

MINUTES

NON-LEGISLATIVE MEETING – AUGUST 2, 2017

The August 2, 2017 Non-Legislative Meeting of the Lower Swatara Township Board of Commissioners was called to order at 7:00 P.M. by President Jon G. Wilt. The following officials were in attendance:

- Jon G. Wilt, President
- Laddie J. Springer, Vice President
- Michael J. Davies, Assistant Secretary
- Todd F. Truntz, Commissioner
- Benjamin C. Hall, Commissioner
- Jean R. Arroyo, Secretary
- Peter R. Henninger, Solicitor
- Erin G. Letavic, HRG, Engineer
- Ann Hursh, Planning and Zoning Coordinator
- Daniel L. Wagner, Public Works Director
- Scott Young, Officer in Charge

Residents and visitors in attendance: (PLEASE SEE ATTACHED SIGN-IN SHEET)

President Wilt welcomed everyone to the meeting and opened the floor for public comments.

PUBLIC COMMENTS:

Lee Dickerson, 1880 North Union Street, expressed concerns with the sewerage issues and problems at the end of North Union Street and with the lack of action on the comprehensive plan. Mr. Dickerson stated that he was told over two years ago by his personal attorney that this is how the script would play out on the development of his property: it would be a slow process, would make it through the Planning Commission, and then be stale mated by the Commissioners before it was even presented. He was told that if he went for a variance, the variance would not be approved. Solicitor Henninger explained that Mr. Dickerson had originally filed an application for a zoning change. He then withdrew that application and decided to ask for a variance. The variance was denied, so Mr. Dickerson took an appeal to the Court of Common Pleas. Briefs have been filed, and the court's decision is being awaited. Since this is a pending

legal matter, he advised the Board not to discuss this further. As far as the comprehensive plan is concerned, the Board will take action when it feels it is appropriate, which could be tonight

Dave Klingaman, 241 Keystone Drive, referenced Mr. Dickerson's comments and asked why, when residents bring concerns to the Board, the Commissioners can just table them and never discuss them. He asked why they can't set a time limit to give a decision. Solicitor Henninger explained that in regards to the Dickerson matter, the issue is in litigation. The Zoning Hearing Board did make a ruling, and that ruling was challenged and is now in court. Timeframes on many other matters are not controlled by this Board, but are set by the state legislature through rules and regulations under the first class township code.

Marjie Hartz, North Union Street, referenced page 66 of the draft comprehensive plan, which indicates that the Dauphin County Comprehensive Plan was last updated in 2008. She noted that it was just updated, and asked if this will be adjusted in the Township's plan. Solicitor Henninger agreed it should be. Ms. Hartz also questioned page 33, which says Area 1 North Union Street north of Fulling Mill Road should retain its current zoning designation of Mineral Recovery. However, the attached map shows the current zoning as Industrial (Mineral Recovery). Ms. Letavic recalled that the context of this was related to particular areas that the committee was looking at as far as alternate uses/rezoning. Ultimately, it was decided to retain the Mineral Recovery zoning, but she believes that the map and chart may simply document the discussion that occurred. Ms. Hartz stated this is very confusing. She also noted that the Concerned Citizens' Group in regards to the UPS project is actively involved and attending meetings and would like the Board to know that is strongly opposed to the project. She suggested that politics seem to be playing a huge role in the UPS process. As elected officials, the Commissioners must remember that it is people above politics.

Bill Leonard, 1401 Heritage Square, stated that he spent about fourteen years on the Board of Commissioners, two on the Planning Commission, and also served as Fire Chief for about six to eight years. He recalled that he rarely saw any big issues that had 100% agreement one way or the other. The UPS project is no different, and there are many concerns that need addressed. However, Mr. Leonard stated that he feels there may be people who have not spoken up yet that do support that kind of development in that part of the community. There are pictures on social media expressing concerns about truck traffic on Fulling Mill Road. He explained that Fulling Mill Road was designed from North Union Street to the Fire Department to be a collector

road to get as much traffic out of Old Reliance, Shopes Gardens, and Route 230 and into that part of the Township as much as possible. Also, the North Union Street interchange was expanded to further help with getting truck and business traffic out of the central part of the Township and over to the northeast part. Mr. Leonard noted that he does not favor development on the west side of North Union Street, but does see value in continuing to build out business and commercial opportunities on the east side. Using the approximately one mile of roadway involved and comparing it to the about 40 miles of road in the Township, it sounds like what will be seen through incremental truck traffic is an impact of 2 1/2 % of Township roads.

Mr. Leonard referenced the Pennsy Supply quarry, and stated he does not know if they own it or are leasing it. He stated that he understands they may be paying some royalties, but is not sure if that information is accurate. He asked if the Township gets any tax revenue from the holes in the ground at the Pennsy quarry. Solicitor Henninger explained that the Township only receives real estate taxes. Mr. Leonard added that concerns are being expressed about farmland being taken away, yet the two quarries on North Union Street already took farmland away and do not provide any revenue. Those two quarries combined are almost twice the size of the site UPS is interested in. Truck traffic also results from the quarry. He surmised that the \$12,000 - \$15,000 expenditure recently approved by the Township for resurfacing a portion of North Union Street is needed as a result of the traffic that is already there. UPS has indicated that if its plan is approved, it will be willing to make some of these improvements for the Township. Mr. Leonard stated that he feels UPS is a very good company, and he would hate to see them relocate on the east side of the Swatara Creek and pay tax revenue to either Derry Township or Londonderry Township rather than Lower Swatara Township and the Middletown Area School District, while hypothetically still driving through Lower Swatara Township to get off at the Vine Street interchange. He agreed there will be sacrifices involved, but suggested everyone also consider the overall benefits of the project.

