VIII. FINANCIAL & TECHNICAL CAPACITY

The estimated cost of the development is \$2 million. The applicant has submitted a letter from TD Bank attesting to their capacity to successfully complete the project (*Attachment D*).

IX. ZONING ANALYSIS

As noted during the preliminary review, off-street parking on 16 Pleasant Avenue constitutes a conditional use under the R-5 zone, but, because this parking currently exists, it is not being reviewed anew here. It should also be noted that, because the church and rectory buildings currently exist and are being reused, there are existing non-conformities with respect to dimensional requirements. Per the zoning review, no new non-conformities are being created.

The applicant has proposed to use the active street frontage provisions of the B-2c zone to achieve the desired residential density for the adaptive reuse of the church. The B-2c allows for a density of 1 per 1,600 SF in off-peninsula locations by right, with the density increasing to 1 per 435 SF for projects with active street frontages. This means that, with the by-right density of the B-2c zone, the applicant could develop eight units in the former church. Assuming the density for projects with active street frontages, 30 units would technically be permitted.

Section 14-188 of the code defines an active street frontage as follows:

A building will be determined to have an active street frontage upon meeting the following guidelines to the greatest extent practicable as determined by the Planning Board or Planning Authority:

- *the primary building façade shall be within ten feet of the front street line;*
- *there shall be no parking on the lot within 35 feet of the front street line;*
- *no more than 25% of the first floor primary façade shall consist of access to garages, unutilized space, service entrances, storage or mechanicals, and the*

remaining minimum 75% shall have an average depth of a minimum of 20 feet for residential or commercial uses;

- *all primary ground floor entries to multi-family buildings must orient to street, not to interior blocks or parking lots.*

During the board workshop on this proposal, staff discussed the potential to either redesign or move the southernmost ADA parking space on the 15 Pleasant Avenue lot to meet the intent of the active street frontage provisions, although compliance is not technically required given that the parking on the plan falls in the R-5 zone and not the B-2c. In their revised submittal, the applicant has reiterated the difficulty of redesigning these spaces, as well as a preference for retaining the ADA spaces in close proximity to the accessible building entrance. The spaces have not been relocated.

As discussed at the workshop, the building, in its existing condition, falls just over the 10 foot limit from the front property line. This means that, technically, it does not meet the build-to guideline for an active street frontage. However, at the workshop, the board appeared to generally agree that, given that the building is existing, it meets this guideline to maximum extent practicable.

Findings related to the active street frontage provisions have been included in the motions.

X. SITE PLAN SUBMISSION REQUIREMENTS (Section 14-527) and SUBDIVISION PLAT AND RECORDING PLAT REQUIREMENTS (Section 14-496)

Staff has reviewed the subdivision plat. The city's surveyor has indicated his approval (*Attachment 5*). The plat remains to be fully reviewed by Corporation Counsel, and elements relating to easements, a unit breakdown, and any conditions of approval remain to be added. A final subdivision plat meeting the requirements of *Section 14-496(b)* has been included as a condition of approval.

XI. SUBDIVISION REVIEW (14-497(a). Review Criteria)

The proposed development has been reviewed by staff for conformance with the relevant review standards of the City of Portland's subdivision ordinance. Staff comments are below.

1. Water, Air Pollution

There are very minor site changes proposed, including the demolition of a breezeway, the removal of a shed, and some additional paving. The development is not anticipated to have detrimental water or air impacts.

2 & 3. Adequacy of Water Supply

The applicant has provided evidence of capacity from the Portland Water District (*Attachment C*).

4. Soil Erosion

No unreasonable soil erosion or reduction in the capacity of the land to hold water is anticipated.

5. Impacts on Existing or Proposed Highways and Public Roads

The applicant has provided an estimated trip generation of 16 peak hour trips based on the Institute of Transportation Engineers Trip Generation Manual (*Attachment C*). No traffic impact analysis has been conducted. Tom Errico, the city's consulting traffic engineer, has concurred that no traffic study is required (*Attachment 1*).

6. Sanitary Sewer/Stormwater Disposal

The applicant has proposed to use existing sewer connections in Pleasant Avenue. The applicant has provided evidence of sewer capacity (*Attachment G*).

7. Solid Waste

In the revised plans, the applicant has moved the proposed trash and recycling enclosure away from Forest Avenue to the west side of the property.

8. Scenic Beauty

This proposal is not deemed to have an adverse impact on the scenic beauty of the area.

9. Comprehensive Plan

The proposed project will add rental housing to the city's housing stock, and thus meet a number of housing objectives of the comprehensive plan. The project will also adaptively reuse an existing building on a major commuter corridor and transit line, thus achieving some of the smart growth objectives of the comprehensive plan as well.

10. Financial and Technical Capacity

The applicant has submitted a letter from TD Bank attesting to the applicant's capacity to successfully complete the project (*Attachment D*).

11. Wetland/Water Body Impacts

There are no anticipated impacts to wetlands.

12. Groundwater Impacts

There are no anticipated impacts to groundwater supplies.

13. Flood-Prone Area

Per the city's existing flood maps, the site is not located in a flood zone.

XII. SITE PLAN REVIEW

The proposed development has been reviewed by staff for conformance with the relevant review standards of the City of Portland's site plan ordinance. Staff comments are below.

1. Transportation Standards**a. Impact on Surrounding Street Systems**

As noted above, the applicant's narrative estimates that the project will add 16 peak hour trips to the adjacent street system. The impact of these trips is anticipated to be negligible. Mr. Errico has stated that he does not anticipate negative traffic or safety impacts (*Attachment 1*).

b. Access and Circulation

The applicant has proposed to provide vehicular access to ADA parking serving the church lot at 3 Pleasant Avenue and parking serving the single-family home at 15 Pleasant Avenue via the existing curb cut on the north side of Pleasant Avenue. This driveway, as well as the ADA parking for the church redevelopment, will technically lie on the single-family lot at 15 Pleasant Avenue, with a 30 foot wide access easement to the church property.

In the revised submittal, the applicant provided turning templates in an effort to document that circulation can occur to the parking for the single-family home at rear, but Mr. Errico indicated that his concerns remained. Ultimately, the applicant and Mr. Errico agreed that stacked parking represents the preferred design option for the single-family parking, and the applicant revised plans to that effect. Mr. Errico has indicated that he has no further comments on the parking circulation (*Attachment 1*).

As proposed, access to the off-site parking at 16 Pleasant Avenue (which will serve the church redevelopment) would be provided via an existing driveway shared with the property at 14 Pleasant Avenue. Easements will be necessary in this location as well. As noted above, parking and access easements have been included as a condition of approval.

Pedestrian access to the converted church building would remain largely as is, with the exception of a new secondary entrance at the northeast corner of the site on Forest Avenue, which would be reachable via a new sidewalk from the street. The main entrance from Pleasant Avenue would continue to exist as it

currently does, via a sidewalk with steps to the building. ADA access would continue to be provided to the west on Pleasant Avenue via a ramp; the sidewalk to the ADA ramp would be reconstructed. In the revised submittal, the applicant has made some modifications to ensure an accessible route from the street. There are no proposed changes to pedestrian access to the single-family lot or the parking. It should be noted that DPS has reviewed the condition of the Forest Avenue/Pleasant Avenue ramp; this ramp was reconstructed this summer and needs no further work.

c. *Public Transit Access*

Given that this project is over 20 residential units and located along a transit route, a transit facility, consisting of a transit shelter and a pullout bay, is technically required. Following conversations with METRO, the applicant has identified a transit shelter pad on the plans. The applicant has depicted a public access easement surrounding the shelter site on the draft subdivision plan. It appears that a pullout is not possible given right-of-way constraints. Additional coordination with METRO will be required to identify the exact location of the transit facilities. Plans showing the final location and details related to this shelter have been included as a condition of approval.

d. *Parking*

Division 20 of the land use ordinance requires one parking space per unit for residential development in the B-2 zone (*Section 14-332(a)*). At this ratio, the church redevelopment would be required to provide 25 parking spaces for the 25 residential units. The final plans show 23 parking spaces off-site at 16 Pleasant Avenue and two ADA spaces next door at 15 Pleasant Avenue, or exactly 25 spaces. Both of these parking areas lie within 100 feet of the church lot at 3 Pleasant Avenue, thus meeting the requirements of *Section 14-334* of the ordinance, which permits off-site parking for uses in non-residential zones. In the final submittal, the applicant has adjusted the striping adjacent to the handicapped parking spaces to ensure that it meets the requirements for a van accessible space.

Division 20 generally requires two parking spaces per unit for residential buildings in zones without exceptions. Two spaces are proposed at the rear of the single-family building at 15 Pleasant Avenue, meeting this requirement.

The final plans include 10 bike parking spaces in two bike racks, meeting the requirement for residential structures. In the revised plans, the applicant has moved one of these racks to a location outside of the fence as requested by staff.

e. *Transportation Demand Management*

A transportation demand management plan is not required.

2. *Environmental Quality Standards*

a. *Preservation of Significant Natural Features*

There are no known significant natural features on the site.

b. *Landscaping and Landscape Preservation*

The final plans show additional landscaping around the parking area at 16 Pleasant Avenue, two street trees on the Pleasant Avenue frontage of the church building, and landscaping around the proposed transformer on the Forest Avenue frontage. Jeff Tarling, the city's arborist, has reviewed the landscaping plan and verbally indicated his approval.

The final plans show a transformer on the Forest Avenue frontage at the northeast corner of the property. Staff has discussed the location of the proposed transformer on the Forest Avenue frontage with DPS, Mr. Tarling, and the applicant in an effort to find a more discreet location. There is some potential that the transformer might be moved to a nearby pole; otherwise, evergreen landscaping or fencing will be required per the site plan ordinance. The resolution of this issue has been included as a condition of approval.

c. *Water Quality/Storm Water Management/Erosion Control*

The applicant has indicated in the revised submittal that the impervious surface on site would increase by just under 1,000 SF, less than the threshold for stormwater mitigation. As currently proposed, all stormwater would runoff as in the existing condition and discharge to the city's combined system, with no treatment planned. David Senus, the city's consulting civil engineer, has indicated his approval of the plans as proposed.

3. Public Infrastructure and Community Safety Standards

a. *Consistency with Related Master Plans*

As noted above, the project is generally deemed consistent with related master plans.

b. *Public Safety and Fire Prevention*

The applicant has provided a life safety summary for review by the city's Fire Prevention Bureau (*Attachment B*). Per this summary, the converted church building would have sprinklers. A hydrant is provided at the corner of Forest and Pleasant Avenues. At the request of Assistant Fire Chief Keith Gautreau, street trees have been located to minimize conflict with emergency responders. Assistant Chief Gautreau has indicated his general approval (*Attachment 4*).

c. *Availability and Capacity of Public Utilities*

The Portland Water District has provided documentation of capacity to serve the project (*Attachment C*). The applicant has also provided evidence of sufficient sewer capacity to service the residential units on the site (*Attachment G*).

4. Site Design Standards

a. *Massing, Ventilation, and Wind Impact*

No comments.

b. *Shadows*

Not applicable.

c. *Snow and Ice Loading*

No comments.

d. *View Corridors*

Not applicable.

e. *Historic Resources*

The existing church building is not designated as a historic structure, nor are there historic structures within 100 feet.

f. *Exterior Lighting*

No new exterior lighting is proposed.

g. *Noise and Vibration*

No comments.

h. *Signage and Wayfinding*

No signage or wayfinding is proposed at this time.

i. *Zoning-Related Design Standards*

The applicant has not proposed any changes to the existing rectory building. However, they have proposed modest exterior changes to the existing church building, including the addition of doors, windows, and several dormers. These additions have generally been designed to integrate with the building's existing

historic character. Based on the multi-family design standards, the city's urban designer has requested that the applicant:

- Review the elevations, particularly with respect to the north side, to ensure that the drawings accurately depict the existing roof design and window pattern;
- Align proposed windows on the second and third floors on the north side with existing first floor windows; and
- Confirm that proposed dormers match the existing roof pitch.

At the time of final plan review, no additional drawings had been provided. The resolution of the design comments has been included as a condition of approval.

XII. STAFF RECOMMENDATION

Subject to the proposed motions and conditions of approval listed below, Planning Division staff recommends that the planning board approve the proposed Pleasant Avenue Church Redevelopment project.

XIII. PROPOSED MOTIONS

A. WAIVERS

On the basis of the application, plans, reports and other information submitted by the applicant; findings and recommendations contained in the planning board report for the public hearing on November 10, 2015 for application 2015-102 relevant to Portland's technical and design standards and other regulations; and the testimony presented at the planning board hearing:

1. The planning board **finds/does not find** that the applicant has demonstrated that site constraints prevent the planting of all required street trees in the right-of-way. The planning board **waives/does not waive** the site plan standard (*Section 14-526 (b) (iii)*) requiring one street tree per unit for multi-family development and concludes that the applicant shall contribute \$3,400 for 17 street trees to Portland's tree fund.

B. SUBDIVISION

On the basis of the application, plans, reports and other information submitted by the applicant; findings and recommendations contained in the planning board report for the public hearing on November 10, 2015 for application 2015-102 relevant to the subdivision regulations; and the testimony presented at the planning board hearing, the planning board finds that the plan **does/does not** meet the active street frontage provisions of the B-2c zone as defined in *Section 14-188* to the greatest extent practicable and **is/is not** in conformance with the subdivision standards of the land use code, subject to the following conditions of approval, which must be met prior to the signing of the plat:

1. The applicant shall finalize the subdivision plat to meet the requirements of *Section 14-496* for review and approval by Corporation Counsel, the Department of Public Services, and the Planning Authority; and
2. The applicant shall provide evidence of parking and access easements by and between 15 Pleasant Avenue, 16 Pleasant Avenue, and 3 Pleasant Avenue for review and approval by the Planning Authority; and
3. The applicant shall provide a public access easement on 3 Pleasant Avenue for purposes of the transit shelter for review and approval by the Planning Authority.

C. DEVELOPMENT REVIEW

On the basis of the application, plans, reports and other information submitted by the applicant; findings and recommendations contained in the Planning Board Report for the public hearing on November 10, 2015 for application 2015-102 relevant to the site plan regulations; and the testimony

presented at the planning board hearing, the planning board finds that the plan **is/is not** in conformance with the site plan standards of the land use code, subject to the following conditions of approval that must be met prior to the issuance of a building permit, unless otherwise stated:

1. Prior to the issuance of a certificate of occupancy, the applicant shall submit plans depicting the final location of the proposed transit shelter for review and approval by the city's consulting traffic engineer;
2. The applicant shall resolve the location of the proposed electrical transformer on the Forest Avenue frontage in order to either screen the transformer per the standards of *Section 14-526(b)2b* or otherwise remove it from public view for review and approval by the Planning Authority; and
3. The applicant shall provide revised elevations addressing the multi-family design standards for review and approval by the Planning Authority.

XIV. ATTACHMENTS

PLANNING BOARD REPORT ATTACHMENTS

1. Traffic Engineer review (memo from Thomas Errico, 11/5/15)
2. Department of Public Services review (memo from David Margolis-Pineo, 11/2/15)
3. Civil Engineer review (memo from David Senus, 11/2/15)
4. Fire Prevention Bureau review (memo from Keith Gautreau, 11/2/15)
5. Surveyor review (memo from Bill Clark, 11/2/15)

APPLICANT'S SUBMITTALS

- A. Cover Letter (from Andrew Johnston, FST, 9/29/15)
- B. Level III Site Plan application
- C. Development Description
 - a. Project Overview
 - b. Project Purpose & Need
 - c. Existing Conditions
 - d. Proposed Development
 - e. Land Use Review
 - f. State and Federal Permits
 - g. Easements or Other Burdens
 - h. Traffic
 - i. Soils/Geotechnical Review
 - j. Natural Features
 - k. Utilities & Stormwater
- D. Right, Title, & Interest; Technical; & Financial Capacity
 - a. Right, Title and Interest
 - b. Technical Capacity
 - c. Financial Capacity
- E. Conformity With Site Plan Standards
- F. Neighborhood Meeting Packet
- G. Cover Letter (from Andrew Johnston, FST, 10/30/15)
- H. Cover Letter (from Andrew Johnston, FST, 11/5/15)

PLANS

- Plan 1. Cover Sheet
- Plan 2. Boundary Survey
- Plan 3. Subdivision Plan
- Plan 4. Site Layout Plan
- Plan 5. Site Details

- Plan 6. Landscaping Plan
- Plan 7. First Floor Plan
- Plan 8. Second Floor Plan
- Plan 9. Third Floor Plan
- Plan 10. South & East Elevations
- Plan 11. North & West Elevations

PUBLIC COMMENT

- PC-1. Email from Lorrie Ferrari (7/31/15)
- PC-2. Email from Theresa Puckett (8/19/15)
- PC-3. Email from Betty Libby (8/24/15)
- PC-4. Email from Philip Chamberlain (8/26/15)
- PC-5. Email from Marina Schneller (8/31/15)
- PC-6. Email from Betty Libby (10/8/15)

From: Tom Errico <thomas.errico@tylin.com>
To: Helen Donaldson <HCD@portlandmaine.gov>
CC: David Margolis-Pineo <DMP@portlandmaine.gov>, Katherine Earley <KAS@portlandmaine.gov>, Jeff Tarling <JST@portlandmaine.gov>, "JeremiahBartlett" <JBartlett@portlandmaine.gov>
Date: 11/5/2015 11:23 AM
Subject: 3 Pleasant Avenue - Final Traffic Comments

Nell - I have reviewed the updated application materials and the following presents a status update of previous traffic comments.

* I find the parking lot layout on the south side of Pleasant Avenue to be acceptable. With that, the applicant should provide dimensions for the driveway servicing the abutting residential property and provide information on winter maintenance agreements/responsibilities. I would note that encroachment into the driveway by project vehicles is possible, and accordingly delineation of parking spaces is important. Status: The applicant has revised the plan to account for this and noted working with the abutting owner regarding maintenance. I have no further comment.

* The parking area abutting the building is very tight and I'm not sure is workable. The applicant should explore the possibility of relocating one handicapped parking space to the main parking lot, thus creating a more space for vehicle circulation from the two abutting parking spaces (This would need to meet ADA regulations and must be confirmed). I would be supportive of providing additional compact size parking spaces to allow for the target 25 parking spaces. Status: The applicant has agreed to providing two stacked parking spaces for the single family use and therefore I have no further comment.

* I find the parking supply to be acceptable. One parking space per residential unit is proposed. Status: I have no further comment.

* The proposed project will not generate a significant level of traffic volume and therefore the project would not be expected to negatively impact traffic or safety issues in the project area.

* Status: I have no further comment.

* DPS should evaluate the condition of the sidewalk and provision of an ADA compliant sidewalk ramp at the corner of Forest Avenue.

* Status: DPS has indicated that no action is required by the applicant as the City has or will be upgrading the corner. I have no further comment.

If you have any questions, please contact me.

Best regards,

Thomas A. Errico, PE
 Senior Associate
 Traffic Engineering Director
 [T.Y. Lin International]T.Y. Lin International
 12 Northbrook Drive
 Falmouth, ME 04105
 207.781.4721 (main)
 207.347.4354 (direct)
 207.400.0719 (mobile)
 207.781.4753 (fax)
 thomas.errico@tylin.com<mailto:thomas.errico@tylin.com>
 Visit us online at www.tylin.com<http://www.tylin.com>
 Twitter | Facebook | LinkedIn | YouTube

"One Vision, One Company"

Please consider the environment before printing.

From: David Margolis-Pineo
To: Helen Donaldson
Date: 11/2/2015 11:13 AM
Subject: 3 Pleasant Ave - Final Comments

August 21, 2015
November 2, 2015

Memo To: Nell Donaldson
Barbara Barhydt
From: David Margolis-Pineo
Re: Review Comments for 3 Pleasant Ave. – 2015-102

The Department of Public Services has the following review comments.

1. All utility cables to service this complex are required to be placed underground from the road right. There are currently two overhead feeds to the site from Pleasant Ave and one from Forest Ave. It would be desirable to have one underground feed from Pleasant Ave.
Issue addressed. The city will work with CMP and the applicant to choose a location acceptable for the proposed transformer on Forest Ave.
2. Neither Pleasant or Forest Ave are under street moratoriums.
No comment required.
3. The applicant is requested to redirect all roof drains currently discharging to the sewer system to grade.
The applicant has agreed to redirect all roof drains to grade.
4. Survey comments will be forthcoming.
Survey comments have been addressed.
5. All plans are required to be professionally stamped.
Item resolved.

We have no further comments at this time.

From: David Senus <dsenus@woodardcurran.com>
To: Helen Donaldson <HCD@portlandmaine.gov>
Date: 11/2/2015 7:42 AM
Subject: RE: COMMENTS NEEDED: 3 Pleasant Ave Response to Staff Review Comments

Hi Nell.

They have confirmed keeping the additional impervious area to under 1,000 sf and they have added notes related to catch basin inlet protection and street sweeping. All comments from W&C have been adequately addressed.

Thanks
 Dave

David Senus, PE (Maine), Project Manager
 Woodard & Curran, Inc.
 41 Hutchins Drive
 Portland, ME 04102
 Phone: (207) 558-3704
 Cell: (207) 210-7035
 Fax: (207) 774-6635

Woodard & Curran
www.woodardcurran.com<<http://www.woodardcurran.com/>>
 Commitment & Integrity Drive Results

From: Helen Donaldson [mailto:HCD@portlandmaine.gov]
 Sent: Monday, November 02, 2015 7:35 AM
 To: David Margolis-Pineo <DMP@portlandmaine.gov>; David Senus <dsenus@woodardcurran.com>; Jeff Tarling <JST@portlandmaine.gov>; Keith Gautreau <KNG@portlandmaine.gov>; Thomas Errico <thomas.errico@tylin.com>
 Subject: COMMENTS NEEDED: 3 Pleasant Ave Response to Staff Review Comments

All,

Attached are revised plans for 3 Pleasant Avenue. Barbara has an opening on the PB agenda for next week, so she is hoping that we can turn these around in time for a report to go out on Thursday.

Can you please take a look and get me any outstanding comments by the end of the day Wednesday?

Thanks in advance for turning this around so quickly. I apologize for the quick timeframe.

Nell

>>> "Sandi Keef" <SKeef@fstinc.commailto:SKeef@fstinc.com>> 10/30/2015 3:56 PM >>>
 Nell,

Attached please find a copy of FST's response to staff review comments for the Preliminary Submission for 3 Pleasant Ave. We have put a copy in the mail of the letter and attachments, 1 full size copy and 1 – 11x17 size copy of the plans and also a CD with the files as well. Please contact our office with any questions.

Thank you,
 Sandi M. Keef | Technical Assistant
 [FST 100 Years logo]<<http://www.fstinc.com/>>

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MEMORANDUM

To: FILE
From: Nell Donaldson
Subject: Application ID: 2015-102
Date: 11/5/2015

Comments Submitted by: Keith Gautreau/Fire on 8/12/2015

Hydrant location on the corner of Forest and Pleasant is good and adequate flow being tapped into Forest Ave main.

Hydrants

2009 NFPA 1 18.3 Water Supplies and Fire Hydrants

-Fire Department Connections shall not be located where large diameter hose may block egress.

Comments Submitted by: Keith Gautreau/Fire on 8/12/2015

Construction Management Plan

Streets must maintain a 20' width for Fire Department access at all times.

Fire Hydrants shall not be blocked or enclosed by fencing. A 3' foot clearance must be kept at all times around the fire hydrant.

If gates are locked, a Portland Fire Department Knox padlock must be purchased by the applicant to allow access for the Fire Department.

The Construction Company' emergency contact information shall be posted on the property in case of an after hours emergency.

All construction shall comply with 2009 NFPA 1 Chapter 16 Safeguards During Building Construction, Alteration, and Demolition Operations.

Any cutting and welding done will require a Hot Work Permit from Fire Department.

Comments Submitted by: Keith Gautreau/Fire on 8/12/2015

Access to the site looks good off of Forest Ave and Pleasant Ave. 30' Wide access into the proposed parking lot exceeds the minimum requirements. Parking across the street is acceptable and enables better emergency access.

Comments Submitted by: Keith Gautreau/Fire on 10/14/2015

After further looking at the curb cut and driveway for emergency access off Pleasant Ave. it appears very narrow. Emergency access lanes must be minimum 20'.

Comments Submitted by: Keith Gautreau/Fire on 11/2/2015

After having discussions with Nell around the driveway and curbcut on Pleasant, the Fire Dept. will be okay with the proposed width of the driveway for emergency access. We discussed the possibility of moving one of the new proposed trees away from the driveway /curbcut to allow for better aerial ladder access to the upper floors of the apartment building.

From: William Clark
To: Helen Donaldson
CC: David Margolis-Pineo
Date: 11/2/2015 1:14 PM
Subject: Re: 3 Pleasant Ave Subdivision Plat - final survey review 11 02 2015

Hi Nell,

They addressed all five of my comments from 10/22/15, and the easements are clear, as well as the property corners to be set.

I notice they changed the boundary line between Lots A and B.

Great plan.

Thanks,

Bill

>>> Helen Donaldson November 2, 2015 7:52 AM >>>
Bill,

Can you take a look at the attached and let me know if they've addressed your comments?

Thanks,
Nell

>>> William Clark 10/22/2015 3:27 PM >>>
Hi Nell,

I have reviewed the Subdivision Plat dated 9/30/2015 (attached).

1. This is a Subdivision Plan and needs a Professional Land Surveyor's Seal. This is State Law.
2. They need to show property corners to set. This was requested at the last review.
3. Proposed Easement for Transit Shelter.
 - Needs to state "to be conveyed to the City of Portland".
 - Needs bearings and distances to define the area.
 - Needs to meet dimensional requirements of METRO bus shelters, the concrete pad,
 - and area around it to allow for maintenance.

4. Easements on the south side of Pleasant Avenue need to be clearer and state who is benefitted by them.

5. Since all the information on the ALTA/ACSM Land Title Survey is not included there needs to be a reference to the Title Survey and the Title Survey should be recorded.

Thanks,

Bill



September 29, 2015

Ms. Barbara Barhydt
Development Review Services Manager
Planning and Development Department
City of Portland
389 Congress Street
Portland, Maine 04101-3509

**Subject: Proposed Redevelopment of Pleasant Avenue Church
3 Pleasant Avenue – Portland, Maine
Preliminary Site Plan and Subdivision Application**

Dear Ms. Barhydt:

On behalf of Hardypond Development Company, LLC, we are pleased to provide the accompanying revised package of submission materials related to a proposed redevelopment of the former Pleasant Avenue Church site located at 3 Pleasant Avenue into 25 residential apartments. Following input from our previous Neighborhood Meeting, the project has been revised to propose 25 market rate residential units. The project site is located on Map 130, Lots I-012 and I-014 according to the City of Portland Tax Assessor's Maps and also includes redivision of the single parcel into two lots. This submission package is intended to meet the City's Preliminary Submission Requirements as outlined in the Level III Application procedures.

Accompanying this cover letter are the following materials:

- Level III Preliminary Site Plan and Subdivision Application
- Section 1: Written Description of Project
- Section 2: Evidence of Right, Title and Interest
- Section 3: Written Assessment of Proposed Project's Compliance with Applicable Zoning and Land Use Requirements

You will find in the accompanying materials, information including the Preliminary Site Layout Plan and Preliminary Subdivision Plan. We have also included preliminary building elevations and floor plans for the building renovations prepared by Shields Architecture. Preliminary information pertaining to the project's utilities needs and statements regarding compliance with the City's Standards are contained within this submission.

Ms. Barbara Barhydt
September 29, 2015
Page 2

The Development Team expects to continue to work with City Officials/Representatives on both the onsite and offsite components including, but not limited to, coordination with Public Services representatives on new service connections for the proposed building and potential transit improvements.

On behalf of the Design Team, we look forward to your assistance on the project and we look forward to the nearest available workshop meeting with Planning Staff. Please find one (1) hard copy of the application materials including one set each of 11x17 and full size plans, along with a CD containing PDF files for all submitted materials.

If you have any questions regarding these materials, please contact this office.

Sincerely,

FAY, SPOFFORD & THORNDIKE

A handwritten signature in blue ink, appearing to read 'A. Johnston', is written over the company name.

Andrew D. Johnston, P.E.
Principal Engineer

ADJ/smk

Enclosures – See list above

c: Robert Gaudreau, Hardypond Development Company, LLC

AGENT AUTHORIZATION

From: Bob Gaudreau [<mailto:Bob@hardypond.com>]
Sent: Thursday, June 11, 2015 3:21 PM
To: Andrew Johnston
Subject: RE: Shalom House - Pleasant Avenue Church

Andy:

You are allowed to sign the submission of paperwork as my consultant for the City subdivision application.

So does this take care of everything you desired of me?

