MS4 Status Report

For

Upper Providence Township

Permit #PAG130108

Prepared for

Upper Providence Township
1286 Black Rock Road
Phoenixville, PA 19460

Prepared by

Gilmore & Associates, Inc.
184 West Main Street
Suite 300
Trappe, PA 19426

September 29, 2025

UPPER PROVIDENCE TOWNSHIP
MS4 RESPONSIBILITIES

Minimum Control Measures (MCM) Responsibilities of the MS4:

MCM #1: Public Education and Outreach on Stormwater Impacts.

- BMP #1: Develop, implement and maintain a written Public Education and Outreach Program.
- BMP #2: Develop and maintain lists of target audience groups that are present within the areas served by the permittee's regulated small MS4.
- BMP #3: The permittee shall annually publish at least one issue of a newsletter, a pamphlet, a flyer, or a website that includes general stormwater educational information, a description of the permittee's SWMP, and/or information about the permittee's stormwater management activities. The list of publications and the content of the publications must be reviewed and updated at least once during each year of permit coverage. Publications should include a list of references (or links) to refer the reader to additional information (e.g., DEP and EPA stormwater websites, and any other sources helpful to readers).
- BMP #4: Distribute stormwater educational materials and/or information to the target audiences using a variety of distribution methods, including but not limited to: displays, posters, signs, pamphlets, booklets, brochures, radio, local cable TV, newspaper articles, other advertisements (e.g., at bus and train stops/stations), bill stuffers, presentations, conferences, meetings, fact sheets, giveaways, and storm drain stenciling. All permittees shall select and utilize at least two distribution methods annually. These are in addition to BMP #3, above.

MCM #2: Public Involvement / Participation

- BMP #1: Develop, implement and maintain a written Public Involvement and Participation Program (PIPP) which describes various types of possible participation activities and describes methods of encouraging the public's involvement and of soliciting the public's input.
- BMP #2: The permittee shall advertise to the public and solicit public input on the following documents prior to adoption or submission to DEP:
  - Stormwater Management Ordinances (for municipalities);
  - Standard Operating Procedures (SOPs) (for non-municipal entities); and
  - Pollutant Reduction Plans (PRPs), including modifications thereto.
- BMP #3: Regularly solicit public involvement and participation from the target audience groups using available distribution and outreach methods. This shall include an effort to solicit public reporting of suspected illicit discharges. Assist the public to help implement the SWMP.

MCM #3: Illicit Discharge Detection and Elimination (IDD&E).

- BMP #1: The permittee shall develop and implement a written program for the detection, elimination and prevention of illicit discharges into the regulated small MS4.
- BMP #2: The permittee shall develop and maintain map(s) that show permittee and urbanized area boundaries, the location of all outfalls and, if applicable, observation points, and the locations and names of all surface waters that receive discharges from those outfalls. Outfalls and observation points shall be numbered on the map(s).
- BMP #3: In conjunction with the map(s) created under BMP #2 (either on the same map or on a different map), the permittee shall develop and maintain map(s) that show the entire storm sewer collection system within the permittee's jurisdiction that are owned or operated by the permittee (including roads, inlets, piping, swales, catch basins, channels, and any other components of the storm sewer collection system), including privately-owned components of the collection system where conveyances or BMPs on private property receive stormwater flows from upstream publicly-owned components.
- BMP #4: The permittee shall conduct dry weather screenings of its MS4 outfalls to evaluate the presence of illicit discharges. If any illicit discharges are present, the permittee shall identify the source(s) and take appropriate actions to remove or correct them. The permittee shall also respond to reports received from the public or other agencies of suspected or confirmed illicit discharges associated with the storm sewer system, as well as take enforcement action as necessary. The permittee shall immediately report to DEP

illicit discharges that would endanger users downstream from the discharge, or would otherwise result in pollution or create a danger of pollution or would damage property.

- BMP #5: Enact a Stormwater Management Ordinance to implement and enforce a stormwater management program that includes prohibition of non-stormwater discharges to the regulated small MS4.
- BMP #6: Provide educational outreach to public employees, business owners and employees, property owners, the general public and elected officials (i.e., target audiences) about the program to detect and eliminate illicit discharges.

MCM #4: Construction Site Stormwater Runoff Control.

- BMP #1: The permittee may not issue a building or other permit or final approval to those proposing or conducting earth disturbance activities requiring an NPDES permit unless the party proposing the earth disturbance has valid NPDES Permit coverage (i.e., not expired).
- BMP #2: A municipality which issues building or other permits shall notify DEP or the applicable county conservation district (CCD) within 5 days of the receipt of an application for a permit involving an earth disturbance activity consisting of one acre or more.
- BMP #3: Enact, implement and enforce an ordinance or SOP to require the implementation and maintenance of E&S control BMPs, including sanctions for non-compliance.

MCM #5: Post-Construction Stormwater Management (PCSM) in New Development and Redevelopment.

- BMP #1: Enact, implement and enforce an ordinance or SOP to require post-construction stormwater management from new development and redevelopment projects, including sanctions for non-compliance.
- BMP #2: Develop and implement measures to encourage and expand the use of Low Impact Development (LID) in new development and redevelopment. Measures should also be included to encourage retrofitting LID into existing development. Guidance on implementing LID practices may be found on DEP's MS4 website, www.dep.pa.gov/MS4. Enact ordinances consistent with LID practices and repeal sections of ordinances that conflict with LID practices. Submission of an ordinance that is consistent with DEP's 2022 Model Stormwater Management Ordinance will satisfy this BMP.
- BMP #3: Ensure adequate O&M of all post-construction stormwater management BMPs that have been installed at development or redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale.

MCM #6: Pollution Prevention / Good Housekeeping.

- BMP #1: Identify and document all operations that are owned or operated by the permittee and have the potential for generating pollution in stormwater runoff to the regulated small MS4. This includes activities conducted by contractors for the permittee. Activities may include the following: street sweeping; snow removal/deicing; inlet/outfall cleaning; lawn/grounds care; general storm sewer system inspections and maintenance/repairs; park and open space maintenance; municipal building maintenance; new construction and land disturbances; right-of-way maintenance; vehicle operation, fueling, washing and maintenance; and material transfer operations, including leaf/yard debris pickup and disposal procedures. Facilities can include streets; roads; highways; parking lots and other large paved surfaces; maintenance and storage yards; waste transfer stations; parks; fleet or maintenance shops; wastewater treatment plants; stormwater conveyances (open and closed pipe); riparian buffers; and stormwater storage or treatment units (e.g., basins, infiltration/filtering structures, constructed wetlands, etc.).
- BMP #2: Develop, implement and maintain a written O&M program for all operations that could contribute to the discharge of pollutants from the regulated small MS4, as identified under BMP #1. This program shall address stormwater collection or conveyance systems within the regulated MS4.
- BMP #3: Develop and implement an employee training program that addresses appropriate topics to further the goal of preventing or reducing the discharge of pollutants from operations to the regulated small MS4. The program may be developed and implemented using guidance and training materials that are available from federal, state or local agencies, or other organizations. All relevant employees and contractors shall receive training (i.e., public works staff, building, zoning, and code enforcement staff, engineering staff, police and fire responders, etc.). Training topics shall include operation, inspection, maintenance and repair activities associated with any of the operations identified under BMP #1. Training must cover all relevant parts of the permittee's overall stormwater management program that could affect operations, such as illicit discharge detection and elimination, construction sites, and ordinance requirements.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

ANNUAL MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) STATUS REPORT

FOR THE PERIOD July 1, 2024 TO JUNE 30, 2025

GENERAL INFORMATION			
Permittee Name:	Upper Providence Township	NPDES Permit No.:	PAG-130108
Mailing Address:	1286 Black Rock Road	Effective Date:	June, 2018
City, State, Zip:	Phoenixville, PA 19460	Expiration Date:	March, 2025
MS4 Contact Person:	Timothy Tieperman	Renewal Due Date:	TBD
Title:	Manager	Municipality:	Upper Providence Township
Phone:	610-933-9179	County:	Montgomery
Email:	ttieperman@uprov-montco.org		
Co-Permittees (if applicable):			
Appendix(ces) that permittee is subject to (select all that apply): ☐ Appendix A ☒ Appendix B ☒ Appendix C ☐ Appendix D ☒ Appendix E ☐ Appendix F			

WATER QUALITY INFORMATION

Are there any discharges to waters within the Chesapeake Bay Watershed? ☐ Yes ☒ No

Identify all surface waters that receive stormwater discharges from the permittee's MS4 and provide the requested information (see instructions).

Receiving Water Name	Ch. 93 Class.	Impaired?	Cause(s)	TMDL?	WLA?
Donny Brook	TSF,MF	Yes	Siltation	N/A	N/A
Doe Run	TSF,MF	Yes	Siltation	N/A	N/A
Schoolhouse Run	TSF,MF	Yes	Siltation	N/A	N/A
Perkiomen Creek	WWF,MF	Yes	Pathogen	N/A	N/A
Schuylkill River	WWF,MF	Yes	PCB	N/A	N/A

GENERAL MINIMUM CONTROL MEASURE (MCM) INFORMATION

Have you completed all MCM activities required by the permit for this reporting period? ☐ Yes ☐ No

List the current entity responsible for implementing each MCM of your SWMP, along with contact name and phone number.

MCM	Entity Responsible	Contact Name	Phone
#1 Public Education and Outreach on Storm Water Impacts	Manager	Timothy Tieperman	610-933-9179
#2 Public Involvement/Participation	Manager	Timothy Tieperman	610-933-9179
#3 Illicit Discharge Detection and Elimination (IDD&E)	Public Works Director	Don Kelly	610-933-9179
#4 Construction Site Storm Water Runoff Control	Gilmore & Associates, Inc.	Michael Coyne	610-489-4949
#5 Post-Construction Storm Water Management in New Development and Redevelopment	Gilmore & Associates, Inc.	Michael Coyne	610-489-4949
#6 Pollution Prevention / Good Housekeeping	Public Works Director	Don Kelly	610-933-9179

MCM #1 – PUBLIC EDUCATION AND OUTREACH ON STORM WATER IMPACTS

BMP #1: Develop, implement and maintain a written Public Education and Outreach Program.

1. For new permittees only, has the written PEOP been developed and implemented within the first year of permit coverage?

   ☒ Yes ☐ No

2. Date of latest annual review of PEOP: 06-2022 Were updates made? ☒ Yes ☐ No

3. What were the plans and goals for public education and outreach for the reporting period?

   The goals of the Upper Providence Township Public Education and Outreach Program for the reporting period included continuing the efforts to inform and engage Township residents regarding water quality issues. Upper Providence Township upgraded the information available to Township residents through the Township website. Upgraded information included educational materials and more efficient links to PADEP and EPA websites.

4. Did the MS4 achieve its goal(s) for the PEOP during the reporting period? ☒ Yes ☐ No

5. Identify specific plans and goals for public education and outreach for the upcoming year:

   The goals of the Upper Providence Township Public Education and Outreach Program for the upcoming year include upgrading the annual public education public presentation to be more dynamic and engaging to solicit interest from the average Township resident and make water quality an important issue for the public.

BMP #2: Develop and maintain lists of target audience groups present within the areas served by your MS4.

1. For new permittees only, have the target audience lists been developed and implemented within the first year of permit coverage?

   ☐ Yes ☐ No

2. Date of latest annual review of target audience lists: 9-1-18 Were updates made? ☐ Yes ☒ No

BMP #3: Annually publish at least one educational item on your Stormwater Management Program.

1. For new permittees only, were stormwater educational and informational items produced and published in print and/or on the Internet within the first year of permit coverage?

   ☐ Yes ☐ No

2. Date of latest annual review of educational materials: Were updates made? ☒ Yes ☐ No

3. Do you have a municipal website? ☒ Yes ☐ No (URL: https://www.uprov-montco.org/)

If Yes, what MS4-related material does it contain?

The Upper Providence Township website contains several pages dedicated to the MS4 Stormwater Management Program. The information includes a list of potential pollutants, an overview of the illicit discharge and detection program, and links to the PADEP and EPA website pages.

4. Describe any other method(s) used during the reporting period to provide information on stormwater to the public:

The Township has held monthly meetings that include MS4 public education presentations. The Township also distributes a quarterly newsletter. The Winter, 2023 newsletter contains several entries on MS4 stormwater education. A copy of the newsletter is included in the staus report package.

5. Identify specific plans for the publication of stormwater materials for the upcoming year:

The Township intends to continue providing educational material through the established means (website, public presentations, Community Day exhibits, newsletters, etc.).

BMP #4: Distribute stormwater educational materials to the target audiences.

Identify the two additional methods of distributing stormwater educational materials during the previous reporting period (e.g., displays, posters, signs, pamphlets, booklets, brochures, radio, local cable TV, newspaper articles, other advertisements, bill stuffers, posters, presentations, conferences, meetings, fact sheets, giveaways, or storm drain stenciling).

Copies of the information was made available for public review and distibution at the Upper Providence Township Building and on the Township website are included in this report.

MCM #1 Comments:

MCM #2 – PUBLIC INVOLVEMENT/PARTICIPATION

BMP #1: Develop, implement and maintain a written Public Involvement and Participation Program (PIPP)

1. For new permittees only, was the PIPP developed and implemented within one year of permit coverage?

   ☐ Yes ☐ No

2. Date of latest annual review of PIPP: 05-2021 Were updates made? ☐ Yes ☒ No

BMP #2: Advertise to the public and solicit public input on ordinances, SOPs, Pollutant Reduction Plans (PRPs) (if applicable) and TMDL Plans (if applicable), including modifications thereto, prior to adoption or submission to DEP:

1. Was an MS4-related ordinance, SOP, PRP or TMDL Plan developed during the reporting period? ☐ Yes ☐ No

2. If Yes, describe how you advertised the draft document(s) and how you provided opportunities for public review, input and feedback:

   An updated Stormwater Ordinance was prepared for Upper Providence Township to comply with the 2022 Model Ordinance requirements (see attached). In addition, a revised PRP, approved by PADEP, (streambank restoration) is currently under construction.

3. If an ordinance, SOP or plan was developed or amended during the reporting period, provide the following information:

Ordinance / SOP / Plan Name	Date of Public Notice	Date of Public Hearing	Date Enacted or Submitted to DEP
Revised Stormwater PRP	10/17/22	11/16/22	11/21/22
Stromwater Ordinance No. 258		4/22/24	4/26/24

BMP #3: Regularly solicit public involvement and participation from the target audience groups using available distribution and outreach methods.

1. At least one public meeting or other MS4 event must be held during the 5-year permit coverage period to solicit participation and feedback from target audience groups. Was this meeting or event held during the reporting period?

   ☒ Yes ☐ No If Yes, Date of Meeting or Event: Several public meetings were held during the 5 year permit coverage period. Dates and materials are included in the Public Education and Outreach section of the report.

2. Report instances of cooperation and participation in MS4 activities; presentations the permittee made to local watershed and conservation organizations; and similar instances of participation or coordination with organizations in the community.

   Upper Providence Township is in partnership with the Schuylkill Canal Association and the Perkiomen Watershed Conservancy in providing educational materials and events (stream cleanup, rain garden construction, etc.). Copies of the provided information are included in the report package.

3. Report activities in which members of the public assisted or participated in the meetings and in the implementation of the SWMP, including education activities or efforts such as cleanups, monitoring, storm drain stenciling, or others.

   Members of the community participate in the following efforts:
   Recycling Day - members of the community drop off electronic devices to the Township Public Works facilities for proper disposal.
   Rain Barrel Demonstration - members of the community are instructed on the value and operation of rain barrels.

MCM #2 Comments:

MCM #3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDD&E)

BMP #1: Develop and implement a written program for the detection, elimination, and prevention of illicit discharges into the regulated small MS4.

1. For new permittees only, was the written IDD&E program developed within one year of permit coverage?

   ☐ Yes ☐ No

2. Date of latest annual review of IDD&E program: 06-2022 Were updates made? ☒ Yes ☐ No

BMP #2: Develop and maintain map(s) that show permittee and urbanized area boundaries, the location of all outfalls and, if applicable, observation points, and the locations and names of all surface waters that receive discharges from those outfalls. Outfalls and observation points shall be numbered on the map(s).

1. Have you completed a map(s) that includes all components of BMP #2? ☒ Yes ☐ No

   If Yes and you are a new permittee and have not submitted the map(s) previously, attach the map(s) to this report.

   If No, date by which permittee expects map(s) to be completed:

2. Date of last update or revision to map(s): 8-30-17

3. Total No. of Outfalls in MS4: 364 Total No. of Outfalls Mapped: 364

4. Total No. of Observation Points: Total No. of Observation Points Mapped:

5. During the reporting period, have you identified any existing outfalls that have not been previously reported to DEP in an NOI, application or annual report, or are any new MS4 outfalls proposed for the next reporting period?

☐ Yes ☒ No If Yes, select: ☐ Existing Outfall(s) Identified ☐ New Outfall(s) Proposed

BMP #3: In conjunction with the map(s) created under BMP #2 (either on the same map or on a different map), the permittee shall develop and maintain map(s) that show the entire storm sewer collection system within the permittee's jurisdiction that are owned or operated by the permittee (including roads, inlets, piping, swales, catch basins, channels, and any other components of the storm sewer collection system), including privately-owned components of the collection system where conveyances or BMPs on private property receive stormwater flows from upstream publicly-owned components.

1. Have you completed a map(s) that includes all components of BMP #3? ☒ Yes ☐ No

   If Yes and you are a new permittee and have not submitted the map(s) previously, attach the map(s) to this report.

   If No, date by which permittee expects map(s) to be completed:

2. If Yes to #1, is the map(s) on the same map(s) as for outfalls and receiving waters? ☒ Yes ☐ No

3. Date of last update or revision to map(s): 8-30-18

BMP #4: Conduct dry weather screenings of MS4 outfalls to evaluate the presence of illicit discharges. If any illicit discharges are present, the permittee shall identify the source(s) and take appropriate actions to remove or correct any illicit discharges. The permittee shall also respond to reports received from the public or other agencies of suspected or confirmed illicit discharges associated with the storm sewer system, as well as take enforcement action as necessary. The permittee shall immediately report to DEP illicit discharges that would endanger users downstream from the discharge, or would otherwise result in pollution or create a danger of pollution or would damage property.

For new permittees, all identified outfalls (and if applicable observation points) must be screened during dry weather at least twice within the 5-year period following permit coverage. For existing permittees, all identified outfalls (and if applicable observation points) must be screen during dry weather at least once within the 5-year period following permit coverage and, for areas where past problems have been reported or known sources of dry weather flows occur on a continual basis, outfalls must be screened annually during each year of permit coverage.

1. How many unique outfalls (and if applicable observation points) were screened during the reporting period? 233

2. Indicate the percentage of all outfalls screened in the past five years. 100%

3. Indicate the percent of outfalls screened during the reporting period that revealed dry weather flows: 5%

4. Did any dry weather flows reveal color, turbidity, sheen, odor, floating or submerged solids? ☐ Yes ☒ No

5. If Yes for #4, attach all sample results to this report with a map identifying the sample location. Explain the corrective action(s) taken in the attachment.

6. Do you use the MS4 Outfall Field Screening Report form (3800-FM-BCW0521) provided in the permit?

   ☐ Yes ☒ No

   If No, attach a copy of your screening report form.

BMP #5: Enact a Stormwater Management Ordinance or SOP to implement and enforce a stormwater management program that includes prohibition of non-stormwater discharges to the regulated small MS4.

1. Do you have an ordinance (municipal) or SOP or other mechanism (non-municipal) that prohibits non-stormwater discharges? ☒ Yes ☐ No

   If Yes, indicate the date of the ordinance or SOP: 2-17-04

2. If Yes to #1, is the ordinance or SOP consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j) with respect to authorized non-stormwater discharges? ☐ Yes ☒ No

   If Yes to #2 and the ordinance or SOP has not been submitted to DEP previously, attach the ordinance or SOP.

3. Were there any violations of the ordinance or SOP during the reporting period? ☐ Yes ☒ No

If Yes to #3, complete the table below (attach additional sheets as necessary).

Violation Date	Nature of Violation	Responsible Party	Enforcement Taken

4. Did you approve any waiver or variance during the reporting period that allowed an exception to non-stormwater discharge provisions of an ordinance or SOP? ☐ Yes ☒ No

If Yes to #4, identify the entity that received the waiver or variance and the type of non-stormwater discharge approved.

BMP #6: Provide educational outreach to public employees, business owners and employees, property owners, the general public and elected officials (i.e., target audiences) about the program to detect and eliminate illicit discharges.

1. Was IDD&E-related information distributed to public employees, businesses, and the general public during the reporting period? ☐ Yes ☒ No

If Yes, what was distributed? .

2. Is there a well-publicized method for employees, businesses and the public to report stormwater pollution incidents?

☒ Yes ☐ No

3. Do you maintain documentation of all responses, action taken, and the time required to take action? ☒ Yes ☐ No

MCM #3 Comments:

MCM #4 – CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

Are you relying on PA's statewide program for stormwater associated with construction activities to satisfy this MCM?

☒ Yes ☐ No

(If Yes, respond to questions for BMP Nos. 1, 2 and 3 only in this section. If No, respond to questions for all BMPs in this section)

BMP #1: The permittee may not issue a building or other permit or final approval to those proposing or conducting earth disturbance activities requiring an NPDES permit unless the party proposing the earth disturbance has valid NPDES Permit coverage (i.e., not expired) under 25 Pa. Code Chapter 102.

During the reporting period, did you comply with 25 Pa. Code § 102.43 (relating to withholding building or other permits or approvals until DEP or a county conservation district (CCD) has approved NPDES permit coverage)?

☒ Yes ☐ No ☐ Not Applicable (no building permit applications received)

BMP #2: A municipality or county which issues building or other permits shall notify DEP or the applicable CCD within 5 days of the receipt of an application for a permit involving an earth disturbance activity consisting of one acre or more, in accordance with 25 Pa. Code § 102.42.

During the reporting period, did you comply with 25 Pa. Code § 102.42 (relating to notifying DEP/CCD within 5 days of receiving an application involving an earth disturbance activity of one acre or more)?

☒ Yes ☐ No ☐ Not Applicable (no building permit applications received)

BMP #3: Enact, implement and enforce an ordinance or SOP to require the implementation and maintenance of E&S control BMPs, including sanctions for non-compliance, as applicable.

1. Do you have an ordinance (municipal) or SOP or other mechanism (non-municipal) that requires implementation and maintenance of E&S control BMPs? ☒ Yes ☐ No

   If Yes, indicate the date of the ordinance or SOP: 2-17-04

2. If Yes to #1, is the ordinance or SOP consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j)? ☐ Yes ☒ No

3. If Yes to #2 and the ordinance or SOP has not been submitted previously, attach a copy of the ordinance or SOP.

BMP #4: Review Erosion and Sediment (E&S) control plans to ensure that such plans adequately consider water quality impacts and meet regulatory requirements.

Specify the number of E&S Plans you reviewed during the reporting period: 12

BMP #5: Conduct inspections regarding installation and maintenance of E&S control measures during earth disturbance activities. Maintain records of site inspections, including dates and inspection results, in accordance with the record retention requirements in this permit.

Specify the number of E&S inspections you completed during the reporting period: 55

BMP #6: Conduct enforcement when installation and maintenance of E&S control measures during earth disturbance activities does not comply with permit and/or regulatory requirements.

Specify the number of enforcement actions you took during the reporting period for improper E&S: 3

BMP #7: Develop and implement requirements for construction site operators to control waste at construction sites that may cause adverse impacts to water quality. The permittee shall provide education on these requirements to construction site operators.

Specify the method(s) by which you are educating construction site operators on controlling waste at construction sites:

Coordination with Montgomery County Conservation District

BMP #8: Develop and implement procedures for the receipt and consideration of public inquiries, concerns, and information submitted by the public to the permittee regarding local construction activities.

1. A tracking system has been established for receipt of public inquiries and complaints. ☒ Yes ☐ No

2. Specify the number of inquiries and complaints received during the reporting period:

MCM #4 Comments:

MCM #5 – POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

BMP #1: Enact, implement and enforce an ordinance or SOP to require post-construction stormwater management from new development and redevelopment projects, including sanctions for non-compliance.

1. Do you have an ordinance (municipal) or SOP or other mechanism (non-municipal) that requires implementation and maintenance of post-construction stormwater management (PCSM) BMPs? ☒ Yes ☐ No

   If Yes, indicate the date of the ordinance or SOP: 2-17-04

2. If Yes to #1, is the ordinance or SOP consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j)? ☐ Yes ☒ No

3. If Yes to #2 and the ordinance or SOP has not been submitted previously, attach a copy of the ordinance or SOP.

BMP #2: Develop and implement measures to encourage and expand the use of Low Impact Development (LID) in new development and redevelopment. Measures should also be included to encourage retrofitting LID into existing development. Enact ordinances consistent with LID practices and repeal sections of ordinances that conflict with LID practices.

1. Do you have an ordinance (municipal) or SOP or other mechanism (non-municipal) that encourages and expands the use of LID in new development and redevelopment? ☒ Yes ☐ No

   If Yes, indicate the date of the ordinance or SOP: 8-25-04

2. If Yes to #1, is the ordinance or SOP consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j)? ☐ Yes ☒ No

3. If Yes to #2 and the ordinance or SOP has not been submitted previously, attach a copy of the ordinance or SOP.

BMP #3: Ensure adequate O&M of all post-construction stormwater management BMPs that have been installed at development or redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale.

1. Do you have an inventory of all PCSM BMPs that were installed to meet requirements in NPDES Permits for Stormwater Discharges Associated with Construction Activities approved since March 10, 2003? ☐ Yes ☒ No

   If Yes to #1, complete Table 1 on the next page.

2. Has proper O&M occurred during the reporting period for all PCSM BMPs? ☒ Yes ☐ No

3. If No to #2, explain what action(s) the permittee has taken or plans to take to ensure proper O&M.

If you are relying on PA's statewide program for stormwater associated with construction activities, you may skip to MCM #6, otherwise complete all questions for BMPs #4 - #6 in this section.

BMP #4: Require the implementation of a combination of structural and/or non-structural BMPs that are appropriate to the local community, that minimize water quality impacts, and that are designed to maintain pre-development runoff conditions.

1. Specify the number of PCSM Plans reviewed during the reporting period for projects disturbing greater than or equal to one acre (including projects less than one acre that are part of a larger common plan of development or sale): 2

2. Has a tracking system been established and maintained to record qualifying projects and their associated BMPs?

   ☒ Yes ☐ No

PCSM BMP INVENTORY

Table 1. To complete the information needed for MCM #5, BMP #3, list all existing structural BMPs that discharge stormwater to the permittee's MS4 that were installed to satisfy PCSM requirements for earth disturbance activities under Chapter 102, and provide the requested information (see instructions).

BMP No.	BMP Name	DA (ac)	Entity Responsible for O&M	Latitude	Longitude	Date Installed	O&M Requirements	NPDES Permit No.
1	Infiltration Trench	0.07	Property Owner	40°10'12"	75°25'40"	3/15/15	O&M Agreement	
2	Bioretention Basin	0.04	Property Owner	40°09'10"	75°21'40"	3/22/15	O&M Agreement	
3	Amended Soils	0.28	Property Owner	40°09'17"	75°19'55"	4/8/15	O&M Agreement	
4	Vegetative Swale	0.07	Property Owner	40°09'01"	75°19'50"	3/10/15	O&M Agreement	
5	Seepage Bed	2.70	Property Owner	40°10'08"	75°31'05"	7/1/24	O&M Agreement	
6	Underground BMP	0.31	Property Owner	40°11'59"	75°30'09"	6/1/24	O&M Agreement	
7	Rain Garden	0.83	Property Owner	40°10'56"	75°30'31"	3/1/24	O&M Agreement	
8	Underground BMP	0.50	Property Owner	40°11'00"	75°31'31"	3/27/24	O&M Agreement	
9	Infiltration Basin	1.00	Property Owner	40°07'44"	75°26'56"	9/27/23	O&M Agreement	
10	Infiltration Basin	0.22	Property Owner	40°10'31"	75°31'18"	10/2/23	O&M Agreement	
11	Infiltration Basin	0.08	Property Owner	40°12'14"	75°29'14"	11/7/23	O&M Agreement	
12	Infiltration Basin	0.08	Property Owner	40°12'15"	75°29'14"	11/10/23	O&M Agreement	
13	Infiltration Basin	0.08	Property Owner	40°12'14"	75°29'15"	11/16/23	O&M Agreement	
14	Seepage Pit	0.41	Property Owner	40°10'18"	75°28'28"	4/12/24	O&M Agreement	
15	Rain Garden	1.00	Property Owner	40°10'02"	75°30'51"	5/1/24	O&M Agreement	
16	Seepage Bed	0.97	Property Owner	40°12'26"	75°28'04"	3/1/24	O&M Agreement	

BMP #5: Ensure that controls are installed that shall prevent or minimize water quality impacts. The permittee shall inspect all qualifying development or redevelopment projects during the construction phase to ensure proper installation of the approved structural PCSM BMPs. A tracking system (e.g., database, spreadsheet, or written list) shall be implemented to track the inspections conducted and to track the results of the inspections (e.g., BMPs were, or were not, installed properly).

