



August 2, 2024

Mila Carter, Township Manager and Director of Planning and Zoning
Westtown Township
1039 Wilmington Pike
West Chester, PA 19382

RE: Marketplace at Westtown – Chase Bank
Land Development Review – RESUBMISSION REQUIRED
Westtown Township
236-22-0297

Dear Ms. Carter,

As requested, Cedarville Engineering Group, LLC (CEG) has completed a Land Development Review of the submitted Plans for Marketplace at Westtown – Chase Bank. The site (Parcel 67-2-42.4) comprised of roughly 18.5 acres, is located south of West Chester Pike to the east of the municipal boundary line between Westtown Township and East Goshen Township in the C-1 Commercial District of Westtown Township, Chester County. The project includes the construction of a new Chase Bank location, lighting, landscaping, walkways, utility connection, and an underground stormwater BMP to manage the change in runoff volume within an existing parking area for a shopping center complex.

The following information was received by our office on July 19, 2024:

- A. Submission Cover Letter dated July 16, 2024 prepared by Kaplin and Stewart Attorneys at Law.
- B. Parking Assessment prepared by Dynamic Traffic LLC dated January 19, 2023.
- C. Full size Plan titled “Preliminary/Final Land Development Plans for Westtown AM West TIC LLC – Proposed Chase Bank” consisting of Sheets 1-21 of 21, prepared by Dynamic Engineering Consultants, P.C., dated July 12, 2024.
- D. Stormwater Management Plan Narrative dated July 2024.
- E. Westtown Township Application for Approval of Preliminary Plan, undated.
- F. Full size Plan titled “Zoning Variance Plan” consisting of Sheets 1 of 1, prepared by Dynamic Engineering Consultants, P.C., dated September 7, 2022 and last revised October 12, 2023.
- G. Full size Plan titled “Overall Zoning Variance Plan” consisting of Sheets 1 of 1, prepared by Dynamic Engineering Consultants, P.C., dated September 7, 2022 and last revised October 12, 2023.

Cedarville Engineering Group, LLC

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The documents have been reviewed for compliance with Chapter 80 – Westtown Township Erosion, Sediment Control and Grading Ordinance, Chapter 144 – Westtown Township Stormwater Management Ordinance, Chapter 149 – Westtown Township Subdivision of Land Ordinance, and Chapter 170 – Westtown Township Zoning Ordinance.

We offer the following comments:

Chapter 80 – Erosion, Sediment Control and Grading

1. *Section 80-5.E – A time schedule indicating the anticipated starting and completion dates of the development sequence, the expected date of completion of construction of each of the measures referred to in Subsection D of this section and the time of exposure of each area prior to the completion of such measures.*
2. *Section 80-8.J – The design, installation and maintenance of erosion and sediment control measures shall be accomplished in accordance with standards and specifications established by the USDA Soil Conservation Service and the Chester County Soil Conservation District, except as otherwise stipulated in this or other applicable township ordinances.*

The following shall be addressed:

- The Stabilized Construction Entrance detail shall be revised to be consistent with the Plan and specify the required parameters (length, width, wash rack, etc.). The detail shall be in accordance with Standard Construction Detail #3-1 or #3-2 as referenced in the Pennsylvania Erosion and Sedimentation Pollution Control Manual.
- The location of the clean stone stockpile referenced in the Sequence of Construction Step 3 shall be shown on the Plan.
- Compost filter socks as currently proposed shall incorporate a J-hook at the terminal end of the filter sock.
- The concrete washout location shall be shown on the Erosion and Sedimentation Control Plan.
- The locations of Inlet Protection for existing inlets noted in Step 5 of the Sequence of Construction shall be shown on the Plan.
- A detail for the proposed Inlet Protection shall be provided on the Plan, in accordance with Construction Detail #4-20 or #4-21 as referenced in the Pennsylvania Erosion and Sedimentation Pollution Control Manual.
- The Standard E&S Control Notes shall be revised to reference Westtown Township in addition to the Conservation District for all notes, this includes but is not limited to Note 30 and 32.
- All Standard E&S Control Notes not applicable to the current project shall be removed, this shall include, but is not limited to Notes 35 and 37 referencing channels and 38-40 referencing sediment basins and traps.
- Operation and maintenance requirements for each E&S BMP shall be added to the RCE Detail, Concrete Washout Detail, and Temporary Stockpile Detail.



Chapter 144 – Stormwater Management

3. *Section 144-108 – For all activities requiring submittal of a stormwater management (SWM) site plan that involve subdivision or land development, the applicant shall post financial security to the municipality for the timely installation and proper construction of all stormwater management facilities as required by the approved SWM site plan and this chapter, and such financial security shall:
A. Be equal to or greater than the full construction cost of the required facilities except to the extent that financial security for the cost of any of such improvements is required to be and is posted with the Pennsylvania Department of Transportation in connection with a highway occupancy permit application; and
B. Be determined, collected, applied and enforced in accordance with Sections 509 through 511 of the MPC and the provisions of the municipality's Subdivision and Land Development Ordinance (SALDO).*

Section 144-403.G – Financial security, per the requirements of § 144-108, shall be submitted to the municipality prior to approval of the SWM site plan.

