

October 3, 2017
W-P Project No. 13755A

Steve Puleo, Community Planner
City of South Portland
Department of Planning & Development
P.O. Box 9422
South Portland, ME 04116-9422

Subject: Site Plan Application 16 Hill Street, South Portland, ME 04106

Dear Mr. Puleo:

On behalf of JLJ Construction, LLC (Christopher M. and Bridget L. King), we are pleased to submit the enclosed revised application materials and plans for the Site Plan Application for a minor subdivision located at 16 Hill Street, South Portland.

The site is located in the Residential (G) district of South Portland. The proposed development includes the construction of a 2,006 SF two-unit attached building, a 384 SF addition to the existing house, construction of approximately 4,407 SF of driveway/parking and the implementation of a new stormwater, erosion and sediment control plan.

On-site utility improvements include domestic water, sanitary sewer, natural gas, underground electrical and communication services. Stormwater management will be accomplished by routing the site runoff to a series of grassed underdrained soil filters that are directly connected to the City's MS4. The site has been designed to treat runoff from 90% of the new impervious surfaces and 64% of the disturbed pervious surfaces.

On August 1, 2017, Wright-Pierce submitted the draft site plan application for the above referenced project located at 16 Hill Street, South Portland, Maine. The draft site plan application and plans were reviewed by City staff and review comments were received by Wright-Pierce in a final letter dated September 26, 2017.

Wright-Pierce has reviewed the September 26, 2017 staff comments with the owner. The original staff comments are provided below in ***bold italics*** with our responses written after the comments.

PLANNING DIRECTOR

A determination by the CEO relative to conformance with the zoning standards is required, including, in this case, net residential density.

- See below for comments from the CEO.

We should have the draft condo documents available for legal review. This project will cause problems if the condo association's roles and responsibilities are not well defined.

- It is not the owners intent to set the development up as a condominium at this time. The owner would like to reserve the right to establish the condos at a later date.

WATER RESOURCE PROTECTION

The required stormwater treatment volume should be calculated as 0.5” over 90% of the new impervious area and 0.2” over 100% of the new disturbed area. The submitted calculations are based on total impervious and total disturbed areas.

- The stormwater treatment calculations have been revised to reflect only the new impervious area and disturbed pervious areas.

Please include cross-section detail of the proposed infiltration basin.

- Based on staff comments, the proposed infiltration basin has been changed to a grassed underdrained soil filter. This filter will be built in accordance with the detail provided for the grassed underdrained infiltration swale adjacent to the driveway.

As currently graded the grassed infiltration basin will discharge flow to the property to the east, if overtopping. A piped outfall structure connected to the infiltration swale underdrain should be included; or, the basin should be graded such that discharging flow is directed to the north (raise the berm on the eastern edge and include low point at the northern edge). Additionally, if the soils are not conducive to infiltration an under drain system should be considered.

- This grassed infiltration basin has been changed to a grassed underdrained soil filter. Site grading has been revised to show that any overflow will be directed toward the swale adjacent to the driveway.

There appears to be a grading conflict along the infiltration swale at the western edge of the property. Proposed grade appears to be 1.5’ above the elevation of the adjacent property (see 26’ contour).

- Contours have been revised to fix this issue.

The proposed sewer lateral will require a minimum of two external cleanouts due to its length.

- Two cleanouts have been added, one at the 45 degree bend and one halfway between the bend and the connection to the sewer main.

It appears that the applicant addressed most of the concerns we raised in our last round of comments (i.e., provide piping for grassed underdrained infiltration swale directly into City’s MS4 system; ESC plan, etc.). However, based on the latest submittal it’s still unclear to me whether the grassed infiltration basin will spillover onto the neighboring property during heavier rain events. Our previous comments suggested tying it into the underdrained infiltration swale if there would be a high likelihood of spillovers. Unless the applicant can demonstrate that this won’t be the case we may want to consider requiring piped connections to the MS4 for all stormwater BMPs. However, I’ll defer to our engineer reviewers on this question.

- An underdrain has been added and grading has been revised to ensure that spillovers are directed to the east and contained within the property. This structure is also sized three times larger than the required treatment volume to reduce spillovers.

