

Manheim Township
COMBINED
POLLUTANT REDUCTION PLAN
Permit Term (2018-2023)

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Narrative

INTRODUCTION

Manheim Township is located within Lancaster County's designated urbanized area. The Township also happens to lie completely within the Chesapeake Bay Watershed. The NPDES Stormwater Discharge from Small Municipal Separate Storm Sewer Systems Permit (PAG-13) requires that any regulated MS4 located in or discharging to the Chesapeake Bay to develop and implement a Chesapeake Bay Pollutant Reduction Plan. The purpose of the Manheim Township's Pollutant Reduction Plan is to reduce three specified pollutants (sediment, phosphorus, and nitrogen) from being discharged to the receiving waters of the Chesapeake Bay. This plan is one of the Township's primary initiatives to cleaning and restoring the Chesapeake Bay.

BOROUGH BACKGROUND & HISTORY

Manheim Township was established as one of Lancaster County's first Townships in 1729. In the early days, Pennsylvania Townships served only as convenient tax assessment units with no elected officials. However, this changed in 1834 with the first generation of laws establishing municipal governments and their electoral and leadership structure and duties.

Manheim Township was established initially as a Second Class Township and remained so from 1834 to 1952. In 1952, the community voted to elevate Manheim Township to a Township of the First Class as classified by the Commonwealth of Pennsylvania. The Township is and remains the only First Class Township in Lancaster County.

Today, the Township is a full service community that operates under the "council/manager" form of government and provides its citizens with public safety, recreation and administrative services and a variety of community programs and public facilities.

The Township occupies approximately 24 square miles within Lancaster County and is roughly 5.4 miles wide and 5.3 miles long. The Township is situated immediately north of the City of Lancaster, which serves as the County seat of government. The Township's east and west boundaries are generally determined by natural features, the Conestoga River and Little Conestoga Creek respectfully, whereas the northern and southern boundaries are man-made lines. Annexation of land by the City of Lancaster beginning in 1931 and ending in 1952 has resulted in a very irregular southern boundary that includes "islands" of Township land area completely surrounded by Lancaster City.

In addition to the City of Lancaster, Manheim Township is contiguous to Warwick Township to the north, West Earl Township to the northeast, Upper Leacock Township and East Lampeter Township to the east, Lancaster Township to the southeast and southwest, East Hempfield Township and East Petersburg Borough to the west, and Penn Township to the northwest.

Manheim Township has had a long history of population growth. The earliest US census figures reveal a total population of 780 residents in Manheim Township in the year 1790 (the first US Census). The Township has grown continuously in each following census. Prior to 1980, Manheim Township's growth had outpaced the majority of municipalities in Lancaster County. As a result, with the exception of the City of Lancaster, Manheim Township currently is the second largest municipality in population in Lancaster County behind only the City of Lancaster

with a population of 38,113 in (2010), which was an increase of 13.1% since the Census 2000 population of 33,697.

The historic population growth trends of the Township provide some insight to the anticipated growth of the future. Although the Township population continues to increase, the period from 1990 to 2000 experienced an increase in population change over the decade of 16.68% from 28,880.

For over 200 years since its establishment, Manheim Township would have been described as a small and tranquil farming community. The Township's topography and proximity to suitable farm land and transportation helped to stimulate a stable rural economy at the edge of the City of Lancaster. However, the Township historically has been host to schools and various businesses that defined the community.

The character of the community has changed gradually over the last five or six decades from its original rural farming community to a more rapidly growing suburban "bedroom" community. The Township still hosts rural lands in its northeast quadrant. However, being bisected by New Holland Pike (PA 23), US 222, Oregon Pike (PA 272), Lititz Pike (PA 501) and Manheim Pike (PA 72) and US 30, the Township has remained an attractive place to live and conduct business that is most accessible to many community centers in the region.

Convenient access to the City of Lancaster and surrounding communities has added to the desirability of living in Manheim Township, which has also contributed to the growth and development trends for residential and non-residential patterns of development. The Township's commercial growth area has been concentrated in the southern one-third of the Township near the major road and rail systems and an ample local road network. First generation of suburban development is situated near the City of Lancaster. Newer developments and retirement communities are located in the northern two thirds of the Township.

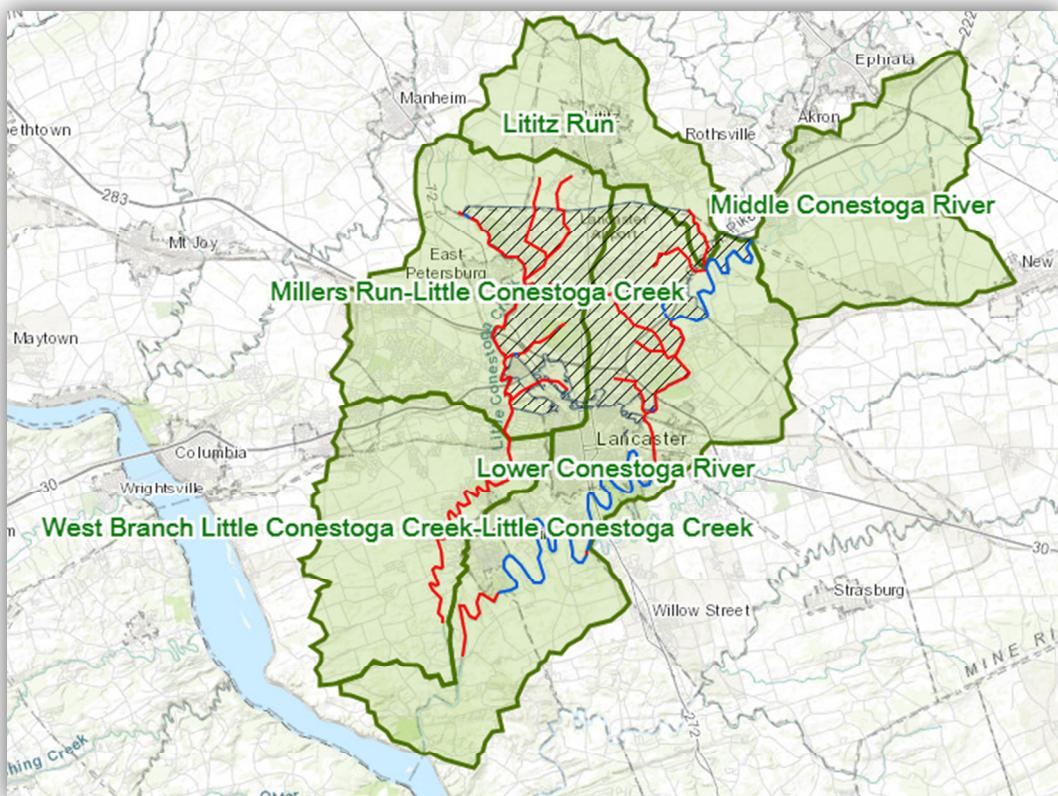
Also contributing to the Township's historic growth and development is the long time availability of public sewer and water services. Public water provided by the City of Lancaster has expanded into the Township and stimulated new development and business opportunities. Public sewer currently provided by the Lancaster Area Sewer Authority has a role in stimulating development and re-development of commercial and residential areas of the Township. In step with the demand and need for public safety, policing, recreation and similar support, the Township continues to plan and provide for public services to effectively and efficiently support the changing community.

For more than a century, Manheim Township has provided public services to the community and citizens. As Manheim Township's population has grown and the amount and complexity of county, state, and federal regulatory and procedural requirements have expanded, the Township has employed professional staff for the purpose of managing its daily affairs. This has allowed the elected Commissioners to more effectively transact the growing volume of Township business required by law and spend time establishing important long-range policies that are then carried out by Township staff and appointed volunteers.

Today, Manheim Township's governmental organization of elected Commissioners, volunteer boards and staff work together to provide for the safety, health, and general welfare of all Township residents. Manheim Township staff plays a vital role as the operational link between the Township elected officials, appointed volunteers, and citizens by providing communication, direct assistance, and coordination of providing public services.

POLLUTANT REDUCTION PLAN

To meet MS4 Permit Requirements, the Township has elected to submit a Combined PRP to address local impaired waters (Permit Appendix E) and the Chesapeake Bay Watershed impairments (Permit Appendix D). The pollutant aggregation process has permitted us to break the Township up into three main watersheds. These watersheds are Lititz Run, Miller's Run – Little Conestoga Creek, and Lower Conestoga River as shown in the graphic below. Though we will be demonstrating the targets and proposed achievements within each watershed as required by Appendix E, the plan will ultimately rely of the total MS4 area of the municipality as required by Appendix D to demonstrate compliance with required reductions.



Manheim Township does discharge runoff to Lititz Run, which has an approved TMDL Plan. In anticipation of needing to prepare a TMDL Plan and file an individual MS4 permit, Manheim Township teamed up with Lititz Borough and Warwick Township to create a joint TMDL Plan. The Township recently received guidance from DEP that because the Township's drainage area to Lititz Run is so minimal, the Township is eligible to submit for a general MS4 permit and is not required to prepare and submit a TMDL Plan. Although the plan is no longer required, we have included it as Appendix V of this PRP to recognize the Township's financial contribution to and support of the creation and implementation of the TMDL Plan.

This plan was prepared utilizing the guidelines outlined in the following Pennsylvania Department of Environmental Protection documents:

- 3800-PM-BCW0100k - National Pollutant Discharge Elimination Systems (NPDES) Stormwater Discharges from Small Municipal Separate Storm Sewer Systems Pollutant Reduction Plan (PRP) Instructions, last revised March 2017.

- 3800-PM-BCW0100m - National Pollutant Discharge Elimination Systems (NPDES) Stormwater Discharges from Small Municipal Separate Storm Sewer Systems BMP Effectiveness Values, last revised May 2016.
- Pollutant Aggregation Suggestions for MS4 Municipal Requirements Table, last revised May 9, 2017
- Pollution Reduction Plan: A Methodology

Section A

Public Participation

Public Participation

Manheim Township provided a complete copy of this pollutant reduction plan for public review. A Public Notice describing the plan and inviting the public to review and issue written comments was published in the LNP, a daily newspaper in Lancaster County, on July 16, 2017 and July 19, 2017. Additionally, a notice was posted on the Manheim Township website, <http://www.manheimtownship.org/>, from July 24, 2017 to August 24, 2017. The Township also included an article in their August 2017 Newsletter explaining the plan. A copy of the proof of publication, a screen shot of the notice that was posted on the website, and a copy of the newsletter article are located in Appendix I.

An initial presentation of the plan occurred on July 24, 2017 at the regularly scheduled Commissioner's Meeting. Public comments were then solicited verbally at the August 14, 2017 regularly scheduled Commissioner's Meeting. A copy of the minutes from these two meetings can be found in Appendix II with the portions of the meetings that refer to this plan highlighted.

Public comments were received for a period of 30-days from the commencement of the initial presentation. No verbal or written comments were received by the Township within this period.

