



April 13, 2017

REISSUED: June 12, 2017

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

RE: Ewing Tract – Sunderland Avenue Extension
Subdivision and Land Development Application
West Vincent Township
File No. WVT-16-016

Dear Ms. Batdorf:

On behalf of West Vincent Township, we have completed a review of the Ewing Tract - Sunderland Avenue Extension Land Development Application. Ewing Group, LLC (Toll Brothers) proposes to construct the Sunderland Avenue East Extension between Rainer Road and Eagle Farms Road. The extension was previously approved by West Vincent Township and subsequently removed on the amended plans for Phase 2 of the Development. The Application proposes to add the extension of Sunderland Avenue back to the Development.

The following information was submitted by Riley Riper Hollin & Colagreco, and was received by our office on March 15, 2017:

- A. One (1) copy of the cover letter from Riley Riper Hollin & Colagreco regarding the Sunderland Avenue East Extension Subdivision and Land Development Application dated March 13, 2017. (RRHC Letter)
- B. One (1) copy of Subdivision and/or Land Development Application dated March 13, 2017.
- C. One (1) full size set of plans consisting of 24 sheets titled "Ewing Tract Final Land Development Plan R3-Residential District - Tier IV Option", sheets 1-5, 12, 15, 22, 25, 32, 35-37, 43, 46, 48-49, 59, 68-70, and 72-74, prepared by Taylor Wiseman & Taylor, dated February 14, 2003, last revised January 13, 2017. (Plans)
- D. One (1) full size set of plans consisting of 4 sheets titled "Phases II & IIA Overall Subdivision Plan for Ewing Tract", sheets 2, 3, 6, and 7, prepared by Taylor Wiseman & Taylor, dated January 28, 2008, last revised January 13, 2017. (Subdivision Plans)
- E. One (1) 11x17 size plan consisting of 1 sheet titled "Turning Exhibit Fire Truck", prepared by Taylor Wiseman & Taylor, dated March 8, 2017.
- F. One (1) copy of Resource Assessment Report for Sunderland Avenue East Extension Ewing Tract dated March 8, 2017.
- G. One (1) copy of property Deeds.

- H. One (1) copy of "Greenway Maintenance Standards Ewing Tract" dated June 30, 2003 and last revised January 20, 2017.
- I. One (1) copy of "Engineer's Report Hydraulic and Hydrologic Analysis Sunderland Avenue East Culvert" dated March 7, 2017.

The following information was submitted by Taylor Wiseman & Taylor, and was received by our office on May 2, 2017:

- A. Region 1 Worksheet dated April 4, 2012.
- B. Region 2 Worksheet dated April 4, 2012.
- C. Region 3 Worksheet dated April 4, 2012.
- D. Region 4 Worksheet dated April 4, 2012.
- E. Sunderland Avenue East Comparison Plan prepared by Taylor Wiseman & Taylor, dated April 25, 2017.
- F. Post Construction Stormwater Management Plan Report dated February 28, 2003 and last revised April 9, 2012.
- G. One (1) full size set of plans consisting of 2 sheets titled "Ewing Tract Final Land Development Plan R3-Residential District - Tier IV Option", sheets 25 and 48, prepared by Taylor Wiseman & Taylor, dated February 14, 2003, last revised February 28, 2007. (Plans).
- H. One (1) full size set of plans consisting of 1 sheet titled "Ewing Tract Final Land Development Plan R3-Residential District - Tier IV Option", sheet 15, prepared by Taylor Wiseman & Taylor, dated February 14, 2003, last revised October 10, 2007. (Plans).
- I. One (1) full size set of plans consisting of 3 sheets titled "Ewing Tract Final Land Development Plan R3-Residential District - Tier IV Option", sheets 12, 22, and 49, prepared by Taylor Wiseman & Taylor, dated February 14, 2003, last revised January 29, 2008. (Plans).
- J. One (1) full size set of plans consisting of 1 sheet titled "Ewing Tract Final Land Development Plan R3-Residential District - Tier IV Option", sheet 3, prepared by Taylor Wiseman & Taylor, dated February 14, 2003, last revised April 11, 2008. (Plans).

