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November 6, 2023
Ref: #11530

East Vincent Township
262 Ridge Road
Spring City, PA 19475

Attention: Robert Zienkowski, Township Manager

Reference: Conditional Use Sketch Plan Review; 53 Lot Development with On-Lot Sewer
Artisan Construction Group LLC (Benson Tract/Bechtel Farm at Stony Run)
446 Stony Run Road, UPI Nos. 21-5-79 and 21-5-78

Dear Bob:

We have received the Conditional Use Plan submission pertaining to the above-referenced major subdivision that was forwarded to our office for review by the Township. The submission consists of the following documents:

- “Bechtel Farm at Stony Run Conditional Use Development Plan” dated June 24, 2022, revision 7, prepared by Edward B. Walsh & Associates, Inc., Sheet 1 of 2.
- “Conditional Use Development Plan - Revised Site Plan of 53 Lots w/On-Lot Sewer” dated January 3, 2022, last revised September 29, 2023, prepared by Stuart and Associates, LLC, Sheet 2 of 2.
- Waiver Request letter dated October 4, 2023 from John W. Benson III, Artisan Construction Group, LLC, identifying fifteen (15) requested waivers from the East Vincent Township Subdivision and Land Development Ordinance.

Relative to this matter, we note that the applicant is proposing to subdivide a 67.9 acre (gross)/58.65 acre (net) tract consisting of two parcels (21-5-78 and 21-5-79) into 53 fee-simple lots for the new construction of 52 single-family detached dwellings on Lots 1 through 52, with an existing farmhouse and its accessory structures to remain on proposed Lot 53, all within the LR Low Density Residential Zoning District. All proposed dwellings will be served by proposed public water and individual on-lot sanitary sewer service.

The development will be served by a single point of access along the southern side of Stony Run Road (S.R. 1032) to a proposed internal road system of three new roads, one of which is a cul-de-sac road providing 10 perpendicular on-street parking spaces in its bulb. The roads are proposed to have a 50 ft. wide right-of-way with a 20 ft. wide cartway and 5 ft. wide sidewalk along both sides of the cartway and are proposed to be offered for dedication

to East Vincent Township. On-street parking is noted to be prohibited on all cartways except for the aforementioned cul-de-sac spaces. Three stormwater basins are proposed: one in O.S.1 (Open Space #1) and the remaining two in O.S.3 (Open Space #3). An 8 ft. wide multi-use trail is proposed to be constructed along the Stony Run Road frontage and an approximately 6 ft. wide internal trail system is proposed, meandering around two stormwater basins in the southerly open space. The trails are noted to be owned and maintained by a Homeowners Association with the Stony Run Road trail being for public use and the internal trails being for use by residents only.

As per your request, we have performed a cursory review of the Conditional Use Sketch Plan submission pertaining to the proposed subdivision and thereby offer the following comments for consideration by Township Officials:

I. ZONING ORDINANCE & CONDITIONAL USE

The following comments are based upon the requirements of the East Vincent Zoning Ordinance (“ZO”):

1. Development under the Open Space Design Option is a Conditional Use in the LR Zoning District; the Board of Supervisors must approve the proposed use. (ZO Section 27-602.3 and 27-902.1.B)
2. Per comment No. 1, for a conditional use application, the applicant must address the following pursuant to Article 19 of the Zoning Ordinance:
 - a. The applicant must address the general Conditional Use application criteria contained within the Zoning Ordinance as it applies to the current application to the satisfaction of the Township. (ZO Section 27-1901.6)
 - b. The applicant should demonstrate evidence of adequate water supply and sewage disposal. We note that in a previous submission, the applicant provided a service commitment letter from PA American Water dated August 5, 2022. Suitability of on-site soils for on-lot sewage disposal has not been demonstrated. (ZO Section 27-1901.3.B)
 - c. General Note 18 on Sheet 1 references phasing of the development. The applicant should discuss with the Board of Supervisors if the development will occur in one or more phases and revise the plans to reflect any anticipated phasing. To the extent that conditions are being considered for conditional use approval of the 53 lot plans, the applicant should be required to submit during the Preliminary Plan process for the Township review and approval phasing plans to depict the location and boundaries of each phase, and a listing of the improvements necessary for development of that phase. Each phase will need to construct all improvements necessary for the development of that phase, irrespective of their location upon the tract. Lastly, the applicant’s phasing plan shall identify the timing of construction of the proposed improvements to the

intersection of Stony Run Road at West Bridge Street. (ZO Section 27-1901.3.C)

