

CIVIL ENGINEERING • LAND SURVEYING ENVIRONMENTAL ASSESSMENT

February 25, 2014

JN 1931-01-01

New Bedford Conservation Commission City Hall 133 William Street New Bedford, MA 02740

RE: CARDINAL PLACE SUBDIVISION

Dear Commission Members,

Enclosed are a set of plans which have been revised in response to comments from various City Departments and the February 14th letter from Nitsch Engineering. Our responses to the Nitsch comments are as follows:

- 1. A seventh lot has not been added. The lot already exists and has previously been developed with two existing buildings. The plans merely provide improved frontage to the existing lot. It is intended that the two structures be razed and replaced with a single dwelling with less impervious area. The volume and rate of runoff will thus be less than under existing conditions. In addition, it is proposed to provide infiltrators for the roof runoff in order to infiltrate the 100 year storm runoff, thereby further decreasing the existing rate and volume of runoff. Since the runoff sheds northerly and the peak rate and volume of runoff will be less, drainage calculations have not been included.
- 2. The diameter of the cul-de-sac was reduced, but the road length was increased resulting in an increase in impervious area. In our November 2013 drainage calculations there was 16,727 square feet of impervious area. In the February calculations there is 17,508 square feet which is a 781 square foot increase.
- 3. A detail of the drain near the intersection with Swallow Street has been added to replace the trench drain. This is acceptable to DPI.
- 4. No response necessary.
- 5. The DEP stormwater regulations require that the first one inch depth of runoff be treated, which the design accomplishes. The runoff will not "flow back from the leach pit into the Stormceptor during large storms" so there will no resuspension of sediment. We discussed Nitsch's suggestion of using a Stormceptor designed for submerged conditions with Stormceptor technical staff and they stated that was a bad idea and that it would have the opposite of the intended effect. The submerged Stormceptor insert should only be used when it is in a submerged condition under zero flow conditions.

The standard Stormceptor that Prime is specifying captures the first flush and allows the larger storm flows to go over the top of the weir and flow through. The



Stormceptor technical staff stated that, if they provided a higher weir, it would force the higher flows to pass down into the Stormceptor base and flush out the sediment that had been captured. They are strongly opposed to Nitsch's concept.

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- 6. The infiltrators at each home will be sized to infiltrate the 100 year storm.
- 7. A small infiltration basin is proposed to be constructed 25 feet away from the wetlands. The only work proposed within the 25 foot no disturb zone is a vegetated overflow swale from the infiltration basin. This will not negatively impact the wetlands.

We trust all issues have been addressed and look forward to your approval. We hope Nitsch will not wait until the day of your next hearing to respond.

Sincerely,

PRIME ENGINEERING, INC.

Richard J. Rheaume, P.E. LSP

Chief Engineer

enc.

Cc: Nitsch Engineering

New Bedford Planning Board



February 26, 2014

JN 1931-01-01

New Bedford Planning Board 133 William Street New Bedford, MA 02740

RE: CARDINAL PLACE SUBDIVISION

Dear Board Members,

Enclosed are plans that have been revised in response to input from the Conservation Commission, their agent, their peer review consultant, DPI, City Planner and Planning Board members. The several changes are as follows:

- 1. The trench drain has been replaced with special gutter inlets at the request of DPI;
- 2. There is a minor revision to drain easement 1-A;
- The northern most lot has been renumbered to Lot 7;

We request that the name be allowed to remain "Ava's Way." That name was promised to the proponents five year old daughter, Ava. While it is true that several streets are named after birds, most are not. The nearby streets include Pequot Street, Cherokee Street, Sassaquin Street, June Street, Tobey Street, May Street, Ivers Street, Meadow Street, Crescent Street, Thorndike Street, Leroy Street, Oak Avenue, Park Street, Jordan Street, Morton Street, Spruce Street and Pine Street, none of which are birds.

We believe that the revised plans and the above responses answer all questions raised. We look forward to your favorable review.

Sincerely,

PRIME ENGINEERING, INC.

Richard J. Rheaume, P.E., LSP

Chief Engineer

enc.

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