



**VIA ELECTRONIC MAIL**

**West Chester Office**  
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West Chester, PA 19380  
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November 18, 2019

Erica L. Batdorf, Township Manager  
West Vincent Township  
729 Saint Matthews Road  
Chester Springs, PA 19425

RE: 2969 Horseshoe Trail  
Minor Subdivision/Land Development Application Review – Resubmission Required  
West Vincent Township  
File No: 11084.59

Dear Ms. Batdorf:

As requested, we have completed a review of the submitted Subdivision/Land Development Application and the submitted Sewage Facilities Planning Module Application for 2969 Horseshoe Trail Road – Parcel 25-3-92.1. The site, containing approximately 10.0 acres, is located on the north side of Horseshoe Trail Road within the R-2 Residential Zoning District. The owner is proposing to subdivide the lot into a 4.68-acre lot and a 5.32-acre lot and to construct a 4 bedroom dwelling on each proposed lot, each served by a separate on-lot sewage disposal system.

The following information was received by ARRO:

- Preliminary/Final Subdivision and Land Development Plan for 2969 Horseshoe Trail, dated October 8, 2019, consisting of 7 sheets, and prepared for Patricia Morgera by Inland Design. (Plan)
- Post Construction Stormwater Management Report for 2969 Horseshoe Trail, prepared for Patricia Morgera by Inland Design. (Report)
- Sewage Facilities Planning Module Component 1 for 2969 Horseshoe Trail, prepared for Patricia Morgera by Willow Run Consulting, Inc.
  - Project Narrative, prepared by Willow Run Consulting, Inc.
  - PNDI, dated September 24, 2019, and prepared by Inland Design, LLC.
  - Plot Plan consisting of 1 sheet dated October 8, 2019, and prepared by InLand Design, LLC. (Plan)
  - Completeness Checklist
  - Set consisting of 6 sheets of "Site Investigation and Percolation Test Report For Onlot Disposal Of Sewage", dated July 22, July 24, and July 25, 2019, and prepared by Hollis Weston of the Chester County Health Department.

We have reviewed the information for compliance with the following Ordinances:

- West Vincent Township Subdivision and Land Development Ordinance of 1998 (As amended by Ordinance No. 170-2016) (SALDO)
- West Vincent Township Stormwater Management Ordinance (Ordinance No. 160 of 2014).

### **Relief Requested**

The applicant is requesting waivers from the requirements of the following sections of the SALDO.

1. *§404.C – Final Impact Analysis and Resource Conservation Plan*

The applicant has requested relief from provided preliminary impact analysis and resource conservation plan. The ordinance section description must be corrected on the Plan. ARRO does not recommend approval of this waiver for this project. The Plan includes proposed improvements for which impact analysis is required.

2. *§403.F – Five-Step Design Process for Residential Subdivisions*

*All preliminary plans in the residential districts shall include documentation of a five-step design process in determining the layout of proposed Greenway lands, house sites, streets, stormwater facilities, and lot lines, as described below.*

The applicant has requested relief from providing five step design process since greenway lands on the property are already under a conservation easement. The section number must be corrected on the Plan. ARRO does not recommend approval of this waiver for this project. All five step of the process shall be addressed. The pre-existing conservation easement may be included as step 1 of the five-step process.

3. *§403.I.1 – Sewer and Water Feasibility Report*

The applicant has requested relief from providing sewer and water feasibility report. The section number must be corrected in the waiver request on the Plan. ARRO does not object to this waiver as this will be addressed by the Sewage Facilities Planning Module.

4. *§403.I.2 – Hydrogeology and Groundwater Protection Study*

*All proposed subdivisions or land developments within the Township shall be in compliance with the West Vincent Township Well Ordinance (Ordinance No. 97-78, as amended), the contents of which are hereby incorporated herein by reference. Without limiting the foregoing, all applicants for subdivision or land development approval shall submit all information required under the Well Ordinance, at the times specified therein, in conjunction*

*with their applications for subdivision or land development approval. All applicants shall comply with the substantive requirements of the Well Ordinance.*

The applicant has requested relief from providing hydrogeology and groundwater protection study. The section number must be corrected on the Plan. ARRO does not recommend approval of this waiver for this project since wells are proposed.

