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May 10, 2022

Town of Wareham  
Zoning Board of Appeals  
Memorial Town Hall  
54 Marion Road  
Wareham, MA 02571

RE: Consulting Engineer Review Comments for The Proposed Site Plan at 8 & 10 Charge Pond Road, Wareham, MA

Dear Board Members,

We have reviewed the letter entitled “8 & 10 Charge Pond Road Site Plan Review” prepared by Charles L. Rowley and dated May 5, 2022. Please see below for the comments listed on this letter followed by our responses and a description of plan changes shown in red.

### **VariANCES**

The application requests a variance for use and for setbacks in accordance with a letter of denial for a building permit from Inspectional Services Director David Riquinha. As described in the letter, contractor bays are not allowed in the CG or R-60 districts and are noted as Industrial uses.

The property consists of two abutting lots with 299 feet of frontage on Charge Pond Road. The two lots are divided between the General Commercial (CG) zoning district and the R-60 (Residential) zoning district by a line generally running parallel with Cranberry Highway.

A document from Attorney Jilian Morton suggests that because of the size, shape and topography of the subject property it is unique and that variances should be given for the requested uses. However, if the property is taken as a whole (see Sheet 2 of the plan set) and not as two separate parcels, it is apparent that there is no unusual shape and except for a very small area at the southerly end is nearly square.

The size of the property, if divided by the zoning district boundary line is approximately 74,000 square feet for the CG district and 66,200 square feet for the R-60 district. In each case, the minimum lot area is met.

As shown on Sheet 2, the topography is gently sloping with no unusual outcrops or dramatic changes in direction and is not unusual.

Frontage is more than is required for each of the zoning districts.

The matter of variance would therefore appear to be solely on the basis of use and not for dimensional or topographic concerns.

The variance request for allowing a less than 40-foot buffer between the subject property and the residential use to the south appears to be one of its own making and not one of hardship.

If the parking configuration was changed at the southerly entrance by removing 6 parking spaces and the drainage area moved away from the boundary, the 40-foot buffer could be met and the variance would be unnecessary. See Sheet 4 of the plan set for grading.

At the previous zoning board meeting, the board voted to overturn the building commissioner's decision that this is an industrial use and instead consider this as a commercial use. This decision eliminated the need for a landscape buffer variance as a commercial use requires 20 feet from a single-family home which is achieved with the current configuration. The board also voted to approve the use variance to allow the site layout to extend into the R-60 zoned portion of the lot.

#### **Article 9, Parking**

1. A table of parking is shown on Sheet 3 of the plans. It would be useful to know the number of employees both current and anticipated to compare to the total number of spaces shown. Using 27 spaces, the total employees for the greatest shift would be 41. Similarly, how many large vehicles are currently used and how many may be in the future would help in assessing the total parking needs.

The parking table on sheet 3 has been updated to show the number of employees and number of vehicles, both existing and proposed.

2. The project overview cites a proposed building size of 7350 square feet instead of 6500 square feet as shown on the plans. Also, the number of parking spaces is noted as 33 and not 52 as shown on the plans. Numbers should be consistent.

The proposed building area is 6,100 S.F. and the total number of parking spaces provided is 51 spaces. The project overview has been adjusted to say a 6,100 S.F. building and 51 parking spaces have been provided, which is consistent with the site plan.

#### **Article 10, Landscaping**

1. The project is new and is greater than 5000 square feet for non-residential development. Section 1031 requires all plans to be prepared by a Registered Landscape Architect. None is shown.

We would like to request a waiver from this requirement as the site development is for a well-established landscaping company and all landscaping done on the premise will be to a professional standard.

2. The plan also needs to comply with all appropriate sections of 1032, 1042, 1050, 1060 (specifically 1062.1.3 and 1062.3) and 1070 of the Zoning By-Law.

