



YOUR GOALS. OUR MISSION.

December 5, 2024

Smithfield Township Planning Commission
1155 Red Fox Road
East Stroudsburg, PA 18301

**SUBJECT: LTS HOMES, LLC – 3-POINT GARDEN ROAD MAJOR SUBDIVISION
PRELIMINARY PLAN REVIEW NO. 2
SMITHFIELD TOWNSHIP, MONROE COUNTY, PENNSYLVANIA
PROJECT NO. SMTW-R0010**

Dear Planning Commission Members:

Pursuant to the Township's request, we have performed our second review of the Preliminary Major Subdivision Plan Application for 3-Point Garden Road. The submitted information consists of the following items.

- Letter of transmittal prepared by Ott Consulting, Inc., dated November 4, 2024.
- Response letter prepared by Ott Consulting, Inc., dated November 4, 2024.
- Waiver and Deferral Request letter prepared by Ott Consulting, Inc., dated June 28, 2024, revised November 4, 2024.
- Wetland Evaluation prepared by C&H Environmental, dated December 14, 2023 with Addendum dated August 6, 2024.
- Property Deed, Deed Book 2640, Page 4022.
- Title Insurance Policy, under cover letter prepared Capstone Settlement, Inc., dated November 21, 2023.
- Letter of transmittal to the Marshalls Creek Volunteer Fire Company prepared by Ott Consulting, Inc., dated November 4, 2024.
- Notice to Landowners with list of recipients and Certified Mail receipts, prepared by Ott Consulting, Inc., dated November 4, 2024.
- Erosion & Sediment Control Plan Narrative prepared by Ott Consulting, Inc., dated October 11, 2024, revised November 4, 2024.
- Stormwater Management & PCSM Report prepared by Ott Consulting, Inc., dated June 28, 2024, revised November 4, 2024.
- Preliminary Post Construction Stormwater Management Plan (3 sheets) prepared by Ott Consulting, Inc., dated June 28, 2024, revised November 4, 2024.



- Preliminary Erosion & Sediment Control Plan (2 sheets) prepared by Ott Consulting, Inc., dated June 28, 2024, revised November 4, 2024.
- Preliminary Major Subdivision Plan set (7 sheets) prepared by Ott Consulting, Inc., dated June 28, 2024, revised November 4, 2024

BACKGROUND INFORMATION

The Applicant is proposing a 7-lot major subdivision of a property located on the northern side of 3-Point Garden Road and is bordered to the north by Franklin Hill Road. The property is located within the R-1, Low Density Residential Zoning District.

The existing property has an area of 10.48 acres and consists of steep slopes and woodland areas. An unidentified stream is shown traversing the northern portion of the existing property.

The submitted plan proposes to subdivide the existing property into seven (7) lots.

1. Proposed Lot 1 will have an area of 43,907 square feet and consist of a single-family residential dwelling taking access from 3-Point Garden Road and will be served by public sanitary sewer and on-lot water.
2. Proposed Lot 2 will have an area of 40,950 square feet and consist of a single-family residential dwelling taking access from 3-Point Garden Road and will be served by public sanitary sewer and on-lot water.
3. Proposed Lot 3 will have an area of 40,950 square feet and consist of a single-family residential dwelling taking access from 3-Point Garden Road and will be served by public sanitary sewer and on-lot water.
4. Proposed Lot 4 will have an area of 40,935 square feet and consist of a single-family residential dwelling taking access from 3-Point Garden Road and will be served by public sanitary sewer and on-lot water.
5. Proposed Lot 5 will have an area of 50,130 square feet and consist of a single-family residential dwelling taking access from 3-Point Garden Road via a shared driveway with Proposed Lot 2. Proposed Lot 5 will be served by public sanitary sewer and on-lot water.
6. Proposed Lot 6 will have an area of 53,128 square feet and consist of a single-family residential dwelling taking access from 3-Point Garden Road via a shared driveway with Proposed Lot 4. Proposed Lot 6 will be served by public sanitary sewer and on-lot water.
7. Proposed Lot 7 will have an area of 145,118 square feet and consist of a single-family residential dwelling taking access from Franklin Hill Road and will be served by public sanitary sewer and on-lot water.

Stormwater management is proposed on each lot. The proposed limit of disturbance is 5.06 acres. In addition, and per Section 309, Schedule of District Regulations, one-family detached dwellings are permitted within the R-1, Low Density Residential Zoning District.



Based on our review of the above information and our previous review letter dated August 1, 2024, we offer the following comments and/or recommendations for consideration.

ZONING ORDINANCE COMMENTS

- 1.-4. Previous Comments 1 through 4 satisfied.
- 5. In accordance with Section 401.1.E, “limited disturbance of moderately steep slopes and very steep slopes shall be permitted under the conditions described below:

| Steep Slope Category | Percent | Maximum Area of Disturbance |
|-----------------------------|----------------|------------------------------------|
| Moderately Steep Slope | 15% to 25% | 60% |
| Very steep slope | 25% or greater | 10% |

Disturbance refers to any development activities, including regrading and stripping of vegetation. The use of regraded slopes shall be minimized and is generally discouraged. The use of retaining walls for grade changes is encouraged”.

