



October 19, 2015

Ms. Barbara Barhydt
Planning Department
Portland City Hall
389 Congress Street
Portland, Maine 04101

**RE: Level I Site Plan Development Review Application
Drainage Improvements
60 Oaklawn Road, Peaks Island
Portland, Maine**

Dear Ms. Barhydt:

Walsh Engineering Associates, Inc. (WEA) is pleased to submit this Level I Site Alteration application on behalf of John Halbirt (Applicant) for the work related to the drainage improvements located at his residence at 60 Oaklawn Road, Peaks Island, Portland, Maine (Map 90, Block J, Lot 2). As we have discussed previously, the project has already begun and will require an After-the-Fact permit application from the City. The Applicant will also submit Section 2 and Section 7 Maine DEP PBRs for Activities Adjacent to a Natural Resource and Outfall Pipes, respectively. A copy of the PBR notification will be forwarded to the City when it is submitted to the Maine DEP.

Request for Authorization to Proceed

As the City is aware, the project was under construction prior to the issuance of this permit application. Pipes and structures have been installed and erosion and sedimentation control devices are in place and functioning. However, portions of pipe trenches and structure excavations are still open. The Applicant put the project on hold when he was informed that a permit application was necessary. The Applicant is a seasonal resident of Peaks Island and will be returning to Texas near the end of October. For safety reasons, the Applicant is respectfully requesting authorization to backfill the open excavations prior to approval of the permit application so that the site is safe and stabilized before he returns to Texas. Backfilled and disturbed areas will be mulched for the winter season. Landscaping and permanent seeding will be completed following approval of the permit application in the spring of 2016. The Applicant understands that he will be proceeding with the work at his own risk if the City requires and modifications to the design. Please contact us ASAP to let us know if the Applicant may proceed.

Project History

The applicant began construction of the drainage improvements at his property in August 2015 in association with the construction of a garage addition. The garage addition was previously permitted by others through the City of Portland and did not require any Maine DEP permits. During routine building inspections, the City Building Inspector informed Mr. Halbirt that

permits were required for the drainage improvement portion of the project. At that time Mr. Halbirt contacted WEA to assist him with the required permit applications.

On September 9, 2015, WEA visited the subject property to review the existing conditions and the drainage improvements currently under construction and to understand the goals of the project. With this information, WEA contacted the Maine DEP and the City of Portland to determine the appropriate permitting requirements. WEA returned to the site on September 28, 2015 to locate the limits of vegetation along the beach. The existing conditions and the proposed drainage improvements are described in the following sections.

Existing conditions

The subject property is currently developed with a single family residential house, a shed, and associated landscaping and stormwater amenities. The property abuts the Atlantic Ocean and is entirely within the Shoreland Zone.

Stormwater currently flows overland to two inlet locations on the property. One inlet is located at the end of a riprap swale on the north side of the property. This inlet is connected to a very old stone drainage conduit that discharges to the beach. A large patch of Japanese Knotweed (invasive species) is located at the discharge location. The stone conduit has collapsed, causing stormwater to back up and flow overland to the beach. This stone conduit is located on the abutting property to the north. The abutting property owners, Joseph and Nancy Wright, provided verbal authorization for the Applicant to perform the proposed work on their property. An easement is being obtained for the offsite work associated with the project. A draft copy of the easement is included with this submission. A copy of the recorded deed will be provided when it is signed by all parties.

The second stormwater inlet is located near the shed on the Applicant's property. This inlet is connected to an old 6-inch underdrain that dead-ends in the existing building foundation backfill. This underdrain has clogged, causing stormwater to back up and flow overland to the beach.

Proposed Site Improvements

The applicant has begun the installation of a new drainage system to replace the failed drainage system on the properties. The new drainage system consists of the installation of one field inlet, four drainage manholes and a network of 6-inch SDR35 drainage pipe. The main drainage line is installed parallel to the existing stone conduit. The new pipe discharges approximately 7 feet north of the existing stone conduit outlet, which is within the 75-foot setback from the High Tide Line as determined by visual observation. Approximately 45 square feet of Japanese Knotweed was removed for the installation of the pipe outfall and a riprap apron. A 32-foot vegetated buffer remains beyond the downgradient end of the riprap apron.

