

AGENDA
MONTGOMERY TOWNSHIP
BOARD OF SUPERVISORS
November 9, 2015

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Robert J. Birch
Candyce Fluehr Chimera
Michael J. Fox
Jeffrey W. McDonnell
Joseph P. Walsh

Lawrence J. Gegan
Township Manager

ACTION MEETING – 8:00 PM

1. Call to Order by Chairman
2. Pledge of Allegiance
3. Public Comment
4. Announcement of Executive Session
5. Consider Approval of Minutes of October 26, 2015 Meeting
6. Consider Adoption of the 2016 Preliminary Budget
7. Presentation – Montgomery Township MS4 TMDL Strategy Plan
8. Announce 2015 Holiday Lights Contest and Breakfast with Santa
9. Consider Authorization to Solicit Proposals for Janitorial Services – Community & Recreation Center
10. Consider Approval of Addendums to Community and Recreation Center Fitness Services Agreement
11. Consider Amended Waiver of Formal Land Development – Burger King #M-15-76 (Amending #M-15-72)
12. Consider Authorization to Submit Applications – Traffic Signal Upgrades
 - DeKalb Pike (SR 2202) and Bethlehem Pike (SR 309) – #64-1056
 - DeKalb Pike (SR 2202) and Montgomery Mall Access Driveway - #64-1985
13. Consider Approval of Out of State Training – Department of Fire Services
14. Consider Approval of Out of State Training - Police Department
15. Consider Authorization to Advertise Proposed Ordinance #15-290 – Montgomery County Financing for Purchase of Radios
16. Consider Establishment of Community and Recreation Center Advisory Committee and Approval of By-Laws
17. Consider Payment of Bills
18. Other Business
19. Adjournment

Future Public Hearings/Meetings:

11-10-2015 @7:30pm – Zoning Hearing Board
11-11-2015 @6:45pm – Autumn Festival Committee (Mont CRC)
11-11-2015 @7:30pm – Park & Recreation Board (Mont CRC)
11-16-2015 @7:30pm – Finance Committee
11-17-2015 @12:30pm – Business Development Partnership
11-18-2015 @6:00pm – Sewer Authority Board

11-18-2015 @7:00pm – Senior Committee (Mont CRC)
11-18-2015 @7:30pm – Shade Tree Commission
11-18-2015 @7:30pm – Public Safety Committee
11-19-2015 @7:30pm – Planning Commission
11-23-2015 @8:00pm – Board of Supervisors

MONTGOMERY TOWNSHIP BOARD OF SUPERVISORS
BOARD ACTION SUMMARY

SUBJECT: Public Comment

MEETING DATE: November 9, 2015 ITEM NUMBER: #3

MEETING/AGENDA: WORK SESSION ACTION XX NONE

REASON FOR CONSIDERATION: Operational: XX Information: Discussion: Policy:

INITIATED BY: Lawrence J. Gregan
Township Manager

BOARD LIAISON: Michael J. Fox, Chairman
of the Board of Supervisors



BACKGROUND:

The Board needs to remind all individual(s) making a comment that they need to identify themselves by name and address for public record.

The Board needs to remind the public about the policy of recording devices. The individual(s) needs to request permission to record the meeting from the Chairman and needs to identify themselves, by name and address for public record.

ZONING, SUBDIVISION OR LAND DEVELOPMENT IMPACT:

None.

PREVIOUS BOARD ACTION:

None.

ALTERNATIVES/OPTIONS:

None.

BUDGET IMPACT:

None.

RECOMMENDATION:

None.

MOTION/RESOLUTION:

None.

DISTRIBUTION: Board of Supervisors, Frank R. Bartle, Esq.

MONTGOMERY TOWNSHIP BOARD OF SUPERVISORS
BOARD ACTION SUMMARY

SUBJECT: Announcement of Executive Session

MEETING DATE: November 9, 2015 ITEM NUMBER: #4

MEETING/AGENDA: WORK SESSION ACTION XX NONE

REASON FOR CONSIDERATION: Operational: XX Information: Discussion: Policy:

INITIATED BY: Lawrence J. Gregan BOARD LIAISON: Michael J. Fox, Chairman
Township Manager of the Board of Supervisors



BACKGROUND:

Frank Bartle will announce that the Board of Supervisors met in Executive Session and will summarize the matters discussed.

ZONING, SUBDIVISION OR LAND DEVELOPMENT IMPACT:

None.

PREVIOUS BOARD ACTION:

None.

ALTERNATIVES/OPTIONS:

None.

BUDGET IMPACT:

None.

RECOMMENDATION:

None.

MOTION/RESOLUTION:

None.

DISTRIBUTION: Board of Supervisors, Frank R. Bartle, Esq.

MONTGOMERY TOWNSHIP BOARD OF SUPERVISORS
BOARD ACTION SUMMARY

SUBJECT: Consider Approval of Minutes for October 26, 2015

MEETING DATE: November 9, 2015 ITEM NUMBER: #5

MEETING/AGENDA: WORK SESSION ACTION XX NONE

REASON FOR CONSIDERATION: Operational: XX Information: Discussion: Policy:

INITIATED BY: Lawrence J. Grogan
Township Manager

BOARD LIAISON: Michael J. Fox, Chairman
of the Board of Supervisors

BACKGROUND:

Please contact Deb Rivas on Monday, November 9, 2015 before noon with any changes to the minutes.

ZONING, SUBDIVISION OR LAND DEVELOPMENT IMPACT:

None.

PREVIOUS BOARD ACTION:

None.

ALTERNATIVES/OPTIONS:

None.

BUDGET IMPACT:

None.

RECOMMENDATION:

None.

MOTION/RESOLUTION:

None.

DISTRIBUTION: Board of Supervisors, Frank R. Bartle, Esq.

**MINUTES OF MEETING
MONTGOMERY TOWNSHIP BOARD OF SUPERVISORS
OCTOBER 26, 2015**

Chairman Michael J. Fox called the executive session to order at 7:30 p.m. In attendance were Vice Chairman Candyce Fluehr Chimera, Supervisors Robert Birch, Jeffrey McDonnell and Joseph Walsh. Also in attendance were Robert Iannozzi, Esquire, Bruce Shoupe and Lawrence Gregan.

Chairman Michael J. Fox called the action meeting to order at 8:00 p.m. In attendance were Vice Chairman Candyce Fluehr Chimera, Supervisors Robert Birch, Jeffrey McDonnell and Joseph Walsh. Also in attendance were Robert Iannozzi, Esquire, Lawrence Gregan, Scott Bendig, Rick Lesniak, Shannon Drosnock, Ann Shade, Stacy Crandell, Bruce Shoupe, Rich Grier, Brian Forman, Kelsey McMeans and Deb Rivas.

Following the Pledge of Allegiance, Chairman Michael J. Fox called for public comment from the audience and there was none.

Township Solicitor Robert Iannozzi, Esquire reported that the Board had met in an executive session earlier in the evening at 7:30 p.m. to discuss three matters of potential litigation and one personnel matter. Mr. Iannozzi stated that this matter was a legitimate subject of executive session pursuant to Pennsylvania's Sunshine Law.

Chairman Michael Fox made a motion and Supervisor Robert Birch seconded the motion to approve the minutes of the October 13, 2015 Board meeting. The minutes of the meeting were unanimously approved as submitted.

Resolution #1 made by Chairman Michael Fox, seconded by Supervisor Joseph Walsh and adopted unanimously, appointed Michael Lyon to serve as a member of the Montgomery Township Planning Commission with an existing four year term to expire on January 1, 2019.

Police Chief Scott Bendig reported that in early 2015 the Montgomery Township Police Department's Canine Unit was reduced to two active teams due to the retirement of Canine Jammer and the untimely passing of Canine Bauer. Two new canines were added to the unit

this year and were introduced to the Board and residents. Canine Cooper is a 22 month old Belgian Malinois assigned to Officer Brian Schreiber. Cooper was imported from Slovakia and trained at the Tarheel Canine Academy in patrol work and narcotics detection. Canine Major is a 21 month old German Shepard assigned to Officer Tim Woch. Major was imported from Slovakia and trained at Tarheel Canine Academy in patrol work and narcotics detection. Chief Bendig also reported that the purchase of these two canines could not have occurred without the generous assistance of members of our community, and in particular, the assistance of District Attorney Risa Vetri Ferman. District Attorney Ferman has been an ardent supporter of the Department's Canine Unit, providing funding for the purchase and training of several of our canines since taking office as our District Attorney in 2007. In appreciation for this support, the Board of Supervisors recognized District Attorney Ferman with a framed photograph of the Canine Unit with the District Attorney along with patches from the Police Department and the Canine Unit. Resolution #2 made Chairman Michael Fox, seconded by Supervisor Joseph Walsh and adopted unanimously, welcomed the new police canines, Cooper and Major, and expressed the Board's sincere appreciation to District Attorney Ferman for her unwavering support of the Montgomery Township Police Department's Canine Unit.

Director of Fire Services Richard Lesniak reported that the Township had received the annual allocation by the Commonwealth of Pennsylvania of a share of the Foreign Fire Insurance Tax in the amount of \$181,959.48, a decrease of 28% from the 2015 allocation. The funds are a result of taxes paid by foreign fire insurance companies to the State of Pennsylvania in accordance with Act 205 of 1984. The funds are allocated by the State to support the Volunteer Fire Relief Association of the volunteer fire company that serves the Township. Resolution #3 made by Chairman Michael Fox, seconded by Vice Chairman Candyce Fluehr Chimera and adopted unanimously, presented a check in the amount of \$181,959.48 from the Commonwealth of Pennsylvania to the FDMT Fire Relief Association.

Director of Fire Services Rick Lesniak reported that the Montgomery Township Department of Fire Services recently received the 2014 Life Safety Achievement award which recognizes the Career and Volunteer members of the Department for its outstanding Fire Prevention program and accomplishments. Montgomery Township is one of only 96 fire departments across the United States to receive the award this year for recording zero fire deaths in 2014. In addition to zero deaths, the award recognizes active and effective fire prevention programs as well as a clear commitment to reducing the number of house fires in the community. Resolution #4 made by Chairman Michael Fox, seconded by Vice Chairman Candyce Fluehr Chimera and adopted unanimously, acknowledged the Fire Department's Life Safety Achievement Award for 2014, and expressed their appreciation and congratulations to the men and women of the Fire Department for this accomplishment.

Director of Recreation and Community Center Brian Forman reported that the Recreation Department is ready to advertise the Winter Recreation Programs and Fees to be offered to the public during the months of January through March, 2016. Programs offered include birthday parties, various sports activities, pickle ball, basketball, volleyball, holistic health, painting, cake decorating and many other programs. The Recreation Department continues to offer a wide selection of healthy fitness classes, including Zumba, yoga and spinning classes at the new Community and Recreation Center. Resolution #5 made by Chairman Michael Fox, seconded by Supervisor Joseph Walsh and adopted unanimously, approved the 2016 Winter Programs and Fee Schedule amendment as submitted.

Chief of Police Scott Bendig reported that members of the Police Highway Safety Unit recently identified several intersections where traffic control devices (signs) had not been installed or where more appropriate signs should be installed. The Police Department has been working to prioritize the signs to be modified for several developments in the Township. An ordinance has been prepared to amend stop and yield regulatory signs at ten locations in Montgomery Village and is ready for the Board's consideration this evening. Resolution #6

made by Chairman Michael Fox, seconded by Supervisor Joseph Walsh and adopted unanimously, adopted Ordinance #15-289 - Amending Stop Intersections and Yield Intersections for the Montgomery Village Development.

Director of Finance Shannon Drosnock reported that the annual General Municipal Pension System State Aid allocation for 2015 has been received in the amount of \$427,370.97, which is a decrease of 1% from the 2014 allocation. The funds are allocated by the Township to the Police and Non-Uniformed Pension plans to offset the cost of these plans. Resolution #7 made by Chairman Michael Fox, seconded by Supervisor Joseph Walsh and adopted unanimously, accepted the recommendation to allocate the 2015 Act 205 General Municipal Pension System State Aid to the Police Pension Plan in the amount of \$243,601.45 and to the Non Uniformed Employee Pension Plan in the amount of \$183,769.52.

Director of Planning and Zoning Bruce Shoupe reported that the Township has received a request from Bharatiya Temple to waive the special event permit fees associated with their Festival which was held on October 22, 2015. In the past, it has been the policy of the Board of Supervisors to waive permit fees for non-profit and religious organizations. Resolution #8 made by Chairman Michael Fox, seconded by Vice Chairman Candyce Fluehr Chimera and adopted unanimously, approved the request of Bharatiya Temple to waive all special event permit fees associated with their Festival which was held on October 22, 2015.

Township Manager Lawrence Gregan reported that Montgomery Township owns and maintains a municipal separate storm sewer system (MS4) requiring a National Pollutant Discharge Elimination System (NPDES) permit to allow discharge of stormwater runoff to waters of the Commonwealth of Pennsylvania. At this time the Township is required to file an amended MS4 TMDL strategy with the state by the end of this year. The draft strategy document has been prepared by the Township Engineer, Gilmore & Associates. The Township is required to solicit public comment, and advertise a public meeting, including a statement whereby the draft strategy document is now available for public inspection. Any comments that are received in

response to the public meeting and to the draft strategy are required to be incorporated into the response, including answers to those questions and comments. The Township is proposing that the Township Engineer present the strategy at the November 9th meeting. In addition, the 30 day public comment period would commence with the advertisement of the notice of the TMDL strategy's availability, which would be October 26, 2015 and run for 30 days from that time period.

Chairman Michael Fox made a motion to approve the payment of bills for October 26, 2015. Supervisor Robert Birch seconded the motion. The payment of bills was unanimously approved as submitted.

Under other business, Director of Recreation and Community Center Brian Forman reported that the Community and Recreation Center is proposing to engage AGT Fitness Management, Inc. to provide certified fitness staff to the Community and Recreation Center for a one year contract period. Under the contract, AGT would provide professional staffing for the fitness center including a full time on-site fitness specialists and group fitness instructors. These positions would provide staffing for all of the hours that the Community and Recreation Center is open per week. The cost for the services under this contract would be \$6,995.00 per month. A financial cost-benefit analysis was presented which shows that the Township would spend less money annually by contracting with AGT Fitness Management, Inc. than it would by providing a similar level of coverage with Township hired staff. Resolution #10 made by Chairman Michael Fox, seconded by Supervisor Joseph Walsh and adopted unanimously, approved the agreement with AGT Fitness Management Inc. to provide Certified Fitness Staff to the Community and Recreation Center at the cost of \$6,995.00 per month.

There being no further business to come before the Board, the meeting adjourned at 8:30 p.m.

MONTGOMERY TOWNSHIP BOARD OF SUPERVISORS
BOARD ACTION SUMMARY

SUBJECT: Consider Approval of 2016 Preliminary Budget

MEETING DATE: November 9, 2015

ITEM NUMBER: #6

MEETING/AGENDA: WORK SESSION

ACTION XX

NONE

REASON FOR CONSIDERATION: Operational: XX Policy: Discussion: Information:

INITIATED BY: Shannon Q. Drosnock
Finance Director

BOARD LIAISON: Robert J. Birch, Supervisor
Liaison – Finance Committee



BACKGROUND:

The Board of Supervisors conducted four public workshops during the month of October. These meetings were held with all department heads and representatives of the FDMT and Montgomery Township Sewer Authority to review proposed revenues and expenditures for the 2016 Preliminary Budget. A summary of the proposed revenues and expenditures for each fund is attached. Presentation slides highlighting the revenue and expenditures in the 2016 Preliminary Budget will be presented at the public meeting on Monday night.

Upon adoption of a preliminary budget by the Board, a notice must be advertised once in one newspaper of general circulation in the township that the proposed budget is available for public inspection at the Township Building. After the approved preliminary budget has been available for public inspection for twenty (20) days, the Board of Supervisors shall, after making revisions as are appropriate, adopt a final budget not later than December 31st.

The adoption of this 2016 Preliminary Budget is an important step towards adoption of a Final Budget for 2016. If the estimated revenues or expenses in a proposed Final Budget are increased more than ten percent in the aggregate or more than twenty-five percent in any major category over the advertised 2016 Preliminary Budget, a Final Budget may not be legally adopted with those increases unless it is been advertised again and an opportunity given to taxpayers to examine the amended Final Budget.

ZONING, SUBDIVISION OR LAND DEVELOPMENT IMPACT:

None.

PREVIOUS BOARD ACTION:

None.

ALTERNATIVES/OPTIONS:

None.

BUDGET IMPACT:

As described above.

RECOMMENDATION:

Approve the 2016 Preliminary Budget for public inspection as proposed.

MOTION/RESOLUTION:

BE IT RESOLVED by the Board of Supervisors of Montgomery Township that we hereby adopt the 2016 Preliminary Budget for all funds in the form attached hereto.

BE IT FURTHER RESOLVED that we hereby set Monday December 14, 2015 at 8:00 p.m. in the Township Building as the date, time and place for the Public Meeting for consideration of adoption of the 2016 Final Budget.

MOTION: _____ SECOND: _____

ROLL CALL:

| | | | | |
|------------------------|-----|---------|---------|--------|
| Robert J. Birch | Aye | Opposed | Abstain | Absent |
| Candyce Fluehr Chimera | Aye | Opposed | Abstain | Absent |
| Jeffrey W. McDonnell | Aye | Opposed | Abstain | Absent |
| Joseph P. Walsh | Aye | Opposed | Abstain | Absent |
| Michael J. Fox | Aye | Opposed | Abstain | Absent |

DISTRIBUTION: Board of Supervisors, Frank R. Bartle, Esq.

**MONTGOMERY TOWNSHIP
2016 PRELIMINARY BUDGET**

| | | 2015 | 2016 |
|---|--|----------------------|----------------------|
| Fund-Dept | | Original Budget | |
| FUND 01 GENERAL FUND | | | |
| REVENUES | | | |
| Subtotal Real Estate Taxes | | 1,626,100.00 | 1,636,100.00 |
| Subtotal Earned Income Taxes | | 4,790,000.00 | 5,190,000.00 |
| Subtotal Local Enabling Taxes | | 4,065,000.00 | 4,151,000.00 |
| Subtotal Permits | | 579,000.00 | 579,000.00 |
| Subtotal Licenses | | 623,750.00 | 650,500.00 |
| Subtotal Fines | | 175,000.00 | 175,000.00 |
| Subtotal Interest | | 18,300.00 | 40,000.00 |
| Subtotal Rent | | 0.00 | 0.00 |
| Subtotal Grants | | 503,000.00 | 520,500.00 |
| Subtotal Departmental Fees | | 75,750.00 | 75,750.00 |
| Subtotal Other Financing Sources | | 76,000.00 | 76,000.00 |
| Subtotal Interfund Transfers | | 579,800.00 | 311,350.00 |
| Total General Fund Revenues | | 13,111,700.00 | 13,405,200.00 |
| EXPENDITURES | | | |
| Subtotal Administration | | 1,342,250.00 | 1,391,850.00 |
| Subtotal Tax Collection | | 231,300.00 | 221,750.00 |
| Subtotal Finance | | 884,600.00 | 675,800.00 |
| Subtotal Police | | 6,047,250.00 | 6,278,000.00 |
| Subtotal Police Vehicles | | 258,900.00 | 285,300.00 |
| Subtotal Fire Protection | | 85,140.00 | 87,150.00 |
| Subtotal Emergency and VMSC | | 12,550.00 | 14,450.00 |
| Public Works - General | | | |
| Subtotal Public Works - General | | 1,874,385.00 | 1,768,250.00 |
| Subtotal Snow Removal | | 101,100.00 | 123,100.00 |
| Subtotal Public Works - Traffic Lights | | 82,550.00 | 82,200.00 |
| Subtotal Public Works - Street Lighting | | 19,500.00 | 20,500.00 |
| Subtotal Public Works - Repair | | 30,000.00 | 30,000.00 |
| Subtotal Interfund Transfers | | 1,384,850.00 | 1,658,100.00 |
| Total Expenditures General Fund | | 13,111,700.00 | 13,405,200.00 |
| TOTAL SURPLUS/DEFICIT GENERAL FUND | | 0.00 | 0.00 |

**MONTGOMERY TOWNSHIP
2016 PRELIMINARY BUDGET**

| Fund-Dept | 2015 | 2016 |
|--|-----------------------|---------------------|
| | Original Budget | |
| FUND 04 DEPARTMENT OF FIRE SERVICES | | |
| Revenue subtotal | 1,112,100.00 | 965,100.00 |
| Expenditure Subtotal | 1,112,100.00 | 965,100.00 |
| | | |
| TOTAL/SURPLUS/DEFICIT FIRE PROTECTION | 0.00 | 0.00 |
| FUND 05 PARKS AND RECREATION | | |
| Revenue Subtotal | 449,600.00 | 468,800.00 |
| Expenditure Subtotal | 258,850.00 | 499,650.00 |
| | | |
| TOTAL SURPLUS/DEFICIT FUND 05: PARKS FUND | 190,750.00 | (30,850.00) |
| FUND 06 BASIN MAINTENANCE: | | |
| Revenue Subtotal | 35,400.00 | 74,200.00 |
| Expenditure Subtotal | 85,500.00 | 74,200.00 |
| | | |
| TOTAL SURPLUS/DEFICIT FUND 06: BASIN MAINTENANCE | (50,100.00) | 0.00 |
| FUND 07 STREET LIGHTS: | | |
| Revenue Subtotal | 137,400.00 | 143,200.00 |
| Expenditure Subtotal | 137,400.00 | 143,200.00 |
| | | |
| TOTAL SURPLUS/DEFICIT FUND 07: STREET LIGHTS | 0.00 | 0.00 |
| FUND 08 RECREATION CENTER: | | |
| Subtotal Revenues | 3,398,600.00 | 863,000.00 |
| Expenditure Subtotal | 7,750,120.00 | 1,052,725.00 |
| | | |
| TOTAL SURPLUS/DEFICIT FUND 08: RECREATION CENTER | (4,351,520.00) | (189,725.00) |
| FUND 23: DEBT SERVICE | | |
| Subtotal Fund 23 Revenue | 527,280.00 | 532,680.00 |
| Subtotal Expenditures Fund 23 | 763,650.00 | 539,000.00 |
| | | |
| TOTAL SURPLUS/DEFICIT FUND 23: DEBT SERVICE | (236,370.00) | (6,320.00) |
| FUND 30: CAPITAL RESERVE FUND | | |
| Subtotal Revenue Capital Reserve Fund | 595,050.00 | 803,095.00 |
| Subtotal Expenditures Capital Reserve Fund | 6,261,300.00 | 1,519,850.00 |
| | | |
| TOTAL SURPLUS/DEFICIT FUND 30 CAPITAL RESERVE FUND | (5,666,250.00) | (716,755.00) |
| FUND 31: PARK DEVELOPMENT FUND | | |
| Subtotal Revenue Park Development Fund | 91,700.00 | 1,500.00 |
| Subtotal Expenditures Park Development Fund | 416,000.00 | 0.00 |
| | | |
| TOTAL SURPLUS/DEFICIT FUND 31 PARK DEVELOPMENT FUND | (324,300.00) | 1,500.00 |

**MONTGOMERY TOWNSHIP
2016 PRELIMINARY BUDGET**

| | | 2015 | 2016 |
|--|--|-----------------|------------|
| Fund-Dept | | Original Budget | |
| FUND 35: LIQUID FUELS | | | |
| Subtotal Liquid Fuels Revenues | | 575,300.00 | 662,100.00 |
| Subtotal Liquid Fuels Expenditures | | 541,000.00 | 591,700.00 |
| TOTAL SURPLUS/DEFICIT FUND 35 LIQUID FUELS | | 34,300.00 | 70,400.00 |
| FUND 93: ENVIRONMENT | | | |
| Subtotal Environment Revenue | | 45,500.00 | 75,100.00 |
| Subtotal Environment Expenditures | | 392,900.00 | 63,500.00 |
| TOTAL SURPLUS/DEFICIT FUND 93 ENVIRONMENTAL | | (347,400.00) | 11,600.00 |

**MONTGOMERY TOWNSHIP
2016 PRELIMINARY BUDGET**

| Fund-Dept | 2015 | 2016 |
|---|------------------------|----------------------|
| | Original Budget | |
| FUND 94: REPLACEMENT TREE | | |
| Subtotal Replacement Tree Revenue | 227,400.00 | 50,800.00 |
| Subtotal Replacement Tree Expenditures | 290,500.00 | 50,800.00 |
| TOTAL SURPLUS/DEFICIT FUND 94 REPLACEMENT TREE | (63,100.00) | 0.00 |
| FUND 95: AUTUMN FESTIVAL | | |
| Subtotal Autumn Festival Revenue | 25,550.00 | 25,500.00 |
| Subtotal Autumn Festival Expenditures | 25,550.00 | 37,500.00 |
| TOTAL SURPLUS/DEFICIT FUND 95 AUTUMN FESTIVAL | 0.00 | (12,000.00) |
| FUND 96: RESTORATION FUND | | |
| Subtotal Restoration Fund Revenue | 100.00 | 0.00 |
| Subtotal Restoration Fund Expenditures | 9,900.00 | 9,900.00 |
| TOTAL SURPLUS/DEFICIT FUND 96 RESTORATION FUND | (9,800.00) | (9,900.00) |
| TOTAL SURPLUS/DEFICIT FUND 99 FIRE DEPARTMENT MONTGOMERY | 0.00 | 0.00 |
| | | |
| | | |
| Grand total profit/loss | (10,823,790.00) | (882,050.00) |
| | 0.00 | 0.00 |
| GRAND TOTAL REVENUES - ALL FUNDS | 22,335,000.00 | 20,315,475.00 |
| GRAND TOTAL EXPENSES - ALL FUNDS | 33,158,790.00 | 21,197,525.00 |
| TOTAL SURPLUS/DEFICIT ALL FUNDS | (10,823,790.00) | (882,050.00) |
| | | |

**MONTGOMERY TOWNSHIP BOARD OF SUPERVISORS
BOARD ACTION SUMMARY**

SUBJECT: Presentation - Township's MS4 TMDL Strategy

MEETING DATE: November 9, 2015

ITEM NUMBER: #7

MEETING/AGENDA:

ACTION

NONE

REASON FOR CONSIDERATION: Operational: xx Policy: Discussion: Information:

INITIATED BY: Lawrence J. Gregan
Township Manager

BOARD LIAISON: Michael J. Fox, Chairman,
Board of Supervisors

BACKGROUND:

Montgomery Township owns and maintains a municipal separate storm sewer system (MS4) requiring a National Pollutant Discharge Elimination System (NPDES) permit to allow discharge of stormwater runoff to waters of the Commonwealth of Pennsylvania. The Wissahickon Creek and Neshaminy Creek watersheds have approved Total Maximum Daily Load (TMDL) plans. These plans establish sediment waste load allocations (WLA) for the Township limiting the amount of sediment that is permitted to be discharged to these watersheds. At this time, the Wissahickon and Neshaminy TMDL plans have siltation (sediment) WLAs attributed to the Township.

The attached MS4 TMDL Strategy has been prepared by the Township Engineer to satisfy the conditions of the NPDES MS4 permit. The intent of this Strategy is to establish the WLA of the Township and to present a plan to reduce waste loads discharged consistent with the WLAs in the approved TMDLs for each watershed. The Township is required to submit this TMDL Strategy to DEP by December 31, 2015 and is currently soliciting public involvement and participation for the revised TMDL Strategy.

This presentation, incorporated as a part of the public involvement and participation process, is an opportunity for the public to hear a presentation on the proposed strategy and to provide an opportunity to provide verbal or written comments on the strategy. A public notice of this meeting was posted in The Reporter, a newspaper of general circulation in the area on October 28, 2015. In addition, this notice, contained a statement describing the Strategy, where it may be reviewed by the public, and notice that written comments can be made to the Township by November 25, 2015.

Following completion of the public involvement and participation process, the Township Engineer will consider and make a record of each comment received and prepare a written response. This record will be submitted to DEP with the MS4 TMDL Strategy by December 31, 2015.

ZONING, SUBDIVISION OR LAND DEVELOPMENT IMPACT: None.

PREVIOUS BOARD ACTION: None.

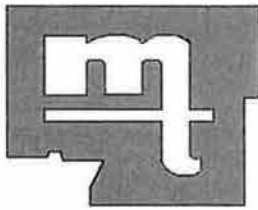
ALTERNATIVES/OPTIONS: None.

BUDGET IMPACT: None.

RECOMMENDATION: Hear the presentation and accept any verbal or written comments on the strategy.

MOTION/RESOLUTION: None

DISTRIBUTION: Board of Supervisors, Frank R. Bartle, Esq.



Montgomery Township
1001 Stump Road
Montgomeryville, PA 18936
215-393-6900, Fax: 215-855-6656

November 6, 2015

Legal Notice Advertising – The Reporter
Via Email: legals@thereporteronline.com
307 Derstine Avenue
Lansdale, PA 19446

ATTN: Legal Advertising, Account #881229

Dear Marcia:

Please insert the attached legal notice in the next edition of your paper and submit proof of publication to my attention at the above address. Thank you for your attention.

NOTICE OF PUBLIC COMMENT PERIOD AND PUBLIC MEETING for the Montgomery Township MS4 TMDL Strategy. The MS4 TMDL Strategy outlines the plan the Township will use to reduce pollutants discharged from the Township storm sewer system (MS4) consistent with the waste load allocations presented in the Neshaminy Creek and Wissahickon Creek TMDL plans. The Township is soliciting written comments on the MS4 TMDL Strategy. Interested persons may submit written comments during the thirty (30) day period beginning October 26, 2015 and ending November 25, 2015. The document will be available for review at the Township office address below weekdays between the hours of 9AM and 4PM during the comment period. The document is also available for review on the Township website (www.montgomerytp.org). Written and verbal comments will be accepted at the public meeting scheduled 8PM November 9, 2015 (same night as regular BOS meeting) at the Township office address below. Comments must be submitted in writing to the attention of the Township Manager at the Township office address below or by email (lgregan@montgomerytp.org). Comments submitted by facsimile will not be accepted. Comments, including comments submitted by email, must include the originator's name and address.

All regular meetings and work sessions of the Board will be in the Township Administration Building and are open to the public, pursuant to Section 704 of the Sunshine Act (65 Pa. C.S. §701, *et seq.*) At any regular meetings and work sessions of the Board, deliberation and official action may be taken on any item properly before the Board. All interested citizens of Montgomery Township may attend this meeting and will be given the opportunity to be heard at the appropriate time. Persons with disabilities, wishing to attend the Public Hearing and requiring auxiliary aid, service or other accommodations to participate, should contact the Montgomery Township Director of Administration and Human Resources at 215-393-6900.

MONTGOMERY TOWNSHIP BOARD OF SUPERVISORS
Lawrence J. Gregan, Township Manager

Thank you for your assistance with this ad.

Sincerely,

Deborah A. Rivas

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MS4 TMDL Strategy
For
Montgomery Township
Montgomery County, Pennsylvania

September 2012
Revised October 2015

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**MS4 TMDL Strategy
For
Montgomery Township
Montgomery County, Pennsylvania**

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1.0. Introduction

Montgomery Township, located within Montgomery County, is comprised of 10.7 square miles of land situated within the Neshaminy Creek and Wissahickon Creek watersheds. The Township owns and maintains a small municipal separate storm sewer system (MS4) requiring a National Pollutant Discharge Elimination System (NPDES) permit to allow discharge of stormwater runoff to waters of the Commonwealth of Pennsylvania. The Wissahickon Creek and Neshaminy Creek have approved Total Maximum Daily Load (TMDL) plans. These plans establish sediment waste load allocations (WLA) for Montgomery Township limiting the amount of pollution that is permitted to be discharged to waters of the Commonwealth of Pennsylvania. At the time of this Strategy, the Wissahickon and Neshaminy TMDL plans have siltation (sediment) WLAs attributed to the Township. Nutrient WLAs have not been established for Montgomery Township in either watershed. This MS4 TMDL Strategy is prepared to satisfy the permit condition requiring this document.

The intent of this MS4 TMDL Strategy is to establish the WLA of the Township and to present a plan to reduce waste loads discharged from the regulated small MS4 consistent with the WLAs in the approved TMDLs for each watershed. Upon approval of this Strategy by the Pennsylvania Department of Environmental Protection (PADEP), the Township will provide MS4 TMDL Design Details for implementation of the Strategy. Together, these documents, the MS4 TMDL Strategy and the MS4 TMDL Design Details, comprise the MS4 TMDL Plan satisfying the requirement of the Township's NPDES MS4 Permit. Implementation of the TMDL Plan is an adaptive, iterative and dynamic process. The TMDL Plan will be evaluated and updated by the Township on an as-needed basis based on its effectiveness in reducing pollutant loads in discharges from the regulated small MS4, upon the reasonableness of achieving the WLAs and the cost/benefit of the BMP under consideration.

2.0. Watersheds

Montgomery Township is located within the Neshaminy Creek and Wissahickon Creek watersheds. The current, approved TMDL plans associated with these watersheds are listed below.

- PADEP, 2003. Total Maximum Daily Load (TMDL) Assessment for the Neshaminy Creek Watershed in Southeast Pennsylvania. Pennsylvania Department of Environmental Protection
- US EPA, 2003. Nutrient and Siltation TMDL Development for Wissahickon Creek, Pennsylvania - Final Report. U.S. Environmental Protection Agency Region 3

The Neshaminy Creek TMDL plan was developed based on different geographic sections (sub-watersheds) and by source and cause of impairment. Montgomery Township is within the Little Neshaminy Sub-Basin and the West Branch Neshaminy Creek Sub-Basin #2 of the Neshaminy watershed. At the time of this Strategy, the Wissahickon and Neshaminy TMDL plans have siltation (sediment) WLAs attributed to the Township. Nutrient WLAs have not been established for Montgomery Township in either watershed. The following table lists the applicable watersheds and the current pollutants attributed to the Township per the current TMDL plans.

TABLE 2-1: TMDL PLAN SUMMARY

| Watershed | Hydrologic Unit Code (HUC) | TMDL Plan Approval Year | TMDL Plan Analysis Year | Pollutant(s) |
|--|----------------------------|-------------------------|-------------------------|--------------|
| Neshaminy - Little Neshaminy Sub-Basin | 02040203 | 2003 | 2000 | siltation |
| Neshaminy - West Branch Neshaminy Creek Sub-Basin #2 | 02040203 | 2003 | 2000 | siltation |
| Wissahickon | 02040203 | 2003 | 2002 | siltation |

3.0. Existing Pollutant Loads

Pollutants are transported by stormwater runoff and discharged to Waters of the Commonwealth of Pennsylvania through the Township storm sewer system. The TMDL plans for each watershed presents the waste load at the time the report was prepared. The TMDL plans are prepared based upon stream monitoring, historic rainfall data as well as hydrologic, hydraulic and pollutant modeling. The methodology and computational tools used to prepare each TMDL plan may vary but the result of each is the existing pollutant load at the time of the plan, the waste load allocation for the watershed and reduction percentage. In the case of the Neshaminy and Wissahickon TMDL plans, the WLA for sediment is presented as pounds per year (lbs/yr). The Wissahickon TMDL plan presents the WLA attributed to each municipality within the watershed. The Neshaminy TMDL plan presents the WLA for each sub-basin. The tables below documents the WLA and reduction percentage attributed to area of Montgomery Township per the current approved TMDL plans for each watershed. The WLAs within the Neshaminy watershed are prorated based on the area of the Township with the sub-watershed areas.

