



YOUR GOALS. OUR MISSION.

June 29, 2022

LVL Engineering Group
Attn: Jon Tresslar
559 Main Street Suite 230
Bethlehem, PA 18081

**SUBJECT: BLACK BUFFALO PRELIMINARY/FINAL LAND DEVELOPMENT
PLAN REVIEW NO. 1 RESPONSE
SMITHFIELD TOWNSHIP, MONROE COUNTY, PENNSYLVANIA
PROJECT LVL ENGINEERING PROJECT NO. 2132237R
T & M PROJECT #JGPT00022**

Dear Mr. Tresslar:

The following is our response to the review comments (in order) from LVL's Plan Review No. 1 for the Black Buffalo Preliminary/Final Land Development Review to the Smithfield Township Planning Commission dated June 7, 2022. Original comments are depicted below following numbering of the letter. Our responses are provided in **bold**.

ZONING ORDINANCE COMMENTS

1. In accordance with the Schedule of District Regulations, the required lot width is 150-feet. *On Sheet 2, two Zoning Data charts are provided. One lists the existing lot width of 767-feet and the other lists the proposed lot width as 919.4-feet. No changes are proposed to the existing property; therefore, we believe the lot widths should be consistent and the plan should be revised accordingly. In addition, the lot width shall be dimensioned on the plan.*
Comment Addressed.
2. In accordance with the Schedule of District Regulations, the required rear yard depth is 55-feet (adjacent to residential uses). *The setback line along the northerly property line shall be shown and dimensioned as the rear yard.*
Comment Addressed.
3. In accordance with the Schedule of District Regulations, the permitted building height in the M-1, Industrial Zoning District is 35-feet. *The proposed building height is 50-feet. The Zoning Data on Sheet 2 acknowledges the proposed building height exceeding the requirements of this Section and notes that a variance will be required.*
Comment noted, a variance will be requested.
4. In accordance with Section 401.3.C, "no structure, filling, piping, diverting or stormwater detention basin shall be permitted within floodplain areas, unless the use, activity or development occurring in the floodplain is in strict compliance with the Smithfield Township Floodplain Ordinance [Chapter 8)". *The proposed discharge pipe from Infiltration/Detention Basin 001 and the scour hole are proposed within Zone AE of the FEMA 100-year floodplain. A Conditional Use is required. Refer to the Floodplain Ordinance Comments.*



Comment noted. We understand a conditional use may be required for the encroachment. It was recommended by the Monroe County Conservation District the pipe be extended and a rip-rap/scour hole be provided right up to the wetlands in lieu of a level spreader at a pipe outfall closer to the basin and further south of the floodplain.

In addition, the Natural Resources Table on the Existing Resources and Site Analysis Plan (Sheet 6) shows no proposed disturbance for Floodplains (100 year), however the limit of disturbance line associated with the basin discharge pipe and scour hole is within Zone AE of the FEMA 100-year Floodplain. The Natural Resources Table shall be revised.

Comment Addressed.

5. In accordance with Section 404.2.A.(1), "a traffic impact study shall be required for all subdivisions and land developments that, at build-out, are projected to generate fifty (50) or more trip-ends per project peak hour or five hundred (500) trip-ends per day based on the latest edition of Trip Generation published by the Institute of Transportation Engineers. This shall include project additions, changes of use and replacement of nonconforming uses that increase the total traffic (existing plus new traffic) to more than five hundred (500) trip ends per day." A *Transportation Impact Study (TIS)* was prepared and submitted. The TIS indicates 168 new vehicle trips per day will access the proposed driveway from Airstrip Road. The following has been determined through the TIS.
- The weekday morning and afternoon peak hour Overall Levels of Service at the intersection of Airstrip Road and the proposed driveway is A during the Existing Condition and 2024 Build-Out Condition.*
 - The weekday morning and afternoon peak hour Overall Levels of Service at the intersection of Airport Road and Milford Road is A during the Existing Condition and 2024 Build-Out Condition.*
 - The Queue Analysis has determined that the queue lengths will not extend into adjacent intersections or disrupt the internal operations of the proposed development.*
 - Four (4) new truck trips have been determined at the intersection of Airstrip Road and Airport Road during the weekday morning and afternoon peak hour.*

Based upon our review of the TIS, the following comments shall be addressed.

- Currently the TIS provides the Levels of Service and delay (in seconds) at the EB Airstrip Road and NB Airport Road in Table 1, Airport Road, and Airstrip Road, however each turning movement should be analyzed for the Level of Service and delay. Therefore, the EB left and right movements from Airstrip Road, and the left and thru movements from Airport Road should each be presented with a Level of Service rating and delay. Similarly, Table 1, Airport Road, and Milford Road (S.R. 2012) should be revised the same.*

Per the Highway Capacity Manual (HCM), 6th Edition, "the LOS is determined for each minor-street movement (or shared movement), as well as the major-street left turns". The minor street is a shared movement and therefore only one LOS is computed for that shared movement. The major street left-turn can be provided separate to the approach delay, however the delay for through vehicles is assumed to experience zero delay. This update can be made as an interim submission but will not result in any changes of the conclusions and recommendations.
- One hundred sixty-eight (168) new vehicle trips have been determined for the proposed development. The total vehicle trips for Airstrip Road, including the development of Vigon shall be presented and/or summarized in the TIS.*



The TIS included the proposed Vigon development as part of no-build conditions. The total daily trips for Airstrip Road with both the proposed Black Buffalo Development (168 trips, or 84 vehicles) and the Vigon Development (300 trips, or 150 vehicles) is 468 trips or 234 vehicles.