More detail could also be provided for the stormwater BMP Inspection & Maintenance Plan, which currently identifies only the grassed underdrained infiltration swale for annual monitoring. I recommend also including the grassed infiltration basin and stone drip edge. The Erosion & Sedimentation Control Plan is still very general and at the very least should refer directly to DEP's Erosion and Sediment Control Practices Field Guide for Contractors (http://www.maine.gov/dep/land/erosion/escbmps/esc_bmp_field.pdf).

- The grassed infiltration basin has been changed to the same type of BMP as the grassed underdrained infiltration swale so that maintenance item will now apply to both BMPs. The stone drip edge has been added to the maintenance table and the narrative now references the DEP's Erosion and Sediment Control Practices Field Guide for Contractors.

The waiver request for an overall reduction in treatment areas seems reasonable given that 100% of the redeveloped portion of the parcel will meet the 27-1536 requirements for IC (0.5" for 90% IC area) and disturbed pervious areas (0.2" for all area). A portion of the existing developed area (back side of existing house) will also receive some treatment.

- Noted.

The proposed sewer to service the rear building will need at least to external clean-outs do to the length. Please indicate pipe size on the plan

- Two cleanouts have been added, one at the 45 degree bend and one halfway between the bend and the connection to the sewer main.

The infiltration basin/swale adjacent to the proposed driveway should be connected to the MS4 rather than discharging stormwater onto our public roadway, which will cause an icing condition. The applicant should consider a perforated pipe throughout.

- This BMP is now equipped with an underdrain, overflow grate and is piped directly to the MS4.

A sump pump discharge from the proposed building and a roof leader from the existing building is shown to be discharging the infiltration basin/swale. Elevations of these two discharges should be shown on the plan along with spot elevations along the swale.

- Pipe inverts have been added.

The proposed grass infiltration swale as called on the plan, should be connected via piping to the driveway infiltration basin/swale if the existing soils are no conducive to infiltrating water.

- The proposed grass infiltration swale has been changed to a grassed underdrained soil filter with connection to the underdrain of the infiltration swale adjacent to the driveway.

CORPORATION COUNSEL

Right/title or interest: The subject property is owned by Christopher M. King and Bridget L. King. They have submitted a copy of their deed (CCRD Book 32389, Page 158) with the application materials. The actual applicant is JJJ Construction, LLC, whose two members are Christopher M. King and Bridget L. King.

- This clarification has now been added to Exhibit 4 – Right, Title or Interest.

Corporate status: The applicant has submitted evidence from the Maine Secretary of State's Office indicating that it is a Maine limited liability company in good standing in Maine.

- This clarification has now been added to Exhibit 3 – Corporate or Partnership Status.

Financial capacity: The estimated project cost is \$237,350. The applicant has submitted a copy of its commitment letter from Biddeford Savings Bank dated July 19, 2017, indicating that the bank will finance up to \$450,000 for the project at 16 Hill Street.

- This clarification has now been added to Exhibit 8 – Financial Capacity

The applicant is proposing that a homeowners' association be formed, which will be responsible for stormwater infrastructure maintenance, mowing and snowplowing. We recommend some sort of a condition of approval to ensure that this truly happens, such as the following:

- ***The applicant shall provide the Director of Planning and Development with proof of filing of the homeowners' association articles of incorporation with the Secretary of State's Office prior to the issuance of any building permits.***
- ***The Corporation Counsel must review and approve the homeowners' association documentation for legal sufficiency and to ensure perpetual maintenance of stormwater management infrastructure prior to the issuance of any building permits.***
 - The conditions of approval have been added to Exhibit 7 – Condominium, Homeowners or Property owner's association.

CODE ENFORCEMENT

The existing conditions including square footage of the building seems inaccurate to me, the house alone in 984 sqft not even including the existing shed size? The overall final square footage of lot coverage seems inaccurate also.

- Square footages of the existing house and lot have been revised to reflect the results of the boundary survey.

Otherwise, looks acceptable. Until building permit plan review.

- Noted.

