

LOWER SALFORD TOWNSHIP  
BOARD OF SUPERVISORS  
REORGANIZATION MEETING MINUTES  
January 5, 2026

The Reorganization Meeting of the Lower Salford Township Board of Supervisors was called to order at 7:30 p.m. by the Township Manager, Joseph S. Czajkowski. Present were Supervisors Keith Bergman, Dave Scheuren, Kent Krauss, Marybeth Morrell and Rick Alderfer. Also present were Assistant to the Township Manager, Holly Hosterman; Director of Building and Zoning, Mike Beuke, Special Projects Coordinator, Grace Kelley; and Township Solicitor, Andy Freimuth.

Mr. Czajkowski led everyone in the Pledge of Allegiance.

The Honorable Judge Stella Tsai swore in Marybeth Morrell and Rick Alderfer as Township Supervisors.

Public Discussion Period

Margaret Burke, 352 Park Avenue, congratulated Supervisor Morrell on being the first woman elected to Supervisor in the Township.

Reorganization of Board

Temporary Chairman Czajkowski asked for nominations for Chairman of the Board of Supervisors for the 2026 calendar year. Supervisor Scheuren nominated Supervisor Bergman, which was seconded by Supervisor Krauss. Temporary Chairman Czajkowski called for a vote to name Supervisor Bergman Chairman. Vote was unanimous in favor and Supervisor Bergman was elected Chairman.

Chairman Bergman then opened the nominations for the position of Vice-Chairman for the 2026 calendar year. Supervisor Krauss nominated Supervisor Dave Scheuren as Vice Chairman. Supervisor Morrell seconded. The vote was unanimous in favor and Supervisor Scheuren was elected Vice Chairman.

Agenda Items 6 through 24

Supervisor Scheuren made a motion to approve agenda items 6 through 24 as listed below. Supervisor Krauss seconded the motion, and items 6 through 22 were approved by a unanimous vote.

6. Motion for the appointment of the following for 2026:

- Solicitor - Law Firm of Wisler, Pearlstine, LLP.
- Consulting Engineers – CKS Engineering
- Traffic Engineers – Bowman
- Township Manager - Joseph S. Czajkowski
- Secretary-Treasurer - Joseph S. Czajkowski
- Assistant to the Township Manager – Holly Hosterman
- Zoning Officer/Building Official – Michael Beuke
- Building Inspector/Fire Safety Inspector – Keystone Municipal Services
- Solicitor for Zoning Hearing Board- Marc Jonas, Esquire
- Solicitor for UCC Appeals Board – The Law Offices of Robert Brant and Assoc.
- Independent Auditor – Maillie, LLP

- Pension Actuary – Conrad Siegel

7. Motion to appoint individuals to fill positions on the various Township Commissions and Boards listed below:

- A) Planning Commission (4-year term)
  - 1. Terry Crippen – 4-year term ending 12/31/29
  - 2. David Bowe – 4-year term ending 12/31/29
- B) Zoning Hearing Board (3-year term)
  - 1. Paul Erhart– 3-year term ending 12/31/28
- C) Park Board (5-year term)
  - 1. Stephanie Moyer – 5-year term ending 12/31/30
- D) Communications Committee (3-year term)
  - 1. Rob Carlson - 3-year term ending 12/31/2028
  - 2. Kevin Shelly - 3-year term ending 12/31/2028
  - 3. Jessica Bancroft – (Alternate)
- E) Lower Salford Township Authority (5-year term)
  - 1. Karl Janetka – 5-year term ending 12/31/2030
- F) Indian Valley Regional Planning Commission (annual appointment)
  - 1. Keith Bergman
  - 2. David Goodman
- G) Recreation Authority (5-year term)
  - 1. Karl Janetka– 5-year term ending 12/31/2030
- H) Industrial Development Authority (5-year term)
  - 1. Chris Canavan – 5-year term ending 12/31/2030
- I) UCC Appeals Board – (5-year term)
  - 1. Matt Hufnagle – term ending 12/31/2030
  - 2. Rob Reilley - term ending 12/31/2030
- J) Indian Valley Public Library Board (3-year term)
  - 1. Doug Johnson – term ending 12/31/2027

8. Motion to appoint Douglas Johnson to the Vacancy Board for 2026. (The Vacancy Board consists of the Board of Supervisors and one registered voter. The purpose of this Board is to fill an elected office left vacant through disability or resignation.)

9. Motion to appoint Holly Hosterman to the Northern Montgomery County Recycling Committee.

10. Motion to appoint Tom Gamon as Fire Marshal, Don Lynch, Deputy Fire Marshal, and Ryan Nase, Deputy Fire Marshal, for 2026.

11. Motion to reappoint Fire Police presently active for the year 2026.

12. Motion to appoint Aaron Curry to the Freedom Valley Medical Rescue Board (3-year term).

13. Motion to reappoint Cory Moyer Emergency Operations Coordinator and to appoint Chris Missimer and Don Lynch as Deputy Emergency Operations Coordinators, and to reappoint Vince Medveckus and Elliot Towles as Deputy Emergency Operations Coordinators for the year 2026.

14. Motion to appoint Keith Bergman as voting delegate at the State Association of Township Supervisors Convention.
15. Motion re-enacting and re-imposing the Earned Income Tax for 2026 and further that Berkheimer Associates is recognized as Earned Income Tax Collector as designated by the Montgomery County Tax Collection Committee pursuant to Act 32.
16. Motion designating Harleysville Savings Bank as primary depository for Township funds for 2026.
17. Motion designating PLGIT as depository for Recycling Fund and various maintenance agreements, TD Bank for developer escrow funds and Harleysville Savings Bank for golf course funds
18. Motion designating Univest as Investment Management Agency for the Lower Salford Township Police Pension Fund and the Non-Uniformed Employees & Township Authority Pension Fund.
19. Motion Confirming the IRS Standard Mileage Reimbursement rate of 72.5 cents per mile
20. Motion to appoint Mallie, LLP, as the Township Independent Auditor for the 2025 audit.
21. Motion to recommend to the Board of Auditors that the Treasurer's Bond be set in the amount of \$3,500,000 for 2026.
22. Motion to accept the 2026 Budget figures for both Police and Non-Uniformed pensions as calculated by the Actuary and included in the budget.
23. Motion to approve all wages and pay ranges for Township employees as designated in the Budget for 2026.
24. Motion of Board of Supervisors to appoint a committee consisting of the Manager and his designate to open and read sealed bids other than at a Board of Supervisors meeting.
25. A. Motion designating the first Wednesday of the month as the regular public meeting of the Board of Supervisors to begin at 7:30 p.m.  
  
B. A motion designating a public work session will be held the day prior to the Board meeting, in addition to the third Wednesday of each month (excluding July and August third Wednesday meetings, which are cancelled) beginning at 7:30 a.m.  
  
Supervisor Scheuren made a motion to approve the regular meeting work session meeting schedule as posted. Supervisor Krauss seconded the motion. The motion passed unanimously.
26. Announcement that monthly meetings of Township advisory boards and committees for the year 2026 will be held in-person at the Township Building, 379 Main Street, Harleysville, PA as follows:

- Planning Commission - 4<sup>th</sup> Wednesday - 7:30 p.m.\*
- Zoning Hearing Board - as advertised
- UCC Appeals Board – as advertised
- Lower Salford Industrial Development Authority – as advertised
- Park Board - 4<sup>th</sup> Tuesday - 7:00 p.m.\*\*
- Recreation Authority – 4<sup>th</sup> Thursday – 7:00 p.m. \*\*\*
- Police Committee – 2<sup>nd</sup> Thursday (odd numbered months) – 1:00 p.m.
- Communications Committee – 3<sup>rd</sup> Wednesday of each month at 7:30 p.m.
- Sewer Authority - 3<sup>rd</sup> Tuesday - 7:30 p.m.\*\*\*\*
- Board of Auditors - reorganization meeting January 7th at 1:00 p.m.
- Indian Valley Regional Planning Commission at Franconia Township, 671 Allentown Road – Fourth Tuesday of every month beginning in January at 7:00 p.m.

- \* with the exception of the July and August meetings to be combined and held on August 12 and the November and December meetings to be combined and held on December 9.
- \*\* with the exception of the May, August, November and December meetings which are cancelled.
- \*\*\* with the exception of the January and November meetings, which are cancelled. The December meeting will be held on December 10.
- \*\*\*\* The Authority will conduct workshop meetings at 7:00 a.m. on the first Wednesday of every month at its offices at 57 Main Street, with the exception of the July meeting which is cancelled.

27. Announcement that non-uniformed employee holidays for 2026 are as follows: New Year's Day, Martin Luther King Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Day after Thanksgiving, Christmas Eve Day (after 12:00 noon), Christmas Day, Birthday and 7 personal days which include 3 days for death in the family. (Police Department Holidays as per collective bargaining agreement.)

28. Consent Agenda:

Supervisor Scheuren moved to approve the December 3, 2025 meeting minutes. Supervisor Krauss seconded the motion. The motion passed unanimously. Supervisor Scheuren moved to approve the monthly bills and December 2025 Treasurers Report as posted. Supervisor Krauss seconded the motion. The motion passed unanimously.

29. Committee Reports

- Park Board - Mrs. Hosterman stated that the next Park Board meeting was scheduled for January 27<sup>th</sup> at 7:00 pm.
- Zoning Hearing Board – Mr. Beuke stated that there were no applications before the Zoning Hearing Board for the month of January.
- Fire Chief – No Report
- FVMR – Chief Colleen Haines gave the ambulance report for the month of December, noting that there were 289 calls and 81 recalls for the month. Chief Haines noted that the Power Truck was working well. She also noted that for 2025 there were 2630 dispatches for Lower Salford and 710 recalls.

- Recreation Authority – Chairman Bergman noted that the 2026 budget was approved in December. He said that the course did very well in 2025 and reminded all that the performance of the course was very weather dependent. He said that the next meeting of the Recreation Authority would be on February 26<sup>th</sup> at 7:00pm.
- Communications Committee – Grace Kelley reported that the Committee looks forward to welcoming their first alternate member at the next meeting on January 21<sup>st</sup> at 7:30pm.

### 30. New Business –

- A) Ordinance 2026-01- Earned Income Tax Increase for Open Space – Chairman Bergman opened the hearing and turned the proceedings over to Solicitor Freimuth. Mr. Freimuth gave an overview of the ordinance noting that the ordinance would authorize the placement of a question on the May 19<sup>th</sup> primary ballot asking voters whether they would be in favor of an additional ¼% earned income tax for the purposes of acquiring the Allebach property and other open space. The board noted that they were in favor of the question and hopes that it passes. Supervisor Krauss moved to adopt Ordinance 2026-01. Supervisor Scheuren seconded the motion. The motion passed unanimously.
- B) Resolution 2026-01 – Amending and Reestablishing the Fee Schedule for Certain Services Rendered by Lower Salford Township – Supervisor Krauss moved to adopt Resolution 2026-01. Supervisor Scheuren seconded the motion. The motion passed unanimously.
- C) Resolution 2026-02 – A Resolution Setting the Police Department Contribution to the Pension Fund – Supervisor Scheuren moved to adopt Resolution 2026-02. Supervisor Krauss seconded the motion. The motion passed unanimously.
- D) Resolution 2026-03- Authorizing the Disposal of Township Property Valued at \$2,000 or Less – Supervisor Scheuren moved to adopt Resolution 2026-03. Supervisor Krauss seconded the motion. The motion passed unanimously.

PUBLIC COMMENT – Supervisor Krauss congratulated Supervisors Morrell and Alderfer on their recent elections and welcomed them to the Board of Supervisors. He said that he looked forward to working with them.

Supervisor Alderfer thanked the members of the Board and Township Staff for the encouragement and support he has received since the election, and he looks forward to working with everyone. Supervisor Morrell echoed those comments.

There being no additional business, Mr. Freimuth motioned to adjourn at 8:00pm

Respectfully Submitted,

Joseph S. Czajkowski  
Township Manager/Secretary

Code: items from 2022 DEP Model Ordinance  
items that are in DEP Model but we believe could be modified  
items that DEP ordinance says is optional  
Our edits  
items from East Branch Perkiomen Creek Ordinance or Article IX of Lower  
Salford Township SALDO  
items modified after in-house review

BOARD OF SUPERVISORS  
LOWER SALFORD TOWNSHIP

MONTGOMERY COUNTY, PENNSYLVANIA ORDINANCE NO. 2025-\_\_

"STORMWATER MANAGEMENT ORDINANCE"

AN ORDINANCE AMENDING THE LOWER SALFORD TOWNSHIP CODE OF  
ORDINANCES OF LOWER SALFORD TOWNSHIP BY ADDING CHAPTER \_\_  
(STORMWATER MANAGEMENT ORDINANCE).

The Board of Supervisors of Lower Salford Township does hereby ENACT and  
ORDAIN as follows:

SECTION I. Amendment to the Code.

The Codified Ordinances of Lower Salford Township is hereby amended by adding  
a new Chapter \_\_ entitled "Stormwater Management Ordinance" as follows:

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## CHAPTER \_\_\_\_: STORMWATER MANAGEMENT

### ARTICLE I: GENERAL PROVISIONS

#### § \_\_\_\_ - 1. Short Title

This Ordinance shall be known and may be cited as the "Lower Salford Township Stormwater Management Ordinance."

#### § \_\_\_\_ - 2. Statement of Findings

The Board of Supervisors of Lower Salford Township, Montgomery County, Pennsylvania finds that:

- A. Inadequate management of accelerated runoff of stormwater resulting from development throughout a watershed increases runoff volumes, flows and velocities, contributes to erosion and sedimentation, overtaxes the carrying capacity of streams and storm sewers, greatly increases the cost of public facilities to carry and control stormwater, undermines flood plain management and flood control efforts in downstream communities, reduces groundwater recharge, threatens public health and safety, and increases nonpoint source pollution of water resources.
- B. A comprehensive program of stormwater management, including reasonable regulation of development and activities causing accelerated runoff, is fundamental to the public health, safety, and welfare and the protection of people of the Commonwealth, their resources, and the environment.
- C. Stormwater is an important water resource that provides groundwater recharge for water supplies and supports the base flow of streams.
- D. The use of green infrastructure and low impact development (LID) are intended to address the root cause of water quality impairment by using systems and practices which use or mimic natural processes to: 1) infiltrate and recharge, 2) evapotranspire, and/or 3) harvest and use precipitation near where it falls to earth. Green infrastructure practices and LID contribute to the restoration or maintenance of pre-development hydrology.
- E. Federal and state regulations requires Lower Salford Township to implement a program of stormwater controls. The Township has been required to obtain a permit for stormwater discharges from their separate storm sewer systems under the National Pollutant Discharge Elimination System (NPDES) program.

#### § \_\_\_\_ - 3. Purpose

The purpose of this Ordinance is to promote health, safety, and welfare within the Township and its watershed by minimizing the harms and maximizing the benefits described in § \_\_\_\_-2 of this Ordinance, through provisions designed to:

- A. Meet legal water quality requirements under state law, including regulations at 25 Pa. Code 93 to protect, maintain, reclaim, and restore the existing and designated uses of the waters of this Commonwealth.
- B. Preserve natural drainage systems.

- C. Manage stormwater runoff close to the source, reduce runoff volumes and mimic predevelopment hydrology.
- D. Provide procedures and performance standards for stormwater planning and management.
- E. Maintain groundwater recharge to prevent degradation of surface and groundwater quality and to otherwise protect water resources.
- F. Prevent scour and erosion of stream banks and streambeds.
- G. Provide proper operation and maintenance of all stormwater best management practices (BMPs) that are implemented within the Township.
- H. Provide standards to meet NPDES permit requirements.
- I. To restrict impact to adjoining property owners.

#### **§ \_\_\_ - 4. Statutory Authority**

The Township is empowered to regulate land use activities that affect runoff by the authority of the Act of July 31, 1968, P.L. 805, No. 247, The Pennsylvania Municipalities Planning Code, as amended, and/or the Act of October 4, 1978, P.L. 864 (Act 167), 32 P.S. Section 680.1, et seq., as amended, The Stormwater Management Act.

#### **§ \_\_\_ - 5. Applicability**

All regulated activities and all activities that may affect stormwater runoff, including land development and earth disturbance activity, are subject to regulation by this Chapter.

Regulated activities include, but are not limited to, the following:

- A. Land development.
- B. Subdivision.
- C. Construction of new or additional impervious or semipervious surfaces (driveways, parking lots, patios, tennis courts, etc.).
- D. Construction of new buildings or additions to existing buildings.
- E. Diversion or piping of any natural or man-made stream channel.
- F. Installation of BMPs and/or stormwater management facilities or appurtenances thereto.

#### **§ \_\_\_ - 6. Exemptions**

- A. General exemptions. The following land use activities, not proposed in conjunction with a subdivision or land development, are exempt from the requirements of this chapter, except where otherwise identified herein:
  - 1. Installation of 1,500 square feet or less of cumulative impervious surface area when not in conjunction with a subdivision or land development.

Cumulative impervious area includes any new impervious areas added since the adoption of the East Branch Perkiomen Creek Stormwater Management Plan (March 2, 2005) for

areas within the Each Branch Perkiomen Creek watershed or since the adoption of this Chapter for all other areas of Lower Salford Township.

2. Use of land for gardening for home consumption.
3. Agricultural activity is exempt from the Stormwater Management Plan preparation requirements of this Chapter provided the activities are performed according to the requirements of 25 Pa. Code Chapter 102.
4. Forest management and timber operations are exempt from the Stormwater Management Plan preparation requirements of this Chapter provided the activities are performed according to the requirements of 25 Pa. Code Chapter 102
5. Public road replacement, replacement paving, repaving and/or driveway maintenance (without expansion).
6. Repair and reconstruction of on-lot sewage disposal systems where work is performed in accordance with a valid permit issued by the Montgomery County Department of Health.
7. Any aspect of stormwater management facility/BMP maintenance to an existing system made in accordance with plans and specifications approved by the Township.
8. Lots that are part of an approved subdivision utilizing overall subdivision stormwater management facilities are exempt from individual lot controls if the total quantity of impervious surface area on the lot (existing plus proposed) is equal to or less than that quantity accounted for, from the lot, in the stormwater management design approved in conjunction with the subdivision. This exemption does not relieve those lots from utilizing on-lot controls where such controls are designated as part of the overall approved subdivision stormwater management system.
9. Construction or reconstruction of buildings or additions to existing buildings or other impervious surface (regulated activities) are exempt where the an area of impervious surface is removed from the site so that upon completion of the regulated activity, the total increase of impervious surface area is 1,500 square feet or less and the area where existing impervious surface is removed is restored with a minimum of six inches of topsoil and permanent pervious groundcover.
10. Lot line adjustment subdivisions are exempt when no increase in impervious surface is proposed.
11. No exemption shall be provided for regulated activities as defined in § \_\_\_\_ - 5.E & F of this chapter.
12. Exemptions from any provisions of this Chapter shall not relieve the applicant from the requirements in § \_\_\_\_ - 14, D through K, under General Requirements.
13. The Township may deny or revoke any exemption pursuant to this Section at any time for any project that the Township believes may pose a threat to public health and safety or the environment.

- D. Regulated activity not proposed in conjunction with a subdivision or land development that create cumulative impervious surfaces up to 5,000 square feet as defined in § \_\_\_-6.A.1 are exempt from certain criteria as defined in the following table:

Impervious Surface Exemption Thresholds			
Ordinance Section or Requirement	Proposed Cumulative Impervious Surface		
	0 to 1,500 square feet	1,501 to 5,000 square feet	Over 5,000 square feet
§ ___-__: Volume Control Requirements	Exempt	Not Exempt – Residential project can utilize Appendix B for Small Projects	Not Exempt
§ ___-__: Rate Control Requirements	Exempt	Exempt	Not Exempt
§ ___-__: Plan Requirements	Exempt	Not Exempt except for residential small project	Not Exempt

#### § \_\_\_- 7. Repealer

Any other ordinance provision(s) or regulation of the Township inconsistent with any of the provisions of this Chapter is hereby repealed to the extent of the inconsistency only.

#### § \_\_\_- 8. Severability

In the event that a court of competent jurisdiction declares any section or provision of this Chapter invalid, such decision shall not affect the validity of any of the remaining provisions of this Chapter.

#### § \_\_\_- 9. Compatibility with Other Requirements

Approvals issued and actions taken under this Chapter do not relieve the applicant of the responsibility to secure required permits or approvals for activities regulated by any other code, law, regulation or ordinance.

#### § \_\_\_- 10. Erroneous Permit

Any permit or authorization issued or approved based on false, misleading or erroneous information provided by an applicant is void without the necessity of any proceedings for revocation. Any work undertaken or use established pursuant to such permit or other authorization is unlawful. No action may be taken by a board, agency or employee of the Township purporting to validate such a violation.

#### § \_\_\_- 11. Waivers

- A. If the Township determines that any requirement under this Chapter cannot be achieved for a particular regulated activity, the Township may, after an evaluation of alternatives, approve measures other than those in this Chapter, subject to § \_\_\_- 11, paragraphs B and C.

- B. Waivers or modifications of the requirements of this Chapter may be approved by the Township if enforcement will exact undue hardship because of peculiar conditions pertaining to the land in question, provided that the modifications will not be contrary to the public interest and that the purpose of the Chapter is preserved. Cost or financial burden shall not be considered a hardship. Modification may be considered if an alternative standard or approach will provide equal or better achievement of the purpose of the Chapter. A request for modifications shall be in writing and accompany the Stormwater Management Plan submission. The request shall provide the facts on which the request is based, the provision(s) of the Chapter involved and the proposed modification.
- C. No waiver or modification of any regulated stormwater activity involving earth disturbance greater than or equal to one acre may be granted by the Township unless that action is approved in advance by the Pennsylvania Department of Environmental Protection (PADEP) or Montgomery County Conservation District.

## ARTICLE II. DEFINITIONS

### §\_\_ - 12. Word Usage

For the purposes of this Chapter, certain terms and words used herein shall be interpreted as follows:

- A. Words used in the present tense include the future tense; the singular number includes the plural, and the plural number includes the singular; words of masculine gender include feminine gender; and words of feminine gender include masculine gender.
- B. The word "includes" or "including" shall not limit the term to the specific example but is intended to extend its meaning to all other instances of like kind and character.
- C. The word "person" includes an individual, firm, association, organization, partnership, trust, company, corporation, or any other similar entity.
- D. The words "shall" and "must" are mandatory; the words "may" and "should" are permissive.
- E. The words "used or occupied" include the words "intended, designed, maintained, or arranged to be used, occupied, or maintained."

### §\_\_ - 13. Definitions

These definitions do not necessarily reflect the definitions contained in pertinent regulations or statutes, and are intended for this Chapter only.

**Agricultural Activity** – Activities associated with agriculture such as agricultural cultivation, agricultural operation, and animal heavy use areas. This includes the work of producing crops including tillage, land clearing, plowing, disking, harrowing, planting, harvesting crops or pasturing and raising of livestock and installation of conservation measures. Construction of new buildings or impervious area is not considered an agricultural activity.

**Alteration** As applied to land, a change in topography as a result of the moving of soil and rock from one location or position to another; also the changing of surface conditions by causing the surface to be more or less impervious; land disturbance.

**Applicant** – A landowner, developer, or other person who has filed an application to the Township for approval to engage in any regulated activity at a project site in the Township.

**As-Built Drawings** Those maintained by the contractor as he constructs the project and upon which he documents the actual locations of the building components and changes to the original contract documents. These, or a copy of the same, are submitted to the Township at the completion of the project.