Financial security in an amount acceptable to the Township shall be provided prior to Plan recording. A Construction Cost Estimate shall be submitted for review and approval, with the required financial security incorporated into a Developer's Agreement to be executed prior to Plan recording.

4. *Section 144-305.A – The post-construction total runoff volume shall not exceed the predevelopment total runoff volume for all storms equal to or less than the two-year, twenty-four-hour duration precipitation (design storm). The water quality and runoff volume to be managed shall consist of any runoff volume generated by the proposed regulated activity over and above the predevelopment total runoff volume and shall be captured and permanently retained or infiltrated on the site. Permanent retention options may include, but are not limited to, reuse, evaporation, transpiration, and infiltration.*

The following shall be addressed:

- Water quality volume calculations shall be provided that demonstrate the net two-year runoff volume will be managed. Calculations shall demonstrate that this volume is managed at an elevation below the invert of the lowest outlet structure orifice.
 - The net two-year volume shall be calculated based on the site limits of disturbance.
 - The 4 inch underdrain proposed at the bottom of the BMP as shown on the Outlet Structure Detail Basin (OCS STR 100) and 12" HDEP Schematic Underground Infiltration Basin Detail, shall incorporate a valve or other acceptable means to facilitate infiltrate by preventing runoff to immediately enter the underdrain.
5. *Section 144-306.A – For regulated activities involving both new development and redevelopment, infiltration should be designed to accommodate the entire water quality and runoff volume required in § [144-305](#). Infiltration BMPs should be consistent with the*

design and infiltration period guidelines included in the PA BMP Manual or other PA DEP design guidance. If the runoff volume required by § [144-305](#) cannot be infiltrated, then alternative methods consistent with the PA BMP Manual (as amended) or other PA DEP guidance, such as the Managed Release Concept, may be used to manage this volume with approval from the Municipal Engineer.

Section 144-306.H – A detailed soils evaluation of the site shall be conducted by a qualified professional and at a minimum shall address soil permeability, depth to bedrock, and subgrade stability. The general process for designing the infiltration BMP shall be conducted by a qualified licensed professional and shall be consistent with the PA BMP Manual (as amended)(or other guidance acceptable to the Municipal Engineer) and in general shall:

- (1) Analyze hydrologic soil groups as well as natural and man-made features within the site to determine general areas of suitability for infiltration practices. In areas where development on fill material is under consideration, conduct geotechnical investigations of subgrade stability; infiltration may not be ruled out without conducting these tests.
- (2) Provide field tests such as double ring infiltrometer or other hydraulic conductivity tests (at the elevation of the proposed infiltration surface) to determine the appropriate hydraulic conductivity rate. Standard septic/sewage percolation tests are not acceptable for design purposes.
- (3) Design the infiltration facility for the required retention (infiltration) volume based on field-determined infiltration capacity (and apply safety factor as per applicable design guidelines) at the elevation of the proposed infiltration surface.
- (4) On-lot infiltration features are encouraged; however, it shall be demonstrated to the Municipal Engineer that the soils are conducive to infiltration on the identified lots.

Section 144-303.I – Infiltration BMPs shall be selected based on suitability of soils and site conditions and shall be constructed on soils that have the following characteristics:

- (1) A minimum depth of 24 inches between the bottom of the BMP and the top of the limiting zone. Additional depth may be required in areas underlain by karst or carbonate geology. (See § [144-306M](#).)
- (2) An infiltration rate sufficient to accept the additional stormwater volume and drain completely as determined by field tests conducted by the applicant.
- (3) The infiltration facility shall completely drain the retention (infiltration) volume within three days (72 hours) from the end of the design storm.

The following shall be addressed:

- The “Volume of Runoff to be Infiltrated” cell within the Infiltration Basin Drain Time Calculations” worksheet shall be revised to coincide with the total storage below the lowest orifice.
- Calculations shall be based upon infiltration testing as outlined in the above referenced section of the Ordinance. Infiltration testing as outlined in the above referenced sections of the Ordinance shall be provided and a tested infiltration rate



used for dewatering calculations to validate that the location of the BMP is conducive to infiltration.

- The above referenced testing shall include supporting information demonstrating that the bottom of the BMP is located a minimum of 24 inches from the limiting zone.

6. *Section 144-306.Q – The following procedures and materials shall be required during the construction of all subsurface facilities:*

- (1) *The bottom of the bed and/or trench shall be scarified prior to the placement of aggregate.*
- (2) *The bottom of the bed and/or trench shall be scarified prior to the placement of aggregate*
- (3) *Only clean aggregate with documented porosity, free of fines, shall be allowed.*
- (4) *The tops, bottoms and sides of all seepage beds, trenches, or like facilities shall be covered with drainage fabric. Fabric shall be nonwoven fabric acceptable to the Municipal Engineer.*
- (5) *Stormwater shall be distributed throughout the entire seepage bed/trench or like facility and provisions for the collection of debris shall be provided in all facilities.*

The above referenced notes shall be added to the 12” HDPE Schematic Underground Infiltration Basin Detail.

