

LANCASTER TOWNSHIP,  
LANCASTER COUNTY

Municipal Separate Storm Sewer System (MS4)  
Storm Water Management Plan (SWMP) Update

Minimum Control Measures (MCMs) 1 through 5



June 5, 2019 for Board of Supervisors approval

Prepared by: Benton G. Webber, P.E.  
Lancaster Township Engineer

The update of the SWMP update was made available for public review and comment during the month of May 2019. Both a hard copy was available in the Township office and PDF format available for download on the Township website. An advertisement regarding the public review was placed in the local newspaper. No comments or questions were received.

## Public Education and Outreach Program (PEOP) Lancaster Township, Lancaster County

### INTRODUCTION

Lancaster Township's small Municipal Separate Storm Sewer System (MS4) collects stormwater runoff and manages the runoff through stormwater management facilities including, but not limited to, inlets, pipes, swales, and basins. Much of this runoff is ultimately discharged at various identified outfall locations to surface waters that include the Conestoga River, the Little Conestoga Creek, Fox Rill, and an Unnamed Tributary to the Little Conestoga Creek. The health and quality of these surface waters and waters downstream are directly impacted by stormwater runoff.

Lancaster Township's MS4 coverage under the Commonwealth's General Permit (PAG-13), #133584, is valid from September 1, 2015 through August 31, 2020. The Township submitted its General Permit Notice-of-Intent (NOI) on August 24, 2017. As of this writing, the renewal permit has not yet been issued. Lancaster Township is a renewal permittee as the previous permit covered activities from 2003.

Annual reporting to the Pennsylvania Department of Environmental Protection (PA DEP) is required, since the entirety of the township is located within the Chesapeake Bay watershed. As of this writing, the Township's most recent Annual Report was filed with PA DEP on September 20, 2018 and posted on the Township's website.

Part C.I.B of the MS4 General Permit contains a description of the Stormwater Management Program (SWMP), its six Minimum Control Measures (MCMs), and subordinate Best Management Practices (BMPs) required of Lancaster Township under the Phase II NPDES Stormwater Regulations. The Township will monitor the entire SWMP and update as necessary, including this Public Education and Outreach Program (PEOP) targeting MCM #1. As part of the Township's authorization to discharge waters from the MS4 to surface waters of the Commonwealth, these specific requirements include public education and outreach in water quality improvement issues. The requirements for MCM #1 are stated below:

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

- *Implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff (40 CFR Part 122.34(b)(1)(i)).*

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

*For existing permittees, the existing PEOP shall be reviewed and revised as necessary. The permittee's PEOP shall be designed to achieve measurable improvements in the target audience's understanding of the causes and impacts of stormwater pollution and the steps they can take to prevent it.*

**BMP #2:** *Develop and maintain lists of target audience groups that are present within the areas served by the permittee's regulated small MS4. In most communities, the target audiences shall include residents, businesses (including commercial, industrial and retailers), developers, schools, and municipal employees.*

*For existing permittees, the lists shall continue to be reviewed and updated annually.*

**BMP #3:** *The permittee shall annually publish at least one issue of a newsletter, a pamphlet, a flyer, or a web site that includes general stormwater educational information, a general 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., PA DEP and US EPA stormwater websites, and any other sources that will be helpful to readers). The permittee must implement at least one of the following alternatives:*

- *Publish and distribute in printed form a newsletter, a pamphlet or a flyer containing information consistent with this BMP.*
- *Publish educational and informational items including links to DEP's and EPA's stormwater websites on your municipal website.*

*For existing permittees, the list of items published and the content in these items shall be reviewed, updated, and maintained annually*

*The permittee's publications shall contain stormwater educational information that addresses one or more of the 6 MCMs.*

**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, storm drain stenciling.*

*All permittees shall select and utilize at least two distribution methods in each permit year. These are in addition to BMP #3, above.*

## **PURPOSE OF THE PLAN**

Lancaster Township, Lancaster County has a population of 16,149 residents, according to the 2010 U.S. Census, which represents a 15.8% increase since 2000. As a result, the remaining agricultural land uses may come under pressure for development into predominately residential, mixed-use, and commercial land uses on smaller sized properties.

With a mix of homes, businesses, institutions, industries, and agriculture, the water quality of Lancaster Township streams can be negatively impacted by pollutants conveyed via stormwater runoff. Successful public education and outreach efforts should result in a greater number of people within Lancaster Township that are aware of these issues affecting water quality. With increased awareness, there is an increased chance that water quality improvement can be realized through collective action.

In order for Lancaster Township to improve its communication with the public and achieve positive results, the following goals for the PEOP are established:

- Meet the requirements of the MS4 General Permit.
- Strengthen the linkage between land use activities and water quality and flooding.
- Increase community involvement in watershed protection activities through awareness, education, and action.
- Make target audience groups aware that they live and/or operate in a watershed and that their day-to-day activities affect water quality.
- Inform and educate the target audience groups about the causes of stormwater pollution and the effects on local streams and rivers.
- Emphasize the storm sewer system as an important component of municipal infrastructure (on par with the sanitary sewer system) and why pollutants from a variety of sources must be eliminated from the system.
- Connect pollution reduction efforts to decreased water treatment costs.

The purpose of this PEOP is to identify target audience groups and to determine the most effective methodology to convey information to each of these groups. Publishing articles in a newsletter will reach most target audience groups but not all. With the target audience group lists in hand, Lancaster Township pursues customized outreach for each of the identified target audience groups.

## **TARGET AUDIENCE GROUPS**

Lancaster Township has identified the following target audience groups:

- Residents/Homeowners
- Homeowners Associations
- Apartment Complexes
- Agricultural Community
- Business, Institutions, and Industry
- Local Governmental Agencies (Municipal and Special-Purpose)
- Utilities, Developers, and Contractors
- Community-based Organizations

Below are descriptions of these target audience groups, their significance and relationship to stormwater, ways in which they receive distributed information, and educational initiatives to consider.

**Residents/Homeowners** – This group includes Township residents (renters and homeowners) that reside in new and old developments. Property size is generally small (under one acre), and these lots are likely to be served by a storm sewer system that includes inlet boxes, pipes, and curbed streets. These residents and the neighborhoods they live in are exposed to the most stormwater infrastructure and therefore have a great impact on improving water quality. They will receive the newsletter, pick up material available at the Township building, and acquire zoning and building permits for residential projects that propose to increase impervious area. This group has the potential to positively impact stormwater through the following educational initiatives:

- Importance of managing stormwater associated with the increase of impervious coverage.
- Improved understanding of how a storm sewer system works, where it drains to, and why dumping any substance into it has a negative impact on water quality.
- Improved understanding of NPDES-required BMP inspection and maintenance.
- Proper lawn fertilization technique, as well as proper frequency and amount of application.
- Wide-ranging benefits of utilizing green practices to capture and infiltrate stormwater runoff generated by an individual lot.

**Homeowners Associations** – Several residential developments within the township have created homeowners associations (HOAs), and public education and outreach efforts can reach these neighborhoods using a central point of contact such as the HOA manager. The same strategies for educating residents applies for this target audience group.

- HOAs and subdivisions that have developed into close-knit neighborhoods may be easier to reach for waterway cleanup projects (often sponsored by watershed associations) and other events.

**Apartment Complexes** – Apartment complexes contain a large number of residents but usually have only one point of contact, such as a management office. The same strategies for educating residents applies for this target audience group.

**Agricultural Community** – A small portion of Lancaster Township's land area is used for agriculture, including crop production and the raising of livestock. Because of the area devoted to this industry, there are considerable challenges and opportunities related to this community's role in water quality improvement. This community may be more effectively reached through distributed material, such as a newsletter, and/or meetings with officials.

- Sediment is the largest contributor to stream impairments locally, and a major component of pollution to the Chesapeake Bay. Agricultural operators play an increasingly vital role in improving water quality.
- Members of the agricultural community should understand the proper inspection and maintenance of NPDES-required BMPs.
- Agricultural Erosion & Sedimentation and/or Conservation Plans are building blocks to improved water quality – each farm in Lancaster Township should have and implement one.

- Cost-sharing programs for streamside conservation projects are impactful, such as the Conservation Reserve Enhancement Program (CREP).

**Business, Institutions, and Industry** – This group can have a large impact on water quality, and successful public education and outreach can potentially leverage pooled financial resources and sponsorship of watershed restoration activities. The focus of educational materials should include the following:

- Businesses that have a physical location within the township can support municipal and/or watershed group efforts by displaying posters, distributing handouts, sponsoring events, etc.
- Improved understanding of NPDES-required BMP inspection and maintenance.
- Non-residential land uses that involve the routine use of cleaners, chemicals, or other types of process liquids and have the potential for these substances to end up in the storm sewer system.
- Green infrastructure techniques, such as rain gardens, can help to manage stormwater runoff from the larger impervious areas of non-residential uses.

**Local Governmental Agencies (Municipal and Special-Purpose)** – In Lancaster Township, this target audience group and intended educational outreach refers specifically to the School District of Lancaster, Penn Manor School District, and the municipal staff of the Township.

**School District of Lancaster** – The school district includes the municipalities of Lancaster City, Lancaster Township, and others, and serves as an education and outreach outlet to children and their families. Water quality education and hands-on experiences should be vital components of the curriculum, and the Lancaster County Clean Water Consortium have been identified to coordinate educational opportunities for students in School District of Lancaster. In reaching the members of this target audience group, it is important to acknowledge that:

- Future generations hold the key to continued success in improving water quality.
- Improved understanding of NPDES-required BMP inspection and maintenance is needed.
- Students at all grade levels should be able to understand the sources, allowable amounts, and effects of common pollutants.

**Municipal Staff** – Lancaster Township owns the Township building and grounds, municipal park land, and maintains a municipal garage. The Township will continue to implement proper operational practices to reduce impacts on water quality. The *Good Housekeeping Operation & Maintenance Program* will be used to develop these best management practices.

- Municipal staff must lead by example and employ "good housekeeping" principles at the municipal garage, the Township building, and community parks.
- Training will be continue to be critical to instill best practices in employees.

**Utilities, Developers, and Contractors** – This group does business within the township without necessarily having an established business location in the township. This group is important in the context of public education and outreach as their practices can have a large impact on stormwater runoff and pollution.

- All land-disturbing activities, including clearing, grading, and excavation, that disturb 1 or more acres are required to be covered under a state or EPA-issued NPDES construction stormwater permit prior to land disturbance.
- All land-disturbing activities, including clearing, grading, and excavation, that disturb less than an acre are required to obtain approval of a Stormwater Management Site Plan, a Minor Land Disturbance Permit application, or a Stormwater Management Exemption application.

**Community-based Organizations** – These include, but are not limited to, watershed groups, nonprofit organizations, Boy and Girl Scouts, local churches, and faith-based organizations. This group, as a whole, can bring together multiple target audience groups for specific projects that protect and enhance water resources. There is an opportunity to work with these groups as partners on specific projects to increase awareness and improve stormwater quality.

#### EDUCATIONAL INFORMATION – IMPLEMENTATION

The Township provides much educational information through printed materials that include the Township newsletter and the local newspaper. Additionally, the Lancaster County Conservation District conducts public education and outreach activities on behalf of the Township. All of this information reaches a wide range of target audience groups and is listed in the following table:

PUBLICATION	INFORMATION CONVEYED	METHOD AND TIMING OF DISTRIBUTION	WHO IT REACHES
Lancaster Township Newsletter	Includes information for residents on stormwater runoff and steps that residents can take to address runoff issues	Newsletter mailed to residents, distributed bi-annually – available online	All Target Audience Groups, except for Community-Based Organizations and Developers/Contractors
"Clean Water is Everyone's Responsibility"	Includes recommended actions to prevent stormwater runoff pollution	One-time distribution to schools in MS4 areas of Lancaster County	School District of Lancaster
"Benefits of Low Impact Development"	Definition of Low Impact Development (LID) and Benefits and Techniques of LID	Annual distribution to developers and contractors in Lancaster County	Developers and Contractors

At the end of each permit year, Lancaster Township will review and update the PEOP as well as the list and content of the items that are published and distributed to the target audience groups. Strategies to conserve staff time and budget will include partnering with community-based organizations and the use of electronic contact methods.

The Township's message must reach the different target audience groups identified in the previous section. The overarching message of this PEOP is summarized by these principles:

- Water quality improvements are made on small and large scales by individual residents, farmers, and businesses.
- Watershed awareness leads to a stronger connection between people and water resources.
- Identifying and mitigating current sources of pollution and sedimentation to waters of the Commonwealth goes a long way toward improving water quality.
- When armed with good information, many individuals will choose to make decisions that benefit the common good.
- Cost-efficient and/or naturally-based solutions often involve simple techniques that many people are able to implement.