Thanks Bob

Hardypond Development Company, LLC
It's Manager

From: Andrew Johnston [<mailto:AJohnston@fstinc.com>]
Sent: Thursday, June 11, 2015 8:51 AM
To: Bob Gaudreau
Cc: Sandi Keef
Subject: Shalom House - Pleasant Avenue Church

Hi Bob,
We are finalizing the preliminary application package for submission, but will need a couple of items from you to do this.

Could you send us the following:

- A copy of the new deed
- A letter of financial capacity
- An agent authorization letter (assuming that you would like us to sign the application)

Thanks,
Andy

Andrew D. Johnston, P.E. | Principal Engineer



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T: 207-775-1121 x4126 | F: 207-879-0896

ajohnston@fstinc.com | www.fstinc.com |  

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Portland, Maine



Yes. Life's good here.

Jeff Levine, AICP, Director
Planning & Urban Development Department

Electronic Signature and Fee Payment Confirmation

Notice: Your electronic signature is considered a legal signature per state law.

By digitally signing the attached document(s), you are signifying your understanding this is a legal document and your electronic signature is considered a **legal signature** per Maine state law. You are also signifying your intent on paying your fees by the opportunities below.

I, the undersigned, intend and acknowledge that no Site Plan or Historic Preservation Applications can be reviewed until payment of appropriate application fees are **paid in full** to the Inspections Office, City of Portland Maine by method noted below:

- ☐ Within 24-48 hours, once my complete application and corresponding paperwork has been electronically delivered, I intend to **call the Inspections Office** at 207-874-8703 and speak to an administrative representative and provide a credit/debit card over the phone.
- ☐ Within 24-48 hours, once my application and corresponding paperwork has been electronically delivered, I intend to **call the Inspections Office** at 207-874-8703 and speak to an administrative representative and provide a credit/debit card over the phone.
- ☒ I intend to deliver a payment method through the U.S. Postal Service mail once my application paperwork has been electronically delivered.


Applicant Signature:

September 29, 2015

Date:

Andrew D. Johnston, P.E.

September 29, 2015

I have provided digital copies and sent them on:

Date:

NOTE: All electronic paperwork must be delivered to buildinginspections@portlandmaine.gov or by physical means i.e. a thumb drive or CD to the Inspections Office, City Hall, 3rd Floor, Room 315.



Level III – Preliminary and Final Site Plans Development Review Application Portland, Maine

Planning and Urban Development Department
Planning Division

Portland's Planning and Urban Development Department coordinates the development review process for site plan, subdivision and other applications under the City's Land Use Code. Attached is the application form for a Level III: Preliminary or Final Site Plan. Please note that Portland has delegated review from the State of Maine for reviews under the Site Location of Development Act, Chapter 500 Stormwater Permits, and Traffic Movement Permits.

Level III: Site Plan Development includes:

- New structures with a total floor area of 10,000 sq. ft. or more except in Industrial Zones.
- New structures with a total floor area of 20,000 sq. ft. or more in Industrial Zones.
- New temporary or permanent parking area(s) or paving of existing unpaved parking areas for more than 75 vehicles.
- Building addition(s) with a total floor area of 10,000 sq. ft. or more (cumulatively within a 3 year period) except in Industrial Zones.
- Building addition(s) with a total floor area of 20,000 sq. ft. or more in Industrial Zones.
- A change in the use of a total floor area of 20,000 sq. ft. or more in any existing building (cumulatively within a 3 year period).
- Multiple family development (3 or more dwelling units) or the addition of any additional dwelling unit if subject to subdivision review.
- Any new major or minor auto business in the B-2 or B-5 Zone, or the construction of any new major or minor auto business greater than 10,000 sq. ft. of building area in any other permitted zone.
- Correctional prerelease facilities.
- Park improvements: New structures greater than 10,000 sq. ft. and/or facilities encompassing 20,000 sq. ft. or more (excludes rehabilitation or replacement of existing facilities); new nighttime outdoor lighting of sports, athletic or recreation facilities not previously illuminated.
- Land disturbance of 3 acres or more (includes stripping, grading, grubbing, filling or excavation).

Portland's development review process and requirements are outlined in the Land Use Code (Chapter 14) which is available on our website:

Land Use Code: <http://me-portland.civicplus.com/DocumentCenter/Home/View/1080>

Design Manual: <http://me-portland.civicplus.com/DocumentCenter/View/2355>

Technical Manual: <http://me-portland.civicplus.com/DocumentCenter/View/2356>

Planning Division
Fourth Floor, City Hall
389 Congress Street
(207) 874-8719

Office Hours
Monday thru Friday
8:00 a.m. – 4:30 p.m.

PROJECT NAME: Pleasant Avenue Church Redevelopment

PROPOSED DEVELOPMENT ADDRESS:

3 Pleasant Avenue, Portland, Maine

PROJECT DESCRIPTION:

Redevelopment of the existing church building to construct 25 apartment units.

Division of the Rectory from the church lot.

CHART/BLOCK/LOT: Map 130, Lots H-013, I-012 & I-014

PRELIMINARY PLAN
FINAL PLAN

09/29/15 (date)
_____ (date)

CONTACT INFORMATION:

Applicant – must be owner, Lessee or Buyer Name: Hardypond Development Company, LLC Business Name, if applicable: Address: 7 Tee Drive City/State : Portland, ME Zip Code: 04103	Applicant Contact Information Work # 207-797-6066 Home# Cell # Fax# e-mail: bob@hardypond.com
Owner – (if different from Applicant) Name: Same Address: City/State : Zip Code:	Owner Contact Information Work # Home# Cell # Fax# e-mail:
Agent/ Representative Fay, Spofford & Thorndike Name: Attn: Andrew Johnston, P.E. Address: 778 Main Street, Suite 8 City/State : South Portland, ME Zip Code: 04106	Agent/Representative Contact information Work # 207-775-1121 Cell # e-mail:
Billing Information Hardypond Development Company, LLC Name: Attn: Robert Gaudreau Address: 7 Tee Drive City/State : Portland, ME Zip Code: 04103	Billing Information Work # 207-797-6066 Cell # Fax# e-mail: bob@hardypond.com

Engineer Fay, Spofford & Thorndike Name: Attn: Andrew Johnston, P.E. Address: 778 Main Street, Suite 8 City/State : South Portland, ME Zip Code: 04106	Engineer Contact Information Work # 207-775-1121 Cell # _____ Fax# 207-879-0896 e-mail: ajohnston@fstinc.com
Surveyor Owen Haskell, Inc. Name: Attn: John Swan, PLS Address: 390 US Route 1, Unit 10 City/State : Falmouth, ME Zip Code: 04105	Surveyor Contact Information Work # 207-774-0424 Cell # _____ Fax# _____ e-mail: jswan@owenhaskell.com
Architect Shields Architecture Name: Attn: John Shields Address: 216 Range Road City/State : Cumberland, ME Zip Code: 04021	Architect Contact Information Work # 207-775-8926 Cell # _____ Fax# _____ e-mail: jshields@maine.rr.com
Attorney Name: Address: City/State : _____ Zip Code: _____	Attorney Contact Information Work # _____ Cell # _____ Fax# _____ e-mail: _____

APPLICATION FEES:

Check all reviews that apply. (Payment may be made by Credit Card, Cash or Check payable to the City of Portland.)

Level III Development (check applicable reviews) ☒ Less than 50,000 sq. ft. (\$500.00) ☐ 50,000 - 100,000 sq. ft. (\$1,000) ☐ 100,000 – 200,000 sq. ft. (\$2,000) ☐ 200,000 – 300,000 sq. ft. (\$3,000) ☐ over \$300,00 sq. ft. (\$5,000) ☐ Parking lots over 11 spaces (\$1,000) ☐ After-the-fact Review (\$1,000.00 plus applicable application fee) Plan Amendments (check applicable reviews) ☐ Planning Staff Review (\$250) ☐ Planning Board Review (\$500) The City invoices separately for the following: • Notices (\$.75 each) • Legal Ad (% of total Ad) • Planning Review (\$40.00 hour) • Legal Review (\$75.00 hour) Third party review fees are assessed separately. Any outside reviews or analysis requested from the Applicant as part of the development review, are the responsibility of the Applicant and are separate from any application or invoice fees.	Other Reviews (check applicable reviews) ☐ Traffic Movement (\$1,000) ☐ Stormwater Quality (\$250) ☒ Subdivisions (\$500 + \$25/lot) # of Lots <u>26</u> x \$25/lot = <u>\$1,150</u> ☐ Site Location (\$3,000, except for residential projects which shall be \$200/lot) # of Lots <u> </u> x \$200/lot = <u> </u> ☐ Other _____ ☐ Change of Use ☐ Flood Plain ☐ Shoreland ☐ Design Review ☐ Housing Replacement ☐ Historic Preservation
--	--

APPLICATION SUBMISSION:

1. All site plans and written application materials must be submitted electronically on a CD or thumb drive with each plan submitted as separate files, with individual file which can be found on the **Electronic Plan and Document Submittal** page of the City's website at <http://me-portland.civicplus.com/764/Electronic-Plan-and-Document-Submittal>
2. In addition, one (1) paper set of the plans (full size), one (1) paper set of plans (11 x 17), paper copy of written materials, and the application fee must be submitted to the Building Inspections Office to start the review process.

The application must be complete, including but not limited to the contact information, project data, application checklists, wastewater capacity, plan for fire department review, and applicant signature. The submissions shall include one (1) paper packet with folded plans containing the following materials:

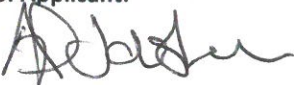
1. One (1) full size site plans that must be folded.
2. One (1) copy of all written materials or as follows, unless otherwise noted:
 - a. Application form that is completed and signed.
 - b. Cover letter stating the nature of the project.
 - c. All Written Submittals (Sec. 14-525 2. (c), including evidence of right, title and interest.
3. A stamped standard boundary survey prepared by a registered land surveyor at a scale not less than one inch to 50 feet.
4. Plans and maps based upon the boundary survey and containing the information found in the attached sample plan checklist.
5. One (1) set of plans reduced to 11 x 17.

Please refer to the application checklist (attached) for a detailed list of submission requirements.

APPLICANT SIGNATURE:

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Planning Authority and Code Enforcement's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

This application is for a Level III Site Plan review. It is not a permit to begin construction. An approved site plan, a Performance Guarantee, Inspection Fee, Building Permit, and associated fees will be required prior to construction. Other Federal, State or local permits may be required prior to construction, which are the responsibility of the applicant to obtain.

Signature of Applicant: 	Date: September 29, 2015
--	-----------------------------

PROJECT DATA

The following information is required where applicable, in order to complete the application.

Total Area of Site	32,600	sq. ft.
Proposed Total Disturbed Area of the Site	2,600 +/-	sq. ft.
If the proposed disturbance is greater than one acre, then the applicant shall apply for a Maine Construction General Permit (MCGP) with DEP and a Stormwater Management Permit, Chapter 500, with the City of Portland.		
Impervious Surface Area		
Impervious Area (Total Existing)	20,875	sq. ft.
Impervious Area (Total Proposed)	22,179	sq. ft.
Building Ground Floor Area and Total Floor Area (former Church)		
Building Footprint (Total Existing)	8,995	sq. ft.
Building Footprint (Total Proposed)	8,995	sq. ft.
Building Floor Area (Total Existing)	17,582	sq. ft.
Building Floor Area (Total Proposed)	17,582	sq. ft.
Zoning		
Existing	B2c/R5	
Proposed, if applicable	N/A	
Land Use		
Existing	Institutional, Residential, Parking	
Proposed	Residential, Parking	
Residential, If applicable (former Church)		
# of Residential Units (Total Existing)	0	
# of Residential Units (Total Proposed)	1	
# of Lots (Total Proposed)	26	
# of Affordable Housing Units (Total Proposed)	26	
# of Affordable Housing Units (Total Proposed)	0	
Proposed Bedroom Mix (former Church)		
# of Efficiency Units (Total Proposed)	16	
# of One-Bedroom Units (Total Proposed)	9	
# of Two-Bedroom Units (Total Proposed)	0	
# of Three-Bedroom Units (Total Proposed)	0	
Parking Spaces		
# of Parking Spaces (Total Existing)	25	
# of Parking Spaces (Total Proposed)	25	
# of Handicapped Spaces (Total Proposed)	2	
Bicycle Parking Spaces		
# of Bicycle Spaces (Total Existing)	0	
# of Bicycle Spaces (Total Proposed)	10	
Estimated Cost of Project		
	\$2,000,000	

PRELIMINARY PLAN (Optional) - Level III Site Plan			
Applicant Checklist	Planner Checklist	# of Copies	GENERAL WRITTEN SUBMISSIONS CHECKLIST
X		1	Completed Application form
X		1	Application fees
X		1	Written description of project
X		1	Evidence of right, title and interest
X		1	Evidence of state and/or federal approvals, if applicable
X		1	Written assessment of proposed project's compliance with applicable zoning requirements
X		1	Summary of existing and/or proposed easement, covenants, public or private rights-of-way, or other burdens on the site
X		1	Written requests for waivers from site plan or technical standards, if applicable.
X		1	Evidence of financial and technical capacity
		1	Traffic Analysis (may be preliminary, in nature, during the preliminary plan phase)
Applicant Checklist	Planner Checklist	# of Copies	SITE PLAN SUBMISSIONS CHECKLIST
X		1	Boundary Survey meeting the requirements of Section 13 of the City of Portland's Technical Manual
X		1	Preliminary Site Plan including the following: (information provided may be preliminary in nature during preliminary plan phase)
			Proposed grading and contours;
			Existing structures with distances from property line;
			Proposed site layout and dimensions for all proposed structures (including piers, docks or wharves in Shoreland Zone), paved areas, and pedestrian and vehicle access ways;
			Preliminary design of proposed stormwater management system in accordance with Section 5 of the Technical Manual (note that Portland has a separate applicability section);
			Preliminary infrastructure improvements;
			Preliminary Landscape Plan in accordance with Section 4 of the Technical Manual;
			Location of significant natural features (including wetlands, ponds, watercourses, floodplains, significant wildlife habitats and fisheries or other important natural features) located on the site as defined in Section 14-526 (b) (1);
			Proposed buffers and preservation measures for significant natural features, as defined in Section 14-526 (b) (1);
			Location , dimensions and ownership of easements, public or private rights of way, both existing and proposed;
			Exterior building elevations.

FINAL PLAN - Level III Site Plan			
Applicant Checklist	Planner Checklist	# of Copies	GENERAL WRITTEN SUBMISSIONS CHECKLIST (* If applicant chooses to submit a Preliminary Plan, then the * items were submitted for that phase and only updates are required)
		1	* Completed Application form
		1	* Application fees
		1	* Written description of project
		1	* Evidence of right, title and interest
		1	* Evidence of state and/or federal permits
		1	* Written assessment of proposed project's specific compliance with applicable Zoning requirements
		1	* Summary of existing and/or proposed easements, covenants, public or private rights-of-way, or other burdens on the site
		1	* Evidence of financial and technical capacity
		1	Construction Management Plan
		1	A traffic study and other applicable transportation plans in accordance with Section 1 of the technical Manual, where applicable.
		1	Written summary of significant natural features located on the site (Section 14-526 (b) (a))
		1	Stormwater management plan and stormwater calculations
		1	Written summary of project's consistency with related city master plans
		1	Evidence of utility capacity to serve
		1	Written summary of solid waste generation and proposed management of solid waste
		1	A code summary referencing NFPA 1 and all Fire Department technical standards
		1	Where applicable, an assessment of the development's consistency with any applicable design standards contained in Section 14-526 and in City of Portland Design Manual
		1	Manufacturer's verification that all proposed HVAC and manufacturing equipment meets applicable state and federal emissions requirements.

Applicant Checklist	Planner Checklist	# of Copies	SITE PLAN SUBMISSIONS CHECKLIST (* If applicant chooses to submit a Preliminary Plan, then the * items were submitted for that phase and only updates are required)
		1	* Boundary Survey meeting the requirements of Section 13 of the City of Portland's Technical Manual
		1	Final Site Plans including the following:
			Existing and proposed structures, as applicable, and distance from property line (including location of proposed piers, docks or wharves if in Shoreland Zone);
			Existing and proposed structures on parcels abutting site;
			All streets and intersections adjacent to the site and any proposed geometric modifications to those streets or intersections;
			Location, dimensions and materials of all existing and proposed driveways, vehicle and pedestrian access ways, and bicycle access ways, with corresponding curb lines;
			Engineered construction specifications and cross-sectional drawings for all proposed driveways, paved areas, sidewalks;
			Location and dimensions of all proposed loading areas including turning templates for applicable design delivery vehicles;
			Existing and proposed public transit infrastructure with applicable dimensions and engineering specifications;
			Location of existing and proposed vehicle and bicycle parking spaces with applicable dimensional and engineering information;
			Location of all snow storage areas and/or a snow removal plan;
			A traffic control plan as detailed in Section 1 of the Technical Manual;
			Proposed buffers and preservation measures for significant natural features, where applicable, as defined in Section 14-526(b)(1);
			Location and proposed alteration to any watercourse;
			A delineation of wetlands boundaries prepared by a qualified professional as detailed in Section 8 of the Technical Manual;
			Proposed buffers and preservation measures for wetlands;
			Existing soil conditions and location of test pits and test borings;
			Existing vegetation to be preserved, proposed site landscaping, screening and proposed street trees, as applicable;
			A stormwater management and drainage plan, in accordance with Section 5 of the Technical Manual;
			Grading plan;
			Ground water protection measures;
			Existing and proposed sewer mains and connections;

- Continued on next page -

		Location of all existing and proposed fire hydrants and a life safety plan in accordance with Section 3 of the Technical Manual;
		Location, sizing, and directional flows of all existing and proposed utilities within the project site and on all abutting streets;
		Location and dimensions of off-premises public or publicly accessible infrastructure immediately adjacent to the site;
		Location and size of all on site solid waste receptacles, including on site storage containers for recyclable materials for any commercial or industrial property;
		Plans showing the location, ground floor area, floor plans and grade elevations for all buildings;
		A shadow analysis as described in Section 11 of the Technical Manual, if applicable;
		A note on the plan identifying the Historic Preservation designation and a copy of the Application for Certificate of Appropriateness, if applicable, as specified in Section Article IX, the Historic Preservation Ordinance;
		Location and dimensions of all existing and proposed HVAC and mechanical equipment and all proposed screening, where applicable;
		An exterior lighting plan in accordance with Section 12 of the Technical Manual;
		A signage plan showing the location, dimensions, height and setback of all existing and proposed signs;
		Location, dimensions and ownership of easements, public or private rights of way, both existing and proposed.



**PORTLAND FIRE DEPARTMENT
SITE REVIEW
FIRE DEPARTMENT CHECKLIST**



A separate drawing[s] shall be provided as part of the site plan application for the Portland Fire Department's review.

1. Name, address, telephone number of applicant
3. Name address, telephone number of architect
4. Proposed uses of any structures [NFPA and IBC classification]
6. Square footage of all structures [total and per story]
7. Elevation of all structures
8. Proposed fire protection of all structures
 - **As of September 16, 2010 all new construction of one and two family homes are required to be sprinkled in compliance with NFPA 13D. This is required by City Code. (NFPA 101 2009 ed.)**
9. Hydrant locations
10. Water main[s] size and location
11. Access to all structures [min. 2 sides]
12. A code summary shall be included referencing NFPA 1 and all fire department. Technical standards.

Some structures may require Fire flows using annex H of NFPA 1



September 29, 2015

Keith Gautreau, Assistant Chief
City of Portland Fire Department
380 Congress Street
Portland, ME 04101

Subject: Proposed Redevelopment of Pleasant Avenue Church
3 Pleasant Ave, Portland, Maine
Applicant: Hardypond Development Company, LLC
NFPA 1 Review to Access and Other Fire Department Issues

Dear Assistant Chief Gautreau:

In accordance with instructions in the City's Site Plan Review packet, please find enclosed the drawing necessary for your review of the former Pleasant Avenue Church site at 3 Pleasant Street for the redevelopment project to construct up to 25 residential apartments. We have listed each item in your checklist below, followed by our response:

➤ **Fire Department Checklist:**

1. Name, address, telephone number of applicant:

Hardypond Development Company, LLC
7 Tee Drive
Portland, Maine 04103
Phone: 207-797-6066
bob@hardypond.com

2. Name address, telephone number of architect:

John Shields
Shields Architecture
216 Range Road
Cumberland, ME 04021
Phone: 207-776-8926
jshields@maine.rr.com

3. Proposed uses of any structures [NFPA and IBC classification]:

The following IBC and NFPA classifications will apply to the Phase III development:

IBC – 2009	NFPA Classification – 2009
R2	Chapter 30

Assistant Chief Keith Gautreau
September 29, 2015
Page 2

4. Square footage of all structures [total and per story]:

BUILDING PROGRAM		
Structure	Total (SF)	Per Story ±
Residential	17,582	1 st Floor – 8,900 SF 2 nd Floor – 5,041 SF 3 rd Floor – 3,641 SF

5. Elevation of all structures:

Building elevations are currently being prepared and will be provided to the Fire Department upon completion.

6. Proposed fire protection of all structures:

All of the structures are proposed to have a sprinkler system. Fire protection is currently provided by an existing onsite hydrant and hydrants within Pleasant Avenue in the vicinity of the site.

7. Hydrant locations:

There is an existing hydrant in front of the building, on the north side of Pleasant Avenue approximately 15' from Forest Avenue.

8. Water main[s] size and location:

The site will be served from the 8" main in Pleasant Avenue.

9. Access to all structures [min. 2 sides]:

The accompanying site plan depicts the site's access conditions that include access to two or more sides of the buildings from the adjacent public streets.

10. A Code Summary shall be included referencing NFPA 1 and all Fire Department Technical Standards.

➤ **NFPA 1 – Chapter 18 Fire Department Access and Water Supply**

18.2 Fire Department Access

The project consists of the re-development of the existing church on the corner of Pleasant Avenue and Forest Avenue. The site has frontage on both of the adjacent streets. Forest Avenue has a paved width of approximately 48 feet adjacent to the site. Pleasant Avenue has a paved width of approximately 40 feet adjacent to the site.

Assistant Chief Keith Gautreau

September 29, 2015

Page 3

Per NFPA 1 Chapter 18.2.3.2.1 access is available to within 50 feet of at least one exterior door of the building.

Per NFPA Chapter 18.2.3.2.2 all first story floors are located within 150 feet of an access road.

There is an existing fire hydrant at the front of the church property, on the north side of Pleasant Avenue, approximately 15 feet from the intersection with Forest Avenue. This is shown on the Site Plan. Additional nearby hydrants are located at the corner of Norwood Street and Pleasant Avenue, and on the east side of Forest Avenue, opposite the intersection with Hartley Street.

➤ **City of Portland Technical Manual Section 3 – Public Safety**

Part 3.4 Site Access Standards

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).

Supporting evidence: Not applicable. No dead-end roads exist or are proposed.

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.

Supporting evidence: As depicted on the site plans, the building has access from two sides via the adjacent streets.

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.*

Supporting Evidence: The existing Church and Vestry buildings will remain. The connecting breezeway will be removed providing enhanced separation and access for emergency vehicles.

Assistant Chief Keith Gautreau
September 29, 2015
Page 4

3.4.4. Fire Dept. access roads shall extend to within 50' of an exterior door providing access to the interior of the structure.

Supporting Evidence: All buildings will be provided with an exterior entrance door that will be within 50' of an adjacent street.

3.4.5. Site access shall provide a minimum of nine (9) feet clearance height to accommodate ambulance access.

Supporting Evidence: Not applicable. Clear access is provided along the two adjacent streets.

3.4.6. Elevators shall be sized to accommodate an 80 x 24 inch stretcher.

Supporting Evidence: There are no elevators proposed for the project.

3.4.7. All structures are required to display the assigned street number. Numbers shall be clearly visible from the public right of way.

Supporting Evidence: The applicant will work with the City's Public Services Division to assign street addresses and numbering to meet City standards.

If you have any questions with the information submitted, please contact our office.

Prepared By:

FAY, SPOFFORD & THORNDIKE



Andrew D. Johnston, P.E.
Principal Engineer

ADJ/smk

Enclosure: Figure C-1 – Conceptual Site
Floor Plans and Elevations prepared by Shields Architecture

c: Bob Gautreau, Hardypond Development Company, LLC



September 29, 2015

Mr. David Margolis-Pineo
City of Portland
Department of Public Services
55 Portland Street
Portland, Maine 04101-2991

**Subject: Proposed Redevelopment of Pleasant Avenue Church
3 Pleasant Ave, Portland, Maine
Wastewater Capacity Application**

Dear Mr. Margolis-Pineo:

Our office is working as a consultant to Hardypond Development Company, LLC in the site planning and permitting associated with a proposed redevelopment of the former Pleasant Avenue Church in the City of Portland to construct up to 25 residential apartments. The project site is located on Map 130, Lots I-012, I-013, and H-013 according to the City of Portland Tax Assessor's Maps. On behalf of the developer, we are requesting a letter affirming that the proposed project can be served by the municipal wastewater treatment system.

The project will consist of three buildings with size and use summarized as follows:

Location	Use	Size (SF)
Church	Residential Apartment	17,000±/Above Grade
Rectory	Single-family	2,000±

The accompanying plans indicate the current program proposed.

The project will consist of apartment units in existing and proposed buildings, with estimated daily water uses as follows:

Location	Use	Demand Criteria	Estimated Demand
Church	Residential Apartment	120 gal. per unit/per day – 25 units at 70 gpd	3,000 gpd
Rectory	Single-family 4-Bedroom	360 gal. per day	360 gpd
Total Estimated Flow			3,360 gpd

Mr. David Margolis-Pineo
September 29, 2015
Page 2

Based on this modest amount of flow, we trust that the existing wastewater collection and treatment system has adequate capacity to serve this project. We are in the process of completing the Level III Site Plan Application for a submission to the City Planning Staff and would appreciate your response to the Planning Department.

If you have any questions concerning this request, please contact me.

Sincerely,

FAY, SPOFFORD & THORNDIKE

A handwritten signature in blue ink, appearing to read "A. Johnston", is positioned above the printed name.

Andrew D. Johnston, P.E.
Principal Engineer

ADJ/smk

Enclosures

c: Robert Gaudreau, Hardypond Development Company, LLC

CITY OF PORTLAND WASTEWATER CAPACITY APPLICATION

Department of Public Services,
55 Portland Street,
Portland, Maine 04101-2991



Mr. Frank J. Brancely,
Senior Engineering Technician,
Phone #: (207) 874-8832,
Fax #: (207) 874-8852,
E-mail: fjb@portlandmaine.gov

Date: September 29, 2015

1. Please, Submit Utility, Site, and Locus Plans.

Site Address: 3 Pleasant Avenue

Chart Block Lot Number: 130-I-14

Proposed Use: Residential Apartments

Previous Use: Church (Institutional)

Existing Sanitary Flows: N/A (Vacant) GPD

Existing Process Flows: N/A GPD

Description and location of City sewer that is to
receive the proposed building sewer lateral.

15" diameter sewer in Pleasant Avenue

Site Category | Commercial (see part 4 below)
Industrial (complete part 5 below)
Governmental
Residential
Other (specify)

X

(Clearly, indicate the proposed connections, on the submitted plans)

2. Please, Submit Contact Information.

City Planner's Name: Barbara Barhydt Phone: 207-874-8699

Owner/Developer Name: Hardypond Development Company, LLC

Owner/Developer Address: 7 Tee Drive, Portland, ME 04103

Phone: 207-797-6066

Fax: _____ E-mail: bob@hardypond.com

Engineering Consultant Name: Fay, Spofford & Thorndike, Attn: Andrew Johnston, P.E.

Engineering Consultant Address: 778 Main Street, Suite 8, South Portland, ME 04106

Phone: 207-775-1121

Fax: 207-879-0896

E-mail: ajohnston@fstinc.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: 3,360 GPD

Peaking Factor/ Peak Times: 6

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)

TR-16, Handbook of Subsurface Wastewater Disposal in Maine 2015

**(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)**

(See attached letter)

4. Please, Submit External Grease Interceptor Calculations.

Total Drainage Fixture Unit (DFU) Values:

N/A - Residential Only

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 below, or attached, as a separate sheet)

Notes, Comments or Calculation

Pleasant Avenue Church Redevelopment Sewer Demand Estimate

Map , Lots City of Portland, Maine

Building	Use	Demand Criteria	Unit Demand	Units	Demand (gpd)
Church	Apartment	120gpd per dwelling unit	120	25	3000
House Lot	Single family	90gpd/ bedroom	90	4	360
TOTAL PROJECT AVERAGE DAILY WATER DEMAND ESTIMATE				29	3360

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LIST OF ATTACHMENTS

Section 1: Attachment A – Existing Site Photographs

Section 2: Attachment B – Deed

Attachment C – Letter of Financial Capacity

Section 3: Attachment D – Correspondence with Utility Companies

LIST OF PLANS

SHEET #	TITLE
C-1.0	COVER SHEET
C-2.0	ALTA/ACSM LAND TITLE SURVEY BY OWEN HASKELL, INC.
C-2.1	SUBDIVISION PLAN
C-3.0	SITE LAYOUT PLAN
C-4.0	SITE DETAILS

1. DEVELOPMENT DESCRIPTION

1.1 PROJECT OVERVIEW

Hardypond Development Company, LLC has acquired the site of the Pleasant Avenue Church with the objective of redeveloping the site and associated properties to construct 25 market rate apartment units for workforce housing. The apartment units will be constructed within the existing church building, which will be modified to reflect current codes, but with sensitivity to the historical character of the structure. The existing rectory building is currently attached to the church via a breezeway. This will be demolished and the property will be divided to provide a separate lot for the existing residence. It is our understanding that this meets the definition of a functional division of the land.