The following information was submitted by Riley Riper Hollin & Colagreco, and was received by our office on May 4, 2017:

- A. One (1) copy of waiver Requests dated May 4, 2017. (RRHC Letter)

We have reviewed the information for compliance with the West Vincent Township Subdivision and Land Development Ordinance (SALDO) (Ord. No. 170-2016) and the West Vincent Township Stormwater Management Ordinance (Ord. No. 160-2014) and offer the following comments for your consideration:

Subdivision and Land Development Ordinance Comments:

1. *Section 403.B.2 - A preliminary plan shall consist of and be prepared in accordance with the following minimum standards: Dimensions shall be set in feet, bearings in degrees, minutes, and seconds (errors of closure not to exceed one part per 10,000).*

The legal description for the proposed right-of-way for East Sunderland Avenue along with the Closure Report shall be provided to the Township for review.

2. *Section 403.B.2 - A preliminary plan shall consist of and be prepared in accordance with the following: A note placed on the plan indicating where noncompliance occurs relative to zoning, subdivision, building, sanitation, and other applicable Township ordinances, and a citation of the date and content of any decision concerning a Special Exception, Variance, or Conditional Use and any request for a waiver.*

The requested waivers must be listed on the Plans.

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

Monuments at all angle points and beginning and ending of curves defining the right-of-way for East Sunderland Avenue shall be added to the Plans.

The monuments along the right-of-way must be referenced in the legal descriptions for all parcels for clarity and completeness.

4. *Section 404.E.3.a - 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 length (in feet and hundredths of a foot) of all straight lines and of the radius and the arc (or chord) of all curved lines (including curved lot lines).*

The horizontal alignment for the roadway centerline and the right-of-way lines for East Sunderland Avenue shall be added to the Plans.

5. *Section 404.K.3. All offers of dedication of realty or structures and all declarations, easements and covenants governing the reservation and maintenance of undedicated open space, for the Final Plan shall be in such form as shall be satisfactory to the Board of Supervisors.*

The format for the offer of dedication for the Sunderland Avenue East right-of-way to West Vincent Township must be acceptable to the Township Solicitor.

6. *Section 510 - Improvements Agreements*

An Improvements Agreement must be executed for this Application.

7. Section 511 – Performance Guarantees (Escrow Agreements)

Financial security sufficient to cover the cost of all proposed improvements for East Sunderland Avenue in accordance with this section shall be provided in a form acceptable to the Township Solicitor prior to the release and recordation of the Plans.

8. Section 610.A – Erosion, Sediment Control and Stormwater Management. *No grading, excavating, removal, or other movement of the topsoil and no removal or destruction of trees or other vegetative cover of the land shall be commenced until such time that a plan for minimizing erosion and sedimentation has been reviewed by the Township Engineer and approved by the County Conservation District and the Board of Supervisors, or there has been a determination by the Planning Commission and the Board of Supervisors that such plans are not necessary. Appropriate earthmoving and NPDES permits from the Township and the Department of Environmental Protection shall be required.*

The Applicant must provide a copy of all correspondence with the CCCD and PADEP regarding the required erosion and sedimentation control facilities and NPDES stormwater discharge permits. Copies of permits and approvals by these agencies shall be provided prior to Final Plan approval.

9. Section 610.B – Erosion, Sediment Control and Stormwater Management. *No subdivision or land development plan shall be approved unless there has been a plan approved by the Board of Supervisors that provides for minimizing erosion and sedimentation and for stormwater management consistent with this Section, and an improvement bond, cash, or other acceptable securities are deposited with the Township in the form of an escrow guarantee which will ensure installation and completion of the required improvements; or there has been a determination by the Board of Supervisors that a plan for minimizing erosion and sedimentation and/or stormwater management is unnecessary.*

Erosion and Sediment Control Narrative and Calculations must be submitted for review and approval.

