



August 6, 2019

Ref: VHB Project No. 12815.00/05

Mr. Craig Dixon
Chairman
New Bedford Conservation Commission
New Bedford City Hall
133 William Street
New Bedford, MA 02744

Re: DEP File # 049-0828
North New Bedford Station – South Coast Rail
Response to Peer Review Comment Letter

Dear Mr. Dixon,

VHB has prepared this letter in response to the stormwater management comments in a letter by Jennifer Johnson, PE, Project Manager at Nitsch Engineering Inc. dated August 1, 2019. Each comment is provided below in italics, followed by a response in bold.

- 1. The proposed project is considered a redevelopment project under the Massachusetts Department of Environmental Protection (MassDEP) Stormwater Management Standards, and therefore is required to meet the following Stormwater Management Standards only to the maximum extent practicable: Standard 2, Standard 3, and the pretreatment and structural best management practice requirements of Standards 4, 5, and 6. Existing stormwater discharges shall comply with Standard 1 only to the maximum extent practicable. A redevelopment project shall also comply with all other requirements of the Stormwater Management Standards and improve existing conditions. The information provided in the submittal appears to be consistent with these requirements.*

No response required.

2. The project results in a reduction in total impervious area when compared to the existing condition, which results in a decrease in peak flows and volumes from the project.

No response required.

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3. The Stormwater Report describes that there will be some surcharging of the stormwater piping from the City system into the proposed stormwater system. We recommend that the Applicant and Commission coordinate with the Department of Public Infrastructure regarding whether the City system can accommodate flows from the project.

The South Coast Rail (SCR) team meets regularly with the New Bedford Department of Public Infrastructure (DPI). Meetings on March 8, 2019 and June 7, 2019 included a focus on the North New Bedford Station Design, including BMP selection as well as the drainage connection to the Church Street Culvert. The design as proposed integrates the feedback and collaboration with DPI through this process. We understand DPI will be providing an email to the Commission regarding our coordination on the design.

4. The pipe sizing calculations indicate a surcharge conditions during the 25-year storm for the pipe segments that connect to the City system. This may be due to the surcharge condition described above. We recommend that the Applicant consider increasing the size of these segments to provide additional capacity.

During the collaboration with DPI, it was determined that a practical maximum proposed pipe connection size of 18" to the Church Street Culvert, and an assumed tailwater condition in the culvert. Increasing the sizes of the pipes on the site would negligibly impact the surcharging of the upstream pipes on the station site, and we prefer to leave the design as proposed.

5. The soil borings indicate that groundwater is approximately two (2) to three (3) feet below existing grade. The project includes an underground stormwater management system that extends down to approximately six (6) feet below finished grade. Therefore, the bottom of the system will sit in groundwater. The detail provided indicates that this system will be wrapped in geotextile fabric/membrane. We assume this system is assumed to be watertight and not allow for groundwater to rise into the system. The Applicant should confirm whether the system will allow for groundwater to rise into the system. If so, this will impact the volume of the system. If the intent is for this system to be watertight, the detail should be revised to include an impervious membrane around the system

Yes, the bottom of the system will be in groundwater and the system will be lined to be watertight. The detail has been revised to include a watertight membrane around the system.



6. We recommend that the Applicant review the locations of SDCB 108 and DCB 9, as well as SDCB 11 and SDCB 12, as there may be some redundancy in the design as shown and the number of structures could be reduced.

The catch basin layout is proposed to provide inlet capacity for the larger design storms. As such, we propose to retain the catch basins as originally proposed.

7. It appears that WQS 119 is located downstream of the Underground Stormwater Management System. We recommend that this treatment be provided upstream of the system to serve as pretreatment and reduce sediment transport into the system.

The plans have been revised to move the water quality unit to a location upstream of the detention system. The diameter of the unit was increased by 1-foot based on this change to accommodate the piping configuration.

8. Based on the header pipe configuration on Sheet GD-300, it appears that stormwater could bypass the Underground Stormwater Management System. The system configuration on Sheet GD-300 is not consistent with the system detail on Sheet SD-307. Based on the detail, we assume the intent is to route stormwater collected by the closed drainage system through the underground system with the longest flow path possible. The detail - and plan - should be revised to be consistent.

Your understanding of the intent is correct. The detail has been revised for consistency and clarification.

9. We recommend that all materials include references to Massachusetts Highway Specifications.

The SCR project will be constructed under per MBTA specifications, which are similar to Massachusetts Highway (MHD) Specifications and in many ways but are not identical. A reference to MHD specifications is therefore not applicable in this instance.

10. We recommend that erosion controls be established along the western portion of the site along the railroad tracks.

The site preparation plan has been updated to indicate an interim erosion control line along the station site's border with the railroad right of way. The contractor will need to coordinate the placement of this line based on the sequence of construction activities on the station site and the adjacent track right of way.

11. The Operations and Maintenance Plan describes street sweeping. The Total Suspended Solids calculations do not account for street sweeping. If street sweeping is part of the Operations and Maintenance protocol, TSS removal will be better than shown in the stormwater management report. If street sweeping is not proposed, it should be removed from the Operations and Maintenance Report.



Street sweeping is proposed at least annually, which will help with source control but will not be counted towards the TSS removal calculation. The O&M plan has been updated accordingly to include annual sweeping.

12. Flows to the west towards the railroad tracks are shown to decrease in the Stormwater Report. However, there is a point discharge from the site towards abutting properties. We are concerned that this concentrated discharge may negatively impact abutting properties and recommend the project mitigate this discharge as much as possible.

The outfall to the west of the railroad tracks will discharge to the reconstructed stone-lined track-side swale, which was approved by the Commission in the Order of Conditions under DEP File 049-0805. This swale is sized to convey runoff from the tributary area without impact to the westerly properties. It is located lower than the adjacent properties to the west.

Sincerely,

Vanasse Hangen Brustlin, Inc.

A handwritten signature in blue ink that reads "Karen Staffier".

Karen Staffier, PE, LEED AP, ENV SP

Senior Project Manager
KarenStaffier@vhb.com

Enclosures:

Revised Plan Sheets dated 08/06/2019

Cover Sheet

SD-307 Site Details 7

SP-300 Site Preparation Plan

GD-300 Overall Grading and Utility Plan

Revised page #52 of the Stormwater Management Report Operations and Maintenance Plan

cc.

Lars Carlson, VHB

Ken Caputo, VHB

Jean Fox, MassDOT

Holly Palmgren, MBTA