August 13, 2014

Mr. Matt Baumann, Director of Planning and Zoning
Tredyffrin Township
1100 DuPortail Road
Berwyn, PA 19312-1079

RE: Wayne Glen
Conditional Use Submission – Review (Plans 07-16-14)
Record Owner/Applicant: Arcadia Tredyffrin, LLC
Zoning: Professional (P) / Residential District (R-1)
Special Overlay: Trout Creek Stormwater Overlay District
TPN/UPI 43-6E-9 / 43-6F-13
MT No. 5592-02

Dear Mr. Baumann:

We are in receipt of the following information submitted on behalf of the applicant, Arcadia Tredyffrin, LLC;


Project Overview

The property under review consists of two parcels, a 26.968 acre lot located in the Residential District (R-1) zoning district and a 10.019 acre lot located in the Professional (P) zoning district. The applicant has applied for conditional use approval to construct a high-density residential subdivision and two commercial buildings under the Trout Creek Stormwater Overlay District Zoning Amendment. The applicant proposes to install a dam that creates a capture and reuse system that intercepts, diverts, stores, and releases stormwater runoff for future use.
The current plans propose to construct 78 Townhomes (single family attached) and 30 new Carriage Homes (single family detached & semi-detached) along with a new stormwater regional detention basin on the Residential District Lot. The plans propose to construct two new office buildings and a parking garage on the Professional Lot. The two proposed office buildings and parking garage will be inter-connected with an overhead corridor.

McCormick Taylor has completed a Conditional Use review for the Wayne Glen Conditional Use Submission for compliance with the Tredyffrin Township Ordinances, specifically Zoning (§208); and Subdivision and Land Development (§181); as well as reasonable and customary engineering standards. The following comments are offered for your consideration.

**Principal Issues:**

**Karst Areas:** The applicant has proposed a Stormwater Regional Detention System composed of multiple stormwater management facilities, some of which are in locations of karst material. The potential increase the risks of sinkholes in residential and professional areas should be considered.

**Open Space:** The applicant is not required to provide Open Space under the Trout Creek Overlay District; however, 108 dwellings are proposed with no recreational facilities in the age targeted residential area.

**Porous Paving / Belgian Block:** The applicant has proposed porous paving in sections of the residential development as a bonus offered in the Trout Creek Overlay District. The paving will be accompanied by Belgian block curbs. Belgian block curbs and porous paving require annual maintenance and inspection.

**Retaining Wall:** The applicant has proposed numerous retaining walls to accommodate the topography of the existing lots.

**Right-of-Way:** The applicant has proposed private roadways within the Residential and Professional Lots. No right-of-way has been proposed.

**Bridge Culvert / Dam:** The applicant has proposed to replace the bridge culvert located on Walker Road.

**Green Roof:** The applicant has proposed to install green roofs on the two proposed Office Buildings on the Professional Lot. Green roofs will require annual maintenance.

**Grading:** The applicant has proposed townhouses that provide side and rear yards that are not easily accessible. The targeted age community will have difficulty accessing the side and rear yards with the current slopes proposed.
Variances Requested

No zoning variances are requested for this Conditional Use Application.

Waivers Requested

§181-45.B – The minimum required block length is 600 feet. The applicant has proposed blocks that do not meet the minimum requirement of 600 feet and are requesting a waiver from this requirement.

§181-46.A.9 – Dead end streets are not permitted. The applicant has proposed a dead end street adjacent to Basin 7 and is requesting a waiver from this requirement.

§181-46.B.3 – Permanent cul-de-sac streets shall have a circular turnaround with a Right-of-Way Radius of 70 feet, an outer paving radius of 60 feet, and an inner paving radius of 20 feet for a residential area with a center island. The applicant has provided an oval shaped cul-de-sac that is to be privately owned with no right-of-way and is requesting a waiver from this requirement.

§181-46.D.2.a – The minimum radii of center line on horizontal curves shall be 200 feet on intercommunity service or secondary streets and 100 feet on local residential streets.

§181-46.F.4 – The minimum rights-of-way and cartway widths for all streets shall be provided as follows:
  - Cul-de-sac (under 400 feet long) – 50 foot Right-of-Way / 24 foot wide cartway
  - Local Residential / Service – 50 foot Right-of-Way / 28 foot cartway

The applicant has proposed no right of way and an 18 foot cartway for the cul-de-sac and a 20 foot cartways for all roadways within the residential parcel.

§181-46.H – The street standards are defined under this section. The applicant is requesting a waiver from this requirement.

§181-46.J.6 – The minimum required straight driveway length is 25 feet. The applicant has proposed 18 foot driveways and is requesting a waiver from this requirement.

§181-46.J.7 – Driveways to single-family residences shall intersect streets at angles of between 60º and 90º and all other driveways shall intersect streets at angles of between 75º and 90º degrees. The angle of intersection is the acute angle made by the intersection of the center line of the driveway with the center line of the road. The applicant has proposed driveways along the curved turns within the proposed residential area that do not meet the above and are requesting a waiver from this requirement.

§181-46.M.3 – Sidewalks are required on both sides of the street when an area is developed on both sides of a street. The applicant has proposed sidewalk on only one side of the street though out the entire proposed residential area and are requesting a waiver from this requirement.

§181-50.B.3 – No dwelling shall be located closer than 20 feet to any interior loop street, court, cul-de-sac, modified cul-de-sac or common parking area. The applicant has proposed driveways
that are 18 feet in length on the proposed cul-de-sac and are requesting a waiver from this requirement.