Section B

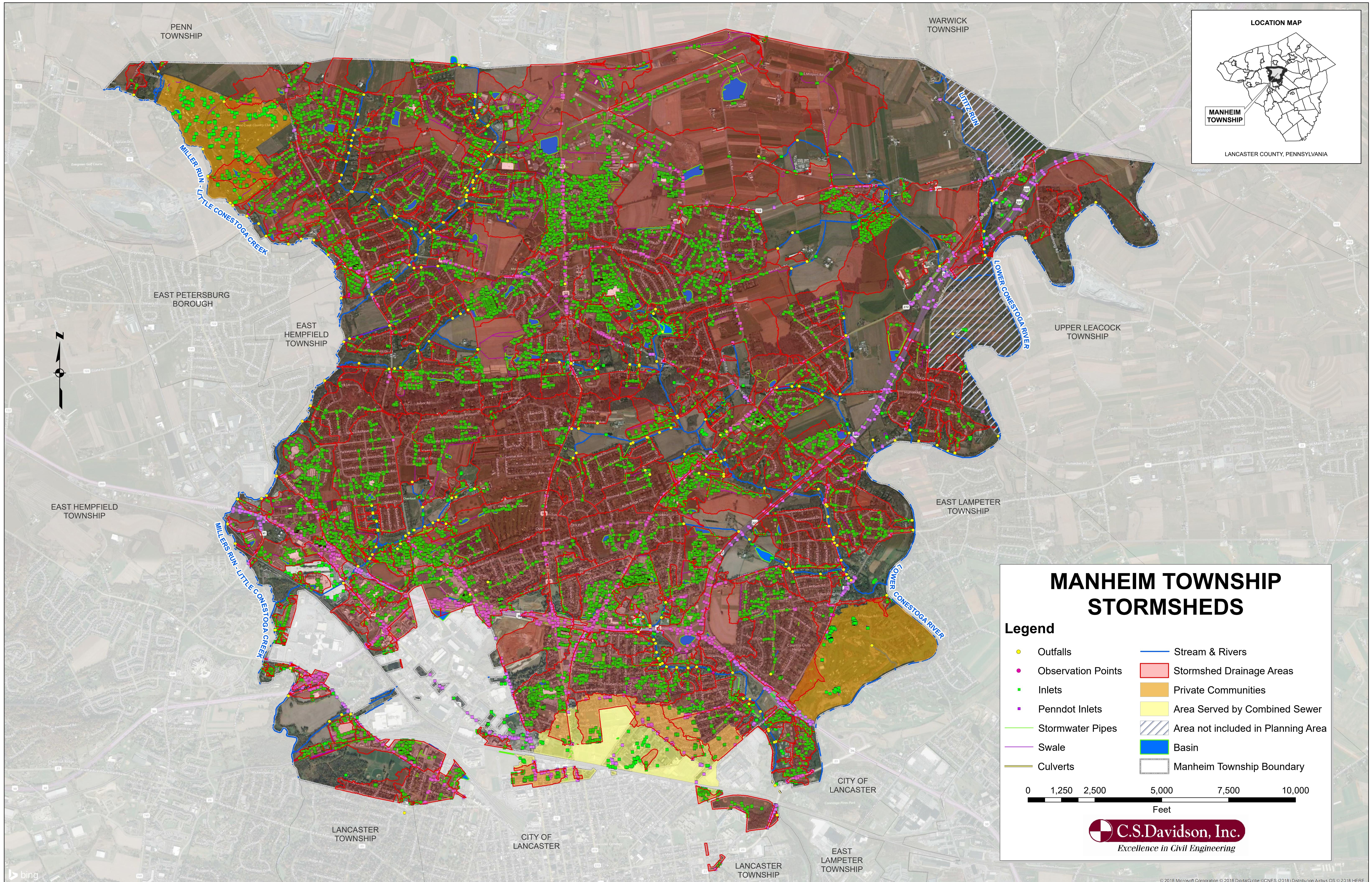
Maps

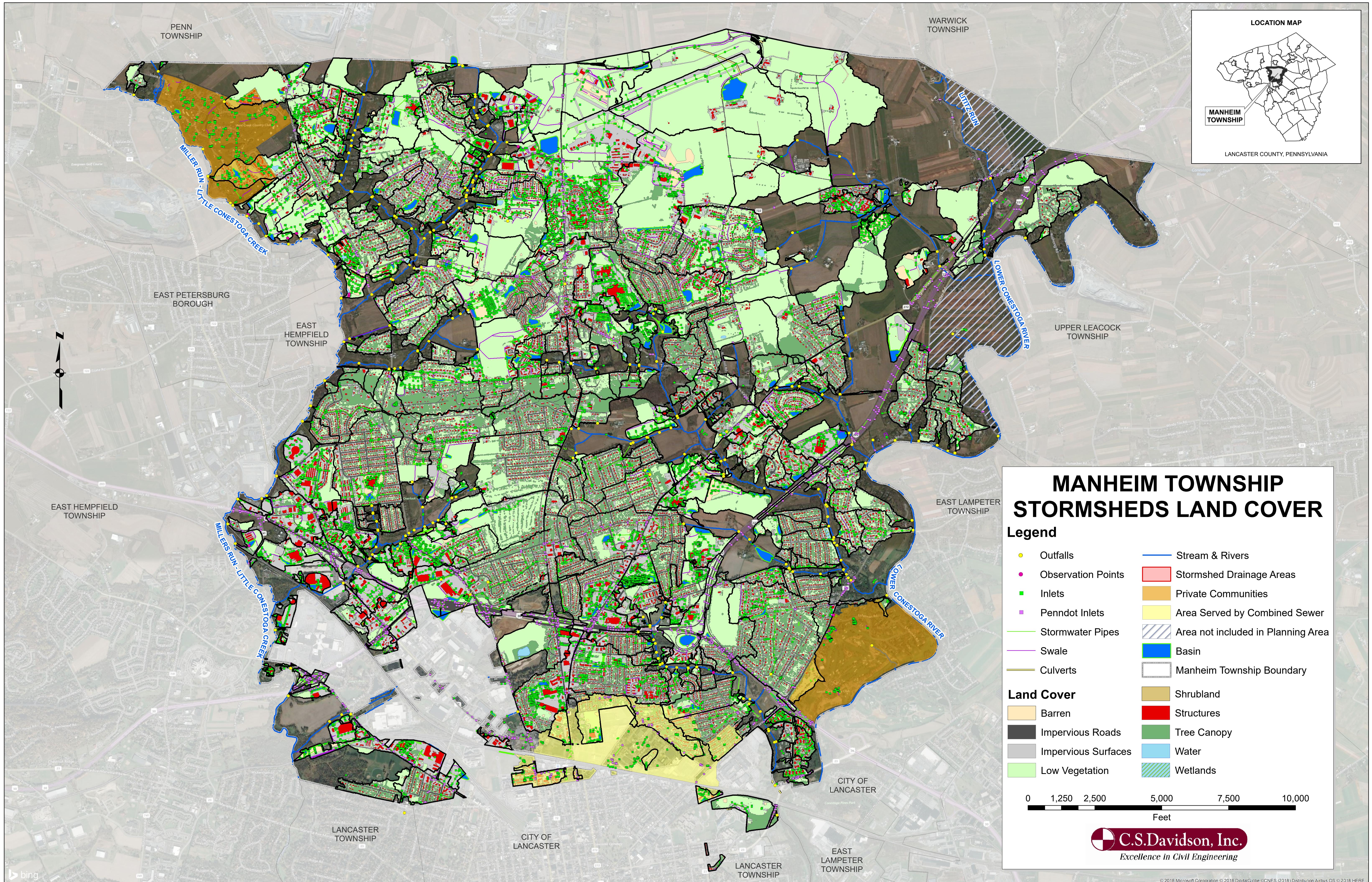
Maps

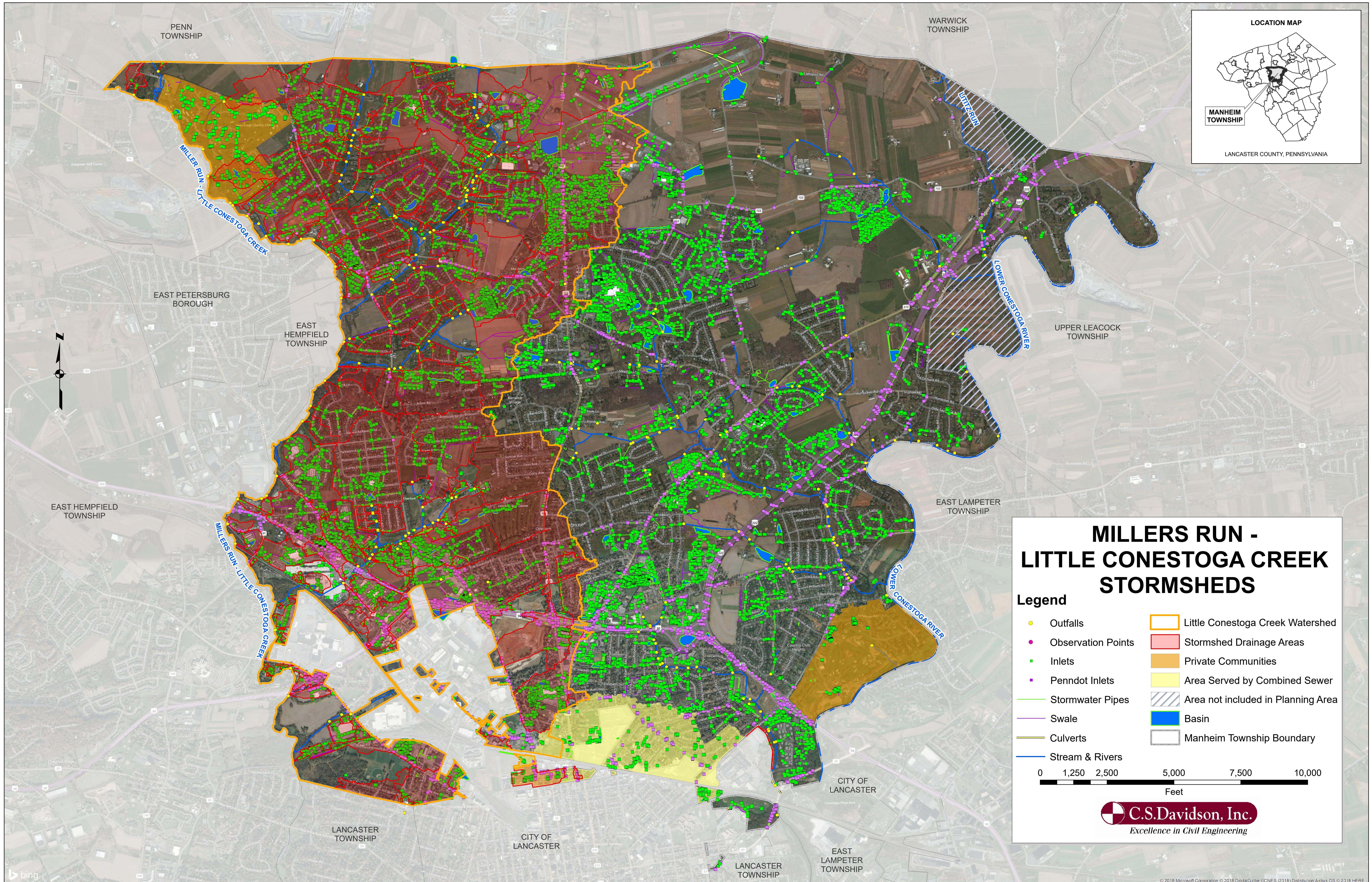
Maps developed for the analysis required by this plan have been included in this Section. The overall stormsheds map was utilized to designate the Pollutants Reduction Plan (PRP) planning area. Once the planning area was delineated, a land use map was developed for purposes of calculating the baseline pollution loading. This process will be covered in greater detail in Section D.

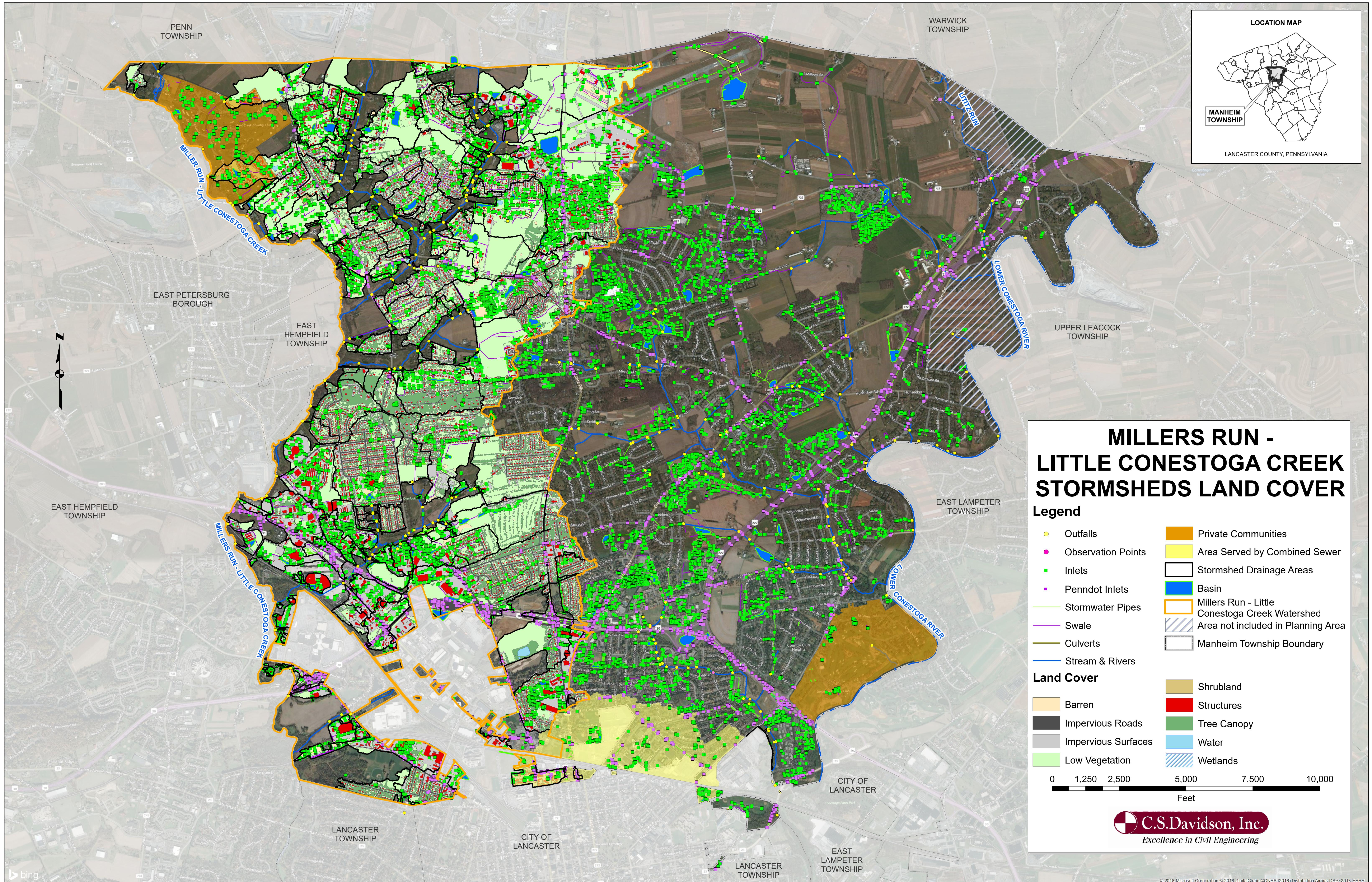
The following is a summary of maps included within this section. Please note the mapping for the Lititz Run Watershed has been included within the Lower Conestoga Creek Mapping:

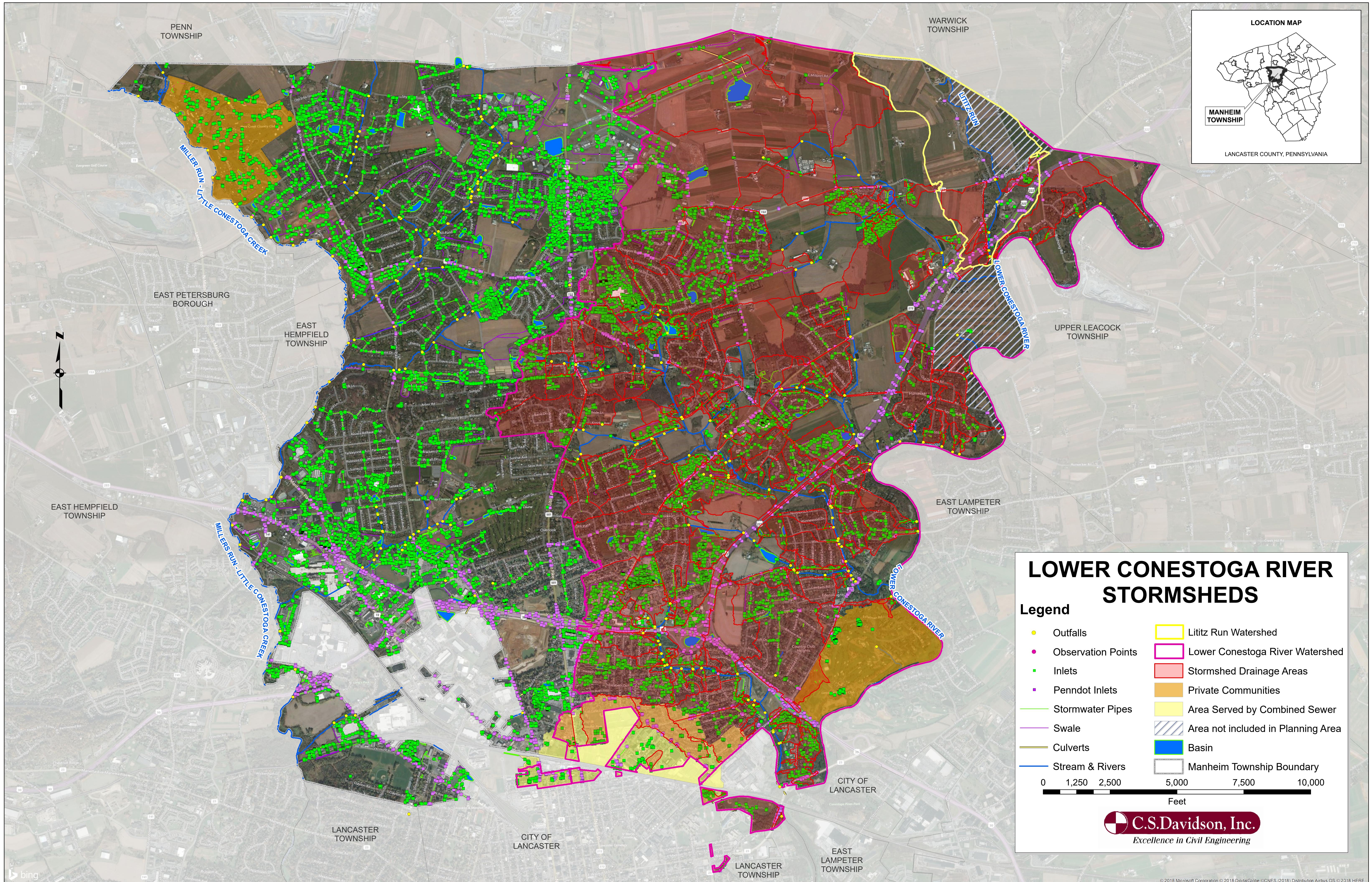
- Manheim Township Stormsheds (Overall)
- Manheim Township Land Cover (Overall)
- Miller's Run-Little Conestoga Creek Stormsheds
- Miller's Run-Little Conestoga Creek Land Cover
- Lower Conestoga Creek Stormsheds
- Lower Conestoga Creek Land Cover

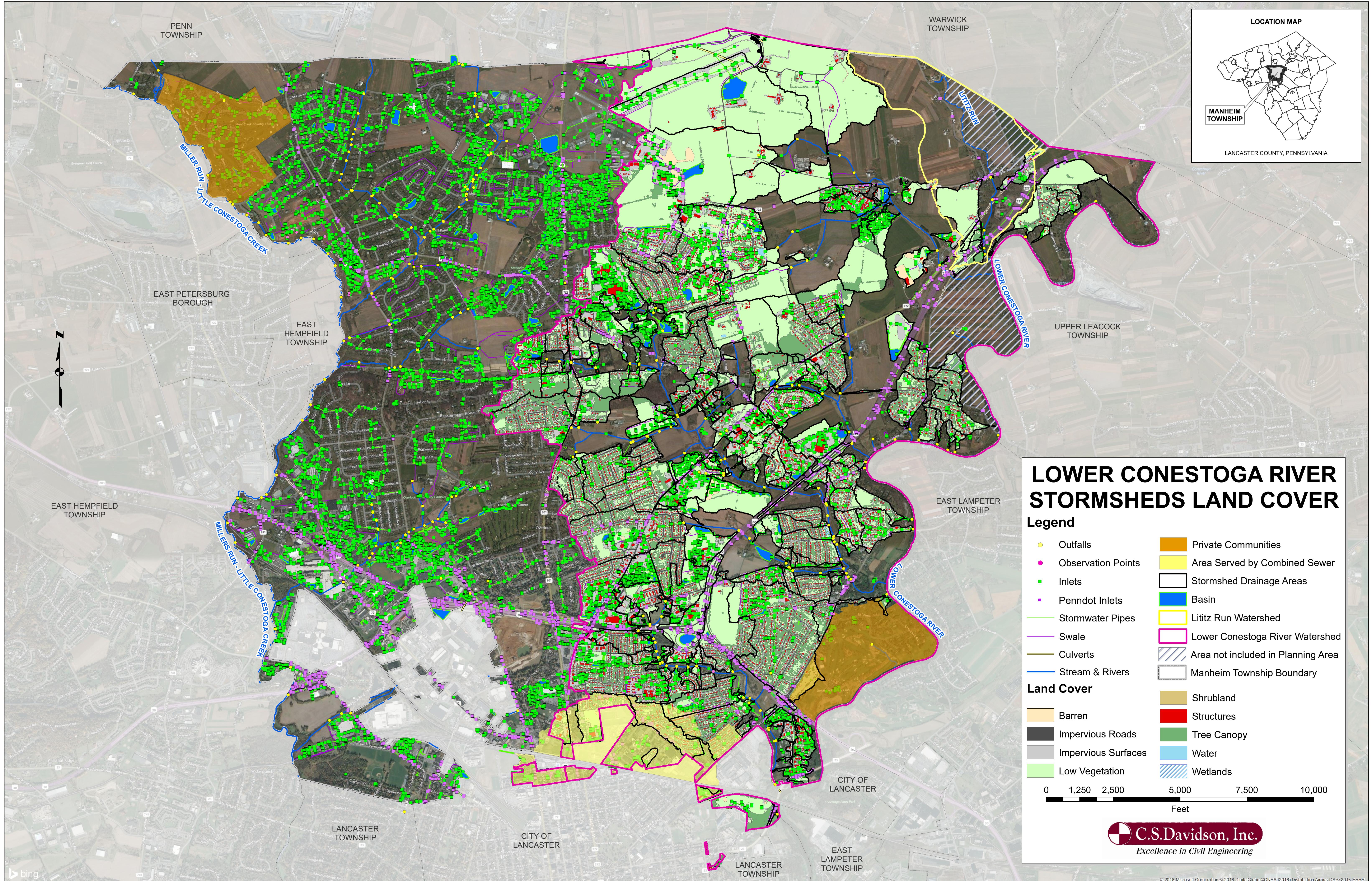












Section C

Pollutants of Concern

Pollutants of Concern

The pollutants of concern were determined by referencing both the Municipal MS4 Requirements Table and the Pollution Aggregation Table. All watersheds within the Township, with the exception of Bachman Run, require an Appendix E plan be prepared to address sediment.

Because of the requirement to complete an Appendix D plan for the entire Township, the Township has elected to address the pollutants of concern for the overall PRP Planning Area instead of providing separate PRPs for each impaired watershed. This report will still outline the baseline loads and proposed reductions per watershed, but the success of the plan will be judged with respect to the Township-wide reductions.

