***Charles L. Rowley, PE, PLS***

Consulting Engineer and Land Surveyor

## 5 Carver Road Tel: 508-295-1881

**PO Box 9 Cell: 508-295-0545**

# West Wareham, MA 02576 E-mail: [crsr63@verizon.net](mailto:crsr63@verizon.net)

April 22, 2022

Town of Wareham Planning Board

Memorial Town Hall

54 Marion Road

Wareham, MA 02571 Re: Bay Pointe Phase IV

Site Plan Review

Attention: Michael King, Chairman

Dear Chairman King:

I have received a set of site plans for Phase IV, so-called, for Bay Pointe Club, LLC. The plans are dated April 6, 2022 and consist of 18 sheets. The review is summarized to include those technical issues that relate directly to the plan set prepared by Principe Engineering dated April 6, 2022 which are the result of the previous review dated March 31, 2022.

A supplementary section has been included at the end of the review that deals with the overall design of the project as it relates to the Zoning By-Law, specifically for the Conference Recreational district and Article 15, Site Plan Review.

Plans and written documents received

Sheet 3 of 18

1. Distinguish between Cape Cod Berm and pavers for Buildings, A, B, and C. The same line work is designated for both.
2. As previously requested, label the width of each island for Buildings C, D, E and F.

Sheet 4 of 18

1. As previously requested, identify and show the location for each type of headwall to be used at pipe ends. Unidentified line work on landscape plans are not acceptable substitutes for the details required.
2. Retaining walls of undetermined height have now been included between Buildings E and F and the drainage area. It is assumed that 4’ high picket fences such as shown on Sheet 18 apply to both of these new walls. Please clarify.
3. The notation on Sheet 5 relative to the crossing point for drainage and water should be placed on Sheet 4 as well for clarity.

Sheets 6 through 10 inclusive

1. These sheets are dedicated to landscape features around each building.
2. As previously requested, the locations of multiple downspouts are now shown as unidentified black dots for each building. A detail of a typical downspout is shown on Sheet 18 of the plan set.
3. The location and type of downspout should be cause for concern being so close to the foundation walls. It is better to carry downspouts away from foundations to prevent weeping of runoff to the interior of the walls. Bedding for downspouts as shown consists of crushed stone.
4. As a result of previous comments related to roof runoff all landscape features on the garage sides of Buildings A, B, and C have been removed.

Re: Bay Pointe Phase IV

Site Plan Review

Page two

1. Landscape features within the layout lines of Bay Pointe Drive are in conflict with the intended purpose of the use of the layout for utilities and other street type features for their entire length and width.

The full width of streets as laid out under the provisions of Chapter 41, Section 81W are dedicated for access and egress and for the installation of utilities and not for private development or landscaping.

1. Landscape features for private property should be contained within the limits of the lots. This applies to the Pro-Shop landscaping and in front of Buildings A and B.
2. Details for a roof drain that is on three sides of the Pro Shop were previously requested but are not shown. No proposed elevations are shown that would indicate that the discharge point will not be flooded.

Sheet 14 of 18

1. As previously requested, 12” long hoods for the pipe outlets for the double grated catch basin are not shown.

Sheet 17 of 18

1. It is the applicant’s choice to construct an expensive reinforced cement concrete retaining wall to the rear of Building D. However, there appears to be substantial room to do a much less expensive alternative.

Pump Station Summary

In the Principe Engineering reply to the March 31, 2022 review it was noted that details of the pump station connection are shown on separately attached plans for Phases II/III. No such plans have been submitted as part of the site plan application for this project.

Any changes to the plan for Phases II/III, if they are to be considered for this project should be a part of the plan set. It has yet to be determined by the Planning Board if this is a minor modification.

In reviewing the information submitted by the applicant for the sewer pumps, it appears that positive displacement pumps are intended for high head conditions and low discharge rates. If it takes 3 pumps working in tandem to discharge 37 gallons per minute, using pumps with greater than one horsepower might be more efficient. In order to establish that these pumps work sufficient to handle 15,620 gallons per day as identified by the letter to Stonestreet by Principe Engineering dated March 21, 2022 the following information is requested.

* The peak flow rate, the design flow rate and when it occurs on a daily basis,
* The storage capacity of the 5-foot diameter wet well that contains the four pumps,
* The time it takes to empty the wet well and the number of anticipated cycles per day for the pump system to operate.

No further comments can be made for the sewer facilities for this project can be made until the appropriate drawings for the pump station changes are submitted for review. In addition to the information requested above, this includes but is not limited to the full size and dimensioning of the new receiving well near the existing Phase II pump station, connecting plumbing and other details and how it is to perform to capture and control the intended flow.

Re: Bay Pointe Phase IV

Site Plan Review

Page three

Section 2, General Design Considerations and the Zoning By-Law

The following issues, having been raised over the several months that the public hearing process has been going on, need to be resolved both for the applicant’s benefit and that of the Planning Board.

1. Status of Lot 1004B as it pertains to compliance with the Zoning By-Law
2. Landscape and driveway locations that extend beyond the lot lines,
3. Accessible routes within parking areas and sidewalks.

While having been mentioned within previous review documents, these items have not been discussed within the public hearing process. The Board is encouraged to review the previous reports submitted for the relevant concerns and to discuss each issue with the applicant.

I am prepared to provide information that may assist the Board at the next public hearing of May 2, 2022. Please feel free to contact me if you have any questions.

Very truly yours,

Charles L. Rowley

Charles L. Rowley, PE, PLS

CC Board Members

Ken Buckland, Town Planner

Aaron Shaheen, Asst. Planner

Tim Fay, Stonestreet Corp.

Tom Principe, PE

Jim Munise, BOS Liaison