

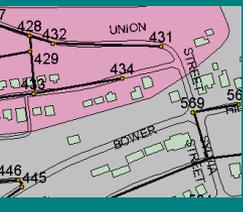
MT. LEBANON
P E N N S Y L V A N I A

Stormwater Utility Informational Meeting

Presented by: The Municipality of Mt. Lebanon,
The Gateway Engineers, Inc. and AMEC

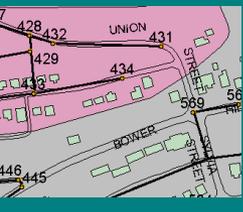
May 2011





Overview

- ◆ We plan to present for you a today a comprehensive overview of the implementation of the Stormwater Utility in Mt. Lebanon.
- ◆ The subjects to be discussed are as follows:
 - ◆ How did we get to today?
 - ◆ Costs associated with the utility

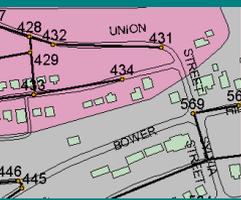


Overview

- ◆ Review of the rate structure
- ◆ Examples of how the rate applies to properties
- ◆ Address questions

The presentation will take about an hour and we have reserved an hour for questions.

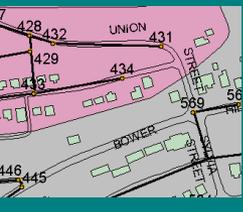




Overview

Presenting with me today will be Dan Deiseroth, our Municipal Engineer from Gateway Engineers. Dan has over 25 years experience as a civil engineer working for local government and private industry on infrastructure projects. He has served as Mt. Lebanon's engineer for over 10 years and....





Overview

Keith Readling of AMEC, an international engineering firm, is a civil engineer who has worked on municipal infrastructure and stormwater management for over 30 years and has worked on setting up 35 stormwater utilities.

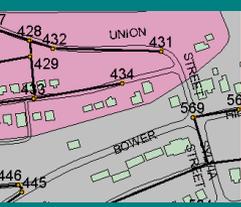




How Did We Get Here Today?

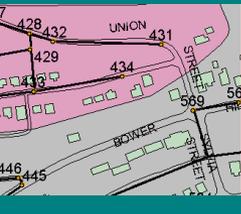


Up until 2011, funds for repairing and maintaining the stormwater system came from the General Fund of the operating budget.



The Mt. Lebanon Commission has made a decision that funding mechanism is no longer feasible because of the severity of the storm water problems: steadily increasing flooding and water pollution; unfunded state and federal mandates to control these problems and meet standards; an aging, deteriorating, and undersized 75-mile conveyance system for stormwater, and competition for dollars with other municipal needs.



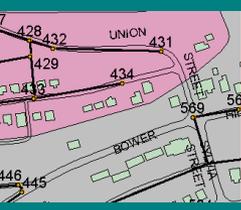


How Did We Get Here Today?

The Commission has decided that a stormwater utility is the fairest way to operate and maintain the municipality's stormwater system, meet federal water quality requirements and add capital improvements to mitigate flooding, erosion and sedimentation.

The stormwater fee, like other utility fees such as water and sanitary sewer, will be based on the amount of demand a user places upon the system. All property owners who generate stormwater runoff from hard surfaces will pay a fee.



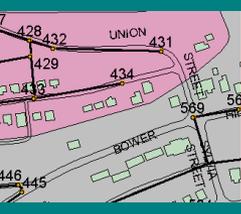


How Did We Get Here Today?

Impervious surfaces are hard surfaces that do not allow rain or snowmelt to infiltrate at the same rate as natural surfaces such as grass or dirt. They include rooftops, driveways, patios, parking lots, and other man-made structures.

A built-out community, such as Mt. Lebanon, has a significant amount of impervious surfaces. Natural surfaces to absorb stormwater are limited; this results in periodic flooding and related runoff problems.