Municipal MS4 Requirements Table:

MANHEIM TWP	PAG133534	No	Lititz Run	Appendix E-Suspended Solids (4a), Appendix B-Pathogens (5)	
			Unnamed Tributaries to Conestoga River	Appendix E-Nutrients (5)	Flow Alterations (4c)
			Little Conestoga Creek	Appendix B-Pathogens (5), Appendix E-Nutrients, Siltation (5)	Cause Unknown (5)
			Landis Run	Appendix B-Pathogens (5), Appendix E-Siltation (5)	Flow Alterations (4c)
			Conestoga River	Appendix B-Pathogens (5), Appendix E-Organic Enrichment/Low D.O., Siltation (5)	Chlorine, Mercury (5)
			Bachman Run	Appendix B-Pathogens (5)	
			Chesapeake Bay Nutrients/Sediment	Appendix D-Nutrients, Siltation (4a)	

Pollution Aggregation Table:

MANHEIM TWP	PAG133534	Lititz Run, Lower Conestoga River, Middle Conestoga River	Chesapeake Bay Nutrients/Sediment, Conestoga River, Landis Run, Lititz Run, Unnamed Tributaries to Conestoga River	Appendix D-Siltation/Nutrients, Appendix E-Nutrients, Organic Enrichment/Low D.O., Siltation, Suspended Solids
		Lititz Run, Lower Conestoga River	Conestoga River, Landis Run, Lititz Run	Appendix B-Pathogens
		Millers Run-Little Conestoga Creek, West Branch Little Conestoga Creek-Little Conestoga Creek	Bachman Run, Chesapeake Bay Nutrients/Sediment, Little Conestoga Creek, Bachman Run, Little Conestoga Creek	Appendix B-Pathogens, Appendix D-Siltation/Nutrients, Appendix E-Nutrients, Organic Enrichment/Low D.O., Siltation, Suspended Solids
		Lititz Run, Lower Conestoga River, Middle Conestoga River	Chesapeake Bay Nutrients/Sediment, Conestoga River, Landis Run, Lititz Run, Unnamed Tributaries to Conestoga River	Appendix D-Siltation/Nutrients, Appendix E-Nutrients, Organic Enrichment/Low D.O., Siltation, Suspended Solids

Consistent with the guidance provided in the DEP pollutant reduction plans instruction document, an assumption can be made that meeting the sediment reduction goal for a given watershed will also result in achieving the nutrient reduction goal. As such, this PRP will focus on sediment as the main pollutant of concern. This decision is further supported by the siltation impairments listed on the above tables.

Section D

Existing Loading for Pollutants of Concern

Existing Loading for Pollutants of Concern

The Township elected to utilize the DEP Simplified Method for calculating the baseline pollution load applicable for this PRP. Storm sewersheds were delineated for each regulated MS4 Outfall. The areas of these sewersheds are what make up the planning area for this PRP. Any land located outside of a sewersheds was not included in the baseline calculations. The land cover map for the overall planning area included in Section B provides the basis for the values in the below table. The Township did utilize parsing to refine these values. A portion of the Township that is currently served by a combined sewer, not covered under the MS4 permit, was excluded from the planning area. Industrial/Commercial sites with their own NPDES Permits were also parsed out of the planning area. Additionally, PennDOT State Route rights of ways were also parsed out of the baseline. A map of all parsed out areas and a copy of pertinent permit information from DEP eFacts has been included in Appendix III.

In addition to the baseline adjustments above, the Township also took a baseline reduction credit for numerous existing BMPs within the planning area. A summary of these BMPs, a location map and inspection reports are located within Appendix IV. Individual O&M agreements for existing BMPs are on file and are available upon request.

Overall Baseline Loading Calculation:

Land Cover	Area (ac)	TN lbs/yr	TP lbs/yr	TSS lbs/yr
Impervious Area	3,539.70	136,384.64	5,486.54	5,240,278.07
Non Impervious Area	6,808.66	151,424.60	2,451.12	2,121,866.19
Total	10,348.36	287,809.24	7,937.65	8,500,432.08

Area to be Parsed Out

Land Cover	Area (ac)
Impervious Area	610.01
Non Impervious Area	863.66
Total	1,478.67

Land Cover	Area (ac)	TN lbs/yr	TP lbs/yr	TSS lbs/yr
Impervious Area	2,924.69	112,688.31	4,533.27	4,329,798.82
Non Impervious Area	5,945.00	132,216.80	2,140.20	1,135,078.85
Total	8,869.69	244,905.11	6,673.47	5,464,877.67

Existing BMP Reductions	TN lbs/yr	TP lbs/yr	TSS lbs/yr
	12,971.38	567.23	579,889,26
Total	231,933.73	6,106.24	4,884,988.41

Required Reductions

TN lbs (3%)	TP lbs (5%)	TSS lbs (10%)
6958	305	488,499

As stated previously in Sections B and C, the Township will be focusing on the sediment loading of the entire planning area as its pollutant of concern and to meet both Appendix D and E permit requirements. As such, projects equating to the reduction of 488,499 pounds of sediment per year will demonstrate that the goals of this plan have been met.

For comparative purposes, we have also included the baseline loading calculation for each individual watershed:

Lititz Run Baseline Loading Calculation:

Land Cover	Area (ac)	TN lbs/yr	TP lbs/yr	TSS lbs/yr
Impervious Area	15.87	611.47	24.60	23,494.42
Non Impervious Area	78.81	1,752.73	28.37	15,047.19
Total	94.68	2,364.21	52.97	38,541.62

Area to be Parsed Out	Area (Ac)
Impervious	7.05
Non Impervious	5.99

Land Cover (After Parsing)	Area (ac)	TN lbs/yr	TP lbs/yr	TSS lbs/yr
Impervious Area	8.82	339.83	13.67	13,057.39
Non Impervious Area	72.82	1,619.52	26.22	13,903.52
Total	81.64	1,959.35	39.89	26,960.82

Required Reductions

TN lbs/yr	TP lbs/yr	TSS lbs (10%)
59	2	2,696

Miller's Run-Little Conestoga Creek Baseline Loading Calculation:

Land Cover	Area (ac)	TN lbs/yr	TP lbs/yr	TSS lbs/yr
Impervious Area	1,828.20	70,440.55	2,833.71	2,706,522.13
Non Impervious Area	2,937.24	65,324.22	1,057.41	560,807.23
Total	4,765.44	135,764.76	3,891.12	3,267,329.36

Area to be Parsed Out	Area (Ac)
Impervious	297.70
Non Impervious	307.77

Land Cover (After Parsing)	Area (ac)	TN lbs/yr	TP lbs/yr	TSS lbs/yr
Impervious Area	1,530.50	58,970.17	2,372.28	2,265,798.12
Non Impervious Area	2,629.47	58,479.41	946.61	502,044.71
Total	4,159.97	117,449.58	3,318.88	2,767,842.82

Existing BMP Reductions	TN lbs/yr	TP lbs/yr	TSS lbs/yr
	9,562.32	388.14	403,072.32
	107,887.26	2,930.74	2,364,770.48

Required Reductions

TN lbs/yr	TP lbs/yr	TSS lbs (10%)
3,237	147	236,477

Lower Conestoga River Baseline Loading Calculation:

Land Cover	Area (ac)	TN lbs/yr	TP lbs/yr	TSS lbs/yr
Impervious Area	1,695.63	65,332.62	2,628.23	2,510,261.52
Non Impervious Area	3,792.61	84,347.65	1,365.34	724,123.03
Total	5,488.24	149,680.27	3,993.57	3,234,384.55

Area to be Parsed Out	Area (Ac)
Impervious	310.26
Non Impervious	549.90

Land Cover (After Parsing)	Area (ac)	TN lbs/yr	TP lbs/yr	TSS lbs/yr
Impervious Area	1,385.37	53,378.31	2,147.32	2,050,943.31
Non Impervious Area	3,242.71	72,117.87	1,167.38	619,130.62
Total	4,628.08	125,496.18	3,314.70	2,670,073.93

Existing BMP Reductions	TN lbs/yr	TP lbs/yr	TSS lbs/yr
	3,409.06	179.09	176,816.92
Total	122,087.12	3,135.61	2,493,257.01

Required Reductions

TN lbs/yr	TP lbs/yr	TSS lbs (10%)
3,663	157	249,326

Section E

BMPs to Achieve the Minimum Required Reductions


BMPs to Achieve the Minimum Required Reductions

The Township has chosen multiple projects to meet the 488,499 pounds of sediment per year required reduction. For pollutant reduction calculations, the DEP Simplified Method was utilized to remain consistent with how the baseline loading was determined.

Manheim Township Proposed BMPs:

Name	TN (lbs)	TP (lbs)	TSS (lbs)
Landis Woods	101	91	60,139
RLPS	155	141	92,902
Stoner Park	92	84	55,202
Grandview Chase	139	126	83,028
Stonehenge Linear Park	153	139	91,555
Wetherburn Commons	165	150	98,736
Stoner Park	80	2	1,090
Overlook Community Campus	360	8	5,945
Total	1,245	741	488,597

A BMP location map and summary of each project is located within this section. The proposed BMPs demonstrate that the Township is proposing to meet 100% of the required sediment goal.



Landis Woods Stream Restoration

BEST MANAGEMENT PRACTICE (BMP) TYPE SELECTION

Stream Restoration

DESCRIPTION An annual mass nutrient and sediment reduction credit for qualifying stream restoration practices that prevent channel or bank erosion that otherwise would be delivered downstream from an actively enlarging or incising urban stream. Applies to 0 to 3rd order streams that are not tidally influenced. If one of the protocols is cited and pounds are reported, then the mass reduction is received for the protocol.

WHEN SELECTING BMP TYPE "STREAM RESTORATION", PLEASE PROVIDE ANTICIPATED LENGTH OF STREAM RESTORATION TO OCCUR

1,340 FT

POLLUTANT TYPE	<u>Total Nitrogen</u> (TN)	<u>Total Phosphorus</u> (TP)	<u>Total Suspended Solids,</u> <u>Sediments (TSS)</u>
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BMP REMOVAL EFFICIENCY FOR EACH POLLUTANT TYPE (%)

0.075 (lbs/ft/yr)	0.068 (lbs/ft/yr)	44.88 (lbs/ft/yr)
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ESTIMATED DRAINAGE AREA TO SELECTED BMP TYPE (Acres)

ESTIMATED POLLUTANT LOADING FROM ESTIMATED DRAINAGE AREA (lbs/year)

N/A	N/A	N/A
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LAND COVER DESCRIPTION LAND COVER BREAKDOWN FOR DRAINAGE AREA (%)

Developed Impervious	Developed Pervious	Undeveloped
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ESTIMATED POLLUTANT LOADING REDUCTION REMOVAL (lbs/year)

101	91	60,139
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ESTIMATED CONSTRUCTION COST OF SELECTED BMP TYPE

\$335,000

ESTIMATED CONSTRUCTION The cost provided above for the selected BMP Type is provided as a general reference for MS4 COST DETAILS planning purposes. Actual construction costs will vary.

The estimated construction cost assumes that Stream Restoration costs \$ 250.00 per every one (1) linear foot. It is anticipated that approximately fifty (50) linear feet (LF) will be needed to treat one (1) acre of contributory drainage area.

ADD 25% FOR PROJECT RELATED EXPENSES

\$418,750

ADDITIONAL COMMENTS: *The estimated construction cost listed above represents the cost of the proposed BMP only. Additional costs for the overall project should be considered.*



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RLPS Stream Restoration

**BEST MANAGEMENT PRACTICE (BMP)
TYPE SELECTION**

Stream Restoration

DESCRIPTION *An annual mass nutrient and sediment reduction credit for qualifying stream restoration practices that prevent channel or bank erosion that otherwise would be delivered downstream from an actively enlarging or incising urban stream. Applies to 0 to 3rd order streams that are not tidally influenced. If one of the protocols is cited and pounds are reported, then the mass reduction is received for the protocol.*

WHEN SELECTING BMP TYPE "STREAM RESTORATION", PLEASE PROVIDE ANTICIPATED LENGTH OF STREAM RESTORATION TO OCCUR

2,070 FT

POLLUTANT TYPE	<u>Total Nitrogen</u> (TN)	<u>Total Phosphorus</u> (TP)	<u>Total Suspended Solids,</u> <u>Sediments (TSS)</u>
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BMP REMOVAL EFFICIENCY FOR EACH POLLUTANT TYPE (%)

	0.075 (lbs/ft/yr)	0.068 (lbs/ft/yr)	44.88 (lbs/ft/yr)
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ESTIMATED DRAINAGE AREA TO SELECTED BMP TYPE (Acres)

ESTIMATED POLLUTANT LOADING FROM ESTIMATED DRAINAGE AREA (lbs/year)

	N/A	N/A	N/A
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LAND COVER DESCRIPTION
LAND COVER BREAKDOWN FOR DRAINAGE AREA (%)

<u>Developed</u> <u>Impervious</u>	<u>Developed</u> <u>Pervious</u>	<u>Undeveloped</u>
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ESTIMATED POLLUTANT LOADING REDUCTION REMOVAL (lbs/year)

	155	141	92,902
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ESTIMATED CONSTRUCTION COST OF SELECTED BMP TYPE

\$517,500

ESTIMATED CONSTRUCTION COST DETAILS *The cost provided above for the selected BMP Type is provided as a general reference for MS4 planning purposes. Actual construction costs will vary.*

The estimated construction cost assumes that Stream Restoration costs \$ 250.00 per every one (1) linear foot. It is anticipated that approximately fifty (50) linear feet (LF) will be needed to treat one (1) acre of contributory drainage area.

ADD 25% FOR PROJECT RELATED EXPENSES

\$646,875

ADDITIONAL COMMENTS: *The estimated construction cost listed above represents the cost of the proposed BMP only. Additional costs for the overall project should be considered.*



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Stoner Park Stream Restoration

**BEST MANAGEMENT PRACTICE (BMP)
TYPE SELECTION**

Stream Restoration

DESCRIPTION *An annual mass nutrient and sediment reduction credit for qualifying stream restoration practices that prevent channel or bank erosion that otherwise would be delivered downstream from an actively enlarging or incising urban stream. Applies to 0 to 3rd order streams that are not tidally influenced. If one of the protocols is cited and pounds are reported, then the mass reduction is received for the protocol.*

WHEN SELECTING BMP TYPE "STREAM RESTORATION", PLEASE PROVIDE ANTICIPATED LENGTH OF STREAM RESTORATION TO OCCUR

1,230 FT

POLLUTANT TYPE	<u>Total Nitrogen</u> (TN)	<u>Total Phosphorus</u> (TP)	<u>Total Suspended Solids, Sediments (TSS)</u>
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BMP REMOVAL EFFICIENCY FOR EACH POLLUTANT TYPE (%)

	0.075 (lbs/ft/yr)	0.068 (lbs/ft/yr)	44.88 (lbs/ft/yr)
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ESTIMATED DRAINAGE AREA TO SELECTED BMP TYPE (Acres)

ESTIMATED POLLUTANT LOADING FROM ESTIMATED DRAINAGE AREA (lbs/year)

N/A	N/A	N/A
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LAND COVER DESCRIPTION
LAND COVER BREAKDOWN FOR DRAINAGE AREA (%)

<u>Developed</u> <u>Impervious</u>	<u>Developed</u> <u>Pervious</u>	<u>Undeveloped</u>

ESTIMATED POLLUTANT LOADING REDUCTION REMOVAL (lbs/year)

92	84	55,202
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ESTIMATED CONSTRUCTION COST OF SELECTED BMP TYPE

\$307,500

ESTIMATED CONSTRUCTION COST DETAILS *The cost provided above for the selected BMP Type is provided as a general reference for MS4 planning purposes. Actual construction costs will vary.*

The estimated construction cost assumes that Stream Restoration costs \$ 250.00 per every one (1) linear foot. It is anticipated that approximately fifty (50) linear feet (LF) will be needed to treat one (1) acre of contributory drainage area.

ADD 25% FOR PROJECT RELATED EXPENSES

\$384,375

ADDITIONAL COMMENTS: *The estimated construction cost listed above represents the cost of the proposed BMP only. Additional costs for the overall project should be considered.*



C.S. Davidson, Inc.

Excellence in Civil Engineering

Grandview Chase Stream Restoration

**BEST MANAGEMENT PRACTICE (BMP)
TYPE SELECTION**

Stream Restoration

DESCRIPTION *An annual mass nutrient and sediment reduction credit for qualifying stream restoration practices that prevent channel or bank erosion that otherwise would be delivered downstream from an actively enlarging or incising urban stream. Applies to 0 to 3rd order streams that are not tidally influenced. If one of the protocols is cited and pounds are reported, then the mass reduction is received for the protocol.*

WHEN SELECTING BMP TYPE "STREAM RESTORATION", PLEASE PROVIDE ANTICIPATED LENGTH OF STREAM RESTORATION TO OCCUR

1,850 FT

POLLUTANT TYPE	Total Nitrogen (TN)	Total Phosphorus (TP)	Total Suspended Solids, Sediments (TSS)
----------------	------------------------	--------------------------	--------------------------------------------

BMP REMOVAL EFFICIENCY FOR EACH POLLUTANT TYPE (%)

	0.075 (lbs/ft/yr)	0.068 (lbs/ft/yr)	44.88 (lbs/ft/yr)
--	----------------------	----------------------	----------------------

ESTIMATED DRAINAGE AREA TO SELECTED BMP TYPE (Acres)

ESTIMATED POLLUTANT LOADING FROM ESTIMATED DRAINAGE AREA (lbs/year)

	N/A	N/A	N/A
--	-----	-----	-----

LAND COVER DESCRIPTION
LAND COVER BREAKDOWN FOR DRAINAGE AREA (%)

<u>Developed</u> <u>Impervious</u>	<u>Developed</u> <u>Pervious</u>	<u>Undeveloped</u>
---------------------------------------	-------------------------------------	--------------------

ESTIMATED POLLUTANT LOADING REDUCTION REMOVAL (lbs/year)

	139	126	83,028
--	-----	-----	--------

ESTIMATED CONSTRUCTION COST OF SELECTED BMP TYPE

\$462,500

ESTIMATED CONSTRUCTION COST DETAILS *The cost provided above for the selected BMP Type is provided as a general reference for MS4 planning purposes. Actual construction costs will vary.*

The estimated construction cost assumes that Stream Restoration costs \$ 250.00 per every one (1) linear foot. It is anticipated that approximately fifty (50) linear feet (LF) will be needed to treat one (1) acre of contributory drainage area.