Ms. Hartz stated that the area is zoned Mineral Recovery for a reason; the quarry has been there for a long, long time and there is stone there to recover.

NANCY AVOLESE AND RUTH SHIREMAN: HISTORIC PRESERVATION SOCIETY OF LOWER SWATARA TOWNSHIP:

Nancy Avolese, 1451 North Union Street and Ruth Shireman, 790 Longview Drive, referenced a concept paper they had provided the Board about establishing a Historic Preservation Society of Lower Swatara Township. The mission is to educate, promote interest in, and advocate for the preservation of historic buildings, cemeteries, and landscapes in Lower Swatara Township. The group would provide advisory information to the Board of Commissioners on needed preservation efforts. There would be no cost to the taxpayers; Ms. Avolese and Ms. Shireman would be doing this on their own, and would also provide a digital library of historical landmarks, historical properties, etc. and would give out plaques to those who apply (the applicant would pay for the plaque). Ms. Avolese added that if the Board approves, one of the things the group will do is be caretakers of the small cemetery on Route 230. She noted that she has two masons that are willing to do some of the work for free. No decision is needed tonight. This is just something that the Board is being asked to consider. Ms. Avolese stated that they feel history is important, and anyone that doesn't think so is awfully shortsighted.

APPROVAL OF MINUTES:

A motion was made by Vice President Springer, seconded by Commissioner Hall, to approve the Minutes of the July 5, 2017 Workshop Meeting. The motion was unanimously approved.

PLANNING AND ZONING REPORT:

Ann Hursh, Planning and Zoning Coordinator, reported that the Planning Commission met on July 27 for the review and discussion of the Petition to Amend the Zoning Ordinance and Zoning Map Amendment for BT-NEWYO, LLC as submitted by McNees, Wallace & Nurick LLC for a proposed regional hub facility for UPS. It took action to table the application until the August 24 meeting. This was done to allow residents to submit any additional information or concerns that they may have and to give the Planning Commission members time to review any new information. The Zoning Hearing Board met on July 6 as rescheduled due to the lack of a quorum at the June 27 meeting. The hearing was for Docket No. 2017-03 – MRPI Fulling Mill

Road, 140 Fulling Mill Road, requesting a variance from Zoning Ordinance §Maximum Fence Height, for a 9' high security fence. The decision was to approve the variance. The hearing also addressed Docket No. 2017-04 – Phoenix Contact, 586 Fulling Mill Road, requesting a variance from Zoning Ordinance §27-2402 Off-Street Parking, Required Parking Spaces. The decision was to approve the variance.

Staff completed the Organizational Analysis for the Codification Project Update and returned it to General Code as required. Storm damage complaints concerning erosion and debris were investigated, documented and resolved. Ms. Hursh reported that she attended a day long training seminar titled “Selling Stormwater” on July 17. The Chesapeake Bay Pollution Reduction Plan (CBPRP) has been submitted for staff review; Ms. Letavic will present it later this evening. The Land Development Plans for Soccer Shots and AV Flight are ready to be recorded. A resident from Evergreen Drive attended the last Board meeting to discuss a concern regarding a detention basin issue. Ms. Hursh explained that the president of the Woodridge Homeowners Association has been asked to provide her with a list of the names and addresses of the other homeowners involved. Meetings will be set up in the near future, even if they need to be one-on-one due to scheduling conflicts. In response to a question from Commissioner Hall, Ms. Hursh confirmed that the department is busier this year than the previous year.

PUBLIC WORKS REPORT:

Mr. Wagner reported that the Department has been very busy. Recently completed projects include placing a border around the playset areas at both Shopes and Old Reliance Parks, applying the remaining grub control at the parks, applying soil amendments again to the playing surfaces of both soccer and baseball fields, completing the annual leak detection test with the fueling system, setting up and cleaning up from the movie night at Shopes Gardens and Vacation Bible School week at both Georgetown and Market St. Playgrounds, completing vehicle inspections for the month, watering the soccer fields regularly as needed, and replacing signs that were not meeting specs or were hit during vehicle crashes.

Current projects include weekly mowing of the parks, mowing of the hazard mitigation lots, mowing around the tree plantings at the Fulling Mill Road property, addressing cleanup and repair issues from the rain event on July 23, making repairs to North Union St. for the paving at the end of September, and removal of the fallen tree at Old Reliance Park. The Department also hopes to get

back to the Shope Gardens and Old Reliance playground projects to get the remaining border, wood carpet, and drainage installed. Mr. Wagner added that he was contacted by Suez today. They anticipate coming in tomorrow to repair the cross bore on Swatara Drive. Mr. Wagner also updated the Board on the situation with PPL and the cross bore at the Market Street and Hanover Street area. He anticipated this will be taken care of in the upcoming months.

Mr. Wagner again noted that there are an overwhelming number of one calls for the Public Works and Municipal Authority, routinely 40 – 50 month. This is very time consuming.

The Board discussed the PennDOT 2017-2018 Winter Maintenance Agreement.

