



- Land Use Planning
- Civil Engineering
- Construction Permitting

May 24, 2016

Mr. John G. Radcliffe  
Chairman  
New Bedford Conservation Commission  
New Bedford City Hall  
133 William Street  
New Bedford, MA 02744

RE: **Response to Review Comments Dated 5/3/16**  
**Northside Farm Subdivision**  
**Acushnet Avenue**  
**New Bedford, MA 02745**  
**DEP No. SE 049-0736**

Dear Chairman Radcliffe:

The purpose of this correspondence is to respond to the review comments submitted for the project at Northside Farm by Mr. Scott Turner, P.E. from Nitsch Engineering, Inc. dated 5/3/16.

The following response and brief description of each major comment is offered for your review and consideration:

**Comments by Nitsch Engineering, Submitted to New Bedford Conservation Commission, dated 5/3/16**

*1. The storage volume and infiltration rate for the existing Ponds RC and Infiltration System 1 should be modeled consistently in the existing and proposed condition. The volume should be based on the as-built condition, and the infiltration rate should be based on the soil layer directly underlying the system as shown in Test Pit 1A (medium sand). We understand that the outlet for Infiltration System 1 will be modified as part of the proposed project, which is reflected in the proposed condition model.*

The infiltration rate for the existing conditions has been revised based on the underlying soils. The revised stormwater summary is shown below:

**Design Control Point No. 1 (Acushnet Avenue)**

Storm	Existing Conditions (DCP 1)	Post-Construction (DCP 1)
2-Year-24Hour (3.20")	0.08 cfs	0.08 cfs
10-Year-24Hour (4.60")	0.17 cfs	3.23 cfs
25-Year-24Hour (5.60")	0.24 cfs	5.74 cfs
100-Year-24Hour (6.80")	0.32 cfs	9.35 cfs

**Cavanaro Consulting, Inc.**

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**Design Control Point No. 2 (Arnoff Street)**

<b>Storm</b>	<b>Existing Conditions (DCP 2)</b>	<b>Post-Construction (DCP 2)</b>
2–Year-24Hour (3.20")	3.72 cfs	1.77 cfs
10–Year-24Hour (4.60")	7.72 cfs	3.28 cfs
25–Year-24Hour (5.60")	10.84 cfs	4.43 cfs
100–Year-24Hour (6.80")	14.74 cfs	5.86 cfs

**Design Control Point No. 3 (Eastern portion -Wetlands)**

<b>Storm</b>	<b>Existing Conditions (DCP 3)</b>	<b>Post-Construction (DCP 3)</b>
2–Year-24Hour (3.20")	7.93 cfs	4.36 cfs
10–Year-24Hour (4.60")	16.42 cfs	14.82 cfs
25–Year-24Hour (5.60")	23.06 cfs	22.04 cfs
100–Year-24Hour (6.80")	31.37 cfs	27.15 cfs

**Total Combined Runoff (DCP 1, DCP 2 and DCP3)**

<b>Storm</b>	<b>Existing Conditions</b>	<b>Post-Construction</b>
2–Year-24Hour (3.20")	11.73 cfs	6.21 cfs
10–Year-24Hour (4.60")	24.31 cfs	21.33 cfs
25–Year-24Hour (5.60")	34.14 cfs	32.21 cfs
100–Year-24Hour (6.80")	46.43 cfs	42.36 cfs

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2. *The detail for the Infiltration Pond indicates a perforated pipe to be located at the bottom of the basin, which would effectively drain the basin. It is unclear what the design intent is for the pipe, since it is not included in the outlet controls modeled in HydroCAD. Given the highly infiltrative soils underlying the pond, we recommend that the perforated pipe be removed from the basin and that the basin be seeded with a conservation seed mix.*

The perforated pipe at the bottom of infiltration pond No. 3 has been removed.

3. *We understand that the Applicant will review the proposed project and the increase in run-off being discharged to the municipal drainage system with DPI. We recommend that the outcome of this correspondence be conveyed to the Conservation Commission.*

Any correspondence with the Department of Infrastructure (DPI) will be forwarded to the Conservation Commission.

4. *Inlet protection for existing and proposed catch basins should be included on the plan and detail sheets and in the maintenance section of the Construction Period Erosion, Sedimentation, and Pollution Prevention Plan.*

A detail for the inlet protection of the catch basins is on detail sheet DTIV and a note for the placement of the inlet protection has been added to sheet GD. The Construction operation and maintenance plan has been updated to include the inlet protection for existing and proposed catch basins.

5. *We understand that DPI will be responsible for maintenance of all proposed drainage system components. It is unclear if this includes the existing Infiltration System 1, which is shared by the bank and the proposed subdivision. As previously noted, we recommend that the Conservation Commission consider adding a condition to the project, if approved, to require the submittal of the inspection and maintenance forms for the stormwater BMPs to the Conservation Commission.*

In a typical subdivision the City (DPI) would be responsible for the operation and maintenance of all proposed drainage system components that service a public way. Since a portion of adjacent Bank runoff contributes to infiltration system No.1 that will have to be coordinated with the city. If the stormwater systems are to be maintained by the City, it can be a condition that we will produce inspection and maintenance forms for all Stormwater BMPs. A sample of the inspection form is attached.

6. *Previously, we recommended reducing the slopes of the proposed Infiltration Pond to 3:1. The Applicant indicated that some of the slopes had to remain steeper than 3:1 but would be stabilized with riprap. The extent of the riprap should be indicated on the plan.*

The extent of the rip rap has been shown on the grading and drainage plan and a note has been added to detail sheet DTI.

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We appreciate Mr. Turner's thoughtful review and look forward to presenting this project to you and the Board at our scheduled hearing on 6/7/16.

Sincerely,

**CAVANARO CONSULTING, INC.**



Brendan Sullivan, P.E., P.L.S.  
Project Manager

Enclosure

Cc: T. Tedeschi  
S. Turner  
C. Mulford  
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