#### **PLAN FOR ADDITIONAL OUTREACH**

In addition to printed, online, and Lancaster County Conservation District distributed materials, as well as the bi-annual Township Newsletter, the Township will implement the following outreach methods:

1. Discuss stormwater management and the SWMP at a Township Supervisors meeting in July of each year
2. Post educational material aimed at various target audience groups on the Township website
3. Distribute pamphlets to all owners of newly constructed homes, building permit applicants, and developers who are new to the township
4. Educational presentations at local schools and civic institutions

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## Public Involvement and Participation Program (PIPP) Lancaster Township, Lancaster County

### INTRODUCTION

Lancaster Township's small Municipal Separate Storm Sewer System (MS4) collects stormwater runoff and manages the runoff through stormwater management facilities including, but not limited to, inlets, pipes, swales, and basins. Much of this runoff is ultimately discharged at various identified outfall locations to surface waters that include the Conestoga River, the Little Conestoga Creek, Fox Rill, and an Unnamed Tributary to the Little Conestoga Creek. The health and quality of these surface waters and waters downstream are directly impacted by stormwater runoff.

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Annual reporting to the Pennsylvania Department of Environmental Protection (PA DEP) is required, since the entirety of the township is located within the Chesapeake Bay watershed. As of this writing, the Township's most recent Annual Report was filed with PA DEP on September 20, 2018 and posted on the Township's website.

Part C.I.B of the MS4 General Permit contains a description of the Stormwater Management Program (SWMP), its six Minimum Control Measures (MCMs), and subordinate Best Management Practices (BMPs) required of Lancaster Township under the Phase II NPDES Stormwater Regulations. The Township will monitor the entire SWMP and update as necessary, including this Public Involvement and Participation Program (PEOP) targeting MCM #2. As part of the Township's authorization to discharge waters from the MS4 to surface waters of the Commonwealth, these specific requirements include public involvement and participation in water quality improvement issues. The requirements for MCM #2 are stated below:

#### **MCM #2: Public Involvement / Participation**

- *Comply with applicable state and local public notice requirements when implementing a public involvement / participation program (40 CFR Part 122.34(b)(2)(i)).*

**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.*

*All permittees shall reevaluate the PIPP annually and make revisions as necessary. The PIPP shall include, at a minimum:*

- (1) *Opportunities for the public to participate in the decision-making processes associated with the development, implementation, and update of programs and activities related to this General Permit.*
- (2) *Methods of routine communication to groups such as watershed associations, environmental advisory committees, and other environmental organizations that operate within proximity to the permittee's regulated small MS4s or their receiving waters.*
- (3) *Annual MS4 Status Reports and all other plans, programs, maps and reports required by this General Permit available to the public on the permittee's website, at the permittee's municipal offices, or by mail upon request.*

**BMP #2:** *Advertise to the public and solicit public input on the following documents prior to adoption or submission to DEP:*

■ **Stormwater Management Ordinances**

*The permittee shall provide notice to the public; provide opportunities for public comment; document and evaluate the public comments; and document the permittee's responses to the comments prior to finalizing the documents. The permittee shall provide this documentation to DEP upon request.*

■ **Pollutant Reduction Plans (PRPs), including modifications thereto**

*Where submission of a modified CBPRP to DEP is required, the permittee shall solicit public involvement and participation, as follows:*

*The permittee shall make a complete copy of the CBPRP available for public review.*

1. *The permittee shall publish, in a newspaper of general circulation in the area, a public notice containing a statement describing the plan, where it may be reviewed by the public, and the length of time the permittee will provide for the receipt of comments. The public notice must be published at least 45 days prior to the deadline for submission of the PRP to DEP.*
2. *The permittee shall accept written comments for a minimum of 30 days from the date of public notice.*
3. *The permittee shall accept comments from any interested member of the public at a public meeting or hearing, which may include a regularly scheduled meeting of the governing body of the municipality or municipal authority that is the permittee.*
4. *The permittee shall consider and make a record of the consideration of each timely comment received from the public during the public comment period concerning the plan, identifying any changes made to the plan in response to the comment.*
5. *Modified CBPRPs submitted to DEP must include a copy of the newspaper notice, a copy of all written comments received from the public and a copy of the permittee's record of consideration of all timely comments received in the public comment period.*

**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 in their efforts to help implement the SWMP.*

- (1) The permittee shall solicit public involvement and participation from target audience groups on the implementation of the SWMP. The solicitation can take the form of public meetings or other events. The public shall be given notice in advance of each meeting or event. During the meetings or events, the permittee should present a summary of progress, activities, and accomplishments with implementation of the SWMP, and the permittee should provide opportunities for the public to provide feedback and input. The presentation can be made at specific MS4 events or during any other public meeting. Existing permittees shall conduct at least one public meeting that includes information on SWMP implementation by March 15, 2023; new permittees shall conduct at least one public meeting within 5 years following approval of General Permit coverage.*
- (2) The permittee shall document and report instances of cooperation and participation in MS4 activities; presentations the permittee made to local watershed organizations and conservation organizations; and similar instances of participation or coordination with organizations in the community.*
- (3) The permittee shall also document and 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 organized implementation efforts such as cleanups, monitoring, storm drain stenciling, or others.*

The purpose of this PIPP is to describe various types of possible participation activities and methods of encouraging the public's involvement and of soliciting the public's input. In order for Lancaster Township to improve its communication with the public and achieve positive results, the following goals for the PIPP are established:

- Meet the requirements of the MS4 General Permit.
- Continue Adopt-An-Inlet program to involve the public and create more awareness among township residents.
- Solicit public involvement in waterway cleanup or restoration projects.
- Continue to rely on the Lancaster County Conservation District for handling public complaints regarding erosion and sedimentation.
- Continue the IDDE complaint reporting facility on the Township's website.
- Continue posting the Township's Annual Reports as they are submitted to DEP.
- Continue the Township's annual SWMP update presentation at the July Board of Supervisors meeting.

## **ORDINANCE ADOPTION**

On April 14, 2014, the Lancaster Township Board of Supervisors adopted a new Stormwater Management Ordinance (SWMO). Below is the appropriate documentation for adoption of the SWMO:

### Documentation of SWMO Advertisement

(attached)

### Documentation of Public Comment

(attached)

### Documentation of Municipal Response

No municipal response was required. No public comments were received.

## **PLAN FOR PUBLIC INVOLVEMENT AND PARTICIPATION**

Lancaster Township will regularly solicit public involvement and participation from the target audiences, and will continue to improve the process for public reporting of suspected illicit discharges. Additionally, Lancaster Township proposes the following near-term projects that are either being implemented or have the potential to be implemented:

**Annual Public Meeting** – Lancaster Township will hold at least one public meeting per year to solicit public involvement and participation from target audience groups and present a summary of the Township's progress, activities, and accomplishments with ongoing implementation of the SWMP. The public will be encouraged to provide feedback and input.

- Lancaster Township will hold a public meeting in July of each year to discuss the current MS4 program and provide an opportunity for members of the public to ask questions or to volunteer to become involved in water quality projects in the future.

**Chesapeake Bay Pollution Reduction Plan** – As the Township works to develop its Chesapeake Bay Pollution Reduction Plan, it will look to involve the community by developing the plan through public, transparent process.

- During the 2013-2020 permit term, Lancaster Township will solicit meaningful feedback and ideas to properly position the Township for pollution reduction through cost-effective solutions.

**Engagement with Service Organizations** – The Township will continue its support of the projects implemented by such organizations as the Lancaster County Conservancy and the Boy Scouts.

**Coordination with Target Audience Groups** – The Township will continue working with property owners and responsible parties for maintenance of their stormwater facilities and for compliance with issued NPDES permits.

**FUTURE CONSIDERATIONS FOR PUBLIC INVOLVEMENT AND PARTICIPATION**

There are other opportunities for the public to be involved in water quality improvement efforts, namely during program planning and implementation stages. As noted in the introductory section of this document, the Township's MS4 permit requires a comprehensive local Stormwater Management Program (SWMP). Although elements of the SWMP have been in place for several years, there are others that have just recently come under consideration, such as the development of the Chesapeake Bay Pollution Reduction Plan. The Township will continue to evaluate ways in which the public can become more involved in the Township's SWMP.

The Township will also make public the periodic progress reports of the SWMP on the Township website and in print at the Township Office. The Township will initiate a reporting system beginning with progress made in 2015 and will intend to document accomplishments no less frequently than once per year. Not only does this assist in compiling the required Annual Report for submission to the PA DEP, it can serve as an update to township residents. The breadth of the SWMP offers a range of topics to discuss, including public involvement, illicit discharge detection and elimination, and stormwater facility inspections.

The Township will maintain regular communication with the Lancaster County Clean Water Consortium, the Little Conestoga Watershed Association, and the Lancaster County Conservation District representative in attendance. This will allow the Township to participate in watershed association events, activities, and communications, all of which are important tools to help reach the identified target audience groups.

Lancaster Township will continue to improve the process for public reporting of suspected illicit discharges through an Illicit Discharge Detection & Elimination Program. The Township's website should include a Citizen Complaint Illicit Discharge Reporting Form for anyone to fill out and submit. When implemented, the Township will evaluate the effectiveness of this form as a mechanism for citizen reporting of complaints and continue to look for ways to enhance this program.

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Invoice No. 3204607

## PROOF OF PUBLICATION NOTICE IN

Ord 2014-04

State of Pennsylvania)  
 ) ss:  
 County of Lancaster)

Penny L. Stauffer of the County and State aforesaid, being duly sworn, deposes and says that the Intelligencer Journal-New Era a daily newspaper of general circulation published at Lancaster, County and State aforesaid, was established 1794-1877 since which date said daily newspaper has been regularly issued in said county, and that a copy of the printed notice or publication is attached hereto exactly the same as was printed and published in the regular editions and issues of said daily newspaper on the following dates:

27<sup>TH</sup> DAY OF MARCH 2014

Affiant further deposes that she is the Billing Clerk duly authorized by the Lancaster Newspapers, Inc., a corporation, publisher of said Intelligencer Journal-Lancaster New Era-Sunday News a newspaper of general circulation, to verify the foregoing statement under oath, and also declares that affiant is not interested in the subject matter of the aforesaid notice or advertisement and that all allegations in the foregoing statement as to time, place and character of publication are true.

Notice is hereby given that the Board of Supervisors of Lancaster Township, Lancaster County, Pennsylvania, at its regular public meeting on Monday, April 14, 2014, at 7:00 P.M., prevailing time, at the Lancaster Town-

ship Municipal Building, 1240 Maple Ave., Lancaster, Pennsylvania, shall conduct a public hearing and shall consider and, if appropriate, at that meeting or at a subsequent public meeting held within 60 days after the publication of this notice, shall enact a proposed Ordinance regulating storm water management within the Township. The caption of the proposed Ordinance is as follows:  
 LANCASTER TOWNSHIP ORDINANCE No. 2014-04  
 AN ORDINANCE TO AMEND THE CODE OF ORDINANCES OF THE TOWNSHIP OF LANCASTER, ES-

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Next Column

TABLISHING CHAPTER 229, STORM WATER MANAGEMENT, TO IMPLEMENT THE LANCASTER COUNTY ACT 167 STORM WATER MANAGEMENT PLAN  
 The proposed Ordinance can be summarized as follows:  
 An Ordinance to amend the designed to promote the health, safety and welfare of the Township caused by inadequate management of storm water runoff by instituting a comprehensive program of storm water management including regulation of development; management of runoff and erosion and sedimentation prob-

Continued  
Next Column


lems; preservation of existing natural drainage systems; implementation of procedures performance, and design criteria for storm water planning and management; promotion of storm water runoff prevention; fostering creative methods for improving water quality; and promotion of a regional approach to water resource management.  
 A copy of the Proposed Ordinance may be examined without charge at the offices of this newspaper and at the Lancaster Township Municipal Building, 1240 Maple Ave., Lancaster, Pennsylvania, Monday through Friday from 9:00 A.M. to 4:00 P.M. A copy of the proposed ordinance may be obtained for the cost of reproduction at the Lancaster Township Municipal Building during the above hours.  
 NIKOLAUS & HOENADEL, LLP  
 Township Solicitor

  
 (Signature)

## COPY OF NOTICE OF PUBLICATION

Sworn and subscribed to before me this

27<sup>TH</sup> DAY OF MARCH 2014

  
 Notary Public

My commission expires  
 Commonwealth of Pennsylvania  
 NOTARIAL SEAL

CAROLE A. GOOD, Notary Public  
 Lancaster City, Lancaster County, PA  
 My Commission Expires Feb. 25, 2018

**LANCASTER TOWNSHIP BOARD OF SUPERVISORS MEETING**  
**MINUTES**  
**April 14, 2014**

**I. PLEDGE OF ALLEGIANCE, CALL TO ORDER, AND ROLL CALL**

The duly advertised Lancaster Township Board of Supervisors meeting was held on Monday, April 14, 2014 in the township building at 1240 Maple Avenue, Lancaster, PA. The meeting was called to order at 7:15PM by Chair Kathleen M. Wasong. Vice Chair Benjamin H. Bamford, Treasurer Thomas H. Schaller, and Township Manager William M. Laudien were also present. Others in attendance included township staff and interested parties. Ms. Wasong led those assembled in the Pledge of Allegiance.

**II. PUBLIC COMMENT ON AGENDA ITEMS**

No public comments.

**III. SECRETARY'S REPORT**

The minutes of the March 10, 2014 board meeting were approved by general consent.