- d. Erosion & Sediment Control and Stormwater Management must comply with the Subdivision and Land Development Ordinance (SLDO). (ZO Section 27-1901.3.D)
- e. The Township Solicitor must review the language, terms and conditions of any proposed covenants and restrictions. (ZO Section 27-1901.3.E)
- f. The applicant's development plan must demonstrate coordinated internal and external vehicular and pedestrian circulation; well related, convenient and efficient parking areas; agreeable surroundings that provide comfort, safety, and convenience for prospective residents; and high quality design in terms of building relationship, facade treatment, signage, lighting, landscaped and planted buffers and screens, as well as other natural and constructed amenities in furtherance of the comprehensive planning objectives of East Vincent Township. (ZO Section 27-1901.4.B). Therefore, we offer the following comments:
 - i. We note that on-street parking is only proposed at the proposed cul-de-sac bulb which is remotely located to most dwellings. This could result in unintended on-street parking when residents host multiple guests that cannot be accommodated on individual driveways. This adversely impacts "convenience" and "safety" within the neighborhood. Additional on-street parking areas throughout the development should be considered. To the extent that conditions are being considered for the conditional use approval for the 53 lot plans, the applicant should present to the Township options for additional on-street parking areas throughout the development, such that they are more accessible and convenient to all lots.
 - ii. While a larger lot size is contemplated relative to prior submissions for this tract, the implementation of on-lot sewage disposal likely restricts the opportunity to provide side-loaded garages on many of the lots. All dwellings on the plan are shown to have front-loaded garages which may detract from the architectural character of the proposed buildings. Design renderings of the dwellings should be supplied to the Township for review and approval during the Preliminary Plan application process, and the applicant shall vary the front-loaded and side-loaded garages to enhance the architectural character of the development.
 - iii. The 20 ft. wide cartway width may be less desirable to emergency services and does not support on-street parking by residents or their guests. This may be detrimental to safety and circulation within the site.

- iv. Design renderings of all dwellings have not been supplied with the current proposal; therefore, we are unable to comment on building design.
- v. Landscaping detail is limited to the depiction of buffer plantings at the easterly and westerly tract property lines, areas around stormwater basins, and at the emergency access. Conceptually, these plantings contribute to agreeable surroundings; however, a detailed analysis cannot be performed relative to appropriate plant quantities, species selection, and placement. We note that the planted tract buffer appears to be reduced in width on the westerly side which directly abuts existing residential uses.
- g. Any application for conditional use approval involving a use that can be expected to generate more than 50 trips during any peak hour, based on the most current version of the Trip Generation Manual published by the Institute of Transportation Engineers (ITE), shall be accompanied by traffic studies demonstrating feasible compliance with the objectives of the Zoning Ordinance, Subdivision and Land Development Ordinance, and the East Vincent Township Comprehensive Plan, as applicable. Such studies shall estimate traffic volumes, turning movements, and levels of service at intersections, and potentially unsafe conditions existing prior to development as well as any that may be reasonably expected to occur after proposed development and shall suggest action(s) to mitigate any anticipated reduction of level of service or other negative impact to traffic conditions resulting from the development as proposed. We defer to the Township Traffic Engineer for comment on the anticipated number of trips for this 53 unit development. The applicant shall indicate if the previously discussed off-site intersection improvements at Stony Run Road and West Bridge Street are proposed to be provided/constructed by the applicant as part of this current proposal. (ZO Section 27-1901.4.D)
- h. The applicant shall describe the mitigating measures used to address impacts to the existing site resources. We note that the use of on-lot septic disposal may compromise existing prime agricultural soils and local groundwater supplies adjacent to the High-Quality Stony Run. Studies and analyses shall be provided by the applicant at the time of Preliminary Plan application, to the satisfaction of the Township, to demonstrate that on-lot septic systems will not adversely impact neighboring properties or the HQ Stony Run. (ZO Section 1901.4.C.2)
- i. Consistency with the spirit, purposes, and intent of the East Vincent Township Comprehensive Plan, Open Space Plan, and this chapter shall be demonstrated to the Board of Supervisors. Based on the underlying Low Density Residential (LR) zoning classification, the proposal's size and scale is generally appropriate; however, in prior submissions, an 89 acre tract to the south was potentially offered as dedicated open space. As that tract of land is