§181-52.I – A partial waiver will be requested during land development to permit coordination of the buffer area plantings, perimeter yard plantings, and stormwater improvement plantings, as applicable, and to determine future planting of dam and regional basin in conjunction with the department of environmental protection. The applicant has references section §208-163.D.4 stating the Board of Supervisors may reduce this requirement if it is determined that a buffer of less than 20 feet in width will provide adequate protection to an abutting property or district, or if the public stormwater improvement is located within the buffer area.

§181-54 – Protection standards related to but not limited to: Tree protection, steep slope protection, karst area requirements, water body areas, wetland areas, pedestrian trails, etc. The applicant has requested a general waiver from the above requirements.

ZONING ORDINANCE

1. §208-102.H – A Lighting Plan shall be provided for review to ensure compliance with this section. The applicant has stated that a lighting plan will be provided during Land Development.

2. §208-104 – The applicant shall indicate the dimensions of the loading areas on the plans. The applicant has stated that compliance will be addressed during Land Development.

3. §208-163.B.3 – 200 square feet of additional impervious coverage per dwelling unit for residential decks, patios or other outside paving shall be planned for and accommodated in the initial stormwater management system. The applicant shall ensure compliance with this section.

SUBDIVISION AND LAND DEVELOPMENT

4. §181-23.B – The applicant is required to submit a lighting plan, architectural building plans, and shadow analysis plan in addition to the proposed plans. The applicant has acknowledged this requirement and plans to comply during land development and request a waiver during land development for shadow analysis and a partial waiver from the requirements of §181-36.D.2 (vegetative cover).

5. §181-45.B – Blocks are to have a minimum length of 600 feet. The applicant has requested a waiver from this requirement on sheet 11 of the proposed plans.

6. §181-46.A.9 – Dead-end streets shall be prohibited, except as stubs to permit future street extension into adjoining tracts or when designed as cul-de-sac streets. The applicant has proposed that private Road D is to be a dead end turn around. The applicant has requested a waiver on sheet 9 of the proposed plans.
7. §181-46.B.13 – Parking areas are to be illuminated. The applicant has stated they will comply during Land Development.

8. §181-46.D.1 – Sight distance is required to be provided at all vertical curves. The applicant has stated they will comply during Land Development.

9. §181-46.E.6 – Clear sight triangles are required at all intersections. The applicant has proposed a parking space at the intersection of Road D and Road E that contains a spot infringing on the proposed sight triangle. The applicant has stated they will request a waiver during Land Development.

10. §181-46.F.1 – The applicant is not complaint with the street width requirements. With the currently proposed streets, no parking signs would be required in all applicable areas. The applicant has stated they will comply during Land Development.

11. §181-46.J.3 – Private driveways on corner lots shall be located at least 40 feet from an intersection. The applicant shall revise the plans or request a waiver.

12. §181-46.M.10 – The Planning Commission may require additional paths to promote connectivity. The applicant has stated they will comply during Land Development.

13. §181-46.N – The applicant shall provide street lights. The applicant has stated they will comply during Land Development.


   a. The applicant shall provide a note in regards to ownership and maintenance of the green roofs located on the Professional Lot. The locations of the green roof shall be labeled on the plans.

   b. The applicant shall add a separate note indicating that the Regional Detention Basin shall be owner and maintained by the Homeowners Association. All costs or costs of damages caused by the Regional Detention Basin are the responsibility of the Homeowners Association.

   c. The applicant has stated in note 2 on sheet 10 of the plan set that the “Roadways within the community are proposed to be Private Drives with no right-of-way and will be owned and maintained by the Homeowners Association.” The applicant has not indicated who will own and maintain the roadways and associated improvements within the Professional Lot. The applicant shall provide additional information in regards to ownership and maintenance of the Professional lot.

**ADDITIONAL COMMENTS**

15. The applicant shall add note to the plans indicating that the applicant is responsible for the reasonable cost of repair of any physical damage to adjoining homes to the extent caused by stormwater impacts directly resulting from the applicant construction, both
during construction and for a two year period after installation of the stormwater facilities for the residential phase.

16. The applicant shall add a note to the plans indicating that the non-residential land development applicant shall be responsible for the reasonable cost of repair to any physical damage to adjoining homes to the extent caused by stormwater impacts directly resulting from the non-residential land development applicants construction both during construction of and for a two year period after installation of the stormwater facilities for the non-residential phase.

17. The applicant has proposed to replace the existing culvert/bridge located on Walker Road with a culvert consistent with the design identified in the Trout Creek Study of 2010 or otherwise approved by the Township Engineer and DEP. The applicant shall add a note to the plan in regards to the ownership and maintenance responsibilities of the proposed replacement culvert/bridge.

18. The proposed grading around some of the proposed townhouses and carriage homes will make the access and walkability of the sites difficult to achieve. Furthermore, several of the proposed units will have steep grading directly adjacent to the stormwater management systems, which will make the access of the buildings difficult for future emergency service responders. We recommend, that at a minimum, that the grading concept be revised to maintain a maximum slope of 5:1 around the external areas of the building. This slope should be maintained to a minimum of the eight (8) feet away from the footprint of the buildings. Moreover, segmental retaining walls should be situated, at a minimum, at a horizontal distance equal to the maximum height of the wall, but never less than eight (8) feet from the buildings. This will preclude the possibility of the geo-grid material (detail on sheet 31) from encroaching into the building foundation area.

I trust that the foregoing will assist Tredyffrin Township in their evaluation of the Conditional Use Application. It is recommended that the Planning Commission not act on this application until the review comments above are satisfactorily addressed.

Regards,

Kevin M. Matson, P.E.
Municipal Group Manager

cc: Stephen Burgo, P.E. – Tredyffrin Township Engineer
Nicholas A. Szeredai, E.I.T. – McCormick Taylor