



**EDWARD B. WALSH & ASSOCIATES, INC.**  
*Complete Civil Engineering Design / Consultation Services*  
Whiteland Business Park  
855 Springdale Drive, Suite 202  
Exton, PA 19341

April 15, 2022

Ms. Tiffany Loomis, Borough Manager  
Malvern Borough  
1 E. 1<sup>st</sup> Avenue - Suite 3  
Malvern, PA 19355

Re: Renehan – 551 Sugartown Road Subdivision  
Preliminary / Final Review #1  
EBWA Project #2780-142

Dear Ms. Loomis:

In accordance with Malvern Borough's request, I have reviewed the above referenced project for compliance with the Borough's Zoning, Subdivision & Land Development, and Stormwater Management Ordinances. The following information was submitted for review:

- Preliminary/Final Subdivision & Land Development Plan for 551 Sugartown Road, prepared for Renehan Building Group, LLC., prepared by JMR Engineering LLC., dated March 7, 2022, nine (9) plan sheets.
- Post Construction Stormwater Management Narrative & Report for 551 Sugartown Road, prepared for Renehan Building Group, LLC., dated March 7, 2022.
- SALDO Application, Waiver Request Letter, and Neighbor Notifications
- Request of Sewage Planning Exemption

The applicant is proposing to consolidate and subdivide parcel 2-6-29 (owned by Paoli Memorial Grounds) and parcel 2-6-30 (owned by Renehan Building Group) into two lots and construct two single-family dwellings. The parcels are located at the corner of Sugartown Road and Monument Avenue. Access for Lot 1 is proposed to be off of Sugartown Road (PennDOT road) and access for Lot 2 is proposed to be off of Monument Avenue. The following comments and recommendations are offered for the Borough's consideration of the submitted plan:

**Zoning Ordinance**

1. Section 501 - The tract is located in the R-2 Zoning District. Single-Family Detached dwellings are uses permitted by right.

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2. Section 502 – Area and Bulk Regulations. The proposed subdivision is noted to be in compliance with the applicable area and bulk regulations for the R-2 Zoning District. The plan must be revised to include a lot area (net) tabulation, including all easements, slopes (as applicable), and rights-of-way.
  
3. Article XXII – Natural Resource Protection Standards -
  - a. Section 2202 – Steep slopes regulations. The applicant has requested an interpretation by the Borough’s Zoning Officer regarding the existing steep slopes located onsite. The design engineer’s opinion is that the steep slopes are manmade (not a natural condition) therefore are not regulated as a Natural Resource Standards. Upon review by the Borough, Project General Note 11 must be updated, if applicable.
  - b. Section 2203 – Wetland protection regulations. The plan must be updated to indicate the wetlands or a note added regarding the absence of wetlands onsite.
  - c. Section 2204 – Woodlands and specimen vegetation.
    - i. The plan indicates the location / diameter of free standing trees located onsite but there appears to be additional trees within the existing tree lines that have not been surveyed. The plan must be updated to indicate all trees onsite and the tree species must be noted.
    - ii. Additional information must be supplied to ensure compliance with Section 2204.A.1 of the Zoning Ordinance (*no more than 60% of woodlands shall be regraded, cleared, built upon or otherwise altered*). The applicant should reference Section 201 – Woodland definition to determine applicability.
    - iii. The plan specifies specimen trees and notes the specimen trees are to remain. I recommend the applicant perform a visual inspection of the trees to assess the health of the trees to ensure they are suitable to remain with the proposed dwelling locations (if unhealthy or a safety hazard, consideration to removing the trees should be given, with approval by the Borough).
  
4. Section 2306 – Obstructions to vision at intersection  
*No obstructions to visibility at intersections shall be permitted. No fence, wall, or other structure shall be erected, allowed, or maintained and no hedge, tree, shrub, or other growth shall be planted or allowed to exist that obstructs required sight distance at street intersections, vision for through traffic at ... driveways, street intersections or along streets. A clear sight triangle shall be maintained in accordance with the standards set forth in the Malvern Borough Subdivision and Land Development Ordinance.*

See below SALDO comments regarding the sight triangles / sight distances.