not offered as part of this proposal, the Township's Open Space Plan should be closely considered, as the rural character south of the PECO transmission line corridor could be compromised by future infill development on said tract owned by the applicant.

- j. The applicant shall demonstrate to the Board of Supervisors that the proposed development will not adversely affect existing public services, utilities, recreational opportunities, and public schools. Arrangements for expansion or improvement of such services may be required as a condition of approval. (ZO Section 27-1901.6.G)
 - k. Emergency access design considerations shall be discussed. As noted above, a single access road is proposed into the development from Stony Run Road along with a 20 ft. wide emergency access from Stony Run Road. Emergency services shall review the layout and determine if the proposed emergency access is adequate for this 53 lot development. General Note 38 on Sheet 1 of 2 refers to the proposed maintenance of the emergency access drive. (ZO Section 27-1901.6.K)
 - l. The applicant must demonstrate to the Board of Supervisors that the proposed layout of the dwelling units, design of lots, and open space areas are appropriate and conform to the Open Space Design Option relative to ZO Section 27-904.5.L:
 - i. The establishment of safe and efficient pedestrian and vehicular access and circulation.
 - ii. Establishment of suitable private yard areas for all residences.
 - iii. The consideration of potential impacts to existing neighboring properties.
 - iv. Provisions for adequate and cost effective use and management of open space areas in accordance with ZO Sections 27-905 & 906.
 - m. The adequacy of sanitation and public safety provisions and the necessity to provide a certificate of adequacy of sewage facilities for the proposed on-systems from a governmental health agency must be addressed. (ZO Section 1901.6.L)
3. Development under the Open Space Design Option shall be served by individual, community, or public water supply systems. As noted above, a service commitment letter was previously supplied by PA American Water, noting that extension of water main will be the developer's responsibility. (ZO Sections 27-902.2 and SLDO 424)
4. Development under the Open Space Design Option shall be served by individual or public sewage disposal systems consistent with the East Vincent Township Sewage

Facilities (Act 537) Plan. The plan illustrates a typical lot configuration with two absorption field areas (primary and secondary); however, to the best of our knowledge, the percolation rates and viability of on-lot systems have not been confirmed. Additionally, based on the typical 120 by 45 foot septic field, some of the proposed lots may not be able to provide a secondary disposal area within the depicted lot areas. We understand such sizing is theoretical, but the Township should comment on the potential conflicts that may arise in providing a secondary disposal area as required under PA Title 25 Chapter 73. We note that the applicant indicated at a recent Township meeting that, if individual septic disposal systems were precluded on a particular lot, it would not develop that lot. The applicant shall conduct all necessary testing during the Preliminary Plan process to establish the location(s) and validity of on-lot septic systems for each proposed lot. Where on-lot septic is determined to not be viable for a particular lot, the plans shall be revised to reflect the same and consideration shall be given to the neighborhood layout and preservation of open space. (ZO Sections 27-902.3, 27-1718 and SLDO 423)

5. The applicant should confirm if public water service will be provided to the existing farmhouse in addition to the proposed 52 dwellings.
6. The existing farmhouse septic drain field is shown on the plan to encroach into the proposed open space OS.3; this configuration is not acceptable. The applicant must indicate if the existing system will remain in service or if a new on-lot system will be installed.
7. Maximum dwelling units or lots are calculated considering the "net tract area" in acres multiplied by 0.7 for LR zoned properties, rounded to nearest whole number. Therefore, the maximum base density for the 58.65 acre LR-zoned tract is 41 dwellings or lots.