ADD 25% FOR PROJECT RELATED EXPENSES

\$578,125

ADDITIONAL COMMENTS: *The estimated construction cost listed above represents the cost of the proposed BMP only. Additional costs for the overall project should be considered.*



C.S. Davidson, Inc.

Excellence in Civil Engineering

Stonehenge Linear Park Stream Restoration

**BEST MANAGEMENT PRACTICE (BMP)
TYPE SELECTION**

Stream Restoration

DESCRIPTION *An annual mass nutrient and sediment reduction credit for qualifying stream restoration practices that prevent channel or bank erosion that otherwise would be delivered downstream from an actively enlarging or incising urban stream. Applies to 0 to 3rd order streams that are not tidally influenced. If one of the protocols is cited and pounds are reported, then the mass reduction is received for the protocol.*

WHEN SELECTING BMP TYPE "STREAM RESTORATION", PLEASE PROVIDE ANTICIPATED LENGTH OF STREAM RESTORATION TO OCCUR

2,040 FT

POLLUTANT TYPE	<u>Total Nitrogen</u> (TN)	<u>Total Phosphorus</u> (TP)	<u>Total Suspended Solids, Sediments (TSS)</u>
----------------	-------------------------------	---------------------------------	----------------------------------------------------

BMP REMOVAL EFFICIENCY FOR EACH POLLUTANT TYPE (%)

	0.075 (lbs/ft/yr)	0.068 (lbs/ft/yr)	44.88 (lbs/ft/yr)
--	----------------------	----------------------	----------------------

ESTIMATED DRAINAGE AREA TO SELECTED BMP TYPE (Acres)

ESTIMATED POLLUTANT LOADING FROM ESTIMATED DRAINAGE AREA (lbs/year)

N/A	N/A	N/A
-----	-----	-----

LAND COVER DESCRIPTION
LAND COVER BREAKDOWN FOR DRAINAGE AREA (%)

<u>Developed</u> <u>Impervious</u>	<u>Developed</u> <u>Pervious</u>	<u>Undeveloped</u>

ESTIMATED POLLUTANT LOADING REDUCTION REMOVAL (lbs/year)

153	139	91,555
-----	-----	--------

ESTIMATED CONSTRUCTION COST OF SELECTED BMP TYPE

\$510,000

ESTIMATED CONSTRUCTION COST DETAILS *The cost provided above for the selected BMP Type is provided as a general reference for MS4 planning purposes. Actual construction costs will vary.*

The estimated construction cost assumes that Stream Restoration costs \$ 250.00 per every one (1) linear foot. It is anticipated that approximately fifty (50) linear feet (LF) will be needed to treat one (1) acre of contributory drainage area.

ADD 25% FOR PROJECT RELATED EXPENSES

\$637,500

ADDITIONAL COMMENTS: *The estimated construction cost listed above represents the cost of the proposed BMP only. Additional costs for the overall project should be considered.*



C.S. Davidson, Inc.

Excellence in Civil Engineering

Wetherburn Commons Stream Restoration

**BEST MANAGEMENT PRACTICE (BMP)
TYPE SELECTION**

Stream Restoration

DESCRIPTION *An annual mass nutrient and sediment reduction credit for qualifying stream restoration practices that prevent channel or bank erosion that otherwise would be delivered downstream from an actively enlarging or incising urban stream. Applies to 0 to 3rd order streams that are not tidally influenced. If one of the protocols is cited and pounds are reported, then the mass reduction is received for the protocol.*

WHEN SELECTING BMP TYPE "STREAM RESTORATION", PLEASE PROVIDE ANTICIPATED LENGTH OF STREAM RESTORATION TO OCCUR

2,200 FT

POLLUTANT TYPE	<u>Total Nitrogen</u> (TN)	<u>Total Phosphorus</u> (TP)	<u>Total Suspended Solids, Sediments (TSS)</u>
----------------	-------------------------------	---------------------------------	----------------------------------------------------

BMP REMOVAL EFFICIENCY FOR EACH POLLUTANT TYPE (%)

	0.075 (lbs/ft/yr)	0.068 (lbs/ft/yr)	44.88 (lbs/ft/yr)
--	----------------------	----------------------	----------------------

ESTIMATED DRAINAGE AREA TO SELECTED BMP TYPE (Acres)

ESTIMATED POLLUTANT LOADING FROM ESTIMATED DRAINAGE AREA (lbs/year)

	N/A	N/A	N/A
--	-----	-----	-----

LAND COVER DESCRIPTION
LAND COVER BREAKDOWN FOR DRAINAGE AREA (%)

	<u>Developed</u> <u>Impervious</u>	<u>Developed</u> <u>Pervious</u>	<u>Undeveloped</u>
--	---------------------------------------	-------------------------------------	--------------------

ESTIMATED POLLUTANT LOADING REDUCTION REMOVAL (lbs/year)

	165	150	98,736
--	-----	-----	--------

ESTIMATED CONSTRUCTION COST OF SELECTED BMP TYPE

\$550,000

ESTIMATED CONSTRUCTION *The cost provided above for the selected BMP Type is provided as a general reference for MS4 COST DETAILS planning purposes. Actual construction costs will vary.*

The estimated construction cost assumes that Stream Restoration costs \$ 250.00 per every one (1) linear foot. It is anticipated that approximately fifty (50) linear feet (LF) will be needed to treat one (1) acre of contributory drainage area.

ADD 25% FOR PROJECT RELATED EXPENSES

\$687,500

ADDITIONAL COMMENTS: *The estimated construction cost listed above represents the cost of the proposed BMP only. Additional costs for the overall project should be considered.*



C.S. Davidson, Inc.

Excellence in Civil Engineering

Stoner Park Basin Retrofit

BEST MANAGEMENT PRACTICE (BMP) TYPE SELECTION

Bioretention - Raingarden (A/B Soils w/o Underdrain)

DESCRIPTION An excavated pit backfilled with engineered media, topsoil, mulch, and vegetation. These are planting areas installed in shallow basins in which the storm water runoff is temporarily ponded and then treated by filtering through the bed components, and through biological and biochemical reactions within the soil matrix and around the root zones of the plants. This BMP has no underdrain and is in A or B soil.

WHEN SELECTING BMP TYPE "STREAM RESTORATION", PLEASE PROVIDE ANTICIPATED LENGTH OF STREAM RESTORATION TO OCCUR

POLLUTANT TYPE	<u>Total Nitrogen</u> (TN)	<u>Total Phosphorus</u> (TP)	<u>Total Suspended Solids,</u> <u>Sediments (TSS)</u>
----------------	-------------------------------	---------------------------------	----------------------------------------------------------

BMP REMOVAL EFFICIENCY FOR EACH POLLUTANT TYPE (%)

80.000	85.000	90.00
--------	--------	-------

ESTIMATED DRAINAGE AREA TO SELECTED BMP TYPE (Acres)

4.51

ESTIMATED POLLUTANT LOADING FROM ESTIMATED DRAINAGE AREA (lbs/year)

107	2	1,364
-----	---	-------

CURRENT REDUCTION AS ABOVE GROUND DRAINAGE BASIN

5	0.2	136
---	-----	-----

LAND COVER DESCRIPTION
LAND COVER BREAKDOWN FOR DRAINAGE AREA (%)

LAND COVER DESCRIPTION	<u>Developed</u> <u>Impervious</u>	<u>Developed</u> <u>Pervious</u>	<u>Undeveloped</u>
	8%	92%	0%

ESTIMATED POLLUTANT LOADING REDUCTION REMOVAL (lbs/year)

80	2	1,090
----	---	-------

ESTIMATED CONSTRUCTION COST OF SELECTED BMP TYPE

\$45,100

ESTIMATED CONSTRUCTION The cost provided above for the selected BMP Type is provided as a general reference for MS4 COST DETAILS planning purposes. Actual construction costs will vary.

The estimated construction cost assumes Bio-retention basins / Raingardens will cost \$ 10,000 per every one (1) acre of contributory drainage area.

ADD 25% FOR PROJECT RELATED EXPENSES

\$56,375

ADDITIONAL COMMENTS: The estimated construction cost listed above represents the cost of the proposed BMP only. Additional costs for the overall project should be considered.



C.S. Davidson, Inc.

Excellence in Civil Engineering

Overlook Community Campus Basin Retrofit

**BEST MANAGEMENT PRACTICE (BMP)
TYPE SELECTION**

Bioretention - Raingarden (A/B Soils w/o Underdrain)

DESCRIPTION An excavated pit backfilled with engineered media, topsoil, mulch, and vegetation. These are planting areas installed in shallow basins in which the storm water runoff is temporarily ponded and then treated by filtering through the bed components, and through biological and biochemical reactions within the soil matrix and around the root zones of the plants. This BMP has no underdrain and is in A or B soil.

WHEN SELECTING BMP TYPE "STREAM RESTORATION", PLEASE PROVIDE ANTICIPATED LENGTH OF STREAM RESTORATION TO OCCUR

POLLUTANT TYPE	<u>Total Nitrogen</u> (TN)	<u>Total Phosphorus</u> (TP)	<u>Total Suspended Solids,</u> <u>Sediments (TSS)</u>
BMP REMOVAL EFFICIENCY FOR EACH POLLUTANT TYPE (%)	80.000	85.000	90.00
ESTIMATED DRAINAGE AREA TO SELECTED BMP TYPE (Acres)		19.448	
ESTIMATED POLLUTANT LOADING FROM ESTIMATED DRAINAGE AREA (lbs/year)	480	10	7,432
CURRENT REDUCTION AS ABOVE GROUND DRAINAGE BASIN	24	1	743
LAND COVER DESCRIPTION	<u>Developed</u> <u>Impervious</u>	<u>Developed</u> <u>Pervious</u>	<u>Undeveloped</u>
LAND COVER BREAKDOWN FOR DRAINAGE AREA (%)	15%	85%	0%
ESTIMATED POLLUTANT LOADING REDUCTION REMOVAL (lbs/year)	360	8	5,945

ESTIMATED CONSTRUCTION COST OF SELECTED BMP TYPE \$194,500

ESTIMATED CONSTRUCTION The cost provided above for the selected BMP Type is provided as a general reference for MS4 COST DETAILS planning purposes. Actual construction costs will vary.

The estimated construction cost assumes Bio-retention basins / Raingardens will cost \$ 10,000 per every one (1) acre of contributory drainage area.

ADD 25% FOR PROJECT RELATED EXPENSES \$243,125

ADDITIONAL COMMENTS: The estimated construction cost listed above represents the cost of the proposed BMP only. Additional costs for the overall project should be considered.



C.S. Davidson, Inc.

Excellence in Civil Engineering

Section F

Funding Mechanisms

Funding Mechanisms

The cost to complete the projects outlined in Section D is estimated to be \$3,652,625. This cost breaks down to \$730,525 annually for the five years of the permit term.

The Township does plan to explore grant opportunities to help defray this cost. In the event grant funding is not available, the Township plans to use money from a combination of its General Fund Balance and its Capital Reserve Account to fund the project. The Township is also considering implementing a stormwater management user fee to fund this effort.

Section G

BMP Operation and Maintenance (O&M)

BMP Operation and Maintenance (O&M)

The responsibility of the long-term operation and maintenance of the proposed projects will be Manheim Township's. The Township will perform biannual inspections for the first three years and annual inspections for subsequent years. Additional inspections should occur following large storm events.

The Township will utilize the following operation and maintenance plans:

Stream Restorations

Stream restorations will experience a five year initial monitoring period to ensure proper vegetation and stability in addition to ensuring invasive species are not established. Following the initial five-year monitoring period, a regular maintenance plan will be followed. The following normal Operations and Maintenance of the project will be required to allow the system to develop into and maintain its full ecological potential:

- Avoid encroachment into the proposed floodplain area. Encroachments will detract from the functions and services of the wetlands and stream system.
- Manage any invasive species that may try to out-compete the proposed native riparian planting community until viable successional processes can naturally be sustained. Invasive species control should be implemented at a minimum one time per year using the appropriate methods described below based on site conditions.
- Visually inspect the floodplain and channel. Appropriate corrective measures shall be identified by a qualified professional to address any noted instabilities. The Township shall be responsible for any necessary corrective measures.

Pond Retrofits

Pond Retrofits will experience a three year initial monitoring period to ensure proper vegetation and stability in addition to ensuring invasive species are not established. Following the initial three-year monitoring period, a regular maintenance plan will be followed. The following normal Operations and Maintenance of the project will be required to allow the system to develop into and maintain its full ecological potential:

- Manage any invasive species that may try to out-compete the proposed native planting community until viable successional processes can naturally be sustained. Invasive species control should be implemented at a minimum one time per year using the appropriate methods described below based on site conditions.
- Visually inspect the pond bottom, side slopes, berm, spillway, and outlet control structure. Appropriate corrective measures shall be identified by a qualified professional to address any noted instabilities. The Township shall be responsible for any necessary corrective measures.

Appendix I

Proof of Publication

PROOF OF PUBLICATION NOTICE IN

State of Pennsylvania}
} ss:
County of Lancaster}

An Affiant of the County and State aforesaid, being duly sworn, deposes and says that the LNP, 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:

16TH AND 19TH DAY OF JULY 2017

Affiant further deposes that he/she is the Clerk duly authorized by the LNP Media Group, Inc., a corporation, publisher of said LNP, 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.

PUBLIC NOTICE
Manheim Township has created a Pollutant Reduction Plan (PRP) and Lititz Run TMDL Plan (LRTMDLP) to meet the requirements of its Municipal Separate Storm Sewer (MS4) permit with the Department of Environmental Protection (DEP). The PRP and LRTMDLP include estimates of the existing pollutants that are discharged to streams within the Township and the associated reductions that are required by DEP. The plans also identify proposed stormwater improvements needed to meet these pollutant reduction requirements. Possible funding sources and ongoing operation and maintenance responsibilities for the proposed stormwater improvements are included in the PRP and LRTMDLP. A draft of the PRP and LRTMDLP will be available for public inspection at the Township office located at 1840 Municipal Drive, Lancaster, Mondays through Fridays between the hours of 8 am and 5 pm. An initial presentation of the plans will be offered at the Commissioners meeting on July 24, 2017, and the public review period will begin on July 25, 2017, and will continue for 30 days until August 24, 2017. During this period, comments will be accepted verbally at the Commissioner's meeting on August 14, 2017, or can be submitted in writing to the Township office or via email to pmellott@manheimtownship.org.

Carole A. Hood

(Affiant's Signature)

COPY OF NOTICE OF PUBLICATION

Sworn and subscribed to before me this
19TH DAY OF JULY 2017 -

Jeffrey J. Hollinger

Notary Public

COMMONWEALTH OF PENNSYLVANIA

NOTARIAL SEAL
Jeffrey J. Hollinger, Notary Public
City of Lancaster, Lancaster County
My Commission Expires June 10, 2021
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

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The "Other" Manheim Township/Borough

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"E" Services

ON-LINE RECREATION Registration

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NEWS & ANNOUNCEMENTS [view all](#)

Manheim Township's Pollutant Reduction and Lititz Run TMDL Plan The public review period for the Township's Pollutant Reduction Plan (PRP) and the Lititz Run TMDL Plan (LRTMDLP) begins July 25, 2017... [Read on...](#)

The State of the Township July 2017 By Dave Heck, President of the Manheim Township Board of Commissioners [Read on...](#)

Manheim Township's 2017 National Night Out Event! Please join us Tuesday, August 1 from 6 to 8 p.m. at the Overlook Community Campus for an evening of fun and fellowship! There will be food, games and other fun family activities. [Read on...](#)

July Issue of "In the Stacks" now available! Check out programs and events coming to the Library in July. [Read on...](#)

NOW HIRING MANHEIM TOWNSHIP POLICE OFFICERS! If you are interested in improving our community by becoming a Manheim Township Police Officer... [Read on...](#)

CALENDAR [view all](#)

Wed, Jul. 26
Public Library Foundation Board

Tue, Aug. 1
Parks and Recreation Board - Rescheduled

Thu, Aug. 3
Community Life Task Force

FAQs [view all](#)

- Do you have a mosquito complaint?
- What is an F.A.Q.?
- Can I sign up for news and alert information?
- Where do I go to request a public record or document?
- What facilities and amenities are available in Manheim Township?
- Is there a Township calendar available on the website?
- Am I able to search the website for information?
- Are there any job openings at Manheim Township?
- How do I submit a comment or suggestion?
- How long do I have to remove snow?

QUICK LINKS [view all](#)

- Emergency Preparedness
- Job Postings - Employment
- Schedule of Fees
- Right to Know - Open Records Request Information

10:29 AM 7/26/2017

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- The "Other" Manheim Township/Borough

Emergency Preparedness

- "E" Services
- ON-LINE RECREATION Registration

Illicit Discharge Reporting

- Code of Ordinances (NO Planning & Zoning)
- Maps and Directions
- Volunteers
- Employee Intranet

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News and Information (Home Page)

Posted on: July 21, 2017

Manheim Township's Pollutant Reduction and Lititz Run TMDL Plan

PUBLIC NOTICE - Manheim Township has created a Pollutant Reduction Plan (PRP) and Lititz Run TMDL Plan (LRTMDLP) to meet the requirements of its Municipal Separate Storm Sewer (MS4) permit with the Department of Environmental Protection (DEP). The PRP and LRTMDLP include estimates of the existing pollutants that are discharged to streams within the Township and the associated reductions that are required by DEP. The plans also identify proposed stormwater improvements needed to meet these pollutant reduction requirements. Possible funding sources and ongoing operation and maintenance responsibilities for the proposed stormwater improvements are included in the PRP and LRTMDLP. A draft of the PRP and LRTMDLP will be available for public inspection at the Township office located at 1840 Municipal Drive, Lancaster, Mondays through Fridays between the hours of 8 am and 5 pm. An initial presentation of the plans will be offered at the Commissioners meeting on July 24, 2017 and the public review period will begin on July 25, 2017 and will continue for 30 days until August 24, 2017. During this period, comments will be accepted verbally at the Commissioner's meeting on August 14, 2017 or can be submitted in writing to the Township office or via email to pmellott@manheimtownship.org.

