



July 31, 2018

File No. 17-04016-02

Jason Bobst, Township Manager
West Norriton Township
1630 Marshall Street
Jeffersonville, PA 19403

Reference: Markley Farm –Final Land Development for Phase II
TMP No. 63-00-01108-008

Dear Mr. Bobst:

Pursuant to your request, Gilmore & Associates, Inc. has reviewed the submitted plans for the above-referenced project and offers the following comments for consideration by West Norriton Township.

I. Submission

- A. Subdivision and Land Development Plans of Markley Farm Property R-2 Cluster Land Development Phase 2 prepared by Woodrow & Associates, Inc., dated June 15, 2018, consisting of sheets 1 to 33 of 33.
- B. Post-Construction Stormwater Management Report prepared by Woodrow & Associates, Inc., dated June 2018, last revised July 2018.
- C. Erosion and Sediment Control Report prepared by Woodrow & Associates, Inc., dated June 2018, last revised July 2018.

II. General Information

The Applicant proposes the land development of TMP #63-00-01108-008 located within R-2 Residence Zoning District. The subject property is approximately 55.56 acres and is mostly undeveloped farm land that includes a pond and wetlands. The property also contains the existing swim club with associated accessory buildings and an existing access drive. Conditional use approval was granted to permit a Cluster Development within the R-2 Residence District consisting of 79 lots. The proposed development will be constructed in two phases. Only Phase 2 is proposed at this time. Phase 2 consists of 40 new lots, labeled 1 through 40 on the plans. Access to Phase 2 of the development is proposed from one point along Chestnut Avenue. The increase in stormwater runoff generated from Phase 2 of the proposed development will be controlled by three rain-gardens and two slow release basins. A walking path has been proposed to provide pedestrian access to the Open Space and the proposed development in Phase 1.

III. Review Comments

A. Zoning Ordinance

Upon review, we have found no outstanding issues with respect to the West Norriton Township Zoning Ordinance.

B. Waivers Granted

The following waivers were previously approved as part of the Preliminary approval:

1. §22-503.1.C(1)(d)(8) – From requiring a cul-de-sac to terminate at the development boundary.
2. §22-503.1.E(1) – From requiring that no more than two streets shall cross at the same point.
3. §22-503.1.C(1)(a) – To allow a residential street to have a paved width of 27 feet.
4. §22-503.1.C(1)(b) – From the requirement of widening Chestnut Avenue and Oakland Drive to have a 40-foot paved cartway.
5. §22-504.2.A – From the requirement of having a stopping area measured 20 feet behind the right-of-way line not exceeding a 4% grade for driveways.
6. §22-504.2.B – To allow driveways to be located within 40 feet of a street intersection.
7. §22-507.1.E – To allow double frontage lots along Chestnut Avenue and Oakland Drive, so long as the lots take driveway access from the proposed internal road network.
8. §22-509.2.A – To allow utilities and trail connections within the perimeter buffer.
9. Appendix A - §B(21) – From the requirement that basins must have a fenced perimeter.
10. Appendix A - §C(2)(g)(iv) -To allow the use of HDPE pipe in the storm sewer network.

C. Subdivision and Land Development Ordinance (SALDO)

We have identified the following issues with the proposed plan in regards to the requirements and provisions of the current West Norriton Township Subdivision and Land Development Ordinance:

1. §22-106 – The following comments shall be addressed regarding the Erosion and Sediment Controls plans:
 - a. It was noted on the E&S Plans that the Rain Garden and/or smaller basins are to be partially excavated to allow stormwater runoff to enter the system through the lowest orifice. This practice would give sediment the opportunity to clog the stormsewer and discharge into local waterways. The Rain Gardens shall not allow any runoff to enter the stormsewer system during construction.
 - b. The plans shall be revised to provide silt sock after endwall ST-52, prior to stormwater discharge into the stream.
 - c. The construction sequence on Sheet 26 shall be updated to reflect Phase 2 – Only.
2. §22-403 – The Applicant is responsible for any other required approvals, permits, etc. (i.e., MCPC, MCCD, PADEP, Municipal Authority, Fire Marshal, etc.) as applicable. Copies of these permits and approvals should be submitted to the Township.
3. §22-507 – Lots 25 and 26 have Top-of-Wall elevations that are lower than surrounding grade spot elevations. The plan shall provide a minimum of 6 inches between the top of foundation wall and surrounding grade.
4. §22-507.2(A) – The Applicant shall analyze the grading along the southeastern property line, in the area of Lots 1 through 10, to ensure existing flow will not be hindered by the proposed berm in the rear of the lots. Additional grading shall be provided.
5. §22-507.2(B) – The plans shall be revised to relocate the emergency spillway for Basin C-1 in the area of the interior swale toward Basin B-2. In addition, the emergency spillway for Basin B-1 shall be directed toward Chestnut Avenue.

