



www.EngineeringPropertiesPC.com
71 Clinton Street
Montgomery, NY 12549
phone: (845) 457-7727
fax: (845) 457-1899

January 10, 2013

Town of Lloyd Planning Board
Town Hall
12 Church Street
Highland, NY 12528

ATTN: Chairman Saso and Board Members

**RE: W.O. # 944.01
MOUNTAINSIDE WOODS
TOWN OF LLOYD
PLANNING BOARD COMMENT RESPONSE LETTER**

Dear Chairman Saso and Planning Board Members:

Please find enclosed three (3) copies of the revised plans and CD's of the revised drawings in PDF format along with two (2) copies of the revised SWPPP. Additional copies of the plans and SWPPP have been sent directly to Morris Associates along with a copy of this letter. The plans have been revised in accordance with the Morris Associates Comprehensive Review of Preliminary Plans letter dated October 22, 2012, the SWPPP & Additional Drainage Review letter dated October 22, 2012 and Next Steps in Review of Preliminary Plans & Supplemental Review Comments dated November 28, 2012. Below you will find a comment by comment by comment response.

Comprehensive Review of Preliminary Plans (10/22/12):

1. No response required.
2. See responses below regarding the SWPPP.
3. Regarding requests of the Planning Board
 - a. Deed restrictions have been prepared by the Project Attorney and circulated to the Planning Board for review.
 - b. Architectural options for the dwellings units and garages were submitted to the Board at the August 16th Planning Board Workshop. A streetscape was included in the DEIS at Figure 2.3D
4. No further response required.
5. No further response required.
6. The "10' Lawn Area" notation on the Typical Lot Layout(s) has been removed.
7. No further response required. The waivers to build within 100' of a primary conservation area and within 50' of a secondary conservation area as depicted on

the Resource Analysis Plan (R-100) have been requested and are included in the draft Preliminary Subdivision Approval which is under review by the Planning Board.

8. The additional locations for town road signs are shown on the plans along with the revised construction details shown on the detail sheets. It should be noted that the sign dimensions are in the sign schedule.
9. No response required. The waiver to omit the soils information has been requested and is included in the draft Preliminary Subdivision Approval which is under review by the Planning Board.
10. No response required. The waiver to omit the watershed boundary information has been requested and is included in the draft Preliminary Subdivision Approval which is under review by the Planning Board.
11. All easement metes and bounds are now shown on the Subdivision Plans (S-1 thru S-5).
12. Notes have been added to the plans depicting the requirement that the encroaching accessory structures must be relocated by the structures' owner.
13. Regarding the Highland Fire District Comments:

On street parking shall be prohibited within the Mountainside Woods development and enforceable by the Town of Lloyd Police Department thereby allowing for full access of the Highland Fire District Fire Apparatus. In addition, a turning radius template that closely simulates the ladder truck which the Highland Fire District currently owns, and a future possible replacement, was used to create a turning template figure which was distributed at the October 22, 2012 Planning Board Meeting. This figure demonstrates that all proposed streets, cul-de-sacs, and roundabouts can adequately accommodate the passage of this truck.

Regarding the Highway Superintendent Comments:

1. A SWPPP has been completed and revised in accordance with the comments made by the Town Engineer (Morris Associates). The revised SWPPP is under review.
2. After several meetings with the Highway Superintendent, numerous revisions have been made to the cul-de-sac's to accommodate to the greatest extent practical the concerns of the Highway Superintendent including reducing the cul-de-sac pavement width, proposing the cul-de-sac to be "one-way" traffic, removing the curbs on the inner islands, and providing turning templates ensuring adequate space for passage of the Town Highway Department's largest vehicle.
3. Mountable curbing along with a grassed median between the curb and sidewalk is proposed to accommodate any unauthorized parking, to prevent parking on the sidewalk and to maintain adequate access for emergency vehicles.
4. As per discussions with the Planning Board, street trees have been located between the curb and the sidewalk.
5. All construction details have been previously revised to meet current Town of Lloyd Highway Standards.