7. *Section 144-308.A – Post-construction peak flow rates from any regulated activity shall not exceed the predevelopment peak flow rates as shown for each of the design storms specified in Table 308.1.*

Section 144-308.E – Areas located outside of the site (i.e., areas outside of the regulated activity) that drain through a proposed site are not subject to peak flow rate control requirements. Drainage facilities located on the site shall be designed to safely convey flows from outside of the site through the site.

Section 144-402.B.(12) – The total extent of the upstream area draining through the site.

The following shall be addressed:

- The provided routing shall be revised to include all areas within the limits of disturbance.
- The full extent of drainage area (pre and post) shall be included in the routing calculations to ensure the BMP is not overloaded. At present, the drainage areas appear to terminate at the roadway adjacent to the site.
- The provided Drainage Area Plans shall be revised to include the full upslope drainage area for drainage area POD 001.
- The post development non-impervious cover shall be revised to “lawn” cover or additional details and O&M notes added for a ‘managed meadow’ BMP (PA BMP Manual BMP 6.7.2 Landscape Restoration). Small pockets of landscaping do not meet this BMP’s requirements.

- It shall be clarified as to how POD 01 and POD 02 were determined. Points of discharge shall have a defined point of interest, i.e. and existing storm conveyance structure.

8. *Section 144-310.C – Any drainage conveyance facility and/or channel not governed by PA Chapter 105 regulations shall be designed to convey, without damage to the drainage facility or roadway, runoff from the twenty-five-year storm event. Larger storm events (fifty-year and 100-year storms) shall also be safely conveyed in the direction of natural flow without creating additional damage to any drainage facilities, nearby structures, or roadways.*

Section 144-311.B.(10) – A minimum one foot of freeboard between the hydraulic grade line (HGL) of the design storm and the ground elevation shall be provided throughout all proposed storm sewer conveyance systems.

Proposed storm sewer shall be revised to reduce the Hydraulic Grade Line one foot below the ground and rim elevations of structures, in the following locations:

- Line 2 to line 1 at the Dn location
- Line 6 to line 5 at the Dn location
- Line 10 to line 5 at the Dn location
- Line 1 to End at the Up location
- Line 1 to End at the Up location
- Line 5 to line 4 at the Up location

9. *Section 144-311.B.(3) – All inlets shall be precast concrete, PennDOT type and shall have bicycle-safe-type grate.*

A bicycle safe grate detail shall be added to the Plan and specified on the PennDOT Type M and Type C Inlet Boxes and Assemblies detail.

10. *Section 144-311.B.(11) – Velocity within the storm sewer system shall be no less than three feet per second and no greater than 11 feet per second for the design storm peak flow.*

The grade of the proposed storm sewer shall be revised so that a velocity of a minimum of 3 feet per second is maintained.

11. *Section 144-311.B.(12) – Storm sewer profiles shall be provided for all systems and shall show all applicable design information, including, but not limited to, pipe size, material, slope, invert and grate/ground elevations, and cover.*

Storm sewer profiles shall be provided with the Plan set.

12. *Section 144-311.E.(1) – A sump shall be provided between the impervious area and the in-ground facility to collect and trap sediment and debris before reaching the in-ground facility.*



A sump shall be provided at STM MH Storm STR #200.

13. *Section 144-311.E.(3) – The distribution pipe shall be encased in a bed of AASHTO No. 1 coarse aggregate completed envelope (top, sides and bottom) by PennDOT Class 1 geotextile.*

The BMP stone callout (3/4 clean stone or suitable backfill) shall be revised to AASHTO No 1 stone or ‘clean washed’ stone.

14. *Section 144-402 – The SWM site plan shall consist of a general description of the project, including items described in § [144-304](#), calculations, maps, and plans. A note on the maps shall refer to the associated computations and erosion and sediment control plan by title and date. The cover sheet of the computations and erosion and sediment control plan shall refer to the associated maps by title and date. All SWM site plan materials shall be submitted to the municipality in a format that is clear, concise, legible, neat, and well organized; otherwise, the SWM site plan shall not be accepted for review and shall be returned to the applicant.*

A note shall be added to the Plan and Report that reference one another by title and date.

15. *Section 144-402.B.(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.*

The referenced statement shall be added to the Plan and signed by the Applicant prior to Plan approval.

16. *Section 144-402.B.(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 Westtown Township Code, Chapter 144, Stormwater Management."

The referenced signature block shall be added to the Plan and signed and sealed prior to Plan approval.