**IV. TREASURER'S REPORT**

Mr. Schaller presented the treasurer's report as of March 2014:

General Fund.....	\$5,377,326.11
Highway Aid Fund.....	834,065.38
Parks Fund.....	34,034.47
Capital Reserve Fund.....	1,455,495.40
TOTAL .....	\$7,700,921.36

Ms. Wasong stated the treasurer's report would be filed for audit.

**V. PAYMENT OF BILLS**

On a motion by Mr. Schaller, seconded by Mr. Bamford, the board unanimously approved the payment of bills (March 11, 2014–April 14, 2014):

General Fund.....	\$302,394.70
Escrow Fund .....	2,006.78
State Highway Fund.....	21,856.75
Parks Fund .....	2,115.27
Capital Reserve Fund.....	-0-
TOTAL .....	\$328,373.50

**VI. REPORTS**

- A. **Lancaster Township Fire Department:** Mr. Schaller reported 28 calls in March 2014, making a year-to-date total of 148 calls.
- B. **Lafayette Fire Company:** There were nine calls answered on the east side of Lancaster Township during the month of March 2014.
- C. **Police:** Officer Michael Piacentino gave an overview of the March 2014 police report.

- D. Sewer/Other Reports:** Reports are available for public inspection at the meeting and during regular business hours.
- E. Recycling Report:** February 2014: 23.04%
- F. Lancaster Inter-Municipal Committee Report:** Ms. Wasong reported LIMC met on April 9, 2014 at West Lampeter Township. The bulk of the meeting was spent discussing the Lancaster County Conservancy and how county municipalities will be working with it for NPDES permit compliance. The next meeting will be Wednesday, May 14 and will be held at Mountville Borough, 7:30AM.

**VII. ANNOUNCEMENTS**

- A. Next Board of Supervisors Meeting:** Originally set for Monday, May 12, the meeting has been moved to Monday, May 19, 2014, and will take place at the Maple Grove Community Building, 1420 Columbia Avenue, 7:00PM, workshop at 6:00PM.
- B. Office closed:** The township office will be closed Friday, April 18, 2014.

**VIII. OLD BUSINESS**

There was no old business.

**IX. PLANNING/ZONING BUSINESS**

- A. Ordinance 2014-03**  
Mr. Schaller moved, Mr. Bamford seconded, and the board unanimously approved Ordinance 2014-03 amending the Zoning Ordinance for Lancaster Township to revise the provisions relating to Bed and Breakfast establishment uses and to amend section 280-201 and section 280-1505.
- B. LTPC #189—Release of Financial Security**  
Mr. Bamford moved, Mr. Schaller seconded, and the board unanimously approved a request to release the financial security on the Elm Avenue Condominiums Subdivision Plan, Lot 1, based on the letter dated April 10, 2014 from the township engineer, Rettew.
- C. LTPC #189—Release of Financial Security**  
Mr. Schaller moved, Mr. Bamford seconded, and the board unanimously approved a request to release the financial security on the Elm Avenue Condominiums Land Development Plan, Lot 4, based on the letter dated April 10, 2014 from the township engineer, Rettew.

**X. NEW BUSINESS**

- A. Ordinance 2014-01**  
Mr. Schaller moved, Mr. Bamford seconded, and the board unanimously approved Ordinance No. 2014-01 to amend Chapter 231 of the Code of Lancaster Township relating to the maintenance of sidewalks and to add provisions relating to dumpsters and portable storage devices in a public right-of-way.
- B. Ordinance 2014-02**  
Mr. Bamford moved, Mr. Schaller seconded, and the board unanimously approved Ordinance No. 2014-02, as modified, to amend Chapter 263 of the Code of Lancaster Township relating to Vehicles and Traffic, amending Articles I, II,



III, IV, VI, VII, IX, and X, adding provisions relating to parking and snow emergency routes, and establishing permit parking on the north side of Maple Avenue, from an unnamed common alley to the rear of the Hamilton Arms Nursing Home to Rider Avenue.

**C. Ordinance 2014-04**

Mr. Schaller moved, Mr. Bamford seconded, and the board unanimously approved Ordinance 2014-04 to amend the Code of Lancaster Township, establishing Chapter 229, Storm Water Management, to implement the Lancaster County Act 167 Storm Water Management Plan.

**D. 2014/2015 Memorandum of Understanding with LCCD**

Mr. Bamford moved, Mr. Schaller seconded, and the board unanimously approved a Memorandum of Understanding between the township and Lancaster County Conservation District. This document validates the linkage between Lancaster Township and LCCD as required by the Municipal Separate Storm Sewer System (MS4) protocol.

**E. Fire Department Engine Purchase Request**

Mr. Bamford moved, Mr. Schaller seconded, and the board unanimously approved a request by the Lancaster Township Fire Department to purchase a new 2014 or 2015 Pierce Arrow XT firefighter truck for an amount not to exceed \$594,000.00 and directing the township manager to work with the fire company to reduce that amount as much as possible, and with the stipulation that the current truck will be sold and the proceeds will come back to the township.

**XI. GUEST RECOGNITION AND PARTICIPATION**

- Peggie Miller, Valley Road, asked what the amendments to the Bed & Breakfast Ordinance were. Ms. Wasong stated that the amendments pertained to ownership and the number of bedrooms permitted. Mr. Schaller indicated that the owner shall be the primary occupant of the establishment. Ms. Wasong explained the number of bedrooms allowed is based on the zoning area. No more than four if located in a residential district and no more than eight in a local or general commercial district, which is what it was in the original ordinance. Any already-operating establishments are grandfathered in.

**XII. ADJOURNMENT**

There being no further business, the meeting was adjourned at 7:42PM.

Respectfully submitted,

---

William M. Laudien, Secretary

## Illicit Discharge Detection & Elimination Program (IDD&E) Lancaster Township, Lancaster County

### INTRODUCTION

Lancaster Township's small Municipal Separate Storm Sewer System (MS4) collects stormwater runoff and manages the runoff through stormwater management facilities including, but not limited to, inlets, pipes, swales, and basins. Much of this runoff is ultimately discharged at various identified outfall locations to surface waters that include the Conestoga River, the Little Conestoga Creek, Fox Rill, and an Unnamed Tributary to the Little Conestoga Creek. The health and quality of these surface waters and waters downstream are directly impacted by stormwater runoff.

Lancaster Township's MS4 coverage under the Commonwealth's General Permit (PAG-13), #133584, is valid from September 1, 2015 through August 31, 2020. The Township submitted its General Permit Notice-of-Intent (NOI) on August 24, 2017. As of this writing, the renewal permit has not yet been issued. Lancaster Township is a renewal permittee as the previous permit covered activities from 2003.

Annual reporting to the Pennsylvania Department of Environmental Protection (PA DEP) is required, since the entirety of the township is located within the Chesapeake Bay watershed. As of this writing, the Township's most recent Annual Report was filed with PA DEP on September 20, 2018 and posted on the Township's website.

Part C.I.B of the MS4 General Permit contains a description of the Stormwater Management Program (SWMP), its six Minimum Control Measures (MCMs), and subordinate Best Management Practices (BMPs) required of Lancaster Township under the Phase II NPDES Stormwater Regulations. The Township will monitor the entire SWMP and update as necessary, including this Illicit Discharge Detection and Elimination (IDD&E) Program targeting MCM #3. As part of the Township's authorization to discharge waters from the MS4 to surface waters of the Commonwealth, these specific requirements include the detection and elimination of illicit discharges. The requirements for MCM #3 are stated below:

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

- *Develop, implement, and enforce a program to detect and eliminate illicit discharges into the permittee's regulated small MS4 (40 CFR Part 122.34(b)(3)(i)).*

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

- *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.*

- *Procedures for screening outfalls in priority areas. The program shall include dry weather field screening of outfalls for non-stormwater flows, and sampling of dry weather discharges for selected chemical and biological parameters. Test results shall be used as indicators of possible discharge sources.*
- *Procedures for identifying the source of an illicit discharge when a contaminated flow is detected at a regulated small MS4 outfall.*
- *Procedures for eliminating an illicit discharge.*
- *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.*
- *Mechanisms for gaining access to private property to inspect outfalls (e.g., land easements, consent agreements, search warrants) and for investigating illicit connections and discharges.*
- *Procedures for program documentation, evaluation and assessment. Records shall 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.*
- *Procedures for addressing information or complaints received from the public.*

*The IDD&E program shall continue to be implemented and evaluated annually.*

#### **IDENTIFICATION OF PRIORITY AREAS AND ASSESSMENT OF ILLICIT DISCHARGE POTENTIAL**

The outfall and storm sewer collection system mapping, as required by MCM #3, BMP's #2 and #3, is one of the most important tools that Lancaster Township should use to keep track of outfall screening schedules and to determine priority areas. The mapping can also help to locate the source of an identified illicit discharge by tracing the MS4 back from the point of discharge. These maps will be included as an appendix to this IDD&E Program as well as the downstream outfall chart for each receiving waterway.

Factors for Determining Priority Areas

The mapping will also show the priority areas that Lancaster Township has identified as well as the regulated MS4 outfalls within them. Priority areas are areas with the highest illicit discharge potential that may need field monitoring on a more frequent basis. According to the Center for Watershed Protection's publication *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments (2004)*, there are as many as ten factors that indicate illicit discharge potential (not all may apply to Lancaster Township):

- Past Discharge Complaints and Reports
- Poor Dry Weather Water Quality
- Density of Generating Sites or Industrial NPDES Stormwater Permits
- Stormwater Outfall Density
- Age of Subwatershed Development
- Sewer Conversion
- Historic Combined Sewer Systems
- Presence of Older Industrial Operations
- Aging or Failing Sewer Infrastructure
- Density of Aging Septic Systems

In order to determine the geographic extent of priority areas and assess the illicit discharge potential caused by interaction of sewage disposal systems with storm drain systems, the above factors should be taken into consideration along with the evaluation of certain land uses referred to as Common Generating Sites. According to Table A.1 in the IDD&E Guidance Manual (referenced above), if the land use is categorized as posing a medium or high illicit discharge potential, then the use should be considered for inclusion in a priority area. GIS data, containing land use information, can be used to identify where these land uses are located. Identified MS4 outfalls located in close proximity to the following uses will require field monitoring on a more frequent basis.

- Automobile Dealers
- Automobile Parking
- Automobile Recyclers and Scrap Yards
- Automobile Repair
- Food Processing
- Gasoline Stations
- Maintenance Depots
- Municipal Fleet Washing
- Nurseries and Garden Centers
- Oil Change Shops
- Public Works Yards
- Transportation Equipment
- Trucking Companies and Distribution Centers

Identified Priority Areas

Listed below are the identified priority areas in Lancaster Township, due to observed and reported illicit discharges.

PRIORITY AREA 1 – Hamilton Park

PRIORITY AREA 2 – Abbeyville Manor

PRIORITY AREA 3 – Sterling Place & Hawthorne Ridge

**ILLICIT DISCHARGE FIELD MONITORING AND SOURCE IDENTIFICATION**

BMP #4 under MCM #3 of the MS4 General Permit states that all MS4 outfalls regulated by the Township's permit must be inspected at least once per five-year permit term. Outfalls located within the previously identified priority areas, however, will be monitored for illicit discharges no less frequently than once per year during varying seasonal and meteorological conditions, such as periods of both low and high groundwater conditions. As previously mentioned, the outfall mapping serves as a guide for Township Staff to track their field monitoring efforts and locate the appropriate outfalls.

Included as an appendix to this IDD&E Program is the Outfall Reconnaissance Inventory/Sample Collection Field Sheet to be used during the field monitoring process. Basic field monitoring consists of Township Staff visiting the selected outfalls and observing current conditions. For regulated MS4 outfalls that are located on private property, Township Staff must present the proper credentials and utilize a common sense and safety first approach. The legal authority for right-of-entry is provided by Section 229-64 of the Lancaster Township Storm Water Management Ordinance (SWMO), adopted April 14, 2014, which states that "the Township shall have the right of entry for the purposes of inspecting all storm water conveyance, treatment, or storage facilities."

If dry weather flow is observed at an outfall during the process of field monitoring, the inspector will observe the flow and surrounding conditions, checking for odor, color, turbidity, sheen, floating/submerged solids, or any unusual features. Photo documentation of the observed discharge will supplement the Outfall Reconnaissance Inventory/Sample Collection Field Sheet. Samples of the discharge will promptly be collected for testing. The Township will contact its engineer, RETTEW Associates, Inc., who will conduct on site testing or transport the sample to a laboratory for further testing. On site testing capability includes pH, temperature, and residual chlorine. Other on site testing (and lab testing) will be guided by Chapter 11 of the Center for Watershed Protection's publication *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments*, depending on the characteristics of the discharge. All observations and test results will be recorded on the Outfall Reconnaissance Inventory/Sample Collection Field Sheet. The results of track down efforts will be recorded separately.

Field inspector(s) will attempt to track the discharge back to a probable source using the outfall and storm sewer collection system mapping as a guide, when possible. Other common methods that inspectors may utilize to track down the source include visual inspection at manholes and dye testing. Video testing of sewer lines, which may already be occurring as a standard operational procedure, can also assist with source identification if the illicit discharge may be caused by the interaction of sewage disposal systems with storm drain systems.