6. In accordance with Section 402 and Schedule II, a manufacturing and wholesale or warehouse establishment requires one (1) parking space for each three (3) employees, plus one (1) for each 1,000 gross square feet, but not less than 25% of the total floor area, plus one (1) per each three (3) employees. *The proposed factory requires 132 parking spaces plus one (1) space for each employee. Sixty-three (63) parking spaces are proposed. The Zoning Data on Sheet 2 acknowledges the proposed parking not meeting the requirements of Schedule II and notes that a variance will be required.*

Comment noted, a variance is requested.

7. In accordance with Section 502.7.A, "tree fences or other approved landscaping features, shall be provided for screening purposes along any boundary of a commercial, planned boulevard and/or manufacturing lot which abuts an existing lot used solely for residential purposes. Minimum height and density of the screening features shall be approved by the Board of Supervisors." *Screening is provided along the northerly property line shared between the adjoining residential dwelling and the proposed development. The parcel line between Parcels 16-7312-00-37-9122 and 16-7312-00- 57-2601 shall be shown on the plan to ensure the screen is provided along the length of the parcel that is being developed.*

Comment Addressed. The proposed screening along the northerly property line has been extended along the entire portion of the proposed development Parcel 16-7312-00-37-9122.

8. In accordance with Section 502.7.B.(1), "a minimum of one (1) tree shall be planted within the perimeter planting area for every fifty (50) feet of the perimeter of the parking area exclusive of driveway widths. Required perimeter trees shall be planted no less than twenty-five (25) feet and no more than fifty (50) feet apart. Interior landscaped islands within parking areas shall include one (1) shade tree for each twenty (20) feet in length and five (5) shrubs for each forty (40) feet in length." *Twelve (12) shade trees are required around the perimeter of the proposed parking area and 12 trees are proposed. However, the proposed trees should also be placed along the northern edge of the proposed parking area.*

Comment Addressed. The proposed parking area trees have been revised to provide trees along the northern edge of the proposed parking area. Additionally, the planting requirements table and planting schedule have been revised for the correct interior island measurements and requirements.

In addition, the Planting Schedule lists 7 required trees and 17 required shrubs for 137 linear feet of interior island. The linear footage appears incorrect and the number of required and provided trees shall be revised accordingly.

Comment Addressed.

9. In accordance with Section 504.A, "after the effective date of this Chapter and except as otherwise herein provided, no person shall erect any sign as defined herein without first obtaining a zoning/building permit therefor from the Zoning Officer." *A note to this effect shall be placed on the plan.*

Comment Addressed. See General Note #29 on Sheet 2 of 23.

SUBDIVISION AND LAND DEVELOPMENT ORDINANCE COMMENTS

10. In accordance with Section 602.G, "the applicant/developer shall notify all abutting property owners of the proposed development. This notification shall contain a statement as to the size and scope of the proposed project and the date of the first Planning Commission review of the project. Said notice



shall be sent to the mailing address of the abutting property owners as shown on the tax rolls of the Township. A list indicating the names and addresses of the people notified as well as a copy of the letter sent, a certification with "return receipt requested" indicating that the letters had been sent shall be submitted to the Township." *The required notifications must be sent to the neighboring property owners with proof of notification provided to the Township.*

Comment Addressed. Notifications were issued. A list of owners the notices were mailed to is provided with this re-submission along with a sample of the letter.

11. In accordance with Section 603.A.7, the plan shall include "proof of any, modification, variance or special exceptions which may have been granted by the Township Zoning Hearing Board." *All requested and approved Conditional Uses, Variances, and plan modifications must be listed on the plan with any conditions and dates of approval.*

Comment Addressed. List of waivers and variances have been added to Sheet 2 of 23.

12. In accordance with Section 603.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 required title report shall be submitted.*

Comment Addressed. Title report is provided with this re-submission.

13. In accordance with Sections 603.A.12 and 703.D, proof of submission to all agencies, authorities, commissions, persons, etc., required to be distributed by the applicant/developer under the submission guidelines of this Part. *Submission to the following agencies is required.*

- a. *Monroe County Planning Commission - Provide comments received from the Planning Commission upon receipt.*

Comment Addressed. Plans were submitted and comments received. Comment letters are provided with this re-submission.

- b. *Monroe County Conservation District, PADEP NPDES Approval - Provide all submissions to, correspondences with, and permit from the County Conservation District.*
An electronic submission was made to the Monroe County Conservation District on 06/01/22. Additional information was requested by MCCD, and a subsequent submission was made on 6/21/22.