**Subdivision and Land Development Ordinance**

1. Section 300.B – Based upon the noted criteria (greater than 1,500 sf of impervious coverage), the project is classified as a Major Subdivision application.
  
2. Section 300.C – The project is classified as a Major Land Development application.

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- a. Applicant has submitted the plans under a preliminary / final application. A waiver to allow the project to be submitted as a preliminary / final application in lieu of separate applications has been requested by the applicant and must be reviewed by the Planning Commission.
  - b. A site visit with the Planning Commission should be scheduled by the applicant if requested by the Planning Commission.
  - c. Four-step design process documentation. This information must be submitted or a waiver must be requested.
  - d. A review by the Borough Fire Marshal must be completed for the project.
3. Section 300.G – Any plan applications for tracts of land along the municipal boundary shall, at the same time as any plans or supplementary documentation are submitted to the Borough, include submission of one additional complete set of such plans and documentation, which shall be forwarded by the Borough to the adjacent municipality for its comments.

The Borough should submit a copy of the plan to Willistown Township. In addition, work is proposed in Willistown Township (cleaning clogged storm sewer). I believe the applicant has met with Willistown Township regarding this matter and if so, should provide documentation / summary of the discussions with Willistown Township.

4. Section 402.A.2 – The Title Plan must be updated with the full boundary information for UPI 2-6-29. The boundary error of closure must be noted on the plan.
5. Section 402.B.1 – The location map scale shall not be less than 800-feet to the inch.
6. Section 402.B.2.b – The telephone number of the applicant must be noted on the plan.
7. Section 402.B.2.d – The zoning boundaries must be noted on the plan, including the Borough line.
8. Section 402.B.2.e – A waiver request letter must be updated to indicate all waivers.
9. Section 402.B.2.j – The right-of-way and road widths, along with full topography, for the proposed sewer extension must be added to the plan.
10. Section 402.B.2.k – The existing sanitary sewer mains / laterals must be labeled on the plan including the size, material and inverts.
11. Section 402.B.2.n – The location and elevation of the datum to which contour elevations refer shall be added to the plan.
12. Section 402.B.4.b – The location of the proposed utility easements (sewer) must be added to the plan.

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13. Section 402.B.4.f – An address for the proposed lot, as provided by the Malvern Post Office and the Borough staff, must be added to the plan.
14. Section 403.B.8 - A certification of ownership, acknowledgement of plan and offer of dedication shall be affixed on the plan, and shall be duly acknowledged and signed by the owner(s) of the property and notarized.

The proposed subdivision includes two parcels of land (UPI 2-6-30 – Renehan, and UPI 2-6-29 – Paoli Memorial Grounds). The plan must be revised to include the applicable certificates / acknowledgements from both parties. The Paoli Memorial Grounds should be required to also be a party to his application, as required by the Borough.

15. Section 503 – Street Standards. *Where a subdivision abuts or contains an existing street of inadequate right-of-way width, additional right-of-way width shall be dedicated to conform to the standards set by the Borough. Where a subdivision abuts or contains an existing street of inadequate cartway width, the applicant shall be required to widen and/or reconstruct the roadway to meet current Borough standards.* Monument Avenue is considered a Local Distributor, therefore the minimum standards are a 50-foot wide right-of-way and a 32-foot wide cartway. Sugartown Road is a major collector, therefore the minimum standards are a 60-foot wide right-of-way and a 34-foot wide cartway.

The applicant is requesting a waiver for relief of the requirement to widen Monument Avenue and Sugartown Road. The existing cartway widths should be clearly identified on the plans and the waiver requested reviewed with the Borough Planning Commission.

The applicant has noted the right-of-way of both Monument Avenue and Sugartown Road to be 50-foot wide (existing). The applicant is proposing to dedicate additional right-of-way along Sugartown Road to Malvern Borough. The proposed road dedication should be reviewed with the Borough staff and Planning Commission. Sugartown Road is an existing PennDOT road (not Borough owned). The Borough may wish not to accept dedication of right-of-way in this area.