17. *Section 144-402.B.(5) – The following signature block for Westtown Township: "On behalf of Westtown Township, (Municipal official or designee), on this date [Signature date], has reviewed and hereby certifies to the best of my knowledge that the SWM Site Plan meets all design standards and criteria of Westtown Township Code, Chapter [144](#), Stormwater Management."*

The above referenced statement shall be added to the Plan.



18. Section 144-402.C.(2) - *The name of the project, tax parcel number(s), and the names, addresses and phone numbers of the owner of the property, the applicant, firm preparing the plan.*

The Owner/Applicant's phone number shall be added to the Property Information.

19. Section 144-402.C.(7) - *Legal property boundaries, including:*
(a) *The total project property boundary and size with distances marked to the nearest foot and bearings to the nearest degree.*
(b) *Boundaries, size and description of purpose of all existing easements and deed-restricted areas of the project property, with distances marked to the nearest foot and bearings to the nearest degree.*

The project boundary size and descriptions shall be added to Sheet 5.

20. Section 144-402.C.(8).(d) - *For named waters, show names and their watershed boundaries within the site.*

The Receiving Surface Waters note shall be revised to note the site watershed.

21. Section 144-402.C.(8).(f).[1] - *The designated use as determined by PADEP (25 Pa. Code Chapter 93);*

The referenced designated use shall be noted on the Plan.

22. Section 144-402.C.(8).(n) - *Water supply wells*

Section 144-402.C.(15) - The location of all existing and proposed utilities, sanitary sewers, on-lot wastewater facilities (including subsurface tanks and leach fields), and water supply lines within the site and within 50 feet beyond the proposed limits of earth disturbance.

The location of existing water service, shall be clearly shown on the Plan. A note to coordinate with the provider does not address the above referenced Ordinance requirements.

23. Section 144-402.C.(11) - *Existing and proposed man-made features, 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 (must differentiate existing impervious surfaces installed after December 16, 2013);*

(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; and*
- (e) Percent of the site covered by impervious surfaces for both the existing and proposed post-construction conditions.*

A tabulation of impervious coverage as described by the above referenced section of the Ordinance shall be added to the Plan.

24. *Section 144-402.C.(18).(c) – Easements, as per the requirements of Article VII.*

An easement shall be offered to the Township for the purposes of inspection and maintenance (if needed due to inaction of the Owner).

25. *Section 144-402.G – Inspections, operation, and maintenance requirements. The following documents shall be prepared and submitted to the Township for review and approval as part of the SWM site plan, in accordance with the requirements of Article VII, for each BMP and conveyance included in the SWM site plan (including any to be located on any property other than the property being developed by the applicant);*

- (1) An O&M plan.*
- (2) An O&M agreement.*
- (3) Any easement agreements that are needed to ensure access, inspection, maintenance, operation, repair and permanent protection of any permanent BMP(s) and conveyances associated with the regulated activity.*
- (4) Any written deed, deed amendment or equivalent document (if needed) to be recorded against a subject property, as shown on the SWM site plan maps or plan sheets, or recorded plan sheets for the purpose of protecting and prohibiting disturbance to a BMP or conveyance; and*
- (5) Written approval, easement agreements, or other documentation for discharges to adjacent or down-gradient properties when required to comply with § 144-301G and Article VII of this chapter.*

Section 144-701.D – General Requirements for protection, operation and maintenance of stormwater BMPs and conveyances – For any BMP or man-made conveyance (including any to be located on any property other than the property being developed by the applicant) to be owned by a person other than the Township:

- (1) An O&M agreement shall be submitted to the Township for review and approval; and*
- (2) 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.*

The following shall be addressed:





- A Stormwater Management Operation & Maintenance Agreement must be executed and recorded for the proposed stormwater BMP's to be incorporated. The O&M Agreement will be provided by Westtown Township at the time that stamped and approved Plans are issued for the project. The applicable signatures must be signed by the property owner prior to Plan recording.
- Operation and maintenance requirements for the proposed BMP shall be added to the Plan.
- The Plan shall clearly note the person(s) responsible for the operations and maintenance of the proposed BMP.

Chapter 149 – Subdivision of Land

26. *Section 149-403.A – Before the final plan is signed by the Board of Supervisors, the applicant shall submit an agreement, subject to the approval of the Board of Supervisors, provided for, but not limited to , the following where applicable: In accordance with the approved final plan, the applicant will layout and construct all street and other improvements, including , but not limited to, grading, paving , curbs, gutter, sidewalks, streetlights, fire hydrants, water mains, street singses, shade trees, storm and sanitary sewers, stormwater management structures, landscaping, traffic control devices, open space areas, and erosion and sediment control measures.*

Section 149-403.C.C – The applicant shall sign a tri-party agreement with a financial institution and the Township guaranteeing and securing completion of the improvements listed in Subsection A, except as provided for in Subsection E, within one year of the date of the approved plan.

(2) The applicant shall deposit with the Township an escrow account in an amount equal to 110% of the cost of the improvements, based on a construction cost estimate prepared by a bona fide contractor and reviewed and approved by the Township Engineer, whose decision shall be final.