**ILLCIT DISCHARGE ELIMINATION AND PREVENTION**Follow-up Actions if Issues are Found

Follow-up action will be pursued by the Township if an illicit discharge can be identified and/or a laboratory analytical test confirms the presence of pollutants in a collected sample. The Township will contact the landowner and/or operator of the facility suspected of producing the illicit discharge, with the intent of eliminating ongoing or future prohibited discharges into the storm sewer system per Section 229-62.4 of the SWMO. The landowner and/or operator of the facility suspected of producing the illicit discharge will be directed to correct the problem. Subsequent inspections of the affected area will be conducted to ensure that the issue has been eliminated. If conditions persist, actions will be taken pursuant to Section 229-67 of the SWMO, including the issuance of a written notice from Lancaster Township describing a condition of noncompliance. Failure to comply with this written notice may include a fine of not more than \$1,000 for each offense along with the costs of prosecution, upon conviction of a summary offense.

Educational Outreach to Target Audience Groups

Prevention of illicit discharges into Lancaster Township's MS4 and waterways depends heavily on the behavior of the target audience groups. Therefore, successful educational outreach and public participation are of prime importance toward prevention of illicit discharges; these overall efforts of Lancaster Township are detailed more thoroughly in the PEO and PIPP of the overall SWMP, but information that relates to illicit discharge detection and elimination is listed in the following table:

PUBLICATION	INFORMATION CONVEYED	METHOD AND TIMING OF DISTRIBUTION	WHO IT REACHES
Lancaster Township Newsletter	Includes information for residents on storm water runoff and steps that residents can take to address runoff issues	Newsletter mailed to residents, distributed bi-annually – available at the Township Office	All Target Audience Groups, except for Community-Based Organizations and Developers/Contractors
"When It Rains, It Drains" – PA DEP Pamphlet	Includes information for residents and developers on sources of storm water pollution and suggested solutions	Pamphlet available at the Township Office, continuously available – distributed to all owners of newly constructed homes, building permit applicants, and developers new to the township	All Target Audience Groups

A critical objective of this IDD&E Program is to increase awareness of what constitutes an illicit discharge and to encourage more eyes to keep watch of what is flowing into township storm drains and waterways. Additional assistance from target audience groups, especially residents, could help with the identification of pollutants early and initiate a prompt cleanup response from the Township or other emergency responders. To that end, the Citizen Complaint Illicit Discharge Reporting Form is made available on the Township's website, which would allow anyone to report a suspected illicit discharge, and a hard copy of the form is also available at the Township Office. When notified, the Township promptly responds to any complaints received. Additionally, the Township keeps any forms that are submitted as well as written documentation of the actions taken by responders and submit all information to PA DEP in the annual report. Enabling public reporting of suspected illicit discharges would increase the monitoring frequency by supplementing Township outfall screenings and therefore the likelihood of detecting illicit discharges.

#### **ANNUAL PROGRAM DOCUMENTATION, EVALUATION, AND ASSESSMENT**

At the conclusion of each permit year, the preparation of the required annual report will detail that permit year's work under the IDD&E Program. The IDD&E portion of the annual report will document the following IDD&E Program components:

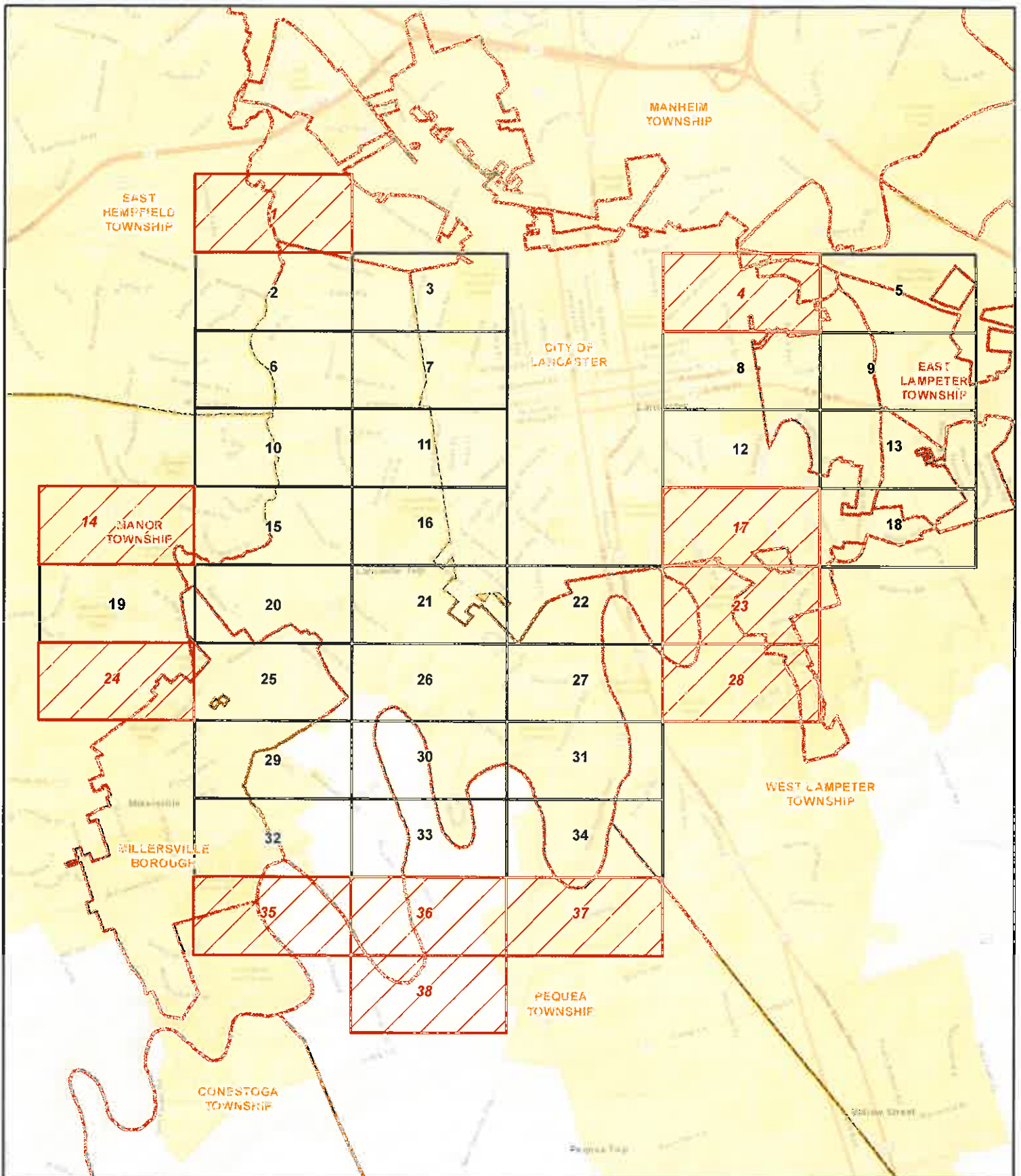
- Outfall Reconnaissance Inventory Activity (including results from any lab testing)
- Citizen Complaints/Reports and Follow-Up
- Mapping and Priority Area Updates (including new outfalls and changing land uses)
- Outreach materials

Lancaster Township will continually evaluate the process for public reporting of suspected illicit discharges through the IDD&E Program and the effectiveness of the Citizen Complaint Illicit Discharge Reporting Form as a mechanism for reporting of complaints. The Township will also assess the distributed IDD&E materials and update as necessary.

\\server01\Eng\MS4\MCMs\3 - IDDE\IDD&E plan 2019 update.docx



APPENDIX  
OUTFALL AND STORM SEWER MAPPING







# Lancaster Township MS4 Mapping

Sheet Index

11/7/2016

## Legend

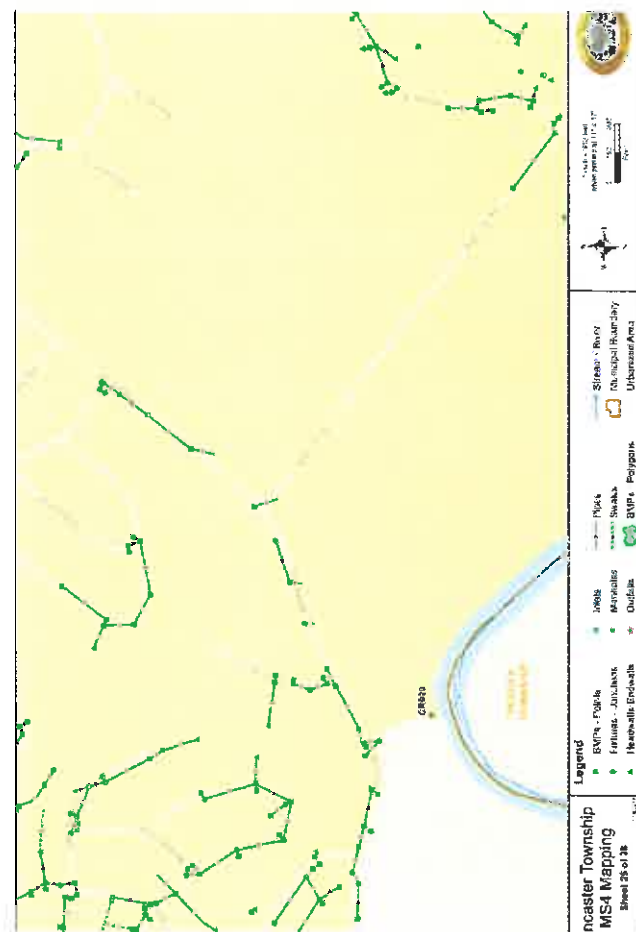
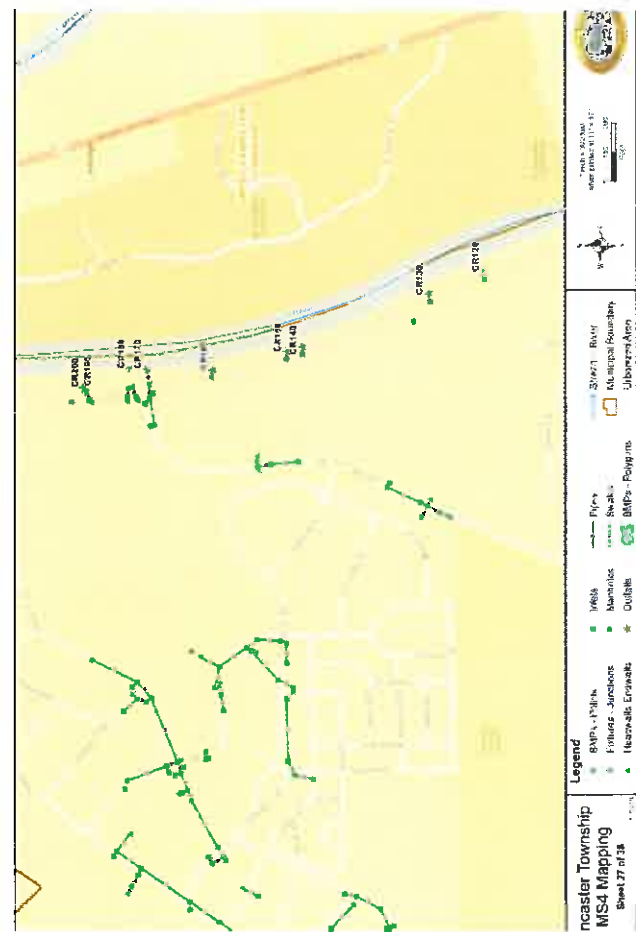
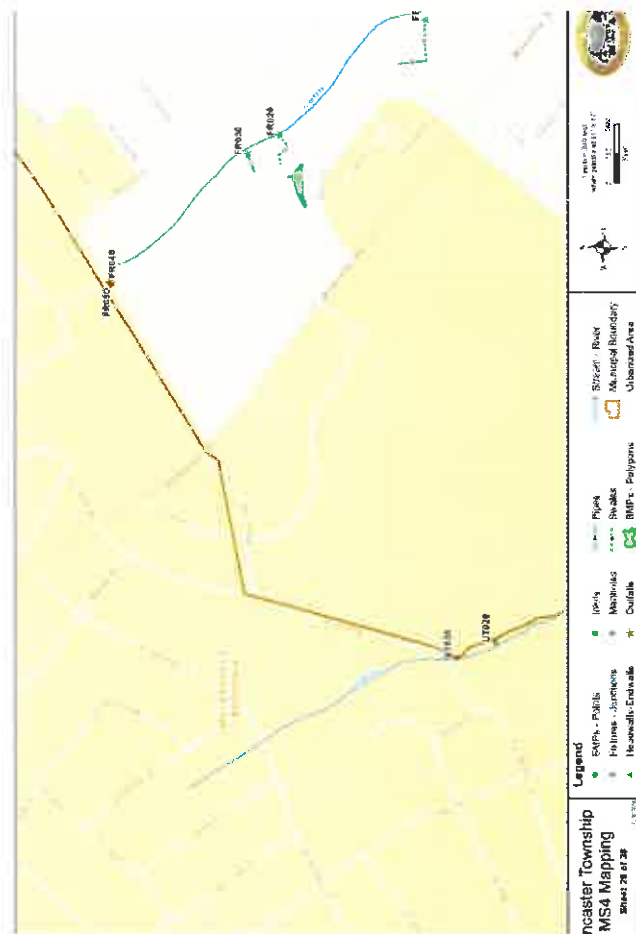
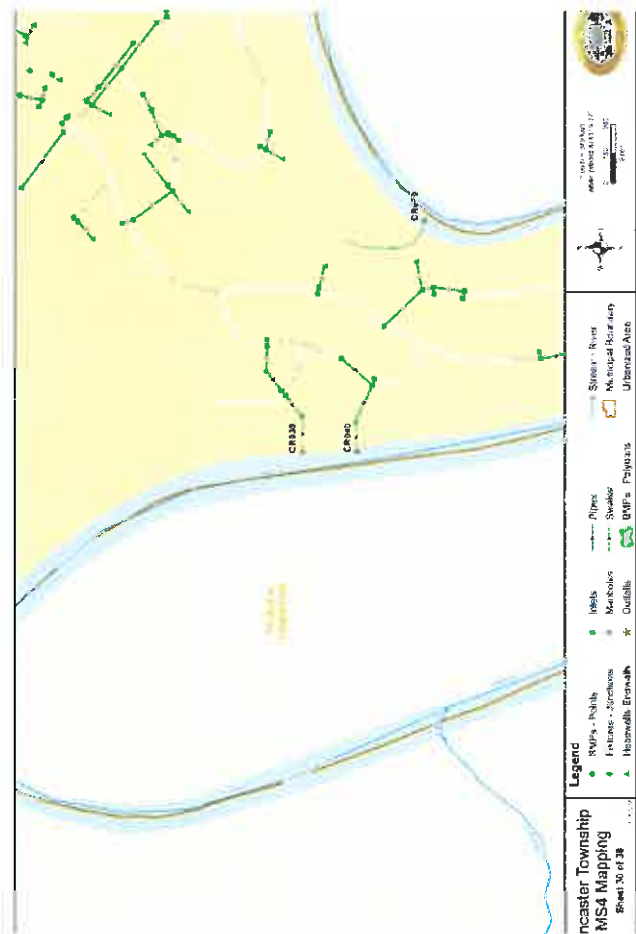
-  Grid Map Generated
-  Grid Map Not Generated (no storm water features present)
-  Municipal Boundary
-  Urbanized Area



