

Engineering, Architecture, Surveying, D.P.C.

August 4, 2021

Mr. Doug Finch, Town Manager Town of Canandaigua 5440 Routes 5 & 20 West Canandaigua, New York 14424

RE: CANANDAIGUA SHORES SUBDIVISION – 3535 STATE ROUTE 364

Preliminary Subdivision/Site Plan Review

TAX MAP No. 98.19-1-20.100

**CPN No. 21-035** 

MRB PROJECT NO.: 0300.12001.000 PHASE 223

Dear Mr. Finch:

MRB has completed a review of the submitted Preliminary Subdivision & Site Plans regarding the above referenced project, dated April 7, 2021, last revised April 19, 2021; Engineer's Report dated April 20, 2021; and SWPPP dated April 19, 2021, all prepared by Marks Engineering, P.C. We offer the following comments for the Planning Board's consideration. A brief written response to each comment should be provided by the design engineer.

## **SEQR COMMENTS**

- Question B should include the following agencies: NYSDEC, NYSDOT, OCDPW, NYSDOH, Town of Canandaigua Town Board, Town of Canandaigua Planning Board, Ontario County Planning Board, Town of Hopewell (Planning Board and/or Town Board), and Canandaigua Lake County Sewer District. The Town of Canandaigua Zoning Board of Appeals may also need to be included.
- 2. It is our understanding that a zoning change is part of this project, as such C.3.c should be answered "yes," and the new zoning should be described.
- 3. Question D.1.d indicates that only 1 new lot is proposed, whereas the subdivision plat shows 4 new lots for the Canandaigua section and 9 new lots for the Hopewell section. Also, D.1.d.ii is answered "yes," indicating that a cluster/conservation subdivision is proposed, whereas it is our understanding that such is not proposed.
- 4. D.1.f should include a count of the single family dwellings as well.
- 5. It is our understanding that the proposed project site is located within an archeologically sensitive area. As such, coordination with NYS SHPO will be required, along with obtaining a "no impact" letter from NYS SHPO.
- 6. The Full EAF Part 1 should have the date noted on page 13.

### **SUBDIVISION PLAT COMMENTS**

- 7. The subdivision plat should show all proposed monuments, pins, pipes, and/or markers. Monuments shall be placed in accordance with the requirements described in the Town of Canandaigua Site Design and Development Criteria Manual (SDDC).
- 8. The plat shows the eastern line as being the boundary between Canandaigua and Gorham, whereas this boundary is between Canandaigua and Hopewell.
- 9. The proposed right of ways should be labeled on the plat. All proposed easements should also be shown on the plat.
- 10. The liber and page of the existing sanitary sewer easement should be noted on the plans, if known.

# **SITE PLAN AND GENERAL COMMENTS**

- 11. The proposed NYS Route 364 curb cut will require review and approval from NYSDOT, and the proposed County Road 18 curb cut will require review and approval from OCDPW. A copy of all correspondence with these agencies is to be provided to the Town Development Office.
- 12. The construction sequence should be expanded to be more detailed. The Hopewell components of the project should have their own separate construction sequence, as should the two single-family residences in the Canandaigua section. The following items should be added to the sequence:
  - a. Delineation of limits of disturbance
  - b. Roadway construction
  - c. Landscaping
  - d. Lighting
  - e. Sidewalks
  - f. Stormwater management facility
  - g. Infiltration/Filtration SMPs are not to be constructed until all contributing drainage areas have achieved final stabilization.
- 13. All stabilization timing notes on the plans and in the SWPPP should be revised to indicate that where soil disturbance activities have temporarily or permanently ceased, soil stabilization measures shall be initiated by the end of the next business day and completed within 14 days (7 days if over 5-acres of disturbance, or 3 days if between November 15<sup>th</sup> and April 1<sup>st</sup>).