**Best Management Practice (BMP) – See Stormwater Control Measure (SCM)**

**BMP Manual** – Pennsylvania Stormwater Best Management Practices Manual, Pennsylvania Department of Environmental Protection, No. 363-0300-002 (December 2006), as amended.

**Conservation District** – The Montgomery County Conservation District, operating pursuant to the Conservation District Law (3 P. S. § 851(c)) that has the authority under a delegation agreement executed with DEP to administer and enforce all or a portion of the regulations promulgated under 25 Pa. Code 102.

**Design Storm** – The magnitude and temporal distribution of precipitation from a storm event measured in probability of occurrence (e.g., a 5-year storm) and duration (e.g., 24 hours) used in

**Development Site (Site)** – See Project Site.

**Disturbed Area** – An unstabilized land area where an earth disturbance activity is occurring or has occurred.

**Earth Disturbance Activity** – A construction or other human activity which disturbs the surface of the land, including, but not limited to: clearing and grubbing; grading; excavations; embankments; road maintenance; building construction; and the moving, depositing, stockpiling, or storing of soil, rock, or earth materials.

**Erosion** – The natural process by which the surface of the land is worn away by water, wind, or chemical action.

**E&S Manual** – Erosion and Sediment Pollution Control Manual, Pennsylvania Department of Environmental Protection, No. 363-2134-008 (March 31, 2012) as amended.

**ERSAM** - Existing Resource and Site Analysis Map

**Existing Condition** – The dominant land cover during the 5-year period immediately preceding a proposed regulated activity.

**FEMA** – Federal Emergency Management Agency.

**Floodplain** – Any land area susceptible to inundation by water from any natural source or delineated by applicable FEMA maps and studies as being a special flood hazard area. ~~Also includes areas that comprise Group 13 Soils, as listed in Appendix A of the Pennsylvania DEP Technical Manual for Sewage Enforcement Officers (as amended or replaced from time to time by DEP). Also includes areas identified as part of the Floodplain Conservation District in the Zoning Ordinance (Chapter 164).~~

**Forest Management/Timber Operations** – Planning and activities necessary for the management of forestland. These include conducting a timber inventory, preparation of forest management plans, silvicultural treatment, cutting budgets, logging road design and construction, timber harvesting, site preparation, and reforestation.

**Green Infrastructure** – Systems and practices that use or mimic natural processes to infiltrate, evapotranspire, or reuse stormwater on the site where it is generated.

**Hydrologic Soil Group (HSG)** – Infiltration rates of soils vary widely and are affected by subsurface permeability as well as surface intake rates. Soils are classified into four HSGs (A, B, C, and D) according to their minimum infiltration rate, which is obtained for bare soil after prolonged wetting. The NRCS defines the four groups and provides a list of most of the soils in the United States and their group classification. The soils in the area of the development site may be identified from a soil survey report that can be obtained from local NRCS offices or conservation district offices. Soils become less pervious as the HSG varies from A to D (NRCS1,2).

**Impervious Surface (Impervious Area)** – A surface that prevents the infiltration of water into the ground. Impervious surfaces include, but are not limited to, buildings, streets, sidewalks, patios, pavements, roof areas, driveway areas, compacted stone and other areas determined by the Township Engineer to be impervious within the meaning of this definition. ~~A surface that prevents the infiltration of water into the ground. Impervious surfaces (or areas) shall include, but not be limited to: roofs; additional indoor living spaces, patios, garages, storage sheds and similar structures; and any new streets or sidewalks. Decks, parking areas, and driveway areas are not counted as impervious areas if they do not prevent infiltration.~~

**Karst** – A type of topography or landscape characterized by surface depressions, sinkholes, rock



primarily from surface canals, underground drainage, and other. There is removal of carbonate rocks, such as limestone or dolomite.

**Land Development (Development)** – Inclusive of any or all of the following meanings: (i) the improvement of one lot or two or more contiguous lots, tracts, or parcels of land for any purpose involving (a) a group of two or more buildings or (b) the division or allocation of land or space between or among two or more existing or prospective occupants by means of, or for the purpose of streets, common areas, leaseholds, condominiums, building groups, or other features; (ii) any subdivision of land; (iii) development in accordance with Section 503(1.1) of the PA Municipalities Planning Code.

**Limiting zone** - A soil horizon or condition in the soil profile or underlying strata which includes one of the following:

- (i) A seasonal high water table, whether perched or regional, determined by direct observation of the water table or indicated by soil mottling.
- (ii) A rock with open joints, fracture or solution channels, or masses of loose rock fragments, including gravel, with insufficient fine soil to fill the voids between the fragments.
- (iii) A rock formation, other stratum or soil condition which is so slowly permeable that it effectively limits downward passage of effluent.

**Low Impact Development (LID)** – Site design approaches and small-scale stormwater management practices that promote the use of natural systems for infiltration, evapotranspiration, and reuse of rainwater. LID can be applied to new development, urban retrofits, and revitalization projects. LID utilizes design techniques that infiltrate, filter, evaporate, and store runoff close to its source. Rather than rely on costly large-scale conveyance and treatment systems, LID addresses stormwater through a variety of small, cost-effective landscape features located on-site.

**Municipality or Township** – Lower Salford Township, Montgomery County, Pennsylvania.

**NPDES** – National Pollutant Discharge Elimination System

**NRCS** – USDA Natural Resources Conservation Service (previously SCS).

**Manning Equation (Manning formula)** - A method for calculation of velocity of flow (e.g., feet per second) and flow rate (e.g., cubic feet per second) in open channels based upon channel shape, roughness, depth of flow and slope. "Open channels" may include closed conduits so long as the flow is not under pressure.

**PADEP** – The Pennsylvania Department of Environmental Protection.

**Peak Discharge** – The maximum rate of stormwater runoff from a specific storm event.

**Pervious Area** – Any area not defined as impervious.

**Post-Construction Stormwater Control (PCSM) Manual** – A manual developed to update and replace the Pennsylvania Stormwater Best Management Practices Manual, as approved and amended by the PADEP.

**Project Site** – The specific area of land where any regulated activities in the Township are planned, conducted, or maintained.

**Qualified Professional** – Any person licensed by the Pennsylvania Department of State or otherwise qualified by law to perform the work required by this Chapter. A Pennsylvania

**Rational Formula or Rational Method** - A rainfall-runoff relation used to estimate peak flow.

**Regulated Activities** – Any earth disturbance activities or any activities that involve the alteration or development of land in a manner that may affect stormwater runoff.

**Regulated Earth Disturbance Activity** – Activity involving earth disturbance subject to regulation under 25 Pa. Code 92, 25 Pa. Code 102, or the Clean Streams Law.

**Retention Volume/Removed Runoff** – The volume of runoff that is captured and not released directly into the surface waters of this Commonwealth during or after a storm event.

**Return Period** – The average interval, in years, within which a storm event of a given magnitude can be expected to occur one time. For example, the 25-year return period rainfall would be expected to occur on average once every 25 years; or stated in another way, the probability of a 25 year storm occurring in any one year is 0.04 (i.e., a 4% chance).

**Riparian Buffer** – A permanent area of trees and shrubs located adjacent to streams, lakes, ponds and wetlands.

**Runoff** – Any part of precipitation that flows over the land.

**Sediment** – Soils or other materials transported by surface water as a product of erosion.

**Soil-Cover Complex Method** A method of runoff computation developed by the NRCS that is based on relating soil type and land use/cover to a runoff parameter called Curve Number (CN).

**State Water Quality Requirements** – The regulatory requirements to protect, maintain, reclaim, and restore water quality under Title 25 of the Pennsylvania Code and the Clean Streams Law.

**Storage Indication Method** - A reservoir routing procedure based on solution of the continuity equation (inflow minus outflow equals the change in storage) with outflow defined as a function of storage volume and depth.

**Stormwater** – Drainage runoff from the surface of the land resulting from precipitation or snow or ice melt.

**Stormwater Control Measure (SCM)** – Activities, facilities, designs, measures, or procedures used to manage stormwater impacts from regulated activities, to meet state water quality requirements, to promote groundwater recharge, and to otherwise meet the purposes of this Chapter. SCMs are commonly grouped into one of two broad categories or measures: "structural" or "non-structural." In this Chapter, non-structural SCMs refer to operational and/or behavior-related practices that attempt to minimize the contact of pollutants with stormwater runoff, whereas structural SCMs are those that consist of a physical device or practice that is installed to capture and treat stormwater runoff. Structural SCMs include, but are not limited to, a wide variety of practices and devices, from large-scale retention ponds and constructed wetlands, to small-scale underground treatment systems, infiltration facilities, filter strips, low impact design, bioretention, wet ponds, permeable paving, grassed swales, riparian or forested buffers, sand filters, detention basins, and manufactured devices. Structural SCMs are permanent appurtenances to the project site.

**Stormwater Management Facility** – Any structure, natural or man-made, that, due to its condition, design, or construction, conveys, stores, or otherwise affects stormwater runoff. Typical stormwater management facilities include, but are not limited to: detention and retention basins; open channels; storm sewers; pipes; and infiltration facilities.

**Stormwater management plan** – The plan prepared by the developer or his representative indicating how stormwater runoff will be managed at the development site in accordance with this Chapter.

**Subdivision** – As defined in The Pennsylvania Municipalities Planning Code, Act of July 31, 1968, P.L. 805, No. 247.

**Time-of-Concentration (T<sub>c</sub>)** - The time for surface runoff to travel from the hydraulically most distant point of the watershed to a point of interest within the watershed. This time is the combined total of overland flow time and flow time in pipes or channels, if any.

**USDA** – United States Department of Agriculture.

**Waters of this Commonwealth** – Any and all rivers, streams, creeks, rivulets, impoundments, ditches, watercourses, storm sewers, lakes, dammed water, wetlands, ponds, springs, and all other bodies or channels of conveyance of surface and underground water, or parts thereof, whether natural or artificial, within or on the boundaries of this Commonwealth.

**Watershed** – Region or area drained by a river, watercourse, or other surface water of this Commonwealth.

**Wetland** – Areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs, and similar areas.

## ARTICLE III – STORMWATER MANAGEMENT STANDARDS

### §\_\_ - 14. General Requirements

- A. For all regulated activities, unless preparation of a Stormwater Management Plan is specifically exempted in §\_\_ - 6:
1. Preparation and implementation of an approved Stormwater Management Plan is required.
  2. No regulated activities shall commence until the Township issues written approval of a Stormwater Management Plan, which demonstrates compliance with the requirements of this Chapter.
- B. Stormwater Management Plans approved by the Township, in accordance with §\_\_ - \_\_ (Section 406), shall be on site throughout the duration of the regulated activity.
- C. The Township may, after consultation with PADEP, approve measures for meeting the state water quality requirements other than those in this Chapter, provided that they meet the minimum requirements of, and do not conflict with, state law including, but not limited to, the Clean Streams Law.
- D. For all regulated earth disturbance activities, erosion and sediment control BMPs shall be designed, implemented, operated, and maintained during the regulated earth disturbance activities (e.g., during construction) to meet the purposes and requirements of this Chapter and to meet all requirements under Title 25 of the Pennsylvania Code and the Clean Streams Law. Various BMPs and their design standards are listed in the *Erosion and Sediment Pollution Control Program Manual* (E&S Manual), No. 363-2134-008, as amended and updated.
- E. Impervious areas:
1. The measurement of impervious areas shall include all of the impervious areas in the total proposed development even if development is to take place in stages.
  2. For development taking place in stages, the entire development plan must be used in determining conformance with this Chapter.
  3. For projects that add impervious area to a parcel, the total impervious area on the parcel is subject to the requirements of this Chapter; except that the volume controls in §\_\_ - 15 and the peak rate controls of §\_\_ - 16 do not need to be retrofitted to existing impervious areas that are not being altered by the proposed regulated activity.
- F. Areas of existing diffused drainage discharge shall be subject to any applicable discharge criteria in the general direction of existing discharge, whether proposed to be concentrated or maintained as diffused drainage areas, except as otherwise provided by this Chapter. If diffused flow is proposed to be concentrated and discharged onto adjacent property, the applicant must document that adequate downstream conveyance facilities exist to safely transport the concentrated discharge, or otherwise prove that no erosion, sedimentation, flooding, or other harm will result from the concentrated discharge.

- G. Whenever a watercourse is located within a development site, it shall remain open in its natural state and location and should not be piped, impeded, or altered (except for road crossings). It is the responsibility of the developer to stabilize existing eroded stream/channel banks. The developer must submit pictorial documentation of existing stream/channel banks to determine whether existing banks must be stabilized.
- H. Where a development site is traversed by watercourses drainage easements shall be provided conforming to the line of such watercourses. The terms of the easement shall prohibit excavation, the placing of fill or structures, the removal of trees/vegetation, and any alterations that may adversely affect the flow of stormwater within any portion of the easement. For subdivisions or land developments, the width of the easement shall be consistent with the requirements for riparian buffers in Section \_\_-17.
- I. Work within natural drainageways shall be subject to approval by the municipality and the PADEP.
- J. When there is a question whether wetlands may be involved, it is the responsibility of the applicant or his agent to show that the land in question cannot be classified as wetlands; otherwise approval to work in the area must be obtained from PADEP.
- K. All regulated activities shall include such measures as necessary to:
1. Protect health, safety, and property.
  2. Meet the water quality goals of this Chapter by implementing measures to:
    - a. Minimize disturbance to floodplains, wetlands, and wooded areas.
    - b. Maintain or extend riparian buffers.
    - c. Avoid erosive flow conditions in natural flow pathways.
    - d. Minimize thermal impacts to waters of this Commonwealth.
    - e. Disconnect impervious surfaces by directing runoff to pervious areas, wherever possible.
  3. Incorporate methods described in the *Pennsylvania Stormwater Best Management Practices Manual* (BMP Manual) or the *Pennsylvania Post-Construction Stormwater Management Manual* (PCSM Manual), as appropriate.
- L. The design of all facilities over karst shall include an evaluation of measures to minimize adverse effects.
- M. The design storm volumes to be used in the analysis of peak rates of discharge should be obtained from the latest version of the *Precipitation-Frequency Atlas of the United States*, National Oceanic and Atmospheric Administration (NOAA), National Weather Service, Hydrometeorological Design Studies Center, Silver Spring, Maryland.

NOAA's Atlas 14 can be accessed at: <http://hdsc.nws.noaa.gov/hdsc/pfds/>.

- N. For all regulated activities, SCMs shall be designed, implemented, operated, and maintained to meet the purposes and requirements of this Chapter and to meet all requirements under Title 25 of the Pennsylvania Code, the Clean Streams Law, and the Storm Water Management Act.
- O. Proposed SCMs and their design standards shall be designed consistent with the recommendations of the BMP Manual or PCSM Manual and other appropriate standards. When there is a conflict between the Manuals and the ordinances in the Lower Salford Township Code, the ordinance requirements shall be met.
- P. ~~All stormwater runoff and floodplain calculations and stormwater management facilities design shall be prepared by a professional engineer licensed in the Commonwealth of Pennsylvania unless the project is using Appendix \_\_\_ for Small Projects for a residential project.~~
- Q. ~~When subdivisions or land developments are submitted to the Township for approval in sections, a complete storm sewer design for the proposed subdivision and land development shall be submitted. The proposed design must include the entire tract and not a portion.~~

#### **§\_\_\_ - 15 Approvals by Other Agencies**

- A. The following permit requirements may apply to certain regulated earth disturbance activities, and must be met prior to commencement of regulated earth disturbance activities, as applicable:
1. All regulated earth disturbance activities subject to permit requirements by PADEP under 25 Pa. Code Chapter 102.
  2. Work within natural drainageways subject to permit by PADEP under 25 Pa. Code Chapter 105.
  3. Any stormwater management facility that would be located in or adjacent to surface waters of the commonwealth, including wetlands, subject to permit by PADEP under 25 Pa. Code Chapter 105.
  4. Any stormwater management facility that would be located on a state highway right-of-way, or require access from a state highway, shall be subject to approval by the Pennsylvania Department of Transportation (PENNDOT).
  5. Culverts, bridges, storm sewers or any other facilities which must pass or convey flows from the tributary area and any facility which may constitute a dam subject to permit by PADEP under 25 Pa. Code Chapter 105.

#### **§\_\_\_ - 16. Volume Controls**

The green infrastructure and low impact development practices provided in the BMP Manual shall be utilized for all regulated activities wherever possible. Water volume controls shall be implemented using the *Design Storm Method* in Subsection A or the *Simplified Method* in Subsection B below. For regulated activity areas equal or less than one acre that do not require hydrologic routing to design the stormwater facilities, this Chapter establishes no preference for either methodology; therefore, the applicant may select either methodology on the basis of

economic considerations, the intrinsic limitations on applicability of the analytical procedures associated with each methodology and other factors.

A. The *Design Storm Method* (CG-1 in the BMP Manual) is applicable to any size of regulated activity. This method requires detailed modeling based on site conditions.

1. Do not increase the post-development total runoff volume for all storms equal to or less than the 2-year 24-hour duration precipitation.

2. For modeling purposes:

a. Existing (predevelopment) non-forested pervious areas must be considered meadow in good condition.

b. Twenty percent (20%) of existing impervious area, when present, shall be considered meadow in good condition in the model for existing conditions for land development submissions only.

B. The *Simplified Method* (CG-2 in the BMP Manual) provided below is independent of site conditions and should be used if the *Design Storm Method* is not followed. This method is not applicable to regulated activities greater than one acre or for projects that require design of stormwater storage facilities for peak rate control. For new impervious surfaces:

1. Stormwater facilities shall capture at least the first two (2) inches of runoff from all new impervious surfaces.

2. At least the first one inch of runoff from new impervious surfaces shall be permanently removed from the runoff flow, i.e., it shall not be released into the surface waters of this Commonwealth. Removal options include reuse, evaporation, transpiration, and infiltration.

3. Wherever possible, infiltration facilities should be designed to accommodate infiltration of the entire permanently removed runoff; however, in all cases at least the first 0.5 inch of the permanently removed runoff should be infiltrated.

#### §\_\_ - 17. Rate Controls

A. For all areas of the Township including the areas covered by the East Branch Perkiomen Creek Act 167 Stormwater Management Plan (District C-2):

Post-development discharge rates shall not exceed the pre-development discharge rates for the 24-hour storm events as outlined in the following table.

Post Development Design Storm	Pre-Development Design Storm
2-year	1-year
5-year	2-year
10-year	10-year
25-year	25-year
50-year	50-year

**§\_\_ - 18      Riparian Buffers**

- A. In order to protect and improve water quality, a Riparian Buffer Easement shall be created and recorded as part of any subdivision or land development that encompasses a Riparian Buffer.
- B. Except as required by Chapter 102, the Riparian Buffer Easement shall be measured to be the greater of the limit of the 100 year floodplain or a minimum of 35 feet from the top of the streambank (on each side).
- I. Minimum Management Requirements for Riparian Buffers.
  - 1. Existing native vegetation shall be protected and maintained within the Riparian Buffer Easement.
  - 2. Whenever practicable invasive vegetation shall be actively removed and the Riparian Buffer Easement shall be planted with native trees, shrubs and other vegetation to create a diverse native plant community appropriate to the intended ecological context of the site.
- D. The Riparian Buffer Easement shall be enforceable by the Township and shall be recorded in the appropriate County Recorder of Deeds Office, so that it shall run with the land and shall limit the use of the property located therein. The easement shall allow for the continued private ownership and shall count toward the minimum lot area required by Zoning, unless otherwise specified in the Lower Salford Township Zoning Ordinance.
- E. Any permitted use within the Riparian Buffer Easement shall be conducted in a manner that will maintain the extent of the existing 100-year floodplain, improve or maintain the stream stability, and preserve and protect the ecological function of the floodplain.
- F. The following conditions shall apply when public and/or private recreation trails are permitted within Riparian Buffers:
  - 1. Trails shall be for non-motorized use only.
  - 2. Trails shall be designed to have the least impact on native plant species and other sensitive environmental features.
- G. Septic drainfields and sewage disposal systems shall not be permitted within the Riparian Buffer Easement and shall comply with setback requirements established under 25 Pa. Code Chapter 73.

**§\_\_ - 19      Design Requirements****A. General Requirements**

- 1. The discharge of the outlet pipe for a SCM must be a minimum of 25 feet from the



property line.

2. Landscaping and planting in and around the perimeter of SCMs shall be provided in accordance with the Lower Salford Township Subdivision and Land Development Ordinance.
3. SCMs should utilize the natural contours of the land whenever possible. When such design is not practical, the construction shall utilize slopes as flat as possible to blend the structure into the terrain.
4. All basins shall have slopes of three horizontal to one vertical (3:1), or flatter. The top or toe of the slope shall be located a minimum of 5 feet from any property line.
5. Emergency overflow facilities/spillways shall be provided for SCMs in order to convey basin inflow in excess of design flows, out of the basin, or in the event the outlet structure becomes blocked and is unable to convey flow. Emergency spillways should be designed and constructed in accordance with the Lower Salford Township Standard Details. The minimum capacity of all emergency spillways shall be equivalent to the peak flow rate of the one-hundred-year, post development design storm (entering to the basin).

#### B. Infiltration SCMs

1. **Infiltration SCMs should be spread out, made as shallow as practicable, and located to maximize use of natural on-site infiltration features while still meeting the other requirements of this Chapter.**
2. Infiltration SCMs shall be constructed on soils that have the following characteristics:
  - a. A minimum soil depth of 24 inches between the bottom of the infiltration BMPs and the top of bedrock or seasonally high water table (i.e. limiting zone). The minimum required separation between the limiting zone may be increased, if required by the Township, should project specific conditions exist (such as anticipated increased contaminants) which dictate greater prevention of groundwater contamination.
  - b. An infiltration rate sufficient to accept the additional stormwater load and dewater completely as determined by field tests. The minimum acceptable infiltration rate for field tested soils shall be 0.25 inches/hour (in/hr). A safety factor of 50% shall be applied to field tested infiltration rates to determine the rate to be utilized for design purposes (e.g., for soil which measured 0.4 in/hr in the field, the BMP design shall use 0.2 in/hr to insure safe infiltration rates after construction.)
  - c. All infiltration facilities shall be designed to completely infiltrate runoff volume within 72 hours from the peak of the design storm.
  - d. A soils evaluation of the project site shall be required to determine the suitability of infiltration facilities. The soils evaluation must be performed by a qualified engineer, geologist and/or soil scientist in accordance with the BMP Manual or

PCSM Manual which addresses soil permeability, depth to the limiting zone, susceptibility to sinkhole formation and subgrade stability. The general process for designing infiltration SCM shall be:

- [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.
- [2] Provide field tests such as double ring infiltrometer or hydraulic conductivity tests at the level of the proposed infiltration surface to determine the appropriate conductivity range. Percolation tests are not recommended for design purposes.
- [3] Design the infiltration SCM based on field-determined capacity at the level of the proposed infiltration surface and based on the safety factor of 50%.
- [4] If individual on-lot infiltration systems are proposed, it must be demonstrated that the soils are conducive to infiltration on the lots identified.
- [5] For subdivisions and land developments, soils investigation shall be conducted prior to preliminary plan submission.