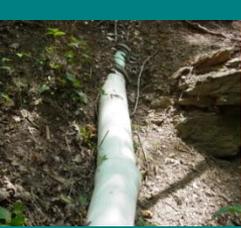
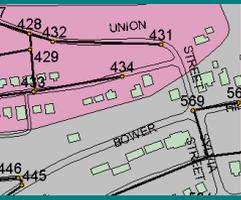




How Did We Get Here Today?

A stormwater utility is a separate entity and fund established by the municipality to ensure that the storm sewer infrastructure is well maintained and stormwater is adequately managed. The utility would fund operations and maintenance of the stormwater infrastructure, administration of Mt. Lebanon's federally mandated municipal permit requirements, and design and construction of capital improvements.





Costs for the Program

5 Year Budget

Major Cost Category	Year 1	Year 2	Year 3	Year 4	Year 5
Administration	6%	7%	7%	6%	8%
Engineering/ Master planning	16%	1%	1%	1%	1%
Operations	37%	44%	46%	37%	47%
Capital Improvements	40%	44%	42%	52%	39%
Stormwater Quality	1%	4%	4%	4%	5%



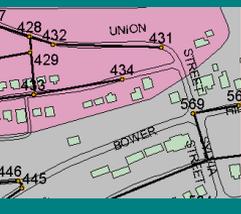


Costs for the Program



- ◆ *Administration to include*

Billing, Finance and Customer Service and Legal Support Services



- ◆ *Public Education Programs-General*

Public education is a component of the NPDES permit the municipality has for its storm sewer system.



- ◆ *Engineering and Master Planning*

System/Project Design Engineering

The system/project design engineering is a one time fee associated with set up of the stormwater utility.





Costs for the Program



◆ *Operations*

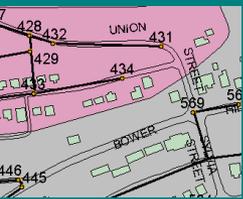
Storm sewer and culvert maintenance

Remedial repair and replacement

Currently, no work occurs for remedial repair and replacement of the system.

Video testing of storm sewers

Emergency Repairs



◆ *Capital Improvement*

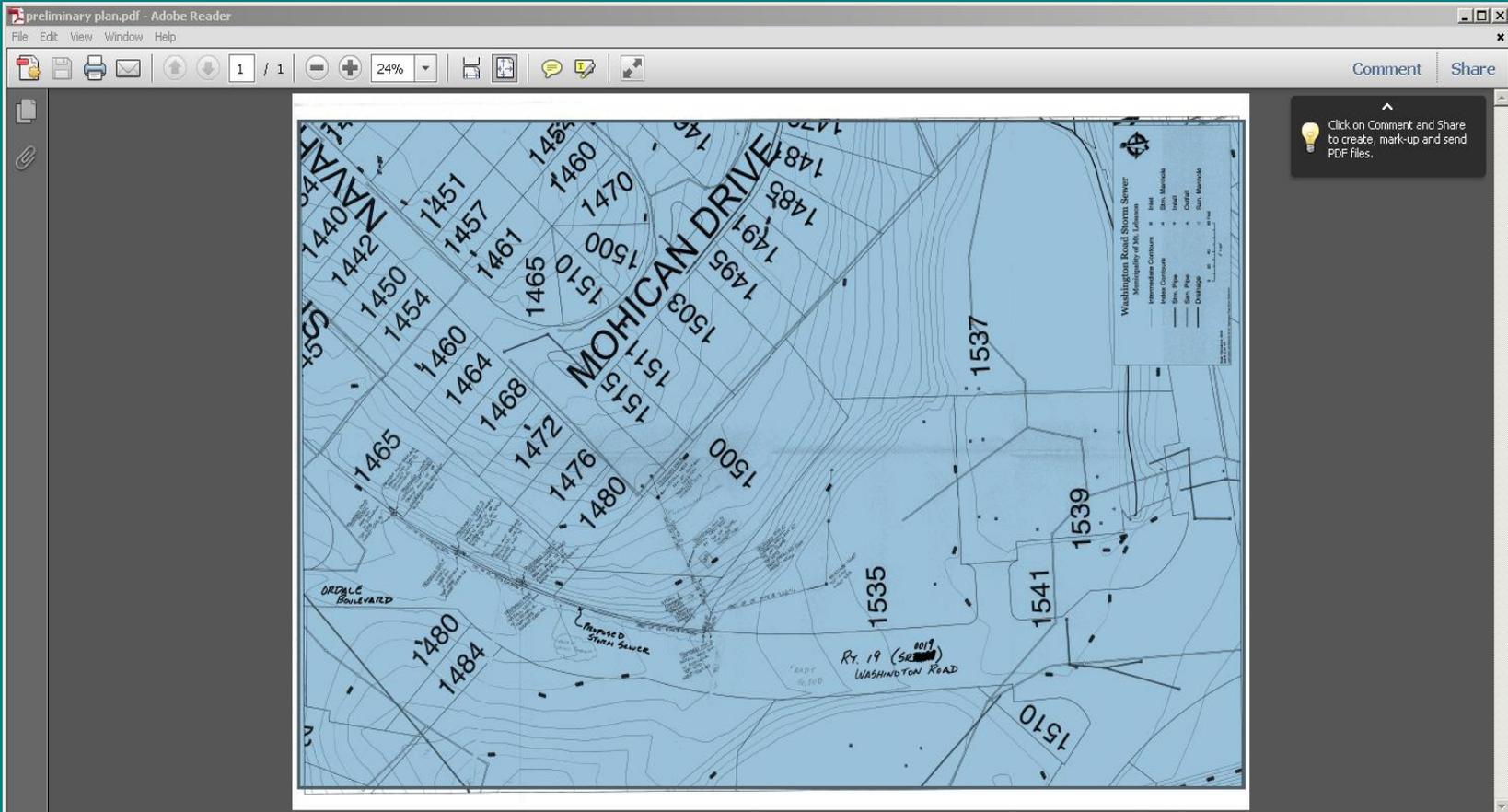
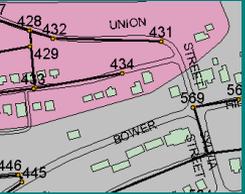
Mt. Lebanon has adopted a five year budget for capital improvements in the system to address flooding and the other capital needs in the system.