1. During the reporting period have you inspected all qualifying development and redevelopment projects during the construction phase to ensure proper installation of approved structural BMPs?

   ☒ Yes ☐ No ☐ Not Applicable (no qualifying projects during reporting period)

2. Has a tracking system been established and maintained to record results of inspections?

   ☒ Yes ☐ No

BMP #6: Develop a written procedure that describes how the permittee shall address all required components of this MCM.

Have you developed a written plan that addresses: 1) minimum requirements for use of structural and/or non-structural BMPs in plans for development and redevelopment; 2) criteria for selecting and standards for sizing stormwater BMPs; and 3) implementation of an inspection program to ensure that BMPs are properly installed? ☒ Yes ☐ No

MCM #5 Comments:

MCM #6 – POLLUTION PREVENTION / GOOD HOUSEKEEPING

BMP #1: Identify and document all operations that are owned or operated by the permittee and have the potential for generating pollution in stormwater runoff to the MS4. This includes activities conducted by contractors for the permittee.

1. Have you identified all facilities and activities owned and operated by the permitee that have the potential to generate stormwater runoff into the MS4? ☒ Yes ☐ No

2. When was the inventory last reviewed? 9-1-18

3. When was it last updated? 9-1-18

BMP #2: Develop, implement and maintain a written O&M program for all operations that could contribute to the discharge of pollutants from the MS4, as identified under BMP #1. This program shall address stormwater collection or conveyance systems within the regulated MS4.

1. Have you developed a written O&M program for the operations identified in BMP #1? ☒ Yes ☐ No

2. Date of last review or update to written O&M program: 9-1-18

BMP #3: Develop and implement an employee training program that addresses appropriate topics to further the goal of preventing or reducing the discharge of pollutants from operations to the regulated small MS4. All relevant employees and contractors shall receive training.

1. Have you developed an employee training program? ☒ Yes ☐ No

2. Date of last review or update to training program: 9-1-18 Date of latest training:

3. Training topics covered:

   Good housekeeping procedures relating to municipal operations (municipal facilities, vehicle maintenance, etc.).

4. Name(s) of training presenter(s):

   Tom Broadbelt, Public Works Director

5. Names of training attendees:

MCM #6 Comments:

POLLUTANT CONTROL MEASURES (PCMs)

Indicate the status of implementing PCMs in Appendices A, B and/or C by completing the table below. Skip this section if PCMs are not applicable.

Task	Date Completed	Attached	Anticipated Completion Date
Storm Sewershed Map(s)	September, 2017	☒	
Source Inventory		☐	
Investigation of Suspected Sources		☐	
Ordinance/SOP for Controlling Animal Wastes		☐	

PCM Comments:

POLLUTANT REDUCTION PLANS (PRPs) AND TMDL PLANS

1. Complete this section if the development and submission of a PRP and/or TMDL Plan was required as an attachment to the latest NOI or application or was required by the permit, regardless of whether DEP has approved the plan(s).

Type of Plan	Submission Date	DEP Approval Date	Surface Waters Addressed by Plan
☐ Chesapeake Bay PRP (Appendix D)			Chesapeake Bay
☒ Impaired Waters PRP (Appendix E)	9-12-18	N/A	Donny Brook, Doe Run, Schoolhouse Run
☐ TMDL Plan (Appendix F)			
☐ Combined Chesapeake Bay / Impaired Waters PRP			Chesapeake Bay,
☐ Combined PRP / TMDL Plan			

☐ Joint Plan *(if checked, list the name of the MS4 group or names of all entities participating in the joint plan below)*

Joint Plan Participants:

2. Identify the pollutants of concern and pollutant load reduction requirements under the permit (see instructions).

Type of Plan	TSS Load Reduction (lbs/yr)	TP Load Reduction (lbs/yr)	TN Load Reduction (lbs/yr)
☐ Chesapeake Bay PRP (Appendix D)			
☒ Impaired Waters PRP (Appendix E)	52,480		
☐ TMDL Plan (Appendix F)			
☐ Combined Chesapeake Bay / Impaired Waters PRP			
☐ Combined PRP / TMDL Plan			

3. Date Final Report Demonstrating Achievement of Pollutant Load Reductions Due: September, 2023

4. Have any modifications to the plan(s) occurred since DEP approval? ☐ Yes ☒ No

   If Yes to #4, was the updated plan(s) submitted to DEP? ☐ Yes ☐ No

   If Yes to #4, did you comply with the public participation requirements of the applicable appendix? ☐ Yes ☐ No

   If Yes to #4, describe the plan modifications.

5. Summary of progress achieved during reporting period.

6. Anticipated activities for next reporting period.

PRP/TMDL Plan Comments:

NEW BMPs FOR PRP/TMDL PLAN IMPLEMENTATION

Table 2. List all new structural BMPs installed and ongoing non-structural BMPs implemented during the reporting period that are being used toward achieving load reductions in the permittee's PRP and/or TMDL Plan (see instructions).

BMP No.	BMP Name	DA (ac)	% Imp.	BMP Extent	Units	Latitude	Longitude	Date Installed or Implemented	Planning Area?	Ch. 102?	Annual Sediment Load Reduction (lbs/yr)
1	Greenwood Ave. Streambank Restoration					40°12'52"	75°28'57"	10/24	☐	☐	
						° ' "	° ' "		☐	☐	
						° ' "	° ' "		☐	☐	
						° ' "	° ' "		☐	☐	
						° ' "	° ' "		☐	☐	

BMP INVENTORY FOR PRP/TMDL PLAN IMPLEMENTATION

Table 3. List all existing structural BMPs that have been installed in prior reporting periods and are eligible to use toward achieving load reductions in the permittee's PRP and/or TMDL Plan (see instructions).

BMP No.	BMP Name	DA (ac)	% Imp.	BMP Extent	Units	Latitude	Longitude	Date Installed	Annual Sediment Load Reduction (lbs/yr)	Date of Latest Inspect -ion	Satis-factory?
						° ' "	° ' "				☐
						° ' "	° ' "				☐
						° ' "	° ' "				☐
						° ' "	° ' "				☐
						° ' "	° ' "				☐

						° ' "	° ' "				☐

CERTIFICATION

For PAG-13 Permittees: I have read the latest PAG-13 General Permit issued by DEP and agree and certify that (1) the permittee continues to be eligible for coverage under the PAG-13 General Permit and (2) the permittee will continue to comply with the conditions of that permit, including any modifications thereto. I understand that if I do not agree to the terms and conditions of the PAG-13 General Permit, I will apply for an individual permit within 90 days of publication of the General Permit. I also acknowledge that any facility construction needed to comply with the General Permit requirements shall be designed, built, operated, and maintained in accordance with operative laws and regulations.

For All Permittees: I certify under penalty of law that this report was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Timothy Tieperman, Manager	
Name of Responsible Official	Signature
610-933-9179	9/30/2025
Telephone No.	Date

Upper Providence Township

MCM#1 - Public Education and Outreach on Stormwater Impacts

Upper Providence Township Public Education and Outreach Program (2 Sheets)

Examples of Public Education Materials Distributed and Made Available to Upper Providence Township Residents (20 Sheets)

2025 Perkiomen Watershed Conservancy Benefactor Benefits (2 Sheets)

Upper Providence Township
NPDES MS4 Permit PAG130108
2024 Progress Report
Public Education and Outreach Program
June, 2024

MCM#1 – Develop, Implement, and Maintain a Written Public Education and Outreach Program (PEOP):

Residents - The Township organizes events throughout the year. These events include Community Day, held in September of most years. These types of events represent opportunities to emphasize the importance of environmental protection, including stormwater quality measures. The Township annually distributes stormwater educational material. The Township has upgraded its tracking efforts to document the number of public education materials distributed to Township residents as a way to quantify and meet their measurable goal of twenty (20) materials distributed. The Township also partners with area organizations, including the Perkiomen Watershed Conservancy and the Schuylkill Canal Association by promoting stream cleanup and community events. The Township website, currently containing educational material and links will continue to be updated to provide the latest in educational resources.

Schools - The Township is continuing its efforts to recruit local organizations that include school age residents, for participation in waterway cleanup and assorted stormwater quality improvement efforts. These groups include scouts, athletic organizations, and school age participants in Township sponsored summer camps and activity programs. The Township's association with the Perkiomen Watershed Conservancy assists in distributing educational materials to school age children through programs such as Summer Science Academy, Floating Classroom, etc. The Conservancy provides annual information regarding the dates of the programs, number of attendees, etc.

Businesses - Information is available to local business organizations during semi-monthly Supervisor meetings. Local businesses are also encouraged to view the Township website for the most up to date stormwater educational materials.

Developers - Stormwater literature is included in information packages accompanying building permits. This form of distribution appears to be an effective way of reaching the developer portion of the target audience. The Township plans to continue these efforts. The Township enforces a grading permit program that reviews, monitors, and regulates any earth disturbance activities with a disturbed area greater than 1,000 square feet. Review of the permit application includes the location, nature, and operation of all necessary erosion and sedimentation facilities.

Municipal Employees - The posting of stormwater information on employee lounge bulletin boards and periodic inclusion of storm water literature with paycheck distribution appears to be an effective distribution method. The Township plans to continue this distribution process. In addition, the Parks and Recreation Director is responsible for distribution of environmental information.

Solutions to Stormwater Pollution

Easy Things You Can Do Every Day To Protect Our Water

A Guide to Healthy Habits for Cleaner Water

Pollution on streets, parking lots and lawns is washed by rain into storm drains, then directly to our drinking water supplies and the ocean and lakes our children play in. Fertilizer, oil, pesticides, detergents, pet waste, grass clippings: You name it and it ends up in our water.

Stormwater pollution is one of New Jersey's greatest threats to clean and plentiful water, and that's why we're all doing something about it.

By sharing the responsibility and making small, easy changes in our daily lives, we can keep common pollutants out of stormwater. It all adds up to cleaner water, and it saves the high cost of cleaning up once it's dirty.

As part of New Jersey's initiative to keep our water clean and plentiful and to meet federal requirements, many municipalities and other public agencies including colleges and military bases must adopt ordinances or other rules prohibiting various activities that contribute to stormwater pollution. Breaking these rules can result in fines or other penalties.

As a resident, business, or other member of the New Jersey community, it is important to know these easy things you can do every day to protect our water.

Limit your use of fertilizers and pesticides

- Do a soil test to see if you need a fertilizer.
- Do not apply fertilizers if heavy rain is predicted.
- Look into alternatives for pesticides.
- Maintain a small lawn and keep the rest of your property or yard in a natural state with trees and other native vegetation that requires little or no fertilizer.
- If you use fertilizers and pesticides, follow the instructions on the label on how to correctly apply it.

Make sure you properly store or discard any unused portions.

Properly use and dispose of hazardous products

- Hazardous products include some household or commercial cleaning products, lawn and garden care products, motor oil, antifreeze, and paints.
- Do not pour any hazardous products down a storm drain because storm drains are usually connected to local waterbodies and the water is not treated.

- If you have hazardous products in your home or workplace, make sure you store or dispose of them properly. Read the label for guidance.
- Use natural or less toxic alternatives when possible.
- Recycle used motor oil.
- Contact your municipality, county or facility management office for the locations of hazardous-waste disposal facilities.

Keep pollution out of storm drains

- Municipalities and many other public agencies are required to mark certain storm drain inlets with messages reminding people that storm drains are connected to local waterbodies.
- Do not let sewage or other wastes flow into a stormwater system.

Clean up after your pet

- Many municipalities and public agencies must enact and enforce local pet-waste rules.
- An example is requiring pet owners or their keepers to pick up and properly dispose of pet waste dropped on public or other people's property.
- Make sure you know your town's or agency's requirements and comply with them. It's the law. And remember to:
  - Use newspaper, bags or pooper-scoopers to pick up wastes.
  - Dispose of the wrapped pet waste in the trash or un-wrapped in a toilet.
  - Never discard pet waste in a storm drain.

Don't feed wildlife

- Do not feed wildlife, such as ducks and geese, in public areas.
- Many municipalities and other public agencies must enact and enforce a rule that prohibits wildlife feeding in these areas.

Don't litter

- Place litter in trash receptacles.
- Recycle. Recycle. Recycle.
- Participate in community cleanups.

Dispose of yard waste properly

- Keep leaves and grass out of storm drains.
- If your municipality or agency has yard waste collection rules, follow them.
- Use leaves and grass clippings as a resource for compost.
- Use a mulching mower that recycles grass clippings into the lawn.

Contact information

For more information on stormwater related topics, visit www.njstormwater.org or www.nonpointsource.org

Additional information is also available at U. S. Environmental Protection Agency Web sites www.epa.gov/npdes/stormwater or www.epa.gov/nps

New Jersey Department of Environmental Protection
Division of Water Quality
Bureau of Nonpoint Pollution Control
Municipal Stormwater Regulation Program
(609) 633-7021

April 2004

Stormwater Pollution Prevention Tips

Spring 2023

Caring for Your Yard this Spring

Spring is here and with it comes warmer weather, rain and lots of yard work! Before you head outside to tackle your latest project, remember that what you do to your yard has a direct impact on the local environment. Luckily, there are lots of small steps that you can take as a homeowner to make your yard more eco-friendly!

Consider these tips to help you reduce stormwater pollution and provide valuable habitat for local wildlife on your property.

Visit our website to learn more:
www.perkiomenwatershed.org

PERKIOMEN
WATERSHED CONSERVANCY

Clean-up

Collect and dispose of any trash that might have blown into your yard over the winter. Mulch or compost leaves and garden cuttings from the fall so that they don't get washed into local streams.

Fertilize Carefully

Look for slow release nitrogen fertilizer since it is less likely to harm water quality. Several small fertilizer applications spread out over the growing season is better than one large application. Never apply fertilizer before it rains!

Plant Natives!

Spring is a great time to plant native trees, shrubs and perennials! Native PA species require less maintenance, are more beneficial for wildlife and absorb more stormwater than non-natives.

Mow Sharp and High

A sharp mower blade cuts grass cleanly which improves turf health. Set your mower deck to 2.5 inches or more to help reduce stormwater runoff and shade out weeds. Where possible, consider converting a section of your lawn to a native garden.

STORMWATER POLLUTION PREVENTION TIPS

SUMMER 2023

SUMMER STORMWATER MANAGEMENT

Stormwater runoff is a major pollutant of our local waterways. It flows from rooftops, over paved streets, sidewalks, parking lots, across bare soil and lawns. As it flows, runoff collects and transports many different kinds of pollutants. This water drains directly into nearby creeks and streams without being treated at a sewage plant.

Luckily, there are many steps that you can take to help reduce the amount of pollutants entering our waterways.

Here are some tips to manage stormwater pollution this summer:

- **Pick up after your dog.** Their waste is not natural, its full of bacteria and excess nutrients that will create algae blooms and contaminate local waterways.
- **Water your lawn & garden slowly.** Only water your grass and plants when necessary. When watering, be sure to do so slowly to reduce runoff. Consider investing in irrigation hoses or gator bags where possible.
- **Wash your car the right way.** Either wash it at a car wash that filters wastewater, or in a grassy area.

PERKIOMEN WATERSHED CONSERVANCY

Visit our website to learn more:
www.perkiomenwatershed.org

STORMWATER POLLUTION PREVENTION TIPS

Fall 2022

Managing Stormwater on Your Property this Fall

Fall is here, which means there is lots of raking to do! Did you know that yard debris, including leaves and other organic plant material like shrubbery trimmings and grass clippings are a significant source of stormwater pollution? This debris can clog culverts, storm drains, and pipes, causing flooding.

Debris can also carry fertilizers and pesticides from your yard and deposit them in streams and ponds. Piles of leaves and grass clippings will overload a stream's ability to process leaf litter, causing nutrient pollution and oxygen depletion.

When working on your yard this fall, consider some of these tips to enhance water quality and manage stormwater:

- **Do not pile leaves or other yard waste near streams or drainage channels** where they can blow or wash into creeks. Use designated leaf collection bags for curbside leaf recycling.
- **Do not blow leaves or grass clippings off your property** into streets, streams, ponds, or drainage swales.
- **Recycle grass clippings and their nutrients on your lawn.** Mulch your leaves into your yard, or pile them in your garden areas. They will add nutrients back into your lawn and provide shelter for wildlife during the winter months.
- **Plant a native tree!** Trees provide vital habitat for wildlife and absorb more stormwater than you lawn does.

PERKIOMEN WATERSHED CONSERVANCY

Visit our website to learn more: www.perkiomenwatershed.org

Stormwater Pollution Prevention Tips

WINTER 2022 - 2023

Melting Snow Is Stormwater Too!

Stormwater runoff can come in many forms, including snow melt! When the ground is frozen, melting snow can't infiltrate into the soil the way a light or moderate rain would be able to. This means that even a small amount of snow can cause flooding issues on your property.

When snow melts, it picks up all kinds of debris and pollutants that will make their way to nearby streams and creeks.

Check out some steps that you can take to prevent stormwater pollution this winter.

- **Start shoveling early!** The more snow you remove, the less salt and sand you'll need.
- **Pile snow in locations with the most opportunity for it to infiltrate into the ground.**
- **Use deicing salt sparingly.** Follow product instructions and give it time to work. Sweep up any remaining material.
- **Clear away any snow that may have been thrown onto the storm drains.**
- **Salt is not effective once temperatures hit 15 degrees Fahrenheit or below.** Consider using traction materials that contain acetate, potassium chloride, magnesium chloride, or cracked cornmeal.

PERKIOMEN WATERSHED CONSERVANCY

Visit our website to learn more: www.perkiomenwatershed.org

Living Streamside

Guide to Designing your Property and Protecting our Watershed

BACKYARD BUFFER PROGRAM

No-Mow Zone

Tip Sheet #1

Description:

- A stream buffer where mowing does not occur and Pennsylvania native plants are grown.
- You decide the width (5 feet, 10 feet or more). The wider the buffer, the greater the services and functions provided.

Functions/Benefits:

- Improves water quality reaching the stream
- Low growing dense grasses and wildflowers trap pollutants
- Creates wildlife habitat
- Reduces area of mowed lawn. Reduced mowing saves gas and money and protects the atmosphere
- Shrubs and trees provide shade to cool the stream
- Stabilizes soil and reduces bank erosion
- Slows stormwater runoff and increases infiltration

Photo 1

Photo 2

Photo Credits: 1) Western Michigan University, Environmental Safety and Emergency Management, 2) Sustainable Walworth, Walworth County Wisconsin

For more information, contact:
Jeanne Waldowski
Philadelphia Water Department (Office of Watersheds)
215-685-4945
Jeanne.waldowski@phila.gov
http://www.phillywatersheds.org/public

Living Streamside

Guide to Designing your Property and Protecting our Watershed

BACKYARD BUFFER PROGRAM

No-Mow Zone

Tip Sheet #1

General Installation:

1. Remove existing sod/turf from top of bank by a) renting a sod cutter to remove or b) smothering with black plastic or newspaper (for a growing season).
2. Till soil and add/mix in amendments (topsoil, compost or other organics).
3. Seed with native mix of wildflowers and grasses (suppliers can help recommend specific mixes based on your site conditions).
4. Install 100% biodegradable fiber fabric mat or erosion control blanket over seeded area.
5. Plant container plants (trees, shrubs and/or perennials). Cut an "X" in biodegradable fabric mat/blanket and dig a hole for the plant to be installed.
6. Water until vegetation becomes established.
7. For meadow mix, mow once/year (early spring) to 6 inches in height (don't mow any shorter).

Sources:

100% biodegradable fiber fabric mat/erosion control blankets (weed and seed free):

- Pennington Seed Starter Mat® (available at local home/hardware stores)
- Curlex® erosion control blanket (available at www.benmeadows.com)

Seed mixes/packets:

- Bowman's Hill Wildflower Preserve (packets only) web: www.bhwp.org, phone: (215) 862-2924
- Ernst Conservation Seed (retail/$25min order), web: www.ernstseed.com, phone: (800) 873-3321
- Pinelands Nursery & Supply (bulk orders, 5 lb min), web: www.pinelandsnursery.com , phone: (800) 291-9486

Cost Estimates:

100% biodegradable fiber fabric mat/erosion control blankets (weed and seed free):

Pennington Seed Starter Mat® - size/cost: 39" x 20' $15/roll

Curlex® erosion control blanket- size/cost: 1' x 101' $45/roll

Seed Mixes:

Riparian Buffer Mix (similar to Basin Bottom Mix) from suppliers: 1/2 to 1/3 lb per 1,000 Sq Ft ($40-75 per lb)

Bowman's Hill Wildflower Preserve Seed Packets: $2-3/packet, yield 8-10 pots of plants

References

- A Homeowner's Guide to Stormwater Management, Philadelphia Water Department (www.delawareestuary.org/pdf/HomeownersGuideSWMgmnt.pdf)
- Guide to Gardening for Life in Southeastern Pennsylvania (http://www.audubon.org/bird/at_home/guidetogardeningforlife_pa.html)
- List of native plant nurseries: Pennsylvania Native Plant Society (www.pawildflower.org)
- Adopt-a-buffer Toolkit, Delaware Riverkeeper Network (www.delawareriverkeeper.org/pdf/Toolkit-Final.pdf)

Note: PWD does not endorse any products or suppliers identified nor can they verify any information/claims these sources provide. Design and installation of a project is site specific and the responsibility of the property owner.

For more information, contact:
Jeanne Waldowski
Philadelphia Water Department (Office of Watersheds)
215-685-4945
Jeanne.waldowski@phila.gov
http://www.phillywatersheds.org/public

Received 09-18-24

PERKIOMEN WATERSHED CONSERVANCY

Jessie Kemper
Director of Conservation
1 Skippack Pike, Schwenksville, PA 19473
jkemper@perkiomenwatershed.org
Phone 610.287.9383

2025 Membership Form

Please fill out and return with your membership payment.

Membership Levels	Price per Level *(Circle desired 2025 Membership Level)*	Membership Level Benefits
✓ Benefactor	$1,000	• **MS4 Municipal Grant Program:** fulfills MCM #2- Public Involvement/Participation and adds to your BMP Inventory • **Stormwater Symposium:** fulfills MCM #6- Pollution Prevention/Good Housekeeping for Municipal Operations • **Community Engagement Workshop:** fulfills MCM #1- Public Education and Outreach, MCM #2- Public Involvement/Participation • **Stormwater Statistics Package:** fulfills MCM #2- Public Involvement/Participation, adds to your BMP inventory and helps with MS4 reports • **Educational Articles:** fulfills MCM #1- Public Education and Outreach
Patron	$500	• **Stormwater Statistics Package:** fulfills MCM #2- Public Involvement/Participation, adds to your BMP inventory and helps with MS4 reports • **Educational Articles:** fulfills MCM #1- Public Education and Outreach
Promoter	$250	• **Educational Articles:** fulfills MCM #1- Public Education and Outreach

Municipality: Upper Providence Twp.

Who should we contact regarding MS4 materials?

Name: Tom Broadbelt

Title: Director of Public Works

Mailing Address: 1286 Black Rock Rd.
Phoenixville Pa 19460

Email: Tbroadbelt@Uprov-Mont.org Phone: 610-933-9179

PERKIOMEN
WATERSHED CONSERVANCY

Jessie Kemper
Director of Conservation
1 Skippack Pike, Schwenksville, PA 19473
jkemper@perkiomenwatershed.org
Phone 610.287.9383

2025 Benefactor Benefits Received

1. **Educational Articles** – access to the following educational articles to share with staff and residents of your municipality:
    a. Fall Flyer – Bringing Biodiversity Back to Your Yard
    b. Winter Flyer – Snow is Stormwater Too
    c. Spring Flyer – Managing Spring Stormwater
    d. Summer Flyer – Protecting Water Resources this Summer

2. **Stormwater Statistics Package** – access to an informational package that summarizes the benefits your municipality received by participating in events and conservation projects hosted by the Perkiomen Watershed Conservancy.

3. **Perkiomen Stormwater Symposium** – municipal staff members were eligible to receive two free tickets to the Stormwater Symposium. This training brought together regional partners and experts to discuss the different methods local organizations are using to tackle stormwater issues. The Symposium was designed to be a one-stop-shop for municipal staff covering all six MCMs while also providing education materials and volunteer opportunities for municipal residents.

4. **Community Stormwater Workshops** – residents were given the opportunity to learn about installing rain gardens in their yards, converting a section of their lawn to native garden, or building their own rain barrel to be installed at home during these interactive stormwater workshops.

5. **MS4 Municipal Grant Program** – the opportunity to apply for grant funding to install BMPs within your municipality. Potential projects for this grant include rain garden installations, stormwater basin naturalizations, riparian buffer plantings, etc.

Please contact Jessie (jkemper@perkiomenwatershed.org) if you need copies any benefits listed above.

Upper Providence Township

MCM#2 - Public Involvement / Participation

Public Involvement / Participation Program (1 Sheet)

Township Website Links to Stormwater Issues / Associations (1 Sheet)

Perkiomen Watershed Stormwater Reduction Statistics (1 Sheet)

Upper Providence Township
NPDES MS4 Permit PAG130108
2019 Progress Report
Public Involvement / Participation Program
May 20, 2024

MCM#2 – Develop, Implement, and Maintain a Written Public Involvement and Participation Program (PIPP):

The Township organizes events throughout the year. These events include Community Day held in September of every year. These types of events represent opportunities to emphasize the importance of environmental protection, including stormwater quality measures. The Township annually distributes stormwater educational material.

The Township also partners with area organizations, including the Perkiomen Watershed Conservancy and the Schuylkill Canal Association by promoting stream cleanup and community events.

The Perkiomen Watershed Conservancy sponsors community events, such as stream cleanups, rain barrel construction demonstrations, Out and About Explorations, etc. By partnering with the Conservancy, Upper Providence Township is advocating participation in the programs provided by the conservancy.

The Schuylkill Canal Association sponsors community events, such as Earth Day Cleanup, Schuylkill River Trail Weekend, Canal Day, etc. By partnering with the Association, Upper Providence Township is advocating participation in the programs provided by the association.

STORMWATER MANAGEMENT

After stormwater flows across lawns, down driveways and streets, and into storm drains in Upper Providence Township, it eventually makes its way into the Schuylkill Canal, the Schuylkill River, the Perkiomen Creek, and other waterways used for drinking, swimming, and fishing. Before entering our water supply, stormwater picks up dirt, debris, and chemicals.

Here are some ways residents can protect our water supply by helping reduce the contaminants in our stormwater:

- Use the Waste System Authority of Eastern Montgomery County's Household Hazardous Waste Collection Program to dispose of hazardous

Quick Links

- After the Storm Brochure (PDF)
- Keep Winter Wonderful (PDF)
- Department of Environmental Protection Stormwater Management
- An Essential Guide on Home Water Conservation [60+Ways to Save Water at Home]
- Pennsylvania Department of Environmental Protection
- Perkiomen Watershed Conservancy
- Protecting Water Quality from Urban Runoff (PDF)
- Rain Drain Brochure (PDF)

household substances, such as used motor oil, cleaning supplies, and paint.