(3) If the improvements are not completed within the one-year period, the Township shall have the right to withdraw the escrow funds to complete the improvements, or shall require the financial security be increased by an additional 10% for each succeeding year beyond the first posting date of the security or to an amount not exceeding 110% of the cost of completing the required improvements as reestablished.

Financial security in an amount acceptable to the Township shall be provided prior to Plan recording. A Construction Cost Estimate shall be submitted for review and approval, with the required financial security incorporated into a Developer's Agreement to be executed prior to Plan recording.

27. *Section 149-409 – As-built plans*
Within 30 days after completion and Township approval of subdivision and/or land development improvements as shown on final plans, and before Township acceptance or dedication of such improvements, the applicant shall submit to the Board a corrected copy of said plans showing actual dimensions and conditions of streets and all other



improvements, certified by a professional engineer to be in accordance with actual construction.

Final As-built Plans shall be required upon completion of site improvements. This shall be noted on the Plan, and shall be included as part of the above referenced financial security.

28. *Section 149-600.C – If the preliminary plan and all supporting data comply in all respects with the requirements for final plans (see Article VII), the Township may, in the case of small subdivisions involving no new streets or limited development of land, proceed to final action at the first consideration of the plan if a written request for final approval is made by the applicant and agreed to by the Board of Supervisors.*

A formal request to the Township must be made for the Plan to be reviewed as Preliminary/Final. Acceptance of this request is at the discretion of the Board of Supervisors.

29. *Section 149-602.B.(7) – The total tract boundary lines of the property being developed, with accurate distances to hundredths of a foot and bearings to the nearest second. These boundaries shall be balanced and closed with an error closure not less than one foot in 10,000 feet; provided, however, that the boundary(ies) of adjoining additional unplatted land of the subdivider (i.e., between separately submitted plan sections) are not required to be based upon field survey, and may be calculated. Existing and proposed monuments shall be indicated, along with a statement of the total area of the property being developed. In addition, the engineer or surveyor shall certify to the accuracy of the survey and that the drawn plan is in conformance with all Township chapters.*

Section 149-702.B.(7) – The total tract boundary lines of the area being developed with accurate distances to hundredths of a foot and bearings to the nearest second. These boundaries shall be balanced and closed with an error closure not less than one foot in 10,000 feet; provided, however, that the boundary(ies) adjoining additional unplatted land of the subdivider for example, between separately submitted final plan sections are not required to be based upon field survey, and may be calculated. Existing and proposed monuments shall be indicated, along with a statement of the total area of the property being developed. In addition, the engineer or surveyor shall certify to the accuracy of the survey and that the drawn plan is in conformance with Township chapters.

Sheet 5 shall be revised to note the bearings and distances of the parcel boundaries.

30. *Section 149-602.B.(8) – Location and elevation of the bench mark to which contour elevations refer. Where reasonable and practical, datum used shall be USGS (United States Geodetic Survey) from a known, established bench mark. All subdivisions and/or land developments shall have an actual field run or aerial topography.*

Section 149-702.B.(8) – Location and elevation of the bench mark to which contour lines refer. Where reasonable and practical, datum used shall be USGS (United States Geodetic





Survey) from a known, established bench mark. All subdivisions and/or land developments shall have an actual field run or aerial topography.

The project datum and benchmark shall be noted on the Plan.

31. *Section 149-602.B.(10) – Location and ownership of all existing sewer lines, water lines, fire hydrants, utility transmission lines, culverts, bridges, railroads, watercourses, trees, wetlands (or certification that none are present), soils, easements, rights-of-way and other significant man-made or natural features within the proposed subdivision and within 50 feet from the boundaries of the proposed subdivision.*

Section 149-702.B.(15) – Location and ownership of all existing sewer lines, water lines, fire hydrants, railroads, watercourses, trees, wetlands (or certification that none are present), soils, easements, rights-of-way and other significant man-made, historical or natural features within the proposed subdivision and within 50 feet from the boundaries of the proposed subdivision.

The location of the existing water line shall be clearly shown on the Plan.

32. *Section 149-602.B.(12) – All existing streets, including streets of record (recorded but not constructed), on or abutting the tract, including names, right-of-way widths, cartway (pavement) widths and approximate grades.*

Section 149-702.B.(12) – All existing streets, including streets of record (recorded but not constructed), on or abutting the tract, including names, right-of-way widths, cartway (pavement) widths and approximate grades

The following shall be addressed:

- West Chester Pike cartway and right-of-way widths shall be dimensioned on the Plan.

33. *Section 149-602.B.(14) – A legend indicating existing features and proposed features.*

The following shall be addressed:

- A legend shall be provided on the E&S Plan and Site Plan.
- All legends shall include all line types associated with the applicable plan sheet.

34. *Section 149-602.C.(3).(a) – Utility easement locations.*

Section 149-702.B.(21).(a) – Utility easement locations.

Applicable utility easements shall be shown on the Plan.





