



Engineers
Planners
Surveyors
Landscape Architects
Environmental Scientists

555 Hudson Valley Avenue, Suite 101
New Windsor, NY 12553-4749
T: 845.564.4495
F: 845.567.1025
www.maserconsulting.com

March 23, 2021

VIA EMAIL

James Patterson, Chair
Village of Warwick Planning Board
77 Main Street
Warwick, NY 10990

Re: Warwick Meadows, Phase IV
Tax Lots 218-1-91, 92, 93, 94 & 96 and 219-1-2.2
Warwick, Orange County, New York
MC Project No. 15002429D

Dear Mr. Patterson:

Below please find our responses to a comment letter received from Engineering & Surveying Properties, dated March 2, 2021. The comments have been repeated here for clarity.

Comment 1. Site Plans:

Comment 1a. The proposed road width in Sheffield Drive has been reduced to 26 feet. This should be labeled on Sheet 3, along with the proposed width (24 feet) of Magnolia Drive.

Response 1a: Dimensioning as requested is provided.

Comment 1b. As discussed at the last Planning Board meeting, sidewalks are now shown on both sides of Sheffield Drive on the west side of the project.

Response 1b: Statement is correct.

Comment 1c. The "edge of existing asphalt" linetype in the legends of the Existing Conditions / Demolition Plan and the Grading and Drainage Plan appears to not be used.

Response 1c: The linetype has been removed from the drawing legend.

Comment 1d. Show limits of clearing on the Existing Conditions/ Demolition Plan and label the proposed right-of-way.

Response 1d: The limits of clearing and labeling of the proposed right-of-way has been added to the Existing Conditions/ Demolition Plan.



- Comment 1e. Please show or label more clearly on the Existing Conditions / Demolition Plan which asphalt areas are to be removed. Provide more clarity on this plan for the meaning of the “proposed sawcut lines” on Sheffield Drive.
- Response 1e: The limits of asphalt to be removed have been clarified. Sawcut lines indicate where new pavement will meet existing pavements.
- Comment 1f. Existing contour lines are missing from the northeast corner of the property on Sheet 6 of 23.
- Response 1f: This has been corrected.
- Comment 1g. Please provide more existing contour labels in the areas where construction comes close to existing wetlands.
- Response 1g: Additional contour labels have been added.
- Comment 1h. We recommend that a larger buffer be provided where the proposed construction near the inlet of the existing culvert under Sheffield Drive is immediately adjacent to federal wetlands.
- Response 1h: Proposed grading in that area has been pulled back to provide additional buffering.
- Comment 1i. Some text on the plans is corrupted. (For an example, see Site Note 7.A on Sheet 1).
- Response 1i: The corrupt text is due to a program error with Adobe Acrobat PDF reader. This has been resolved.
- Comment 1j. The proposed grading creates an unnecessary low point along the downhill side of the proposed retaining wall west of Building #9.
- Response 1j: The grading in this location has been removed, eliminating the low point at the wall.
- Comment 2. Lot Line Adjustment Plan:
- Comment 2a. The area of existing Lot 218-1-96 is labeled incorrectly near the bottom of the sheet.
- Response 2a: The existing lot area has been revised.

- Comment 2b. The plan must be signed and sealed by a licensed surveyor.
- Response 2b: Satisfying this comment will be completed as a condition of site plan approval.
- Comment 3. Drainage & Utility Information:
- Comment 3a. Make labels of the pond numbers shown on the Grading and Drainage Plans consistent with the numbering in the SWPPP report.
- Response 3a: The plans, maps and reports have been updated for consistency.
- Comment 3b. All new storm drainage pipes located within the Sheffield Drive right-of-way should be a minimum of 15 inches in diameter.
- Response 3b: The pipe sizes have been revised.
- Comment 3c. There is a typo on Sheet 7 for the rim elevation of Catch Basin S-82.
- Response 3c: The errant callout has been removed.
- Comment 3d. The sizes of the rip rap pads proposed at the flared end sections should be specified.
- Response 3d: A detail has been added to the plans for the outlet protection.
- Comment 3e. Profiles of the sanitary sewer mains should be provided. It appears that the sanitary sewer main from Manhole 10 to 11 can be lowered so that it is below the proposed water supply piping.
- Response 3e: Additional profiles of the sanitary mains have been provided. The sanitary run between manhole 10 & 11 (now San MH 6& 7) has been revised.
- Comment 3f. Please show drainage pipes along southwest loop Road "A" on its profile (that is, not just perpendicular crossings).
- Response 3f: The drainage pipes withing the roadways have been added to the road profiles.
- Comment 3g. The middle portion of drainage pipe P-8 appears to have little to no cover under the proposed grading design.
- Response 3g: The drainage network in this area has been revised and pipe P-8 has been removed.