- Use pesticides, fertilizers, and herbicides properly to prevent excess runoff.
- Pick up after pets and dispose of their waste properly. If left in your yard or at the park, pet waste can be carried into the storm sewer system or a stream by stormwater runoff.
- Instead of washing your car in your driveway, take it to a commercial car wash, where the water is treated and recycled.
- Plant drought-tolerant, native plants and grasses in your garden. They often require less water, fertilizer, and pesticides.

Protect Our Waterways

Updated state and federal guidelines no longer recommend flushing stormwater into the nearest waterway or detention basin. Read10 Things You Can Do to Protect Our Waterways (PDF)

- Schuylkill Canal Association
- Solution to Pollution (PDF)
- Stormwater and Construction Industry (PDF)
- A Student's Guide to Conservation and Environmental Science

VIEW ALL LINKS

PERKIOMEN
WATERSHED CONSERVANCY

Jessie Kemper
Director of Conservation
1 Skippack Pike, Schwenksville, PA 19473
jkemper@perkiomenwatershed.org
Phone 610.287.9383

Upper Providence Township Stormwater Reduction Statistics Package

The chart below shows the statistics for your municipality during the 2025 membership year:

Conservation Project	Site(s)	Number Municipal Volunteers	Municipal Volunteer Hours	Amount
Tree Plantings	2	25	75	80 trees planted
Stream Clean-up	1	8	24	15 bags of trash & 1 tire removed
Water Chestnut Removal	0	0	0	0 bags of EWC removed
Native Garden Installations	0	0	0	0 perennials planted
Community Stormwater Workshops	0	0	0	0 rain barrels made
TOTALS	**3**	**33**	**99**	**96**

The chart below shows the statistics for the entire Perkiomen Watershed during the 2025 membership year:

Conservation Project	Site(s)	Number of Volunteers	Volunteer Hours	Total Amount
Tree Plantings	10	200	800	700 trees planted
Stream Clean-up	182	1,770	5,310	1,815 bags of trash removed
Water Chestnut Removal	1	50	1,600	180 bags of EWC removed
Native Garden Installations	2	100	300	3,000 native plants installed
Community Stormwater Workshops	12	100	100	50 rain barrels made 200 native plants given to residents
TOTALS	**207**	**2,220**	**8,110**	**5,945**

Upper Providence Township

MCM#3 – Illicit Discharge Detection and Elimination

MS4 IDD&E Checklist (2 Sheets)

Illicit Discharge Detection and Elimination Program (1 Sheet)

Illicit Discharge Inspection Quarterly Summary Report (1 Sheet)

Typical Outfall Inspection Form (FOF-005-2630) (1 Sheet)
Copies of All Outfall Inspection Forms Available Upon Request

UPT MS4 Outfall Map 2018 Annual Report Copy (1 Sheet)

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) ILLICIT DISCHARGE DETECTION & ELIMINATION (IDD&E) CHECKLIST

This checklist may be used by MS4 permittees to ensure complete implementation of MCM #3 of MS4 NPDES permits.

Requirement	Check if Completed
BMP #1: Develop and maintain a written IDD&E program to detect, eliminate and prevent illicit discharges. The program must be developed within one year of permit coverage for new permittees and updated and evaluated annually for renewal permittees. The program must include:	☒
a. Dry weather field screening of outfalls for non-stormwater flows.	☒
b. Sampling of dry weather discharges for selected chemical and biological parameters.	☒
c. Procedures for identifying priority areas. These are areas with a higher likelihood of illicit discharges, illicit connections or illegal dumping. Priority areas may include areas with older infrastructure, a concentration of high-risk activities, or past history of water pollution problems.	☒
d. Procedures for screening outfalls in priority areas during varying seasonal and meteorological conditions.	☒
e. Procedures for identifying the source of an illicit discharge when a contaminated flow is detected at a regulated small MS4 outfall.	☒
f. Procedures for eliminating an illicit discharge.	☒
g. Procedures for assessing the potential for illicit discharges caused by the interaction of sewage disposal systems (e.g., on-lot septic systems, sanitary piping) with storm drain systems.	☒
h. Mechanisms for gaining access to private property to inspect outfalls (e.g., land easements, consent agreements, search warrants).	☐
i. Procedures for program documentation, evaluation and assessment.	☒
j. Recordkeeping – records must be kept of all outfall inspections, flows observed, results of field screening and testing, and other follow-up investigation and corrective action work performed under this program.	☒
BMPs #2 & #3: Develop and maintain map(s) of your regulated small MS4. The map(s) must be developed by the fourth year of permit coverage for new permittees and be updated as necessary. The map(s) must depict the following:	☒
a. Locations of all outfalls directly or indirectly discharging stormwater from your MS4.	☒
b. Locations and names of all surface waters of the Commonwealth that receive discharges from those outfalls.	☒
c. The entire storm sewer collection system, including roads, inlets, piping, swales, catch basins, channels, basins, etc.	☒
d. Municipal and/or watershed boundaries.	☒
BMP #4: Conduct outfall field screening, identify the source of any illicit discharges, and remove or correct any illicit discharges using procedures developed under BMP #1. Specific requirements include the following:	☒
a. New permittees – screen all identified MS4 outfalls at least twice during dry weather during the permit term; screen at least forty percent of the total number of outfalls per year.	☒
b. Renewal permittees – screen all identified MS4 outfalls at least once during each permit coverage term; for areas where past problems have been reported or known sources of dry weather flows occur on a continual basis, outfalls must be screened annually.	☒

Requirement	Check if Completed
c. If screening reveals dry weather flow, the discharge from the outfall and the area around the outfall must be inspected visually for color, turbidity, sheen, floating or submerged solids; for adverse effects on plants or animals in proximity to the outfall; and for odor. If the outfall produces any odor, or if the visual inspection shows any indication that the discharge may contain pollutants, then samples of the discharge must be collected for field and/or lab testing of selected chemical and biological parameters as part of a process to determine if the dry weather flow is illicit.	☒
d. Prioritize outfall screenings according to the perceived chance of illicit discharges within the outfall's contributing drainage area.	☒
e. Inspections must be recorded on the Outfall Reconnaissance Inventory/Sample Collection field sheet.	☐
f. Adequate written documentation must be maintained to justify a determination that an outfall flow is not illicit. If an outfall flow is illicit, the actions taken to identify and eliminate the illicit flow must be documented.	☒
g. The results of outfall inspections and actions taken to remove or correct illicit discharges must be summarized in periodic reports.	☒
BMP #5: Enact a stormwater management ordinance to implement and enforce a stormwater management program that includes prohibition of non-stormwater discharges to the regulated small MS4.	☒
a. New permittees – within the first year of coverage under the permit, new permittees must enact and implement an ordinance from an Act 167 Plan approved by the Department in 2005 or later, the MS4 Stormwater Management Ordinance, or an ordinance that satisfies all applicable requirements in a completed and signed MS4 Stormwater Management Ordinance Checklist.	☒
b. New permittees – submit a letter signed by a municipal official, municipal engineer, or the municipal solicitor as an attachment to your first year report certifying the enactment of an ordinance that meets all applicable requirements of this permit.	☐
c. Renewal permittees – continue to maintain, update, implement, and enforce a Stormwater Management Ordinance that satisfies all applicable requirements.	☒
BMP #6: Provide educational outreach to public employees, business owners and employees, property owners, the general public and elected officials (i.e., target audiences) about the program to detect and eliminate illicit discharges.	☒
a. During each year of permit coverage, appropriate educational information concerning illicit discharges shall be distributed to the target audiences using methods outlined under MCM #1 of the MS4 NPDES permit.	☒
b. Establish and promote a stormwater pollution reporting mechanism (e.g., a complaint line with message recording) by the end of the first year of permit coverage for the public to use to notify you of illicit discharges, illegal dumping or outfall pollution.	☒
c. Respond to all complaints in a timely and appropriate manner. Document all responses, include the action taken, the time required to take the action, whether the complaint was resolved successfully.	☒

Upper Providence Township
NPDES MS4 Permit PAG130108
2022 Progress Report
Illicit Discharge Detection and Elimination
June, 2024

MCM#3 – Develop, Implement, and Maintain a Written Program for the Detection, Elimination, and Prevention of Illicit Discharges into a Regulated MS4 (IDD&E):

The Township conducts dry weather outfall screening in accordance with the requirements of the IDD&E program. Township Public Works employees monitor outfalls two (2) times per year. The number of outfalls monitored each reporting period exceeds the minimum requirement of 20% of the system per year. If an outfall or observation point regularly has dry weather flow or a history of problems, those outfalls are to be screened once per year. Copies of the outfall screening forms are available upon request.

A GIS based map has been developed, maintained, and updated yearly. The map shows the location of all outfalls and the locations and names of all surface waters of the commonwealth that receive discharges from those outfalls. The database provides the capability of tracing an illicit discharge to a specific area with property owner information associated with affected properties.

Illicit Discharge Inspection Quarterly Summary Report

Municipality: Upper Providence Township

Contact Name: Tim Tieperman, Manager, Upper Providence Township

Reporting Period: July 1, 2024 thru June 30, 2025

Year: 2025

I. Field Activities

1. *Describe field surveys.*

	Industrial Areas	Commercial Areas	Residential Areas	Other (describe)
Number of screening points	0	6	188	
Channel Miles				

2. *List how many discharges were identified by the following methods.* Include only discharges that could have been prevented by BMPs. Do not include fluid releases associated with minor traffic accidents.

a. During field surveys at defined screening points:

0 identified by maintenance crews

___ identified by illicit discharge inspectors

b. Calls from:

_____ maintenance crews

_____ other agencies

_____ public

3. *List the number of times the following materials were identified.*

0	Paint	0	Concrete Cutting Slurry/Washwaters
0	Concrete	0	Vehicle Cleaning Washwaters
0	Construction Debris	0	Building/Sidewalk Washwaters
0	Medical Wastes	0	Other Washwaters
0	Food Wastes	0	Sewage
0	Industrial Wastes (solvents, metals, corrosives, cooling tower blowdown, etc.)	0	Automotive Fluids (antifreeze, used motor oil, fuels, etc.)

____ Other (describe): _____

II. Follow-up Activities

1. *Describe whether sources of discharges were identified.*

0 Number of sources that were identified

0 Number of incidents when source of discharge was not identified

2. *Describe whether discharges were abated.*

0 Number of discharge incidents that were abated.

0 Number of new discharge incidents where discharge is continuing, as of the end of the reporting period. (ATTACH INSPECTION REPORT)

0 Number of continuing discharges that have already been reported in previous quarter(s).

3. *Describe enforcement activities conducted.*

0	Verbal Notice	0	Warning Notice
0	Administrative Action	0	Administrative Action w/ Penalty and/or Fine
0	Legal Notice		

This form was modified from *Municipal Urban Runoff Program: A How-To Guide For Developing Urban Runoff Programs for Small Municipalities,* by the City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, and Central Coast Regional Water Quality Control Board, 1998.

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

MS4 OUTFALL FIELD SCREENING REPORT

BACKGROUND INFORMATION

Permittee Name: **Upper Providence Township**	NPDES Permit No.: PAI130108
Date of Inspection:	Outfall ID No.:
Land Uses in Outfall Drainage Area (Select All): ☐ Industrial ☐ Urban Residential ☐ Commercial ☐ Suburban Residential ☐ Open Space ☐ Other:	Latitude: ____° ____' ____"
	Longitude: ____° ____' ____"
	Dry Weather Inspection? ☐ Yes ☐ No
	Date of Previous Precipitation:
	Amount of Previous Precipitation: in
Inspector Name(s):	Were Photographs Taken? ☐ Yes ☐ No
	Are Photographs Attached? ☐ Yes ☐ No

OUTFALL DESCRIPTION

TYPE	MATERIAL	SHAPE	DIMENSIONS	SUBMERGED
☐ Closed Pipe	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other	☐ Circular ☐ Single ☐ Elliptical ☐ Double ☐ Box ☐ Triple ☐ Other ☐ Other	Diameter: ____ in	☐ In Water ☐ With Sediment
☐ Open Channel	☐ Concrete ☐ Earthen ☐ Rip-Rap ☐ Other	☐ Trapezoid ☐ Parabolic ☐ Other	Depth: ____ in Top Width: ____ in Bottom Width: ____	

Dry Weather Flow Present at Outfall During Inspection? ☐ Yes ☒ No *(If No, skip to Certification Section)*

Description of Flow Rate: ☐ Trickle ☐ Moderate ☐ Significant ☐ N/A

DRY WEATHER FLOW EVALUATION

Does the dry weather flow contain color? ☐ Yes ☐ No If Yes, provide a description below.

Does the dry weather flow contain an odor? ☐ Yes ☐ No If Yes, provide a description below.

Is there an observed change in the receiving waters as a result of the discharge? ☐ Yes ☐ No
If Yes, provide a description below.

Does the dry weather flow contain floating solids, scum, sheen or substances that result in deposits? ☐ Yes ☐ No
If Yes, provide a description below.

Were sample(s) collected of the dry weather flow? ☐ Yes ☐ No (If Yes, No. Samples: _____)

FIELD / LABORATORY ANALYSIS

PARAMETER	RESULTS	UNITS	PARAMETER	RESULTS	UNITS
Flow Rate		GPM	Fecal Coliform		No./100 mL
pH		S.U.	COD		mg/L
Total Residual Chlorine (TRC)		mg/L	BOD5		mg/L
Conductivity		µmhos/cm	TSS		mg/L
Ammonia-Nitrogen		mg/L	TDS		mg/L
Other: _____			Oil and Grease		mg/L
Other: _____			Other: _____		

Indicate the parameters above that were analyzed by a DEP-certified laboratory:

ILLICIT DISCHARGES

Is the dry weather flow an illicit discharge? ☐ Yes ☐ No

If Yes, describe efforts made to determine the source(s) of the illicit discharge.

Describe corrective actions taken by the permittee in response to the finding of an illicit discharge.

Inspector Comments:

RESPONSIBLE OFFICIAL CERTIFICATION

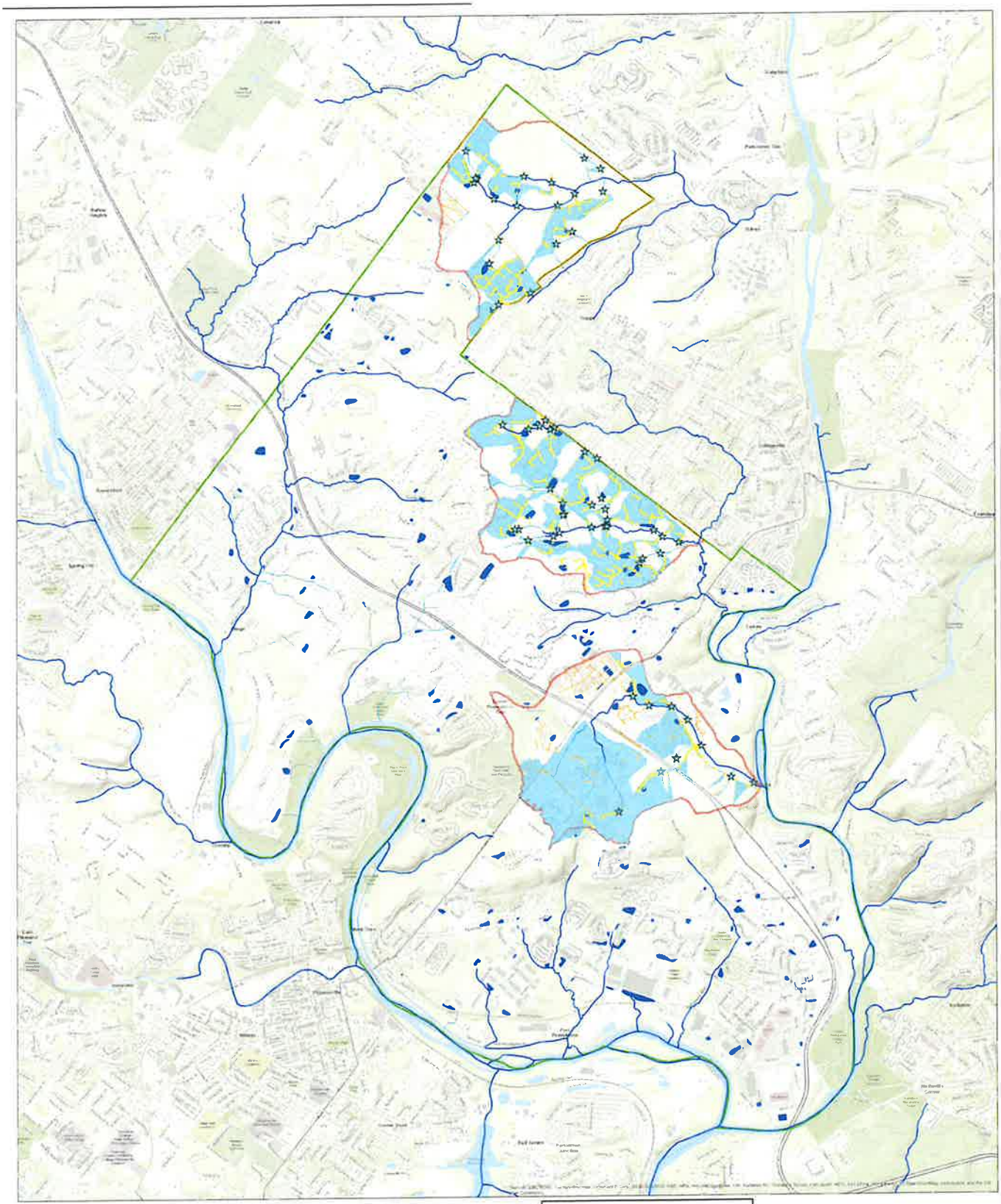
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Responsible Official Name

Signature

Telephone No.

Date



UPPER PROVIDENCE TOWNSHIP
MS4 STORMWATER MAP

MONTGOMERY COUNTY, PENNSYLVANIA

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES
184 West Main Street, Suite 300 Trappe, PA 19426
(610) 489-4949
www.gilmore-assoc.com

JOB NO: 14-06034T

Date: 8/23/2021

Legend

- MS4_PRP_Outfalls
- Streams
- Stormwater Conveyance Channels
- Unmapped Streams
- Storm_Pipes_PRP
- Storm_Structures_PRP
- Private_structures_PRP
- Private_pipes_PRP
- Storm_Basins
- PRP Planning Area
- School Run Watershed
- Doe Run Watershed
- Donny Brook Watershed
- Upper Providence Township Boundary

N

W E

S

Upper Providence Township

MCM#3 – Pollutant Reduction Plan Sediment Removal Status

350 Greenwood Avenue PRP Streambank Restoration Plans (5 Sheets)

350 Greenwood Avenue Streambank Restoration Site Review Plan (1 Sheet)

350 Greenwood Avenue Streambank Restoration Site Review Email (4 Sheets)

Please note, a PADEP site review of the above referenced project is currently scheduled for October 20, 2025 to review compliance with the Upper Providence Township Sediment Removal Requirement for the current 5 year permit cycle.

Outlook

FW: New MS4 DEP Requirements

From Jim Hersh <jhersh@gilmore-assoc.com>

Date Wed 4/30/2025 9:56 AM

To Dave Leh <DLEH@gilmore-assoc.com>; Jennifer Gutshall <jgutshall@gilmore-assoc.com>; Edward Brown <ebrown@gilmore-assoc.com>; Krista Heinrich <kheinrich@gilmore-assoc.com>; Colleen Kane <ckane@gilmore-assoc.com>; Erin von Hacht <evonhacht@gilmore-assoc.com>; Adam Skrocki <askrocki@gilmore-assoc.com>; David Fetzer <dftezer@gilmore-assoc.com>; Brian Studer <bstuder@gilmore-assoc.com>; MaryLou Flickinger <MLOWRIE@gilmore-assoc.com>; Bianca M. Nitica <bnitica@gilmore-assoc.com>

All,

Andrew Schank from the Newtown Office provided the below summary of MS4 requirements which were in the DRAFT permit regulations that DEP released earlier this year. It is my understanding that DEP plans to finalize requirements based on feedback (the comment window is closed) and roll out the final version later this summer (hopefully). I just wanted to pass along Andrew's notes since I know Municipalities are always asking what we know or have heard.

Thanks
Jim

From: Andrew R. Schanck <aschanck@gilmore-assoc.com>
Sent: Tuesday, April 29, 2025 1:54 PM
To: Amanda Fuller <afuller@gilmore-assoc.com>; Colleen Kane <ckane@gilmore-assoc.com>; Janene Marchand <jmarchand@gilmore-assoc.com>; Jim Hersh <jhersh@gilmore-assoc.com>; Krista Heinrich <kheinrich@gilmore-assoc.com>; MaryLou Flickinger <MLOWRIE@gilmore-assoc.com>; Meghan Davis <mdavis@gilmore-assoc.com>
Subject: RE: New MS4 DEP Requirements

Hello all,

Here are my formal notes on my review of the draft PAG-13 General Permit MS4:

- Pollutant Reduction Plans (PRPs) calculated in lb of sediment / yr will be replaced by Volume Management Plans with a Volume Management Objective (VMO) expressed in CF of runoff / yr.

- The VMO will still be based on Urbanized Area in the municipality. However, the parsing that was allowed in the previous cycle will be replaced by a percentage reduction based on the urban area that is treated by SCMs that are "functional and capable of treating at least one inch of runoff from impervious surfaces"

- The above requirement puts heavy emphasize on municipalities establishing an accurate SCM Inventory and keeping up with maintenance tracking on their SCM Inventory. The SCMs that can counted against the VMO requirement must be on the SCm Inventory with evidence of maintenance documented, as the draft guidance stands currently. For the municipalities that have already been diligently been keeping up with this, this will likely be a reward, but for those that

have been doing the bare minimum in this department, this will either force them to dive into this effort more deeply or will put them behind.

- This setup will once again be tough for old municipalities with very old infrastructure that was built before modern SWM requirements in place. The relief for some of the larger and older municipalities is there is currently supposed to be a 50,000 CF / yr cap.

- One big change is that a municipality's volume will NOT be broken down by watershed but will be one community-wide volume target number.

- The VMO amount can also be reduced through the Maximum Extent Practicable (MEP) Calculator Spreadsheet. The spreadsheet appears that it will be mandatory for all VMO calculations, even if it doesn't provide reductions. The urbanized impervious area and percent treated by inventoried and maintained by SCMs is the first part of the MEP spreadsheet.

- Step 2 of the MEP spreadsheet is where things get weird. A feasibility index is calculated by Financial, Socioeconomic and "SCM Opportunity" factors. This will require information to be input about the municipality including but not limited to Lowest Quintile Household Income, Poverty and Unemployment Rates, average utility bills, affordability indictors, percentage of impervious under municipal ownership and % of that area untreated, and number of annual land development projects per year. Some of these it seems can be looked up from state data tables, but this will likely still require all of us to bug municipal officials for information to input.

- All of those and more factors go into a score in the calculator, and if it is higher than 1, it becomes a reduction factor. If it is below 1, it does not amplify the requirement, it just becomes a factor of 1.

- Unless a municipality has no MS4 obligations even before the MEP credits and reductions, it sounds like there is going to be a minimum VMO for municaplities.

- The calculation of the VMO will be based on one inch of runoff, but fortunately, the draft guidance is currently to allow up to the 2-year storm to count toward meeting the VMO, so SCM projects proposed that can handle a larger portion of their watershed's drainage will be beneficial.

- There no longer appears to be a watershed size component to SCM crediting. That should create better SCMs than the previous cycle, where running a huge drainage area through an overwhelmed SCM just for the sake of credit was the name of the game.

- The new MS4 general permit looks like it going to heavily encourage collaborations between multiple municipalities. As the draft stands, it sounds like they will give a 1% credit per different municipality involved to each municipality (so collaborations of 10 much better than collaborations of 2). They are also heavily incentivizing municipalities being willing to be co-permittee on a project (rather than just lump on) by adding an extra 10% of credit.

- SCMs that have a volume component will be credited directly related to their management of one inch of runoff. Other SCMs and mitigation strategies may be able to obtain volume credit for non-volume, but it seems like these opportunities will be limited. This credit can be applied to crediting former cycle MS4 projects, SCMs in the SCM Inventory, or new proposed MS4 projects.

- How SCMs and MS4 projects are credited look like they will change significantly. The change will be most significant for stream restoration, which PADEP clearly wants to disincentivize. Stream restoration must now have a floodplain reconnection component for credit. Volume management of floodplain reconnection will now be based on the volume of runoff flowing through the floodplain reconnection area perpendicular to the stream for 1" of rainfall. I can't say for sure without a good project example, but it seems like in most cases this would greatly reduce the credit for stream

restoration relative to other SCMs, even with the extra design effort and cost of the floodplain reconnection.

- I was not able to find specific criteria on what parameters would need to be met for floodplain reconnection and restoration.

- One of the craziest parts of the new guidelines is that, for previous cycle MS4 stream restoration projects, only the ones with floodplain reconnection are supposed to be credited toward the next cycle, UNLESS (a) the project handled the entire permit cycle sediment requirement; and (b) some crazy formula is filled out involving the amount of money paid for by the municipality (grants don't count) relative to the budget or something. I'm not even going to try to summarize it in more depth. Hopefully, common sense prevails and this gets changed, but if not, it will be one of those things we'll have to figure out when we all do these Volume Management Plans.

- Dry detention basins are not supposed to count at all toward the SCM Inventory for credits, but if retrofitted for the previous MS4 cycle, it looks like they can be counted at 50%.

- Swales are now to count only with check dams.

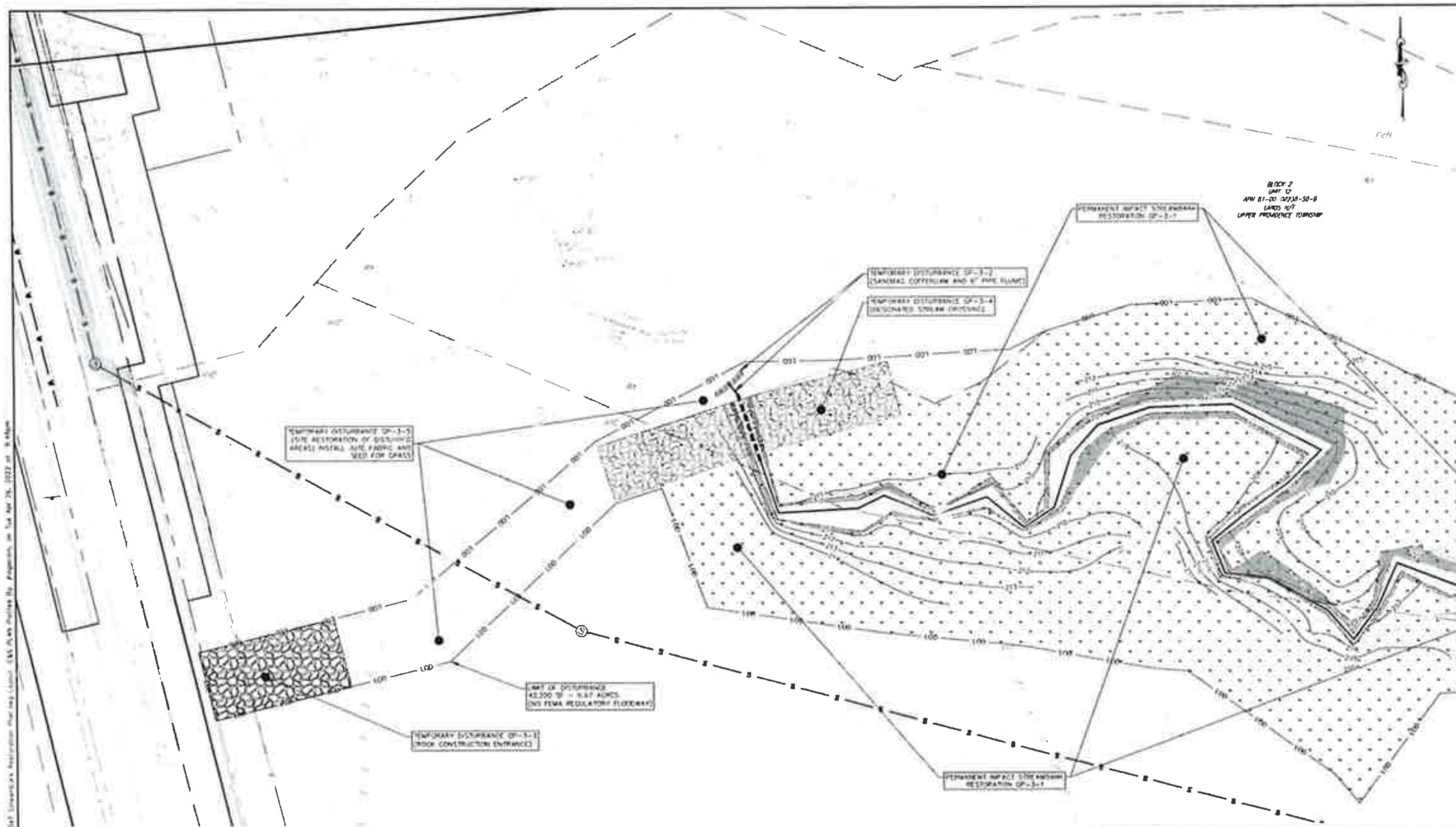
- It looks like small infiltration and some nonstructural volume SCMs, like tree planting, can count. For SCM Inventory credit, it is probably not that easy to track these types of SCMs, since many of them are likely on non-NPDES projects.