The disturbance in acreage and percent for each steep slope category shall be listed on the plan to confirm compliance with this Section. The steep slopes shall also be delineated on the Erosion & Sediment Control Plan to confirm areas of disturbance. (Previous Comment 5) Existing steep slopes 15% to 25% exist and are disturbed on Proposed Lots 1, 2, 3, 4, and 6. Existing steep slopes 25%+ exist on Proposed Lots 1 and 2. In addition, the disturbed area of existing steep slopes 25%+ listed in the Steep Slope Disturbance chart on Sheet C-1.1 for Proposed Lot 7 appears low when compared to the plan view. The Steep Slope Disturbance chart shall be revised to list all existing and disturbed areas of steep slopes.

SUBDIVISION AND LAND DEVELOPMENT ORDINANCE COMMENTS

- 6. In accordance with Section 602.1.F and 603.A.1.A.(12), all submissions to, correspondence with, and approvals/permits from the following agencies shall be provided.
 - a. Smithfield Township Sewer Authority – *A copy of the transmittal and submitted documents were provided with this submission. (Previous Comment 6.a) A revised submission was made electronically on November 13, 2024.*
 - b. Fire Company *(Previous Comment 6.b) A submission to the Fire Company has been made under transmittal dated November 4, 2024.*
 - c. Monroe County Planning Commission *(Previous Comment 6.c) The response letter indicates a submission was made on October 11, 2024.*
 - d. Monroe County Conservation District/Pennsylvania Department of Environmental Protection – *Erosion control and NPDES Permit. (Previous Comment 6.d) The response letter indicates a copy of the pending submission to the County Conservation District will be provided.*



- 7.-8. Previous Comments 7 and 8 satisfied.
9. In accordance with Section 603.1.A.(11), “a recent title report shall be submitted verifying any restrictions in the deed affecting the subdivision or development of the property, including, but not limited to, any underground, overhead or surface utility easements or rights-of-way. Copies of easements shall be submitted for review.” *The title report shall be submitted as required. (Previous Comment 9) A copy of the title insurance has been provided. The title report is still required.*
10. Previous Comment 10 satisfied.
11. In accordance with Section 603.1.C.(2), “the features to be shown on the Site Context Map include:
- (a) “Topography (from the most current U.S.G.S. maps).” *The existing topography shall be provided on the Site Context Map (Sheet C-2.2). (Previous Comment 11.(a)) The existing topography now shown on Sheet C-2.2 shall be labeled with elevations.*
 - (j) Previous Comment 11.(j) satisfied.
- 12.-16. Previous Comments 12 through 16 satisfied.
17. In accordance with Sections 603.1.D.(13)(f) and 1002.7.E, slopes of 15% to 25% and slopes greater than 25% shall be mapped and shown on the plans. The total area of land within these slopes shall be calculated and shown in table form on the plans. The area to be disturbed under the proposed plan application within each slope classification shall be shown and the area of proposed disturbance shall be shown and compared with the Zoning Ordinance [Chapter 27] requirements on slope restrictions. *The existing area (in square feet) and disturbed area (in square feet and percent) of each steep slope category shall be provided on the plan. The steep slopes shall also be delineated on the Erosion & Sediment Control Plan to confirm areas of disturbance. (Previous Comment) Refer to Zoning Ordinance Comment 5 for comments related to the Steep Slope Disturbance chart on Sheet C-1.1.*
18. In accordance with Section 601.1.G.(1), the plan shall include “the layout, proposed dimensions, proposed use and consecutive numbering of all lots. All sheets shall show lot numbers. Lot closure reports shall be supplied demonstrating that the proposed lots close with an error less than one in 10,000.” *The dimensions of the proposed lots shall be provided on the plan and lot closure reports shall be submitted for review. (Previous Comment 18) The dimensions of the proposed lots shall still be provided on the plan. The response letter indicates lot closure reports will be provided under separate cover.*
20. Previous Comment 20 satisfied.
21. In accordance with Sections 603.1.G.(14) and 1101, a landscape plan showing all required street trees, buffers, tree protection areas, a plan for tree protection during construction designed to meet the requirements of §22-1103 of this Chapter and other required plantings, as required by §22-1101 of this Chapter and other Township Ordinances. *(From Previous Comment 21) Waivers from Sections 603.1.G.(14) and 1101 are requested. The request states:*



A landscaping plan is not proposed at this time, due to the rural nature of the subject property and limited site disturbance.

Per Section 1101.1.C.(2)(e), existing woodlands along Franklin Hill Road and 3-Point Garden Road may be utilized as street trees. Also, per Section 1102.1, the existing woodlands may be utilized to meet the buffer requirements. However, the Applicant shall demonstrate that the existing trees to remain meet the requirements of Part 11 and the intent of the buffer and street trees. There is concern with the proximity of the proposed driveways accessing Lots 1/5 and 4/6 to the existing property line and retaining woodlands that meet the intent of the buffer requirements.

The proposed woods line shall be shown on the plan to determine the extent of the existing trees to remain along 3-Point Garden Road and Franklin Hill Road.