A waiver from sections 1062.1.3 and 1062.3 is requested. These sections require a landscape island to be provided for long rows of parking spaces. The two sections of parking that would need to comply with this requirement are located on each side of the building and consist of 18 parking spaces each. These spaces are to be used for employee parking and company vehicles and would not be used by the public. These spaces will also be screened from the road by a privacy fence. Additionally, landscape islands would create more obstacles for trucks with trailers that are trying to maneuver around the site.

### **Article 11, Signs**

1. The site plan, Sheet 3 indicates a sign to be located in the front yard. Signage needs to comply with sections 1172 and 1173 of the Zoning By-Law. This includes all signs proposed for the site.

All signs located on the premise will comply with Article 11 of the Zoning By-Law.

### **Article 12, Lighting**

1. Seven wall type lights are proposed for the project on each side of the building. The lights are 60 feet or more away from Charge Pond Road. It is recommended that appropriate lighting of the driveways onto Charge Pond Road be lit for public safety. There is substantial traffic on Charge Pond Road at certain times of the day when visibility is limited mostly due to darkness in winter months.

Two proposed light posts have been added to the plan, one at each entrance to provide appropriate lighting near Charge Pond Road.

### **Article 15, Site Plan Review**

#### **Plans**

**Sheet 2 of 8:** Shows the location of the property along Charge Pond Road as it exists prior to development. Ref. to variance requests as noted above.

No Comment.

#### **Sheet 3 of 8**

1. It is recommended that the curb radii at the second entrance be increased to 20 feet even though the width of the pavement has been increased to 28 feet. This will reduce the chances of running across grassed and landscape areas with large vehicles with trailers.

Curb radii at the second entrance has been increased to 20 feet.

2. The plan shows that there is significant clearing beyond the parking and stormwater basin that does not appear necessary (See Section 1541 of the By-Law). The topography is flat and small slopes can be accommodated close to the paved areas. Moving the smaller drainage basin closer to the pavement would also reduce some of the clearing and provide for the 40-foot buffer that is needed at the southerly lot boundary.

Now that the Zoning Board of Appeals is considering this use as commercial, there is no longer a need to meet a 40-foot buffer behind the drainage basin. The provided buffer zone to the north is still well over the required distance.

3. The types of materials to be stored in the bins located at the rear of the site should be identified. Runoff protection should be provided for those materials subject to erosion.

Material to be stored in the bins include mulch, loam, compost, stonedust, and 3/4" stone. The bins have been labeled on plan with the anticipated type of material to be stored in each. These materials are not stored in the bins for a long period of time and the bins will remain empty during the offseason.

4. The Board should determine if the landscape plan complies with the appropriate sections of Article 10, Landscaping.

All landscaping done on premise will comply with Article 10 of the Zoning By-Law.

5. Stop signs should be placed at each entrance.

Stop signs have been added to each entrance

6. Sidewalk ramps and cross walk painted lines should be established at each entrance.

Sidewalk ramps and painted cross walks have been added to both entrances.

7. All curb radii for site parking should be defined.

Curb radii for site parking has been identified.

8. Construction entrances should be identified for location and details should be provided to show the level of construction to be done.

Construction entrances has been added to the plan. Locations are shown on page 3 and a detail is shown on page 8.

**Sheet 4 of 8**

1. Contour 32 at the first entrance pitches toward Charge Pond Road and collects runoff in a catch basin. If the four parking spaces at the entrance and the first two along the southerly boundary line are removed, the 40-foot buffer can be maintained. The catch basin should be moved to the edge of pavement at the layout line of Charge Pond Road.

The Zoning Board of Appeals has decided this is a commercial use, therefore, the current layout maintains a 20 foot buffer.

2. Is there an opportunity to have the electric service run underground from the utility pole rather than overhead?

If electric service can be connected through underground conduits, then this approach will be utilized. The line type for the electric service has been adjusted to reflect this.

**Sheet 5 of 8**

This sheet is for on-site sewage disposal only and is left to the Board of Health for review subject to any changes in the location of clearing that the Board of Appeals may impose.