3. Infiltration SCMs shall be designed to meet the following requirements:

- a. When infiltration SCMs are proposed, the locations of existing and proposed septic tanks, on-site sewage disposal areas, other infiltration areas, wells and structures with basements must be shown. Separation distances should be provided in accordance with the BMP Manual or PCSM Manual, whichever is being utilized by the PADEP, for the specific type of infiltration SCM. Generally, the following separation distances shall be provided between the infiltration system and the following features:
  - [1] A separation distance of no less than 5 feet from underground utilities
  - [2] A separation distance of no less than 50 feet from any existing or proposed on-site sewage disposal system.
  - [3] A separation distance of no less than 100 feet from individual and non-residential wells shall be provided.
  - [4] A separation distance of no less than 300 feet from community or municipal water supply wells treating over 10,000 GPD for drinking purposes shall be provided.
  - [3] A separation distance of at least 20 feet from basements, foundations, septic tanks, property lines or other structures.
- b. The infiltration system shall have positive overflow controls for extreme storm events and, if the system is underground, to prevent storage within 1 foot of the finished surface or grade.
- c. Surface inflows shall be designed to prevent direct discharge of sediment and other pollutants into the infiltration system. Pretreatment may be required for surface drainage discharging to the infiltration SCM as directed by the Township Engineer.
- d. Infiltration SCMs shall be designed, constructed and maintained in accordance with the recommendations in the BMP Manual or PCSM Manual, whichever is being utilized by the PADEP. Any modification to the recommendations must be submitted for review and approval by the Township Engineer.

- e. Special attention shall be paid to proper installation of infiltration stormwater management systems during the construction and to careful avoidance of soil compaction during site development. Areas proposed for infiltration shall be protected from sedimentation and compaction during the construction phase, so as to maintain their maximum infiltration capacity.
- f. The drainage plan must include safeguards against groundwater contamination for uses which have a potential for a pollutant discharge. The Township may require the installation of a mitigative layer or an impermeable liner in the SCM and/or detention basins where the possibility of groundwater contamination exists. A detailed hydrogeologic investigation may be required by the Township. If an impermeable liner or other containment measures are required to prevent contaminated runoff from infiltrating into the ground, additional measures conforming to the requirements of this chapter must be implemented to improve the quality of stormwater runoff from the development site.
- g. Infiltration SCMs shall not be constructed nor receive runoff until the entire contributory drainage area to the infiltration SCM has achieved final stabilization.
- h. For underground infiltration facilities, access must be provided at each storm sewer connection and as needed for inspection and maintenance of the facility.

#### C. Non-Infiltration SCMs

- 1. Non-infiltration SCMs include but are not limited to bioretention (without infiltration), green roofs, constructed wetlands, and managed release concept (MRC) SCMs.
- 2. Non-infiltration SCMs should be designed, constructed and maintained in accordance with the recommendations in the BMP Manual, PADEP Guidelines, or PCSM Manual, whichever is being utilized by the PADEP. Any modification to the recommendations must be submitted for review and approval by the Township Engineer.
- 3. If infiltration is possible, the separation distance for Infiltration SCMs shall be met. If the SCM is non-infiltrating the following separation distances shall be provided unless a modification is approved by the Township Engineer:
  - a. Five (5) feet from underground utilities.
  - b. Ten (10) feet from a property line.
  - c. Fifty (50) feet from a private well or septic system.

#### D. Rate Control SCMs

- 1. Rate Control SCMs include but are not limited to wet basins, above-ground detention basins and underground detention basins.
- 2. Separation distances shall be provided as outlined above for infiltration SCMs and non-infiltrating SCMs as appropriate depending on whether infiltration is possible.
- 3. If wet ponds are proposed, the developer shall demonstrate that such ponds are

designed to protect the public's health and safety. Should any stormwater management facility require a dam safety permit under the PADEP Chapter 105 regulations, the facility shall be designed in accordance with Chapter 105 including the dam safety requirements.

4. Rate Control SCMs shall be designed in accordance with recommendations in the BMP Manual, PCSM Manual, or other appropriate standards. If other standards are used, the stormwater management report must include reference and justification for the use of these standards.
5. For above ground stormwater facilities, the design shall be consistent with the following:
  - a. The basin inflow and outflow structures shall not be located directly across from each other and shall not be in close proximity to one another. A length-to-width ratio of at least 2:1 shall be provided to maximize the flow path between inflow point and the outflow structure. The distance between these two structures must be at least 75% of the maximum pond length. Alternatively, a means for extending the time of surface flow from basin inflow point to basin outlet structure, designed to the satisfaction of the Township Engineer, may be utilized.
  - b. Safety fencing may be required around stormwater facilities under the following conditions:
    - [1] If the maximum depth of detained runoff is greater than 24 inches for a 2-year or 10-year storm event.
    - [2] If the maximum depth of detained runoff is greater than 36 inches for a 100-year storm event.
    - [3] If determined necessary for the health and/or safety of the surrounding community by the Township Board of Supervisors.
  - c. **Normally dry, open top, storage facilities should completely drain both the volume control and rate control capacities over a period of time not less than 24 and not more than 72 hours from the end of the design storm.**
  - d. For wet basins, a safety bench and an aquatic bench shall be provided. The safety bench shall be a minimum of 4 ft. in width and approximately 6 inches above the permanent pool elevation with a reverse slope no greater than 10:1. The aquatic bench shall be approximately 12 inches below the permanent pool elevation and a minimum of 6 ft. wide.
  - e. When the basin is not designed for infiltration or as a non-infiltrating SCM such as an MRC, the bottom shall have a minimum slope of 2%.
  - f. In all cases, the discharge end of the basin shall be provided with a properly designed multi-stage outlet control structure, culvert pipe, and endwall. Perforated riser pipes alone, without provision for permanent outlet control structure, or a stand-alone culvert pipe are not permitted for permanent basins.
  - g. The minimum top of basin berm width (at the design elevation) shall be 10 feet. A cutoff trench (keyway) of impervious material shall be provided under all embankments that require fill material. The cutoff trench shall be a minimum of

eight feet wide and three feet deep and have side slopes of one horizontal to one vertical.

- h. The minimum freeboard through the emergency spillway shall be one foot. "Freeboard" is defined as the difference between the design flow elevation through the spillway and the elevation of the top of the settled basin berm.
  - i. Anti-seep collars shall be installed around the pipe barrel and shall be centered within the normal saturation zone of the berm. The anti-seep collars and their connections to the pipe barrel shall be watertight. The anti-seep collars shall be poured in place and extend a minimum of two feet beyond the outside of the principal pipe barrel. A minimum of two collars shall be installed on each basin outlet pipe.
  - j. All basin outlet pipes shall be watertight reinforced concrete having "O-Ring" joints. All joints shall be mortared. Crushed stone bedding/backfill shall not be utilized through basin berms.
  - k. The top of outlet structure box shall be at least six inches lower than the elevation of the emergency spillway.
  - l. Energy dissipating devices (rock lining/rip rap, or other approved materials) shall be provided at all basin outlets and shall be sized in accordance with PADEP Erosion and Sediment Pollution Control Program Manual, latest revision.
  - m. Stone gabion baskets or concrete or segmental block retaining walls shall not be permitted for use in construction of detention basins or wet basins.
  - n. Wet basins shall provide a means of draining the water for repair and/or inspection as needed.
6. For underground stormwater management facilities, the design shall be consistent with the following:
- a. The bottom of the basin shall be a minimum of 2 feet above the seasonal high groundwater table.
  - b. The underground basin shall have an emergency overflow device/spillway to convey flows greater than the design flow and to convey flows from the 100-year storm in the event that the orifices or weirs in the structure become blocked.
  - c. The maximum water surface elevation shall be a minimum of 1 foot below the ground surface or pavement cross-section.
  - d. Pretreatment may be required if the stormwater is able to infiltrate into the ground as determined by the Township Engineer.
  - e. Access must be provided at each storm sewer connection and as needed for inspection and maintenance of the facility.

E. Access to stormwater facilities

1. Access easement and stabilized drive to stormwater facilities shall be provided for maintenance and operation if required by the Township Engineer. This access easement shall be cleared and, when possible, be at least 20 feet in width.
2. Depressed curb and concrete apron shall be provided where the accessway enters a street/driveway. The stabilized driveway shall extend from the bottom of the interior basin berm embankment near the outlet structure to the point of access to the basin from a public right-of-way or paved driveway within an access easement. Access easements shall be owned and maintained by the individual lot owner(s) or homeowner's association but shall be established to permit access for maintenance and inspection by the owner and by Lower Salford Township or its designee, for emergency, inspection and/or maintenance, at any reasonable time.

F. Collection system standards.

1. **Design storm event:** The collection system shall be designed for the twenty-five (25) year storm event at a minimum. If the collection system drainage area is proposed to be managed by a Rate Control SCM, the runoff from the one-hundred (100) year storm event must be safely conveyed to the SCM.
2. **Curb inlets.** Curb inlets shall be located at curb tangents on the uphill side of street intersections, and at intervals along the curblin to control the maximum amount of encroachment of runoff on the roadway pavement so that same does not exceed a width of one half the travel lane during the design storm event. Design and location of curb inlets shall be approved by the Township.
3. **Pipe materials.** All storm sewer piping **within private or public streets and areas to be dedicated to the Township** shall be Class III reinforced concrete pipe (RCP), except when pipe class and strength is required to be increased in accordance with PennDOT specifications. Piping shall be saw-cut at ends, as needed, and not hammered or broken. All pipe joints and lift holes must be mortared except where designed for infiltration. **In other areas, High Density Polyethylene Pipe (HDPE) pipe may be used. The HDPE must be smooth lined corrugated pipe.**
4. **Minimum pipe size.** Minimum pipe diameter shall be 18 inches **within public or private streets and areas to be dedicated to the Township.** For other areas, the minimum pipe diameter shall be 12 inches.
5. **Inlet and manhole construction.** Inlets and manholes shall be in accordance with the Lower Salford Township Standard Details.
6. **Open-end pipes** must be fitted with concrete endwalls or wing walls in accordance with PennDOT standards.
7. **Flow velocity.** Stormwater collection systems shall be designed to produce a minimum velocity of three feet per second when flowing full. The maximum permissible velocity shall be 15 feet per second. Pipe slopes shall not be less than 1/2 of 1% (0.005 ft/ft), with the exception that terminal sections of pipe shall have a minimum slope of 1%

(0.01 ft/ft).

8. **Inlet and manhole spacing.** Inlet spacing shall be so arranged that ninety-five (95) percent of the gutter flow will be captured. Manholes shall be spaced at intervals not exceeding 300 feet for pipes that are 24 inches or less, and shall be located wherever branches are connected or sizes are changed, and wherever there is a change in alignment or grade. For pipes greater than 24 inches, manholes shall be spaced at intervals not exceeding 450 feet.
9. Stormwater collection facilities shall be designed and constructed to intercept concentrated runoff prior to discharge over public/private rights-of-way, sidewalks, streets, and driveways.
10. **Inlet Capacity;**
  - a. The capacity of all Type "C" inlets shall be based on a maximum surface flow to the inlets of four cubic feet per second (cfs), calculated based on the design storm event, except that a Type "C" inlet at a low point of a paved area may be designed to accept a maximum of six cfs.
  - b. If the surface flow to an inlet exceeds four cfs, additional inlets shall be provided upstream of the inlet to intercept the excessive surface flow. The maximum flow to Type "C" inlets located in low points (such as sag vertical curves) shall include the overland flow directed to the inlet as well as all bypass runoff from upstream inlets. The bypass flow from upstream inlets shall be calculated using inlet efficiency curves included in PennDOT Design Manual Part 2, latest edition.
  - c. Type "M" inlets shall be designed to accept a maximum surface flow of six cfs, unless otherwise approved by the Township.
  - d. Double inlets will not be permitted where additional pipe and inlets can be placed upstream to intercept excessive surface flow.
  - e. A maximum of 12 cfs shall be permitted to be collected by a Type "M" inlet located in an isolated pervious area, provided the designer can verify that such an inlet would not cause stormwater to accumulate on any adjoining public or private property, outside of a storm sewer easement, and that the depth of the accumulated stormwater would not exceed 12 inches.
11. A minimum drop of two inches shall be provided between the inlet and outlet pipe invert elevations within all inlets and manholes. When varying pipe sizes enter an inlet or manhole, the elevation of crown of all pipes shall be matched. Storm sewer pipes shall enter and exit the sides of inlet boxes and shall not encroach into the corner, wherever possible.
12. Stormwater pipes shall have a minimum depth of cover of **24 inches** (including over the bell). Where cover is restricted, equivalent pipe arches may be specified in lieu of circular pipe, to achieve required cover. Stormwater pipes conveying swale flow under driveway crossings shall have a minimum cover of 12 inches, including over the bell, but in no case shall the cover be less than that required for the anticipated traffic

loading. For driveway culverts, cover may be less than 12 inches if the design engineer verifies such pipe has sufficient strength for the anticipated vehicle loading. Where cover is restricted, concrete trench drain with bolt-down metal grate may be used.

13. The capacity of all stormwater pipes shall be calculated utilizing the Manning Equation for open channel flow as applied to closed conduit flow. The Manning's roughness coefficient shall be 0.13 for all **RCP and HDPE** pipe. In cases where pressure flow may occur, the hydraulic grade line shall be calculated throughout the storm sewer system to verify that at least one foot of freeboard will be provided in all inlets and manholes for the design storm event.
14. Culverts shall be designed based on procedures contained in Hydraulic Design of Highway Culverts, HDS #5, U.S. Department of Transportation, Federal Highway Administration. Where pressure flow is anticipated in storm sewer pipes (non-open channel flow), the applicant's designer shall be required to calculate the elevation of the hydraulic grade line through the storm sewer system. Wherever the hydraulic grade line elevation exceeds the pipe crown elevation for the design flow, pipes with watertight joints must be specified.
15. Storm sewer structures (e.g., endwalls, inlets, pipe sections, etc.) may not be located on top of or within 10 feet of electric, communication, water, sanitary sewer, or gas services and/or mains and structures, unless approval is received from the Township and the authority or utility having jurisdiction over same.
16. Stormwater pipes must be oriented at right angles to electric, water, sanitary sewer, and gas utilities when crossing above or beneath same. Crossing angles of less than 90° will only be permitted at the discretion of the Township. When skewed crossings are permitted, interior angles between alignment of the storm sewer pipe and utility may not be less than 45°. Vertical and horizontal design of storm sewers must be linear.
17. Roadway underdrain is required along both sides of all proposed roadways, existing roadways proposed to be widened, and within existing or proposed roadside swales as directed by the Township.
18. Where a storm sewer system is not located within a right-of-way or dedicated public property, a twenty-foot (20) wide easement shall be established to encompass the storm sewer system. For multiple pipes or utilities, the width of the easement shall be a minimum of 30 feet. **Nothing shall be permitted to be placed, planted, set or put within the areas of an easement unless it is a portable or removable object. The area shall be kept as lawn.**
19. Stormwater roof drains and sump pumps shall not discharge water directly onto a sidewalk or a street and shall be constructed to discharge to a dry well/seepage pit or above ground entirely on the subject property, except where such discharge could flow across a sidewalk or onto a street. If approved by the Township Engineer, roof drains and sump pumps may be discharged directly to a storm sewer system if such system discharges to a stormwater BMP or water quality facility.
20. Storm sewer design.
  - i. Design flow rate.



- [1] The storm sewer system shall be designed to carry the design storm peak flow rate. The drainage area and runoff coefficient to each inlet shall be indicated on the stormwater management plan. The one-hundred-year flow rate shall be determined by the Rational Method formula,  $Q = CIA$ , where:

Q = Peak runoff rate measured in cubic feet per second (cfs).

C = Runoff coefficient. The coefficient of stormwater runoff includes many variables, such as ground slope, ground cover, shape of drainage area, etc.

I = Intensity: average rainfall intensity in inches per hour for a time equal to the time of concentration.

A = Area: drainage area in acres.

- [2] Values for the rainfall intensity shall be obtained from the latest version of the **Precipitation-Frequency Atlas of the United States**, National Oceanic and Atmospheric Administration (NOAA), National Weather Service, Hydrometeorological Design Studies Center, Silver Spring, Maryland. NOAA's Atlas 14 can be accessed at: <http://hdsc.nws.noaa.gov/hdsc/pfds/>

- ii. Consideration shall be given to future land use changes in the drainage area in selecting the Rational ("C") coefficient. For drainage areas containing several different types of ground cover, a weighted value of "C" shall be used.
- iii. In determining the peak flow rate to individual storm sewer inlets (or other collection structures) the time of concentration method (as referenced in § \_\_\_\_-20.L) shall be used for inlet drainage areas in excess of one acre, unless otherwise approved by the Township. For inlet drainage areas less than one acre, a five-minute time of concentration shall be used unless otherwise approved by the Township.
- iv. In determining the required design flow rate through a storm sewer piping system, if a five-minute time of concentration results in a pipe size exceeding 30 inches (or equivalent flow area of 4.9 square feet), within any run of pipe, the time of concentration approach may be used for sizing of pipes from that point on, by adjusting the time of concentration.
- v. Overflow system. An overflow system shall be provided to carry all bypass flow and/or flow in excess of storm sewer design capacity to the SCM (or other approved outlet point) when the capacity of the storm sewer system is exceeded. Stormwater runoff will not be permitted to surcharge from storm sewer structures.

21. Open swales and gutters.

- a. Open swales shall be designed on the basis of Manning's Formula as indicated for collection systems with the following considerations:
  - i. Bank slopes. Slopes for swale banks shall not be steeper than one vertical to four horizontal.

- ii. Swale/channel design shall be in accordance with the PADEP Erosion and Sediment Pollution Control Program Manual.
- b. Swales shall be stabilized with biodegradable erosion control matting to permit establishment of permanent vegetation. Swales shall be of such shape and size to effectively contain the, Rational Method design storm, or greater, and to conform to all other specifications of the Township. **The design storm shall be as defined in §\_\_-19.F.1.**
- c. To minimize sheet flow of stormwater across lots located on the lower side of roads or streets, and to divert flow away from building areas, the cross-section of the street as constructed shall provide for parallel ditches or swales or curb on the lower side which shall discharge only at drainage easements, unless otherwise approved by the Township.
- d. Gutters and swales adjacent to road paving shall be permitted to carry a maximum flow of four cubic feet per second prior to discharge away from the street surface, unless it is proven to the satisfaction of the Township by engineering calculations that the road slopes or other factors would allow higher gutter or swale capacity.
- e. Flows larger than those permitted in gutters and roadside swales may be conveyed in swales outside the required road right-of-way in separate drainage easements, or may be conveyed in pipes or culverts inside or outside the required road right-of-way.
- f. Existing and proposed swales shall be provided with underdrains as deemed necessary by the Township should overland seepage result in potential maintenance problems. Underdrains must discharge into a natural drainage channel or stormwater management system.
- g. Where drainage swales are used to divert surface waters away from buildings, they shall be sodded, landscaped, or otherwise protected as required and shall be of a slope, shape, and size conforming with the requirements of the Township. Concentration of surface water runoff shall be permitted only in swales, watercourses, SCMs, or other areas designed to meet the objectives of this chapter.

## 22. Bridge and culvert design.

Any proposed bridge or culvert to convey flow within a watercourse, perennial stream, intermittent stream or ephemeral stream shall be designed in accordance with the following principals:

- a. Bridges and culverts shall be designed and constructed to meet current Pennsylvania Department of Transportation construction and loading standards (HS-25 loading standards, minimum). They shall be constructed to the full width of the right-of-way or to an adequate dimension to accommodate special grade conditions. Approval of the Pennsylvania Department of Environmental Protection is required for all improvements in and along all waters of the commonwealth. The applicant shall provide verification of Department of Environmental Protection approval for all such proposed bridges and culverts.
- b. Approval of the Pennsylvania Department of Environmental Protection is required for

all improvements in and along waters of the commonwealth. Where applicable, stormwater management facilities or programs shall comply with the requirements of Chapter 102 (Erosion Control), Chapter 105 (Dam Safety and Waterway Management), and Chapter 106 (Floodplain Management) of Pennsylvania Code, Title 25, Rules and Regulations of the Department of Environmental Protection.

- c. All bridges, culverts and drainage channels shall be designed to convey a flow rate equal to a one-hundred-year, twenty-four-hour storm, as defined by the United States Department of Agriculture, Soil Conservation Services, Technical Release No. 55. All bridges and culverts shall be designed to pass the one-hundred-year design storm without increasing the extent and depth of the one-hundred-year floodplain.

F. Grading and drainage.

- a. After completion of rough grading, a minimum of six inches of topsoil shall be returned to remaining disturbed areas prior to final grading and seeding.
- b. Lots shall be graded to secure proper drainage away from buildings and to prevent the collection of stormwater in pools. Minimum 2% slopes shall be maintained away from and around all structures. Separation between the top of foundation wall (or slab) and final grade shall comply with Township Building Code requirements.
- c. Excavation. No excavation shall be made with a cut face steeper in slope than **three** horizontal to one vertical (3:1), except under one or more of the following conditions:
  - [1] The material in which the excavation is made is sufficiently stable to sustain a slope of steeper than 3:1, and a written statement (certification) from a professional civil engineer, licensed in the Commonwealth of Pennsylvania and experienced in erosion control, to this effect is submitted to the Township Engineer for review. This statement shall indicate the site has been inspected and that the deviation from the slope specified herein will not result in injury to persons or damage to property.
  - [2] A concrete, segmental block, or stone masonry wall, constructed in accordance with Township requirements, is provided to support the face of the excavation.
- d. Fill. No fill shall be made which creates any exposed surface steeper in slope than **three** horizontal to one vertical (3:1), except under one or more of the following conditions:
  - [1] The fill is located so that settlement, sliding, or erosion will not result in property damage or be a hazard to adjoining property, streets, alleys, or buildings.
  - [2] A written statement from a professional civil engineer, licensed in the Commonwealth of Pennsylvania and experienced in erosion control, certifying the site has been inspected and that the proposed deviation from the slope specified above will not endanger any property or result in property damage, is submitted to and approved by the Township.
  - [3] A concrete, segmental block, or stone masonry wall, constructed in accordance with Township requirements, is provided to support the face of the fill.

- e. Slopes and fences. The top or bottom edge of slopes shall be a minimum of five feet from property or right-of-way lines of streets or alleys in order to permit the normal rounding of the edge without encroaching on the abutting property. A protective fence shall be required at the top of the wall (or embankment), pursuant to the requirements of the Pennsylvania Uniform Construction Code, where walls or slopes (steeper than two horizontal to one vertical) are approved under the criteria in this chapter.
- f. Adequate provision shall be made to prevent surface water from damaging the cut face of excavation and the sloping surfaces of fills.
- g. Cleanup. All lots must be kept free of any debris or nuisances whatsoever during construction.
- h. Design of erosion and sedimentation control facilities (particularly stormwater/sediment basins) shall incorporate best management practices as defined herein.
- i. Cut and fill operations shall be kept to a minimum. Wherever feasible, natural vegetation shall be retained, protected, and supplemented. Cut and fills shall not endanger or otherwise adversely impact adjoining property.
- j. No grading equipment shall be permitted to be loaded and/or unloaded on a public street, and no grading equipment shall be permitted to travel on or across a public street unless licensed for operation on public thoroughfares.
- k. Grading equipment shall not be permitted to cross intermittent and perennial streams. Temporary crossing shall only be permitted where application is made, and approval is received, from the PADEP (where applicable), the Montgomery County Conservation District, and Lower Salford Township.
- l. Design of energy dissipation for storm sewer pipes and channels shall be in accordance with the PADEP E&S Manual or the Hydraulic Engineering Circular No. 14, "Hydraulic Design of Energy Dissipaters for Culverts and Channels," as published by the Department of Transportation, FHA, when deemed necessary by the Township, and as approved by the Montgomery County Conservation District.
- m. To control the dissemination of mud and dirt onto public roads and driveways, tire cleaning areas constructed in accordance with the standards in the PADEP E&S Manual shall be installed at each point of access to the site and individual lots (upon construction of internal streets in a binder condition). When deemed necessary by the Township, washing stations shall also be set up at every construction entrance in order to wash mud and dirt from exiting vehicles. Appropriate measures must be taken to control runoff from such locations. The developer shall be responsible for the placement of appropriate signage identifying construction entrances and washing stations. Construction entrances shall be maintained by the developer during construction, as determined by the Township.
- n. In the event any mud and/or debris is transported from the site onto a public roadway, the debris shall be removed immediately and the roadway swept and/or washed as deemed necessary by the Township at the owner's expense.