23. In accordance with Section 603.1.G.(17)(b), “Soil Erosion and Sedimentation Control Plan. The plan shall include all grading and facilities proposed to control soil erosion and sedimentation during construction and proposed detention/retention facilities, in conformance with all applicable Pennsylvania Department of Environmental Protection and United States Soil Conservation Service regulations. A satisfactory letter shall be required from the Monroe County Conservation District on the soil erosion and sediment control plan.” ***(From Previous Comment 23) The response letter indicates a copy of the pending submission to the County Conservation District will be provided. All submissions to, correspondence with, and approvals from the County Conservation District/PADEP shall be provided.***
25. Previous Comment 25 satisfied.
26. In accordance with Section 603.1.H.(3)(b), the plan shall include storm sewer profiles including:
- 1) Profile of existing ground surface with elevations at top of manhole or inlets.
 - 2) Profile of storm drain and subsurface drains or sewer, showing type and size of pipe, grade, cradle, manhole and inlet locations.”

Profiles of the proposed storm sewer pipes crossing the driveway on Lot 3 and the shared driveway accessing Lots 4 and 6 shall also be provided on the plan. (Previous Comment 26) The following comments are related to our review of the profiles provided on Sheets C-6.1 and C-6.2.

- a. ***Grading is not proposed between manholes MH-2 and MH-3, therefore the POI 2 Bypass Pipe Run profile shall be revised to remove the proposed grading accordingly.***
- b. ***The invert in of the discharge pipe from Rain Garden 6 is shown as 624.46 in the POI 2 Bypass Pipe Run profile. The Pond Report suggests the invert is 625.50. The profile or Pond Report shall be revised accordingly.***
- c. ***The sanitary laterals shall be shown in the plan view on Sheet C-6.1.***



- d. The grate elevations at IN-7 and IN-9 shown in the Lot 3 Driveway Culvert profile and the Lots 4 and 6 Driveway Culvert profile, respectively are high when compared to the existing contours and shall be revised.*
- e. The pipe invert and top of grate elevation at IN-7 shown in the Lots 4 and 6 Driveway Culvert profile provides only 6-inches of cover over the top of pipe. This shall be revised.*
- f. The proposed grading associated with the downstream invert of the Lots 4/6 culvert pipe shall be shown in plan view.*

In addition, the drainage area to IN-4 appears to be the sum of the predevelopment POI 001 and POI 002 Offsite areas. The area utilized in the IN-4 peak flow calculations is high when compared to these offsite areas. The area to IN-4 shall be revised accordingly. (New Comment)

27.-28. Previous Comments 27 and 28 1 satisfied.

29. In accordance with Sections 1002.13 and 1302.3.A, lots and/or parcels shall be laid out and graded to provide positive drainage away from buildings and to prevent damage to neighboring lots, tracts, or parcels. Stormwater management shall be provided in accord with Township stormwater regulations. *The following comments shall be addressed to confirm positive drainage away from the proposed dwellings.*

- a. Previous Comment 29.a satisfied.
- b. Spot elevations shall be provided on the eastern side of the proposed dwelling on Lot 4. Also, the proposed grading at the rear of this dwelling is less than 2%. The proposed grading shall be revised to provide a minimum slope of 2% across the proposed lawn. (Previous Comment 29.b) Spot elevations shall be provided between the existing and proposed 631 contours behind the proposed dwelling on Lot 4.*
- c. Spot elevations shall be provided between the existing and proposed 655 contours east of the proposed dwelling on Lot 1. (New Comment)*

30. In accordance with Section 1008.3, “where a subdivision abuts or contains an existing street, the applicant/developer shall be required to improve said street to Township standards, and, provide an additional ultimate right-of-way width to conform to the standards set by the Township”. Franklin Hill Road and 3-Point Garden Road are classified as Local Access Streets. Appendix B requires a 50-foot wide right-of-way and a 26-foot wide cartway (18-foot wide travelway with 2, 4-foot wide shoulders) along Local Access Streets. *The existing widths of Franklin Hill Road and 3-Point Garden Road are 19-feet ± and 23-feet ±, respectively. In addition, the existing rights-of-way are 33-feet, and a 60-foot right-of-way is proposed. The plan shall be revised to meet the requirements of this Section. (From Previous Comment 30) A 25-foot wide half-width right-of-way is now proposed along both Franklin Hill Road and 3-Point Garden Road as required for a Local Access Street in Appendix B.*

The required cartway width along a Local Access Street is 26-feet (18-foot wide cartway plus two, 4-foot wide shoulders). Franklin Hill Road and 3-Point Garden Road shall be revised to provide the required 13-foot half-width (9-foot wide travel way plus a 4-foot wide shoulder).



A deferral is requested for the roadway widening due to the nominal increase in width.

We recommend Franklin Hill Road and 3-Point Garden Road be widened with a stone shoulder for consistency with other projects within the Township.

