Nitsch Engineering

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October 16, 2017

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

RE: Nitsch Project #9972
Wamsutta Layover Facility
New Bedford, MA

Dear Mr. Dixon:

This letter is in regard to the proposed South Coast Rail Layover Facility located off Wamsutta Street in New Bedford, Massachusetts. Nitsch Engineering has reviewed the following documents for compliance with the Massachusetts Department of Environmental Protection (MassDEP) Stormwater Management Standards:

- Plans entitled, "South Coast Rail, Wamsutta Layover, Notice of Intent (NOI) Plans, Track and Facility Infrastructure," prepared by the VHB/HNTB Team, dated September 7, 2017; and

- Notice of Intent (NOI) entitled, "Notice of Intent – Wamsutta Layover," prepared by the VHB/HNTB Team, including a stormwater report, dated September 7, 2017.

This project includes the construction of a Layover Facility off Wamsutta Street designed as part of the South Coast Rail Project. The project is located on a previously developed site that is located in close proximity to New Bedford Harbor. Below are our comments on the proposed project regarding stormwater management only:

1. The site is a redevelopment site. Therefore, the project is required to meet the Massachusetts Stormwater Management Standards to the maximum extent practicable.
2. The projects stormwater management system proposes to discharge directly to the municipal stormwater system in Wamsutta Street. The municipal system appears to discharge to the wetlands system on site. However, the submitted plans do not include invert information so we cannot verify that occurs. We recommend that the applicant verify that the municipal drainage system discharges to the wetlands system on site and/or provide invert information for the municipal drainage system.
3. The applicant contends that the wetlands system on site is subject to tidal influence, which precludes the project from meeting Stormwater Management Standard 2 regarding peak rate attenuation. The wetlands system discharges to a culvert that travels beneath existing railroad tracks and Herman Melville Boulevard before discharging to a sizeable channel that ultimately discharges to the Acushnet River. Therefore, the project's discharge is not directly to an unprotected coastal area. The discharge to the Acushnet River is north of the Hurricane Barrier as well as Popes Island, which provides protection to the discharge area. The Stormwater Management Standards state that Standard 2 may be waived for projects that discharge to land subject to coastal storm flowage as described in the Wetlands Protection Act (WPA). The WPA describes land subject to coastal storm flowage, as "land subject to any inundation caused by coastal storms up to and including the 100-year storm, surge of record or storm of record, whichever is greater." The Federal Emergency Management Agency (FEMA) Map submitted with the application indicates that the area of the proposed project lies within the 500-year floodplain (.2% annual chance flood) and areas protected by levees from 1% annual chance flood. We feel the applicant should provide additional documentation that the project discharges to land subject to coastal storm flowage, and is therefore exempt from Standard 2. If the project is not exempt from Standard 2, hydrologic calculations will need to be prepared to demonstrate compliance with Standard 2.

4. The proposed project appears to be increasing the amount of impervious surface on site. This would result in an increase in flows from the site and into the municipal system. The project is proposing a 24-inch reinforced concrete pipe to connect to the municipal system. There is an existing 24-inch diameter pipe downstream of the proposed connection. The applicant should quantify the increase in flows and also verify that the existing municipal stormwater piping in Wamsutta Street can accommodate the flow from the project, as well as the existing flow in the Wamsutta Street municipal system.
5. The applicant has not provided pipe sizing calculations for the proposed stormwater management system on site. We recommend that calculations be provided to verify that the system is sized appropriately, as well as the system downstream of the connection point as described above.
6. The proposed project includes catch basin to catch basin connections along the drain lines between the tracks. Typically, catch basin to manhole connections are installed to prevent sediments collected in the catch basin sumps from being re-suspended.
7. The applicant states that the proposed project is located on a site that is capped to isolate contaminated soils, precluding the project from providing groundwater recharge. Assuming the site is capped, we agree with that approach.
8. The proposed project includes a Water Quality Structure that will treat all of the stormwater generated by the proposed project. Stormwater calculations were provided that show a Stormceptor 4800 unit for water quality unit 1, and a Stormceptor 450i unit for water quality unit 3. The proposed plans show details that are effectively the same units described in the calculations.
9. The stormwater management report includes descriptions of erosion and sedimentation control measures, including catch basin protection, construction entrance/exit, diversion channels, etc. The grading plan shows a filter tube for erosion control only along the perimeter of disturbance generally within the buffer zone only. We recommend that the additional erosion controls, such as a construction exit, catch basin protection, etc., be shown on the plans as well.
10. The grading and utility plan 1 does not show grading on the plans. This plan includes the work to be performed in the buffer zone. We recommend grading be shown on this plan.
11. A grass channel is described as a Low Impact Development measure in the stormwater checklist. There is no detail for the grass channel or location shown on the plans.

If you have any questions, please call us at 617-338-0063.

Very truly yours,

Nitsch Engineering, Inc.

Scott D. Turner, PE, AICP, LEED AP ND
Director of Planning

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