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February 17, 2017

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

RE: Nitsch Project #9972 Whalers Woods Church Street New Bedford, MA

Dear Mr. Dixon:

This letter is in regards to the Whalers Woods project located off Church Street in New Bedford, Massachusetts. Nitsch Engineering has reviewed the following additional items submitted as part of the proposed project:

- Plans entitled "As-Built, Whalers Woods Estates, New Bedford, Massachusetts," prepared by Prime Engineering, dated September 16, 2015; and
- Mark-ups of design plans dated December 3, 2003 showing detention basin design volumes compared with as-built design volumes.

We do not have copies of the approved drainage calculations for this project or the approved plans. We have the following comments based on the information described above.

- 1. The detention pond volumes shown on the marked-up design plans appear to indicate that the as-built detention pond volumes generally match the volumes shown on the design plans. However, we cannot confirm that they match because we do not have copies of the approved calculations.
- 2. The as-built plans for pond 3 do not have any contour labels. Therefore, we cannot verify the elevations match. There are no labels regarding outlet invert elevations in detention pond 3. Therefore, we cannot verify the pond would work as designed.
- 3. The as-built plans do not show the closed drainage system rim and invert elevations.
- 4. The swale and headwall located to the west of Mate Drive does not show invert information or contour elevations. Also, the rip-rap shown on the design plans at the discharge from the headwall is not shown on the as-built plans.
- 5. The design plans show the top of berm elevation of pond 4 as 88.5. Presumably, this elevation is shown on the plans to ensure that adequate freeboard is provided during the 100-year storm. The asbuilt plans show the top of berm elevation as 88. It is unclear whether the top of the berm has been built to elevation 88.5. Also, there is no information provided regarding the elevations and discharge controls of the outlet control structure. The outlet control structure details should be provided.
- 6. The design plans show the top of berm elevation of pond 2 as 88.6. Presumably, this elevation is shown on the plans to ensure that adequate freeboard is provided during the 100-year storm. Spot elevations on the as-built plans are less than 88.6 and vary. The Applicant should verify the top of berm elevations. Also, there is no information provided regarding the elevations and discharge controls of the outlet control structure. The outlet control structure details should be provided.
- 7. The design plans show the top of berm elevation of pond 5 as 88.4. It appears that there is a substantial amount of the berm that is less than elevation 84. The elevations and descriptions on the as-built plans may be erroneous. The weir at elevation 86.05 should be 2 feet long.
- 8. The design plans show a cross-culvert, depression, and headwalls on Watson Way just south of the intersection of Watson Way and Mate Drive. This culvert, depression, and associated headwalls do not appear on the as-built plans.

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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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