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March 31, 2022

Town of Wareham Planning Board

Memorial Town Hall

54 Marion Road

Wareham, MA 02571 Re: Bay Pointe Club, LLC

Review of Plans of March 7, 2022

Attention: Michael King, Chairman

Dear Chairman King:

I have reviewed the set of latest plans for Bay Pointe, Phase IV by Principe Engineering Co. dated March 7, 2022 together with a letter that specifies certain information with regard to a new pump station. The following comments are with respect to these two documents and with a summary of issues that have been submitted in previous reviews for Phase IV but which are in need of resolution by the Planning Board.

Plans

Sheet 3 of 18

1. No handicap parking or accessible routes have been provided for Buildings, A, B, C, D or G. Accessible spaces may not be required for these buildings and that finding is left to the Building Commissioner for a determination. However, accessible routes are required between each building and parking area and would include handicap ramps placed at each building and which would not be blocked by parked vehicles.
2. Specify the distance between islands of the Pro Shop Parking area.
3. There is a section near the Pro Shop building labeled as “Drop Off Area”. What are the two rectangles shown on the plan?
4. Cape Cod berms should be extended to enclose grassed areas for Buildings A, B, and C. The radii are missing for two small islands located in the cluster of garage spaces.
5. Label the full width of each island in the parking areas for Buildings C, D, E and F.
6. Outside parking for Buildings C, D, E. F and G should have overall parking limits as follows, not including additional handicap spaces if required and the appropriate handicap ramps from parking spaces to sidewalks.
7. Bldg. C: Required length: 181 feet. Scales 177’ face of curb to face of curb.
8. Bldg. D: Required length: 143 feet. Scales 139 feet face of curb to face of curb.
9. Bldg. E: Required length: 167 feet. Scales 164 feet face of curb to face of curb.
10. Bldg. F: Required length: 167 feet. Scales 164 feet face of curb to face of curb.
11. Bldg. G: Required length: 128 feet. Scales 121 feet face of curb to face of curb.

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1. For Buildings A and B, at least one handicap ramp should be provided for each section of parking. Each ramp space should be separate from adjacent parking spaces.
2. Pro Shop Parking
3. Parking for the Pro Shop should have spaces dimensioned from face of curb to face of curb for each aisle.
4. Label the radius between spaces 76 and 77 to be 29 feet. Dimension the outside radius to the left of the drop off area.
5. Label the width of the islands that separate parking spaces.
6. Total width of parking should be 183 feet. The scaled width is 179 feet.
7. The width of all proposed sidewalks should be labeled.

Sheet 4 of 18

1. CB-6 has a rim grade of 33.91 and an invert grade for the 18” pipe of 31.16. This does not give enough space between the top of the casting and the inside surface of the structure for the pipe to be installed. The pipe could be adjusted with a lower outlet grade to provide the necessary clearance and still meet the invert at the far end.
2. The location for each type of headwall now shown on the details sheets 14 and 15 should be noted. It is assumed that no flared ends will be required even though the detail remains on the plans.
3. The top of slope for the sediment forebay behind Buildings E and F continues to be only three (3) feet from the two closest building units. It is recommended that the top of slope be reshaped to allow for a more flat living area at least for these locations, if not for all units having walkout spaces in that area.
4. The grassed drainage swale that is located adjacent to the retaining wall behind Building G is near the same grade as the sidewalk that abuts the Pro Shop parking. It is recommended that the grade be adjusted to allow for more separation to the sidewalk to avoid flooding or freezing surfaces. The swale could be eliminated altogether by extending the drainage line from CB-A to the sediment forebay.
5. The grades for the Pro Shop parking include two handicap access ramps leading to the Pro Shop. Runoff from the parking area should be intercepted before reaching the ramps or the grading should be adjusted so that runoff will not exit or flood the ramp areas. This is also a requirement under 521 CMR 21.5.
6. As has been noted previously there is a conflict between the elevation of the drainage line from CB-4 to the sediment forebay and the proposed water line as it crosses approximately 20 feet from CB-4. A note should be placed on plan sheets 4 and 5 that these pipes do not have proper separation clearance assuming that the water main is constructed with the customary 4.5 feet to 5 feet of cover.
7. Although not mentioned in earlier reviews, the detail for Cape Cod berms shows that they are five (5) inches high from front to back and with a one (1) inch lip at the gutter line. A typical Cape Cod berm is made flush with the gutter grade and with a rise of not more than 3” from front to back to avoid damage from snow plow blades. Width of the berm remains at twelve (12) inches minimum.
8. No labels or notations have been added to show where roof runoff will be directed.

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1. Information for sewer manholes 3B and C4 is incomplete. Also there needs to be a one (1) inch drop in all sewer manholes from invert in to invert out within the channel slope.
2. Water mains should be shown with the appropriate size of tees and gate valves at all intersecting pipes.

Sheet 6 of 18, Landscape Plan

1. Article 10 of the Zoning By-Law applies to this project. There needs to be a 10 vegetated buffer between Building E and the property line that separates Greenlinks Condominium on Lot 1005. Ref: Section 1042.
2. Section 1061.2 requires the implementation of one or more of the landscape features between the parking lot and the public way of Bay Pointe Drive. The site plan should limit its activity to within the boundaries of the lot except for where grade changes might require sloping to accommodate entrances or exits. Locating the parking aisle within the public right of way does not meet this requirement.
3. The landscaping between the Pro Shop parking and Bay Pointe Drive does not meet the requirements of Section 1061.2 along its northerly line. One of two alternatives would make the landscaping compliant:
4. Shift the parking away from the layout line sufficient to meet the requirement or,
5. Relocate the southerly layout line of Bay Pointe Drive to match more nearly the eventual pavement location of Bay Pointe Drive as it passes the parking lot.
6. There appears to be a perimeter drain around the Pro Shop building. Is this existing or proposed? If proposed, there are no details of it.
7. There are four areas on the plan of heavy cross hatching that are not labeled. If they are intended to represent the rip rap shown in the detail sheets for flared ends or headwalls they are not consistent. The spillway detail for the drainage basin does not show stone other than at the top. See the grading on Sheet 4.