14. As previously agreed, the “on lot” flow paths (swales) have been removed from the plans and a Typical Lot Grading detail has been added to the detail sheets depicting the typical runoff sheet flow direction.
15. Note #4 of the earthwork construction notes has been revised accordingly.
16. Turing templates were distributed at the Planning Board Meeting on October 22, 2012. See response to comment #13 above.
17. The split rail fence has been revised as requested.
18. As the property line is non-tangent, a known point is required to establish the property line corner.
19. A “Proposed Trail” has been shown where the existing trail will be disturbed by grading for Road and the “trails” are shown on the site plans along with the crossings as requested.
20. A few of the vertical curves proposed for Road A-H and the Loop Road do not meet minimum standards. These vertical curve locations are at intersections providing a transition from one road to another and do not pose any sight distance limitations. A waiver for these vertical curves has been requested and is included in the draft Preliminary Subdivision Approval which is under review by the Planning Board. In addition, these areas were discussed with the Highway Superintendent at a meeting at the Town of Lloyd Water Plant on August 29, 2012, who stated that they were acceptable provided there was no “puddles” upon completion.
21. The Road I profile was inadvertently omitted from the plans and is now included on the plan set.
22. The intersection of Road A with Road C has been revised to provide a negative slope away from the intersection and therefore a waiver is not required.
23. The Road Cross Section Detail has been revised as required.
24. As previously agreed, that the underdrain, reinforcing bar and pea gravel were not required to be included in the mountable curb.
25. The Sidewalk Detail has been revised as required.
26. The missing contour is now shown on the all sheets.
27. Regarding the construction schedule and sequencing:
 - a. Additional notes have been added to the Phasing Plan referencing the notations located on the Detail Sheets.
 - b. Additional notes have been added as they relate to the additional requirements if more than 5 acres need to be disturbed at any one time.
 - c. The sequencing of construction notes were revised to include the additional construction items as requested.
 - d. The sequencing of rough grading and use of temporary erosion control methods has been revised as requested.
 - e. A temporary sediment basin outlet structure detail is shown on the detail plans, while the temporary sediment basin is shown on the erosion & sediment control plans. In addition, a rip-rap swale has been added.

28. The water main connection to the existing Town Water Plant will be made during Phase 4 and is shown on the phasing plan as such.
29. There are only two locations where concrete encasement is proposed and these are labeled on the plans and profiles. Modifications to the utility system to eliminate the need for encasement would result in utility depths of more than 10-15 feet and become very difficult to construct and maintain.
30. The water main within Road I is shown on the profile.
31. The proposed water main has been relocated as requested.
32. The water service connection has been relocated to be outside the proposed concrete encasement.
33. It is our understanding that the maximum valve spacing is 800 feet and the maximum spacing proposed along Vista Drive Extension is approximately ± 675 feet from the tee with Road I to the existing valve within Toc Drive.
34. All construction details for connecting the water main to the existing Town Water Plant are now shown on the plans.
35. The Water Service Connection Detail has been revised accordingly.
36. Ulster County Health Department Approval will be provided prior to a request for Final Subdivision Approval from the Town Planning Board.
37. On December 19, 2012, the Lloyd Town Board held a public hearing on the sewer district extension. The public hearing was closed the same night. The Board's resolution regarding the extension awaits review and agreement on the terms of the Sewer Contribution Agreement and Developer's Agreement.
38. A copy of our utility crossing design worksheet has been provided to Morris Associates for their review with this submission. There are no crossing conflicts that we are aware of, however there are a few crossings that provide less than 6" of clearance. A detail, depicting that flowable backfill (K-Crete) shall be utilized, has been provided for instances of less than 6" of clearance at a crossing.
39. The Water / Sewer Crossing detail has been revised accordingly.
40. The size of the existing sewer mains within the Sunny Brook Development are labeled by their line type (-----8 S-----8 S----- representing an 8" diameter main). The rim inverts of any of the structures along the cul-de-sac may be above finish centerline grade as all cul-de-sacs are super-elevated to drain to the center of the island. The notation for SMH 44 has been relocated for legibility.
41. The sewer service connects on the side of the house into the easement as there is a storm drain conflict in front of the unit. The storm drain is currently at minimum slopes and revisions would again cause undesirable pipe depths.
42. All utilities have been survey located and are shown on the plans.
43. On December 19, 2012, the Lloyd Town Board held a public hearing on the sewer district extension. The public hearing was closed the same night. The Board's resolution regarding the extension awaits review and agreement on the terms of the Sewer Contribution Agreement and Developer's Agreement.