A portion of the Paoli Memorial Grounds land (UPI 2-6-29) extends along the frontage of the parcel to the east (UPI 2-6-31 – Markowski). Consideration should be given to conveying this land to UPI 2-6-31.

16. Section 506.G –  
*Clear sight triangles shall be provided at all street intersections and shall be shown on the final subdivision plan to be recorded. Within such triangles, no vision obstructing object shall be permitted which obscures vision above the height of 30 inches and below 10 feet measured from the centerline grade of intersecting public streets. Deed restrictions shall be recorded to provide for enforcement of this provision. Clear sight triangles shall be established from a distance of:*
  - (1) *Seventy-five feet from the point of intersection of the centerlines*
  - (2) *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 25 feet back from the curb line of the uncontrolled or through street to the distance required above.*

The clear sight triangle for the existing road intersection must be labeled on the plan along with the notes about maintaining the triangle, assuming it encroaches into the existing lot.

17. Section 506.H – *Sight distance requirements for all intersections shall be in accordance with the Pennsylvania Code, Title 67, Transportation, Chapter 441, "Access To and Occupancy of Highways by Driveways and Local Roads," latest revision. Plans shall indicate the clear sight distances. Sugartown Road is a PennDOT State Highway, therefore a PennDOT permit is required for the Lot 1 driveway.*

The sight distance analysis for the driveways must be evaluated to determine if the proposed profiles are measured from the driveway (12-ft from the edge of road) or if they are centerline profiles. The analysis must take into account the embankments and the existing vegetation.

18. Section 509.F – The plan must be revised to indicate all utility improvements in the public roads and the limits of the pavement restoration. Please note, Sugartown Road is PennDOT road and permits must be obtained for the utility improvements (and the driveway). Copies of the permits must be supplied to the Borough upon receipt.

19. Section 512 – Easements.

- a. Utility easements must be added to the plan for the proposed sewer lateral on Lot 2. The plan must clearly identify the intent of the easement (sewer easement on Lot 2 for the benefit of Lot 1). The easement is not to be dedicated to Malvern Borough.
- b. The stormwater design for the development involves runoff from proposed Lot 1 to discharge to Lot 2 as a point discharge and the stormwater system on Lot 2 is designed to manage the runoff volume (2-year storm) for Lot 1. The applicant should review with the Borough Solicitor if some type of easement agreement is necessary between the two properties.

20. Section 513 – Driveways.

- a. Additional information regarding the sight distances for the driveways must be provided as noted above.
- b. In addition to the driveway profiles, I recommend spot elevations be added to the grading plan.

21. Section 514.A – Curbs. Curbs shall be installed along both sides of all streets and shall be plain concrete curbs. The applicant has requested a waiver of this requirement.

22. Section 515.A – Sidewalks and Trails. Sidewalks shall be provided on both sides of all existing streets where required by the Borough. The applicant has requested a waiver of this requirement. The applicant must review this waiver with the Planning Commission

to determine if sidewalk improvements are desired for this property. If not, consideration should be given to requiring a fee-in-lieu of for the sidewalk.