Sheet 7 of 18

1. The plan is inconsistent with the linework on Sheet 3 that indicates all edging around the Pro Shop parking is concrete curb. Curb should be labeled.

Sheet 10 of 18

1. This sheet indicates that flat paver edging will be used between garages for Buildings A, B, and C. Pavers will be flush with the adjacent garage pavement. Label these areas to distinguish them from Cape Cod berms. Also indicate if they will contain roof downspouts and where they will be located. The narrow island for Building C is only three (3) feet in width but will drop 12 inches from side to side at the building. Containment may be difficult at this location.
2. There is concern for how proposed plantings within these islands will hold up over the long run especially if roof runoff is discharged over these same areas. If roof runoff was collected and diverted to the storm drainage system by pipe, this concern would be eliminated.

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1. Show the double grated catch basin with the cement concrete collar and twelve (12) inch depth of hood as noted in the detail for the four (4) foot catch basin.
2. A curb inlet is not recommended for a double grate since there will only be support on two sides of each casting. A double grate may not be necessary if the runoff is captured at other locations as well.

Sheet 17 of 18

1. It is recommended that an alternative to a retaining wall be considered for behind Building D. The proposed wall is 188 feet long with a maximum exposed height of not more than 4 feet over a very short length of wall. There appears to be more than enough room to reconfigure grades with a 2:1 or 3:1 slope, blend with existing conditions and still stay within the limits of work as shown on the plan.

Pump Station Summary

A letter from Principe Engineering to Tim Fay dated March 21, 2021 (2022?) was reviewed. The letter states that the new pump station for Phase IV would include 4 low pressure pumps discharging effluent through a 1-1/2” force main to the gravity sewer main of Phase II. The full location of this main has not been shown on the plans as far as it extends to a sewer manhole for discharge.

The explanation as to why four pumps are needed has not been fully explained. Only two pumps are designed for the Phase II pump station. In any event the four pumps need to be grinder pumps in accordance with Wareham Sewer Department requirements. This should be noted on the plans.

The additional flow from Phase IV will require an expansion of the holding capacity for the Phase II pump station. An eight (8) foot diameter equalization manhole has been suggested but no construction details have been presented.

A summary of the anticipated pumping cycles for each station would be helpful since most of the peak flow occurs between the hours of 7 AM and 8PM on a daily basis.

Unresolved Comments

There are four previous review letters that have been submitted to the Planning Board for consideration. The letter dates are November 30, 2021, January 10, 2022, February 7, 2022 and February 25, 2022. The following items mentioned in these reviews are either unresolved or have not been part of the general discussion of the project.

1. Overall density of Phase IV should be discussed and appropriate language inserted in such Special Permit modification the Board may approve. Phase IV does not match the density that was approved for Phases I, II and III by virtue of the number of units and the land area occupied by each phase.
2. The stormwater plan includes to sediment containment areas that are directly behind Buildings E and F. It has been suggested that these should be moved away from the buildings to allow for more usable space and to separate areas that could be breeding grounds for mosquitos away from the buildings. It has also been suggested that including subsurface infiltration for the stormwater system could reduce the amount of land area

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required for the sediment control and surface infiltration as shown on the plans. Both recommendations have been rejected.

1. The design of the pump station for Phase IV is incomplete. Details for connections to sanitary manholes and a new receiving well at the Phase II pump station have not been provided as asked for. The question of why four pumps in the Phase IV station has not been completely answered.
2. When it was discovered that the force main from the Bay Pointe Condominiums does not fall within the old lines of Cahoon Road but runs across the golf course, it was recommended that a plan be submitted for the file that would reference where the relocation will be done and how it will connect to the Phase II station. The plan should be submitted.
3. Roof runoff continues to be a concern as there has been no documented evidence as to where this runoff is collected or where it will be discharged. The only information that has been received is that the location would show on the architectural plans and that discharges would be in landscaped and planted areas.
4. The need for a revised purchase and sale agreement between the Town of Wareham and the applicant to account for the EDC property not having been part of the Special Permit for Phases I, II and III. The Principe response of February 25, 2022 states that “everything requested has been submitted to the Town Planner and Town Solicitor”. A revised P & S should be made part of the record for the project.
5. The Conference Recreational District requirements contained in Section 580.5.2 (a-d) of the Zoning By-law have not been fully satisfied.
6. The concerns raised as Items 6 and 7 above were mentioned as the first four items of my November 30, 2021 letter to the Planning Board. In a response letter from Principe Engineering dated December 30, 2021, each of these four items were noted as being “Under separate cover (Timothy Fay, Stonestreet)“. The Planning Board web site does not indicate that there are any responses of record for the Board to consider.

This concludes my review of the latest set of plans for Phase IV and the response letters received from Principe Engineering. 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, Wareham Town Planner

Aaron Shaheen, Asst. Planner

Timothy Fay, Stonestreet

Tom Principe, PE

Jim Munise, BOS Liaison to Planning Board