To view the draft plan, [click here](#).

Next

The State of the Township July 2017

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3:56 PM 7/25/2017

Appendix II

Public Comments/Record of Consideration

**MINUTES OF THE MEETING OF THE
MANHEIM TOWNSHIP BOARD OF COMMISSIONERS
MONDAY, JULY 24, 2017 – 5:30 P.M.**

Note: The recording system malfunctioned during the meeting. Only small portions of the meeting were audible on the recording.

Roll Call: The meeting of the Manheim Township Board of Commissioners was held at 5:30 p.m., Monday, July 24, 2017 in the Municipal Building. Members present were: Commissioners Heck, Hodge, Kling and Mecum, and Secretary-Manager Sean P. Molchany. Commissioner DiMeo was absent. President Heck led all in the pledge of allegiance to the flag of the United States of America.

Approval of Minutes: Commissioner Mecum moved to approve the minutes of the July 10, 2017 meeting. Seconded by Mr. Kling. President Heck asked if there were any questions or comments from the Board or the audience. There were none. Motion carried 4 - 0.

Payment of Bills: Commissioner Hodge moved to approve the July 24, 2017 disbursements and to fund the appropriate accounts for the disbursements. Commissioner Hodge presented bills for the period ending July 24, 2017 from the General Fund in the amount of \$149,292.17, from the Golf Course Fund in the amount of \$21,672.45, from the Capital Reserve Fund in the amount of \$159,044.65, from the Parks Capital Fund in the amount of \$14,767.71, from the Highway Aid Fund in the amount of \$17,688.37, and from the Escrow Fund in the amount of \$28,746.92 for a Grand Total of \$391,212.27. Commissioner Hodge explained the large payments this month were for multiple vehicle leases, Township engineering projects, exterior staining, escrow refund to John Frye and the electric bill. Seconded by Mr. Mecum. President Heck asked if there were any questions or comments from the Board or the audience. There were none. Motion carried 4 - 0.

Department Reports/Announcements:

President Heck announced the Commissioners had an executive session prior to the meeting to discuss personnel and legal matters.

Public Hearings/Presentations/Appointments:

The Township Engineer, Jeff Shue with CS Davidson, presented the Manheim Township's Pollutant Reduction Plan (PRP) and Lititz Run TMDL Plan (LRTMDLP).

The current MS-4 regulations require six minimum control measures. The Township has been meeting these requirements, such as Stormwater management for new developments, etc. A new Federal Government regulation deals with a combined pollution reduction plan. To meet these new regulations, the Township must create and implement a pollution reduction plan for all effected watersheds within the

COMMISSIONERS MEETING MINUTES – MONDAY, JULY 24, 2017

Township. There are three watersheds located within Manheim Township; Miller's Run – Little Conestoga Creek, Lower Conestoga River, and Lititz Run. The DEP has identified Lititz Run as a TMDL stream which means there is an additional regulation on Lititz Run. Warwick Township and Lititz Borough are asking the DEP to recognize that a majority of the required improvements have already been done. DEP does recognize that very little of Lititz Run flows through the Township and this portion is located within our Agricultural Preserve area. Additionally the Township has joined with the other municipalities to do a joint study of Lititz Run. This means the Township's proposed plan will not have to address Lititz Run.

The requirements for this plan must identify and classify impaired streams, include all effected water sheds within the Township, and implement a plan to reduce the amount of silt entering the streams and ultimately depositing in the Chesapeake Bay.

Public participation is also a requirement. Public Notice of this plan and presentation was published in the newspaper and posted on the Township's website. A public comment period will run from July 25 through August 24th and an article on the PRP will be included in September 2017 Township newsletter.

By identifying storm sheds (watersheds flowing to a defined outfall) the Township is able to define/reduce the "planning area" within the Township. The Township is required to inspect and monitor the amount of pollution within these watersheds. The Township is responsible for monitoring over 7,000 acres of the total 12,000 acres of storm shed area. This acreage includes both impervious and non-impervious surfaces. The Township elected to utilize the DEP Simplified Method for calculating the baseline pollution load applicable for the PRP. The Township's new plan reduced the number of acres significantly by eliminating private properties, such as Alcoa, International Papers, Lancaster Oil, Thermacore, etc., and government owned sites, such as LCSWA, PaDOT roadways, Norfolk Southern, Amtrak, Lancaster Airport and the USPS, from the calculation. These properties have their own MS-4 reporting requirements or NPDES requirements so they are not included in the baseline calculations.

The Township calculated the sediment loading, (sediment which goes to the streams from the storm sewer within the Township) to arrive at a baseline of pollution flowing to the streams. Existing land use allows the Township to define the baseline of pollution in the Township which is flowing to the streams. When this over 7,000 acres is entered into the models given to the Township from the DEP, it calculates to 4,982,349.52 pounds per year of silt and sediment polluting the streams through the storm sewer.

Currently there are 331 BMP's (BMP's are storm-water basins, underground storage facilities, etc.) within the Township. These are documentable, Township approved, areas which are reducing sediment as designed. The Township is further responsible for monitoring all 331 BMP's within in the township to insure they

COMMISSIONERS MEETING MINUTES – MONDAY, JULY 24, 2017

continue functioning as designed. The Township took a baseline reduction credit for the numerous existing BMPs within the planning area. This equates to over 600,000 lbs. of sediment a year which is prevented from reaching the streams. This number creates the baseline. The Township's target is the reduction of an additional 4,900,000 pounds per year.

In order to achieve the minimum required reduction of 425,506 pounds of sediment per year, the Township has proposed BMP's for the following areas, Landis Woods, RLPS, Stoner Park, Grandview Chase, Stonehenge Linear Park, Wetherburn Commons, Stoner Park and Overlook Community Campus. This would include the retrofit of the basins at Stoner Park and Overlook Community Campus and stream restoration at the other six sites. Stream restoration projects are the most efficient way to meet this requirement. The implementation of the proposed BMP's demonstrates the Township is prepared to meet 105% of the required sediment goal, exceeding the calculated goal of 438,059 pounds of sediment per year by 22,925 pounds.

The total five-year project implementation cost is projected to be \$3,441,750 with an anticipated annual cost of \$688,350. The Township will explore grant opportunities to help defray this cost.

Old Business: There was no old business this evening.

New Business:

Consent Agenda: Commissioner Kling moved to approve the following items in the Consent Agenda which consisted of two financial security reductions and three extension of time requests. Seconded by Mr. Mecum. President Heck asked if there were any questions or comments from the Board or the audience. There were no questions. Motion carried 4 - 0.

Belmont Planned Commercial Development (Commercial Area) - Final Subdivision and Land Development Plan, Fruitville Pike, Zoned R-3, Financial Security Reduction #10

Authorized the partial financial security reduction as permitted by Section 509 of the Pennsylvania Municipalities Planning Code in the amount of Nine Hundred Thirty Thousand One Hundred Forty Nine and 00/100 (\$930,149.00) dollars which represents the cost associated with a portion of the site improvements constructed at the time of the current request and as inspected by the Township Engineer. The amount of financial security being retained by the Township for site improvements less the partial financial security reduction is Nine Million Nine Hundred Forty Thousand Ninety Three and 64/100 (\$9,940,093.64) dollars.

COMMISSIONERS MEETING MINUTES – MONDAY, JULY 24, 2017

Belmont Planned Commercial Development (Residential Area) - Final Subdivision and Land Development Plan, Fruitville Pike, Zoned R-3, Financial Security Reduction #7

Authorized the partial financial security reduction as permitted by Section 509 of the Pennsylvania Municipalities Planning Code in the amount of Ten Thousand Eight Hundred Ninety and 00/100 (\$10,890.00) dollars which represents the cost associated with a portion of the site improvements constructed at the time of the current request and as inspected by the Township Engineer. The amount of financial security being retained by the Township for site improvements less the partial financial security reduction is One Million Three Hundred Seventeen Thousand Four Hundred Thirty Four and 94/100 (\$1,317,434.94) dollars.

Chapman Ford – Preliminary/Final Lot Add-On Plan, 1485 Manheim Pike, Zoned B-4 & D-R Overlay, Time Extension

Approved the time extension request for Chapman Ford Preliminary/Final Lot add-On Plan for action by the Manheim Township Commissioners. The request will extend the time period in which to act on the plan to October 20, 2017.

Overlook Town Center – Final Phase II & III Subdivision and Land Development Plan, Grand Street and Town Boulevard, Zoned B-3 & D-R Overlay, Time Extension

Approved the time extension request for Overlook Town Center Final Phase II & III Subdivision and Land Development Plan for action by the Manheim Township Commissioners. The request will extend the time period in which to act on the plan to November 15, 2017.

Lancaster KIA – Preliminary/Final Land Development Plan, 1046 Manheim Pike, Zoned I-2, T-6 Overlay, Time Extension

Approved the time extension request for Lancaster KIA Preliminary/Final Land Development Plan for action by the Manheim Township Commissioners. The request will extend the time period in which to act on the plan to September 20, 2017.

Resolutions:

Resolution 2017 – 39 Budget Amendment – Human Resource Director & Code Compliance Staff Positions

Commissioner Mecum moved to adopt Resolution 2017 – 39 authorizing amendments and supplemental appropriations of encumbered and unencumbered funds within various budgeted line items of the 2017 General Fund regarding the Human Resource Director and Code Compliance staff positions. Seconded by Mr.

COMMISSIONERS MEETING MINUTES – MONDAY, JULY 24, 2017

Hodge. President Heck asked if there were any questions or comments from the Board or the audience. There were none. Motion carried 4 - 0.

Ordinances: There were no Ordinances this evening.

Motions/Decisions:

Motion: Road Closure for A Race to Remember 5K Walk/Run on Saturday, November 11, 2017 at Reidenbaugh Elementary School, portions of Snyder Road, Brighton Avenue, Suffolk Drive, Wheatfield Drive and Dorset Street

Commissioner Hodge moved to approve the temporary road closure for the Race to Remember 5K Walk/Run on Saturday, November 11, 2017, at Reidenbaugh Elementary School, portions of Snyder Road, Brighton Avenue, Suffolk Drive Wheatfield Drive and Dorset Street from approximately 8:30 a.m. to 11:00 a.m., and authorize proper Township officials to supply appropriate traffic control items for the event. Seconded by Mr. Mecum. President Heck asked if there were any questions or comments from the Board or the audience. There were none. Motion carried 4 - 0.

Motion: Settlements East – Preliminary Subdivision and Land Development Plan, Landis Valley Road, Zoned R-2

Commissioner Mecum moved to approve the Settlements East Preliminary Subdivision and Land Development Plan and the requested modifications. The approval is contingent upon the owner/applicant's written acceptance of the conditions outlined in the Township Review Letter, dated July 24, 2017 and subject to the submission of information meeting those conditions. Seconded by Mr. Kling. President Heck asked if there were any questions or comments from the Board or the audience. There were none. Motion carried 4 - 0.

Motion: Stonehenge Reserve – Subdivision/Land Development Ordinance, 632 & 662 Integrity Drive, Zoned R-1, Modification Requests

Commissioner Kling moved to deny the following modifications in accordance with Section 203 of the Subdivision and Land Development Ordinance:

- Section 802.1.C: Preliminary and Final Plan Approval Condition for the Requirement of Sidewalk Installation
- Section 805: Sidewalks to be Installed per Township Requirements

Seconded by Mr. Mecum. President Heck asked if there were any questions or comments from the Board or the audience. Mark Will, with JPM Development Group, presented arguments to accept the modification requests. He included a petition signed by of nineteen Stonehenge Reserve residents asking for the elimination of

COMMISSIONERS MEETING MINUTES – MONDAY, JULY 24, 2017

the sidewalk requirement along 632 & 662 Integrity Drive. Lisa Douglas, Director of Planning and Zoning, presented the Township's position on enforcing the requirement which included the fact that the sidewalk was included on the recorded plan and there is sidewalk throughout the rest of the development. There were no further questions or comments. Motion carried 4 - 0.

Motion: Acceptance of the Staffing for Adequate Fire and Emergency Response (SAFER) Grant

Commissioner Kling moved to approve the acceptance of the Staffing for Adequate Fire and Emergency Response (SAFER) Grant. Seconded by Mr. Hodge. President Heck asked if there were any questions or comments from the Board or the audience. Fire Chief Rick Kane explained his department intends to use the SAFER Grant for the purpose of hiring two firefighter positions, which were not approved by the Board during the 2017 budget hearing. FEMA awarded Manheim Township one of only fifteen hiring grants. This grant will allow the Township to hire these two additional full-time firefighters/EMTs. This will help fill the need for addressing the understaffing at the Southern Fire Station, which is one of the busiest stations in Lancaster County. The grant funds 75% of the salary and benefit package for the first and second year (starting in 2018), and 35% of salary and benefits in the third year. Not till 2021 will the Township assume the full salary and benefit package. Some discussion continued regarding full-time verses part-time employees. There were no further questions or comments. Motion carried 4 - 0.

Acknowledgments: There were no Acknowledgements this evening.

Other Business/Deliberations: There were no other business or deliberations this evening.

Correspondence and Petitions: There was no correspondence or petitions this evening.

Public Comment: There were no public comments this evening.

Adjournment: There being no further business before the Commissioners, Commissioner Mecum moved and Mr. Hodge seconded that the meeting adjourn at 6:17 p.m., with all in favor.

Respectfully submitted,

Sean P. Molchany
Manager-Secretary

**MINUTES OF THE MEETING OF THE
MANHEIM TOWNSHIP BOARD OF COMMISSIONERS
MONDAY, AUGUST 14, 2017 – 5:30 P.M.**

Roll Call: The meeting of the Manheim Township Board of Commissioners was held at 5:33 p.m., Monday, August 14, 2017 in the Municipal Building. Members present were: Commissioners DiMeo, Heck, Hodge, Kling and Mecum, and Secretary -Manager Sean P. Molchany. President Heck led all in the pledge of allegiance to the flag of the United States of America.

Approval of Minutes: Commissioner Mecum moved to approve the minutes of the July 24, 2017 meeting. Seconded by Mr. Hodge. President Heck asked if there were any questions or comments from the Board or the audience. There were none. Motion carried 4-0. Commissioner DiMeo abstained since she was not present at the July 24, 2017 meeting.

Payment of Bills: Commissioner DiMeo moved to approve the August 14, 2017 disbursements and to fund the appropriate accounts for the disbursements. Commissioner DiMeo presented bills for the period ending August 14, 2017 from the General Fund in the amount of \$787,465.62, from the Golf Course Fund in the amount of \$55,160.04, from the Capital Reserve Fund in the amount of \$77,872.90, from the Parks Capital Fund in the amount of \$11,649.45, from the Highway Aid Fund in the amount of \$18,072.74, and from the Escrow Fund in the amount of \$23,802.39 for a Grand Total of \$974,023.14. Commissioner DiMeo explained the large payments this month were for the quarterly workers compensation payment, Department Head Pension Payment (old plan), Neffsville Fire Company's May -July reimbursement, LED replacements for traffic lights, electrical usage, tree trimming service, books and computers for the library, health, life and disability insurance, credit card payment, and the Township engineer. Seconded by Mr. Hodge. President Heck asked if there were any questions or comments from the Board or the audience. There were none. Motion carried unanimously.

Department Reports/Announcements:

Commissioner Mecum shared his ride -along experience with Officer Michael Tropp, Manheim Township Police Department. During the three hour ride-along they responded to three different incidents including an accident on Route 30.

Commissioner Mecum was impressed by the officer's skills in dealing with the different situations and people within those situations.

Commissioner Hodge stated he and Commissioner DiMeo attended the Manheim Township's National Night Out event on August 2nd. Commissioner Hodge felt the event was very well done and he appreciated all the people involved with its planning and execution.

COMMISSIONERS MEETING MINUTES – MONDAY, AUGUST 14, 2017

Commissioner Kling also shared his ride-along experience with Officer Aaron McCoy, Manheim Township Police Department. Commissioner Kling was very impressed with the technology the police use. He was also surprised by the amount and variety of calls to which the police respond, from speeders to fist -fights to burglar alarm activations.

President Heck announced the Commissioners had an executive session prior to the meeting to discuss a legal and a personnel matter.

Deputy Fire Chief Adrian Borry presented a monthly report on the status of the Manheim Township Fire Rescue. MTFR participated, along with Public Works, Recreation and Park Planning and the Police Departments, in the National Night Out event. The general consensus among the participating departments was that the evening was a success and they are looking forward to continuing this tradition.

There were no remarkable changes in the call percentages for the month of July with total calls being 249. Fridays in July were the busiest days of the week for calls and 5:00 p.m. the busiest time of the day. In 52.6% of all calls the incident response time was between three to seven minutes.

Significant calls in the month of July were six fires resulting in property loss. Three of those were in Manheim Township. The fire incident on Sunrise Avenue came in as possible entrapment in the home. They also responded to a fire call at the Intelligencer Printing building. While the building's sprinkler system prevented the fire from spreading, there was significant damage to one of the printing presses where the fire originated. Additionally there was significant water damage to the paper supplies and products within the building as a result of the sprinkler system activation. They also assisted with the ladder truck to additional structure fires. There were no injuries to any firefighters or damage to equipment.

Commissioner Hodge was impressed by the excellent response times. D.C. Borry responded this is a testament to the staffing arrangements at the fire stations which include the duty crews, live-ins and career personnel. Commissioner Mecum pointed out and D.C. Borry confirmed, the response times are skewed by responding to calls outside the Township.