Mr. Wagner explained that after the last winter storm (March 13 – 14, 2017), the Public Works Department took a pretty good “whooping” about its response, and there was staff discussion with Terry Kauffman (previous Interim Manager) and Mr. Williamson about continued plowing of certain PennDOT roads. Concerns of when Township roadways or developments were plowed factored into this. It was suggested that PA Route 230 no longer be taken care of by the Township. President Wilt asked if this has been discussed with PennDOT since he believes the Township is in year three of a five-year agreement. Mr. Wagner stated it has not, but changes can be made at any time. President Wilt commented that he is concerned this could be a safety hazard if PennDOT does not address 230 in a timely manner. Commissioner Truntz agreed this could be looked into, but added that there were tempers flaring during the storm and no one meant to be derogatory. He suggested this be discussed further. Commissioner Davies asked if the Township is equipped to handle plowing 230. Mr. Wagner explained that the Township has been able to maintain it pretty well, although a snow blower for the front of the loader would be useful. The Board agreed to table any action on this item until further discussions are held with PennDOT.

Mr. Wagner stated that before the Board tonight is a memo relative to the sale of items on Municibid which were previously approved via resolution. A motion was made by Commissioner Truntz, seconded by Commissioner Hall, to approve the sale of the following equipment to the high bidders upon receipt of a certified check, money order, or cash:

- | | |
|---------------------------------|--|
| 1.) 2006 Crown Victoria | Sale Price of \$1,178.00 sold to Glenda Washington of
Pittsburg, PA |
| 2.) 2009 Dodge Charger SE | Sale Price of \$1,450.00 sold to Kevin Kline of Bernville PA |
| 3.) 2008 Dodge Charger SE | Sale Price of \$5,000.00 sold to David Huff of Saint Marys
PA |
| 4.) Stihl Demolition Saw | Sale Price of \$ 410.00 sold to Hayden Crick of Harrisburg
PA |
| 5.) Accu-Turn 5402 Tire Machine | Sale Price of \$ 701.00 sold to Dale Hess of Mount Joy, PA |

The motion was unanimously approved.

A motion was made by Vice President Springer, seconded by Commissioner Hall, to approve authorization for Lester Lanman, Municipal Authority Manager/Assistant Superintendent of Public Works, to sign title transfers on behalf of Lower Swatara Township. The motion was unanimously approved.

Mr. Wagner recognized Seth Myers, who recently resigned from the Department, and stated that he was a great worker and will be missed. He wished him well. Mr. Wagner reported that the Department is in need of help. It is now down a total of four employees – two full time and two part time. In 1990, the Department had four employees, which was expanded to five. In 2002, it was expanded to six employees. That is currently where the Department stands, and there are additional requirements such as extra roads, MS4 regulations, and parks. He stated that the Department needs expanded; he has been looking for part-time help since March. President Wilt stated these are personnel issues which should not be addressed at a public meeting. Commissioner Truntz added that the Township has advertised for help, and interviews will be scheduled.

Mr. Wagner reminded residents that the dumpster will be available on August 5 from 8:00 A.M. to noon.

Commissioner Truntz commented that he understands the pressure the Department is under, and expressed his appreciation for the efforts of the crew during the recent storm. He also inquired if there is an estimated time for re-opening of the two parks. Mr. Wagner explained that he hopes they can be completed by the end of next week. In response to a question from Commissioner Truntz, Mr. Wagner confirmed that the old playground equipment was removed last fall because of safety issues.

Commissioner Hall stated that he would like to discuss the PA One Call issue with Mr. Wagner. He also asked Mr. Wagner to remind Suez about the issue with Anglesey Circle. Mr. Wagner confirmed that they are aware of this and it will be addressed.

The Board discussed a letter from the County offering gypsy moth spraying. Solicitor Henninger recalled that in the past, the Township did not participate because of ineligibility or lack of interest. Unless interest has been expressed, he recommended the Township advise the County that it is not interested in participating this year. A motion was made by Commissioner Truntz, seconded by Commissioner Davies, to decline participation in the gypsy moth spraying. The motion was unanimously approved.

MANAGER'S REPORT:

A motion was made by Commissioner Hall, seconded by Commissioner Davies, to approve Resolution No. 2017-R-15 appointing Jean R. Arroyo, Township Secretary, as the Right To Know Officer for the Township and Scott A. Young, Officer in Charge, as the Right to Know Officer for the Police Department until their successors are appointed. The motion was unanimously approved.

The Board discussed modifications to the Fire Company Lease to allow for Life Lion EMS to be housed at the Lower Swatara Township Volunteer Fire Company building on Fulling Mill Road. The Township owns that property, and it has a long-term lease with the Fire Department; Article 10.1 of that lease states that the tenant may not assign or transfer this lease or sublease the whole or any part of the leased premises. A motion was made by Commissioner Truntz, seconded by Vice President Springer, to waive the provisions of Article 10.1 of the lease in order to allow the Life Lion EMS to sublease the property. The motion was unanimously approved.