1 inch = 4,000 feet  
when printed at 11" x 17"

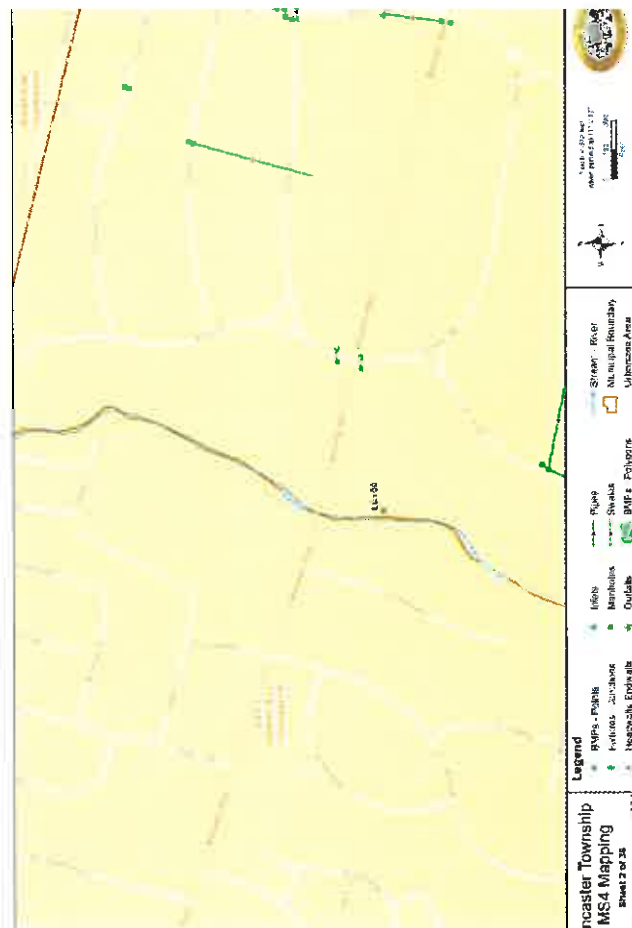
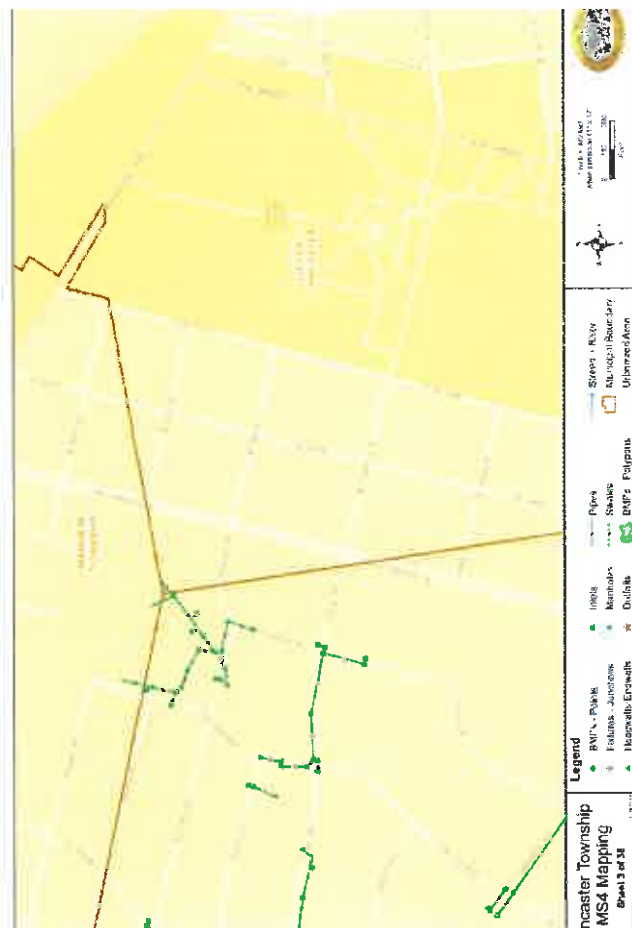
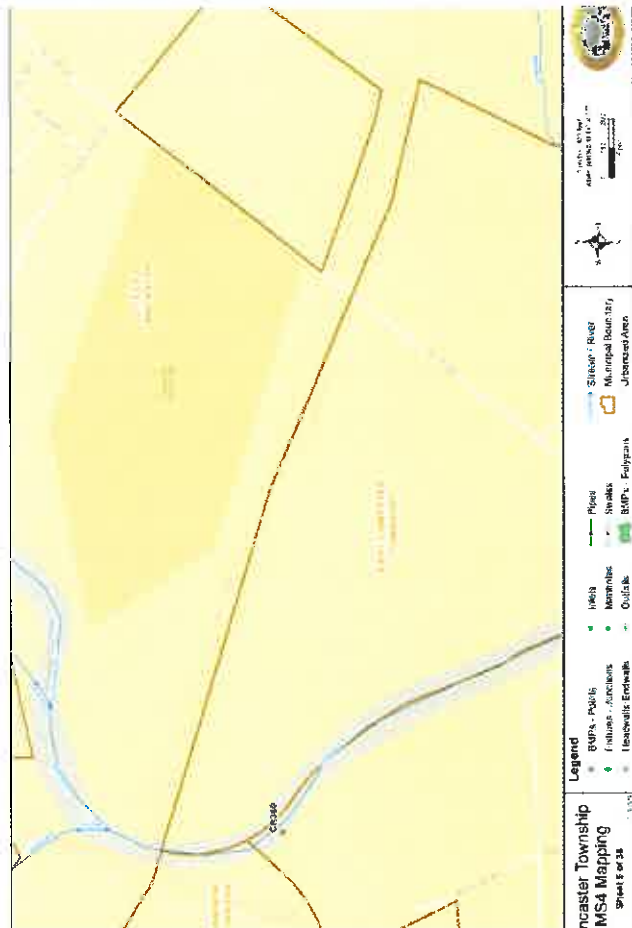
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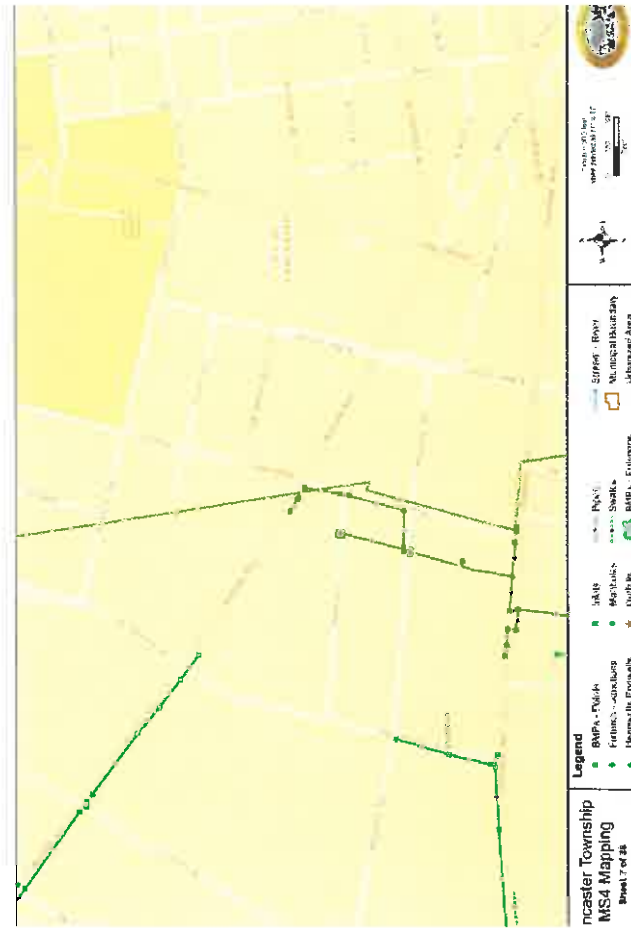
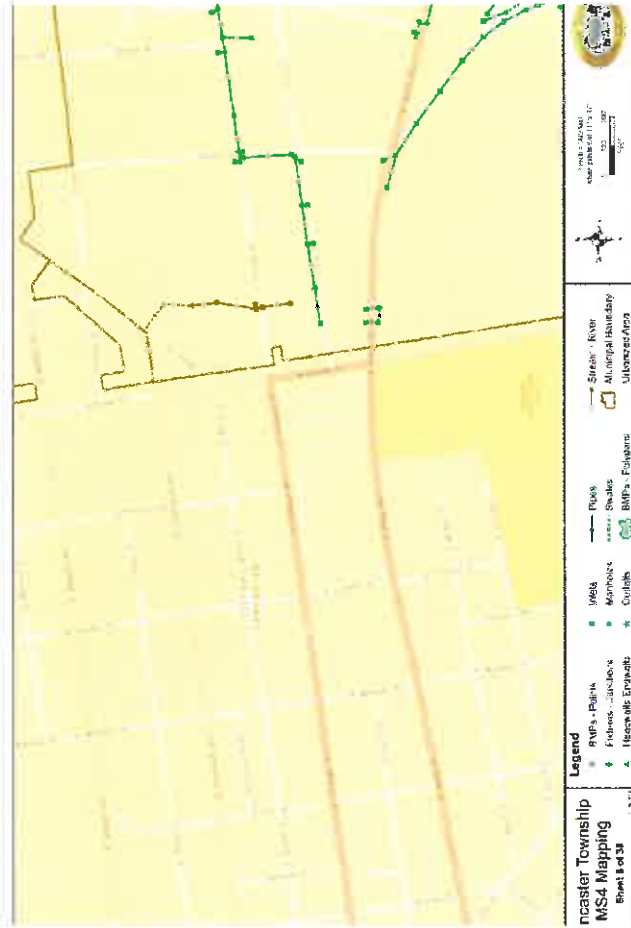
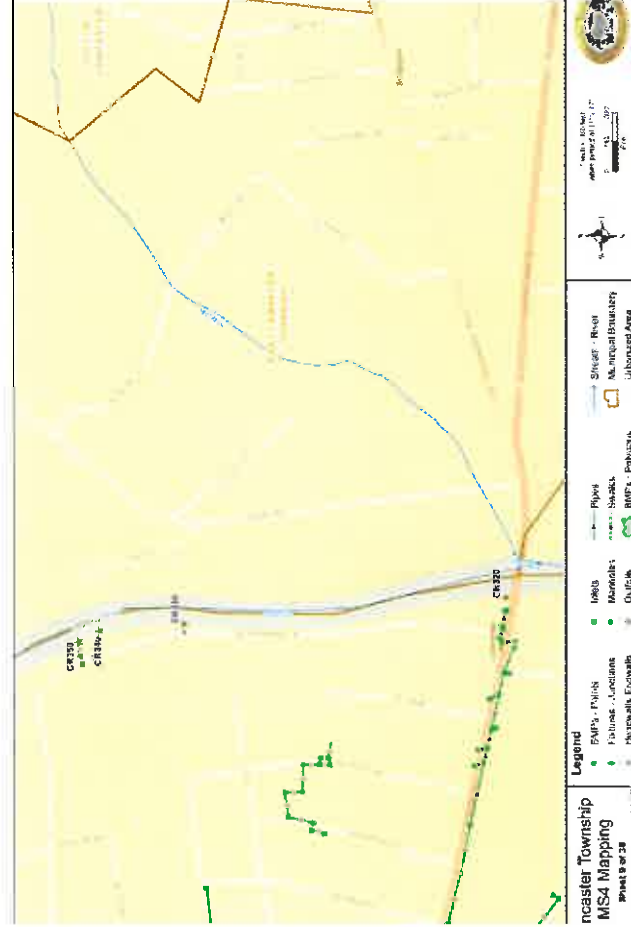
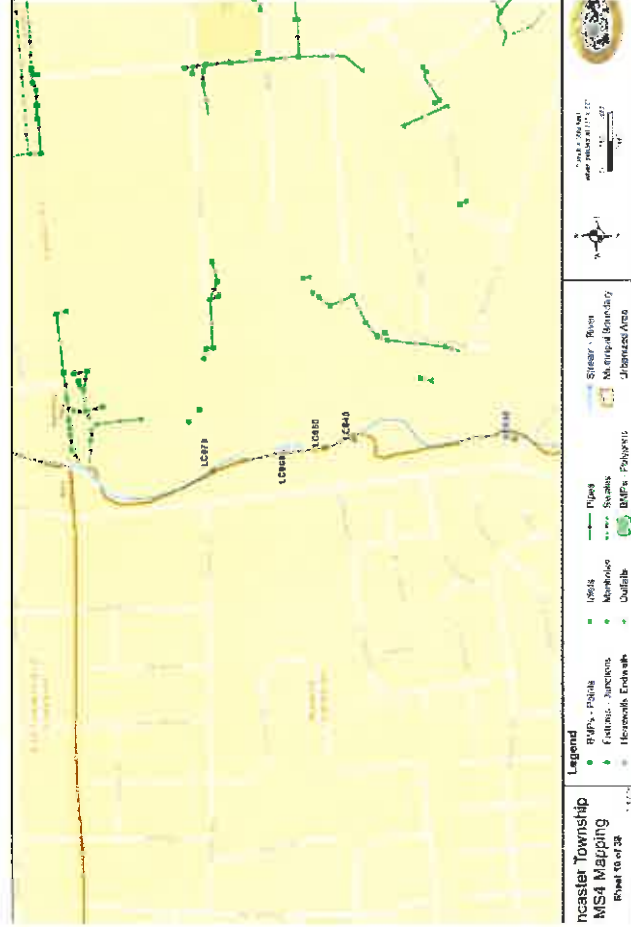