An easement will be provided on Map 130, Lot H-013, opposite the church site to provide parking for the new use. A total of 25 parking spaces are provided. Section 14.332.4(a) of the City of Portland Land Use Ordinance requires one parking space per dwelling unit for multi-family uses in the B-2c zone.

The project proposes minimal changes to the existing site features and no significant changes to cover conditions, or stormwater runoff.

The objective is to receive approvals for the project in the fall of 2015, begin work on the project immediately thereafter, and have the first tenant spaces available in late fall 2016.

1.2 PROJECT PURPOSE AND NEED

The proposed project is considered a unique opportunity to transform a vacant landmark property into a dynamic new moderate density residential development within an established neighborhood. The benefits of this project include the following:

- The provision of much needed off-peninsula residential units in a growth area with proximity to public transportation and services.
- Provision of housing stock that meets the needs of all residents of the City.
- The renovation of a currently vacant property, promoting infill development and reducing urban sprawl.
- The preservation of a landmark structure and redeveloping to highest and best use.

1.3 EXISTING CONDITIONS

The existing project site comprises Lot I-012/I-014; the church property with frontage on Pleasant Avenue and Forest Avenue; and Lot H-013 which is the parking lot on the opposite side of Pleasant Avenue.

The church lot area is 22,500 SF $\pm$ and includes the main church building, with a footprint area of 9,000 SF $\pm$ and the rectory building with a footprint area of 1,315 SF $\pm$. The two structures are currently connected by a breezeway that joins the southwest corner of the church to the northeast corner of the rectory. A small shed/garage is located to the rear of the rectory. There is a shared driveway that enters the site just east of the rectory building and terminates in two

un-striped parking spaces. There is also parking along the Pleasant Avenue street frontage, including a single handicapped space adjacent to the church entrance at the center of the structure. A brick sidewalk leads from the street to the formal entrance to the building at the southeast corner. The remainder of the property is grass lawn, with street trees and small shrub plantings alongside the building. The property slopes in generally southerly and easterly directions towards the adjacent streets. There are no surface inlets and it appears that runoff from the property drains by sheet flow to Pleasant Avenue and Forest Avenue.

Lot H-013, which houses the current parking lot, has a total land area of approximately 10,100 SF. The majority of the lot is paved, with small, green spaces around the perimeters. The lot slopes gently at a grade of around 2% to a single catch basin located towards the rear of the lot on the eastern side. The pipe from this structure exits towards Pleasant Avenue. There are no other features on the property.

The street conditions adjacent to the property are described as follows:

Street Name	Description	On-street Parking	Condition
Pleasant Avenue	Approximately 40 feet paved width, two-way traffic, bituminous sidewalks both sides.	Yes, on both sides of street.	Moderate, some cracking, and subsidence in sidewalks and pavement.
Forest Avenue	Approximately 47 feet paved width, striped bike lanes on either side, concrete sidewalks on either side.	No	Good, some curb displacement

1.4 PROPOSED DEVELOPMENT

The development program includes the following elements:

1.4.1 ON-SITE

Twenty-five (25) new apartment units are proposed in the redeveloped church building, along with tenant laundry facilities and storage space. The basement of the building will house additional storage, mechanical equipment, and services. The unit breakdown in the building is as follows:

Floor Level	Gross (SF)	Unit (SF)	# Units	Description
Basement	8,900	N/A	None	Mechanical and Service Space
First Floor	8,900	6,741	14	5 efficiencies (1 ADA compliant), 8 one-bed units (1 ADA compliant), 1 two-bed units
Second Floor	5,041	3,797	7	3 efficiencies, 4 one-bed units
Third Floor	3,641	2,233	4	4 efficiencies

Exterior improvements to the property will be limited and will include the demolition of the existing breezeway connecting the church to the rectory, minor re-configuration of the driveway to provide two ADA accessible parking spaces, the provision of bicycle racks and a small enclosed garden/patio area adjacent to the southeast door.

A rear sidewalk connection to Forest Avenue and fenced enclosure for recycling and trash bins will also be added.

1.4.2 OFF-SITE

Limited improvements are proposed to Lot H-013 on the opposite side of the street. An easement will be provided in favor of the new apartment property to allow access and parking on the parcel. A new fence will be constructed along the west side of the parking lot to screen the adjacent property. New pavement striping is proposed to clearly delineate the parking spaces.

1.5 LAND ORDINANCE REVIEW

1.5.1 OVERVIEW

The property currently lies within the City of Portland B-2 Community Business Zone and R-5 Residential Zone. The following Space and Bulk requirements apply to the B-2 Community Business Zone:

B-2 Community Business Zone Summary Dimensional and Parking Requirements Applied to Pleasant Avenue Church Redevelopment		
Zoning Requirements	Current B-2 Zoning Standard	Pleasant Avenue Church
Minimum Lot Size	None	13,094 SF
Minimum Street Frontage	20 feet	127.17 feet on Forest Ave 140.02 feet on Pleasant Ave
Front Yard Setback	None	3.6 feet on Forest Ave, 10.0 feet on Pleasant Ave
Rear Yard Setback	10 feet	1.0 feet (existing)
Side Yard Setback	None	28.6 feet existing, 4.5 feet proposed
Front Yard Maximum	No more than 10 feet	10 feet (existing)
Structure Setbacks	Portions of a structure above 35 feet shall be no closer than 5 feet from the side property line and no closer than 15 feet from a rear property line when such a property line abuts a residential zone.	Not applicable – portions of the building greater than 35 feet do not abut a residential zone property line.
Height Maximum	45 feet	Height of existing structure not known (approximately 50 feet).
Maximum Impervious Surface Ratio	For Residential Uses: None	
Minimum Lot Area per Dwelling Unit	Projects with active street frontages* as defined in Section 14-188, 435 square feet.	Area of lot in B-2c Zone = 13,094 sf. Units allowed = $13,094/435 = 30$. Units proposed = 25
Parking	One space per dwelling unit	1 space per dwelling unit

* Active Street Frontage (Section 14-188)

A building will be determined to have an active street frontage upon meeting the following guidelines to the greatest extent practicable as determined by the Planning Board or Planning Authority: the primary building façade shall be within ten feet of the front street line; there shall be no parking on the lot within 35 feet of the front street line; no more than 35% of the first floor primary façade shall consist of access to garages, unutilized space, service entrances, storage or mechanicals, and the remaining 75% shall have an average depth of a minimum of 20 feet for residential or commercial uses; all primary ground floor entries to multi-family buildings must orient to the street, not to interior blocks or parking lots.

The following Space and Bulk requirements apply to the R-5 Residential Zone:

R-5 Residential Zone Summary Dimensional and Parking Requirements Applied to Pleasant Avenue Church Redevelopment – Lot B – Single family Dwelling		
Zoning Requirements	Current R-5 Zoning Standard	Lot B – Rectory
Minimum Lot Size	6,000 SF generally	6,586 SF
Minimum Street Frontage	50 feet	80 feet
Front Yard Setback	20 feet	15.1 feet (existing)
Rear Yard Setback	20 feet	13.4 feet (to new division line)
Side Yard Setback	2 ½ story – 14 feet	3.1 feet (existing)
Height Maximum	35 feet	Height of existing structure not known – approximately 30 feet
Maximum Lot Coverage	40% of lot area	Building coverage = 22.7%
Parking	Two spaces per dwelling unit	Two spaces provided

1.5.2 SHORELAND ZONING

Not applicable. The site is not located within the Shoreland Zoning District.

1.6 STATE AND FEDERAL PERMITS

The project does not require any State or Federal permits other than State Fire Marshall approval. The development is subject to Site Plan and Subdivision review and approval by the City of Portland and will also require a Building Permit(s) through the City Code Enforcement Office.

1.7 EASEMENTS OR OTHER BURDENS

There is an existing mutual access easement over Lot H-013 and the adjacent property to the east. This is shown on the Survey Plan and will remain to service this lot and the new apartment parcel (Lot A). A new easement will be provided to allow use of this parcel for parking to serve Lot A. A parking and access easement is proposed on Lot B to allow for ADA accessible parking for future residents of the redeveloped church property (Lot A), adjacent to the building and entry ramp.

1.8 TRAFFIC

The proposed project will not result in a significant increase in traffic. The Institute of Transportation Engineers Trip Generation Manual (7th Edition) gives a peak hour trip generation rate for apartments of 0.51-0.62 trips per unit. Using these standard figures, the project could

be expected to generate approximately 16 trips per peak hour. Given the nature and condition of Pleasant Avenue and the abutting streets, we foresee no major impacts to the capacity of the vicinity transportation network. No further traffic analysis is currently proposed.

1.9 SOILS/GEOTECHNICAL REVIEW

The proposed project does not involve any new building structures, or any significant site improvements. Therefore, a detailed geotechnical investigation is not warranted.

1.10 NATURAL FEATURES

There are no significant natural features on either of the existing land parcels. Both properties have been developed for a significant period and there is no land that has not been developed or otherwise disturbed.

1.11 UTILITIES AND STORMWATER

The project will re-use existing utility connections to the extent practical. It is anticipated that a new gas service may be installed to serve the rectory building. In addition, upgrades may be required to the water (fire and domestic) services to the church building pending investigation on size, age, and condition of existing piping.

The project does not propose any significant changes to cover conditions across the site and there will be no significant increase in impervious area. The only improvements are related to the provision of two ADA accessible parking spaces at the entrance to the church building. The total site disturbance associated with this work is approximately 2,600 SF. No changes will be made to existing drainage patterns at the site, which currently drains to the municipal drainage system in Pleasant Avenue. Therefore, no new stormwater management measures are proposed.

1.12 ATTACHMENTS

Attachment A – Existing Site Photographs

ATTACHMENT A

Existing Site Photographs



PHOTO 1 – Views of Parking Lot (Map 130, Lot H-13 from street)



PHOTO 2 – View of Parking Lot (Map 130, Lot H-13)



FAY, SPOFFORD & THORNDIKE

778 Main Street, Suite 8
 South Portland, ME 04106
 Toll Free: 800.835.8666
 Main: 207.775.1121
 Fax: 207.879.0896

**Existing Site Photographs
 Pleasant Avenue Church – Portland, ME
 Photos Taken June 16, 2015**



PHOTO 3 – Existing Church Driveway (Map 130, Lots I-12 & I-14)



PHOTO 4 – Existing Breezeway Connecting Church and Rectory



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 South Portland, ME 04106
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 Main: 207.775.1121
 Fax: 207.879.0896

**Existing Site Photographs
 Pleasant Avenue Church – Portland, ME
 Photos Taken June 16, 2015**



PHOTO 5 – Existing Rectory



PHOTO 6 – Existing Church Building from Pleasant Avenue



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778 Main Street, Suite 8
South Portland, ME 04106
Toll Free: 800.835.8666
Main: 207.775.1121
Fax: 207.879.0896

**Existing Site Photographs
Pleasant Avenue Church – Portland, ME
Photos Taken June 16, 2015**



PHOTO 7 – Existing Church Building from Corner of Pleasant Avenue and Forest Avenue



PHOTO 8 – Existing Church Building from Pleasant Avenue



FAY, SPOFFORD & THORNDIKE

778 Main Street, Suite 8
South Portland, ME 04106
Toll Free: 800.835.8666
Main: 207.775.1121
Fax: 207.879.0896

**Existing Site Photographs
Pleasant Avenue Church – Portland, ME
Photos Taken June 16, 2015**



PHOTO 9 – Existing Church Building from Forest Avenue



FAY, SPOFFORD & THORNDIKE

778 Main Street, Suite 8
South Portland, ME 04106
Toll Free: 800.835.8666
Main: 207.775.1121
Fax: 207.879.0896

**Existing Site Photographs
Pleasant Avenue Church – Portland, ME
Photos Taken June 16, 2015**

2. TECHNICAL AND FINANCIAL CAPACITY

2.0 TITLE, RIGHT AND INTEREST

The applicant owns the project site. A copy of the Deed is provided in Attachment B.

2.1 TECHNICAL CAPACITY

The applicant has assembled a highly qualified team of professionals to plan, permit, and develop construction documents for the project. The Team is working under the direction of Mr. Robert Gaudreau of Hardypond Development Company, LLC as Project Developer.

The Team services will be provided by the following companies and their respective team leaders:

2.2 CONSULTANT TEAM

<i>Civil Engineer</i>	Andrew D. Johnston, P.E. Fay, Spofford & Thorndike 778 Main Street, Suite 8 South Portland, ME 04106 (207) 775-1121 – Work (207) 879-0896 – Fax (207) 756-9359 – Cell ajohnston@fstinc.com
<i>Surveyor</i>	John Swan Owen Haskell, Inc. 390 US Route 1, Unit 10 Falmouth, Maine 04105 (207) 774-0424 – Work (207) 774-0511 – Fax jswan@owenhaskell.com
<i>Architect</i>	John Shields Shields Architecture 216 Range Road Cumberland, ME 04021 (207) 775-8926 – Work jshields@maine.rr.com
<i>Attorney</i>	N/A
<i>Landscape Architect</i>	N/A
<i>Lighting/Site Electrical</i>	N/A

2.3 EXPERIENCE OF PROJECT TEAM

The team of consultants retained by developer has expertise and experience in the design of similar residential housing projects. Resumes of key personnel for development team can be provided upon request.

2.4 FINANCIAL CAPACITY

The applicant has the means at its disposal for financing the proposed Pleasant Avenue Redevelopment project. A letter of financial capacity for the project is contained in Attachment D.

2.5 CONSTRUCTION COST ESTIMATE

The preliminary project cost is \$2,000,000.

This value is considered preliminary and approximate and is subject to change as building design and project layout is refined.

2.6 ATTACHMENTS

Attachment B – Deed

Attachment C – Letter of Financial Capacity

ATTACHMENT B

Deed

TRUSTEE'S DEED

I/We, JOHN R. DOWNES, SANDRA L. BROOKS, ARTHUR F. SCHASSBERGER, THOMAS G. SHEFFIELD, SUZANNE L. ROBERGE and MARGARET L. SHEFFIELD, Pastor, TRUSTEES of the Clark Memorial United Methodist Church established pursuant to the Agreement of Trust titled Book of Discipline of the United Methodist Church - 2012 (the "Trust"),

for full value and consideration paid,

hereby grant to HARDYPOND DEVELOPMENT COMPANY, LLC, a Maine limited liability company, whose mailing address is 55 Hardy Road, Falmouth, Maine 04105, its successors and assigns forever,

A certain lot or parcel of land with the buildings thereon, situated on the northerly side of Pleasant Avenue and the westerly side of Forest Avenue in the City of Portland, County of Cumberland and State of Maine bounded and described as follows:

Beginning at the intersection of the northerly sideline of Pleasant Avenue with the westerly sideline of Forest Avenue thence, N 84°22'06" W along the northerly sideline of said Pleasant Avenue 220.02 feet to land now or formerly of James F. and Joann McGreal as described in deed book 9759 page 104;

Thence, N 05°37'54" E along land of said McGreal 123.41 feet to land now or formerly of Michael L. Frager as described in deed book 11464/253;

Thence, S 80°54'22" E along land of said Frager, land now or formerly of Caleb C. Bell II deed book 31402 page 242 and land now or formerly of Martha J. Walsh deed book 3413 Page 42 a distance of 163.08 feet to the westerly sideline of Forest Avenue;

Thence, S 21°07'05" E along the westerly sideline of said Forest Avenue 127.17 feet to the northerly sideline of said Pleasant Avenue and the point of beginning containing 22,538 square feet.

For a more particular description of the above described parcel of land see "ALTA/ACSM Land Title Survey 15-19 & 16 Pleasant Avenue Portland, Cumberland County, Maine made for Hardypond Development Company, LLC" by Owen Haskell, Inc.

Basis of bearings: Maine State Plane NAD83

Also conveying another certain lot or parcel of land situated on the southerly side of Pleasant Avenue in the City of Portland, County of Cumberland and State of Maine bounded and described as follows:

Beginning at a point on the southerly sideline of Pleasant Avenue at the northwesterly corner of land now or formerly of Roger S. Zimmerman as described in deed book 4588 page 246, said point being 174.32 feet from the westerly sideline of Forest Avenue on a course of N 84°22'06"W;

Thence, S 05°37'54" W along land of said Zimmerman 157.73 feet to land now or formerly of Andrew Pixley and Rebecca Wertheimer as described in deed book 27033 page 168;

Thence, N 81°07'27" W along land of said Pixley and Wertheimer and land now or formerly of John T. and Kelly J. Clancy-Jenkins as described in deed book 8671 page 257 a distance of 65.10 feet to other land of Clark Memorial Methodist Church;

MAINE REAL ESTATE TAX PAID

Thence, N 05°37'54" E along other land of said Clark Memorial Methodist Church 154.04 feet to the southerly sideline of said Pleasant Avenue;

Thence, S 84°22'06" E along the southerly sideline of said Pleasant Avenue 65.00 feet to land of said Zimmerman and the point of beginning containing 10,133 square feet.

The above described parcel of land is subject to and benefited by easements as described in deed book 4588 page 246.

For a more particular description of the above described parcel of land see "ALTA/ACSM Land Title Survey 15-19 & 16 Pleasant Avenue Portland, Cumberland County, Maine made for Hardypond Development Company, LLC" by Owen Haskell, Inc.

Basis of bearings: Maine State Plane NAD83

Each of the Trustees as listed above hereby warrants and covenants that they have full authority under the terms of the Trust to execute this deed and to convey the hereinabove described Trust property, that no actions are pending with respect to this Trust which could affect the Trustees' ability to convey the Trust property.

Dated: May 15, 2015

Trustees of the Clark Memorial
United Methodist Church

John R. Downes
John R. Downes, Trustee

Sandra L. Brooks
Sandra L. Brooks, Trustee

Arthur F. Schassberger
Arthur F. Schassberger, Trustee

Thomas G. Sheffield
Thomas G. Sheffield, Trustee

Suzanne L. Roberge
Suzanne L. Roberge, Trustee

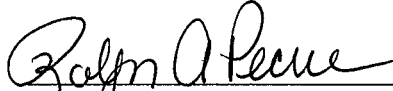
Margaret L. Sheffield
Margaret L. Sheffield, Pastor, Trustee

State of Maine
County of Cumberland, ss.

May 15, 2015

Personally appeared the above-named John R. Downes, Trustee under the above-described Trust, and acknowledged the foregoing instrument to be his free act and deed in his said capacity.

Before me,



Notary Public

Print Name: _____

My Commission Expires **ROBYN A. PEARCE**

Notary Public, Maine

My Commission Expires November 23, 2017

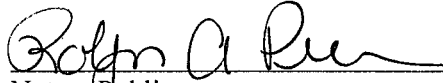
SEAL

State of Maine
County of Cumberland, ss.

May 15, 2015

Personally appeared the above-named Sandra L. Brooks, Trustee under the above-described Trust, and acknowledged the foregoing instrument to be her free act and deed in her said capacity.

Before me,



Notary Public

Print Name: _____

My Commission Expires: _____

ROBYN A. PEARCE

Notary Public, Maine

My Commission Expires November 23, 2017

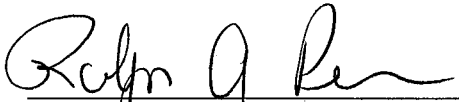
SEAL

State of Maine
County of Cumberland, ss.

May 15, 2015

Personally appeared the above-named Arthur F. Schassberger, Trustee under the above-described Trust, and acknowledged the foregoing instrument to be his free act and deed in his said capacity.

Before me,



Notary Public

Print Name: _____

My Commission Expires: _____

ROBYN A. PEARCE

Notary Public, Maine

My Commission Expires November 23, 2017

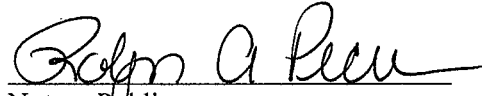
SEAL

State of Maine
County of Cumberland, ss.

May 15, 2015

Personally appeared the above-named Thomas G. Sheffield, Trustee under the above-described Trust, and acknowledged the foregoing instrument to be his free act and deed in his said capacity.

Before me,


Notary Public

Print Name: _____

My Commission Expires: _____

ROBYN A. PEARCE
Notary Public, Maine
My Commission Expires November 23, 2017

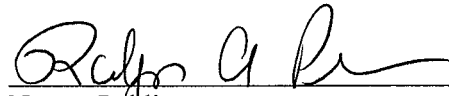
SEAL

State of Maine
County of Cumberland, ss.

May 15, 2015

Personally appeared the above-named Suzanne L. Roberge, Trustee under the above-described Trust, and acknowledged the foregoing instrument to be her free act and deed in her said capacity.

Before me,


Notary Public

Print Name: _____

My Commission Expires: _____

ROBYN A. PEARCE
Notary Public, Maine
My Commission Expires November 23, 2017

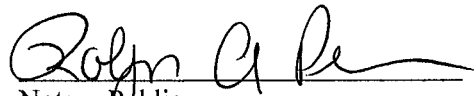
SEAL

State of Maine
County of Cumberland, ss.

May 15, 2015

Personally appeared the above-named Margaret L. Sheffield, Pastor, Trustee under the above-described Trust, and acknowledged the foregoing instrument to be her free act and deed in her said capacity.

Before me,


Notary Public

Print Name: _____

My Commission Expires: _____

ROBYN A. PEARCE
Notary Public, Maine
My Commission Expires November 23, 2017

SEAL

Received
Recorded Register of Deeds
May 15, 2015 02:08:50P
Cumberland County
Nancy A. Lane

ATTACHMENT C

Letter of Financial Capacity



Bank

America's Most Convenient Bank®

TD Bank, N.A.

One Portland Square

P.O. Box 9540

Portland, ME 04112-9540

T: 207-761-8600 F: 207-761-8660

www.tdbank.com

June 11, 2015

City of Portland
389 Congress Street
Portland, Maine 04101

RE: Hardypond Development Company, LLC – Proposed Pleasant Avenue Project

To Whom it May Concern:

TD Bank, NA (the "Bank") has completed a preliminary review of Hardypond Development Company, LLC's (the "Company") proposed project to be located at the former Clark Methodist Church on Pleasant Avenue in Portland. Based on the Bank's knowledge of the project, and the longstanding satisfactory relationship with Bob Gaudreau and Hardypond, we believe that the Company and its principal possess the financial capacity to successfully complete the proposed project.

Please do not hesitate to call me at (207) 828-7026 should you have any questions.
Thank you.

Sincerely,

Ellen Niewoehner
Vice President
Commercial Lending

3. CONFORMITY WITH APPLICABLE DESIGN STANDARDS

The following statement is made in accordance with the City of Portland Code of Ordinances, Chapter 14 Land Use, Article V Section 14-526.

3.1 OVERVIEW

This project conforms with all the applicable design standards of Section 14-526 as demonstrated in the following narrative.

(a) Transportation Standards

1. Impact on Surrounding Street Systems:

The development will fit in with the existing street system, as it will use existing driveways on Pleasant Avenue. Based on the number of residential units proposed, and the limited car ownership anticipated, the project is expected to have an insignificant impact on traffic in the neighborhood. The proximity of the site to public transportation and the adjacent bikeway on Forest Avenue are major assets to the project.

2. Access and Circulation:

a. Site Access and Circulation.

- (i) Access to the former church site is provided via the existing driveway on Pleasant Avenue. This will function in the same manner as the existing driveway. There is no provision for circulation on the property.

Access to the small parking lot on Lot H-013 will be via the existing driveway and shared easement with the abutting property. The parking lot layout is designed in accordance with the City Technical Standards.

- (ii) Access and egress have been designed to avoid conflicts with existing turning movements and traffic flows to the extent practicable.

- (iii) The site does not feature drive up services as mentioned in this requirement.

- (iv) Site access has been designed so as not to impede potential future connection to adjacent streets.

b. Loading and Servicing.

- (i) Not required. There is adequate area along Pleasant Avenue for infrequent periods of loading/unloading associated with residents moving in or out of units.

c. Sidewalks.

- (i) There are existing sidewalks on both sides of Pleasant Avenue and along the eastern side of Forest Avenue abutting the site.

(ii) The adjacent sidewalks appear to be in serviceable condition.

(iii) There are existing internal sidewalks leading to the building entries. These will remain. The concrete sidewalk from Pleasant Avenue to the accessible entrance to the former church will be reconstructed.

3. Public Transit Access:

- a. The development will be served by the existing No. 2 Metro service route with a stop directly adjacent to the property on Forest Avenue.
- b. An area has been identified on the site plan for location of a transit shelter. The applicant will coordinate with Metro and City staff to finalize the location. Given the width of Forest Avenue at this location, a pull-out bay is not proposed.
- c. The location of the transit shelter will be at the base of the sidewalk.
- d. The applicant will not request a waiver to this standard.

4. Parking:

a. Location and Required Number of Vehicle Parking Spaces:

(i) The applicant is proposing to provide a total of twenty-five (25) parking spaces for the project. Two (2) ADA spaces will be provided adjacent to the building entrance. A further twenty-three (23) parking spaces will be provided in the lot on the opposite side of the street. 14-332.2 (b) allows incentives for affordable housing units for rent or sale. Under this provision, the Planning Board may establish a parking requirement for affordable housing units that is less than one parking space per unit. The applicant does not propose to take advantage of this provision at this time.

(ii) The applicant has not prepared a TDM strategy.

(iii) The development does not propose to provide more than the minimum required parking.

(iv) Parking spaces and aisles have been designed to meet the applicable section of the Technical Design Manual.

(v) The project does not propose temporary parking.

b. Location and Required Number of Bicycle Parking Spaces:

(i) The project will provide ten (10) bicycle parking spaces on two pads inside the fenced garden area on Pleasant Avenue.

c. Motorcycles and Scooter Parking:

(i) The project does not propose any motorcycle or scooter parking.

d. Snow Storage:

(i) Snow storage management will employ two approaches.

1. There is space on the main site and the parking lot site to plow moderate amounts of snow to the perimeters of the site.
2. In the event of excessive snow accumulation, provision will be made for removal and off-site snow disposal.

5. Transportation Demand Management (TDM):

- a. A TDM plan is not required for the project.

(b) Environmental Quality Standards

1. Preservation of Significant Natural Features:

- a. The existing site retains no prominent significant natural features therefore no issue related to the preservation of these features applies.
- b. The applicant is not requesting a waiver from this standard.

2. Landscaping and Landscaping Preservation:

a. Landscape Preservation.

- (i) The site's existing tree population will be maintained.

- (ii) Not applicable.

- (iii) Adequate measures to protect existing vegetation during construction will be provided.

- (iv) The applicant will not require a waiver from this standard.

b. Site Landscaping.

(i) Landscaped Buffers:

- (a) There are no observable service or loading areas. The proposed dumpster area will have an enclosure for screening consisting of either wood or PVC.

- (b) The development will be designed to meet the understory planting requirements of Section 4 of the Technical Manual. The project landscape architect is currently reviewing the existing site plant material suitable for reuse and landscape understory compliance.

- (c) Not applicable.

- (d) The Applicant intends to preserve the site landscaping to the extent practicable.

(ii) Parking Lot Landscaping:

- a) The existing pavement and landscaping on Map 130, Lot H013 will remain. No changes are proposed to this area.
- b) Not applicable.
- c) Not applicable.

(iii) Not applicable.

3. Water Quality, Stormwater Management and Erosion Control:

a. Stormwater:

- (i) All stormwater draining onto the site from adjacent properties will be accounted for in the pipe sizing and redirection to a new discharge location as necessary. Runoff from the site will continue to be directed to the City's storm drainage systems in the streets.
- (ii) All stormwater runoff is proposed to discharge to the City street systems. The project will not adversely impact adjacent lots or the City street system.
- (iii) All stormwater runoff is proposed to discharge to the City street systems. The project will not adversely impact adjacent lots or the City street system.
- (iv) All stormwater runoff is proposed to discharge to the City street systems. The project will not adversely impact adjacent lots or the City street system.