TABLE 3-1: NESHAMINY CREEK WATERSHED SEDIMENT LOADING

| NESHAMINY CREEK SEDIMENT LOADING SUMMARY | | | | | | | | | |
|--|----------------------|-------------------------|-------------------------|---|------------------------|--|-----------------------|-------------------------|-----------------------------|
| Watershed | Total Watershed Area | Township Watershed Area | % Watershed of Township | Total Existing Sediment Load in Watershed | Watershed Sediment WLA | Total Existing Sediment Load in Township | Township Sediment WLA | Sediment Load Reduction | Township Sediment Reduction |
| | (ac) | (ac) | (%) | (lbs/year) | (lbs/year) | (lbs/year) | (lbs/year) | (%) | (lbs/year) |
| Little Neshaminy | 27,262 | 3,963 | 14.54% | 8,369,480 | 6,937,351 | 1,216,648 | 1,008,463 | 17.11% | 208,185 |
| West Branch, Sub-Basin 2 | 2,521 | 1,876 | 74.41% | 672,510 | 295,629 | 500,448 | 219,992 | 56.04% | 280,456 |

TABLE 3-2: WISSAHICKON CREEK WATERSHED SEDIMENT LOADING

| WISSAHICKON CREEK SEDIMENT LOADING SUMMARY | | | | |
|--|------------------------|--------------|--------------------|--------------------|
| Source | Existing Sediment Load | Sediment WLA | Sediment Reduction | Sediment Reduction |
| | (lbs/year) | (lbs/year) | (%) | (lbs/year) |
| Streambank Erosion | 25,444 | 13,231 | 48.00% | 12,213 |
| Overland | 135,550 | 97,898 | 27.78% | 37,653 |
| TOTAL | 160,994 | 111,128 | 30.97% | 49,866 |

TABLE 3-3: TOWNSHIP POLLUTANT REDUCTION REQUIREMENT

| SUMMARY | | | | |
|-------------------------------------|--|--------------------------------------|--|---|
| Watershed | TMDL Plan Township Sediment Load (lbs/yr) | Township Sediment WLA (lbs/yr) | Township Pollutant Reduction (lbs/yr) | Township Pollutant Reduction (%) |
| Little Neshaminy | 1,216,648 | 1,008,463 | 208,185 | 17% |
| West Branch Neshaminy, Sub-Basin #2 | 500,448 | 219,992 | 280,456 | 56% |
| Wissahickon | 160,994 | 111,128 | 49,866 | 31% |
| TOTAL | 1,878,089 | 1,339,584 | 538,506 | 29% |

3.1. MS4 Tributary Area

The existing pollutant loads presented above are attributed the entire Township area. The Township's permit obligation applies only to runoff collected by and discharged from the MS4. The following table summarizes areas that are not tributary to the Township's MS4. The sediment loads generated from these non-tributary areas are parsed from the Township loads to determine that which is attributed to only the MS4. The Township reserves the right to modify parsed areas in the future. Any modification to parsed areas will be documented in future updates of the MS4 TMDL Plan.

TABLE 3-4: SUMMARY OF PARSED AREAS

| Area Description | Unit | Little Neshaminy | West Branch #2 | Wissahickon | TOTAL |
|----------------------|--------------|------------------|----------------|-------------|--------------|
| PADOT Roads | acres | 95 | 48 | 14 | 157 |
| Not Tributary to MS4 | acres | 1,424 | 597 | 429 | 2,450 |
| Total | acres | 1,519 | 644 | 444 | 2,608 |

3.1.1. Transitional Areas

The Neshaminy Creek TMDL Plan includes significant pollutant loads due to "transitional" land uses (Tables C.2.4 & C.6.3 of the Neshaminy TMDL Plan). These transitional uses are considered to be new developments or construction sites and contribute a significant portion of the overland sediment load. Comparison of historical and current aerial photography indicates the majority of new developments and construction sites at the time the Neshaminy TMDL Plan was prepared have been stabilized for several years. Also, the size, rate and frequency of development within the Township have decreased sharply in the decade following the preparation of the Neshaminy TMDL Plan. For the purpose of determining the sediment load attributed to the Township, the sediment load from these transitional uses presented in the TMDL Plan will be adjusted to account for the transition of these areas from disturbed to stabilized land cover classifications. It is assumed that 75 percent of transitional land uses have been stabilized and converted to low intensity development. Low intensity development was selected as a conservative assumption due to a higher loading rate per the Neshaminy TMDL Plan (Tables C.2.4 & C.6.3 of the Neshaminy TMDL Plan).

TABLE 3-5: TRANSITIONAL USE ADJUSTMENT SUMMARY

| TRANSITIONAL USE ADJUSTMENT SUMMARY | |
|-------------------------------------|---------------------------|
| Watershed | Sediment Load (lbs/yr) |
| Little Neshaminy | 87,110 |
| West Branch Neshaminy, Sub-Basin #2 | 229,666 |
| TOTAL | 316,776 |

3.1.2. MS4 Pollutant Loads

The following table summarizes the sediment loads, WLAs and required sediment reductions for the overall Township and that which is attributed to the MS4 after accounting for parsed areas and transitional land uses.

TABLE 3-6: MONTGOMERY TOWNSHIP MS4 POLLUTANT LOAD SUMMARY

| Row | Watershed | Unit | Little Neshaminy | West Branch #2 | Wissahickon | TOTAL | Source |
|-----|---|---------|------------------|----------------|-------------|-----------|---------------|
| A | Watershed Area | acres | 27,262 | 2,521 | N/A | | TMDL Plan |
| B | TMDL Plan Watershed Sediment Load | lb/year | 8,369,480 | 672,510 | N/A | | TMDL Plan |
| C | TMDL Plan Watershed WLA | lb/year | 6,937,351 | 295,629 | N/A | | TMDL Plan |
| D | TMDL Plan Watershed Pollutant Reduction | lb/year | 1,432,129 | 376,881 | N/A | | TMDL Plan |
| E | TMDL Plan Watershed Pollutant Reduction | % | 17.1% | 56.0% | N/A | | TMDL Plan |
| F | Township Area Within Watershed | acres | 3,963 | 1,876 | 944 | 6,783 | Mapping |
| G | Township Area Within Watershed | % | 14.5% | 74.4% | N/A | | F/A |
| H | Township Sediment Load | lb/year | 1,216,648 | 500,448 | 160,994 | 1,878,089 | B*G |
| I | Township WLA | lb/year | 1,008,463 | 219,992 | 111,128 | 1,339,584 | C*G |
| J | Township Pollutant Reduction | lb/year | 208,185 | 280,456 | 49,866 | 538,506 | D*G |
| K | Township Pollutant Reduction | % | 17.1% | 56.0% | 31.0% | | J/H |
| L | Transitional Area Adjustment | lb/year | -87,110 | -229,666 | 0 | -316,776 | Section 3.1.1 |
| M | Adjusted Township Sediment Load | lb/year | 1,129,538 | 270,782 | 160,994 | 1,561,313 | H+L |
| N | Parsed Area - Total | acres | 1,519 | 644 | 444 | 2,608 | Table 3-4 |
| O | Parsed Area - Total | % | 38.3% | 34.3% | 47.0% | | N/F |
| P | Parsed Area Sediment Load - Total | lb/year | -433,032 | -93,013 | -75,688 | -601,733 | M*O |
| Q | MS4 Sediment Load | lb/year | 696,505 | 177,769 | 85,306 | 959,581 | H+L+P |
| R | MS4 Required Pollutant Reduction | % | 17.1% | 56.0% | 31.0% | | K |
| S | MS4 Required Pollutant Reduction | lb/year | 119,181 | 99,623 | 26,422 | 245,227 | Q*R |

4.0. Pollutant Reduction Strategy

As presented in Table 3-6 above, Montgomery Township has a significant requirement to reduce sediment discharging from the MS4. The Township plans to achieve the sediment reduction using three basic approaches listed below and described in subsequent sections.

- Quantify existing best management practices (BMPs)
- Amend the Township Stormwater Management Ordinance to require pollutant reductions
- Implement new BMPs

The Township intends to implement this Strategy over 25 years. The Township intends that at or before the conclusion of 25 years the sediment reduction presented in Table 3-6 will be achieved and the assumptions made in the approved watershed TMDL Plans regarding attaining water quality will be satisfied.

The Township anticipates that setting realistic goals that can be quantified by “measurable” success, the reduction percentages outlined in each approved watershed TMDL Plan can be met and water quality in all waterways within the municipality will be positively impacted by implementation of this MS4 TMDL Strategy. Implementation of the MS4 TMDL Plan is an adaptive, iterative and dynamic process. The MS4 TMDL Plan will be evaluated and updated by the Township on an as-needed basis based on its effectiveness in reducing pollutant loads in discharges from the regulated small MS4, upon the reasonableness of achieving the WLAs and the cost/benefit of the BMP under consideration. Therefore, it is intended that this Strategy, in its entirety, including the implementation term, may be modified by the Township periodically to reflect actual results, achievable goals and obstacles encountered during the process of implementation of this Strategy.

4.1. Pollutant Load Concentration Calculation Method

In subsequent sections of this Strategy, pollutant load concentrations are required to quantify the amount of sediment generated from area tributary to proposed BMPs. The Water Quality Analysis of Pollutant Loading method (Worksheet 12, Pennsylvania Stormwater BMP Manual, 2006, PADEP) is utilized to approximate sediment generated on an annual basis. The method requires three input parameters:

- Pollutant event mean concentration (EMC) in mg/L (Table 8.3 of the PA BMP Manual)
- Tributary area in acres (measured from a map)
- Annual runoff depth in feet

For the purposes of the Strategy, runoff depth is calculated using 4 years (2012 – 2014) of daily rain gauge data from the Ambler Borough Waste Water Treatment Plant and the Runoff Curve Number method accounting for the initial abstraction and land cover classification.

TABLE 4-1: AVERAGE ANNUAL RUNOFF BASED ON LAND COVER CLASSIFICATION

| LAND COVER CLASSIFICATION | CN | AVERAGE ANNUAL RUNOFF (in/year) |
|----------------------------------|----|---------------------------------|
| Forest | 62 | 4.63 |
| Meadow | 60 | 4.10 |
| Fertilized Planting Area | 65 | 5.53 |
| Native Planting Area | 58 | 3.62 |
| Lawn, Low Input | 68 | 6.59 |
| Lawn, High Input | 65 | 5.53 |
| Golf Course Fairway/Green | 68 | 6.59 |
| Grassed Athletic Field | 70 | 7.39 |
| Rooftop | 98 | 43.51 |
| High Traffic Street/Highway | 97 | 39.80 |
| Medium Traffic Street | 90 | 23.96 |
| Low Traffic/Residential Street | 89 | 22.47 |
| Res. Driveway, Play Courts, etc. | 98 | 43.51 |
| High Traffic Parking Lot | 98 | 43.51 |
| Low Traffic Parking Lot | 98 | 43.51 |

4.2. Existing BMPs

Both the Wissahickon and the Neshaminy Creeks TMDL Plans were based on analyses completed in the years 2002 and 2000, respectively. Beginning in 2009, the Township has implemented a basin naturalization program. The Township owns 63 basins. These basins were originally constructed as peak rate control basins. The Township program includes naturalizing these basins to provide a water quality benefit. All areas tributary to these basins are low intensity residential developments. The following parameters are used to determine the sediment load from these areas and the reduction provided by the improved basins.

- Tributary area – determined by inspection of the storm sewer map.
- Area cover conditions – 25% impervious area and 75% lawn area was assumed.
- Runoff depth – values for impervious and lawn areas from Table 4-1.
- EMC TSS – 35 mg/L was used for impervious areas to account for rooftops and roads, 108 mg/L was used for lawns, low input.

A detailed tabulation of the calculations can be found in Appendix D-2. A summary follows.

TABLE 4-2: EXISTING NATURALIZED BASINS

| EXISTING NATURALIZED BASIN SUMMARY | | |
|-------------------------------------|---------------------------|--------------------------------|
| Watershed | Sediment Load (lbs/yr) | Sediment Reduction (lbs/yr) |
| Little Neshaminy | 242,890 | 60,723 |
| West Branch Neshaminy, Sub-Basin #2 | 95,701 | 23,925 |
| Wissahickon | 6,431 | 1,608 |
| TOTAL | 345,023 | 86,256 |

4.3. Ordinance Requirements

The current Township Ordinances require peak rate and volume reductions as well as water quality requirements. These requirements are typically met by the implementation of BMPs. However, the pollutant reduction associated with these BMPs is generally not quantified. The Township intends to include pollutant reduction requirements consistent with the WLAs in the approved TMDLs for each watershed. The purpose of this ordinance requirement is to ensure developments and other projects achieve the pollutant reductions required by the TMDL Plans and that those benefits are quantified under the TMDL Plan requirements. It is not possible to quantify the pollutant reductions achievable from these new ordinance requirements for inclusion in this Strategy. Any BMPs installed throughout the Township will be included in future reporting regarding implementation the MS4 TMDL Plan.

4.4. Potential New BMPs

The Township anticipates that sediment reduction from existing BMPs and from future projects subject to new ordinance requirements will not achieve the substantial pollutant reduction required by the TMDL Plans. The Township includes with this Strategy several potential BMPs that may be implementable in striving to meet the WLA requirements. These potential BMPs may be on private property and therefore, no guarantee is provided that these BMPs can or will be implemented. Implementation of any BMP expected to contribute to achieving the goal of this Strategy will require, planning, design, permitting approval, property owner consent, etc. Therefore, the potential BMPs presented in this MS4 TMDL Plan are to be considered conceptual in scope and in no way imply any obligation of the Township to implement these specific BMPs in the locations identified. As stated previously, implementation of the TMDL Plan is an adaptive, iterative and dynamic process. The TMDL Plan will be evaluated and updated by the Township on an as-needed basis based on its effectiveness in reducing pollutant loads in discharges from the regulated small MS4, upon the reasonableness of achieving the WLAs and the cost/benefit of the BMP under consideration.

The WLAs and pollutant reduction requirements vary by watershed. The potential BMPs are grouped geographically by watershed. Additional information regarding these potential BMPs is provided in Appendices E-1 and E-2.

4.4.1. Little Neshaminy Sub-Watershed

The Little Neshaminy Sub-Watershed requires a 17 percent reduction in sediment.

TABLE 4-3: LITTLE NESHAMINY - ESTIMATED SEDIMENT REDUCTION FROM POTENTIAL BMPs

| LITTLE NESHAMINY POTENTIAL BMP SUMMARY | | | |
|--|----------|---------------------------|--------------------------------|
| BMP | Appendix | Sediment Load (lbs/yr) | Sediment Reduction (lbs/yr) |
| Naturalize Existing Township Basins | E-1 | 41,341 | 10,335 |
| Riparian Buffer Restoration | E-2 | 4,833 | 4,108 |
| Streetsweeping | C | 102,812 | 87,390 |
| TOTAL | | 148,986 | 101,833 |

4.4.2. West Branch Neshaminy, Sub-Basin #2

The West Branch Neshaminy, Sub-Basin #2 watershed requires a 56 percent reduction in sediment.

TABLE 4-4: WEST BRANCH NESHAMINY - ESTIMATED SEDIMENT REDUCTION FROM POTENTIAL BMPs

| WEST BRANCH NESHAMINY, SUB-BASIN #2 POTENTIAL BMP SUMMARY | | | |
|---|----------|---------------------------|--------------------------------|
| BMP | Appendix | Sediment Load (lbs/yr) | Sediment Reduction (lbs/yr) |
| Naturalize Existing Township Basins | E-1 | 42,012 | 10,503 |
| Naturalize Existing Private Basins | E-2 | 6,060 | 1,515 |
| Neshaminy Creek Trib.: Riparian Buffer Restoration | E-2 | 568 | 483 |
| Neshaminy Creek Trib.: Riparian Buffer Restoration | E-2 | 936 | 796 |
| Runoff Capture and Reuse | E-2 | 5,821 | 5,821 |
| Stream Bank Restoration | E-2 | 25,100 | 21,335 |
| Fellowship Park Rain Garden | E-2 | 550 | 467 |
| Streetsweeping | C | 42,838 | 36,412 |
| TOTAL | | 123,885 | 77,332 |

4.4.3. Wissahickon Creek

The Wissahickon watershed requires a 31 percent reduction in sediment.

TABLE 4-5: WISSAHICKON - ESTIMATED SEDIMENT REDUCTION FROM POTENTIAL BMPs

| WISSAHICKON POTENTIAL BMP SUMMARY | | | |
|--|----------|---------------------------|--------------------------------|
| BMP | Appendix | Sediment Load (lbs/yr) | Sediment Reduction (lbs/yr) |
| Trewellyn Creek: Riparian Buffer Restoration | E-2 | 2,265 | 1,517 |
| Wissahickon Creek: Floodplain Restoration | E-2 | 5,105 | 4,339 |
| Basin Naturalization | E-2 | 4,984 | 4,236 |
| Streetsweeping | C | 25,703 | 21,848 |
| TOTAL | | 38,057 | 31,940 |

4.5. Pollutant Reduction Strategy Summary

The following table summarizes the sediment load, WLA and required sediment reduction for the overall Township and that which is attributed to the MS4 after accounting for parsed and transitional areas. It also includes a summary of the existing and potential BMPs contemplated to achieve the required sediment load reduction.

TABLE 4-6: MS4 TMDL STRATEGY SUMMARY

| Row | Watershed | Unit | Little | West Branch | Wissahickon | TOTAL | Source |
|-----|---|---------|-----------|-------------|-------------|-----------|-------------|
| A | Watershed Area | acres | 27,262 | 2,521 | N/A | | TMDL Plan |
| B | TMDL Plan Watershed Sediment Load | lb/year | 8,369,480 | 672,510 | N/A | | TMDL Plan |
| C | TMDL Plan Watershed WLA | lb/year | 6,937,351 | 295,629 | N/A | | TMDL Plan |
| D | TMDL Plan Watershed Pollutant Reduction | lb/year | 1,432,129 | 376,881 | N/A | | TMDL Plan |
| E | TMDL Plan Watershed Pollutant Reduction | % | 17.1% | 56.0% | N/A | | TMDL Plan |
| F | Township Area Within Watershed | acres | 3,963 | 1,876 | 944 | 6,783 | Mapping |
| G | Township Area Within Watershed | % | 14.5% | 74.4% | N/A | | F/A |
| H | Township Sediment Load | lb/year | 1,216,648 | 500,448 | 160,994 | 1,878,089 | B*G |
| I | Township WLA | lb/year | 1,008,463 | 219,992 | 111,128 | 1,339,584 | C*G |
| J | Township Pollutant Reduction | lb/year | 208,185 | 280,456 | 49,866 | 538,506 | D*G |
| K | Township Pollutant Reduction | % | 17.1% | 56.0% | 31.0% | | J/H |
| L | Transitional Area Adjustment | lb/year | -87,110 | -229,666 | 0 | -316,776 | Table 3-5 |
| M | Adjusted Township Sediment Load | lb/year | 1,129,538 | 270,782 | 160,994 | 1,561,313 | H+L |
| N | Parsed Area - Total | acres | 1,519 | 644 | 444 | 2,608 | Table 3-4 |
| O | Parsed Area - Total | % | 38.3% | 34.3% | 47.0% | | N/F |
| P | Parsed Area Sediment Load - Total | lb/year | -433,032 | -93,013 | -75,688 | -601,733 | M*O |
| Q | MS4 Sediment Load | lb/year | 696,505 | 177,769 | 85,306 | 959,581 | H+L+P |
| R | MS4 Required Pollutant Reduction | % | 17.1% | 56.0% | 31.0% | | K |
| S | MS4 Required Pollutant Reduction | lb/year | 119,181 | 99,623 | 26,422 | 245,227 | Q*R |
| T | Existing BMPs | lb/year | 60,723 | 23,925 | 1,608 | 86,256 | Table 4-2 |
| U | Future Potential BMPs | lb/year | 101,833 | 77,332 | 31,940 | 211,105 | Section 4.4 |
| V | Pollutant Reduction Potential | lb/year | 162,556 | 101,258 | 33,547 | 297,361 | T+V |
| W | Net Potential - Required | lb/year | 43,375 | 1,634 | 7,125 | 52,134 | V-S |

The table above indicates that implementation of this Strategy will potentially exceed the required pollutant reduction in each watershed and 52,134 lbs/year overall.

5.0. Public Participation

As part of the preparation of this MS4 TMDL Strategy, PADEP requires solicitation of public involvement and participation. The following are required:

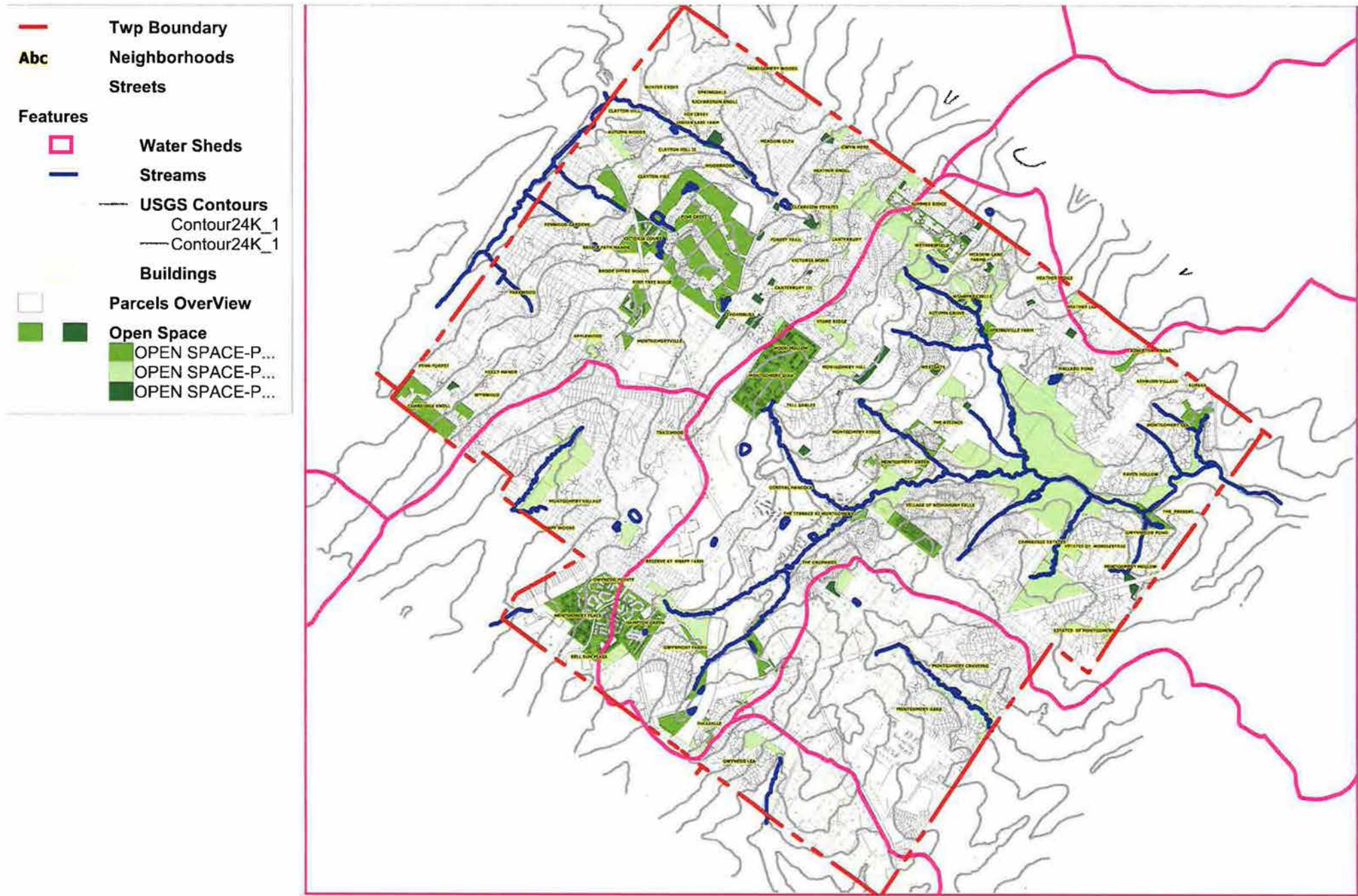
- A copy of the MS4 TMDL Strategy must be available for public review.

- Publish, in a newspaper of general circulation in the area, a public notice containing a statement describing the Strategy, where it may be reviewed by the public, and the length of time provided for the receipt of comments.
- Accept written comments for a minimum of 30 days from the date of public notice.
- Accept any verbal or written comments from any interested member of the public at a public meeting or hearing.
- Consider and make a record of the consideration of each timely comment received from the public during the public comment period concerning the Strategy, identifying any changes made to the Strategy in response to the comment.

Submission of the MS4 TMDL Strategy to PADEP must include a copy of the newspaper notice, a copy of all written comments received from the public and a copy of the record of consideration of all timely comments received in the public comment period. Documentation of public participation will be included as Appendix F.

APPENDIX A
TOWNSHIP WATERSHED MAP

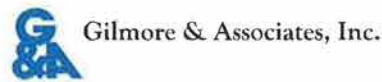
Montgomery Township Watershed Map



APPENDIX B

TRANSITIONAL LAND USE ADJUSTMENT

CLIENT:
MONTGOMERY TOWNSHIP
PROJECT NAME:
NPDES MS4 PERMIT RENEWAL
PROJECT NUMBER:
11-12055



| WATERSHED TMDL - SEDIMENT LOADING VALUES for 2000 LAND USE CONDITIONS | | | | | | |
|---|------------------|-----------------------------|----------------|-----------------------------|---------------|-----------------------------|
| LAND USE CATEGORY | LITTLE NESHAMINY | | WEST BRANCH #2 | | TOTAL | |
| | AREA (ac) | SEDIMENT LOAD (lbs/year) | AREA (ac) | SEDIMENT LOAD (lbs/year) | AREA (ac) | SEDIMENT LOAD (lbs/year) |
| Hay Pasture | 2,570 | 43,465 | 89 | 3,091 | 2,659 | 46,556 |
| Cropland | 6,926 | 1,053,201 | 114 | 24,840 | 7,040 | 1,078,041 |
| Coniferous Forest | 296 | 243 | 54 | 154 | 350 | 397 |
| Mixed Forest | 1,908 | 2,252 | 163 | 487 | 2,071 | 2,739 |
| Deciduous Forest | 6,655 | 10,110 | 516 | 2,053 | 7,171 | 12,163 |
| Unpaved Roads | 7 | 3,289 | 0 | 0 | 7 | 3,289 |
| Transitional | 1,187 | 826,324 | 187 | 425,717 | 1,374 | 1,252,041 |
| Low Intensity Dev | 5,909 | 136,071 | 1,091 | 82,914 | 7,000 | 218,985 |
| High Intensity Dev | 1,804 | 30,949 | 306 | 15,475 | 2,110 | 46,424 |
| Stream Bank | 0 | 6,263,576 | 0 | 117,779 | 0 | 6,381,355 |
| Groundwater | 0 | 0 | 0 | 0 | 0 | 0 |
| Point Source | 0 | 0 | 0 | 0 | 0 | 0 |
| Septic Systems | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 27,262 | 8,369,480 | 2,520 | 672,510 | 29,782 | 9,041,990 |

| TOWNSHIP - SEDIMENT LOADING ATTRIBUTED TO THE TOWNSHIP | | | | | | |
|--|---------------------------|-----------------------------|-------------------------|-----------------------------|--------------|-----------------------------|
| LAND USE CATEGORY | LITTLE NESHAMINY (14.54%) | | WEST BRANCH #2 (74.41%) | | TOTAL | |
| | AREA (ac) | SEDIMENT LOAD (lbs/year) | AREA (ac) | SEDIMENT LOAD (lbs/year) | AREA (ac) | SEDIMENT LOAD (lbs/year) |
| Hay Pasture | 374 | 6,318 | 66 | 2,300 | 440 | 8,619 |
| Cropland | 1,007 | 153,101 | 85 | 18,485 | 1,092 | 171,586 |
| Coniferous Forest | 43 | 35 | 40 | 115 | 83 | 150 |
| Mixed Forest | 277 | 327 | 121 | 362 | 399 | 690 |
| Deciduous Forest | 967 | 1,470 | 384 | 1,528 | 1,351 | 2,997 |
| Unpaved Roads | 1 | 478 | 0 | 0 | 1 | 478 |
| Transitional | 173 | 120,120 | 139 | 316,797 | 312 | 436,917 |
| Low Intensity Dev | 859 | 19,780 | 812 | 61,700 | 1,671 | 81,481 |
| High Intensity Dev | 262 | 4,499 | 228 | 11,516 | 490 | 16,015 |
| Stream Bank | 0 | 910,518 | 0 | 87,645 | 0 | 998,164 |
| Groundwater | 0 | 0 | 0 | 0 | 0 | 0 |
| Point Source | 0 | 0 | 0 | 0 | 0 | 0 |
| Septic Systems | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 3,963 | 1,216,648 | 1,875 | 500,448 | 5,838 | 1,717,095 |

| TOWNSHIP - SEDIMENT LOADING ATTRIBUTED TO THE TOWNSHIP, ADJUSTED FOR REDUCED TRANSITIONAL LAND USES | | | | | | |
|---|------------------|-----------------------------|----------------|-----------------------------|--------------|-----------------------------|
| LAND USE CATEGORY | LITTLE NESHAMINY | | WEST BRANCH #2 | | TOTAL | |
| | AREA (ac) | SEDIMENT LOAD (lbs/year) | AREA (ac) | SEDIMENT LOAD (lbs/year) | AREA (ac) | SEDIMENT LOAD (lbs/year) |
| Hay Pasture | 374 | 6,318 | 66 | 2,300 | 440 | 8,619 |
| Cropland | 1,007 | 153,101 | 85 | 18,485 | 1,092 | 171,586 |
| Coniferous Forest | 43 | 35 | 40 | 115 | 83 | 150 |
| Mixed Forest | 277 | 327 | 121 | 362 | 399 | 690 |
| Deciduous Forest | 967 | 1,470 | 384 | 1,528 | 1,351 | 2,997 |
| Unpaved Roads | 1 | 478 | 0 | 0 | 1 | 478 |
| Transitional (25%) | 43 | 30,030 | 35 | 79,199 | 78 | 109,229 |
| Low Intensity Dev | 988 | 22,760 | 916 | 69,632 | 1,905 | 92,392 |
| High Intensity Dev | 262 | 4,499 | 228 | 11,516 | 490 | 16,015 |
| Stream Bank | 0 | 910,518 | 0 | 87,645 | 0 | 998,164 |
| Groundwater | 0 | 0 | 0 | 0 | 0 | 0 |
| Point Source | 0 | 0 | 0 | 0 | 0 | 0 |
| Septic Systems | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 3,963 | 1,129,537 | 1,875 | 270,782 | 5,838 | 1,400,319 |

| | LITTLE NESHAMINY | WEST BRANCH #2 | TOTAL |
|--------------------------|------------------|----------------|----------------|
| NET Sediment Load | 87,110 | 229,666 | 316,776 |
| Adjustment | | | |

APPENDIX C

TOWNSHIP ROADWAY SEDIMENT LOADING CALCULATION

CLIENT:

MONTGOMERY TOWNSHIP

PROJECT NAME:

NPDES MS4 PERMIT RENEWAL

PROJECT NUMBER:

11-12055



Gilmore & Associates, Inc.
Engineering and Consulting Services

| Street Name | Classification | Sidewalks | Curb | Length (mi) | Length (ft) | ROW | Paved | Impervious Area (ft ²) | TSS EMC (mg/L) | Q (ft/year) | Grass Area (lbs/year) | TSS EMC (mg/L) | Q (ft/year) | Sediment Load (lbs/year) |
|---------------------|----------------|-----------|------|----------------|----------------|-----|-------|--|----------------------|----------------|-----------------------------|----------------------|----------------|--------------------------------|
| Aaron Way | Low Traffic | Yes | Yes | 0.05 | 264 | 50 | 26 | 9,240 | 86 | 1.88 | 3,960 | 180 | 0.55 | 117 |
| Abbey Lane | Low Traffic | Yes | Yes | 0.77 | 4066 | 50 | 29 | 154,968 | 86 | 1.88 | 48,312 | 180 | 0.55 | 1845 |
| Acorn Place | Low Traffic | Yes | Yes | 0.07 | 370 | 50 | 26 | 12,936 | 86 | 1.88 | 5,544 | 180 | 0.55 | 163 |
| Addison Lane | Low Traffic | Yes | Yes | 0.54 | 2851 | 50 | 28 | 105,494 | 86 | 1.88 | 37,066 | 180 | 0.55 | 1282 |
| Aileen Dr. | Low Traffic | Yes | Yes | 0.34 | 1795 | 50 | 28 | 66,422 | 86 | 1.88 | 23,338 | 180 | 0.55 | 807 |
| Amber Place | Low Traffic | Yes | Yes | 0.06 | 317 | 50 | 30 | 12,355 | 86 | 1.88 | 3,485 | 180 | 0.55 | 145 |
| Andrew Lane | Low Traffic | Yes | Yes | 0.81 | 4277 | 50 | 28 | 158,242 | 86 | 1.88 | 55,598 | 180 | 0.55 | 1923 |
| Annabel Road | Low Traffic | Yes | Yes | 0.38 | 2006 | 50 | 28 | 74,237 | 86 | 1.88 | 26,083 | 180 | 0.55 | 902 |
| Applewood Lane | Low Traffic | Yes | Yes | 0.33 | 1742 | 50 | 30 | 67,954 | 86 | 1.88 | 19,166 | 180 | 0.55 | 797 |
| Arbor Lane | Low Traffic | Yes | Yes | 0.07 | 370 | 50 | 32 | 15,154 | 86 | 1.88 | 3,326 | 180 | 0.55 | 172 |
| Arbour Green Circle | Low Traffic | Yes | Yes | 0.06 | 317 | 50 | 26 | 11,088 | 86 | 1.88 | 4,752 | 180 | 0.55 | 140 |
| Armada Circle | Low Traffic | Yes | Yes | 0.05 | 264 | 50 | 30 | 10,296 | 86 | 1.88 | 2,904 | 180 | 0.55 | 121 |
| Arrowhead Circle | Low Traffic | Yes | Yes | 0.06 | 317 | 50 | 26 | 11,088 | 86 | 1.88 | 4,752 | 180 | 0.55 | 140 |
| Ashley Circle | Low Traffic | Yes | Yes | 0.09 | 475 | 50 | 30 | 18,533 | 86 | 1.88 | 5,227 | 180 | 0.55 | 217 |
| Aspen Place | Low Traffic | Yes | Yes | 0.10 | 528 | 50 | 26 | 18,480 | 86 | 1.88 | 7,920 | 180 | 0.55 | 233 |
| August Lane | Low Traffic | Yes | Yes | 0.23 | 1214 | 50 | 26 | 42,504 | 86 | 1.88 | 18,216 | 180 | 0.55 | 537 |
| Avondale Drive | Low Traffic | Yes | Yes | 0.54 | 2851 | 50 | 26 | 99,792 | 86 | 1.88 | 42,768 | 180 | 0.55 | 1260 |
| Azalea Place | Low Traffic | Yes | Yes | 0.08 | 422 | 50 | 26 | 14,784 | 86 | 1.88 | 6,336 | 180 | 0.55 | 187 |
| Bailey Drive | Low Traffic | Yes | Yes | 0.19 | 1003 | 50 | 26 | 35,112 | 86 | 1.88 | 15,048 | 180 | 0.55 | 443 |
| Baker Place | Low Traffic | Yes | Yes | 0.10 | 528 | 50 | 26 | 18,480 | 86 | 1.88 | 7,920 | 180 | 0.55 | 233 |
| Banbury Avenue | Low Traffic | Yes | Yes | 0.35 | 1848 | 50 | 30 | 72,072 | 86 | 1.88 | 20,328 | 180 | 0.55 | 845 |
| Bartlett Drive | Low Traffic | Yes | Yes | 0.09 | 475 | 50 | 32 | 19,483 | 86 | 1.88 | 4,277 | 180 | 0.55 | 221 |
| Beaumont Terrace | Low Traffic | Yes | Yes | 0.10 | 528 | 50 | 26 | 18,480 | 86 | 1.88 | 7,920 | 180 | 0.55 | 233 |
| Bedford Lane | Low Traffic | Yes | Yes | 0.36 | 1901 | 50 | 30 | 74,131 | 86 | 1.88 | 20,909 | 180 | 0.55 | 869 |
| Beechwood Drive | Low Traffic | Yes | Yes | 0.45 | 2376 | 40 | 16 | 59,400 | 86 | 1.88 | 35,640 | 180 | 0.55 | 812 |
| Bell Run Boulevard | Low Traffic | Yes | Yes | 0.53 | 2798 | 50 | 34 | 120,331 | 86 | 1.88 | 19,589 | 180 | 0.55 | 1323 |
| Bellows Way | Low Traffic | Yes | Yes | 0.56 | 2957 | 50 | 30 | 115,315 | 86 | 1.88 | 32,525 | 180 | 0.55 | 1352 |
| Blue Jay Way | Low Traffic | Yes | Yes | 0.17 | 898 | 50 | 24 | 29,621 | 86 | 1.88 | 15,259 | 180 | 0.55 | 390 |
| Bonnie Lane | Low Traffic | Yes | Yes | 0.39 | 2059 | 50 | 26 | 72,072 | 86 | 1.88 | 30,888 | 180 | 0.55 | 910 |
| Bradford Court | Low Traffic | Yes | Yes | 0.06 | 317 | 50 | 26 | 11,088 | 86 | 1.88 | 4,752 | 180 | 0.55 | 140 |
| Bridlepath Ln | Low Traffic | Yes | Yes | 0.14 | 739 | 50 | 26 | 25,872 | 86 | 1.88 | 11,088 | 180 | 0.55 | 327 |
| Bridlepath Road | Low Traffic | Yes | Yes | 0.15 | 792 | 50 | 26 | 27,720 | 86 | 1.88 | 11,880 | 180 | 0.55 | 350 |
| Brighton Circle | Low Traffic | Yes | Yes | 0.07 | 370 | 50 | 26 | 12,936 | 86 | 1.88 | 5,544 | 180 | 0.55 | 163 |
| Brighton Place | Low Traffic | Yes | Yes | 0.05 | 264 | 50 | 26 | 9,240 | 86 | 1.88 | 3,960 | 180 | 0.55 | 117 |
| Brittany Place | Low Traffic | Yes | Yes | 0.06 | 317 | 50 | 30 | 12,355 | 86 | 1.88 | 3,485 | 180 | 0.55 | 145 |
| Broad Acres Road | Low Traffic | Yes | Yes | 0.46 | 2429 | 50 | 27 | 86,909 | 86 | 1.88 | 34,531 | 180 | 0.55 | 1081 |
| Brook Circle | Low Traffic | Yes | Yes | 0.06 | 317 | 50 | 30 | 12,355 | 86 | 1.88 | 3,485 | 180 | 0.55 | 145 |
| Brookshyre Way | Low Traffic | Yes | Yes | 0.17 | 898 | 50 | 32 | 36,802 | 86 | 1.88 | 8,078 | 180 | 0.55 | 417 |
| Brookwood Road | Low Traffic | Yes | Yes | 0.11 | 581 | 50 | 26 | 20,328 | 86 | 1.88 | 8,712 | 180 | 0.55 | 257 |
| Browning Circle | Low Traffic | Yes | Yes | 0.05 | 264 | 50 | 30 | 10,296 | 86 | 1.88 | 2,904 | 180 | 0.55 | 121 |

CLIENT:
 MONTGOMERY TOWNSHIP
PROJECT NAME:
 NPDES MS4 PERMIT RENEWAL
PROJECT NUMBER:
 11-12055



| Street Name | Classification | Sidewalks | Curb | Length (mi) | Length (ft) | ROW | Paved | Impervious Area (ft ²) | TSS EMC (mg/L) | Q (ft/year) | Grass Area (lbs/year) | TSS EMC (mg/L) | Q (ft/year) | Sediment Load (lbs/year) |
|--------------------|----------------|-----------|------|----------------|----------------|-----|-------|--|----------------------|----------------|-----------------------------|----------------------|----------------|--------------------------------|
| Bryan Way | Low Traffic | Yes | Yes | 0.20 | 1056 | 50 | 30 | 41,184 | 86 | 1.88 | 11,616 | 180 | 0.55 | 483 |
| Buckingham Lane | Low Traffic | Yes | Yes | 0.30 | 1584 | 50 | 28 | 58,608 | 86 | 1.88 | 20,592 | 180 | 0.55 | 712 |
| Cambridge Court | Low Traffic | Yes | Yes | 0.07 | 370 | 50 | 26 | 12,936 | 86 | 1.88 | 5,544 | 180 | 0.55 | 163 |
| Camp Drive | Low Traffic | Yes | Yes | 0.07 | 370 | 50 | 36 | 16,632 | 86 | 1.88 | 1,848 | 180 | 0.55 | 178 |
| Canterbury Lane | Low Traffic | Yes | Yes | 0.62 | 3274 | 50 | 30 | 127,670 | 86 | 1.88 | 36,010 | 180 | 0.55 | 1497 |
| Carnaby Circle | Low Traffic | Yes | Yes | 0.05 | 264 | 50 | 28 | 9,768 | 86 | 1.88 | 3,432 | 180 | 0.55 | 119 |
| Carson Drive | Low Traffic | Yes | Yes | 0.22 | 1162 | 50 | 26 | 40,656 | 86 | 1.88 | 17,424 | 180 | 0.55 | 513 |
| Cathedral Dr. | Low Traffic | Yes | Yes | 0.53 | 2798 | 50 | 30 | 109,138 | 86 | 1.88 | 30,782 | 180 | 0.55 | 1280 |
| Cedar Lane | Low Traffic | Yes | Yes | 0.15 | 792 | 50 | 26 | 27,720 | 86 | 1.88 | 11,880 | 180 | 0.55 | 350 |
| Chamberlain Circle | Low Traffic | Yes | Yes | 0.05 | 264 | 50 | 30 | 10,296 | 86 | 1.88 | 2,904 | 180 | 0.55 | 121 |
| Channel House Rd. | Low Traffic | Yes | Yes | 0.06 | 317 | 50 | 28 | 11,722 | 86 | 1.88 | 4,118 | 180 | 0.55 | 142 |
| Chaps Way | Low Traffic | Yes | Yes | 0.10 | 528 | 50 | 30 | 20,592 | 86 | 1.88 | 5,808 | 180 | 0.55 | 241 |
| Chatham Place | Low Traffic | Yes | Yes | 0.55 | 2904 | 50 | 30 | 113,256 | 86 | 1.88 | 31,944 | 180 | 0.55 | 1328 |
| Chester Circle | Low Traffic | Yes | Yes | 0.07 | 370 | 50 | 30 | 14,414 | 86 | 1.88 | 4,066 | 180 | 0.55 | 169 |
| Cheswick Drive | Low Traffic | Yes | Yes | 0.49 | 2587 | 50 | 26 | 90,552 | 86 | 1.88 | 38,808 | 180 | 0.55 | 1143 |
| Churchill Circle | Low Traffic | Yes | Yes | 0.08 | 422 | 50 | 28 | 15,629 | 86 | 1.88 | 5,491 | 180 | 0.55 | 190 |
| Citadel Court | Low Traffic | Yes | Yes | 0.07 | 370 | 50 | 30 | 14,414 | 86 | 1.88 | 4,066 | 180 | 0.55 | 169 |
| Claremont Drive | Low Traffic | Yes | Yes | 1.49 | 7867 | 53 | 32 | 320,760 | 86 | 1.88 | 95,832 | 180 | 0.55 | 3794 |
| Clayton Court | Low Traffic | Yes | Yes | 0.13 | 686 | 50 | 26 | 24,024 | 86 | 1.88 | 10,296 | 180 | 0.55 | 303 |
| Cloverleaf Lane | Low Traffic | Yes | Yes | 0.34 | 1795 | 50 | 26 | 62,832 | 86 | 1.88 | 26,928 | 180 | 0.55 | 793 |
| Colt Circle | Low Traffic | Yes | Yes | 0.10 | 528 | 50 | 30 | 20,592 | 86 | 1.88 | 5,808 | 180 | 0.55 | 241 |
| Colwyn Terrace | Low Traffic | Yes | Yes | 0.20 | 1056 | 50 | 26 | 36,960 | 86 | 1.88 | 15,840 | 180 | 0.55 | 467 |
| Commerce Drive | Low Traffic | Yes | Yes | 0.54 | 2851 | 50 | 26 | 99,792 | 86 | 1.88 | 42,768 | 180 | 0.55 | 1260 |
| Compton Court | Low Traffic | Yes | Yes | 0.05 | 264 | 50 | 26 | 9,240 | 86 | 1.88 | 3,960 | 180 | 0.55 | 117 |
| Conrad Lane | Low Traffic | Yes | Yes | 0.17 | 898 | 50 | 26 | 31,416 | 86 | 1.88 | 13,464 | 180 | 0.55 | 397 |
| Copperleaf Circle | Low Traffic | Yes | Yes | 0.07 | 370 | 50 | 28 | 13,675 | 86 | 1.88 | 4,805 | 180 | 0.55 | 166 |
| Corporate Drive | Low Traffic | Yes | Yes | 0.39 | 2059 | 50 | 30 | 80,309 | 86 | 1.88 | 22,651 | 180 | 0.55 | 942 |
| Country Club Drive | Low Traffic | Yes | Yes | 1.08 | 5702 | 50 | 26 | 199,584 | 86 | 1.88 | 85,536 | 180 | 0.55 | 2520 |
| Country Lane | Low Traffic | Yes | Yes | 0.16 | 845 | 33 | 26 | 29,568 | 86 | 1.88 | -1,690 | 180 | 0.55 | 285 |
| Cove Circle | Low Traffic | Yes | Yes | 0.05 | 264 | 50 | 26 | 9,240 | 86 | 1.88 | 3,960 | 180 | 0.55 | 117 |
| Coventry Circle | Low Traffic | Yes | Yes | 0.09 | 475 | 50 | 30 | 18,533 | 86 | 1.88 | 5,227 | 180 | 0.55 | 217 |
| Crestwood Circle | Low Traffic | Yes | Yes | 0.04 | 211 | 50 | 30 | 8,237 | 86 | 1.88 | 2,323 | 180 | 0.55 | 97 |
| Crestwood Drive | Low Traffic | Yes | Yes | 0.29 | 1531 | 50 | 26 | 53,592 | 86 | 1.88 | 22,968 | 180 | 0.55 | 677 |
| Cricklewood Circle | Low Traffic | Yes | Yes | 0.32 | 1690 | 66 | 40 | 82,790 | 86 | 1.88 | 28,723 | 180 | 0.55 | 1004 |
| Damson Lane | Low Traffic | Yes | Yes | 0.07 | 370 | 50 | 32 | 15,154 | 86 | 1.88 | 3,326 | 180 | 0.55 | 172 |
| David Lane | Low Traffic | Yes | Yes | 0.09 | 475 | 50 | 30 | 18,533 | 86 | 1.88 | 5,227 | 180 | 0.55 | 217 |
| Davis Dr. | Low Traffic | Yes | Yes | 0.66 | 3485 | 50 | 28 | 128,938 | 86 | 1.88 | 45,302 | 180 | 0.55 | 1567 |
| Dayton Drive South | Low Traffic | Yes | Yes | 0.18 | 950 | 50 | 26 | 33,264 | 86 | 1.88 | 14,256 | 180 | 0.55 | 420 |
| Deerpath Lane | Low Traffic | Yes | Yes | 0.08 | 422 | 50 | 30 | 16,474 | 86 | 1.88 | 4,646 | 180 | 0.55 | 193 |
| Devonshire Drive | Low Traffic | Yes | Yes | 0.17 | 898 | 50 | 26 | 31,416 | 86 | 1.88 | 13,464 | 180 | 0.55 | 397 |

CLIENT:
MONTGOMERY TOWNSHIP
PROJECT NAME:
NPDES MS4 PERMIT RENEWAL
PROJECT NUMBER:
11-12055



| Street Name | Classification | Sidewalks | Curb | Length (mi) | Length (ft) | ROW | Paved | Impervious Area (ft ²) | TSS EMC (mg/L) | Q (ft/year) | Grass Area (lbs/year) | TSS EMC (mg/L) | Q (ft/year) | Sediment Load (lbs/year) |
|---------------------|----------------|-----------|------|----------------|----------------|-----|-------|--|----------------------|----------------|-----------------------------|----------------------|----------------|--------------------------------|
| Dickens Court | Low Traffic | Yes | Yes | 0.08 | 422 | 50 | 30 | 16,474 | 86 | 1.88 | 4,646 | 180 | 0.55 | 193 |
| Domorah Drive | Low Traffic | Yes | Yes | 0.31 | 1637 | 50 | 30 | 63,835 | 86 | 1.88 | 18,005 | 180 | 0.55 | 749 |
| Dorter Ln | Low Traffic | Yes | Yes | 0.13 | 686 | 50 | 28 | 25,397 | 86 | 1.88 | 8,923 | 180 | 0.55 | 309 |
| Douglas Road | Low Traffic | Yes | Yes | 0.51 | 2693 | 50 | 28 | 99,634 | 86 | 1.88 | 35,006 | 180 | 0.55 | 1211 |
| Drake Lane | Low Traffic | Yes | Yes | 0.61 | 3221 | 50 | 30 | 125,611 | 86 | 1.88 | 35,429 | 180 | 0.55 | 1473 |
| Drayton Circle | Low Traffic | Yes | Yes | 0.09 | 475 | 50 | 30 | 18,533 | 86 | 1.88 | 5,227 | 180 | 0.55 | 217 |
| Duchess Place | Low Traffic | Yes | Yes | 0.05 | 264 | 50 | 30 | 10,296 | 86 | 1.88 | 2,904 | 180 | 0.55 | 121 |
| Durham Way | Low Traffic | Yes | Yes | 0.18 | 950 | 50 | 30 | 37,066 | 86 | 1.88 | 10,454 | 180 | 0.55 | 435 |
| Eagle Lane | Low Traffic | Yes | Yes | 0.16 | 845 | 50 | 26 | 29,568 | 86 | 1.88 | 12,672 | 180 | 0.55 | 373 |
| Eaton Drive | Low Traffic | Yes | Yes | 0.15 | 792 | 50 | 26 | 27,720 | 86 | 1.88 | 11,880 | 180 | 0.55 | 350 |
| Edgar Allen Circle | Low Traffic | Yes | Yes | 0.08 | 422 | 50 | 28 | 15,629 | 86 | 1.88 | 5,491 | 180 | 0.55 | 190 |
| Elberta Drive | Low Traffic | Yes | Yes | 0.08 | 422 | 50 | 32 | 17,318 | 86 | 1.88 | 3,802 | 180 | 0.55 | 196 |
| Embassy Drive | Low Traffic | Yes | Yes | 0.21 | 1109 | 50 | 30 | 43,243 | 86 | 1.88 | 12,197 | 180 | 0.55 | 507 |
| Enterprise Drive | Low Traffic | Yes | Yes | 0.15 | 792 | 50 | 26 | 27,720 | 86 | 1.88 | 11,880 | 180 | 0.55 | 350 |
| Fairacres Drive | Low Traffic | Yes | Yes | 0.15 | 792 | 80 | 64 | 57,816 | 86 | 1.88 | 5,544 | 180 | 0.55 | 612 |
| Fairview Drive | Low Traffic | Yes | Yes | 0.21 | 1109 | 50 | 30 | 43,243 | 86 | 1.88 | 12,197 | 180 | 0.55 | 507 |
| Falling Leaf Way | Low Traffic | Yes | Yes | 0.06 | 317 | 50 | 26 | 11,088 | 86 | 1.88 | 4,752 | 180 | 0.55 | 140 |
| Field Terrace | Low Traffic | Yes | Yes | 0.10 | 528 | 50 | 26 | 18,480 | 86 | 1.88 | 7,920 | 180 | 0.55 | 233 |
| Forest Trail Drive | Low Traffic | Yes | Yes | 0.66 | 3485 | 58 | 26 | 121,968 | 86 | 1.88 | 79,728 | 180 | 0.55 | 1708 |
| Freedom Way | Low Traffic | Yes | Yes | 0.23 | 1214 | 50 | 34 | 52,219 | 86 | 1.88 | 8,501 | 180 | 0.55 | 574 |
| Gift Circle | Low Traffic | Yes | Yes | 0.10 | 528 | 50 | 24 | 17,424 | 86 | 1.88 | 8,976 | 180 | 0.55 | 229 |
| Glasgow Circle | Low Traffic | Yes | Yes | 0.05 | 264 | 50 | 26 | 9,240 | 86 | 1.88 | 3,960 | 180 | 0.55 | 117 |
| Glen Road | Low Traffic | Yes | Yes | 0.28 | 1478 | 50 | 26 | 51,744 | 86 | 1.88 | 22,176 | 180 | 0.55 | 653 |
| Goodwin Lane | Low Traffic | Yes | Yes | 0.33 | 1742 | 50 | 28 | 64,469 | 86 | 1.88 | 22,651 | 180 | 0.55 | 783 |
| Gordon Lane | Low Traffic | Yes | Yes | 0.22 | 1162 | 50 | 24 | 38,333 | 86 | 1.88 | 19,747 | 180 | 0.55 | 504 |
| Grays Lane | Low Traffic | Yes | Yes | 0.77 | 4066 | 50 | 30 | 158,558 | 86 | 1.88 | 44,722 | 180 | 0.55 | 1859 |
| Green Spring Circle | Low Traffic | Yes | Yes | 0.15 | 792 | 50 | 26 | 27,720 | 86 | 1.88 | 11,880 | 180 | 0.55 | 350 |
| Green Tree Tavern | Low Traffic | Yes | Yes | 0.82 | 4330 | 50 | 28 | 160,195 | 86 | 1.88 | 56,285 | 180 | 0.55 | 1947 |
| Greenbriar Road | Low Traffic | Yes | Yes | 0.16 | 845 | 50 | 26 | 29,568 | 86 | 1.88 | 12,672 | 180 | 0.55 | 373 |
| Grouse Court | Low Traffic | Yes | Yes | 0.05 | 264 | 50 | 28 | 9,768 | 86 | 1.88 | 3,432 | 180 | 0.55 | 119 |
| Guilford Court | Low Traffic | Yes | Yes | 0.05 | 264 | 50 | 26 | 9,240 | 86 | 1.88 | 3,960 | 180 | 0.55 | 117 |
| Guinness Lane | Low Traffic | Yes | Yes | 0.16 | 845 | 50 | 30 | 32,947 | 86 | 1.88 | 9,293 | 180 | 0.55 | 386 |
| Gwynedd Lea Drive | Low Traffic | Yes | Yes | 0.42 | 2218 | 50 | 26 | 77,616 | 86 | 1.88 | 33,264 | 180 | 0.55 | 980 |
| Gwynmont Circle | Low Traffic | Yes | Yes | 0.26 | 1373 | 50 | 30 | 53,539 | 86 | 1.88 | 15,101 | 180 | 0.55 | 628 |
| Gwynmont Drive | Low Traffic | Yes | Yes | 0.39 | 2059 | 50 | 32 | 84,427 | 86 | 1.88 | 18,533 | 180 | 0.55 | 958 |
| Halloway Circle | Low Traffic | Yes | Yes | 0.07 | 370 | 50 | 30 | 14,414 | 86 | 1.88 | 4,066 | 180 | 0.55 | 169 |
| Hampton Circle | Low Traffic | Yes | Yes | 0.09 | 475 | 50 | 26 | 16,632 | 86 | 1.88 | 7,128 | 180 | 0.55 | 210 |
| Hanover Avenue | Low Traffic | Yes | Yes | 0.27 | 1426 | 50 | 30 | 55,598 | 86 | 1.88 | 15,682 | 180 | 0.55 | 652 |
| Harbob Lane | Low Traffic | Yes | Yes | 0.11 | 581 | 50 | 26 | 20,328 | 86 | 1.88 | 8,712 | 180 | 0.55 | 257 |
| Hawthorne Circle | Low Traffic | Yes | Yes | 0.46 | 2429 | 50 | 26 | 85,008 | 86 | 1.88 | 36,432 | 180 | 0.55 | 1073 |

CLIENT:
MONTGOMERY TOWNSHIP
PROJECT NAME:
NPDES MS4 PERMIT RENEWAL
PROJECT NUMBER:
11-12055



| Street Name | Classification | Sidewalks | Curb | Length (mi) | Length (ft) | ROW | Paved | Impervious Area (ft ²) | TSS EMC (mg/L) | Q (ft/year) | Grass Area (lbs/year) | TSS EMC (mg/L) | Q (ft/year) | Sediment Load (lbs/year) |
|------------------|----------------|-----------|------|----------------|----------------|-----|-------|--|----------------------|----------------|-----------------------------|----------------------|----------------|--------------------------------|
| Hawthorne Drive | Low Traffic | Yes | Yes | 0.54 | 2851 | 50 | 26 | 99,792 | 86 | 1.88 | 42,768 | 180 | 0.55 | 1260 |
| Heartwood Drive | Low Traffic | Yes | Yes | 0.53 | 2798 | 50 | 26 | 97,944 | 86 | 1.88 | 41,976 | 180 | 0.55 | 1237 |
| Hedgegrow Place | Low Traffic | Yes | Yes | 0.07 | 370 | 50 | 26 | 12,936 | 86 | 1.88 | 5,544 | 180 | 0.55 | 163 |
| Hemlock Drive | Low Traffic | Yes | Yes | 0.48 | 2534 | 50 | 26 | 88,704 | 86 | 1.88 | 38,016 | 180 | 0.55 | 1120 |
| Henning Drive | Low Traffic | Yes | Yes | 0.11 | 581 | 50 | 32 | 23,813 | 86 | 1.88 | 5,227 | 180 | 0.55 | 270 |
| Heritage Drive | Low Traffic | Yes | Yes | 0.03 | 158 | 50 | 26 | 5,544 | 86 | 1.88 | 2,376 | 180 | 0.55 | 70 |
| Heron Court | Low Traffic | Yes | Yes | 0.09 | 475 | 50 | 28 | 17,582 | 86 | 1.88 | 6,178 | 180 | 0.55 | 214 |
| Holl Court | Low Traffic | Yes | Yes | 0.06 | 317 | 50 | 28 | 11,722 | 86 | 1.88 | 4,118 | 180 | 0.55 | 142 |
| Holly Drive | Low Traffic | Yes | Yes | 0.52 | 2746 | 50 | 26 | 96,096 | 86 | 1.88 | 41,184 | 180 | 0.55 | 1213 |
| Horseshoe Lane | Low Traffic | Yes | Yes | 0.31 | 1637 | 50 | 30 | 63,835 | 86 | 1.88 | 18,005 | 180 | 0.55 | 749 |
| Independence Dr. | Low Traffic | Yes | Yes | 0.61 | 3221 | 50 | 26 | 112,728 | 86 | 1.88 | 48,312 | 180 | 0.55 | 1423 |
| Jason Place | Low Traffic | Yes | Yes | 0.10 | 528 | 50 | 26 | 18,480 | 86 | 1.88 | 7,920 | 180 | 0.55 | 233 |
| Jonathan Drive | Low Traffic | Yes | Yes | 0.33 | 1742 | 50 | 32 | 71,438 | 86 | 1.88 | 15,682 | 180 | 0.55 | 810 |
| Kelsey Drive | Low Traffic | Yes | Yes | 0.32 | 1690 | 50 | 26 | 59,136 | 86 | 1.88 | 25,344 | 180 | 0.55 | 747 |
| Kent Drive | Low Traffic | Yes | Yes | 0.31 | 1637 | 50 | 26 | 57,288 | 86 | 1.88 | 24,552 | 180 | 0.55 | 723 |
| Keystone Drive | Low Traffic | Yes | Yes | 0.55 | 2904 | 50 | 30 | 113,256 | 86 | 1.88 | 31,944 | 180 | 0.55 | 1328 |
| Kingston Way | Low Traffic | Yes | Yes | 0.34 | 1795 | 50 | 26 | 62,832 | 86 | 1.88 | 26,928 | 180 | 0.55 | 793 |
| Knapp Road | Medium Traffic | Yes | Yes | 1.23 | 6494 | 33 | 24 | 214,315 | 113 | 1.88 | 0 | 180 | 0.55 | 2815 |
| Knollwood Drive | Low Traffic | Yes | Yes | 0.27 | 1426 | 50 | 26 | 49,896 | 86 | 1.88 | 21,384 | 180 | 0.55 | 630 |
| Lantern Lane | Low Traffic | Yes | Yes | 0.15 | 792 | 50 | 26 | 27,720 | 86 | 1.88 | 11,880 | 180 | 0.55 | 350 |
| Lawn Avenue | Low Traffic | Yes | Yes | 0.47 | 2482 | 50 | 26 | 86,856 | 86 | 1.88 | 37,224 | 180 | 0.55 | 1097 |
| Lea Drive | Low Traffic | Yes | Yes | 0.17 | 898 | 50 | 33 | 37,699 | 86 | 1.88 | 7,181 | 180 | 0.55 | 421 |
| Lenape Drive | Low Traffic | Yes | Yes | 0.15 | 792 | 50 | 26 | 27,720 | 86 | 1.88 | 11,880 | 180 | 0.55 | 350 |
| Lindsey Place | Low Traffic | Yes | Yes | 0.05 | 264 | 50 | 30 | 10,296 | 86 | 1.88 | 2,904 | 180 | 0.55 | 121 |
| Line Street | Low Traffic | Yes | Yes | 0.84 | 4435 | 40 | 24 | 146,362 | 86 | 1.88 | 31,046 | 180 | 0.55 | 1653 |
| Longleat Drive | Low Traffic | Yes | Yes | 0.34 | 1795 | 50 | 30 | 70,013 | 86 | 1.88 | 19,747 | 180 | 0.55 | 821 |
| Lower State Road | Medium Traffic | Yes | Yes | 0.61 | 3221 | 33 | 18 | 86,962 | 113 | 1.88 | 19,325 | 180 | 0.55 | 1261 |
| Macintosh Lane | Low Traffic | Yes | Yes | 0.07 | 370 | 50 | 32 | 15,154 | 86 | 1.88 | 3,326 | 180 | 0.55 | 172 |
| Madison Court | Low Traffic | Yes | Yes | 0.07 | 370 | 50 | 26 | 12,936 | 86 | 1.88 | 5,544 | 180 | 0.55 | 163 |
| Magdalena Lane | Low Traffic | Yes | Yes | 0.27 | 1426 | 50 | 26 | 49,896 | 86 | 1.88 | 21,384 | 180 | 0.55 | 630 |
| Magella Court | Low Traffic | Yes | Yes | 0.08 | 422 | 50 | 28 | 15,629 | 86 | 1.88 | 5,491 | 180 | 0.55 | 190 |
| Magnolia Place | Low Traffic | Yes | Yes | 0.08 | 422 | 50 | 26 | 14,784 | 86 | 1.88 | 6,336 | 180 | 0.55 | 187 |
| Major Drive | Low Traffic | Yes | Yes | 0.17 | 898 | 50 | 28 | 33,211 | 86 | 1.88 | 11,669 | 180 | 0.55 | 404 |
| Mallard Drive | Low Traffic | Yes | Yes | 1.46 | 7709 | 50 | 28 | 285,226 | 86 | 1.88 | 100,214 | 180 | 0.55 | 3466 |
| Manor Drive | Low Traffic | Yes | Yes | 0.19 | 1003 | 50 | 28 | 37,118 | 86 | 1.88 | 13,042 | 180 | 0.55 | 451 |
| Matthew Drive | Low Traffic | Yes | Yes | 0.28 | 1478 | 50 | 26 | 51,744 | 86 | 1.88 | 22,176 | 180 | 0.55 | 653 |
| McLaughlin Road | Low Traffic | Yes | Yes | 0.15 | 792 | 33 | 10 | 15,048 | 86 | 1.88 | 11,088 | 180 | 0.55 | 218 |
| Meadow Glen Rd. | Low Traffic | Yes | Yes | 0.34 | 1795 | 50 | 26 | 62,832 | 86 | 1.88 | 26,928 | 180 | 0.55 | 793 |
| Meadowood Dr. | Low Traffic | Yes | Yes | 0.40 | 2112 | 50 | 26 | 73,920 | 86 | 1.88 | 31,680 | 180 | 0.55 | 933 |
| Mele Avenue | Low Traffic | Yes | Yes | 0.20 | 1056 | 50 | 26 | 36,960 | 86 | 1.88 | 15,840 | 180 | 0.55 | 467 |

CLIENT:
 MONTGOMERY TOWNSHIP
PROJECT NAME:
 NPDES MS4 PERMIT RENEWAL
PROJECT NUMBER:
 11-12055



| Street Name | Classification | Sidewalks | Curb | Length (mi) | Length (ft) | ROW | Paved | Impervious Area (ft ²) | TSS EMC (mg/L) | Q (ft/year) | Grass Area (lbs/year) | TSS EMC (mg/L) | Q (ft/year) | Sediment Load (lbs/year) |
|--------------------|----------------|-----------|------|----------------|----------------|-----|-------|--|----------------------|----------------|-----------------------------|----------------------|----------------|--------------------------------|
| Merton Circle | Low Traffic | Yes | Yes | 0.08 | 422 | 50 | 30 | 16,474 | 86 | 1.88 | 4,646 | 180 | 0.55 | 193 |
| Montclair Drive | Low Traffic | Yes | Yes | 0.06 | 317 | 50 | 26 | 11,088 | 86 | 1.88 | 4,752 | 180 | 0.55 | 140 |
| Montg. Glen Drive | Low Traffic | Yes | Yes | 0.66 | 3485 | 50 | 32 | 142,877 | 86 | 1.88 | 31,363 | 180 | 0.55 | 1620 |
| Morgan St. | Low Traffic | Yes | Yes | 0.04 | 211 | 50 | 50 | 12,461 | 86 | 1.88 | -1,901 | 180 | 0.55 | 113 |
| Morningside Drive | Low Traffic | Yes | Yes | 0.40 | 2112 | 50 | 22 | 65,472 | 86 | 1.88 | 40,128 | 180 | 0.55 | 901 |
| Narcissus Place | Low Traffic | Yes | Yes | 0.06 | 317 | 50 | 26 | 11,088 | 86 | 1.88 | 4,752 | 180 | 0.55 | 140 |
| Nevermore Circle | Low Traffic | Yes | Yes | 0.05 | 264 | 50 | 28 | 9,768 | 86 | 1.88 | 3,432 | 180 | 0.55 | 119 |
| Newport Lane | Low Traffic | Yes | Yes | 0.44 | 2323 | 50 | 30 | 90,605 | 86 | 1.88 | 25,555 | 180 | 0.55 | 1062 |
| Noble Court | Low Traffic | Yes | Yes | 0.06 | 317 | 50 | 30 | 12,355 | 86 | 1.88 | 3,485 | 180 | 0.55 | 145 |
| North Wales Road | Medium Traffic | Yes | Yes | 0.77 | 4066 | 43 | 31 | 161,304 | 113 | 1.88 | 15,048 | 180 | 0.55 | 2211 |
| Nottingham Way | Low Traffic | Yes | Yes | 0.09 | 475 | 50 | 28 | 17,582 | 86 | 1.88 | 6,178 | 180 | 0.55 | 214 |
| Old Oak Tree Road | Low Traffic | Yes | Yes | 0.09 | 475 | 50 | 30 | 18,533 | 86 | 1.88 | 5,227 | 180 | 0.55 | 217 |
| Orchard Drive | Low Traffic | Yes | Yes | 0.42 | 2218 | 50 | 32 | 90,922 | 86 | 1.88 | 19,958 | 180 | 0.55 | 1031 |
| Oval Lane | Low Traffic | Yes | Yes | 0.06 | 317 | 50 | 30 | 12,355 | 86 | 1.88 | 3,485 | 180 | 0.55 | 145 |
| Oxford Lane | Low Traffic | Yes | Yes | 0.33 | 1742 | 50 | 30 | 67,954 | 86 | 1.88 | 19,166 | 180 | 0.55 | 797 |
| Park Drive | Low Traffic | Yes | Yes | 0.43 | 2270 | 60 | 40 | 111,250 | 86 | 1.88 | 24,974 | 180 | 0.55 | 1265 |
| Parliament Drive | Low Traffic | Yes | Yes | 0.05 | 264 | 50 | 28 | 9,768 | 86 | 1.88 | 3,432 | 180 | 0.55 | 119 |
| Pauline Circle | Low Traffic | Yes | Yes | 0.06 | 317 | 50 | 26 | 11,088 | 86 | 1.88 | 4,752 | 180 | 0.55 | 140 |
| Pecan Drive | Low Traffic | Yes | Yes | 0.38 | 2006 | 40 | 16 | 50,160 | 86 | 1.88 | 30,096 | 180 | 0.55 | 686 |
| Pemberton Court | Low Traffic | Yes | Yes | 0.11 | 581 | 50 | 26 | 20,328 | 86 | 1.88 | 8,712 | 180 | 0.55 | 257 |
| Pendulum Way | Low Traffic | Yes | Yes | 0.07 | 370 | 50 | 28 | 13,675 | 86 | 1.88 | 4,805 | 180 | 0.55 | 166 |
| Pine Crest Lane | Low Traffic | Yes | Yes | 0.68 | 3590 | 50 | 26 | 125,664 | 86 | 1.88 | 53,856 | 180 | 0.55 | 1586 |
| Pintail Court | Low Traffic | Yes | Yes | 0.07 | 370 | 50 | 28 | 13,675 | 86 | 1.88 | 4,805 | 180 | 0.55 | 166 |
| Pioneer Drive | Low Traffic | Yes | Yes | 0.35 | 1848 | 50 | 28 | 68,270 | 86 | 1.88 | 24,130 | 180 | 0.55 | 830 |
| Pioneer Spur | Low Traffic | Yes | Yes | 0.13 | 686 | 50 | 30 | 26,770 | 86 | 1.88 | 7,550 | 180 | 0.55 | 314 |
| Poe Court | Low Traffic | Yes | Yes | 0.22 | 1162 | 50 | 28 | 42,979 | 86 | 1.88 | 15,101 | 180 | 0.55 | 522 |
| Potters Way | Low Traffic | Yes | Yes | 0.06 | 317 | 50 | 28 | 11,722 | 86 | 1.88 | 4,118 | 180 | 0.55 | 142 |
| Preston Drive | Low Traffic | Yes | Yes | 0.30 | 1584 | 50 | 30 | 61,776 | 86 | 1.88 | 17,424 | 180 | 0.55 | 724 |
| Progress Drive | Low Traffic | Yes | Yes | 0.23 | 1214 | 50 | 30 | 47,362 | 86 | 1.88 | 13,358 | 180 | 0.55 | 555 |
| Quail Ct. | Low Traffic | Yes | Yes | 0.09 | 475 | 50 | 28 | 17,582 | 86 | 1.88 | 6,178 | 180 | 0.55 | 214 |
| Raven Hollow Drive | Low Traffic | Yes | Yes | 0.72 | 3802 | 50 | 28 | 140,659 | 86 | 1.88 | 49,421 | 180 | 0.55 | 1709 |
| Ravenwood Place | Low Traffic | Yes | Yes | 0.10 | 528 | 50 | 30 | 20,592 | 86 | 1.88 | 5,808 | 180 | 0.55 | 241 |
| Red Haven Drive | Low Traffic | Yes | Yes | 0.46 | 2429 | 50 | 32 | 99,581 | 86 | 1.88 | 21,859 | 180 | 0.55 | 1129 |
| Regency Drive | Low Traffic | Yes | Yes | 1.07 | 5650 | 50 | 30 | 220,334 | 86 | 1.88 | 62,146 | 180 | 0.55 | 2584 |
| Richardson Road | Low Traffic | Yes | Yes | 0.96 | 5069 | 33 | 18 | 136,858 | 86 | 1.88 | 30,413 | 180 | 0.55 | 1554 |
| Ridgeview Road | Low Traffic | Yes | Yes | 0.21 | 1109 | 50 | 26 | 38,808 | 86 | 1.88 | 16,632 | 180 | 0.55 | 490 |
| Rose Lane | Low Traffic | Yes | Yes | 0.13 | 686 | 50 | 26 | 24,024 | 86 | 1.88 | 10,296 | 180 | 0.55 | 303 |
| Rosetwig Ln | Low Traffic | Yes | Yes | 0.32 | 1690 | 50 | 33 | 70,963 | 86 | 1.88 | 13,517 | 180 | 0.55 | 792 |
| Rosewood Drive | Low Traffic | Yes | Yes | 0.38 | 2006 | 50 | 26 | 70,224 | 86 | 1.88 | 30,096 | 180 | 0.55 | 887 |
| Ross Court | Low Traffic | Yes | Yes | 0.05 | 264 | 50 | 30 | 10,296 | 86 | 1.88 | 2,904 | 180 | 0.55 | 121 |