We offer the following comments for your consideration:

**Subdivision and Land Development Comments:**

*§404.B - Existing Resources and Site Analysis Plan*

*A plan as stipulated in Section 403.D. consistent with the terms of preliminary plan approval and modified as necessary to reflect the proposal for final approval.*

1. *§403.D.1 - Topography, the contour lines of which shall generally be at two-foot intervals, determined by photogrammetry and measured in accordance with the standards contained in Article XVII of the Township Zoning Ordinance (although 10-foot intervals are permissible beyond the parcel boundaries, interpolated from U.S.G.S. published maps). The determination of appropriate contour intervals shall be made by the Planning Commission, which may specify greater or lesser intervals on exceptionally steep or flat sites. Slopes between 15 and 25 percent and exceeding 25 percent shall be clearly indicated. Topography for major subdivisions shall be prepared by a professional land surveyor or professional engineer from an actual field survey of the site or from stereoscopic aerial photography and shall be coordinated with official U.S.G.S. benchmarks. Datum to which contour elevations refer shall be noted*

Areas of precautionary and steep slopes shall be shown along the western boundary of lot 2B and additional area in the center of lot 2B.

2. *§404.D.3 - Sufficient data to determine readily the location, bearing and length of every lot and boundary line and to produce such lines upon the ground, including all dimensions, angles, and bearings of the lines. The gross tract acreage and adjusted tract area shall be shown. For each lot created, including areas to be dedicated to public use, the gross and net lot area shall be indicated to the nearest one-thousandth (0.001) of an acre. For lot sizes smaller than one (1) acre, the lot area shall be indicated by square feet.*

Legal descriptions and closure reports for the proposed lots must be provided for review.

2. *§403.D.7 - A viewshed analysis showing the location and extent of views into the property from public roads and from adjoining properties.*

A viewshed analysis shall be provided.

3. *§403.D.8 - Visual resources as delineated in the Township Open Space and Recreation Plan.*

The plan shall include the visual resources delineated in the West Vincent Township Open Space and Recreation Plan, 1992.

*§404.D.1 - All information required in Section 403G.*

4. *§403.G.2.a - Proposed subdivision or land development name or identifying title and deed book and page reference(s) applicable to the subject property*

The UPI information, deed book and page shall be revised as needed based on correction of County records.

5. *§403.G.2.h - The names of all owners of all adjacent lands with appropriate deed references.*

The owner of the original lot #1 east of the tract shall be shown along with appropriate deed references.

6. *§403.G.2.i - The locations and dimensions of all existing street rights-of-way and paving widths, including those approved or recorded but not constructed, existing gas, electric, and petroleum transmission lines, water courses, buildings, structures, sources of water supply, easements, trails and any other significant features, man-made and natural within the property proposed to be developed or subdivided and within 200 feet of the tract boundaries. Significant natural features shall include information shown on the Existing Resources and Site Analysis Plan.*

The cartway width of Horseshoe Trail shall be shown on the Plan.

7. *§403.G.2.I.1 - Building envelope showing setback lines and yard area requirements.*

The setbacks and yard area requirements shall be dimensioned on the title plan.

8. *§403.G.2.I.2 - Proposed easements and rights-of-way*

The easements for the shared driveway shall be added to the Plan. The trail easements shall be labeled.

9. *§403.G.2.I.3 - The location of all percolation tests and test pits and the location of the primary and reserve disposal beds approved by the Chester County Health Department shall be indicated on each proposed lot.*

The primary and reserve septic bed locations shall be clarified on the title plan to show two individual bed locations not a general area of the site.

10. *§403.G.2.o - Notes regarding ownership, maintenance responsibilities, and any use restrictions for all rights-of-way and easements within or adjacent to the subdivision or land development except those rights-of-way for pre-existing public streets.*

The required notes shall be provided on the Plan for the driveway(s) and trail(s).