- c. *Smithfield Sewer Authority - Provide capacity letter from the Authority.*

An initial planning module exemption package was submitted to the Authority in May. The Authority requested additional forms, and a check request in the amount of \$1,500. The additional forms and check are being supplied.

- d. *Brodhead Creek Regional Authority- Provide will-serve letter from Authority.*

Comment noted. BCRA is working on the waterline extension in Airstrip Road. We have been in communication with them regarding the extension.

- e. *Pennsylvania Department of Environmental Protection - Provide Sewage Facilities Planning Module approval.*

Comment noted. The module must be approved by the Authority prior to being issued to DEP. We are working on obtaining all sewer approvals.

- f. *Fire Company- Provide proof of submission to and any comments from the fire company.*

Plans were submitted to the fire company on 6/27/22.

14. In accordance with Section 603.A.15, "a community impact analysis including the following



information shall be submitted for rural residential developments or subdivisions containing fifteen or more dwelling units or residential lots in the aggregate; all non-residential developments (with the exception of agricultural development) with buildings containing in excess of thirty thousand (30,000) square feet of impervious surface; development of any kind impacting thirty (30) acres of land or more in the aggregate; or any development where, at the discretion of the Board of Supervisors, a community impact analysis would be required." The following comments are related to our review of the Community Impact Analysis.

a. *Language noting the decommissioning of the existing airport shall be included.*
Comment Addressed. Revised report is provided.

b. *The Analysis shall provide a short summary of the results of the Transportation Impact Study.*
Comment Addressed. Revised report is provided.

15. In accordance with Section 603.B.6, the boundary line of the subdivision shall be shown as a solid heavy line." *The boundary line of Parcels 16-7312-00-37-9122 and 16-7312-00-57-2601 shall be shown with metes and bounds on the plan.*
Comment Addressed.
16. In accordance with Section 603.0.1, the Existing Resources and Site Analysis Plan shall include "a complete outline survey of the property to be subdivided or developed shall be provided, showing all courses, distances, areas, and tie-ins to all adjacent intersections. The survey shall not have an error of closure greater than one (1) part in ten thousand (10,000). Lot closure reports shall be submitted demonstrating the above stated closure requirements." *The Lots 1 & 2 Line/Curve Table shall be provided on the Existing Resources and Site Analysis Plan, or a note referencing the location of the table in the plan set shall be added.*
Comment Addressed.
17. In accordance with Section 603.D.13.(h), "wetlands shall be defined by metes and bounds." *The plan shall be revised accordingly.*
Comment Addressed.
18. In accordance with Section 603.G.2, the plan shall show "building setback lines established by zoning or other ordinances or deed restrictions with distances from the right-of-way line. Building setback lines from floodplains, water features and wetlands shall be shown as chords and defined by metes and bounds. Building setback lines shall be truncated where an easement, buffer, or right-of-way is proposed which would limit the ability of future homeowners from building." *The building setback lines shall end at the outer wetland buffer.*
Comment Addressed.
19. In accordance with Section 603.G.13, turning movement diagrams shall be provided to demonstrate that the largest truck or emergency vehicle servicing the development can safely and conveniently navigate the proposed roads, drives, parking and loading areas." *Turning movement diagrams shall be provided on the plan and presented to the fire company. The movements shall include the cul-de-sac bulb at the new terminus of Airstrip Road.*
Comment Addressed. Turning movements are provided.
20. In accordance with Section 603.G.16, The Preliminary Plan Application shall contain "A proposed stormwater management plan, prepared in accordance with the Smithfield Township Stormwater Management Ordinance [Chapter 26, Part 2], the PA DEP BMP Manual, and this Chapter all as amended including a plan of the surface drainage system of the tract to be subdivided or developed, shall be provided along with supporting calculations showing watershed areas, inlets, pipe size and



material, pipe slope, headwalls, endwalls, and manholes and a statement of the design parameters utilized in arranging and sizing the system." *Refer to the Stormwater Management Ordinance Comments and the Stormwater Management and Storm Sewer Design Comments.*

Comment noted.

21. In accordance with Sections 603.G.17 and 1302.1.A, a soil erosion and sediment control plan and design basis of surface and subsurface drainage for protection against soil erosion during and after the construction period shall be provided. *The proposed disturbance is greater than one (1) acre and a NPDES permit from the Monroe County Conservation District is required. All submissions to, correspondences with, and permit from the Conservation District shall be provided upon receipt. Based upon our review, erosion control matting shall also be provided along the slopes and swales leading to Endwall 20.*

An electronic submission of an Erosion and Sediment Control Plan was made to the Monroe County Conservation District on 06/01/22. Additional erosion control matting was added in the swale leading to Endwall 20.

22. In accordance with Section 603.G.21, "the plan shall include "a statement or certificate by the applicant/developer indicating that, to the best of his or her knowledge, the plans are in conformity with engineering, zoning, building, sanitation and other applicable Township ordinances and regulations and, if they are not so conforming, detailing the areas of nonconformance and the reasons for requesting a modification to the Township standards". *The statement/certificate shall be provided on the plan.*

Comment Addressed. The signature block under the design engineer has language similar to what is being requested.