- b. The Stormwater Management Plan will meet the requirements and goals stated in Section 5 of the Technical Manual.
- c. The project is not located in a watershed of an urban impaired stream as listed by the MeDEP.
- d. N/A
- e. The project is serviced by both a public wastewater system and public drainage system. The project will not pose a risk of groundwater contamination.
- f. The project will be connected to the public sanitary sewer system which is adequately sized for the project flows.

(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 and residential access.
- b. No changes to emergency access conditions within the surrounding streets is proposed.
- c. Fire hydrants are located within the adjacent street system. The renovated church building will be fully sprinklered.

3. Availability and Adequate Capacity of Public Utilities:

- a. The applicant will secure letters from all applicable utilities stating their ability to serve this project. Copies of correspondence with utilities are provided in Attachment D.
- b. All on site electrical lines will be underground.
- c. All new utility infrastructure will meet the provisions of the Technical Manual.
- d. The project has an existing sewer service connection.
- e. The sanitary sewer collection system meets all applicable sections of the Technical Manual. A stormwater management system is not required based on the project size.
- f. The project will use fenced trash enclosure at the northeast side of the site to store trash and recyclables temporarily until a contracted waste management company can pick up and dispose of the solid waste from the street.

(e) Site Design Standards.

1. Massing, Ventilation and Wind Impact:

- a. The bulk, location and height of the existing building does not result in adverse impacts to abutting properties.
- b. HVAC venting is proposed to be directed to the building roof and directed away from public spaces.

2. Shadows:

- a. The development is located in the B-2c and R-5 Zones and this standard is not applicable to existing structures.

3. Snow and Ice Loading:

- a. The proposed building is located such that accumulated snow and ice will not fall onto adjacent properties or public ways.

4. View Corridors:

- a. The project site is located outside the Downtown Vision View Corridor Protection Plan.

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 or within 100 ft. of a designated landmark, 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. No new pole lights are proposed.

7. Noise and Vibration:

The project noise levels will be designed to meet the permitted levels as outlined in the B-2c and R-5 Zones. All HVAC and mechanical equipment is proposed to be mounted on the roof.

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) Not applicable.
 - (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 is designed to be a moderate density development with multiple story building, and the associated driveway and utility improvements.

3.2 ATTACHMENTS

Attachment D – Correspondence with Utility Companies

ATTACHMENT D

Correspondence with Utility Companies



6/4/2015

Andrew Johnston
Fay, Spofford & Thorndike
South Portland, Maine 04106
Sent via email to: AJohnston@fstinc.com

RE: Ability to Serve Letter 3 Pleasant Avenue Redevelopment project, Portland, ME.

Dear Mr. Johnston:

CMP has the ability to serve the proposed project located at 3 Pleasant Avenue in Portland, Maine, in accordance with our CMP Handbook (web link below). We can provide you the desired pad or pole mounted transformers per your request and city approval, in accordance with our CMP Standards Handbook. If you have any questions on the process, or need help in completion of the documents, please feel free to contact me.

New Service Milestones

- Call 1-800-565-3181 to establish a new account and an SAP work order.
- Submit any electronic drawings (PDF (preferred) or DWG files) of the site layout and proposed electrical connections if you have them.
- Submit Load information. Please complete this CMP spreadsheet using load information
- Submit the easement information worksheet. Please complete this CMP form and either email or fax back to us.
- Preliminary meetings with CMP to determine the details of job
- Field planner design appointment to cost out job and develop CMP Invoice.
- Submit invoice for payment.
- Easements signed and payment received.
- Job scheduled for completion after the electrical inspection has been received.

This process can take several months, depending upon several factors including transformer delivery, potential substation upgrades, return of completed paperwork, and other jobs in the system that may be ahead of yours. In addition, contact with the other utilities, including telephone and cable, should be commenced as soon as practical. They may have additional work or charges in addition to the CMP work required to bring your project on line.

For your convenience, here is a link to the CMP Website which contains our Handbook with details on most service requirements:

162 Canco Road Portland, ME 04103
Tel (800) 750-4000
207-842-2367 office
207-458-0382 cell
207-626-4082 fax

www.cmpco.com



An equal opportunity employer



[CMP Handbook of Standard Requirements](http://www.cmpco.com/MediaLibrary/3/6/Content%20Management/YourAccount/PDFs%20and%20Docs/handbook.pdf)

(<http://www.cmpco.com/MediaLibrary/3/6/Content%20Management/YourAccount/PDFs%20and%20Docs/handbook.pdf>)

If you have any questions, please contact me.

Regards,

A handwritten signature in black ink that reads "Jamie Cough".

Jamie Cough
Energy Services Advisor
Central Maine Power Company
162 Canco Road
Portland, ME 04103
207-842-2367 office
207-458-0382 cell
207-626-4082 fax

162 Canco Road Portland, ME 04103
Tel (800) 750-4000
207-842-2367 office
207-458-0382 cell
207-626-4082 fax

www.cmpco.com



An equal opportunity employer



September 29, 2015

Mr. Jamie Cough
Central Maine Power
162 Canco Road
Portland, ME 04103

**Subject: Proposed Redevelopment of Pleasant Avenue Church
3 Pleasant Ave, Portland, Maine
Request for Ability to Serve**

Dear Mr. Cough:

Our office is working as a consultant to Robert Gaudreau on the site planning and permitting associated with a proposed redevelopment of the former Pleasant Avenue Church in the City of Portland to construct up to 25 residential apartments. The project site is located on Map 130, Lots I-012 and I-014 according to the City of Portland Tax Assessor's Maps. On behalf of the developer, we would like to verify CMP's ability to provide power for the project and determine any impact fees, or infrastructure improvements that may be required to serve the site.

The project will consist of renovating two existing buildings with size and use summarized as follows:

Location	Use	Size (SF)
Church	Residential Apartment	17,000±
Rectory	Single-family	2,000±

The buildings will include an underground service extension into each building. Three Phase power is desired. On behalf of the developer, we are requesting a letter affirming that the proposed project can be served by the CMP supply system.

We trust that the existing power supply system has adequate capacity to serve this project. We are in the process of completing the Preliminary Level III Site Plan Application for a submission to the City Planning Staff and we would appreciate your confirmation of site conditions.

We look forward to your review of this request and a summary of your findings and any updated cost projections for the project you may be able to provide. Please include in your assessment for any costs that could be associated with the following:

- Upgrades to nearby CMP infrastructure
- All onsite overhead and underground improvements
- Impact fees or connection fees
- CMP engineering costs

FAY, SPOFFORD & THORNDIKE

Mr. Jamie Cough
September 29, 2015
Page 2

If you have any questions concerning this request, please contact me.

Sincerely,

FAY, SPOFFORD & THORNDIKE



Andrew D. Johnston
Principal Engineer

ADJ/smk

Enclosure: Figure C-1 – Conceptual Site

c: Bob Gaudreau

R:\SP-M167 3 Pleasant Avenue - Portland, ME\Admin\Correspondence Out\Ability to Serve\SP-M167 2015.09.29 Cough-CMP.doc



June 4, 2015

Fay, Spofford & Thorndike
Andrew D. Johnston
Principal Engineer

**Re: Proposed Redevelopment of Pleasant Avenue Church
3 Pleasant Ave, Portland Maine**

Dear Mr. Johnston:

Thank you for your interest in using natural gas for the above referenced project.

Unitil has natural gas in the vicinity of this project to provide additional gas service. Both Forest Ave and Pleasant Ave are part of Unitil's S.U.R.E Project, scheduled for upgrade from cast iron to plastic in 2020. The evaluation to complete the design, costs and determining what the customer contribution may be, if any, can be completed once Unitil receives the completed design in pdf. Unitil welcomes the opportunity for further discussions regarding this project.

If you have any further questions or require additional information, please contact me directly at (207) 541-2536 or at Harmon@unitil.com.

Sincerely,

Bridget L. Harmon
Business Development Representative
Customer Energy Solutions
(o) 207-541-2536 (f) 207-541-2586

ME GAS CUSTOMER ENERGY SOLUTIONS
1075 Forest Avenue
Portland, ME 04103-3586

T 207-541-2508 www.unitil.com



September 29, 2015

Ms. Kelly Fowler
Unitil Service Corp.
PO Box 3586
1075 Forest Avenue
Portland ME 04103

**Subject: Proposed Redevelopment of Pleasant Avenue Church
3 Pleasant Ave, Portland, Maine
Ability to Serve Project with Natural Gas**

Dear Ms. Fowler:

Our office is working as a consultant to Robert Gaudreau on the site planning and permitting associated with the redevelopment of the former Pleasant Avenue Church in the City of Portland to construct up to 25 residential apartments. The project site is located on Map 130, Lots I-012 and I-014 according to the City of Portland Tax Assessor's Maps. The mechanical subcontractor estimates that the gas load for the new apartments will be approximately 1,000,000 BTU/HR. On behalf of the developer, we would like to verify Unitil's ability to provide natural gas services for the project and to determine any impact fees.

At this time, I would request a written letter stating Unitil has the ability to serve the proposed development. Specifically, our office is interested in a letter from you indicating the following:

- The ability of Unitil to serve the project.
- Any connection service or impact fees.
- Notification of any Unitil plans for or recent upgrade the service in this area.
- Engineering and/or construction upgrade fees required to extend the main to the project development area.

If you have any questions concerning this request, please contact me.

Sincerely,

FAY, SPOFFORD & THORNDIKE

A handwritten signature in blue ink, appearing to read 'A. Johnston', is written over a light blue horizontal line.

Andrew D. Johnston
Principal Engineer

ADJ/smk

Enclosure: Figure C-1 – Conceptual Site

c: Bob Gaudreau

R:\SP-M167 3 Pleasant Avenue - Portland, ME\Admin\Correspondence Out\Ability to Serve\SP-M167 2015.09.29-Fowler-ABS-Natural Gas.docx



Portland Water District

FROM SEBAGO LAKE TO CASCO BAY

July 1, 2015

FST

778 Main Street, Suite 8
South Portland, ME 04106

Attn: Andrew Johnson
Re: 3 Pleasant Avenue - Portland
Ability to Serve with PWD Water

Dear Mr. Johnson

The Portland Water District has received your request for an Ability to Serve Determination for the noted site submitted on June 1, 2015. 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.

Conditions of Service

The following conditions of service apply:

- It is the District's understanding that the existing Pleasant Avenue Church and Vestry will be converted into 25 residential apartment units. New fire and domestic service(s) may be installed through the properties frontage on Pleasant Avenue or Forest Avenue.
- The existing 1-inch and ¾-inch diameter services will not be adequate for the proposed use; therefore, they must be terminated by shutting the corporation valve and cutting the piping from the water main.
- Water District approval of water infrastructure plans will be required for the project prior to construction. As your project progresses, we advise that you submit any preliminary design plans to MEANS for review of the water main and water service line configuration. We will work with you to ensure that the design meets our current standards.

Existing Site Service

According to District records, the project site does currently have existing water service. A 1-inch diameter copper water service line serving the church building and a ¾" copper service serving the parsonage building, located as shown on the attached water service cards, provide water service to this site. Please refer to the "Conditions of Service" section of this letter for requirements related to the use of these services.



Water System Characteristics

According to District records, there is an 8-inch diameter cast iron water main on northerly side of Pleasant Avenue and a public fire hydrant located at the site.

The current data from the nearest hydrant with flow test information is as follows:

Hydrant Location: Pleasant Avenue at Forest Avenue
Hydrant Number: POD-HYD01235
Last Tested: 4/16/2015
Static Pressure: 85 psi
Residual Pressure: Not measured
Flow: Not measured

Public Fire Protection

It is not anticipated that this project will include the installation of new public hydrants to be accepted into the District water system. 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 the church building 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 the MEANS Division to request a hydrant flow test and we will work with you to get more complete data.

If the District can be of further assistance in this matter, please let us know.

Sincerely,
Portland Water District


Glissen Havu, E.I.
Design Engineer

SERVICE RECORD

NO. 15 Pleasant AveREG. NO. SV 2711773ST. DIVISION PortlandCode No. 27

Name _____

Name _____

Name _____

SERVICE DATA

Size of Pipe 1"Kind of Pipe CopperMain to Stop 20' 6"Stop to St. Line 614Date 5/16/2009Mat. on Private 3/4" copperDepth/Main 5' 6"Depth/Private 5' 6"

Shut at Corp. _____

* Note Sewer + Gas go over 8" main

MEASURES

5' 6" - 10' - 1" Gas 6" Sewer

cut + smt + 3/4" corp

gas + water 4' apart sewer 1' away

CODE NO. **D-12-12B**DISTRICT **DEERING**
ST.REQ NO. **9199**NO. **19****Pleasant Ave.**

NAME

Black Memorial Church Parsonage

NAME

NAME

SERVICE RECORD

RENEWAL RECORDS

KIND OF PIPE

KIND OF PIPE

COP.

SIZE OF PIPE

SIZE OF PIPE

3/4"

MAIN TO STOP

MAIN TO STOP

16'6"

STOP TO ST. LINE

STOP TO ST. LINE

5'

ST. LINE TO BUILDING

ST. LINE TO BUILDING

TOTAL LENGTH

TOTAL LENGTH

21'6"

DATE

DATE

8/17/36

REMARKS

REMARKS

SERVICE SHUT AT CORP.



September 29, 2015

MEANS Group
Portland Water District
225 Douglass Street
P.O. Box 3553
Portland, Maine 04104-3553

**Subject: Proposed Redevelopment of Pleasant Avenue Church
3 Pleasant Ave, Portland, Maine
Water Supply Ability to Serve**

Dear Coordinator:

Our office is working as a consultant to Robert Gaudreau on the site planning and permitting associated with a proposed redevelopment of the former Pleasant Avenue Church in the City of Portland to construct up to 25 residential apartments. The project site is located on Map 130, Lots I-012 and I-014 according to the City of Portland Tax Assessor's Maps. On behalf of the developer, we would like to verify the Portland Water District's ability to provide domestic and fire supply water for the project and determine any impact fees, or infrastructure improvements that may be required to serve the site.

The project will consist of apartment units in existing buildings, with estimated daily water uses as follows:

Location	Use	Demand Criteria	Estimated Demand
Church	Residential Apartment	Average Occupancy 1.0/unit @ 70 gal. per person/per day - 25 units at 70 gpd	1,750 gpd
Rectory	Single-family 4-Bedroom	Estimated Occupancy 2.5/Unit @ 70 gal. per person/day	175 gpd
Total Project Water Demand			1,925 gpd

The church building will have a fire protection sprinkler system; however, at this time, the size and flow requirements for the fire service have not yet been determined.

We are preparing an application to the City for Level III Site Plan Review, and are seeking to provide documentation indicating the District's ability to provide water supply to this project.

MEANS Group
September 29, 2015
Page 2

If you have any questions concerning this request, please contact me.

Sincerely,

FAY, SPOFFORD & THORNDIKE

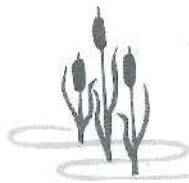
A handwritten signature in blue ink, appearing to read "A. Johnston", is positioned above the printed name.

Andrew D. Johnston
Principal Engineer

ADJ/smk

Enclosure – Figure C-1 – Conceptual Site

c: Bob Gaudreau

**HARDYPOND DEVELOPMENT**

7 Tee Drive, Portland, ME 04103

Tel: (207) 797-6066

Fax: (207) 797-8986

October 15, 2015

Planning and Urban Development Department
Planning Division and Planning Board
City of Portland
389 Congress St. Fourth Floor
Portland, ME 04101

Re: Neighborhood Meeting Certification – 3 Pleasant Avenue Redevelopment

I, **Frank Carr**, hereby certify that a neighborhood meeting was held on **October 8, 2015 at 3 Pleasant Avenue at 6:00PM.**

I also certify that on (date at least ten (10) days prior to the neighborhood meeting), 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 or within 1000 feet of a proposed industrial subdivision or industrial zone change.
2. Residents on the "interested parties" list.
3. A digital copy of the notice was also provided to the Planning Division (jmy@portlandmaine.gov and ldobson@portlandmaine.gov) and the assigned planner to be forwarded to those on the interested citizen list who receive e-mail notices.

We also placed an ad in the Legal Notices section of the Portland Press Herald, and called all interested parties individually who signed in for our August 8, 2015 meeting.

Sincerely,

Frank Carr
Director of Business Development
Hardy Pond Development

Attached to this certification are:

1. Copy of the invitation sent
2. Newspaper Legal Ad
3. Sign-in sheet
4. Meeting minutes

September 28, 2015



Dear Neighbor:

Please join us for a **Neighborhood Meeting** to discuss our request for **Site Plan and Subdivision Plan** approval for the proposed redevelopment of 3 Pleasant Avenue, Portland, formerly known as "Clark Memorial Church". The redevelopment is proposed to include 25 residential apartments in the former church building and a single family residential house in the former vestry.

Meeting Location: **Public Meeting Space at the Former Clark Memorial Church**
3 Pleasant Avenue
Portland, Maine

Meeting Date: **Thursday, October 8, 2015**

Meeting Time: **6:00 p.m.**

The City Code requires that property owners within 500 feet (except notices must be sent to property owners within 1,000 feet for industrial zoning map amendments and industrial subdivisions) 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 feel free to contact me at 207-775-1121.

Sincerely,

FAY, SPOFFORD & THORNDIKE

A handwritten signature in dark ink, appearing to read "Andrew D. Johnston".

Andrew D. Johnston, P.E.
Principal Engineer

ADJ/smk

R:\SP-M167 3 Pleasant Avenue - Portland, ME\Admin\Permitting\Local\Neighborhood Meeting\SP-M167 2015.09.28 Neighborhood Meeting Letter.docx

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 plan was not submitted. 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

LEGAL ADVERTISEMENTS

of Portland, Docket No. RE-12-353, wherein the Court adjudged the foreclosure of a mortgage granted by Dionne Baggs to Mortgage Electronic Registration Systems, Inc., acting solely as nominee for America's Wholesale Lender dated March 8, 2004 and recorded in the Cumberland County Registry of Deeds in Book 21008, Page 238, should the period of redemption have expired without redemption of the property by the mortgagor(s), a public sale of the property described in the mortgage will be conducted on

October 29, 2015 commencing at 10:00 a.m. at 190 US Route One, 2nd Floor, Rear, Falmouth, Maine

The property is located at 43 William Knight Road, Windham, Cumberland County, Maine, reference as described in said mortgage.

The sale will be by public auction. All bidders for the property will be required to make a deposit of \$5,000.00 in cash, certified or bank check at the time of the public sale made payable to Shechtman Halperin Savage, LLP, which deposit is non-refundable as to the highest bidder. The balance of the purchase price shall be paid within thirty (30) days of the public sale. In the event a representative of The Bank of New York Mellon f/k/a The Bank of New York as Trustee for the Benefit of the Certificateholders of the CWABS, Inc., Asset-Backed Certificates 2004-04 is not present at the time and place stated in this notice, no sale shall be deemed to have occurred and all rights to reschedule a subsequent sale are reserved.

Additional terms will be announced at the public sale.

The Bank of New York Mellon f/k/a The Bank of New York as Trustee for the Benefit of the Certificateholders of the CWABS, Inc., Asset-Backed Certificates 2004-04, by its attorneys, Shechtman Halperin Savage, LLP, James M. Garnet, Esq., John M. Ney, Jr., Esq., 1080 Main Street, Pawtucket, RI 02860 (401) 272-1400

Legal Advertisement
NOTICE OF PUBLIC SALE

Notice is hereby given that in accordance with the Judgment of Foreclosure and Sale entered May 7, 2015 in the action entitled JPMorgan Chase Bank, National Association v. Terri L. Beardsley, et al., by the West Bath District

Court, Docket No. WESDC-RE-13-139, wherein the Court adjudged the foreclosure of a mortgage granted by Terri L. Beardsley to Mortgage Electronic Registration Systems, Inc., as nominee for Regency Mortgage Corporation dated August 20, 2010 and recorded in the Cumberland County Registry of Deeds in Book 28014, Page 36, the period of redemption having expired, a public sale of the property described in the mortgage will be conducted on

October 30, 2015 at 10:00 am
At Bendett & McHugh, P.C., 30 Danforth Street, Suite 104, Portland, Maine.

The property is located at 28 Somerset, Unit B-28, Freeport, Maine, as described in said mortgage. The sale will be by public auction. All bidders for the property will be required to make a deposit of \$5,000.00 in certified or bank check at the time of the public sale made payable to Bendett & McHugh, P.C., which deposit is non-refundable as to the highest bidder. The balance of the purchase price shall be paid within thirty (30) days of the public sale. In the event a representative of the mortgagor is not present at the time and place stated in this notice, no sale shall be deemed to have occurred and all rights to reschedule a subsequent sale are reserved. **If the sale is set aside for any reason, the Purchaser at the sale shall be entitled only to a return of the deposit paid. The Purchaser shall have no further recourse against the Mortgagor, the Mortgagee or the Mortgagee's attorney.**

This property will be sold as is. Additional terms will be announced at the public sale.

JPMorgan Chase Bank, National Association by its attorneys, Bendett & McHugh, P.C., 30 Danforth Street, Ste. 104 Portland, ME 04101 207-221-0016

Legal Advertisement
NOTICE OF PUBLIC SALE

Notice is hereby given that in accordance with the Judgment of Foreclosure and Sale entered May 8, 2015, in the action entitled Wells Fargo Bank, NA v. Heath A. Phillips, et al., by the West Bath District Court, Docket No. WESDC-RE-14-85, wherein the Court adjudged the foreclosure of a mortgage granted by Heath A. Phillips to Mortgage Electronic Registration Systems, Inc., as nominee for PrimeLending, a PlainsCapital Company, dated September 25, 2008, and recorded in

the Sagadahoc County Registry of Deeds in Book 3023, Page 107, the period of redemption having expired, a public sale of the property described in the mortgage will be conducted on

November 6, 2015 at 10:00 am
At Bendett & McHugh, P.C., 30 Danforth Street, Suite 104, Portland, Maine.

The property is located at 185 Alexander Reed Road, Richmond, Maine, as described in said mortgage. The sale will be by public auction. All bidders for the property will be required to make a deposit of \$5,000.00 in certified or bank check at the time of the public sale made payable to Bendett & McHugh, P.C., which deposit is non-refundable as to the highest bidder. The balance of the purchase price shall be paid within thirty (30) days of the public sale. In the event a representative of the mortgagor is not present at the time and place stated in this notice, no sale shall be deemed to have occurred and all rights to reschedule a subsequent sale are reserved. **If the sale is set aside for any reason, the Purchaser at the sale shall be entitled only to a return of the deposit paid. The Purchaser shall have no further recourse against the Mortgagor, the Mortgagee or the Mortgagee's attorney.**

This property will be sold as is. Additional terms will be announced at the public sale.

Wells Fargo Bank, NA by its attorneys, Bendett & McHugh, P.C., 30 Danforth Street, Ste. 104 Portland, ME 04101 207-221-0016

Legal Advertisement
Notice of Public Sale Pursuant to 10 M.R.S.A. §3259 October 23, 2015 at 10:00 a.m.

Property located at 27 Twin Meadows Lane, Falmouth, ME (Map R03, Lot 4 on Block 026)

Notice is hereby given that in accordance with a Judgment and Order of Sale docketed June 4, 2015 entered by the Cumberland County Superior Court in the case of Burton Associates, et als. v. Gary Auritt, et al. Docket #CUMSUP-RE-10-53, wherein the Court adjudged foreclosure of mechanics liens of Burton Associates, Hammond Lumber Company and LaPlante Electric by virtue of Hammond Lumber Mechanics' Lien Certificate recorded in the Cumberland County Registry of Deeds at Book 28362, Page

163, Hammond Lumber Amended Clerk's Certificate recorded at said registry at Book 28773, Page 193; Burton Associates' Clerk's Certificate recorded at said registry at Book 28271, Page 259; LaPlante Electric's Mechanics' Lien Certificate recorded at Book 28518, Page 270; LaPlante Electric's Clerk's Certificate recorded at said registry at Book 28593, Page 34, and ordered the sale pursuant to 10 M.R.S.A. §3259, the period of redemption from said Judgment and Order of Sale having expired, a public sale of the property described in the deed of Aqua Cove Mortgage Corp. to Gary Auritt and Shannon Auritt, dated October 19, 2009, recorded in the Cumberland County Registry of Deeds in Book 27334, Page 104 will be conducted on October 23, 2015, commencing at 10:00 AM at the law office of Bernstein, Shur at 100 Middle St., 6th Floor, Portland, ME.

The property will be offered for sale by public auction, on an "as is" basis, without warranties of any kind, subject to all outstanding municipal assessments and any other encumbrances, land use laws, and conditions an inspection of the property or survey might reveal. The deposit to bid shall be \$15,000. The deposit must be increased to 10% of the successful bid amount within 5 days of the public sale. The balance of the purchase price will be due and payable within 30 days of the public sale. Any and all right, title, and interest of Gary Auritt and Shannon Auritt, their heirs and assigns, will be conveyed to the successful bidder by release deed. All other terms and conditions of the sale will be available from Frank M. Underkuffler, Esq., 116 Main St., Farmington, ME 04938, telephone number 778-9771.

Dated: September 15, 2015.

Hammond Lumber Company
By: Frank M. Underkuffler
Its attorney

Legal Advertisement

Please join us Thursday, October 8th, 2015 at 6PM for a Neighborhood Meeting to discuss our request for Site Plan and Subdivision Plan approval for the proposed redevelopment of 3 Pleasant Avenue, Portland, formerly known as "Clark Memorial Church". The redevelopment is proposed to include 25 market rate residential apartments in the former church building and a single family residential house in the former vestry. Meeting Location: Public Meeting Space at the former Clark Memorial Church 3

Pleasant Avenue Portland, Maine. A sign-in sheet will be circulated and minutes of the meeting will be taken.

Legal Advertisement
SOUTHERN MAINE COMMUNITY COLLEGE NOTICE TO ARCHITECTS AND ENGINEERS REQUEST FOR QUALIFICATIONS

SOUTHERN MAINE COMMUNITY COLLEGE (SMCC) is requesting Architectural / Engineering services from qualified firms to perform **CAMPUS MASTER PLANNING SERVICES** for our South Portland and Brunswick Campuses. Qualification packages are due at 1:00 PM on Wednesday, October 14, 2015, at 92 Campus Center Drive, South Portland, Maine 04106.

Responding firms must comply with the detailed Notice to Architects and Engineers on the BGS website: http://www.maine.gov/bgs/constr/public/prof_services?RFQ_prof.htm Bureau of General Services, 77 State House Station, Augusta, Maine 04333, (207) 624-7360

Note: this Request for Qualifications supersedes the Request for Proposals previously issued/advised by SMCC on 8/26/15

Legal Advertisement

The next quarterly meeting of the Maine Historic Preservation Commission will be held at 10:30 a.m., October 23, 2015 at the Elsie and William Viles House, 71 Stone Street, Augusta, Maine.

The Commission meets quarterly to nominate buildings, sites, and districts to the National Register of Historic Places. For more information, contact the Maine Historic Preservation Commission, 55 Capitol Street, 65 State House Station, Augusta, Maine 04333-0065; telephone 287-2132.

Legal Advertisement

The Standish Planning Board will hold a business meeting on Monday, October 05, 2015 at 7:00 PM in the Standish Municipal Building in Council Chambers

New Business:

Amendment to Standish Town Code, Chapter 181, Land Use Ordinance: Article III, District Regulations regarding overhead doors and Article V, general standards, regarding pedestrian ways

To ensure your participation in this meeting, please

inform us of any special requirements you have regarding a disability at 42-3461

Legal Advertisement
Town of Ogunquit Public Hearing Notice

The Ogunquit Select Board will hold a Public Hearing on the New Application for an On-premise Liquor License Permit for **Prego, LLC dba Five-O Shore Road**, Ogunquit, Maine. The hearing will be held at 6:00pm on Tuesday, October 6, 2015 at the Dunaway Community Center (Town Office), 23 School Street, Ogunquit, Maine, 03907

Legal Advertisement
Town of Ogunquit Public Hearing Notice

The Ogunquit Select Board will hold a Public Hearing on the New Application for an On-premise Liquor License Permit for **Lafin Properties, LLC dba Beachfire**, Ogunquit, Maine. The hearing will be held at 6:00pm on Tuesday, October 6, 2015 at the Dunaway Community Center (Town Office), 23 School Street, Ogunquit, Maine, 03907

Legal Advertisement
Town of Scarborough Zoning Board of Appeals

In compliance with Section V, Zoning Ordinance, Town of Scarborough, adopted March 1985, you are hereby notified of the following appeals. The Town of Scarborough Zoning Board of Appeals will hold a public hearing at 7:00 P.M. on October 14, 2015, at the Municipal Building to hear the following:

Re-approval Hardship Variance Joseph & Charlene Doherty, 16 Jones Creek Dr., U22/8 Special Exception Lindsay Diminick, 15Forecaster Way, R79/5607 Special Exception Christina LaBrecque, 23 Topley Road, R1/8B Standard Variance, Michael Zilkha, 35 Winslow Homer Rd, U19/16 Practically Difficulty Variance Peter & Lorraine Talbot, 3 Pinewood Circle, U17/75

Mark Maroon, Chairman
Zoning Board of Appeals



RECREATION

Boats, Canoes & Kayaks

17.5' FOUR WIND HORIZON 180 2007 190HP Volvo Penta, 4.3L I/O, very low hrs, great cond., First \$13,500 takes it. 207-446-8824

TRANSPORTATION

Antique, Classic, Custom

CHEVROLET CAMARO Z28 1999 45K mi, MINT cond., no rust, garaged 6 yrs 'til 7/14. New tires, 1-tops, LS1 motor w/LS6 air intake. Long tube headers, 3" dual exhaust, Racing cam, New 2 stage clutch, New high strength racing torque arm, 6 spd performance enhanced trans., Eng. balanced & blue printed, Heads ported & polished, High compression pistons, 30 lb Ford fuel injectors, 12 bolt Moser 4:10 rear end, Traction bars, High pressure fuel pump \$11,000/best. 207-329-5341 leave message.