11. *§403.O - Ordinance Relief Report*

*The applicant shall provide a report which identifies any conditional uses, special exceptions, and/or variances necessary or granted, along with the applicable decisions of the Zoning Hearing Board and/or Board of Supervisors. The report shall also identify all subdivision waivers requested along with reasons why the waivers are needed in accordance with Section 1203 of this Ordinance.*

An ordinance relief report listing all the requested waivers must be provided.

12. *§404.D.4 - For residential subdivisions, proposed driveway locations and the names of all streets, as approved in writing by the U.S. Postal Service, County Emergency Services Department and local fire companies, and house numbers as assigned by the Township shall be shown.*

The applicant must coordinate street address numbers with the Township Manager or other designee of the Board of Supervisors. The street addresses shall be shown on the Plan prior to Recordation.

13. *§404.D.5 - Permanent concrete control and reference monuments, as required by Section 603 of this Ordinance.*

The title plan shall include the monument and marker locations.

14. *§404.E.3 - The following data for the cartway edges (curb lines) and right-of-way lines of all recorded (except those which are to be vacated) and/or proposed streets and sidewalks within or abutting the property.*

The Horseshoe Trail ultimate right-of-way shall include the required labeling for radii and arcs.

15. *§404.E.4 - Notification from PennDOT or the Township shall be provided confirming that a Highway Occupancy Permit will be issued after preliminary approval.*

The applicant shall provide the PennDOT highway occupancy permit for the driveway. The Township must be copied on all correspondence regarding the Highway Occupancy Permit required for the project, including any extensions to permits that would otherwise expire.

16. *§404.E.9 - Where individual on-lot sewage systems are to be provided, the location described in metes and bounds of the primary and secondary absorption areas and a statement indicating that such description shall be recorded with the deed for any and all affected lots.*

The required information shall be provided.

17. *§404.G – Final Greenway Ownership and Management Plan*  
The greenway area shall be clearly labeled on the Plan and/or legend.

18. *§507.C.4: No approval of the detailed Final Plan shall be granted by the Board until notification of PaDEP's approval of the Sewage Facilities Planning Module has been received by the Board. Should such notification not be received within the time limitations for detailed final plan approval in accord with the Act, the time limitations shall be extended for not more than ninety (90) days at the written request of the applicant. If the applicant refuses to provide such written request, approval of the detailed Final Plan shall be denied.*

The applicant should note that the Plan cannot be signed and approved by the Board of Supervisors for recording until the PADEP approval of the Sewage Facilities Planning Module is obtained and provided to the Township.

19. *§507.E.1 - The landowner shall execute a Subdivision and Land Development Agreement in accordance with Section 509.*

A Subdivision and Land Development Agreement, in a format approved by the Township Solicitor, shall be executed prior the release of the Plan for recordation.

20. *§510.C - The applicant agrees to have prepared a deed or deeds of dedication to the Township for such streets, easements for sanitary and storm sewers, sidewalks, and other public improvements, provided that the Township shall not accept dedication of such improvements until their completion is certified as satisfactory to the Township Engineer.*

An offer of dedication shall be provided for the ultimate right of way for Horseshoe Trail.

21. *§603.A.1 - Permanent stone or concrete monuments shall be accurately placed at the intersection of all lines forming angles and at changes in directions of lines in the boundary (perimeter) of the property being subdivided.*

Monuments shall be placed at the northeast and southeast corners of the perimeter of the property.

22. *§603.B.1 - Markers shall be accurately placed at all lot corners within a subdivision.*

Markers shall be placed at the corners of the line(s) between lots 2A and 2B.

23. §605.A - *The minimum area, width, and building setback lines for lots shall be as provided in the area and bulk regulations of the West Vincent Township Zoning Ordinance.*

The tract perimeter setback shall be provided around the entire perimeter.

24. §607.A.1 - *Each lot shall have a sanitary sewer system in accordance with the provisions of the Pennsylvania Department of Environmental Protection and the Chester County Health Department.*

Approval must be obtained from the Pennsylvania Department of Environmental Protection (PADEP) and the Chester County Health Department through the approval of a Sewage Facilities Planning Module.