Applicants may receive Transferrable Development Rights (TDRs) from eligible sending areas. When received by another eligible tract, a receiving multiplier of 1.25 applies; therefore, only 10 TDRs are needed from an eligible sending tract to provide for 12 dwellings at this receiving tract.

Where TDRs are used, the base multiplier of the LR zoning district is increased from 0.7 to 0.9, resulting in an adjusted maximum density of 53 dwellings or lots. This increase requires at least 12 TDRs to be received from an eligible area. General Note 20 indicates the source of a permissible sending tract as was acknowledged under Resolution No. 2022-35. Resolution No. 2022-35 should be revisited to reflect the number of TDRs that would be utilized from the sending tract, from which parcel(s) such TDRs would be sent from, and potential development restrictions and future yield of remainders of the 89 acre tract to the south. (ZO Sections 27-904.2 and 27-2404.1.B.1.a.1)

8. The applicant should confirm that no rear wall of any principal residential structure will be within 50 feet measured perpendicularly of another principal residential structure. It appears that it could occur between Lots 22 and 23. (ZO Section 27-904.5.A)

9. Future plans should include a note limiting the placement of accessory structures as stipulated in ZO Section 27-904.5.B.
10. The “typical single family detached dwelling” schematic on Sheet 2 of 2 notes a lot area of 24,050 square feet. Lots greater than 20,000 square feet, but less than one acre, may not exceed 25% impervious coverage; therefore, the maximum impervious area based on the proposed typical lot area is 6,012 square feet. Additionally, the maximum permitted building coverage shall not exceed 65% of the maximum impervious coverage permitted for a lot. It appears that the maximum impervious and building coverages will be met, based on the information provided within the schematic, but will need to be confirmed with the preliminary/final plans. (ZO Sections 27-904.5.J and 27-904.5.K.1)
11. The applicant must demonstrate maximum conservation of scenic views from public roads and neighboring residential properties. Existing vegetation, changes in topography, or new landscaping may be used to screen the development from view. (ZO Section 27-905.4.A)
12. The three stormwater management areas shown on the plans are all located within open space areas. Stormwater management facilities may not be located within restricted open space unless the applicant demonstrates to the Township Engineer that the facilities promote groundwater recharge, are available and appropriate for active or passive recreational use or scenic enjoyment, and otherwise conform to criteria set forth for open spaces. The Board of Supervisors must also approve any stormwater management facility located within any restricted open space. (ZO Sections 27-906.1.A.2.c and 27-202.1)
13. The Township may require sufficient perimeter parking, safe and convenient access to accommodate pedestrian, bicycle, and maintenance vehicles to the open space. We note that trailheads commence at the cul-de-sac bulb and between Lots 1 and 53, both interconnecting with the internal sidewalk network. Perimeter parking is only provided at the cul-de-sac bulb. (ZO Section 27-906.1.D)
14. The plan should clearly identify “restricted” open space. The proposed ownership and dedication of the restricted open space should be discussed with the Township. Plan Note 21 on Sheet 1 of 2 states that all open space shown on the final approved plan will be owned and maintained by the Homeowners Association. An open space management plan will need to be provided with future submissions. (ZO 27-906.2 and 27-906.3)
15. The followings portions of proposed open spaces contributing to restricted open space must be excluded as the areas do not extend 100 feet in all directions (ZO 27-906.1.A.2.b)
 - a. Open Space OS.2, in its entirety
 - b. Open Space OS.3, east of Lot 1, southwest of Lot 40, and west of Lot 53

16. The position of the dwelling on Lot 44 must maintain a minimum of 25 feet from Open Space OS.3. This required setback distance cannot be confirmed on the current plans. (ZO Section 27-906.1.A.1.2.a)
17. The applicant should indicate if the existing animals at the farmhouse are proposed to remain at proposed Lot 53. If so, compliance with ZO Section 27-1610 is required.