Example Capital Project

Icing along Rt. 19

Estimated Cost \$160K



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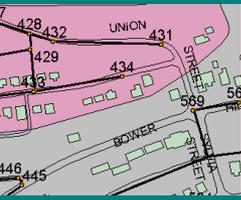


Costs for the Program



◆ *Stormwater Quality*

NPDES Administration and Reporting
Street Sweeping



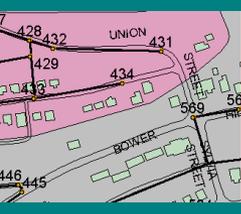
◆ **Overall Cost of Program**

\$830K to \$1.35K per year

***Variance depends upon if curb and gutter maintenance is included.**

Current funding of these program is at only 14% of the projected need.





Costs for the Program

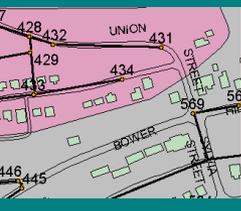
- ◆ Range of fee \$4 to \$8 per month per ERU
- ◆ The 2011 adopted budget includes \$253,090 in revenue from the adoption and implementation of the stormwater utility.



MT. LEBANON
PENNSYLVANIA



On Call. On Time. On Target.



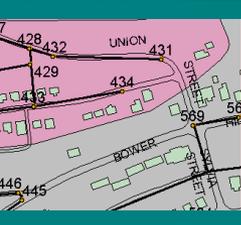
Rate Structure

- ◆ Rate structure based on cost causation
- ◆ Costs are caused by peak flows and pollution
 - ◆ Engineering and Master Planning
 - ◆ Operations of the System
 - ◆ Capital Improvements
 - ◆ Water Quality Program



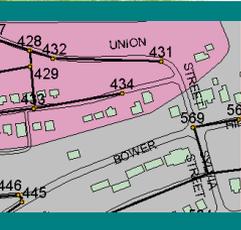


Rate Structure



- ◆ Peak flows and surface water pollution – tied directly to hard surface area (EPA)
- ◆ Hard surface area (impervious area) – single most significant indicator
- ◆ 75% of all stormwater utilities (about 2,000 nationwide) use impervious area as sole metric in rate structure

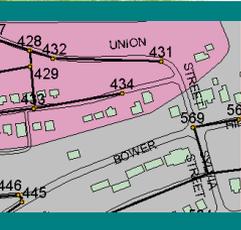




Chosen Rate Structure and Detail

Mt. Lebanon used aerial photographs to measure impervious surface. This calculation is accurate in almost all cases. In cases of error, the calculated amount will err on the side of the customer, likely underestimating the amount of impervious surface on their property.