ENGINEERING PEER REVIEW

The project is subject to the City of South Portland's Stormwater Ordinance Standards for a Basic Stormwater Management Plan, Section 27-1536(d). The site is located in an area served by a separated storm drainage system.

- Noted.

The application proposes to provide treatment to the extent practicable addressing the treatment standards for a Basic Stormwater Management Plan identified in 27-1536(d)(1)(b) using drip edge filters, an infiltration area and a grass lined filtration BMP. These is a recommended practice in the City of South Portland's Stormwater manual applicable to a project of this scope.

- Noted.

The application includes an erosion and sedimentation control plan in accordance with requirements of 27-1536(d)(1)(a). Subject to the comments below, this plan appears to address the performance standards and the waiver noted in the application does not appear to be required.

- Noted.

1. We recommend that erosion control requirements noted in the narrative addressing the requirements of 27-1536(d)(1)(a) and MDEP Chapter 500 Appendix A be placed directly on the plans for reference by the contractor during construction.

- All erosion control BMP's are now shown on the drawings and the erosion and sediment control plan, Exhibit 16, will be shared directly with the contractor.

2. Please review and expand the erosion control narrative for concurrence with the requirements found MDEP Chapter 500 Appendix A Standards for Erosion Control.

- The narrative now contains all applicable requirements contained in MDEP Chapter 500 Appendix A.

a. Address the timing for installation of sedimentation controls prior to construction.

- This has been added to Exhibit 16 - Erosion and Sedimentation Control.

b. Address time limitations for exposed soil in accordance with Chapter 500 Appendix A (7 day limit).

- This has been added to Exhibit 16 - Erosion and Sedimentation Control.

c. The erosion control narrative indicates control measures are to be maintained by the contractor until the vegetation achieved 75% establishment. Revise this to be to 90% established in accordance with the MDEP standards.

- This has been added to Exhibit 16 - Erosion and Sedimentation Control.

d. Address winter condition erosion control requirements for work after November 1.

- This has been added to Exhibit 16 - Erosion and Sedimentation Control.

e. It is our opinion that the implementation of an erosion control plan addressing the applicable Chapter 500 Appendix A items will allow the project to be approved without a waiver of section 27-1536(d)(1)(b).

- Noted.

3. Please comment on any investigation of on-site soil conditions or depth to groundwater determinations that may have been completed for the design of the infiltration basin and under drained soil filter locations. If soils at the depths required are not suitable for infiltration, the area should be designed with an underdrain.

- The soils map provided in Exhibit – 17 was reviewed in the design of the underdrained soil filters. Given that the native soils are a fine sandy loam with a slow infiltration rate, both BMP's are now equipped with an underdrain that connects to the City's MS4.
4. ***Please review the stormwater quality calculations. Typically for re-development site projects, the calculation of treatment percentages are based on the new impervious and developed areas, not including existing areas that are unaffected by the project. The submitted calculations include existing untreated developed areas, lowering the calculated treatment percentages and implying a waiver may be required. It is our opinion that a waiver is not required for this project, provided the comments made in this review are addressed.***
 - The stormwater quality calculations have been revised to only incorporate new impervious areas and disturbed pervious areas.
 5. ***The infiltration basin appears to be proposed as a fill area. Please provide a detail or cross section identifying the construction materials and requirements proposed to ensure the basin will function as intended.***
 - Based on staff comments, the proposed infiltration basin has been changed to a grassed underdrained soil filter. This filter will be built in accordance with the detail provided for the grassed underdrained infiltration swale adjacent to the driveway.
 6. ***Please indicate the bottom area or dimensions of the proposed infiltration area required to provide the treatment volume indicated in the stormwater report.***
 - The bottom area has been added to the plans.
 7. ***Please provide addition spot grades to define the overflow elevations and flow path from the infiltration basin. We recommend that potential overflow drain toward the under drained filter area and Hill Street, away from the butting property to the east. Please provide clarification of the top of berm elevation and width for the infiltration area. The plans imply a zero-width berm at elevation 27.***
 - Contours have been revised to show the berm and overflow spillway that will drain toward the west and Hill Street.
 8. ***Please review the contours along the property lines and if necessary provide additional existing spot elevations. The proposed contours immediately adjacent to the property lines are not legible and imply a fill condition along the property line.***
 - a. ***Specifically the 2.5' spot elevation and 26' contours along the westerly property line are not legible and appear to be above the existing grade at the property line. Please review the constructability of this proposed swale at this location and at the grades indicated without impacting the abutting property to the west.***
 - Contours and labeling have been revised in this location to provide more clarity.
 - b. ***Similarly the elevation 25' contour on the easterly property line appears to be a fill condition at the property line.***

