

June 30, 2014

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

RE: Nitsch Project #9972  
Downey Street  
Review Letter  
New Bedford, MA

Dear Mr. Radcliffe:

This letter is in regard to the proposed Claremont Hangar project located on Downey Street at the New Bedford Regional Airport in New Bedford, Massachusetts. Nitsch Engineering has reviewed the following revised items submitted as part of the proposed project:

- Plan set entitled, "Site Plan, Claremont Hanger, Downey Street, Assessors Map 123-Lot 3, New Bedford, MA," prepared by Thompson Farland, revised June 20, 2014;
- Response Letter to the New Bedford Conservation Commission, prepared by Thompson Farland, dated June 20, 2014;
- Revised stormwater documentation, prepared by Thompson Farland, including:
  - Pre-Development HydroCAD Report (13894PRE), revised June 20, 2014;
  - Post-Development HydroCAD Report (13894POST), revised June 20, 2014; and
- "Long Term Operation and Maintenance Plan, Site Plan, Downey Street, New Bedford, MA", prepared by Thompson Farland, revised through June 20, 2014.

The design of the stormwater management system has been revised in response to the comment letter issued by Nitsch Engineering on June 16, 2014. Nitsch Engineering's current comments are provided below:

1. The revised plans include two (2) bioretention basins located adjacent to the proposed parking lot and driveway.
  - a. A pea stone filter has been added to the design of the bioretention basins to provide pre-treatment for the small amount of impervious area that flows to the bioretention basins. We recommend a detail of the filter be incorporated into the details.
  - b. Soil testing has not been performed onsite. Therefore, the elevation of seasonal high groundwater in this area is unknown. The bottom of the bioretention basins are shown at elevation 59 and 60. The wetlands flags located to the south of the project are also located at elevations 59 and 60. In order to meet the Massachusetts Department of Environmental Protection (MassDEP) Stormwater Standards, there should be 2 feet of separation between seasonal high groundwater and the bottom of the infiltration facilities. It is our opinion that soils test should be performed within the footprints of the proposed bioretention basins to confirm soil texture, permeability rate, and estimated seasonal high groundwater elevation. If the seasonal high groundwater elevation is too high to provide recharge, the bioretention basins could be lined so that water quality treatment can

still be provided. Documentation should be provided regarding how the proposed project meets the MassDEP Stormwater Standards regarding groundwater infiltration.

- c. It is standard engineering practice to provide soil testing including seasonal high groundwater elevations on sites where infiltrative drainage has been proposed. This has historically been the request of the Commission.
2. Based on the existing topography, it appears that the contributing drainage areas should include offsite area to the north and west. Due to the fact that this area will flow into the site and contribute flow to the proposed stormwater management system, they should be accounted for in the design calculations, including sizing calculations for the proposed water quality structures and the closed drainage system.
3. Proprietary water quality structure sizing calculations that are consistent with the current MassDEP-approved methodology should be provided for the proposed Contech water quality inlets to confirm that they will adequately treat the water quality flow rate. Due to the fact that these structures are the sole treatment device for the proposed paved surfaces, Nitsch Engineering recommends that the structures be designed to remove 80% of total suspended solids (TSS) for the water quality flow rate.
4. The Utilities and Grading Plan (Sheet 4 of 6) appear to show a portion of the proposed drainage system connecting to an existing catch basin. Catch basin to catch basin connections are not a preferred engineering practice. Nitsch Engineering recommends that the system be reconfigured to provide catch basin to manhole connections. We are not implying that the applicant reconstruct the airports drainage system. The proposed project could connect with a "wye" connection or construct a manhole around the existing drain line to connect to the existing drainage system.
5. We understand the Commission will condition any issued Order of Conditions to prohibit the fueling of planes or other vehicles outside of the proposed building.

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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