10. Section 610.I.2 – Grading and Excavation Regulations. *During grading and excavation operations, necessary measures for dust control will be exercised.*

A note shall be added to the plan or construction sequence addressing measures proposed to control dust in accordance with the requirements of this Ordinance.

11. Section 611.B.1 – Street Classifications.

a. *Expressway.*

Multi-lane roads with access only by interchange. Properties fronting upon expressway have no direct access. Serves interstate and inter-regional traffic.

b. *Principal Arterial.*

Multi-lane roads with intersections at grade and some access provided to properties with frontage. Intended for high-speed inter-city and commuter traffic.

c. *Minor Arterial.*

Usually two (2) travel lanes with a separate turning lane at intersections. Links boroughs and villages. Access limited depending upon adequate sight 82 distance.

d. *Major Collector.*

Roads designed to collect traffic from residential areas and feed it to the arterial and expressway system. Links neighborhoods, serves some local oriented traffic, and provides direct access for abutting residential lots in rural areas.

e. *Minor Collector.*

Roads designed to collect traffic from residential areas and feed it to the arterial system. Mostly locally-oriented traffic. Serves as through road in neighborhoods and provides direct access for abutting residential lots in rural and suburban areas.

f. *Local Access.*

Roads designed to provide access to all abutting lots. Not intended for through trips, although may be used as such, particularly in rural areas. Includes cul-de-sacs and other single-access streets.

Section 611.B.2.a - Widths for Rights-of-Way and Cartway. Minimum street widths for proposed streets and extension or continuations as follows:

<u>Classification</u>	<u>Cartway Width (in feet)</u>	<u>Right-of-way Width (in feet)</u>
Minor Collector	20	60
Local Access	20	50

By Ordinance requirements, the Sunderland Avenue Extension should be classified a Minor Collector Street.

The applicant is requesting a waiver from Section 611.B.1 to classify Sunderland Avenue East as a Local Access Street. CEDARVILLE offers no objection to this requirement being waived to adjust the classification for this Application.

The applicant is requesting a waiver from Section 611.B.2 to provide a forty (40) foot wide Right-of-Way for the proposed Sunderland Avenue Extension. CEDARVILLE objects to this requirement being waived for this Application. CEDARVILLE recommends the Board require the Applicant provide the full fifty (50) foot Right-of-Way for the proposed Sunderland Avenue Extension to provide for future street expansion, sidewalk/trail expansion or utility corridors.

12. Section 611.B.2.c - Widths for Rights-of-Way and Cartway. If parking is to be permitted or required along a major collector, minor collector, or local access road, an additional eight (8) feet of cartway width shall be required for parking along one (1) side of the street; an additional sixteen (16) feet of cartway width shall be required if parking is to be permitted or required along both sides of the street.

The applicant shall clarify if parking will be permitted on East Sunderland Avenue. If the parking is permitted, the cartway width shall be revised to above mentioned specifics. If the parking is not permitted, the Construction Improvements Plan shall be submitted with "No Parking Fire Lane" (R8-31) sign, "Tow Away Zone" (R7-201) sign and "No Standing Any Time" (R7-4) sign along both sides of the East Sunderland Avenue to ensure there is an unobstructed pathway for the Fire Truck in case of emergencies.

13. Section 611.D.5 - Street Alignment. Minimum curve radius shall not be permitted on maximum grade.

If the Board grants the requested relief from Section 611.B.1 to classify the road as a Local Access Street, the Plan is compliant with the requirements of this section of the Ordinance.

14. Section 611.E.3 - Street Intersections. Clear sight triangles shall be provided at all street intersections. Within such triangles, no object which obscures vision above a height of thirty (30) inches and below a height of ten (10) feet shall be permitted. Heights shall be measured from the centerline grade of the street intersection. Such triangles shall be established by a distance from the curb line or edge of pavement of the intersected street according to the following street function:

- a. Distances for collector and arterial roads shall be in conformance with PennDOT standards, but shall in no case be less than four hundred (400) feet in each direction along the collector or arterial road.
- d. Where an intersection is controlled by a stop sign or traffic signal, the sight triangle shall be measured from a point in the center of the controlled or lesser street twenty-five (25) feet back from the curb line or edge of pavement of the uncontrolled or through street.
- e. The sight triangle shall be measured from a point in the center of the street seventy-five (75) feet back from the curb line, or edge of pavement if there is no curb, for all other intersections not equipped with a stop sign or traffic signal.