Commissioner Truntz remarked that hearing the public outcry, he feels it is time to move forward with approval of the draft comprehensive plan. A motion was made by Commissioner Truntz, seconded by Commissioner Hall, to direct the consultant for the comprehensive plan to revise the draft plan to delete the recommended rezoning to Commercial of the property on the southeast quadrant of the North Union Street interchange with PA Route 283 leaving it residential, and further directing the preparation of a resolution to adopt the proposed plan as revised. The motion was unanimously approved. Solicitor Henninger added that the plan should also be revised as per Ms. Hartz' comment to change the 2008 reference of the Dauphin County Comprehensive plan to 2017. He explained that the comprehensive plan needs to be adopted by resolution, so he will prepare this for action at the August legislative meeting. Solicitor Henninger summarized the comprehensive plan process to-date. The steering committee for the plan met for a period of about two years, and came up with a recommendation. The plan then went to the Planning Commission,

which recommended three changes, one of which was the southeast quadrant of North Union Street (the Dickerson property) which was not recommended for any change by the comp plan committee but was recommended for change by the Planning Commission. The Board's motion is to go with the steering committee's recommendation on that quadrant. Kathy Gotshall, Oberlin Road, explained that she was a member of that steering committee, and it had actually suggested to the Planning Commission that it be changed from Residential to Commercial. Chris DeHart, who was a member of the Planning Commission at that time, explained that the parcel was not done in this comp plan, but was done prior to the comp plan process. The only changes suggested pertained to the Williams' farm.

Solicitor Henninger reported that if the Board is comfortable with what was negotiated, it can approve the hiring of Francis P. Lynch as the interim Township Manager on a month-to-month basis at a salary of \$6,000 per month. A motion was made by Commissioner Truntz, seconded by Commissioner Davies, to approve the hiring of Francis "Frank" P. Lynch under the terms and conditions of the employment letter/agreement, effective August 7, 2017 as drafted and negotiated by the solicitor. The Board and public congratulated Mr. Lynch. Mr. Lynch thanked the Board for the opportunity, and gave some background on his employment history, which included Comcast, the Patriot-News, and Labor and Industry. He has also served on the Board for Susquehanna Township for the last fifteen years. Mr. Lynch stated that he is pleased to work with the team and to try to fulfill the Commissioners wishes of being a truly first-class Township.

SOLICTIOR'S REPORT:

Solicitor Henninger noted that a Public Hearing was held earlier this evening on proposed Ordinance No. 570, which would amend the Zoning Ordinance pertinent to the location, placement, construction, and maintenance of Wireless Telecommunications Towers and Wireless Telecommunications Antennas. A motion was made by Commissioner Davies, seconded by Commissioner Hall, to approve Ordinance No. 570. A roll call vote was taken with the following ballot tabulation: Commissioner Hall – aye, Commissioner Truntz – aye, Commissioner Davies – aye, Vice President Springer -- aye, and President Wilt – aye. Ordinance No. 570 was approved by a 5 – 0 margin.

Solicitor Henninger reported on the Phillips Real Estate Investment Partnership versus Dauphin County Board of Assessment Appeals. Several years ago, Phillips had appealed the County's assessment of its fair market value of \$3,157,800; the Township had participated proportionately in hiring an appraiser to appraise the property, and that figure came in at \$3,100,000. The property owner is willing to accept this appraisal, and all parties are in agreement. A motion was made by Vice President Springer, seconded by Commissioner Truntz, to approve the settlement agreement for a fair market value of 3.1 million dollars for the Phillips property. The motion was unanimously approved.

Solicitor Henninger noted that there is a pension amendment being proposed to the Non-Uniformed Pension Plan with regards to the retirement age for participants hired on or after August 2, 2017. Specifically, it would require anyone who is retiring at 62 to have at least 12 years of service in order to be vested in the pension. This change would need to be done by ordinance. A motion was made by Commissioner Truntz, seconded by Commissioner Davies, to approve advertisement of an ordinance amending the Non-Uniformed Pension Plan with regards to this change. The motion was unanimously approved.

ENGINEER'S REPORT:

Ms. Letavic presented the Board with a memo relative to field views performed by HRG to assist staff with an evaluation of the Township's infrastructure after the storm of July 23. She noted there is a separate report in the Board packet documenting some of the things that were looked at. The majority of the work that needs to be done would require an emergency permit from DEP.

HRG has drafted a project manual for the portions of the Old Reliance and Shope Gardens park project projects to be publicly bid (stormwater BMP installation) The bid documents have been sent to DCNR for concurrence prior to advertisement. Periodic site inspections continue in an effort to facilitate the completion of the project.

Ms. Letavic updated the Board on the Capital Improvement Plan -- PENNVEST funding for stormwater projects. Due to the July 23 storms, and in order to update staff on the utility conflict information that has been obtained for the stormwater designs at Rosedale and Georgetown, Township staff, Municipal Authority staff, and HRG met on July 26. Priorities for the project were re-evaluated and it was determined to add the Hanover Street storm sewer system to the Rosedale project. Though the Georgetown neighborhood will benefit from drainage improvements in the

future, staff's recommendation it to put the project on hold for design and accelerate the schedule for the expanded Rosedale project. HRG is reviewing the engineering scope for an adjustment to the contract for the additional survey and design that is necessary; however, the Township will see short-term cost savings by putting the other project on hold.

Ms. Letavic presented a Power Point on the Chesapeake Bay Pollutant Reduction Plan (see attached). The Township has a new MS4 permit cycle coming up, and part of that is updating the Chesapeake Bay Pollutant Reduction Plan. The Swatara Creek – Susquehanna River Watershed has no local impairments. The Lauren Run – Susquehanna River Watershed and the Chesapeake Bay Watershed do. She explained some of the proposed BMPs (Best Management Practices). The next step is the public comment period (August 1 – 31). The plan is on the Township's website and is also available at the Township Building. Additional steps include the revision of the report (Sept. 1 – 14), and then submission of the report (Sept. 15). Implementation is to start in 2018 when the permit is approved, with completion in five years – 2023. Ms. Letavic noted that while no specific cost estimates have been done on the Township plan, a preliminary cost estimate is \$1.2 million.