- A. Any stormwater runoff calculations shall use generally accepted calculation techniques that are based on the NRCS Soil Cover Complex Method. Table \_\_\_\_-20-1 summarizes acceptable computation methods. Method must be selected by the applicant based on the individual limitations and suitability of each method for a particular site.

Table \_\_\_\_ - 20.1

**Acceptable Computation Methodologies for Stormwater Management Designs**

<b>Method</b>	<b>Method Developed By</b>	<b>Applicability</b>
TR-20 (or commercial computer package based on TR-20)	USDA NRCS	Applicable where use of full hydrology computer model is desirable or necessary
TR-55 (or commercial computer package based on TR-55)	USDA NRCS	Applicable for land development plans within limitations described in TR-55
HEC-1, HEC-HMS	U.S. Army Corps of Engineers	Applicable where use of full hydrologic computer model is desirable or necessary
PSRM	Penn State University	Applicable where use of a hydrologic computer model is desirable or necessary; simpler than TR-20 or HEC-1
Other methods	Varies	Other computation methodologies approved by the Township Engineer

- B. All calculations consistent with this chapter using the Soil Cover Complex Method shall use the appropriate design rainfall depths for the various return period storms according to the latest version of the **Precipitation-Frequency Atlas of the United States**, National Oceanic and Atmospheric Administration (NOAA), National Weather Service, Hydrometeorological Design Studies Center, Silver Spring, Maryland. NOAA's Atlas 14 can be accessed at: <http://hdsc.nws.noaa.gov/hdsc/pfds/>. If a hydrologic computer model such as PSRM or HEC-1/HEC-HMS is used for stormwater runoff calculations, then the duration of rainfall shall be 24 hours.
- C. Runoff curve numbers (CN) for both existing and proposed conditions to be used in the Soil Cover Complex Method shall be obtained from TR-55 or as approved by the Township Engineer.
- D. For the purposes of existing conditions flow rate determination for all development activity, undeveloped land shall be considered as "meadow" in good condition, unless the natural ground cover generates a lower curve number (CN) (e.g., forest), as listed in TR-55.

Wooded areas shall use a ground cover of "woods in good condition." An area shall be considered wooded if there is a contiguous canopy of trees existing over an area of 1/4 acre or more.

- E. For redevelopment sites, the ground cover used to determine the existing conditions runoff volume and flow rate for the developed portion of the site shall be based upon actual land cover conditions. If the developed site contains impervious surfaces, 20% of the impervious surface area shall be considered as "meadow" in good condition in the model for existing conditions runoff volume and flow rate.
- F. Where uniform flow is anticipated, the Manning Equation shall be used for hydraulic computations, and to determine the capacity of open channels, pipes, and storm sewers..
- G. Outlet structures for stormwater management facilities shall be designed to meet the performance standards of this chapter using any generally accepted hydraulic analysis technique or method.
- H. The design of any stormwater management facilities intended to meet the performance standards of this chapter shall be verified by routing the design storm hydrograph through these facilities using the Storage Indication Method. For drainage areas greater than 20 acres in area, the design storm hydrograph shall be computed using a calculation method that produces a full hydrograph.
- I. The time of concentration ( $T_c$ ) is the time required for water to flow from the hydraulically most remote point of the drainage area to the point of interest (design point). Use of the rational formula requires calculation of a  $T_c$  for each design point within the drainage basin. Travel time estimation for the rational method shall be based on NRCS Technical Release No. 55 (2nd Edition). For design purposes, the time of concentration may not be less than five minutes. Travel time ( $T_t$ ) is the time it takes runoff to travel from one location to another in a watershed (subreach) and is a component of time of concentration.  $T_c$  is computed by summing all the travel times for consecutive components of the drainage conveyance system.
- J. Water moves through a watershed as sheet flow, shallow concentrated flow, open channel flow, or some combination of these. Sheet flow rates shall be calculated using the NRCS TR-55 (1986) variation of the kinematic wave equation. Sheet flow length may not exceed 50 feet over paved surfaces and 150 feet over unpaved surfaces. Maximum permitted sheet flow length shall be 150 feet unless site-specific conditions exist (that can be demonstrated) that warrant an increase of the sheet flow length. Under no circumstances shall sheet flow length exceed 300 feet. Shallow concentrated flow time and open channel flow time shall be calculated using standard engineering methodologies.

#### §\_\_\_\_ - 21      Erosion and Sedimentation Requirements

- A. For all regulated earth disturbance activities, erosion and sediment control BMPs shall be designed, implemented, operated, and maintained during the regulated earth disturbance activities (e.g., during construction) to meet the purposes and requirements of this chapter, the Montgomery County Conservation District, and Lower Salford Township, and to meet all requirements under Pennsylvania Code Title 25, Chapter 102, Erosion and Sediment Control, and the Clean Streams Law. Various BMPs and their design standards are

- B. Additional erosion and sedimentation control design standards and criteria that must be or are recommended to be applied where infiltration BMPs or SCMs are proposed include the following:
1. Areas proposed for infiltration BMPs or SCMs shall be protected from sedimentation and compaction during the construction phase, so as to maintain their maximum infiltration capacity. **Appropriate** fabric fence, **silt sock**, or other approved protection mechanism must be installed around proposed infiltration areas to prevent encroachment and compaction by construction equipment.
  2. Infiltration BMPs or SCMs shall not be constructed nor receive runoff until the entire contributory drainage area to the infiltration BMP or SCM has received final stabilization. If necessary, **appropriate** filter fabric fence, **silt sock**, or other approved protection mechanism must be installed in the vicinity of the infiltration area to prevent contamination by runoff containing suspended sediment.
  3. Areas of the site to remain undisturbed shall be protected from encroachment by construction equipment/vehicles to maintain the existing infiltration characteristics of the soil. Four-foot-high orange safety fence or other similar protection fence approved by the Township must be installed around the entire limit of disturbance/clearing prior to commencement of earthmoving activities, and maintained until completion of all construction activity.
- C. No regulated earth disturbance activities within the Township shall commence until approval by the Township of an erosion and sediment control plan for construction activities.
- D. The Pennsylvania Department of Environmental Protection (PADEP) has regulations that require an erosion and sediment control plan for any earth disturbance activity of 5,000 square feet or more, under 25 Pa. Code § 102.4(b).
- E. Approval of the Erosion and Sedimentation Control Plan from the Montgomery County Conservation District may be required as determined by the Township Engineer for any earth disturbance activity less than one acre.
- F. In addition, under 25 Pa. Code Chapter 92, a PADEP NPDES Permit for Stormwater Discharges associated with Construction Activities is required for any earth disturbance of one acre or more. This includes earth disturbance on any portion of, part of, or during any stage of, a larger common plan of development.
- G. Evidence of any necessary permit(s) for regulated earth disturbance activities from the appropriate PADEP regional office or Montgomery County Conservation District must be provided to the Township.
- H. A copy of the erosion and sediment control plan and any required permit, as required by PADEP regulations, shall be available at the project site at all times.





## ARTICLE IV – STORMWATER MANAGEMENT PLAN REQUIREMENTS

### §\_\_\_ - 22 General Requirements

- A. For any of the activities regulated by this chapter, the final approval of subdivision and/or land development plans, the issuance of any building or occupancy permit, or the commencement of any land disturbance activity shall not proceed until the property owner or developer or his/her agent has received written approval of a Stormwater Management Plan from the Township, except where exempt from the requirement to prepare a Stormwater Management Plan pursuant to § \_\_\_-6 of this chapter. Stormwater Management Plans required and approved by the Township shall be on site throughout the duration of the regulated activity.

### §\_\_\_ - 23 Plan Requirements

- A. The Stormwater Management Plan shall consist of all applicable calculations, maps, and plans. A note on the maps shall refer to the associated computations and erosion and sedimentation control plan by title and date. The cover sheet of the computations and erosion and sedimentation control plan shall refer to the associated maps by title and date. All Stormwater Management Plan materials shall be submitted to the Township in a format that is clear, concise, legible, neat, and well organized; otherwise, the Stormwater Management Plan shall be disapproved and returned to the applicant.
- B. The Township shall not approve any Stormwater Management Plan that is deficient in meeting the requirements of this Chapter. At its sole discretion and in accordance with this Article, when a Stormwater Management Plan is found to be deficient, the Township may either disapprove the submission and require a resubmission, or in the case of minor deficiencies, the Township may accept submission of modifications.
- C. Provisions for permanent access or maintenance easements for all physical Stormwater Management BMPs and SCMs, such as ponds and infiltration structures, as necessary to implement the Operation and Maintenance (O&M) Plan.
- E. The Stormwater Management Plan shall provide the following information:
  - 1. General
    - a. General description of project.
    - b. General description of permanent stormwater management techniques, including construction specifications of the materials to be used for stormwater management facilities.
    - c. Complete hydrologic, hydraulic, and structural computations for all stormwater management facilities.
    - d. An erosion and sediment control plan, including all reviews and approvals by the Conservation District.
    - e. Soils information including the results of any infiltration tests and test pits

performed.

- f. The effect of the project (in terms of runoff volumes and peak flows) on adjacent properties and on any existing Township stormwater collection systems that may receive runoff from the project site.
  - g. A declaration of adequacy and Highway Occupancy Permit from the Pennsylvania Department of Transportation (PennDOT) when utilization of a PennDOT storm drainage system is proposed.
2. Map(s) of the project area shall be submitted on 24-inch x 36-inch sheets and shall be prepared in a form that meets the requirements for recording at the offices of the Recorder of Deeds of Montgomery County. The contents of the maps(s) shall include, but not be limited to:
- a. The location of the project relative to highways, municipalities, or other identifiable landmarks.
  - b. Existing contours at intervals of 2 feet. In areas of steep slopes (greater than 15 percent), 5-foot contour intervals may be used as approved by the Township Engineer. Critical spot elevations shall be provided where contours do not provide a sufficient level of detail.
  - c. Existing streams, lakes, ponds, or other bodies of water within the project area.
  - d. Other physical features including flood hazard boundaries, sinkholes, streams, existing drainage courses, areas of natural vegetation to be preserved, and the total extent of the upstream area draining through the site.
  - e. The locations of all existing and proposed utilities, sanitary sewers, water lines, on-site sewage disposal systems and wells within 50 feet of property lines.
  - f. An overlay showing soil names and boundaries.
  - g. Proposed changes to the land surface and vegetative cover, including limits of earth disturbance and the type and amount of impervious area that would be added.
  - h. Proposed structures, roads, paved areas, and buildings.
  - i. Final contours at intervals of 2 feet. In areas of steep slopes (greater than 15 percent), 5-foot contour intervals may be used as approved by the Township Engineer. Critical spot elevations shall be provided where proposed contours do not provide a sufficient level of detail.
  - j. The name of the development, the name and address of the owner of the property, and the name of the individual or firm preparing the plan.
  - k. The date of submission.

- l. A graphic and written scale with a minimum scale of one (1) inch equals fifty (50) feet.
- m. A north arrow.
- n. The total tract boundary and size with distances marked to the nearest foot and bearings to the nearest degree.
- o. Existing and proposed land use(s).
- p. A key map showing all existing man-made features beyond the property boundary that would be affected by the project.
- q. Horizontal and vertical profiles of all open channels and stormwater pipe systems.
- r. Overland drainage paths and drainage areas tributary to the proposed facilities.
- s. An appropriate easement around all stormwater management facilities that includes ingress to and egress from a public right-of-way.
- t. The location of all erosion and sedimentation control facilities and BMPs and appropriate details.
- u. A note on the plan indicating the location and responsibility for maintenance of stormwater management facilities that would be located off-site. All off-site facilities shall meet the performance standards and design criteria specified in this Chapter.
- v. A statement, signed by the landowner, acknowledging the stormwater management system to be a permanent fixture that can be altered or removed only after approval of a revised plan by the Township.
- w. The following signature block for the design engineer:

“(Design Engineer), on this date (date of signature), has reviewed and hereby certify that the drainage plan meets all design standards and criteria of the Lower Salford Township Stormwater Management Ordinance.”
- x. An Operation and Maintenance Plan for all existing and proposed stormwater management facilities and/or BMPs, addressing long-term ownership and maintenance responsibilities for such facilities, including a schedule for operation and maintenance activities.
- y. Erosion and sedimentation control plan and details appropriate for the project.
- z. Construction details of all proposed stormwater management facilities, BMPs and/or SCMs, including, but not limited to, the following as applicable:

- (1) Cross-sections through the facility showing:
  - (a) Side slopes.
  - (b) Bottom slopes.
  - (c) Embankment with slopes identified.
  - (d) Top of berm width and elevation.
  - (e) Emergency spillway elevation.
  - (f) Cutoff trench with side slopes, depth, and bottom width identified.
  - (g) Permanent pool elevation.
  - (h) Water quality storm elevation.
  - (i) Maximum water surface elevation.
  - (j) Outlet structure, outlet pipe, anti-seep collars, and outfall structure.
- (2) Elevation views of the outlet structure and emergency spillway showing:
  - (a) Maximum water surface elevation.
  - (b) Maximum design flow depth in spillway and resulting freeboard to top of berm elevation.
  - (c) Spillway lining and side slopes.
  - (d) Top width and bottom width of spillway.
  - (e) Size and elevation of all control devices in the outlet structure.
- (3) Additional details to construct the stormwater management facility, including but not limited to:
  - (a) Forebays with depth and dimensions.
  - (b) Energy dissipating and sediment removal devices, with dimensions.
  - (c) Underdrains with size, type and locations.
  - (d) Location of soils investigations.

#### §\_\_\_ - 24 Plan Submission

- A. For all activities regulated by this Chapter, the steps below shall be followed for submission. For any activities that require a PADEP Joint Permit Application and regulated under Chapter 105 (Dam Safety and Waterway Management) or Chapter 106 (Floodplain Management) of PADEP's Rules and Regulations, require a PennDOT Highway Occupancy Permit, or require any other permit under applicable state or federal regulations, the proof of application for the permit(s) shall be part of the plan. The plan shall be coordinated with the state and federal permit process.
- B. The Stormwater Management Plan and supporting documents shall be submitted by the applicant as part of the preliminary plan submission for the regulated activity, if land development and/or subdivision approval is required.
- C. For earth disturbance not requiring land development or subdivision approval, a minimum of three (3) copies of the Stormwater Management Plan and supporting documents shall be submitted.
  1. The Township will distribute of the Stormwater Management Plan as follows:
    - a. Two (2) or more copies to the Township accompanied by the requisite municipal review fee, as specified in this Chapter.
    - b. One (1) copy to the Township Engineer.

2. The applicant shall submit the Erosion and Sediment Control Plan and application and/or NPDES Permit application to the Montgomery County Conservation District, if required. If the application is for one acre or more of earth disturbance, the applicant must notify the Conservation District of the project within 5 days of submitting the plan to the Township and provide a copy of the notification to the Township.

#### **§\_\_ - 25 Plan Review**

- A. The Township Engineer shall review **the Stormwater Management Plan for consistency with the provisions of this Chapter.**
- B. For a Stormwater Management Plan submitted with any subdivision or land development application, the Township Engineer shall review the Stormwater Management Plan against this Chapter and the Township Subdivision and Land Development Ordinance provisions not superseded by this chapter.
- C. For activities regulated by this chapter, the Township Engineer shall notify the Township, in writing, whether the Stormwater Management Plan is consistent with this chapter. Should the Stormwater Management Plan be determined to be consistent with this chapter, the Township Engineer will forward an approval letter to the Township with a copy to the developer.
- D. Should the Stormwater Management Plan be determined to be inconsistent with this chapter, the Township Engineer will forward a disapproval letter to the Township with a copy to the developer citing the reason(s) for the disapproval. Any disapproved Stormwater Management Plan may be revised by the developer and resubmitted consistent with this chapter.
- E. **The Township and/or Township Engineer shall notify the applicant in writing within 60 days whether the Stormwater Management Plan is approved or disapproved. If the Stormwater Management Plan involves a Subdivision and Land Development Plan, the notification shall occur within the time period allowed by the Municipalities Planning Code. If a longer notification period is provided by other statute, regulation, or ordinance, the applicant will be so notified by the Township.**
- F. If the Stormwater Management Plan is not approved, the Township and/or Township Engineer will state the reasons for the disapproval in writing. The Township also may approve the Stormwater Management Plan with conditions and, if so, shall provide the acceptable conditions for approval in writing.
- G. The Township shall not approve any subdivision or land development for regulated activities if the Stormwater Management Plan has been found to be inconsistent with this chapter, as determined by the Township Engineer. All required permits from PADEP must be obtained prior to, or as a condition of, final plan approval.
- H. The Township shall not issue a building permit for any regulated activity if the Stormwater Management Plan has been found to be inconsistent with this chapter, as determined by the Township Engineer, or without considering the comments of the Township Engineer. All required permits from PADEP must be obtained prior to issuance of a building permit.
- I. The Township's approval of a Stormwater Management Plan prepared in conjunction with a

regulated activity that is not a subdivision or land development shall be valid for a period not to exceed one year. This time period shall commence on the date that the Township signs the approved Stormwater Management Permit. If stormwater management facilities included in the approved Stormwater Management Plan have not been constructed, or if an as-built survey of these facilities pursuant to § \_\_\_\_-28 of this chapter has not been approved within this time period, the Township may consider the Stormwater Management Plan disapproved and may revoke any and all permits. Stormwater Management Plans that are considered disapproved by the Township shall be resubmitted in accordance with § \_\_\_\_-24 of this chapter.

- J. The Township's approval of a Stormwater Management Plan prepared in conjunction with a subdivision or land development shall remain valid and protected from any change in Township codes and ordinances for a period of five years from the date of preliminary subdivision and/or land development plan approval, pursuant to the provisions of the Pennsylvania Municipalities Planning Code.

#### **§ \_\_\_\_ - 26      Modifications of Plans**

- A. A modification to a previously submitted Stormwater Management Plan for a development site that involves a change in stormwater management facilities or techniques, or that involves the relocation or redesign of stormwater management facilities, or that becomes necessary because soil or other conditions are not as stated on the Stormwater Management Plan as determined by the Township Engineer, shall require a resubmission of the modified Stormwater Management Plan consistent with § \_\_\_\_-24 of this chapter and be subject to review as specified in § \_\_\_\_-25 of this chapter.
- B. A modification to an already approved or disapproved Stormwater Management Plan shall be submitted to the Township, accompanied by the applicable review fee. A modification to a Stormwater Management Plan for which a formal action has not been taken by the Township shall be submitted to the Township, accompanied by the applicable Township review fee.

#### **§ \_\_\_\_ - 27      Resubmission of Disapproved Stormwater Management Plans**

- A. A disapproved Stormwater Management Plan may be resubmitted, with the revisions addressing the Township's concerns, to the Township in accordance with this chapter. The applicable review fee must accompany a resubmission of a disapproved Stormwater Management Plan.

#### **§ \_\_\_\_ - 28      As-Built Plans, Completion Certificate, and Final Inspection**

- A. The developer shall be responsible for providing as-built plans of all Stormwater Management SCMs and/or BMPs included in the approved Stormwater Management Plan for single-family dwelling swimming pools, land developments, any project with one acre or more of earth disturbance, or as required by the Township. The as-built plans and an explanation of any discrepancies with the construction plans shall be submitted to the Township.
- B. The as-built submission shall include a certification of completion signed by a qualified professional verifying that all permanent Stormwater Management SCMs and/or BMPs have been constructed according to the approved plans and specifications. The latitude and longitude coordinates for all permanent Stormwater Management SCMs and/or BMPs must also be submitted, at the central location of the SCMs and/or BMPs. If any licensed qualified professionals contributed to the construction plans, then a licensed qualified professional must sign the completion certificate.

- C. After receipt of the completion certification by the Township, the Township may conduct a final inspection.

## ARTICLE V – OPERATION AND MAINTENANCE

### § \_\_\_\_ - 29      Responsibilities of Developers and Landowners

- A. The Stormwater Management Plan for the regulated development activity **that is part of a land development or includes one acre or more of earth disturbance** shall contain an operation and maintenance (O&M) plan for the stormwater management facilities prepared by a qualified design professional. The O&M plan shall be subject to review and approval of the Township Engineer.
- B. The O&M plan for the development site shall outline required routine maintenance actions and schedules necessary to ensure proper operation of the stormwater management facilities and shall establish responsibilities for the continuing operation and maintenance of all proposed stormwater management facilities.
- C. The Stormwater Management Plan and O&M plan shall include the following:
  - 1. The location and type of all permanent stormwater BMPs and SCMs.
  - 2. The location of the project site relative to streets and municipal boundaries.
  - 3. Existing and final contours at intervals of two feet or as appropriate.
  - 4. Existing features including streams, lakes, ponds, flood hazard boundaries, sinkholes and areas of natural vegetation to be maintained.
  - 5. The location of all existing and proposed utilities, sanitary sewers, and water lines on and within 50 feet of the property.
  - 6. Proposed final changes to the land surface and vegetative cover, including the type and amount of impervious area that would be added,
  - 7. Proposed final structures, roads, paved areas, and buildings,
  - 8. The location of all easements to provide access to the permanent stormwater BMPs and SCMs.
  - 9. Description of how each stormwater management facility will be operated and maintained, and the identity and contact information associated with the person(s) responsible for such operations and maintenance.
  - 10. Name of the project site, name and address of the owner of the property, and name of the individual or firm preparing the plan. The owner shall keep on file with the Township the name, address, and telephone number of the person or entity responsible for operation and maintenance activities. In the event of a change, new information shall be submitted by the owner to the Township within 10 working days of the change.
  - 11. A statement, signed by the facility owner, acknowledging that the stormwater management facilities are fixtures that cannot be altered or removed unless such alteration or removal is approved by the Township.



- D. The Township shall make the final determination on the continuing maintenance responsibilities prior to final approval of the Stormwater Management Plan. The Township may require dedication of such facilities as part of the requirements for approval of the Stormwater Management Plan. Such a requirement is not an indication that the Township will accept the facilities. The Township reserves the right to accept or reject the ownership and operating responsibility for any portion of the stormwater management controls.
- E. Facilities, areas, or structures used as Stormwater Management SCMs and/or BMPs shall be enumerated as permanent real estate appurtenances and recorded as deed restrictions or conservation easements that run with the land.
- F. The Operation and Maintenance (O&M) Plan shall be recorded as a restrictive deed covenant that runs with the land.
- G. The Township may take enforcement actions against an owner for any failure to satisfy the provisions of this Article.