CLIENT:
 MONTGOMERY TOWNSHIP
PROJECT NAME:
 NPDES MS4 PERMIT RENEWAL
PROJECT NUMBER:
 11-12055



| Street Name | Classification | Sidewalks | Curb | Length (mi) | Length (ft) | ROW | Paved | Impervious Area (ft ²) | TSS EMC (mg/L) | Q (ft/year) | Grass Area (lbs/year) | TSS EMC (mg/L) | Q (ft/year) | Sediment Load (lbs/year) |
|---------------------|----------------|-----------|------|----------------|----------------|-----|-------|--|----------------------|----------------|-----------------------------|----------------------|----------------|--------------------------------|
| Royal Court | Low Traffic | Yes | Yes | 0.10 | 528 | 50 | 30 | 20,592 | 86 | 1.88 | 5,808 | 180 | 0.55 | 241 |
| Runnymede Drive | Low Traffic | Yes | Yes | 0.25 | 1320 | 50 | 30 | 51,480 | 86 | 1.88 | 14,520 | 180 | 0.55 | 604 |
| S. Buckingham Lane | Low Traffic | Yes | Yes | 0.16 | 845 | 50 | 28 | 31,258 | 86 | 1.88 | 10,982 | 180 | 0.55 | 380 |
| Samantha Lane | Low Traffic | Yes | Yes | 0.16 | 845 | 50 | 30 | 32,947 | 86 | 1.88 | 9,293 | 180 | 0.55 | 386 |
| Sassafras Drive | Low Traffic | Yes | Yes | 0.17 | 898 | 50 | 26 | 31,416 | 86 | 1.88 | 13,464 | 180 | 0.55 | 397 |
| Savory Lane | Low Traffic | Yes | Yes | 0.32 | 1690 | 50 | 30 | 65,894 | 86 | 1.88 | 18,586 | 180 | 0.55 | 773 |
| Schriener Drive | Low Traffic | Yes | Yes | 0.52 | 2746 | 50 | 25 | 93,984 | 86 | 1.88 | 43,296 | 180 | 0.55 | 1205 |
| Scott Circle | Low Traffic | Yes | Yes | 0.12 | 634 | 50 | 26 | 22,176 | 86 | 1.88 | 9,504 | 180 | 0.55 | 280 |
| Shady Lane | Low Traffic | Yes | Yes | 0.48 | 2534 | 50 | 26 | 88,704 | 86 | 1.88 | 38,016 | 180 | 0.55 | 1120 |
| Shelburne Drive | Low Traffic | Yes | Yes | 0.31 | 1637 | 50 | 26 | 57,288 | 86 | 1.88 | 24,552 | 180 | 0.55 | 723 |
| Simpson Court | Low Traffic | Yes | Yes | 0.05 | 264 | 50 | 26 | 9,240 | 86 | 1.88 | 3,960 | 180 | 0.55 | 117 |
| Society Circle | Low Traffic | Yes | Yes | 0.07 | 370 | 50 | 30 | 14,414 | 86 | 1.88 | 4,066 | 180 | 0.55 | 169 |
| South Drive | Low Traffic | Yes | Yes | 0.10 | 528 | 50 | 22 | 16,368 | 86 | 1.88 | 10,032 | 180 | 0.55 | 225 |
| Sparks Circle | Low Traffic | Yes | Yes | 0.08 | 422 | 50 | 26 | 14,784 | 86 | 1.88 | 6,336 | 180 | 0.55 | 187 |
| Spring Valley Drive | Low Traffic | Yes | Yes | 0.36 | 1901 | 50 | 24 | 62,726 | 86 | 1.88 | 32,314 | 180 | 0.55 | 825 |
| Springdale Lane | Low Traffic | Yes | Yes | 0.24 | 1267 | 50 | 30 | 49,421 | 86 | 1.88 | 13,939 | 180 | 0.55 | 579 |
| Spur Rd. | Low Traffic | Yes | Yes | 0.35 | 1848 | 50 | 28 | 68,376 | 86 | 1.88 | 24,024 | 180 | 0.55 | 831 |
| Stafford Circle | Low Traffic | Yes | Yes | 0.09 | 475 | 50 | 30 | 18,533 | 86 | 1.88 | 5,227 | 180 | 0.55 | 217 |
| Stayman Drive | Low Traffic | Yes | Yes | 0.32 | 1690 | 50 | 32 | 69,274 | 86 | 1.88 | 15,206 | 180 | 0.55 | 786 |
| Steeplechase Dr. | Low Traffic | Yes | Yes | 0.48 | 2534 | 50 | 30 | 98,842 | 86 | 1.88 | 27,878 | 180 | 0.55 | 1159 |
| Sterling Drive | Low Traffic | Yes | Yes | 0.24 | 1267 | 50 | 26 | 44,352 | 86 | 1.88 | 19,008 | 180 | 0.55 | 560 |
| Stevens Mill Rd. | Low Traffic | Yes | Yes | 0.47 | 2482 | 50 | 28 | 91,819 | 86 | 1.88 | 32,261 | 180 | 0.55 | 1116 |
| Stone Ridge Drive | Low Traffic | Yes | Yes | 0.43 | 2270 | 50 | 29 | 86,117 | 86 | 1.88 | 27,403 | 180 | 0.55 | 1029 |
| Stoney Court | Low Traffic | Yes | Yes | 0.06 | 317 | 50 | 26 | 11,088 | 86 | 1.88 | 4,752 | 180 | 0.55 | 140 |
| Stump Road | Medium Traffic | Yes | Yes | 3.20 | 16896 | 33 | 18 | 456,192 | 113 | 1.88 | 101,376 | 180 | 0.55 | 6613 |
| Summer Ridge Dr. | Low Traffic | Yes | Yes | 0.45 | 2376 | 50 | 26 | 83,160 | 86 | 1.88 | 35,640 | 180 | 0.55 | 1050 |
| Summit Place | Low Traffic | Yes | Yes | 0.07 | 370 | 50 | 26 | 12,936 | 86 | 1.88 | 5,544 | 180 | 0.55 | 163 |
| Sunrise Drive | Low Traffic | Yes | Yes | 0.44 | 2323 | 50 | 26 | 81,312 | 86 | 1.88 | 34,848 | 180 | 0.55 | 1027 |
| Sunset Drive | Low Traffic | Yes | Yes | 0.30 | 1584 | 50 | 22 | 49,104 | 86 | 1.88 | 30,096 | 180 | 0.55 | 675 |
| Swallow Court | Low Traffic | Yes | Yes | 0.06 | 317 | 50 | 28 | 11,722 | 86 | 1.88 | 4,118 | 180 | 0.55 | 142 |
| Swan Court | Low Traffic | Yes | Yes | 0.10 | 528 | 50 | 28 | 19,536 | 86 | 1.88 | 6,864 | 180 | 0.55 | 237 |
| Sycamore Drive | Low Traffic | Yes | Yes | 0.21 | 1109 | 40 | 16 | 27,720 | 86 | 1.88 | 16,632 | 180 | 0.55 | 379 |
| Tanglewood Drive | Low Traffic | Yes | Yes | 0.11 | 581 | 50 | 26 | 20,328 | 86 | 1.88 | 8,712 | 180 | 0.55 | 257 |
| Tennyson Lane | Low Traffic | Yes | Yes | 0.32 | 1690 | 50 | 30 | 65,894 | 86 | 1.88 | 18,586 | 180 | 0.55 | 773 |
| Thames Drive | Low Traffic | Yes | Yes | 0.40 | 2112 | 50 | 30 | 82,368 | 86 | 1.88 | 23,232 | 180 | 0.55 | 966 |
| Thatcher Court | Low Traffic | Yes | Yes | 0.05 | 264 | 50 | 28 | 9,768 | 86 | 1.88 | 3,432 | 180 | 0.55 | 119 |
| Torey Circle | Low Traffic | Yes | Yes | 0.07 | 370 | 50 | 30 | 14,414 | 86 | 1.88 | 4,066 | 180 | 0.55 | 169 |
| Tracey Circle | Low Traffic | Yes | Yes | 0.06 | 317 | 50 | 28 | 11,722 | 86 | 1.88 | 4,118 | 180 | 0.55 | 142 |
| Tree Line Drive | Low Traffic | Yes | Yes | 0.55 | 2904 | 50 | 26 | 101,640 | 86 | 1.88 | 43,560 | 180 | 0.55 | 1283 |
| Trotter Lane | Low Traffic | Yes | Yes | 0.14 | 739 | 50 | 32 | 30,307 | 86 | 1.88 | 6,653 | 180 | 0.55 | 344 |

CLIENT:
MONTGOMERY TOWNSHIP
PROJECT NAME:
NPDES MS4 PERMIT RENEWAL
PROJECT NUMBER:
11-12055



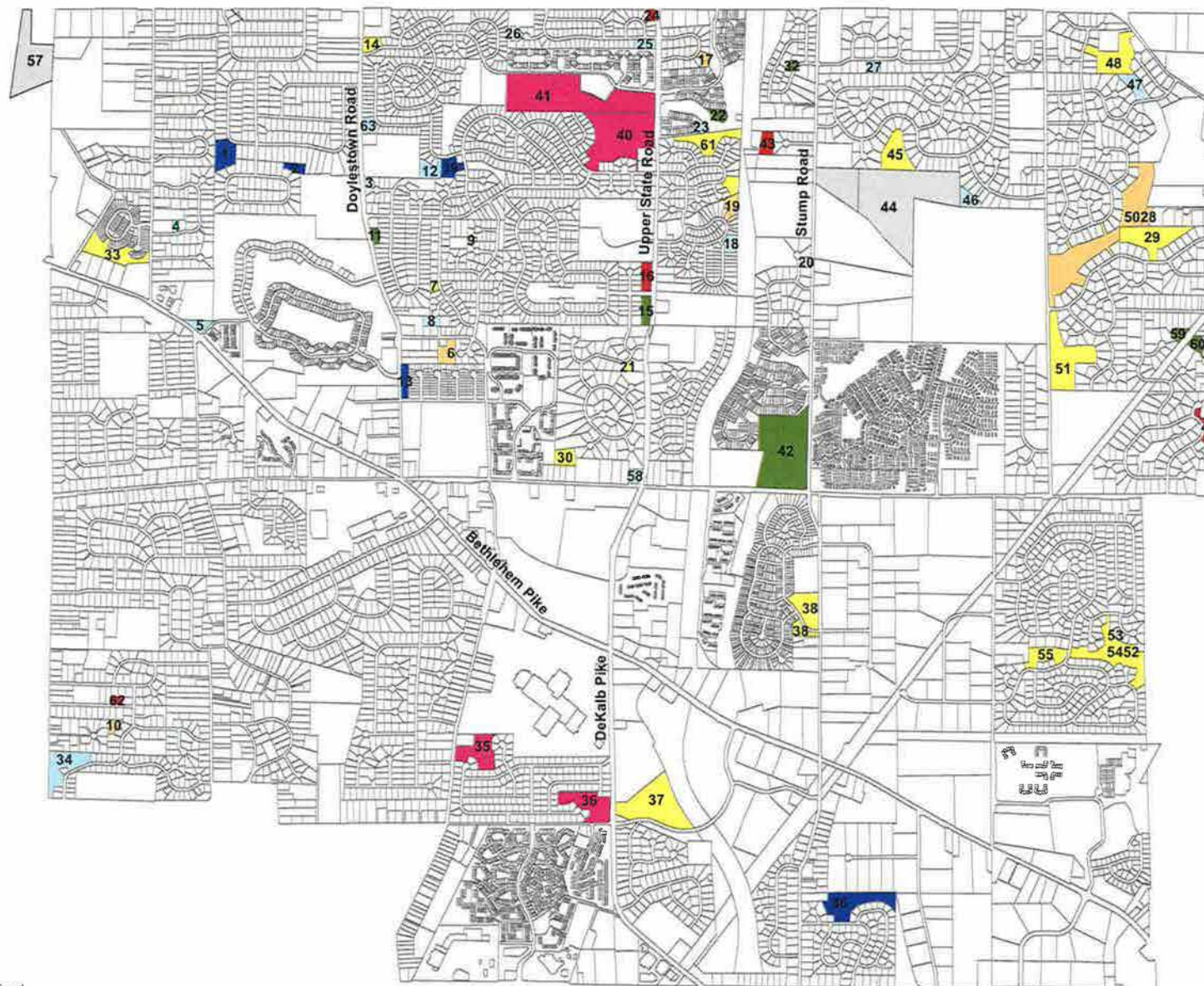
| Street Name | Classification | Sidewalks | Curb | Length (mi) | Length (ft) | ROW | Paved | Impervious Area (ft ²) | TSS EMC (mg/L) | Q (ft/year) | Grass Area (lbs/year) | TSS EMC (mg/L) | Q (ft/year) | Sediment Load (lbs/year) |
|-----------------------|----------------|-----------|------|----------------|----------------|-----|-------|--|----------------------|----------------|-----------------------------|----------------------|----------------|--------------------------------|
| Tudor Drive | Low Traffic | Yes | Yes | 0.91 | 4805 | 50 | 30 | 187,387 | 86 | 1.88 | 52,853 | 180 | 0.55 | 2197 |
| Twining Road | Low Traffic | Yes | Yes | 0.68 | 3590 | 50 | 30 | 140,026 | 86 | 1.88 | 39,494 | 180 | 0.55 | 1642 |
| Usher Lane | Low Traffic | Yes | Yes | 0.22 | 1162 | 50 | 28 | 42,979 | 86 | 1.88 | 15,101 | 180 | 0.55 | 522 |
| Veronica Lane | Low Traffic | Yes | Yes | 0.22 | 1162 | 50 | 28 | 42,979 | 86 | 1.88 | 15,101 | 180 | 0.55 | 522 |
| Village Drive | Low Traffic | Yes | Yes | 0.12 | 634 | 50 | 26 | 22,176 | 86 | 1.88 | 9,504 | 180 | 0.55 | 280 |
| Vilsmeier Road | Low Traffic | Yes | Yes | 0.75 | 3960 | 50 | 16 | 99,000 | 86 | 1.88 | 99,000 | 180 | 0.55 | 1597 |
| Virginia | Low Traffic | Yes | Yes | 0.06 | 317 | 50 | 28 | 11,722 | 86 | 1.88 | 4,118 | 180 | 0.55 | 142 |
| Walden Circle | Low Traffic | Yes | Yes | 0.06 | 317 | 50 | 30 | 12,355 | 86 | 1.88 | 3,485 | 180 | 0.55 | 145 |
| Walden Court | Low Traffic | Yes | Yes | 0.07 | 370 | 50 | 32 | 15,154 | 86 | 1.88 | 3,326 | 180 | 0.55 | 172 |
| Walden Lane | Low Traffic | Yes | Yes | 0.10 | 528 | 50 | 30 | 20,592 | 86 | 1.88 | 5,808 | 180 | 0.55 | 241 |
| Wentworth Drive | Low Traffic | Yes | Yes | 0.40 | 2112 | 50 | 28 | 78,144 | 86 | 1.88 | 27,456 | 180 | 0.55 | 950 |
| West Thomas Rd. | Low Traffic | Yes | Yes | 0.47 | 2482 | 50 | 16 | 62,040 | 86 | 1.88 | 62,040 | 180 | 0.55 | 1001 |
| Westgate Drive | Low Traffic | Yes | Yes | 0.37 | 1954 | 50 | 27 | 70,910 | 86 | 1.88 | 26,770 | 180 | 0.55 | 873 |
| Westminster Drive | Low Traffic | Yes | Yes | 0.54 | 2851 | 50 | 28 | 105,494 | 86 | 1.88 | 37,066 | 180 | 0.55 | 1282 |
| Weston Court | Low Traffic | Yes | Yes | 0.08 | 422 | 50 | 30 | 16,474 | 86 | 1.88 | 4,646 | 180 | 0.55 | 193 |
| Weymouth Circle | Low Traffic | Yes | Yes | 0.06 | 317 | 50 | 30 | 12,355 | 86 | 1.88 | 3,485 | 180 | 0.55 | 145 |
| White Pines Drive | Low Traffic | Yes | Yes | 0.26 | 1373 | 50 | 26 | 48,048 | 86 | 1.88 | 20,592 | 180 | 0.55 | 607 |
| Willowood Court | Low Traffic | Yes | Yes | 0.05 | 264 | 50 | 26 | 9,240 | 86 | 1.88 | 3,960 | 180 | 0.55 | 117 |
| Winter Drive | Low Traffic | Yes | Yes | 0.28 | 1478 | 50 | 26 | 51,744 | 86 | 1.88 | 22,176 | 180 | 0.55 | 653 |
| Witchwood Drive | Low Traffic | Yes | Yes | 0.28 | 1478 | 50 | 40 | 72,442 | 86 | 1.88 | 1,478 | 180 | 0.55 | 733 |
| Woodland Dr. | Low Traffic | Yes | Yes | 0.52 | 2746 | 50 | 26 | 96,096 | 86 | 1.88 | 41,184 | 180 | 0.55 | 1213 |
| Woodlea Terrace | Low Traffic | Yes | Yes | 0.07 | 370 | 50 | 32 | 15,154 | 86 | 1.88 | 3,326 | 180 | 0.55 | 172 |
| Wordsworth Lane | Low Traffic | Yes | Yes | 0.07 | 370 | 50 | 30 | 14,414 | 86 | 1.88 | 4,066 | 180 | 0.55 | 169 |
| Wren Court | Low Traffic | Yes | Yes | 0.05 | 264 | 50 | 28 | 9,768 | 86 | 1.88 | 3,432 | 180 | 0.55 | 119 |
| Wrights Circle | Low Traffic | Yes | Yes | 0.06 | 317 | 50 | 28 | 11,722 | 86 | 1.88 | 4,118 | 180 | 0.55 | 142 |
| TOTAL | | | | | | | | 13,941,998 | | | 4,745,770 | | | 171,353 |
| Neshaminy West Branch | 25% | | | | | | | 3,485,500 | | | 1,186,442 | | | 42,838 |
| Little Neshaminy | 60% | | | | | | | 8,365,199 | | | 2,847,462 | | | 102,812 |
| Wissahickon | 15% | | | | | | | 2,091,300 | | | 711,865 | | | 25,703 |

APPENDIX D

EXISTING NATURALIZED BASINS

APPENDIX D-1

TOWNSHIP BASIN LOCATIONS MAP



Basins

- | | |
|--------------------------------|-------------------------------|
| 1. Andrew Lane | 33. Autumn Woods Park |
| 2. Douglas Road | 34. Cambridge Knoll A |
| 3. Paxino Circle | 35. Knapp Farm |
| 4. Veronica Lane | 36. Knapp Farm |
| 5. Bethlehem Pike | 37. Witchwood Park |
| 6. Montgomery Ave. | 38. The Orchard |
| 7. Pioneer Drive | 39. Canterbury |
| 8. Walden Lane | 40. Spring Valley Park |
| 9. Torrey Circle | 41. Spring Valley Park |
| 10. Addison Lane | 42. Township Building |
| 11. Forest Trail | 43. Baker Place |
| 12. Heather Knoll | 44. Zehr Tract |
| 13. Thornbury | 45. Mallard Pond |
| 14. Gwynmere | 46. Mallard Pond |
| 15. Stone Ridge | 47. Montgomery Lea |
| 16. Stone Ridge | 48. Montgomery Lea |
| 17. Horseshoe Lane | 49. Green Tree Tavern |
| 18. West Gate | 50. Estates of Windlesrae |
| 19. West Gate | 51. Estates of Windlesrae |
| 20. The Ridings | 52. Montgomery Crossing |
| 21. Montgomery Hill | 53. Montgomery Crossing |
| 22. Winners Circle | 54. Montgomery Crossing |
| 23. Winners Circle | 55. Montgomery Crossing |
| 24. Summer Ridge | 56. Gwynedd Lea |
| 25. Summer Ridge | 57. Whistlesop Park (Halfeld) |
| 26. Summer Ridge | 58. Tall Gables |
| 27. Heather Line | 59. Montgomery Hollow |
| 28. Gift Circle (Raven Hollow) | 60. Montgomery Hollow |
| 29. Gwynwood Pond | 61. Autumn Grove |
| 30. Tall Gables | 62. Magdalena |
| 32. Heather Ridge | 63. Bedford Lane |

* Basins are naturalized but have not been assessed

Naturalized Basins

Year Naturalized

- 2009
- 2010
- 2011
- 2012
- 2013
- 2014

Other Basins

- Unassessed Basins
- Assessed But Not to be Naturalized

0 900 1,800 3,600 5,400 7,200 Feet
1 inch = 1,800 feet

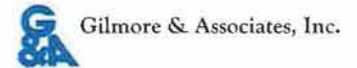
Montgomery Township Stormwater Management Basins

May 26, 2011

APPENDIX D-2

EXISTING NATURALIZED BASINS SEDIMENT CALCULATION

CLIENT:
MONTGOMERY TOWNSHIP
PROJECT NAME:
NPDES MS4 PERMIT RENEWAL
PROJECT NUMBER:
11-12055



| No. | LOCATION | YEAR NATURALIZED | WATERSHED | TRIBUTARY AREA (ac) | 25% IMPERVIOUS COVER (ac) | RUNOFF DEPTH (in) | EMC TSS (mg/L) | IMPERVIOUS SEDIMENT (Lb/year) | 75% LAWN COVER (ac) | RUNOFF DEPTH (in) | EMC TSS (mg/L) | LAWN SEDIMENT (Lb/year) | TOTAL SEDIMENT (Lb/year) | 25% SEDIMENT REDUCTION (Lb/year) |
|-----|----------------------------|---------------------|-----------|---------------------------|------------------------------------|-------------------------|-------------------|-------------------------------------|------------------------------|-------------------------|-------------------|-------------------------------|--------------------------------|---|
| 24 | Summer Ridge | 2009 | LN | 16.5 | 4.1 | 43.51 | 35 | 1,413 | 12.375 | 6.59 | 180 | 3,303 | 4,716 | 1,179 |
| 35 | Knapp Farm | 2009 | LN | 41.8 | 10.5 | 43.51 | 35 | 3,581 | 31.35 | 6.59 | 180 | 8,367 | 11,948 | 2,987 |
| 40 | Spring Valley Park | 2009 | LN | 29.2 | 7.3 | 43.51 | 35 | 2,501 | 21.9 | 6.59 | 180 | 5,845 | 8,346 | 2,087 |
| 41 | Spring Valley Park | 2009 | LN | 54.7 | 13.7 | 43.51 | 35 | 4,686 | 41.025 | 6.59 | 180 | 10,949 | 15,635 | 3,909 |
| 56 | Gwynedd Lea | 2010 | LN | 35.9 | 9.0 | 43.51 | 35 | 3,075 | 26.925 | 6.59 | 180 | 7,186 | 10,261 | 2,565 |
| 15 | Stone Ridge | 2011 | LN | 40.2 | 10.0 | 43.51 | 35 | 3,439 | 30.1125 | 6.59 | 180 | 8,037 | 11,476 | 2,869 |
| 16 | Stone Ridge | 2011 | LN | 40.2 | 10.0 | 43.51 | 35 | 3,439 | 30.1125 | 6.59 | 180 | 8,037 | 11,476 | 2,869 |
| 22 | Winners Circle | 2011 | LN | 22.9 | 5.7 | 43.51 | 35 | 1,962 | 17.175 | 6.59 | 180 | 4,584 | 6,546 | 1,636 |
| 32 | Heather Ridge | 2011 | LN | 14.9 | 3.7 | 43.51 | 35 | 1,276 | 11.175 | 6.59 | 180 | 2,983 | 4,259 | 1,065 |
| 42 | Township Building | 2011 | LN | 4.0 | 1.0 | 43.51 | 35 | 343 | 3 | 6.59 | 180 | 801 | 1,143 | 286 |
| 59 | Montgomery Hollow | 2011 | LN | 11.5 | 2.9 | 43.51 | 35 | 985 | 8.625 | 6.59 | 180 | 2,302 | 3,287 | 822 |
| 60 | Montgomery Hollow | 2011 | LN | 10.4 | 2.6 | 43.51 | 35 | 891 | 7.8 | 6.59 | 180 | 2,082 | 2,973 | 743 |
| 21 | Montgomery Hill | 2012 | LN | 37.0 | 9.3 | 43.51 | 35 | 3,169 | 27.75 | 6.59 | 180 | 7,406 | 10,576 | 2,644 |
| 29 | Gwynwood Pond | 2012 | LN | 18.2 | 4.6 | 43.51 | 35 | 1,559 | 13.65 | 6.59 | 180 | 3,643 | 5,202 | 1,301 |
| 30 | Tall Gables | 2012 | LN | 16.8 | 4.2 | 43.51 | 35 | 1,439 | 12.6 | 6.59 | 180 | 3,363 | 4,802 | 1,200 |
| 38 | The Orchard | 2012 | LN | 13.4 | 3.4 | 43.51 | 35 | 1,148 | 10.05 | 6.59 | 180 | 2,682 | 3,830 | 958 |
| 45 | Mallard Pond | 2012 | LN | 26.9 | 6.7 | 43.51 | 35 | 2,307 | 20.2 | 6.59 | 180 | 5,391 | 7,698 | 1,925 |
| 48 | Montgomery Lea | 2012 | LN | 48.0 | 12.0 | 43.51 | 35 | 4,112 | 36 | 6.59 | 180 | 9,608 | 13,720 | 3,430 |
| 51 | Estates of Windlestrae | 2012 | LN | 15.0 | 3.8 | 43.51 | 35 | 1,285 | 11.25 | 6.59 | 180 | 3,003 | 4,287 | 1,072 |
| 52 | Montgomery Crossing | 2012 | LN | 52.4 | 13.1 | 43.51 | 35 | 4,491 | 39.325 | 6.59 | 180 | 10,496 | 14,987 | 3,747 |
| 53 | Montgomery Crossing | 2012 | LN | 52.4 | 13.1 | 43.51 | 35 | 4,491 | 39.325 | 6.59 | 180 | 10,496 | 14,987 | 3,747 |
| 54 | Montgomery Crossing | 2012 | LN | 52.4 | 13.1 | 43.51 | 35 | 4,491 | 39.325 | 6.59 | 180 | 10,496 | 14,987 | 3,747 |
| 55 | Montgomery Crossing | 2012 | LN | 22.3 | 5.6 | 43.51 | 35 | 1,910 | 16.725 | 6.59 | 180 | 4,464 | 6,374 | 1,594 |
| 61 | Autumn Grove | 2012 | LN | 3.8 | 1.0 | 43.51 | 35 | 326 | 2.85 | 6.59 | 180 | 761 | 1,086 | 272 |
| 17 | Horseshoe Lane | 2013 | LN | 14.2 | 3.6 | 43.51 | 35 | 1,216 | 10.65 | 6.59 | 180 | 2,842 | 4,059 | 1,015 |
| 19 | West Gate | 2013 | LN | 43.9 | 11.0 | 43.51 | 35 | 3,760 | 32.925 | 6.59 | 180 | 8,788 | 12,548 | 3,137 |
| 28 | Gift Circle (Raven Hollow) | 2013 | LN | 6.0 | 1.5 | 43.51 | 35 | 514 | 4.5 | 6.59 | 180 | 1,201 | 1,715 | 429 |
| 50 | Estates of Windlestrae | 2013 | LN | 23.1 | 5.8 | 43.51 | 35 | 1,979 | 17.325 | 6.59 | 180 | 4,624 | 6,603 | 1,651 |
| 43 | Baker Place | 2014 | LN | 26.9 | 6.7 | 43.51 | 35 | 2,307 | 20.2 | 6.59 | 180 | 5,391 | 7,698 | 1,925 |
| 49 | Green Tree Tavern | 2014 | LN | 54.8 | 13.7 | 43.51 | 35 | 4,694 | 41.1 | 6.59 | 180 | 10,969 | 15,664 | 3,916 |
| 36 | Knapp Farm | 2009 | W | 22.5 | 5.6 | 43.51 | 35 | 1,927 | 16.875 | 6.59 | 180 | 4,504 | 6,431 | 1,608 |
| 1 | Andrew Lane | 2010 | WB | 73.0 | 18.3 | 43.51 | 35 | 6,253 | 54.75 | 6.59 | 180 | 14,613 | 20,866 | 5,216 |
| 2 | Douglas Road | 2010 | WB | 8.7 | 2.2 | 43.51 | 35 | 745 | 6.525 | 6.59 | 180 | 1,741 | 2,487 | 622 |
| 13 | Thornbury | 2010 | WB | 21.2 | 5.3 | 43.51 | 35 | 1,815 | 15.8875 | 6.59 | 180 | 4,240 | 6,055 | 1,514 |
| 39 | Canterbury | 2010 | WB | 57.7 | 14.4 | 43.51 | 35 | 4,943 | 43.275 | 6.59 | 180 | 11,550 | 16,492 | 4,123 |
| 11 | Forest Trail | 2011 | WB | 21.2 | 5.3 | 43.51 | 35 | 1,815 | 15.8875 | 6.59 | 180 | 4,240 | 6,055 | 1,514 |
| 7 | Pioneer Drive | 2012 | WB | 21.2 | 5.3 | 43.51 | 35 | 1,815 | 15.8875 | 6.59 | 180 | 4,240 | 6,055 | 1,514 |
| 14 | Gwynmere | 2012 | WB | 22.0 | 5.5 | 43.51 | 35 | 1,885 | 16.5 | 6.59 | 180 | 4,404 | 6,288 | 1,572 |
| 33 | Autumn Woods Park | 2012 | WB | 15.5 | 3.9 | 43.51 | 35 | 1,328 | 11.625 | 6.59 | 180 | 3,103 | 4,430 | 1,108 |
| 6 | Montgomery Ave. | 2013 | WB | 21.2 | 5.3 | 43.51 | 35 | 1,815 | 15.8875 | 6.59 | 180 | 4,240 | 6,055 | 1,514 |
| 9 | Torey Circle | 2013 | WB | 21.2 | 5.3 | 43.51 | 35 | 1,815 | 15.8875 | 6.59 | 180 | 4,240 | 6,055 | 1,514 |
| 10 | Addison Lane | 2013 | WB | 16.3 | 4.1 | 43.51 | 35 | 1,396 | 12.225 | 6.59 | 180 | 3,263 | 4,659 | 1,165 |
| 62 | Magdalena | 2014 | WB | 35.7 | 8.9 | 43.51 | 35 | 3,058 | 26.775 | 6.59 | 180 | 7,146 | 10,204 | 2,551 |

APPENDIX E
POTENTIAL NEW BMPS

APPENDIX E-1

POTENTIAL TOWNSHIP BASINS TO BE NATURALIZED

CLIENT:
MONTGOMERY TOWNSHIP
PROJECT NAME:
NPDES MS4 PERMIT RENEWAL
PROJECT NUMBER:
11-12055



| No. | LOCATION | YEAR TO BE ASSESSED | WATERSHED | TRIBUTARY AREA (ac) | 25% IMPERVIOUS COVER (ac) | RUNOFF DEPTH (in) | EMC TSS (mg/L) | IMPERVIOUS SEDIMENT (Lb/year) | 75% LAWN COVER (ac) | RUNOFF DEPTH (in) | EMC TSS (mg/L) | LAWN SEDIMENT (Lb/year) | TOTAL SEDIMENT (Lb/year) | 25% SEDIMENT REDUCTION (Lb/year) |
|-----|-----------------------------|---------------------|-----------|---------------------|---------------------------|-------------------|----------------|-------------------------------|---------------------|-------------------|----------------|-------------------------|--------------------------|----------------------------------|
| 44 | Zehr Tract | | LN | 26.9 | 6.7 | 43.51 | 35 | 2,307 | 20.2 | 6.59 | 180 | 5,391 | 7,698 | 1,925 |
| 57 | Whistlestop Park (Hatfield) | | LN | 0.0 | 0.0 | 43.51 | 35 | 0 | 0 | 6.59 | 180 | 0 | 0 | 0 |
| 18 | West Gate | 2015 | LN | 25.1 | 6.3 | 43.51 | 35 | 2,150 | 18.825 | 6.59 | 180 | 5,024 | 7,174 | 1,794 |
| 20 | The Ridings | | LN | 15.5 | 3.9 | 43.51 | 35 | 1,328 | 11.625 | 6.59 | 180 | 3,103 | 4,430 | 1,108 |
| 23 | Winners Circle | | LN | 4.6 | 1.2 | 43.51 | 35 | 394 | 3.45 | 6.59 | 180 | 921 | 1,315 | 329 |
| 25 | Summer Ridge | 2015 | LN | 17.9 | 4.5 | 43.51 | 35 | 1,533 | 13.425 | 6.59 | 180 | 3,583 | 5,116 | 1,279 |
| 26 | Summer Ridge | | LN | | 0.0 | 43.51 | 35 | 0 | 0 | 6.59 | 180 | 0 | 0 | 0 |
| 27 | Heather Lea | 2015 | LN | 25.7 | 6.4 | 43.51 | 35 | 2,201 | 19.275 | 6.59 | 180 | 5,144 | 7,346 | 1,836 |
| 46 | Mallard Pond | | LN | 7.5 | 1.9 | 43.51 | 35 | 642 | 5.625 | 6.59 | 180 | 1,501 | 2,144 | 536 |
| 47 | Montgomery Lea | | LN | 8.2 | 2.1 | 43.51 | 35 | 702 | 6.15 | 6.59 | 180 | 1,641 | 2,344 | 586 |
| 58 | Tall Gables | | LN | 13.2 | 3.3 | 43.51 | 35 | 1,131 | 9.9 | 6.59 | 180 | 2,642 | 3,773 | 943 |
| 12 | Heather Knoll* | | WB | 22.1 | 5.5 | 43.51 | 35 | 1,893 | 16.575 | 6.59 | 180 | 4,424 | 6,317 | 1,579 |
| 3 | Pauline Circle | | WB | 22.1 | 5.5 | 43.51 | 35 | 1,893 | 16.575 | 6.59 | 180 | 4,424 | 6,317 | 1,579 |
| 4 | Veronica Lane | 2015 | WB | 10.7 | 2.7 | 43.51 | 35 | 917 | 8.025 | 6.59 | 180 | 2,142 | 3,058 | 765 |
| 5 | Bethlehem Pike | 2015 | WB | 6.8 | 1.7 | 43.51 | 35 | 582 | 5.1 | 6.59 | 180 | 1,361 | 1,944 | 486 |
| 8 | Walden Lane | | WB | 21.2 | 5.3 | 43.51 | 35 | 1,815 | 15.8875 | 6.59 | 180 | 4,240 | 6,055 | 1,514 |
| 34 | Cambridge Knoll A | 2015 | WB | 42.0 | 10.5 | 43.51 | 35 | 3,598 | 31.5 | 6.59 | 180 | 8,407 | 12,005 | 3,001 |
| 63 | Bedford Lane | | WB | 22.1 | 5.5 | 43.51 | 35 | 1,893 | 16.575 | 6.59 | 180 | 4,424 | 6,317 | 1,579 |
| | Bridle Path Rd | | WB | 9.5 | 2.4 | 43.51 | 35 | 814 | 7.125 | 6.59 | 180 | 1,902 | 2,715 | 679 |
| | Brookshire Way | | WB | 11.7 | 2.9 | 43.51 | 35 | 1,002 | 8.775 | 6.59 | 180 | 2,342 | 3,344 | 836 |

APPENDIX E-2
POTENTIAL BMPs

Potential BMP Application for Little Neshaminy Creek: Riparian Buffer Restoration



This Little Neshaminy Creek Tributary collects stormwater from approximately 160 acres of residential suburban neighborhoods and discharges it into Little Neshaminy Creek. This tributary can be considered for bank stabilization / floodplain restorations to reduce polluted run-off. Work completion will be contingent upon public / private partnerships.