FINAL COMMENTS:

Commissioner Truntz thanked Sergeant Scott Young for coordinating the effort to participate in Middletown's National Night Out, and thanked Detective Ryan Gartland for participating. He also thanked everyone for attending tonight's meeting.

Commissioner Hall also thanked Sergeant Young for his efforts. He noted that he appreciates the comments from the public tonight, and how they were kept professional. This is democracy at its best. Commissioner Hall stated that he is also excited about what Ms. Avolesse and Ms. Shireman hope to achieve with the historical society.

Vice President Springer thanked Sergeant Young, Detective Gartland, and Fire Chief Weikle and the Fire Department volunteers for assuring that Lower Swatara Township was well represented at National Night Out.

Commissioner Davies thanked the Public Works employees and the engineer for responding to the recent stormwater issues. He also gave a "hats off" to Sergeant Young and the Police Department for participation in Middletown's National Night Out. Commissioner Davies thanked the public for its comments on the proposed development plans. While the Board has not seen any

filed plans yet, it is good to know what people are thinking. He also welcomed Mr. Lynch on board.

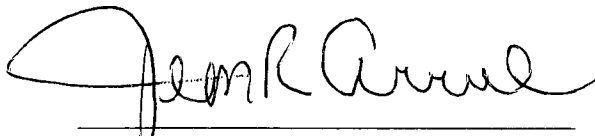
President Wilt thanked those who came out this evening, and again thanked Sergeant Young and Detective Gartland for their efforts at National Night Out. He also welcomed Mr. Lynch on board.

President Wilt requested an executive session immediately upon conclusion of tonight's meeting in order to discuss personnel issues.

ADJOURN AND CONVENE INTO EXECUTIVE SESSION:

Hearing no other business, a motion was made by Commissioner Truntz, seconded by Vice President Springer, to adjourn the meeting and convene into executive session. The motion was unanimously approved, and the meeting adjourned at 8:50.

ATTEST:

A handwritten signature in black ink, appearing to read "Jean R. Arroyo", written over a horizontal line.

Jean R. Arroyo
Township Secretary

PLEASE PRINT NAME CLEARLY

AUGUST 2, 2017

PUBLIC HEARING ON WIRELESS FACILITIES ORDINANCE - 6:45 PM

BOARD OF COMMISSIONERS WORKSHOP - 7:00 PM

Name/Organization	Address/Contact Information
BILL LEONARD	1461 HERITAGE SQUARE
Ruth Shueaari	Longview Dr.
Carolyn Lutz	Woodridge Drive
Tom Williams	Falling Mill
Ron Paul	Richard Ave.
Lyndi Dymus	3812 Hilcrest Rd.
Sheryl Cyphert	Candlewyske Dr.
Chas DEJAN	old Reliance
Paul & Chris Hartz	N. Union St.
Bruce + Joanne Harker	1134 Slater Rd.
Sherry Sontag	Union St.
Nancy Avolase	1451 N. Union St.
LA BURKHOLDER	
Laura Ribic	N. Union St.
Lee Nickman	N. Union
Wagner	Longview Drive
Frye	LSFD
John Weikle	
Brianna Clark	Longview Drive
B. Lytle	old Reliance
Robert F. Feeder	SSTwp
Marile Hartz	Union St

PLEASE PRINT NAME CLEARLY

AUGUST 2, 2017

PUBLIC HEARING ON WIRELESS FACILITIES ORDINANCE – 6:45 PM

BOARD OF COMMISSIONERS WORKSHOP – 7:00 PM

[illegible]

HRG

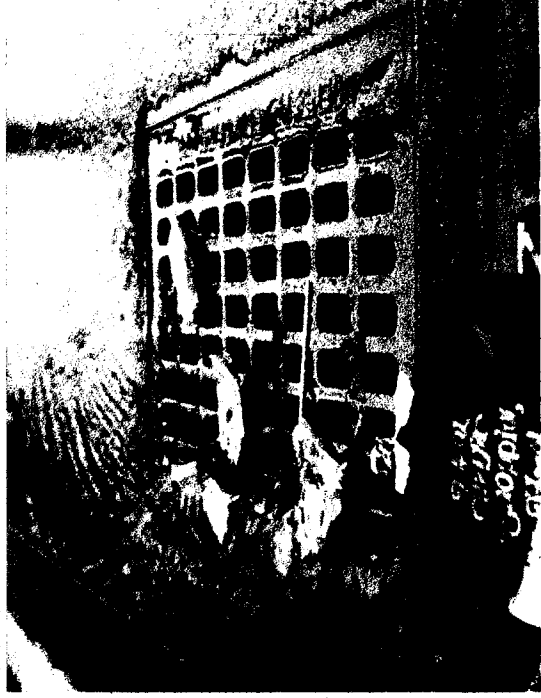
Herbert, Rowland & Grubic, Inc.
Engineering & Related Services

AN EMPLOYEE-OWNED COMPANY

[BUILDING RELATIONSHIPS.
DESIGNING SOLUTIONS.]