The required sight distance and clear sight triangle must be provided and indicated on the Plans for the intersection of Sunderland Avenue East and Eagle Farms Road.

15. Section 612.A – Paving.

The construction detail of the typical roadway cross-section on Sheet 68 of 86 shall be revised to comply with the West Vincent Township paving specifications shown in Appendix C (attached to this letter).

16. Section 612.D. – Finished Grading. *The finished grading for a street or cul-de-sac shall extend across all disturbed soils. The maximum slope between the right-of-way line and top of the curb, or edge of the cartway if there is no curb, shall be one (1) inch per foot, except that sidewalk or walking path paving shall slope one-quarter (0.25) inch per foot as a maximum, unless otherwise directed by the Board of Supervisors.*

The finished grading for the proposed Sunderland Avenue Extension is sufficient to provide safe access to pedestrians along the proposed eight (8) foot wide trail. CEDARVILLE recommends that the Board of Supervisors accept the grading as proposed. If requested, CEDARVILLE offers no objections to the Board granting relief from this section of the Ordinance for this Application. To grade the entire proposed right-of-way as required would significantly impact the existing natural resources along the stream corridor.

17. Section 613 – Bridges and Culverts. *Bridges and culverts shall be designed to meet the requirements and approval of the Township Engineer with regard to design, adequacy, and location. In all cases a culvert or bridge shall extend for the full width of the right-of-way. All culverts and bridges not under Department of Environmental Protection control shall be designed for a fifty (50) year storm. Culverts shall be of reinforced concrete or ABS plastic (smooth lined). Corrugated metal pipe shall be prohibited.*

Wherever the drainage area of the watercourse involved consists of more than one hundred (100) acres, a permit shall be obtained from the Dams and Waterway Management section of the Department of Environmental Protection, Commonwealth of Pennsylvania, in conformance with Chapter 105 of the rules and regulations of the Department of Environmental Protection. Such permit shall be submitted to the Board of Supervisors who shall make appropriate notation of receipt of same upon, and prior to approval of, the Preliminary Plan and upon the Township copy of such plan.

The applicant has proposed to install a 40-foot long, 32'-2"X 10' 8", BridgeCor multi-plate open bottom arch culvert manufactured by Contech to cross the wetlands and Tributary to Pickering Creek. The applicant is requesting a waiver to permit a metal culvert to be utilized rather than a reinforced concrete or ABS plastic culvert. If the Board is inclined to grant relief from this section for the material of the proposed culvert, please be aware that the request for material relief (corrugated metal vs. reinforced concrete) may result in a culvert with a lifespan less than is provided by reinforced concrete. CEDARVILLE offers no objection to the Applicant's proposal to install a 40-ft long culvert in lieu of the required 50-ft long (full right-of-way width).

The Applicant must obtain a General Permit (GP) 7 – Minor Roadway Crossing Permit from the Pennsylvania Department of Environmental Protection (PADEP) prior to the commencement of the work. The Township shall be copied on all permit applications and correspondence with PADEP during the permitting process for this project.

Stormwater Management Comments (Ordinance 160 of 2014):

18. *Section 402.A.3 - A statement, signed by the Applicant, acknowledging that any revision to the approved SWM Site Plan shall be submitted to and approved by the Municipality, and that a revised Erosion and Sediment Control Plan shall be submitted to, and approved by, the Conservation District or Municipality (as applicable) for a determination of adequacy prior to construction of the revised features.*

Section 402.A.4 - The following signature block signed and sealed by the qualified Licensed Professional responsible for the preparation of the SWM Site Plan: "I (name), on this date (date of signature), hereby certify to the best of my knowledge that the SWM Site Plan meets all design standards and criteria of the West Vincent Township Ordinance No., [followed by title of Ordinance]."

