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August 29, 2016

Project No. 16055

Mr. Evan Carroll
Bild Architecture
PO Box 8235
Portland, ME 04104

Response to Comments – 7-Unit Building, 30 Merrill Street, Portland, Maine

Dear Mr. Carroll:

We have prepared the attached packet of plans and narratives in response to review comments from various staff members and consultants to the City of Portland. Please accept this letter as a summary of the response items. The summary is as follows:

Comments from the review table:

- *Need turning templates showing that parking area at rear will function adequately.*

We have provided a plan showing 4 turning templates illustrating 4 typical car movements within the proposed parking area. The published turning radii for Honda and Toyota compact cars was found to be 17.7'. We used this turning radius for the turning templates used on the plan.

- *Bike Parking.*

To add to your response on this issue, we have added the location of the bike rack on the front sidewalk. We have provided an excerpt from the Technical Design Manual as well. This is located on the last detail sheet, Sheet C5.

- *Snow Storage Area:*

We were able to move the parking area over a few feet to the south to maximize the access to the snow storage area.

- *Provide buffering to rear where parking...*

We have shown fencing to be installed 1' from the southern, western and northern property lines of the lot. This will provide visual buffering from the parking area and the first floor residences.

- *Pervious Pavers clarifications:*

We have updated the narratives to include the entire parking and access drive as pervious pavers. The entire sub-base will have a filter layer that will treat stormwater runoff. Runoff will mimic existing conditions of the site by allowing runoff to flow northeasterly to Merrill Street via overland flow once the storage space within sub-layers of the driveway and parking area are maximized.

- *Sewer Capacity:*

We will forward any correspondence from the Sewer Dept. once we receive it. The PWD has determined the expected water usage for the project.

- *Electrical Service:*

We have revised the plans to show an underground power, telephone and cable service for the building, as requested.

- *Site Plan/Civil Set:*

We have revised the plans to include a Site Layout Plan, a Grading & Utility Plan and construction details. We have revised labels, added dimensions and a North Arrow. We have added the exterior doors to the building and show the bicycle rack on the sidewalk. We are proposing that the existing curb-cut on Merrill Street remain as-is for this project. It will adequately service the proposed driveway location. The treatment area for the project is simply the driveway and parking area, in its entirety.

Comments from Woodard & Curran, dated August 23, 2016:

- 1) *The Applicant has requested letters from utilities confirming capacity to serve the proposed development; evidence of confirmation of capacity to serve the proposed development should be provided upon receipt.*

We will submit letters upon receipt.

- 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 Standard: The Applicant has provided Erosion & Sediment Control notes and sedimentation barrier details 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. However, details should be provided for a stabilized construction entrance and catch basin inlet protection measures and the locations of proposed erosion and sediment control measures should be indicated on the drawings.*

We have indicated on the drawings where erosion control measures should be located. We have also indicated that the existing paved driveway will remain and shall act as the stabilized construction entrance for the site.

- b) *General Standard: The project will result in a de minimis increase in impervious area of approximately 315 square feet, assuming the roof to be impervious and proposed parking as pervious. The Applicant has proposed pervious pavers and a green roof. The Applicant should address the following comments:*
 - *The Pervious Paver Section Detail provided on Sheet C2 includes a Filter Layer; however, the Site Plan and stormwater management plan indicate that the limit of the proposed filter bed does not extend over the full area of proposed pervious pavers. A detail should be provided for paver installation in areas outside of the filter bed, to confirm that the entire paver area may be considered pervious. If the additional pavers are not installed in such a way that they are pervious, the impervious surface calculations should be updated, and the filter area should be designed per the Maine DEP Stormwater BMP manual's guidance for "Run-On Modular Pervious Pavement."*

The plans and calculations have been updated to show that the entire parking area and driveway are to be consistently constructed as pervious pavers.

- *The Applicant should provide information on the depth to groundwater and bedrock in the area of the proposed pervious pavers.*

The area is a sandy soil where groundwater and bedrock are expected to be at least 1 foot below the sub-layers of the pervious paver build-up. An Impervious Liner can be introduced during construction if determined to be needed by an inspecting engineer.

- *The Pervious Paver Section Detail should include specifications for the filter layer per Chapter 7.7 of Volume III of the MaineDEP Stormwater BMP Manual.*

We have added this information to the detail.

- *The Operation and Maintenance Plan should specify that winter sand be prohibited in the area of Pervious Pavers. If the Applicant intends to seek credit from the City's Stormwater Service Charge for the proposed Pervious Pavers, the Applicant should ensure that the Operations and Maintenance Plan specifies that accumulated sediment and debris be removed from joint space monthly.*

We have revised the Operations and Maintenance Plan accordingly.

- *A green roof design has not been reviewed. The Applicant should note that green roofs are not currently included in the City's list of treatment systems eligible for credits from the City's Stormwater Service Charge. We encourage the Applicant to review the City's Stormwater Service Charge Credit Manual (available online) to evaluate whether they may want to incorporate stormwater quality treatment measures that qualify for a future Stormwater Service Charge credit.*

The use of a green roof system is completely voluntary by the applicant. We have not taken any treatment credits for this system in our stormwater management plan. We will be sure to advise them on this information regarding the treatment credits.

- c) *Flooding Standard: The project will result in a de minimis increase in impervious area of approximately 315 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.*

3) *The Applicant should provide a detail for pipe trenches, brick sidewalk repair, and pavement repair within the City of Portland Right-Of-Way per the City of Portland Technical Manual.*

We have added these details to the plans.

4) *It appears that the Applicant is proposing to abandon an existing sanitary sewer service connection and install a new one. The Applicant should clarify what methods will be utilized to abandon the existing connection.*

We look forward to working with the sewer dept. to finalize an approach on the sewer connection construction.

Comments from TY Lin International:

- *The site plan depicts the driveway offset from the curb opening, while the existing driveway is centered. The applicant should note why an offset condition is proposed.*

The existing driveway is 7.85' wide, is located on the southerly property line and is 1.5' offset from the southerly edge of the existing curb opening. The existing curb opening is 10 feet wide, at the narrowest point. The proposed driveway is to be 10 feet wide and located 1-foot away from the southerly property line. This results in the existing curb tip-down on Merrill Street being 1.25 feet offset from the northerly edge of the proposed driveway. It leaves 9.20 feet of clear access between the proposed fence and the existing tip-down curb. This width appears to be adequate for access of residential scale vehicles and minimizes impacts to the existing sidewalk and curbing on Merrill Street.

- *The applicant should formally request a waiver from the City's driveway separation standard and provide documentation on why the standard can't be met.*

We will formally request the waiver.

- *A fence is proposed on the edge of the driveway. Details on the fence should be provided.*

Fencing details will be included in the upcoming Landscaping design and details for the site.

- *Access and egress movements from parking spaces will be constrained. The applicant has provided vehicle turning templates that seem to illustrate parking space accessibility is feasible. Given the constrained conditions, I would suggest the applicant simulate the layout in a field test to be reviewed by me. I would note that the parking space adjacent to the handicap space will be difficult to maneuver into and out of.*

If the applicant were to remove the parking space closest to the building, would that eliminate the request for a field test? I believe the required number of parking spaces is 4 for this property. If so, we will discuss this with the applicant.

Thank you for your continued review of this project, and please call with any questions.

Sincerely,
PLYMOUTH ENGINEERING, INC.



Jon H. Whitten, Jr., P.E.
Senior Project Manager