- Contours have been revised in this area to show that there will not be a fill along the property line in this area.
- 9. ***Please provide a proposed finished floor elevation for the proposed building.***
 - Finish floor elevation has been added.
- 10. ***Please clarify the proposed invert elevation and slope of the proposed sewer service. Please clarify if cleanouts on this run of sewer are proposed.***
 - Two cleanouts, pipe inverts and pipe slope have been added to the drawings.
- 11. ***Please review the inverts of the proposed soil filter underdrain pipe. The depths indicated on the plans are several feet deeper than the dimensions shown on the detail imply.***
 - Inverts have been added for the underdrain pipe.
- 12. ***Please review the elevation 27 and 26 contours across the parking stalls at the south end of the driveway and provide spot grades if necessary. The contours as shown imply an excessive cross slope in the parking stalls.***
 - Countours have been adjusted to give the parking stalls the flattest cross slope practicable.
- 13. ***Please review the constructability of the parking stalls at the south end of the driveway. As shown it appears construction at this location will require silt fence and soil disturbance on the abutting property.***
 - Parking stalls have been moved approximately one foot toward Hill Street so all soil disturbance and silt fence can be contained within the property limits.

ASSISTANT CITY MANAGER

I do not have any comments or concerns.

- Noted.

FIRE DEPARTMENT

I have reviewed the plans for 16 Hill Street, Proposed Condominiums Site Plan, PID 1105 and the following code requirements shall be met where applicable:

1. ***NFPA 101 (2009) Life Safety Code including Chapter 30 New Apartment Occupancies***
2. ***NFPA 1 (2009) Fire Code including Chapter 18 Fire Department Access and Water Supply***
3. ***City of South Portland Ordinance, Chapter 8 Fire Protection and Prevention***
4. ***The BOCA National Fire Prevention Code 1996***
5. ***State of Maine adopted Life Safety Codes***
 - These code requirements have been added to Exhibit 19 – Approvals from other agencies.

Requirements, concerns, considerations or review:

1. ***Fire Department Access and Fire Lanes***
 - a. ***The front of the building including the four parking spaces shall have a clear fire lane width of (20)-twenty feet and be appropriately marked.***

- The fire lane has been widened to 20' and signage has been added.
 - b. Fire department access shall have and passageway of at least (15) feet in clear width from a public way to a designated fire lane.**
 - A 2.5' gravel shoulder has been added, resulting in access that is now 15' wide.
 - c. See South Portland Ordinance, Chapter 8 Fire Protection and Prevention, Article XI. Establishment of Fire Lanes and NFPA 1 (2009), Chapter 18 Fire Department Access and Water Supply for complete information on compliance. The stricter shall apply.**
 - Noted.
- 2. Water Supply Requirements**
- a. The proposed building requires a minimum fire flow of 1500 gpm (gallons per minute). Nearest Hill Street hydrant is located within 400 feet of the proposed location and appears to meet the minimum flow rate.**
 - Noted.
 - b. See NFPA 1 (2009), Chapter 18 Fire Department Access and Water Supply**
 - Noted.
- 3. There shall be a minimum of 12 feet separation between structures.**
 - The closest structures on the proposed project are greater than 12 feet apart.