#### **§\_\_ - 30      Operation and Maintenance Agreements**

- A. Prior to final approval of the Stormwater Management Plan for a regulated activity that is part of a land development or includes one acre or more of earth disturbance, the property owner shall sign and record an Operation and Maintenance (O&M) Agreement (see Appendix A) covering all stormwater control facilities which are to be privately owned.
  - 1. The owner, successor and assigns shall maintain all facilities in accordance with the approved maintenance schedule in the O&M Agreement.
  - 2. The owner shall convey to the Township conservation easements to assure access for periodic inspections by the Township and maintenance, as necessary.
  - 3. The owner shall keep on file with the Township the name, address, and telephone number of the person or company responsible for maintenance activities; in the event of a change, new information shall be submitted by the owner to the Township within ten (10) working days of the change.
- B. The owner is responsible for operation and maintenance (O&M) of the Stormwater Management SCMs and/or BMPs. If the owner fails to adhere to the O&M Agreement, the Township may perform the services required and charge the owner appropriate fees. Nonpayment of fees may result in a lien against the property.

#### **§\_\_ - 31      Performance Guarantee**

- A. For Stormwater Management Plans that involve subdivision and land development, the applicant shall provide a financial guarantee to the Township for the timely installation and proper construction of all erosion and sediment control measures and stormwater management controls as required by the approved Stormwater Management Plan and this Chapter in accordance with the provisions of Sections 509, 510, and 511 of the Pennsylvania Municipalities Planning Code.

#### **§\_\_ - 32      Stormwater Easements**

- A. Easements shall be granted by the property owner as necessary to provide for:
  - 1. Access to the property by the Township for inspections and emergency maintenance for

stormwater management facilities.

2. Preservation of stormwater runoff conveyance, infiltration, SCMs and other stormwater facilities, including flood routes for the one-hundred-year storm event.
- B. The purpose of any easement shall be specified in the O&M agreement signed by the property owner.
  - C. Easements are required for all areas used for off-site stormwater control.
  - D. All easements shall be recorded with the Montgomery County Recorder of Deeds in conjunction with final Stormwater Management Plan approval, issuance of a building permit or recordation of a subdivision or land development plan.

## **ARTICLE VI – FEES AND EXPENSES**

### **§\_\_ - 33 Fees and Expenses**

- A. The Township may include all costs incurred in the review fee charged to an applicant.
- B. The review fee may include, but not be limited to, costs for the following:
  - 1. Administrative/clerical processing.
  - 2. Review of the Stormwater Management Plan.
  - 3. Attendance at meetings.
  - 4. Inspections.

## **ARTICLE VII – PROHIBITIONS**

### **§\_\_\_ - 34 Prohibited Discharges and Connections**

- A. Any drain or conveyance, whether on the surface or subsurface, that allows any non-stormwater discharge including sewage, process wastewater, and wash water to enter a regulated small MS4 or to enter the surface waters of this Commonwealth is prohibited.
- B. No person shall allow, or cause to allow, discharges into a regulated small MS4, or discharges into waters of this Commonwealth, which are not composed entirely of stormwater, except (1) as provided in paragraph C below and (2) discharges authorized under a state or federal permit.
- C. The following discharges are authorized unless they are determined to be significant contributors to pollution a regulated small MS4 or to the waters of this Commonwealth:
  - 1. Discharges or flows from firefighting activities.
  - 2. Discharges from potable water sources including water line flushing and fire hydrant flushing, if such discharges do not contain detectable concentrations of Total Residual Chlorine (TRC).
  - 3. Non-contaminated irrigation water, water from lawn maintenance, landscape drainage and flows from riparian habitats and wetlands.
  - 4. Diverted stream flows and springs.
  - 5. Non-contaminated pumped ground water and water from foundation and footing drains and crawl space pumps.
  - 6. Non-contaminated HVAC condensation and water from geothermal systems.
  - 7. Residential (i.e., not commercial) vehicle wash water.
  - 8. Non-contaminated hydrostatic test water discharges, if such discharges do not contain detectable concentrations of TRC.
- D. In the event that the Township or PADEP determines that any of the discharges identified in Subsection C significantly contribute pollutants to a regulated small MS4 or to the waters of this Commonwealth, the Township or PADEP will notify the responsible person(s) to cease the discharge.

### **§\_\_\_ - 35 Roof Drains and Sump Pumps**

- A. Roof drains and sump pumps shall discharge to infiltration or vegetative SCMs and/or BMPs wherever feasible.

### **§\_\_\_ - 36 Alteration of Stormwater Management SCMs and/or BMPs**

- A. No person shall modify, remove, fill, landscape, or alter any Stormwater Management SCMs and/or BMPs, facilities, areas, or structures that were installed as a requirement of this Chapter without the written approval of the Township.



## **ARTICLE VIII – ENFORCEMENT AND PENALTIES**

### **§\_\_ - 37 Right-of-Entry**

- A. Upon presentation of proper credentials, the Township or its designated agent may enter at reasonable times upon any property within the Township to inspect the construction and the post-construction condition of the stormwater structures and facilities in regard to any aspect regulated by this Chapter.

### **§\_\_ - 38 Inspection**

- A. The landowner or the owner's designee shall inspect Stormwater Management SCMs and/or BMPs, facilities and/or structures installed under this Chapter according to the following frequencies, at a minimum, to ensure the SCMs and/or BMPs, facilities and/or structures continue to function as intended:
1. Annually for the first 5 years.
  2. Once every 3 years thereafter.
  3. During or immediately after the cessation of a 10-year or greater storm.
- B. Inspections should be conducted during or immediately following precipitation events. A written inspection report shall be created to document each inspection. The inspection report shall contain the date and time of the inspection, the individual(s) who completed the inspection, the location of the SCM and/or BMP, facility or structure inspected, observations on performance, and recommendations for improving performance, if applicable. Inspection reports shall be submitted to the Township within 30 days following completion of the inspection.

### **§\_\_ - 39 Enforcement**

- A. The approved drainage plan and other applicable approved permit plans shall be on file at the site throughout the duration of the construction activity. Periodic inspections may be conducted by the Township or designee during construction. A final inspection of all SCMs and/or BMPs and stormwater management facilities may be conducted by the Township or designee to confirm compliance with the approved drainage plan prior to the issuance of any occupancy permit.
- B. It shall be unlawful for a person to undertake any regulated activity except as provided in an approved Stormwater Management Plan, unless specifically exempted in §\_\_ - 6.
- C. It shall be unlawful to violate §\_\_ - 33 of this Chapter.
- D. Inspections regarding compliance with the Stormwater Management Plan are a responsibility of the Township.

### **§\_\_ - 40 Suspension and Revocation**

- A. Any approval or permit issued by the Township pursuant to this Chapter may be suspended or revoked for:
1. Non-compliance with or failure to implement any provision of the approved Stormwater

Management Plan or O&M Agreement.

2. A violation of any provision of this Chapter or any other applicable law, ordinance, rule, or regulation relating to the Regulated Activity.
  3. The creation of any condition or the commission of any act during the Regulated Activity which constitutes or creates a hazard, nuisance, pollution, or endangers the life or property of others.
- B. A suspended approval may be reinstated by the Township when:
1. The Township Engineer or designee has inspected and approved the corrections to the violations that caused the suspension.
  2. The Township is satisfied that the violation has been corrected.
- C. An approval that has been revoked by the Township cannot be reinstated. The applicant may apply for a new approval under the provisions of this Chapter.
- D. Whenever the Township finds that a person has violated a prohibition or failed to meet a requirement of this chapter, the Township may order compliance by written notice to the responsible person. Such notice may require without limitation:
1. The performance of monitoring, analyses, and reporting;
  2. The elimination of prohibited discharges;
  3. Cessation of any violating discharges, practices, or operations;
  4. The abatement or remediation of stormwater pollution or contamination hazards and the restoration of any affected property;
  5. Payment of a fine to cover administrative and remediation costs;
  6. The implementation of stormwater management facilities; and
  7. Operation and maintenance of stormwater management facilities.
- E. If a violation causes no immediate danger to life, public health, or property, at its sole discretion, the Township may provide a limited time period for the owner to correct the violation. In these cases, the Township will provide the owner, or the owner's designee, with a written notice of the violation and the time period allowed for the owner to correct the violation. If the owner does not correct the violation within the allowed time period, the Township may revoke or suspend any, or all, applicable approvals and permits pertaining to any provision of this Chapter.

**§\_\_\_ - 41 Penalties**

- A. Anyone violating the provisions of this Chapter shall be guilty of a summary offense, and upon conviction, shall be subject to a fine of not more than **\$1,000 for each violation**, recoverable with costs. Each day that the violation continues shall be a separate offense and penalties shall be cumulative.
- B. In addition, the Township may institute injunctive, mandamus, or any other appropriate action or proceeding at law or in equity for the enforcement of this Chapter. Any court of competent

jurisdiction shall have the right to issue restraining orders, temporary or permanent injunctions, mandamus, or other appropriate forms of remedy or relief.

**§\_\_ - 42 Appeals**

- A. Any person aggrieved by any action of the Township or its designee, relevant to the provisions of this Chapter, may appeal to the Township within 30 days of that action.
- B. Any person aggrieved by any decision of the Township, relevant to the provisions of this Chapter, may appeal to the County Court of Common Pleas in the county where the activity has taken place within 30 days of the Township's decision.



## APPENDIX A

### OPERATION AND MAINTENANCE (O&M) AGREEMENT

#### STORMWATER MANAGEMENT BEST MANAGEMENT PRACTICES (BMPs)

**THIS AGREEMENT**, made and entered into this day of \_\_\_\_\_, 20\_\_\_\_, by and between (hereinafter the "Landowner"), and Lower Salford Township, Montgomery County, Pennsylvania (hereinafter "Township");

#### WITNESSETH

**WHEREAS**, the Landowner is the owner of certain real property as recorded by deed in the land records of Montgomery County, Pennsylvania, Deed Book \_\_\_\_\_ at page \_\_\_\_\_, \_\_\_\_\_ (hereinafter "Property").

**WHEREAS**, the Landowner is proceeding to build and develop the Property; and

**WHEREAS**, the Stormwater Management Operation and Maintenance (O&M) Plan approved by the Township (hereinafter referred to as the "O&M Plan") for the property identified herein, which is attached hereto as Appendix A and made part hereof, as approved by the Township, provides for management of stormwater within the confines of the Property through the use of Stormwater Control Measures (SCMs) or Best Management Practices (BMPs); and

**WHEREAS**, the Township, and the Landowner, his successors and assigns, agree that the health, safety, and welfare of the residents of the Township and the protection and maintenance of water quality require that on site Stormwater Management SCMs and/or BMPs be constructed and maintained on the Property; and

**WHEREAS**, the Township requires, through the implementation of the Stormwater Management Plan, that Stormwater Management SCMs and/or BMPs as required by said Stormwater Management Plan and the Lower Salford Township Stormwater Management Ordinance be constructed and adequately operated and maintained by the Landowner, successors, and assigns.

**NOW, THEREFORE**, in consideration of the foregoing promises, the mutual covenants contained herein, and the following terms and conditions, the parties hereto agree as follows:

1. The Landowner shall construct the SCMs and/or BMPs in accordance with the plans and specifications identified in the Stormwater Management Plan.
2. The Landowner shall operate and maintain the SCMs and/or BMPs as shown on the Stormwater Management Plan in good working order in accordance with the specific operation and maintenance requirements noted on the approved O&M Plan.
3. The Landowner hereby grants permission to the Township, its authorized agents and employees, to enter upon the property, at reasonable times and upon presentation of proper credentials, to inspect the SCMs and/or BMPs whenever necessary. Whenever possible, the Township shall notify the Landowner prior to entering the property.
4. In the event the Landowner fails to operate and maintain the SCMs and/or BMPs per paragraph 2, the Township or its representatives may enter upon the Property and take whatever action is deemed necessary to maintain said SCM(s) and/or BMP(s). It is expressly understood and agreed that the Township is under no obligation to maintain or

repair said facilities, and in no event shall this Agreement be construed to impose any such obligation on the Township.

5. In the event the Township, pursuant to this Agreement, performs work of any nature, or expends any funds in performance of said work for labor, use of equipment, supplies, materials, and the like, the Landowner shall reimburse the Township for all expenses (direct and indirect) incurred within 10 days of receipt of invoice from the Township.
6. The intent and purpose of this Agreement is to ensure the proper maintenance of the on-site SCMs and/or BMPs by the Landowner; provided, however, that this Agreement shall not be deemed to create any additional liability of any party for damage alleged to result from or be caused by stormwater runoff.
7. The Landowner, its executors, administrators, assigns, and other successors in interests, shall release the Township from all damages, accidents, casualties, occurrences, or claims which might arise or be asserted against said employees and representatives from the construction, presence, existence, or maintenance of the SCM(s) and/or BMP(s) by the Landowner or Township.
8. The Township intends to inspect the SCMs and/or BMPs at a minimum of once every three years to ensure their continued functioning.

This Agreement shall be recorded at the Office of the Recorder of Deeds of Montgomery County, Pennsylvania, and shall constitute a covenant running with the Property and/or equitable servitude, and shall be binding on the Landowner, his administrators, executors, assigns, heirs, and any other successors in interests, in perpetuity.

#### ATTEST

**WITNESS** the following signatures and seals:

(SEAL)

For the Township:

\_\_\_\_\_

For the Landowner:

\_\_\_\_\_

**ATTEST:**

\_\_\_\_\_ (City, Borough, Township)

County of \_\_\_\_\_, Pennsylvania

I, \_\_\_\_\_, a Notary Public in and for the county and state aforesaid, whose commission expires on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, do hereby certify that \_\_\_\_\_ whose name(s) is/are signed to the foregoing Agreement bearing date of the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, has

acknowledged the same before me in my said county and state.

GIVEN UNDER MY HAND THIS \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
NOTARY PUBLIC

\_\_\_\_\_  
(SEAL)

**APPENDIX B**  
**SMALL PROJECTS STORMWATER MANAGEMENT**

## APPENDIX B

### Small Project Stormwater Management

Source: Neshaminy Creek Watershed Act 167 Model Stormwater Management Ordinance

Small Project Stormwater Management has been developed to assist those proposing certain residential projects to meet the requirements of the Township Stormwater Management Ordinance without having to hire professional services to draft a formal Drainage Plan. Small Project Stormwater Management is only permitted for residential projects conforming to exemption requirements of § \_\_\_\_-6 of the Stormwater Management Ordinance of Lower Salford Township and where the Regulated Development Activity results in less than 1 acre of earth disturbance.

#### 1. What is an applicant required to submit?

A brief description of the proposed stormwater facilities, including types of materials to be used, total square footage of proposed impervious surface areas, total square footage of existing impervious surface area to be removed (if any), volume calculations, and a simple sketch plan showing the following information:

- Location of proposed structures, driveways, or other paved areas with approximate surface area in square feet.
- Location of any existing or proposed onsite septic system and/or potable water wells showing proximity to proposed infiltration facilities.
- Written Erosion Control Plan if disturbed ground area is to exceed 5,000 square feet. It should be noted that erosion control facilities are required with all land disturbance activities.
- Montgomery County Conservation District erosion and sediment control "Adequacy" letter if applicable.

#### 2. Determination of Required Volume Control and Sizing of Stormwater Facilities

By following the simple steps outlined below in the provided example, an applicant can determine the runoff volume that is required to be controlled and how to choose the appropriate stormwater facility to permanently remove the runoff volume from the site. Impervious area calculations must include all areas on the lot proposed to be covered by roof area or pavement which would prevent rain from naturally percolating into the ground, including impervious surfaces such as sidewalks, driveways, parking areas, patios, swimming pools, and gravel areas. Semi-pervious hardscaping surfaces designed and constructed to allow for infiltration (as approved by the Township) do not have to be included in this calculation.

**Site Plan Example: Controlling runoff volume from a proposed home site**

##### Step 1: Determine Total Impervious Surfaces (Refer to Figure 1)

Impervious Surface			Area (sq. ft.)
House Roof (Front)	17 ft. x 55 ft.	=	935 sq. ft.
House Roof (Rear)	17 ft. x 55 ft.	=	935 sq. ft.
Garage Roof (Left)	9 ft. x 25 ft.	=	225 sq. ft.
Garage Roof (Right)	9 ft. x 25 ft.	=	225 sq. ft.



runoff from the site. A number of different volume control BMPs are described below. Note that Figure 1 is an example of how these BMPs can be utilized in conjunction to control the total required volume on one site.

### 3. Determination of Suitable BMPs for Small Stormwater Management Projects.

#### A. Structural BMPs

##### 1. Infiltration Trench

An Infiltration Trench is a linear stormwater BMP consisting of a continuously perforated pipe at a minimum slope in a stone-filled trench with a level bottom. During small storm events, infiltration trenches can significantly reduce volume and serve in the removal of fine sediments and pollutants. Runoff is stored between the stones and infiltrates through the bottom of the facility and into the soil matrix. Prior to entering the basin, runoff should be pretreated using vegetative buffers strips or swales and filter inlets to limit the amount of coarse sediment entering the trench which can clog and render the trench ineffective. In all cases, an infiltration trench should be designed with a positive (emergency) overflow so that water does not pool in the basin less than 12 inches from the ground surface.

##### Design Considerations:

- Although the width and depth can vary, it is recommended that Infiltration Trenches be limited in depth to not more than six (6) feet of stone.
- Trench is wrapped in nonwoven geotextile (top, sides, and bottom).
- Trench needs to be placed on uncompacted soils.
- Slope of the Trench bottom should be level.
- A minimum of 6" of topsoil is placed over trench and vegetated.
- The discharge or overflow from the Infiltration Trench should be properly designed for anticipated flows.
- Cleanouts or inlets should be installed at both ends of the Infiltration Trench and at appropriate intervals to allow access to the perforated pipe for inspection and maintenance.
- Volume of facility = Depth x Width x Length x Void Space of the gravel bed (assume 40%).
- Filter inlets should have a sump condition of at least 24". Outflow pipe to trench should be fitted with a 90 degree elbow, turned downward towards the bottom of the inlet. The elbow should also be fitted with a non-degradable screen. All runoff must be collected by or discharge to a filter inlet before entering the infiltration trench. An example of a filter inlet is shown in Figure 6.
- Trench may be no closer than thirty (30) feet from a building foundation and fifty (50) feet from septic system drainfields and wellheads.

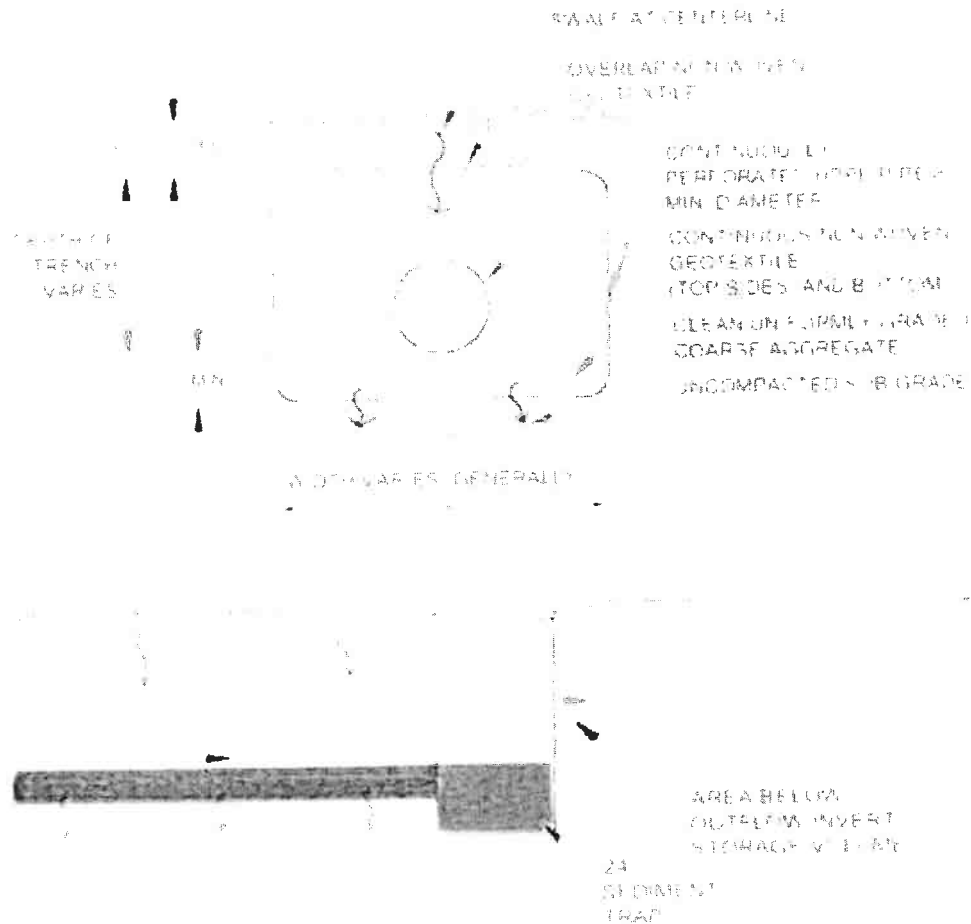
##### Maintenance:

- Catch basins and inlets should be inspected and cleaned at least two times a year.
- The vegetation along the surface of the infiltration trench should be maintained in good condition and any bare spots should be re-vegetated as soon as possible.

- Vehicles should not be parked or driven on the trench and care should be taken to avoid soil compaction by lawn mowers.

**Figure 3: Infiltration Trench Diagram**

Source: PA BMP Guidance Manual, Chapter 6, page 42.





**Figure 4: Example of Infiltration Trench Installation**  
Source: PA BMP Guidance Manual, Chapter 6, Page 46.



**Sizing Example for Infiltration Trench (Based on Example in Figure 1)**

- a. Determine Total Impervious Surface to drain to Infiltration Trench:

Garage Roof (Left)	9 ft. x 25 ft.	=	225 sq ft
Driveway	12 ft. x 50 ft.	=	600 sq ft
Walkway	4 ft. x 20 ft.	=	80 sq ft

- b. Determine the required infiltration volume:  
 $(905 \text{ sq. ft.} \times 2 \text{ inches of runoff}) \div 12 \text{ ft.} = 150.83 \text{ cu. ft.}$   
 $150.83 \text{ cu. ft.} \div 0.4^* = 377.08 \text{ cu. ft.}$   
(\*0.4 assumes 40% void ratio in gravel bed)

- c. Sizing the infiltration trench facility:

Volume of Facility = Depth x Width x Length

Set Depth to 3 feet and determine required surface area of trench.

$$377.08 \text{ cu. ft.} \div 3 \text{ ft} = 125.69 \text{ sq ft.}$$

The width of the trench should be greater than 2 times its depth ( $2 \times D$ ), therefore in this example a trench width of 6 feet is selected.

$$\text{Determine trench length: } L = 125.69 \text{ sq. ft.} \div 6 \text{ ft.} = 20.94 \text{ ft.}$$

Final infiltration trench dimensions: 3 ft. (D) x 6 ft. (W) x 20.94 ft. (L)

**2. Rain Garden**

A Rain Garden is a planted shallow depression designed to catch and filter rainfall runoff. The garden captures rain from a downspout or a paved surface. The water sinks into the ground, aided by deep rooted plants that like both wet and dry conditions. The ideal location for a rain garden is between the source of runoff (roofs and driveways) and the runoff destination (drains, stream, low spots, etc).