23. In accordance with Sections 603.G.24, 1401.3, and 1406, the applicant/developer shall supply to the Township a statement from a registered engineer detailing the demands that the proposed development will have on the existing public sanitary sewer and public water systems within the Township. The applicant/developer shall supply an application for reservation of capacity or an executed capacity reservation agreement from the appropriate authorities having jurisdiction. *A capacity letter from the Sewer Authority, approval of a PADEP Sewage Facilities Planning Module, a will-serve letter from BCRA, and capacity reservation agreements shall be provided.*

Applicant is currently coordinating with Smithfield Township Sewer Authority and BCRA.

24. In accordance with Section 603.G.25, a preliminary plan not involving subdivision of land shall provide preliminary elevation sketches and floor plans. *The required architectural plans shall be submitted.*

Comment Addressed. Preliminary architectural plans have been provided.

25. In accordance with Section 603.H.3.(b)(1) and 603.H.3.(b)(2), the plan shall include a "profile of existing ground surface with elevations at top of manholes or inlets", and a "profile of storm drains and subsurface drains or sewer, showing type and size of pipe, grade, cradle, manhole, and inlet locations". *Profiles of the proposed storm sewer including the basin discharge pipes with anti-seep collars, and a profile of the sanitary sewer lateral shall be provided on the plan.*

Comment Addressed. Profiles have been added to the plan set.

26. In accordance with Section 1005, "wherever a central or public water supply system serves a development, provision shall be made for fire hydrants along streets or on the walls of nonresidential structures as approved by the Fire Company servicing the development in accordance with all prescribed State and county standards". *The Applicant shall discuss the proposed development with the Fire Company.*



Comment Addressed. Plans were submitted to the Fire Company.

27. In accordance with Section 1014.2.B, "curbs shall be constructed in accordance with the standards shown on the Curb Construction Standards, in Appendix C of this Chapter and may be constructed of concrete or Belgian Block." *The "3,000 psi" concrete specified in the Concrete Curb Detail on Sheet 22 shall be revised to note "3,300 psi" concrete as required in Appendix C. In addition, there are three (3) asterisks at the 6" curb height dimension and O "where depressed" note. The note the asterisks should be referencing shall be placed on the plan.*

Comment Addressed.

28. In accordance with Section 1015.5, "sidewalks and walkways adjacent to parking areas shall be set back a minimum of five (5) feet to prevent car overhang from restricting pedestrian movement along the sidewalk". *The proposed sidewalk is immediately adjacent to the parking lot and shall be relocated.*

Comment Addressed. We added width to the sidewalk in order to provide for the depth of the car overhang.

29. In accordance with Section 1020.A, "the lighting plan shall provide for nonglare lights focused downward. The incident light intensity provided at ground level shall be a minimum of one-half (0.5) footcandle anywhere in the area to be illuminated, except where such illumination will cause a spillover effect on adjacent properties. Lighting shall be provided by fixtures with a mounting height not more than twenty (20) feet." *The foot candles shall be clearly presented on the Lighting Plan (Sheet 20).*

Comment Addressed.

30. In accordance with Section 1024.4, "street trees shall be provided at the rate of not less than two (2) trees for every ten (10) parking spaces, which shall be in addition to any other requirements for buffering or landscaping". *Thirteen (13) trees are required and twelve (12) are proposed. One (1) additional tree shall be provided.*

Comment Addressed. One (1) additional tree has been provided.

31. In accordance with Section 1026.2, "collection stations shall be located so as to be separated adequately from habitable buildings to avoid being offensive or a fire hazard and shall be hidden from sight by a solid fence or wall and landscaped and be convenient for collectors and residents. Turning movement diagrams shall be provided demonstrating that the containers can be accessed by a collection truck safely." *A dumpster pad and enclosure detail shall be provided on the plan. In addition, turning movement diagrams shall be provided for trucks accessing the dumpster.*

Comment Addressed.

32. In accordance with Section 1101.1.A.(4), "all plant material shall meet the standards of the American Standard for Nursery Stock by the American Nursery and Landscape Association (2004) or most recent edition, and any heights, spreads and/or caliper sizes for trees and shrubs indicated in this Section". *A note to this effect shall be placed on the plan.*

Comment Addressed. See Note 1 on Sheet 17 of 23.

33. In accordance with Section 1101.1.A.(8), "street trees shall be a minimum of three (3) inches in caliper and shall be a species suggested in subsection (1)(C)(3)(a), street trees. All main branches shall be pruned to a clearance height of seven (7) feet above the ground. Street trees shall have a single, straight trunk and central leader and shall be free of disease and mechanical damage. A note shall be added to the landscape plans stating this information." *Upon review of the Planting Schedule on the Landscape Plan (Sheet 19), it does not appear the proposed street trees are 3- inches minimum caliper, and the Schedule shall be revised to clearly indicate which are street trees with their required minimum*



caliper. The street trees shall be per the approved list in Section 1101.1.C.(3). In addition, the required note shall be placed on the plan.