- 14. Erosion and sediment control note #4 on sheet C001 should also indicate that steep slope seed mix shall be provided.
- 15. Erosion and sediment control note #8 on sheet C001 should be revised to indicate that concrete trucks shall be washed out only into a concrete washout area meeting the requirements of the NYS Standards and Specifications for Erosion and Sediment Control.
- 16. The site notes appear to indicate that the proposed green space is 39%. Please note that the Town Code states that 40% open space is required within MUO districts, and that the 40% excludes impervious area and constrained lands such as slopes of 15% or greater, ridgelines, shorelines, floodplains, or drainage facilities. The amount of open space provided by each parcel should be noted under "site notes."
- 17. The Canandaigua portion of the site shows a 25' front setback from the proposed road and a rear setback of 25', whereas a 60' front setback and 40' rear setback are required. An area variance may be needed.
- 18. The site notes should indicate how many parking spaces are required per each use and for the site as a whole, including indicating how many accessible parking spaces are required. The number of provided accessible parking spaces should also be indicated on the plans.
- 19. The plans should identify what material the proposed trails will be constructed of, and how wide the trails will be. The proposed trails should also be shown on the grading plan.
- 20. Will there be a monument sign or other sign identifying the proposed development? If so, the location(s) should be shown on the plans and details provided.
- 21. The proposed right of way should be labeled on the larger scale site plans and should include the width in the label. All proposed public and private roads/drives should include an identifier in the label. Stationing should be provided on the private drives as well.
- 22. What is the edge treatment for the proposed private drives? How will runoff from these areas be managed? Details for the private drives should be provided.
- 23. It appears that the proposed project would require sidewalk connections between the proposed multifamily dwellings and the sidewalk within the public right of way. This may also include providing sidewalks or striped asphalt access aisles on each side of the proposed driveways between the private drive and the front porch.
- 24. Please note that accessible parking spaces will be required for the proposed mailbox area, and the sidewalk along these parking spaces should also connect to the sidewalk along the public road. Consider making the parking area have

- one-way circulation with angled parking. Is the proposed mailbox location for the entire multifamily development?
- 25. Where private drives intersect the proposed public road from both sides, the intersections should be directly aligned opposite of each other, or with a 250' offset, as required by the Town SDDC. Concrete gutters should not extend through the intersections of the private drives with the proposed public road. The gutter in these areas should terminate by following the curves of the drive intersection to the right of way line, with catch basins proved at the low points, or as otherwise approved by the Town Highway Superintendent.
- 26. The plans should be revised to include an alternative plan showing the Hopewell section as only a private, emergency access drive.
- 27. The design engineer should coordinate with the highway superintendent of each town to determine whether or not a turnaround area will be required at the town line.
- 28. All dead-end turnarounds shall be marked with no parking signs at each end of the hammerhead and along the long edge. No parking signs may also be required along the proposed public road and/or the private drives. The design engineer should coordinate with the Town CEO to determine what locations shall require no parking signs and other such restrictions.
- 29. The proposed dedicated road must have a minimum width of 22' (exclusive of gutters) for dedicated subdivision roads with concrete gutters on both sides. Also, the proposed private drives must have a minimum width of 20' exclusive of shoulders and parking areas. At least one section of private drive does not meet this requirement.
- 30. Per Appendix D of the NYS Fire Code, the roadway would need to be 26' wide, exclusive of shoulders, for 20' to either side of a fire hydrant (40' in total). The plans should be revised accordingly.

## **UTILITY PLAN**

- 31. All proposed downspout locations should be indicated on the plans and should discharge to splash blocks.
- 32. All repeated stormwater management practices should include a number or other identifier.
- 33. The proposed dry swales do not appear to be acting as swales and do not appear to be an appropriate choice for this project in its current layout. As such, the dry swales should be designed as bioretention areas or another suitable practice. If bioretention is used, an underdrain should be provided.
- 34. The plans should show all individual water services, sanitary laterals, and storm laterals (if applicable).

