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September 20, 2021

Richard F. Gosselin, Jr., Chair
Millbury Planning Board
127 Elm Street
Millbury, Massachusetts 01527

Re: Rice Pond Village
17 Rice Road, Millbury
Special Permit Application for a multi-family condominium development

Dear Mr. Gosselin:

I want to take this opportunity to explain how our revised Site Plans now with a revision date of 3 September 2021 have addressed the comments in the letter from the peer reviewer, David Glenn, PE of Stantec Consulting Services, Inc. dated May 7, 2021.

In the interest of brevity, I won't repeat the entirety of each of the comments from that letter but will indicate which number comment it was, on which page it appeared and provide a summary of its focus in a couple words, all in italics. I'll then explain how we addressed that comment in normal text.

#1, page 2 – re plan scale

We are submitting a waiver request to have plans at a scale of 1 inch equals 30 feet. At this scale we can just get the entirety of the proposed layout of Hillcrest Circle onto one sheet and we think that's important for the clarity of the plan.

#2, page 2 – re existing conditions plan stamp

The Site Plans with a revision date of 3 September 2021 are stamped by a professional land surveyor, Robert Nunnemacher, of Thompson-Liston Associats, Inc. and are on the NAD83 and NAVD 88 datums. The land plans show the Mass. Grid plan coordinates of 3 monuments.

#3, page 3 – re contour interval

The Site Plans now show 1 foot interval existing contours. We are submitting a waiver request to not include 1 foot interval proposed contours. The plans will become difficult to read for the density of lines if we show 1 foot proposed contours also.

#4, page 3 – re other existing features along Rice Road

The Existing Conditions Plans do show trees and other features along Rice Road as seems necessary.

#5, page 3 – re building setbacks

The Site Layout Plans, sheets S1-S3, show the required building setback lines and we have included a zoning compliance summary on sheet D4.

#6, page 3 – re snow storage areas

The Site Plans now show eight separate snow storage areas off the side of the traveled way of the proposed private road Hillcrest Circle. This can be seen on sheets S1, G1 and P1 and P2.

#7, page 3 – re adequacy of existing utilities

The recently completed review of sewer capacity by Weston & Sampson, Inc. determined that there is adequate capacity in the system for the proposed development. A hydrant pressure and flow test was performed at the existing hydrant in Thomas Hill Road right in front of the proposed entrance to the site and more than adequate pressure and flow were found. The Plans have now been submitted to Aquarian Water Company.

#8, page 3 – re E-One pumps

The Plans include a detail of the proposed model WH231-92 E-One unit to serve each of units #19-26. This detail notes that the units will discharge to 1.25 inch force mains which will discharge into SMH's at stations 7+50 and 13+00.

#9, page 3 – re driveway and gutter line flow at 6+77

The plans now propose 46 and not 52 units and the locations of driveways have changed somewhat. We added a note to sheet P1 calling for the contractor to build up the beginning of the driveway to units 9&10 to maintain gutter line flow to the catch basin on the left side at station 6+77.

#10, page 3 – re elevations and coordinates of 3 boundary markers

Sheet L1 shows three such points with Mass. Grid plan coordinates and elevations listed for them.

#11, page 3 – re existing trees and sight lines

The prominent existing trees to either side of the proposed entrance are far enough back from the traveled way of Rice Road that they will not be impediments to the lines of sight of drivers leaving Hillcrest Circle.

#12, page 3 – re isometric line drawing

Yes, in our submission of these revised Plans we have included a request for a waiver from the requirement for an isometric line drawing of the project.

#13, page 4 – re locus plan

In our submission of these revised Plans we have included a request for a waiver from the requirement for a separate 100 scale locus plan. We believe we've given good detail of other existing structures on abutting properties on our Existing Conditions, Site Layout and Grading Plans.

#14, page 4 – re building elevation plans

The siding on the duplexes will be vinyl and colors will be a variety of neutral and earth tones.