#### Design Considerations:

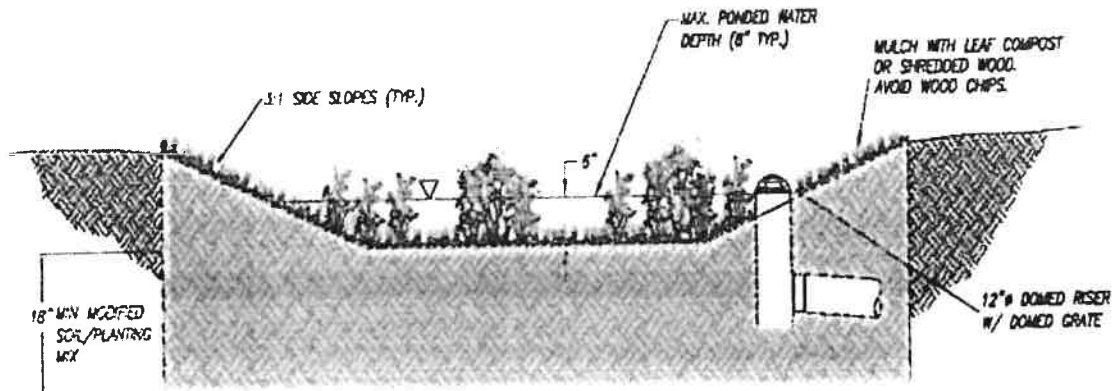
- A maximum of 3:1 side slope is recommended.
- The depth of a rain garden can range from 6 - 8 inches.
- The rain garden should drain within 72 hours.
- The garden should be at least 30 feet from a building's foundation and 50 feet from septic system drainfields and wellheads.
- If the site has clay soils, soil should be amended with compost or organic material.
- Choose native plants. See <http://pa.audubon.org/habitat/PDFs/RGBrochurecomplete.pdf> for a native plant list. To find native plant sources go to [www.pawildflower.org](http://www.pawildflower.org).
- At the rain garden location, the water table should be at least 2 feet below the soil level. If water stands in an area for more than one day after a heavy rain you can assume it has a higher water table and is not a good choice for a rain garden.

#### Maintenance:

- Water plants regularly until they become established.
- Inspect twice a year for sediment buildup, erosion and vegetative conditions.
- Mulch with hardwood when erosion is evident and replenish annually.
- Prune and remove dead vegetation in the spring season.
- Weed as you would any garden.
- Move plants around if some plants would grow better in the drier or wetter parts of the garden.

**Figure 5: Rain Garden Diagram**

Source: PA BMP Guidance Manual, Chapter 6 Page 50.



### Sizing Example for Rain Garden

- a. Pick a site for the rain garden between the source of runoff and between a low-lying area, a.k.a., a drainage area.
- b. Perform an infiltration test to determine the depth of the rain garden:
  - Dig a hole 8" x 8" and saturate hole with water.
  - Fill hole with water to top and put a popsicle stick at the top of the water level.
  - Measure how far it drains down after a few hours (ideally in 4 hrs.).
  - Calculate the depth of water that will drain out over 24 hours.
- c. Determine total impervious surface area to drain to rain garden:

House Roof (Front)	17 ft. x 55 ft.	=	935 sq ft
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- d. Sizing the rain garden:

For this example the infiltration test determined 6" of water drained out of a hole in 24 hours. The depth of the rain garden should be set to the results of the infiltration test so 6" is the depth of the rain garden. The sizing calculation below is based on controlling 1" of runoff. First divide the impervious surface area by the depth of the rain garden.

$$(935 \text{ sq. ft.} \div 6) = 155.83 \text{ sq. ft.}$$

In order to control 2" of runoff volume, the rain garden area needs to be multiplied by 2.

$$155.83 \text{ sq. ft.} * 2 = 311.67 \text{ sq. ft.}$$

The rain garden should be about 311.67 sq. ft. in size and 6" deep.

### 3. Dry Well (a.k.a., Seepage Pit)

A Dry Well, sometimes called a Seepage Pit, is a subsurface storage facility that temporarily stores and infiltrates stormwater runoff from the roofs of structures. By capturing runoff at the source, Dry Wells can dramatically reduce the increased volume of stormwater generated by the roofs of structures. Roof leaders connect directly into the Dry Well, which may be either an excavated pit filled with uniformly graded aggregate wrapped in geotextile, or a prefabricated storage chamber or pipe segment. Dry Wells discharge the stored runoff via infiltration into the surrounding soils. In the event that the Dry Well is overwhelmed in an intense storm event, an overflow mechanism (surcharge pipe, connection to a larger infiltration area, etc.) will ensure that additional runoff is safely conveyed downstream.

#### Design Considerations:

- Dry Wells typically consist of 18 to 48 inches of clean washed, uniformly graded aggregate with 40% void capacity (AASHTO No. 3, or similar).

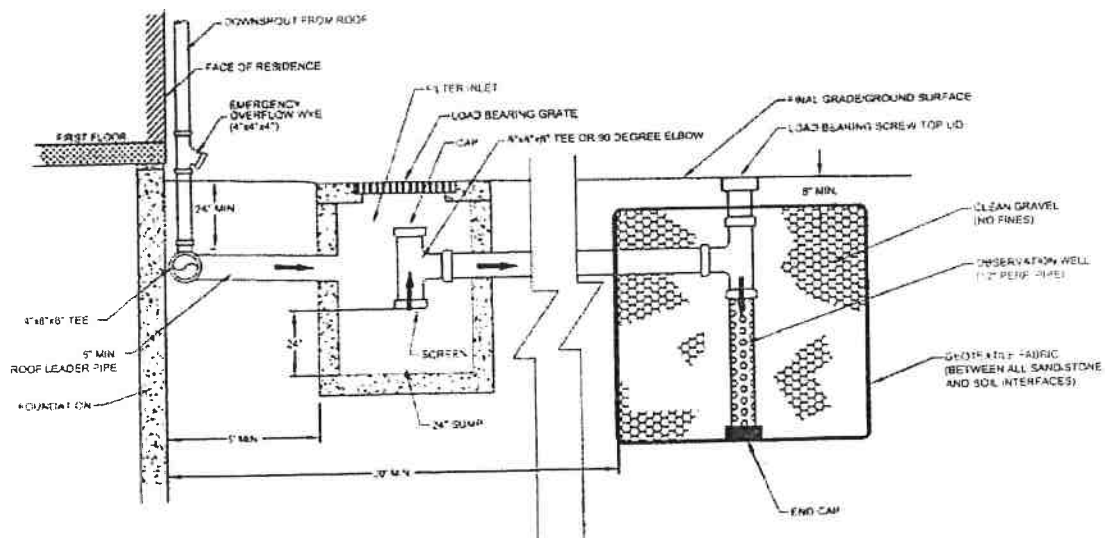
“Clean” gravel fill should average one and one-half to three (1.5 - 3.0) inches in nominal diameter.

- Dry Wells are not recommended when their installation would create a significant risk for basement seepage or flooding. Thirty (30) feet of separation is required between Dry Wells and building foundations and 50 feet from septic system drainfields and wellheads.
- The facility may be either a structural prefabricated chamber or an excavated pit filled with aggregate.
- Depth of dry wells in excess of three-and-a-half (3.5) feet should be avoided unless warranted by soil conditions.
- Stormwater dry wells must never be combined with existing, rehabilitated, or new septic system seepage pits. Discharge of sewage to stormwater dry wells is strictly prohibited.
- Trench is wrapped in nonwoven geotextile (top, sides, and bottom).
- Filter inlet with access lid should have a sump condition of at least 24 inches. Outflow pipe to dry well should be fitted with a 90 degree elbow, turned downward towards the bottom of the inlet. The elbow should also be fitted with a non-degradable screen. Roof leaders must discharge to a filter inlet.

#### Maintenance:

- Dry wells should be inspected at least four (4) times annually as well as after large storm events.
- Remove sediment, debris/trash, and any other waste material from a dry well.
- Regularly clean out gutters and ensure proper connections to the dry well.
- Replace the filter screen that intercepts the roof runoff as necessary.

Figure 6: Dry Well Diagram



### Sizing Example for Dry Wells:

- a. Determine contributing impervious surface area:

House Roof (Rear)	17 ft. x 55 ft.	=	935 sq. ft.
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- b. Determine required volume control:

$$(935 \text{ sq. ft.} \times 2 \text{ inches of runoff}) \div 12 \text{ inches} = 155.83 \text{ cu. ft.}$$

$$155.83 \text{ cu. ft.} \div 0.4^* = 389.58 \text{ cu. ft.}$$

(\*assuming the 40% void ratio in the gravel bed)

- c. Sizing the dry well:

Set depth to 3.5 ft;

Set width equal to length for a square chamber.

$$389.58 \text{ cu. ft.} = 3.5 \text{ ft.} \times L \times L; L = 10.55 \text{ ft.}$$

$$\text{Dimensions} = 3.5 \text{ ft. (D)} \times 10.55 \text{ ft. (L)} \times 10.55 \text{ ft. (W)}$$

### B. Non-Structural BMPs

**Note:** The cumulative volume reduction permitted for non-structural BMP credits shall not exceed 25% of the total stormwater volume required to be captured in conjunction with the Small Project Stormwater Management design (Refer Chapter 8 of the Pennsylvania Stormwater Best Management Practices Manual, 2006, as amended).

#### 1. Tree Plantings and Preservation

Trees and forests reduce stormwater runoff by capturing and storing rainfall in the canopy and releasing water into the atmosphere through evapotranspiration. Tree roots and leaf litter also create soil conditions that promote the infiltration of rainwater into the soil. In addition, trees and forests reduce pollutants by taking up nutrients and other pollutants from soils and water through their root systems. A development site can reduce runoff volume by planting new trees or by preserving trees which existed on the site prior to the development. The volume reduction calculations either determine the cubic feet to be directed to the area under the tree canopy for infiltration or determine a volume reduction credit which can be used to reduce the size of any one of the planned structural BMPs on the site.

#### Tree Considerations:

- Existing trees must have at least a 4" trunk caliper or larger.
- Existing tree canopy must be within 100 ft. of impervious surfaces.
- A tree canopy is classified as the continuous cover of branches and foliage formed by a single tree or collectively by the crowns of adjacent trees.
- New tree plantings must be at least 6 ft. in height and have a 2-inch caliper trunk size as measured 4 feet above the ground surface.

- All existing and newly planted trees must be native to Pennsylvania. Refer <http://www.dcnr.state.pa.us/forestry/commontr/commontrees.pdf> for a guide book titled Common Trees of Pennsylvania for a native tree list.
- When using trees as volume control BMPs, runoff from impervious areas should be directed to drain under the tree canopy.

Determining the required number of planted trees to reduce the runoff volume:

- A. Determine contributing impervious surface area:

Garage Roof (Right)	9 ft. x 25 ft.	=	225 sq. ft.
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- B. Calculate the required control volume:

$$(225 \text{ sq. ft.} \times 2 \text{ inches of runoff}) \div 12 \text{ inches} = 37.50 \text{ cu. ft.}$$

- C. Determine the number of tree plantings:

- Pursuant to Chapter 8 of the Pennsylvania Stormwater Best Management Practices Manual (2006, as amended), a newly planted deciduous tree (2 inch minimum caliper at 4 feet above ground) can reduce runoff volume by 6 cu. ft.
- Pursuant to Chapter 8 of the Pennsylvania Stormwater Best Management Practices Manual (2006, as amended), a newly planted evergreen tree (6 feet minimum height) can reduce runoff volume by 10 cu. ft.

$$37.5 \text{ cu. ft.} \div 6 \text{ cu. ft.} = 6.25 = 7 \text{ Deciduous Trees}$$

This volume credit (7 trees x 6 cu. ft per tree = 42 cu. ft) can be utilized in reducing the size of any one of the structural BMPs planned on the site.

Determining the volume reduction for preserving existing trees:

- A. Calculate approximate area of the existing tree canopy:

$$\sim 22 \text{ sq. ft.} \times \sim 23 \text{ sq. ft.} = 500 \text{ sq. ft.}$$

- B. Measure distance from impervious surface to tree canopy: 35 ft. (example)

- C. Calculate the volume reduction credit by preserving existing trees:

- For Trees within 20 feet of impervious cover:  
Volume Reduction cu.ft.=(Existing Tree Canopy sq. ft. x 1 inch)/12
- For Trees beyond 20 feet but not farther than 100 feet from impervious cover:  
Volume Reduction cu.ft.=(Existing Tree Canopy sq. ft. x 0.5 inch)/12

$$(500 \text{ sq. ft.} \times 0.5 \text{ inches})/12 = 21 \text{ cu. ft.}$$

This volume credit can be utilized in reducing the size of any one of the structural BMPs planned on the site.

## 2. Minimize Soil Compaction and Replant with Lawn or Meadow

When soil is overly compacted during construction it can cause a drastic reduction in the permeability of the soil and rarely is the soil profile completely restored. Runoff from vegetative areas with highly compacted soils similarly resembles runoff from an impervious surface. Minimizing soil compaction and re-planting with a vegetative cover like meadow or lawn, not only increases the infiltration on the site, but also creates a friendly habitat for a variety of wildlife species.

Design Considerations:

- Area shall not be stripped of topsoil.
- Vehicle movement, storage, or equipment/material lay down shall not be permitted in areas preserved for minimum soil compaction.
- The use of soil amendments and additional topsoil is permitted.
- Meadow should be planted with native grasses. Refer to Meadows and Prairies: Wildlife-Friendly Alternatives to Lawn at <http://pubs.cas.psu.edu/FreePubs/pdfs/UH128.pdf> for reference on how to properly plant the meadow and for a list of native species.

Determining the volume reduction by minimizing soil compaction and planting a meadow:

A. Calculate approximate area of preserved meadow:

$$\sim 22 \text{ sq. ft.} \times \sim 23 \text{ sq. ft.} = 500 \text{ sq. ft.}$$

B. Calculate the volume reduction credit by minimizing the soil compaction and planting a lawn/meadow:

- For Meadow Areas: Volume Reduction (cu. ft.) = (Area of Min. Soil Compaction (sq. ft.)  $\times$  1/3 inch of runoff)/12

$$(500 \text{ sq. ft.} \times 1/3 \text{ inch of runoff})/12 = 13.8 \text{ cu. ft.}$$

- For Lawn Areas: Volume Reduction (cu. ft.) = (Area of Min. Soil Compaction (sq. ft.)  $\times$  1/4 inch of runoff)/12

$$(500 \text{ sq. ft.} \times 1/4 \text{ inch of runoff})/12 = 10.4 \text{ cu. ft.}$$

This volume credit can be used to reduce the size of any one of the structural BMPs on the site.

## 3. Rain Barrels

Rain barrels are large containers that collect drainage from roof leaders and temporarily store water to be released to lawns, gardens, and other landscaped areas after the rainfall has ended. Rain barrels are typically between 50 and 200 gallons in size. Although residents may wish to utilize rain barrels for capture and reuse of stormwater runoff, they shall not be used as a volume control BMP because infiltration is not guaranteed after each storm event. A rain barrel is not utilized in this small Projects Stormwater Management example.

#### 4. Summary

Based on the sample residential Regulated Activity shown in Figure 1, a total of 3,000 square feet of impervious surface area is proposed, resulting in a total volume of 500 cubic feet of stormwater runoff that must be controlled/mitigated using structural and non-structural BMPs. As noted in this Appendix, no greater than 25% of the required runoff volume of 500 cubic feet may be managed using nonstructural BMPs ( $500 \text{ cubic feet} \times 25\% = 125 \text{ cubic feet, maximum}$ ). Using a combination of tree plantings, tree preservation, minimizing soils compaction and planting uncompacted areas with meadow ground cover condition results in nonstructural control of 76.8 cubic feet of runoff (42 cubic feet + 21 cubic feet + 13.8 cubic feet). Since this amount is less than 25% of the total required volume to be managed, the full volume of these non-structural BMPs may be accounted for. Structural BMPs of infiltration trench, rain garden, and dry well are shown to control 462.4 cubic feet of volume with this sample improvement project (150.8 cubic feet + 155.3 cubic feet + 155.3 cubic feet). Therefore, since structural and non-structural BMPs control 539.7 cubic feet of runoff volume, the design in this example satisfies the Small Projects Stormwater Management requirement to control at least 500 cubic feet of stormwater runoff volume.



# **§ 164-107. Permitted signs in C Commercial and AO Administrative Office Districts.**

In Commercial and Administrative Office districts, the following signs shall be permitted, and no other:

- A. Any sign permitted in a residential district, provided that the use to which it refers is permitted in a Commercial and Administrative Office districts.
- B. Signs in connection with tourist homes or rooming houses on the same lot therewith, provided that the area of any one side of such sign shall not exceed six square feet and five feet of sign height and provided that not more than one such sign shall be erected on any one street frontage of any property in single and separate ownership.
- C. A business or commercial sign or a series of signs on the same lot as the use to which it refers, or upon a different lot owned by the user in the case of a directional sign, provided that the total sign area on any one street frontage of any property in single and separate ownership conforms to the following area requirements which are based upon building frontage limitations:
  - (1) Thirty square feet for those establishments where the building frontage along any one principal road is 40 feet or less.
  - (2) The allowable area of a sign may be increased by a maximum of one square foot for every three additional feet of building frontage in excess of 40 feet.
  - (3) In order to encourage users to provide the community with an attractive, unified outdoor advertising scheme, it is further provided that, if the user chooses to mount a sign or series of signs flat against the building facade (a sign may not extend more than six inches outward from the facade), the allowable area of the sign may be increased by 15%.
  - (4) Under no circumstances shall the total maximum sign area exceed 80 square feet.
  - (5) Maximum sign height shall be 12 feet for freestanding signs and 18 feet for signs attached to building walls.
- D. A business or commercial sign for an establishment not situated on a primary highway may, with the consent of the owner of the affected property and as a special exception granted by the Zoning Hearing Board, be located at the nearest primary highway intersection to that establishment, provided that the combined area of this sign and the primary sign located at the place of business do not exceed the area specified in § 164-107C of this article. Maximum sign height shall be 12 feet.
- E. Business and commercial signs on multiple-occupancy lots when erected in accordance with one of the following prescribed options:
  - (1) A sign or a series of signs may be mounted flat against the facade of each establishment located within a multiple-occupancy property, provided that the total area and sign height of all signs or series of signs shall conform to the requirements specified for business and commercial signs in § 164-107C of this article; or
  - (2) Signs may be attached to the facade of each establishment and a freestanding multiple

directory sign may be erected, provided that the following conditions are met:

- (a) The total area of signs attached to the facade of each establishment may not exceed 20 square feet.
  - (b) With respect to a multiple directory sign, the amount of space allowed for the purpose of advertising the name of an individual establishment shall not exceed four square feet. In addition, the multiple directory sign is permitted an additional 20% of the total area of the sign to identify the name of the complex or site.
  - (c) The multiple directory sign shall only be used for the purpose of identifying the names and/or addresses of the establishments within individual buildings and shall preclude the use of any other freestanding signs for the said property on the same street frontage.
  - (d) Maximum sign height shall be 12 feet for freestanding signs and 18 feet for signs attached to building walls.
- F. For shopping center uses, signs may be mounted flat against the facade of each establishment and a freestanding sign indicating the name of the shopping center may be erected, provided that the following conditions are met:
- (1) A sign or series of signs may be mounted flat against the facade of each establishment, provided that the total area of all signs or series of signs shall conform to the requirements for business and commercial signs set forth in § 164-107C of this article.
  - (2) A freestanding sign identifying the name of the shopping center, provided that the area of any one side shall not exceed 100 square feet or a total area on all eligible sides of 200 square feet, with a maximum sign height of 18 feet, and provided further that the location shall be approved by the Township Supervisors in connection with the required development plan.
- G. A garden apartment sign on the same lot as the use to which it refers or upon a different lot owned by the user in the case of a directional sign, provided that the total sign area on any one street frontage conforms to the following limitations:
- (1) Twenty square feet for those garden apartment complexes where the street frontage along any one principal road is 200 feet or less.
  - (2) The allowable area of a garden apartment sign may be increased if authorized as a special exception by the Board of Supervisors by a maximum of one square foot for every 10 feet of street frontage in excess of 200 feet.
  - (3) Under no circumstances shall a garden apartment sign with an area in excess of 40 square feet be permitted.
  - (4) Maximum sign height shall be 12 feet.
- H. Real estate signs for sale or rental of commercial properties, said signs not to exceed 40 square feet and sign height of 12 feet. Residential sale or rental signs in a commercial district shall comply with § 164-106E.

- I. For commercial premises located in the C Commercial District, one electronic changeable copy sign attached to a permitted on-premises freestanding sign shall be allowed per premises, providing it meets the following regulations:
- (1) Each message displayed on the electronic changeable copy sign must be static or, if it is a scrolling or flashing message, must be depicted for a minimum of 10 seconds before moving to the next part of the text.
  - (2) Signs which depict time and temperature are permitted to allow for a minimum of five seconds of depiction of the time and temperature before moving on to the next part of the message.
  - (3) Where text is displayed on a background, the text shall be brighter than the background (i.e., dark text shall not be displayed on a bright background).
  - (4) The letter height in electronic changeable copy must be at least 12 inches if all caps, or 11 inches if the message contains lower- and uppercase letters.
  - (5) No freestanding electronic changeable copy sign shall exceed 40% of the total allowable sign face area for any on-premises freestanding sign. In addition, the maximum height of an electronic changeable copy sign shall conform to the standards as specified in § 164-107C.
  - (6) On-premises freestanding electronic changeable copy signs shall not be illuminated more than one-half hour before the time at which the premises is open to the public or more than one-half hour after the time at which the premises is closed to the public, or 10:00 p.m., whichever is later, except in the case of twenty-four-hour businesses, where the illumination must be dimmed or turned off between the hours of midnight and 4:00 a.m.
  - (7) The display may only be used to advertise goods and services sold on-premises, time and temperature, and public service announcements.
  - (8) The addition of any electronic changeable copy sign to any nonconforming freestanding sign is prohibited.
  - (9) Electronic changeable copy signs shall also be subject to the following regulations:
    - (a) They shall not be permitted on any residential land use.
    - (b) They shall not be permitted to be located within 75 feet of any traffic signal or flashing light installation authorized by a Pennsylvania Department of Transportation permit.
    - (c) Any premises with an electronic changeable copy sign shall not be permitted to have any other freestanding or monument sign on the property, with the exception of shopping centers or plazas with multiple businesses, where multiple signs to identify each business are otherwise permitted.
  - (10) Animation and streaming video is prohibited.

(11) Electronic changeable copy signs shall not be permitted in any zoning district except C Commercial.

J. Where a lot or tract has more than one street frontage, a freestanding sign shall only be permitted to be placed along the street of highest classification.

**LOWER SALFORD TOWNSHIP  
BOARD OF SUPERVISORS**

**MONTGOMERY COUNTY, COMMONWEALTH OF PENNSYLVANIA**

**RESOLUTION NO. 2026-04**

**PRELIMINARY LAND DEVELOPMENT APPROVAL**

**Orleans Subdivision – 488 Harleysville Pike**

**WHEREAS, ORLEANS CONSERVATORY GROUP PARTNERS, LP,** (the “Developer”) is the developer of a tract consisting of 8.382 acres (net) located at 488 Harleysville Pike in Lower Salford Township, Montgomery County, Pennsylvania, more particularly identified as Montgomery County Parcel No. 50-00-02536-00-6 (the “Property”); and

**WHEREAS,** Developer proposes to develop the Property with twenty-six (26) townhouse dwelling units, taking access from Harleysville Pike via new private roads, stormwater management facilities, landscaping, a paved trail, and related improvements (the “Development”); and

**WHEREAS,** the Development is more particularly shown on plans prepared by Arna Engineering, Inc., being plans consisting of twenty-four (24) sheets dated August 20, 2024, last revised October 31, 2025 (the “Plans”); and

**WHEREAS,** Developer has previously obtained and supplied or will obtain and supply to the Township all applicable permits from all Authorities, Agencies and Municipalities having jurisdiction in any way over the Development and any necessary offsite easements to legally discharge stormwater or connect to utilities; and

**WHEREAS,** the Developer desires to obtain preliminary land development approval of the Plans from Lower Salford Township in accordance with Section 508 of the Pennsylvania Municipalities Planning Code.