- 35. All proposed watermain and storm sewer should be labeled with size, material, and thickness ratio. Storm sewer should also include length and slope in the labels. All storm sewer structures should include an identifier, rim elevation, and invert elevations with sizes and directions noted. All watermain appurtenances should be labeled or identified with a map key.
- 36. All utility infrastructure proposed for dedication shall be located within the right of way or an acceptable easement. Numerous utilities appear to require easements.
- 37. The plans should show and label the existing watermain. The existing sanitary sewer should also be labeled.
- 38. Will the proposed multifamily dwellings be provided with automatic fire sprinklers? If so, this should be noted on the plans. If not, additional fire hydrants may need to be provided to ensure that all portions of the buildings are within 400' of a fire hydrant.
- 39. Per the Town SDDC, fire hydrants must be provided every 500' within subdivisions. This spacing is exceeded in at least one location.
- 40. What are the orange lines on the utility plans? These lines should be labeled.
- 41. At least one catch basin does not appear to connect to any storm sewer. Please review and revise as necessary.
- 42. A catch basin should be provided on the south side of the road at approximate station 1+30.
- 43. In accordance with the requirements of the Town SDDC, catch basins should be provided at a maximum spacing of every 300'. This spacing appears to be exceeded between the following stations: 8+00 and 11+15 (north side), and 7+45 and 11+15 (south side).
- 44. Whilst most watermain fitting locations are marked, some segments appear to be missing such markings (especially on sheet C204). Please ensure that all fittings are marked on the plans.
- 45. No watermain valves are shown on sheet C204. Valves should be provided in accordance with the requirements of the Town SDDC. Also, the plans will be required to show all disinfection/blow-off/sampling tap locations.

#### **GRADING PLAN**

- 46. The existing contours should be labeled on the 1"=30' scale grading plan sheets.
- 47. In multiple locations, the proposed grading for the proposed public roadway does not appear to appropriately accommodate the intersections of the private drives with the public roadway and results in excessive slopes. The proposed grading should provide appropriate slopes and transitions for all intersections and roadways/drives.

- 48. Multiple portions of the private drives include sections with grades steeper than 10 percent, whereas the maximum grade for fire apparatus access roads shall not exceed 10 percent. The grading should be revised to ensure that the private drives do not exceed 10 percent grade. Retaining walls may need to be provided to accomplish this.
- 49. Fill slopes supporting the public roadway should be designed to be 4:1 (h:v) or flatter. Where fill slopes must be steeper than 4:1, guide rail may need to be provided.
- 50. In order to meet accessibility requirements, the sidewalks for the project would need to be maintained at a slope of 5% or less. This may require providing accessible ramps meeting the requirements of ADA, NYS Building Code, ICC A117.1, and the Fair Housing Act Design Manual.
- 51. Due to the nature of the site and proposed project, as well as the large area of disturbance, phased erosion and sediment control plans may be required.
- 52. Silt fence should be provided on the south side of the NYS Route 364 curb cut. A stabilized construction entrance should also be provided at this location.
- 53. Silt fence should run parallel to contour lines as much as feasible. Except in flat areas, silt fence will not be permitted to run perpendicular to contours. All silt fence should terminate in j-hook ends. All topsoil stockpiles should be fully encompassed by silt fence.
- 54. Due to the slopes of the project site, all silt fence should be reinforced silt fence or super silt fence. Additional rows of silt fence should be provided where necessary to meet the slope length and spacing requirements of the NYS Blue Book.
- 55. Construction staging areas and concrete washout areas should be shown on the plans. A concrete washout area detail should be provided.
- 56. Temporary check dams are to be provided for all swales at a frequency of at least one check dam for every 2' of elevation change. Please update the plans accordingly.
- 57. All catch basins and field inlets are to be provided with suitable temporary inlet protection. Details of such protections should also be provided.
- 58. Sizing calculations should be provided for all temporary or permanent sediment traps and sediment basins.
- 59. All storm sewer end sections should be provided with riprap protection. The size of all riprap areas should be noted on the plans.
- 60. Numerous swales suddenly terminate at "flat" contours. A smooch transition to sheet flow should be provided and may require use of practices such as level spreaders.