Another small patch of Japanese Knotweed of approximately 100 square feet within the 75-foot setback was removed by the Applicant while he was searching for the end of the existing underdrain. This area will be revegetated with Virginia Rose (*rosa virginiana*) shrubs. This species of rose was selected because there is an existing thriving patch of *rosa rugosa* adjacent to the disturbed area, but is considered an invasive species. Virginia Rose will blend nicely with the *rosa rugosa* and is expected to thrive in a similar fashion based on site conditions.

Fire Safety

There are no building structures associated with the proposed project. The proposed project is entirely underground and will not impact fire safety of the surrounding area.

Level I Site Alteration Application and Requirements

Per the city ordinance for Site Plan Review, the project meets the level I Site Alteration requirements. Per Section 14-526, Site Plans are subject to transportation standards, environmental quality standards, public infrastructure and community safety standards, and site design standards. Each of these standards is discussed below:

Transportation Standards

The proposed project does not involve any modifications or additions to transportation infrastructure. Therefore, there will be no impact to the surrounding street systems, internal access and circulation, or parking. There are currently no sidewalks adjacent to the property and no sidewalks are proposed as part of the project. The proposed project will not require any additional parking spaces.

Environmental Quality Standards

The site is located adjacent to the Atlantic Ocean and is entirely within the Shoreland Zone. No alterations are proposed to Significant Natural Features.

Approximately 100 square feet of Japanese Knotweed within 75' of the high tide line was removed by the Applicant while searching for the end of a drainage pipe. Japanese knotweed is considered an invasive species. This area will be replanted with native Virginia Rose (*rosa virginiana*). The replacement of an invasive species with a native species will improve the quality of the Shoreland Zone.

No trees will be cleared as a result of this project. All existing trees will be protected.

Water quality will be improved by replacement of the failed drainage system, which was causing erosion and damage to the neighboring driveway. The drainage improvements will redirect stormwater as previously intended. A riprap apron will be installed to prevent erosion at the discharge location of the new pipe system. A 32-foot vegetated buffer will remain beyond the riprap apron to the beach which will provide additional water quality.

During construction, silt fence will be installed on downgradient portions of the site to trap sediment during rain events. The site fence will be maintained throughout the project and removed once the site is stabilized. All disturbed areas will be loamed, seeded and mulched at the end of the project.

Public Infrastructure and Community Safety Standards

The project has been designed in accordance with the City's Master Plan.

Site Design Standards

Historic Resources: The proposed site alteration does not affect designated landmarks nor is it within designated historic districts or historic landscape districts.

Exterior Lighting: No additional exterior lighting is proposed for the site improvements.

Signage: No signage is proposed.

Zoning related design standards: There are no zoning related design standards applicable to this project.

Evidence of Financial and Technical Capability

The Applicant is a former distributor of drainage pipe and understands the characteristics of piped stormwater flow. The Applicant designed and installed the drainage system prior to WEA's involvement; however, WEA has reviewed the installed drainage system and agrees that it should function adequately for the intended purpose. Visual observation during a 5.5-inch rainfall event on September 30, 2015 indicated that the proposed drainage system is operating properly.

Construction cost for the proposed site alterations is estimated to be approximately \$6,000±. The Applicant hopes to complete the project immediately following permit approvals. The project will be personally funded by the Applicant.

Evidence of Right, Title or Interest

Please find the attached deed for the subject property.

The abutting property owners, Joseph and Nancy Wright, provided verbal authorization for the Applicant to perform the proposed work on their property. An easement is being obtained for the offsite work associated with the project. A draft copy of the easement is included with this submission. A copy of the recorded deed will be provided when it is signed by all parties.

Written Waiver Requests

Per previous discussion with the City, the Applicant is respectfully requesting waivers from sections 13.2.29 and 13.2.30 of the Technical Manual requiring the boundary survey to be provided on the State Plane coordinate system and tied to an official City of Portland Benchmark. Email correspondence from City staff regarding these requests is included with this submission.

Enclosed you will find one (1) copy of the Level I Site Alteration application, one (1) copy of full-size Site Plans, one copy of 11 x 17 inch plans, and electronic copies of all plans and application materials.

I trust you will find the information sufficient for review. We look forward to working with you as part of the review process.

Respectfully,



Silas Canavan, PE
Walsh Engineering Associates, Inc.

- Enc. Application fee
 Letter of Agent Authorization
 Level I Site Alteration Application
 Correspondence with City Staff
 Property Deed
 Drainage Easement
 Erosion and Sedimentation Control Plan
 Boundary Survey
 Site Plans and Details
 CD with electronic materials
- cc. John Halbirt, Applicant