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RESPONSES TO WAREHAM ENGINEERING COMMENTS
FEBRUARY 8, 2022

Plans

Sheet 1 of 17

1. The Signature block should reference Site Plan Approval, not Definitive Plan Approval as shown.

RESPONSE: Signature block has been revised.

Sheet 2 of 17

1. Remove what appears to be the sidewalk from the sheet as this is only for existing conditions.

RESPONSE: Existing plan sheet has been revised.

Sheet 3 of 17

1. The plan continues to show visitor parking only for all parallel parking spaces that are along Bay Pointe Drive. It also shows visitor parking only for all spaces in front of Building C.

RESPONSE: The visitor spaces will not be designated at the site, with the assumption that visitors will be able to park adjacent to their intended destination.

2. The plan shows all parking spaces at 9' x 18' which is not in compliance with Article 9, Section 933.1 of the Zoning By-Law. A waiver for a reduction in parking space dimensions is noted on Sheet 1 of the plan set. A variance from the requirements of the Zoning By-Law cannot be granted by the Planning Board but by proper application only to the Board of Appeals.

RESPONSE: It is our understanding that the authority for granting this variance lies within the purview of the Planning Board.

3. Parking spaces are shown against concrete curb and with sidewalks directly abutting. This was pointed out in a previous review as being unacceptable because vehicle overhang would impede the full use of the sidewalk width. Either the walk should be separated from the end of the parking space or bumper stops should be installed in each parking space.

RESPONSE: The parking spaces provided are of sufficient size to not require vehicles to park extending over the sidewalk. Therefore, curb stops and/or a landscape separation are not necessary.

4. Sidewalks need to have curb cuts and/or ramps that are flush with the adjacent paved surfaces. See 521 CMR Architectural Access Board for specific requirements. Briefly these include a short ramp and landing area in most cases.
RESPONSE: Pursuant to M.G.L. c. 22, § 13A, the Architectural Access Board has issued regulations in order to make public buildings and facilities accessible to, functional for, and safe for use by persons with disabilities. These regulations, which are listed as Section 521 of the Code of Massachusetts Regulations, apply to all buildings and facilities in the Commonwealth that are open to members of the public. Therefore, this project does not need to have curb cuts and/or ramps shown for this private development.

5. The plans show that for most parking spaces they are backed up by vertical concrete curbs. But around planters there is a transition to Cape Cod Berm. A continuation of concrete curb is recommended for continuity.
RESPONSE: The plans previously showed and continue to show all curbing associated with the parking spaces to be surrounded by concrete curb (thick black line).

Sheet 4 of 17

1. Grading near the garages of Building B indicate that there is little to no pitch in pavement from garage floor to the gutter line. Pavement for the third garage from the right pitches toward the garage floor. CB-1 may not collect much of the surface runoff with the grading as is. These comments are based on interpolating between contours for intermediate spot grades within the paved areas.
RESPONSE: Grading plan sheet has been revised to add additional spot grades along the "gutter line" and increase surface pitch away from the Building B garages.

2. The grade at the sidewalk at the second unit of Building F should most likely be 33.70, not 34.70.
RESPONSE: Spot grade corrected.

3. There is a discrepancy between the notation for 12" pipe between CB-A and the swale shown on the plan and the 18" pipe called for in the table. Please make the appropriate adjustment for pipe size.
RESPONSE: Discrepancy corrected.

4. The grading plan and stormwater pipe size table show that in several places the pipe will be exposed for several feet with no cover. It is recommended that in all cases headwalls be provided so that pipe is not exposed. Suitable rip-rap should be placed between the pipe outfall and the bottom of swales or sediment basins.
RESPONSE: The preference is not to install additional concrete structures. The proposal is to install flared ends on the pipe outlets (per the details that have been shown). During construction, grades will be adjusted to assure adequate cover is provided, as is typical practice.