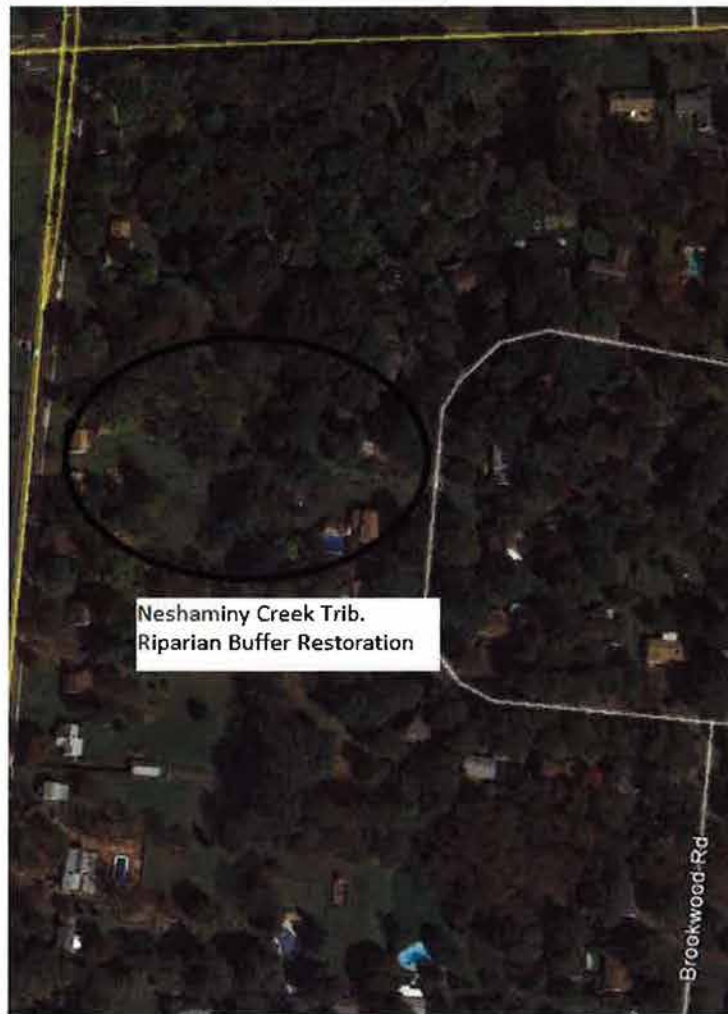
Estimated Pollutant Load and Reduction from BMP

| LAND COVER CLASSIFICATION | ANNUAL RUNOFF (ft) | TSS EMC (mg/l) | TP EMC (mg/l) | NO ₃ EMC (mg/l) | TRIBUTARY AREA (ac) | RUNOFF VOLUME (ac*ft) | TSS (lbs/year) | TP (lbs/year) | NO ₃ (lbs/year) |
|------------------------------|-----------------------|-------------------|------------------|-------------------------------|------------------------|-----------------------------|----------------|------------------|-------------------------------|
| Estimated* | 0.5492 | 55 | 0.25 | 0.4 | 160 | 87.87 | 4832.67 | 21.97 | 35.15 |
| Reduction** | | | | | | | 4107.77 | 18.67 | 10.54 |

*Approximate composite EMC values based on visual inspection of aerial photographs.

** Estimated 85% TSS Reduction, 30% TN Reduction, 85% TP Reduction based on floodplain restoration in accordance with the PADEP BMP Manual.

Potential BMP Application for Neshaminy Creek Trib.: Riparian Buffer Restoration



This Neshaminy Creek Tributary collects stormwater from approximately 140 acres of residential suburban neighborhoods and discharges it to an unnamed tributary to Neshaminy Creek. This tributary can be considered for bank stabilization / floodplain restorations to reduce polluted run-off. Completion will be contingent upon public / private partnerships.

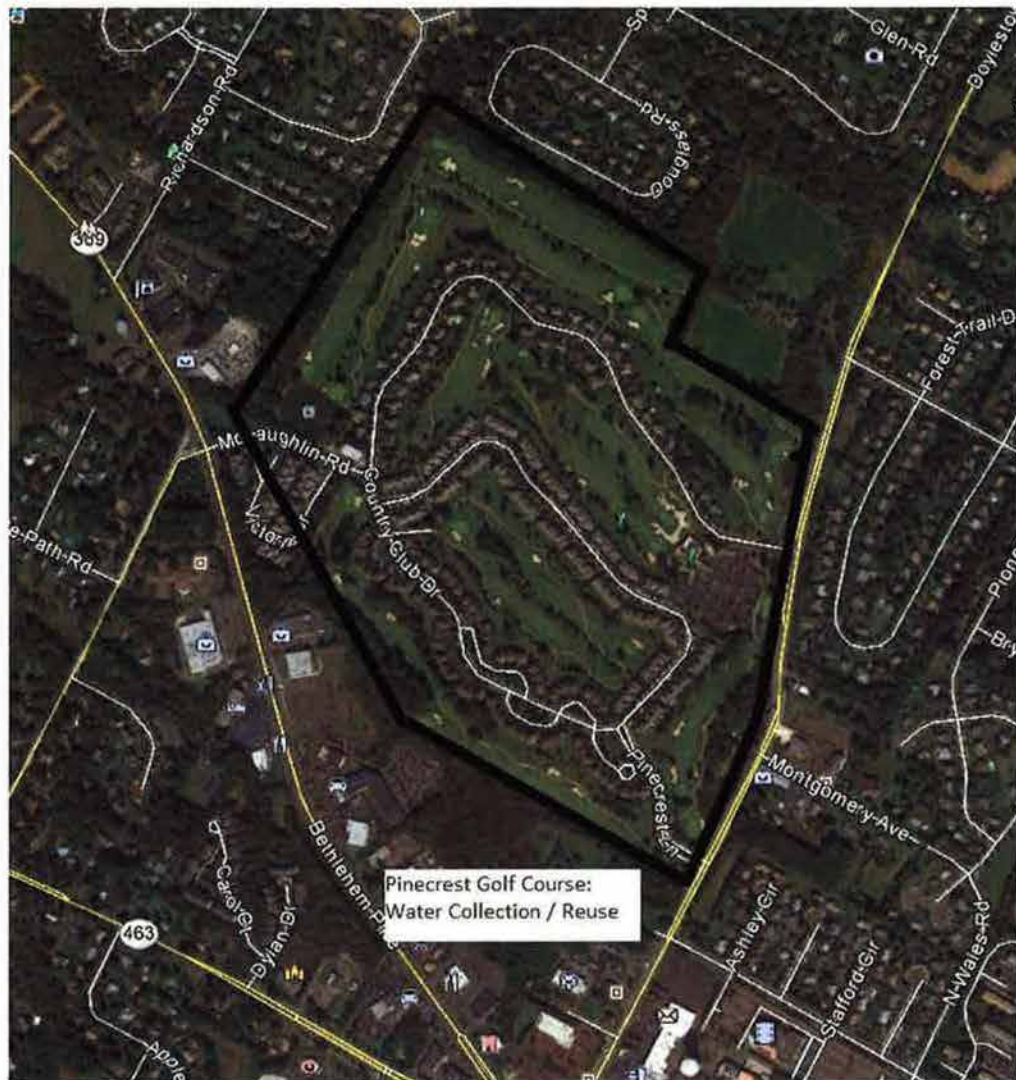
Estimated Pollutant Load and Reduction from BMP

| LAND COVER CLASSIFICATION | ANNUAL RUNOFF (ft) | TSS EMC (mg/l) | TP EMC (mg/l) | NO ₃ EMC (mg/l) | TRIBUTARY AREA (ac) | RUNOFF VOLUME (ac*ft) | TSS (lbs/year) | TP (lbs/year) | NO ₃ (lbs/year) |
|------------------------------|-----------------------|-------------------|------------------|-------------------------------|------------------------|-----------------------------|----------------|------------------|-------------------------------|
| Estimated* | 0.5492 | 55 | 0.25 | 0.4 | 18.8 | 10.32 | 567.84 | 2.58 | 4.13 |
| Reduction** | | | | | | | 482.66 | 2.19 | 1.24 |

*Approximate composite EMC values based on visual inspection of aerial photographs.

** Estimated 85% TSS Reduction, 30% TN Reduction, 85% TP Reduction based on floodplain restoration in accordance with the PADEP BMP Manual.

Potential BMP Application for Neshaminy Creek Trib.: Runoff Capture & Reuse



This Neshaminy Creek Tributary collects stormwater from approximately 162 acres of residential suburban neighborhoods and golf course greens and discharges it into an unnamed tributary to Neshaminy Creek. The Township contemplates a system in which runoff is collected for reuse for groundskeeping. Completion will be contingent upon public / private partnerships.

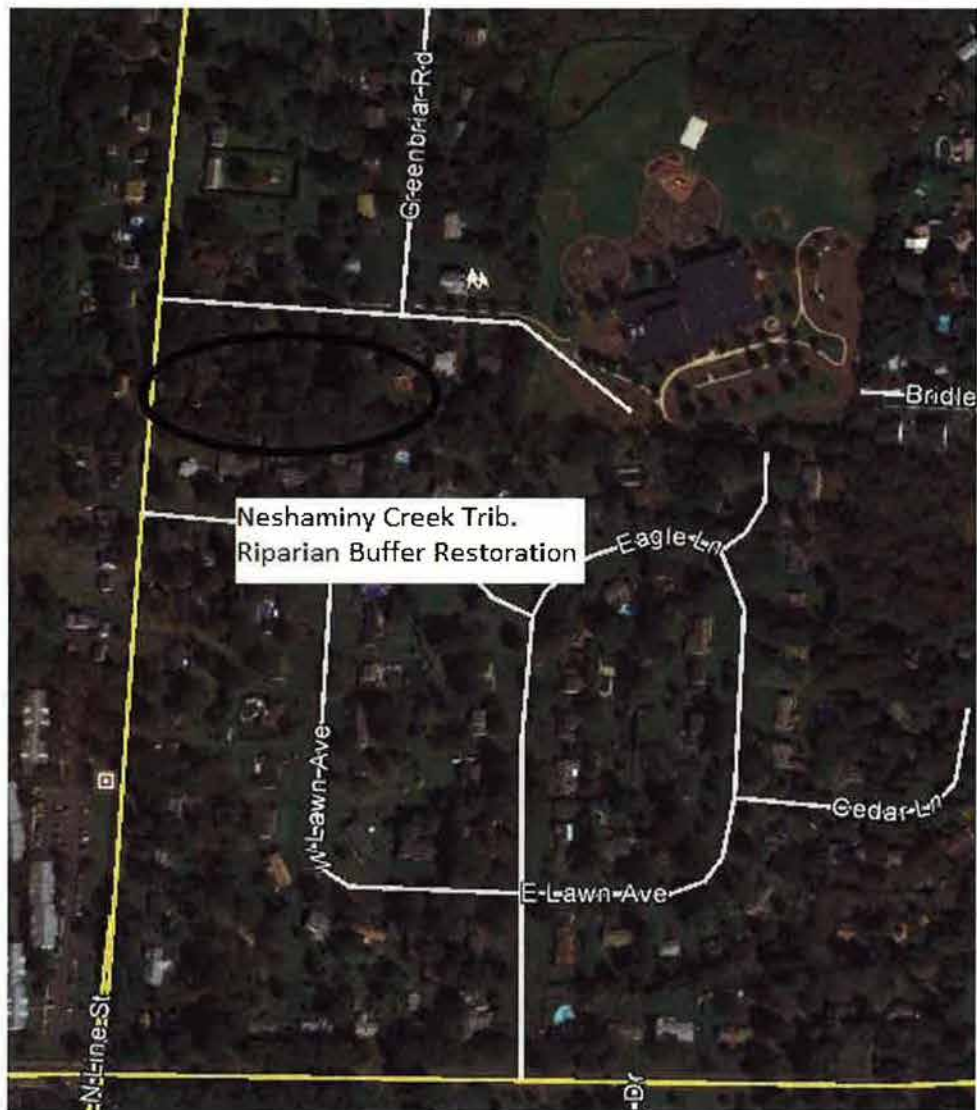
Estimated Pollutant Load and Reduction from BMP

| LAND COVER CLASSIFICATION | ANNUAL RUNOFF (ft) | TSS EMC (mg/l) | TP EMC (mg/l) | NO ₃ EMC (mg/l) | TRIBUTARY AREA (ac) | RUNOFF VOLUME (ac*ft) | TSS (lbs/year) | TP (lbs/year) | NO ₃ (lbs/year) |
|------------------------------|-----------------------|-------------------|------------------|-------------------------------|------------------------|-----------------------------|----------------|------------------|-------------------------------|
| Estimated* | 0.5492 | 200 | 0.5 | 0.8 | 53 | 29.11 | 5821.17 | 14.55 | 23.28 |
| Reduction** | | | | | | | 5821.17 | 14.55 | 23.28 |

* Approximate composite EMC values based on visual inspection of aerial photographs.

** Estimated 100% TSS Reduction, 100% TN Reduction, 100% TP Reduction based on floodplain restoration in accordance with the PADEP BMP Manual.

Potential BMP Application for Neshaminy Creek Trib.: Riparian Buffer Restoration



This Neshaminy Creek Tributary collects stormwater from approximately 31 acres of residential suburban neighborhoods and discharges it to an unnamed tributary to Neshaminy Creek. This tributary can be considered for bank stabilization / floodplain restorations to reduce polluted run-off. Completion will be contingent upon public / private partnerships.

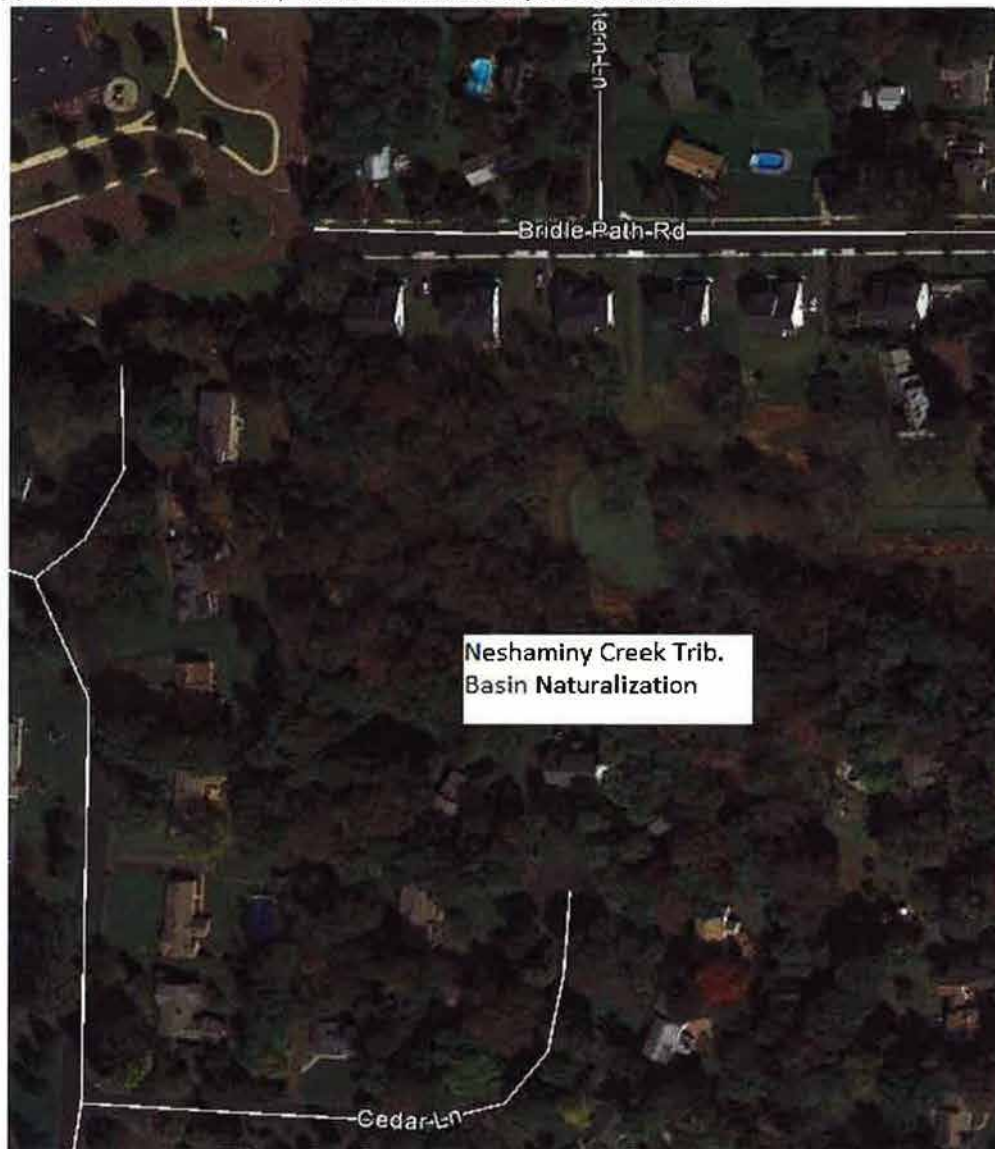
Estimated Pollutant Load and Reduction from BMP

| LAND COVER CLASSIFICATION | ANNUAL RUNOFF (ft) | TSS EMC (mg/l) | TP EMC (mg/l) | NO ₃ EMC (mg/l) | TRIBUTARY AREA (ac) | RUNOFF VOLUME (ac*ft) | TSS (lbs/year) | TP (lbs/year) | NO ₃ (lbs/year) |
|------------------------------|-----------------------|-------------------|------------------|-------------------------------|------------------------|-----------------------------|----------------|------------------|-------------------------------|
| Estimated* | 0.5492 | 55 | 0.25 | 0.4 | 31 | 17.02 | 936.33 | 4.26 | 6.81 |
| Reduction** | | | | | | | 795.88 | 3.62 | 2.04 |

*Approximate composite EMC values based on visual inspection of aerial photographs.

** Estimated 85% TSS Reduction, 30% TN Reduction, 85% TP Reduction based on floodplain restoration in accordance with the PADEP BMP Manual.

Potential BMP Application for Neshaminy Creek Trib.: Landscape Naturalization



The basin at Bridle Path Road collects stormwater from approximately 9.5 acres of residential suburban neighborhoods and discharges it to an unnamed tributary to Neshaminy Creek. This basin can be considered for landscape restoration to reduce polluted run-off. It is anticipated that the naturalization will increase the pollutant removal of the basin by 25%. See Appendix E-1 for pollutant removal estimates. Completion will be contingent upon public / private partnerships.

Potential BMP Application for Neshaminy Creek Trib.: Landscape Naturalization



The basin at Brookshire Way collects stormwater from approximately 11.7 acres of residential suburban neighborhoods and discharges it to an unnamed tributary to Neshaminy Creek. This basin can be considered for landscape restoration to reduce polluted run-off. It is anticipated that the naturalization will increase the pollutant removal of the basin by 25%. See Appendix E-1 for pollutant removal estimates. Completion will be contingent upon public / private partnerships.

Potential BMP Application for Neshaminy Creek Trib.: Raingarden Installation



There is the potential to install a raingarden at Fellowship Park which collects stormwater from approximately 5 acres of athletic fields. It is anticipated that the raingarden will increase the pollutant removal of the area by 85%.

Estimated Polutant Load and Reduction from BMP

| LAND COVER CLASSIFICATION | ANNUAL RUNOFF (ft) | TSS EMC (mg/l) | TP EMC (mg/l) | NO ₃ EMC (mg/l) | TRIBUTARY AREA (ac) | RUNOFF VOLUME (ac*ft) | TSS (lbs/year) | TP (lbs/year) | NO ₃ (lbs/year) |
|------------------------------|-----------------------|-------------------|------------------|-------------------------------|------------------------|-----------------------------|----------------|------------------|-------------------------------|
| Estimated* | 0.5492 | 200 | 1.07 | 1.01 | 5 | 2.75 | 549.17 | 2.94 | 2.77 |
| Reduction** | | | | | | | 466.79 | 2.94 | 2.77 |

*Approximate composite EMC values based on visual inspection of aerial photographs.

** Estimated 85% TSS Reduction, 85% TN Reduction, 30% TP Reduction based on Rain Garden / Bioretention in accordance with the PADEP BMP Manual.

Potential BMP Application for Neshaminy Creek Trib.: Streambank Restoration



This Neshaminy Creek proposed BMP is a streambank restoration that will reduce future erosion from approximately 500 linear feet of streambank in two separate sections. It is anticipated that the restoration will decrease the sediment removal along the banks by a total of 21,335 pounds per year.

Estimated Pollutant Load and Reduction from BMP

Two 500 Linear Feet Sections = 1000 Linear Feet

Average reduction = 25.1 lbs / linear foot / year

Total Reduction 25100 lbs/year

85% Claimed 21335 lbs/year

Potential BMP Application for Trewellyn Creek: Riparian Buffer Restoration



Trewellyn Creek originates in the southeast section of the Township where approximately 75 acres drain towards the headwaters of the creek. The municipality contemplates naturalization of the existing basin and establishment of a riparian buffer that will help remove approximately 67% of the total siltation entering the creek in this area.

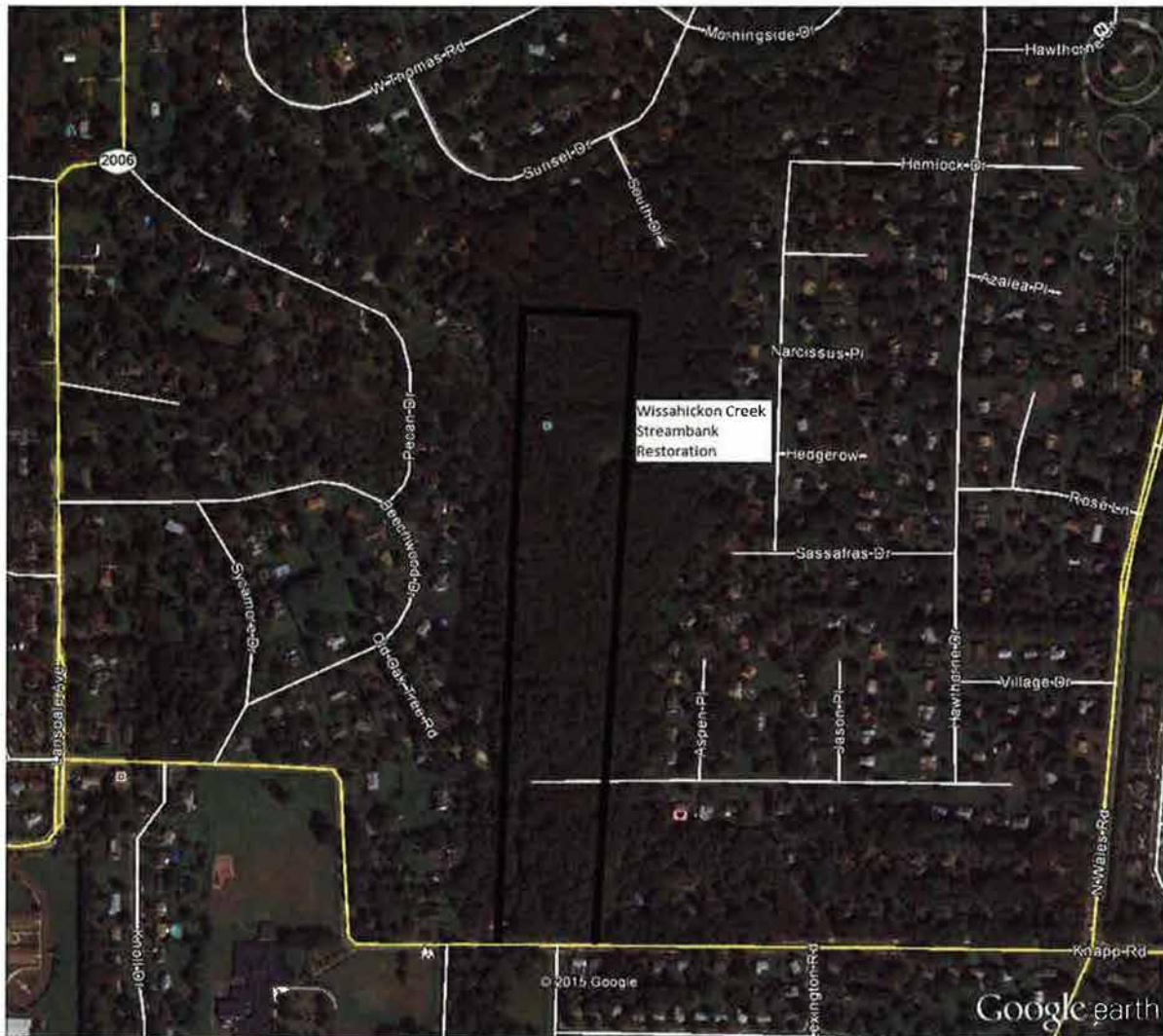
Estimated Pollutant Load and Reduction from BMP

| LAND COVER CLASSIFICATION | ANNUAL RUNOFF (ft) | TSS EMC (mg/l) | TP EMC (mg/l) | NO ₃ EMC (mg/l) | TRIBUTARY AREA (ac) | RUNOFF VOLUME | | TP (lbs/year) | NO ₃ (lbs/year) |
|------------------------------|-----------------------|-------------------|------------------|-------------------------------|------------------------|------------------|----------------|------------------|-------------------------------|
| | | | | | | (ac*ft) | TSS (lbs/year) | | |
| Estimated* | 0.5492 | 55 | 0.25 | 0.4 | 75 | 41.1875 | 2265.3125 | 10.296875 | 16.475 |
| Reduction** | | | | | | | 1517.76 | 4.43 | 5.6015 |

*Approximate composite EMC values based on visual inspection of aerial photographs.

** Estimated 67% TSS Reduction, 34% TN Reduction, 43% TP Reduction based on 100' Buffer in accordance with the PADEP BMP Manual.

Potential BMP Application for Wissahickon Creek: Floodplain Restoration



The Wissahickon Creek in Montgomery Township is surrounded mostly by park lands and suburban residential neighborhoods. In order to accomplish a 48% reduction of sediment highlighted by streambank erosion, it is important that Montgomery Township utilizes all streams and tributaries that contribute to the Wissahickon Creek Watershed. The Township contemplates reduction of streambank erosion by surveying the approximately 3,000 linear feet of the creek and installing bank stabilization/floodplain restoration measures as necessary to reduce erosion.

Estimated Pollutant Load and Reduction from BMP

| LAND COVER CLASSIFICATION | ANNUAL RUNOFF (ft) | TSS EMC (mg/l) | TP EMC (mg/l) | NO ₃ EMC (mg/l) | TRIBUTARY AREA (ac) | RUNOFF | | TP (lbs/year) | NO ₃ (lbs/year) |
|------------------------------|-----------------------|-------------------|------------------|-------------------------------|------------------------|-------------------|----------------|------------------|-------------------------------|
| | | | | | | VOLUME (ac*ft) | TSS (lbs/year) | | |
| Estimated* | 0.5492 | 55 | 0.25 | 0.4 | 169 | 92.809 | 5104.50 | 23.20 | 37.12 |
| Reduction** | | | | | | | 4338.83 | 19.72 | 11.14 |

*Approximate composite EMC values based on visual inspection of aerial photographs.

** Estimated 85% TSS Reduction, 30% TN Reduction, 85% TP Reduction based on floodplain restoration in accordance with the PADEP BMP Manual.

Potential BMP Application for Wissahickon Creek: Basin Naturalization



The Wissahickon Creek Watershed has a few areas in Montgomery Township that drain into existing detention basins. These basins are currently operating as designed, but can be utilized as potential areas for Landscape Restoration. By naturalizing these basins, they will now serve a dual purpose, water retention as well as water quality enhancement. Further site investigations as well as partnerships with the owners of any private basins will have to be coordinated prior to any work being completed.

Estimated Pollutant Load and Reduction from BMP

| LAND COVER CLASSIFICATION | ANNUAL RUNOFF (ft) | TSS EMC (mg/l) | TP EMC (mg/l) | NO ₃ EMC (mg/l) | TRIBUTARY AREA (ac) | RUNOFF VOLUME (ac*ft) | TSS (lbs/year) | TP (lbs/year) | NO ₃ (lbs/year) |
|---------------------------|--------------------|----------------|---------------|----------------------------|---------------------|-----------------------|----------------|---------------|----------------------------|
| Basin 1* | 0.5492 | 55 | 0.25 | 0.4 | 35 | 19.22 | 1057.15 | 4.81 | 7.69 |
| Basin 2* | | | | | 25 | 13.73 | 755.10 | 3.43 | 5.49 |
| Basin 3* | | | | | 25 | 13.73 | 755.10 | 3.43 | 5.49 |
| Basin 4* | | | | | 40 | 21.97 | 1208.17 | 5.49 | 8.79 |
| Basin 5* | | | | | 40 | 21.97 | 1208.17 | 5.49 | 8.79 |
| Total | | | | | 165 | 90.61 | 4983.69 | 22.65 | 36.25 |
| Reduction** | | | | | | | 4236.13 | 19.26 | 10.87 |

*Approximate composite EMC values based on visual inspection of aerial photographs.

** Estimated 85% TSS Reduction, 30% TN Reduction, 85% TP Reduction based on landscape restoration in accordance with the PADEP BMP Manual.

APPENDIX F

PUBLIC COMMENT AND RESPONSES

(Appendix F will be completed following the 30-day public review and comment period.)

MONTGOMERY TOWNSHIP BOARD OF SUPERVISORS
BOARD ACTION SUMMARY

SUBJECT: Announcing 2015 Holiday Lights Contest & Breakfast with Santa

MEETING DATE: November 9, 2015

ITEM NUMBER: #8

MEETING/AGENDA: WORK SESSION

ACTION xx

NONE

REASON FOR CONSIDERATION: Operational: Policy: Discussion: Information: XX

INITIATED BY: Brian Forman, Director
Recreation and Community Center

BOARD LIAISON: Michael J. Fox, Chairman
(Liaison to the Park and Recreation Board)

BACKGROUND:

The Montgomery Township Recreation Department is currently planning the 2015 Holiday Lights Contest and Breakfast with Santa events. These events are run with support from the Park and Recreation Board.