- Currently, the new permit cycle with these draft regs is slated to begin October 1, 2026, so September 30 of next year is currently the target date to have these new Volume Management Plans submitted.

Hope this helps!

Andrew R. Schanck, P.E., Project Manager
Gilmore & Associates, Inc.
12 Terry Drive, Suite 205, Newtown, PA 18940
Main: 215-369-3955 | Direct: 267-274-2227

www.gilmore-assoc.com | BUILDING ON A FOUNDATION OF EXCELLENCE



Map Unit Symbol	Map Unit Name	Hydric rating	Hydrologic Soil Group	Depth to restrictive feature	Depth to Water Table	Disturbed Area	Percent of Disturbed Area
KC	Klinesville channery silt loam, 8 to 15 percent slopes	0	D	10 to 20 inches to lithic bedrock	More than 80 inches	0.40 acres	42.10%
Rt	Rowland silt loam, terrace	5%	C	60 to 99 inches to lithic bedrock	About 12 to 36 inches	0.55 acres	57.90%
Totals for Area of Interest						0.95 acres	100.00%

AVOIDANCE MEASURES:

- GP-3 CANNOT BE USED FOR CONSTRUCTION ACTIVITIES IN WILD TROUT STREAMS FROM OCTOBER 1 THROUGH DECEMBER 31
- GP-3 CANNOT BE USED FOR CONSTRUCTION ACTIVITIES IN STOCKED TROUT STREAMS FROM MARCH 1 TO JUNE 15
- THE UNITED STATES FISH AND WILDLIFE SERVICE HAS REQUESTED THAT THE PROJECT CONSTRUCTION PHASE OCCURS BETWEEN OCTOBER 1 AND MARCH 31

THEREFORE, CONSTRUCTION MAY ONLY OCCUR BETWEEN JANUARY 1 AND FEBRUARY 28.

EROSION & SEDIMENT CONTROL NOTE:

1. THE EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE AT THE SITE AT ALL TIMES, AND ALL BMP's ON THE PLAN MUST BE IMPLEMENTED AND MAINTAINED PRIOR TO, DURING AND AFTER CONSTRUCTION

I, ______________ DO HEREBY CERTIFY PURSUANT TO THE PENALTIES OF 18 Pa. C.S.A. Sec. 4904 TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THAT THE INFORMATION CONTAINED IN THE ACCOMPANYING PLANS, SPECIFICATIONS, AND REPORTS HAS BEEN PREPARED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICE, IS TRUE AND CORRECT, AND IS IN CONFORMANCE WITH CHAPTER 105 OF THE RULES AND REGULATIONS OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

LEGEND:

- WETLANDS
- WATERS OF THE COMMONWEALTH
- SOIL BOUNDARY/TYPE
- LIMIT OF DISTURBANCE
- STREAMBANK PLANTING AREA W/ JUTE FABRIC & BANK SEEDING
- SANDBAG COFFERDAM
- ROCK CONSTRUCTION ENTRANCE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- DISTURBANCE WITHIN TOP OF BANK TO TOP OF BANK

SCALE 1"=20' (20, 0, 20, 40 FEET)

PENNSYLVANIA ONE CALL SYSTEM, INC.

811

BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA! CALL 1-800-242-1776

NON-MEMBERS MUST BE CONTACTED DIRECTLY

PA LAW REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR DEMOLISH

LOCATIONS OF EXISTING UNDERGROUND UTILITIES/FACILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM RECORDS, FIELD MARKOUTS BY UTILITY OWNERS, AND/OR ABOVE-GROUND OBSERVATION OF THE SITE. NO EXCAVATIONS WERE PERFORMED IN THE PREPARATION OF THESE DRAWINGS. THEREFORE ALL UTILITIES SHOWN SHOULD BE CONSIDERED APPROXIMATE IN LOCATION, DEPTH, AND SIZE. THE POTENTIAL EXISTS FOR OTHER UNDERGROUND UTILITIES/FACILITIES TO BE PRESENT WHICH ARE NOT SHOWN ON THE DRAWINGS. ONLY THE VISIBLE LOCATIONS OF UNDERGROUND UTILITIES/FACILITIES AT THE TIME OF FIELD SURVEY SHALL BE CONSIDERED TRUE AND ACCURATE. COMPLETENESS OR ACCURACY OF UNDERGROUND UTILITIES/FACILITIES ARE NOT GUARANTEED BY GILMORE & ASSOCIATES INC.

ALL CONTRACTORS WORKING ON THIS PROJECT SHALL VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES/FACILITIES PRIOR TO START OF WORK AND SHALL COMPLY WITH THE REQUIREMENTS OF P.L. 852, NO. 287 DECEMBER 10, 1974 AS LAST AMENDED ON APRIL 28, 2018 PENNSYLVANIA ACT 50

GILMORE & ASSOCIATES INC. HAS NOT OBTAINED A PA-ONE CALL SERIAL NUMBER FOR DESIGN PURPOSES

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

ONLY THOSE PLANS INCORPORATING THE PROFESSIONAL SEAL SHOULD BE CONSIDERED OFFICIAL AND RELIED UPON BY USER. THIS PLAN IS PREPARED SPECIFICALLY FOR THE CLIENT AND PROJECT DESIGNATED HEREON. MODIFICATION, REVISION, DUPLICATION OR USE WITHOUT THE CONSENT OF GILMORE & ASSOCIATES, INC. IS PROHIBITED.

JOSHUA D. HAGACORN, PROFESSIONAL ENGINEER

DATE 5/17/2022

REV	DESCRIPTION	DATE	BY
1	REVISED PER WOOD REVIEW LETTER DATED 4/1/2022	4/27/2022	JDH

350 GREENWOOD AVENUE STREAMBANK STABILIZATION PROJECT

PRP STREAMBANK RESTORATION

UPPER PROVIDENCE TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

EROSION & SEDIMENTATION CONTROL PLAN

GILMORE & ASSOCIATES, INC.

G&A No. 14-06034T	
TAX MAP PARCEL No. N/A	
TOTAL AREA N/A	TOTAL LOTS N/A
DATE 3/11/2022	SCALE 1"=20'
DRAWN BY JDH	CHECKED BY WKD

SHEET NO.: 1 OF 5

PERMIT PLAN

STANDARD EROSION AND SEDIMENTATION CONTROL PLAN NOTES:

1. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.
2. AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE E&S PLAN PREPARER, THE PCSM PLAN PREPARER, THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE PCSM PLAN, AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE PRECONSTRUCTION MEETING.
3. AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
4. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO IMPLEMENTATION.
5. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.
6. CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMPS SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E&S PLAN.
7. AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN.
8. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE LOCAL CONSERVATION DISTRICT AND/OR THE REGIONAL OFFICE OF THE DEPARTMENT.
9. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1, AND 287.1 ET. SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.
10. ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.
11. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING.
12. ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS.
13. VEHICLES AND EQUIPMENT MAY NEITHER ENTER DIRECTLY NOR EXIT DIRECTLY FROM THE PROJECT AREA ONTO MOUNTAIN ROAD WITHOUT UTILIZING THE ROCK CONSTRUCTION ENTRANCE.
14. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPS SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMPS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
15. A LOG SHOWING DATES THAT E&S BMPS WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.
16. SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
17. ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS.
18. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES (6 TO 12 INCHES ON COMPACTED SOILS) PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.
19. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
20. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
21. FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
22. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
23. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
24. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
25. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDED AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN.
26. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN 1 YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN 1 YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.
27. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.
28. E&S BMPS SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.
29. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE E&S BMPS.
30. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPS MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION STORMWATER MANAGEMENT BMPS. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMPS SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON.
31. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT TO SCHEDULE A FINAL INSPECTION.
32. FAILURE TO CORRECTLY INSTALL E&S BMPS, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPS MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO $10,000 PER DAY IN CIVIL PENALTIES, UP TO $10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO $25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.

SEQUENCE OF CONSTRUCTION:

1. PRIOR TO ANY EARTH DISTURBANCE, A PRE-CONSTRUCTION MEETING IS TO BE HELD BETWEEN THE CONTRACTOR, TOWNSHIP ENGINEER, AND TOWNSHIP STAFF.
2. A MINIMUM OF 10 DAYS PRIOR TO START OF CONSTRUCTION, THE PENNSYLVANIA FISH AND BOAT COMMISSION AND THE MONTGOMERY COUNTY CONSERVATION DISTRICT SHALL BE NOTIFIED.
3. A MINIMUM OF 3 WORKING DAYS PRIOR TO COMMENCEMENT OF EARTH DISTURBANCE, NOTIFICATION TO THE PENNSYLVANIA ONE-CALL SYSTEM SHALL BE MADE.
4. THE LIMITS OF DISTURBANCE (LOD) SHALL BE MARKED BEFORE DISTURBANCE ACTIVITIES WITH CONSTRUCTION FENCE.
5. INSTALL ROCK CONSTRUCTION ENTRANCE.
6. INSTALL TEMPORARY STREAM CROSSING.
7. INSTALL SURFACE WATER DIVERSION/SANDBAG COFFERDAM AND PIPING.
8. WHENEVER POSSIBLE, WORK SHOULD BE SCHEDULED FOR LOW FLOW SEASONS. BASE FLOWS FOR MINOR STREAM CHANNELS ARE TO BE DIVERTED PAST THE WORK AREA. FOR MAJOR STREAM CHANNELS (NORMAL FLOW WIDTH > 10 FEET) BASE FLOW SHALL BE DIVERTED WHEREVER POSSIBLE. ALL SUCH BYPASSES MUST BE COMPLETED AND STABILIZED PRIOR TO DIVERTING FLOW. WHERE DIVERSION IS NOT POSSIBLE OR WHERE IT CAN BE SHOWN THAT THE POTENTIAL ENVIRONMENTAL DAMAGE WOULD BE GREATER WITH DIVERTED FLOW, THIS REQUIREMENT MAY BE WAIVED. IN EITHER CASE, THE DURATION OF THE DISTURBANCE MUST BE MINIMIZED. ALL DISTURBED AREAS WITHIN THE CHANNEL MUST BE STABILIZED PRIOR TO RETURNING BASE FLOW TO THE PORTION OF THE CHANNEL AFFECTED BY THE EARTHWORK (CHAPTER 15).
9. REMOVE ANY UNWANTED VEGETATION IN THE AREA OF STREAMBANK STABILIZATION.
10. EXCAVATE AND GRADE FOR STREAMBANK STABILIZATION. NO MORE THAN 15,000 SQUARE FEET OF DISTURBED AREA MAY REACH FINAL GRADE BEFORE INITIATING SEEDING AND MULCHING OPERATIONS. CESSATION OF ACTIVITY FOR 4 DAYS OR LONGER REQUIRES TEMPORARY STABILIZATION, AND IMMEDIATE STABILIZATION IS REQUIRED AS SOON AS ANY GRADED AREA REACHES FINAL GRADE.
11. INSTALL STREAMBANK STABILIZATION PER DRAWINGS AND SPECIFICATIONS.
12. ANY IN-CHANNEL EXCAVATIONS SHOULD BE DONE FROM TOP OF BANK WHEREVER POSSIBLE UNLESS THIS WOULD REQUIRE REMOVAL OF MATURE TREES TO ACCESS THE CHANNEL. WHERE IT IS NOT POSSIBLE TO WORK FROM TOP OF BANK, A TEMPORARY CROSSING OR CAUSEWAY (FIGURE 3.8) MAY BE USED TO PROVIDE A WORKING PAD FOR ANY EQUIPMENT WITHIN THE CHANNEL. UPON COMPLETION, THE CROSSING OR CAUSEWAY MUST BE REMOVED AND ALL CHANNEL ENTRANCES RESTORED, AS MUCH AS POSSIBLE, TO PRE-CONSTRUCTION CONFIGURATIONS, AND STABILIZED. IF IT CAN BE SHOWN THAT THERE WOULD BE LESS DISTURBANCE TO THE CHANNEL BY NOT USING WORK PADS (E.G. CERTAIN STREAM RESTORATIONS), WORK WITHIN A LIVE STREAM CHANNEL MAY BE APPROVED BY THE DEPARTMENT ON A CASE-BY-CASE BASIS.
13. ALL EXCAVATED CHANNEL MATERIALS THAT SUBSEQUENTLY WILL BE USED AS BACKFILL ARE TO BE PLACED IN A TEMPORARY STOCKPILE LOCATED OUTSIDE THE CHANNEL FLOODWAY. A SEDIMENT BARRIER MUST BE INSTALLED BETWEEN THE STORAGE PILE AND THE STREAM CHANNEL. ALL EXCAVATED MATERIALS THAT WILL NOT BE USED ON SITE SHALL BE IMMEDIATELY REMOVED TO A DISPOSAL SITE HAVING AN APPROVED E&S PLAN.
14. ANY WATER PUMPED FROM EXCAVATED AREAS MUST BE FILTERED PRIOR TO DISCHARGING INTO SURFACE WATERS.
15. SUITABLE PROTECTION MUST BE PROVIDED FOR THE STREAM CHANNEL FROM ANY DISTURBED AREAS THAT HAVE NOT YET ACHIEVED STABILIZATION.
16. RESTORE DISTURBED PERVIOUS AREAS PER DRAWINGS AND SPECIFICATIONS.
17. REMOVE TEMPORARY E&S BMPS UPON COMPLETION AND STABILIZATION OF THE DISTURBED AREA TRIBUTARY TO EACH BMP. VEGETATED AREAS MUST ACHIEVE A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OVER THE ENTIRE DISTURBED AREA.

MAINTENANCE PROGRAM

ALL EROSION CONTROL FACILITIES SHALL BE CHECKED AFTER EACH RUNOFF EVENT TO ENSURE THAT THEY ARE IN GOOD REPAIR AND WORKING CONDITION. DAMAGE TO ANY FACILITY SHALL BE REPAIRED IMMEDIATELY.

SEEDED AREAS THAT HAVE WASHED AWAY SHALL BE FILLED AND GRADED, AS NECESSARY, AND THEN RESEEDED. A BURLAP OR STRAW COVER WILL BE APPLIED TO RETAIN SEED UNTIL IT HAS A CHANCE TO ROOT PROPERLY.

THE ABOVE PROCEDURE SHALL BE REPEATED AFTER EACH RUNOFF EVENT UNTIL NO MORE SIGNS OF EROSION ARE EVIDENT. AT MONTHLY INTERVALS THEREAFTER, INSPECTIONS AND NECESSARY CLEANING WILL BE DONE.

ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT DEPOSITED ON PUBLIC ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE.

SEDIMENT REMOVED FROM BMPS SHOULD BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS, OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED OR PLACED IN TOPSOIL STOCKPILES.

ANY DRY FILL HAULED OFF-SITE MUST BE TAKEN TO A LOCATION WITH AN EROSION AND SEDIMENTATION CONTROL PLAN, WHICH HAS BEEN REVIEWED BY THE LOCAL COUNTY CONSERVATION DISTRICT FOR ADEQUACY.

ANY BORROW MATERIAL HAULED ONTO THE SITE MUST BE TAKEN FROM A LOCATION WITH AN EROSION AND SEDIMENT POLLUTION CONTROL PLAN WHICH HAS BEEN REVIEWED BY THE LOCAL COUNTY CONSERVATION DISTRICT FOR ADEQUACY.

TRASH THAT IS REMOVED FROM ANY OF THE CONTROL DEVICES SHALL BE DISPOSED OF AT AN APPROVED MUNICIPAL DISPOSAL AREA.

THE INSTALLATION AND MAINTENANCE OF THE TEMPORARY CONTROL FACILITIES WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE TEMPORARY CONTROLS WILL BE MAINTAINED IN ACCORDANCE WITH THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION'S PROGRAM MANUAL STANDARDS.

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION'S REGULATIONS REQUIRE A 70% UNIFORM COVER OF EROSION RESISTANT PERENNIAL VEGETATIVE SPECIES BE ESTABLISHED OVER THE DISTURBED AREA BEFORE A SITE CAN BE CONSIDERED TO BE PERMANENTLY STABILIZED WITH VEGETATION. UNTIL SUCH TIME AS THE STANDARD IS ACHIEVED, INTERIM STABILIZATION AND TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES AND FACILITIES THAT ARE USED TO TREAT THE PROJECT RUNOFF MAY BE UTILIZED.

THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF THE TEMPORARY CONTROL FACILITIES ONCE THE SITE IS PERMANENTLY STABILIZED WITH VEGETATION. THE CONTRACTOR SHALL STABILIZE ANY AREAS DISTURBED BY THE REMOVAL OF THE SOIL EROSION CONTROLS.

PROCEDURES WHICH ENSURE THAT THE PROPER MEASURES FOR THE RECYCLING OR DISPOSAL OF MATERIALS ASSOCIATED WITH OR FROM THE PROJECT SITE MUST BE UNDERTAKEN IN ACCORDANCE WITH PA DEP TITLE 25, CHAPTER 102.

AUTHORITY AND CONTINUING AUTHORIZATION

AUTHORIZATION OF THIS GENERAL PERMIT IS UNDER SECTION 7 OF THE DAM SAFETY AND ENCROACHMENTS ACT 32 P.S. §693.7 AND THE RULES AND REGULATIONS PROMULGATED THEREUNDER AT 25 PA CODE §§105.441-105.449 (RELATING TO GENERAL PERMITS). THIS GENERAL PERMIT SHALL AUTHORIZE THE CONTINUED OPERATION AND MAINTENANCE OF BANK REHABILITATION AND PROTECTION AUTHORIZED BY GENERAL PERMIT BWEW-GP-3 (BANK REHABILITATION AND PROTECTION) ISSUED ON JULY 23, 1983 AND REAUTHORIZED JULY 23, 1988 AND AUGUST 20, 1988.

ADDITIONAL CRITERIA FOR BANK REHABILITATION AND PROTECTION:

1. SLOPE PROTECTION AND DUMPED ROCK PROTECTION SHALL NOT EXCEED THE PLACEMENT OF A MAXIMUM OF 1 CUBIC YARD PER RUNNING FOOT BELOW THE PLANE OF THE ORDINARY HIGH WATER MARK OR THE HIGH TIDE LINE (IN ORDER TO BE CONSISTENT WITH THE REQUIREMENTS OF THE ARMY CORPS OF ENGINEERS). WHERE SLOPE PROTECTION OR DUMPED ROCK PROTECTION IS REQUIRED TO BE PLACED IN THE FLOODWAY OR FLOODPLAIN ABOVE THE PLANE OF THE ORDINARY HIGH WATER MARK OR THE HIGH TIDE LINE, AN ADDITIONAL 1 CUBIC YARD PER RUNNING FOOT OF STREAM IS AUTHORIZED.
2. RIPRAP AND OTHER TYPES OF SLOPE PROTECTION, EXCEPT FOR VEGETATIVE STABILIZATION AND DUMPED STONE PROTECTION, SHOULD BE CONSTRUCTED IN TWO LAYERS.
   - (A) AN OUTER LAYER OF MASSIVE PARTICLES TO RESIST THE FORCES OF MOVING WATER.
     - (1) THE OUTER LAYER OR PRINCIPAL PROTECTION LAYER SHOULD CONSIST OF WELL-GRADED PARTICLES. IT IS RECOMMENDED THAT RIPRAP SLOPE PROTECTION SHALL BE SIZED IN ACCORDANCE WITH THE DESIGN PARAMETERS FOR RIPRAP.
     - (2) THE PROTECTING LAYER SHOULD BE PLACED TO A MINIMUM THICKNESS APPROXIMATELY 6 INCHES GREATER THAN THE MAXIMUM PARTICLE SIZE, OR IN ACCORDANCE WITH THE DESIGN PARAMETERS FOR RIPRAP.
   - (B) AN UNDERLYING FILTER LAYER OF FINE MATERIAL OR FILTER FABRIC.
     - (1) SATISFACTORY FILTER MATERIALS ARE MIXTURES OF GRAVEL AND CLEAN SAND WITH ABOUT 80% OF THE MATERIAL RANGING BETWEEN 2 INCHES AND 1/4 INCH. AN ALTERNATIVE IS A COMMERCIALLY AVAILABLE GEOSYNTHETIC FILTER FABRIC THAT WILL ALLOW DRAINAGE WITHOUT LOSS OF BANK MATERIAL.
3. GROUTING OF SLOPE PROTECTION OR DUMPED ROCK PROTECTION IS NOT AUTHORIZED BY THIS GENERAL PERMIT.
4. ONLY CLEAN, NONPOLLUTING MATERIALS SHALL BE USED FOR BANK REHABILITATION AND BANK PROTECTION PROJECTS IN ORDER TO MINIMIZE EXCESSIVE TURBIDITY BY LEACHING OF FINES AS WELL AS TO PRECLUDE ENTRANCE OF UNDESIRABLE CHEMICAL CONSTITUENTS TO THE WATERCOURSE BY NATURAL RUNOFF OR LEACHING.
5. SLAG IS <u>NOT</u> AUTHORIZED FOR USE UNDER THIS GENERAL PERMIT UNLESS IT QUALIFIES AS CO-PRODUCT WHICH IS SUITABLE FOR THE SPECIFIC USE.
6. ALONG STREAMS WHICH ARE CLASSIFIED PRIORITY 1-A OR DESIGNATED SCENIC RIVERS, IT IS RECOMMENDED THAT BANK PROTECTION AND REHABILITATION PROJECTS SHALL MAINTAIN THE NATURAL CHARACTER OF THE BANK BY INCORPORATING VEGETATION. HOWEVER, WOODY VEGETATION SHALL NOT BE INCORPORATED IN RIPRAP PROTECTION. THE USE OF CONCRETE RUBBLE FOR DUMPED ROCK PROTECTION IS PROHIBITED IN SCENIC RIVERS.
7. DUMPED ROCK PROTECTION SHALL HAVE A MAXIMUM EXTERIOR SLOPE OF 1.5 HORIZONTAL TO 1.0 VERTICAL AND A MINIMUM TOP WIDTH OF 18 INCHES AT THE TOP OF THE ZONE TO BE PROTECTED. NO FILTER LAYER IS REQUIRED FOR DUMPED ROCK PROTECTION USING WELL-GRADED ROCK. NATIONAL STONE ASSOCIATION R-7 ROCK IS THE MINIMUM ROCK SIZE TO BE USED FOR DUMPED ROCK PROTECTION.
8. SLOPE PROTECTION SHOULD NOT BE PLACED WITH AN EXTERIOR SLOPE STEEPER THAN 1.5 HORIZONTAL TO 1.0 VERTICAL.
9. FOR ROCK RIPRAP INSTALLATIONS, A TRENCH MUST BE EXCAVATED AT THE TOE OF THE SLOPE TO PROVIDE A SUPPORTING BASE. THIS TRENCH SHOULD BE EXTENDED TO AN ELEVATION OF AT LEAST 2 FEET BELOW THE STREAMBED LEVEL AND BE FILLED WITH THE SAME MATERIAL AS THE OUTER PROTECTION LAYER.
10. IMMEDIATELY FOLLOWING COMPLETION OF THE PROJECT ALL DISTURBED SLOPES SHALL BE STABILIZED TO PREVENT ACCELERATED EROSION IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
11. BANK REHABILITATION AND BANK PROTECTION PROJECTS SHALL BE MAINTAINED IN FUNCTIONAL CONDITION AT ALL TIMES. PERIODIC REMOVAL OF DEBRIS DEPOSITED ON THE BANK PROJECT MAY BE NECESSARY.
12. EACH BANK REHABILITATION AND BANK PROTECTION PROJECT SHALL NOT HINDER COMMERCIAL OR RECREATIONAL NAVIGATION NOR INTERFERE WITH THE NORMAL MIGRATION OF FISH.
13. CHANNEL DEFLECTORS MAY NOT EXTEND FROM THE BANK INTO THE CHANNEL A DISTANCE GREATER THAN 25% OF THE TOTAL CHANNEL WIDTH, AND MAY NOT EXTEND ABOVE THE NORMAL WATER FLOW A DISTANCE GREATER THAN 6 INCHES AT THE STREAMWARD TIP.
14. THE MAXIMUM HEIGHT OF A VERTICAL WALL AUTHORIZED UNDER THIS GENERAL PERMIT IS 6 FEET MEASURED FROM THE TOP OF THE WALL TO THE STREAMBED OR LAKEBED ADJACENT TO THE WALL.