6. §22-507.2.E(3) – Top and bottom elevations shall be added along the retaining wall at Basin B-2. In the event the wall is greater than three (3) feet in height, the Applicant shall provide shop drawings and calculations, signed and sealed by a registered engineer in the Commonwealth of Pennsylvania for the proposed wall.
7. §22-507.3.C – The existing tree lines at the southeastern border of the tract should be shown as to be removed.
8. §22-509.2.A – Note “h” in the Project Waivers List, on the Overall Project Record Plan, Sheet 2 shall be revised to include Lots 31-36, 39 and 40, and exclude Lot 38.
9. §22-514 – The plans shall be revised to show the relocation of the existing utility pole at the intersection of Markley Farm Circle and Chestnut Avenue. In addition, a street light shall be provided at the right-of-way at the above referenced intersection. Lastly, any existing lights or signs to be removed or relocated along Chestnut Street shall be shown on the plans.
10. §22-517.6 – The Applicant shall obtain a “will serve” letter from water authority.
11. §22-602.B – The plans shall be revised to address the following general plan comments.
 - a. Any existing utilities within the project site shall be shown on the existing features plan and be labeled to be removed/abandoned, specifically, the existing well and septic field.
 - b. General Note 27 on the Record Plan should be revised to note that monumentation is to set by a Professional Land Surveyor.
 - c. The existing inlet and sign at the proposed intersection of Markley Farm Circle and Chestnut Avenue shall be shown on the Existing Features plan. Additionally, the plans shall indicate the relocation or removal of each structure.
 - d. The tie-in location of Belgian Block curb with the existing plain concrete curb along Chestnut Avenue shall be provided on the plan set.
 - e. General Note 24 on the Record Plan, Sheet 2, shall be revised to include Lot 37.
 - f. We recommend the Township discuss the possibility of the installation of a fence around Markley Pond, specifically, in the area of the proposed trail to ensure pedestrian safety.
12. §22-1011 – The Applicant is required to provide a traffic impact fee of \$734.44 per generated peak-hour trip for each lot.

D. Stormwater Management Ordinance

We have identified the following issues with the proposed plan in regards to the requirements and provisions of the current West Norriton Township Stormwater Ordinance:

1. §26-131 – The Applicant shall address the following general plan issues with regard to the stormwater improvements:
 - a. The plans shall provide the pre-development drainage areas.
 - b. Infiltration rate and soil testing should be completed at additional testing pits located at each one of the stormwater management facilities. If one of the basins or raingardens is incapable of managing stormwater as set by the provisions of this chapter, underdrain shall be installed to assist infiltration.