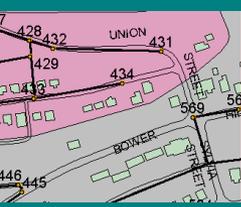




Rate Structure

- ◆ Simplified residential rates (flat rate for individual single family units) – backed up by science and founded on measurements
- ◆ 75% of the residential properties have total impervious area within 1,000 square feet of the median (within 1,000 square feet of 2,400). That still conveys the tight clustering.





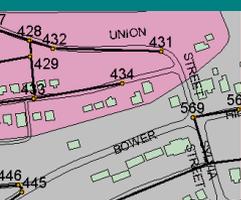
Rate Structure

Equivalent residential units (ERU) – the fundamental unit for charges

- ◆ Single family home – median impervious area = 2,400 square feet (1 ERU)
- ◆ Other properties – measured impervious area divided by 2,400 = ERUs

A property with as much impervious area as 10 typical homes is charged 10 times as much as a home (10 ERUs)





Rate Structure

Townhome units – including proportionate share of common areas with each unit results in simplified rate

PTAXID	Townhouse_Complex	IA	NmbOfUnits	Total_ERUs	ERUsPerUnit
0098-J-00102-0121	North Meadowcroft Avenue	19712.67	10	9	0.90
0141-E-00130	Baywood Avenue	10539.11	7	5	0.71
0141-F-00200	Shady Drive East	7134.14	7	4	0.57
0141-G-00400	Mt Lebanon Mainline 2	131019.20	41	58	1.41
0141-L-00294	Mt Lebanon Mainline	92782.72	55	41	0.75
0252-F-00350-0002	Old Gilkeson Road	5908.64	5	3	0.60
0318-C-00080	Woodbridge	534022.55	232	234	1.01

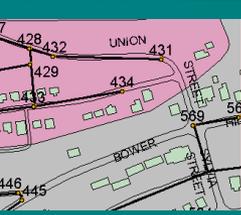




Rate Structure



Credits – reductions in the stormwater utility fee for a qualifying property



- ◆ Individual single family properties ineligible
- ◆ All other properties eligible



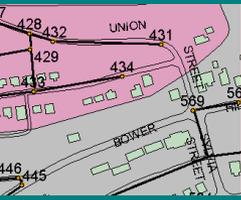
Qualifying for credits based on stormwater controls on the property