Comment Addressed. The planting schedule has been revised to propose 3” minimum caliper street trees. The planting schedule has been revised, noting that Street Trees are denoted on Plan with a “^” symbol after the symbol callout. All proposed street trees are Acer rubrum ‘Bowhall’; Acer rubrum is included in the approve list in Section 1101.1.C.(3). See Notes 2 and 3 on Sheet 17 of 23.

34. In accordance with Section 1101.1.C.(1)(c), "street trees shall be required for any subdivision or land development where suitable street trees do not exist as part of the design and construction of existing streets, sidewalks, pedestrian ways, highways, bicycle trails or pathways that abut or lie within the subdivision or land development". *The Planting Requirements chart on the Landscape Plan (Sheet 19) calculates the required number of street trees utilizing 222 feet of roadway, however it appears this length is that between the access driveway to the project site and the westerly edge of the cul-de-sac bulb. The length shall also include the area between the easterly edge of the cul-de-sac bulb to the shared property line between Parcels 16-7312-00-37-9122 and 16-7312-00-57-2601, excluding the areas of existing wetlands.*

Comment Addressed. The planting requirements table has been revised to show the calculated length along Airstrip Road, excluding the area of existing wetlands.

35. In accordance with Section 1101.1.F.(2)(d)(1), "a fence must be provided around all detention or retention basins". *A fence shall also be provided around Infiltration/Detention Basin 002.*

Comment Addressed.

36. 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.

Comment noted. Applicant will pay the fee in lieu of.

37. In accordance with Section 1301.6.C.(5), "the top of the outlet box shall be set at the one hundred (100) year water surface elevation and shall have an open grate". *The grate elevation of the outlet structure at Infiltration/Detention Basin 002 shall be set to the 100-year water elevation.*

A waiver is being requested for this item. The riser grate is the outlet control for this basin, as such it can not be set at the 100-year water elevation and also provide outlet control for other storms. The outlet configuration for this basin is similar to that which was proposed for the Airstrip Road improvements.

38. In accordance with Section 1301.7.G, "the minimum top width of the detention basin embankment shall be ten (10) feet. An embankment stability analysis shall be supplied for basins with a proposed embankment slope which is less than ten (10) feet." *The berm widths at Infiltration/Detention Basins*



001 and 002 are 8-feet and 6-feet, respectively, and shall be revised.

Comment Addressed. Berm widths have been widened to be 10 feet minimum.

39. In accordance with Section 1301.7.J.(5), "the minimum capacity of all emergency spillways shall be the peak flow rate from the one hundred (100) year design storm after development". *Emergency spillway calculations shall be provided.*

Comment addressed in the revised Stormwater Management Calculations.

40. In accordance with Section 1301.7.Q.(2), "the minimum diameter of all storm drainage pipe shall be eighteen (18) inches or an equivalent thereto. Where headroom is restricted, equivalent pipe arches may be used in lieu of circular pipe." Proposed storm sewer between Endwall 32 and Inlet 31, and Inlets 31 and 30 is 15-inch diameter pipe and shall be revised.

Comment Addressed. The two specified pipe runs have been revised to 18" pipe.

41. In accordance with Section 1302.1.D, "final plans for minimizing erosion and sedimentation as approved will be incorporated into the Agreement and Financial Securities requirements as required by the Township." *The construction cost estimate shall include the required erosion and sedimentation controls.*

Comment noted. A cost estimate will be prepared once the plans are substantially approved by the Township and MCCD.

42. In accordance with Section 1302.3.K "perimeter grades at the corners of the building shall be shown on the grading plan." *Spot elevations shall be provided at all corners of the proposed building.*

Comment Addressed.

43. In accordance with Sections 1503 and 1504, "no plan shall receive final approval unless the streets shown have been improved to a permanently passable condition, or improved as may be required by this Chapter, and any walkways, bikeways, curbs, gutters, streetlights, fire hydrants, shade trees, landscaping, parking lots, line striping, stormwater management facilities, erosion and sedimentation control measures, water mains, sanitary sewers, storm drains and other improvements as may be required by this Chapter or the Smithfield Township Zoning Ordinance [Chapter 27] have been installed. In lieu of the completion of any improvements, the applicant/developer shall furnish to the Township financial security with such surety as the Board of Supervisors shall approve, in an amount sufficient to cover the costs of any improvements which may be required. Such financial security shall provide for and secure to the public the completion of any improvements which may be required on or before the date fixed in the formal action of approval or accompanying agreement for completion of improvements. The amount of financial security to be posted for completion of the required improvements shall be equal to one hundred ten percent (110%) of the cost of completion estimated as of ninety (90) days following the date of scheduled for completion by the applicant/developer. Annually, the Township may adjust the amount of the financial security by comparing the actual cost of the improvements which have been completed and the estimated cost for the completion of the remaining improvements as of the expiration of the ninetieth (90th) day after either the original date scheduled of completion or a rescheduled date of completion. Subsequent to said adjustment, the Township may require the applicant/developer to post additional security in order to assure that the financial security equals said one hundred ten percent (110%). Any additional security shall be posted by the applicant/developer in accordance with this Section." *A construction cost estimate for the improvements shall be provided for review and financial security shall be posted prior to plan recordation.*

Comment noted. A cost estimate will be prepared once the plans are substantially approved by the Township and MCCD and prior to plan recordation.