GENERAL PERMIT PLAN NOTES

1. CONSTRUCTION OF THE BANK REHABILITATION, BANK PROTECTION PROJECT OR REMOVAL OF A GRAVEL BAR SHOULD NOT CONSTRICT OR INCREASE THE NORMAL CHANNEL WIDTH. THE CONFIGURATION OF THE SHORELINE SHALL REMAIN SUBSTANTIALLY THE SAME AND THE WORK SHALL ALIGN SMOOTHLY WITH, AND NOT PROJECT FURTHER INTO THE CHANNEL THAN ADJACENT UPSTREAM AND DOWNSTREAM BANKS. THE UPSTREAM AND DOWNSTREAM ENDS OF A BANK REHABILITATION OR BANK PROTECTION PROJECT SHALL BE KEYED INTO THE STREAM BANK TO ENSURE STABILITY.
2. CONSTRUCTION AND OTHER ACTIVITIES AUTHORIZED BY THIS GENERAL PERMIT SHALL BE PERFORMED IN A MANNER THAT MINIMIZES USE OF EQUIPMENT WITHIN THE STREAM CHANNEL OR BODY OF WATER.
3. BANK REHABILITATION, BANK PROTECTION AND GRAVEL BAR REMOVAL SHALL TAKE PLACE DURING PERIODS WHEN THE STREAM IS AT LOW FLOW.
4. TO THE GREATEST EXTENT POSSIBLE, THE PROJECT SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER WHICH WILL (a) PREVENT PERMANENT OR LONG-TERM ADVERSE CHANGES IN WATER QUALITY, (b) MINIMIZE ALTERATIONS IN NATURAL AQUATIC HABITAT, AND (c) MAINTAIN NATURAL STREAMFLOW VELOCITIES AND MIXING PATTERNS.
5. THE PLACEMENT OF FILL HIGHER THAN THE ELEVATION OF THE EXISTING STREAM BANKS, THE CONSTRUCTION OF LEVEES, THE REALIGNMENT OR RELOCATION OF THE CHANNEL, DREDGING ACTIVITIES IN WATER AND EXCAVATION BELOW EXISTING WATER LEVEL ARE NOT AUTHORIZED BY THIS GENERAL PERMIT.
6. BANK REHABILITATION, BANK PROTECTION, AND GRAVEL BAR REMOVAL PROJECTS SHALL NOT EXTEND ACROSS ADJACENT PROPERTY LINES WITHOUT THE WRITTEN PERMISSION OF ALL AFFECTED PROPERTY OWNERS.
7. DURING CONSTRUCTION ACTIVITIES, ALL PUBLIC AND PRIVATE PROPERTY INCLUDING EXISTING VEGETATION, LANDSCAPE FEATURES AND MONUMENTS WITHIN, ALONG AND ADJACENT TO THE WORK AREA, SHALL BE PROTECTED AND PRESERVED TO THE MAXIMUM DEGREE POSSIBLE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, PRECAUTIONS TAKEN TO MINIMIZE DAMAGE, EROSION, INJURY OR DESTRUCTION, PREVENT POLLUTION, PROVIDE PROTECTION OF ALL TREES AND OTHER WOODY PLANTS, SPECIAL CARE BEING TAKEN TO PROTECT THE NATURAL VEGETATION AND SURROUNDINGS TO INCLUDE ALL NATURAL DRAINAGEWAYS, PONDS, LAKES, WETLANDS, WOODS AND FIELDS, AND STORAGE OF MATERIALS IN SUCH MANNER TO PREVENT LEACHING WHICH WOULD BE INJURIOUS TO SOILS AND TO PLANTS. PRECAUTIONS SHOULD BE TAKEN TO PREVENT DAMAGE TO PIPES, CONDUITS, AND OTHER UNDERGROUND STRUCTURES.
8. ARCHAEOLOGICAL ARTIFACTS DISCOVERED DURING THE PERFORMANCE OF WORK AUTHORIZED UNDER THIS GENERAL PERMIT MUST BE ADEQUATELY PROTECTED AND THEIR DISCOVERY PROMPTLY REPORTED TO THE BUREAU FOR HISTORIC PRESERVATION, PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION, 400 NORTH STREET, SECOND FLOOR, HARRISBURG, PA 17120-0093, TELEPHONE (717) 783-8946.

SEEDING AND MULCHING SCHEDULE:

1. SITE PREPARATION, STABILIZATION AND MAINTENANCE SHALL BE PERFORMED IN ACCORDANCE WITH PENN STATE UNIVERSITY'S "THE AGRONOMY GUIDE" AND PENNDOT FORM 408 SPECIFICATIONS' MOST RECENT ADDITION.

   TEMPORARY SEEDING SPECIFICATION FORMULA E – ANNUAL RYE GRASS

   PERMANENT SEEDING SPECIFICATION FORMULA B –
   - 50% KENTUCKY BLUEGRASS MIXTURE
   - 30% PENNLAWN RED FESCUE
   - 20% PERENNIAL RYEGRASS MIXTURE

   STEEP SLOPE SEEDING SPECIFICATION FORMULA W –
   - 70% TALL FESCUE
   - 20% BIRDSFOOT TREFOIL MIXTURE
   - 10% REDTOP

   SEEDING RATE FOR THE ABOVE MIXTURES:
   - 10 LBS/1,000 SY FOR TEMPORARY SEEDING
   - 21 LBS/1,000 SY FOR PERMANENT SEEDING
   - 11 LBS/1,000 SY FOR STEEP SLOPE SEEDING (SEE NOTE 5)
2. HAY OR STRAW MULCH SHALL BE APPLIED AT THE RATES OF AT LEAST 3.0 TONS PER ACRE AND SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN. MULCH WITH MULCH CONTROL NETTING OR EROSION CONTROL BLANKETS MUST BE INSTALLED ON ALL SLOPES 3:1 OR STEEPER.
3. PULVERIZED AGRICULTURAL LIMESTONE AND COMMERCIAL FERTILIZER SHALL BE APPLIED TO ALL DISTURBED AREAS WHICH ARE TO BE SEEDED EXCEPT FOR TEMPORARY SEED AREAS ARE THE FOLLOWING RATES:

   PULVERIZED AGRICULTURAL LIMESTONE – 90 LBS/1,000 SF
   10-20-20 ANALYSIS COMMERCIAL FERTILIZER – 20 LBS/1,000 SF

NOTE: APPLICATION OF LIME AND FERTILIZER FOR TEMPORARY SEEDING IS UNNECESSARY AND ONLY SERVES TO CONTRIBUTE TO AN OVERABUNDANCE OF NUTRIENT POLLUTION IN THE WATERSHED.

4. PERMANENT SEEDING SHALL TAKE PLACE FROM MARCH 15 TO JUNE 1 OR FROM AUGUST 1 TO OCTOBER 15. IF COMPLETED AT IN OTHER SEASONS, AREAS SHALL RECEIVE TEMPORARY SEEDING AND 3.0 TONS PER ACRE MULCH.
5. NO MORE THAN 15,000 SQUARE FEET OF DISTURBED AREA MAY REACH FINAL GRADE BEFORE INITIATING SEEDING AND MULCHING OPERATIONS.

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PA LAW REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR DEMOLISH

LOCATIONS OF EXISTING UNDERGROUND UTILITIES/FACILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM RECORDS, FIELD MARKOUTS BY UTILITY OWNERS, AND/OR ABOVE-GROUND OBSERVATION OF THE SITE. NO EXCAVATIONS WERE PERFORMED IN THE PREPARATION OF THESE DRAWINGS. THEREFORE ALL UTILITIES SHOWN SHOULD BE CONSIDERED APPROXIMATE IN LOCATION, DEPTH, AND SIZE. THE POTENTIAL EXISTS FOR OTHER UNDERGROUND UTILITIES/FACILITIES TO BE PRESENT WHICH ARE NOT SHOWN ON THE DRAWINGS. ONLY THE VISIBLE LOCATIONS OF UNDERGROUND UTILITIES/FACILITIES AT THE TIME OF FIELD SURVEY SHALL BE CONSIDERED TRUE AND ACCURATE. COMPLETENESS OR ACCURACY OF UNDERGROUND UTILITIES/FACILITIES ARE NOT GUARANTEED BY GILMORE & ASSOCIATES INC.

ALL CONTRACTORS WORKING ON THIS PROJECT SHALL VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES/FACILITIES PRIOR TO START OF WORK AND SHALL COMPLY WITH THE REQUIREMENTS OF P.L. 852 NO. 287 DECEMBER 10, 1974 AS LAST AMENDED ON APRIL 28, 2018 PENNSYLVANIA ACT 50.

GILMORE & ASSOCIATES INC. HAS NOT OBTAINED A PA-ONE CALL SERIAL NUMBER FOR DESIGN PURPOSES.

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

DATE 3/7/2022

REV.	DESCRIPTION	DATE	BY
1	[illegible]	4/27/2022	JDH

350 GREENWOOD AVENUE STREAMBANK STABILIZATION PROJECT

PRP STREAMBANK RESTORATION

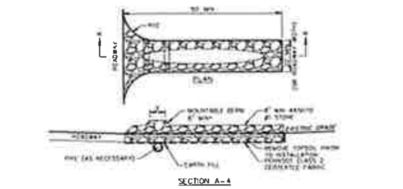
UPPER PROVIDENCE TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

EROSION AND SEDIMENTATION CONTROL NOTES PLAN

JOB NO.: 14-06034T	
TAX MAP PARCEL NO.: N/A	
TOTAL AREA: N/A	TOTAL LOTS: N/A
DATE: 3/11/2022	SCALE: N.T.S.
DRAWN BY: JDH	CHECKED BY: [illegible]

SHEET NO.: 2 OF 5

PERMIT PLAN

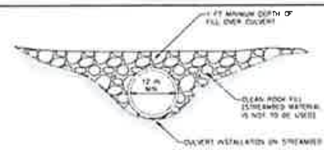


SECTION A-A

MOUNTABLE BERM SHOULD BE USED WHENEVER OPTIONAL CULVERT PIPE IS USED TO PROVIDE PROPER COVER FOR PIPE PER MANUFACTURER'S SPECIFICATION. PIPE TO BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED. RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE. ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT DEPOSITED ON PUBLIC ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWER, CULVERTS OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

ROCK CONSTRUCTION ENTRANCE

NOT TO SCALE



CROSS-SECTION VIEW

NOTES:

PROVIDE 50' STABILIZED ACCESS TO CROSSING ON BOTH SIDES OF STREAM CHANNEL (SEE STANDARD CONSTRUCTION DETAIL #3-17)

PIPES SHALL EXTEND BEYOND THE TOE OF THE ROADWAY.

RUNOFF FROM THE ROADWAY SHALL BE DIVERTED OFF THE ROADWAY AND INTO A SEDIMENT REMOVAL BMP BEFORE IT REACHES THE ROCK APPROACH TO THE CROSSING.

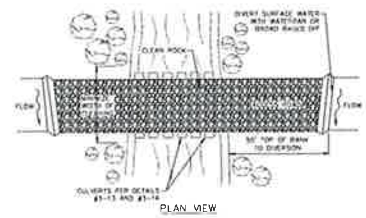
MAINTENANCE:

1. TEMPORARY STREAM CROSSINGS SHALL BE INSPECTED ON A DAILY BASIS.
2. DAMAGED CROSSINGS SHALL BE REPAIRED WITHIN 24 HOURS OF THE INSPECTION AND BEFORE ANY SUBSEQUENT USE.
3. SEDIMENT DEPOSITS ON THE CROSSING OR ITS APPROACHES SHALL BE REMOVED WITHIN 24 HOURS OF THE INSPECTION.

AS SOON AS THE TEMPORARY CROSSING IS NO LONGER NEEDED, IT SHALL BE REMOVED. ALL MATERIALS SHALL BE DISPOSED OF PROPERLY AND DISTURBED AREAS STABILIZED.

STANDARD CONSTRUCTION DETAIL #3-13
TEMPORARY STREAM CROSSING

NOT TO SCALE



PLAN VIEW

NOTES:

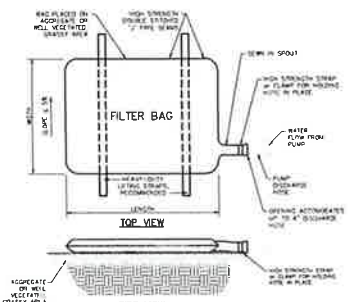
WATERBARS AND BROAD-BASED DIPS SHALL DISCHARGE TO SEDIMENT REMOVAL FACILITY.

CLEAN ROCK SHALL CONFORM TO CHAPTER 105 PERMITTING REQUIREMENTS.

FOLLOW PERMIT CONDITIONS REGARDING REMOVAL OF CROSSING.

STANDARD CONSTRUCTION DETAIL #3-12
TEMPORARY STREAM CROSSING - PLAN VIEW

NOT TO SCALE



TOP VIEW

SIDE VIEW

FILTER BAG TO BE USED WHEN/IF WATER PONDS IN EXCAVATIONS.

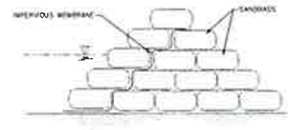
1. LOW VOLUME FILTER BAGS SHALL BE MADE OF NON-WOVEN GEOTEXTILE WHICH RETAINS ALL SEDIMENT PARTICLES LARGER THAN 150 MICRONS. HIGH VOLUME BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES MEETING THE FOLLOWING STANDARDS:

PROPERTY	TEST METHOD	MINIMUM STANDARD
AVG. WIDTH STRENGTH	ASTM D-4884	60 LB/IN
GRAB TENSILE	ASTM D-4632	205 LB
PUNCTURE	ASTM D-4833	110 LB
MULLEN BURST	ASTM D-3786	350 PSI
UV RESISTANCE	ASTM D-4355	70%
AOS % RETAINED	ASTM D-4751	80 SIEVE

2. PLACE FILTER BAGS ON STABLE OR WELL-VEGETATED AREAS WHICH ARE FLATTER THAN 5% SLOPE AND SHALL DISCHARGE ONTO STABLE, EROSION RESISTANT GROUND. WHERE THIS IS NOT POSSIBLE, GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED.
3. PUMP DISCHARGE HOSE SHALL BE INSERTED INTO BAG IN MANNER SPECIFIED BY MANUFACTURER AND SECURELY CLAMPED INTO FILTER BAG. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.
4. LIMIT PUMPING TO 750 GPM OR 1/2 THE MANUFACTURER'S MAXIMUM PUMPING RATE, WHICHEVER IS LESS. PUMP INTAKE SHALL BE FLOATING AND SCREENED.
5. FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL PROBLEM IS CORRECTED.
6. A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY IS REQUIRED FOR DISPOSAL PURPOSES. WHEN SEDIMENT FILLS 1/2 THE VOLUME OF A FILTER BAG, IMMEDIATELY REMOVE THAT BAG FROM SERVICE AND REPLACE WITH NEW BAG IMMEDIATELY. PROPERLY DISPOSE OF SPENT BAGS WITH THEIR SEDIMENTS.
7. THE DISCHARGE FROM THE FILTER BAG SHOULD NOT PASS THROUGH A DISTURBED AREA OR CAUSE AN EROSION PROBLEM DOWN SLOPE.

SEDIMENT FILTER BAG FOR PUMPED WATER

NOT TO SCALE

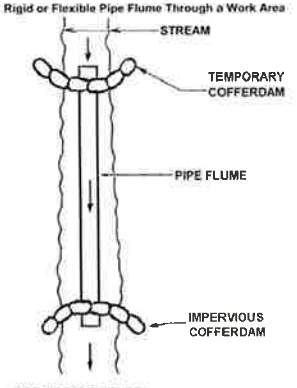


STACKED SANDBAGS OPTION

STANDARD CONSTRUCTION DETAIL #3-15
SANDBAG DIVERSION DAM OR COFFERDAM

NOT TO SCALE

FIGURE 3.10
Rigid or Flexible Pipe Flume Through a Work Area



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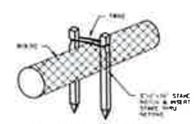
GILMORE & ASSOCIATES INC. HAS NOT OBTAINED A PA-ONE CALL SERIAL NUMBER FOR DESIGN PURPOSES.



BIOLOG TIE-DOWN DETAIL

NOT TO SCALE

BIOLOG INSTALLATION & NOTES:

LIVE STAKES SHALL CONSIST OF THE FOLLOWING SPECIES, CLUSTERED BY SPECIES IN GROUPS OF 15-25:

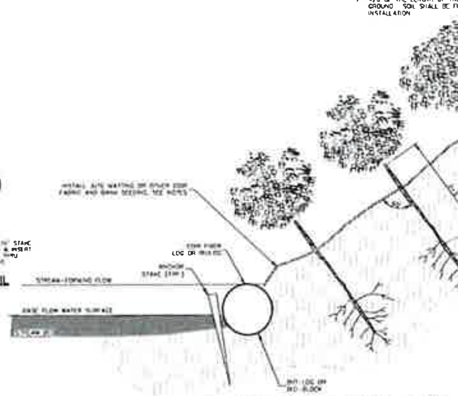
KEY	BOTANICAL NAME	COMMON NAME
CA	CORNUS AMOMUM	SILKY DOGWOOD
CS	CORNUS SERICEA	RED TWIG DOGWOOD
SC	SALIX COTTEI BANKERS DWARF	BANKERS DWARF WILLOW
SP	SALIX PURPUREA	PURPLE TWIG WILLOW

LIVE STAKES:

- 0.5"-1.5" DIAMETER, 2-3 FT LONG DORMANT CUTTINGS
- SIDE BRANCHES CLEANLY REMOVED WITH BARK INTACT
- BASAL END SHALL BE CUT AT AN ANGLE FOR EASE OF INSTALLATION. TOP SHALL BE SQUARE CUT.
- TAMP LIVE STAKE INTO GROUND AT RIGHT ANGLE TO SLOPE. SPACING AS PER DETAIL.
- 4/5 OF LENGTH SHOULD BE INSTALLED INTO GROUND. IF STAKE SPLITS DURING INSTALLATION, IT SHOULD BE REMOVED AND REPLACED.

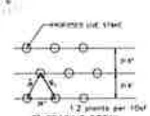
INSTALLATION: Jute Fabric w/ Live Stakes

1. INSTALL TOE PROTECTION OF BIOLOG OR LPSTP AS SPECIFIED IN PLAN VIEW.
2. REGRADE SLOPE AS NEEDED FOR STABILITY, 3:1 OR GREATER IS PREFERABLE.
3. SEED SLOPES WITH STREAM SEED MIX PER SCHEDULE AND INSTALL JUTE FABRIC. SECURE PER MANUFACTURER'S RECOMMENDATIONS.
4. TAMP LIVE STAKES INTO THE GROUND USING DEAD BLOW HAMMER, AT RIGHT ANGLE TO THE SLOPE AND DIVERTED DOWNSTREAM.
   A. LIVE STAKES SHALL BE STORED IN A DARK AREA AT A CONSTANT TEMPERATURE OF NO GREATER THAN 38°F.
   B. LIVE STAKES SHALL BE SHIPPED AND STORED IN SEALED PLASTIC CONTAINERS. THE CONTAINERS SHALL CONTAIN SUFFICIENT MOISTURE TO SUSTAIN 100% MOISTURE.
   C. LIVE STAKES SHALL BE INSTALLED IMMEDIATELY AFTER DELIVERY WHILE STILL DORMANT.
   D. PLANTING SHALL OCCUR DURING THE GROWING SEASON AFTER THE AVERAGE TEMPERATURE IS NO LESS THAN 44°F AND NO GREATER THAN AN AVERAGE OF 70°F.
   E. ALL PLANTINGS SHALL BE CORRECTLY WATERED AFTER INSTALLATION.
5. LIVE STAKES SHALL BE INSTALLED AT TRIANGULAR SPACING OF 2' TO 3' ON CENTER. STAKES SHOULD BE PLACED IN SPECIES GROUPS OF 15-25 PER GROUP.
6. STAKES SHALL BE ORIENTED WITH BUDS UPWARD, BASAL END DOWNWARD. IF STAKE SPLITS DURING INSTALLATION, IT SHALL BE REMOVED AND REPLACED. AN IRON BAR MAY BE USED TO MAKE PILOT HOLE IN FIRM SOIL.
7. 4/5 OF THE LENGTH OF THE LIVE STAKE SHALL BE INSTALLED INTO THE GROUND. SOIL SHALL BE FIRMLY PACKED AROUND STAKE AFTER INSTALLATION.



LIVE STAKES DETAIL (CROSS SECTION)

NOT TO SCALE



3' SPACING DETAIL (LIVE STAKES)

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ONLY THOSE PLANS INCORPORATING THE PROFESSIONAL SEAL SHOULD BE CONSIDERED OFFICIAL AND RELIED UPON BY YOUR. THIS PLAN IS PREPARED SPECIFICALLY FOR THE CLIENT AND PROJECT DESIGNATED HEREON. MODIFICATION, REVISION, DUPLICATION OR USE WITHOUT THE CONSENT OF GILMORE & ASSOCIATES, INC. IS PROHIBITED.

JOSHUA D. HAGADORN
PROFESSIONAL ENGINEER

DATE 3/11/2022

REV.	DESCRIPTION	DATE	BY
1	REVISED PER MCCD REVIEW LETTER DATED 4/11/2022	4/27/2022	JDH

350 GREENWOOD AVENUE STREAMBANK STABILIZATION PROJECT

PRP STREAMBANK RESTORATION

UPPER PROVIDENCE TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

EROSION AND SEDIMENTATION CONTROL DETAILS PLAN

GILMORE & ASSOCIATES, INC.

JOB No.	14-06234T
TAX MAP PARCEL No.	N/A
TOTAL AREA: N/A	TOTAL LOTS: N/A
DATE: 3/11/2022	SCALE: N.T.S.
DRAWN BY: JDH	CHECKED BY: WMD
SHEET NO.:	3 OF 5

PERMIT PLAN

LEGEND

WATERS OF THE COMMONWEALTH

STREAM CENTERLINE

STREAMBANK PLANTING AREA W/ JUTE FABRIC & BANK SEEDING

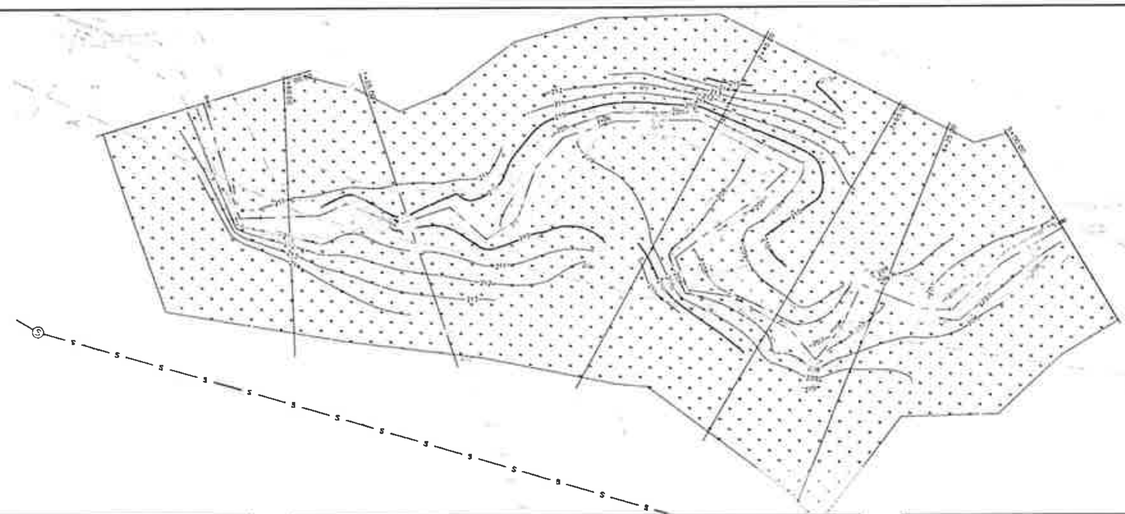
EXISTING MAJOR CONTOUR

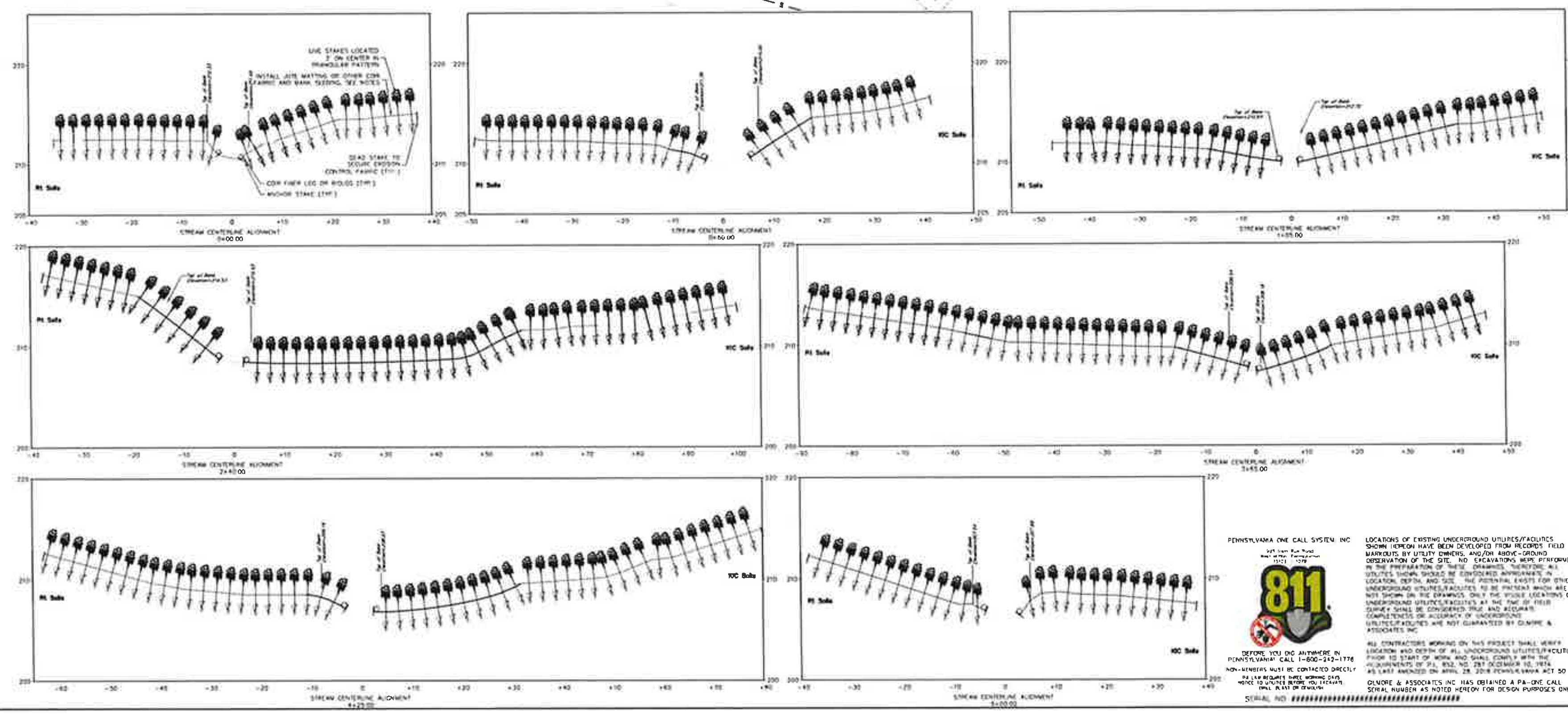
EXISTING MINOR CONTOUR

PROPOSED MAJOR CONTOUR

PROPOSED MINOR CONTOUR

SCALE IN FEET 1"=20'





PENNSYLVANIA ONE CALL SYSTEM, INC

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PA LAW REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR DEMOLISH

SERIAL NO. ##################################

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GILMORE & ASSOCIATES INC. HAS OBTAINED A PA-ONE CALL SERIAL NUMBER AS NOTED HEREON FOR DESIGN PURPOSES ONLY

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

DATE ########

REV	DESCRIPTION	DATE	BY
1	REVISED PER WOOD REVIEW LETTER DATED 4/11/2022	4/27/2022	JDH

350 GREENWOOD AVENUE STREAMBANK STABILIZATION PROJECT

PRP STREAMBANK RESTORATION

UPPER PROVIDENCE TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

STREAMBANK STABILIZATION PLAN AND SECTION VIEWS

G&A GILMORE & ASSOCIATES, INC

JOB No. 14-06034?	
TAX MAP PARCEL No. ##	
TOTAL AREA ######	TOTAL LOTS ##
DATE 3/11/2022	SCALE 1"=20'
DRAWN BY JDH	CHECKED BY MHD

SHEET NO.: 4 OF 5

350 GREENWOOD AVENUE STREAMBANK STABILIZATION PROJECT

PRP STREAMBANK RESTORATION

UPPER PROVIDENCE TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

STREAMBANK STABILIZATION PLAN AND SECTION VIEWS

REV.	DESCRIPTION	DATE	BY
1	REVISED PER MCCD REVIEW LETTER DATED 4/27/2022	4/27/2022	JDH

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

LOCATION MAP

SCALE: 1"=1000'

SHEET NO: 5 OF 5

Outlook

Greenwood Ave Streambank Restoration/Meadows @ Longview

From Jennifer Gutshall <jgutshall@gilmore-assoc.com>
Date Wed 7/30/2025 5:15 PM
To Justin Strahorn <justins@wbhomesinc.com>
Cc Bryan Bortnichak <bbortnichak@upro -montco.org> Michael Coyne <mcoyne@gilmore-assoc.com>

1 attachment (2 MB)
SK 7-30_PERMIT PLANS.1_7-30-25.pdf

Justin,

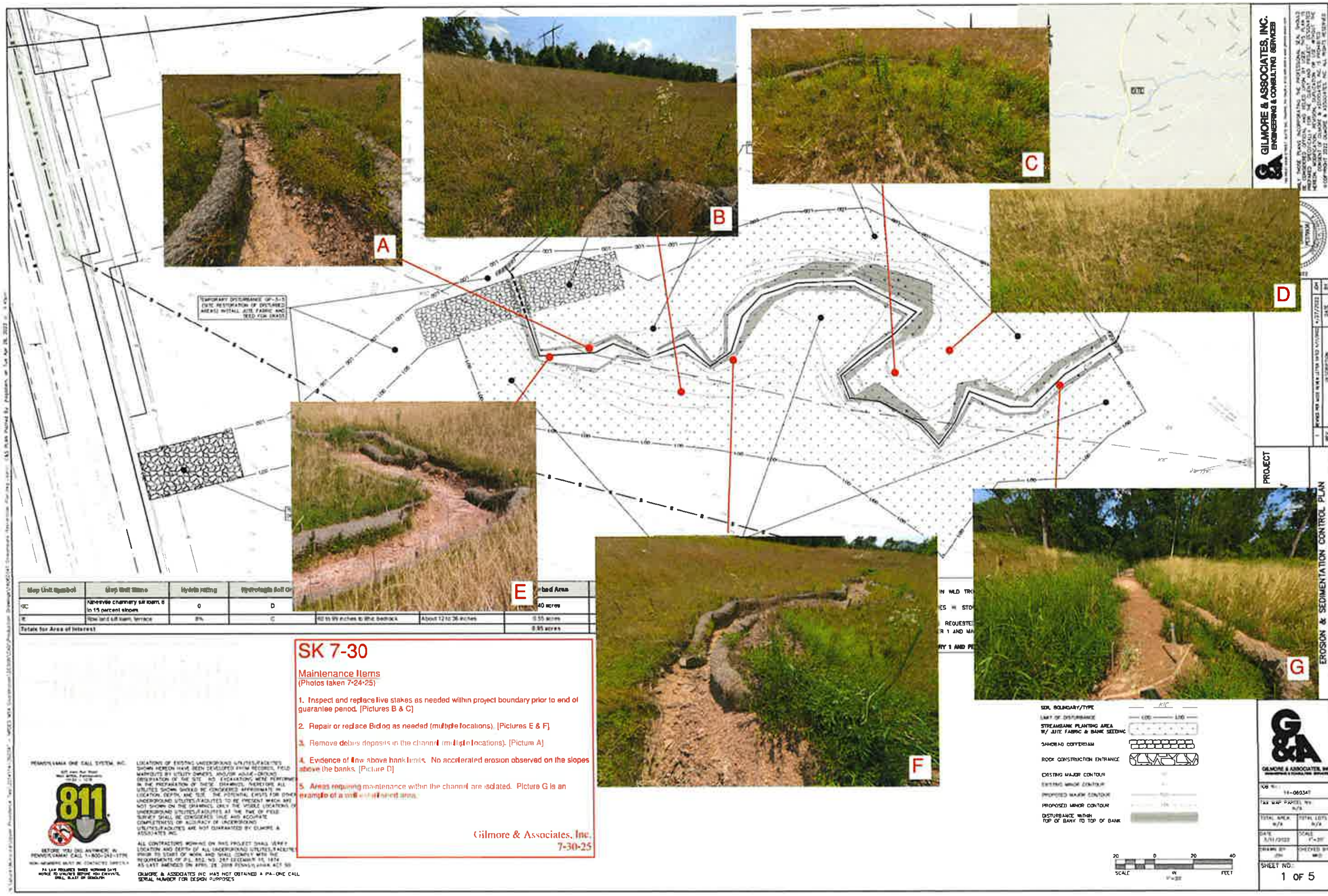
Attached is a summary of our discussions including photographs taken last week.