SWPPP & Additional Drainage Review:

1. Bio-Retention Filter
 - a. The RR_V calculation sheets are correct as labeled as RRV is calculated for each of the individual watersheds.
 - b. An additional structure to be used as a diversion structure has been added prior to the Bio-retention area to utilize the Bio-retention as an “offline” treatment system.
 - c. Soil testing was performed throughout the site with little to no variation in the soil complex. Based upon the presumption of similar soils in the area the proposed bio-retention area, review of the previous soil testing results concludes adequate soil conditions for the bio-retention facility. Copies of those soil testing results were included in the appendices to the EIS.
 - d. A plunge pool has been included as the pretreatment for the bio-retention facility. Sizing calculations are included in the appendices of the SWPPP.
 - e. The bio-filter media as specified on the details is a 75-85% sand dominated mixture. In accordance with the NYSDEC Stormwater Management Design Manual, a K factor of 3.5 should be used for sand mixture. We have utilized a K factor of 2.0 as a factor of safety as the mixture is not 100% sand. There is no reference in the manual to a maximum of 0.25 feet of average height of water above the filter other than in the example in Chapter 8. The figure depicting a bio-retention facility in Chapter 6 (design requirements) shows 6” average ponding depth. Calculations providing 75% of the WQV above the filter are included in the appendices of the SWPPP.
 - f. We request that the landscaping of the stormwater facilities be a condition of approval to be provided prior to Final Approval.
 - g. Additional maintenance requirements have been added to the SWPPP as requested.
2. Ponds A2 & C4
 - a. Spot elevations have been provided on all pond berms to ensure that the one (1’) foot freeboard is provided.
 - b. The Outlet Structure Detail and the hydrologic model have been revised to remedy any conflicting information.
 - c. We request that the landscaping of the stormwater facilities be a condition of approval to be provided prior to Final Approval.
 - d. A detail for the Sediment Markers has been provided.
3. A copy of our Storm Drainage Pipe calculation sheet has been provided to Morris Associates to show that all storm drainage pipes have been designed with adequate capacity for all contributory flow. All oversized structures have been noted on the plans with a designation of “O-CB xx”, which is also noted in the Legend on the Grading and Drainage Plan.
 - a. YD-20 has been revised to be an “Oversize Catchbasin” and duly noted on the plans.

- b. CB 29 has been revised to be an "Oversize Catchbasin" and duly noted on the plans.
 - c. CB-68 has been revised to be an "Oversize Catchbasin" and duly noted on the plans.
 - d. The section of pipe between DMH 70 & DMH 71 traverses a 2:1 slope and therefore is required to be at a steep slope. Reducing the slope of this pipe would require lengthening the pipe and therefore causing excessive depth to the pipe at the top of the slope.
 - e. Please refer to the Storm Drainage Pipe Calculation sheet to see that the pipe exiting DMH 71 is sized adequately to handle the incoming flow.
 - f. YD-36 has been revised to be an "Oversize Catchbasin" and duly noted on the plans.
4. The Drainage Pipe Trench has been revised to indicate the use of HDPE and RCP pipe and also depicts the minimum cover depths as requested.
 5. The tables in the SWPPP have been modified to match all hydrological model data.
 6. Temporary sediment basin calculations were inadvertently omitted and are now included in the Appendices of the SWPPP.
 7. The detail for Sediment Traps has been revised as requested.
 8. The NOI will be completed prior to Final Approval when the actual dates of construction and completion are known. If necessary we request that this be a condition of approval.
 9. Construction access to the SWM facility C4-2 will be provided through the easement and along the path of the proposed stormwater pipe from Vista Drive to the facility.