**NOW, THEREFORE, BE IT RESOLVED** that Lower Salford Township hereby grants preliminary approval of the land development shown on the Plans described herein, subject, however, to the following:

1. At this time, the Lower Salford Township Board of Supervisors waives strict compliance with the following provisions of the Lower Salford Township Subdivision and Land Development Ordinance:

a. Section 142-15.C, requiring that the Plans depict existing features within 100 feet of the tract boundaries. A partial waiver of this requirement is granted to permit Developer to provide information regarding existing features within 50 feet of the boundaries of the Property. The Developer will also provide the Township with an aerial image showing the area surrounding the Property.

b. Section 142-29 Figure 4.1, requiring an equivalent right-of-way of 50 feet in width for the residential streets proposed as part of the Development. A waiver of this requirement is granted to permit the Developer to not provide equivalent rights-of-way for both proposed residential streets, which will be privately owned and maintained.

c. Section 142-31.K(1), requiring a minimum of 800 feet between intersections for streets along principal arterial roads. A waiver of this requirement is granted to permit the Developer to provide a separation of 238.6 feet between proposed Road A and Cheswyck Drive so that proposed Road A aligns with Meetinghouse Road at its intersection with Harleysville Pike, consistent with the requirements of the highway occupancy permit issued by the Pennsylvania Department of Transportation's ("PennDOT").

d. Section 142-33.A, requiring a clear sight triangle of 300 feet along principal arterial roadways. A waiver of this requirement is granted to permit the Developer to provide a clear sight triangle of 65 feet along proposed Road A, given that proposed Road A will serve a

low-density residential area and will also be controlled with a stop sign. Sight triangle lengths of 300 feet are provided along the principal arterial road (i.e., Harleysville Pike).

e. Section 142-34.E(2), requiring that driveways serving individual dwelling units be located at least 150 feet from any street intersection. A partial waiver of this requirement is granted to allow the Developer to provide driveways for units 8 through 15 within 150 feet of the intersection of proposed Road A and proposed Road B, as depicted on the Plans. The partial waiver is granted in consideration of the low volume, low speed, residential traffic anticipated within the Development.

f. Sections 142-39.B(2) and 142-42.F(2), requiring grading at a maximum slope of 4H:1V. A partial waiver of this requirement is granted to permit grading for slopes of 3H:1V in accordance the maximum allowable side slopes as listed in the Pennsylvania Department of Environmental Protection ("PADEP") Erosion and Sedimentation Control Manual and in order to maximize the basin size while minimizing the disturbance of existing natural features and resources on the Property. Retaining walls are also proposed within a portion of the stormwater management basin. Structural plans and design calculations for each wall satisfactory to the Township Engineer shall be submitted by the Developer.

g. Section 142-41.C(12), requiring that all shared-use paths be located no nearer than five (5) feet from the edge of a 25-foot shared use path right-of-way. A waiver of this requirement is granted to permit the Developer to provide a shared-use path along the edge of the right-of-way, as depicted on the Plans, to maximize distance between the proposed shared-use path and adjoining residential properties.

h. Sections 142-42.C and 142-42.C.3, requiring that a total of 666 trees be provided as replacement trees in conjunction with the Development. A partial waiver of these requirements is granted to permit the Developer to provide 80 replacement trees in total,

consisting of a combination of shade trees, ornamental trees and evergreen trees, as shown on the Plans. In addition to the landscaping shown on the Plans, Developer has proposed to supplement certain required landscape buffering on the Property along the southern side of proposed Road A and at the end of the cul-de-sac of proposed Road A as more particularly shown on the plans attached hereto as Exhibit "A" ("Additional Plantings"). The Additional Plantings are subject to the review and approval of the Township Engineer, and the Additional Plantings at the cul-de-sac bulb shall be 8-10 feet at the time of planting, where the Ordinance requires 6-8 feet. Developer shall also incorporate the planting of shrubs to the satisfaction of the Township Engineer along the portion of trail to be constructed on the adjoining property to the east, which will be owned by the Township, and Developer shall revise the plans to depict a 2-rail, split-rail wood fence with mesh along boundary lines of the existing homes that front on Cheswyk and Windsor Drives and extending to the Township open space, with a note on the Plans indicating that the proposed fence will be owned and maintained by the homeowners association for the Development. Developer also agrees to make a voluntary contribution to the Township in the amount of Seventy-five Thousand and 00/100 Dollars (\$75,000.00) in lieu of any remaining replacement tree requirement. Further, Developer agrees to post financial security guaranteeing all required landscaping for a period of 18 months after the project is certified as complete, in accordance with the required development agreement for the Development. As conditioned herein, the Developer has proposed the maximum amount of landscaping required by the Ordinance within the limited area of disturbance for the Development.

i. Section 142-42.E(3)(d), requiring that street trees be distributed evenly along the Property's frontage. A partial waiver of this requirement is granted to allow the Developer to provide the required number of street trees with a certain number of such trees being planted in locations on the Property other than along road frontage. This partial waiver is granted



in consideration of the limited available planting space along the interior private roads due to driveway locations and the location of required utilities.

j. Section 142-42.G(5)(b), requiring Type 6 Element Screening between the proposed residential yard areas and Harleysville Pike. A partial waiver is granted to permit the Developer to provide ornamental plantings and evergreen trees along Harleysville Pike in order to enhance the effectiveness of the buffer, and to provide a non-continuous, two- to three-foot high berm where a continuance berm is required. The non-continuous berm is proposed in order to accommodate and maintain existing drainage patterns from Harleysville Pike. The details of the proposed berm remain subject to the review, comment and approval of the Township Engineer in connection with future plan review submissions by the Developer.

k. Section 142-42.G(5) Figure 4.5, requiring Type 6 Element Screening between detention basins and adjacent residential and office uses. A partial waiver is granted to allow the Developer to utilize the required property line buffer plantings to satisfy the screen buffer requirements, since the required property line buffer consists of higher density plantings and there is a lack of space for the screen buffer.

2. At this time, the Lower Salford Township Board of Supervisors waives strict compliance with the following provisions of the Lower Salford Township Engineering Standards (“LSTES”):

a. LSTES 106, requiring that Class A Concrete curbing be used for all curbing in the Development. A partial waiver of this requirement is granted to permit the Developer to provide Belgium Block curb in connection with proposed Roads A and B, which will be privately owned and maintained. The required concrete curbing is provided along Harleysville Pike.

b. LSTES 107.7(B)(3), requiring a minimum basin bottom slope of 2%. A waiver of this requirement is granted to permit the Developer to provide flat-bottom infiltration basins to promote groundwater recharge and infiltration in accordance with PADEP requirements.

3. Prior to final approval of the Plans, Developer shall revise the Plans to resolve to the satisfaction of the Township, all issues set forth in the Township Engineer's review letter dated December 4, 2025, the entire contents of which are incorporated herein by reference and a true and correct copy of which is attached hereto as Exhibit "B", and all subsequent review letters addressing the contents therein issued by the Township Engineer.

4. Prior to final approval of the Plans, Developer shall revise the Plans to resolve to the satisfaction of the Township, all issues set forth in the Township Traffic Consultant's review letter dated December 4, 2025, the entire contents of which are incorporated herein by reference and a true and correct copy of which is attached hereto as Exhibit "C", and all subsequent review letters addressing the contents therein issued by the Township Traffic Consultant.

5. Prior to final approval of the Plans, Developer shall revise the Plans to depict a bus waiting area consisting of a concrete pad, at a size, acceptable to the Township Engineer and Township Traffic Consultant as part of the proposed sidewalk along Harleysville Pike to provide an area for school age children to access the bus to school.

6. Prior to recording the Plans, Developer shall enter into a Land Development and Financial Security Agreement ("Agreement") with Lower Salford Township. The Agreement shall be satisfactory to the Township Solicitor, and the Developer shall obligate itself to complete all of the required improvements shown on the Plans following final approval in accordance with Township criteria and specifications as well as to secure the completion of the said required

improvements by posting satisfactory financial security as required by the Pennsylvania Municipalities Planning Code.

7. Although the maintenance of all stormwater collection, detention and conveyance facilities shall be the responsibility of Developer, its successors and assigns, Developer shall, prior to the recording of the Plans, execute a declaration to reserve easements in favor of the Township so that the stormwater facilities shown on the Plans following final approval may be maintained by the Township (with all expenses charged to the party responsible for such maintenance) in the event that the maintenance responsibilities with regard to the stormwater facilities are not fulfilled after reasonable notice to do so. The terms and conditions of the declaration shall be satisfactory to the Township Solicitor, and the declaration shall be recorded simultaneously with the Plans.

8. Prior to recording the Plans, Developer shall provide the Township with homeowners association documents for the Development satisfactory to the Township Solicitor addressing, among other things, the required maintenance of proposed stormwater facilities, use and maintenance of the proposed Roads A and B, fencing, sidewalks, on-site and off-site shared use paths, utility installations, lighting, and the responsibilities of the homeowners for other shared improvements. The homeowners association documents shall be recorded contemporaneously with the Plans.

9. Developer shall be required to pay to the Township a Traffic Impact Fee, which is attributable to the projected “new” weekday afternoon peak hour trips generated by the Development, as set forth below. The total Traffic Impact Fee shall be in the amount of Thirty-eight Thousand Three Hundred Twenty-four and 00/100 Dollars (\$38,324.00). The fee is calculated based on the generation of thirteen (13) total “new” weekday afternoon peak hour trips (15 “new” peak hour trips less a credit of 2 “new” trips to the two existing single-family homes) at

a rate of Two Thousand Nine Hundred Forty-eight and 00/100 Dollars (\$2,948.00) per trip, in accordance with the Lower Salford Township Traffic Impact Fee Ordinance.

10. Developer shall be required to pay to the Township a Recreation Impact Fee in the total amount of Thirteen Thousand and 00/100 Dollars (\$13,000.00). The fee is calculated based on the construction of twenty-six (26) total “new” dwelling units at a rate of \$500.00 per new dwelling unit, in accordance with the Lower Salford Township Code of Ordinances.

11. Prior to recording the Plans, Developer shall provide the Township with all required approvals from any outside agencies having jurisdiction over the Development, including, but not limited to: the Montgomery County Conservation District, PADEP, PennDOT, North Penn Water Authority, the Montgomery County Health Department, and the Lower Salford Township Authority.

12. The Development shall be constructed in strict accordance with the content of the Plans, notes on the Plans and the terms and conditions of this Preliminary Approval Resolution.

13. The cost of accomplishing, satisfying and meeting all of the terms and conditions and requirements of the Plans and notes to the Plans and this Preliminary Approval Resolution shall be borne entirely by Developer and shall be at no cost to the Township.

14. Prior to the start of construction of required improvements, Developer shall notify the Township Manager and the Township Engineer and schedule a preconstruction meeting with the Township. Developer shall provide the Township Manager and the Township Engineer with at least seventy-two (72) hours notice prior to the initiation of any grading or ground clearing (regardless of whether such grading or ground clearing is for the construction of private or public improvements) so that the Township may certify that all appropriate erosion and sedimentation control facilities have been properly installed and also that snow fencing or other types of

boundary markers (acceptable to the Township) have been installed to protect such trees as are specifically proposed not to be eliminated during the construction of the Development.

15. Under the provisions of the Pennsylvania Municipalities Planning Code, the Developer has the right to accept or reject conditions imposed by the Board of Supervisors upon preliminary approval. In the absence of an appeal or a notice of rejection filed in writing within thirty (30) days from the date of this Resolution, the conditions set forth herein shall be deemed to have been accepted by Developer. If the Township receives written notice of an appeal or rejection of any of the conditions set forth herein within thirty (30) days from the date of this Resolution, this approval and the waivers granted in Paragraph 1 (which waivers are granted contingent upon the acceptance of the conditions set forth herein) shall be deemed to be automatically rescinded and revoked and the application shall be considered denied based upon the failure to fully comply with all of the sections set forth in Paragraph 1 and the conditions set forth above, all as authorized by Section 508 of the Pennsylvania Municipalities Planning Code.

**APPROVED** at the public meeting of the Lower Salford Township Board of Supervisors held on February 4, 2026.

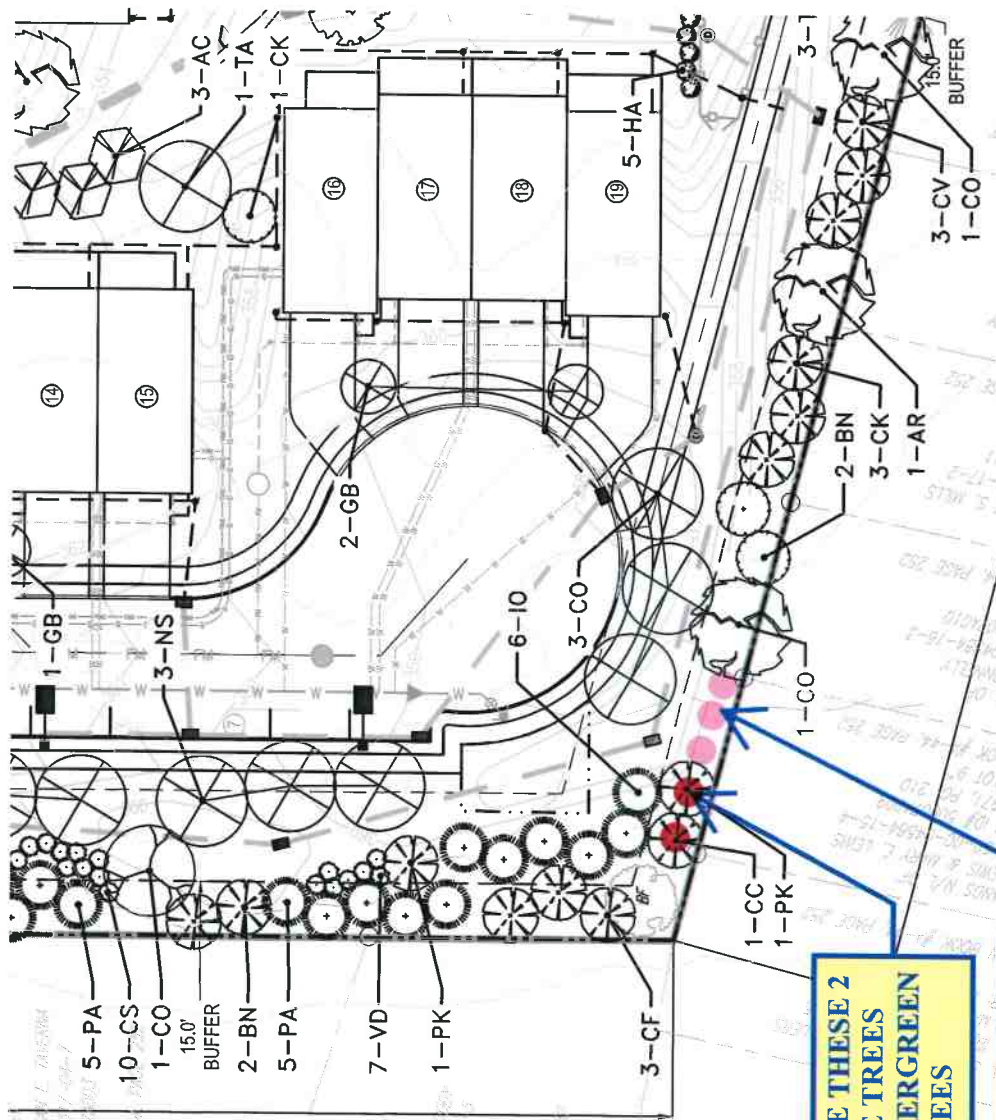
**LOWER SALFORD TOWNSHIP**

By: \_\_\_\_\_  
**Keith A. Bergman**, Chairman,  
Board of Supervisors

Attest: \_\_\_\_\_  
**Joseph S. Czajkowski**, Secretary

## **ADDITIONAL LANDCAPING PLAN**

**EXHIBIT “A”**



**REPLACE THESE 2  
SHADE TREES  
WITH EVERGREEN  
TREES**

**3 NEW  
EVERGREEN  
TREES**

**SKETCH-1  
2025-12-10  
JPO HARLEYSVILLE TRACT  
EXCERPT FROM LANDSCAPE PLAN,  
DWG. NO LP-1, LAST REVISED 10/31/25  
N.T.S.**



CHESWYCK DRIVE  
(T-481)

POSSIBLE  
ADDITIONAL  
LANDSCAPING  
AREAS

MEDIUM INTENSITY BUFFER  
430'

3-AC

1-AR

1-CK

5-PO

1-AR

3-PS

1-PK

1-AR

5-PA

10-CS

1-CO

15.0'  
BUFFER

2-BN

5-PA

7-VD

1-PK

1-AM

1-LS

1-TA

4-NS

2-GB

PRIVATE ROAD A

1-GB

4-GB

2-CO

3-ZS

1-GB

3-NS

2-GB

LIGHT(TYP.)

SKETCH - 2  
2025-12-10

JPO HARLEYSVILLE TRACT  
EXCERPT FROM LANDSCAPE PLAN,  
DWG. NO LP-1, LAST REVISED 10/31/25  
N.T.S.



## **TOWNSHIP ENGINEER REVIEW LETTER**

**EXHIBIT "B"**

December 4, 2025  
Ref: #4601-070

Lower Salford Township  
379 Main Street  
Harleysville, PA 19438

Attention: Michael Beuke, Director of Building and Zoning

Reference: JP Orleans Subdivision & Land Development  
488 Harleysville Pike  
Preliminary/Final Plan – 3<sup>rd</sup> Review  
Tax Parcel No. 50-00-02536-00-6

Dear Mike:

We have reviewed the Preliminary/Final Plan pertaining to the above-referenced residential subdivision and land development that was forwarded to our office. The subject plans consist of twenty-four (24) sheets as prepared by Arna Engineering, Inc. dated August 20, 2024, last revised October 31, 2025; however, Sheets 23 and 24, the landscaping plans, were prepared by InFocus Planning dated August 20, 2024, last revised October 31, 2025. The following reports and supplemental plans were also included for review:

- Post-Construction Stormwater Management Report prepared by Arna Engineering dated August 20, 2024, last revised October 29, 2025.
- Preliminary Architectural Plans (7 sheets) prepared by JP Orleans dated October 31, 2025.

We note the project site consists of 9.15 acres (gross) and 8.38 acres (net), is situated on the southeast side of Harleysville Pike (SR 0113), and is within the R-4 Medium-Density Mixed Dwelling Residential Zoning District. An existing dwelling, detached garage, and barn with a pool will all be razed. The proposed land development will create 26 single-family, attached dwelling units in six building clusters in an unlotted development. There will be two triplex buildings (units 13-15 and 20-22), two quadruplex buildings (units 16-19 and 23-26), and two, six-unit townhouse buildings (units 1-6 and 7-12). The plans propose two private roads, Road A and Road B. Road A will be an east-west oriented cul-de-sac road extending from Harleysville Pike to the southeast corner of the tract and serving seven dwellings. Road A will provide 13 parallel overflow parking spaces along its westerly curb line only. Road B will be a north-south oriented cul-de-sac road perpendicular to Road A and serving 19 dwellings with an emergency access at the end of the cul-de-sac. A 2.46-acre common open space is proposed along the eastern part of the tract, with an eight-foot-wide asphalt trail, within a 25-foot-wide access easement, extending from Road A's cul-de-sac to the northernmost tract boundary which abuts open space of the Park Crossing residential development. Stormwater will be managed by infiltration basins located north of units 19 and 26. A 100-foot-wide Pennsylvania Power and Light (PP&L) easement crosses the northeast corner of the site through the common open space.

We have performed a review of the proposed subdivision and land development and hereby offer the following comments for consideration by Township officials:

## **I. ZONING ISSUES**

The following comments are based upon the provisions of the Lower Salford Township Zoning Ordinance:

1. The proposed triplex buildings, quadruplex buildings, and townhouse buildings are uses permitted by right in the R-4 zoning district where served by public sewers and water. The applicant has provided a will serve letter from the North Penn Water Authority and correspondence noting approval of sanitary sewer EDUs from the Lower Salford Township Authority. (164-46.A)
2. The proposed eight-foot trail through the common open space terminates at the property line common to parcel 50-00-02530-49-8 and notes "asphalt trail connection to adjacent property to be completed by others" on Sheet 4. Note 1 below the Zoning Data Table on Sheet 4 states that the trail connection will be made to the adjacent Township parcel in lieu of meeting the active recreation area requirements. The applicant must provide a detail of the trail and a plan illustrating the connection on the abutting parcel to determine if a trail easement or right-of-way is required. Grading and trail specifications are also required to be shown. If a connection is not made to the Park Crossing trail system, a zoning variance may be required. (164-50.F and 164-22.B)
3. We have the following comments regarding open space and active recreation land:
  - a) At least 5% of the total gross tract area must be set aside for active recreation unless the Board of Supervisors determines that provision of this open space will preclude the completion of a connecting trail. The applicant proposes common open space but no active open space. Per Note 1 of the zoning table on Sheet 4, the Board of Supervisors must approve the community path system in-lieu of active open space. As no active open space area is designated, the Board of Supervisors must confirm that the trail connection to the existing trail at parcel 50-00-02530-49-8 (Park Crossing) is satisfactory. (164-22.A.1)
  - b) Note 23 on the Record Plan indicates a blanket easement will be established to accommodate public access by pedestrians and cyclists. The easement agreement must be prepared and executed to the satisfaction of the Township Solicitor.
4. Typical architectural renderings providing building elevations for each dwelling were provided. We have the following comments on the architectural plans:
  - a) The percentage of transparent openings on "facing walls" for units 6/7, 15/16 and 22/23 may not exceed 3%. It is noted that the calculation on Sheet 6 of the architectural plans has not changed from the previous submission and is proposing 36 s.f. of glass (transparent openings), with a maximum allowable of 40 s.f. However, when adding the square footage of the windows and glass-framed doorway, the total square footage adds to 42.7 s.f. which is greater than the maximum allowable. This discrepancy must be addressed. (164-47.C)

- b) Private individual trash receptacles are to be used. An enclosed area attached to the dwelling unit is to be used for receptacle storage. The location of the receptacle storage is shown at the garage interior of the typical unit on the architectural plans. This typical unit interior layout for the garage/trash area should be shown on the Record Plan. This layout must be maintained during the formal building permit submission, otherwise, design details for storage areas will be necessary. HOA documents may need to prohibit outdoor storage of receptacles. (164-50.G.2)
- 5. The previously submitted Regulated Waters Delineation indicates two watercourses and one wetland area on the tract. Permitting for all construction activities and improvements affecting these features are required from all agencies having jurisdiction. (164-87.B)

## **II. SUBDIVISION AND LAND DEVELOPMENT ISSUES**

The following comments are based upon the requirements of the Lower Salford Township Subdivision and Land Development Ordinance:

- 1. The design of water and sanitary sewer facilities requires approval of the Lower Salford Township Authority and Planning Module Approval (or Planning Exemption) from the PADEP.
- 2. The applicant has indicated that two existing utility poles and wires will be relocated along Harleysville Pike to accommodate proposed road improvements. The location of the utility poles after the final grading and the improvements are completed must be shown on the plan. An adjustment to the location of proposed street trees may be necessary once the new position of the poles and wires is known. (142-42.E.3.c.)
- 3. A Type 1 or Type 6 Site Element Screen is required for the two aboveground stormwater management facilities. Notes within the Landscape Requirements Chart on Sheet 24 indicate that the property line buffer provided in these areas is intended to satisfy the minimum Site Element Screen requirements. This must be approved by the Board of Supervisors, with the recommendation of the Township Planning Commission. (142-42.G.2. and 142-42.G.3.)
- 4. The applicant has shown a 15-foot-wide emergency access connection with a removable bollard from Harleysville Pike to the Road B cul-de-sac, adjacent to Unit 1. The Township Fire Marshal must review the plans and confirm the detail of the removable bollard on Sheet 5 is acceptable. (142-32.B.1.d and 164-50.H)
- 5. The extent of depressed curb is now shown on Sheet 4. A detail of the curb showing the reveal at the driveways must be on the plans.
- 6. A Recreation Impact Fee will be required for each unit. (142-49.A)
- 7. The "Asphalt Walkway Pavement" detail on Sheet 5 must be revised to agree with the Township's standard Bike Path detail. (LSTES-RD107)
- 8. We recommend the "Typical Roadway Section Private Road A" and "Private Road B" details be revised to include 6 in. of 2A stone, 4 in. of base course, 2 in. of binder course, and 1½ in. of wearing course per the Township's standard road detail. (LSTES-RD100)

9. The following 14 waiver requests from the Lower Salford Township Subdivision and Land Development Ordinance are listed on Sheet 4 and in a letter from Arna Engineering, dated August 20, 2024, last revised October 31, 2025: (142-27)

- a) From Section 142-15.C which requires existing features within 100 feet of tract boundaries to be shown. A partial waiver is requested to show information within 50 feet of the tract boundary on all sides of the property except Harleysville Pike, for which the required information is provided.
- b) Sections 142-16 and 142-17, which require separate submission of preliminary and final plans.