The Holiday Lights Contest is an annual event that encourages our residents to decorate their homes in the Township for the holiday season. All entries are due by Friday, December 4 at 8PM. The categories include Most Colorful, Most Variety, Most Traditional, and Grand Prize Winner - "Car Stopper Award."

Park Board members along with Township Staff will judge all of the entries on Tuesday, December 8 and Wednesday, December 9 from 5PM-8PM. Winners will be recognized at the December 14 Board of Supervisors meeting and will earn a gift card and a lawn sign to place in their yard. All participants will receive a certificate.

This year we will hold our Breakfast with Santa on Saturday, December 5 in the Community and Recreation Center. This event is for the whole family with a buffet breakfast provided by Our Towne Catering, holiday music, crafts and much more! With assistance from the FDMT, Santa will arrive on the Fire Truck for a special visit.

ZONING, SUBDIVISION OR LAND DEVELOPMENT IMPACT: None.

PREVIOUS BOARD ACTION: None.

ALTERNATIVES/OPTIONS: None.

BUDGET IMPACT: None.

RECOMMENDATION:

The township staff encourages and invites all Board Members to attend Breakfast with Santa and view the displays presented by the Holiday Lights participants.

MOTION/RESOLUTION:

None.

DISTRIBUTION: Board of Supervisors, Frank R. Bartle, Esq.

Annual Holiday Lights Contest

The holidays will be here before we know it. Once again, not only can you create a wonderful holiday display for all of our residents to enjoy, but you can receive Township recognition for your hard work! The contest is open to all Township residents.

Winners will be awarded a prize, a lawn sign for their yards and will be announced on Comcast Cable Channel 22, Verizon FIOS Channel 34, and the Township website.

Categories that your house will be judged on:

❄ Most Colorful

❄ Most Variety

❄ Most Traditional

❄ Grand Prize Winner "Car Stopper"

Deadline for entries: Friday, December 5th, 8pm

Judging: Tuesday, December 8th and Wednesday, December 9th, 5pm-8pm

Winners announced Monday, December 14th at 8:00 pm during the Board of Supervisors Meeting at the Montgomery Township Building.



Contest Entry Form

Please complete and drop off or send to:

Montgomery Township, Holiday Lights Contest,
1030 Horsham Road, Montgomeryville, PA 18936

OR email your entry to: parkandrec@montgomerytwp.org by

Friday, December 5th, 8pm

A photo of your display must be included with your entry.

Contact Person: _____

Title of Your Display: _____

Address: _____

Home Phone: _____ Work Phone: _____

Email: _____ Cell Phone: _____

Nearest Intersection: _____

❄ **Open to Montgomery Township Residents Only** ❄

Breakfast with Santa



Saturday, December 5

9:30am

Breakfast Buffet

Community and Recreation Center

CRC Members: \$11 Adults; \$5 (3-10 years)

Non-Members: \$18 Adults; \$12 (3-10 years)

**Seating is limited - Reservations Required*

Crafts ❄ Entertainment ❄ Share your list with Santa

*Please call 267-649-7200 for more information or
visit our website, www.MontCRC.com*

MONTGOMERY TOWNSHIP BOARD OF SUPERVISORS
BOARD ACTION SUMMARY

SUBJECT: Consider Authorization to Solicit Proposals for Janitorial Services - Community and Recreation Center

MEETING DATE: November 9, 2015

ITEM NUMBER: #9

MEETING/AGENDA: ACTION xx NONE

REASON FOR CONSIDERATION: Operational: xx Policy: Discussion: Information:

INITIATED BY: Brian Forman, Director of Recreation and Community Center
BOARD LIAISON: Michael J. Fox, Chairman
Liaison – Park and Recreation Board

BACKGROUND:

In order to maintain the highest level of cleanliness for our constituents, the Community and Recreation Center requires professional Janitorial Services to be performed daily in the facility.

A copy of the Advertisement and Notice to Contractors for the services is attached which outlines the scope of the work required. Once approved to proceed, the tentative schedule for receiving Proposals and Awarding a Contract is:

- Advertisement on November 10, 2015
- Proposals Due on December 10, 2015 by 10:00AM
- Award of Contract at the Board Meeting on December 14, 2015 after 8:00PM.

ZONING, SUBDIVISION OR LAND DEVELOPMENT IMPACT: None.

PREVIOUS BOARD ACTION: None

ALTERNATIVES/OPTIONS: None.

BUDGET IMPACT: The estimated cost for the services is approximately \$60,000 for 1 year (\$5,000 per month).

RECOMMENDATION: Township Staff recommends authorizing the advertisement of this RFP for Janitorial Services for the Community and Recreation Center.

MOTION/RESOLUTION:

BE IT RESOLVED by the Board of Supervisors of Montgomery Township that we hereby authorize the Township to Advertise for Proposals for the Janitorial Services in the Community and Recreation Center.

MOTION: _____ SECOND: _____

ROLL CALL:

| | | | | |
|------------------------|-----|---------|---------|--------|
| Robert J. Birch | Aye | Opposed | Abstain | Absent |
| Candyce Fluehr Chimera | Aye | Opposed | Abstain | Absent |
| Jeffrey W. McDonnell | Aye | Opposed | Abstain | Absent |
| Joseph P. Walsh | Aye | Opposed | Abstain | Absent |
| Michael J. Fox | Aye | Opposed | Abstain | Absent |

DISTRIBUTION: Board of Supervisors, Frank R. Bartle, Esq.

SPECIFICATIONS
FOR
JANITORIAL SERVICES

Montgomery Township Community & Recreation Center
1030 Horsham Road

Montgomery Township
1001 Stump Road
Montgomeryville, PA 18936

INTRODUCTION

Montgomery Township is seeking proposals from qualified Contractors to provide Janitorial Services for the Montgomery Township Community and Recreation Center. This document is a Request for Proposal for the services described below and does not obligate Montgomery Township to accept responses from eligible Contractors. The RFP establishes minimum requirements a bidder must meet in order to be eligible for consideration as well as information to be included in the Contractor's bid response.

Carefully examine the specifications, conditions and limitations.

The selection of the successful Contractor will be made based on Montgomery Township's evaluation and determination of the relative ability of each Bidder to deliver quality service in a cost-effective manner.

The following specific criteria will be evaluated and must be addressed in the proposal:

1. Company Profile
2. Personnel Selection Process
3. Training Program
4. Insurance
5. Price (per month)
6. Operations Plan
7. Inspection Process
8. Safety Program
9. References

Montgomery Township is not obligated to accept the lowest bid and reserves the right to reject any and all bids or amend the scope of the work.

SUBMISSION OF PROPOSALS

Responses to this RFP are due by 4:30pm on December 9, 2015. Late submittals will be rejected. All submittals are to be sealed, clearly marked "Janitorial Proposal" and addressed to:

Brian Forman, Director of Recreation and Community Center
Montgomery Township
1001 Stump Road
Montgomeryville, PA 18936
Phone - (215) 393-6900
Fax – (215) 855-6656
bforman@montgomerytp.org

GENERAL CONDITIONS

A. The Contractor shall provide all items of service, labor, cleaning equipment, tools, safety equipment and supervision to satisfactorily provide and meet the full requirements of these specifications as required at the Montgomery Township Community and Recreation Center. All cleaning products, hand soaps, toilet paper, paper towels and trash-can liners will be supplied by the Township.

B. All work shall be performed in a first-class workmanlike manner by skilled workers equipped to produce satisfactory results. The use of all materials, products and equipment shall be in conformity with manufacturer's specifications and instructions. All work shall be performed with regards to the best standard trade practices.

C. Should any dispute arise as to the quality or fitness of equipment, the decision shall rest with the Township.

D. Unsatisfactory Services - If the services described within these specifications do not meet the quality standards of the township, the township shall provide immediate written notice that said unsatisfactory services shall be rectified within a period of Forty Eight (48) hours. If, at the end of Forty Eight (48) hour period services remain unsatisfactory the Township reserves the right to secure such services and deduct the cost of said services from the contractor. The Township shall at any time evaluate the performance and quality of services provided by the contractor.

When the township determines that the contractor has not complied with the requirements of these specifications, the township reserves the right to cancel this contract in writing within thirty (30) days. Any additional cost incurred by the Township to fulfill the obligations of this contract said cost will be deducted from any outstanding monies owed to the contractor.

E. Term (Duration) of Contract- This contract shall be in effect for One (1) full year with an option to renew for an additional year based on the fixed percentage (%) increase identified in this bid document. Montgomery Township reserves the right to cancel the contract at any time during this period if the services describe are not consistent with these specifications or if the township is not one hundred (100%) satisfied with the workmanship and quality of service. In the event of such unsatisfactory performance Montgomery Township shall notify the contractor thirty (30) days prior to the termination of the contract and make one (1) months final payment less any outstanding cost incurred by the township.

F. Immediately upon execution of the contract and before any payments are made to the contractor by the Township, the contractor will provide to the Township a "Schedule of Values" of all work. This "Schedule of Values" shall list each item of work to be completed at the Montgomery Township Community and Recreation Center with its corresponding dollar value. The sum of all of these values should equal the contract price.

G. In the event that any item of work is not completely and satisfactorily performed, the value corresponding to that item will be deducted from all payments made by the Township to the contractor until that item of work is completely and satisfactorily performed.

H. Modifications to the specified janitorial services may be required by the Township at any time and a subsequent change in the contract price negotiated between the parties. If a new price cannot be negotiated to the satisfaction of the Township, the contract may be terminated in accordance with the above specification.

I. The Contractor shall hire, train, supervise and maintain an adequate number of employees as necessary to satisfactorily complete the cleaning services as specified.

J. Prior to assignment of any personnel, the Contractor shall submit to the Township a brief resume of each employee. Said resume shall include, but not be limited to, the employee's name, address, date of birth, social security number, U.S. citizenship status, complete and uninterrupted work history, and criminal record. In the event any employee is considered to be unacceptable to the Township, the Contractor shall immediately remove said employee from further consideration for employment at Township facilities.

K. Furthermore, if, in the Township's opinion, an assigned employee is found to be unacceptable and/or imposes a security risk, the Contractor shall promptly remove said employee from his/her assignment on Township property. Access to the Township buildings by the contractor's employees shall be made in accordance with the Township's identification and security procedures and the Contractor's employees will be required to display, at all times, the Contractor and Township approved identification tags. The Contractor's employees shall not take any packages, parcels, shopping bags, etc., to his/her assignment work area. Any handbags or other containers taken to building areas will be subject to inspection by police or Montgomery Township Community and Recreation Center staff prior to the employee's departing the Montgomery Township Community and Recreation Center premises.

L. Use of telephones by Contractor's employees will be limited to the public lobby phones. Any proven use of office telephones could result in the Township requesting Contractor to remove employee from his/her assignment on the Township's property.

M. Contractor shall provide a minimum of one (1) supervisor who will be responsible to the Township's authorized representative for the detailed cleaning procedures. Any irregularities shall be cleared through the Contractor's supervisor and the Township's authorized representative. The Contractor's supervisor shall be responsible for making the necessary tour of the Montgomery Township Community and Recreation Center in order to insure thorough coverage in all phases of the work to be performed.

N. The Township will *have* its own representative to whom the Contractor's supervisors will be responsible. This representative will, from time to time, request the Contractor's

Supervisor accompany him on tours through the complex in order to point out whether there are any problem areas. The Township fully intends to have close and fairly constant observation and evaluation of the Contractor's performance. The representative for the Montgomery Township Community and Recreation Center shall be the Recreation Director.

O. The Contractor shall provide in sufficient quantity all necessary OSHA approved tools and equipment and Township-approved materials and supplies. Said tools and equipment shall be kept in good operating order to satisfactorily complete work required. All supplies shall be kept in a neat and orderly manner in areas designated by the Montgomery Township Community and Recreation Center Director. All required materials and/or supplies will be the responsibility of the Contractor.

P. All supplies used in the lunch room areas must be in accordance with the rules and regulations of the Department of Environmental Resources and the U.S. Department of Agriculture.

Q. The Contractor agrees in the performance of this Contract that he will comply with all laws or ordinances (State, Federal or Local) including those regulating pollution, and will be responsible for correcting any latent conditions which may cause a violation.

R. Necessary keys or fobs will be supplied by the Township. There will be a replacement charge of \$10.00 and a penalty of \$200.00 for any key lost by the vendor or his employees; the replacement charge will be deducted from the vendor's monthly invoice submitted the month following the replacement.

S. Contractor shall plan and institute the methods and sequence of the performance of specified work so as not to interfere with any of the numerous Montgomery Township Community and Recreation Center activities. The Contractor must modify these methods and sequences at any time during the Contract as instructed by the Township.

T. The Contractor shall submit to the Township's representative on a daily work basis a log showing the names of the Contractor's employees that were working in the Montgomery Township Community and Recreation Center.

U. Contractor shall provide daily check lists showing all items under "Extent of Work" on a daily, weekly, by-weekly, monthly, etc. basis for the Montgomery Township Community and Recreation Center indicating which items of work were done and which items were not done. These checklists are to be signed by the non-working supervisor as certification that the indications are true and correct. Any falsification of this information will be cause for cancellation of this contract.

V. Payments shall be made to the Vendor within thirty (30) days of receipt of invoice after

inspection by and acceptance of work by an authorized representative of the Township and approval of the invoice.

W. All employees of the successful bidder shall be clean and neat in appearance while working within the Montgomery Township Community and Recreation Center. All employees shall be neatly dressed (uniformed employees preferred). All employees, at all times shall wear in plain view an identification card. No improper language, gestures or conduct will be permitted on Township owned property. No smoking will be permitted in Township facilities. Any employee of the successful bidder who demonstrates an unacceptable behavior, or is unacceptable in dress shall not be permitted to work within the facilities.

X. Smoking will not be permitted in Township facilities. A designated smoking area will be assigned outside each facility if necessary. Violation of this requirement may constitute contract termination.

Y. No exterior doors are to be kept propped in an open position.

Z - Liability and Insurance

A. The Contractor shall protect all Township property and work areas from damage, and agrees to indemnify and hold harmless the Township from and against all liability for injuries and damages to person or property at any time sustained by any person or corporation, including Township, whatsoever arising out of, resulting from or in any manner caused by or in connection with Contractor's performance of the Contract. Said indemnification shall include theft, which is attributable to the activities of the Contractor or his employee.

B. The Contractor (or his insurance company) shall, at its own expense, adjust all complaints, unless the Township in particular cases elects to do so at the Contractor's expense. The Contractor (or his insurance company) shall assume full responsibility for all claims and legal actions arising out of the work done and to be done under this Specification.

C. The Contractor shall carry insurance with insurance companies acceptable to the Township for coverage in at least the amounts listed below:

1. Worker's Compensation:

| | |
|--------------------------|---------------------------------|
| a. State: | Statutory |
| b. Applicable Federal | Statutory |
| c. Employer's Liability: | \$100,000 per Accident |
| | \$500,000 Disease, Policy Limit |
| | \$100,000 Disease, per Employee |

2. Comprehensive or Commercial General Liability (including Premises-Operations;

Contractor's Protective; Products and Completed Operations; Broad Form Property Damage:

a. Bodily Injury:

\$1,000,000

\$2,000,000

Each Occurrence

b. Property Damage:

\$1,000,000

\$2,000,000

Aggregate

Each Occurrence

Aggregate

c. Products and Completed Operations to be maintained for Five years after final payment:

\$2,000,000

Aggregate

d. Property Damage Liability insurance shall provide X, C, and U coverage

e. Broad Form Property Damage Coverage shall include Completed Operations

3. Contractual liability:

a. Bodily Injury:

\$1,000,000

\$2,000,000

Each Occurrence

Aggregate

b. Property Damage:

\$1,000,000

\$2,000,000 .

Each Occurrence

Aggregate

4. Personal Injury, with Employment Exclusion deleted:

\$2,000,000

Aggregate

5. Business Auto liability (including owned, non-owned and hired vehicles):

a. Bodily Injury:

\$1,000,000

\$2,000,000

Each Person

Each Occurrence

b. Property Damage:

\$2,000,000

Each Occurrence

6. Umbrella Excess Liability:

\$5,000,000 over primary insurance

\$ 10,000 retention for self-insured hazards each occurrence

Satisfactory evidence, in the form of insurance certificates, shall be submitted by the Contractor to the Township that above policies are in force and no changes in the policies shall be made without thirty (30) days' written notification to the Township.

- D. The Contractor shall operate under and be subject to the Commonwealth of Pennsylvania Workmen's Compensation Act and shall carry satisfactory Compensation Insurance.

AA. SAFETY, SECURITY AND CONSERVATION

A. Contractor shall take all necessary precautions for the safety of employees on the work location and shall comply with all applicable provisions of Federal, State and Local Safety laws and building codes to prevent accidents or injury to persons on, about or adjacent to the premises where work is being performed. This shall include but not be limited to, erecting and maintaining as required by conditions of the work, necessary safeguards for protection of workmen and public and posting danger sign warnings against hazards created by such features of this work as wet floors, scaffolding, window openings, wet stairways, falling materials, etc.

AB. SPECIFICATIONS FOR JANITORIAL SERVICE

Outline

It is the purpose of these specifications to cover required janitorial services to be performed on all designated areas of the Montgomery Township Community and Recreation Center.

All cleaning fluids, polishes, glass cleaners, carpet cleaners, special cleaning fluids, and plastic trash liners and disposal bags necessary to complete all detailed tasks will be supplied by the Township. All cleaning products will be available and maintained on Montgomery Township property. Products supplied by the Township will be in bulk dispensing or individually packaged containers.

The successful bidder will be responsible to provide all necessary cleaning equipment, cleaning tools, dispensing containers, and personal protective equipment to perform the specified tasks.

AC. EXAMINATION OF SITE AND SPECIFICATIONS

Each bidder shall visit the Montgomery Township Community and Recreation Center and fully acquaint themselves with conditions as they exist so that they may fully understand the facilities, difficulties and restrictions attending the execution of the work under his contract. Bidders shall also thoroughly examine and be familiar with the Specifications. Bidders are welcome to tour the facilities by appointment Monday through Friday between 8:30A.M. and 3:00P.M.

Any questions should be directed to: Brian Forman, Montgomery Township Community and Recreation Center Director.

AD. CLEANING SPECIFICATIONS

Montgomery Township Community and Recreation Center

Entry Ways, Lobby, Back Staircase *Daily (unless otherwise noted)*

1. Wash front door glass as well as adjacent architectural metal trims to remove fingerprints, smudges, etc. caused during the day.
2. Sweep, spot clean and vacuum all lobby mats.
3. Dust or damp wipe all horizontal surfaces i.e. window sills, chair rails, baseboards, moldings, partitions and picture frames.
4. Spot clean walls, counters, glass doors and electric switch plates.
5. Vacuum carpeted floor surfaces.
6. Spot clean all carpet stains as needed.
7. Sweep or dust mop all resilient tile floor surfaces.
8. Wet mop lobby tile floors: **Special Note: Daily**
9. Spot clean and polish all bright metal surfaces.
10. Remove gum, tar and other foreign substances from floor surfaces.
11. Wash public telephones with disinfectant cleaner.
12. Spot clean all furniture.
13. Spot clean all interior doors, and inside window glass.
14. Remove cobwebs from ceilings, wall corners, service counter areas as needed.
15. Check exterior of light fixtures for cleanliness. Those requiring cleaning shall be cleaned.
16. All windows and staircase railing cleaned as needed.
17. Empty all trash receptacles.

Offices and Break Area

1. Waste receptacles shall be emptied and wiped clean. Waste shall be removed and placed at assigned location for disposal by Township. The Township reserves the right to change location at their discretion. New plastic protective liners shall be used in waste receptacles.
2. All cleared desks (free of papers), cabinets and other furniture shall be dusted and polished with a treated cloth (including telephones and computer monitors). Computer keyboards shall not be cleaned. Extreme care shall be taken to prevent liquid from entering computer equipment. Rooms marked "DO NOT DISTURB" shall not be entered.
3. All walls, glass doors, and electric switch plates shall be spot cleaned.
4. All floors (except for carpeted areas) shall be mopped as specified (see vinyl flooring specifications). **Special Note: Daily**
5. All carpeted areas shall be vacuumed.
6. Remove any and all stains and spots from all carpeted areas as required.
7. All sinks shall be thoroughly cleaned and sanitized.
8. All bright metal work shall be cleaned and polished.

Weekly

1. Waste receptacle shall be washed and disinfected.
2. All window sills, window frames, chair rails, baseboards, molding, partitions (room dividers) counter tops, and picture frames shall be damp wiped and polished.
3. All cabinets and telephones shall be damp wiped using a detergent disinfectant and the surfaces rubbed to achieve a clean looking finish.
4. All windows (if required), doors, pictures, cabinets, etc., shall be washed and dried (window inside only).
5. All window sills, window frames, chair rails, baseboards, moldings, partitions, and picture frames shall be thoroughly washed.
6. Ceilings shall be spot cleaned and cobwebs shall be removed.

7. Check exterior of light fixtures for cleanliness. Those requiring cleaning shall be cleaned.
8. Buff all resilient tile floor surfaces

Restrooms and Family Restroom/Shower

1. Sweep or dust mop floor surfaces.
2. Wet mop floor surfaces. **Special Note: Daily**
3. Remove gum, tar and other foreign substances from floor surfaces.
4. Dust horizontal surfaces within reach.
5. Remove all fingermarks from walls, stalls, doors and light switches with disinfectant cleaner.
6. Polish all stainless steel and chrome fixtures.
7. Clean and polish mirrors, frames, shelves, wash basins and soap dispensers.
8. Clean, wash and disinfect all showers, basins, bowls, urinals, doorknobs and pulls. Urinals and toilet bowls cleaned with a germicidal toilet bowl cleaner. Basins cleaned with a scouring powder.
9. Empty, clean, and disinfect all waste and sanitary containers. Replace all liners and transport to assigned location for disposal by Township. The Township reserves the right to change location at their discretion. Only new plastic protective liners shall be used in waste receptacles.
10. All toilet room walls, doors, floors, partitions (room dividers), plumbing fixtures, exposed plumbing, towel and toilet paper holders, soap dispensers and changing tables shall be thoroughly washed with a detergent disinfectant.

Weekly

1. High dust all horizontal surfaces (such as door frames, partitions, ledges, etc.).
2. Mineral deposits on toilets, urinals, sinks, tubs and showers shall be removed as needed.
3. Wash and disinfect walls, partitions, doors and trim.

4. Clean baseboards.

Hallways, Upper Level Seating Area, Conference Rooms and Youth Lounge, Elevator

1. Dust or damp wipe all horizontal surfaces i.e. window sills, chair rails, baseboards, moldings, partitions and picture frames.
2. Spot clean walls, counters, glass doors and electric switch plates.
3. Vacuum carpeted floor surfaces.
4. Spot clean all carpet stains as needed.
5. Spot clean and polish all bright metal surfaces.
6. Remove gum, tar and other foreign substances from floor surfaces.
7. Wash public telephones with disinfectant cleaner.
8. Spot clean all furniture.
8. Spot clean all interior doors, and inside window glass.
9. Remove cobwebs from ceilings, wall corners, service counter areas as needed.
10. All windows and staircase railing cleaned as needed.
11. Empty all trash receptacles.

Catering Kitchen (As Needed)

1. Sweep or dust mop and wet mop floor surfaces.
2. Remove gum, tar and other foreign substances from floor surfaces.
3. Clean and disinfect countertops and sinks.
4. Spot clean walls and cabinets.
5. Spot clean and polish bright metal surfaces.

6. Spot clean all appliances; including stove, and oven.
7. Empty all trash receptacles.

Janitorial Rooms, Storage Rooms *Weekly*

1. All wet mops (when used) for each area shall be laundered and mechanically dried.
2. All dust cloths, sweeping tool covers and dust mops shall be removed and replaced with clean cloths, covers and mop heads.
3. Shelves in custodial closets shall be kept clean and in order. Sinks shall be kept clean at all times.
4. Equipment shall be cleaned and stored properly after each usage.
5. All items in custodial Rooms shall be removed so that all surfaces such as walls, floors, shelves, door, metal baseboards, etc., (whether hidden by items or not) shall be dusted and/or dry mopped, then washed, with a detergent disinfectant.
6. Buff all resilient tile floor surfaces (Monthly)

Fitness Center and Group Exercise Studios

1. All cleared desks (free of papers), cabinets and other furniture shall be dusted and polished with a treated cloth (including telephones and computer monitors). Computer keyboards shall not be cleaned. Extreme care shall be taken to prevent liquid from entering computer equipment.
2. Dust and dry wipe all fitness equipment and machines.
3. Sweep and mop flooring, within manufacturers specifications.
4. Using extreme care to not damage flooring, remove all gum, tar and other foreign substances and stains from floor.
5. Dust and remove cobwebs from ceiling, wall corners and TV's.
6. Dust and wet wipe all window sills within reach.
7. Empty trash receptacles.

8. Clean and sanitize water cooler daily.

Gymnasium and Elevated Track

1. Spot clean doors, windows and window sills.
2. Dry mop or sweep flooring.
3. Using extreme care to not damage flooring, remove all gum, tar and other foreign substances and stains from floor.
4. Wet mop, spot clean flooring only within floor manufacturers specifications.
5. Empty all trash receptacles.

PROPOSAL RESPONSE FORM

COMPANY: _____

ADDRESS: _____

PHONE: _____ FAX: _____

SIGNATURE: _____ DATE: _____

PRINT NAME: _____

TITLE: _____

MONTHLY COST PROPOSAL: _____

**MONTGOMERY TOWNSHIP BOARD OF SUPERVISORS
BOARD ACTION SUMMARY**

SUBJECT: Consider Authorization to Execute Addendums A & B to the Agreement with AGT Fitness Management, Inc. to Provide Group Exercise, Personal Training and Nutritional Services to the Community and Recreation Center

MEETING DATE: November 9, 2015

ITEM NUMBER: #10

MEETING/AGENDA:

ACTION

NONE

REASON FOR CONSIDERATION: Operational: Policy: Discussion: xx Information:

INITIATED BY: Brian Forman, Director

Of Recreation and Community Center

BOARD LIAISON: Michael J. Fox, Chairman

Liaison to Park & Recreation Board

BACKGROUND:

AGT Fitness Management, Inc. is proposing Addendums A & B to the agreement executed at the October 26, 2015 meeting. The Addendum's would provide Group Exercise, Personal Training and Nutritional Services to patrons of the Community and Recreation Center.

Addendum A proposes that AGT, in cooperation with the Community and Recreation Center staff, would be responsible for scheduling the Group Exercise programs at the Center. The instructors that have been contracted by the Township prior to the execution of Addendum A would convert to AGT's payroll and be covered by AGT's insurance. The instructors would be employees of AGT, however, AGT would not be able to dismiss any of the previously contracted instructors without Township approval. AGT will invoice the Township for the previously contracted instructors the same rate \$25/Session rate that the Township had previously agreed to with the instructors.

There is no cost to the Township for the instructors to become AGT employees. Addendum A eliminates potential coordination issues between scheduling Township contracted instructors and AGT employed instructors. Addendum A also ensures Group Exercise classes will take place as scheduled as AGT will be responsible to provide a substitute instructor in the event the scheduled instructor is unavailable.

Addendum B proposes AGT provides Personal Training and Nutritional Services in the Community and Recreation Center. These services are provided to patrons on an hourly rate basis and with no cost to the Township. AGT will bill all of the Personal Training Services to the individual patron. The Township will receive 5% of the first \$7,500 in gross revenue from sales of these services and 7.5% of the gross revenue from all sales above \$7,500.

Providing these services is an important component in offering a complete fitness/wellness opportunity for the residents of our community at the Center. AGT understands that the Township is interested in providing these services without our clientele feeling pressured to purchase these additional offerings.

ZONING, SUBDIVISION OR LAND DEVELOPMENT IMPACT:

None.

PREVIOUS BOARD ACTION:

None.

ALTERNATIVES/OPTIONS:

None.

BUDGET IMPACT:

None.

RECOMMENDATION:

Approve Authorization to Execute Addendums A & B to the Agreement with AGT Fitness Management, Inc. to provide Group Exercise, Personal Training and Nutritional Services at the Community and Recreation Center.

MOTION/RESOLUTION:

BE IT RESOLVED by the Board of Supervisors of Montgomery Township that we hereby Approve Authorization to Execute Addendums A & B to the Agreement with AGT Fitness Management, Inc. to provide Group Exercise, Personal Training and Nutritional Services at the Community and Recreation Center.

MOTION: _____ SECOND: _____

ROLL CALL:

| | | | | |
|------------------------|-----|---------|---------|--------|
| Robert J. Birch | Aye | Opposed | Abstain | Absent |
| Candyce Fluehr Chimera | Aye | Opposed | Abstain | Absent |
| Jeffrey W. McDonnell | Aye | Opposed | Abstain | Absent |
| Joseph P. Walsh | Aye | Opposed | Abstain | Absent |
| Michael J. Fox | Aye | Opposed | Abstain | Absent |

DISTRIBUTION: Board of Supervisors, Frank R. Bartle, Esq.

Addendum A

Reference is made to a certain agreement by and between the undersigned parties, said agreement beginning dated _____, 2015.

Be it known, that for good consideration the parties make the following additions or changes a part of said contract as if contained therein:

All group ex instructors contracted by the Township to conduct classes prior to the executed date of the referenced contract will be converted to AGT payroll once the referenced contract is executed. Once converted they will be covered by AGT's insurance. AGT will invoice the Township \$25 per class for these instructors going forward. AGT cannot terminate any of these instructors without the approval of the Township. Lastly, AGT will be in charge of all group ex schedule adjustments and subs, in coordination with the recreation department.

All other terms and provisions of said contract shall remain in full force and effect.

Accepted and Approved By:

By: _____
David Rambo

By: _____
Michael J. Fox, Chairman

AGT Fitness Management, Inc.

Montgomeryville Township

Date: _____

Date: _____

Addendum B

Reference is made to a certain agreement by and between the undersigned parties, said agreement beginning dated _____, 2015.

Be it known, that for good consideration the parties make the following additions or changes a part of said contract as if contained therein:

Township agrees to permit AGT the right to offer and provide personal training and nutritional services within the Fitness Center. AGT will make all appointments and collect all payments for services provided at the Fitness Center. AGT will be solely responsible for billing its services. The Township will receive 5% of the revenue from services up to \$7,500 and 7.5% on anything above that amount. Payment will be remitted to the Township on a monthly basis in the form of a credit that will be used towards the monthly AGT invoice. At any point a designee of the Township can have access to the software to generate revenue reports.

All other terms and provisions of said contract shall remain in full force and effect.

Accepted and Approved By:

By: _____
David Rambo

By: _____
Michael J. Fox, Chairman

AGT Fitness Management, Inc.

Montgomery Township

Date: _____

Date: _____

**MONTGOMERY TOWNSHIP BOARD OF SUPERVISORS
BOARD ACTION SUMMARY**

SUBJECT: Consider Amended Waiver of Formal Land Development Process – Burger King
– 560 DeKalb Pike – #M-15-76 (Amended #M-15-72)

MEETING DATE: November 9, 2015

ITEM NUMBER: #11.

MEETING/AGENDA:

ACTION XX

NONE

REASON FOR CONSIDERATION: Operational: Policy: Discussion: Information:

INITIATED BY: Bruce Shoupe
Director of Planning and Zoning

BOARD LIAISON: Michael J. Fox
Chairman

BACKGROUND:

On June 22, 2015, the Board of Supervisors approved the request of Family Dining, Inc., owner of the Burger King Restaurant, located at 560 DeKalb Pike, for a waiver of the requirement of a formal land development application in order to construct a 510 square foot indoor playground area onto the side of existing building as part of their renovation project. Since then the applicant has amended the plan to provide the addition of a 10 foot wide drive-thru bypass lane and is requesting the Board of Supervisors amend their prior waiver approval to include this additional work.

The Township's staff and consultants have reviewed the revised plan and support the amended waiver requested, conditioned upon the applicant complying with the review letters submitted by the Township Consultants.

ZONING, SUBDIVISION OR LAND DEVELOPMENT IMPACT: None

PREVIOUS BOARD ACTION: None.

ALTERNATIVES/OPTIONS:

Approve or not approve the amended waiver request.

BUDGET IMPACT: None.

RECOMMENDATION:

That the amended waiver request be approved.

MOTION/RESOLUTION:

The resolution is attached.

MOTION: _____ **SECOND:** _____

ROLL CALL:

| | | | | |
|-----------------------|-----|---------|---------|--------|
| Robert J. Birch | Aye | Opposed | Abstain | Absent |
| Candye Fluehr Chimera | Aye | Opposed | Abstain | Absent |
| Jeffrey W. McDonnell | Aye | Opposed | Abstain | Absent |
| Joseph P. Walsh | Aye | Opposed | Abstain | Absent |
| Michael J. Fox | Aye | Opposed | Abstain | Absent |

RESOLUTION #
MONTGOMERY TOWNSHIP
MONTGOMERY COUNTY, PENNSYLVANIA

**A RESOLUTION GRANTING AN AMENDMENT TO THE WAIVER OF THE
REQUIREMENT OF A FORMAL LAND DEVELOPMENT APPLICATION FOR THE
BURGER KING LOCATED AT 560 DEKALB PIKE - #M-15-76
(AMENDED FROM #M-15-72)**

The Board of Supervisors of Montgomery Township, Montgomery County, Pennsylvania, hereby resolves to grant an amendment to the waiver of the requirement of a formal land development application to **Family Dining, Inc.** (Burger King) for the property located at 560 DeKalb Pike, to provide the addition of a 10 foot wide drive-thru bypass lane as more fully detailed on the plans listed on Exhibit "A" attached hereto and made part hereof and further grant the **waiver conditioned upon** the following being satisfied by the Applicant:

1. Fulfilling all obligations and requirements of the comments of Gilmore & Associates, Inc. letter dated October 20, 2015; Traffic Planning & Design, Inc. letter dated October 28, 2015; and Boucher & James letter dated October 28, 2015.
2. All conditions of Approval Resolution #3, approved by the Board of Supervisors on June 22, 2015, shall remain in full effect.
3. The Applicant shall be responsible for payment of all Township Consultant and Solicitor fees related to this project.
4. All future development of this parcel shall be subject to new application and approval by the Board of Supervisors.
5. All signage must meet Zoning Code requirements.
6. The required PennDOT permit(s) must be issued prior to Certificate of Occupancy inspection.

This Resolution shall become effective on the date upon which all of the above stated conditions are accepted by the Applicant in writing. If, for any reason, the Applicant fails to acknowledge the acceptance of the conditions contained in this Resolution within ten (10) days from the date of this Resolution, then the Preliminary/Final Plan approval granted herein shall become null and void, any waivers requested shall be deemed denied, and the plan shall be denied for failure to comply with Sections of the Township Zoning Ordinance and/or Township Subdivision and Land Development Ordinance for the reasons cited herein or as set forth in the letters referenced herein.