- 61. All areas of steep slopes (3:1 h:v or steeper) should be delineated on the plans with hatching and labels.
- 62. All filtration and infiltration practices are be protected from siltation buildup, compaction, and other construction impacts. As such, silt fence and orange construction fencing is to encompass such facilities until all contributing drainage areas have achieved final stabilization.
- 63. All runoff from new impervious surfaces must be directed to a suitably sized stormwater management practice or green infrastructure practice. It appears that some areas may not be meeting this requirement.
- 64. The proposed SWMF does not appear to include an outlet control structure. Whilst a spillway is labeled, the actual dimensions and location of such is not readily apparent. The emergency spillway should include riprap stabilization. Also, in order for the SWMF to provide WQv, the SWMF should be split into at least two cells (a forebay and deep pool), and should provide 4'-6' of depth.
- 65. All stormwater management practices should be labeled and shown on the grading plans.
- 66. All pipe discharges into filtration/infiltration practices are to discharge into a permanent sediment trap in order to protect against clogging of the filtration/infiltration practice. Sheet flow into such practices should include gravel diaphragms along the edges of impervious surfaces discharging to such practices, and vegetated buffers.
- 67. If any infiltration practices are proposed, infiltration testing and soil exploration results are to be provided prior to SWPPP approval being granted. Soil exploration will also be required for any filtration practices. Infiltration testing will also be required upon completion of construction for any filtration/infiltration practices, but prior to the filing of the NOT.

## ROAD PROFILES, LANDSCAPING PLAN, LIGHTING PLAN, AND DETAILS

- 68. Utility profiles will be required to be provided. Road profiles may also need to be provided for private drives.
- 69. The road profiles should be revised to resolve all instances of overlapping text.
- 70. Landscaping note #4 should indicate that trees shall be located a minimum distance of ten feet (10') from the horizontal line of underground utilities, whereas five feet is currently indicated.
- 71. The lighting plan should show true photometric contours.
- 72. Will the buildings include any exterior lighting? If so, all building mounted lighting should be shown on the plans with photometric contours.
- 73. Additional lighting may need to be provided to ensure pedestrian safety along sidewalks and to provide a consistent level of illumination within the roadway.

- 74. The detention area outfall structure detail should be filled out with the appropriate inverts, elevations, and sizes; or replace the detail with the exact outlet control structure proposed.
- 75. Details are to be provided for all stormwater management practices and green infrastructure practices.
- 76. All Town of Canandaigua detail should be marked as such.
- 77. The following Town of Canandaigua Standard Details should be added to the plans:
  - a. Monument detail
  - b. Typical driveway apron detail
  - c. Stabilized shoulder detail
  - d. Walking trail detail
  - e. Utility service plan
  - f. End of main hydrant unit (if proposed)
  - g. Gutter and catch basin apron detail (H-12.0 is currently included, however H-13.0 should also be included).
- 78. The rain garden elevation detail should include labels and dimensions. A rain garden soil mix should be provided. Please also clarify where rain gardens are proposed on the plans.
- 79. A silt fence detail should be provided.

#### **ENGINEER'S REPORT**

- 80. Page 2 appears to indicate that the Hopewell section watermain will join with the Canandaigua section, however the plans do not show this. Please review and revise.
- 81. The size of the townhouse water services should be indicated in the report.
- 82. It does not appear that the fire service demand was calculated. This information is required to be provided.
- 83. Storm sewer calculations are required to be provided for all storm sewer, public and private. Catch basin crossover pipes may be excluded.
- 84. The included traffic analysis does not appear to account for the full buildout of the project as only 127 dwelling units are used in the calculation, however more than 127 dwelling units are proposed. Please also note that a full traffic study may need to be performed.