The applicant requests this waiver as a number of submissions for the project were previously reviewed by the Township.

- c) From Section 142-29 Figure 4.1 which requires a 50-foot-wide right-of-way width for residential streets. The plan proposes no right-of-way for interior Roads A and B, which are to be private.
- d) Section 142-31.K.1, requiring a minimum intersection spacing of 800 feet for principal arterial roadways.

The plan shows the distance between the centerline of Cheswyck Drive and the centerline of proposed Road A to be 236.8 feet. Proposed Road A will be directly aligned with Meetinghouse Road per direction from PennDOT. We defer to the Township Traffic Engineer for further comment on this waiver request.

- e) Section 142-33.A, requiring a clear sight triangle of 300 feet along principal arterial roadways.

The plans depict a 75-foot leg into the site at Road A, with 300-foot legs parallel to the Harleysville Pike cartway. The applicant notes that the access to Harleysville Pike will be a low-density roadway with stop-controlled access. We note that one proposed planting falls within the limits of the proposed reduced sight triangle at the intersection of Road A and Road B.

- f) From Section 142-34.E.2 which requires driveways serving the individual residential units to be located a minimum of 150 feet from street intersections. This request is applicable to proposed Units 8 through 15 only, which have driveways within 150 of the intersections of Roads A and B.
- g) Sections 142-39.B.2 and 142.42.F.2, requiring basin side slopes not to be steeper than 4H:1V.

The applicant requests 3H:1V side slopes with a retaining wall proposed along the easterly side of each infiltration basin. Any waiver, if granted, should be contingent upon the submission of structural plans and design

calculations for each wall prepared by a registered professional engineer licensed in the Commonwealth of Pennsylvania.

- h) Section 142-41.C.12, requiring shared-use paths to be located no closer than five feet to the edge of the 25-foot shared-use path right-of-way.

The proposed 8-foot-wide trail is directly adjacent to the eastern easement line.

- i) Section 142-42.C & 142-42.C.3, requiring replacement trees at one-caliper inch of replacement per one inch of non-specimen tree to be removed and two-caliper inches of replacement per one inch of specimen tree removed. The replacement trees are to be shade trees.

The applicant requests a partial waiver to plant 30 canopy trees, 13 evergreen trees, and 37 ornamental trees (80 trees, 240 caliper inches) to count toward meeting a portion of the replacement tree requirements. A total of 666 trees, 3" minimum caliper (1,998 caliper inches) are required based on current calculations.

- j) Section 142-42.E.3.d, requiring that street trees be distributed along the frontage of the property.

The applicant is requesting a partial waiver from this requirement to plant the required number of street trees throughout the site and not just along the interior private road frontages due to lack of space for planting along the interior private roads. We note that four required street trees will be planted interior to the site.

- k) Section 142-42.G.5.b, requiring a Type 6 Site Element Screen between the attached residential rear yards and Harleysville Pike.

The applicant is requesting a partial waiver from this requirement to only provide the ornamental plantings along with the evergreen trees without a two to three-foot high continuous berm between the townhouse buildings and Harleysville Pike.

- l) Section 142-42.G.5, requiring a Type 6 Site Element Screen between the detention basins and adjacent Residential and Office uses.

The applicant is requesting a partial waiver from this requirement to use the property line buffer planting to satisfy the screen requirements.

- m) From Section 106 of the Lower Salford Township Engineering Standards (LSTES) requiring all curbing to be of Class A concrete. The applicant requests use of Belgian Block curbing at the interior roadways.

- n) From LSTES Section 107.5.A which requires a minimum basin bottom slope of 2%. The basin bottoms are both shown at 0%.

### **III. STORMWATER MANAGEMENT, GRADING, AND EROSION CONTROL**

The following comments pertain to stormwater management, storm drainage, grading, and erosion and sedimentation control aspects of the current plan submission and are based upon the requirements of the Subdivision and Land Development Ordinance (SALDO), the Stormwater Management Ordinance (S.M.O) as referenced in Article IX of the SALDO, and the Lower Salford Township Engineering Standards (LSTES). The project is located within the watershed of the West Branch Skippack Creek.

1. The applicant is advised that an NPDES Permit is required for the proposed 5.90-acre limit of disturbance. Approval from the Montgomery County Conservation District will be required. (142-107)
2. Chapter 105 General Permits will be required from the Pennsylvania Department of Environmental Protection to relocate the existing watercourse. We note a Joint Permit Application was made in October of 2025. Issued permits must be furnished to the Township when they are approved.
3. The plan proposes a 142-linear-foot retaining wall at Infiltration Basin No. 1 and a 214-linear-foot retaining wall at Infiltration Basin No. 2. While an informational detail has been provided on Sheet 5, the wall design must account for the hydrostatic forces generated when the basin is holding stormwater. A note has been added to the Modular Block Wall Section detail on Sheet 5 stating the designer will take into consideration the 100-year water surface elevations while designing the retaining wall. This information must be submitted to the Township prior to construction.
4. We note in the applicant's response that the HOA will take responsibility for inlets CB 2.13, CB 2.14, and the interconnecting pipe located within Harleysville Pike. A maintenance agreement with the Township must be executed prior to recording.

### **IV. GENERAL**

The following items are general engineering considerations pertaining to the project that were noted by our office during the course of review of the current plan submission:

1. The Utility Plan and Soil Erosion and Sediment Pollution Control Notes & Details are both numbered Sheet 13 (Sheets CE-501 and CU-100). We believe that the Utility Plan (CU-100) should be labeled Sheet 15.
2. We note that the wall separating Unit 1 and the emergency access driveway has a maximum height of 7 feet and poses a fall hazard to pedestrians passing through the access which interconnects the Road A cul-de-sac and Harleysville Pike sidewalk. Fencing is now proposed atop the wall, and should be evaluated by the Township Building Code Official.
3. The proposed mailbox area southwest of the Road A and B intersection must be approved by the United States Postal Service.
4. A Transportation Impact Fee will be required as determined by the Township Traffic Engineer.

5. An easement from PP&L to allow the trail through their easement must be submitted to the Township.
6. Review and/or approval from the following agencies is required:
  - a) Township Traffic Engineer
  - b) Montgomery County Conservation District
  - c) Pennsylvania Department of Environmental Protection
  - d) Fire Marshal/Harleysville Emergency Services
  - e) Lower Salford Township Authority
  - f) North Penn Water Authority
7. Proposed road names should be listed for review by the Planning Commission. The Township should consider requiring Road A to be named Meetinghouse "Circle" or "Court".
8. The existing fence in the right-of-way of Harleysville Pike, adjacent to TMP No. 50-00-00317-00-2 is shown to be removed. The applicant has noted that they want to discuss this item with the Planning Commission.
9. We note existing fence in the rear yards of the properties on Cheswyck Drive and Windsor Drive is shown to remain and will not be replaced. The replacement or installation of new fence along the property lines should be discussed with the Planning Commission. We believe representatives for the applicant had stated at previous Planning Commission meetings that a new fence would be installed if PennDOT did not require a left turn lane.

Very truly yours,  
CKS ENGINEERS  
Township Engineers

  
Michele A. Fountain, P.E.

MAF/klk

cc: Joseph Czajkowski, Township Manager (via email)  
Board of Supervisors (5) (via email)  
Planning Commission (7) (via email)  
LST Staff (3) (via email)  
Andrew Freimuth, Esquire, Township Solicitor (via email)  
LSTA (3) (via email)  
Stephanie Butler, Bowman (via email)  
Claire Warner, MCPC (via email)  
Orleans Conservatory Group Partners LP (via email)  
Christen Pionzio, Esquire, Hamburg, Rubin, Mullin, Maxwell & Lupin (via email)  
Anand Bhatt, ARNA Engineering (via email)  
File



**TOWNSHIP TRAFFIC CONSULTANT REVIEW LETTER**

**EXHIBIT "C"**

December 4, 2025

Joseph S. Czajkowski  
Township Manager  
Lower Salford Township  
379 Main Street  
Harleysville, PA 19438

**RE: Traffic Engineering Review #7 –Preliminary/Final Land Development Plans and Highway Occupancy Permit (HOP) Plans**

488 Harleysville Pike (SR 0113)  
Lower Salford Township, Montgomery County, PA  
Project No. 310786-01-001

Dear Joe:

Per your request, Bowman Consulting Group (Bowman) has completed a traffic engineering review for the proposed development at 488 Harleysville Pike (SR 0113). According to the materials provided in this submission, the proposed residential development will consist of a total of 26 townhouse units with access provided via a new local road along Harleysville Pike (SR 0113), directly opposite Meetinghouse Road. It should be noted that an emergency-only access is also proposed to Harleysville Pike (SR 0113) on the eastern end of the site.

The following documents were reviewed as part of the submission:

- Preliminary/Final Land Development Plans, prepared by arna Engineering Inc., last revised October 31, 2025.
- Response to Comments Letter, prepared by arna Engineering Inc., dated November 3, 2025.
- Waiver Request Letter, prepared by arna Engineering Inc., last revised October 31, 2025.
- Drawings for Construction of Access and Roadway Improvements associated with 488 Harleysville Pike, prepared by Traffic Planning and Design, Inc., dated November 5, 2025.
- Roadway Drainage Report, prepared by Traffic Planning and Design, revised November 5, 2025.
- Response to Comments Letter, prepared by Traffic Planning and Design, dated November 5, 2025.

Based on the review of the above listed documents, and the Township's *Subdivision and Land Development Ordinance (SALDO)* and *Zoning Ordinance (ZO)* requirements, Bowman offers the following comments for consideration by the Township and further action by the applicant as the project advances through the formal land development process.

**General Items**

1. A response letter must be provided with the resubmission detailing how each comment below has been addressed, and where each can be found in the resubmission materials (i.e., page number(s)) to assist in the re-review process. Additional comments may follow upon review of any resubmitted and more detailed plans during the land development process.

2. Since Harleysville Pike (SR 0113) is a state road, a Highway Occupancy Permit (HOP) will be required for any modifications/improvements within the Legal Right-of-Way along Harleysville Pike (SR 0113). The Township must also be copied on all studies, plan submissions, and correspondence between the applicant and PennDOT, and invited to any meetings among these parties. **Concurrent submissions of the land development plans and Highway Occupancy Permit (HOP) plans will aid in the review of the project and allow for consolidated review letters to be issued.**

#### **Preliminary/Final Land Development Plans**

3. **Section 142-41** of the **Subdivision and Land Development Ordinance** requires that shared-use paths shall also comply with the American Association of State Highway and Transportation Officials (AASHTO) standards for bicycle facilities. The minimum geometry requirements for a shared use path must be met. The typical shared use path minimum design speed is 18 mph, which requires a 60' minimum centerline radius. Increase the shared use path 50' horizontal curves to meet the 60' requirement.
4. Revise the "Asphalt Walkway Section" detail to reflect 1.5" wearing on 2" binder on 6" of subbase (No. 2A) in accordance with Lower Salford Standard Detail LR507 "Bike Path Detail".
5. The following discrepancies remain between the Land Development plans and the Highway Occupancy Permit plans. The designer(s) should verify the information on the plans and revise as necessary:
  - a. The "Required Right-of-Way Line to be Deeded to the Commonwealth" on the HOP plans is identified as "Ultimate Right-of-Way" on the LD plans.
  - b. The Site Access profile grading.
  - c. The pavement section for the proposed site access.

#### **Highway Occupancy Permit Plans**

6. Provide a copy of the Stormwater Maintenance Highway Occupancy Permit Plans and associated permit to the Township.
7. As previously stated, the HOP plans should reflect a "Required Right of Way Line to Be Deeded to the Commonwealth" at a location specified by PennDOT (i.e. typically provided 5' from the proposed curbline), and the remaining area to the Ultimate Right of Way should be offered to the Township for acceptance. Coordination (i.e. phone call) between the applicant, Township and Department may be required.
8. The pavement marking and signing plan should reflect a proposed 4" White lane edge line due to the widening/overlay within the limits of work.
9. The ADA ramps located at the proposed intersection are under the review of PennDOT as part of the Highway Occupancy Permit, unless otherwise noted in the PennDOT review. The final ADA binder package should be included with the next Township submission to confirm the ramps are consistent and compliant with the final roadway and access design.

## **Waiver Requests**

The following waivers have been requested on the plans. *Please note that Land Development Plans have not been submitted with the HOP plans; the waiver requests and notes below remain from our May 22, 2025 comment letter.*

**Section 142-31.K(1) Waiver Request** – Street intersection spacing. This section requires a minimum intersection spacing of 800 feet between the streets for principal arterial roads. The applicant is requesting a waiver from this section to provide a separation of 238.6 feet between the proposed Road A and Cheswyck Drive.

**Justification:** Since Harleysville Pike (SR 0113) is a PennDOT road, all intersections need to be designed in coordination with PennDOT and per PennDOT requirements. The proposed Road A has been designed to align with Meetinghouse Road per the direction from PennDOT, necessitating the waiver from the minimum intersection spacing of 800 feet between the private road and Cheswyck Drive.

**Response:** Since Road A has been designed to align opposite Meetinghouse Road per direction from PennDOT, and 238.6 feet of space currently exists between Cheswyck Drive and Meetinghouse Road under existing conditions on the opposite side of Harleysville Pike (SR 0113), Bowman does not object to this waiver request.

**Sections 142-33.C Waiver Request** – Clear sight triangle. This section requires a clear sight triangle of 300 feet along principal arterial roadway. The Applicant is requesting a waiver from this requirement to provide a 65-foot sight triangle along the proposed Road A.

**Justification:** The sight triangle lengths of 300 feet are provided along the principal arterial road (Harleysville Pike). The sight triangle leg along the proposed Private Road A is 65 feet long, as the Private Road A being a low-density stop-sign-controlled access, allowing adequate sight lines along Harleysville Pike.

**Response:** The clear sight triangle has been provided on the landscape plan to confirm that vegetation is not located within the clear sight triangle shown on the plans. It is noted that a sight triangle leg greater than 65 feet along the proposed access leg will have existing vegetation that is beyond the applicant's property frontage. Bowman does not object to this waiver request.

**Section 142-34.E.(2) Waiver Request** – Distance from street intersection – This section requires that the driveways for the individual residential units be located a minimum of 150 feet from any street intersection. The Applicant is requesting a partial waiver from this requirement to propose driveways for units 8 through 15 closer to the street intersection than the required 150 feet.

**Justification:** This waiver is necessary due to the unique shape of the property, existing natural resources and the location of existing street intersections of Meeting House Road and Harleysville Pike (SR 0113). Since the proposed private streets are dead-end cul-de-sac streets, the anticipated traffic is limited to the residences of this community and hence, the traffic on the private street will not block the proposed driveways.

**Response:** Since Roads A and B are proposed to be private and traffic is expected to be minimal along these roadways, and there are no sight distance obstructions to the intersections, Bowman does not object to this waiver request.

**LSTES Section 106 Waiver Request** – Curb construction – This section requires all curbing to be of Class A Concrete. The Applicant is requesting a partial waiver from this requirement to provide Belgian Block curb for the private roads A and B, while providing concrete curbing along Harleysville Pike.

**Justification:** This partial waiver is necessary to provide aesthetically pleasing and low maintenance Belgian Block curbs along the private roads A and B.

**Response:** Since Roads A and B are proposed to be private and Belgian Block is a suitable replacement for concrete curbs, Bowman does not object to this waiver request.

#### **Transportation Impact Fee Assessment**

In accordance with the *Lower Salford Township Impact Fee Ordinance*, the "new" weekday afternoon peak hour trip generation for the proposed development will be subject to the Township's Transportation Impact Fee, since it is located in the Transportation Service Area. This area has an impact fee of \$2,948 per "new" weekday afternoon peak hour trip. Based upon information provided in the TIS, the site is anticipated to generate 15 "new" peak hour trips during the weekday afternoon. Providing a credit of 2 "new" trips for the two existing single-family homes, the number of "new" trips subject to the transportation impact fee is 13, resulting in a transportation impact fee of **\$38,324**.

If the Township has any questions, or requires further clarification, please contact me at [sbutler@bowman.com](mailto:sbutler@bowman.com) or 267-419-1256.

Respectfully,



Stephanie L. Butler, P.E.  
Senior Project Manager

SLB/BMJ/MEE

cc: Lower Salford Board of Supervisors  
Lower Salford Township Planning Commission  
Michael Beuke, Lower Salford Township  
Holly Hosterman, Lower Salford Township  
Michele Fountain, P.E., CKS Engineers  
Don Lynch, Lower Salford Fire Marshal  
Andy Freimuth, Esq., Wisler Pearlstine, LLP  
Denise DuBree, LSTA  
Thomas Duffy, P.E., LSTA Engineer  
Mark Mattucci, LSTA Project Manager  
Claire Warner, Montgomery County Planning Commission  
John Gallagher, PennDOT District 6-0 Traffic Unit  
Chirag Thakkar, P.E., LEED AP, Arna Engineering, Inc.  
Eric Ostimchuk, P.E., PTOE, Traffic Planning and Design Inc.

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**LOWER SALFORD TOWNSHIP  
BOARD OF SUPERVISORS**

**MONTGOMERY COUNTY, COMMONWEALTH OF PENNSYLVANIA**

**RESOLUTION 2026 - 05**

**A RESOLUTION AUTHORIZING THE SUBMISSION OF A GRANT APPLICATION FOR  
THE MONTCO FOREVER GREEN GRANT PROGRAM**

**WHEREAS**, Montgomery County has established the Montco Forever Green Grant Program as a competitive funding program to assist municipalities and qualified non-profit land conservation organizations in funding fee title and conservation easement acquisition of open space across Montgomery County; and

**WHEREAS**, the County is accepting applications for open space preservation projects that provide economic, environment, and health benefits as detailed in the 2022 county report, Return on Environment: The Economic Impact of Protected Open Space in Montgomery County, Pennsylvania; and

**WHEREAS**, applications and projects must meet all stated requirements within the Montco Forever Green Grant Program Guidebook; and

**WHEREAS**, Lower Salford Township wishes to submit an application to obtain \$500,000 from the Montco Forever Green Grant Program to provide funding for the purchase of the 62.65-acre Allebach Property located at 460 Stover Road, Harleysville Pa. and;

**WHEREAS**, Lower Salford Township commits to fund an additional \$125,000 of the appraised purchase value of \$21,800,000

**SO RESOLVED** this 4th day of February 2026.

**BOARD OF SUPERVISORS  
LOWER SALFORD TOWNSHIP**

By: \_\_\_\_\_  
**Keith A. Bergman**, Chairman,  
Board of Supervisors

Attest: \_\_\_\_\_  
**Joseph S. Czajkowski**, Secretary

**LOWER SALFORD TOWNSHIP**

**BOARD OF SUPERVISORS**

**RESOLUTION NO. 2026-06**

**A RESOLUTION AUTHORIZING THE SUBMISSION OF A GRANT APPLICATION FOR THE  
2026 ROUND OF THE MONTCO 2040 IMPLEMENTATION GRANT PROGRAM**

**Whereas**, Montgomery County has established the Montco 2040 Implementation Grant Program as a competitive funding program to assist municipalities in implementing the goals of the county comprehensive plan, Montco 2040: A Shared Vision; and

**Whereas**, the County is accepting applications for projects that advance specific goals under either of the county's comprehensive plan's three themes: Connecting Communities, Sustainable Places, and a Vibrant Economy; and

**Whereas**, applications and projects must meet all stated requirements within the Montco 2040 Implementation Grant Program Guidebook; and

**Whereas**, Lower Salford Township wishes to obtain \$156,750 from the Montco 2040 Implementation Grant Program to implement various pedestrian upgrades to ten (10) Lower Salford intersections; and

**Lower Salford Township** is committed to providing a local funding match of \$34,000 for this project, which is 20% of the total project costs.

**Approved** at the Public Meeting of the Lower Salford Township Board of Supervisors held on February 4, 2026.

LOWER SALFORD TOWNSHIP  
BOARD OF SUPERVISORS

By: \_\_\_\_\_  
Keith Bergman, Chairman  
Board of Supervisors

Attest: \_\_\_\_\_  
Joseph S. Czajkowski, Secretary

**LOWER SALFORD TOWNSHIP**

**BOARD OF SUPERVISORS**

**RESOLUTION NO. 2026-07**

**A RESOLUTION AUTHORIZING THE SUBMISSION OF A GRANT APPLICATION FOR THE  
2026 ROUND OF THE MONTCO 2040 IMPLEMENTATION GRANT PROGRAM**

**Whereas**, Montgomery County has established the Montco 2040 Implementation Grant Program as a competitive funding program to assist municipalities in implementing the goals of the county comprehensive plan, Montco 2040: A Shared Vision; and

**Whereas**, the County is accepting applications for projects that advance specific goals under either of the county's comprehensive plan's three themes: Connecting Communities, Sustainable Places, and a Vibrant Economy; and

**Whereas**, applications and projects must meet all stated requirements within the Montco 2040 Implementation Grant Program Guidebook; and

**Whereas**, Lower Salford Township in conjunction with Upper Salford Township wish to obtain \$350,000 from the Montco 2040 Implementation Grant Program to provide funding for a multi-municipal 1.5-mile fiber-optic interconnect to integrate traffic signals along the SR 63 corridor and support future adaptive signal system upgrades.

**Lower Salford Township is** committed to providing a local funding match of \$164,730 of the remaining \$305,564 project costs towards this project, which is 53.91% of the remaining project cost.

**Approved** at the Public Meeting of the Lower Salford Township Board of Supervisors held on February 4, 2026.

LOWER SALFORD TOWNSHIP  
BOARD OF SUPERVISORS

By: \_\_\_\_\_  
Keith Bergman, Chairman  
Board of Supervisors

Attest: \_\_\_\_\_  
Joseph S. Czajkowski, Secretary