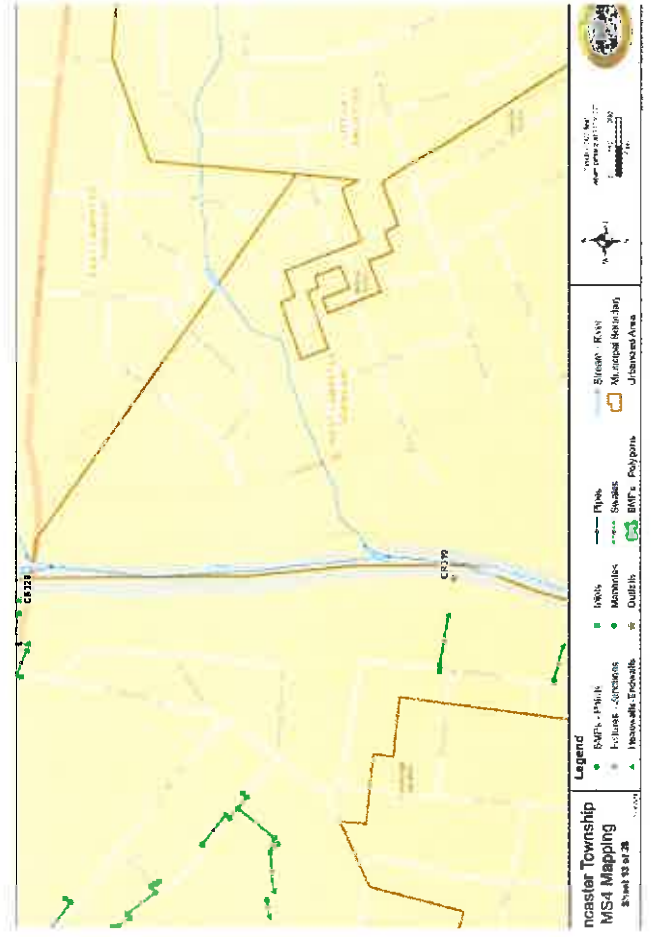
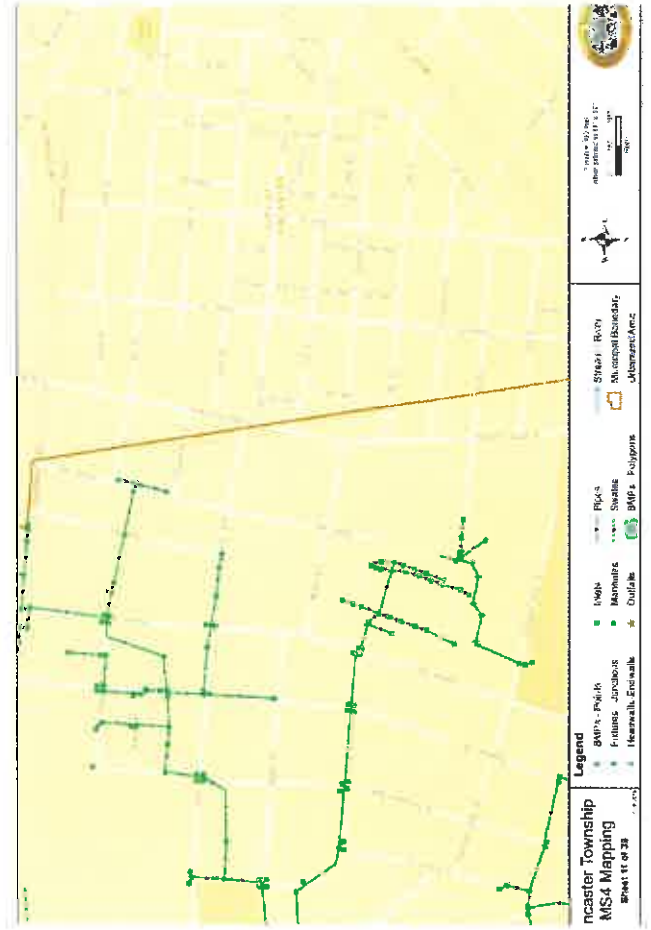
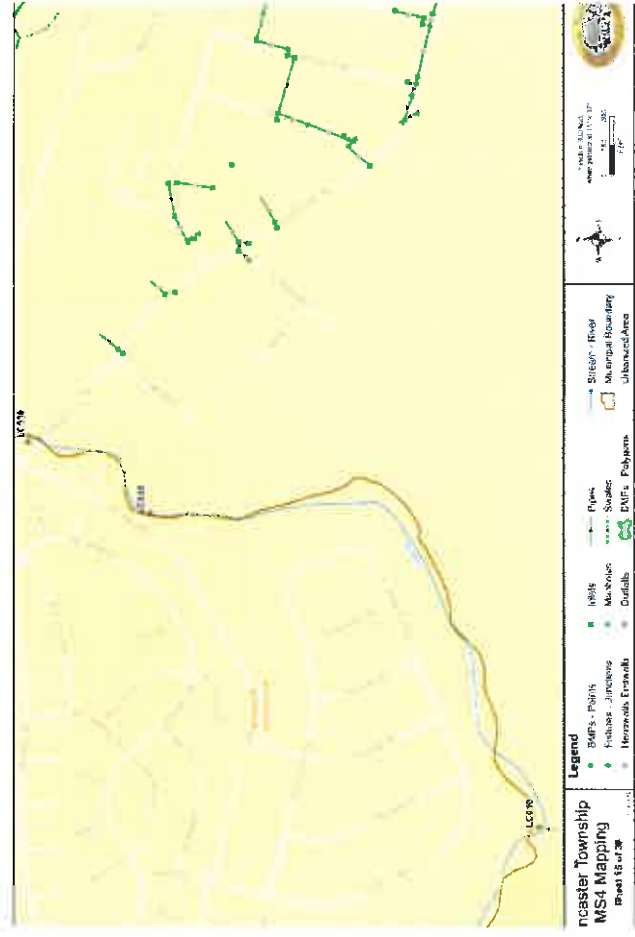
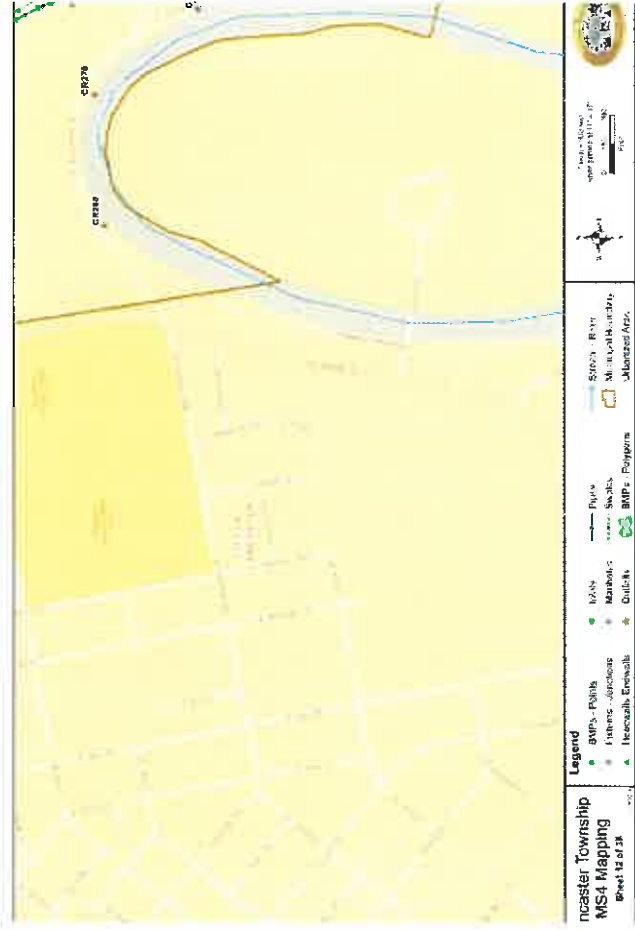