Maximum credit = 50%



311 Washington Road - Existing

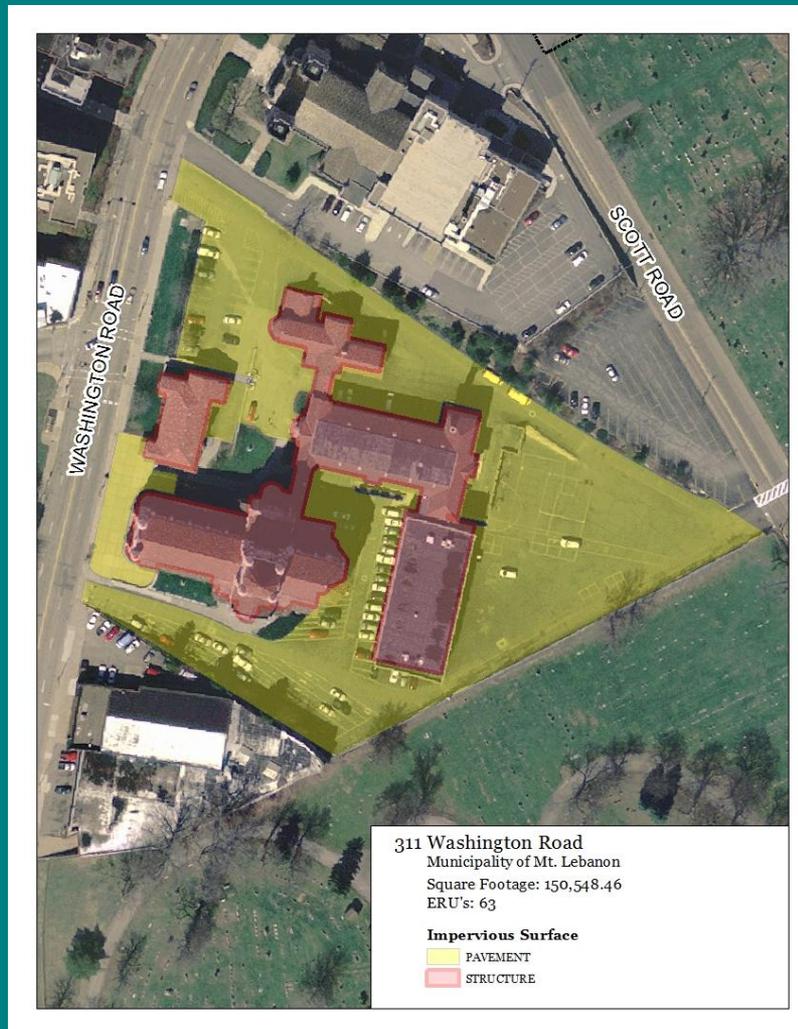
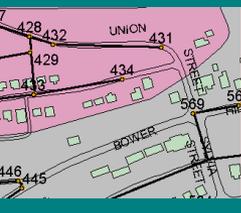


311 Washington Road
Municipality of Mt. Lebanon

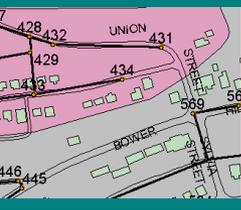
Existing Conditions



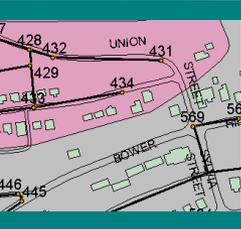
311 Washington Road with Impervious Shown



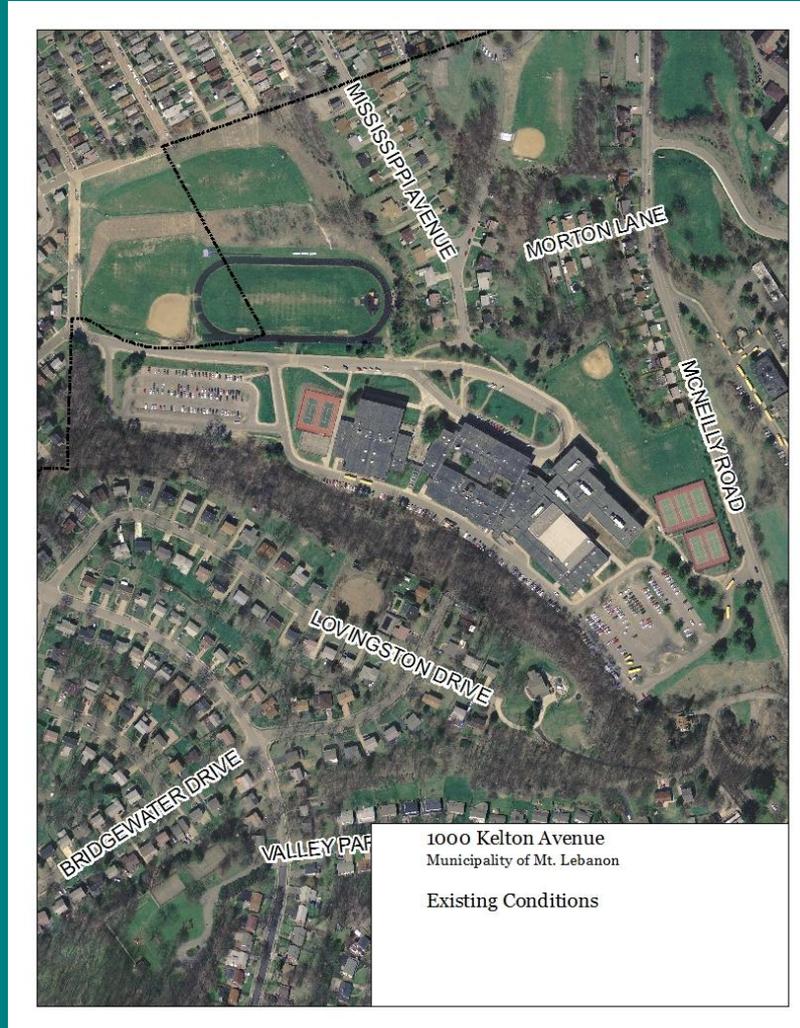
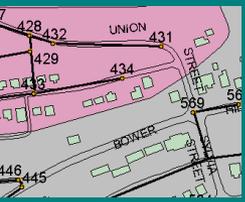
50 Moffett Street - Existing