44. In accordance with Section 1506.2, "the following is a list of items required for as-built drawings. Please note that additional items may be required on a case-by-case basis. Water and sewer as-built drawings should be coordinated with the respective authorities. The as-built plans shall consist of the original plans with design information struck with as-built information placed next to design information. If revised topography is needed due to a significant change in grade (+/-one-half (0.5) feet), the revised topography should be shown in a matter to distinguish it from design topography. *A note shall be placed on the plan requiring an as-built plan in accordance with this Section 1506.2.*
Comment Addressed. Note was added under General Notes number 30 on Sheet 2 of 23.
45. In accordance with Section I 601.3, "all requests for a modification shall be in writing and shall accompany and be a part of the application for development. The request shall state in full the grounds and facts of unreasonableness or hardship on which the request is based, the provision or provisions of the ordinance involved and the minimum modification necessary." *All waiver requests shall be submitted in writing with justification and listed on the plan with dates of approval.*
Comment Addressed. Waiver letter is provided.

STORMWATER MANAGEMENT ORDINANCE COMMENTS

46. In accordance with Section 221.11, "roof drains shall not be connected to streets, sanitary or storm sewers or roadside ditches in order to promote overland flow and infiltration/ percolation of storm water where advantageous to do so. Considering potential pollutant loading, roof drain runoff in most cases will not require pretreatment." *The proposed roof drains are tied into the proposed storm sewer that discharges to Infiltration/Detention Basin 00001. A waiver is required as proposed.*
Waiver.
47. In accordance with Section 223.1.1.(d)(1)(a), permitted activities/development within the 50-foot inner wetland buffer area: "stormwater conveyance required by the Township, buffer maintenance and restoration, the correction of hazardous conditions, stream crossings permitted by DEP and passive unpaved stable trails shall be permitted. No other earth disturbance, grading, filling, buildings, structures, new construction, or development shall be permitted." *The discharge pipe from Infiltration/Detention Basin 001 and scour hole and storm sewer crossing Airstrip Road are proposed within the inner wetland buffer. We believe these are permitted, however other construction including grading and the northerly retaining wall are also proposed within the inner buffer and a waiver will be required.*
Waiver.
48. In accordance with Section 223.I.1.(d)(2)(a), permitted activities/development within the JOO-foot outer wetland buffer area: "storm water conveyance required by the Township, buffer maintenance and restoration, the correction of hazardous conditions, stream crossings permitted by DEP, roads constructed to existing grade, unpaved trails, and limited forestry activities that do not clear cut the buffer (e.g., selective regeneration harvest) in accord with a forestry management plan shall be permitted provided no buildings are involved, and those activities permitted under §§223(1)(5) and 223(1)(6)". *Infiltration/Detention Basins 001 and 002 are proposed within the outer buffer as well as retaining walls, driveway, and building. A waiver is required as proposed.*
Waiver.
49. In accordance with Section 226.2, "all calculations consistent with this Part using the soil cover complex method shall use the appropriate design rainfall depths for the various return period storms



according to the region in which they are located as presented in Table B-1 in Appendix B. If a hydrologic computer model such as PSRM or HEC-1 is used for storm water runoff calculations, then the duration of rainfall shall be twenty-four (24) hours. The SCS "S" curve shown in Figure B-1 of Appendix B shall be used for the rainfall distribution." *Rainfall data from the NOAA was utilized in the calculations. We would support a waiver from Section 226.2.*

Waiver.

50. In accordance with Section 226.3, "for the purposes of existing conditions flow rate determination, undeveloped land shall be considered as "meadow" in good condition, unless the natural ground cover generates a lower curve number or Rational "C" value, as listed in Table B-2 or B-3 in Appendix B". *The existing impervious area has been reduced by 20% and the calculations shall be revised to consider all existing impervious areas as meadow.*

Comment Addressed. Existing impervious is developed land and analyzed as such.

51. In accordance with Section 226.4, "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). Times-of-concentration for channel and pipe flow shall be computed using Manning's equation."

- a. *The Shallow Concentrated Flow length utilized in the Ex South time of concentration calculation appears high when compared to that on the plan. The calculation or plan should be revised.*

Comment addressed in the revised Stormwater Management Calculations.

- b. *A time of concentration of 4.2 minutes is utilized in the Post North peak flow calculation. Chapter 3 of the Urban Hydrology for Small Watersheds (TR-55) requires a minimum 6-minute time of concentration. The calculation shall be revised.*

Comment addressed in the revised Stormwater Management Calculations..

- c. *The time of concentration calculation for Post to North Basin utilizes sheet flow and shallow concentrated flow, however the Proposed Conditions Drainage Area Plan shows the time of concentration path as pipe flow and the calculation shall be revised.*

Comment addressed in the revised Stormwater Management Calculations..