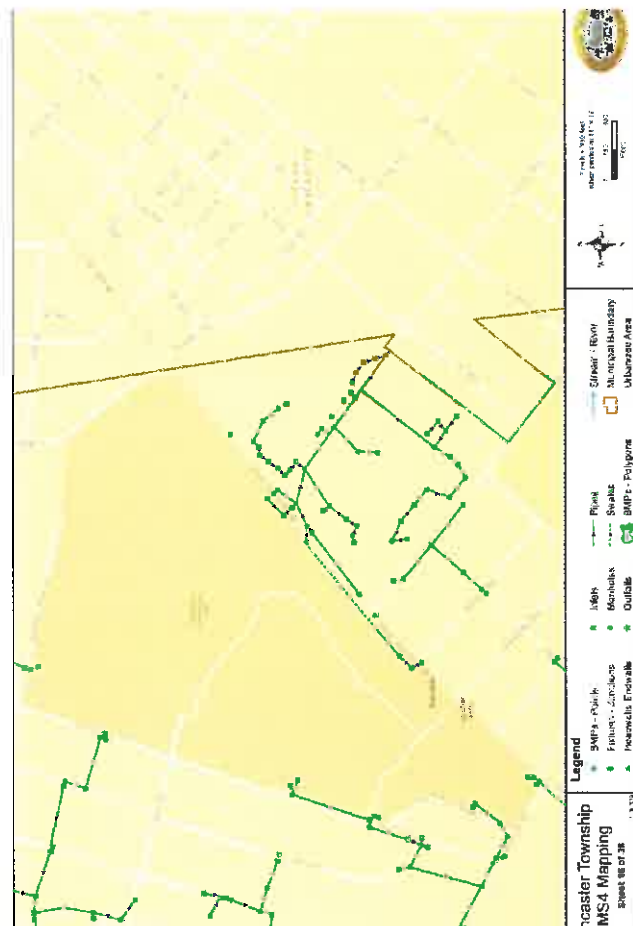
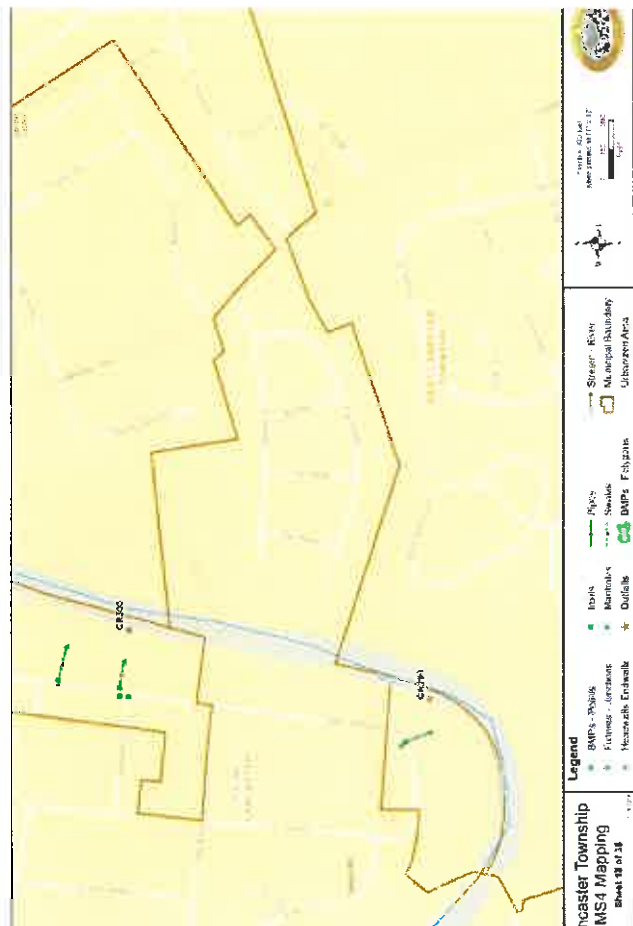
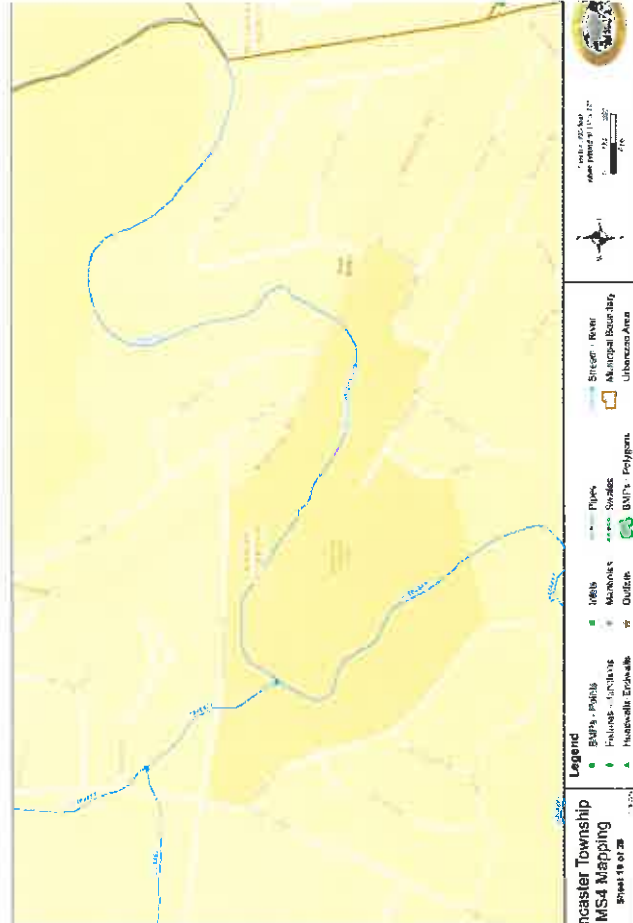
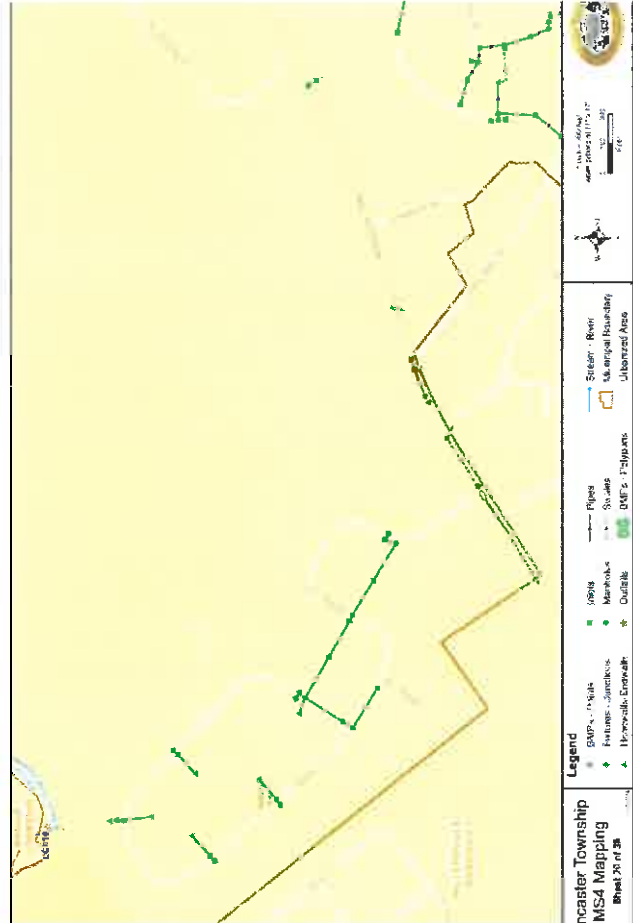




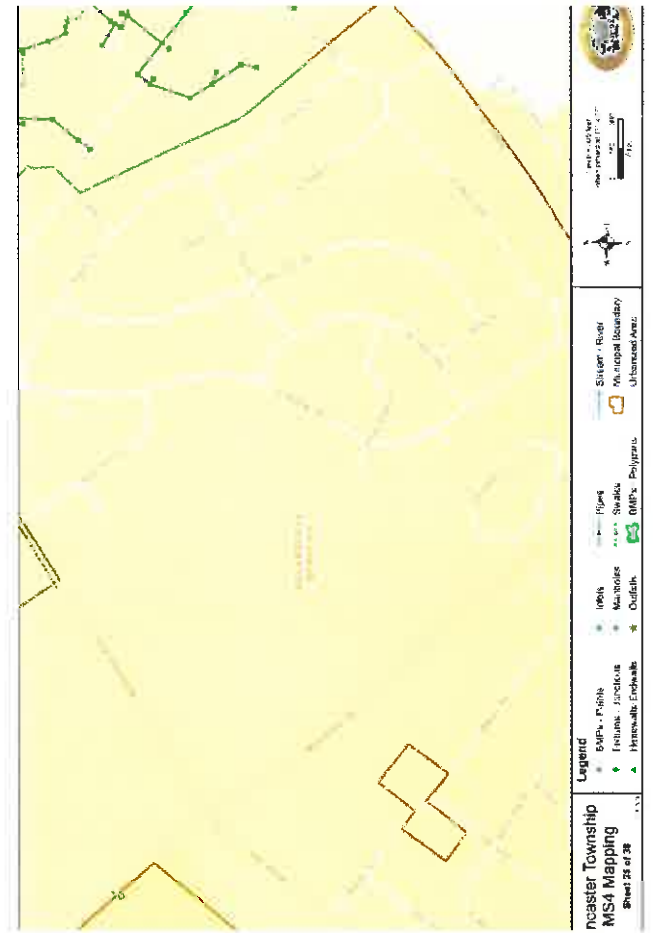
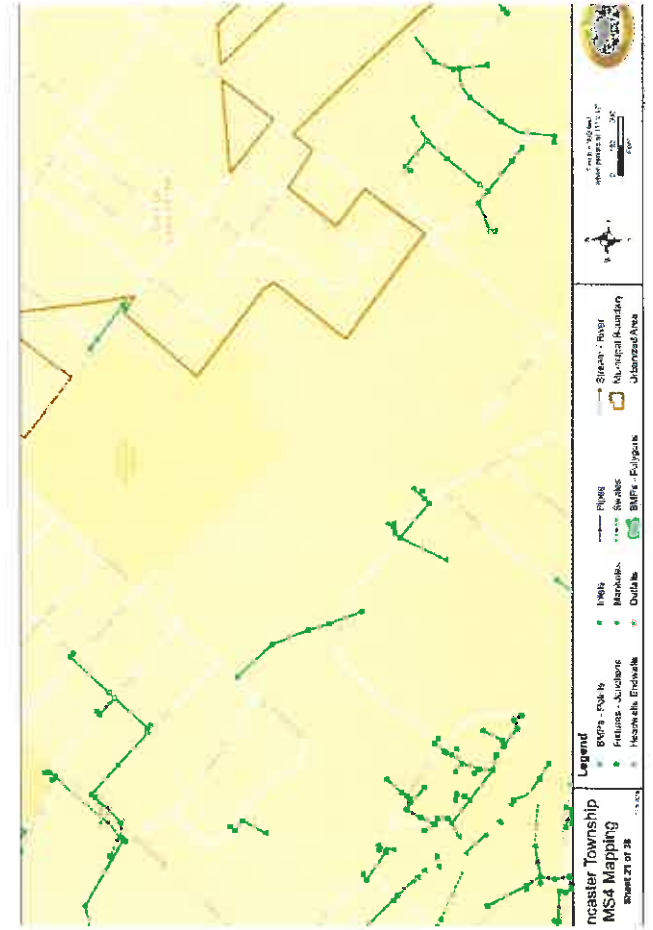
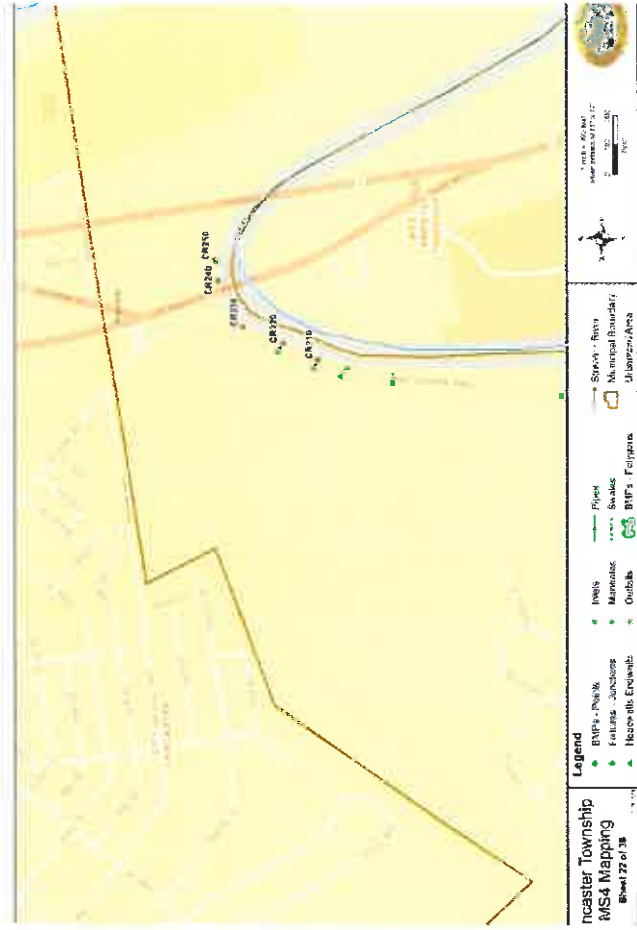












## APPENDIX

### OUTFALL RECONNAISSANCE INVENTORY/SAMPLE COLLECTION FIELD SHEET

## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID:	
Today's date:		Time (Military):	
Investigators:		Form completed by:	
Temperature (°F):	Rainfall (in.):    Last 24 hours:                      Last 48 hours:		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
<b>Land Use in Drainage Area (Check all that apply):</b> <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <input type="checkbox"/> Industrial  <input type="checkbox"/> Ultra-Urban Residential  <input type="checkbox"/> Suburban Residential  <input type="checkbox"/> Commercial         </div> <div style="width: 50%;"> <input type="checkbox"/> Open Space  <input type="checkbox"/> Institutional            Other: _____            Known Industries: _____         </div> </div>			
Notes (e.g., origin of outfall, if known):			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: _____  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume	Liter	Bottle	
	Time to fill	Sec		
<input type="checkbox"/> Flow #2	Flow depth	In	Tape measure	
	Flow width	____' ____"	Tape measure	
	Measured length	____' ____"	Tape measure	
	Time of travel	S	Stop watch	
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 – Faint	<input type="checkbox"/> 2 – Easily detected	<input type="checkbox"/> 3 – Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 – Faint colors in sample bottle	<input type="checkbox"/> 2 – Clearly visible in sample bottle	<input type="checkbox"/> 3 – Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 – Slight cloudiness	<input type="checkbox"/> 2 – Cloudy	<input type="checkbox"/> 3 – Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 – Few/slight; origin not obvious	<input type="checkbox"/> 2 – Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☐ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

### Section 6: Overall Outfall Characterization

<input type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
-----------------------------------	---	--	----------------------------------

### Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No      If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

## Construction Site Runoff Control (CSRC) Lancaster Township, Lancaster County

### INTRODUCTION

Lancaster Township's small Municipal Separate Storm Sewer System (MS4) collects stormwater runoff and manages the runoff through stormwater management facilities including, but not limited to, inlets, pipes, swales, and basins. Much of this runoff is ultimately discharged at various identified outfall locations to surface waters that include the Conestoga River, the Little Conestoga Creek, Fox Rill, and an Unnamed Tributary to the Little Conestoga Creek. The health and quality of these surface waters and waters downstream are directly impacted by stormwater runoff.