II. SUBDIVISION AND LAND DEVELOPMENT ORDINANCE

The following comments are based upon the requirements of the East Vincent Township Subdivision and Land Development Ordinance ("SLDO"):

1. The following information must be provided on this plan with future plan submissions:
 - a. Soils of agricultural capability shall be denoted as Class I, II or III as listed in Section 27-401.A of the East Vincent Township Zoning Ordinance. (SLDO Section 22-307.1.A.8)
 - b. Existing vegetation should be denoted as to type, including woodlands, specimen vegetation, and hedgerows; individual trees of 6-inch caliper or greater dbh; wetland vegetation; old field; meadow, pasture, or cropland; orchard; cultivated and ornamental garden areas. (SLDO Section 22-307.1.A.10)
 - c. Viewsheds, as defined by ridgelines, and including a delineation of all areas and site features, including, but not limited to, historic resources and other significant assets such as visual features that represent the Township's unique character or that are visible from nearby or any other public roads should be defined. The narrative provides a brief summary of impacts to viewsheds, but the subject sheet lacks required detailed information. (SLDO Section 22-307.1.A.14)
2. A traffic impact statement may be required with future submissions. An environmental impact study may also be required as a condition of a conditional use. (SLDO Section 22-307.6)
3. Preliminary Plans, when submitted, will need the Chester County Health Department to review the adequacy of the site to sustain on-site sewage disposal systems, as proposed. (SLDO Section 22-305.4.C.2)
4. Perc test holes and deep test holes shall be performed for the proposed individual on-lot sewage disposal system locations and the exact locations of the successful and failed perc and deep hole tests for the primary and replacement disposal areas shown on the future preliminary plans. (SLDO Sections 22-305.5.B.2.o and 22-423.10)

5. The applicant shall establish that Lots 1 and 35 meet the minimum required and/or maximum allowable depth to width ratio of 1:1 to 1:2.5 to the satisfaction of the Zoning Officer. (SLDO Section 22-403.1.D)
6. The straight horizontal alignment of the interior roadways may encourage speeding; the layout should employ design practices to reduce vehicular speeds and promote safe pedestrian and bicycle traffic. The applicant should explore the incorporation of traffic calming measures or other design modifications during the Preliminary Plan application process to mitigate this concern. (SLDO Section 22-405.3)
7. Clarification of the applicant's intentions regarding the dedication of the proposed streets is required, as Note 15 on Sheet 1 of 2 states they are to be offered for dedication to the Township, whereas Note 39 on Sheet 1 of 2 states that the Township is granted access to the private rights-of-way associated within the roads in the development." (SLDO Section 22-406.1)
8. The minimum cartway width for local streets is 20 feet, which has been proposed. Additional cartway width may be required by the Township for public safety and convenience. We note that the Township recently proposed a standard detail for local residential streets, attached, that depicts a minimum 24 foot wide cartway with 4 foot wide sidewalks. (SLDO Sections 22-406.1 and 22-406.2.A)
9. The length of the cul-de-sac road must be a minimum of 250 feet, as required by SLDO Section 22-411.5 and to count towards Liquid Fuels. The required minimum distance cannot be confirmed on the current plan.
10. The applicant should discuss their intentions regarding dedication of the right-of-way areas between the title line and ultimate right-of-way of Stony Run Road. (SLDO Section 22-406.5)
11. Streetlights will be required for residential streets and sidewalks and should be depicted on future plans accompanied by standard details. We recommend any proposed trail connections to the roadway also be illuminated. We note that a waiver has been requested for lighting levels. (ZO Sections 27-1715 and SLDO 22-414)
12. Suitable landscaping plans, prepared by a registered landscape architect, which illustrate required buffers, street trees, replacement trees, as required, in accordance with the provisions of the Ordinance must be provided at time of future plan submissions. (SLDO Section 22-422)
13. Park and Recreation Land is required at 0.125 acres per residential dwelling unit. The plan indicates that 6.5 acres will be required; however, it is unclear which land area(s) on site will be provided for as recreation land. We note that most open space areas contain storm basins and the largest open space to the south consists primarily of wetlands and flood hazard areas. (SLDO Section s22-428.3, 22-428.4.A and .C, and 22-428.5)