Development Impact Statement comment #2, page 4 – re existing utilities

As noted above, Weston & Sampson, Inc. has now confirmed the adequacy of the municipal sanitary sewer system to receive the development's flows and hydrant pressure and flow tests showed strong capacity in this location. Plans have been sent to Aquarian Water Company.

Site Plan Review #1, page 4 – re depth of loam

We revised the cross-section detail on sheet D2 to propose a 6 inch depth of loam in areas off the side of the traveled way and we revised the notes in multiple locations on sheet D4 to refer to a 6 inch depth of loam being used for grass or lawn plantings.

Site Plan Review #2, page 4 – re utility connections to units

We added proposed water and sanitary sewer connections to the units to sheets P1 and P2. At this time we don't know where some electric, telephone and cable conduit junctions will be placed. Solid waste will be normal residential waste and will be removed via bins rolled to the curb for pickup.

Site Plan Review #3, page 5 – re signs

We added proposed stop sign and street sign locations to the Site Plans per your suggestion and the Town Planner's.

Site Plan Review #4, page 5 – re landscaping

We show the significant existing trees along the project's Rice Road frontage on the landscaping plan. We will make every effort to keep those trees as they are a positive aesthetic feature.

Site Plan Review #5, page 5 – re overflow parking

We have reduced the proposed number of units to 46 but increased the proposed number of overflow parking spaces to 15. They are to be located at four locations along Hillcrest Circle, at station 5+75, 7+30, 10+75 and 13+45. There will be one handicapped accessible space among them and we added notes to sheets P1 and P2 calling for all of them to be a minimum 9' wide and 18' deep and for the aisle beside the handicapped accessible space to be 8 feet wide. We also added a detail for the HC sign to sheet D2.

Site Plan Review #6, page 5 – re curbing

We have included in this submission of revised Site Plans a written waiver request to use sloped granite curbing throughout the site at the limits of the traveled way of Hillcrest Circle. Individual duplex driveways will have no edge treatment.

Site Plan Review #7, page 5 – re photometric plan

We added lighting notes to sheet D4 specifying the locations of the 9 proposed street lights and the make and model of the street lights to be used. A Photometric plan is being submitted separately.

Site Plan Review #8, page 5 – re safety issues

At the suggestion of the Planning Board Chairman, we will make Hillcrest Circle a one way road after the intersection at station 1+75 with traffic only proceeding around the loop of the road in a clockwise direction. This will increase further the accessibility of the road for fire department apparatus. We have added a 5 foot wide paved sidewalk to the right side of the traveled way and we now propose a 5 foot high black vinyl coated chain link fence all along the property's common boundary with the railroad east of the power line easement.

DEP Stormwater Standards #1, page 6 – re no untreated discharges

No response is necessary.

DEP Stormwater Standards #2, page 6 – re no increase in peak flows offsite

We revised the drainage calculations to use the Cornell University type III 24 hour rainfall amounts in the 2, 10, 25 and 100 year return frequency storm events. In the 100 year storm this raised the total 24 hour rainfall to 8.35 inches. This required that we significantly enlarge the proposed infiltration structure. Having done that, we can say that there will be no increase in the peak rate of runoff to any abutting property in the postdevelopment condition as compared to what is experienced in the existing condition.

DEP Stormwater Standard #3, page 7 – re groundwater recharge

Yes, because we are infiltrating all the captured street runoff, the volume of runoff leaving the site will not increase. If we look at the 10 year storm event, for example, the total volume of runoff flowing offsite in the predevelopment condition is 8.414 acre feet (the volume from subcatchments numbers 1, 2, 4 and 5 as well as from reach 3) while the postdevelopment volume of runoff leaving the site is 8.413 (the volume from subcatchments 11, 12, 14 and 15 plus reach 13). It is essentially unchanged.