31. Previous Comment 31 satisfied.
32. In accordance with Section 1012.4, “no dwelling shall hereafter be erected unless there is a direct access to it through an open space on the same lot. Such open space shall not be less than 25 feet in width and shall extend from the dwelling to a street. Every principal building shall be built on a lot with frontage on a public street or road improved to meet the Township’s standards.” *Access easements are required and shall be shown on the plan with metes and bounds, and lot closure reports shall be submitted for review. In addition, Proposed Lots 5 and 6 do not have frontage along 3-Point Garden Road, and a waiver is required as proposed. (From Previous Comment 32) The response letter indicates an access easement will be provided. A note related to the easement shall be placed on the plan. The response letter also indicates lot closure reports will be provided under separate cover. In addition, proposed Lots 5 and 6 do not have street frontage and a waiver is still required as proposed.*
33. In accordance with Section 1012.7, “driveways and access point shall be so located, designed and constructed as to provide adequate sight distance at intersections with streets”. *A sight distance note is provided along 3-Point Garden Road on Sheet C-1.1, however it is unclear which driveway it is related to. Sight distance information shall be provided for each proposed driveway. In addition, the Available Sight Distance shall be provided for the Proposed Lot 7 driveway. (Previous Comment 33) The plan has been revised to provide sight triangles as required in Section 1012 and the sight distance information has been removed. General Note 2 states “PennDOT available sight distances are approximate and shall be field verified”. General Note 2 shall be removed and the available sight distances shall be field verified to determine the extent of disturbance, and the required and available sight distances shall be listed on the plan for each proposed driveway.*
34. In accordance with Section 1012.9, the maximum change of grade along the proposed driveways shall be 10%. *The change of grade exceeds 10% at locations described below and the plan shall be revised.*
 - a. Previous Comment 34.a satisfied.
 - b. *Between the 9% and 2% slopes along the proposed driveway on Lot 2. (From Comment 34.b) This shall still be addressed.*
 - c. Previous Comment 34.c satisfied.
 - d. *A spot elevation shall be provided along the centerline of Franklin Hill Road at the proposed driveway onto Lot 7. (Previous Comment 34.d) The change of grade between the 1% and 10% slopes near the intersection with Franklin Hill Road exceeds 10% and shall be revised.*



35. In accordance with Section 1012.10, “in all zoning districts, private driveways or other street access points shall be controlled and shall be so located so as to provide a minimum distance of five feet from the paved edge of any such driveway or access point to any property line”. *The proposed driveways accessing Lots 2/5 and 4/6 are less than 5-feet from the existing property lines and shall be relocated. (From Previous Comment 35) This shall still be addressed.*
36. In accordance with Section 1014.1.A, “curbs shall be installed along each side of every arterial, collector and local street, access driveway, and parking lots in a land development where pedestrian traffic will be travelling adjacent to the street, access driveway, or parking lot”. *Curbs shall be provided along Franklin Hill Road and 3-Point Garden Road. (Previous Comment 36) A waiver from this Section is requested to not provide curb along Franklin Hill Road and 3-Point Garden Road. The request states:*

The subdivision location is rural in nature and there are no existing/connecting sidewalks in the vicinity of the project.

37. In accordance with Section 1015.1, “sidewalks shall be required on both sides of all streets in subdivision plans and land developments. Street sidewalks shall have a minimum width of four feet, unless otherwise approved by the Board of Supervisors. There shall be a minimum three foot-wide planting strip, between the curb and sidewalk along local streets and 10 feet along collector and arterial streets. This grass planting strip can be used for the location of the underground utilities.” *Sidewalk shall be provided along Franklin Hill Road and 3-Point Garden Road. (Previous Comment 37) A waiver from this Section is requested to not provide sidewalk along Franklin Hill Road and 3-Point Garden Road. The request states:*

The subdivision location is rural in nature and there are no existing/connecting sidewalks in the vicinity of the project.

38. In accordance with Section 1022.2, “residential lots shall front on a street, existing or proposed”. *Proposed Lots 5 and 6 achieve access through Proposed Lots 1 and 4, respectively, therefore Lots 5 and 6 do not have street frontage. (Previous Comment 38) A waiver from this Section is requested to permit Proposed Lots 5 and 6 be flag lots without street frontage. The request states:*

Lots 5 & 6 have been designed with shared driveways to minimize site impacts in accordance with §22-603.1.E.(1).

39. In accordance with Section 1023.5, “where stormwater or surface water will be gathered within the subdivision or land development and discharged or drained in volume over lands within or beyond the boundaries of the subdivision or land development, the applicant/developer shall reserve or obtain easements over all lands affected thereby, which easements shall be adequate for such discharge of drainage and the carrying off of such water and for the maintenance, repair and reconstruction of the same by vehicles, machinery and other equipment for such purposes, and which shall be of sufficient width for such passage and work. The applicant/developer shall convey, free of charge or cost, such easements to the Township upon demand.” *An access easement shall be provided to permit, but not obligate the Township to access and observe, repair, replace, and/or maintain the proposed stormwater management facilities should the property owner fail to do so, at no cost to the Township. Also refer to Stormwater Management*



Ordinance Comment 77. (Previous Comment 39) The response letter indicates an access easement will be provided. A note related to the easement shall be placed on the plan.

40. In accordance with Section 1202.A, “in conformance with the Pennsylvania Municipalities Planning Code, this Section requires the public dedication of land suitable for park land, noncommercial recreational uses, preserved open space, and the construction of recreational facilities. Upon agreement of the Board of Supervisors, any of the following alternatives may be approved by the Board of Supervisors in lieu of public dedication of land, as specified in this Section:

1. Payment of recreation fees.
2. Construction of recreation facilities.
3. Dedication of recreation land or preserved open space to the Township or its designee.
4. A combination of these alternatives.”

Open space and recreation facilities and/or a fee in-lieu-of shall be provided. (Previous Comment 40) The response letter suggests a fee in-lieu-of will be provided.

42.-43. Comments 42 and 43 satisfied.