- d. *The time of concentration calculation for the Post to South Basin shall be provided.*

Comment addressed in the revised Stormwater Management Calculations..

52. In accordance with Section 226.6, "runoff coefficients (c) for both existing and proposed conditions for use in the rational method shall be obtained from Table B-3 in Appendix B". *A calculation in support of the rational coefficient for Drainage Area 20 shall be provided.*

Comment addressed in the revised Stormwater Management Calculations..

53. In accordance with Section 227.4, "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 one hundred (100) year proposed conditions. The height of embankment must provide a minimum one (1.0) foot of freeboard above the maximum pool elevation computed when the facility functions for the one hundred (100) year proposed conditions inflow. Should any storm water 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 one hundred (100) year event." *Emergency spillway calculations for Infiltration/Detention Basins 001 and 002 shall be provided. In addition, the high-water elevations of the 50- and 100-year storm events at*



Infiltration/Detention Basin 002 exceed the proposed elevation of the emergency spillway. The emergency spillway shall be revised accordingly.

Comment addressed in the revised Stormwater Management Calculations..

54. In accordance with Section 227.7, 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 fifty (50) year design storm. *Calculations in support of the proposed vegetated swales shall be submitted.*

Comment Addressed. Vegetated Swale S3.2 was previously designed by others for proposed Airstrip Road improvements. A copy of those calculations are in the revised Stormwater Management report. Calculations for Vegetated Swale BMP 3 have been revised for a 50-year storm for permanent vegetated conditions. Calculations for bare earth and other temporary conditions are based on the SCS requirement of 1.6 cfs per acre drainage area.

55. In accordance with Sections 228.1 and 223.A.4, any earth disturbance must be conducted in conformance with Chapter 102, and an erosion and sedimentation control plan, including all reviews and letters of adequacy obtained by the Conservation District shall be provided to the Township. *The proposed disturbance is greater than one (1) acre and a NPDES permit from the Monroe County Conservation District is required. All submissions to, correspondences with, and permit from the Conservation District shall be provided upon receipt. Also refer to Comment 2.*

Comment Addressed.

56. In accordance with Section 228.2.A, "areas proposed for infiltration BMPs shall be protected from sedimentation and compaction during the construction phase to maintain maximum infiltration capacity." *Sheet 15 notes that the area within proposed Infiltration/Detention Basin 002 shall remain undisturbed. The same note shall be provided for Infiltration/Detention Basin 001.*

The note has been modified to comply with this section.

57. In accordance with Section 28 I .3, "the applicant shall make all requests for waivers in writing and include such requests as a part of the application for development. The applicant in full the grounds and facts, of unreasonableness or hardship on which the request is based, the provision or provisions of this Part involved and the minimum waiver necessary. The applicant shall state how the requested waiver and applicant's proposal shall result in an equal or better means of complying with the intent of this Part as stated in Part 2A." *All waiver requests shall be made in writing with justification and listed on the plan with dates of approval.*

Comment Addressed.

STORMWATER MANAGEMENT AND STORM SEWER DESIGN COMMENTS

58. The discharge elevations from Infiltration/Detention Basins 001 and 002 are 2-feet and 1.5-feet, respectively. A discharge pipe with valve should be provided at each of the basin bottoms to allow for discharge of stormwater should ponding occur for greater than four (4) days.

Comment Addressed.

59. A calculation for the design infiltration rate at Infiltration/Detention Basin 002 is provided in the Stormwater Management Calculations, however infiltration is not utilized in the Pond Report. This should be addressed.

Comment addressed in the revised Stormwater Management Calculations..

60. The Operation and Maintenance note on Sheet 17 that references the Township accessing the site and maintaining the stormwater management facilities shall be expanded to include language indicating the Township is not responsible for the costs of maintenance, repairs, replacement, etc.



Comment Addressed.

61. On Sheets 18 and 24, the outlet elevation at Infiltration/Detention Basin 001 is inconsistent between the Section Through Berm Detail (470.70) and the Outlet Structure Detail (470.00). The Outlet Structure detail is consistent with the Pond Report. The details and/or Pond Report shall be revised.
Comment Addressed.
62. The Section Through Infiltration/Detention Basin 00I Berm on Sheets 18 and 24 show a pipe outlet invert elevation of 470.00. The associated grading with this outlet elevation and scour hole shall be provided on the plan.
Comment Addressed.
63. One (1) discharge pipe is utilized in the Pond Report for Infiltration/Detention Basin 002, while two (2) are shown in the Outlet Structure detail on Sheets 18 and 24. The Pond Report or detail shall be revised.
Comment Addressed.
64. The Snout Oil-Water-Debris Separator Installation detail on Sheet 23 lists Inlets 12 and 21. Inlet 12 shall be revised to Inlet 13, and it does not appear an Inlet 21 is proposed. Also, Inlets 13 and 31 shall note a 24-inch discharge pipe and the type of snout should be corrected accordingly.
The Snout detail has been removed from the plans as it is not necessary.
65. An Anti-Seep Collar detail is provided on Sheet 24. Supporting calculations shall be provided.
Comment Addressed.
66. A Section Through Berm detail for Infiltration/Detention Basin 002 shall be provided on the plan.
Comment Addressed.
67. The inlet out elevation at Inlet 13 is inconsistent between Sheet 9 and the Combined Pipe/Node Report in the Stormwater Management Calculations. The plan or report shall be revised.
Comment Addressed.
68. The proposed dumpster pad is located over storm sewer between Inlet 13 and Manhole 18. The relocation of the dumpster pad should be considered.
The storm sewer layout has been modified to eliminate pipes under the pad.
69. The type of inlet and inlet size shall be provided in plan view or within the required profiles.
Comment Addressed.
70. On Sheet 24, the 9-inch by 24-inch orifice at Infiltration/Detention Basin 001 shall be dimensioned in its Outlet Structure detail.
Comment Addressed.