14. The Township may, as a condition of future approval, require the establishment of a conservation easement(s) or deed restriction(s) for riparian buffer areas in a form acceptable to the Township. (SLDO Section 22-429.3)
15. We offer the following comments regarding the proposed trail:
 - a. Trail systems routed to a sidewalk shall be at the sole discretion of the Board of Supervisors. (SLDO 22-434.3.C)
 - b. Any newly created trail shall be available for public use. Internal trails are noted for resident use only. (SLDO 22-434.3.C)
 - c. The trail surface material should be defined on future submissions. (SLDO 22-434.3.O.2.b)
16. A Lot Consolidation Plan must be included with future plan submissions that details the consolidation of the two individual parcels into a single parcel.

III. GRADING, STORMWATER MANAGEMENT, DRAINAGE AND EROSION AND SEDIMENTATION CONTROL

The following comments pertain to the grading, stormwater management, drainage and erosion and sedimentation control aspects of the current plan submission and area based upon the requirements of the East Vincent Township Stormwater Management Ordinance ("SMO") and the Subdivision and Land Development Ordinance ("SLDO"):

1. We note that the subject site is located with the Stony Run Watershed (High Quality Watershed). The applicant must obtain approval from the Chester County Conservation District for any Erosion and Sedimentation Control Plan proposed in conjunction with any future plan submission and an NPDES Permit for Discharges Associated with Construction Activities from the Pennsylvania Department of Environmental Protection. We note that the applicant has represented that it has received verbal approval of their NPDES Permit for the proposed 86 lot subdivision on said tract of land. The CCCD and PADEP will need to determine their required level of review of the current plan, even with the stormwater basins in the same configuration, as they may require a new NPDES Permit application or modification of the existing NPDES Permit.
2. In future submissions, the applicant will need to demonstrate compliance with water quality and runoff volume, infiltration, stream channel protection, and peak rate control requirements of the Stormwater Management Ordinance. (SMO Sections 23-305 through 308)

IV. WAIVER REQUESTS

John W. Benson, III of Artisan Construction Group, LLC, requested the following 17 waivers from the East Vincent Township Subdivision and Land Development Ordinance, as noted in a letter dated October 4, 2023:

1. From Section 22-305 which requires the separate submission of Preliminary and Final plans.

The applicant seeks to obtain combined preliminary/final land development approval as they have made five preliminary plan submissions to the Township for the subject tract.

2. From Section 22-305.5.B.3 which requires compliance with the four-step design process.

The applicant states a waiver is requested to not provide plans to demonstrate compliance with the four-step design process and that due to the configuration of the site and the protection of existing natural resources located mainly around the perimeter, the size has limited remaining open area suitable for development. The applicant further states that four-step design process would not produce results different from the sketch presented to and discussed with the Planning Commission.

3. From Section 22-307.6.E.2 which requires the submission of a Utility Impact Study.

The applicant states confirmation of serviceability was provided from PA American Water as well as PECO confirming service of the site for electric services.

4. From Section 22-307.6.E.3 which requires a Recreation Impact Study.

The applicant states 6.5 acres of Park and Recreation Land will be offered for dedication, in compliance with Section 22-428, and that the Township has numerous parks and recreational opportunities for the residents to enjoy year round.

5. From Section 22-405.10 which requires additional right-of-way, paving, and/or street improvements to the extent deemed necessary by the Board of Supervisors.

The applicant states widening is not warranted and that this is a PennDOT road which will be reviewed by PennDOT for needed improvements.

6. From Section 22-405.13 which requires that a subdivision with more than five lots provide more than one public street connection.

The applicant states that an emergency access road is provided.

7. From Section 22-406.6 which requires widening of Stony Run Road.

The applicant states widening is not warranted and that this is a PennDOT road which will be reviewed by PennDOT for needed improvements.

8. From Section 22-409.4 which requires local roads to have a minimum 100 foot tangent between reverse horizontal curves.
9. From Section 22-410.12 which requires street intersections to follow straight horizontal course for 100 feet.
10. From Section 22-411.4 which requires access roads to not serve more than 20 lots or exceed 1,000 feet.
11. From Section 22-411.7 which requires cul-de-sacs to be paved and have a 167 foot outside diameter and 135 foot inside diameter with a minimum circular interior right-of-way diameter of 100 feet and an outside right-of-way diameter of 200 feet.