- c. It appears the post construction stormwater report does not include the pre and post peak flows for the 5 year storm. The plans shall be revised accordingly.
 - d. A note shall be added to the Post Construction Stormwater Management Plan in accordance with Appendix A, §B(8) of the West Norriton Township Stormwater Ordinance.
2. §26-131.2.B – The Applicant will be required to enter into a Stormwater Maintenance Agreement with the Township for the proposed stormwater improvements. The document will be prepared by the Township Solicitor and should be executed prior to the release of a grading permit for the project.
3. §26-132 – The Applicant shall clarify the Homeowner’s Association responsibilities for the ownership and maintenance of all proposed BMP’s, specifically, the basins on the individual lots. The Applicant may consider passing ownership and maintenance responsibilities for Basin A-1, B-1 and C-1 to the individual owners of Lots 1, 37 and 10 respectively.
4. Appendix A - §B(5) – Detention basins shall be designed so that the stormwater will be released over a minimum of 24 hours for the one-year twenty-four hour storm event. The calculations for Basins B-2 and B-3 and Rain Garden C-1 are dependent on the 2-year storm and shall be revised to depend on 1-year storm. Calculations for Basins A-1 and B-1 shall be provided.
5. Appendix A - §B(7) – The minimum top width of any basin berm shall be 10 feet.
6. Appendix A - §B(13) – The inverts of basin inlet pipes shall be a minimum of 6 inches above the basin floor. The basin floor elevation shall be noted on the plans.
7. Appendix A - §C(2) – The following revisions shall be made in regards to the stormsewer profiles, details, and schedule:
 - a. ST-08 shall be labeled as a Manhole.
 - b. ST-20 shall be labeled as an M Top Inlet.
 - c. ST-26 should be labeled as a Standard Box with Rack.
 - d. A profile should be added for the underdrain connection between ST-24 and ST-51. Cleanouts shall be provided at a maximum of every 100 feet. ST-51 shall show the underdrain invert on all applicable profiles.
 - e. Inlet 15 on Sheet 18 shall be revised to show the 24” pipe at invert 238.65 as an inlet. The plans currently label both inverts as outlets.
 - f. The Stormwater Piping Schedule on Sheet 12 shall be revised to indicate that ST-02 connects to EX STM MH.
 - g. The details for all basin outlet structures shall be consistent with their Pond Report parameters in the Post Construction Stormwater Management Report.
8. Appendix A - §C(2)(g)(iv) – Stormsewer pipe diameter is required to be a minimum of 18 inches. The plan should be revised or a waiver will be required.

E. Items Discussed at Township Staff Meeting on 6/20/18

1. The contractor shall install two new street lights at the intersection of Oakland Drive and Dorie Drive and the intersection of Oakland Drive and Worthington Circle as part of the Phase I development.
2. The Applicant has agreed to post a separate escrow for the PennDOT improvements. All improvements shall be completed and approved prior to the issuance of ten (10) Use and Occupancy Permits. No additional Use and Occupancy Permits will be issued until all PennDOT work has been completed.
3. The contractor shall install rip rap toe protection along the base of the wall along the Padden property, TMP 63-00-05519-41-2. The rip rap protection shall extend approximately 10 to 15 feet upstream to ensure protection. Additionally, the contractor has agreed to provide three (3) evergreen trees to the property owners in the fall (2018) to be planted. The location and the planting of the trees will be done by the property owner.
4. The existing fence along the property line of Phase II, specifically in the area of the Barnwood Circle cul-de-sac, shall remain in place. However, the contractor shall remove the barbed wire from the top of the fence. We recommend the Applicant coordinate with additional homeowners along the southeastern property line about the removal of the fence.
5. The Applicant shall submit the intersection improvement plans to PennDOT for review. Once PennDOT has reviewed and approved the plans; the Township will acquire the necessary right-of-way needed to complete the improvements.
6. The contractor shall mill and overlay Splitrail Circle curb to curb width of from Dorie Drive, through the intersection and twenty (20) feet past the sanitary manhole on Splitrail Circle. The paving limits on Oakland Drive shall extend to the curb return to the south and to include the electric trench to the North (towards Paddock Circle). Lastly, the final paving shall include Petramat.

If you have any questions regarding the above, please contact this office.

Sincerely,



Erik Garton, P.E., Vice President
Municipal Services Manager
Gilmore & Associates, Inc.

EG/eb/sl

cc: Michael Valyo, Director of Public Works and Planning
Christen Pionzio, Esq., Hamburg, Rubin, Mullin, Maxwell, & Lupin, P.C.
Kathy Frederick, Assistant Township Secretary
Patricia Fisher, Secretary, Recreation and Public Works
Timothy P. Woodrow, P.E., Woodrow & Associates, Inc.
Thomas J. Figaniak, P.E., Gilmore & Associates, Inc.
Edward Brown, E.I.T., Gilmore & Associates, Inc.