44. In accordance with Section 1301.6.B.(3), “the maximum draw down time for stormwater management facilities shall be 72 hours”. *The drawdown time in the Rain Garden Design Data worksheet in the Stormwater Management & PCSM Report shall be revised as needed based on the results of the required infiltration testing. (Previous Comment 44) The response letter indicates drawdown time will be calculated based upon infiltration test results.*

45. In accordance with Section 1301.6.F, “access to facilities shall be provided for maintenance and operation. This access shall be 20 feet wide and shall be cleared, when possible, to a minimum width of 10 feet. Multiple accesses are encouraged for major facilities. The applicant/developer shall provide driveways, curb depressions, sidewalk aprons and all easements and rights-of-way for access to stormwater management facilities.” *An access easement shall be provided to permit, but not obligate the Township to access and observe, repair, replace, and/or maintain the proposed stormwater management facilities should the property owner fail to do so, at no cost to the Township. Also refer to Stormwater Management Ordinance Comment 77. (Previous Comment 45) The response letter indicates an access easement will be provided. A note related to the easement shall be placed on the plan.*

46. In accordance with Sections 1301.7.M.(1) and 1301.7.M.(2), “all drainage channels shall be designed to prevent erosion of the bed and banks”. “Suitable stabilization shall be provided where required to prevent erosion of the drainage channels.” *Calculations and details in support of the swales shown on Proposed Lots 4, 5 and 6 shall be provided for review. (From Previous Comment 46) Refer to Stormwater Management Ordinance Comment 67.*

47. In accordance with Section 1301.7.M.(2), “the minimum diameter of all storm drainage pipe shall be 18 inches or an equivalent thereto. Where headroom is restricted, equivalent pipe arches may be used in lieu of circular pipe.” *(From Previous Comment 47) The discharge pipes from*



the proposed rain gardens have a diameter of 15-inches and shall be revised for compliance with this Section.

48. In accordance with Section 1301.7.O.(1), “a fifty-year storm for the design of all stormwater systems” is required. *The storm sewer and swale calculations shall comply with this Section. (Previous Comment 48) Storm sewer calculations are no longer provided in the Stormwater Management & PCSM Report. Inlet/outlet control calculations shall be submitted for review. Swale calculations (i.e., Worksheet #11) shall still be provided and shall include the existing swale traversing Proposed Lot 7.*
49. In accordance with Section 1302.3.D, “edges of slopes shall be a minimum of five feet from property lines or right-of-way lines in order to permit the normal rounding of the edge without encroaching on the abutting property”. *The proposed driveways accessing Lots 1/5 and 4/6 and the associated grading are located closer than 5-feet from the existing property boundary and the plan shall be revised for compliance with this Section. (Previous Comment) This shall still be addressed as described in Review No. 1 and for the following:*
- a. Along the eastern property line of Lots 1 and 3, and along the southern property line of Lot 6.*
 - b. Along the shared property line of Lots 5 and 6.*
 - c. At the southern property line and at the southern corner of Lot 7.*
51. In accordance with Section 1402.1.F, “for all proposed residential subdivisions containing six or more lots/units including the existing lot/unit, and, all proposed nonresidential subdivisions and/or land developments which are estimated to produce between 500 gallons and 100,000 gallons of water per day over any thirty-day period, the applicant/developer shall complete a “Water Resource Impact Study” which shall in general satisfy” Subsections (1) through (5). ***(Previous Comment 51) A waiver from this Section is requested. The request states:***
- The developer would like to discuss this requirement in more detail with the Township and a hydrogeologist.***

STORMWATER MANAGEMENT ORDINANCE COMMENTS

53. Previous Comment 53 satisfied.
55. In accordance with Section 225.1.A.(3)(a), “a minimum depth of 24 inches between the bottom of the BMP and the limiting zone” is required. *Soil testing shall be completed, and the results submitted for review. (Previous Comment 55) The response letter indicates soil testing will be completed and the results submitted for review.*
56. In accordance with Section 225.1.A.(3)(b), “an infiltration and/or percolation rate sufficient to accept the additional stormwater load and drain completely as determined by field tests conducted by the applicant's design professional”. *The Rain Garden Design Data worksheet in the Stormwater Management Report notes infiltration testing was completed in 2014. The results shall be submitted for review. Confirmation that the infiltration testing from 2014 is still valid*



is required. (Previous Comment 56) The response letter indicates soil testing will be completed and the results submitted for review.

57. In accordance with Section 225.1.A.(3)(c), “the recharge facility shall be capable of completely infiltrating the recharge volume within four days”. *The drawdown time in the Rain Garden Design Data worksheet in the Stormwater Management & PCSM Report shall be revised as needed based on the results of the infiltration testing. (Previous Comment 57) The response letter indicates drawdown time will be calculated based upon infiltration test results.*

58. Previous Comment 58 satisfied.

59. In accordance with Section 225.B, “the applicant shall submit a detailed soils evaluation of the development site to determine the suitability of recharge facilities. The evaluation shall be performed by a design professional, and, at a minimum, address soil permeability, depth to bedrock and subgrade stability. The general process for designing the infiltration BMP shall be:

- (1) Analyze hydrologic soil groups as well as natural and man-made features within the watershed to determine general areas of suitability for infiltration practices.
- (2) Provide site-specific infiltration test results (at the level of the proposed infiltration surface) in accord with ASTM Guide No. D 5126 to determine the appropriate hydraulic conductivity rate.
- (3) Design the infiltration structure for the required storm volume based on field-determined capacity at the level of the proposed infiltration surface.
- (4) If on-lot infiltration structures are proposed by the design professional, the applicant shall demonstrate to the Township that the soils are conducive to infiltrate on the lots identified.