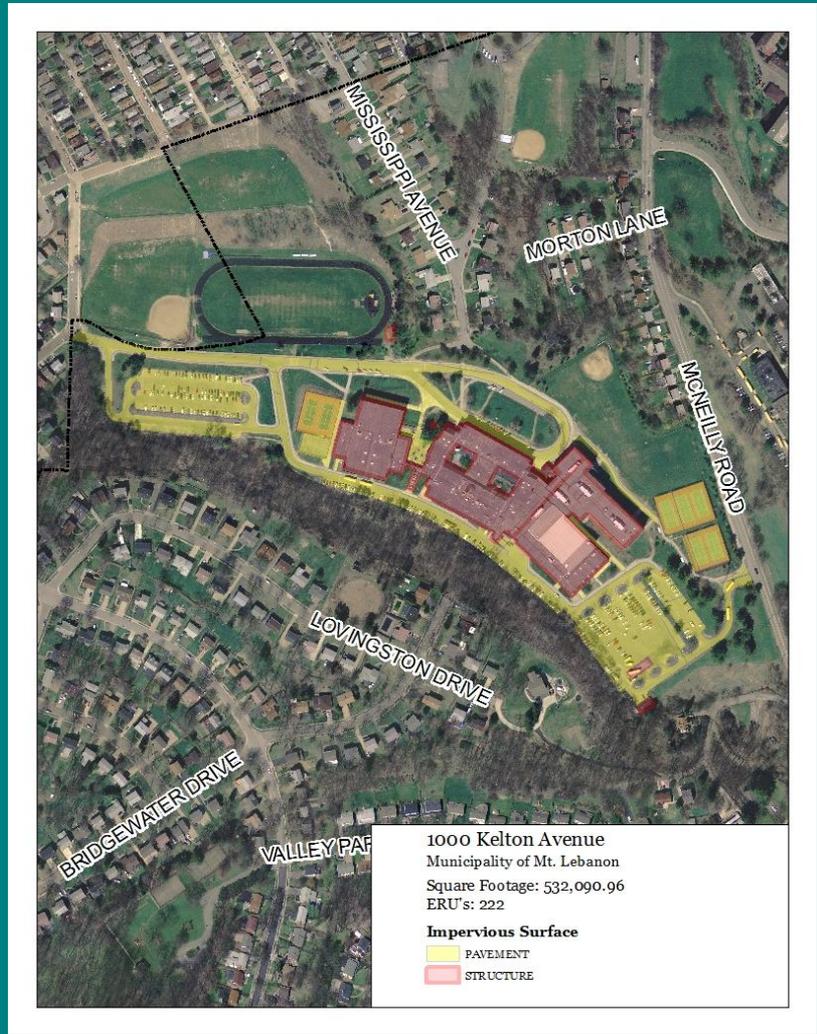
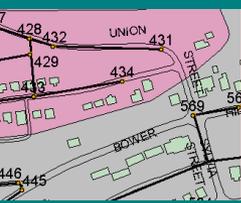
50 Moffett Street with Impervious Shown