DEP Stormwater Standard #4, page 7 – re removal of total suspended solids

The site's entire street drainage system, except for the beginning of Hillcrest Circle which will drain into Rice Road as the existing driveway does, will capture runoff in deep sump catch basins which remove 25% of TSS. Runoff will then be conveyed through piping and drain manholes and through a CDS stormwater filtration unit which will remove up to 80% of TSS. It will then be discharged into the infiltration structure. Our calculations included in the Stormwater Report show that 85% of TSS will be removed before discharge of captured stormwater runoff into the infiltration structure off the north side of Hillcrest Circle at station 10+50.

DEP Stormwater Standard #5, page 7 – re land uses with higher potential pollutant loads

No response is necessary.

DEP Stormwater Standard #6, page 8 – re stormwater discharge to critical areas

No response is necessary.

DEP Stormwater Standard #7, page 8 – re standards if this is redevelopment

Though the Applicant could argue that this project is partially redevelopment in that the existing house, pool and driveway are going to be removed, we are not making that argument and we are not seeking relief from compliance with any of the DEP Stormwater Standards.

DEP Stormwater Standard #8, page 8 – re construction period controls

Many decisions about the location of temporary erosion control measures have to be made in the field based on the topography and stormwater runoff patterns of the site at that time. Nevertheless, in the description of temporary settling basins on sheet D4, we suggest that the expected locations of them include the location of units 1&2, behind unit#10, in the location of unit #17 and behind unit #27. In both the description of the construction process and the sequence of installation and construction on sheet D4, we suggest that the best location for a stockpile is the proposed location of units 35&36. In the construction sequence on sheet D4 and the site entrance mat detail on sheet D1, we call for it to be located at the Hillcrest Circle traveled way entrance off Rice Road. The Applicant will submit a SWPPP before the start of construction and we have included the Site Inspection Report form in the Stormwater Report.

DEP Stormwater Standard #9, page 9 – re long term maintenance

The Applicant does not expect to have a vehicle washing station. We have made revisions to the long term maintenance plan to address the issues of waste products and de-icing materials.

DEP Stormwater Standard #10, page 9 – re illicit discharges

Whitney Street Home Builders, LLC has now added a statement that it will do everything reasonably possible to discourage illicit discharges during the construction phase and that it will add clauses prohibiting them in the condominium documents. Whitney Street Home Builders, LLC, the Applicant, is identified as the future owner of the site on the Post Construction Stormwater Operation & Maintenance Program.

Stormwater #1, page 9 – re drawdown of stormwater within 72 hours

The Stormwater report already included a calculation showing that the infiltration structure receiving the captured street runoff will empty in much less than 72 hours. We now added this calculation for each of the four types of infiltration structures receiving duplex roof runoff.

Stormwater #2, page 9 – re infiltration structure cross section

We added the existing surface grade at the cross-section of the structure to the profile view section of its detail on sheet D3. We show the elevation of seasonal high groundwater and note that, at deep observation hole #8, refusal was also at that depth. There was no refusal at the other three deep holes in the location of the proposed structure.

Stormwater #3, page 9 – re total phosphorus

The applicant will be infiltrating all captured stormwater runoff thereby addressing the issue of phosphorus removal.

Stormwater #4, page 9 – re hoods on catch basins

This was also a suggestion of the Town Planner. On the details of catch basins with both 3 and 4 flange frames shown on sheet D2, we now call for either Lebaron Foundry or Snout model hoods (or an approved equal) to be installed.

Stormwater #5, page 9 – re showing roof leader connections to the drainage system

We have added proposed 6" hdpe connections from duplexes to infiltration structures receiving roof runoff.

I want to thank the peer reviewer for helping to improve the proposed project design. If you have any questions at all, please contact me.

Sincerely,

AZIMUTH LAND DESIGN, LLC

James Tetreault, PE, CPESC

Enclosures

Cc: Stantec Consulting Services, Inc.
Whitney Street Home Builders, LLC