The soil testing shall be completed and submitted as required. (Previous Comment 59) The response letter indicates soil testing will be completed and the results submitted for review.

60. Previous Comment 60 satisfied.

61. In accordance with Section 226.6, “off-site areas that drain through a development site are not subject to release rate criteria when determining allowable peak runoff rates. However, on-site drainage facilities shall be designed to safely convey off-site flows through the development site.” *Offsite drainage area/land use calculations have been provided. Peak flow calculations shall be provided for the offsite drainage areas and the areas shall be included in the required basin routings. (Previous Comment 61) This shall still be addressed. The post development peak flow calculations shall include the offsite areas located on TMPs 16.7.2.39-19 and 16.7.2.39-6 as shown on the Pre-Development Watershed Plan (Sheet WS-1.1) and for consistency with the predevelopment peak flow calculations. In addition, the drainage areas to IN-4 and the existing culvert crossing 3-Point Garden Road shall be included in the post development peak flow calculations as bypass.*

62. Previous Comment 62 satisfied.



63. In accordance with Section 227.4, times of concentration for overland flow shall be calculated using the methodology presented in Chapter 3 of Urban Hydrology for Small Watersheds, NRCS, TR-55 (as amended or replaced from time to time by NRCS).” *The time of concentration paths shall be shown on the Pre-Development and Post-Development Watershed Plans (Sheets WS-1.1 and WS-2.1). (From Previous Comment 63) The time of concentration path for POI 001 Offsite shall be shown on the plan.*
64. In accordance with Section 227.6, “runoff curve numbers (CN) for both existing and proposed conditions to be used in the soil cover complex method shall be obtained from Table B-2 in Appendix B. Due to limitations of the TR-55 methodology, a minimum weighted curve number of 40 shall be utilized for calculations.” *(New Comment) The CN values utilized in Hyd. No. 11 for Rain Garden 1 Offsite and Hyd. No. 19 for Rain Garden 3 Offsite, and the CN value for impervious area in Hyd. No. 15 for Rain Garden 2 Offsite are not correct and shall be revised.*
65. Previous Comment 64 satisfied.
66. In accordance with Section 228.3, “any stormwater management facility (i.e., BMP, detention basin) designed to store runoff and requiring a berm or earthen embankment required or regulated by this Part shall be designed to provide an emergency spillway to handle flow up to and including the 100-year proposed conditions, considering the primary outlet control structures are blocked. The height of embankment must provide a minimum 1.0 foot of freeboard above the maximum pool elevation computed when the facility functions for the 100-year proposed conditions inflow. Should any stormwater management facility require a dam safety permit under Chapter 105, the facility shall be designed in accordance with Chapter 105 and meet the regulations of Chapter 105 concerning dam safety which may be required to pass storms larger than the 100-year event.” *The proposed spillways with elevations shall be shown in the plan view and details shall be provided on the plan. The Applicant shall ensure that stormwater is retained within the proposed rain gardens and infiltration trenches for the 1- through 100-year post development storm events. Routing calculations shall be provided to confirm the proposed high-water elevation in each stormwater management facility. (Previous Comment 65) Outlet control structures are now proposed in each rain garden. The emergency spillway calculations shall be revised to confirm that the required 1-foot of freeboard is provided through the emergency spillway during the 100-year storm event should the outlet structures become clogged.*
67. In accordance with Section 228.6, “any drainage conveyance facility and/or channel not governed by Chapter 105 must be able to convey at a minimum, without damage to the drainage structure or roadway, runoff from the twenty-five-year design storm. Conveyance facilities to or exiting from stormwater management facilities (i.e., detention basins) shall be designed to convey the design flow to or from that structure. Roadway crossings located within designated floodplain areas must be able to convey runoff from a 100-year design storm. Any facility located within a PennDOT right-of-way must meet PennDOT minimum design standards and permit submission requirements.” *Calculations and details in support of the swales shown on Proposed Lots 4, 5 and 6 shall be provided for review. (Previous Comment 66) The proposed swales shall be labeled, and the associated drainage areas shall be shown on the plan. Calculations (i.e., Worksheet #11) shall still be submitted for review and associated details shall be provided on the plan.*