CHEVY CAMARO Z28 1992 Black, auto, 350 V-8, exc. shape, low miles \$6,000. 207-632-6787.

FORD MODEL A RUMBLE SEAT COUPE 1930 Selling for widow. Complete eng. rebuild 1500 mi. ago. Paint fair otherwise very good. \$12,500. 207-318-8757.

MERCEDES-BENZ 190E 1985 59,000 miles, excellent condition, original owner \$6,000. 207-883-5309.

SUBARU IMPREZA WG 2015 hatchback, spoiler, heated seats, black, 850 miles, like new, garaged \$20,500. 883-0910.

Autos For Sale

BMW X5 PREMIUM 2011 AWD, blk/blk, exceptional cond., dealer maint., garaged, 60K mi, full sport & tech pkg, too many options to list \$29,575. 207-318-0805

BUICK LESABRE 2006 Needs work for sticker but looks and drives fine. 152,000 miles. \$1500/best 774-2065

FORD ECONOLINE SI VAN 2006 wheelchair lift w/ cord & remote, silver, 82K miles, good cond. Price reduced to \$7,900. Call 657-3941.

Autos For Sale

FORD F350 2002 With plow. 59K mi, runs great. August sticker, some rust. \$6,900. So. Portland. 799-5367

FORD RANGER P/U 1997 Runs great, all inspected. Asking \$950. Kennebunk 207-286-4625.



FORD TAURUS SE 2006 Sedan, 213K miles - all hwy. V6, new sticker, new tires, great cond., needs nothing \$3,000. 207-205-9123.

GMC HD 1987 half ton, 4WD, auto, PS, PB, 97K miles \$10,900. 207-712-8901.

INFINITI M37 2011 4 dr, Nav., AWD, extra set rims w/snow tires, 40K miles \$25,500. 207-712-8901.

NISSAN MAXIMA SV 2009 red, 70K, leather heated seats, 24MPG, Base, service records, very good cond., \$12,700. 207-939-2417.

SAAB TURBO 1993 4dr, std, midnight blue, registered, high miles, needs muffler \$800 or best offer Boothbay area 207-650-1305.

SATURN AURA 2009 Auto, 4 dr sedan, 28,000 miles \$9,000. 207-272-0402.

SUBARU WRX 2011 black, new snow tires on steel rims, new summer tires incld, dealer maint., 50K, adult owned, exc. cond. \$19,600. 207-318-2289

TOYOTA PRIUS 2007 126K miles, very good cond., pkg #6, nav., Bluetooth, silver w/ grey leather int. Great car! Below book at \$5,800. 829-3175 or 831-3315.

VOLVO S80 2004 AWD, 144K, heated leather, moonroof, 2.5T, auto, Volvo maint., 2nd owner, very good cond., needs nothing, 24/20 mpg \$4,900. 945-9326.

Motorcycles

BMW R1150RS 2003 48,200 miles, bags, new tires & battery, \$4,500. Bridgton 803-2008

HONDA GOLDWING 1800 2001 Runs "as new". 62K miles, 1 owner, includes trailer. Moving to Las Vegas. Sacrifice \$5,500. 207-838-3066

Recreational Vehicles

MONTANA 5TH WHEEL MODEL 3402RL 2013 Self-level sys., 4 slides, "live-in" pkg, king bed, 19' awning \$64,500. 603-723-9306.

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Portland Press Herald
Maine Sunday Telegram
pressherald.com

Where Great Deals
Are Happening

Neighborhood Meeting

3 Pleasant Avenue
August 12, 2015

October 9, 2015

First Name	Last Name	Address	City	ST	Zip	Phone	E-mail
1 Leslie	Wilhelm	32+34 Pleasant Ave	Portland	ME	04103	207 232 6016	L Wilhelm@maine.rr.com
2 Jessica	Kelly	32 Clinton St	Portland	ME	04103	671-5211	jessicakelly@maine.rr.com
3 Jane	Patterson	42 Newens St	Portland	ME	04103	207 522 2087	jpatterson4@earthlink.net
4 Sandra	Brooks	51 Woodlawn Ave	Portland	ME	04103	774 7593	
5 Arthur	Schassberger	22 Pleasant Ave	Portland	ME	04103	899-4307	
6 Ray	Downes	18 A/pine	Portland	ME	04103	797 7980	
7 Johannah	Hart	149 Concord			04103	—	—
8 Douglas	MacDonald	8 Pleasant					
9 Burak	Sezen	8 Pleasant	Portland	ME	04103	207 838 2631	bmsezen@gmail.com
10 Ellen	Jackson	139 Hartley	Portland	ME	04103	773 2249	
11 John + Cheslye	Ventimiglia	41 Pleasant	Portland	ME	04103	774-5799	
12 Marina	Schneller	47 CLINTON	"	"	"	"	
13 John	Thibodeau	114 Clinton St.	"	"	"	"	jet627@icloud.com
14 Max	Fegenbaum	10 Pleasant	"	"	"	"	Max.Fegenbaum@maine.rr.com
15 Bruce	Bonstetter	Clinton	"	"	"	"	
16 Bobbi	Cope	172 Concord St	"	"	"	"	bcope@maine.rr.com
17 Kevin	Williams	15 Clinton	"	"	"	207 245 4217	
18							
19							
20							

REDEVELOPMENT OF 3 PLEASANT AVENUE
NEIGHBORHOOD MEETING
OCTOBER 9, 2015 – 6:00 P.M.

MEETING MINUTES

The meeting was held at 3 Pleasant Avenue, in the community room of the former Clark Memorial Church. Present were: Robert Gaudreau, President of Hardypond Development; Frank Carr, Director of Business Development of Hardypond Development; and various community members (see attached attendance list).

The meeting was opened at 6:00 by Bob Gaudreau, who requested all present to sign the attendance sheet, as required by the City of Portland. Mr. Gaudreau began by noting that the purpose of this meeting was to introduce a new plan for redevelopment of the former church into 25 market-rate apartments, all in the sanctuary, and that the connector between the former church and the attached single-family house will be removed and the house will be sold separately. He also noted that the plan discussed in August, to provide housing for Shalom House, is no longer in development. When asked for details, he declined to comment further.

Mr. Carr noted that the 25 market-rate apartments will fit well with the City of Portland's affordable housing initiative. Monthly rental rates will be between \$900 and \$1,200, and the apartments will be approximately 500 – 600 square feet. It is anticipated that there will be one two-bedroom apartment and that the others will be split evenly between studio units and one-bedroom units. There will be 23 parking spaces across the street, an additional two handicapped parking spaces near the building, and the adjacent house will have its own two spaces. The parking meets the 1 to 1 parking spot to apartment ratio required for market-rate apartments. The site plan and interior plans were available for attendees to review.

One audience member, a member of the Clark Memorial congregation, stated that she is saddened that Shalom is no longer involved because she had felt that providing housing for Shalom clients was a fitting use for the former church building and would have fulfilled a significant need for Shalom House.

Another audience member, who still wanted to voice an opinion even after learning that Shalom has decided not to proceed, stated that she felt that there would have been too high a density of people with mental illness and that such a use wouldn't be appropriate for the neighborhood. Mr. Gaudreau restated that Shalom is no longer involved in the project.

Mr. Carr and Mr. Gaudreau then opened the meeting up to questions and comments from the audience:

Q: Will there be supervision in the building?

A: No – these apartments will be just like any other apartment building, with an offsite property manager available to deal with any maintenance issues or emergencies, but no onsite management or supervision.

Q: Are there plans for any landscaping or green space?

A: There will be a bike rack, a parking fence, and there will be enhancements to the existing plantings, such enhancements to meet the City's requirements. Mr. Gaudreau added that he already has a permit to remove the connector between the church building and the house, and that the demolition will begin shortly.

Q: How much will the building cost to renovate into apartments?

A: Approximately \$2,000,000.

Q: How will the building's units be marketed?

A: The units will be marketed as market-rate apartments, adaptable to meet ADA requirements.

Q: What will be the impact on traffic?

A: While there hasn't been a traffic study specifically for this development, past Forest Avenue traffic data indicate that an additional 25 vehicles in the area would produce a negligible effect on existing traffic. The City has asked the developer to allow the addition of a bus shelter on the corner of the lot, as it is probable that there will be additional bus usage from the building.

Q: Have you heard anything about the return of the trolley?

A: We have no information about any trolley.

Q: Are there any plans for Section 8 housing in the building?

A: The plan is to develop only market-rate apartments.

Q: Will there be an increase in noise in the neighborhood?

A: The building has hardly any insulation at present, and will have much more, both between the interior and the exterior and between the units themselves, which will help to contain and additional noise.

Q: Will the whole building be residential?

A: There will not be any business use of the building.

Q: What about common areas?

A: The old plan based on Shalom House use had common areas, but this plan will only have apartments and whatever space is necessary for hallways.

Q: Will there be marketing to target specific groups, such as seniors and students?

A: There will be only open marketing, not targeted marketing of any kind and the units will be marketed solely as market-rate apartments.

Q: What if Shalom wanted to rent an apartment in the building?

A: That would be inconsistent with Shalom's housing model, which is to acquire buildings with 10 or more units, so we do not anticipate any further interest from Shalom.

Q: Will you be using historic tax credits?

A: No. Historic tax credits are appropriate for former churches that are converted in ways that preserve the sanctuary; they are not appropriate for former churches that break up the sanctuary space into floors of residential units.

When it appeared that there were no further questions from the audience, the meeting was adjourned at approximately 6:30.

Attachments: List of meeting attendees



October 30, 2015

Ms. Helen Donaldson
Planning and Development Department
City of Portland
389 Congress Street
Portland, Maine 04101-3509

**Subject: Proposed Redevelopment of Pleasant Avenue Church
3 Pleasant Avenue – Portland, Maine
Letter of Response #1**

Dear Nell:

On behalf of Hardypond Development Company, LLC, we have received and reviewed staff review comments in response to our Preliminary Site Plan and Subdivision Application related to a proposed redevelopment of the former Pleasant Avenue Church site located at 3 Pleasant Avenue into 25 residential apartments. For ease of reference we have repeated the comments below in *italics* followed by our response.

PB WORKSHOP COMMENTS FROM NELL DONALDSON DATED 10-22-15

SUBDIVISION REVIEW

Comment 1:

Water, Air Pollution. *There are very minor site changes proposed, including the demolition of a breezeway, the removal of a shed, and some additional paving. The development is not anticipated to have detrimental water or air impacts.*

Response:

No response required.

Comment 2 & 3:

Adequacy of Water Supply. *The applicant has provided evidence of capacity from the Portland Water District (Attachment C).*

Response:

No response required.

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Comment 4:

Soil Erosion. *No unreasonable soil erosion or reduction in the capacity of the land to hold water is anticipated.*

Response:

No response required.

Comment 5:

Impacts on Existing or Proposed Highways and Public Roads. *The applicant has provided an estimated trip generation of 16 peak hour trips based on the Institute of Transportation Engineers Trip Generation Manual (Attachment C). No traffic impact analysis has been conducted. Tom Errico, the City's consulting traffic engineer, has concurred that no traffic study is required (Attachment 1).*

Response:

No response required.

Comment 6:

Sanitary Sewer/Stormwater Disposal. *The applicant has submitted a wastewater capacity application to the Department of Public Services (Attachment C). Verification of capacity will be required at the time of final plan. The applicant has proposed to use existing sewer connections in Pleasant Avenue.*

Response:

Verification of wastewater capacity from DPS is included with this submission as Attachment A.

Comment 7:

Solid Waste. *The applicant has proposed trash and recycling enclosure on the Forest Avenue frontage near a new proposed sidewalk with stair access to the building. Staff has requested that the applicant consider moving this trash enclosure to the rear of the building to make it less visible from Forest Avenue.*

Response:

The applicant has worked with the Engineer to revise the location of the trash enclosure to address this comment. The subdivision line between the house lot and the apartment lot has been adjusted to accommodate this, and provide privacy and separation between the lots.

Comment 8:

Scenic Beauty. *This proposal is not deemed to have an adverse impact on the scenic beauty of the area.*

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Response:

No response required.

Comment 9:

Comprehensive Plan. *The proposed project will add rental housing to the City's housing stock, and thus meet a number of housing objectives of the comprehensive plan. The project will also adaptively reuse an existing building on a major commuter corridor and transit line, thus achieving some of the smart growth objectives of the comprehensive plan as well.*

Response:

No response required.

Comment 10:

Financial and Technical Capacity. *The applicant has submitted a letter from TD Bank attesting to the applicant's capacity to successfully complete the project (Attachment D).*

Response:

No response required.

Comment 11:

Wetland/Water Body Impacts. *There are no anticipated impacts to wetlands.*

Response:

No response required.

Comment 12:

Groundwater Impacts. *There are no anticipated impacts to groundwater supplies.*

Response:

No response required.

Comment 13:

Flood-Prone Area. *Per the City's existing flood maps, the site is not located in a flood zone.*

Response:

No response required.

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SITE PLAN REVIEW

1. Transportation Standards

- a. *Impact on Surrounding Street Systems.* As noted above, the applicant's narrative estimates that the project will add 16 peak hour trips to the adjacent street system. The impact of these trips is anticipated to be negligible. Mr. Errico has stated that he does not anticipate negative traffic or safety impacts (Attachment 1).

Response:

No response required.

- b. *Access and Circulation.* The applicant proposes to provide vehicular access to ADA parking serving the church lot at 3 Pleasant Avenue and parking serving the single-family home at 15 Pleasant Avenue via the existing curb cut on the north side of Pleasant Avenue. This driveway, as well as the ADA parking for the church redevelopment, will technically lie on the single-family lot at 15 Pleasant Avenue, with a 30 foot wide access easement to the church property. Staff has requested that the applicant verify that circulation is technically possible around, to, and from these parking spaces. Mr. Errico has reviewed the configuration of proposed parking and drive aisles. He writes,

"The parking area abutting the building is very tight and I'm not sure is workable. The applicant should explore the possibility of relocating one handicapped parking space to the main parking lot, thus creating more space for vehicle circulation from the two abutting parking spaces (This would need to meet ADA regulations and must be confirmed). I would be supportive of providing additional compact size parking spaces to allow for the target 25 parking spaces."

Access to the off-site parking at 16 Pleasant Ave (which will serve the church redevelopment) would be provided via an existing driveway shared with the property at 14 Pleasant Avenue. Easements will be necessary in this location as well. Mr. Errico notes,

"I find the parking lot layout on the south side of Pleasant Avenue to be acceptable. With that, the applicant should provide dimensions for the driveway servicing the abutting residential property and provide information on winter maintenance agreements/responsibilities. I would note that encroachment into the driveway by project vehicles is possible, and accordingly delineation of parking spaces is important."

Pedestrian access to the converted church building would remain largely as is, with the exception of a new secondary entrance at the northeast corner of the site on Forest Avenue, which would be reachable via a new sidewalk from the street. The main entrance from Pleasant Avenue would continue to exist as it currently does, via a sidewalk with steps to the building. ADA access would continue to be provided to the west on Pleasant Avenue via a ramp; the sidewalk to the ADA ramp would be reconstructed. Staff has requested that the applicant document ADA access from the street in the revised submittal. There are no proposed changes to

Ms. Helen Donaldson
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pedestrian access to the single-family lot or the parking. Mr. Errico has noted that DPS has not yet evaluated the condition of the sidewalk and ramp at the Pleasant Avenue/Forest Avenue corner (Attachment 1). This review will be completed prior to the final plan submittal.

Response:

The parking to the rear of the proposed single-family residence is accessible via the driveway. This is evidenced by the previous use of the structure labeled “Wood-framed Shed” on the site plan. It is our understanding that this was used as a garage, with access via the driveway, before the breezeway connecting the two buildings was constructed. We have run turning templates using the AASHTO Large Car Model (19’long) to demonstrate sufficient space to maneuver in and out of this area (see figure provided in Attachment B). This area is fairly tight, but we feel it provides sufficient space to accommodate the parking proposed.

As discussed at the Planning Board workshop meeting, we do not feel that moving one of the handicapped parking spaces to the other side of the street offers a reasonable alternative. This does not appear to meet the letter or spirit of the ADA regulations, which require parking to be provided as proximate as practical to building entrances.

We have reviewed the layout and topography on the approach from Pleasant Avenue and made some minor adjustments to ensure that an accessible route is provided from street onto the property. The new concrete sidewalk and striped access route to the entrance ramp is designed to meet the minimum ADA requirements for accessible routes. The maximum longitudinal slope does not exceed 1:20, the maximum cross slope does not exceed 1:48, and a minimum width of greater than 36” is provided at all locations.

- c. *Public Transit Access. Given that this project is over 20 residential units and located along a transit route, a transit facility, consisting of a transit shelter and a pullout bay, is technically required. The applicant has identified a transit shelter pad on the preliminary plans. A shelter should be designated as well. It appears that a pullout is not possible given right-of-way constraints. Additional coordination with METRO will be required to identify the exact location of these facilities. The applicant has depicted a public access easement surrounding the shelter site on the draft subdivision plan.*

Response:

The Applicant has called Metro to confirm the optimum location for the transit shelter. We are awaiting a response from them. We will continue to coordinate with Metro and City staff to ensure that the final location of the shelter is agreed by all parties.

- d. *Parking. Division 20 of the land use ordinance requires one parking space per unit for residential development in the B-2 zone (Section 14-332(a)). At this ratio, the church redevelopment would be required to provide 25 parking spaces for the 25 residential units. The preliminary plans show 23 parking spaces off-site at 16 Pleasant Avenue and two ADA spaces next door at 15 Pleasant Avenue, or exactly 25 spaces. Both of these parking areas lie within 100 feet of the church lot at 3 Pleasant Avenue, thus meeting the requirements of Section 14-334 of the ordinance, which permits off-site parking for uses in non-residential zones.*

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Mike Farmer of the City's Department of Public Services, has requested additional information on the design of the ADA parking spaces,

"The layout shown on the site plan for two handicapped spaces does not, in my view, meet the design standard for a van accessible space. Does the proposed parking layout meet the design standard for a van accessible space?"

Division 20 generally requires two parking spaces per unit for residential buildings in zones without exceptions. Two spaces are proposed at the rear of the single-family building at 15 Pleasant Avenue, meeting this requirement.

The preliminary plans include 10 bike parking spaces in two bike racks, meeting the requirement for residential structures. All of these spaces are proposed inside a fenced area on the Forest Avenue side of the church building. Staff has requested that the applicant move one of the racks to the outside of the fenced area to improve visitor access to bike parking.

Response:

We have adjusted the striping adjacent to the inboard_handicapped parking space so that it extends the full length of the space at a width of eight feet. This space now meets the requirements for a van accessible parking space. It is our opinion that a van accessible space is not strictly required on this site (private residential development). However, we do need to provide two accessible spaces (one each for the accessible units) and would like to accommodate a van accessible space if practical.

- e. *Transportation Demand Management. A transportation demand management plan is not required.*

Response:

No response required.

2. Environmental Quality Standards

- a. *Preservation of Significant Natural Features. There are no known significant natural features on the site.*

Response:

No response required.

- b. *Landscaping and Landscape Preservation. The preliminary plans show four crab apples and 12 hostas on the off-street parking site at 16 Pleasant Avenue. Staff has requested that the applicant provide a landscaping plan for both buildings and the parking area that meets the standards of the site plan ordinance. Jeff Tarling, the city's arborist, has noted that the landscaping plan should include two additional street trees on the north side of Pleasant Avenue, where two have recently been eliminated. As noted above, staff has also requested that the applicant consider moving trash and recycling to the rear of the building, off both Pleasant and Forest Avenues. In*

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addition, a transformer pad is currently depicted on the Forest Avenue frontage. In the revised plans, this pad should be either moved to a more discreet location or screened from public view.

Response:

A Landscape Plan is provided with this submission for review. The trash enclosure has been moved to the rear of the building, as requested. The transformer pad shown on the Forest Avenue frontage has been re-located to minimize the visual impact and still conform to CMP access requirements. The project will require three-phase electrical service that is only available in Forest Avenue. Initial feedback from CMP indicated that a pad mounted transformer will be required to service the project. However, the Applicant is continuing to investigate alternatives for the new electrical service to the building.

- c. *Water Quality/Storm Water Management/Erosion Control. The applicant has indicated that the impervious surface on site would increase by over 1,000 SF, which would result in a requirement for stormwater mitigation. However, most of the proposed impervious appears to lie over existing impervious; the change in impervious should be verified prior to final plan review. As currently proposed, all stormwater would runoff as in the existing condition and discharge to the city's combined system, with no treatment planned.*

David Margolis-Pineo, of the city's Department of Public Services, has requested that the applicant redirect all roof drains currently discharging to the sewer system to grade (Attachment 2). In addition, David Senus, the city's consulting civil engineer, has noted that the plans "should include notes related to requirements for street sweeping during construction and catch basin inlet protection" (Attachment 3).

Response:

The plans have been revised for this submission and the new total impervious area has been re-calculated as 21,857sf. This compares to the existing impervious area of 20,875sf. Therefore, the increase in impervious area is now 982sf.

The Applicant will re-direct all roof drains to grade as part of this project, removing inflow to the sewer system.

Notes have been added to the plan requiring street sweeping and catch basin inlet protection during construction.

3. Public Infrastructure and Community Safety Standards

- a. *Consistency with Related Master Plans. As noted above, the project is generally deemed consistent with related master plans.*

Response:

No response required.

- b. *Public Safety and Fire Prevention. The applicant has provided a life safety summary for review by the city's Fire Prevention Bureau (Attachment B). Per this summary, the converted church*

Ms. Helen Donaldson
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building would have sprinklers. A hydrant is provided at the corner of Forest and Pleasant Avenues. Assistant Fire Chief Keith Gautreau, of the Fire Prevention Bureau, has indicated his general approval (Attachment 4).

Response:

No response required.

- c. *Availability and Capacity of Public Utilities. The Portland Water District has provided documentation of capacity to serve the project (Attachment C). At the time of final site plan review, the applicant will need to present evidence that there is sufficient sewer capacity to service the commercial and residential units on the site.*

There are currently three overhead electrical feeds to the site, including two from Pleasant Avenue and one from Forest Avenue. Mr. Margolis-Pineo has requested that the applicant place all electrical service underground. The preliminary plans show electrical service underground from Pleasant Avenue. A riser pole and transformer pad are depicted on the site's Forest Avenue frontage, with electrical service underground from this location to the building. The location of this transformer pad and electrical service connection should be confirmed with the Department of Public Services prior to the submission of final plans. As noted above, this transformer, assuming it remains, should be screened from public view.

Response:

Confirmation of sewer capacity from DPS is included with this submission as Attachment A.

The cable and telephone lines serving the properties originate in Pleasant Avenue, as does the electrical service to the Rectory building. These will be placed underground to the site. Three-phase electrical service is only available in Forest Avenue and this is required to serve the former church building. Initial feedback from CMP indicated that a pad mounted transformer will be required to service the project. However, the Applicant is continuing to investigate alternatives for the new electrical service to the building. Pending further information on this, the transformer pad shown on the Forest Avenue frontage has been re-located to minimize the visual impact and still conform to CMP access requirements.

4. Site Design Standards

Comment a:

- a. *Massing, Ventilation, and Wind Impact. No comments.*
b. *Shadows. Not applicable.*
c. *Snow and Ice Loading. Snow storage areas should be delineated on the revised plans.*

Response:

No response required.

- d. *View Corridors. Not applicable.*

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- e. *Historic Resources.* The existing church building is not designated as a historic structure, nor are there historic structures within 100 feet.
- f. *Exterior Lighting.* A lighting plan, complete with photometrics, should be submitted at the time of final review.

Response:

No new external lighting is proposed at this time.

- g. *Noise and Vibration.* No comments.
- h. *Signage and Wayfinding.* No signage or wayfinding is proposed at this time.
- i. *Zoning-Related Design Standards.* The applicant has not proposed any changes to the existing rectory building. However, they have proposed modest exterior changes to the existing church building, including the addition of doors, windows, and several dormers. These additions have generally been designed to integrate with the building's existing historic character. Based on the multi-family design standards, the city's urban designer has requested that the applicant:
 - Review the elevations, particularly with respect to the north side, to ensure that the drawings accurately depict the existing roof design and window pattern;
 - Align proposed windows on the second and third floors on the north side with existing first floor windows; and
 - Confirm that proposed dormers match the existing roof pitch.

Response:

Response to this comment will be provided by the Architect under separate cover.

SUBDIVISION PLAT COMMENTS FROM WILLIAM CLARK DATED 10-22-15

Comment 1:

This is a Subdivision Plan and needs a Professional Land Surveyor's Seal. This is State Law.

Response:

We understand that a Surveyor's stamp is required on a Subdivision Plat Plan. The previous drawing was preliminary. A stamp is provided on the revised plan.

Comment 2:

They need to show property corners to set. This was requested at the last review.

Response:

These are shown on the Subdivision Plat Plan included with this submission.

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Comment 3:

Proposed Easement for Transit Shelter.

Needs to state "to be conveyed to the City of Portland".

Needs bearings and distances to define the area.

Needs to meet dimensional requirements of METRO bus shelters, the concrete pad, and area around it to allow for maintenance.

Response:

The note, bearings, and distances have been added to the plan. We will continue to coordinate with Metro on provisions for the shelter.

Comment 4:

Easements on the south side of Pleasant Avenue need to be clearer and state who is benefitted by them.

Response:

The notes on the plan have been clarified to indicate who is benefitted by the easements.

Comment 5:

Since all the information on the ALTA/ACSM Land Title Survey is not included there needs to be a reference to the Title Survey and the Title Survey should be recorded.

Response:

A reference has been added on the Subdivision Plan.

TRAFFIC COMMENTS FROM TOM ERRICO DATED 10-22-15

Comment 1:

I find the parking lot layout on the south side of Pleasant Avenue to be acceptable. With that, the applicant should provide dimensions for the driveway servicing the abutting residential property and provide information on winter maintenance agreements/responsibilities. I would note that encroachment into the driveway by project vehicles is possible, and accordingly delineation of parking spaces is important.

Response:

A dimension has been added on the plan denoting the clear width of the driveway on the neighboring property. The Applicant will work with the abutting property owner to define winter maintenance responsibilities on the shared driveway. It is our understanding that this shared access arrangement has worked well in the past.

Ms. Helen Donaldson
October 30, 2015
Page 11

Comment 2:

The parking area abutting the building is very tight and I'm not sure is workable. The applicant should explore the possibility of relocating one handicapped parking space to the main parking lot, thus creating more space for vehicle circulation from the two abutting parking spaces (This would need to meet ADA regulations and must be confirmed). I would be supportive of providing additional compact size parking spaces to allow for the target 25 parking spaces.

Response:

Please see previous response in the section above.

Comment 3:

I find the parking supply to be acceptable. One parking space per residential unit is proposed.

Response:

No response required.

Comment 4:

The proposed project will not generate a significant level of traffic volume and therefore the project would not be expected to negatively impact traffic or safety issues in the project area.

Response:

No response required.

Comment 5:

DPS should evaluate the condition of the sidewalk and provision of an ADA compliant sidewalk ramp at the corner of Forest Avenue.

Response:

No response required.

DPS COMMENTS FROM DAVID MARGOLIS-PINEO DATED 8-21-15

Comment 1:

All utility cables to service this complex are required to be placed underground from the road right. There are currently two overhead feeds to the site from Pleasant Ave and one from Forest Ave. It would be desirable to have an underground feed from Pleasant Ave.