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Annual reporting to the Pennsylvania Department of Environmental Protection (PA DEP) is required, since the entirety of the township is located within the Chesapeake Bay watershed. As of this writing, the Township's most recent Annual Report was filed with PA DEP on September 20, 2018 and posted on the Township's website.

Part C.I.B of the MS4 General Permit contains a description of the Stormwater Management Program (SWMP), its six Minimum Control Measures (MCMs), and subordinate Best Management Practices (BMPs) required of Lancaster Township under the Phase II NPDES Stormwater Regulations. The Township will monitor the entire SWMP and update as necessary, including this Construction Site Runoff Control (CSRC) Program targeting MCM #4. As part of the Township's authorization to discharge waters from the MS4 to surface waters of the Commonwealth, these specific requirements include the control of runoff from construction sites. The requirements for MCM #4 are stated below:

#### **MCM #4: Construction Site Runoff Control (CSRC)**

- *Permittees with coverage under the PAG-13 General Permit must rely on DEP's program for issuing NPDES permits for stormwater discharges associated with construction activities to satisfy MCM #4. In addition to relying on the state NPDES permit program for stormwater discharges associated with construction activities, the permittee shall implement the BMPs identified below.*

**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.*

**BMP #2:** *A municipality or county 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, in accordance with 25 Pa. Code § 102.42.*

***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) Municipal permittees shall enact, implement, and enforce an ordinance to require the implementation of E&S control BMPs, including sanctions for non-compliance. All municipal permittees shall submit a copy of an ordinance that is consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j) as an attachment to an Annual MS4 Status Report by September 30, 2022 (existing permittees) or the fourth (4th) Annual MS4 Status Report following approval of coverage under this General Permit (new permittees).*
- (2) Permittees that lack the authority to enact ordinances shall develop, implement and enforce an SOP to require the implementation and maintenance of E&S control BMPs by September 30, 2022 (existing permittees) or the first Annual MS4 Status Report following approval of coverage under this General Permit (new permittees).*

#### **NOTIFICATIONS TO, AND COORDINATION WITH, THE LANCASTER COUNTY CONSERVATION DISTRICT (LCCD)**

In addition to the MCM requirements, Lancaster Township requires that all projects with more than 5,000 square feet of earth disturbance obtain approval of an Erosion and Sedimentation Control (ESC) plan from LCCD. Furthermore, applicants are required to provide simultaneous copies of all correspondence with LCCD to the Township. It is also a requirements of the Township's Stormwater Management Ordinance (SWMO) that the ESC plan approval from LCCD be provided, prior to construction.

Installation of ESC measures depicted on the approved plans are considered a necessary part of the required improvements and are required by the Township to be administered as line items in the Financial Security. Township representatives include the ESC measures as part of the scope of their inspections. Copies of associated reports are distributed to LCCD. More urgent or surprising activities and conditions are brought to the attention of LCCD more explicitly, so that violation or complaint reports can be prepared where appropriate. The complete release of the Financial Security is not granted until the NPDES Notice of Termination is determined acceptable by LCCD.

LCCD provides the Township with an "Annual Summary of Activities" report. This report is reviewed by Township staff for confirmation and follow-up, where needed.

#### **CONSISTENCY WITH DEP's 2022 MODEL STORMWATER MANAGEMENT ORDINANCE**

Lancaster Township is currently reviewing its SWMO and will incorporate appropriate amendments to achieve the consistency required before July of 2022.

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**Post-Construction Stormwater Management (PCSM)  
Best Management Practice (BMP) Inspection & Inventory  
Lancaster Township, Lancaster County**

**INTRODUCTION**

Lancaster Township's small Municipal Separate Storm Sewer System (MS4) collects stormwater runoff and manages the runoff through stormwater management facilities including, but not limited to, inlets, pipes, swales, and basins. Much of this runoff is ultimately discharged at various identified outfall locations to surface waters that include the Conestoga River, the Little Conestoga Creek, Fox Rill, and an Unnamed Tributary to the Little Conestoga Creek. The health and quality of these surface waters and waters downstream are directly impacted by stormwater runoff.

Lancaster Township's MS4 coverage under the Commonwealth's General Permit (PAG-13), #133584, is valid from September 1, 2015 through August 31, 2020. The Township submitted its General Permit Notice-of-Intent (NOI) on August 24, 2017. As of this writing, the renewal permit has not yet been issued. Lancaster Township is a renewal permittee as the previous permit covered activities from 2003.

Annual reporting to the Pennsylvania Department of Environmental Protection (PA DEP) is required, since the entirety of the township is located within the Chesapeake Bay watershed. As of this writing, the Township's most recent Annual Report was filed with PA DEP on September 20, 2018 and posted on the Township's website.

Part C.I.B of the MS4 General Permit contains a description of the Stormwater Management Program (SWMP), its six Minimum Control Measures (MCMs), and subordinate Best Management Practices (BMPs) required of Lancaster Township under the Phase II NPDES Stormwater Regulations. The Township will monitor the entire Stormwater Management Program (SWMP) and update as necessary, including the efforts detailed within this BMP Inspection & Inventory targeting MCM #5 / BMP #5 & #6. As part of the Township's authorization to discharge waters from the MS4 to surface waters of the Commonwealth, there are specific requirements that include ensuring adequate long-term operation and maintenance of BMPs required by an NPDES permit for New and Re-Development Activities. The requirements for MCM #5 are stated below:

**MCM #5: Post-Construction Stormwater Management (PCSM) in New and Re-Development Activities**

- *Permittees with coverage under the PAG-13 General Permit must rely on DEP's program for issuing NPDES permits for stormwater discharges associated with construction activities to satisfy MCM #5. In addition to relying on the state NPDES permit program for stormwater discharges associated with construction activities, the permittee shall implement the BMPs identified below.*

**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.*

*Municipal permittees shall enact, implement, and enforce an ordinance to require the implementation of PCSM BMPs, including sanctions for non-compliance. All municipal permittees shall submit a copy of an ordinance that is consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j) as an attachment to an Annual MS4 Status Report by September 30, 2022.*

**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](http://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 (3800-PM-BCW0100j) 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.*

*Existing permittees shall update and maintain its current inventory PCSM BMPs during the term of coverage under the General Permit. The permittee must track the following information in its PCSM BMP inventory:*

- *All PCSM BMPs that were installed to meet requirements in NPDES Permits for Stormwater Discharges Associated with Construction Activities approved since March 10, 2003.*
- *The exact location of the PCSM BMP (e.g., latitude and longitude, with street address).*
- *Information (e.g., name, address, phone number(s)) for BMP owners and entities responsible for BMP O&M, if different from BMP owners.*
- *The type of BMP and the year it was installed.*
- *Maintenance required for the BMP type according to the Pennsylvania Stormwater BMP Manual or other manuals and resources.*
- *The actual inspection/maintenance activities conducted for each BMP.*
- *An assessment by the permittee if proper O&M has occurred during the year and if not, what actions the permittee has taken, or shall take, to address compliance with O&M requirements*



**PURPOSE OF THE PLAN**

The purpose of this written plan is to describe how Lancaster Township intends to ensure adequate operation and maintenance of all post-construction stormwater management BMPs installed at all qualifying development or redevelopment projects (including those owned or operated by Lancaster Township. LID measures will also be included. The actual inspection and maintenance activities for each BMP and LID measure will be ascertained and assessed by Lancaster Township to determine if the required inspection and maintenance activities were adequately provided.

**PLAN IMPLEMENTATION**

1. This effort will begin with obtaining a list of NPDES permits issued by the County Conservation District.
2. The list of issued NPDES permits will be compared against the records of Lancaster Township to see if a listing of structural BMPs or the post-construction stormwater management (PCSM) plan for each NPDES permit is available.
3. For those qualifying development or redevelopment projects for which no listing of structural BMPs or PCSM plan is readily available, Lancaster Township will contact the County Conservation District and DEP for a copy of the information to allow the structural BMPs to be identified.
4. If the County Conservation District and DEP do not have the necessary information readily available, the Lancaster Township will attempt to make contact with the design firm (if known) or the property owner (if known).
5. For those qualifying development or redevelopment projects for which the necessary information has been found, the Lancaster Township will determine to the maximum extent practicable the following information:
  - the exact location of the PCSM BMP (e.g., street address);
  - information (e.g., name, address, phone number(s)) for BMP owner and entity responsible for BMP Operation and Maintenance (O&M), if different from BMP owner;
  - the type of BMP and the year it was installed; and
  - maintenance required for the BMP type according to the Pennsylvania Stormwater BMP Manual or other manuals and resources.

6. Lancaster Township will attempt to make contact with the BMP property owners and entities responsible for the BMP's inspection and maintenance (if known). The contacts will be made in accordance with the following schedule:
  - a. **Month 1**: Mailing to BMP property owners and entities responsible for the BMP's inspection and maintenance advising / reminding them of responsibility for inspection, maintenance, and reporting. Establish deadline for response. A blank reporting form will be sent with the initial mailing and made available for download on Lancaster Township's website.
  - b. **Month 2**: First reminder mailing. A listing of information gathered to date by Lancaster Township for the specific BMPs will be noted, in case the BMP property owners and entities responsible for the BMP's inspection and maintenance are not aware of the BMPs nor of requirements for inspection, maintenance, and reporting.
  - c. **Month 3**: Public Education session targeted for BMP property owners and entities responsible for the BMP's inspection and maintenance.
  - d. **Month 4**: Initial assessment of problem sites.
  - e. **Month 5**: Final reminder mailing, advising those who have not complied that sanctions and penalties may be applied.
  - f. **Month 7**: Site inspections by Lancaster Township representatives where appropriate.
  - g. **Month 8**: Initial tabulation of actual inspection and maintenance activities.
  - h. **Month 9**: Review assessment of actual inspection and maintenance activities with governing body.
  - i. **Month 10**: Send results of adequacy / inadequacy to BMP property owners and entities responsible for the BMP's inspection and maintenance. Consider citing those in violation of applicable regulations or not maintaining BMPs per the SWM O&M agreement.
  - j. **Month 11**: Incorporate any remaining reports and inspections into inventory.
  - k. **Month 12**: Prepare inventory as of the end of the reporting period for the MS4 permit Annual Report, including recommendations for actions to be taken by Lancaster Township in order to address compliance with O&M requirements by the BMP property owners and entities responsible for the BMP's inspection and maintenance.

**ENFORCEMENT PROTOCOL****A. Notices**

Whenever the authorized Township representative determines that there are reasonable grounds to believe that there has been a violation of any provisions of this Ordinance, or of any regulations adopted pursuant thereto, they shall give notice of such alleged violation as hereinafter provided. Such notice shall:

- be in writing;
- include a statement of the reasons for its issuance;
- allow a reasonable time not to exceed a period of thirty (30) days for the performance of any act it requires;
- be served upon the property owner or his agent as the case may require; provided, however, that such notice or order shall be deemed to have been properly served upon such owner or agent when a copy thereof has been served with such notice by any other method authorized or required by the laws of this State;
- contain an outline of remedial actions which, if taken, will effect compliance with the provisions of the applicable municipal Ordinance.

**B. Penalties**

Any person who fails to comply with any or all of the requirements or provisions of the applicable municipal Ordinance or who fails or refuses to comply with any notice, order of direction of the authorized employee of the Lancaster Township shall be guilty of a misdemeanor and upon conviction shall pay a fine to Lancaster Township, of not less than Twenty-five Dollars (\$25.00) nor more than Six Hundred Dollars (\$600.00) plus costs of prosecution. In addition to the above penalties all other actions are hereby reserved including an action in equity for the proper enforcement of the applicable municipal Ordinance. The imposition of a fine or penalty for any violation of, or noncompliance with this Ordinance shall not excuse the violation or noncompliance or permit it to continue. All such persons shall be required to correct or remedy such violations and noncompliance within a reasonable time. Any development initiated or any structure or building constructed, reconstructed, enlarged, altered, or relocated, in noncompliance with this Ordinance may be declared by the Board of Supervisors to be a public nuisance and abatable as such.

#### **FUTURE CONSIDERATIONS FOR BMP INSPECTION AND INVENTORY**

Lancaster Township will also consider the various LID practices to determine which are feasible within Lancaster Township and should be encouraged. The existing ordinances will be reviewed to determine how they need to be amended in order to repeal sections that conflict with LID practices. Where LID practices are incorporated in qualifying development or redevelopment projects, such LID practices will be included in the Inventory.

Lancaster Township will provide regular education sessions and materials for existing and potential BMP property owners and entities responsible for the inspection and maintenance of BMPs.

#### **CONSISTENCY WITH DEP's 2022 MODEL STORMWATER MANAGEMENT ORDINANCE**

Lancaster Township is currently reviewing its SWMO and will incorporate appropriate amendments to achieve the consistency required before July of 2022.

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