68. In accordance with Sections 228.7, “storm sewers must be able to convey at a minimum proposed conditions runoff from a twenty-five-year design storm without surcharging inlets, where appropriate. Storm sewers and other drainage conveyance systems may be required to convey larger design storms based on individual drainage/subdrainage area characteristics. Storm sewers to or exiting from stormwater management facilities shall be designed to convey design flow to or from that structure.” ***(Previous Comment 67) Storm sewer calculations are no longer provided in the Stormwater Management & PCSM Report. Inlet/outlet control calculations shall be submitted for review and Comments a, b, c, and e below will remain.***
- a. *Profiles of the proposed storm sewer pipes crossing the driveway to Lot 3 and the shared driveway to Lots 4 and 6 shall also be provided on the plan. In addition, calculations in support of the proposed driveway pipes shall be submitted for review. (Previous Comment 67.a) Refer to SALDO Comment 26. This comment remains until storm sewer calculations are submitted for review.*
 - b. *The invert elevation down utilized in the storm sewer calculations for Inlet 2 to LSI is low when compared to the proposed grading. (Previous Comment 67.b) This comment remains until storm sewer calculations are submitted for review.*
 - c. *Inlet 2 surcharges. The calculations shall be revised for compliance with this Section. In addition, the top of grate elevation at Inlet 2 utilized in the storm sewer calculations is inconsistent with that shown in the plan and profile views. The top of grate elevation shall be revised. (Previous Comment 67.c) This comment remains until storm sewer calculations are submitted for review.*
 - d. *The level spreader shall be shown with the associated elevations labeled in the Bypass Pipe Run profile on Sheet C-6.1. (Previous Comment 67.d) The level spreader is now shown and labeled on the plan. The response indicates a final design for the level spreader will be submitted for review.*
 - e. *The top of grate elevation at Inlet 4 is high when compared to the existing contours. The plan, profile, and calculations shall be revised accordingly. (Previous Comment 67.e) This comment remains until storm sewer calculations are submitted for review.*
 - f. *The existing and proposed contours shall be labeled with elevation in the plan views provided on Sheet C-6.1. (Previous Comment 67.f) This shall still be addressed for clarity.*
69. In accordance with Section 228.8, “adequate erosion protection shall be provided along all open channels, and at all points of discharge”. ***(New Comment) Rock riprap is required at the discharge points of the Lot 3 and Lots 4/6 driveway culverts. Associated calculations and details shall be provided, and the rock riprap shall be shown in plan view. In addition, the endwalls and/or end sections shall be shown in plan and profile views and details shall be added to the plans.***
70. In accordance with Section 229.1, “any earth disturbance must be conducted in conformance with Chapter 102”. ***(From Previous Comment 68) The response letter indicates a copy of the pending submission to the County Conservation District will be provided. All submissions to, correspondence with, and approvals from the County Conservation District/PADEP shall be provided.***



71. Previous Comments 69 and 71 satisfied.
72. In accordance with Section 233.2.B.(9), “limits of earth disturbance, including the type and amount of impervious area that would be added” shall be provided on the plan. *The amount of proposed impervious surfaces shall be provided on Sheet C-9.1. (Previous Comment 72) The proposed impervious area in percent has been added to Sheet C-9.1. The proposed impervious area shall also be provided in square feet.*
73. Previous Comment 73 satisfied.
74. In accordance with Section 233.2.B.(15), the plan shall include “the total parent tract and, if different, development site boundary and size with distances marked to the nearest foot and bearings to the nearest degree”. *Metes and bounds along the existing property and proposed lots shall be provided on Sheet C-9.1. (Previous Comment 74) This shall still be completed.*
75. In accordance with Section 233.2.B.(17), the plan shall include “plan and profile drawings of all SWM BMPs, including drainage structures, pipes, open channels, and swales”. *Profiles of the proposed storm sewer pipes crossing the driveway to Lot 3 and the shared driveway to Lots 4 and 6 shall also be provided on the plan. In addition, details in support of the swales shown on Proposed Lots 4, 5 and 6 shall be provided on the plan. (Previous Comment) Refer to SALDO Comments 26 and 48.*
76. In accordance with Section 233.2.B.(20), the plan shall include “overland drainage patterns and swales with time of concentration paths”. *The offsite drainage areas and drainage areas to the proposed inlets and driveway pipes shall be included on the Pre-Development and Post-Development Watershed Plans (Sheets WS-1.1 and WS-2.1). In addition, the time of concentration paths shall be shown on Sheets WS-1.1 and WS-2.1. (Previous Comment 75) This shall still be addressed. The post development peak flow calculations shall include the offsite areas located on TMPs 16.7.2.39-19 and 16.7.2.39-6 as shown on the Pre-Development Watershed Plan (Sheet WS-1.1) and for consistency with the predevelopment peak flow calculations.*

The Pre-Development Watershed Plan (Sheet WS-1.1) shall be revised to clearly delineate POI 003 Onsite and Offsite drainage areas. In addition, the time of concentration path for POI 001 Offsite shall be shown on the plan.
77. In accordance with Section 233.2.B.(21), the plan shall include “a twenty-foot-wide access easement to and around all stormwater management facilities that would provide ingress to and egress from a public right-of-way as necessary to implement the operations and maintenance (O&M) plan. Alternatively, a blanket easement may be provided by a note on the plan”. *An access easement shall be provided to permit, but not obligate the Township to access and observe, repair, replace, and/or maintain the proposed stormwater management facilities should the property owner fail to do so, at no cost to the Township. (Previous Comment 76) The response letter indicates an access easement will be provided. A note related to the easement shall be placed on the plan.*
78. Previous Comments 77 and 78 satisfied.