Response:

The cable and telephone lines serving the properties originate in Pleasant Avenue, as does the electrical service to the Rectory building. These will be placed underground to the site. Three-phase electrical service is only available in Forest Avenue and this is required to serve the former church building. Initial feedback from CMP indicated that a pad mounted transformer will be required to

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service the project. However, the Applicant is continuing to investigate alternatives for the new electrical service to the building. Pending further information on this, the transformer pad shown on the Forest Avenue frontage has been re-located to minimize the visual impact and still conform to CMP access requirements.

Comment 2:

Neither Pleasant or Forest Ave are under street moratoriums.

Response:

No response required.

Comment 3:

The applicant is requested to redirect all roof drains currently discharging to the sewer system to grade.

Response:

The Applicant agrees to do this. A note has been added to the plans indicating that this will be done.

Comment 4:

Survey comments will be forthcoming.

Response:

No response required.

Comment 5:

All plans are required to be professionally stamped.

Response:

All plans are stamped.

Additional Comment from Michael Farmer, DPS

Comment 6:

I have one additional comment, which relates to the designated handicapped parking spaces. The layout shown on the site plan for two handicapped spaces does not, in my view, meet the design standard for a van accessible space. Does the proposed parking layout meet the design standard for a van accessible space?

Response:

Please see previous response to this comment in the section above.

Ms. Helen Donaldson
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Page 13

CIVIL ENGINEERING COMMENTS FROM DAVID SENUS

Comments 7/10/15

Comment 1:

The application is preliminary. As such, we would anticipate that additional documents will be submitted for the final application, including letters from utilities confirming capacity to serve the proposed development and approving the design. Additionally, final plans should include construction details.

Response:

Utility letters from electric, gas and water utilities were provided with the preliminary submission. Confirmation of sewer capacity is provided with this submission as Attachment A.

Comment 2:

In accordance with Section 5 of the City of Portland Technical Manual, a Level III development project is required to submit a stormwater management plan pursuant to the regulations of MaineDEP Chapter 500 Stormwater Management Rules, including conformance with the Basic, General, and Flooding Standards. Given the size of the proposed development and the de minimis increase in impervious area, no formal stormwater management plan submittal will be required. We offer the following comments:

- a. Basic Standard: Proposed project impacts will be small and relatively well contained on the site; however, the plans should include notes related to requirements for street sweeping during construction and catch basin inlet protection.*

Response:

Notes have been added to the revised plans to address this comment.

- b. General Standard: The project will result in a de minimis increase in impervious area of approximately 675 square feet. As such, the project is not required to include any specific stormwater management features for stormwater quality control.*

Response:

No response required.

- c. Flooding Standard: The project will result in a de minimis increase in impervious area of approximately 675 square feet. As such, the project is not required to include any specific stormwater management features to control the rate or quantity of stormwater runoff from the site.*

Response:

No response required.

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Comment 10/14/15

Comment 1:

The applicant addressed our comment regarding utility capacity and providing construction details with the final site plan; however, our comment related to street sweeping and catch basin inlet protection does not appear to be addressed in the latest submittal (see highlighted text from July memorandum).

Response:

Notes have been added to the revised plans to address this comment.

FIRE DEPARTMENTS COMMENTS FROM KEITH GAUTREAU

Comments 8/12/15

Comment 1:

Hydrant location on the corner of Forest and Pleasant is good and adequate flow being tapped into Forest Ave main.

Response:

No response required.

Comment 2:

Hydrants – 2009 NFPA 1 18.3 Water Supplies and Fire Hydrants

Fire Department Connections shall not be located where large diameter hose may block egress.

Response:

Understood. The applicant will comply with this.

Construction Management Plan

Comment 3:

Streets must maintain a 20' width for Fire Department access at all times.

Response:

Understood. The applicant will comply with this.

Comment 4:

Fire Hydrants shall not be blocked or enclosed by fencing. A 3' foot clearance must be kept at all times around the fire hydrant.

Ms. Helen Donaldson
October 30, 2015
Page 15

Response:

Understood. The applicant will comply with this.

Comment 5:

If gates are locked, a Portland Fire Department Knox padlock must be purchased by the applicant to allow access for the Fire Department.

Response:

Understood. The applicant will comply with this.

Comment 6:

The Construction Company's emergency contact information shall be posted on the property in case of an after-hours emergency.

Response:

Understood. The applicant will comply with this.

Comment 7:

All construction shall comply with 2009 NFPA 1 Chapter 16 Safeguards During Building Construction, Alteration, and Demolition Operations.

Response:

Understood. The applicant will comply with this.

Comment 8:

All construction shall comply with 2009 NFPA 1 Chapter 16 Safeguards During Building Construction, Alteration, and Demolition Operations.

Response:

Understood. The applicant will comply with this.

Comment 9:

Any cutting and welding done will require a Hot Work Permit from Fire Department.

Response:

Understood. The applicant will comply with this.

Comment 10:

Access to the site looks good off of Forest Ave and Pleasant Ave. 30' Wide access into the proposed parking lot exceeds the minimum requirements. Parking across the street is acceptable and enables better emergency access.

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October 30, 2015
Page 16

Response:

No response required.

Comment 10/14/15

Comment 1:

After further looking at the curb cut and driveway for emergency access off Pleasant Ave it appears very narrow. Emergency access lanes must be minimum 20'.

Response:

Access to the building is provided along the existing driveway between the two existing buildings on either side and only extends sixty feet from the street. There is little opportunity to widen the driveway without significant impacts to pedestrian access, parking or buildings.

If you have any additional questions or require any additional information, please contact our office.

Sincerely,

FAY, SPOFFORD & THORNDIKE



Andrew D. Johnston, P.E.
Principal Engineer

ADJ/smk

Attachments: Attachment A – Sewer Capacity Letter from DPS
Attachment B – Turning Radius Figure – Large Car
Revised Plan Set

c: Robert Gaudreau, Hardypond Development Company, LLC

ATTACHMENT A

Sewer Capacity Letter from DPS

October 22, 2015

Robert Gaudreau (bob@hardypond.com)
Hardypond Development Company, LLC
7 Tee Drive
Portland, ME 04103

**RE: Capacity to Handle Wastewater Flows from 3 Pleasant Ave
-Residential Apartments**

Dear Mr. Gaudreau:

The Department of Public Services, which includes the Water Resource Division, has reviewed and determined that the downstream sewers from 3 Pleasant Avenue has the capacity to convey the estimated 3,360 gallons per day of wastewater which will be generated from the proposed residential apartments. It is understood that no sources of stormwater runoff, roof drainage, or any other non-contaminated water shall be introduced to the wastewater collection system from this development.

If the City can be of further assistance, please call me at 874-8850 or 400-6695.

Sincerely,
CITY OF PORTLAND

David Margolis-Pineo

David Margolis-Pineo
Deputy City Engineer

Anticipated Wastewater Flows from the proposed Residential Apartments:

25 – One Bedroom Units @ 120 gpd/Unit = 3,000 gpd

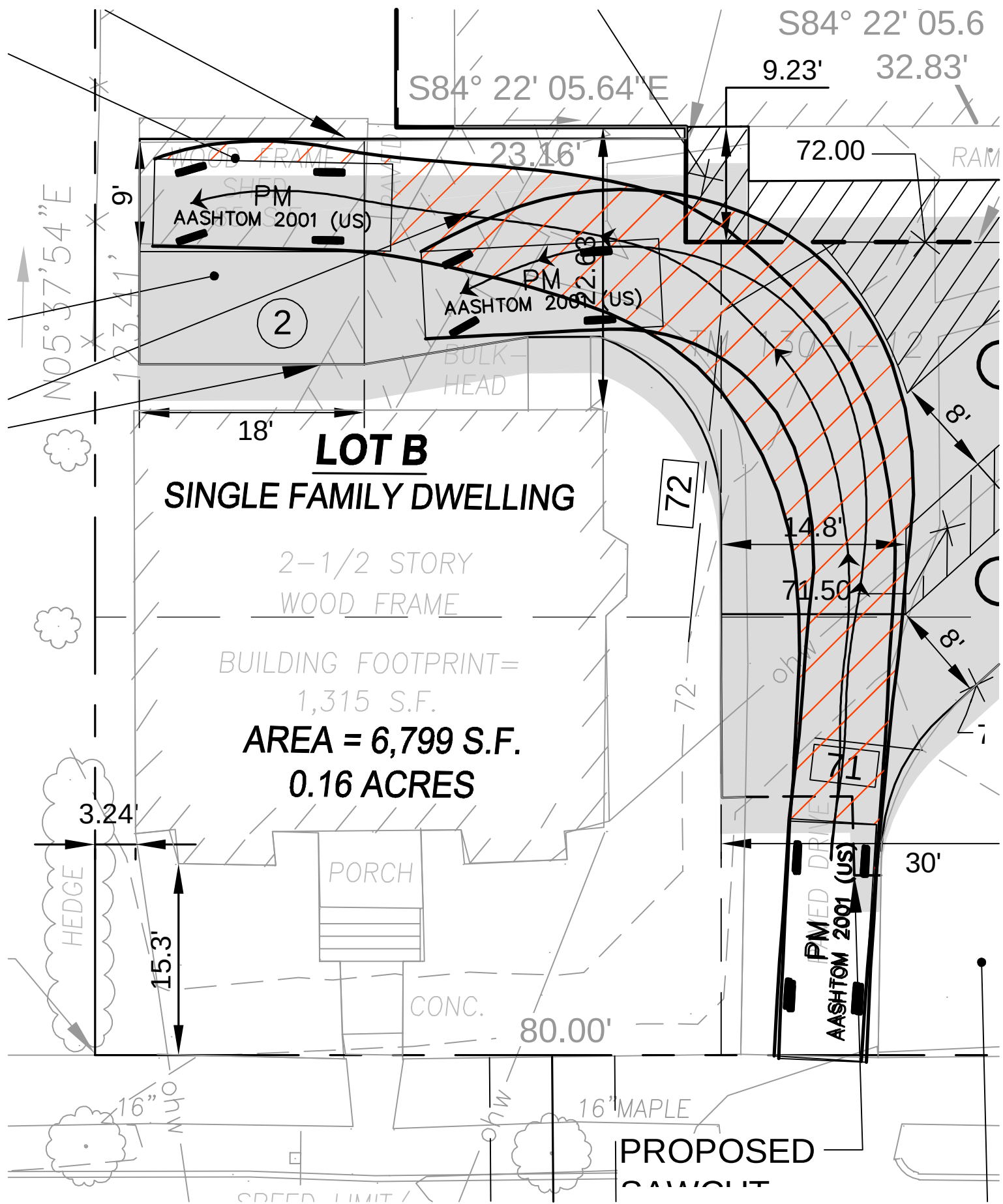
One – Four Bedroom Unit @ 90 gpd/Bedroom = 360 gpd

Total = 3,360 gpd

CC: Jeffrey Levine, Director, Department of Planning and Urban Development, City of Portland
Barbara Barhydt, Development Review Services Mgr., Dep't. of Planning and Urban Development, City of Portland
Nell Donaldson, Department of Planning and Urban Development, City of Portland
Shukria Wiar, Planner, Department of Planning and Urban Development, City of Portland
Jean Fraser, Planner, Department of Planning and Urban Development, City of Portland
Nancy Gallinaro, Water Resources Manager
Benjamin N. Pearson, E.I., Industrial Pretreatment Coordinator, City of Portland
John Emerson, Wastewater Coordinator, City of Portland
Andrew Johnston – FST Engineers

ATTACHMENT B

Turning Radius Figure – Large Car





November 5, 2015

Ms. Helen Donaldson
Planning and Development Department
City of Portland
389 Congress Street
Portland, Maine 04101-3509

**Subject: Proposed Redevelopment of Pleasant Avenue Church
3 Pleasant Avenue – Portland, Maine
Letter of Response #2**

Dear Nell:

On behalf of Hardypond Development Company, LLC, we have received and reviewed additional staff review comments for the referenced project, based on our submission dated October 30, 2015.

In response to these we have made three minor amendments to the site plans, as described below:

1. The parking spaces to the rear of the residential property have been re-configured at the request of the Traffic Review Engineer. These are now shown as “stacked” spaces to the rear of the building.
2. One of the pad-mounted bicycle racks has been re-located outside the fenced garden area.
3. One of the proposed new street trees on Pleasant Avenue has been re-located at the request of the Fire Department.

In addition, we can confirm the areas of each of the parcels, based on the latest layout. These are as follows:

- Lot A (Re-Developed Church Lot) 15,741sf
- Lot B (Single Family Residence) 6,797sf
- TM 130-H-013 (Existing) 10,132sf

We trust that these revisions address the comments received to date and we look forward to reviewing the project with the Planning Board next Tuesday.

Ms. Helen Donaldson
November 5, 2015
Page 2

If you have any additional questions or require any additional information, please do not hesitate to contact our office.

Sincerely,

FAY, SPOFFORD & THORNDIKE

A handwritten signature in blue ink, appearing to read "A. Johnston", is positioned below the firm name.

Andrew D. Johnston, P.E.
Principal Engineer

ADJ/smk

Attachments: Revised Sheet C-3.0 – Site Layout Plan
Revised Sheet L1 – Landscape Plan

c: Robert Gaudreau, Hardypond Development Company, LLC

From: Lorrie Ferrari <lorrieferrari@gmail.com>
To: <HCD@portlandmaine.gov>
Date: 7/31/2015 3:04 PM
Subject: Forest and Pleasant Ave project

Hello

I would like to voice my support for this as this type of housing is badly needed. People cannot be successful if they have no place to live and that includes the homeless shelter as that is no place to live. I am sure you will hear the NIMBY argument from the Preserve Deering Neighborhood but this city does not need to push out those less fortunate and Shalom House does a wonderful job housing folks with very challenging conditions

Thank you

Lorrie Ferrari
Belfield St
Portland

From: Theresa Puckett <theresap19@hotmail.com>
To: "bab@portlandmaine.gov" <bab@portlandmaine.gov>
Date: 8/19/2015 10:30 AM
Subject: Proposed development at 3 Pleasant Ave

I was out of the country when the notice came for the public meeting that was in regards to the proposed development of 3 Pleasant Ave, Portland.

I would like to express my concerns regarding the plan to develop 25 apartments in this space. I am very concerned about the density of this development and think it is totally unreasonable for this small space and area. Parking would also be an issue as it is already at a premium. There are already several apartments on this end of the street that don't include parking and this is especially problematic during the winter. Also, I am not aware of any apartment in our residential neighborhood, that has more than 8 units.

I would like a copy of the minutes of the meeting from 8/13/15.

You are welcome to call me at 772-4176.
I live at 48 Pleasant Ave.

Theresa Puckett

From: Betty Libby <bettjlibb@yahoo.com>
To: "hcd@portlandmaine.gov" <hcd@portlandmaine.gov>
Date: 8/24/2015 11:50 AM
Subject: 3 Pleasant Avenue - Shalom House

Dear Ms. Donaldson:

I received your notice regarding the plans for 3 Pleasant Avenue. A number of residents on Pleasant Avenue are concerned by the already lack of parking especially during the odd/even parking days. There seems to be no need for this in the first place since the street sweeper does not sweep the streets on a daily basis. We do not want to pay parking tickets due to no place close to park.

Is this proposal for single person apartments? Are there going to be more residents in each apartment with potentially more cause for more than an one vehicle? 14 spaces and 2 handicap spaces is already 10 parking spots shy of what there should be for 25 apartments and a single family home.

Is the town going to consider changing the even/odd parking issue to both sides of the street parking to alleviate the potential parking issue? At times people on our street already have to park and walk a great distance with this even/odd parking and with more cars on this road something should be done to relieve the owners and residents who already live on this street. Some of us work late nights and do not want to walk in the dark great lengths, our safety is an issue.

I would like to continue to receive notification of public hearings. Please take this real concern to the Planning Board.

I would also like more information on what type of housing Shalom House is?

Thank you. Betty Libby 38 Pleasant Avenue Portland Maine

From: philz21 <philz21@yahoo.co.uk>
To: <hcd@portlandmaine.gov>
CC: Sarah Chamberlain <sk.chamberlain@yahoo.com>
Date: 8/26/2015 6:06 PM
Subject: Clark Church Project

Hi Nell, My name is Philip Chamberlain. Along with my wife Sarah and our family, we are residents on Clinton street. I understand you can put is on an email list about this project, could you add mine and I've cc'd my wife's to be added too. We are both in favor of working class housing being developed on this lot rather than the current proposal of having a very large Shalom House built with residents who will mostly be unemployed and unsupervised. We are hearing from our neighbours that they have the same concerns and the community are in favor of the above proposal rather than the current proposal. We will be attending the Planning Board meeting on the 8th. Is there anything else we should be aware of or doing to communicate our very grave concerns to the planning board and the city? Thanks for your help. Sincerely, Phil

Sent from my Verizon Wireless 4G LTE smartphone

From: Marina Schneller <marinaschneller@yahoo.com>
To: "hcd@portlandmaine.gov" <hcd@portlandmaine.gov>
Date: 8/31/2015 12:42 PM
Subject: Clark Memorial Church [formerly] Redevelopment proposal : Neighborhood meeting, Thurs. August 13 2015

I received the postcard entitled IMPORTANT NOTICE FROM CITY OF PORTLAND' and subsequently the August 3, 2015 invitation from FST to attend the Neighborhood Meeting and did attend.

The meeting was attended by other residents in the vicinity of the former Church. Generally those residents, who bear high assessments and property tax rates--who pay Portland property tax and probably income tax to both the state of Maine and the U.S. Treasury--were concerned 1] for the safety of children in the neighborhood who may attend any one of the three local schools: two of the schools are three blocks from the Clark Memorial [DHS and Longfellow] while Lincoln Junior is about 5 blocks from the site; 2] for the residents' property values and 3] for the residents' safety and well-being. While Forest Ave. may enjoy commercial zoning, it and the Church are contiguous to an area zoned substantially residential.

The City Notice indicated that the Church conversion to 25 apartments was for Shalom House. One of the several posters at the Church recited that the mission of Shalom House was to "give hope to adults with severe mental illness." This 'mission' statement also appeared in a meeting handout. The following points were developed in response to questions posed by the residents and answered by the panel: There will be no custodian on the premises of the converted Church. Of the 25 occupants of the converted Church, 10 - 15% may work [that is, 2.5 to 3.75 of the 25 occupants may work]. Shalom House spends a lot of money on bed bug infestation. At least some of the Shalom facilities in other areas of Portland have required police intervention [no reference to these occurrences were made in any of the handouts]. It is intended that the single family house will be sold. [in the city's NOTICE, it is stated that, the large parking lot across the street from the former 'Church' will have 12 parking spaces, with 2 handicapped spaces on site and 2 spaces on lot B for the single family home'.---it is pretty hard to determine where the last 4 parking spaces will occur.] That is a total of 16 parking spaces one or two structure(s) removed from Forest Ave. Apparently --Portland Landmark recommends retention of the stained glass opaque windows--Difficult to see how additional windows can be added. Portland Landmark should review this. Some occupants will be sleeping in the rafters...there was no proposal for skylights. The following quid pro quo issues were developed in response to residents' questioning. The project will cost about 2 million dollars. The housing will be substantially Section 8 Housing. The Lenders will obtain [low-income] tax credits. There appears to be no tax benefit to the city.

The question which should arise is pretty transparent.
 Marina Schneller

From: Betty Libby <bettjlibb@yahoo.com>
To: Helen Donaldson <HCD@portlandmaine.gov>
Date: 10/8/2015 1:14 PM
Subject: Re: neighborhood meeting - 3 Pleasant Avenue

Hi Helen/Nell: I am unable to attend the neighborhood meeting as I have to work.

However, could it be noted for the record that I have a concern with the parking issue for that many proposed apartments on Pleasant Avenue where we are required to do an even/odd parking.

I feel strongly that with 25 apartments and a single family home that the lot for 12 spaces is not adequate and will result in excessive overflow to on street parking.

To alleviate this situation the City of Portland should allow parking on both sides of the street so current real estate owners or tenants do not have to park an incredible distance (as is already the case on some evenings) or have the threat of receiving parking tickets.

Pleasant Avenue is also a difficult street to pull out into Forest Avenue, especially turning left. I foresee great congestion with so many apartments/cars in one small area. A street light should be considered to prevent accidents and help with flow of traffic.

Thank you for sharing this with the planning board members. Betty Libby 38 Pleasant Avenue Portland Maine 04103

On Tuesday, October 6, 2015 9:09 AM, Helen Donaldson <HCD@portlandmaine.gov> wrote:

To Whom It May Concern: Attached please find a pdf of the neighborhood meeting notice for the revised plans for the redevelopment of the former church at 3 Pleasant Avenue. The meeting will be held at 6 pm on Thursday, 10/8/15. I apologize that I am only forwarding it now, as I just received it here. Again, I will let you know as soon as the planning board workshop on this item is scheduled. Best, Nell

Nell Donaldson
 City of Portland Planning Division
 389 Congress Street
 Portland, Maine
 04101874-8723
 hcd@portlandmaine.gov

--

MAP	LOT
130	I-012, I-013, & H-013

ATTN: ROBERT GAUDREAU

PROJECT LOCATION

LOCATION MAP
N.T.S.

C-1.0	COVER SHEET
C-2.0	ALTA/ACSM LAND TITLE SURVEY BY OWEN HASKELL, INC.
C-2.1	SUBDIVISION PLAT PLAN
C-3.0	SITE LAYOUT PLAN
C-4.0	SITE DETAILS

SEWER
CITY OF PORTLAND
PUBLIC SERVICES ENGINEERING DEPARTMENT
55 PORTLAND STREET
PORTLAND, MAINE 04102
207.874.8850
ATTN: DAVID MARGOLIS-PINEO. P.E.

PORTLAND WATER DISTRICT
225 DOUGLAS STREET
P.O. BOX 3533
PORTLAND, MAINE 04104
207.761.8310
ATTN: GLISSEN HAVU

CENTRAL MAINE POWER
162 CANCO ROAD
PORTLAND, MAINE 04103
207.791.1023
ATTN: JAMIE COUGH

FAIRPOINT COMMUNICATIONS
FIVE DAVIS FARM ROAD
PORTLAND, MAINE 04103
207.797.1842
ATTN: SUE SERRETTE

TIME WARNER CABLE
118 JOHNSON ROAD
PORTLAND, MAINE 04102
877.546.0962
ATTN: ANDREW TROTTIER

UNITIL
1075 FOREST AVENUE
PORTLAND, MAINE 04103
207.797.8002 EXT 6620
ATTN: ALEX SMITH

1.888.DIGSAFE
1.888.344.7233
DIG SAFE MAINE

LOCAL
SITE PLAN APPROVAL

STREET OPENING PERMIT

CITY OF PORTLAND PLANNING DEPARTMENT
CITY HALL
389 CONGRESS STREET
PORTLAND, MAINE 04101
207.874.8719
ATTN: BARBARA BARHYDT

CITY OF PORTLAND CODE ENFORCEMENT OFFICE
CITY HALL
389 CONGRESS STREET
PORTLAND, MAINE 04101
207.874.8703

CITY OF PORTLAND CODE ENFORCEMENT OFFICE
CITY HALL
389 CONGRESS STREET
PORTLAND, MAINE 04101
207.874.8703

PRELIMINARY SUBMISSION 09.28.15
FINAL SUBMISSION 10.30.15

BY CONTRACTOR - PRIOR TO
CONSTRUCTION

PRIOR TO CONSTRUCTION

778 MAIN STREET, SUITE 8
SOUTH PORTLAND, MAINE 04106
207.775.1121
ATTN: ANDREW JOHNSTON, P.E.

SHIELDS ARCHITECTURE

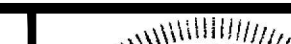
CUMBERLAND, MAINE
207.776 8926
ATTN: JOHN SHIELDS

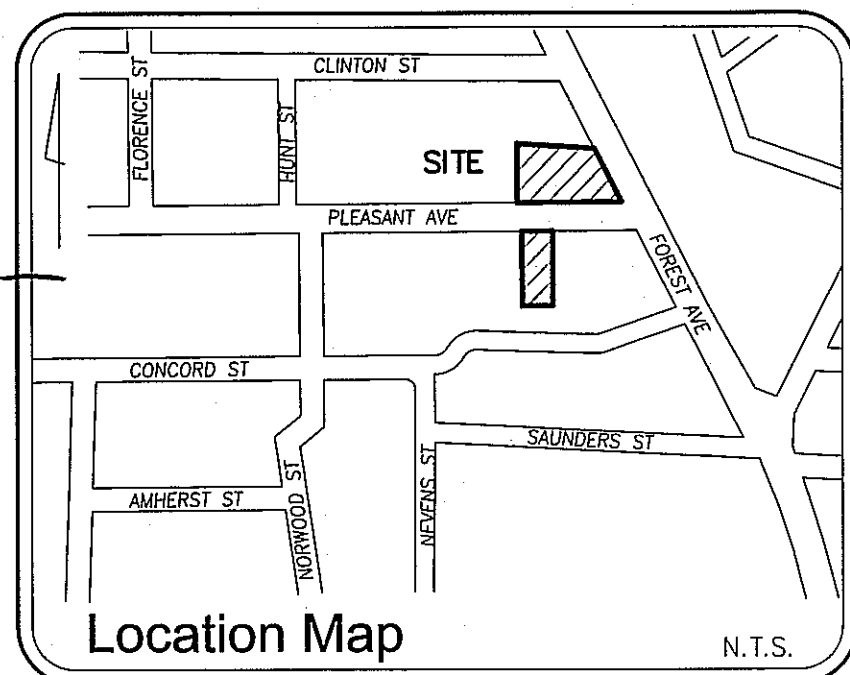
390 U.S. ROUTE 1, SUITE 10
FALMOUTH, MAINE 04105
207.774.0424

160 LONGWOODS RD
CUMBERLAND, MAINE 04021
207.939.1717

PRELIMINARY - NOT FOR CONSTRUCTION

PRELIMINARY NOT FOR CONSTRUCTION

				PROJECT 3 PLEASANT AVENUE CHURCH RE-DEVELOPMENT	 FAY, SPOFFORD & THORNDIKE ENGINEERS • PLANNERS • SCIENTISTS 778 MAIN ST, SUITE 8, SOUTH PORTLAND, ME 04106	
2	10.30.15	FINAL CITY SUBMISSION		SHEET TITLE COVER SHEET		
1	09.28.15	PRELIMINARY CITY SUBMISSION		CLIENT HARDY POND DEVELOPMENT COMPANY, LLC	DRAWN: PBF	DATE:
REV	DATE	DESCRIPTION	P.E. ANDREW D. JOHNSTON LIC. # 9994		DESIGNED:	SCALE: N.T.S.
REVISIONS				CHECKED:	JOB NO.	
				FILE NAME: SP-M167 COVER		
				SHEET	C-1.0	



Schedule B Section 2 Exceptions:

FIRST AMERICAN TITLE INSURANCE COMPANY
COMMITMENT FOR TITLE INSURANCE, FILE NO. 15-112375SW
EFFECTIVE DATE: APRIL 8, 2015

1-6. NON SURVEY ITEMS.

7. SUCH STATE OF FACTS AS SHOWN ON A PLAN ENTITLED "PLAN OF CLARK AND LOVELL'S LAND IN WESTBROOK, MAINE" RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN PLAN BOOK 1, PAGE 34 - AS SHOWN ON PLAN.

8. SUBJECT TO AND WITH THE BENEFIT OF THE TERMS AND CONDITIONS OF AN EASEMENT RESERVED IN A DEED FROM CLARK MEMORIAL UNITED METHODIST CHURCH TO ROGER S. ZIMMERMAN AND RONALD L. BREAZEALE DATED APRIL 4, 1980 AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 4588, PAGE 246, AND SUBJECT TO THE EASEMENT RIGHTS CONVEYED IN SAID DEED (PARKING LOT). - AS SHOWN ON SURVEY.

9. NON SURVEY ITEM.

Plan References:

1. "PLAN OF CLARK AND LOVELL'S LAND IN WESTBROOK, MAINE" RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN PLAN BOOK 1, PAGE 34

2. CITY OF PORTLAND MAINE BLUE SHEET FOR FOREST AVENUE, PLEASANT AVENUE, CONCORD STREET AND CLINTON STREET.

3. PLANS AND WORKSHEETS ON FILE WITH THE E.C. JORDAN CO. 1881 THROUGH 1944.

Notes:

1. OWNER OF RECORD: CLARK MEMORIAL UNITED METHODIST CHURCH, 15 PLEASANT AVENUE, PORTLAND, MAINE, C.C.R.D. BOOK 364 PAGE 152, BOOK 1158 PAGE 119, BOOK 4013 PAGE 211.