COMMUNITY PLANNER

- 1. Are you intending to make "Start of Construction" within 6 months? If not, you need to request a waiver of Section 27-1428(a) for an extension of approval period. See below for the proposed language.**
 - Construction is still scheduled to begin in 2017.
- 2. Please provide an existing condition survey to your plan set. Also, you need a signing mylar, the Planning Board needs to sign the plan for recording.**
 - An existing condition survey has been added as sheet C-1. A signing mylar will be delivered.
- 3. Please incorporate filter berms as part of your erosion control plan.**
 - In lieu of filter berms, we have shown silt fence on the drawings and in the erosion control plan.
- 4. I did see any proposed landscaping, is there going to be any?**
 - There will be landscaping, however, a landscaping plan has not been developed at this time.
- 5. Please include on Sheet C-1 and the subdivision mylar the waivers and Conditions of Approval, see below:**
 - The following conditions of approval have been added to Sheet C-1 and the subdivision mylar.

Approved Waivers:

The approved waiver of Section 27-1428(a) Time limitations for an 18 month extension to approval period to expire on October 10, 2019.

-Noted.

Conditions of Approval:

1. Prior to the release of the recoding mylar and pre-construction meeting with the City, the applicant shall pay all outstanding review escrow account fees, including erosion and sedimentation control inspection escrow, and post the necessary performance guarantee(s) in such amount(s) as established by the City.

2. Planning Board Regulation #5, standard condition of approval: This approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. No project, plan or development previously approved by the Planning Board may be altered or modified without securing prior approval of the Planning Board in the form of an amended approval; provided, however, that, if at any time it becomes necessary or desirable to make modifications to the project, plan or development, the Planning Director may approve modifications determined by the Planning Director to be de minimis in that they (i) do not amount to a waiver or substantial alteration of any condition or requirement set by the Planning Board; (ii) do not affect any approval standard; (iii) meet all applicable ordinances and laws; (iv) are reviewed and approved by all appropriate City staff and consultants; and (v) do not involve any change to lot lines. De minimis changes include only the modifications listed in Section 24-27 of the Subdivision Ordinance and Section 27-140 of the Zoning Ordinance.

3. The property is subject to a Stormwater Management System Maintenance Agreement that runs with the land and is binding upon the property owner and its successors and assigns as their interests may from time to time appear. Prior to the scheduling of a preconstruction meeting, said agreement shall be duly executed and recorded by the applicant at the Cumberland County Registry of Deeds, with a copy of the recorded instrument contemporaneously provided to the Director of Planning and Development.

4. Prior to the issuance of a Certificate of Occupancy for the project, the applicant must submit an inspection report to the Code Enforcement Officer documenting that the stormwater facilities have been installed and are functioning as designed and approved and are fully operational. This inspection report must be prepared by a qualified inspector as defined in Section 27-1536 ©(3)€ of the South Portland Code of Ordinances, as may be amended.

5. On or by July 15th of each year, a completed and signed certification shall be provided by each property owner or applicant to the City's Director of Water Resource Protection in a form provided by that Department, certifying that a qualified inspection employed by the property owner or applicant has inspected, cleaned and maintained the stormwater management facilities, describing any deficiencies found during inspection of the stormwater management facilities and certifying that the person has repaired any deficiencies in the stormwater management facilities noted.

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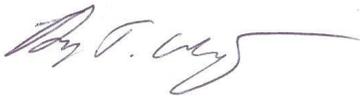
6. Prior to the issuance of a building permit, the applicant shall provide the Planning and Development Director with satisfactory evidence that one of the first six methods set forth in Section#3(B) of the City's Site Plan application form relating to the applicant's financial capacity is in place.

7. Prior to issuance of the certificate of occupancy, the applicant shall provide the recorded executed conservation easement with the City of South Portland and the recorded deed of the properties to the Planning and Development Director.

8. The area between the street utility excavations shall be milled so that pavement restoration is unified.
- These conditions of approval have been added to the plans.

Based on our review of the staff comments, we feel the attached final site plan application addresses the comments in full. As such, it is our understanding that the application will be heard by the Planning Board on October 10th, 2017. We appreciate your time and effort with this review and look forward to speaking in the future.

Sincerely,
WRIGHT-PIERCE



Ryan T. Wingard, PE
Senior Project Manager
ryan.wingard@wright-pierce.com

Enclosures

cc: *JLJ Construction, Inc.*
File