Police Chief, Tom Rudzinski, presented a report on the status of the Manheim Township Police Department for the month of July. Officers handled 218 criminal investigations, 164 crashes and 832 calls for service. There were a total of 4,154 dispatches from County-Wide Communications during the month for all three municipalities. There were 389 traffic citations and 213 warnings issued.

Notable crimes in July included a prostitution arrest at the Days Inn and a burglary on Koser Road on August 3rd. The officers were able to identify the culprit from the property owner's surveillance equipment. One of the responding officers spotted the car a short time later and an arrest was made only hours after the crime occurred.

COMMISSIONERS MEETING MINUTES – MONDAY, AUGUST 14, 2017

They also responded to three shots fired calls in Manheim Township. Two of them in the 2600 block of Coventry Road were targeted not random shootings. Similarly on the 1000 block of Marshall Avenue they responded to another targeted shots fired incident. All three incidents are still under investigation. Unfortunately the homeowner on Marshall Avenue is not cooperating with the police investigation.

There was an aggravated harassment by a prisoner which started with a domestic disturbance at the Days Inn. An officer was spit on by the perpetrator while in custody.

Within the last two weeks they have had between 15 to 20 thefts from vehicles within the Clearview, Olde Hickory and Crooked Oak neighborhoods. Every single one of those incidents involved an unlocked vehicle. They were able to apprehend juvenile suspects and connect them to the majority of these crimes. During the arrest, one of the juveniles assaulted two officers. The officers sustained very minor injuries.

Chief Rudzinski assured the Commissioners the only involvement he had with their ride-alongs was in choosing the officers. All calls were random. The Commissioner ride-alongs are a good way to introduce the officers and Commissioners and to encourage open communication.

As stated by others this evening, National Night Out was a tremendous success. Chief Rudzinski was very impressed with the turn out for the event and is looking forward to continuing this event.

Public Hearings/Presentations/Appointments:

Public Comment on the Township's Pollutant Reduction Plan (PRP) and Lititz Run TMDL Plan (LRTMDLP) — There were no public comments made this evening regarding this matter.

Public Hearing — Oak Lawn Farm Rezoning Petition

Separate minutes are prepared for Public Hearings.

Following the Public Hearing, Commissioner Hodge moved to approve the requested zoning change from R-2 to Agricultural. Seconded by Ms. DiMeo. President Heck asked if there were any questions or comments from the Board or audience. Commissioner Mecum stated, and Commissioner Hodge concurred, this action makes them very happy. Anita Ratcliffe, 1125 Oakmont Drive, lives adjacent to the farm and she considers the farm both a tremendous personal and community benefit. She has one request to the family. Those adjacent to the farm would be very happy if the views from their properties were not obstructed by future building. Watching the seasonal farming cycle take place next door is a pleasure. There were no further questions. Motion carried unanimously.

COMMISSIONERS MEETING MINUTES – MONDAY, AUGUST 14, 2017

Old Business: There was no old business this evening.

New Business:

Consent Agenda: Commissioner Kling moved to approve the following item in the Consent Agenda which consisted of a financial security reduction. Seconded by Mr. Hodge. President Heck asked if there were any questions or comments from the Board or the audience. There were no questions. Motion carried unanimously.

Area 18, LP — Preliminary/Final Subdivision and Land Development Plan, Delp Road and Manheim Pike, Zoned B-4, D -R & T-1 Overlays, Financial Security Reduction #2

Authorized the partial financial security reduction as permitted by Section 509 of the Pennsylvania Municipalities Planning Code in the amount of One Million One Hundred Six Thousand Seven Hundred Twenty Four and 85/100 (\$1,106,724.85) dollars which represents the cost associated with a portion of the site improvements constructed at the time of the current request and as inspected by the Township Engineer. The amount of financial security being retained by the Township for site improvements less the partial financial security reduction is Three Hundred Seventy Five Thousand Eight Hundred Forty Nine and 86/100 (\$375,849.86) dollars.

Resolutions:

Resolution 2017 – 40: Installation of a New School Zone Warning Flasher Located on Buckwalter and Snyder Roads Adjacent to Reidenbaugh Elementary School

Commissioner DiMeo moved to adopt Resolution 2017- 40 authorizing the proper Township officials to execute the Application for Traffic Signal Approval for the new school zone warning flasher located at Buckwalter and Snyder Roads, adjacent to Reidenbaugh Elementary School. Seconded by Mr. Mecum. President Heck asked if there were any questions or comments from the Board or the audience. There were none. Motion carried unanimously.

Resolution 2017 – 41: Planning Module for Robert L. Fryer, Jr.

Commissioner Mecum moved to adopt Resolution 2017 – 41 approving the Planning Module for Robert L. Fryer, Jr. Seconded by Mr. Hodge. President Heck asked if there were any questions or comments from the Board or the audience. A member of the audience asked for an explanation of a planning module. Commissioner Kling offered a brief explanation. There were no further comments or questions. Motion carried unanimously.

Resolution 2017 – 42: Supporting SB 745: Establishing the Electronic Publication of Legal Notices Act

COMMISSIONERS MEETING MINUTES – MONDAY, AUGUST 14, 2017

Commissioner Hodge moved to adopt Resolution 2017 – 42 supporting Senate Bill 745 providing local government entities with the option to use a statewide database for publication of its various actions and notices. Seconded by Ms. DiMeo. President Heck asked if there were any questions or comments from the Board or the audience. A member of the audience asked if this meant the elimination of notices published in the newspapers. The Commissioners affirmed this would eliminate the need for publishing notices in the local newspaper at a significant savings to the Township and would be more efficient. This audience member went on to ask about access to these notices for those who do not own computers. Commissioner Hodge pointed out the Manheim Township Public Library offers the use of computers to its patrons. There were no further comments or questions. Motion carried unanimously.

Resolution 2017 – 43: Lititz Pike and Airport Road/West Airport Roads Traffic Signal Modification

Commissioner Kling moved to adopt Resolution 2017- 43 authorizing the proper Township officials to execute the Application for Traffic Signal Approval for the modifications to the traffic signal located at Lititz Pike and Airport/West Airport Roads. Seconded by Ms. DiMeo. President Heck asked if there were any questions or comments from the Board or the audience. There were none. Motion carried unanimously.

Ordinances:

Ordinance 2017 – 08: Traffic Ordinance - Remove Deaf/Hard of Hearing Warning Signs Located at 1810 Oregon Pike; Install Reserved (Handicapped) Parking in Front of 730 Skyline Drive

Commissioner DiMeo moved to adopt Ordinance 2017 – 08 providing for the removal of Deaf/Hard of Hearing Crossing Warning Signs on Oregon Pike and an amendment to Schedule II-D (special purpose parking zones) which is contained in the Code of the Township of Manheim at Section 480-75, and is referred to in Section 480-24. Seconded by Mr. Mecum. President Heck asked if there were any questions or comments from the Board or the audience. There were none. Motion carried unanimously.

Motions/Decisions:

Motion: Landis Homes Retirement Community – North Campus – Final Phase II Land Development Plan, 1001 East Oregon Road Zoned Institutional District

Commissioner Mecum moved to approve the Landis Homes Retirement Community North Campus Phase II Land Development Plan. The approval is contingent upon the owner/applicant's written acceptance of the conditions outlined in the Township Review Letter, dated August 2, 2017 and subject to the submission of information

COMMISSIONERS MEETING MINUTES – MONDAY, AUGUST 14, 2017

meeting those conditions. Seconded by Mr. Hodge. At President Heck's request, Craig Smith with RGS gave a brief overview of the project. President Heck asked if there were any questions or comments from the Board or the audience. There were none. Motion carried unanimously.

Motion: 1431 Hunsicker Road – Preliminary/Final Subdivision and Land Development Plan, 1441 Hunsicker Road, Zoned R-1, Modification Request

In accordance with Section 203 of the Subdivision and Land Development Ordinance, Commissioner Kling moved to approve a modification of Section 603, Financial Security, with the following conditions:

1. Any future improvements to Lot #2 will require the posting of necessary financial security associated with such improvement in an amount determined by the Township;
2. A grading permit along with all other applicable permits shall be obtained at prior to any site improvements on Lot #2;
3. Any alterations made to the approved and recorded plans will require additional Township reviews and approvals.

Seconded by Ms. DiMeo. President Heck asked if there were any questions or comments from the Board or the audience. There were none. Motion carried unanimously.

Acknowledgments:

Engineering and Traffic Study – Post a Watch Children Sign on the Property Line between 922 and 924 Shreiner Avenue Facing Southbound Traffic

President Heck acknowledged receipt of the Engineering and Traffic Study to post a Watch Children Sign on the property line between 922 and 924 Shreiner Avenue facing southbound traffic and authorized the Township Solicitor to prepare an Ordinance for adoption.

Kissel Hill Commons Planned Residential Development – Revised Conditional Use, Lot 286 - Brentwood Drive, Chatham Way and Bayberry Place, Zoned R-2, Revised Conditional Use Request

President Heck acknowledged receipt of the revised conditional use request for the Kissel Hill Commons Planned Residential Development to permit revisions to the previously approved Conditional Use and Tentative plan for the Planned Residential Development located along Brentwood Drive, Chatham Way and Bayberry Place. I authorize the sending of the request to the Manheim Township Planning

COMMISSIONERS MEETING MINUTES – MONDAY, AUGUST 14, 2017

Commission for their review and comments and to schedule a public hearing for October 9, 2017 at 5:30 p.m. here at the Township offices.

Other Business/Deliberations: There were no other business or deliberations this evening.

Correspondence and Petitions: Mr. Molchany read a note from Bette Oberle thanking the Commissioners for allowing the National Night Out event.

Public Comment:

Marguerite Adams, Melody Lane, appreciated the promotional article in the Township Merchandiser and encouraged the Commissioners and the Township to continue to use this media outlet.

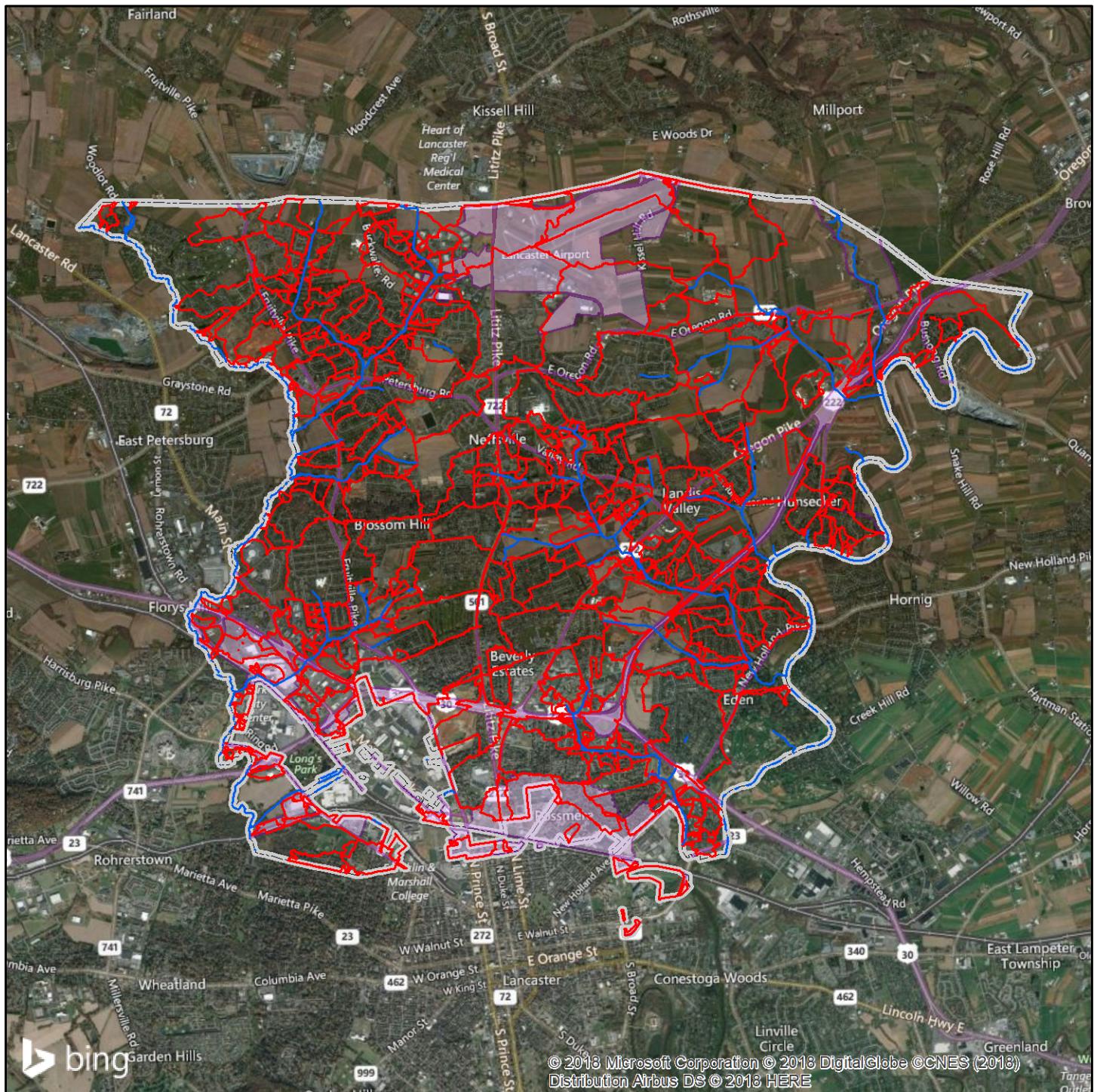
Adjournment: There being no further business before the Commissioners, Commissioner Hodge moved and Mr. Mecum seconded that the meeting adjourn at 6:22 p.m., with all in favor.

Respectfully submitted,

Sean P. Molchany
Manager-Secretary

Appendix III

Areas Parsed Out of Stormsheds



AREAS TO BE PARSED OUT

Overall

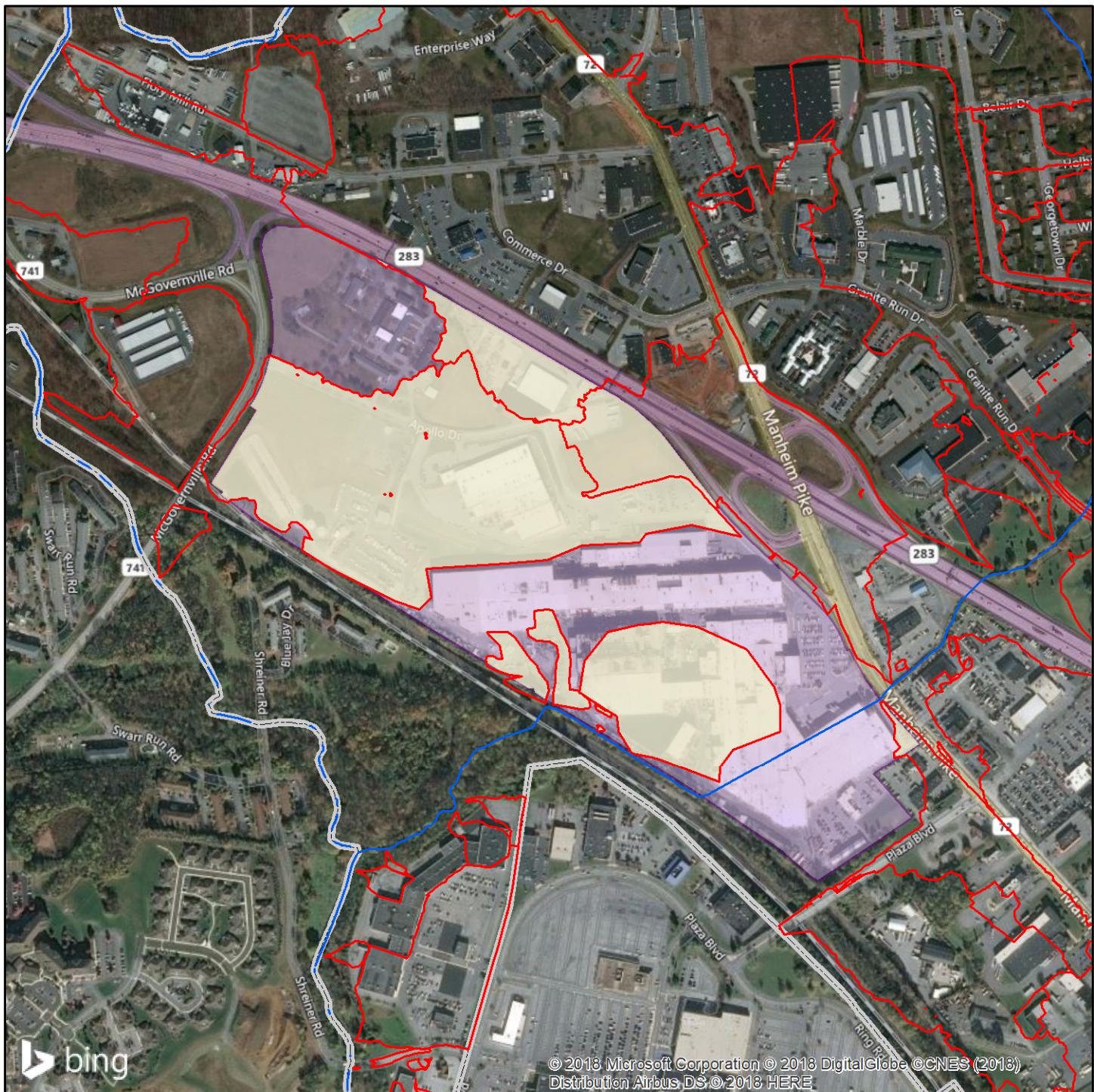


Facility ID:
Permit Number:

1 inch = 6,000 feet

Legend

- Stream & Rivers
- Final Drainage Areas
- Areas to beParsed Out within Stormsheds
- Areas to beParsed Out
- Manheim Township Boundary



AREAS TO BE PARSED OUT

Alumax
 1480 Manheim Pike Lancaster, Pa 17601
 Facility ID: 697568
 Permit Number: PAR203601



Legend

Stream & Rivers	Areas to be Parsed Out within Stormsheds	Manheim Township Boundary
Final Drainage Areas	Areas to be Parsed Out	1 inch = 700 feet

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Facility Search Details

Facility ID:	697568
Facility Name:	ALUMAX MILL PRODUCTS
Address:	1480 MANHEIM PIKE LANCASTER, PA 17601 Manheim Township, Lancaster County
Status:	Active
Program:	Clean Water

Facility Search Sub-Facility Details

Sub Facility Name	Type:	Other ID:	Status:	eMap PA Location:
STORMWATER 001	Discharge Point	001	Active	View Map in eMapPa
STORMWATER 002	Discharge Point	002	Active	View Map in eMapPa
STORMWATER 003	Discharge Point	003	Active	View Map in eMapPa
STORMWATER 004	Discharge Point	004	Active	View Map in eMapPa
STORMWATER 005	Discharge Point	005	Active	View Map in eMapPa
STORMWATER 006	Discharge Point	006	Active	View Map in eMapPa
STORMWATER 007	Discharge Point	007	Active	View Map in eMapPa
STORMWATER 008	Discharge Point	008	Active	View Map in eMapPa
STORMWATER 009	Discharge Point	009	Active	View Map in eMapPa

[**<<**](#) [**<**](#) [**1 ▾**](#) of 2 [**Go**](#) [**>**](#) [**>>**](#)

(12 records, 9 per page)

Facility Search Permit Details

Authorization	Status:	Permit Number:	Date Received:
PAG-03 Discharge of Stormwater Assoc w Industrial Activities (498125)	Issued	PAR203601	02/28/2003
PAG-03 Discharge of Stormwater Assoc w Industrial Activities (692196)	Issued	PAR203601	08/17/2007
PAG-03 Discharge of Stormwater Assoc w Industrial Activities (915659)	Issued	PAR203601	02/23/2012
PAG-03 Discharge of Stormwater Assoc w Industrial Activities (1148968)	Issued	PAR203601	07/12/2016

Facility Search Inspection Details

Inspection Type	Inspection Date	Result
Storm Water Industrial-Non-Sampling (1970950)	04/13/2011	No Violations Noted
Storm Water Industrial-Non-Sampling (2284394)	05/19/2014	No Violations Noted
Storm Water Industrial-Non-Sampling (2301321)	07/29/2014	No Violations Noted

Facility Search Tank Remediation

No records matched the criteria.

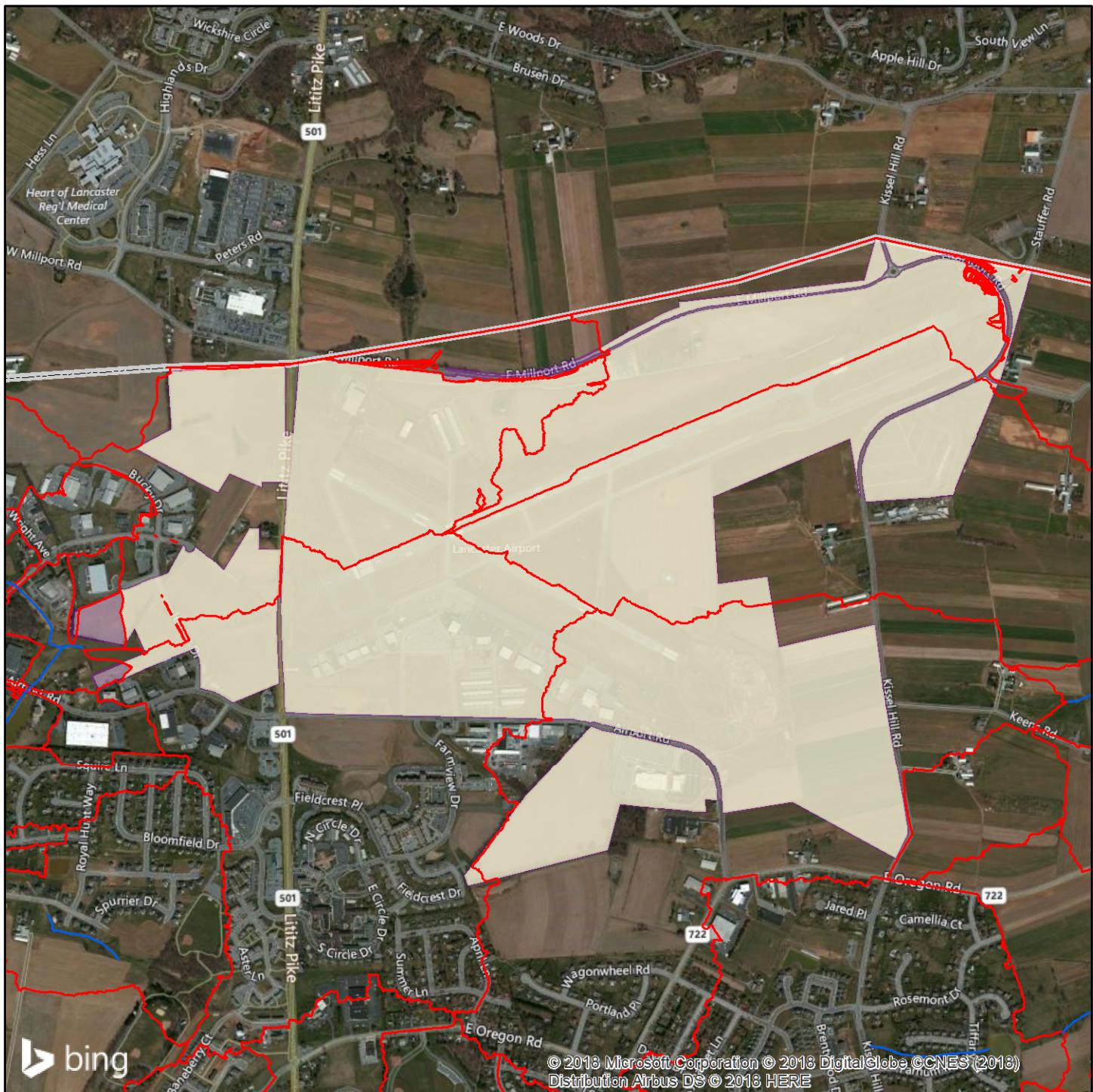
Corrective Action/Tank Closure requirements remain outstanding for incidents in Inactive status.

Facility Search Land Recycling Information

No records matched the criteria.

Facility Search Air Emissions

No records matched the criteria.



AREAS TO BE PARSED OUT

Lancaster Airport
 110 E MILLPORT RD SUITE 201
 Facility ID: 667746
 Permit Number: PAR803677



Legend

- Stream & Rivers
- Areas to be Parsed Out within Stormsheds
- Manheim Township Boundary
- Final Drainage Areas
- Areas to be Parsed Out

1 inch = 1,500 feet

 C.S. Davidson, Inc.
Excellence in Civil Engineering

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South Central Regional Office

Site Search

Sites by County/Muni Search

Site ID:	448331
Site Name:	LANCASTER AIRPORT
Address:	500 AIRPORT RD STE G LITITZ, PA 17543-7752
Status:	Active

Clients (3)

Client List
LANCASTER AIRPORT AUTH (73861)
MANHEIM TWP LANCASTER CNTY (1730)
TRANSP SECURITY ADMIN AT LANCASTER AIRPORT (240634)

Programs (4)

DEP Programs
Clean Water
Environmental Cleanup & Brownfields
Safe Drinking Water
Waste Management

PA Municipalities (1)

Municipalities/Counties
Manheim Twp, Lancaster County

Site Permits (1)

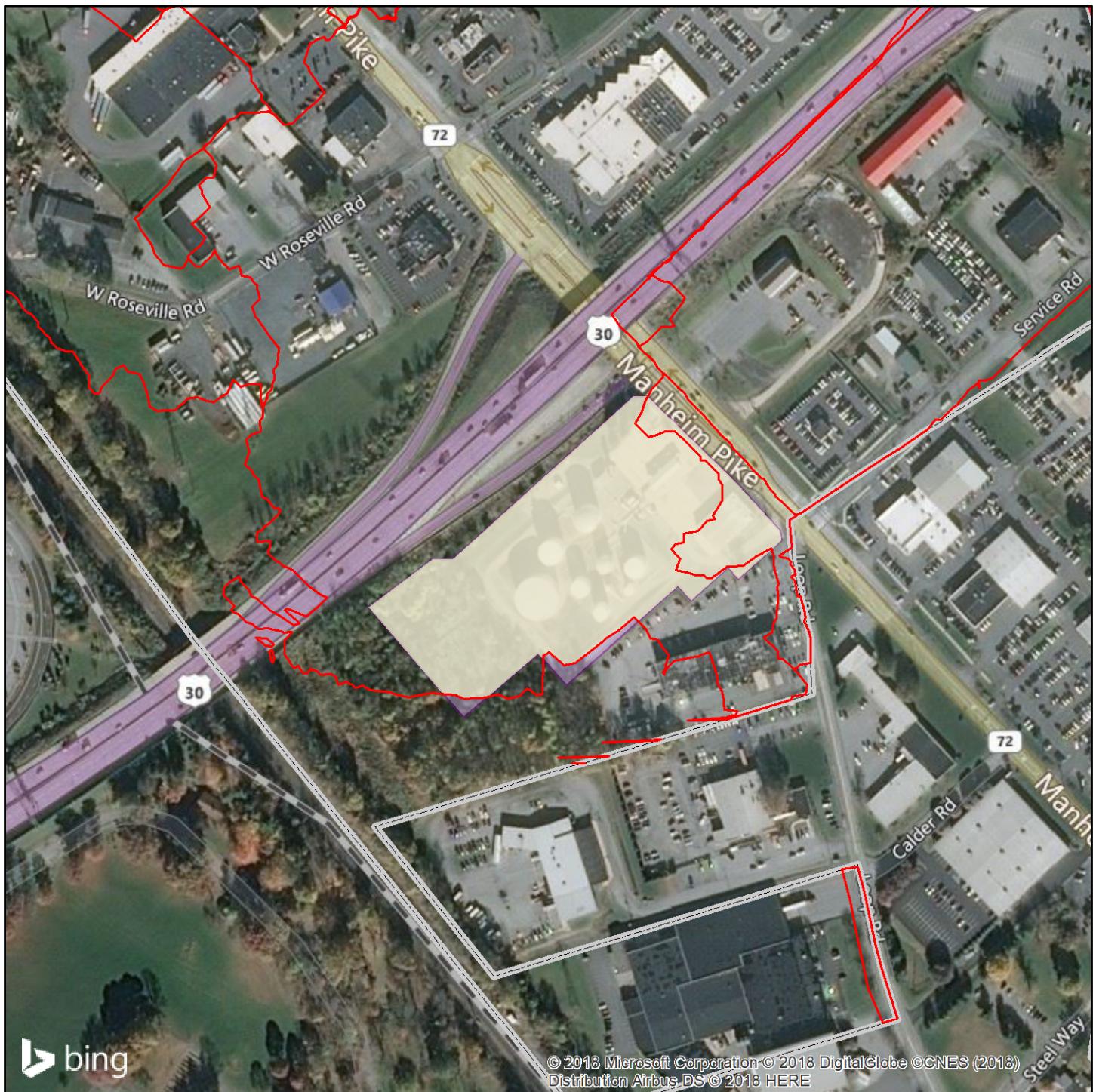
Authorization Id	Authorization Type	Date Received	Status/Date
585656	Planning Mailer Application/Exemption Request	03/17/2005	Issued 03/22/2005

Facility Permits (4)

Authorization Id	Authorization Type	Date Received	Status/Date
1043562	PAG-03 Discharge of Stormwater Assoc w Industrial Activities	09/22/2014	Issued 02/18/2015
817227	PAG-03 Discharge of Stormwater Assoc w Industrial Activities	12/18/2009	Issued 03/01/2010
432014	Storage Tank Registration/Permitting	08/05/1989	Issued 08/05/1989
592445	PAG-03 Discharge of Stormwater Assoc w Industrial Activities	05/09/2005	Issued 06/02/2005

Site-Level and Primary Facility-Level Inspections (12)

Inspection ID	Inspection Date	Inspection Type	Inspection Results
2544709	12/07/2016	Compliance Evaluation	Violation(s) Noted View Details
2530226	10/21/2016	Administrative/File Review	Violation(s) Noted View Details
2303291	09/04/2014	Administrative/File Review	Violation(s) Noted View Details
2268213	05/02/2014	Compliance Evaluation	No Violations Noted
2264434	04/21/2014	Administrative/File Review	Violation(s) Noted View Details
2249672	02/25/2014	Storm Water Industrial-Non-Sampling	No Violations Noted
2266544	07/08/2013	Facility Operations Inspection	No Violations Noted
2143498	02/27/2013	Compliance Evaluation	Violation(s) Noted View Details
1907333	07/13/2010	Facility Operations Inspection	No Violations Noted
1873447	03/01/2010	Administrative/File Review	Violation(s) Noted View Details
1583740	11/21/2006	Facility Operations Inspection	No Violations Noted
1137318	12/14/2001	Facility Operations Inspection	No Violations Noted



AREAS TO BE PARSED OUT

Lancaster Petrol
 1360 Manheim Pike Lancaster, Pa 17604
 Facility ID: 654717
 Permit Number: PAR803670



Legend

- Stream & Rivers
- Areas to be Parsed Out within Stormsheds
- Manheim Township Boundary
- Final Drainage Areas
- Areas to be Parsed Out

1 inch = 300 feet

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EPA Envirofacts

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Facility Search Details

Facility ID:	654717
Facility Name:	LANCASTER PETROLEUM STORAGE TERMINAL
Address:	1360 MANHEIM PIKE LANCASTER, PA 17604 Manheim Township, Lancaster County
Status:	Active
Program:	Clean Water

Facility Search Sub-Facility Details

Sub Facility Name	Type:	Other ID:	Status:	eMap PA Location:
STORMWATER 001	Discharge Point	001	Active	View Map in eMapPa

Facility Search Permit Details

Authorization	Status:	Permit Number:	Date Received:
PAG-03 Discharge of Stormwater Assoc w Industrial Activities (566024)	Issued	PAR803670	08/16/2004
PAG-03 Discharge of Stormwater Assoc w Industrial Activities (790204)	Issued	PAR803670	04/23/2009
PAG-03 Discharge of Stormwater Assoc w Industrial Activities (882577)	Issued	PAR803670	05/27/2011
PAG-03 Discharge of Stormwater Assoc w Industrial Activities (1007759)	Issued	PAR803670	12/26/2013
PAG-03 Discharge of Stormwater Assoc w Industrial Activities (1062653)	Issued	PAR803670	02/09/2015

Facility Search Inspection Details

Inspection Type	Inspection Date	Result
Storm Water Industrial-Non-Sampling (2301337)	07/29/2014	No Violations Noted

Facility Search Tank Remediation

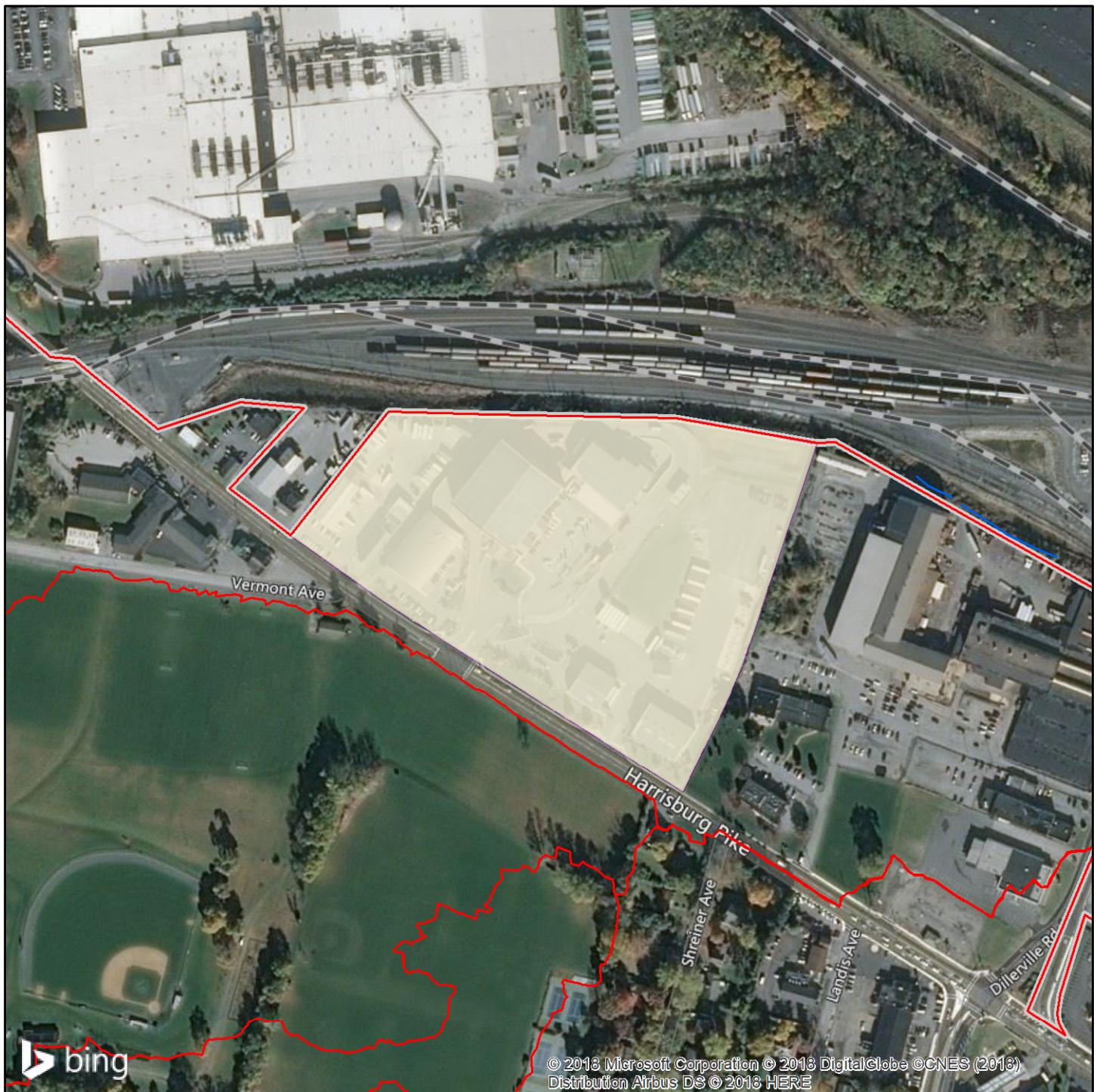
No records matched the criteria.