The Board of Health will conduct their review after this site plan review is complete but prior to any building permits are issued.

**Sheet 6 of 8**

This sheet shows the fire department turning movements within the site. A letter from the Wareham Fire Department to the ZBA should be provided to confirm that the layout will meet Fire Department requirements.

Verbal confirmation has been given by the Wareham Fire Department that the layout shown on the plans provides adequate access for their purposes.

**Sheet 7 of 8**

1. Leaching Pit Detail: Secure the frame and grate to the riser similar to that shown for a Catch Basin.

Leaching Pit detail has been updated to show the frame & grate secured to the riser.

2. Extend the hood of the outlet pipe shown in the Catch Basin Detail to 12 inches below the pipe flow line.

The note calling out the hood of the outlet pipe on the Catch Basin Detail has been updated to call for the hood to extend 12" below the pipe invert.

3. Show the casting and cover of the Manhole detail secured as noted above.

Manhole detail has been updated to show the casting and cover secured.

4. Provide a detail for sidewalk construction and adjustment and a detail for handicap ramps.

Details for sidewalk construction and handicap ramps have been provided on page 8.

### **Impact Statement**

Little mention is made of the traffic that uses Charge Pond Road on a daily basis to residential areas, to the YMCA and to a lesser degree from the Little League fields. All of these are located beyond the project site. The amount of traffic generated at certain times of the day is a concern for vehicles entering and exiting the proposed project without appropriate lighting of the entrances.

Lighting has been added to both entrances to assist traffic when visibility is limited due to darkness. The impact statement has been updated to state this as well.

### **Stormwater Management**

1. The project documents do not include the typical computation sheet for total suspended solids or compliance with the ten performance standards that are signed by a professional engineer. They should be included.

A full stormwater management report has been completed including computations for total suspended solids.

2. No pre-construction runoff calculations or tabulation have been included to show that post construction runoff is less than pre-construction runoff.

A pre-construction runoff plan and calculations have been added to the report. A comparison of pre and post runoff has also been included.

3. In order to take advantage of the good soil conditions found on the site the bottom and sides of the infiltration area should not be lined with dense turf that will slow down the infiltration process. Loamy sand is in Group A which does have an infiltration rate of

2.4 inches per hour. C classified soils only have a rate of 0.27 inches per hour. See notes at the bottom of Sheet 8.

The dense turf has been removed from the infiltration basins.

4. The calculations do not take the large leaching pits into consideration when determining the peak runoff levels. If the grates were lowered to the base grade of the basin, they could begin the infiltration process quickly and reduce the peak elevations for runoff in most, if not all cases. A reduction in the basin grate elevation for each area is recommended. Being located as they are they should provide adequate infiltration without sediment buildup.

Both basin grates have been lowered to the elevation of the bottom of each basin. Stormwater calculations have been updated to account for the leaching pits and new peak runoff levels have been generated.

5. If low impact design was used at the perimeter of the parking areas, much of the runoff could be captured in stone trenches at the edge of pavement and the grass slopes could be used for reduction in contaminants. It could also help to slow down overall runoff to where infiltration basins might be reduced in size. It is recommended that this alternative design be considered.

Low impact design has been considered and although it does work well in certain scenarios, we feel that our standard stormwater design is the best application for this site. Due to the large perimeter of this parking lot, a large amount of stone would be needed for a trench. The required maintenance for a trench this size would be much more than the maintenance required for a standard system. Also, during the winter months, you may experience some backups when the temperature drops below freezing.

### **Operation and Maintenance Plan**

A project operation and maintenance plan should be prepared and used during construction and after construction is complete. This is one of the requirements of the Stormwater Regulations.

An operation and maintenance plan has been included in the stormwater report.

Respectfully yours,



Samuel J. Iamele, EIT  
Project Engineer

Cc: File; Client