## **SWPPP & DRAINAGE COMMENTS**

- 85. The design engineer should consider providing full water quality, runoff reduction, and water quantity controls within the Hopewell section, and separate the Hopewell section from the Canandaigua section. Please note, however, that the two sections would still need to be covered under a single SWPPP and NOI. Please also note that any WQv/RRv requirements for the Hopewell section that are not met within the Hopewell section may be subject to the Town of Canandaigua's enhanced phosphorus removal requirements.
- 86. As the project will disturb significantly more than 5 acres, the project will be required to obtain a 5-acre waiver from the Town of Canandaigua, or the plans will need to demonstrate in detail how the project will be phased to maintain the site at less than 5 acres of open, disturbed area.
- 87. The Town of Canandaigua stormwater maintenance agreement will be required to be completed and filed.
- 88. The following comments pertain to the hydrology modeling and drainage area maps:
  - a. The hydrology modeling must account for any offsite drainage that contributes to the site and is not safely diverted around the site. Such diversions may require some modeling or calculations to be provided to ensure that such diversions are properly designed.
  - b. The proposed drainage area map should be revised to clearly identify all subcatchment area boundaries. The time of concentration paths should also be clearly shown on said map.
  - c. Based upon review of aerial imagery of the site, the existing site is primarily forest and/or brush conditions whereas the existing conditions model indicates the entire site is grass cover. The existing conditions model shall be revised to accurately model the existing conditions. This may include some existing impervious area (such as public roadways).
  - d. The time of concentration for the existing conditions should be based on TR-55 methodology.
  - e. If stormwater management requirements for the Hopewell section are not fully met by SMPs/GI practices contained within the Hopewell section, then the existing conditions model may need to be revised to combine existing subcatchments 1 and 2.
  - f. The routing diagram for the proposed conditions model should be revised to provide better legibility. All pond nodes corresponding to SMPs/GI practices are to be labeled with the name/identifier of said practice (i.e. bioretention #1).
  - g. The site is modeled as having significantly greater portions of HSG B and HSG C soils in the proposed conditions than in the existing conditions. The

- amount of each type of HSG must remain consistent between existing and proposed conditions.
- h. Proposed subcatchment 2 should model the SWMF within its boundaries as a pond/waterbody with a CN of 98.
- i. Proposed subcatchment 4 includes both sheet flow and direct entry in the time of concentration calculations. Direct entry should only be used if the time of concentration would be less than 6 minutes in total. Sheet flow must also be limited to 100' in the proposed conditions.
- j. Pond 4P, the proposed SWMF, must have the starting water elevation set at the lowest outlet invert, or the stage storage table must start at the lowest outlet invert. Exfiltration will not be permitted for the SWMF. Also, the lowest outlet appears to be a 24" horizontal orifice/grate. If this is accurate, please note that the proposed SWMF is unlikely to be capable of providing the required 24-hour extended detention for the WQv/CPv, and as such would not be considered as a water quality practice. Lastly, please verify that all outlet sizes and inverts are accurate to the plans.
- k. Filtration practices must limit the exfiltration to the design hydraulic conductivity (0.5 ft/day (0.25 in/hr) for bioretention, dry swales, and rain gardens). All of the pond nodes labeled OS-# are to be revised accordingly. Also, please verify the inverts of the horizontal grates. Lastly, the horizontal grates must be routed into the outlet pipes these catch basins are connected to.
- 89. The provided NYSDEC GI Worksheets are to be revised to provide sizing calculations for every practice proposed. Orifice sizing calculations and extended detention requirements for the WQv and CPv will need to be provided for the proposed SWMF. CPv requirements for the site as a whole will also need to be calculated, as well as a demonstration that the CPv requirements have been met.
- 90. It is recommended that the appropriate pages from the NYS Blue Book be included within the SWPPP or that a copy of the NYS Blue Book be kept with the SWPPP onsite. If neither of these two options will be provided, the SWPPP will need to describe in detail the maintenance and installation requirements for all proposed erosion control, sediment control, and pollution prevention practices.
- 91. Prior to receiving SWPPP approval, a "no impact" letter will be required to be provided from NYS SHPO, and said letter will need to be included within the SWPPP.
- 92. The following comments pertain to the draft NOI:
  - a. The federal tax ID should be provided.
  - b. Please review and revise the acreages in question 4 to match what is proposed on the plans.

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- c. Question 12 should be answered "yes" as the Canandaigua Lake watershed is a AA watershed.
- d. Question 13 is answered "yes," however it does not appear that the site contains any slope phase E or F soils. Please review and revise if necessary.

If you have any questions, comments or concerns regarding any of the above comments please call me at our office.

Sincerely,

Lance S. Brabant, CPESC

Director of Planning & Environmental Services