The above referenced statement must be added to the Plans.

19. *Section 402.B.11 - Existing and proposed structures including roads, paved areas, buildings, and other Impervious and Pervious Surfaces on the project property (or an appropriate portion of the property as determined in consultation with the Municipal Engineer) and within the proposed Disturbed Area, and including the type and total area of the following.*
- a. Existing impervious surfaces*
 - b. Existing impervious surfaces proposed to be replaced*
 - c. Existing impervious surfaces to be permanently removed and replaced with pervious ground cover*
 - d. New or additional impervious surfaces*
 - e. Percent of the site covered by impervious surfaces for both the existing and proposed post-construction conditions*

The above referenced information must be added to the Plans.

20. *Section 404.E. All required permits from PADEP shall be obtained and submitted to the Municipality prior to (or as a condition of) final approval of any proposed subdivision, land development, or other Regulated Activity by the Municipality.*

The Applicant must provide a copy of all correspondence with the CCCD and PADEP regarding the required erosion and sedimentation control facilities, the PADEP General Permit, and the NPDES stormwater discharge permits. Copies of permits and approvals by these agencies shall be provided prior to Final Plan approval.

21. *Section 702. Operation and Maintenance Plans*

An Operation and Maintenance Plan, consistent with the requirements of this section of the Ordinance, shall be provided for review.

22. Section 703. Operation and Maintenance Agreements

An Operation and Maintenance Agreement must be provided to the Township prior to Final Plan Approval. The Applicant is directed to coordinate with the Township Secretary and Township Solicitor to obtain the correct format of the Agreement.

23. Section 704. Easements and Deed Restrictions.

Easements shall be established for all BMP's and Conveyances in accordance with the requirements of this section of the Ordinance.

Additional Comments:

24. The applicant will be required to submit fully engineered construction plans prior to Final Plan approval. At minimum, those plan shall include:

- A profile of proposed culvert extended 25-feet past the end of the construction/limits of disturbance for the culvert installation
- Headwall/Endwall design and construction details
- Road backfill and paving details
- Grading
- Details and location for guiderails and/or fencing
- Erosion and Sediment Control plan and details
- Riprap Apron and Geotextile information and details
- Construction Sequence
- Details of type of material surrounding the culvert along with soil compaction information

25. The HEC-RAS calculations for the Station 683.922 immediately downstream of the culvert location of the H&H Report shows an average velocity of approximately 12.22 feet per second for a 100-year flood event. The high surge in velocity causes shear stress on the bed at the downstream end resulting in an increase of erosive forces with the removal of material from the bed and from the banks across most of the channel width. This increase in transport of bed material from the waterway lowers the natural bed elevation. Countermeasures to resist erosion and prevent scour must be provided to minimize damage to the natural waterway. The applicant has proposed to address this with R-8 size Riprap. We request the Applicant explore more alternatives that will provide a more naturalized appearance.

26. The fill cover over the culvert is approximately 10 feet. The applicant shall submit documentation confirming the load bearing capacity of the structure.

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

Please do not hesitate to call with any questions.

Best Regards,
CEDARVILLE Engineering Group, LLC

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

Bryan D. Kulakowsky, P.E.
Township Engineer

cc: Tammy Swavely – West Vincent Township Secretary
West Vincent Township Board of Supervisors (Township to distribute)
West Vincent Township Planning Commission (Township to distribute)
Joseph J. McGrory, Jr., West Vincent Township Solicitor
Tom Wargo – West Vincent Township Code Official
Hamburg, Rubin, Mullin, Maxwell & Lupin, P.C. – Robert Sebia (RSebia@hrmml.com)
Toll Bros (Applicant) – Mike Downs (mdowns@tollbrothersinc.com)
Riley Riper Hollin & Colagreco (Attorney) – Alyson Zarro (Alyson@rrhc.com)