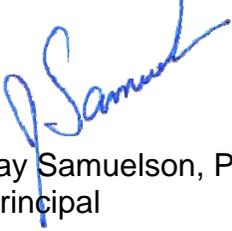
Next Steps in Review of Preliminary Plans & Supplemental Review Comments (11/28/12):

1. No response required.
2. The submission of this letter and attached plans and SWPPP provide a written response to all outstanding comments. Limited requests regarding conditions of approval relating to the plans are included.
3. The submission of this letter and attached plans and SWPPP provides a written response to all outstanding comments and/or provides requests for conditions of approval.
4. No response required.
5. The proposed dwelling structures, attached or detached garages, porches and driveways shown on the plans represent the typical layout of each lot but is not intended to depict the proposed final layout for each dwelling, attached or detached garages, porches and driveways that may be built. Architectural notes and dwelling standards, bulk requirements (both minimum and maximums) along with general notations provide parameters for the construction on individual lots. Note #2 of the Typical Lot Layout(s) states that a Plot Plan will be required to be submitted with

- each building permit application depicting compliance with architectural notes and dwelling standards and bulk requirements (both minimum and maximums).
6. Typical dwellings, garages (attached and detached), porches, and driveways are labeled on plan sets on Sheets C-101 through C-104. The linework for the above mentioned items repeats on all plan sheets (C-105 through C-118) however are not labeled to provide clarity for other design linework shown on those plans.
 7. Note #16 has been revised accordingly.
 8. The typical lot layout(s) have been removed from the detail sheets and moved to the cover sheet (C-100) adjacent to the bulk requirements for reference.
 9. At the meeting of November 29, 2012, it was agreed to limit the maximum dwelling footprint areas based upon lot coverage and maximum building coverage. These limitations have been incorporated into the bulk table, architectural notes and dwelling standards on sheet C-100.
 10. The bulk tables have been revised in accordance with the maximum building and lot coverage percentages as recommended by the Board's engineers in their letter dated November 28, 2012. In addition, the SWPPP has been revised to incorporate possible maximum impervious areas on the individual lots based upon maximum lot coverage percentages as shown in the bulk tables.
 11. Regarding the Architectural Notes and Dwelling Standards:
 - a. At the meeting of November 29, 2012, it was agreed to limit the maximum dwelling footprint areas based upon lot size. These limitations have been incorporated into the Architectural Notes and Dwelling Standards on sheet C-100.
 - b. Note # 4 has been revised as requested.
 - c. A note regarding the use of patios has been added as requested.
 - d. No response required.
 12. Note # 17 has been revised accordingly.
 13. The Rail Trail connection will be made during Phase 3 after construction of Road C has been completed as it would be a safety hazard and liability to invite the public through an active construction site.
 14. The phasing plan has been revised to include the construction of the water main connection to the existing water treatment plant during Phase 4.
 15. The location of monuments have been shown on Sheets S-2 through S-5. A detail depicting size and material is included on the Detail Sheets. It should be noted that there is a conflict between the Town of Lloyd Zoning Code section 90-5 F.[4] and the Town of Lloyd Highway Standards for Concrete Monuments with the requirement of a 2½" cross inscribed on the top and a vertical steel pin exposed out the top. The detail included on the plans shows our proposed resolution to this conflict. In addition, we request that the monuments be set flush to ground level with the bottom of the chamfered top rather than 3¼" exposed. The lowering of the top of the monument avoids conflicts with lawn mowers as many of these monuments will be set in lawn areas.

If you have any additional questions and/or comments please don't hesitate to contact this office.

Sincerely,
Engineering & Surveying Properties, PC



Jay Samuelson, P.E.
Principal

cc: A. Learn, PE – Morris Associates
Liz Axelson, AICP – Morris Associates
D. Weinberg
file