Sheet 5 of 17

1. Check on the possible conflict between the water main depth and the storm drainage line connecting CB-3 and CB-4.
RESPONSE: Since water lines are pressurized, the water main can be adjusted in the field to a location below the drainage lines, eliminating any possible conflict.
2. PVC water pipe should be identified by Class C-900 and by other standards of the Onset Water Department.
RESPONSE: A note was, and continues to be, on the Utility Plan (sheet 5 of 17) indicating that the proposed water is to be reviewed and approved by Onset Water and meet all required standards and details.
3. Two existing sewer manholes in Bay Pointe Drive will require reconstruction of the flow channels to allow for new pipe inlets. A separate detail should be shown.
RESPONSE: The plans have been revised to indicate that an alternative to the connection to the existing sewer pump station is proposed.

Sheet 11 of 17

1. The construction entrance detail shows 3"-4.5" stone but the thickness of the entrance is labelled as 2". Minimum depth should be at least the maximum stone size.
RESPONSE: Detail has been revised.
2. According to Onset Water Department guidelines, the depth of cover on all pipe is 5 feet. The plan shows 4'-6".
RESPONSE: Detail has been revised.

Sheet 13 of 17

1. Concrete Curb detail should show cement concrete backing brought to the top of the binder course of mix.
RESPONSE: The detail utilized is a MASSDOT standard detail and is an accepted engineering/construction practice for installing concrete curb. The detail has not been revised.
2. The sidewalk detail should specify the overall width as well as the clear walking width as required by the Architectural Access Board (AAB).
*RESPONSE: Pursuant to M.G.L. c. 22, § 13A, the Architectural Access Board has issued regulations in order to make **public** buildings and facilities accessible to, functional for, and safe for use by persons with disabilities. These regulations, which are listed as Section 521 of the Code of Massachusetts Regulations, apply to all buildings and facilities in the Commonwealth that are open to members of the **public**. Therefore, these dimensions are not required for this detail for this **private** development.*

Sheet 14 of 17

1. The Detail of the double grated catch basin does not show a 4-foot sump. How are bricks stacked to support the double grate as noted in Section A-A?

RESPONSE: Detail has been revised.

Sheet 16 of 17

1. The plan details show two gravity block wall sections by **Techo-Bloc**. The block sizes are not clear in the notations as to height, width or length. Please explain.

RESPONSE: Detail has been revised. However, please note that the details shown are for informational purposes only, and manufacturer, brand, and/or style may be modified during construction. Shop drawings are required to be submitted and approved by the owner and the design engineer.

2. The plan shows a new detail of proposed fencing on top of the gravity walls. This detail is insufficient to show that the fencing can be properly installed on top of the walls by drilling through the cap stones into the blocks that are shown on a batter. The fencing detail indicates that 5" square tubing is supported within 12" x 42" of cement concrete. These details appear to be very much incompatible with each other.

RESPONSE: Detail has been revised. However, please note that the details shown are for informational purposes only, and manufacturer, brand, and/or style may be modified during construction. Shop drawings are required to be submitted and approved by the owner and the design engineer.

3. As was noted in a previous review, it is doubtful that 4' or 6' high fencing can be safely placed on top of an unsupported gravity block wall. Not only could the fencing be blown over by high winds but wall failure could result. As shown, this combination of materials is not recommended for approval by the Planning Board.

RESPONSE: Detail has been revised. However, please note that the details shown are for informational purposes only, and manufacturer, brand, and/or style may be modified during construction. Shop drawings are required to be submitted and approved by the owner and the design engineer.

4. A reply by Principe Engineering in response to how 4" perforated pipe behind the walls is discharged suggests that weep holes are to be cored through the wall at 3' intervals. Not details of such are shown on the plans to show how holes are to be cored into block or how free draining aggregate is to be retained. What is the recommendation of Techo-Bloc for relieving water from behind the wall?

RESPONSE: Detail has been revised. However, please note that the details shown are for informational purposes only, and manufacturer, brand, and/or style may be modified during construction. Shop drawings are required to be submitted and approved by the owner and the design engineer.

Stormwater Management

1. The plan shows a revision to the shape and size of the infiltration area that is within the golf course. This was done in response to a concern for spillover of runoff to an off-site wetland area. The drainage calculations have been supplied to show that runoff has been reduced.

RESPONSE: No response required.