Lower Swatara Township Chesapeake Bay Pollutant Reduction Plan (CBPRP)

August 2, 2017



2013 PAG-13

NPDES (National Pollutant Discharge Elimination System) General Permit (PAG-13) for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4s)

- Water Quality Permit
- Improved quality of local streams
- Quality \leftrightarrow Developed Land without Stormwater Controls

2018 PAG-13

NPDES (National Pollutant Discharge Elimination System) General Permit (PAG-13) for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4s)

Updated permit requires:

- ✓ Pollution Control Measures (PCMs)
- ✓ Updated list of authorized non-stormwater discharges
- ✓ Increased public involvement
- ✓ Clearer requirements requiring public access
- ✓ Pollutant Reduction Plans – Chesapeake Bay and locally impaired waters

Pollutant Reduction Plans

2018 PAG-13

Appendix D

- Estimate existing sediment (TSS), Total Phosphorus (TP), and Total Nitrogen (TN) loads to the Chesapeake Bay
- Identify BMPs to reduce pollutant loads by 10%, 5% and 3% respectively within 5 years*

Appendix E

- Estimate existing TSS, TP, TN loads to locally impaired waters
- Identify BMPs to reduce pollutant loads by 10%, 5% and 3% respectively within 5 years*

**Presumptive approach in which a 10% sediment reduction is assumed to also result in a 5% TP reduction and a 3% TN reduction.*

Impaired Watershed Planning Areas

Chesapeake Bay Watershed

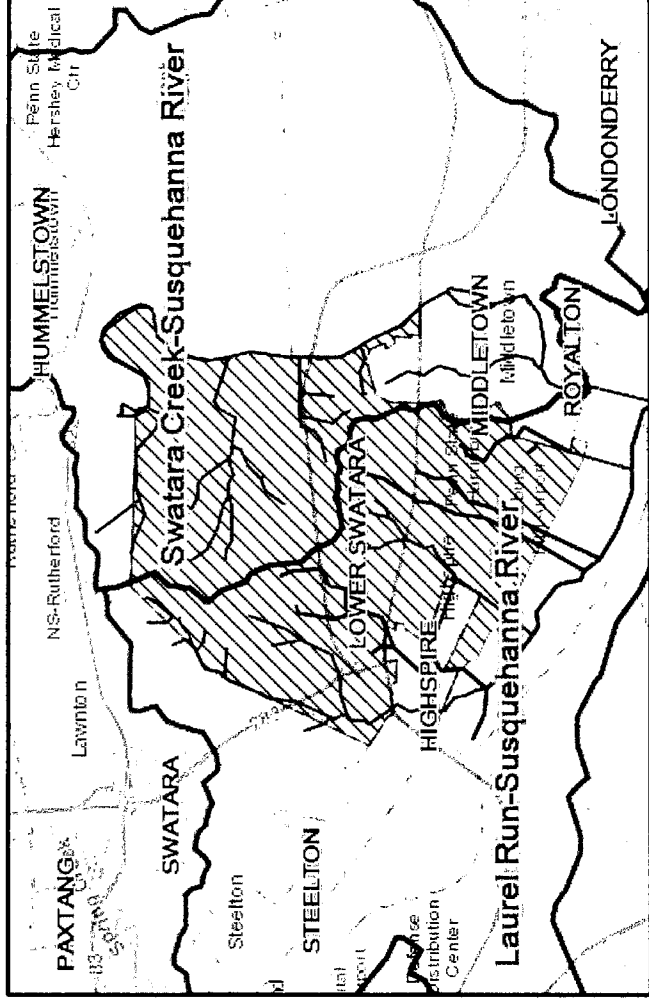
- Includes all Urbanized Area (UA) within Township (hatched area)

Swatara Creek – Susquehanna River Watershed

- No local impairments

Laurel Run- Susquehanna River Watershed

- Unnamed Tributaries to Sherman Creek (TSS)
- Unnamed Tributaries to Susquehanna River (TSS)



Existing Pollutant Loading, Baseline

- **Township UA** (2010 US Census)
 7,943.2 acres
- **UA Land Use** (PADEP)
 26% Impervious / 74 % Pervious
- **Dauphin County Developed Land Loading Rates** (PADEP)
 1,999.14 lbs/ac/yr (Impervious) 299.62 lbs/ac/yr (Pervious)

Baseline Pollutant Loading

Planning Area	UA (acres)	Pollutant Load TSS (lbs/yr)
CBPRP	7,943	5,889,845
Laurel Run PRP	4,648	3,446,173