Corrective Action/Tank Closure requirements remain outstanding for incidents in Inactive status.**Facility Search Land Recycling Information**

No records matched the criteria.

Facility Search Air Emissions

No records matched the criteria.



AREAS TO BE PARSED OUT

LCSWA

1299 Harrisburg Pike Lancaster, Pa 17604

Facility ID: 572261

Permit Number: PAR403505



Legend

Stream & Rivers	Areas to be Parsed Out within Stormsheds	Manheim Township Boundary
Final Drainage Areas	Areas to be Parsed Out	C.S.Davidson, Inc. Excellence in Civil Engineering

1 inch = 350 feet

C.S.Davidson, Inc.

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Permits, Licensing, and Certification**The PA Code****Facility Search Details**

Facility ID:	572261
Facility Name:	LANCASTER CNTY SWMA TRANSFER STATION
Address:	1299 HARRISBURG PIKE PO BOX 4425 LANCASTER, PA 17604-4425 Manheim Township, Lancaster County
Status:	Active
Program:	Clean Water

Facility Search Sub-Facility Details

Sub Facility Name	Type:	Other ID:	Status:	eMap PA Location:
STORMWATER 001	Discharge Point	001	Active	View Map in eMapPa
STORMWATER 002	Discharge Point	002	Active	View Map in eMapPa
STORMWATER 003	Discharge Point	003	Active	View Map in eMapPa
STORMWATER 004	Discharge Point	004	Active	View Map in eMapPa
STORMWATER 005	Discharge Point	005	Active	View Map in eMapPa
STORMWATER OUTFALL 005A (DESIGNATED 006)	Discharge Point	006	Active	View Map in eMapPa

Facility Search Permit Details

Authorization	Status:	Permit Number:	Date Received:
PAG-03 Discharge of Stormwater Assoc w Industrial Activities (375663)	Issued	PAR403505	02/11/2002
PAG-03 Discharge of Stormwater Assoc w Industrial Activities (650574)	Issued	PAR403505	10/06/2006
PAG-03 Discharge of Stormwater Assoc w Industrial Activities (881804)	Issued	PAR403505	05/25/2011
PAG-03 Discharge of Stormwater Assoc w Industrial Activities (1104856)	Issued	PAR403505	12/28/2015

Facility Search Inspection Details

Inspection Type	Inspection Date	Result
Storm Water Industrial-Non-Sampling (2249668)	02/25/2014	No Violations Noted

Facility Search Tank Remediation

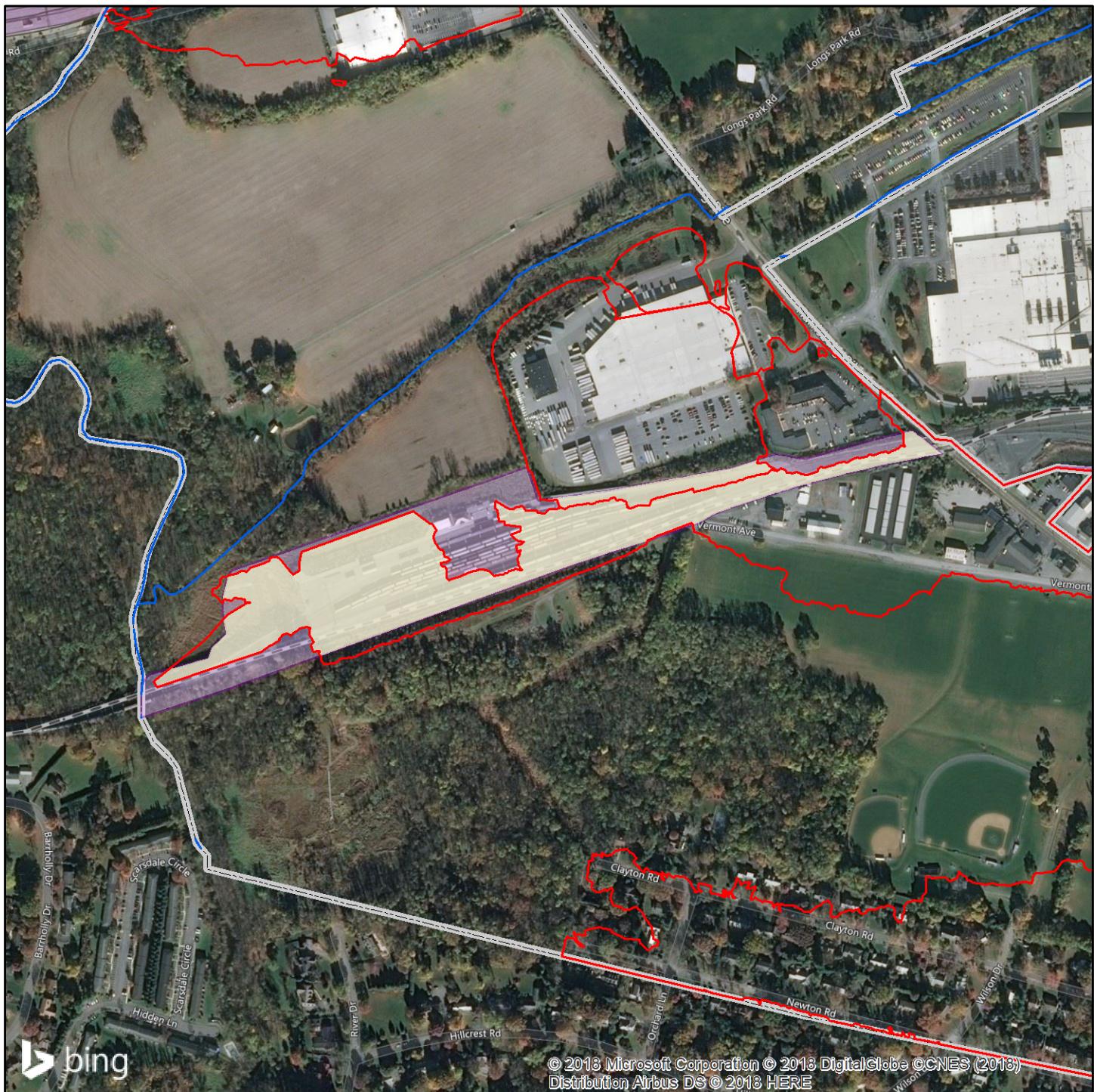
No records matched the criteria.
Corrective Action/Tank Closure requirements remain outstanding for incidents in Inactive status.

Facility Search Land Recycling Information

No records matched the criteria.

Facility Search Air Emissions

No records matched the criteria.



AREAS TO BE PARSED OUT

Norfolk Southern
 333 Harrisburg Ave Lancaster, Pa 17604
 Facility ID: 663557
 Permit Number: PAR803673



Legend

Stream & Rivers	Areas to be Parsed Out within Stormsheds	Manheim Township Boundary
Final Drainage Areas	Areas to be Parsed Out	1 inch = 550 feet

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Other Sites

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eNotice

EPA ECHO

EPA Envirofacts

Permits, Licensing, and Certification

The PA Code

Facility Search Details

Facility ID:	663557
Facility Name:	NORFOLK SOUTHERN RAILWAY CO LANCASTER H. CRAIG LEWIS YARD
Address:	333 HARRISBURG AVE LANCASTER, PA 17604 Lancaster City, Lancaster County
Status:	Active
Program:	Clean Water

Facility Search Sub-Facility Details

Sub Facility Name	Type:	Other ID:	Status:	eMap PA Location:
OUTFALL 002	Discharge Point	002	Active	View Map in eMapPa
STORMWATER 001	Discharge Point	001	Active	View Map in eMapPa

Facility Search Permit Details

Authorization	Status:	Permit Number:	Date Received:
PAG-03 Discharge of Stormwater Assoc w Industrial Activities (577198)	Issued	PAR803673	11/12/2004
PAG-03 Discharge of Stormwater Assoc w Industrial Activities (800629)	Issued	PAR803673	07/20/2009
PAG-03 Discharge of Stormwater Assoc w Industrial Activities (1016007)	Issued	PAR803673	02/28/2014

Facility Search Inspection Details

Inspection Type	Inspection Date	Result
Storm Water Industrial-Non-Sampling (2284309)	06/27/2014	No Violations Noted

Facility Search Tank Remediation

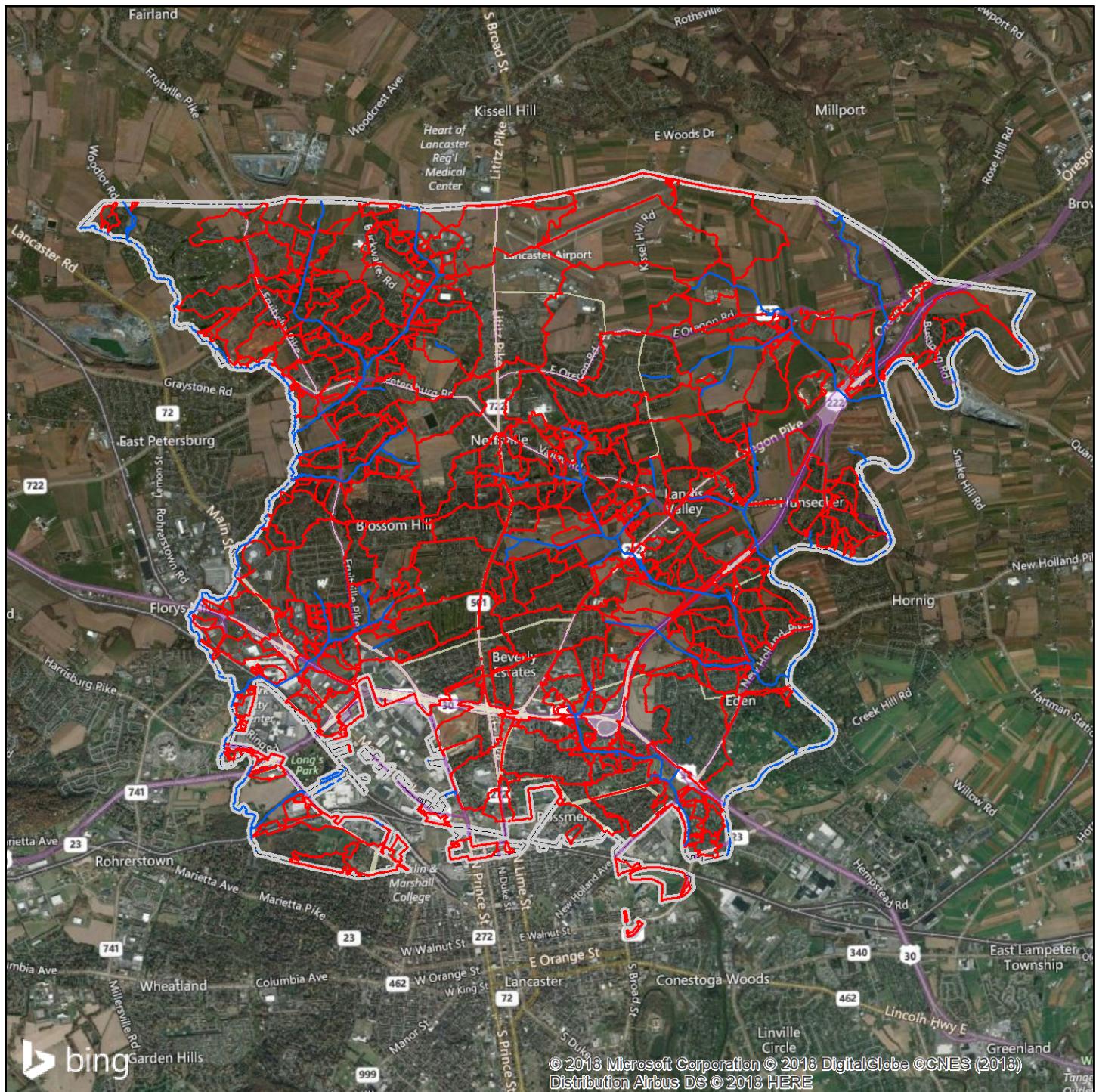
No records matched the criteria.

Corrective Action/Tank Closure requirements remain outstanding for incidents in Inactive status.**Facility Search Land Recycling Information**

No records matched the criteria.

Facility Search Air Emissions

No records matched the criteria.



AREAS TO BE PARSED OUT

Penndot State Routes



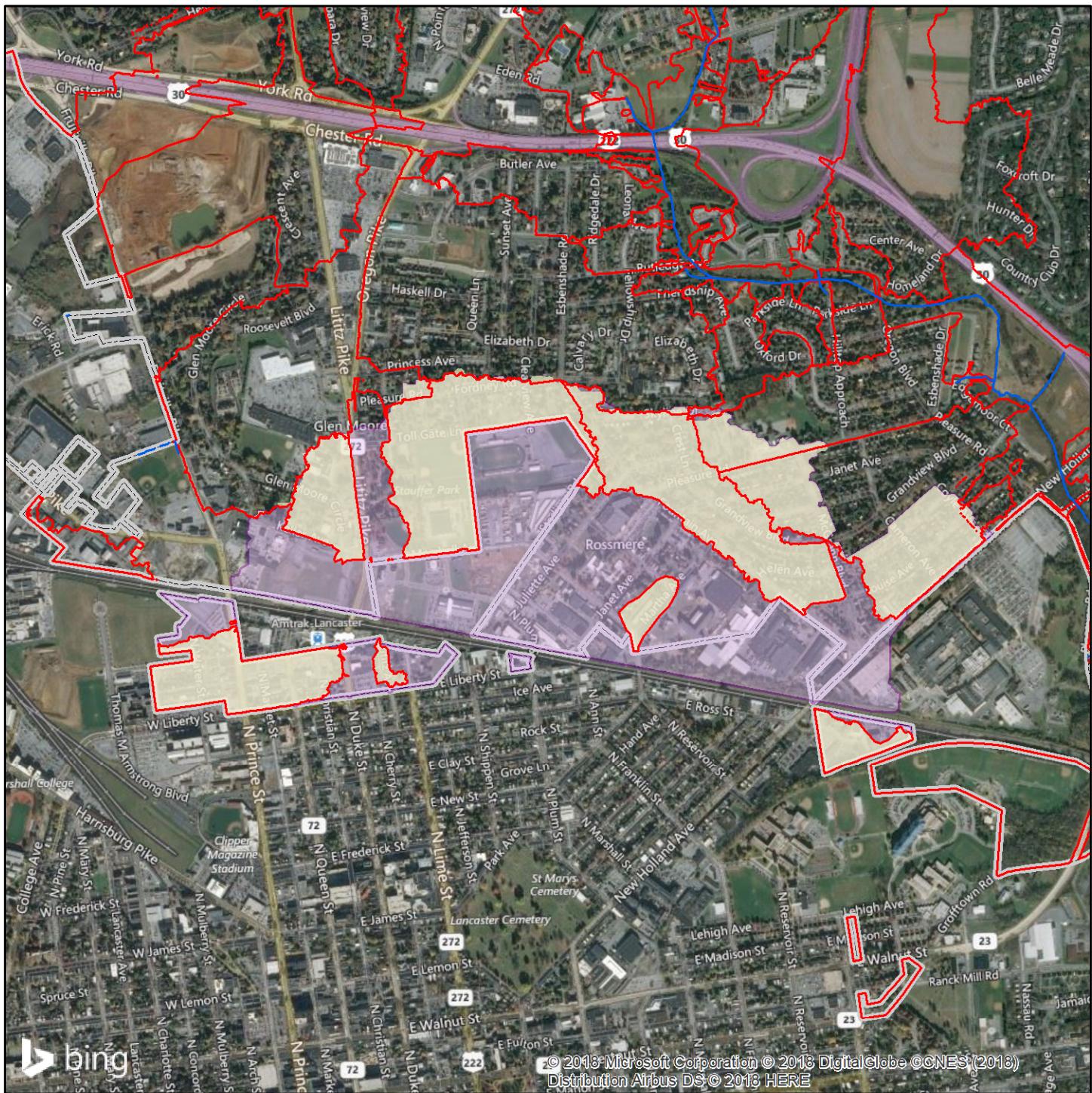
Facility ID:
Permit Number:

1 inch = 6,000 feet

 C.S. Davidson, Inc.
Excellence in Civil Engineering

Legend

Stream & Rivers	Areas to be Parsed Out within Stormsheds	Manheim Township Boundary
Final Drainage Areas	Areas to be Parsed Out	



AREAS TO BE PARSED OUT

Combined Sewer Area



Facility ID:

Permit Number:

1 inch = 1,500 feet

Legend

Stream & Rivers

Areas to be Parsed Out within Stormsheds



Manheim Township Boundary

Final Drainage Areas

Areas to be Parsed Out