Please coordinate the maintenance work and look into the guarantee period for the live stakes. Following your maintenance and inspection of the live stakes, we will schedule the inspection by DEP.

Let us know your schedule or if you have any questions.
Jen

Jennifer Gutshall, P.E., Project Manager
Gilmore & Associates, Inc.
401 Plymouth Road, Suite 150, Plymouth Meeting, PA 19462
Main: 610-489-4949 | Direct: 484-971-4837

www.gilmore-assoc.com | BUILDING ON A FOUNDATION OF EXCELLENCE



SK 7-30

Maintenance Items
(Photos taken 7-24-25)

1. Inspect and replace live stakes as needed within project boundary prior to end of guarantee period. [Pictures B & C]
2. Repair or replace Biolog as needed (multiple locations). [Pictures E & F]
3. Remove debris deposits in the channel (multiple locations). [Picture A]
4. Evidence of flow above bank limits. No accelerated erosion observed on the slopes above the banks. [Picture D]
5. Areas requiring maintenance within the channel are isolated. Picture G is an example of a well established area.

Gilmore & Associates, Inc.
7-30-25

Outlook

Re: Greenwood Ave Streambank Restoration/Meadows @ Longview

From Jake Keith <jakek@wbhomesinc.com>
Date Tue 8/5/2025 8:40 AM
To Jennifer Gutshall <jgutshall@gilmore-assoc.com>; Justin Strahorn <justins@wbhomesinc.com>; Bryan Bortnichak (bbortnichak@uprov-montco.org) <bbortnichak@uprov-montco.org>; Michael Coyne <mcoyne@gilmore-assoc.com>; Don Kelly <dkelly@uprov-montco.org>

2 attachments (46 KB)
Outlook-1alwgxyb; Outlook-VB-Faceboo;

Not a problem Jen. We will let you know when it is complete and get back to you.

Thank you,

Jake Keith
Land Development Project Manager

404 N. Sumneytown Pike, Suite 200
North Wales, PA 19454
267.903.4334

Website: http://www.wbhomesinc.com/

https://www.facebook.com/wbhomes

From: Jennifer Gutshall <jgutshall@gilmore-assoc.com>
Sent: Monday, August 4, 2025 10:19 AM
To: Jake Keith <jakek@wbhomesinc.com>; Justin Strahorn <justins@wbhomesinc.com>; Bryan Bortnichak (bbortnichak@uprov-montco.org) <bbortnichak@uprov-montco.org>; Michael Coyne <mcoyne@gilmore-assoc.com>; Don Kelly <dkelly@uprov-montco.org>
Subject: Re: Greenwood Ave Streambank Restoration/Meadows @ Longview

Jake-thank you for arranging the site walk this morning with Steve and Pickering Valley.

All - the biologs will be repaired and/or replaced as needed. Pickering Valley will reapply deer repellent to the live stakes taking extra care with the dogwoods.

Anticipated that the biologs will be completed in about 2 weeks. Upon confirmation from WB Homes, I will arrange a site inspection with PADEP.

IMPORTANT - No moving within the project limits. Mowing within the sanitary sewer easement is acceptable.

Let me know if anyone has any questions.
Jen

Get Outlook for iOS

From: Jake Keith <jakek@wbhomesinc.com>
Sent: Thursday, July 31, 2025 9:45:45 AM
To: Jennifer Gutshall <jgutshall@gilmore-assoc.com>; Justin Strahorn <justins@wbhomesinc.com>; Bryan Bortnichak (bbortnichak@uprov-montco.org) <bbortnichak@uprov-montco.org>; Michael Coyne <mcoyne@gilmore-assoc.com>
Subject: RE: Greenwood Ave Streambank Restoration/Meadows @ Longview

Sounds great! I sent a meeting invite for Monday at 8:30.

Thank you,

Jake Keith
Land Development Project Manager

404 N. Sumneytown Pike, Suite 200
North Wales, PA 19454
267.903.4334

Website: http://www.wbhomesinc.com/

https://www.facebook.com/wbhomes

From: Jennifer Gutshall <jgutshall@gilmore-assoc.com>
Sent: Thursday, July 31, 2025 9:41 AM
To: Jake Keith <jakek@wbhomesinc.com>; Justin Strahorn <justins@wbhomesinc.com>; Bryan Bortnichak (bbortnichak@uprov-montco.org) <bbortnichak@uprov-montco.org>; Michael Coyne <mcoyne@gilmore-assoc.com>
Subject: RE: Greenwood Ave Streambank Restoration/Meadows @ Longview

Jake,
No maintenance for item 4. Just an observation that the stabilization above the banks held up to confirmed flow.
Let's talk about item 5 next week at the site.
Jen

Jennifer Gutshall, P.E., Project Manager
Gilmore & Associates, Inc.
401 Plymouth Road, Suite 150, Plymouth Meeting, PA 19462
Main: 610-489-4949 | Direct: 484-971-4837

www.gilmore-assoc.com | BUILDING ON A FOUNDATION OF EXCELLENCE

From: Jake Keith <jakek@wbhomesinc.com>
Sent: Thursday, July 31, 2025 9:10 AM
To: Justin Strahorn <justins@wbhomesinc.com>; Jennifer Gutshall <jgutshall@gilmore-assoc.com>; Bryan Bortnichak (bbortnichak@uprov-montco.org) <bbortnichak@uprov-montco.org>; Michael Coyne <mcoyne@gilmore-assoc.com>
Subject: Re: Greenwood Ave Streambank Restoration/Meadows @ Longview

Jen,

I was hoping you could elaborate on maintenance item number 4, do we need to make any changes due to evidence of flows?

Just to clarify, for the maintenance outlined in number 5 are you recommending reseeding?

Thank you,

Jake Keith
Land Development Project Manager

404 N. Sumneytown Pike, Suite 200
North Wales, PA 19454
267.903.4334

Website: http://www.wbhomesinc.com/

https://www.facebook.com/wbhomes

From: Justin Strahorn <justins@wbhomesinc.com>
Sent: Thursday, July 31, 2025 8:19 AM
To: Jennifer Gutshall - Gilmore and Associates (jgutshall@gilmore-assoc.com) <jgutshall@gilmore-assoc.com>; Bryan Bortnichak (bbortnichak@uprov-montco.org) <bbortnichak@uprov-montco.org>; Michael R. Coyne (mcoyne@gilmore-assoc.com) <mcoyne@gilmore-assoc.com>

Cc: Jake Keith <jakek@wbhomesinc.com>
Subject: FW: Greenwood Ave Streambank Restoration/Meadows @ Longview

Thanks Jen – we are on it.

Jake, from our office, is coordinating the repair/maintenance.

Justin B. Strahorn
Project Manager

W.B. Homes, Inc.
404 N. Sumneytown Pike
North Wales, PA 19454
Mobile: 267.640.7714

From: Jennifer Gutshall <jgutshall@gilmore-assoc.com>
Sent: Wednesday, July 30, 2025 5:16 PM
To: Justin Strahorn <justins@wbhomesinc.com>
Cc: Bryan Bortnichak <bbortnichak@uprov-montco.org>; Michael Coyne <mcoyne@gilmore-assoc.com>
Subject: Greenwood Ave Streambank Restoration/Meadows @ Longview

Justin,

Attached is a summary of our discussions including photographs taken last week.

Please coordinate the maintenance work and look into the guarantee period for the live stakes. Following your maintenance and inspection of the live stakes, we will schedule the inspection by DEP.

Let us know your schedule or if you have any questions.
Jen

Jennifer Gutshall, P.E., Project Manager
Gilmore & Associates, Inc.
401 Plymouth Road, Suite 150, Plymouth Meeting, PA 19462
Main: 610-489-4949 | Direct: 484-971-4837

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Upper Providence Township

MCM#4 Construction Site Storm Water Runoff Control

Construction Site Stormwater Runoff Control Program (1 Sheet)

Stormwater Ordinance Compliance Letter (1 Sheet)

Updated Stormwater Ordinance 258 (26 Sheets)

Site Inspection Field Reports (Available Upon Request)

Upper Providence Township
NPDES MS4 Permit PAG130108
2019 Progress Report
Construction Site Stormwater Runoff Control
September 1, 2024

MCM#4 – Develop, Implement, and Maintain a Program for Construction Stormwater Permitting, Construction Inspection and Enforcement of Installation and Maintenance of Necessary E&S Control Measures:

The Township is relying on the Pennsylvania state wide program for stormwater associated with construction activities to satisfy this MCM. The Montgomery County Conservation District is responsible for implementation and enforcement of NPDES permits and earth disturbances.

The Township Engineer conducts routine erosion and sedimentation control inspections in accordance with the Stormwater Management Ordinance (Chapter 150) and approved Developer's Agreements. When e&s control measure deficiencies are observed, they are noted and the developer's representative is notified and directed to take appropriate action to correct the deficiencies in a timely manner. If efforts to remedy erosion control deficiencies are not successful, the Montgomery County Conservation District is contacted to perform a site inspection and enforce the terms of the earth disturbance permit.

Provisions for enforcement of control of other types of construction related pollutants, such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste are included in the Upper Providence Engineering Construction Standards and Improvement Procedures. Site review by the Township Engineer on-site representative includes monitoring of various types of potential sources of pollution.

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

September 29, 2025

Department of Environmental Protection
Clean Water Program
Southeast Regional Office
2 E. Main Street | Norristown, PA 19401

Reference: Upper Providence Township
Ordinance Compliance Letter

To Whom it may Concern:

Please accept this letter verifying Upper Providence Township has enacted and implements Stormwater Ordinance, Chapter 258, which meets the requirements of the MS4's General Permit prohibiting non-stormwater discharges and regulating Post Construction Stormwater Management Activities.

If you have any questions, feel free to contact me.

Sincerely,

Jennifer W. Gutshall, P.E.
Gilmore & Associates, Inc.

Chapter 258

STORMWATER MANAGEMENT

ARTICLE IX
Enforcement and penalties

[HISTORY: Adopted by the Board of Supervisors of the Township of Upper Providence 2-17-2004 by Ord. No. 433 (Ch. 150 of the 1990 Code). Amendments noted where applicable.]

ARTICLE I
General Provisions

§ 258-1. Short title.

This chapter shall be known and may be cited as the "Upper Providence Township Stormwater Management Ordinance."

§ 258-2. Purpose.

The purpose of this chapter is to promote health, safety and welfare within the Township and its watershed by minimizing the harms and maximizing the benefits described in this section of this chapter, through provisions designed to:

A. Provide review procedures and performance standards for stormwater planning and management.

B. Utilize and preserve the existing natural drainage systems as much as possible.

C. Manage stormwater impacts close to the runoff source, in a manner which requires a minimum of structures and relies on natural processes.

D. Focus on infiltration of stormwater, to maintain groundwater recharge and to prevent degradation of surface and groundwater quality and to otherwise protect water resources.

E. Maintain existing flows and quality of streams and watercourses.

F. Meet legal water quality requirements under state law, including regulations at 25 Pa. Code Chapter 93.4a to protect and maintain existing uses and maintain the level of water quality to support those uses in all streams, and to protect and maintain water quality in special protection streams.

G. Prevent scour and erosion of streambanks and streambeds.

H. Provide for proper operations and maintenance of all permanent stormwater management BMPs that are implemented in the Township.

I. Provide a mechanism to identify controls necessary to meet the NPDES permit requirements.

J. Implement an illegal discharge detection and elimination program to address nonstormwater discharges into the Township's separate storm sewer system.

§ 258-3. Statutory authority. [Amended 1-5-2009 by Ord. No. 499]

The Township is empowered to regulate land use activities that affect stormwater impacts by the authority of the Pennsylvania Municipalities Planning Code (53 P.S. § 10101 et seq.) and the Pennsylvania Stormwater Management Act (32 P.S. § 680.1 et seq.).

§ 258-4. Applicability.

A. This chapter applies to any regulated earth disturbance activities within the Township and all stormwater runoff entering into the Township's separate storm sewer system from lands within the boundaries of the Township.

§ 258-5. Compatibility with other requirements.

A. 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. To the extent that this chapter imposes more rigorous or stringent requirements for stormwater management, the specific requirements contained in this chapter shall be followed.

B. Nothing in this chapter shall be construed to affect any of the Township's requirements regarding stormwater matters which do not conflict with the provisions of this chapter, such as local stormwater management design criteria (e.g., inlet spacing, inlet type, collection system design and details, outlet structure design, etc.).

ARTICLE II
Definitions

§ 258-6. Definitions and word usage.

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

(1) 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.

(2) 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.

(3) The words "shall" and "must" are mandatory; the words "may" and "should" are permissive.

B. As used in this chapter, the following terms shall have the meanings indicated:

ACCELERATED EROSION — The removal of the surface of the land through the combined action of human activities and the natural processes at a rate greater than would occur because of the natural process alone.

APPLICANT — A landowner, developer or other person who has filed an application for approval to engage in any regulated earth disturbance activity at a project site in the Township.

BMP (BEST MANAGEMENT PRACTICE) — Activities, facilities, designs, measures or procedures used to manage stormwater impacts from regulated earth disturbance activities, to meet state water quality requirements, to promote groundwater recharge and to otherwise meet the purposes of this chapter.

CONSERVATION DISTRICT — The Montgomery County Conservation District.

DEP — The Pennsylvania Department of Environmental Protection.

DEVELOPER — A person that seeks to undertake any regulated earth disturbance activities at a project site in the Township.

DEVELOPMENT — See "earth disturbance activity." The term includes redevelopment.

DEVELOPMENT SITE — The specific tract of land where any earth disturbance activities in the Township are planned, conducted or maintained.

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 process by which the surface of the land, including channels, is worn away by water, wind, or chemical action.

EROSION AND SEDIMENT CONTROL PLAN — A plan for a project site, which identifies BMPs to minimize accelerated erosion and sedimentation.

GROUNDWATER RECHARGE — Replenishment of existing natural underground water supplies.

IMPERVIOUS SURFACE — A surface that prevents the infiltration of water into the ground. Impervious surface includes, but is not limited to, any roof, parking or driveway areas and any new streets and sidewalks. Any surface areas designed to initially be gravel or crushed stone shall be

assumed to be impervious surfaces.

NPDES — National Pollutant Discharge Elimination System, the federal government's system for issuance of permits under the Clean Water Act, which is delegated to DEP in Pennsylvania.

OUTFALL — Point source, as described in 40 CFR 122.2, at the point where the Township's storm sewer system discharges to surface waters of the commonwealth.

PERSON — An individual, partnership, public or private association, company or corporation or a governmental unit, public utility or any other legal entity whatsoever which is recognized by law as the subject of rights and duties.

POINT SOURCE — Any discernible, confined and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel or conduit from which stormwater is or may be discharged, as defined in state regulations at 25 Pa. Code § 92a.2.**[Amended at time of adoption of Code (see Ch. 1, General Provisions, Art. I)]**

PROJECT SITE — The specific area of land where any regulated earth disturbance activities in the Township are planned, conducted or maintained.

REDEVELOPMENT — Earth disturbance activities on land which has previously been disturbed or developed.

REGULATED EARTH DISTURBANCE ACTIVITY — Earth disturbance activity one acre or more with a point source discharge to surface waters or the Township's storm sewer system or five acres or more regardless of the planned runoff. This includes earth disturbance on any portion of, part or during any stage of a larger common plan of development. This only includes road maintenance activities involving 25 acres or more or earth disturbance.

ROAD MAINTENANCE — Earth disturbance activities within the existing road cross-section, such as grading and repairing existing unpaved road surfaces, cutting road banks, cleaning or clearing drainage ditches and other similar activities.

SEPARATE STORM SEWER SYSTEM — A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels or storm drains) primarily used for collecting and conveying stormwater runoff.

STATE WATER QUALITY REQUIREMENTS — As defined under state regulations, protection of designated and existing uses (see 25 Pa. Code Chapters 93 and 96), including:

(1) Each stream segment in Pennsylvania has a "designated use," such as "cold water fishery" or "potable water supply," which are listed in Chapter 93. These uses must be protected and maintained, under state regulations.

(2) "Existing uses" are those attained as of November 1975, regardless whether they have been designated in Chapter 93. Regulated earth disturbance activities must be designed to protect and maintain existing uses and maintain the level of water quality necessary to protect those uses in all streams and to protect and maintain water quality in special protection streams.

(3) Water quality involves the chemical, biological and physical characteristics of surface water bodies. After regulated earth disturbance activities are complete, these characteristics can be impacted by addition of pollutants such as sediment and changes in habitat through increased flow volumes and/or rates as a result of changes in land surface area from those activities. Therefore, permanent discharges to surface waters must be managed to protect the streambank, streambed and structural integrity of the waterway to

prevent these impacts.

STORMWATER — The surface runoff generated by precipitation reaching the ground surface.

SURFACE WATERS OF THE 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 water, or parts thereof, whether natural or artificial, within or on the boundaries of this commonwealth.

TOWNSHIP — Township of Upper Providence, Montgomery County, Pennsylvania.

WATERCOURSE — A channel or conveyance of surface water, such as a steam or creek, having defined bed and banks, whether natural or artificial, with perennial or intermittent flow.

WATERSHED — Region or area drained by a river, watercourse or other body of water, whether natural or artificial.

ARTICLE III
Stormwater Management for Water Quality

§ 258-7. General requirements for stormwater management.

A. All regulated earth disturbance activities within the Township shall be designed, implemented, operated and maintained to meet the purposes of this chapter, through these two elements:

(1) Erosion and sediment control during the earth disturbance activities (e.g., during construction), and

(2) Water quality protection measures after completion of earth disturbance activities (e.g., after construction), including operations and maintenance.

B. No regulated earth disturbance activities within the Township shall commence until the requirements of this chapter are met.

C. Erosion and sediment control during regulated earth disturbance activities shall be addressed as required by § 258-8.

D. Postconstruction water quality protection shall be addressed as required by § 258-9. Operations and maintenance of permanent stormwater BMPs shall be addressed as required by Article V.

§ 258-8. Erosion and sediment control during regulated earth disturbance activities.

A. 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.

B. Evidence of any necessary permit(s) for regulated earth disturbance activities from the appropriate DEP regional office or County Conservation District must be provided to the Township.

C. A copy of the erosion and sediment control plan and any required permit, as required by DEP regulations, shall be available at the project site at all times.

§ 258-9. Water quality requirements after regulated earth disturbance activities are complete.

A. No regulated earth disturbance activities within the Township shall commence until approval by the Township of a plan which demonstrates compliance with this chapter after construction is complete.

B. To control postconstruction stormwater impacts from regulated earth disturbance activities, State Water Quality Requirements can be met by BMPs, including site design, which provide for replication of preconstruction stormwater infiltration and runoff condition, so that postconstruction stormwater discharges do not degrade the physical, chemical or biological characteristics of the receiving waters. This may be achieved by the following:

(1) Infiltration: replication of preconstruction stormwater infiltration conditions;

(2) Treatment: use of water quality treatment BMPs to ensure filtering out of the chemical and physical pollutants from the stormwater runoff; and

(3) Streambank and streambed protection: management of volume and rate of postconstruction stormwater discharges to prevent physical degradation of receiving waters (e.g., from scouring).

ARTICLE IV
Stormwater Management for Runoff Control

§ 258-10. General requirements.

Measures used to collect and carry stormwater on any site shall be designed to meet the following minimum performance standards:

A. Prevent erosion damage and satisfactorily carry off or detain and control the rate of release of surface waters.

B. When subsurface soil conditions are suitable, require runoff control measures to percolate the stormwater into the ground to aid in the recharge of groundwaters, and the preservation of baseflow.

C. Carry surface water to the nearest adequate street, storm drain, detention basin, natural watercourse or drainage facility.

D. Take surface water from the bottom of vertical grades, to lead water away from springs and collect water upgrade of all street intersections at the earliest or most efficient point.

E. Control/accommodate not only the anticipated peak discharge from the on-site disturbed ares, but also the existing runoff being contributed from all land at a higher elevation in the same watershed.

F. Maintain the adequacy of the natural stream channels. Accelerated bank erosion shall be prevented by controlling the rate and velocity of runoff discharged to these watercourses so as to avoid increasing the occurrence of stream bank overflow.

G. Preserve the adequacy of existing culverts and bridges by suppressing the new flood peaks created by the new earth disturbances.

H. If in the course of preparing or reviewing the stormwater management plan the Township Engineer determines that off-site improvements are necessary to satisfactorily control the stormwater from the site, the applicant shall be responsible for such off-site improvements.

I. All stormwater detention and retention facilities shall be in place and functioning prior to the creation of any impervious surface.

J. Whenever a watercourse, stream or intermittent stream is located within a grading site, it shall remain open in its natural state and location and shall not be piped unless permitted by Pennsylvania Department of Environmental Protection (DEP) and the Upper Providence Township Board of Supervisors.

K. The existing points of natural drainage discharge onto adjacent property shall not be altered without the written approval and a drainage easement from the affected land owners.

L. No stormwater runoff or natural drainage shall be so diverted as to overload existing drainage systems or create flooding or the need for additional drainage structures on other private properties or public lands.

§ 258-11. Detention facility design.

A. Stormwater detention facilities. Stormwater detention facilities include all structural measures, which can reliably and predictably achieve the peak discharge requirements. Stormwater detention facilities include, but are not necessarily limited to, detention basins, retention basins, bioretention areas, open

(at-grade) sand filters, closed (belowgrade) sand filters, water quality inlets, dry wells, below-grade detention chambers and rooftop detention.

B. Peak discharge design storms. Detention facilities shall be designed to control the fifty-year storm post-development runoff peak discharge rate from a site to the pre-development two-year storm peak runoff discharge rate and the 100-year storm post-development runoff peak discharge rate to the pre-development 100-year storm peak runoff discharge rate. **[Amended 3-15-2021 by Ord. No. 588]**

C. Runoff calculation methodology.

(1) Any stormwater runoff calculation involving a project with 1.0 acre or greater of earth disturbance, including on- and off-site areas, that will require an NPDES permit shall use an accepted calculation technique that is based on the NRCS soil cover complex method. For project with less than 1.0 acre of earth disturbance, the rational method with a minimum ascending limb factor of three and a minimum receding limb multiplier of seven, universal rational method or other accepted similar method selected by the design professional that is based on the limitations and suitability of the method for a particular site. All stormwater runoff calculation methods are subject to authorization by the Township Engineer. All runoff hydrographs shall take into consideration the duration of the storm event to compute the runoff volume and routing. **[Amended 3-15-2021 by Ord. No. 588]**

(2) 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.

(3) For purposes of pre-development flow rate determination, undeveloped land shall be considered as "meadow, in good condition", unless the natural ground cover generates a lower curve number or rational "c" value.

(4) All calculations using the rational method or derivation of the rational method shall use rainfall intensities consistent with appropriate times of concentration for overland flow and return periods from NRCS methodology as published in the NOAA Atlas 14. The time of concentration for sheet flow and shallow concentrated flow shall both be calculated using NRCS methodology. Times of concentration for channel and pipe flow shall be computed using Manning's equation or NRCS methodology. The predevelopment maximum flow length for sheet flow shall be 300 feet and the post development maximum flow length for sheet flow shall be 150 feet for disturbed area. **[Amended 3-15-2021 by Ord. No. 588]**

(5) All calculations using the rational method or derivation of the rational method shall use the runoff coefficients for the soil hydrologic classification and slope in Runoff Coefficients for the Rational Equation table in the PADEP E and S Manual. **[Amended 3-15-2021 by Ord. No. 588]**

(6) The design of any stormwater detention facilities intended to meet the performance standards of this chapter shall be verified by routing the design storm hydrograph through these facilities using accepted methods of practice. The Township Engineer may approve the use of any generally accepted reservoir routing technique, which shall use a total runoff volume that is consistent with the volume from a method that produces a full hydrograph. The computer routing program used must take into account the tail water effect of the discharge pipe on the orifice design as well as the submergence of the discharge pipe outlet. **[Amended 3-15-2021 by Ord. No. 588]**

(7) Outlet structures for stormwater BMPs shall be designed to meet the performance standards of

this chapter using any generally accepted hydraulic analysis technique or method approved by the Township Engineer. **[Added 3-15-2021 by Ord. No. 588]**

D. Stormwater detention and retention facilities. Stormwater detention and retention facilities shall meet the following minimum design/construction standards:

(1) Detention basin shall be designed to facilitate regular maintenance, mowing and periodic silt removal and reseeding. Shallow broad basins are preferred to steep sided basins.

(2) The maximum slope of the earth and detention basin embankment shall be three to one (3:1) with the exception that any slope to be maintained by the Township shall be 4:1. The top or toe of any slope shall be located a minimum of five feet from a property line. Whenever possible, the side slope and basin shape shall conform to the natural topography.