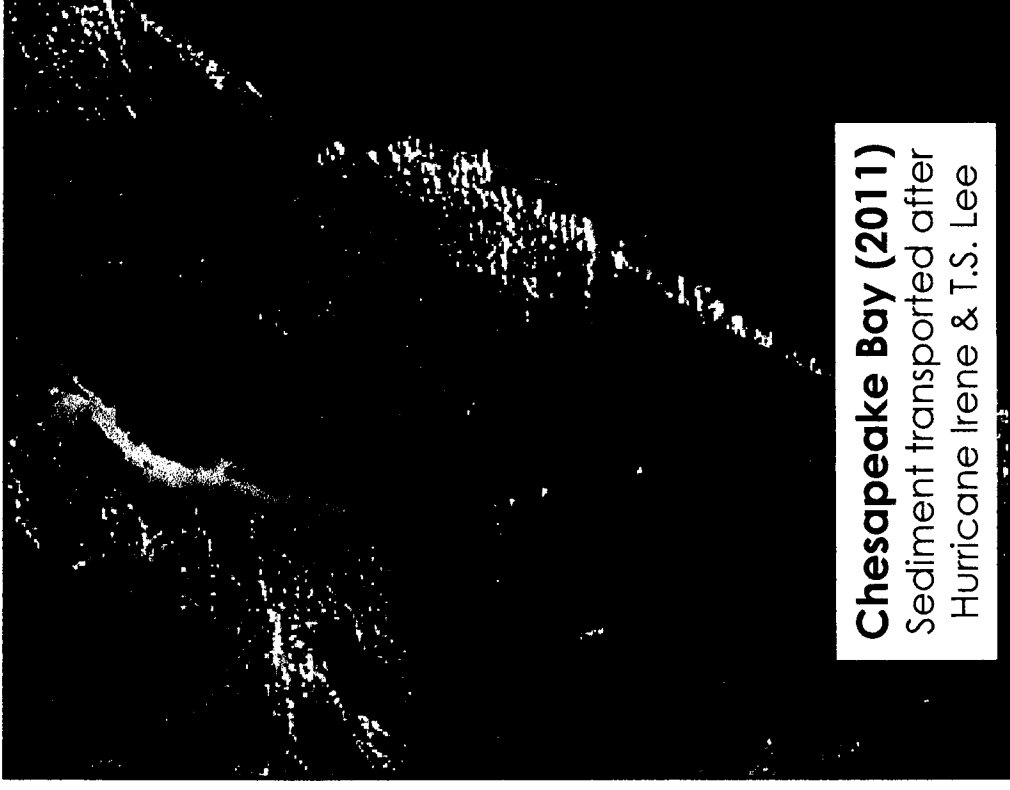
Existing Pollutant Loading

Sediment (TSS)

- Loose particles of clay, silt and sand
- Generated by natural weathering, accelerated erosion from development, and resuspension of previously eroded sediments stored in stream corridors
- Excess TSS affects stream flows, degrades water quality, and negatively affects local and downstream habitats

Sediment Measurement - "lbs/yr"

- Mass per unit area per unit time
- Model-based measure of water quality
- Not a literal pounds removed



Chesapeake Bay (2011)
Sediment transported after
Hurricane Irene & T.S. Lee

Existing Pollutant Loading, Adjusted

Parsed Areas

- **PennDOT / PA Turnpike**
- **Private Properties**
 - Susquehanna Regional Airport
 - Penn State Harrisburg Campus
- **PAG-03s**
 - Stormwater Associated w/ Industrial Activity Permittees
- **Direct Discharge Areas**

Existing BMPs

- Previously installed structural BMPs that provide water quality benefit

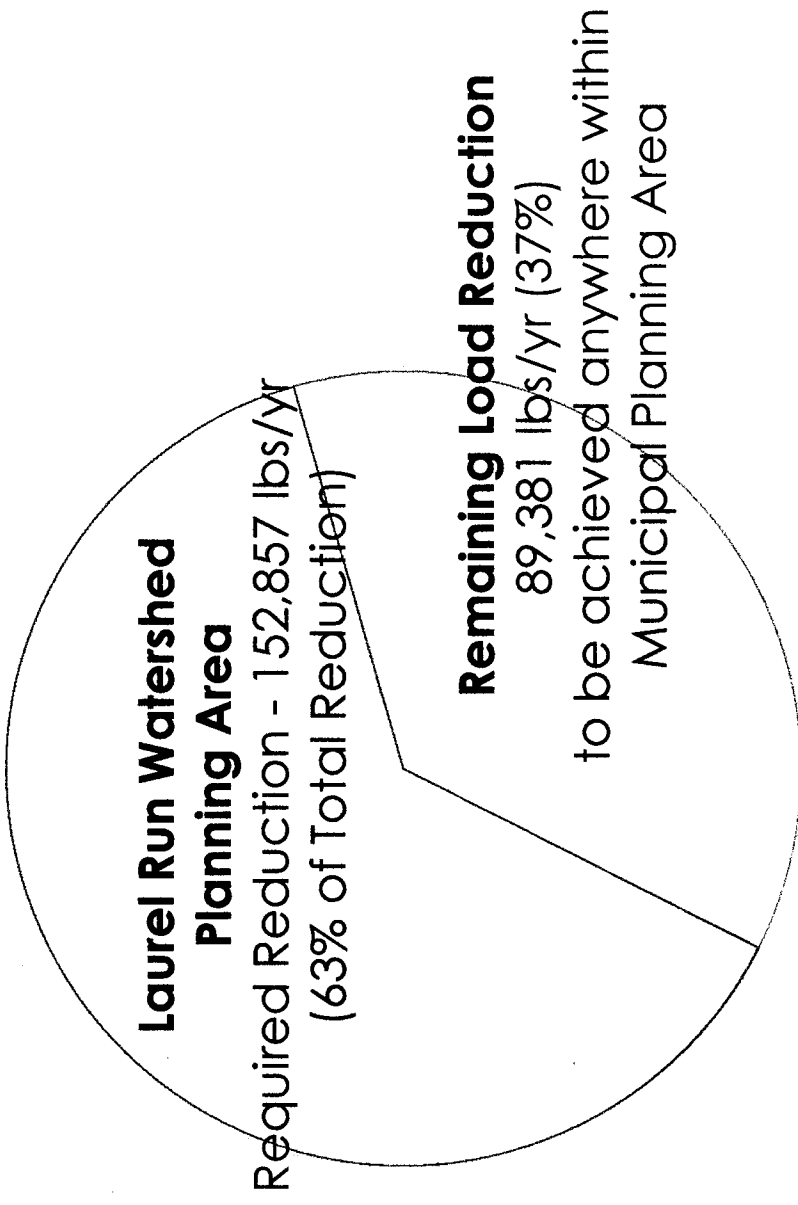
Planning Area	UA (acres)	Pollutant Load TSS (lbs/yr)	
CBPRP	2,413	2,422,383	242,238
Laurel Run PRP	3,759	1,528,658	152,865



[BUILDING RELATIONSHIPS.
DESIGNING SOLUTIONS.]