2. PROPERTY IS SHOWN AS TAX MAP 130-I-12, 14 AND TM 130-H-13 ON CITY OF PORTLAND'S ASSESSORS MAP.

3. BEARINGS ARE MAINE STATE PLANE COORDINATE SYSTEM NAD 83 PER CITY POINTS

4. ELEVATIONS ARE NGVD 1929, CITY BENCH MARK, 3' OFFSET MONUMENT NORTHERLY SIDE OF CONCORD STREET AT FIRST ANGLE WESTERLY OF FOREST AVENUE, ELEVATION = 65.89'

Utility Note:

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. CALL 1-888-DIGSAFE AT LEAST THREE BUSINESS DAYS BEFORE PERFORMING ANY CONSTRUCTION. DUE TO OSHA CONFINED SPACE REQUIREMENTS, ALL INVERTS AND PIPE SIZES MUST BE VERIFIED PRIOR TO ANY CONSTRUCTION.

Flood Zone Note:

BY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS IN ZONE X, AREAS DETERMINED TO BE OUTSIDE OF 500-YEAR FLOOD PLAIN, OF THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 230051 0007C, WHICH BEARS AN EFFECTIVE DATE OF DECEMBER 8, 1998 AND IS NOT IN A SPECIAL FLOOD HAZARD AREA.

Zoning Information:

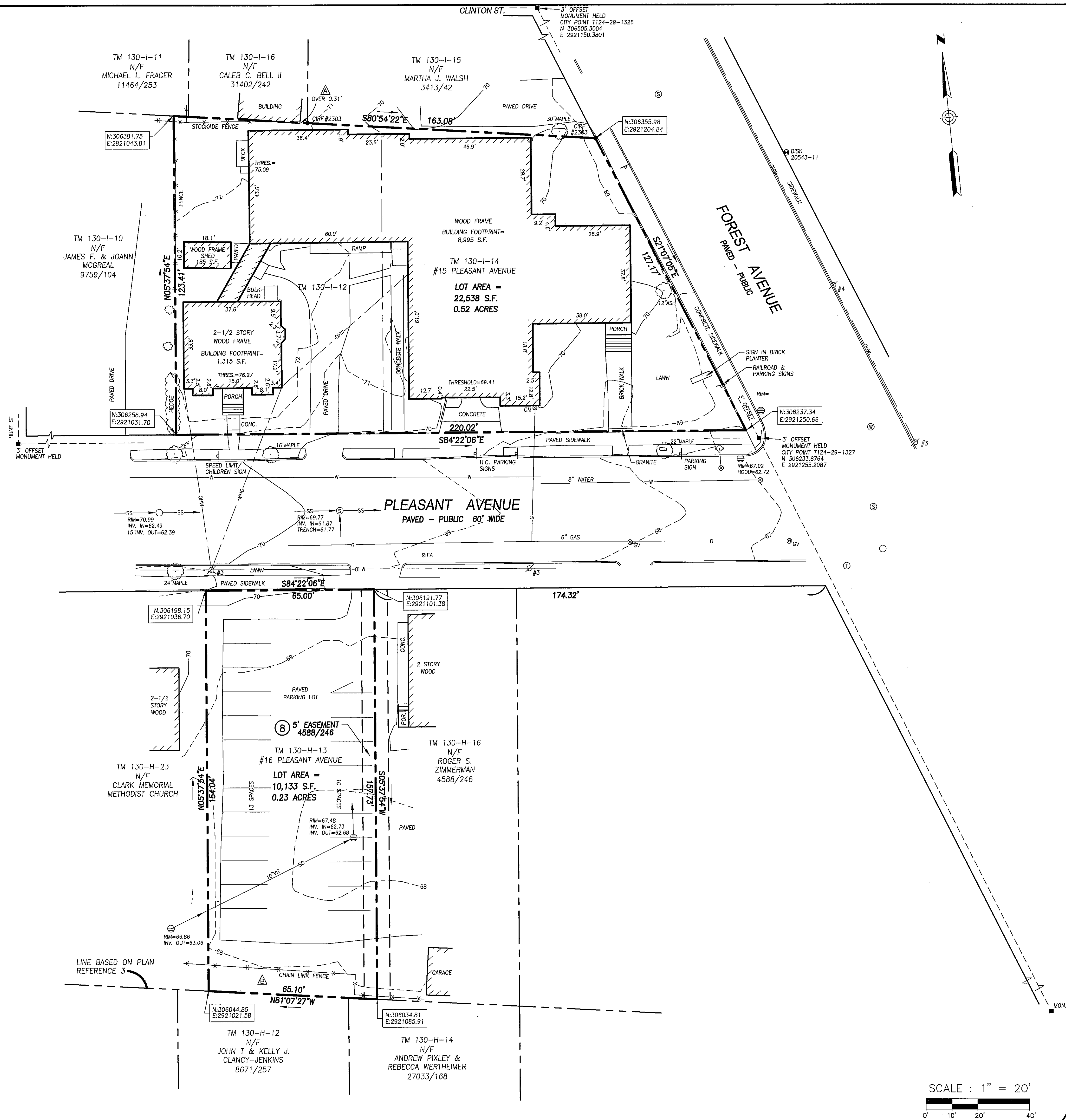
NONE PROVIDED BY TITLE INSURER

Possible Encroachments

- ▲ BUILDING ONTO PROPERTY 0.3'
- ▲ OCCUPIED BY JENKINS

Legend:

- | | |
|--------------------------|----------------------|
| ● IRON PIPE OR ROD FOUND | — Curb |
| ⊙ GAS VALVE | — FENCE |
| ⊙ WATER VALVE | — OHW |
| ⊙ HYDRANT | — W |
| ⊙ UTILITY POLE | — G |
| ⊙ MANHOLE | — SS |
| ⊙ CATCH BASIN | — SD |
| ⊙ SIGN | — 70 |
| ⊙ GM GAS METER | — N/F |
| ⊙ DECIDUOUS TREE | 000/000 |
| | ① |
| | NOW OR FORMERLY |
| | DEED BOOK/PAGE |
| | SCHEDULE B EXCEPTION |



Legal Description

15-19 PLEASANT AVENUE:

A CERTAIN LOT OR PARCEL OF LAND, WITH THE BUILDINGS THEREON, SITUATED ON THE NORTHERLY SIDE OF PLEASANT AVENUE AND SOUTHWESTERLY SIDE OF FOREST AVENUE, IN THE CITY OF PORTLAND, COUNTY OF CUMBERLAND AND STATE OF MAINE, FORMERLY WESTBROOK, BEING NUMBERED 1 AND 2 AS SHOWN ON A PLAN OF CLARK AND LOVELL'S LAND, RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN PLAN BOOK 1, PAGE 34, TO WHICH PLAN REFERENCE IS HEREBY MADE FOR A MORE PARTICULAR DESCRIPTION OF SAID LOT.

ALSO, ANOTHER CERTAIN LOT OR PARCEL OF LAND, WITH THE BUILDING THEREON, SITUATED ON THE NORTHERLY SIDE OF PLEASANT AVENUE AT THE INTERSECTION OF A LINE DRAWN PARALLEL WITH AND TEN (10) FEET DISTANT WESTERLY FROM THE WESTERLY SIDE LINE OF THE BRICK FOUNDATION WALL OF THE CLARK MEMORIAL CHURCH; THENCE FROM SAID POINT RUNNING NORTHERLY ON THE LINE PARALLEL WITH AND TEN (10) FEET DISTANT WESTERLY FROM SAID WALL ONE HUNDRED TWELVE (112) FEET, MORE OR LESS, TO LAND NOW OR FORMERLY OF ONE ROYAL LEIGHTON; THENCE NORTHWESTERLY ON THE LINE OF LINE OF LAND FORMERLY OF ROYAL LEIGHTON EIGHTY (80) FEET; THENCE SOUTHERLY ONE HUNDRED TWELVE (112) FEET, MORE OR LESS, TO THE POINT OF BEGINNING.

16 PLEASANT AVENUE: PARKING LOT

A CERTAIN LOT OR PARCEL OF LAND WITH THE BUILDING THEREON, LOCATED IN THE CITY OF PORTLAND, IN THE COUNTY OF CUMBERLAND AND STATE OF MAINE, ON THE SOUTHERLY SIDE OF PLEASANT AVENUE AND BOUNDED AND DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHEASTLY CORNER OF LAND CONVEYED BY MARION W. LITTLEFIELD TO MILDRED G. BODWELL BY DEED DATED AUGUST 15, 1940 AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 1614, PAGE 118, BEING THE NORTHEASTLY CORNER OF LOT 5 AS SHOWN ON PLAN OF LAND OF CLARK AND LOVELL RECORDED IN SAID REGISTRY OF DEEDS IN PLAN BOOK 1, PAGE 34; THENCE EASTERLY BY SAID PLEASANT AVENUE ONE HUNDRED TWENTY (120) FEET, MORE OR LESS, TO THE NORTHEASTLY CORNER OF LAND CONVEYED BY CLARENCE A. WESTON TO MARION W. LITTLEFIELD BY DEED DATED JULY 14, 1923 AND RECORDED IN SAID REGISTRY OF DEEDS IN BOOK 1143, PAGE 139; THENCE SOUTHERLY NINE (9) RODS AND FIFTEEN (15) LINKS, MORE OR LESS, AND ON A COURSE WHICH WAS ON OCTOBER 2, 1866 SOUTH EIGHTEEN AND THREE-FOURTHS DEGREES WEST, TO LAND FORMERLY OF WILLIAM MITCHELL; THENCE WESTERLY BY SAID MITCHELL LAND ONE HUNDRED TWENTY (120) FEET, MORE OR LESS, TO THE SOUTHEASTLY CORNER OF LOT 5 AS SHOWN ON SAID PLAN OF CLARK AND LOVELL; THENCE NORTHERLY BY THE EASTERLY LINE OF LOT 5, FORMERLY OF MILDRED G. BODWELL, AND PARALLEL TO THE SECOND COURSE, TO THE POINT OF BEGINNING. BEING LOT 4 AND THE MAJOR PORTION OF LOT 3 AS SHOWN ON SAID PLAN OF CLARK AND LOVELL.

EXCEPTING FROM THE 16 PLEASANT AVENUE PARCEL IS A CERTAIN LOT OR PARCEL OF LAND WITH THE BUILDING THEREON, SITUATED IN THE CITY OF PORTLAND, IN THE COUNTY OF CUMBERLAND AND STATE OF MAINE, ON THE SOUTHERLY SIDE OF PLEASANT AVENUE AND BOUNDED AND DESCRIBED AS FOLLOWS:

COMMENCING AT AN IRON SET IN THE GROUND ON THE SOUTHERLY SIDELINE OF SAID PLEASANT AVENUE AT THE NORTHEASTLY CORNER OF LAND CONVEYED BY CLARENCE A. WESTON TO MARION W. LITTLEFIELD BY DEED DATED JULY 14, 1923 AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 1143, PAGE 139; THENCE SOUTH 18° 45' WEST, WHICH COURSE WAS ON OCTOBER 1866 SOUTH 18 3/4° WEST, 158.40 FEET BY OTHER LAND OF CLARK MEMORIAL UNITED METHODIST CHURCH AND BY LAND NOW OR FORMERLY OF MCMANN TO AN IRON SET IN THE GROUND AT LAND FORMERLY OF WILLIAM MITCHELL AND NOW OR FORMERLY OF MORES; THENCE NORTH 69° 17' WEST BY SAID LAND OF MORSE AND BY LAND NOW OR FORMERLY OF PINKHAM, 55.03 FEET TO AN IRON; THENCE NORTH 18° 45' EAST BY OTHER LAND OF CLARK MEMORIAL UNITED METHODIST CHURCH, 156.51 FEET TO A P.K. SPIKE SET IN THE GROUND ON THE SOUTHERLY SIDELINE OF SAID PLEASANT AVENUE; THENCE SOUTH 71° 15' EAST BY SAID PLEASANT AVENUE, 55 FEET TO THE POINT OF BEGINNING.

ALTA/ACSM Land Title Survey

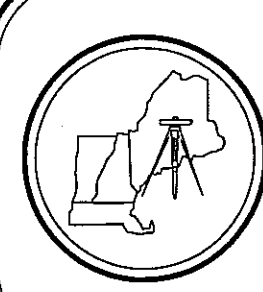
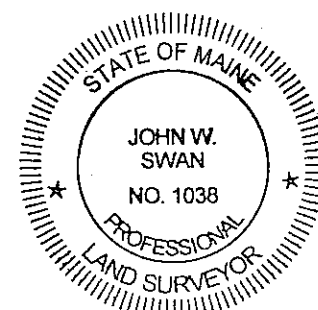
15-19 & 16 Pleasant Avenue
Portland, Cumberland County, Maine
made for
Hardypond Development Company, LLC

Surveyor's Certification

TO: HARDYPOND DEVELOPMENT COMPANY, LLC, FIRST AMERICAN TITLE INSURANCE COMPANY

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2011 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS. THE FIELD WORK WAS COMPLETED ON MAY 7, 2015.

JOHN W. SWAN
PROFESSIONAL LAND SURVEYOR NO. 1038
IN THE STATE OF MAINE
DATE OF PLAN: MAY 13, 2015
REVISION DATE:
OHI JOB NO. 2015-058P



OWEN HASKELL, INC.
PROFESSIONAL LAND SURVEYORS
390 U.S. ROUTE ONE, UNIT 10
FALMOUTH, MAINE 04105
Tel. (207) 774-0424 www.owenhaskell.com

PORTLAND ZONING**ZONE B2c**

- MULTI FAMILY IS PERMITTED USE
- MINIMUM LOT ARE PER DWELLING UNIT -
 - 1,500 SF GENERALLY.
 - 435 SF IN PROJECTS WITH "ACTIVE STREET FRONTS" PER SECTION 14-188.

A BUILDING WILL BE DETERMINED TO HAVE AN ACTIVE STREET FRONTAGE UPON MEETING THE FOLLOWING GUIDELINES TO THE GREATEST EXTENT PRACTICABLE AS DETERMINED BY THE PLANNING BOARD OR PLANNING AUTHORITY:

- THE PRIMARY BUILDING FAÇADE SHALL BE WITHIN TEN FEET OF THE FRONT STREET LINE;
- THERE SHALL BE NO PARKING ON THE LOT WITHIN 35 FEET OF THE FRONT STREET LINE;
- NO MORE THAN 35% OF THE FIRST FLOOR PRIMARY FAÇADE SHALL CONSIST OF ACCESS TO GARAGES, UNUTILIZED SPACE, SERVICE ENTRANCES, STORAGE OR MECHANICALS, AND THE REMAINING 75% SHALL HAVE AN AVERAGE DEPTH OF A MINIMUM OF 20 FEET FOR RESIDENTIAL OR COMMERCIAL USES;
- ALL PRIMARY GROUND FLOOR ENTRIES TO MULTI-FAMILY BUILDINGS MUST ORIENT TO THE STREET, NOT TO INTERIOR BLOCKS OR PARKING LOTS.

- PARKING - 1 SPACE PER DWELLING UNIT.

ZONE R5

- PERMITTED USE - SINGLE & TWO FAMILY DWELLINGS.
- DIMENSIONAL REQUIREMENTS
 - MIN. LOT AREA - 6,000SF GENERALLY
 - MIN. STREET FRONTAGE - 50'
 - FRONT YARD - 20'
 - REAR YARD - 20'
 - SIDE YARD - 8' - 14' DEPENDING ON HEIGHT
 - MIN. LOT WIDTH - 60'
- PARKING - 2 SPACES PER DWELLING UNIT.

DENSITY CALCULATION

AREA OF LOT A IN B2c ZONE = 13,094 SF

AREA OF LOT B IN R5 ZONE = 2,858 SF

B2c REQUIRES 435 SF/DWELLING UNIT

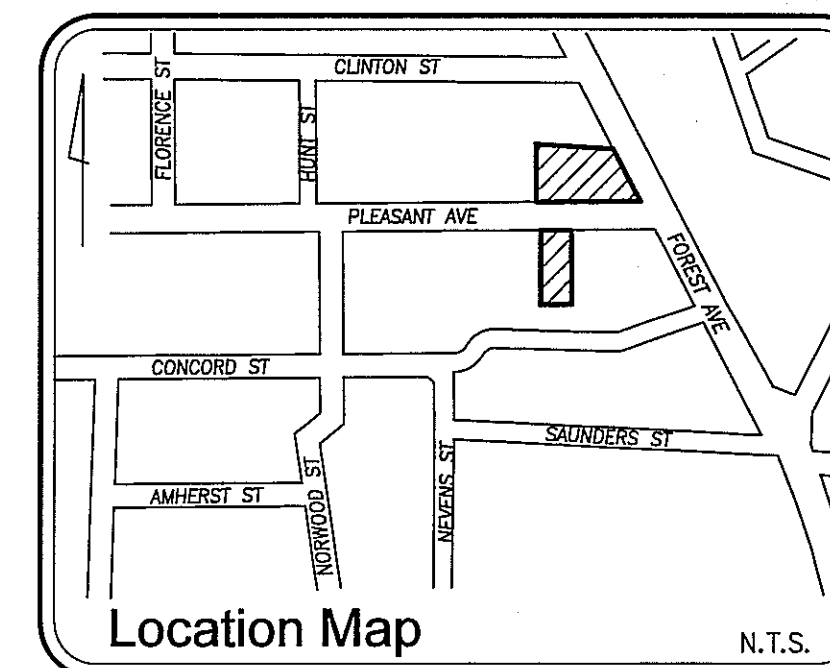
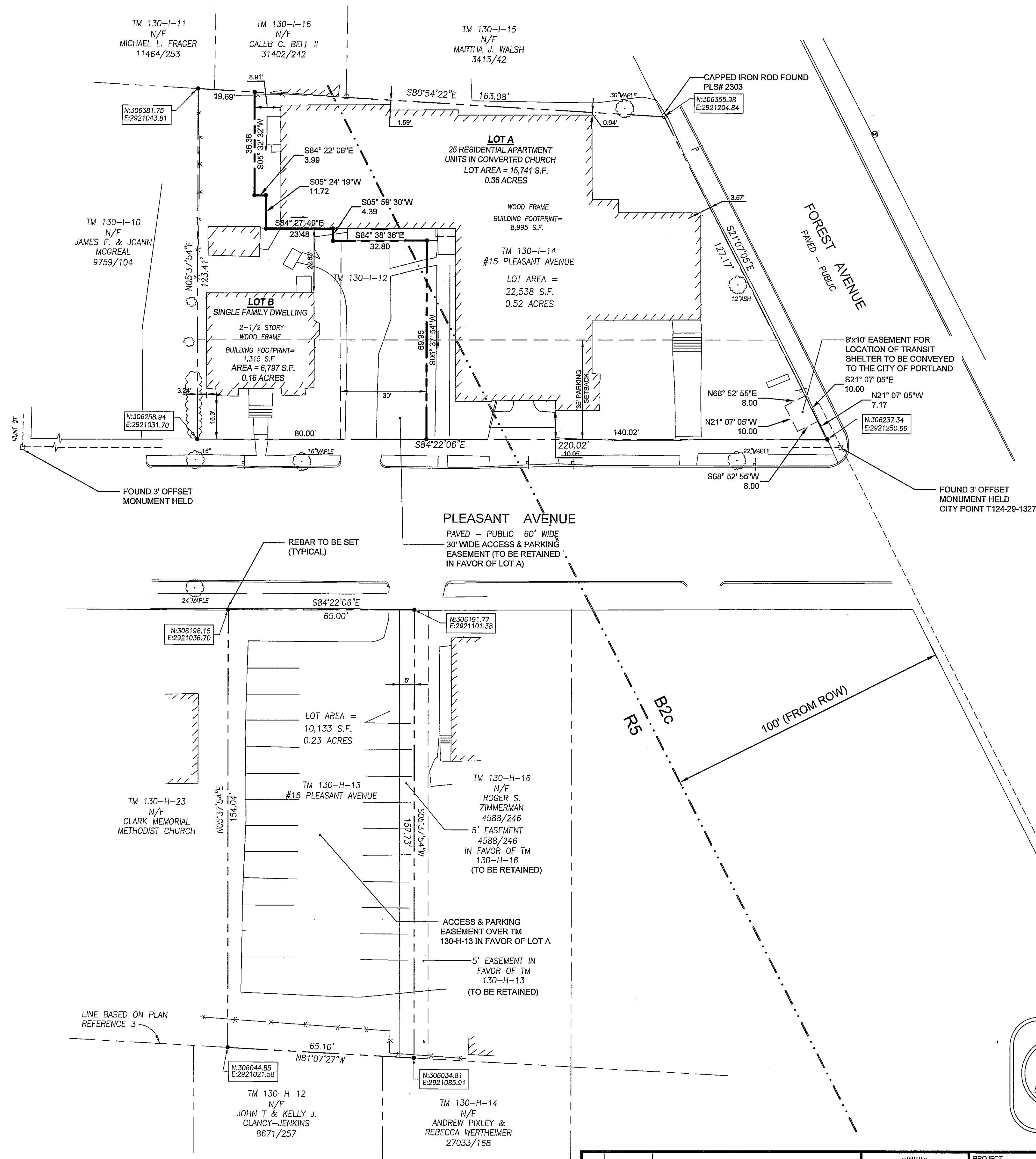
UNITS ALLOWED = 13,094 / 4 = 30

REFERENCES

- ALTA/ASCM LAND TITLE SURVEY 15-19 AND 16 PLEASANT AVE. PORTLAND, CUMBERLAND COUNTY, MAINE MADE FOR "HARDY POND DEVELOPMENT COMPANY, LLC" BY OWEN HASKELL, INC. DATED MAY 13, 2015.

LEGEND

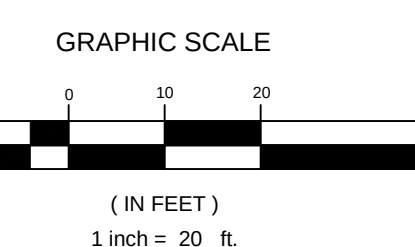
○ IRON PIPE OR ROD FOUND	— CURB
● IRON ROD SET	
⊙ GAS VALVE	
⊙ WATER VALVE	
⊙ HYDRANT	
⊙ UTILITY POLE	
⊙ MANHOLE	
⊙ CATCH BASIN	
⊙ SIGN	
⊙ GM GAS METER	
⊙ DECIDUOUS TREE	
— OHW — OVERHEAD WIRES	
— W — WATER LINE	
— G — GAS LINE	
— SS — SANITARY SEWER	
— SD — STORM DRAIN	
— 70 — 1' CONTOUR	
N/F NOW OR FORMERLY	
000/000 DEED BOOK/PAGE	
① SCHEDULE B EXCEPTION	



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		PROJECT 3 PLEASANT AVENUE CHURCH RE-DEVELOPMENT	FAY, SPOFFORD & THORNDIKE ENGINEERS • PLANNERS • SCIENTISTS 778 MAIN ST, SUITE 8, SOUTH PORTLAND, ME 04106
		SHEET TITLE SUBDIVISION PLAT PLAN	
2	10.30.15	FINAL CITY SUBMISSION	DRAWN: PBF DATE: 06.09.2015
REV	DATE	DESCRIPTION	DESIGNED: ADJ SCALE: 1"=20'
		REVISIONS	CHECKED: JWS JOB NO. SP-M167
			FILE NAME: SP-M167-SP
			SHEET C-2.1

12"x18"
B



	FAY, SPOFFORD & THORNDIKE ENGINEERS • PLANNERS • SCIENTISTS	
	778 MAIN ST, SUITE 8, SOUTH PORTLAND, ME 04101	
DRAWN: PBF	DATE: 06.09.2015	
DESIGNED: ADJ	SCALE: 1"=20'	
CHECKED: ADJ	JOB NO. SP-M167	
FILE NAME: SP-M167-SP		
SHEET C-3 0		



	FAY, SPOFFORD & THORNDIKE ENGINEERS • PLANNERS • SCIENTISTS 778 MAIN ST, SUITE 8, SOUTH PORTLAND, ME 04106	
	DRAWN: PBF	DATE:
	DESIGNED:	SCALE: NTS
	CHECKED:	JOB NO.
FILE NAME: SP-M167 DETAILS		
SHEET C-40		

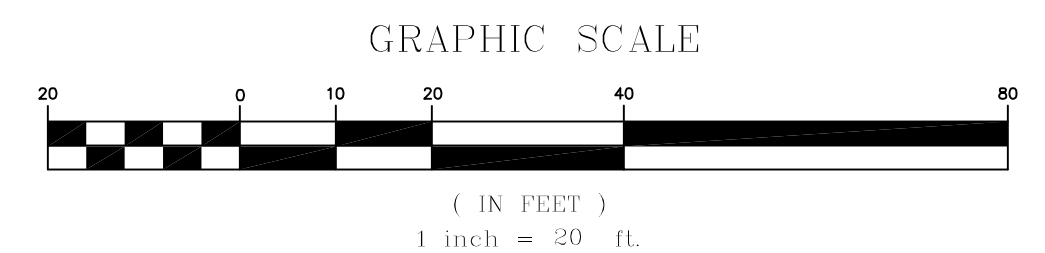
PRELIMINARY - NOT FOR CONSTRUCTION



- PLANT LIST:

NOTES:

1. STAKE ONLY TREES WITH SANDY OR CLAYEY ROOTBALLS. WHEN REQUIRED STAKING SHALL CONFORM TO THE LATEST GUIDELINES FROM THE INTERNATIONAL SOCIETY OF ARBORICULTURE.
2. DO NOT CUT MAIN LEADER.