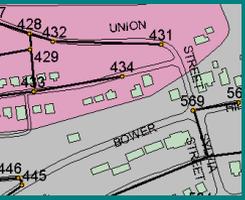
1000 Kelton Avenue - Existing



1000 Kelton Avenue with Impervious Shown



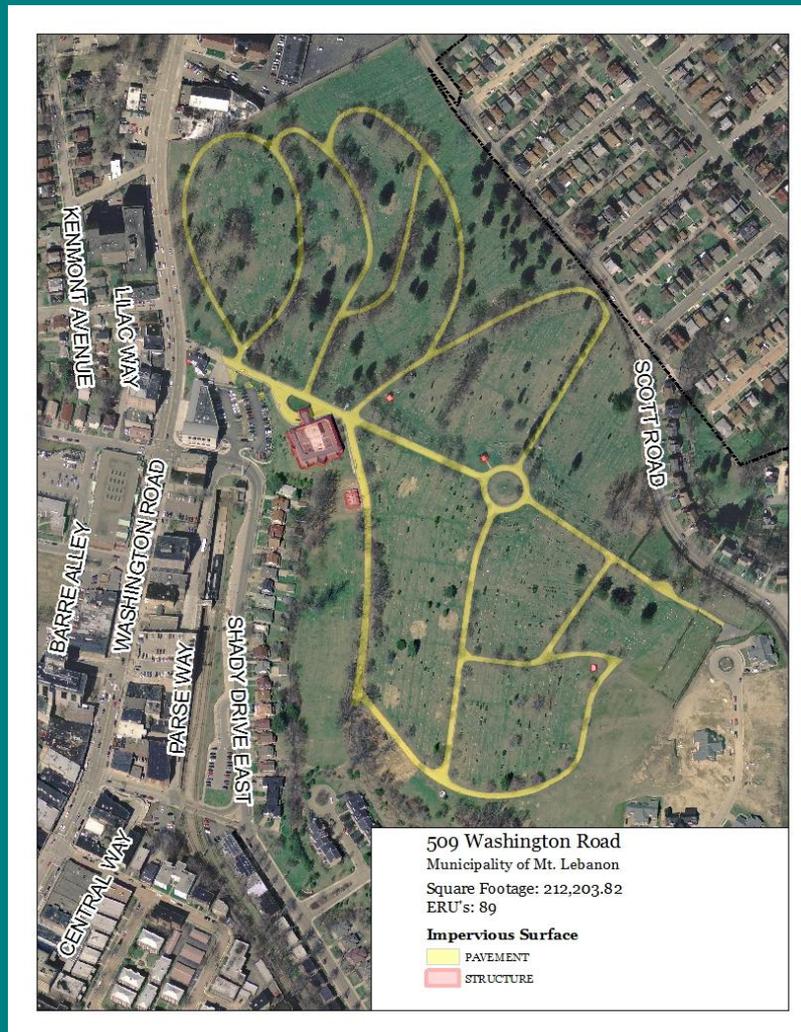
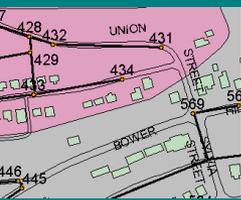
509 Washington Road - Existing



509 Washington Road
Municipality of Mt. Lebanon

Existing Conditions

509 Washington Road with Impervious Shown

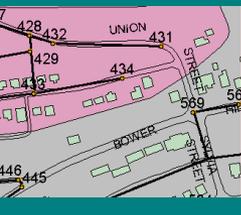




Next Steps



- ◆ The Commission will begin the public process of introducing an ordinance to create the utility in June.

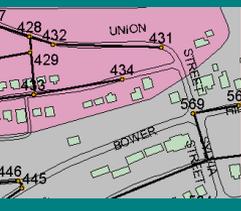


- ◆ It is anticipated that the first bills for the stormwater utility will be issued on September 1st.



- ◆ If you have questions about your individual property, we have a sign up sheet in which we will make arrangements to meet with you individually.





Questions?