25. §615.C.5 - *In Tier III and IV subdivisions with fewer than ten (10) dwelling units, where there would be no particular benefit accruing from a public dedication (as described above), the recreational land that is part of the requirement for undivided open space shall be designated for private shared recreational usage among the subdivision lot owners.*

The applicant shall address the requirement for private shared recreational space

**Stormwater Management Comments:**

26. §303.A - *No Regulated Activity within the Municipality shall commence until:*

The applicant shall provide the required Chester County Conservation District letter of adequacy and the NPDES Construction Activities Permit

27. §305.E - *Water quality improvement shall be achieved in conjunction with achieving the infiltration requirements of Section 306. The infiltration volume required under Section 306 may be included as a component of the water quality volume. If the calculated water quality and runoff volume is greater than the volume infiltrated, then the difference between the two (2) volumes shall be managed for water quality and runoff volume control through other techniques or practices but shall not be discharged from the Site.*

The required stormwater volume shall be retained in the beds and not discharged. The Plan shows the outlet from each of the beds below the bed invert. Collected stormwater will freely discharge and not be infiltrated as described in the Report. The Report appendices B and C shall include the infiltrated bed model information to match the design shown on the Plan.

28. §306.I - *A detailed soils evaluation of the Site shall be conducted by a qualified professional and at a minimum shall address soil permeability, depth to bedrock, and subgrade stability. The general process for designing the infiltration BMP shall be conducted by a qualified Licensed Professional and shall be consistent with the PA BMP Manual (as amended) (or other guidance acceptable to the Municipal Engineer) and in general shall:*

The lot descriptions in the infiltration test report are inconsistent with the Plan. The lot numbers on the infiltration test results table (Plan sheet 3) are inconsistent with the test report and the locations shown on the Plan.

29. *§306.K.2 - Be set back at least twenty-five (25) feet from all buildings and features with sub-grade elements (e.g., basements, foundation walls, etc.), and at least ten (10) feet from property lines or right-of-way boundaries, unless otherwise approved by the Municipal Engineer;*

For lot 2B, the infiltration bed shall be set at least 25 feet from the building.

30. *§309.D - The Applicant shall utilize the following ground cover assumptions for all Predevelopment water quality and runoff volume, infiltration volume and peak flow rate calculations:*

The undisturbed area curve numbers are inconsistent from pre-development to post-development. If the area is not being disturbed the ground cover and/or soils must be consistent from pre-development to post-development conditions. (Report pages D1, D3, D6, D8)

31. *§310.D - Conveyance facilities to or exiting from stormwater management facilities (i.e., detention basins) shall be designed to convey the design flow to or from the facility.*

The Report must include sizing or capacity calculations for the collection piping.

32. *§402.A.2 – A listing of all regulatory approvals required for the proposed project and the status of the review and approval process for each. Final approval or adequacy letter must be submitted to the Municipality prior to (or as a condition of) the Municipality's issuing final approval of the SWM Site Plan. Proof of application or documentation of required permit(s) or approvals for the programs listed below shall be part of the SWM Site Plan, if applicable:*

- a. *NPDES Permit for Stormwater Discharges from Construction Activities;*
- b. *PADEP permits as needed;*
- c. *PennDOT Highway Occupancy Permit;*
- d. *Erosion and Sediment Control Plan letter of adequacy; and*
- e. *Any other permit under applicable State or Federal regulations*

A listing of the applicable permits, along with their permit numbers and approval dates shall be added to the Plan. The applicable permits must be provided to the Township prior to execution and recordation of the Plan.

33. *§402.B.8.g - Areas that are part of the Pennsylvania Natural Diversity Inventory (PNDI) and a list of potential impacts and clearances received (for Regulated Activities involving one (1) acre or more of proposed Earth Disturbance).*

The PNDI report shall be provided.

34. *§402.B.8.j - Areas classified by the Municipality as steep slopes.*

Additional steep slopes shall be shown as identified above.

35. *§402.B.11.e - Percent of the Site covered by Impervious Surfaces for both the existing and proposed Post-construction conditions.*

The required impervious surface tabulation shall be provided on the PCSWM plan or the Title Plan shall be recorded with the PCSWM Plan.

36. *§402.C.7 - Expected project time schedule; and*

The expected schedule for the project shall be included on the Plan.