Resolution #
Page 2 of 2

DULY PRESENTED AND ADOPTED by the Board of Supervisors of
Montgomery Township, Montgomery County, Pennsylvania, at a public meeting held this
9th day of November, 2015.

MOTION BY:

SECOND BY:

VOTE:

The above conditions are agreed to by _____
(Print)

representing **Family Dining, Inc.** this day of , 2015.

Applicant

xc: Applicant, F. Bartle, R. Dunlevy, B. Shoupe, M. Stoerrle, K. Johnson, J. Stern-
Goldstein, MCPC, Minute Book, Resolution File, File

EXHIBIT "A"

PLANS-STUDIES

| <u>DESCRIPTION</u> | <u>ORIGINAL DATE</u> | <u>REVISED DATE</u> |
|------------------------------|----------------------|---------------------|
| 1. Site Improvement Plan | 1-30-15 | 9-25-15 |
| 2. Site Grading Plan | 1-30-15 | 9-25-15 |
| 3. Construction Details Plan | 1-30-15 | 9-25-15 |



BOHLERTM
ENGINEERING

3701 Corporate Parkway, Suite 200
Center Valley, PA 18034
PHONE 610.709.9971
FAX 610.709.9976

October 20, 2015
Via: FedEx

Montgomery Township
1001 Stump Road
Montgomeryville, PA 18936

Attention: Bruce Shoupe, Director of Planning and Zoning

OCT 21 2015

Re: Proposed Burger King Expansion
Dekalb Pike & Bethlehem Pike
Montgomery Township
Montgomery County, PA
PY150785

Dear Mr. Shoupe:

On behalf of Family Dining, Inc., Bohler Engineering is hereby submitting for the following items in regards to the above referenced project:

- One (1) copy of the completed Consultant Escrow Fee Agreement.
- Five (5) copies of the Site Improvement Plans, dated 01/21/15, last revised 9/25/15, Sheets C-1 – C-3.
- One (1) CD containing a PDF of the Site Improvement Plans.

The plans submitted with this letter incorporate a drive-thru bypass lane in order to improve drive-thru operations and safety at this facility. As shown on the plans, the resulting impervious coverage associated with all site improvements is a net decrease of 147 SF. **On behalf of Family Dining, Inc., Bohler Engineering PA, LLC is requesting that the attached plans be considered an amendment to the Land Development waiver that was previously approved by the Township for this project.**

Thank you for your assistance and should you have any questions or require additional information, please do not hesitate to contact me at this office.

Sincerely,

BOHLER ENGINEERING

Matthew Chartrand, P.E.

MMC/sw

Cc: Greg Winans, US Restaurants

\\bohlereng\PANZURA\PA-PROJECTS\15-PY150785\Correspondence\PY150785_2015-10-20-L (Twp).doc

[illegible]

TRAFFIC PLANNING AND DESIGN, INC.



2500 E. High Street | Suite 650 | Pottstown, PA | 19464
610.326.3100 | TPD@TrafficPD.com

October 28, 2015

Mr. Bruce S. Shoupe
Township Director of Planning and Zoning
Montgomery Township
1001 Stump Road
Montgomeryville, PA 18936-9605

Re: Proposed Burger King Expansion
Amended Waiver of Land Development Request
TPD# MOTO-A-00093

Dear Bruce:

In our role as Township Traffic/Street Lighting Engineer, Traffic Planning and Design, Inc. (TPD) has reviewed the Site Improvement Plans for the above referenced project, prepared by Bohler Engineering and dated January 21, 2015, last revised September 25, 2015.

The plans have been amended to remove a drive-through canopy and provide a 10 foot wide by-pass lane. With the revision made to the plans to provide a single exiting lane at the drive-through, TPD concurs with the design of the by-pass lane.

Additionally, TPD has reviewed the revised traffic signal permit plans for the intersections of DeKalb Pike and Montgomery Mall and DeKalb Pike and Bethlehem Pike. The revisions are found to be consistent with the left turn lane striping modifications proposed along DeKalb Pike. Upon satisfactorily addressing all PennDOT comments, the Applicant should provide a mylar copy of the traffic signal permit plan for signature by Montgomery Township.

We reserve the right to make additional comments as additional information is submitted. Please call if you have any questions.

Sincerely,

Kevin L. Johnson, P.E.
President

cc: Larry Gegan, Township Manager
Marita Stoerrle, Township Development Coordinator
Kevin Costello, Township Public Works Director
Russ Dunlevy, P.E., Township Engineer
Matthew Chartrand, P.E. – Bohler Engineering
Joseph Platt, P.E., TPD



GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

October 20, 2015

File No. 2015-03010

Bruce S. Shoupe, Director of Planning and Zoning
Montgomery Township
1001 Stump Road
Montgomeryville, PA 18936-9605

Reference: Burger King Restaurant Expansion - Land Development Waiver Request - #M-15-72
560 Dekalb Pike, Montgomery Township, PA
Tax Parcel #: 46-00-00796-00-4

Dear Bruce:

Pursuant to your request, Gilmore & Associates, Inc. has reviewed the following materials associated with an amended Land Development Waiver request for the above-referenced project and offers the following comments for consideration by the Montgomery Township Board of Supervisors:

- A. Comment Response letter prepared by Bohler Engineering, dated October 20, 2015
- B. Site Improvement Plans, Sheets C-1 to C-3 of 3, as prepared by Bohler Engineering, dated January 21, 2015, last revised September 25, 2015

The plan was amended to include a bypass lane at the drive through. Upon review of the amended plan, it appears to comply with the Township Zoning, Subdivision and Land Development Ordinance, and Stormwater Management Ordinances.

If you have any questions regarding the above, please contact this office.

Sincerely,

James P. Dougherty, P.E.
Senior Project Engineer
Township Engineers

JPD/nm/sl

Enclosure

cc: Lawrence J. Gegan, Manager – Montgomery Township
Marita A. Stoerrle, Development Coordinator – Montgomery Township
Marianne McConnell, Deputy Zoning Officer – Montgomery Township
Ken Amey, AICP – Montgomery Township
Frank R. Bartle, Esq., Solicitor – Dischell Bartle & Dooley, PC
Kevin Johnson, P.E. – Traffic Planning & Design, Inc.
Judith Stern Goldstein, ASLA, R.L.A. – Boucher & James, Inc.
Greg Winans, Applicant – US Restaurants
Matthew Chartrand, P.E. – Bohler Engineering
Russell S. Dunlevy, P.E., Executive Vice President – Gilmore & Associates, Inc.

BUILDING ON A FOUNDATION OF EXCELLENCE

65 E. Butler Avenue | Suite 100 | New Britain, PA 18901 Phone: 215-345-4330 | Fax: 215-345-8606

www.gilmore-assoc.com



Boucher & James, Inc.
CONSULTING ENGINEERS

AN EMPLOYEE OWNED COMPANY

INNOVATIVE ENGINEERING

Fountainville Professional Building
1456 Ferry Road, Building 500
Doylestown, PA 18901
215-345-9400
Fax 215-345-9401

2738 Rimrock Drive
Stroudsburg, PA 18360
570-629-0300
Fax 570-629-0306

559 Main Street, Suite 230
Bethlehem, PA 18018
610-419-9407
Fax 610-419-9408
www.bjengineers.com

October 28, 2015

Lawrence Gegan, Township Manager
Montgomery Township
1001 Stump Road
Montgomeryville, PA 18936

**SUBJECT: BURGER KING EXPANSION
AMENDED WAIVER OF LAND DEVELOPMENT REQUEST
TOWNSHIP NO. M-15-72
PROJECT NO. 1555291R**

Dear Mr. Gegan:

Please be advised that we have reviewed the Site Improvement Plans for the proposed Burger King expansion, prepared by Bohler Engineering, and dated January 21, 2015, last revised September 25, 2015. The site is located on DeKalb Pike approximately 400' south of the intersection of DeKalb Pike and Bethlehem Pike.

The site currently contains a 3,910 SF Burger King with associated parking and drive-through facilities. On June 22, 2015 at their regularly scheduled meeting, the Montgomery Township Board of Supervisors granted a Waiver of Land Development for a proposed 510 SF addition, the removal of a 32 SF vestibule, parking lot modifications to relocate/add ADA parking spaces and a ramp, and an expansion of the north side of the building pad to accommodate the proposed building expansion and a set of stairs.

The amendment proposes the addition of a drive-thru bypass lane. The site is located within the C Commercial Zoning District.

It does not appear that there are any landscaping issues pertinent to the amended plans. Please feel free to contact us if you should have any questions or comments.

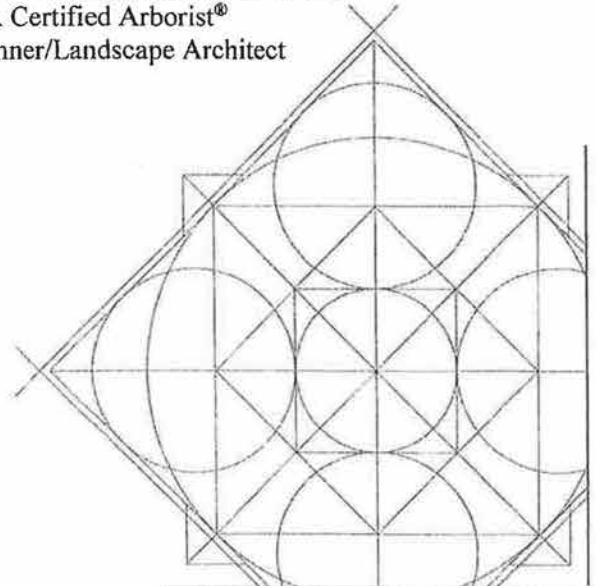
Sincerely,

Judith Stern Goldstein, ASLA, R.L.A.
Managing Director

Valerie L. Liggett, ASLA, R.L.A.
ISA Certified Arborist®
Planner/Landscape Architect

JSG/vll/kam

cc: Board of Supervisors
Planning Commission
Bruce Shoupe, Director of Planning and Zoning
Marita Stoerrle, Development Coordinator
Marianne McConnell, Deputy Zoning Officer
James P. Dougherty, P.E., Gilmore & Associates, Inc.
Kevin Johnson, P.E., Traffic Planning & Design
Ken Amey, AICP
Greg Winans, US Restaurants
Matthew Chartrand, P.E.



**MONTGOMERY TOWNSHIP BOARD OF SUPERVISORS
BOARD ACTION SUMMARY**

SUBJECT: Consider Authorization to Submit Applications – Traffic Signal Upgrades
DeKalb Pike (SR 2202) and Bethlehem Pike (SR 309) - File # 64-1056
DeKalb Pike (SR 2202) and Montgomery Mall Access Driveway - # 64-1985

MEETING DATE: November 9, 2015 **ITEM NUMBER:** # 12 .

MEETING/AGENDA: ACTION XX NONE

REASON FOR CONSIDERATION: Operational: XX Policy: Discussion: Information:

INITIATED BY: Lawrence J. Gregan **BOARD LIAISON:** Robert J. Birch, Supervisor
Township Manager Liaison – Public Safety Committee

BACKGROUND:

As a condition of Pennsylvania Department of Transportation approval of the Highway Occupancy Permit for the proposed playground area addition at the Burger King Restaurant property on DeKalb Pike, the applicant is required to perform traffic turn lane improvements on DeKalb Pike.

The improvements on DeKalb Pike in front of the Burger King Restaurant reflect the reduction on the left turn land length for the eastbound approach and the addition of a two-way center turn lane with signage.

The improvements on DeKalb Pike are located between the above two intersections requiring that the revisions to both traffic signal permit 64-1056 and 64-1985 be submitted and approved by Pennsylvania Department of Transportation.

The revisions have been reviewed by the Township Traffic Engineer and recommended for approval.

ZONING, SUBDIVISION OR LAND DEVELOPMENT IMPACT:

None.

PREVIOUS BOARD ACTION:

None.

ALTERNATIVES/OPTIONS:

None.

BUDGET IMPACT:

The costs for upgrading these traffic signals are the responsibility of the developer and will be included in the Escrow funds posted to guarantee the completion of the on site development improvements.

RECOMMENDATION:

Adopt the attached Resolutions authorizing the Township Manager to submit applications to the Pennsylvania Department of Transportation for traffic signal improvements involving the "reduction on the left turn land length for the eastbound approach and the addition of a two-way center turn lane with signage" on DeKalb Pike between the intersections of DeKalb Pike and Bethlehem Pike and DeKalb Pike and the Montgomery Mall Access Driveway.

MOTION/RESOLUTION:

BE IT RESOLVED by the Board of Supervisors of Montgomery Township that we hereby adopt a Resolution authorizing the Township Manager to submit applications to the Pennsylvania Department of Transportation for traffic signal improvements involving "reduction on the left turn land length for the eastbound approach and the addition of a two-way center turn lane with signage" on DeKalb Pike between the intersections of DeKalb Pike and Bethlehem Pike and DeKalb Pike (file #64-1056) and the Montgomery Mall Access Driveway (file #64-1985).

MOTION: _____ SECOND: _____

ROLL CALL:

| | | | | |
|------------------------|-----|---------|---------|--------|
| Robert J. Birch | Aye | Opposed | Abstain | Absent |
| Candyce Fluehr Chimera | Aye | Opposed | Abstain | Absent |
| Michael J. Fox | Aye | Opposed | Abstain | Absent |
| Jeffrey W. McDonnell | Aye | Opposed | Abstain | Absent |
| Joseph P. Walsh | Aye | Opposed | Abstain | Absent |

DISTRIBUTION: Board of Supervisors, Frank R. Bartle, Esq.

RESOLUTION

BE IT RESOLVED, by authority of the **Board of Supervisors** of the **Township of Montgomery, Montgomery County**, and it is hereby resolved by authority of the same, that the **Township Manager/Secretary** of said MUNICIPALITY is authorized and directed to submit the attached Applications for Traffic Signal Approval to the Pennsylvania Department of Transportation and to sign these Applications on behalf of the MUNICIPALITY.

ATTEST

MONTGOMERY TOWNSHIP

(Signature and designation
of official title)

Lawrence J. Gregan, Secretary

Print or type above name and
title

By: _____
(Signature and designation
of official title)

Michael J. Fox, Chairman

Print or type above name and
title

(SEAL)

I, **Lawrence J. Gregan, Township Manager/Secretary** of the **Board of Supervisors of Montgomery Township**, do hereby certify that the foregoing is a true and correct copy of the Resolution adopted at a regular meeting of the **Board of Supervisors of Montgomery Township**, held the **9th** day of **November**, 2015.

DATE: November 9, 2015

(Signature and designation
of official title)

**Lawrence J. Gregan,
Township Manager/Secretary**

Print or type above name/title

Application for Traffic Signal Approval

Please Type or Print all information in Blue or Black Ink



County : _____
 Engineering District : _____
 Department Tracking # : _____
 Initial Submission Date : _____

A - Applicant's (Municipal) Contact Information

Municipal Contact's Name : Larry Gegan Title : Township Manager
 Municipal Name : Montgomery Township
 Municipal Address : 1001 Stump Road, Montgomeryville, PA 18936
 Municipal Phone Number : 215-393-6920 Alternative Phone Number : _____
 E-mail Address : lgegan@montgomerytpw.org
 Municipal Hours of Operation : 8:30a - 4:30p

B - Application Description

Location (*intersection*) : DeKalb Pike (SR 2202) and Montgomeryville Mall Driveway
 Traffic Control Device is : ☐ NEW Traffic Signal ☒ EXISTING Traffic Signal (Permit Number) : 64-1985
 Type of Device (*select one*) ☒ Traffic Control Signal (MUTCD Section 4D, 4E, 4G) ☐ Flashing Beacon (MUTCD Section 4L) ☐ School Warning System (MUTCD Section 7B)
☐ Other : _____
 Is Traffic Signal part of a system? : ☒ YES ☐ NO System Number (*if applicable*) : I-0185
 If YES, provide locations of all signalized intersections in system.
US202 & Connector A (File#3657); US202 & Knapp Road (File#3656); US202 & Welsh Road (File#3702); DeKalb Pike & US202 (File#3701); DeKalb Pike & Hancock Road (File#2352); DeKalb Pike & Welsh Road (File#1057); Welsh Road & Stump Road (File #3039); Knapp Road & Witchwood Drive (File#3661); DeKalb Pike & Montgomery Mall/Courtyard Access (File#1985); DeKalb Pike & Cheswick Drive (File#3394); DeKalb Pike & Knapp Road (File#2541); DeKalb Pike & Gwynmont Drive (File#3140)
 Explain the proposed improvements :
Addition of a two-way center left turn lane with signage to DeKalb Pike (SR 2202). Minor updates also incorporated to reflect existing and proposed conditions along Burger King frontage.
 Associated with Highway Occupancy Permit (HOP)? : ☒ YES ☐ NO If YES, HOP Application # : 91700

C - Maintenance and Operation Information

Maintenance and Operations are typically performed by? :
☐ Municipal Personnel ☐ Municipal Contractor ☐ Municipal Personnel & Contractor
☐ Other : _____
 Maintenance and Operations Contact Name : _____ Company/Organization : _____
 Phone # : _____ Alternative Phone # : _____ E-mail : _____

D - Attachments Listing

| | | |
|--|---|---|
| <input checked="" type="checkbox"/> Municipal Resolution (<i>required</i>) | <input type="checkbox"/> Location Map | <input type="checkbox"/> Traffic Volumes / Pedestrian Volumes |
| <input type="checkbox"/> Letter of Financial Commitment | <input type="checkbox"/> Photographs | <input type="checkbox"/> Turn Lane Analysis |
| <input checked="" type="checkbox"/> Traffic Signal Permit | <input type="checkbox"/> Straight Line Diagram | <input type="checkbox"/> Turn Restriction Studies |
| <input type="checkbox"/> Warrant Analysis | <input type="checkbox"/> Capacity Analysis | <input type="checkbox"/> Other : _____ |
| <input type="checkbox"/> Crash Analysis | <input type="checkbox"/> Traffic Impact Study (TIS) | |
| <input type="checkbox"/> Traffic Signal Study | <input type="checkbox"/> Condition Diagram | |

Application for Traffic Signal Approval

Please Type or Print all Information in Blue or Black Ink



County : _____
 Engineering District : _____
 Department Tracking # : _____
 Initial Submission Date : _____

E - Applicant (Municipal) Certification

The applicant desires to own, operate, and maintain the traffic control device in the location indicated above; and the Vehicle Code requires the approval of the Department of Transportation ("Department") before any traffic signals may be legally erected or modified. A signed Application for Traffic Signal Approval (TE-160) must be submitted in conformance with the instructions provided by the Department, and a Traffic Signal Permit must be issued, before any work can begin.

If the Department approves a traffic signal after a traffic engineering study and engineering judgment indicates the need, the traffic signal shall be installed, owned, operated, and maintained within the parameters indicated in the Vehicle Code and the Department's regulations relating to traffic signs, signals, and markings. The Department may direct appropriate alterations to the design or operation (including, but not limited to, hours of operation) of the traffic signal, or require removal of the traffic signal, if traffic conditions or other considerations necessitate alteration or removal.

All items associated with the traffic control device (geometric features, signs, signals, pavement markings, pedestrian accommodations, and other traffic control device associated items) are the applicant's responsibility. The Traffic Signal Permit will then document all of the items associated with operation of each traffic control device. The applicant, at its sole expense, shall provide the necessary inspection, maintenance, and operation activities in conformance with the Department's Publication 191 or as otherwise agreed to by the Department. The applicant shall perform the preventative and responsive maintenance requirements and recordkeeping in accordance with the exhibits specified below. If the applicant fails to provide the required inspection, maintenance, or operation services within thirty (30) days of receipt of written notice from the Department, the Department shall have the right to perform the required inspection, maintenance, or operation services in the applicant's stead and the applicant shall reimburse the Department for all costs incurred. Federal- and/or state-aid participation may be withheld on all future projects if the applicant fails to demonstrate to the Department the ability to provide all required maintenance and operation services. The applicant certifies that it has funds available and committed for the operation and maintenance of the traffic control device and that it will make available sufficient funds for all required future inspection, maintenance, and operation activities.

The applicant shall indemnify, save harmless and, defend (if requested) the Commonwealth of Pennsylvania, its agents, representatives, and employees from and against any damages recoverable under the Sovereign Immunity Act, 42 Pa. C.S. §§ 8521-8528, up to the limitations on damages under said law, arising out of any personal injury or damage to property which is finally determined by a court to be caused by or result from acts or omissions of the applicant and for which a court has held applicant, its officials, or employees to be liable. This provision shall not be construed to limit the applicant in asserting any rights or defenses. Additionally, the applicant shall include in any contracts into which it enters for maintenance, operation, or inspection of the traffic control device this same obligation to indemnify the Commonwealth and its officers, agents, and employees; and it shall require its contractor(s) to provide public liability insurance coverage, naming the Commonwealth and the applicant as additional insureds for bodily injury, including death and property damage, in the minimum amounts of \$500,000 per person, \$1,000,000 per occurrence, it being the intention of parties to have the contractor fully insure and indemnify the Commonwealth and the applicant.

The applicant shall comply with the study and ordinance requirements of 75 Pa. C.S. § 6109. The applicant submits this application with the intention of being legally bound.

Neither this application nor any Traffic Signal Permit creates any rights or obligations with respect to parties other than the applicant and the Department. Third parties may not rely upon any representations made by either the applicant or the Department in connection with the submission or approval of this application or any work permitted or approved that is related to this application, as regards either payment of funds or performance of any particular item of maintenance precisely as specified.

The applicant agrees to comply with the attached Exhibits:

- Exhibit "A": Preventative and Response Maintenance Requirements (Sheet 3 of 5)
- Exhibit "B": Recordkeeping (Sheet 4 of 5)
- Exhibit "C": Signal Maintenance Organization (Sheet 5 of 5)

Printed Municipal Contact Name : _____ Date : _____
 Signed By : _____ Witness or Attest : _____
 Title of Signatory : _____ Title of Witness or Attester: _____

Exhibit "A":**Preventative and Response Maintenance Requirements**
 County : _____
 Engineering District : _____
 Department Tracking # : _____
 Initial Submission Date : _____
Preventive Maintenance

The APPLICANT or its contractor will provide preventive maintenance for each individual component of the traffic signal installation covered by this application at intervals not less than those indicated in the Preventive Maintenance Summary, PA DOT Publication 191, current version. This is the recommended level of maintenance to keep the intersection control equipment and signals in mechanically, structurally and aesthetically good condition.

Response Maintenance

The APPLICANT or its contractor will provide response maintenance in accordance with the provisions of the Response Maintenance Schedule. It encompasses the work necessary to restore a traffic signal system to proper and safe operation. Includes Emergency Repair and Final Repair.

FINAL REPAIR:

Repair or replace failed equipment to restore system to proper and safe operation in accordance with permit within a 24-hour period.

EMERGENCY REPAIR:

Use alternative means or mode to temporarily restore system to safe operation within a 24-hour period. Final repair must then be completed within 30 days unless prohibited by weather conditions or availability of equipment.

Response Maintenance Schedule**KNOCKDOWNS**

Support - Mast arm
 Support - Strain pole
 Span wire/tether wire
 Pedestal
 Cabinet
 Signal heads

TYPE OF REPAIR PERMITTED

Emergency or Final
 Emergency or Final
 Final Only
 Emergency or Final
 Emergency or Final
 Final Only

EQUIPMENT FAILURE

Lamp burnout (veh. & ped.)
 Local controller
 Master controller
 Detector sensor
 - Loop
 - Magnetometer
 - Sonic
 - Magnetic
 - Pushbutton
 Detector amplifier
 Conflict monitor
 Flasher
 Time clock
 Load switch/relay
 Coordination unit
 Communication interface, mode
 Signal cable
 Traffic Signal Communications
 Traffic Signal Systems

Final Only
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**Exhibit "B":
Recordkeeping**

County : _____

Engineering District : _____

Department Tracking # : _____

Initial Submission Date : _____

Recordkeeping

Accurate and up-to-date recordkeeping is an essential component of a good traffic signal maintenance program. In recognition of this fact, the APPLICANT must prepare, retain, and make available to the COMMONWEALTH, on request, a record of all preventive and response maintenance activities performed on the traffic signal equipment covered by this application.

The APPLICANT shall establish a separate file for each installation and keep its records in the municipal building, signal maintenance shop, or other weather-protected enclosure.

At a minimum, the following records will be kept by the APPLICANT or its contractor for each traffic signal. These forms can be found in Section 10.0, Maintenance Record Forms, PA DOT Publication 191, current version.

FORM 1 - Master Intersection Record

This form, which lists all maintenance functions performed at the intersection, should be updated within one day of the activity but no more than one week later.

FORM 2 - Response Maintenance Record

Each time response maintenance is required at the intersection, this form is to be completed. Once the pertinent information is transferred to the master intersection record, this form is to be placed in the intersection file.

FORM 3 - Preventive Maintenance Record

This form will be used to provide a record of the preventive maintenance activities performed at each intersection. The date, the activities performed, and the signature of the person in charge of the work must be recorded in the form.

This form may be kept at the intersection, if it is adequately protected from the weather. Form 1 must be updated at the central file, however, to reflect the date and activity.

**Exhibit "C":
Signal Maintenance Organization**

County : _____
 Engineering District : _____
 Department Tracking # : _____
 Initial Submission Date : _____

Personnel Classifications

In order to properly maintain the traffic signal equipment covered by this applicant, the APPLICANT agrees to provide, as minimum, the following staff throughout the useful life of equipment. The APPLICANT agrees to abide by all guidance provided in PA DOT Publication 191.

Traffic Engineer - The administrative position which has prime responsibility for the proper operation of traffic signal equipment. The principal function of this position is the supervision and control of subordinate personnel and the planning of their activities to ensure adequate preventive and response maintenance programs.

Minimum Position Requirements

1. A thorough understanding of traffic signal design, installation and maintenance.
2. A working knowledge of the interaction between the following traffic characteristics: Intersection geometry, traffic flow theory, control type (fixed time, actuated, etc.), signal phasing and timing, and interconnection.
3. An ability to supervise subordinate personnel effectively in the assignment of their work.
4. Possession of a college degree in engineering, which includes course work in traffic engineering.
5. Either four years experience in the field of traffic engineering or its equivalent in graduate college work.

Signal Specialist - The individual responsible for the diagnostics and repair of all traffic signal equipment including solid state equipment.

Minimum Position Requirements

1. Extensive training and troubleshooting skills in electronics and software.
2. Ability to repair modules in the shop and to design test equipment needed to diagnose and repair a problem.
3. Ability to make design and modifications to implement or omit special functions.
4. Ability to implement a recordkeeping system to include maintenance activities, inventory control and identification of recurring problems.
5. Ability to perform all tasks required of a signal technician.

Signal Technician - Individual responsible for the operation and maintenance of traffic signals and electromechanical equipment.

Minimum Position Requirements

1. Ability to perform response maintenance on solid state equipment up to the device exchange level.
2. Capability to diagnose a vehicle loop failure and initiate corrective action.
3. Ability to tune detector amplifiers.
4. Ability to follow wiring schematics, check and set timings from plan sheet and check all field connections.
5. Ability to perform preventive maintenance on all equipment and to maintain accurate records of all work perform.

Training

The APPLICANT agrees to secure training in order to upgrade the ability of its present staff to properly perform the required maintenance functions. The APPLICANT agrees to abide by all guidance provided in PA DOT Publication 191.

Budget Requirements

The APPLICANT agrees to provide, in its annual operating budget, dedicated funds which are sufficient to cover the cost of the personnel, training, contractors (if utilized) and specialized maintenance equipment which are required, by virtue of this application. The APPLICANT agrees to abide by all guidance provided in PA DOT Publication 191..

Application Instructions



pennsylvania
DEPARTMENT OF TRANSPORTATION

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Municipal Contact's Name: Provide the municipal contact name that is (or will be responsible) for the traffic signal. Typically this is either the Municipal Manager or Roadmaster.

Title: Provide the title of the municipal contact name.

Municipal Name: Provide the official municipal name.

Municipal Address: Provide the full address of the municipal building.

Municipal Phone Number: Provide the municipal phone number of the municipal contact.

Alternative Phone Number: Provide an alternative phone number of the municipal contact.

E-mail Address: Provide the e-mail address of the municipal contact.

Municipal Hours of Operation: Please provide the municipalities normal operating hours (i.e. Monday-Thursday 9 AM - 2 PM)

B - Application Description

Location (intersection): Please provide a detailed location of the device or devices being considered for approval.

Please include any State Route and/or local road names in your description.

Traffic Control Device is: (Please select one of the two following categories)

NEW Traffic Signal: This item should be selected when requesting approval of a traffic signal that is currently not in operation at the device location indicated above.

EXISTING Traffic Signal: This item should be selected when requesting approval to make a modification or update to an existing traffic signal.

(Permit Number): Please provide the traffic signal permit number.

Type of Device (select one): (Please select one of the four following categories)

Traffic Control Signal: As defined in federal Manual on Uniform Traffic Control Devices (MUTCD) Sections 4D, 4E, and 4G. When selecting this category this is the typical red/yellow/green and pedestrian signal indications

Flashing Beacon: As defined in federal Manual on Uniform Traffic Control Devices (MUTCD) Section 4L. When selecting this category, this is typically either the flashing yellow/red signal at an intersection and/or the flashing yellow warning sign.

School Warning System: As defined in federal Manual on Uniform Traffic Control Devices (MUTCD) Section 7B. When selecting this category, this is typically the flashing school warning sign with a 15 mph indication.

Other: When selecting this category, this pertains to all other permitted electrically powered traffic control devices approved by the Department.

Is Traffic Signal part of a system?: Check off the appropriate box, either YES or NO. If YES, please fill in the **System Number (if applicable):** line.

Explain the proposed improvements: Provide a description of the proposed improvements to the intersection. This may be as complex as installing and/or upgrading a traffic signal or as non-complex as placement of a new traffic sign to supplement an existing traffic signal.

Associated with Highway Occupancy Permit (HOP)?: Check off the appropriate box, either YES or NO. If YES, please fill in the **Application #:** line.

C - Maintenance and Operation Information

Maintenance and Operations are typically performed by?: Please indicate if maintenance and operation will be performed by Municipal Personnel or through Contract Services.

Maintenance and Operations Contact Name: Provide the primary maintenance contact name for the individual that is (or will be responsible) for the maintenance and operation of the traffic signal.

Company/Organization: Provide the name of the company/organization with which the primary maintenance contact is affiliated.

Phone #: Provide the phone number for the primary maintenance contact.

Alternative Phone #: Provide an alternative phone number for the primary maintenance contact or affiliated company/organization.

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Check off all documents which will be submitted along with this application. Note that a Municipal Resolution, authorizing the municipal contact to submit and sign the application, is a required document.

A sample Municipal Resolution has been provided on the next page.

E - Applicant (Municipal) Certification

Printed Municipal Contact Name: Please print the name of the municipal contact person signing the application.

Date: Please provide the date on which the application was signed.

Signed By: Please provide the signature of the named municipal contact.

Title of Signatory: Please provide the title of municipal contact.

Witness or Attest: Please provide the signature of the person witnessing or attesting the signature.

Witness or Attester: Please provide the title of the person witnessing or attesting the signature.

Application for Traffic Signal Approval

Please Type or Print all information in Blue or Black Ink



County : _____
 Engineering District : _____
 Department Tracking # : _____
 Initial Submission Date : _____

A - Applicant's (Municipal) Contact Information

Municipal Contact's Name : Larry Gregan Title : Township Manager
 Municipal Name : Montgomery Township
 Municipal Address : 1001 Stump Road, Montgomeryville, PA 18936
 Municipal Phone Number : 215-393-6920 Alternative Phone Number : _____
 E-mail Address : lgregan@montgomerytp.org
 Municipal Hours of Operation : 8:30a - 4:30p

B - Application Description

Location (intersection) : Dekalb Pike (SR 2202) and Bethlehem Pike (SR 0309)

Traffic Control Device is : ☐ NEW Traffic Signal ☒ EXISTING Traffic Signal (Permit Number) : 64-1056

Type of Device (select one) ☒ Traffic Control Signal (MUTCD Section 4D, 4E, 4G) ☐ Flashing Beacon (MUTCD Section 4L) ☐ School Warning System (MUTCD Section 7B)
☐ Other : _____

Is Traffic Signal part of a system? : ☒ YES ☐ NO

System Number (if applicable) : I-0011

If YES, provide locations of all signalized intersections in system.

Welsh Rd & SR309 (File#0210); SR309 & English Village (File#2704); SR309 & Hartman Rd (File#1618); SR309 & Stump Rd (File#0429); SR309 & Knapp Rd (File#3004); SR309 & Garden Golf Blvd (File#3367); SR309 & Dekalb Pike/Upper State Rd (File #1056); SR309 & Mall Dr S (File #1984); SR309 & Mall Dr. N (File#1983); SR309 & N Wales Rd (File#1594); SR309 & Horsham Rd/Dekalb Pk (File#0197); Welsh Rd & Lower State Rd (File#2040); Welsh Rd & Gwynedd Crossing/Darden Dr (File#2705); Welsh Rd & Evans Rd (File #2508)

Explain the proposed improvements :

Reduction in left turn lane length for Dekalb Pike (SR 2202) eastbound approach and addition of a two-way center left turn lane with signage. Minor updates also incorporated to reflect existing and proposed conditions along Burger King frontage.

Associated with Highway Occupancy Permit (HOP)? : ☒ YES ☐ NO If YES, HOP Application # : 91700

C - Maintenance and Operation Information

Maintenance and Operations are typically performed by? :

☐ Municipal Personnel ☐ Municipal Contractor ☐ Municipal Personnel & Contractor
☐ Other : _____

Maintenance and Operations Contact Name : _____ Company/Organization : _____

Phone # : _____ Alternative Phone # : _____ E-mail : _____

D - Attachments Listing

| | | |
|---|---|---|
| <input checked="" type="checkbox"/> Municipal Resolution (required) | <input type="checkbox"/> Location Map | <input type="checkbox"/> Traffic Volumes / Pedestrian Volumes |
| <input type="checkbox"/> Letter of Financial Commitment | <input type="checkbox"/> Photographs | <input type="checkbox"/> Turn Lane Analysis |
| <input checked="" type="checkbox"/> Traffic Signal Permit | <input type="checkbox"/> Straight Line Diagram | <input type="checkbox"/> Turn Restriction Studies |
| <input type="checkbox"/> Warrant Analysis | <input type="checkbox"/> Capacity Analysis | <input type="checkbox"/> Other : _____ |
| <input type="checkbox"/> Crash Analysis | <input type="checkbox"/> Traffic Impact Study (TIS) | |
| <input type="checkbox"/> Traffic Signal Study | <input type="checkbox"/> Condition Diagram | |

Application for Traffic Signal Approval

Please Type or Print all information in Blue or Black Ink



County : _____
 Engineering District : _____
 Department Tracking # : _____
 Initial Submission Date : _____

E - Applicant (Municipal) Certification

The applicant desires to own, operate, and maintain the traffic control device in the location indicated above; and the Vehicle Code requires the approval of the Department of Transportation ("Department") before any traffic signals may be legally erected or modified. A signed Application for Traffic Signal Approval (TE-160) must be submitted in conformance with the instructions provided by the Department, and a Traffic Signal Permit must be issued, before any work can begin.