2. As previously suggested via comment to the Planning Board, this runoff could be further reduced by introducing subsurface infiltration into the design. It has also been suggested that moving the sediment containment areas away from the immediate proximity to Buildings E and F would be preferable to the current location. Adding infiltration practices might allow this to take place.

RESPONSE: As previously responded, Principe Engineering respectfully disagrees with this opinion. No subsurface infiltration will be added to the project and the location of the sediment containment areas have not been relocated.

3. It has been mentioned that the control of roof runoff is essential given the planting areas and landscape features shown. The plans show that every downspout will be allowed to discharge over ground through stone swales. No details of these swales are shown on the plans and runoff appears to be allowed to discharge directly into the paved surfaces. Freezing weather could make these conditions hazardous.

RESPONSE: A detail was in fact provided via photographic example as part of the 1-11-22 submission on Sheet 17 of 17. However, a dimensioned detail has been provided to clarify intent. It is our professional opinion that this detail will satisfactorily address the above concern.

4. An Operation and Maintenance Plan has been submitted for review. The plan includes the removal of sediment and debris from the forebays and drainage swales as would be required for all such facilities. However, these sediment traps are also potential breeding areas for mosquitos unless they are maintained such that there is no buildup or ponding of surface water. It is recommended that these areas be located away from the immediate vicinity of living spaces.

RESPONSE: These locations will be maintained. The location of the sediment containment areas have not been relocated.

5. The O&M Plan, as approved or amended should be specifically called for in any conditions the Board may impose on the project. The responsible person or entity to collect data, make inspections and to whom the reports should be sent should be identified.

RESPONSE: The owner/responsible party was listed on Page 1 of the previously submitted O&M.

6. The O&M plan says no easements are necessary. However, if the residential units are to be held under a different entity from the golf course, stormwater easements will be necessary.

RESPONSE: The limits of a proposed drainage easement has been shown on the plan.

General Comments

1. The plan indicates that the Building Inspector has determined that for the Pro Shop, 67 parking spaces are necessary. A total of 88 spaces are shown. Providing parking spaces that are in compliance with Section 9 of the Zoning By-Law would only lengthen the overall parking area by 7.5 feet and the width by 6 feet. The elimination of six spaces at the end would make up for the added length and still provide 82 spaces.

RESPONSE: A request for relief from the dimensional requirements of these parking spaces is included in the current proposal and reductions in the number of parking spaces shown is not desired. Therefore, no changes to the parking lot have been made.

2. In number of parking spaces required for 52 units of housing is two per unit or 104 spaces. A total of 137 spaces is shown. Visitor spaces total 33 and are shown in front of Buildings A and B and in front of Building C. One option might be to widen Bay Pointe Drive in front of Buildings A and B sufficient to allow for drop offs, deliveries or temporary parallel visitor parking without designation and to eliminate the separate driveway in front of the buildings. This would allow for the enhancement of landscaping to the area that is the “gateway” to Bay Pointe. In addition, a sidewalk could be shown along Bay Pointe Drive connecting to Onset Avenue. As to Unit C, the currently shown visitor parking might be removed and be replaced by a similar widening of the driveway or left at 24 feet in width to allow for similar drop offs, deliveries or temporary parallel visitor parking without designation. This again could enhance the appearance of the overall site. In each of these cases, the number of parking spaces for each unit is not compromised as each has a garage space and outside space for a total of two per unit. Each of the available spaces that are in line with garages are 10 feet wide. Other spaces that are on the site should be made to be in compliance with the standards of Article 9.

RESPONSE: The owner of the property, the design engineer, the project landscape architect and the project architect all respectfully disagree with this design opinion and firmly believe that these options would result in a negative visual appearance to the “gateway” of Bay Pointe. No changes have been made to the plans in response to this opinion by Mr. Rowley.

3. No revised architectural plans were provided or reviewed.

RESPONSE: No response required.

4. No recommendations are made at this time as to making a connection to the existing sewer pump station.

RESPONSE: The plans have been revised to indicate that an alternative to the connection to the existing sewer pump station is proposed.

5. Nothing has been received to indicate that the Purchase and Sale document between Bay Pointe and the Town of Wareham has been revised and submitted.
RESPONSE: The applicant has submitted everything requested to the Town Planner and the Town's solicitor.