T.G. MILLER, P.C.

ENGINEERS AND SURVEYORS

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November 3, 2017

Michael H. Long, AICP, Town Planning Consultant
Town of Lansing
29 Auburn Road
Lansing, NY 14882

Re: Lansing Trails Apartments (Milton Meadows Apartments), Storm Water Pollution Prevention Plan Review

Dear Mike,

We received a revised Storm Water Pollution Prevention Plan (SWPPP), drawings C101 to C208 and the Engineer's Report dated September 20, 2017 prepared by Passero Associates. We have summarized our comments related to the stormwater management design, road design and water system extension as it relates to the revised plans which excludes previously proposed phase 2 development. These comments are in addition to the response letter received by Passero Associates dated October 20, 2017.

**Stormwater Management**

1. Review existing and proposed runoff curve numbers. Are the existing conditions closer to "Meadow" than "Fair Pasture"?
   ***Response: We will revise the CN calculations to values reflective of an existing meadow condition.***
   **Comment: Revised weighed CN calculation have been provided but not applied to the Hydraflow calculations. Update calculations and watershed exhibits with revised CN values. Proposed CN values should resemble proposed conditions with "Grass" in lieu of all "Meadows".**

2. Consider analyzing a common design point for existing and proposed conditions at the existing channel as it leaves Parcel F. Model off-site flows to understand impact from diversion swales.
   ***Response: The report will be revised to consider a common discharge point for existing and proposed conditions. The offsite flows will be modeled and included in the report.***
   **Comment: Common watershed design point is still not evident.**

3. Provide additional information for pond sizing, sub-drainage areas to pond, forebay sizing, detail invert/spillway elevations, etc. Provide infiltration test and test pit information for stormwater practices.
   ***Response: This information is included in appendix J of the report. The hydraflow output includes pond sizing and structure information/spillway information. Infiltration tests were performed and it was determined the site***

***contains an impermeable clay layer. As a result, the infiltration practices will be designed to include an underdrain and imported media to ensure they provide the necessary water quality volume.***
**Comment: Provide CPv orifice elevation and sizing calculations. Provide appropriate pretreatment volume in forebay and label spillway and berm elevations. Provide minimum 1' freeboard in infiltration basin. Elevation on the outlet control structure and hydraflow calculation are not consistent. A geotechnical report has been provided but no testing has occurred at the proposed infiltration basin. Provide additional details for proposed underdrain and provide depth to bedrock and groundwater. Review use of infiltration practice at this location. Does it meet the intent of the NYSWDM?**

4. Consider piping concentrated flow from pond outlets to existing channels or consider use of level spreaders.
***Response: We will revise the plans to include a level spreader. This will avoid disturbance to the wetland.***
**Comment: Provide details and locations of proposed level spreaders. Review need for a drainage easement for the proposed channel leaving the infiltration basin west of the property line. Currently the channel will create concentrated flows which will be directed across the trail.**

5. Provide pipe sizing calculations for pipes with R.O.W. Provide swale sizing calculations for diversion swales.
***Response: Pipes have been removed from the right of way.***
**Comment: It is noted that a cross culvert is shown within R.O.W. directing a portion of the road drainage to the privately maintained storm sewer. Provide location and additional description for swale sizing calculations that were submitted.**

6. Provide stormwater treatment for Town dedicated road.
***Response: A series of swales and catch basins will be installed that will capture road runoff and convey the water to an onsite treatment area.***
**Comment: Revise depth of roadside ditches per Town Highway Specifications.**

7. Clarify RRv and WQv calculations and areas of treatment. It appears total WQv required is less than provided.
***Response: The calculations will be revised to provide the necessary WQv per NYSDEC requirements.***
**Comment: Total impervious cover per the WQv calculations is 3.2 ac vs. 4.0 ac as noted in the NOI. Please clarify total impervious cover including the proposed roadway. Provide summary and description of where RRv and WQv are treated.**