The applicant states the cul-de-sac size and configuration is intended to minimize impact on existing features. A 40 ft. paved radius and 100 ft. right-of-way diameter is proposed, without an interior island.

12. From Section 22-411.9 which requires an open center open space in a cul-de-sac with a 50 foot radius.

The applicant states the cul-de-sac size and configuration is intended to minimize impact on existing features. A 100 foot right-of-way diameter without an interior island is proposed.

13. From Section 22-414.3.A which requires minimum illumination levels for residential streets and sidewalks.

The applicant states that prior feedback from the Planning Commission indicated they want to protect the night sky. A total of nine lights will be proposed; two 13.5 feet high at the entrance and seven 12 feet high throughout the internal street network.

14. From Section 22-426.8.B.7 which requires infiltration facilities to dewater in a maximum of 24 hours.

The applicant states that Basin No. 1 will dewater in 15.2 hours, Basin No. 2 will dewater in 10.03 hours, and Basin No. 3 will dewater in 27.06 hours.

15. From Section 22-426.8.C.9 which requires a minimum basin bottom slope of 2% to be maintained for sheet flow.

The applicant states a flat bottom is requested in accordance with the PA BMP Manual and to meet NPDES permit requirements. The basin bottoms will be naturalized.

16. From Section 23-311.9.H which requires reinforced concrete pipe (RCP) stormwater conveyance pipe.

The applicant proposes HDPE (High Density Polyethylene) pipe.

17. From Section 22-426.7.B.4 which requires stormwater calculations to use the next lowest hydrologic soil group in post-development analyses.

The applicant states the stormwater management design will provide the rate reduction required by the Stormwater Ordinance and that the design is consistent with PADEP regulations.

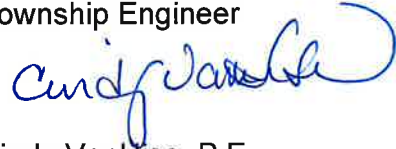
V. GENERAL ENGINEERING COMMENTS

The following are general engineering comments pertaining to the project:

1. General Note 1 on Sheet 1 of 2 references a "Sheet 3" which is not included with this submission.
2. On-street parking described in General Note 12 on Sheet 1 of 2 conflicts with the prohibition described in General Note 44 on Sheet 1 of 2 and shown on the Stuart Associates plan Typical Single-Family Detached Dwelling sketch.
3. Highway Occupancy Permits from PennDOT will be required for any improvements along Stony Run Road.
4. If any easements, deed restrictions, or covenants preclude this development, they must be determined prior to any future submissions. We recommend that the applicant determine if there are any such restrictions on the project site. Any easements must be shown on the plans and restrictions described with supporting references (deed book, page, etc.).
5. A snow storage area and easement must be provided at the cul-de-sac bulb on future plan submissions.
6. To the extent that a cluster mailbox is required by the Postmaster, a location acceptable to the Postmaster and Township should be identified on future submissions.
7. A school bus pickup location must be coordinated with the School District and shown on future submissions.

If you should have any questions concerning the comments as outlined above, please do not hesitate to contact this office.