37. *§702.C: A statement that no BMP or man-made Conveyance may be used by the owner or others for any purpose other than its intended stormwater control function, or, if approved by the Municipal Engineer, a statement of specific allowable uses of the BMP (i.e., recreational benefits that maybe associated with certain BMPs owned by a homeowners association, or allowable uses by an individual residential Landowner).*

The required statement shall be included on the Plan.

38. *§703: Operation and Maintenance Agreements*

An O&M agreement will be provided for execution upon approval of the Plan. This agreement shall be executed by the Applicant and provided to the Township for the Township's execution prior to final approval and recording of the Plan.

39. *§704.C: For any BMP or Conveyance which is designed to receive runoff from another parcel or parcels and which is owned by the Landowner of the parcel upon which the BMP or Conveyance is located, in addition to any easement or easement agreement required pursuant to Subsection 704.A or .B, an easement agreement shall be prepared and executed between the Landowner of the parcel or parcels draining to the BMP or Conveyance and the owner of the BMP or Conveyance. This easement agreement shall:*

An easement agreement shall be prepared and executed between the owners of the two lots to address runoff from Lot B which is collected to the BMP on Lot A.

40. *§705.D: The owner of each BMP and Conveyance shall keep on file with the Municipality the name, address, and telephone number of the person responsible for maintenance activities and implementation of the O&M Plan. In the event of a change, new information shall be submitted by the BMP or Conveyance owner to the Municipality within thirty (30) working days of the change.*

The required note shall be included on the Plan.

41. *§706.A & §706.A.1: Persons installing stormwater controls or BMPs shall be required to pay a specified amount to the Municipal Stormwater Control and BMP Operation and Maintenance Fund to help cover the costs of periodic inspections and maintenance expenses. The amount of the deposit shall be determined as follows: If the BMP or Conveyance is to be privately owned and maintained, the deposit shall cover the cost of periodic inspections performed by the Municipality, as estimated by the Municipal Engineer, for a period of eighteen (18) months. This is to be paid in a manner specified by the Municipality. After that period of time, inspections will be performed at the expense of the Municipality.*

The appropriate fee is to be paid in a manner as determined by the Township.

**Sewage Facility Planning Module Comments:**

42. Section H must be completed by the authorized jurisdictional SEO prior to any municipal action by West Vincent Township. The Chester County Health Department administers all on-lot sewage disposal system testing, and therefore; should complete this section.
43. Section J – ARRO defers comment on the planning and zoning ordinances to the Zoning Officer and Municipal Planning Code Officer.
44. PNDI US Fish and Wildlife Service Response: It should be noted that the Phase 1 Survey for Bog Turtle habitat is dated as December 28, 2017. These surveys are valid for two years. If the project does not receive approval before this date, another Phase 1 Survey may need to be conducted.
45. An On-lot Sewage Management Agreement shall be completed prior to municipal action by West Vincent Township.
46. A Resolution for Plan Revision for New Land Development shall be submitted by the applicant for municipal action.

**General Comments:**

47. The line shown on plan north of and parallel to the required ROW line shall be labeled.
48. PCSWM O&M Responsible Party Note 6 is inconsistent with the Plan with respect to the BMPs proposed and the lots involved.

Please note, a revised submission may generate further review comments. Once we receive the revised information addressing the comments in this letter, ARRO will confirm that the application is compliant with the West Vincent Township Ordinances.

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Please do not hesitate to contact me via email at [bryan.kulakowsky@arroconsulting.com](mailto:bryan.kulakowsky@arroconsulting.com) or by phone at our West Chester office with any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Bryan D. Kulakowsky', with a long horizontal line extending to the right.

Bryan D. Kulakowsky, P.E.  
ARRO Consulting, Inc. – Township Engineer

BDK:ted

CC: Kathy Shillenn – West Vincent Township Secretary  
Tracey Franey – West Vincent Township Zoning Officer  
Linda R. Layer, P.E. – InLand Design ([linda@inlanddesign.net](mailto:linda@inlanddesign.net))  
John Mott, P.E. – ARRO  
Lowell Leaman, P.E. – ARRO