35. *Section 149-602.C.(3).(b) – Conceptual location, size and invert elevation of all sanitary and storm sewers and location of all manholes, inlets and culverts with the material of each indicated, and any proposed connections with existing facilities. (These data may be on a separate plan.) (NOTE: All construction of sanitary sewers shall be in accordance with the standards and specifications adopted by Westtown Township and the plan shall be so noted.)*

*Section 149-702.B.(21).(b) – Sanitary and storm sewers. See Subsection **B(15)** above.*

The sanitary sewer design and layout is subject to the review and approval of the Township Sewer Engineer.

36. *Section 149-602.C.(4).(b) – A statement noting water and sewer needs and verification of the availability of both.*

A statement of availability for both water and sanitary services shall be provided.

37. *Section 149-803.B.(1).(g).[1] – The stormwater management plan shall include a plan stating the proposed methods and schedules of maintenance of stormwater facilities to ensure their proper operation. The method of ownership and maintenance responsibilities of stormwater facilities shall be subject to approval by the Board of Supervisors.*

Section 149-803.B.(1).(g).[4] – If stormwater facilities that require proper maintenance are to be privately owned, legal mechanisms shall be established prior to property conveyance to require the owner and his/her successor and assigns to properly maintain the facilities in a safe, functional and attractive manner in accordance with the approved maintenance schedule.

The following shall be addressed:

- A Stormwater Management Operation & Maintenance Agreement must be executed and recorded for the proposed stormwater BMP's to be incorporated. The O&M Agreement will be provided by Westtown Township at the time that stamped and approved Plans are issued for the project. The applicable signatures must be signed by the property owner prior to Plan recording.
 - Operation and maintenance requirements for the proposed BMP shall be added to the Plan.
 - The Plan shall clearly note the person(s) responsible for the operations and maintenance of the proposed BMP.
38. *Section 149-803.B.(1).(g).[5] – If stormwater facilities will not be municipally owned, the developer shall establish a legal right of the Township to access the facilities for periodic inspections and maintenance at the Township's discretion. However, the Township is under no obligation to perform such inspections and maintenance. The Township may require that the entity responsible for maintenance of stormwater facilities reimburse the*

Township for costs of maintenance and repair of stormwater facilities if that entity fails to perform its duties.

An easement shall be provided that grants the Township the right, but not the obligation, for periodic inspection and maintenance purposes.

39. *Section 149-803.B.(2).(e) – The entire contributory drainage area shall be taken into account in basin design.*

The drainage area maps and areas used in stormwater calculations shall be revised to include the full upslope drainage area to the BMP.

40. *Section 149-803.B.(3).(c) – All inlets shall be precast concrete, PennDOT type and shall have bicycle-safe-type grate.*

A bicycle safe grate detail shall be added to the Plan and specified on the PennDOT Type M and Type C Inlet Boxes and Assemblies detail.

41. *Section 149-803.B.(3).(h) – Storm sewers shall have a minimum cover of 24 inches.*

The storm sewer layout shall be revised to provide a minimum of 24 inches of cover. Cover in the following areas shall be increased based on the provided storm sewer calculations:

- Line 1 to End, Dn and Up
- Line 2 to line 1, Dn
- Line 5 to line 4, Up
- Line 6 to line 5, Dn
- Line 7 to line 6, Up
- Line 8 to line 7, Dn
- Line 9 to line 7, Dn
- Line 10 to line 5, Dn

42. *Section 149-803.B.(7) – Individual berms or inground basins may be used where practical but title plan shall contain a note that facilities are permanent and shall be maintained by the property owner.*

A note shall be added to the Plan that the BMP is a permanent feature to not be removed and that the property owner is responsible for its maintenance and operation.

43. *Section 149-804.A – Traffic impact study. A traffic impact study shall be required for any subdivision or land development that is expected to generate more than 250 total average weekday trip-ends after build-out.*

The referenced Traffic Impact Study is subject to review by the Township Traffic Engineer.



44. Section 149-918.A - Plan requirements. All proposed water distribution systems shall be designed, connected and installed to meet the specifications and requirements of the DEP, Pennsylvania Utility Commission (PUC), CCHD and all Township ordinances. The complete design of the proposed distribution system.

The proposed water distribution system and connection shall be shown on the Plan connecting to the existing water service or main to the site. Final review and approval of the system shall be received by the utility owner.

45. Section 149-925.G.(1) - Lot or perimeter yard requirements. Each yard shall be landscaped as follows:

	Landscaping Per 100 Linear Feet		
	Canopy Trees Mature Height Over 30 Feet	Ornamental Flowering Trees	Shrubs
Single-family detached dwelling			
Street frontage	1.5	0.5	
All other property lines	0.5	0.5	
All other dwellings			
Street frontage(s)	1.0	0.5	4.0
All other property line	0.5	0.5	2.0
Nonresidential			
Street frontage(s)	2.0	1.5	6.0
All other property lines	1.0	1.0	3.0

Section 149-925.G.(2) - Parking area requirements.