23. Section 517 – Stormwater Management Ordinance – 2014-61, Adopted May 20, 2014.

- a. Section 105 – The applicant is proposing a regulated activity (construction of proposed impervious coverage in excess of 400 square feet and earth disturbance in excess of 5,000 square feet) therefore stormwater management controls are required as part of this project.
- b. Section 301.C - No Regulated Activity shall commence until the Borough issues approval of a SWM Site Plan, which demonstrates compliance with the requirements of this Ordinance.
- c. Section 305 - Water Quality and Runoff Volume Requirements and Section 306 – Infiltration Requirements.
  1. The design engineer is proposing to have Lot 2 manage the necessary volume and infiltration requirements for both proposed dwellings. The stormwater report and recorded plans must be revised to clearly identify the intent of the design and standard Operation and Maintenance Agreement be revised to identify this intent. This should also be reviewed with the Solicitor to determine if any easement or agreement is required to ensure that this volume management is maintained in perpetuity.
  2. Clarification must be provided regarding the soil type / curve numbers utilized on the Volume Differential worksheet (page 38). B soils were used for the post developed area and C soils were used for the pre-developed grass areas.
  3. A summary chart of the provided volume control must be added to the stormwater report.
- b. Section 308 – Stormwater Peak Rate Control Requirements
  1. The design engineer must evaluate all drainage area lines to ensure the areas are properly calculated (flow perpendicular to the contour lines). Areas of concern include the offsite land area to the north and the east, and B2 area at the retaining wall (Lot 2).
  2. Clarification for the post developed bypass time of concentration must be provided (6 minute).
  3. It is recommended that the drainage area lines that discharge to the stormwater facilities be added to the PCSM Plan to assist with the proper grading during construction.
  4. The design engineer must verify the pre and post bypass flows noted in Table 2 in the narrative report verses the hydrocad worksheets.
  5. The berm construction detail must be revised to indicate the following:
    - Berm bottom elevation.
    - Outlet pipe and stand pipe as applicable (clarification to be provided on what is proposed). The design must match the basin routing calculations.

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- c. Section 310.F – Any facility located within a PennDOT right-of-way shall comply with PennDOT minimum design standards and permit submission and approval requirements. The applicant is proposing to discharge runoff into the PennDOT right-of-way. PennDOT approval is required for this discharge.
- d. Section 311.A.8 – Discharge points. The minimum distance between a proposed stormwater management facility (above the ground or subsurface detention/infiltration facility, or retention basin), discharge point (including the energy dissipater, the emergency spillway, dam breast area, or water storage area) and a downstream property boundary shall in no case be less than indicated in the table below.

<i>Drainage Area Distance</i>	
<i>(acres)</i>	<i>(feet)</i>
<i>1 to 2</i>	<i>25</i>

The proposed drainage area (in series) to BMP 2 is in excess of one-acre. The plan must be revised or a waiver obtained.

- e. Section 402.B.8 – The watershed must be noted on the plans and the PA DEP Chapter 93 designation must be corrected in the stormwater narrative.
  - f. Section 404.H - All or portions of the final approved SWM Site Plan shall be recorded at the County Recorder of Deeds.
  - g. Section 701 & 702 – Operation and Maintenance Responsibilities and Easements. An O&M Agreement must be prepared and submitted to the Borough for review and approval in accordance with Section 701 of the Ordinance. The O&M Plan shall be attached to, incorporated within, and recorded as a public record along with a fully executed O&M Agreement, all of which shall be recorded as a restrictive covenant that runs with the land and shall be binding upon the Landowner and any heirs, administrators, successors in interest or assigns of the Landowner.
  - h. Section 706 - Municipal Stormwater Control and BMP Operation and Maintenance Fund. 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 in accordance with Section 706 of the Ordinance.
  - i. The design of the roof drain piping must be submitted for review and approval and details must be added to the plan (inverts and slopes).
24. Section 518 – Erosion and sedimentation control.
- a. Additional silt controls must be installed along Sugartown Road and Monument Avenue along the property frontages to ensure sediment does not leave the property during construction.

