

## DPI Response to Nitsch Comment #3

**Sarah Porter**

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**From:** Shawn Syde  
**Sent:** Tuesday, August 6, 2019 8:02 AM  
**To:** Sarah Porter  
**Cc:** Jamie Ponte; Stephanie Crampton  
**Subject:** South Coast Rail - Nitsch Engineering Comments

Hi Sarah,

I received a request from VHB to provide input on a comment received on their Notice of Intent submittal for the proposed South Coast Rail – Phase 1 North New Bedford Station Project. The comment, received in a letter dated August 1, 2019 from Nitsch Engineering, is as follows:

*The Stormwater Report describes that there will be some surcharging of the stormwater piping from the City's 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 flow from the project.*

The Department of Public Infrastructure (DPI) has been coordinating closely with VHB throughout the planning and design phase of the South Coast Rail station and track improvements work. The work proposed at the North New Bedford Station is proposing to convey stormwater runoff easterly and westerly on the site. The flow that will be conveyed easterly will ultimately discharge to a 64" x 46.5" stormdrain within Church Street. This flow is conveyed to an outfall in the Acushnet River via a large drain in Earle Street. The original design proposed by VHB included use of a grass area and the station parking lot as storage of flow during larger storm events and conveying much of that flow to the City's system. This was due in part to existing site conditions and a lack of storage and outlet capacity. Given that this was not an ideal design, the DPI and VHB worked together to develop an approach to reduce peak stormwater flows to the City's system to the extent practicable and mitigate flooding. This was achieved through a combination of additional on-site underground storage, modification of the design to accommodate larger outlet pipes to the City's system, and the use of green infrastructure in the area adjacent to the City's right of way. The remaining surcharging noted by Nitsch is due in part to the approach used by VHB to analyze the piping network where the City's downstream system was presumed to be flowing full – basically under a surcharged condition. This approach, although conservative as it results in slightly oversized on-site drainage piping to reduce pipe surcharging, is the correct approach for design. This revised approach is consistent with the submitted design by VHB to the Commission. Given that the design now reduces peak flow to the City's system over existing conditions, concerns about potential flooding of the system have been mitigated. As such, the DPI is acceptable with the proposed approach by VHB.

If you have any questions, please let me know.

Thanks,

Shawn



**Shawn T. Syde, P.E.**

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