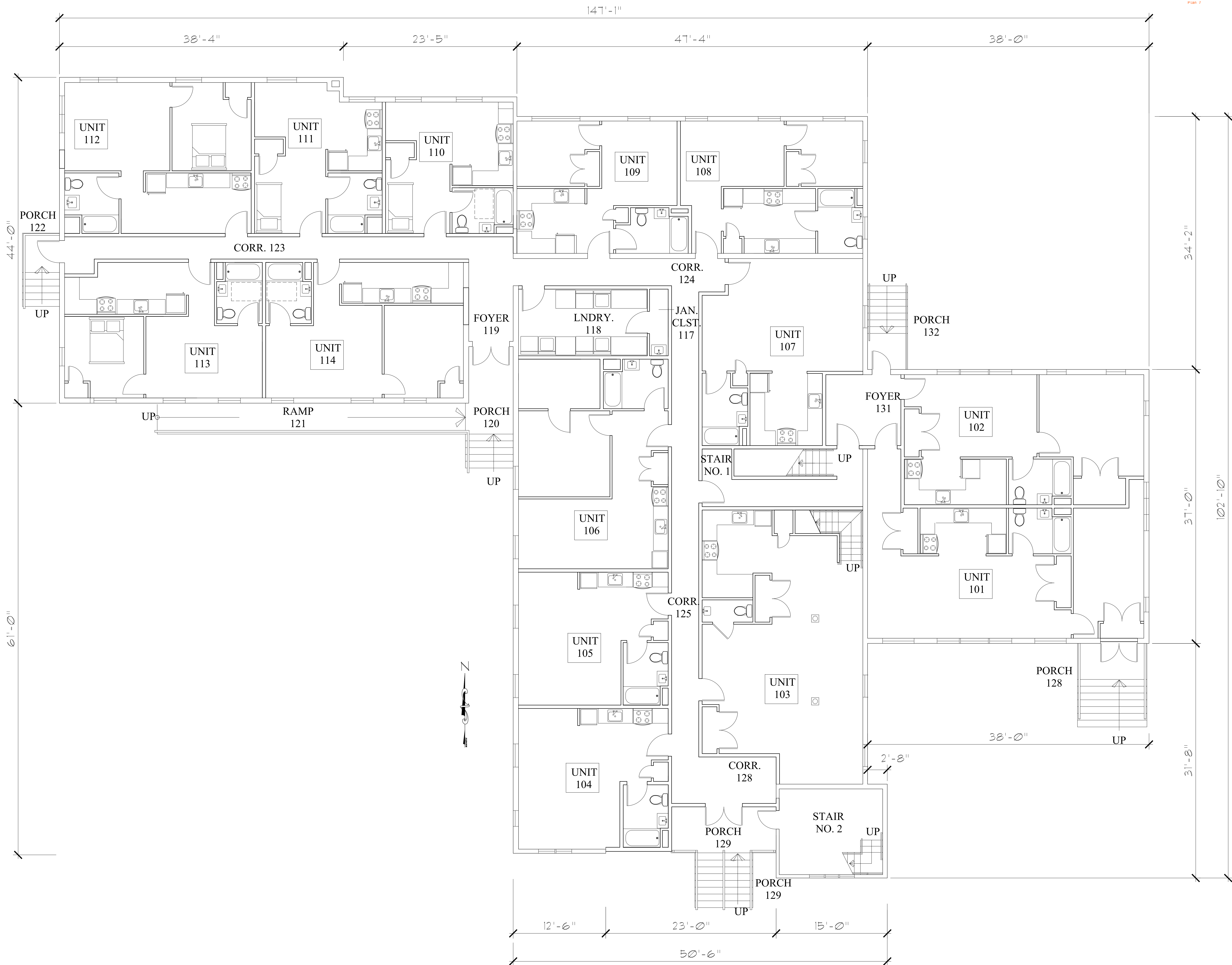


DECIDUOUS TREE PLANTING



2 SHRUB PLANTING DETAIL
SCALE: N.T.S.

[illegible]





Drawing

SECOND FLOOR PLAN

Date:

9/28/15

Project:

Scale:

1/4" = 1'-0"

PLEASANT AVENUE
PORTLAND, MAINE

Architect

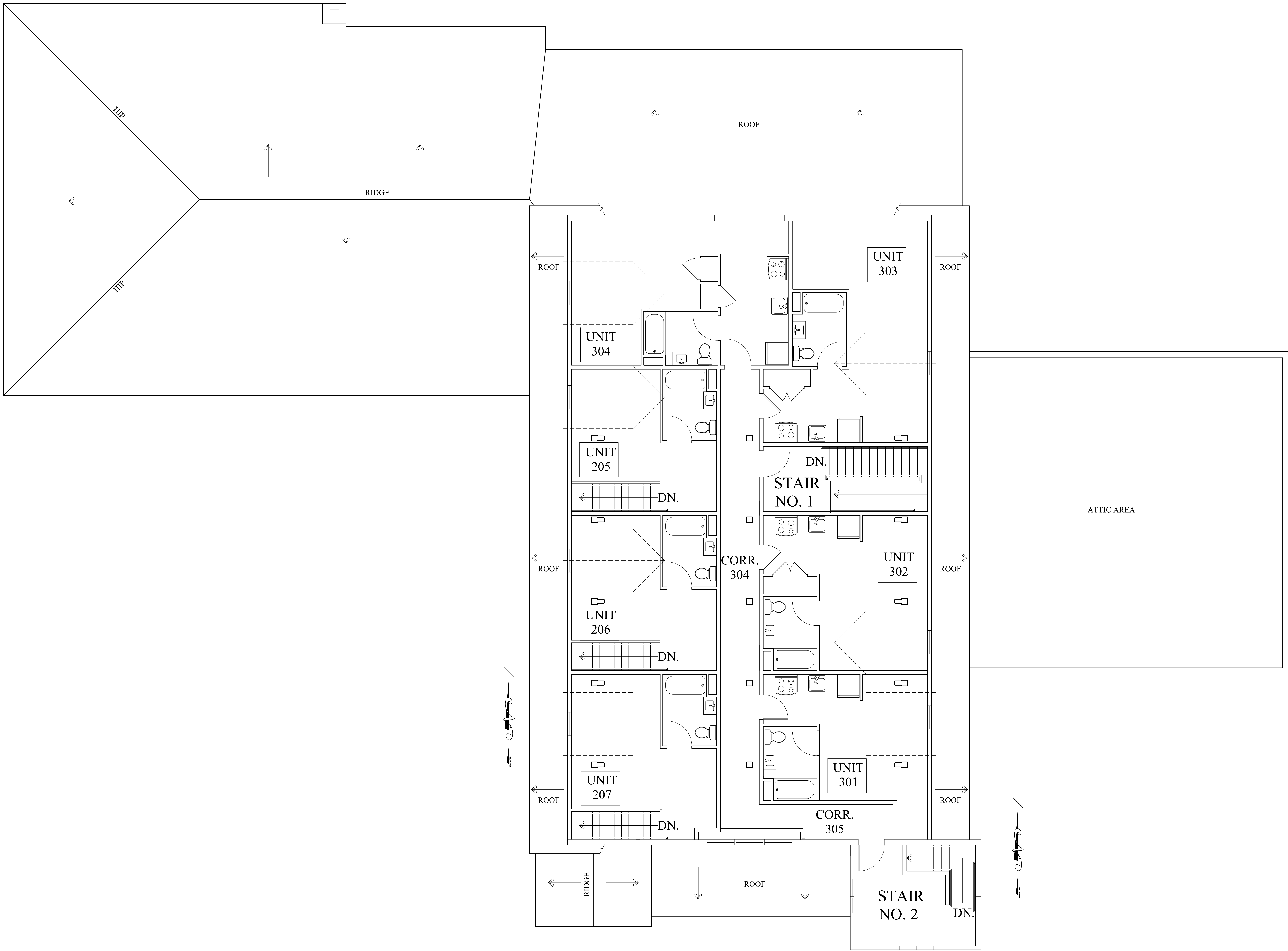
SHIELDS ARCHITECTURE

CUMBERLAND, MAINE
(207) 776-8926

Owner

HARDYOND DEVELOPMENT, LLC

7 TEE DRIVE
Portland, Maine 04103



Drawing

THIRD FLOOR PLAN

Date:

9/28/15

Project:

Scale:

1/4" = 1'-0"

PLEASANT AVENUE
PORTLAND, MAINE

Architect

SHIELDS ARCHITECTURE
CUMBERLAND, MAINE
(207) 776-8926

Owner

HARDY POND DEVELOPMENT, LLC
7 TEE DRIVE
Portland, Maine 04103



SOUTH (PLEASANT AVENUE) ELEVATION

GENERAL NOTE

ASPHALT SHINGLE ROOFING, VINYL SIDING
AND BRICK FOUNDATIONS ARE TYPICAL.

KEYED NOTES

- 1 NEW BRICK FOUNDATION TO
MATCH EXISTING.
- 2 NEW WOOD STEPS.
- 3 NEW DOOR.
- 4 NEW SIDING TO MATCH EXISTING.
- 5 NEW WINDOW.
- 6 NEW DORMER (TYP.)



EAST (FOREST AVENUE) ELEVATION

Drawing

SOUTH & EAST
ELEVATIONS

Date
9/28/15

Project:

Scale
1/4" = 1'-0"

PLEASANT AVENUE
PORTLAND, MAINE

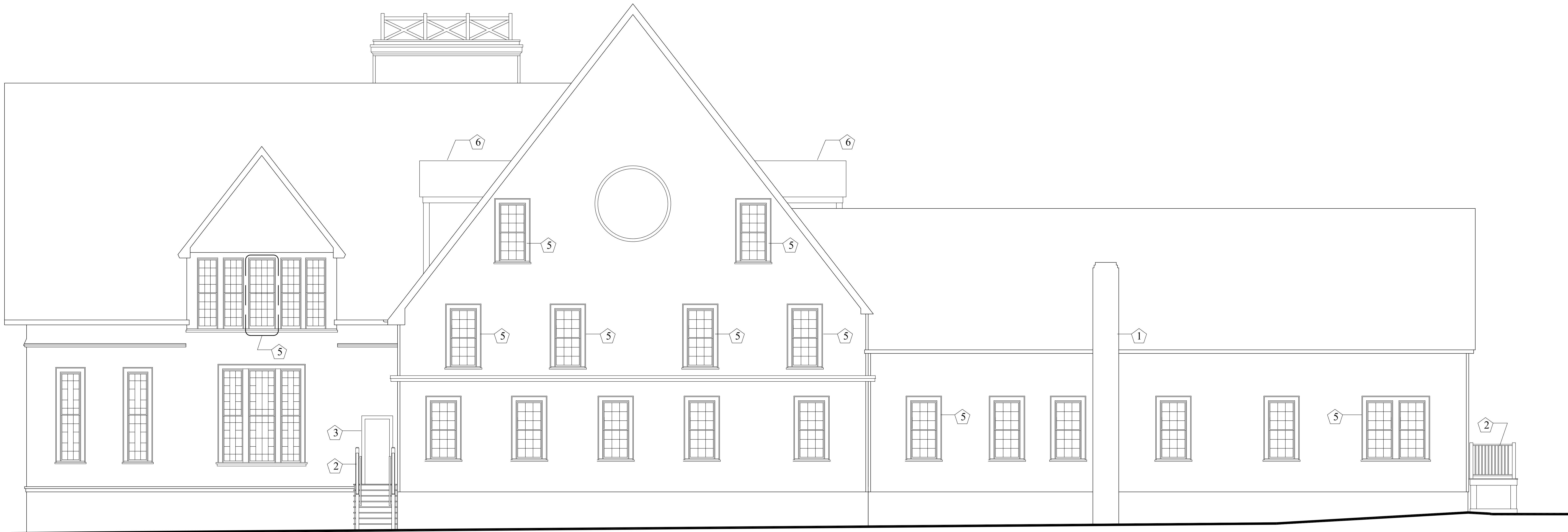
Architect

SHIELDS ARCHITECTURE
CUMBERLAND, MAINE
(207) 776-8926

Owner

HARDY POND DEVELOPMENT, LLC
7 TEE DRIVE
Portland, Maine 04103

Plan 38



NORTH ELEVATION

GENERAL NOTE

ASPHALT SHINGLE ROOFING, VINYL SIDING
AND BRICK FOUNDATIONS ARE TYPICAL.

KEYED NOTES

- 1 EXISTING CHIMNEY.
- 2 NEW WOOD STEPS.
- 3 NEW DOOR.
- 4 NOT USED.
- 5 NEW WINDOW.
- 6 NEW DORMER (TYP.)



WEST ELEVATION

Drawing

NORTH & WEST
ELEVATIONS

Date
9/28/15

Project

PLEASANT AVENUE
PORTLAND, MAINE

Scale
1/4" = 1'-0"

Architect

SHIELDS ARCHITECTURE
CUMBERLAND, MAINE
(207) 776-8926

Owner

HARDYOND DEVELOPMENT, LLC
7 TEE DRIVE
Portland, Maine 04103

A-7



PLANNING BOARD REPORT PORTLAND, MAINE

Amendment to Division 29
Housing Preservation and Replacement Ordinance
City of Portland, Applicant

Submitted to: Portland Planning Board Public Hearing Date: November 10, 2015	Prepared by: Jeff Levine, Director Report Prepared: November 3, 2015
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I. INTRODUCTION

A public hearing has been scheduled to consider a proposal initiated by City staff and approved by the Housing and Community Development Committee at their meeting on October 14 to amend Division 29 of the Land Use Ordinance relating to housing preservation and replacement.

In addition to legal ads appearing in the November 2, 2015 and November 3, 2015 editions of the Portland Press Herald, notices were sent to the Interested Parties List.

II. STAFF PROPOSAL

Staff is proposing that three changes be made to Division 29:

- Requiring that any replacement units provided off-site be located within the same U.S. Census Block Group as the units removed;
- Adding a three year timeframe to situations where a performance guaranty or letter of credit is held in lieu of replacement units or a payment to the Housing Trust; and
- Adding a definition of “application” so that it is clear when a property owner makes a request for units to be removed.

The first two of these changes were recommended unanimously by the Housing and Community Development Committee of the City Council at their meeting on October 14. The third item is a housekeeping amendment added to this proposed set of amendments by staff.

III. BACKGROUND

The Housing Preservation and Replacement Ordinance was originally adopted in 2002 and last amended in 2011. The ordinance requires that anyone demolishing or otherwise removing housing units, with limited exceptions, replace the units or make a payment in the City's Housing Trust. That payment is adjusted based on the cost of living, and is currently approximately \$64,200 per unit.

The Housing Trust contributions have been a valuable way to produce replacement housing. The Trust is far more flexible than federal sources of funds and provides a tool for the City to support creation of workforce and affordable housing at no direct cost to the City's general fund. Most recently, the Housing Trust was used to help fund the 65 Munjoy Street project, an eight unit affordable home ownership project.

However, as the housing market has strengthened, there have been fewer units being removed. In addition, since there are housing developments occurring in the City, those wishing to remove units have been seeking to partner with developers of other housing projects to replace the lost units. In theory, that means the ordinance is functioning as planned. However, there is a need to clarify the rules under which units are actual replacements, and not simply housing that may have been developed elsewhere in the city regardless.

There is also a need to bring closure to situations where the City holds performance guaranties in lieu of replacement units or payments to the Housing Trust.

Finally, there is an implementation concern with the existing ordinance. It requires that replacement units not be in the formal development review process before an application is received to remove the units needing replacement. However, the code is unclear as to what that "application" is. Our initial thought is that the term means an application to demolish. We propose clarifying that it means a written intent to demolish so an applicant doesn't have to prepare the full set of materials for a demolition permit before knowing if there is approval for the replacement units.

IV. Land Use Policy and Comprehensive Plan Considerations

These changes are consistent with the Comprehensive Plan goal that "[t]he existing housing stock will be enhanced and preserved." They are also consistent with the three purposes of Division 29:

1. To promote and facilitate an adequate supply of housing, particularly affordable housing for all economic groups;
2. To limit the net loss of housing units in the city;
3. To preserve housing in zones where housing is permitted for in the city for all residents in order to promote the health, safety and welfare of its citizens.

These changes will better limit the net loss of housing units in residential zones in the city by ensuring that replacement units are truly related to the units being removed, both geographically and in terms of timing.

V. DRAFT OF PROPOSED AMENDMENT

A draft of the proposed text amendment follows.

VI. SUMMARY

The amendments are summarized in III. Background above.

VII. MOTIONS FOR THE BOARD TO CONSIDER

On the basis of the application, plans, reports and other information submitted by the applicant, findings and recommendations contained in the Planning Board Report for the public hearing on November 10, 2015 and on the basis of the testimony presented at the public hearing, the Planning Board finds that the proposed zoning text amendments **[is or is not]** consistent with Portland's Comprehensive Plan and **[recommends or does not recommend]** adoption of the amendments to the City Council.

ATTACHMENTS

Staff Attachments

1. Memorandum to Housing and Community Development Committee (9/25/15)
2. Memorandum to Housing and Community Development Committee (10/8/15)

PROPOSED DIVISION 29 AMENDMENTS

DIVISION 29. HOUSING PRESERVATION AND
REPLACEMENT

Sec. 14-483.

Housing preservation and replacement.

(a) *Purpose.* The purpose of these regulations is:

1. To promote and facilitate an adequate supply of housing, particularly affordable housing for all economic groups;
2. To limit the net loss of housing units in the city;
3. To preserve housing in zones where housing is permitted for in the city for all residents in order to promote the health, safety and welfare of its citizens.

(b) *Definitions.*

Application. Except when specifically defined otherwise, "application" means the first written notification to the Department of Planning & Urban Development of intent to remove dwelling units. This application will expire if not followed up with an application to demolish the units in question within one year.

Dwelling unit. A dwelling unit is one (1) or more rooms with private bath and kitchen facilities comprising an independent self-contained dwelling unit. For purposes of this section only it also includes single family, two-family and multi-family dwellings and any dwelling units in those dwellings, or dwelling units, or rooms that people rent or sleep in within lodging houses, dormitories, shelters and sheltered care group homes.

Loss of dwelling or dwelling unit for purposes of this section means the elimination or conversion to nonresidential use of a dwelling or dwelling units; elimination includes dwelling units lost due to demolition unless the demolition resulted from

accidents outside of the owner's control, fire, natural disasters, or acts of war.

Original site means the location where the demolition or conversion to non-residential use of dwellings and dwelling units will take place.

(c) *Applicability*. Except as otherwise provided in this section, this section shall apply to the loss of three or more dwelling units in a five year period, provided that such dwelling units were a legally registered residential use as of July 1, 2002.

Except as otherwise provided in this section, this section shall also apply to proposals that (a) result in the loss of fewer than three (3) dwelling units which were legally registered residential use as of July 1, 2002, and (b) creates surface parking.

Determination of number of the dwelling units within a structure or structures and the number of units lost will be based on records in the Department of Planning and Urban Development indicating the legal, registered use of the property since July 1, 2002 through the time of application. The actual use of the property for purposes of applicability of this section may be rebutted by the owner by proof of documentary evidence including but not limited to photographs, letters, and sworn affidavits. The Planning Authority may conduct its own investigation of the actual use and shall determine the applicability of this section based on the totality of the evidence.

(d) *Exemptions*.

This section does not apply to:

1. Consolidation, elimination or reconfiguration of one (1) or more dwelling units within an existing structure, as long as all the resulting units remain as dwelling units after such consolidation, elimination or reconfiguration, except as provided by subsection 5 below. Conversion of a dwelling unit to a hotel or motel room shall not qualify for the exemption provided by the paragraph.

The amendments to paragraph (d)(1) approved by the City Council on June 6, 2011 shall have an effective date of April 25, 2011 but not apply to any final determination regarding the applicability of this section made by the Planning Authority prior to April 25, 2011.

2. Proposals that result in a number of units equal to or greater than the number of units lost as determined by the Planning Authority; or
3. Grandfathered dwelling units existing in zones which no longer permit residential uses.
4. Property which has been ordered demolished by the City, pursuant to 17 M.R.S.A. §2851, et seq., as amended, except where it is determined by the Building Authority that the deterioration was caused by neglect or lack of maintenance.
5. Subparagraph 1, above notwithstanding, the conversion to a non-residential use of any dwelling units located on the ground floor of a building within a business zone.

(e) *Site plan administrative authorization or approval required.* Notwithstanding any other provision of this section, a person who proposes to demolish or to convert to a nonresidential use three or more dwellings or dwelling units in the City, in a zone where such use is otherwise permitted, must first obtain administrative authorization or site plan approval from the City's Planning Authority or Planning Board pursuant to Sec. 14-521, et. seq.

In addition the requirements of 14-521, et. seq., where this section is applicable, the applicant must also submit a statement certifying the number of dwelling units to be demolished or converted to nonresidential use, as well as a description of the characteristics of each of those units.

(f) *Tenant Notification Requirements.* Prior to elimination as a result of demolition or conversion to non-residential use, the owner shall:

1. Provide the Planning Authority a list containing the name of each tenant currently residing in the dwelling units to be demolished or converted to non-residential use, as well as verification of compliance with tenant notice requirements of this section.
2. Deliver to each tenant who occupies such a dwelling unit a written notice to vacate the unit. The notice shall either be sent by certified mail, return receipt requested, or served in-hand. The notice will grant the tenant not less than ninety (90) days from the date of receipt of the notice to vacate the unit; and
3. File proof of service of the notice with the Planning Authority.

(g) *Housing Replacement Requirements.* In addition to the requirements of 14-521, et. seq, the Planning Authority shall require, as a condition of approval, that an owner shall replace any dwelling units that are demolished or converted to non-residential use.

This section may be satisfied in any one of the following ways:

1. Construction of Units. The construction of housing units within a new structure or a new addition either on site or off-site;
2. Residential Conversion. The conversion of nonresidential building to residential use; or

a

The applicant may use either of the two methods or a combination of the two to fulfill their replacement requirement.

(h) *Replacement Unit Requirement.* In addition to the foregoing, all replacement units built pursuant to subsection (g)(1) or (2) above shall:

1. Be located within ~~the City of Portland~~the same Census Block Group as the parcel from which the units are being removed.
2. Not previously have been on the market as of the date of application.
3. Be situated within a development which has not been a candidate for site plan approval as of the date of the application; ~~and-~~
4. Be comparable in size to the units replaced; for the purpose of this section, "comparable in size" means that the aggregate size of the replacement units will be no less than 80% of the size of the aggregate of the original units.

(i) *Contribution to the Housing Trust Fund.*

1. The applicant may meet the requirements of this section by depositing \$50,000 for each dwelling unit into the City's Housing Trust Fund in section 14-489.
2. Beginning on January 1, 2004 and annually thereafter, the amount of the contribution shall be adjusted by multiplying this amount originally deposited for each unit by a fraction, the denominator of which shall be the "Consumer Price Index for Urban Wage Earners and Clerical Workers ("CPI-W"), " U.S. City Average, "All Items Index," as published by the United States Bureau of Labor Statistics ("the Index") for January 1, 2003 Year, and the numerator of which shall be the Index for the same month in each subsequent year. In the event that the Index is not then in existence, the parties shall use such equivalent price index as is published by any successor governmental agency then in existence; or, if none, then by such nongovernmental agency as may then be publishing an equivalent price index, in lieu of and adjusted to the Index. If the Index shall cease to use 1982-84 equals 100 as the basis of calculation, or if a substantial change is made in the terms or number of items contained in the Index, the Base Index shall be

adjusted to conform to such change, using such computation thereof, if available, as shall be employed by the United States Department of Labor in computing same. Notwithstanding anything herein to the contrary, contributions made after January 1, 2004 shall not be less than the amount originally required to be deposited pursuant to sub-section (i)(1) for each rooming or dwelling unit.

(j) *Performance Guaranty/Letter of Credit.* Owners or affiliates must post a performance guaranty in the form of a letter of credit, or other security acceptable to the city attorney in amount equivalent to the amount the applicant would have been required to contribute to the City's Housing Trust Fund if the applicant had chosen that option pursuant to sub-section g. Such a performance guaranty shall be valid for no more than three years, after which the full amount due shall be provided to the City's Housing Trust if replacement units satisfying the conditions of this Division 29 do not have Certificates of Occupancy.

(k) *Partial waiver of replacement requirements.* Any owner who has applied for site plan review for elimination or conversion to non-residential use of dwelling units may apply to the Zoning Board of Appeals for a partial waiver from the housing replacement requirements of this section. Such waiver may be a downward adjustment of up to fifty percent (50%) of the owner's housing replacement obligation if the owner establishes to the board's satisfaction that:

1. The proposed development is consistent with the comprehensive plan;
2. The proposed development provides significant value and benefit to the immediate and surrounding neighborhood, including, but not limited to, community enhancement, social benefits or job creation;
3. The applicant demonstrates with objective evidence that the imposition of the requirements of this section would impose such an economic burden upon the project relative to its scope

that it renders the project impossible to develop; and

4. The requested relief does not constitute a grant of a special privilege inconsistent with the limitations upon similar properties.

The Zoning Board of Appeals must make positive findings on each of the four (4) criteria above in order for any such adjustment to be valid. An applicant aggrieved of a decision of the Zoning Board of Appeals may appeal a decision under this sub- section pursuant to Sec. 14-553 of the City Code.

(l) *Effect of Other City Ordinances.*

1. *Historic Preservation.* Nothing in this division shall permit the demolition or conversion to non-residential use, of dwelling units in residential property protected by the Historic Preservation Ordinance (Sections 14-601, et seq.), except as permitted by that ordinance.
2. *Conditional Zone.* A conditional zone may not be used to circumvent the application of this section. The terms of this section shall apply to any conditional zone which involves dwelling units affected by this section. Notwithstanding the foregoing, nothing herein shall be deemed to prevent the City and the applicant from agreeing to terms which exceed those imposed by this section by means of a conditional zone.

(m) *Appeals.* Any applicant aggrieved by a decision of the Planning Authority under this section may appeal to the Zoning Board of Appeals within 30 days of that decision.



TO: Councilor Donoghue, Chair
Members of the Housing and Community Development Committee

FROM: Jeff Levine, Director, Planning & Urban Development Department

DATE: **September 25, 2015**

SUBJECT: **Review of Housing Replacement Ordinance**

Staff is seeking clarification from the Committee regarding the intent and purpose of the Housing Replacement Ordinance (HRO).

The HRO was created to limit the net loss of housing units resulting from the demolition of residential property, conversion to non-residential uses and the reduction or consolidation of dwelling units. The ordinance applies to the loss of three or more dwelling units and requires that the unit(s) be replaced or a deposit be made to the City's Housing Trust Fund for each unit lost.

There are certain instances when exemptions are allowed. This is one of the areas for which staff is seeking clarification. Possible future action may include (1) the creation of enabling regulations that would clarify how the ordinance is applied; (2) a re-write of the ordinance to clarify certain provisions; or (3) take no action.

A copy of the Housing Replacement Ordinance (City Code Section 14-483) is attached.



Jeff Levine, AICP
Director, Planning & Urban Development Department

Memorandum

To: Housing and Community Development Committee

From: Jeff Levine, Director

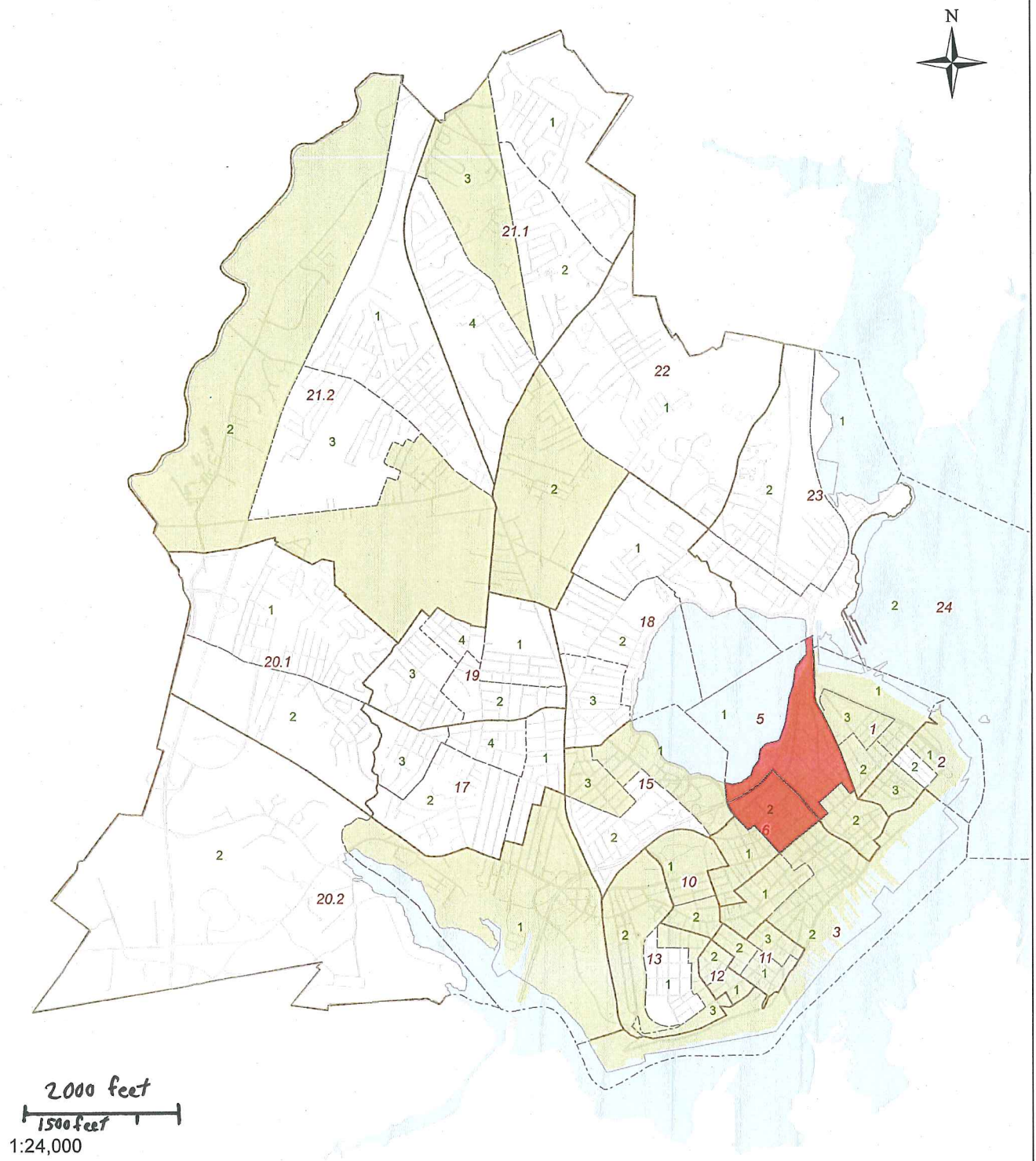
Date: October 8, 2015

Re: Housing Replacement Ordinance

As per your direction at the October 7 meeting, I have prepared two draft amendments to the Housing Replacement Ordinance (Division 29.) One of these drafts would require replacement units to be on the same parcel as the demolished units. The second draft provides two options for off-site replacement. The first option requires that the replacement units be within a specific distance (1500 feet for the purposes of discussion.) The second option requires the replacement units be within the same Census Block Group as the demolished units. That could potentially be Tract if you felt Block Group was too restrictive. By comparison, the current requirement is simply that the replacement units be within the City of Portland. I also include a Census Block Group map with a scale for reference.

<i>Current Language</i>	<i>Draft 1</i>	<i>Draft 2 Option 1</i>	<i>Draft 2 Option 2</i>
Units must be within the City of Portland	Units must be on the same parcel, as defined	Units must be within the same Block Group/Tract	Units must be within 1500 (or other finite amount) feet

Though this issue didn't come up in your discussion, I'd also like to propose a timeframe for provision of replacement units. Presently there is no deadline. As a result, we could be asked to hold a Letter of Credit indefinitely while an owner evaluates his/her options. I would recommend a timeframe be added to this option. I'd recommend a starting point for this discussion of an outside limit of three years.



- 2010 Block Groups
- 2010 Census Tracts
- Block Groups > 51% Low Income
- Bayside Neighborhood

City of Portland Block Groups > 51% Low Income Target Area: Bayside Neighborhood