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- b. Silt sock calculations must be provided to ensure the sock is properly sized for the upslope drainage area.
  - c. The tree protection fence must be installed along the tree row in the northeast corner of the property.
25. Section 519 – Sewage disposal. The applicant is proposing to install individual grinder pumps and low pressure laterals for both dwellings and connect the laterals to the public sewer locate in Monument Avenue.
  - a. A full sewer design must be submitted for review and approval including the grinder pump design, lateral size and specifications, construction details, and rim / invert elevations. Calculations must be supplied to verify the flow and pump will generate a minimum of 2.0 ft / sec velocity.
  - b. Full topography of the lateral design location including the existing right-of-way limits, existing utilities and existing trees must be added to the plan and considered in the design. The neighboring sewer lateral for UPI 2-6-31 must be noted on the plan.
  - c. Roadway restoration limits must be noted on the plan.
  - d. Per Section 519.G.5, the maximum length of a lateral is 150-feet. The proposed lateral lengths exceed this distance. A waiver has been requested for relief of this requirement.
  - e. If permitted to run two parallel private laterals in Monument Avenue, the applicant will be required to enter into a written agreement with the Borough to detail the operation and maintenance of the grinder pump / forcemain laterals.
  - f. Sewer Planning for the subdivision is required to be approved by PA DEP.
  - g. The applicant will be required to pay two (2) additional tapping fees.
26. Section 520 – Water Supply. The applicant is proposing to connect the two dwelling to public water supply via Sugartown Road.
  - a. A PennDOT permit will be required for the utility connection.
  - b. The laterals are proposed to be constructed through a steep slope area located in the PennDOT right-of-way. The applicant should review this with Aqua to ensure there are no proposed issues.
  - c. Note number 14 (sheet 1) regarding the water lateral locations must be updated.
  - d. Section 520.H – Documentation must be provided to ensure the minimum water supply requirements per Section 520.H have been met.
27. Section 521 – Utilities.

The PA One Call System serial number must be added to the plan along with all notified utilities (Malvern Borough missing).
28. Section 522 – Monuments and Markers. The proposed monument and markers must be noted on the plan (label, note or added to legend).
29. Section 525 – Landscaping, Screening and Street Trees. A landscape plan must be prepared and submitted for review and approval. The applicant must follow Section 525.D of the ordinance related to the vegetation disturbance and replacement.



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30. Section 525 – Landscaping, Screening and Street Trees.

- a. The applicant must contact the Borough to coordinate a review of the landscape plan with the Shade Tree Commission to evaluate the proposed street trees.
- b. The design professional must evaluate the following for the proposed tree planting locations:
  1. Conflicts with the existing overhead electric lines along both Sugartown Road and Monument Avenue.
  2. Conflicts with the existing trees that are to remain.
  3. Placement of the trees in relationship to the steep slope areas.
- c. Section 525.D – Vegetation Disturbance and Replacement. Additional information must be provided regarding the existing trees and the proposed tree removal onsite. Replacement requirements must follow Section 525.D of the SALDO as applicable.

31. Section 526 – Grading.

- a. The design engineer must evaluate the proposed grading onsite. Due to the nature of a residential property, I recommend all slopes be a minimum of 3:1 for future maintenance purposes. If not feasible, any slopes steep than 3:1 must be landscaped with plant material that prevents erosion and does not require regular mowing.
- b. Retaining walls.
  - i. The top and bottom wall heights must be noted on the plan.
  - ii. Design drawings and calculations prepared by a qualified professional engineer must be submitted for all walls greater than four (4) feet in height. A note must be added to the plan indicating this requirement.
  - iii. Guard protection must be noted on the plan for all walls greater than 30-inches as required by the building code.
  - iv. The retaining wall located at BMP-2 must be design to accommodate water inundation. Notes must be added to the plan regarding this requirement.
  - v. The proposed wall at the Lot 2 driveway must be designed to accommodate the proposed sewer lateral crossing.

**General Comments**

1. The existing street name must be updated to be Monument Avenue (not Road).
2. Lot numbers must be added to all plan sheets.
3. Road way restoration details must be updated to reference WMA - warm mix asphalt (in lieu of HMA).

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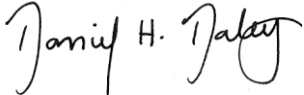
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If you should have any questions or require any additional information, please do not hesitate to contact me.

Very truly yours,

EDWARD B. WALSH & ASSOCIATES, INC.

Malvern Borough Engineers

A handwritten signature in black ink that reads "Daniel H. Daley". The signature is written in a cursive style with a large, stylized initial 'D'.

Daniel H. Daley, P.E.

cc: Corinne Badman, Assistant Borough Manager  
Bill Wilfong, Malvern Borough  
JMR Engineering, LLC.  
Renehan Building Group, LLC.