8. Complete

9. Is there a defined spillway or outlet for the small basin east of Building 10?
***Response: The small spillway east of building 10 is simply a low point to collect runoff from the slope along the diversion swale and runoff from the sidewalk areas. The catch basin structure proposed that basin will collect water that enters this area and covey it to the onsite ponds.***

**Comment: No connecting piping or outlet from the depression is apparent.**

10. Complete NOI and MS4 acceptance forms
***Response: The NOI and MS4 Form will be completed prior to the construction.***
**Comment: Revise NOI accordingly:**
    - **#12 Project is located within a watershed with AA classified waters.**
    - **#27 Complete**
    - **#30 Complete**
    - **#32 Verify**
    - **Sign page 6 and 14**

11. Complete

12. Review use of silt fence in areas of concreted flow. Consider alternative practices.
***Response: We will revise areas where silt fence treats concentrated flow and replace with temporary check dams.***
**Comment: Comment still stands.**

13. Provide details for temporary sediment basins and outlet type and location.
***Response: Details for temporary sediment basins will be provided on the revised plans.***
**Comment: Provide detail for temporary outlet riser and stone filter for sediment basin.**

14. Consider providing phased grading and erosion and sediment control plan.
***Response: Due to the mass earthwork requirements to make the site balance, all earthwork for the 13.5-acre project will be completed at the beginning of the project. As areas are fine graded, they will receive topsoil and seed. Areas that are not worked will receive temporary stabilization measures.***
**Comment: Provide summary within the SWPPP requesting approval of greater than 5 acres to be disturbed at any one time along with a summary of the additional inspection requirements. Consider providing a phased erosion and sediment control plan or more detailed sequencing notes for mass grading outlining appropriate sediment basins and temporary diversion swales. Size and located temporary sediment basins as necessary.**

**15. Provide stormwater maintenance agreement.**

**Road Design**

1. Complete

2. Will there be public trail access through the site? Review need for easements and midblock crosswalk on Town road.
***Response: We have added an easement for the portion of the Town trail system that will remain on site.***
**Comment: Shift crosswalk signs on the Town Road to be on the back side of crosswalk as approached from direction of travel to conform to NYSDOT crosswalk details.**

3. Complete

4. It appears stormwater will sheet flow over the proposed sidewalk along the portion of Town dedicated road. Review drainage options with Highway Superintendent along the west side of the road.
   ***Response: A swale on the east and west sides of the road will be designed to collect runoff and convey it to an onsite water treatment area. A swale will be placed between the roadway and the sidewalk to limit the runoff sheeting across the sidewalk.***
   **Comment: Have drainage options been reviewed with the Highway Superintendent? It appears there is still sheet flow over the walk.**

**Water System**

1. Complete.
2. A cut-in-tee and repair coupling will be required in lieu of a tapping sleeve and valve at the connection to the existing main.
   ***Response: The notes on the plans have been revised to show a cut in tee being used for the connection.***
   **Comment: Show location of existing sign and planter box near connection point and call out to protect.**
3. Provide additional details and profile for crossing below Rt. 34B and south side road dich.
   ***Response: A road crossing profile has been added to the plans for the water main crossing Rt 34.***
   **Comment: Provide additional details for casing pipe under the highway. Review depth of existing main and provide appropriate coordination notes. Consider pot-holing the existing water main to verify depth or show the existing culverts being extended with new end sections and rip rap to accommodate a shallower bury depth from what is shown.**
4. Complete.

**NYSDOT**

1. Provide comments from NYSDOT for drainage, intersection and utility installation.
   ***Response: Once received, we will pass along comments from NYSDOT.***
   **Comment: Please provide any NYSDOT comments if issued.**

If you have any questions please feel free to contact me or we can arrange a time to meet to review in more detail.

Sincerely,

Donald Harner

Donald Harner, P.E., CPESC

Cc: T. Ellis, Chair
E. LaVigne, Supervisor
L. Day, Code Enforcement
C. Purcell, Highway Superintendent
G. Krogh, Esq.
D. Herrick, Town Engineer