STORMWATER MANAGEMENT AND STORM SEWER DESIGN COMMENTS

- 79.-83. Previous Comments 79 through 83 satisfied.
84. The Rain Garden Detail on Sheet C-9.2 shall include design information for each rain garden, i.e., bottom elevation, top of berm elevation, spillway elevation and width, etc. ***(Previous Comment 84) The following comments are related to the outlet structure/rain garden details on Sheet C-9.3.***
- a. ***The cover between the 15-inch discharge pipes and top of grates are less than 1-foot for OCS 1, 2, 4, and 5. The cover is only 3-inches at OCS 2 and no cover is provided at OCS 5.***
 - b. ***The 3-inch orifice shown in the OCS 3 Detail is indicated as “inactive” in the Pond Report. The detail shall be revised to remove the 3-inch orifice.***
 - c. ***The 90-degree v-notch weir shown in the OCS 6 Detail is indicated as “inactive” in the Pond Report. The detail shall be revised to remove the weir.***
 - d. ***The invert elevation of the 3-inch orifice in the Section View of the OCS 3 Detail is incorrect and shall be revised.***
 - e. ***The invert elevation of the 6-inch orifice in the OCS 7 Detail is inconsistent with the Pond Report and shall be revised.***
 - f. ***The slopes and downstream inverts of the proposed discharge pipes shall be shown in the rain garden details.***
85. A Level Spreader Detail is provided on Sheet C-9.2. The level spreader shall be shown and labeled in plan and profile views. In addition, the detail shall be revised to include dimensions and invert elevations related to the level spreader construction. ***(Previous Comment 85) The level spreader is now shown and labeled on the plan. The response indicates a final design for the level spreader will be submitted for review.***
- 87.-89. Previous Comments 87 through 89 satisfied.
90. The existing edge of pavement of 3-Point Garden Road and the existing driveway and dwelling on TMP 16.7.2.39-19 shall be shown in their entirety to conform the impervious area utilized in Hyd. No. 2 for Predev POI 001 Offsite. In addition, the impervious areas on TMP 16.7B.3.31 shall be shown in plan view in support of the calculations for the existing culvert crossing 3-Point Garden Road. ***(New Comment)***
91. The areas of POI 001 Onsite and Offsite and of POI 002 Onsite and Offsite utilized in the peak flow calculations appear low when compared to the plan view and should be revised. In addition, the area for Rain Garden 3 Offsite in Worksheet 4b and Hyd. No. 19 are low when compared to the plan view and should also be revised. ***(New Comment)***
92. The area of woodlands utilized in Hyd. No. 1 for Predev POI 001 Onsite is inconsistent with that in Worksheet 4b. Hyd. No. 1 and Worksheet 4b shall be revised for consistency. ***(New Comment)***



93. Worksheet 4b shall be revised to include the rooftop area for Rain Garden 002 Onsite, Rain Garden 003 Onsite, Rain Garden 004 Onsite, and Rain Garden 005 Onsite. *(New Comment)*
94. The Offsite Rain Garden 002 and Offsite Rain Garden 006 areas appear to include lawn and Worksheet 4b, Hyd. No. 15, and Hyd. No. 27 shall be revised. *(New Comment)*
95. The impervious area utilized in the peak flow calculations for Rain Garden 6 Onsite appears high when compared to the plan view and should be revised. *(New Comment)*
96. It appears the drainage areas labeled “offsite” on the Post -Development Watershed Plan (Sheet WS-2.1) are undisturbed onsite areas. This shall be confirmed, and the plan notations shall be revised for clarity. *(New Comment)*
97. All storm sewer structures shall be labeled in plan view. *(New Comment)*

MISCELLANEOUS COMMENTS

98. Previous Comment 91 satisfied.
99. The proposed contours shall be labeled with elevations on all plans. *(Previous Comment 92) This shall still be addressed for clarity.*
100. The proposed utility easements shall extend to the property lines along 3-Point Garden Road and the shared property lines between Proposed Lots 1 and 5 and between Proposed Lots 4 and 6. *(Previous Comment 93) The locations of the utility easements are unclear, and the plan shall be revised. In addition, the utility easements shall be described by metes and bounds.*
101. Previous Comments 94 through 98 satisfied.

PLAN REVISION COMMENT

102. The proposed wells on Lots 1, 2, 3, 4, 5, and 6 are in close proximity to the proposed dwellings and/or driveways and shall be relocated. *(New Comment)*
103. The signature blocks for the Township Engineer, Planning Commission, and Board of Commissioners, and for the County Planning Commission are not required on Sheet C-9.1 and shall be removed. *(New Comment)*

The above comments represent a thorough and comprehensive review of the information submitted, with the intent of giving the Township the best direction possible. However, due to the nature and number of comments, the receipt of a revised plan submission may generate new comments.

In order to facilitate an efficient re-review of revised plans, the Design Engineer shall provide a letter, addressing item by item, their action in response to each of our comments.



If you should have any questions regarding the above comments, please call me.

Sincerely,

Jon S. Tresslar, P.E., P.L.S.
Township Engineer

JST/meh

cc: Julia Heilakka – Township Manager
Ronold J. Karasek, Esquire – Smithfield Township Solicitor
Ken Wolf – Smithfield Township Zoning Officer
J. Michael Preston, P.E., Ott Consulting, Inc. – Applicant’s Engineer
Robert L. Weseloh, CPA, LTS Homes, LLC – Applicant/Developer
Rick Wyckoff, LTS Homes, LLC – Applicant/Developer
Melissa E. Hutchison, P.E. – T&M Associates