(a) Each planter island which is 20 feet or less in length shall contain one tree and 10 shrubs.

(b) Each planter island which is more than 20 feet in length shall contain two trees and 20 shrubs.

A landscape requirement tabulation shall be provided to demonstrate compliance with the referenced Ordinance section.

46. Section 149-925.I.(1) - All landscape plans shall be prepared and sealed by a landscape architect registered in the Commonwealth of Pennsylvania.

The Landscape Plan shall be signed and sealed by a Registered Landscape Architect, in accordance with the above referenced section of the Ordinance.

47. Section 149-925.I.(2) - A two-year maintenance and replacement guaranty shall be provided to the Township by the landscape contractor. All plantings which do not survive after the expiration of the maintenance guaranty shall be replaced by the owner.



A two-year maintenance and replacement guaranty shall be provided to the Township following installation of the plantings.

Chapter 170 – Zoning

48. *Section 170-1102.C – Maximum Building Coverage: 25%*

The Applicant shall clarify how the total building coverage of the lot remains at 15% with the addition of another building. Confirmation shall be received from the Westtown Township Zoning Officer regarding compliance with coverage requirements.

49. *Section 170-1102.F – Minimum front yard setback: 50 feet for any building or parking area.*

Section 170-1102.G – Minimum side yards:

(1) Fifteen feet minimum for each, except 50 feet from the future right-of-way line of Route 202 or Route 3 and 30 feet from the future right-of-way line of Route 926 or Route 352.

Section 170-1102.H – Minimum rear yard: 50 feet.

Confirmation shall be received from the Westtown Township Zoning Officer regarding compliance with setback requirements.

50. *Section 170-1509.D – Any organic refuse and garbage shall be stored in tight, verminproof containers. On multifamily, commercial, or industrial properties, solid waste storage shall be centralized to expedite collection. Storage containers shall be enclosed on three sides with masonry walls and shall be architecturally screened*

The trash enclosure for refuse collection shall be shown on the Plan.

51. *Section 170-1513.A.(1) – Blocking or interfering with the use of accessways, automobile parking facilities, or pedestrian ways; or*

The stop bar proposed to the north of the building shall be relocated to allow a minimum ten (10) foot backup for vehicles exiting the parking space closest to the stop bar.

52. *Section 170-1513.B – Minimum interior drive widths*

<i>Use</i>	<i>Two-Lane Two-Way Drives</i>
<i>Commercial and others</i>	<i>28 ft</i>

The proposed lane width between parking areas over the proposed BMP shall be dimensioned on the Plan.

53. *Section 170-1513.D – Fire lane easements*





The need for provision of fire lane easement shall be reviewed and determined by the Township Fire Marshal.

54. Section 170-1514.D.(1).(e) – Examples of illumination levels for typical outdoor applications, as extracted from the IESNA RP-33-99 and RP-8-00 Recommended Practices, are presented below

Classification	Maintained Average Illumination Levels (Lux/ Footcandles) (See Note 2)	Uniformity Ratios	
		(Average: Minimum) (Note 3)	(Maximum: Minimum)
Streets and roadways			
Local commercial	9/0.9 average minimum 12.0/1.2 average maximum	6:1	
Local residential	4/0.4 average minimum 7/0.7 average maximum	6:1	
Parking (Commercial/ institutional, industrial/municipal use)			
High activity (e.g., major athletic/civic/ cultural events; fast food, etc.)	10/1 average minimum 20/2 average maximum	5:1	20:1
Medium activity (e.g., hospitals, community shopping centers, office parks, commuter lots, etc.)	5/0.5 average minimum 10/1 average maximum	5:1	20:1
Low activity (e.g., schools, churches, neighborhood shopping, multifamily developments, etc.)	2/0.2 average minimum 5/0.5 average maximum	5:1	20:1
Sidewalks and bikeways	5/0.5 average minimum 20/2.0 average maximum	4:1	
Building entrances (Commercial/industrial/ institutional)	25/2.5 average minimum 50/5.0 average maximum	5:1	
Service station dispenser areas	50/5 average minimum 200/20 average maximum	5:1	
Car dealerships	20/2.0 average minimum 100/10 average maximum	5:1	

NOTES (Apply to all classifications):

- 1 Illumination levels are maintained horizontal at grade.
- 2 Maximum average illuminance levels are applicable to commercial areas with high nighttime pedestrian activities or areas with light (brightly illuminated) surroundings.
- 3 Uniformity ratios dictate the lowest illuminance allowable based on the average selected. For example, in high activity parking areas with two fc average, the minimum level would be 2/5 or .4 fc.

The provided lighting layout shall be revised to provide uniformity ratios of 5:1 for Average: Minimum and 20:1 Maximum: The Plan currently proposes a minimum of 13.4:1 and 74:1, respectively.

55. Section 170-1514.D.(2).(b) – For lighting horizontal tasks such as roadways, sidewalks, entrance drives and parking areas, luminaires shall meet IESNA full-cutoff criteria (no light output emitted above 90° at any lateral angle around the fixture).