(3) Unless permitted by the conditions of § 300-110B, detention basins shall not be located within floodplains nor within areas of floodplain or alluvial soils.

(4) Detention basins shall be designed so they return to normal conditions within approximately 24 hours after termination of the storm, unless the Township Engineer finds that downstream conditions may warrant other design criteria for stormwater release.

(5) If retention basins are used, the applicant shall demonstrate that such ponds are designed to protect public health, safety and welfare.

(6) Fences may be required for any detention or retention basins where there is a permanent water surface or conditions warrant.

(7) The minimum top width of the detention basin berm shall be 10 feet. A cutoff trench (keyway) of relative impervious material shall be provided beneath all embankments requiring fill material. The keyway shall be a minimum eight feet wide, minimum three feet deep and have 1:1 side slopes. Infiltration basins and rain gardens berms with impoundment depths less than 3.0 feet may be reduced to a minimum top width of 5.0 feet and are not required to have cutoff trench (keyway). **[Amended 3-15-2021 by Ord. No. 588]**

(8) In order to ensure proper drainage on the basin bottom, a minimum grade of 2% shall be maintained for sheet flow. Where a 2% slope cannot be maintained, low flow channels at a minimum grade of 1% constructed of concrete or other materials approved by the Township Engineer, shall be constructed between all basin inlets and the basin outlet. The bottom slope of detention facilities that are designed to also provide infiltration may be reduced to 0.0% provided that the proposed facility meets PADEP BMP design criteria. **[Amended 3-15-2021 by Ord. No. 588]**

(9) All detention and retention basin embankments shall be placed in eight-inch maximum lifts to a minimum ninety-five-percent dry density. Prior to proceeding to the next lift, compaction shall be checked by the Township Engineer or an approved soils engineer who shall provide the Township Engineer with a written report. Compaction tests shall be performed using the modified proctor method in accordance with ASTM D-1577. Compaction tests shall be run on the leading and trailing edge as well as the top of the berm.

(10) Emergency overflow facilities shall be provided for detention facilities to accommodate runoff in excess of design flows. Whenever possible, emergency spillway for the detention basins shall be constructed on undisturbed ground. Emergency spillways shall be constructed of concrete pavers, gabions or other similar materials approved by the Township Engineer. All emergency

spillways shall be constructed so that the detention basin berm is protected against erosion. The minimum capacity of all emergency spillway shall be the flow rate of the 100-year design storm after development. The construction material of the emergency spillway shall extend along the upstream and downstream berm embankment slopes. The upstream edge of the emergency spillway shall be a minimum of three feet below the spillway crest elevation. The downstream slope of the spillway shall, as a minimum, extend to the top of the berm embankment. The emergency spillway shall not discharge over earthen fill or easily erodible material.

(11) The minimum freeboard from the spillway flow depth to the top of berm shall be one foot. **[Amended 3-15-2021 by Ord. No. 588]**

(12) Antiseep collars shall be installed around the pipe barrel within the normal saturation zone of the detention basin berms. The antiseep collars and their connections to the pipe barrels shall be watertight. The antiseep collars shall extend a minimum of two feet beyond the outside of the principle pipe barrel. The maximum spacing between collars shall be 14 times the minimum projection of the collar measured perpendicular to the pipe. A minimum of two antiseep collar shall be installed on each outlet pipe.

(13) All outlet pipes through the basin berm shall be reinforced concrete pipe, designed to withstand the loading caused by a fully saturated berm and shall be watertight joints using O-ring joint pipe. Outlet pipe shall be backfilled with material similar to the core material (semi-impervious).

(14) The invert of the inlet pipe(s) into a basin shall be six inches above the basin floor or lining so that it can adequately drain after rainstorms. Inlet pipe(s) shall discharge to areas of the basin that slope toward the outlet structure.

(15) Energy dissipaters and/or level spreaders shall be installed at points where pipes or drainageways drain to or from the basin. Energy dissipaters shall comply with criteria in Hydraulic Engineering Circular No. 15 - Design of Stable Channels with Flexible Linings published by the Federal Highway Administration of the United States Department of Transportation of the Engineering Field Manual for Conservation Practices. NCRS energy dissipating device calculations shall be submitted for Township review and approval.

(16) Inlet and outlet structures shall be located at a maximum distance from one another in order to promote water quality benefits. The Township Engineer may require a rock filter or rock-filled gabion for entrapping sediments carried in stormwater if sufficient separation of inlet and outlet structures cannot be achieved.

(17) A perforated riser, or similar sediment control device, shall be provided at each outlet of all detention basins during construction for sediment control. The riser shall be constructed of metal or concrete. The riser shall extend to a maximum elevation of two feet below the crest elevation of the emergency spillway. The perforated riser shall be designed so that the rate of outflow is controlled by the pipe barrel through the basin berm, when the depth of water within the basin exceeds the height of the riser. Circular perforations with a maximum diameter of one inch shall be spaced 12 inches vertically. The horizontal spacing shall be in accordance to DEP soil erosion and sedimentation control manual specifications. The perforations shall be cleanly cut and shall not be susceptible to enlargement. All metal risers shall be suitably coated to prevent corrosion. A trash rack or similar appurtenance shall be provided to prevent debris from entering the pipe. All risers shall have concrete base attached with a watertight connect. The base shall be of sufficient weight to prevent flotation of the riser. An antivortex device consisting of a thin vertical plate normal to the base and berm shall be provided at the top of the riser. Unless this

structure is part of the permanent outlet control, it shall be removed from the site when it has been adequately stabilized as determined by the Township Engineer.

(18) All drainage channels shall be designed to prevent erosion of the bed and banks. The maximum permissible flow velocity shall not exceed the design requirements outlined in the current Soil Erosion and Sedimentation Control Manual, published by the Pennsylvania Depart of Environmental Protection. Suitable stabilization shall be provided where required to prevent erosion of the drainage channels.

(19) Any vegetated drainage channel requiring mowing of the vegetation shall have a maximum of three horizontal to one vertical on those areas to be mowed.

(20) Because of the critical nature of vegetated drainage channels, the design of all vegetated channels shall, as a minimum, conform to the design requirements outlined in the current Soil Erosion and Sedimentation Control Manual, published by the Department of Environmental Protection.

§ 258-12. Stormwater conveyance system.

A. General.

(1) Storm sewers, culverts, bridges and related installations shall be provided:

(a) To permit unimpeded flow of natural watercourses and in such a manner as to protect the natural character of the watercourses and to provide regulated discharge;

(b) To insure adequate drainage of all low points along the line of streets; and

(c) To intercept stormwater runoff along streets at intervals reasonably related to the extent and grade of the area drained and to prevent substantial flow of water across intersections.

(2) All storm sewer system components shall conform to current PennDOT standards.

(3) Drainage structures, which drain watershed areas in excess of one-half square mile (320 acres) or which have a span of eight feet or more, shall be designed for a maximum expected runoff as calculated using the Natural Resources Conservation Service Technical release 55 Urban Hydrology for Small Watersheds (less than 2,000 acres).

(4) The design storm for the above structures shall be a 100-year storm. A water obstruction permit shall be obtained from the Pennsylvania Department of Environmental Protection for the waterway opening before final design is undertaken.

(5) The cartway over the culvert or bridge shall be as wide as the ultimate width of the roadway approaches. Additional width may be required to provide sidewalk on one or both sides of the cartway.

B. Storm sewer design and construction requirements. **[Amended 6-2-2008 by Ord. No. 490]**

(1) Minimum pipe size shall be 15 inches in diameter. All storm sewer piping located under a driveway or a street, whether public or private, shall be reinforced concrete pipe, unless otherwise approved by the Township Engineer. All other storm sewer piping shall be either reinforced concrete pipe or high-density polyethylene (HDPE), unless otherwise approved by the Township Engineer. **[Amended 1-5-2009 by Ord. No. 499; 3-15-2021 by Ord. No. 588]**

(2) Minimum pipe slope shall be 0.005 ft./ft.

(3) Minimum drop across junctions shall be two inches. At changes in pipe diameter, pipe crowns shall be matched at junctions (manhole, inlet or junction box).

(4) Maximum distance between junctions shall be 300 feet.

(5) Runoff to proposed storm sewers and inlets shall be calculated using the rational method.

(6) Runoff coefficients.

Character of Land	Runoff Coefficient
Woods	0.18
Meadow	0.22
Pasture	0.30
Cultivated ground	0.35
Roofs and paving	0.95
Steep grass slopes (15% and <)	0.35
Gravel paving	0.85
Lawns (mowed)	0.26

These values should be weighted for actual design conditions by combining the various land use components, when approved by the Township

(7) The time of concentration shall be assumed five minutes for pipes under 30 inches. For pipes 30 inches or greater, the calculated time of concentration can be utilized.

(8) The time of concentration to inlets for grate capacity calculations shall be assumed five minutes.

(9) All storm sewer pipes shall be designed at a minimum to accommodate a minimum of a ten-year storm. Twenty-five-year storms shall be used as required by the Township Engineer.

(10) All storm sewer pipes at inlets in sump condition shall be designed to accommodate the fifty-year storm; floodplain and other critical areas shall be designed to accommodate the 100-year storm.

(11) The rainfall intensity shall be obtained from the Storm Intensity-Duration-Frequency Curves for Region 5 in the Pennsylvania Department of Transportation Design Manual-Part 2.

(12) All storm sewer pipes and inlets intended to drain to detention facilities shall be designed to accommodate the 100-year storm if the bypass or overflow runoff will not reach the basin by overland flow. In cases where the bypass or overflow runoff will flow over land, a stable swale shall be constructed to accommodate the excess runoff.

(13) All inlets in sump condition shall be six-foot inlets or dual four-foot inlets, as needed.

(14) All storm sewer systems shall be analyzed for both inlet and outlet control (including tailwater effects) by using the equations and nomographs as shown in the ERA's Hydraulic Design

Services No. 5. In lieu of this, computer programs that calculate the actual hydraulic grade line for the storm sewer system can be used, provided that all losses (friction, bend, junction, etc.) are taken into account. Documentation for the program must be submitted for approval.

(15) Minimum cover over pipes is two feet from finished grade to outside of pipe bell.

(16) Inlet capacities shall be calculated using PennDOT or manufacturer's nomographs. Documentation for manufacturer's nomograph must be provided to the Township Engineer.

(17) A minimum of one foot of freeboard must be provided between the inlet grate elevation or stormwater manhole rim and the hydraulic grade line elevation.

C. Shoulders in cut areas (without swales).

(1) Water flowing in the shoulder shall not encroach more than two-thirds the shoulder width during a twenty-five-year frequency storm of five-minute duration.

(2) The maximum velocity as determined by Manning's equation shall not exceed the allowable velocities for the specific type of shoulder material.

(3) Inlets shall be provided to control the shoulder encroachment and water velocity.

D. Swales adjacent to shoulders.

(1) Swales in cut areas shall be designed to prevent the passage of water on the cartway during a twenty-five-year frequency storm of five-minute duration.

(2) The maximum velocity as determined by Manning's equation shall not exceed the allowable velocities for the specific type of shoulder material.

E. Curb sections.

(1) The maximum encroachment of water on the roadway pavement shall not exceed three inches in depth at the curb during a twenty-five-year frequency storm of five minute duration.

(2) Inlets shall be provided to control the encroachment of water on the pavement.

F. Inlets, general.

(1) At street intersections, inlets shall be placed in the tangent portion, rather than the curved portion, of the curbing.

(2) If the capacity of the shoulder, swale, curb section, or depressed median section exceeds the assumed inlet capacities, the inlet capacities shall govern the spacing of inlets.

(3) If the capacity of the shoulder, swale, curb section, or depressed median section is less than the inlet capacities, then the shoulder, swale, curb section or depressed section capacity shall govern the spacing of inlets.

§ 258-13. Water quality and groundwater recharge BMPs.

All stormwater BMPs shall be designed to satisfy the following requirements:

A. All facilities shall be provided with the capability to withstand the discharge associated with the 100-year return rainfall event, without failing or resulting in damage to downstream areas. Some

nondetention BMPs may be designed to bypass stormwater discharges, which are in excess of the appropriate design storm. In this case, conveyance must be provided to transport the 100-year surcharge flow to a downstream facility, natural watercourse or storm drainage system inlet.

B. All groundwater recharge devices shall be protected from sedimentation. Areas designated for recharge shall not receive runoff until the contributory drainage areas have achieved final stabilization.

C. The required infiltration or water quality volume shall be calculated using PADEP NPDES change in runoff volume for two-year storm method. (PADEP's modified SCS CN direct runoff calculation method.) **[Added 3-15-2021 by Ord. No. 588]**

ARTICLE V
Stormwater BMP Operations and Maintenance Plan Requirements

§ 258-14. General requirements.

A. No regulated earth disturbance activities within the Township shall commence until approval by the Township of BMP operations and maintenance plan which describes how the permanent (e.g., postconstruction) stormwater BMPs will be properly operated and maintained.

B. The following items shall be included in the BMP operations and maintenance plan:

(1) Map(s) of the project area, in a form that meets the requirements for recording at the offices of the Recorder of Deeds of Montgomery County, and shall be submitted on twenty-four-inch-by-thirty-six-inch or thirty-inch-by-forty-two-inch sheets. The contents of the maps(s) shall include, but not be limited to:

(a) Clear identification of the location and nature of permanent stormwater BMPs;

(b) The location of the project site relative to highways, municipal boundaries or other identifiable landmarks;

(c) Existing and final contours at intervals of two feet, or others as appropriate;

(d) Existing streams, lakes, ponds or other bodies of water within the project site area;

(e) Other physical features, including flood hazard boundaries, sinkholes, streams, existing drainage courses and areas of natural vegetation to be preserved;

(f) The locations of all existing and proposed utilities, sanitary sewers and water lines within 50 feet of property lines of the project site;

(g) Proposed final changes to the land surface and vegetative cover, including the type and amount of impervious area that would be added;

(h) Proposed final structures, roads, paved areas and buildings; and

(i) A fifteen-foot wide access easement around all stormwater BMPs that would provide ingress to and egress from a public right-of-way.

(2) A description of how each permanent stormwater BMPs will be operated and maintained and the identity of the person(s) responsible for operations and maintenance;

(3) The name of the project site, the name and address of the owner of the property, and the name of the individual or firm preparing the plan; and

(4) A statement, signed by the landowner, acknowledging that the stormwater BMPs are fixtures that can be altered or removed only after approval by the Township.

§ 258-15. Responsibilities for operations and maintenance of stormwater BMPs.

A. The BMP operations and maintenance plan for the project site shall establish responsibilities for the continuing operation and maintenance of all permanent BMPs, as follows:

(1) If a plan includes structures or lots which are to be separately owned and in which streets, sewers

and other public improvements are to be dedicated to the Township, stormwater BMPs may also be dedicated to and maintained by the Township;

(2) If a plan includes operations and maintenance by a single ownership or if sewers and other public improvements are to be privately owned and maintained, then the operation and maintenance of stormwater BMPs shall be the responsibility of the owner or private management entity.

B. The Township shall make the final determination on the continuing operations and maintenance responsibilities. The Township reserves the right to accept or reject the operations and maintenance responsibility for any or all of the stormwater BMPs.

§ 258-16. Township review of BMP operations and maintenance plan.

A. The Township shall review the BMP operations and maintenance plan for consistency with the purposes and requirements of this chapter and any permits issued by DEP.

B. The Township shall notify the applicant in writing whether the BMP operations and maintenance plan is approved.

C. The Township may require an as-built survey of all stormwater BMPs and an explanation of any discrepancies with the operations and maintenance plan.

§ 258-17. Adherence to approved stormwater BMP operations and maintenance plan.

It shall be unlawful to alter or remove any permanent stormwater BMP required by an approved BMP operations and maintenance plan, or to allow the property to remain in a condition which does not conform to an approved BMP operations and maintenance plan, unless an exception is granted in writing by the Township.

§ 258-18. Operations and maintenance agreement for privately owned stormwater BMPs.

A. The property owner shall sign an operations and maintenance agreement with the Township covering all BMP that are to be privately owned. The agreement shall be substantially the same as the agreement in Appendix B of this chapter.[1]

B. Other items may be included in the agreement where determined necessary to guarantee the satisfactory operation and maintenance of all permanent BMPs. The agreement shall be subject to the review and approval of the Township.

§ 258-19. Stormwater management easements.

A. Stormwater management easements are required for all areas used for off-site stormwater control unless a waiver is granted by the Municipal Engineer. All such easements shall be in a form satisfactory to the Township Solicitor.

B. Stormwater management easements shall be provided by the property owner if necessary for access for inspections and maintenance or preservation of stormwater runoff conveyance, infiltration and detention areas and other BMPs by persons other than the property owner. The purpose of the easement shall be specified in any agreement under § 258-18.

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1. **Editor's Note: Said appendix is included as an attachment to this chapter.**

§ 258-20. Recording of approved BMP operations and maintenance plan and related agreements.

A. The owner of any land upon which permanent BMPs will be placed, constructed or implemented, as described in the BMP operations and maintenance plan, shall record the following documents in the office of the Recorder of Deeds for Montgomery County within 15 days of approval of the BMP operations plan by the Township:

(1) The operations and maintenance plan or a summary thereof;

(2) Operations and maintenance agreements under § 258-18; and

(3) Easements under § 258-19.

B. The Township may suspend or revoke any approvals granted for the project site upon discovery of the failure of the owner to comply with this section.

§ 258-21. Municipal stormwater BMP operation and maintenance fund.

If stormwater BMPs are accepted by the Township for dedication, the Township may require persons installing stormwater BMPs to pay a specified amount to the municipal BMP operation and maintenance fund to help defray costs of operations and maintenance activities. The amount may be determined as follows:

A. If the stormwater BMP is to be owned and maintained by the Township, the amount shall cover the estimated costs for operations and maintenance for 10 years, as determined by the Township.

B. The amount shall then be converted to present worth of the annual series values.

ARTICLE VI
Inspections and Right of Entry

§ 258-22. Inspections.

A. The Township or its designee may inspect all phases of the construction, operations, maintenance and any other implementation of stormwater BMPs.

B. During any stage of the regulated earth disturbance activities, if the Township or its designee determines that any BMPs are not being implemented in accordance with this chapter, the Township may suspend or revoke any existing permits or other approvals until the deficiencies are corrected.

§ 258-23. Right of entry.

A. Upon presentation of proper credentials, duly authorized representatives of the Township may enter at reasonable times upon any property within the Township to inspect the implementation, condition or operation and maintenance of the BMPs in regard to any aspect governed by this chapter.

B. Stormwater BMP owners and operators shall allow persons working on behalf of the Township ready access to all parts of the premises for the purposes of determining compliance with this chapter.

C. Persons working on behalf of the Township shall have the right to temporarily locate on any BMP in the Township such devices as are necessary to conduct monitoring and/or sampling of the discharges from such BMP.

ARTICLE VII
Fees and Expenses

§ 258-24. General.

The Township may charge a reasonable fee for review of erosion and sedimentation control plans, design of BMPs and operations and maintenance plans to defray review costs incurred by the Township. The applicant shall pay all such fees.

§ 258-25. Expenses covered by fees.

The fees required by this chapter may cover:

A. Administrative/clerical costs.

B. The review of all above-mentioned plans and designs by the Township Engineer.

C. The site inspections, including, but not limited to, preconstruction meetings, inspections during construction of BMPs, and final inspection upon completion of the stormwater BMPs.

D. Any additional work required to monitor and enforce sny provisions of this chapter, correct violations and assure proper completion of stipulated remedial actions.

ARTICLE VIII
Prohibitions

§ 258-26. Prohibited discharges.

A. No person in the Township shall allow, or cause to allow, stormwater discharges into the Township's separate storm sewer system which are not composed entirely of stormwater, except as provided in Subsection B below.

B. Discharges which may be allowed, based on a finding by the Township that the discharge(s) do not significantly contribute to pollution to surface waters of the commonwealth, are:

(1) Discharges from firefighting activities.

(2) Potable water sources, including dechlorinated water line and fire hydrant flushings.

(3) Irrigation drainage.

(4) Routine external building washdown (which does not use detergents or other compounds).

(5) Air-conditioning condensate.

(6) Water from individual residential car washing.

(7) Springs.

(8) Water from crawl space pumps.

(9) Uncontaminated water from foundation or from footing drains.

(10) Flows from riparian habitats and wetlands.

(11) Lawn watering.

(12) Pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spill material has been removed) and where detergents are not used.

(13) Dechlorinated swimming pool discharges.

(14) Uncontaminated groundwater.

C. In the event that the Township determines that any of the discharges identified in Subsection B significantly contribute to pollution of waters of the commonwealth, or is so notified by DEP, the Township will notify the responsible person to cease the discharge.

§ 258-27. Prohibited connections.

A. The following connections are prohibited, except as provided in § 258-26B above:

(1) Any drain or conveyance, whether on the surface or subsurface, which allows any nonstormwater discharge, including sewage, process wastewater and wash water, to enter the separate storm sewer system and any connections to the storm drain system from indoor drains and sinks; and

(2) Any drain or conveyance connected from a commercial or industrial land use to the separate

storm sewer system which has not been documented in plans, maps or equivalent records and approved by the Township.

§ 258-28. Roof drains.

A. Roof drains shall not be connected to streets, sanitary or storm sewers or roadside ditches except as provided in § 258-26B.

B. When it is more advantageous to connect directly to streets or storm sewers, connections of roof drains to streets or roadside ditches may be permitted by the Township.

C. Roof drains shall discharge to infiltration areas or vegetative BMPs to the maximum extent practicable.

§ 258-29. Alteration of stormwater BMPs.

A. No person shall modify, remove, fill, landscape or alter any existing BMP, unless it is part of an approved maintenance program, without the written approval of the Township.

B. No person shall place any structure, fill, landscaping or vegetation into a BMP or within a drainage easement, which would limit or alter the functioning of the BMP, without the written approval of the Township.

ARTICLE IX
Enforcement and penalties

§ 258-30. Public nuisance.

The violation of any provision of this chapter is hereby deemed a public nuisance.

§ 258-31. Enforcement generally.

A. 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 connections or 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 BMPs and

(7) Operation and maintenance of stormwater BMPs.

B. Such notification shall set forth the nature of the violation(s) and establish a time limit for correction of these violations(s). Said notice may further advise that, if applicable, should the violator fail to take the required action within the established deadline, the work will be done by the Township or designee and the expense thereof shall be charged to the violator.

C. Failure to comply within the time specified shall also subject such person to the penalty provisions of this chapter. All such penalties shall be deemed cumulative and shall not prevent the Township from pursuing any and all other remedies available in law or equity.

D. Each day that a violation continues shall constitute a separate violation.

§ 258-32. Suspension and revocation of permits and approvals.

A. Any building land development or other permit or approval issued by the Township may be suspended or revoked by the Township for:

(1) Noncompliance with or failure to implement any provision of the permit;

(2) A violation of any provision of this chapter; or

(3) The creation of any condition or the commission of any act during construction or development which constitutes or creates a hazard or nuisance, pollution or which endangers the life or property of others.

B. A suspended permit or approval shall be reinstated by the Township when:

(1) The Township Engineer or designee has inspected and approved the corrections to the

stormwater BMPs or the elimination of the hazard or nuisance; and/or

(2) The Township is satisfied that the violation of this chapter, law or rule and regulation has been corrected.

§ 258-33. Violations and penalties.

A. Any person who violates or permits a violation of this chapter shall, upon conviction in a summary proceeding brought before a Magisterial District Judge under the Pennsylvania Rules of Criminal Procedure, be guilty of a summary offense and shall be punishable by a fine of not more than $1,000, plus costs of prosecution. In default of payment thereof, the defendant may be sentenced to imprisonment for a term not exceeding 90 days. Each day or portion thereof that such violation continues or is permitted to continue shall constitute a separate offense, and each section of this chapter that is violated shall also constitute a separate offense. **[Amended at time of adoption of Code (see Ch. 1, General Provisions, Art. I)]**

B. In addition, the Township, through its Solicitor, 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.

§ 258-34. Appeals.

Any person aggrieved by any action of the Township or its designee relevant the provisions of this chapter may appeal to the relevant judicial or administrative body according to law within the time period allowed.

Upper Providence Township

MCM#6 Pollution Prevention – Good Housekeeping

Upper Providence Township O&M Program for Municipal Vehicles (2 Sheets)

Street Sweeping Certifications (5 Sheets)

Storm Sewer / Inlet Repairs (13 Sheets)

General Construction Site Waste Management (2 Sheets)

Spill Prevention and Control Measures (3 Sheets)

Upper Providence Township
NPDES MS4 Permit PAG130108
2019 Progress Report
Operation and Maintenance Program for Municipal Vehicles
May 20, 2024

MCM#6 – Develop, Implement, and Maintain Written Operation and Maintenance Program for Municipal Vehicle Operations :

The MS4 Permit requires the development and implementation of a pollution prevention based Operation and maintenance program for all municipal vehicle operations. The goal of this program is to reduce or prevent pollutant runoff from municipal operations from adversely impacting the storm sewer system or the environment. The following is the program for Upper Providence Township.

Municipal Vehicle Operations:

- All municipal vehicles will be operated in a manner that reduces the potential for pollution to the municipal storm sewer system or to the environment. This includes obeying all traffic rules and being alert at all times.
- In the event of a vehicle pollution incident involving either vehicle fluids or cargo, all attempts will be made to prevent the spilled material(s) from entering the storm system or nearby waterways. This could include diking, damming, absorbing, or removing the material from the affected area. All recovered material will be properly disposed of in accordance with all applicable state and federal waste disposal regulations. Appropriate spill containment and recovery equipment will be maintained at the public works facility. For any spill beyond the township's ability to address, local contractors will be contacted to provide assistance. An up to date list of appropriate contractors will be maintained and readily available. All other entities will be contacted (PADEP, PA Fish & Boat Commission, water users / intakes, etc.) will also be contacted.

Municipal Vehicle Maintenance:

- All vehicle maintenance will be performed indoors to reduce the potential for leaks or spills to impact the storm water system.
- Products of maintenance activities, such as greasy rags, oil filters, air filters, batteries, degreasers, used oil and coolant, etc. will be placed in appropriately labeled containers for proper disposal or recycling. If these containers cannot be stored under roof, they will be placed in secure areas with provisions to prevent releases to the environment. Areas containing spillage or contaminants will not be washed so the runoff could enter the storm sewer system. Dry cleanup methods will be utilized as much as possible.
- Drip pans or containers will be used for all leaking vehicles. Outdoor vehicle storage areas will be periodically inspected to check for evidence of leakage.

- Indoor floor drains will not be connected to any part of the storm sewer system and will not allow the discharge of pollutants to the environment.
- Non-hazardous cleaners and solvents will be used whenever possible.
- Vehicle storage and maintenance areas will be routinely inspected to determine the effectiveness of the pollution prevention program. Inspection records will be maintained and any deficiencies will be promptly addressed.

Municipal Vehicle Fueling:

- All vehicle fueling operations will be monitored to prevent or react to spillages.
- All underground storage tanks will be operated and maintained according to all applicable local, state, and federal requirements. This could include the use of overfill prevention equipment, corrosion prevention equipment, and spill detection equipment.
- Above ground storage tanks will be supplied with suitable secondary containment.
- "Topping off" of vehicle fuel tanks will be discouraged through training and signage.
- Spillage from fueling activities will be controlled and cleaned up.
- Appropriate clean up materials, such as oil dry or absorbent pads will be maintained at the fueling area and will be used to prevent spillage from entering the storm sewer system. Water will not be used to clean up any spillage.

Municipal Vehicle / Equipment Washing:

- Municipal vehicles will be washed at commercial car washes whenever possible.
- If commercial car washes are not viable, designated washing areas will be established, preferably indoors where wash water can be recycled or directed to treatment.
- If outdoor washing occurs, it will be conducted on gravel, grass, or other permeable surfaces so that the runoff will not enter the storm sewer system.
- Phosphate-free biodegradable detergents will be used whenever possible.
- If needed, vehicle / equipment wash water will be collected and discharged to the sanitary sewer system.
- The waste water generated from any power washing or stream cleaning activities will not be allowed to enter the storm sewer system.