- Comment 3h. Provide details for the proposed concrete washout stations and storm inlet sediment traps.
- Response 3h: The requested details have been added to sheet 14 of the site plans.
- Comment 3i. Confirm the elevations of temporary sediment pond #5.
- Response 3i: The temporary sediment basin bottom has been raised 5 feet, to elevation 735.0
- Comment 3j. Show the isolator rows for underground infiltration basins on the detail and in plan view, and show any flow splitters needed. Provide calculations showing that they will provide sufficient pretreatment, particularly for infiltration basin P-2.
- Response 3j: The isolator rows have been shown on the plans for the subsurface basins. Pretreatment sizing has been provided within the SWPPP.
- Comment 3k. On the OCS-10 outlet structure detail, clearly show that both of the two inlets are to be on the opposite side of the weir from the outlet.
- Response 3k: The stormwater basin associated with this outlet control structure has been removed.
- Comment 3l. The outlet structure elevations for P-8 are inconsistent between the plan view and the detail.
- Response 3l: The plan and detail have been revised for consistency.
- Comment 3m. Correct elevations and inverts for bioretention basin P-9 for consistency between the plan view, section detail, and outlet structure detail. Show riprap inlet protection.
- Response 3m: Site plans and details have been revised for consistency.
- Comment 4. SWPPP report:
- Comment 4a. In the SWPPP narrative:
- Comment 4a(i). Page 7 states incorrectly that stormwater quantity was not studied for this project.
- Response 4a(i): This section of the report has been revised.

Comment 4a(ii). Pages 10-15 should refer to the municipality as the village, not town.

Response 4a(ii): References to the “town” have been replaced with “village”

Comment 4a(iii). Page 15 mentions that three buildings have disconnection of rooftop runoff. Is this shown on the plans?

Response 4a(iii): Roof leader disconnection has been used on the northern half of buildings 1 & 2, and the eastern side of building 14. All other building roof leaders and captured by the proposed roof leader trunk lines and tie into the drainage system.

Comment 4a(iv). Page 17: typo “date” instead of “rate”

Response 4a(iv): The typo has been corrected.

Comment 4a(v). Page 26: incorrectly refers to the Town of Wawayanda.

Response 4a(v): This reference has been removed.

Comment 4b. Provide calculations for the capacity of the stormwater proposed drainage pipes.

Response 4b: The stormwater drainage system is designed to convey flows from the 25-year storm event, per New York State standards. The stormwater pipe capacity technical report is being prepared by our office and will be submitted to the Planning board engineer for review.

Comment 4c. The draft NOI should be completed.

Response 4c: A complete NOI has been included as an appendix to the revised SWPPP.

Comment 4d. As the Village of Warwick is not an MS4, the MS4 acceptance form is not needed.

Response 4d: Comment noted, references to an MS4 have been eliminated from the SWPPP.

Comment 4e. While the infiltration tests that were performed show consistently good results, no tests were done at Ponds 3, 4, 7, and 10. Tests should be performed at those locations. Tests should also be performed at Ponds 6 and 8 at depths that are suitable with the proposed basin elevations.

- Response 4e. The stormwater basins have been redesigned to utilize the existing soil testing information. Where infiltration testing was not conducted, the stormwater basins have been designed as Bioretention basins. Additionally, some basins have been combined and/or eliminated to utilize existing infiltration testing data.
- Comment 4f. Provide pretreatment for the infiltration basins and bioretention basin.
- Response 4f: Pretreatment has been provided by a combination of hydrodynamic separators and the subsurface chamber isolator rows.
- Comment 4g. Please clarify the SWPPP sizing calculations to indicate which watersheds or ponds they refer to.
- Response 4g: The Green Infrastructure worksheets have been reviewed and labeled to match the watershed maps and the site plans.
- Comment 4h. The spreadsheet mentions rain barrels in the North West area. Are rain barrels proposed?
- Response 4h: No rain barrels have been proposed. This has been removed from the GI worksheets.
- Comment 5. Operation and Maintenance Plan - A comprehensive operation and maintenance plan is presented in Appendix 14 of the SWPPP. The proposed above-ground infiltration basins should also be mentioned in the plan. A formal agreement shall be prepared and shall include the requirement for annual inspection reports to be submitted to the Village of Warwick Building Department.
- Response 5: A formal agreement is being prepared
- Comment 6. Landscape Plan - We have not completed our review of the landscaping plan and details.
- Response 6: Comment Noted.



Mr. James Patterson
MC Project No. 15002429D
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If you have any questions regarding the above responses please feel free to call me at 845.564.4495, extension 3802.

Very truly yours,

MASER CONSULTING CONNECTICUT, P.C.

A handwritten signature in black ink, appearing to read 'Andrew B. Fetherston', written in a cursive style.

Andrew B. Fetherston, P.E.
Principal

ABF/cm
Enclosures

cc: Warwick Commons Stage 5, LLC; w/encl. (Digital Copy)
Dave Everett, Esq., Whiteman Osterman & Hanna LLP; w/encl. (Digital Copy)

File, w/encl.

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