The proposed fixtures shall note either full cutoff or the BUG rating with a U of 0 and a G of 2 or less.

56. *Section 170-1703.B.(1) – Parking spaces shall have a dust-free, all-weather surface; this requirement shall be met by paving unless otherwise approved by the Board of Supervisors. Pervious surfaces such as porous paving, concrete lattice blocks, or gravel may be substituted if approved by the Board, e.g., for reserve or overflow parking. Pervious surfaces shall be the only permitted means of providing parking in areas subject to floodplain regulations.*

Proposed pavement saw cut lines shall be labeled.

57. *Section 170-1703.B.(2) – Parking areas shall have a minimum slope of 1% in any direction to provide for drainage, and a maximum slope of 5% in any direction for safety, user convenience, and stormwater management.*

The following shall be addressed:

- The slope of the handicap parking area and adjacent spaces shall be increased to provide a minimum slope of 1% in all directions to provide for drainage.
- The spot elevation TC:413.30/G:412.80 adjacent to the proposed 414 contour line shown at the northeast portion of the project area creates a low point, based upon the spot elevations shown immediately to the north and south. This shall be clarified.
- A slope of approximately 14% is proposed between the 413-contour line and the TC:413.17/G:412.67 spot elevation at the beginning of the drive through area and shall be revised accordingly.

58. *Section 170-1704 – Handicap Parking*

Section 170-1705.B.(4) – Banks, credit unions, and related retail financial service organizations:

(a) One parking space per 75 square feet of floor area devoted to customer service and related circulation; plus

(b) Parking for the balance of the facility used for office purposes at a ratio of one parking space per 225 square feet of gross leasable area.

The following shall be addressed:

- A parking tabulation shall be added to the Plan.
- The floor area devoted to customer services and related circulation shall be clearly noted on the tabulation.
- The minimum number of provided ADA spaces shall be based on the calculated quantity of required parking spaces.



59. Section 170-1706.B – The minimum amount of shared parking required shall be based on the application of the below percentages to the parking required for each land use as per § 170-1705.

Use	Weekday			Weekend		
	9:00 a.m. to 6:00 p.m.	6:00 p.m. to 12:00 a.m.	12:00 a.m. to 9:00 a.m.	9:00 a.m. to 6:00 p.m.	6:00 p.m. to 12:00 a.m.	12:00 a.m. to 9:00 a.m.
Offices	100%	10%	5%	10%	5%	5%
Retail and service uses	60%	90%	5%	100%	70%	5%
Hotel/motel	60%	100%	100%	60%	100%	100%
Restaurant	50%	100%	10%	80%	100%	10%
Entertainment	40%	100%	10%	80%	100%	10%
Other uses	The Board shall determine with which of the preceding categories any unlisted use shall comply.					

Section 170-1706.C – The applicant shall execute a written declaration that provides, in relevant part, that the minimum amount of shared parking required, based on the application of the percentages contained in § 170-1706B, shall be maintained at all times. The Township Solicitor shall review the declaration, as to form, content, and execution, which shall be finally approved by the Board of Supervisors. A draft of the declaration shall be submitted with the application for a building permit, and the final version of the declaration shall be retained by the Township and made a part of the property file.

Section 170-1709.C – The number of parking spaces for an existing shopping center may be reduced to 3.5 for each 1,000 square feet of gross leasable area, or fraction thereof, within the shopping center only when the following conditions are met to the satisfaction of the Township:

[Added 2-20-2024 by Ord. No. 2024-01]

(1) The applicant shall submit to the Township for review and approval a parking study which includes:

(a) Evidence documenting that the nature of the proposed occupancy or use of the buildings require less parking area or fewer spaces than that required by this article.

(b) Documentation of parking occupancy based on two separate observations completed during peak summer and winter periods, the specific time of which are confirmed with the Township traffic engineering prior to collecting data.

(c) A comparison of the observed and proposed parking relative to the 85th percentile parking demand presented in the Institute of Transportation Engineer's Parking Generation, latest edition.

(2) An area equal to 10% of the parking being removed will be landscaped, including full depth removal of the existing paving.

The following shall be addressed:



- Compliance with the above referenced Ordinance section is subject to review by the Township Traffic Engineer and Township Zoning Officer.
- Based on the reduction in parking calculation as calculated above, 10% of the reduction in area must be provided as additional landscape area. The Applicant shall provide supporting calculations demonstrating this area is provided, in addition to any required landscaping area to replace the removed landscaping area.
- The Applicant shall address whether shared parking is to be proposed.

General Comments:

60. The Applicant shall verify and revise all plan scales to confirm accuracy, including but not limited to the Grading Plan and Landscape Plan.

Please do not hesitate to contact me with any questions.

Best Regards,
Cedarville Engineering Group, LLC

A handwritten signature in black ink, appearing to read "Robert E. Flinchbaugh".

Robert E. Flinchbaugh, P.E.
Engineering Team Lead

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