DESIGN COMMENTS

71. A detailed plan of the proposed handicap ramp and spaces shall be provided in the plan set and shall include dimensions, slope arrows, and spot elevations to confirm the ramp design and grading across the parking spaces is in accordance with the Americans with Disabilities Act.
The parking lot and adjacent sidewalk were revised to address vehicle overhang and grading concerns in the parking lot. Once these revisions are reviewed and approved, and no additional revisions are anticipated, we will provide the detailed ramp and ADA stall plan. As currently designed the ramp and stalls comply.



72. The parking lot grading is less than 0.5% between spot elevation 479.26 and the 479 contour. The proposed grade shall be revised to be a minimum of 0.5%.
Comment Addressed.
73. On Sheet 19, Landscape Plan, there are conflicts between light posts and proposed trees on the northerly end of the proposed parking area and north of the proposed Infiltration/Detention Basin 001. The plan shall be revised to remove these conflicts. In addition, the GS tree labels at the proposed parking lot appear incorrect and should be revised.
Comment Addressed. The GS tree labels have been corrected. Proposed trees have been relocated around light posts to remove conflicts.

FLOODPLAIN ORDINANCE COMMENTS

74. In accordance with Section 103.2.A, "it shall be unlawful for any person to undertake, or cause to be undertaken, any construction or development anywhere in, on, under, across, or through the floodplain of the Township of Smithfield unless a conditional use permit has been obtained from the Floodplain Administrator and after hearing by the Township Board of Supervisors."
- In addition, and in accordance with Sections 105.A and 108, activities/development that are compatible with maintaining the existing hydrologic regime and do not alter the cross-sectional dimension of the floodplain and its storage capacity, including stormwater conveyance and stormwater management facilities for water quality as outlined in the Township's Stormwater Management Ordinance are permitted.
- The discharge pipe from Infiltration/Detention Basin 001 and the scour hole are located within Zone AE of the FEMA 100-year floodplain. This work is permitted by Conditional Use, however additional information such as the grading at and associated with the scour hole shall be provided on the plan.*
- Comment Addressed. Additional contours at the pipe and scour hole have been provided. Please also see response to comment #4 in this letter.**

MISCELLANEOUS COMMENTS

75. A detail in support of the proposed retaining walls shall be placed on the plan with a note indicating that design plans and calculations prepared by a PA Professional Engineer are required prior to construction.
Comment Addressed. A detail has been added to the detail sheets. Calculations will be provided prior to construction.
76. The basin seed mix shall be clearly identified on the plan.
Comment Addressed. The basin seed mixes were on the originally submitted plans. there is a hatch showing the type of mix being proposed for the side slopes and the basin bottom. The hatch matches a detail on Sheet 19 of 23.
77. The referenced Jurisdictional Determination dated July 30, 2020, shall be submitted.
Comment Addressed.
78. Improvements along Airstrip Road are shown as proposed on these plans. To ensure construction follows the previously approved Airstrip Road design the proposed improvements shall be removed from these plans, and those improvements shall be referenced by note with approved plan name and date. In addition, we understand that the improvements along Airstrip Road are to be constructed for access to the Vigon Land Development. The timing of the Airstrip Road construction shall be



addressed.

Comment Addressed. The viewports are removed with notations related to the originally approved plans.

79. On Sheet 6, Existing Resources and Site Analysis Plan, shows the existing runway removed past the limits of disturbance. The impervious area being removed, or the limit of disturbance shall be revised.
Comment Addressed.
80. On Sheet 6, Existing Resources and Site Analysis Plan, the hatching for the wetland margin and impervious areas to be removed are the same and should be revised for clarity.
Comment Addressed.
81. Sheets 18 and 24 have duplicate outlet structure, emergency spillway, berm, and scour hole details. We suggest only one (I) set of details be provided in the plan set.
Duplicate details have been removed from the plans.

Should you have any questions, or require any additional information please contact me at 610-234-4235.

Very truly yours,
T&M ASSOCIATES

A handwritten signature in black ink, appearing to read 'Mark J Buchvalt', with a long horizontal flourish extending to the right.

Mark J Buchvalt, PE
Group Manager