Street Sweepings 2025

Pioneer Crossing Landfill

Pioneer Crossing Landfill
727 Red Lane Road
Birdsboro, PA 19508
(610) 582-2900

CUSTOMER INFORMATION

ID: 005757
UPPER PROVIDENCE TOWNSHIP
PUBLIC WORKS
WAG 1286 BLACK ROCK ROAD
PHOENIXVILLE, PA 19460

TICKET: 777107
PAYMENT:

VEHICLE: UPT29
UPPER PROVIDENCE TOWNSHIP
PLATE#: MG5081M
CONTAINER:

CONTRACT: 5757-MSWSS-CU-46
REFERENCE:
PO Number:

BOL:
Cell:
Type: NONE

DATE IN: 07-May-2025 TIME IN: 8:13 am
DATE OUT: 07-May-2025 TIME OUT: 8:34 am

GROSS WEIGHT 40,240 lb
TARE WEIGHT 23,300 lb
NET WEIGHT 16,940 lb

Shipment Type: INBOUND
Payment Type: INVOICE
WEIGHMASTER:
Patricia Updegrove Lic Exp:20250101 PA#:060484

QTY.	UNIT	RATE	SUBTOTAL
MSW - Municipal Waste			
8.47	tn		

SUBTOTAL:
TAX:
TOTAL:

Street Sweepings 2025

Pioneer Crossing Landfill

Pioneer Crossing Landfill
727 Red Lane Road
Birdsboro, PA 19508
(610) 582-2900

CUSTOMER INFORMATION

ID: 005757
UPPER PROVIDENCE TOWNSHIP
PUBLIC WORKS
WAG 1286 BLACK ROCK ROAD
PHOENIXVILLE, PA 19460

TICKET: 777143
PAYMENT:

VEHICLE: UPT29
UPPER PROVIDENCE TOWNSHIP
PLATE#: MG5081M
CONTAINER:

CONTRACT: 5757-MSWSS-CU-46
REFERENCE:
PO Number:

BOL:
Cell:
Type: NONE

DATE IN: 07-May-2025 TIME IN: 10:36 am
DATE OUT: 07-May-2025 TIME OUT: 10:53 am

GROSS WEIGHT 40,380 lb
TARE WEIGHT 23,240 lb
NET WEIGHT 17,140 lb

Shipment Type: INBOUND
Payment Type: INVOICE
WEIGHMASTER:
Heather Creasy Lic Exp:20261201 PA#:97359

QTY.	UNIT	RATE	SUBTOTAL
MSW - Municipal Waste			
8.57	tn		

SUBTOTAL:
TAX:
TOTAL:

Street Sweepings 2025

Pioneer Crossing Landfill

Pioneer Crossing Landfill
727 Red Lane Road
Birdsboro, PA 19508
(610) 582-2900

CUSTOMER INFORMATION

ID: 005757
UPPER PROVIDENCE TOWNSHIP
PUBLIC WORKS
WAG 1286 BLACK ROCK ROAD
PHOENIXVILLE, PA 19460

TICKET: 777032
PAYMENT:

VEHICLE: UPT29
UPPER PROVIDENCE TOWNSHIP
PLATE#: MG5081M
CONTAINER:

CONTRACT: 5757-MSWSS-CU-46
REFERENCE:
PO Number:

BOL:
Cell:
Type: NONE

DATE IN: 06-May-2025 TIME IN: 2:02 pm
DATE OUT: 06-May-2025 TIME OUT: 2:17 pm

GROSS WEIGHT 40,580 lb
TARE WEIGHT 23,400 lb
NET WEIGHT 17,180 lb

Shipment Type: INBOUND
Payment Type: INVOICE
WEIGHMASTER:
Heather Creasy Lic Exp:20261201 PA#:97359

QTY.	UNIT	RATE	SUBTOTAL
MSW - Municipal Waste			
8.59	tn		

SUBTOTAL:
TAX:
TOTAL:

Street Sweepings 2025

Pioneer Crossing Landfill

Pioneer Crossing Landfill
727 Red Lane Road
Birdsboro, PA 19508
(610) 582-2900

CUSTOMER INFORMATION

ID: 005757
UPPER PROVIDENCE TOWNSHIP
PUBLIC WORKS
WAG 1286 BLACK ROCK ROAD
PHOENIXVILLE, PA 19460

TICKET: 776993
PAYMENT:

VEHICLE: UPT29
UPPER PROVIDENCE TOWNSHIP
PLATE#: MG5061M
CONTAINER:

CONTRACT: 5757-MSWSS-CU-46
REFERENCE:
PO Number:

BOL:
Cell:
Type: NONE

DATE IN: 06-May-2025 TIME IN: 10:45 am
DATE OUT: 06-May-2025 TIME OUT: 11:10 am

GROSS WEIGHT 39,300 lb
TARE WEIGHT 23,460 lb
NET WEIGHT 15,840 lb

Shipment Type: INBOUND
Payment Type: INVOICE
WEIGHMASTER:
IN - Patricia Updegrove Lic Exp:20250101 PA#:060484 OUT - Heather Creasy Lic

QTY.	UNIT	RATE	SUBTOTAL
MSW - Municipal Waste			
7.92	tn		

SUBTOTAL:
TAX:
TOTAL:

Sweeping Co. LLC
Don't Stress! We'll sweep up your mess!

Invoice #: 22810
Invoice Date: 4/14/2025
Due: 5/14/2025

Upper Providence Township
1286 Blackrock Rd
Phoenixville, PA 19460

rlorenzo@uprov-montco.org

R&S Sweeping Co. LLC
110 N. Township Line Rd.
Royersford, PA 19468

484-792-1464
rssweep1@gmail.com

Service address:
1286 Blackrock Rd
Phoenixville, PA 19460

Service Date	Item	Unit Cost	Quantity	Price
4/8/2025	**Sweeping** Dave on site	$150.00	8	$1200.00
4/8/2025	**Sweeping overtime** Dave on site	$165.00	1	$165.00
4/8/2025	**Sweeping** Mark on site	$150.00	8	$1200.00
4/8/2025	**Sweeping overtime** Mark on site	$165.00	1	$165.00
4/9/2025	**Sweeping** Kevin on site	$150.00	8	$1200.00
4/9/2025	**Sweeping overtime** Kevin on site	$165.00	1	$165.00
4/9/2025	**Sweeping** Dave on site	$150.00	8	$1200.00
4/9/2025	**Sweeping overtime** Dave on site	$165.00	1	$165.00
4/10/2025	**Sweeping** Kevin on site	$150.00	8	$1200.00
4/10/2025	**Sweeping overtime** Kevin on site	$165.00	1	$165.00
4/10/2025	**Sweeping**	$150.00	8	$1200.00

	Dave on site			
4/10/2025	**Sweeping overtime** Dave on site	$165.00	1	$165.00

Subtotal: $8190.00

Total: $8190.00

Thank you for your business! Should you have any questions, please do not hesitate to reach out to our Office Manager: Fern Hallermeier 215-450-7055.

Please be advised that any balance over 30 days is subject to an 18% APR (1.5% monthly) finance charge.

Received 04-23-25

R&S Sweeping Co. LLC
Don't Stress! We'll sweep up your mess!

Invoice #: 22859
Invoice Date: 4/21/2025
Due: 5/21/2025

Upper Providence Township
1286 Blackrock Rd
Phoenixville, PA 19460

rlorenzo@uprov-montco.org

R&S Sweeping Co. LLC
110 N. Township Line Rd.
Royersford, PA 19468

484-792-1464
rssweep1@gmail.com

Service address:
1286 Blackrock Rd
Phoenixville, PA 19460

Service Date	Item	Unit Cost	Quantity	Price
4/15/2025	**Sweeping**	$150.00	8	$1200.00
4/15/2025	**Sweeping overtime**	$165.00	1	$165.00
4/16/2025	**Sweeping** Ahmed on site	$150.00	8	$1200.00
4/16/2025	**Sweeping overtime** Ahmed on site	$165.00	1	$165.00
4/16/2025	**Sweeping** Dave on site	$150.00	8	$1200.00
4/16/2025	**Sweeping overtime** Dave on site	$165.00	1	$165.00
4/17/2025	**Sweeping overtime**	$165.00	1	$165.00
4/17/2025	**Sweeping**	$150.00	8	$1200.00

Subtotal: $5460.00

Total: $5460.00

Thank you for your business! Should you have any questions, please do not hesitate to reach out to our Office Manager: Fern Hallermeier 215-450-7055.

Please be advised that any balance over 30 days is subject to an 18% APR (1.5% monthly) finance charge.

Received 04-29-25

Sweeping Co. LLC
Don't Stress! We'll sweep up your mess!

Invoice #: 22903
Invoice Date: 4/28/2025
Due: 5/28/2025

Upper Providence Township
1286 Blackrock Rd
Phoenixville, PA 19460

rlorenzo@uprov-montco.org

R&S Sweeping Co. LLC
110 N. Township Line Rd.
Royersford, PA 19468

484-792-1464
rssweep1@gmail.com

Service address:
1286 Blackrock Rd
Phoenixville, PA 19460

Service Date	Item	Unit Cost	Quantity	Price
4/24/2025	**Sweeping**	$150.00	8	$1200.00
4/25/2025	**Sweeping**	$150.00	5	$750.00

Subtotal: $1950.00

Total: $1950.00

Thank you for your business! Should you have any questions, please do not hesitate to reach out to our Office Manager: Fern Hallermeier 215-450-7055.

Please be advised that any balance over 30 days is subject to an 18% APR (1.5% monthly) finance charge.

Inlets Repaired - 13

Inlets Vacuumed Out - 125

OutFalls InSpected - January - April Q-1

2024 Storm Inlet Repair
July

Date	Type Of Work	Location
7/2/2024	Dig swale, clean pipe, matting & seed	451 Mennonite rd.
7/16/2024	Clear storm water R/W, Dig swale. Place R-5' s	Hopwood rd.
7/23/2024	clean inlet tops	Total (43)
7/25/2024	Vac out inlets	6- Paddington, Mennonite, Hopwood, Morgan
7/26/2024	Excavate sinkhole, repair broken storm water pipe	Paddington dr.

2024 Storm Inlet Repair
August

Date	Type Of Work	Location
8/8/2024	Clean inlets	Twnsp. Wide - Total (35)
8/13/2024	Dig swale & remove sediments	Paddington rd.
8/23/2024	Remove sediment, dirt , seed and matting	Paddington rd.

2024 Storm Inlet Repair
September

Date	Type Of Work	Location
9/24/2024	Saw cut inlet for repair	Longford rd
9/25/2024	Saw cut inlets for repair	Longford rd
9/26/2024	clear inlet of trees and debri	Amanda ln. @ R.T. 29

2024 Storm Inlet Repair
October

Date	Type Of Work	Location
10/1/2024	Excavate inlet remove s-top, backfillm sinkhole	Longford rd
10/2/2024	replace inlet c-top	Longford rd
10/3/2024	Excavate inlet remove c-top	Longford rd
10/4/2024	replace inlet c-top	Longford rd
10/10/2024	Excavate inlet & remove c-top	Longford rd
10/16/2024	Dig swale & clean sediments, seed and erossion matting	Longford rd
10/16/2024	Cut shoulders	Ashenfelter rd
10/25/2024	Remove debris & sediments around culvert	Buckwalter rd
10/29/2024	Remove debris & sediments around culvert	Buckwalter rd
10/30/2024	Grade creek banks, seed & errosion matting	Buckwalter rd

2024 Storm Inlet Repair
November

Date	Type Of Work	Location
11/1/2024	Excavate & Blacktop Sinkholes Around Inlet	4 Winding Ridge Rd
11/1/2024	saw cut inlets fo repairs	# 4, 5 Winding Ridge rd
11/5/2024	Excavate inlets, brick and point c-tops,	# 4, 5 Winding Ridge rd
11/6/2024	Backfill & Blactop inlets	# 4, 5 Winding Ridge rd
11/6/2024	Ditch shoulders	Old State rd
11/13/2024	Ditch shoulders	Old State rd
11/14/2024	Ditch shoulders	Driebelbis rd
11/15/2024	leaf vac	
11/19/2024	leaf vac	Tara dr, 6th ave, Gay st, Springertown rd, Yeager rd, Mennonite rd
11/20/2024	Clean inlets	Country Ridge - 2
11/21/2024	Ditch shoulders	Cidermill rd, Lower Indianhead rd, N.S. Reber rds.
11/22/2024	Ditch shoulders, Vac leaves	Lovers ln.
11/27/2024	Clean inlets	202 country Ridge rd. -2

2024 Storm Inlet Repair
December

Date	Type Of Work	Location
12/5/2024	Ditch Shoulders	S.Trappe, Mennonite, Pennapacker rds., College ave
12/10/2024	Ditch Shoulders	Anderson rd, Yocum rd, Longford rd.
12/11/2024	Clean Inlets , Four men	Township wide - (Total 132 inlets)
12/12/2024	Clean leaves, Ditch Shoulders	Fruit Farm rd, Old State rd, Longford rd
12/31/2024	Ditch Shoulders	Longford rd

2025 Storm Inlet Repair
January

Date	Type Of Work	Location
1/8/2025	Remove tree from creek	Mingo rd
1/16/2025	Check & count storm water grates for replacement	Yeager rd, Mingo rd
1/23/2025	check outfalls	Quadrant - 1
1/24/2025	Check outfalls	Quadrant - 1
1/28/2025	check outfalls	Quadrant - 1
1/31/2025	Clean Inlets	Total 71

2025 Storm Inlet Repair
February

Date	Type Of Work	Location
2/7/2025	Vacuum out inlets	Country Ridge - Total 51
2/21/2025	Vacuum out inlets & Swales	Prov Pond. 10 inlets, Groff cir, Hafner, Woodlynn dr
2/27/2028	Reshape stone swales	Hafner rd
2/28/2025	Reshape stone swales, Add R-5's, Vac leaves	Hafner rd

2025 Storm Inlet Repair
March

Date	Type Of Work	Location
3/4/2025	Dig swale @ 265 Hafner rd	Hafner rd
3/6/2025	Vac. Intake pipe , swale & inlets	Yeager rd, Hafner rd 2 inlets
3/7/2025	Vac. Inlets Total- 56	Old state rd, Woods edge, The Highlands, Springertown rd
3/19/2025	Re-Point Mortar & Replace Brick Inside Inlets	Marshwood Dr
3/25/2025	Re-Point Mortar & Replace Brick Inside Inlets	Bryce Way & Marshwood Dr

2025 Storm Inlet Repair
April

Date	Type Of Work	Location
4/1/2025	Clean Inlets	21 Total
4/2/2025	Clean Inlets	54 Total
4/3/2025	Clean Inlets	25 Total
4/4/2025	Clean Inlets	32 Total
4/10/2025	Outfall Inspections	Quadrant - 1
4/8/2025	Street Sweeping	Township Wide
4/9/2025	Street Sweeping	Township Wide
4/10/2025	Street Sweeping	Township Wide
4/15/2025	Street Sweeping	Township Wide
4/16/2025	Street Sweeping	Township Wide
4/17/2025	Street Sweeping	Township Wide
4/24/2025	Street Sweeping	Township Wide
4/25/2025	Street Sweeping	Township Wide

2025 Storm Inlet Repair
May

Date	Type Of Work	Location
5/6/2025	Dispose of street sweepings	Pioneer Crossing Landfill
5/7/2025	Dispose of street sweepings	Pioneer Crossing Landfill
5/9/2025	Clean inlets	Township Wide (Total 167)
5/1/2025	raplace storwater grates & clean out boxes	Mingo rd , Yeager rd (Total 5)
5/28/2025	Clean inlets	Township Wide (Total 55)

2025 Storm Inlet Repair
June

Date	Type Of Work	Location
6/4/2025	Excavate, repoint, backfill & blacktop inlet	Willowwood dr
6/18/2025	Dig swale, seed & place errion matting	711 Hollow rd (The Primrose School)

Stormwater Best Management Practice

Spill Prevention and Control Measures

Minimum Measure: Construction Site Stormwater Runoff Control
Subcategory: Good Housekeeping/Materials Management

Description

Liquid and solid products may enter the environment when they leak or spill from containers during use or transfer. These materials may then directly enter nearby storm drains or receiving waters, or stormwater may carry them there (WES, 2008). Federal requirements for the construction and development industry require that any stormwater discharge permit for construction sites include requirements to "minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures" (40 CFR §450.21(d)(3)). Most state Construction General Permits (CGPs) and EPA's CGP require that stormwater pollution prevention plans (SWPPPs) identify measures to prevent, contain, clean up and dispose of material leaks or spills. Managers of small municipal separate storm sewer systems (MS4) should develop, implement and enforce a program to reduce stormwater pollutants from any construction activity within the MS4 that results in a land disturbance of greater than or equal to one acre, as well as any construction activity that is part of a larger common plan of development or sale that would disturb one acre or more. Managers should share these procedures with construction personnel as part of the program and examine those procedures when doing inspections/reviews.

Applicability

Spill prevention and control measures apply to construction sites that store or use materials such as pesticides, paints, cleaners, petroleum products, fertilizers, concrete wash, metals, solvents, soil stabilizers and binders, and contaminated groundwater. Construction staff should develop spill prevention and control measures for material storage areas, refueling stations (both mobile and stationary), material transfer locations, storm drain inlet and outlet locations, and waterways (WES, 2008). The spill prevention, control and countermeasure (SPCC) rule (40 CFR §112) covers every site with a total aboveground oil storage capacity greater than 1,320 gallons or a buried oil storage capacity greater than 42,000 gallons of petroleum products. The SPCC rule requires every such site to prepare and implement an SPCC plan, which may differ from SWPPP requirements for spill prevention and control measures (U.S. EPA, 2007).

Skill kit at a construction site.

Siting and Design Considerations

As the name implies, spill prevention and control measures consist of pollution prevention measures and measures to control and minimize impact if a spill does occur. Prevention measures should be routinely implemented by construction staff while spill control measures are generally included within a spill plan such as an SPCC plan. All construction staff should be familiar with both prevention and control measures.

When developing spill prevention and control measures, construction staff should identify areas where spills are likely to occur, such as loading and unloading areas, storage and processing areas, places where dust or particulate matter is generated or handled, areas where

EPA-832-F-21-028J
December 2021

equipment maintenance and fueling occur, chemical storage areas, and areas designated for waste disposal. Construction staff should also evaluate the spill potential for stationary facilities—including manufacturing areas, warehouses, service stations, parking lots and access roads—during the project planning phase and re-evaluate that potential during each phase of construction. Designing projects to minimize or use the right amount of herbicides, fertilizers and petroleum-based fuels can also be an important way to reduce stormwater pollutants (PWD, 2018). If construction staff need any of these materials on-site, they should use them as quickly as possible upon delivery to minimize the risk of a spill.

The most successful spill prevention and control measures include both structural and operational controls. Routine prevention measures include (SPU, 2017a, 2017b; U.S. EPA, 2019):

- Recycling, reclaiming or reusing materials, thereby reducing the amount of process materials that are brought on-site.
- Installing leak detection devices, overflow controls and diversion berms.
- Installing inlet protection on storm drains.
- Performing preventative maintenance on storm tanks, valves, pumps, pipes and other equipment.
- Using material transfer procedures or filling procedures for tanks and other equipment that minimize spills.
- Substituting less toxic or non-toxic materials for toxic materials.
- Storing materials in covered areas and within adequate secondary containment structures.
- Leaving hazardous materials in original, labeled containers and keeping Safety Data Sheets on-site.
- Storing materials off the bare ground and away from vehicular traffic and drainage pathways.
- Maintaining a clearly labeled and prominently displayed spill kit that includes, at a minimum, absorbent pads, sorbent booms or socks, absorbent granular material, protective clothing (such as latex gloves and safety glasses), thick plastic garbage bags, and drain covers.
- Following good housekeeping practices at project sites, such as appropriately disposing of unwanted or unused waste material and immediately cleaning up spills or debris.

In the event of a spill, it is critical that a plan and appropriate equipment be in place and responsible parties be identified to carry out control measures immediately. A spill plan, such as an SPCC plan, should include components such as (SPU, 2017a, 2017b; U.S. EPA, 2019):

- Identification of individuals responsible for implementing control measures as well as personnel to contact in case of a spill.
- Identification of spill response procedures for small, medium and worst-case discharges, as appropriate.
- Definition of safety measures for each kind of waste.
- Instructions for how to notify appropriate authorities, such as police and fire departments, hospitals, or municipal sewage treatment facilities, for assistance.
- Description of procedures approved by state and local governments for containing, diverting, isolating and cleaning up spills.
- Description of spill response equipment to use, including safety and cleanup equipment, location of spill kits, and proper disposal methods for used materials.

For any spill, construction staff should avoid the use of water for cleaning to prevent contaminated stormwater from reaching storm drains; dry spills can be swept up while wet spills can be contained and absorbed using the equipment included in standard spill kits.

Limitations

Training is necessary to ensure that all workers are aware of and knowledgeable about spill prevention and control measures. All staff on-site should receive training on spill prevention and control measures, including regular refresher training. Construction staff should make equipment and materials for cleanup readily accessible and mark them clearly so workers can follow procedures quickly and effectively.

Maintenance Considerations

Construction staff should update the spill prevention and control measures regularly to accommodate any changes to the site, procedures or responsible staff (this

may include a site diagram showing the locations of spill kits, drainage pathways and evacuation routes). They should regularly inspect areas where spills may occur to ensure that procedures are posted and cleanup equipment is readily available. They should also replace spill kit materials as soon as workers use them and ensure spill kits always remain easily accessible.

Effectiveness

Spill prevention and control measures can be highly effective at reducing the risk of surface and groundwater contamination; however, to ensure workers follow the procedures, construction staff should provide worker training, appropriate materials and equipment for cleanup, and adequate staff time. If a spill occurs, prompt action is the most effective measure to limit environmental harm and cleanup costs.

Cost Considerations

Spill prevention and control measures can be inexpensive to implement; however, construction staff need adequate time and resources to properly handle and dispose of spills. Good housekeeping is the cheapest and most cost-effective way to control a spill. Once a spill has occurred, the cost of cleanup can be significant.

Additional Information

Additional information on related practices and the Phase II MS4 program can be found at EPA's National Menu of Best Management Practices (BMPs) for Stormwater website

References

Philadelphia Water Department (PWD). (2018). *Stormwater retrofit guidance manual.* Philadelphia, PA: City of Philadelphia.

Seattle Public Utilities (SPU). (2017a). *City of Seattle stormwater manual* (Vol. 2).

Seattle Public Utilities (SPU). (2017b). *City of Seattle stormwater manual* (Vol. 4).

U.S. Environmental Protection Agency (U.S. EPA). (2007). *Developing your stormwater pollution prevention plan: A guide for construction sites* (EPA-833-R-06-004).

U.S. Environmental Protection Agency (U.S. EPA). (2019). *Oil spills prevention and preparedness regulations.*

Water Environment Services (WES). (2008). *Erosion prevention and sediment control: Planning and design manual.*

Stormwater Best Management Practice

General Construction Site Waste Management

Minimum Measure: Construction Site Stormwater Runoff Control
Subcategory: Good Housekeeping/Materials Management

Description

Construction staff manage and dispose of building materials and other construction site wastes to reduce the risk of pollution to stormwater. Practices such as trash disposal, recycling, proper material handling, and spill prevention and cleanup measures can reduce the potential for stormwater flow to mobilize construction site wastes and contaminate surface or ground water.

Applicability

Proper management and disposal of wastes will reduce pollution in stormwater discharge from any construction site. Good waste management practices include properly locating refuse piles, covering materials that stormwater discharges might displace, and preventing spills and leaks from hazardous materials.

Siting and Design Considerations

Waste management practices vary depending on the type of waste being managed, whether it is hazardous, and whether it might contaminate stormwater. Below are examples of management practices for different categories of construction site waste.

General Solid Wastes:

- Designate a waste collection area on-site that does not receive a substantial amount of stormwater flow from upland areas and does not drain directly to a waterbody.
- Ensure that containers have lids to cover them when it rains, or keep containers in a covered area whenever possible.
- Schedule waste collection to prevent the containers from overfilling.
- Clean up spills immediately. Use an absorbent material such as sawdust or cat litter to contain the spill.
- During the demolition phase of construction, provide extra containers and schedule more frequent pickups.
- Collect, remove and dispose of all construction site wastes at authorized disposal areas. Contact a local environmental agency to identify these disposal sites.

Construction waste should be collected in designated waste collection areas on-site, such as metal dumpsters.

Hazardous Materials and Wastes:

- For spills of hazardous materials, follow cleanup instructions on the package or, if applicable, the Safety Data Sheet.
- Consult with local waste management authorities about the requirements for disposing of hazardous materials.
- Never remove the original product label from the container—it contains important safety information. Follow the manufacturer's recommended method of disposal, which should appear on the label.
- Never mix excess products when disposing of them, unless the manufacturer specifically recommends doing so.
- For soils containing hazardous substances, consult with state or local solid waste regulatory agencies or private firms to ensure proper disposal. Some landfills might accept contaminated soils, but they require laboratory tests first.
- Construction staff often use sandblasting to remove paint and dirt from surfaces. This produces sandblasting grits—sand and paint and dirt particles. Sandblasting grits from older structures are hazardous, because they are more likely to contain lead-, cadmium- or chrome-based paints. To ensure

EPA-832-F-21-028EE
December 2021

proper disposal of sandblasting grits, contract with a licensed waste management or transport and disposal firm.

Pesticides and Fertilizers:

- Follow all federal, state and local regulations that apply to the use, handling or disposal of pesticides and fertilizers.
- Do not handle the materials any more than necessary.
- Store pesticides and fertilizers in a dry, covered area.
- Construct berms or dikes to contain stored pesticides and fertilizers in case of spillage.
- Follow the application rates and methods specified on the product label.
- Have equipment and absorbent materials available in storage and application areas to contain and clean up any spills.

Petroleum Products:

- Store new and used petroleum products for vehicles in covered areas with berms or dikes in place to contain any spills.
- Immediately contain and clean up any spills with absorbent materials.
- Have equipment available in fuel storage areas and in vehicles to contain and clean up any spills.

Detergents:

- Detergents that contain phosphorus and nitrogen are common in wash water for cleaning vehicles. Excesses of these nutrients can be a major source of water pollution. Use detergents only as recommended and limit their use on the site. Do not dump wash water containing detergents into the storm drain system; direct it to a sanitary sewer or capture and contain it for transport to a wastewater treatment plant for proper treatment.

Limitations

An effective waste management system requires training and signage to promote awareness of the hazards of improper storage, handling and disposal of wastes. Site superintendents should be aware of worker habits and inspect storage areas regularly. They may need to spend extra management time to ensure that all workers are following the proper procedures.

Maintenance Considerations

Construction staff should inspect storage and use areas and identify containers or equipment that could malfunction and cause leaks or spills. In addition, it is important for staff to check equipment and containers for leaks, corrosion, support or foundation failure, or other signs of deterioration, and test them for soundness. Construction staff should immediately repair or replace any defective containers.

Effectiveness

Waste management practices are effective only when all construction staff follow them consistently. In storage and use areas, site superintendents should post the guidelines for proper handling, storage and disposal of construction site wastes. In addition, site superintendents should ensure that workers receive training in these practices to ensure that everyone is knowledgeable enough to participate.

Cost Considerations

The costs associated with construction site waste management include purchasing and posting signs, increased management time for oversight, additional labor needed for special handling of wastes, transportation costs for waste hauling, and fees charged by disposal facilities to take the wastes.

Additional Information

Additional information on related practices and the Phase II MS4 program can be found at EPA's National Menu of Best Management Practices (BMPs) for Stormwater website

Disclaimer

This fact sheet is intended to be used for informational purposes only. These examples and references are not intended to be comprehensive and do not preclude the use of other technically sound practices. State or local requirements may apply.