Very truly yours,
CKS ENGINEERS
Township Engineer



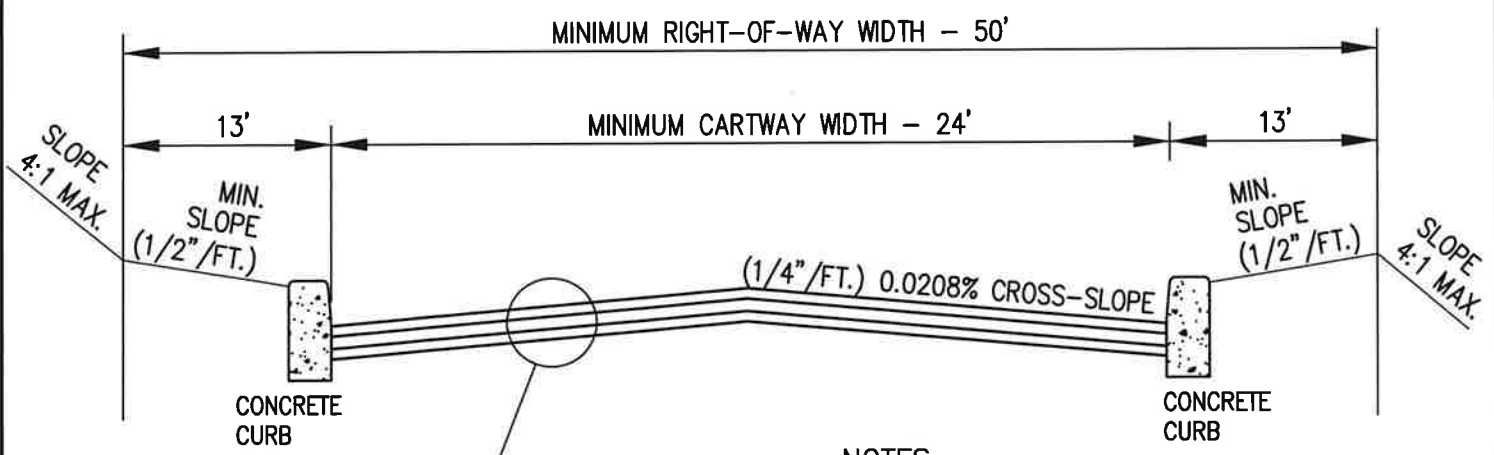
Cindy VanHise, P.E.

CVH/kik

Encl.: (Cross-Section Detail of Local Residential Streets)

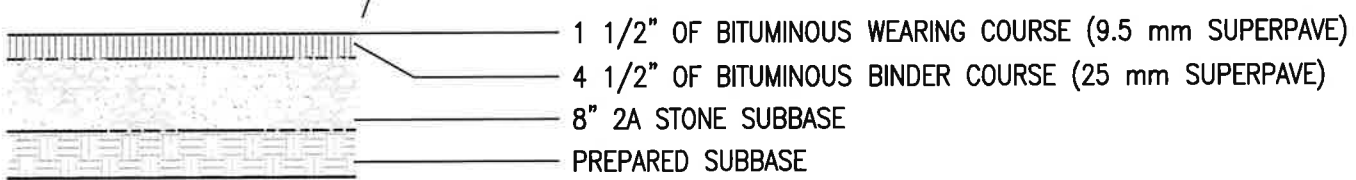
cc: Patrick McKenna, Esq., Township Solicitor
Haley Baer, Township Zoning Officer
Bill Brown, P.E, Township Wastewater Engineer
Thomas Comitta, RLA, Township Planner
Michael Schneider, Township Traffic Engineer
Artisan Construction Group, LLC, Applicant
Adam Brower, P.E., Edward B. Walsh & Associates, Inc.
Patrick Stuart, RLA, Stuart & Associates, LLC
George DiPersio, CKS Engineers
File

T:\CAD_GIS\AUTOCAD\EAST VINCENT TOWNSHIP MUNICIPAL\11500-067\11500-067 TYPICAL ROAD X SECTION DETAIL.DWG



NOTES:

- 1.) ALL SUBGRADE AREAS TO BE COMPACTED AND APPROVED PRIOR TO PLACEMENT OF MATERIALS
- 2.) PAVEMENT BASE UNDERDRAIN TO BE PLACED AS DIRECTED BY THE TOWNSHIP ENGINEER.



TYPICAL CROSS-SECTION OF LOCAL RESIDENTIAL STREET

N.T.S.

<p>STANDARD DETAIL</p> <p>TYPICAL CROSS-SECTION OF</p> <p>LOCAL RESIDENTIAL STREET</p>	<p>EAST VINCENT TOWNSHIP</p> <p>CHESTER COUNTY, PENNSYLVANIA</p>	
	<p>Date:</p> <p>7/6/22</p>	<p>Detail No.</p>