Pollutant (TSS) Reduction Requirements

Total Required Pollutant Reduction – 242,238 lbs/yr



☐ CBPRP

☐ Laurel Run

HRG

Herbert, Rowland & Grubic, Inc.
Engineering & Related Services
AN EMPLOYEE-OWNED COMPANY

[BUILDING RELATIONSHIPS.
DESIGNING SOLUTIONS.]

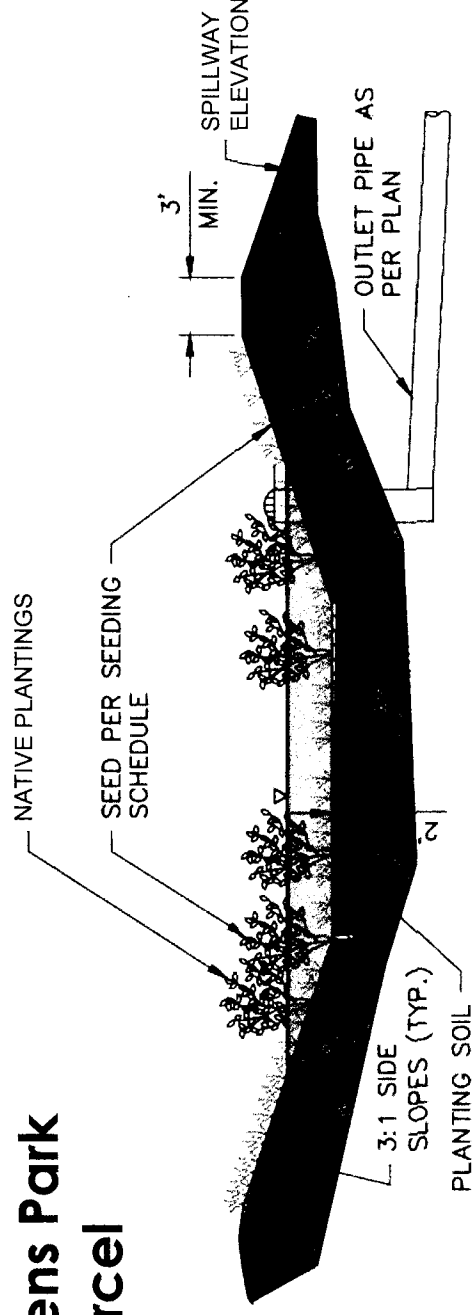
Pollutant Load Reduction Strategy

Site	BMP Type	Planning Area	Drainage Area (acres)	Length (ft)	Load Reduction
Shireman Parcel	Bioretention	CBPRP	1	n/a	667
	Buffer Plantings		20	700	7,415
Old Reliance Park	Bioretention	CBPRP	1	n/a	667
Shope Gardens Park	Bioretention	CBPRP	1	n/a	667
Middletown Area High School	Stream Restoration	CBPRP/ Laurel Run	n/a	1,600	71,808
Greenfield Park	Basin Retrofit	CBPRP/ Laurel Run	20	n/a	12,013
	Stream Restoration		n/a	1,600	71,808
Hershey Creamery	Stream Restoration	CBPRP/ Laurel Run	n/a	1,800	80,784
Total (CBPRP Planning Area)					245,829
Total (Laurel Run Planning Area)					156,296

Proposed BMPs

Bioretention - excavated shallow surface depressions with amended soil media (sand, soil, and organic material mix) planted with specially selected native vegetation to capture and treat stormwater runoff.

Old Reliance Park Shope Gardens Park Shireman Parcel



Proposed BMPs

Stormwater Detention Basins – designed to temporarily detain runoff and discharge at a controlled rate, offers limited water quality benefit.

Basin Retrofit – addition of amended soil media (sand, soil, and organic material mix) and native vegetation to existing detention basin promotes infiltration and increases the basins ability to treat runoff and improve water quality.



Proposed BMPs

Stream Restoration

- Repair/stabilization of eroded areas, reconnection to surrounding floodplain, in-stream calming measures
- Improvements to vegetated buffers, removal of invasive species, installation of native plantings

Hershey Creamery

Middletown Area High School

Greenfield Park



Next Steps

- | | |
|--|-----------------|
| • Public comment period | Aug 1-31, 2017 |
| • Revise report | Sept 1-14, 2017 |
| • Submit report | Sept 15, 2017 |
| • Implementation | |
| – Start in 2018 when permit is approved | |
| – Complete in 2023 (5-years) | |
| – Preliminary cost estimate: \$1.2 million | |

Questions?



[BUILDING RELATIONSHIPS.
DESIGNING SOLUTIONS.]