If the Department approves a traffic signal after a traffic engineering study and engineering judgment indicates the need, the traffic signal shall be installed, owned, operated, and maintained within the parameters indicated in the Vehicle Code and the Department's regulations relating to traffic signs, signals, and markings. The Department may direct appropriate alterations to the design or operation (including, but not limited to, hours of operation) of the traffic signal, or require removal of the traffic signal, if traffic conditions or other considerations necessitate alteration or removal.

All items associated with the traffic control device (geometric features, signs, signals, pavement markings, pedestrian accommodations, and other traffic control device associated items) are the applicant's responsibility. The Traffic Signal Permit will then document all of the items associated with operation of each traffic control device. The applicant, at its sole expense, shall provide the necessary inspection, maintenance, and operation activities in conformance with the Department's Publication 191 or as otherwise agreed to by the Department. The applicant shall perform the preventative and responsive maintenance requirements and recordkeeping in accordance with the exhibits specified below. If the applicant fails to provide the required inspection, maintenance, or operation services within thirty (30) days of receipt of written notice from the Department, the Department shall have the right to perform the required inspection, maintenance, or operation services in the applicant's stead and the applicant shall reimburse the Department for all costs incurred. Federal- and/or state-aid participation may be withheld on all future projects if the applicant fails to demonstrate to the Department the ability to provide all required maintenance and operation services. The applicant certifies that it has funds available and committed for the operation and maintenance of the traffic control device and that it will make available sufficient funds for all required future inspection, maintenance, and operation activities.

The applicant shall indemnify, save harmless and, defend (if requested) the Commonwealth of Pennsylvania, its agents, representatives, and employees from and against any damages recoverable under the Sovereign Immunity Act, 42 Pa. C.S. §§ 8521-8528, up to the limitations on damages under said law, arising out of any personal injury or damage to property which is finally determined by a court to be caused by or result from acts or omissions of the applicant and for which a court has held applicant, its officials, or employees to be liable. This provision shall not be construed to limit the applicant in asserting any rights or defenses. Additionally, the applicant shall include in any contracts into which it enters for maintenance, operation, or inspection of the traffic control device this same obligation to indemnify the Commonwealth and its officers, agents, and employees; and it shall require its contractor(s) to provide public liability insurance coverage, naming the Commonwealth and the applicant as additional insureds for bodily injury, including death and property damage, in the minimum amounts of \$500,000 per person, \$1,000,000 per occurrence, it being the intention of parties to have the contractor fully insure and indemnify the Commonwealth and the applicant.

The applicant shall comply with the study and ordinance requirements of 75 Pa. C.S. § 6109. The applicant submits this application with the intention of being legally bound.

Neither this application nor any Traffic Signal Permit creates any rights or obligations with respect to parties other than the applicant and the Department. Third parties may not rely upon any representations made by either the applicant or the Department in connection with the submission or approval of this application or any work permitted or approved that is related to this application, as regards either payment of funds or performance of any particular item of maintenance precisely as specified.

The applicant agrees to comply with the attached Exhibits:

- Exhibit "A": Preventative and Response Maintenance Requirements (Sheet 3 of 5)
- Exhibit "B": Recordkeeping (Sheet 4 of 5)
- Exhibit "C": Signal Maintenance Organization (Sheet 5 of 5)

Printed Municipal Contact Name : _____

Date : _____

Signed By : _____

Witness or Attest : _____

Title of Signatory : _____

Title of Witness or Attester: _____

**Exhibit "A":
Preventative and Response Maintenance
Requirements**
 County : _____
 Engineering District : _____
 Department Tracking # : _____
 Initial Submission Date : _____
Preventive Maintenance

The APPLICANT or its contractor will provide preventive maintenance for each individual component of the traffic signal installation covered by this application at intervals not less than those indicated in the Preventive Maintenance Summary, PA DOT Publication 191, current version. This is the recommended level of maintenance to keep the intersection control equipment and signals in mechanically, structurally and aesthetically good condition.

Response Maintenance

The APPLICANT or its contractor will provide response maintenance in accordance with the provisions of the Response Maintenance Schedule. It encompasses the work necessary to restore a traffic signal system to proper and safe operation. Includes Emergency Repair and Final Repair.

FINAL REPAIR:

Repair or replace failed equipment to restore system to proper and safe operation in accordance with permit within a 24-hour period.

EMERGENCY REPAIR:

Use alternative means or mode to temporarily restore system to safe operation within a 24-hour period. Final repair must then be completed within 30 days unless prohibited by weather conditions or availability of equipment.

Response Maintenance Schedule**KNOCKDOWNS**

Support - Mast arm
 Support - Strain pole
 Span wire/tether wire
 Pedestal
 Cabinet
 Signal heads

TYPE OF REPAIR PERMITTED

Emergency or Final
 Emergency or Final
 Final Only
 Emergency or Final
 Emergency or Final
 Final Only

EQUIPMENT FAILURE

Lamp burnout (veh. & ped.)
 Local controller
 Master controller
 Detector sensor
 - Loop
 - Magnetometer
 - Sonic
 - Magnetic
 - Pushbutton
 Detector amplifier
 Conflict monitor
 Flasher
 Time clock
 Load switch/relay
 Coordination unit
 Communication interface, mode
 Signal cable
 Traffic Signal Communications
 Traffic Signal Systems

Final Only
 Emergency or Final
 Emergency or Final
 Emergency or Final
 Emergency or Final
 Emergency or Final
 Emergency or Final
 Final Only
 Final Only
 Emergency or Final
 Final Only
 Emergency or Final
 Emergency or Final
 Final Only
 Final Only
 Final Only

**Exhibit "B":
Recordkeeping**

County : _____
 Engineering District : _____
 Department Tracking # : _____
 Initial Submission Date : _____

Recordkeeping

Accurate and up-to-date recordkeeping is an essential component of a good traffic signal maintenance program. In recognition of this fact, the APPLICANT must prepare, retain, and make available to the COMMONWEALTH, on request, a record of all preventive and response maintenance activities performed on the traffic signal equipment covered by this application.

The APPLICANT shall establish a separate file for each installation and keep its records in the municipal building, signal maintenance shop, or other weather-protected enclosure.

At a minimum, the following records will be kept by the APPLICANT or its contractor for each traffic signal. These forms can be found in Section 10.0, Maintenance Record Forms, PA DOT Publication 191, current version.

FORM 1 - Master Intersection Record

This form, which lists all maintenance functions performed at the intersection, should be updated within one day of the activity but no more than one week later.

FORM 2 - Response Maintenance Record

Each time response maintenance is required at the intersection, this form is to be completed. Once the pertinent information is transferred to the master intersection record, this form is to be placed in the intersection file.

FORM 3 - Preventive Maintenance Record

This form will be used to provide a record of the preventive maintenance activities performed at each intersection. The date, the activities performed, and the signature of the person in charge of the work must be recorded in the form.

This form may be kept at the intersection, if it is adequately protected from the weather. Form 1 must be updated at the central file, however, to reflect the date and activity.

**Exhibit "C":
Signal Maintenance Organization**

County : _____
 Engineering District : _____
 Department Tracking # : _____
 Initial Submission Date : _____

Personnel Classifications

In order to properly maintain the traffic signal equipment covered by this applicant, the APPLICANT agrees to provide, as minimum, the following staff throughout the useful life of equipment. The APPLICANT agrees to abide by all guidance provided in PA DOT Publication 191.

Traffic Engineer - The administrative position which has prime responsibility for the proper operation of traffic signal equipment. The principal function of this position is the supervision and control of subordinate personnel and the planning of their activities to ensure adequate preventive and response maintenance programs.

Minimum Position Requirements

1. A thorough understanding of traffic signal design, installation and maintenance.
2. A working knowledge of the interaction between the following traffic characteristics: intersection geometry, traffic flow theory, control type (fixed time, actuated, etc.), signal phasing and timing, and interconnection.
3. An ability to supervise subordinate personnel effectively in the assignment of their work.
4. Possession of a college degree in engineering, which includes course work in traffic engineering.
5. Either four years experience in the field of traffic engineering or its equivalent in graduate college work.

Signal Specialist - The individual responsible for the diagnostics and repair of all traffic signal equipment including solid state equipment.

Minimum Position Requirements

1. Extensive training and troubleshooting skills in electronics and software.
2. Ability to repair modules in the shop and to design test equipment needed to diagnose and repair a problem.
3. Ability to make design and modifications to implement or omit special functions.
4. Ability to implement a recordkeeping system to include maintenance activities, inventory control and identification of recurring problems.
5. Ability to perform all tasks required of a signal technician.

Signal Technician - Individual responsible for the operation and maintenance of traffic signals and electromechanical equipment.

Minimum Position Requirements

1. Ability to perform response maintenance on solid state equipment up to the device exchange level.
2. Capability to diagnose a vehicle loop failure and initiate corrective action.
3. Ability to tune detector amplifiers.
4. Ability to follow wiring schematics, check and set timings from plan sheet and check all field connections.
5. Ability to perform preventive maintenance on all equipment and to maintain accurate records of all work perform.

Training

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Budget Requirements

The APPLICANT agrees to provide, in its annual operating budget, dedicated funds which are sufficient to cover the cost of the personnel, training, contractors (if utilized) and specialized maintenance equipment which are required, by virtue of this application. The APPLICANT agrees to abide by all guidance provided in PA DOT Publication 191..

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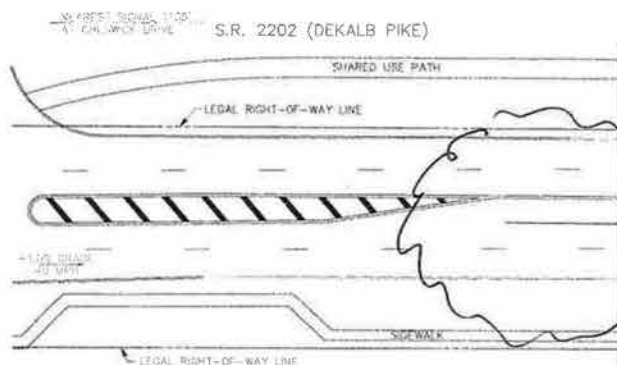
Witness or Attest: Please provide the signature of the person witnessing or attesting the signature.

Witness or Attester: Please provide the title of the person witnessing or attesting the signature.

| PHASE | 2+5 | | | | 2+6 | | | | 4+8 | | | | EMERGENCY PHASING |
|--------------------|-----|---|---|---|-----|---|---|---|-----|----|----|----|-------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | |
| 1 | G | G | Y | Y | G | G | Y | Y | R | R | R | R | Y |
| 3.4 | R | R | R | R | G | G | Y | Y | R | R | R | R | Y |
| 5.6 | R | R | R | R | R | R | R | R | G | G | Y | Y | R |
| 7.8 | R | R | R | R | R | R | R | R | R | R | R | R | R |
| 9.10 | R | R | R | R | R | R | R | R | G | G | Y | Y | R |
| 11.12 | H | H | H | H | H | H | H | H | H | H | H | H | OFF |
| FIXED | | | | | | | | | | | | | OFF |
| MINIMUM PASSAGE | 5 | | | | 10 | | | | 5 | | | | |
| MAX I | 9 | | | | 39 | | | | 20 | | | | |
| MAX II | 9 | | | | 44 | | | | 25 | | | | |
| PEDESTRIAN* MEMORY | NL | | | | SWR | | | | NL | | | | |

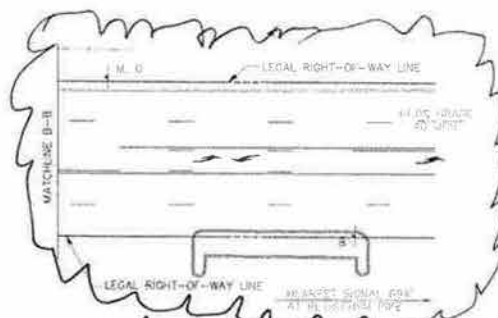
- ① G IF FOLLOWED BY 2+5
- ② G IF FOLLOWED BY 2+6
- ③ UPON PEDESTRIAN ACTUATION ONLY, OTHERWISE HAND SYMBOL AT ALL TIMES
- ④ REMAINS M IF FOLLOWED BY 2+5
- ⑤ TIMINGS AS SHOWN IN PHASE 2+6. IT MAY TIME OUT IN THIS PHASE OR MAY BE COMPLETED IN PHASE 2+6

- * UPON PEDESTRIAN ACTIVATION ONLY, OTHERWISE HAND SYMBOL AT ALL TIMES.
- REFER TO SYSTEM PERMIT #0-0185 FOR TRAFFIC ADAPTIVE OPERATION.
- PHASE SEQUENCE SELECTED BY TRAFFIC ADAPTIVE PROCESSOR.
- * PHASE PASSAGE CALCULATED BY TRAFFIC ADAPTIVE PROCESSOR.
- PHASE 2+5 SHALL NOT FOLLOW PHASE 2+6



* CONTROLLER TO BE EQUIPPED WITH EMERGENCY PREVENTION FOR THE NORTHBOUND & SOUTHBOUND APPROACHES OF DEKALB PIKE AND THE EASTBOUND AND WESTBOUND APPROACHES OF MONTGOMERY HALL DRIVEWAY WITH A FAIL SAFE DEVICE FOR EACH DIRECTION OF OPERATION. THIS EMERGENCY BEACON SHALL CONSIST OF A FLASHING WHITE FLUO LIGHT, AND SHALL FLASH WHEN THE EMERGENCY VEHICLE HAS CONTROL OF THE INTERSECTION FOR THE APPROPRIATE APPROACH. LOCATION OF EMERGENCY VEHICLE DETECTORS ARE TO BE FIELD ADJUSTED TO ACHIEVE MAXIMUM OPERATION.

- THE SIGNALS, WHEN ACTIVATED BY AN EMERGENCY VEHICLE, SHALL TERMINATE ALL GREEN INDICATIONS IMMEDIATELY, FOLLOWED BY THE COMPLETE YELLOW AND RED CLEARANCE INTERVALS. ACCORDINGLY, THEN THE GREEN INTERVAL FOR THE PRE-EMPTION PHASE SHALL FOLLOW.
- THE SIGNALS, WHEN ACTIVATED BY AN EMERGENCY VEHICLE, SHALL TIME THE UNIT #1, YELLOW AND RED INDICATIONS, FOLLOWED BY THE GREEN INTERVAL, OF THE PRE-EMPTION PHASE AND DEPEND ON THE APPROXIMATED EMERGENCY VEHICLE ONLY IN THOSE PHASES NOT PASSING A YELLOW TRAIL COUNTER (PHASE #3) MAY REMAIN GREEN WHEN COVERED BY AN APPROACHING EMERGENCY VEHICLE.
- IF SIGNALS HAVE BEEN ACTIVATED BY PEDESTRIAN PUSH BUTTON AND THE SIGNAL IS PRE-EMPTED, THE PEDESTRIAN TIME SHALL BE SPLIT BETWEEN "RED WALK" AND "RED CLEAR" THE "RED WALK" INTERVAL SHALL TERMINATE IMMEDIATELY FOLLOWED BY THE "RED CLEAR" INTERVAL. THIS INTERVAL SHALL TIME OUT FOLLOWED BY THE APPROPRIATE SELECTIVE CLEARANCES BEFORE GOING INTO EMERGENCY PRE-EMPTION.
- IF THE SIGNALS, WHEN ACTIVATED BY AN EMERGENCY VEHICLE, ARE FLASHING ALL SIGNALS SHALL REMAIN FLASHING.
- IF ADDITIONAL PRE-EMPTION PHASES ARE ACTIVATED WHILE IN PRE-EMPTION, THE ORIGINAL PRE-EMPTION PHASE SHALL TIME OUT BEFORE PROCEEDING TO THE NEXT PRE-EMPTION PHASE.
- UPON COMPLETION OF PRE-EMPTION, PHASE 2, 4, 6, OR 8 IN RETURNING TO NORMAL OPERATION, PHASE 2+4, 8 INTERVAL 5 SHALL FOLLOW.
- IN EMERGENCY PRE-EMPTION, NO PRIORITY SHALL BE ESTABLISHED. PRE-EMPTION SHALL BE A "FIRST COME, FIRST SERVED" OPERATION.



BURGER KING RESTAURANT
ADDNL CENTER
LEFT TURN LANE

| PRE-EMPTION PHASING | | | | | | | | | | | | | |
|---------------------|----------|-----|----|----|-----|----|----|-----|----|----|----------|----|----|
| | | I | | | II | | | III | | | IV | | |
| PHASE | | 2 | | | 6 | | | 8 | | | 11 | | |
| SIGNAL | | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 1 | CHANGING | G | Y | R | R | R | R | R | R | R | CHANGING | R | R |
| 2 | CHANGING | G | Y | R | R | R | R | R | R | R | CHANGING | R | R |
| 3,4 | CHANGING | G | Y | R | R | R | R | R | R | R | CHANGING | R | R |
| 5,6 | CHANGING | G | Y | R | R | R | R | R | R | R | CHANGING | R | R |
| 7,8 | CHANGING | G | Y | R | R | R | R | R | R | R | CHANGING | R | R |
| FIXED | | * 4 | 2 | | * 4 | 2 | | * 3 | 3 | | * 3 | | |

NOTE:
IF PRE-EMPTION EQUIPMENT HAS ENCODING CAPABILITIES
FOR VEHICLE IDENTIFICATION, IT IS RECOMMENDED TO
HAVE THE ZERO "00" FEATURE ON, TO GIVE UNCODED
EMITTERS THE ABILITY TO ACTIVATE THE EMERGENCY
PRE-EMPTION.

② 0/Y. - WHEN RETURNING TO NORMAL OPERATION

10. MOORE, K. P. & J. C. WILSON. 1972. A new species of the genus *Stenobothrus* (Hymenoptera: Braconidae) from the Hawaiian Islands. *Ann. Entomol. Soc. Am.* 65: 101-102.

- [illegible]

TRANSFORMATIONS OF TRANSFORMATION

FORM NO. 10-75 (REV. 1-68)

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DOI: 10.1177/1056492608321111
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© 2004 Blackwell Publishing Ltd, *Journal of Internal Medicine* 255: 105–112

DISCUSSION AND CONCLUSIONS

¹ *Journal of the American Medical Association*, 281, 1999, 2222-2223.

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|--|-----------------------|-------------------|------------------------------------|---------------------------------|----------------------------------|---|--|---|---|---|--|---|--|---|---|---|---|--|--|--|--|--|--|---|---|--|---|--|---|--|--|---|---|-----------------------|
| 2. α and β are the roots of the equation $x^2 + px + q = 0$ | $\alpha + \beta = -p$ | $\alpha\beta = q$ | $\alpha - \beta = \sqrt{p^2 - 4q}$ | $\alpha^2 + \beta^2 = p^2 - 2q$ | $\alpha^3 + \beta^3 = p^3 - 3pq$ | $\alpha^4 + \beta^4 = p^4 - 4p^2q + 2q^2$ | $\alpha^5 + \beta^5 = p^5 - 5p^3q + 5pq^2$ | $\alpha^6 + \beta^6 = p^6 - 6p^4q + 8p^2q^2 - 2q^3$ | $\alpha^7 + \beta^7 = p^7 - 7p^5q + 14p^3q^2 - 7pq^3$ | $\alpha^8 + \beta^8 = p^8 - 8p^6q + 18p^4q^2 - 8p^2q^3 + q^4$ | $\alpha^9 + \beta^9 = p^9 - 9p^7q + 27p^5q^2 - 27p^3q^3 + 9pq^4$ | $\alpha^{10} + \beta^{10} = p^{10} - 10p^8q + 35p^6q^2 - 35p^4q^3 + 10p^2q^4 - q^5$ | $\alpha^{11} + \beta^{11} = p^{11} - 11p^9q + 44p^7q^2 - 66p^5q^3 + 44p^3q^4 - 11pq^5$ | $\alpha^{12} + \beta^{12} = p^{12} - 12p^{10}q + 60p^8q^2 - 120p^6q^3 + 120p^4q^4 - 60p^2q^5 + q^6$ | $\alpha^{13} + \beta^{13} = p^{13} - 13p^{11}q + 78p^9q^2 - 208p^7q^3 + 272p^5q^4 - 182p^3q^5 + 78pq^6 - q^7$ | $\alpha^{14} + \beta^{14} = p^{14} - 14p^{12}q + 91p^{10}q^2 - 364p^8q^3 + 728p^6q^4 - 858p^4q^5 + 546p^2q^6 - q^7$ | $\alpha^{15} + \beta^{15} = p^{15} - 15p^{13}q + 105p^{11}q^2 - 455p^9q^3 + 1001p^7q^4 - 1365p^5q^5 + 1001p^3q^6 - 315p^2q^7 + q^8$ | $\alpha^{16} + \beta^{16} = p^{16} - 16p^{14}q + 128p^{12}q^2 - 640p^{10}q^3 + 1792p^8q^4 - 3200p^6q^5 + 3200p^4q^6 - 1568p^2q^7 + 256q^8$ | $\alpha^{17} + \beta^{17} = p^{17} - 17p^{15}q + 153p^{13}q^2 - 850p^{11}q^3 + 2720p^9q^4 - 5440p^7q^5 + 6432p^5q^6 - 4096p^3q^7 + 1280p^2q^8 - q^9$ | $\alpha^{18} + \beta^{18} = p^{18} - 18p^{16}q + 180p^{14}q^2 - 1296p^{12}q^3 + 6220p^{10}q^4 - 20736p^8q^5 + 43008p^6q^6 - 43008p^4q^7 + 20736p^2q^8 - 1296q^9$ | $\alpha^{19} + \beta^{19} = p^{19} - 19p^{17}q + 171p^{15}q^2 - 1330p^{13}q^3 + 8030p^{11}q^4 - 35430p^9q^5 + 100320p^7q^6 - 200640p^5q^7 + 200640p^3q^8 - 100320p^2q^9 + 171q^{10}$ | $\alpha^{20} + \beta^{20} = p^{20} - 20p^{18}q + 210p^{16}q^2 - 1800p^{14}q^3 + 12600p^{12}q^4 - 60480p^{10}q^5 + 229320p^8q^6 - 549120p^6q^7 + 983040p^4q^8 - 1228800p^2q^9 + 655360q^{10}$ | $\alpha^{21} + \beta^{21} = p^{21} - 21p^{19}q + 203p^{17}q^2 - 1701p^{15}q^3 + 12006p^{13}q^4 - 72036p^{11}q^5 + 352800p^9q^6 - 1312320p^7q^7 + 352800p^5q^8 - 72036p^3q^9 + 12006p^2q^{10} - 1701q^{11}$ | $\alpha^{22} + \beta^{22} = p^{22} - 22p^{20}q + 242p^{18}q^2 - 2200p^{16}q^3 + 17160p^{14}q^4 - 102960p^{12}q^5 + 462000p^{10}q^6 - 1716000p^8q^7 + 3528000p^6q^8 - 5491200p^4q^9 + 5491200p^2q^{10} - 2200q^{11}$ | $\alpha^{23} + \beta^{23} = p^{23} - 23p^{21}q + 253p^{19}q^2 - 2303p^{17}q^3 + 19381p^{15}q^4 - 145643p^{13}q^5 + 894786p^{11}q^6 - 4473930p^9q^7 + 1716000p^7q^8 - 3528000p^5q^9 + 5491200p^3q^{10} - 5491200p^2q^{11} + 253q^{12}$ | $\alpha^{24} + \beta^{24} = p^{24} - 24p^{22}q + 264p^{20}q^2 - 2640p^{18}q^3 + 22032p^{16}q^4 - 168960p^{14}q^5 + 1029600p^{12}q^6 - 4620000p^{10}q^7 + 17160000p^8q^8 - 35280000p^6q^9 + 54912000p^4q^{10} - 54912000p^2q^{11} + 2640q^{12}$ | $\alpha^{25} + \beta^{25} = p^{25} - 25p^{23}q + 275p^{21}q^2 - 2753p^{19}q^3 + 24205p^{17}q^4 - 193813p^{15}q^5 + 1200600p^{13}q^6 - 5491200p^{11}q^7 + 20064000p^9q^8 - 44739300p^7q^9 + 72036000p^5q^{10} - 72036000p^3q^{11} + 24205p^2q^{12} - 2753q^{13}$ | $\alpha^{26} + \beta^{26} = p^{26} - 26p^{24}q + 286p^{22}q^2 - 2860p^{20}q^3 + 25344p^{18}q^4 - 200640p^{16}q^5 + 1200600p^{14}q^6 - 5491200p^{12}q^7 + 20064000p^{10}q^8 - 44739300p^8q^9 + 72036000p^6q^{10} - 72036000p^4q^{11} + 24205p^2q^{12} - 2860q^{13}$ | $\alpha^{27} + \beta^{27} = p^{27} - 27p^{25}q + 297p^{23}q^2 - 2973p^{21}q^3 + 26403p^{19}q^4 - 200640p^{17}q^5 + 1200600p^{15}q^6 - 5491200p^{13}q^7 + 20064000p^{11}q^8 - 44739300p^9q^9 + 72036000p^7q^{10} - 72036000p^5q^{11} + 24205p^3q^{12} - 2973p^2q^{13} + 297q^{14}$ | $\alpha^{28} + \beta^{28} = p^{28} - 28p^{26}q + 308p^{24}q^2 - 3080p^{22}q^3 + 27744p^{20}q^4 - 200640p^{18}q^5 + 1200600p^{16}q^6 - 5491200p^{14}q^7 + 20064000p^{12}q^8 - 44739300p^{10}q^9 + 72036000p^8q^{10} - 72036000p^6q^{11} + 24205p^4q^{12} - 3080p^2q^{13} + 308q^{14}$ | $\alpha^{29} + \beta^{29} = p^{29} - 29p^{27}q + 319p^{25}q^2 - 3193p^{23}q^3 + 28603p^{21}q^4 - 200640p^{19}q^5 + 1200600p^{17}q^6 - 5491200p^{15}q^7 + 20064000p^{13}q^8 - 44739300p^{11}q^9 + 72036000p^9q^{10} - 72036000p^7q^{11} + 24205p^5q^{12} - 3193p^3q^{13} + 319q^{14}$ | $\alpha^{30} + \beta^{30} = p^{30} - 30p^{28}q + 330p^{26}q^2 - 3300p^{24}q^3 + 29840p^{22}q^4 - 200640p^{20}q^5 + 1200600p^{18}q^6 - 5491200p^{16}q^7 + 20064000p^{14}q^8 - 44739300p^{12}q^9 + 72036000p^{10}q^{10} - 72036000p^8q^{11} + 24205p^6q^{12} - 3300p^4q^{13} + 330q^{14}$ | $\alpha^{31} + \beta^{31} = p^{31} - 31p^{29}q + 341p^{27}q^2 - 3413p^{25}q^3 + 30003p^{23}q^4 - 200640p^{21}q^5 + 1200600p^{19}q^6 - 5491200p^{17}q^7 + 20064000p^{15}q^8 - 44739300p^{13}q^9 + 72036000p^{11}q^{10} - 72036000p^9q^{11} + 24205p^7q^{12} - 3413p^5q^{13} + 341q^{14}$ | $\alpha^{32} + \beta$ |
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|--|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|

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| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|

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| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
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| 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 | 2045 | 2046 | 2047 | 2048 | 2049 | 2050 | 2051 | 2052 | 2053 | 2054 | 2055 | 2056 | 2057 | 2058 | 2059 | 2060 | 2061 | 2062 | 2063 | 2064 | 2065 | 2066 | 2067 | 2068 | 2069 | 2070 | 2071 | 2072 | 2073 | 2074 | 2075 | 2076 | 2077 | 2078 | 2079 | 2080 | 2081 | 2082 | 2083 | 2084 | 2085 | 2086 | 2087 | 2088 | 2089 | 2090 | 2091 | 2092 | 2093 | 2094 | 2095 | 2096 | 2097 | 2098 | 2099 | 2100 | 2101 | 2102 | 2103 | 2104 | 2105 | 2106 | 2107 | 2108 | 2109 | 2110 | 2111 | 2112 | 2113 | 2114 | 2115 | 2116 | 2117 | 2118 | 2119 | 2120 | 2121 | 2122 | 2123 | 2124 | 2125 | 2126 | 2127 | 2128 | 2129 | 2130 | 2131 | 2132 | 2133 | 2134 | 2135 | 2136 | 2137 | 2138 | 2139 | 2140 | 2141 | 2142 | 2143 | 2144 | 2145 | 2146 | 2147 | 2148 | 2149 | 2150 | 2151 | 2152 | 2153 | 2154 | 2155 | 2156 | 2157 | 2158 | 2159 | 2160 | 2161 | 2162 | 2163 | 2164 | 2165 | 2166 | 2167 | 2168 | 2169 | 2170 | 2171 | 2172 | 2173 | 2174 | 2175 | 2176 | 2177 | 2178 | 2179 | 2180 | 2181 | 2182 | 2183 | 2184 | 2185 | 2186 | 2187 | 2188 | 2189 | 2190 | 2191 | 2192 | 2193 | 2194 | 2195 | 2196 | 2197 | 2198 | 2199 | 2200 | 2201 | 2202 | 2203 | 2204 | 2205 | 2206 | 2207 | 2208 | 2209 | 2210 | 2211 | 2212 | 2213 | 2214 | 2215 | 2216 | 2217 | 2218 | 2219 | 2220 | 2221 | 2222 | 2223 | 2224 | 2225 | 2226 | 2227 | 2228 | 2229 | 2230 | 2231 | 2232 | 2233 | 2234 | 2235 | 2236 | 2237 | 2238 | 2239 | 2240 | 2241 | 2242 | 2243 | 2244 | 2245 | 2246 | 2247 | 2248 | 2249 | 2250 | 2251 | 2252 | 2253 | 2254 | 2255 | 2256 | 2257 | 2258 | 2259 | 2260 | 2261 | 2262 | 2263 | 2264 | 2265 | 2266 | 2267 | 2268 | 2269 | 2270 | 2271 | 2272 | 2273 | 2274 | 2275 | 2276 | 2277 | 2278 | 2279 | 2280 | 2281 | 2282 | 2283 | 2284 | 2285 | 2286 | 2287 | 2288 | 2289 | 2290 | 2291 | 2292 | 2293 | 2294 | 2295 | 2296 | 2297 | 2298 | 2299 | 2300 | 2301 | 2302 | 2303 | 2304 | 2305 | 2306 | 2307 | 2308 | 2309 | 2310 | 2311 | 2312 | 2313 | 2314 | 2315 | 2316 | 2317 | 2318 | 2319 | 2320 | 2321 | 2322 | 2323 | 2324 | 2325 | 2326 | 2327 | 2328 | 2329 | 2330 | 2331 | 2332 | 2333 | 2334 | 2335 | 2336 | 2337 | 2338 | 2339 | 2340 | 2341 | 2342 | 2343 | 2344 | 2345 | 2346 | 2347 | 2348 | 2349 | 2350 | 2351 | 2352 | 2353 | 2354 | 2355 | 2356 | 2357 | 2358 | 2359 | 2360 | 2361 | 2362 | 2363 | 2364 | 2365 | 2366 | 2367 | 2368 | 2369 | 2370 | 2371 | 2372 | 2373 | 2374 | 2375 | 2376 | 2377 | 2378 | 2379 | 2380 | 2381 | 2382 | 2383 | 2384 | 2385 | 2386 | 2387 | 2388 | 2389 | 2390 | 2391 | 2392 | 2393 | 2394 | 2395 | 2396 | 2397 | 2398</ |
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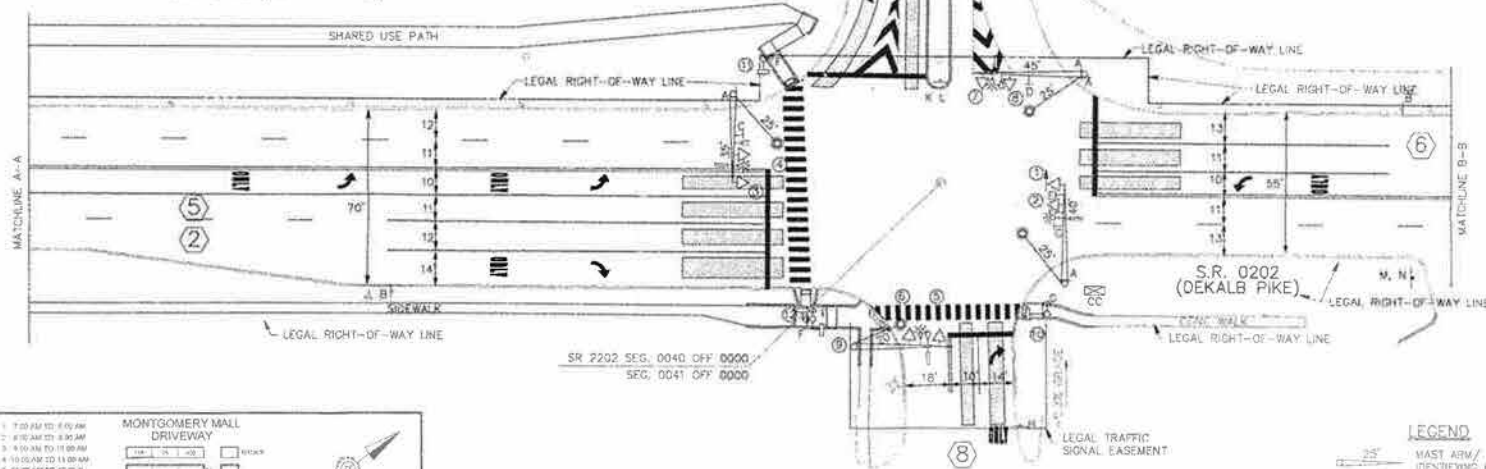
SIGN DETAILS

N.T.S.
D.D.3-4

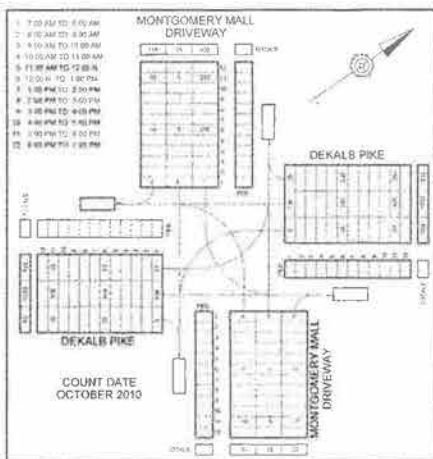


SEE DRAWING ON
PAGE 1 OF 2 FOR
ELEVATION

S.R. 2202 (DEKALB PIKE)



SR 2202 SEG. 0040 OFF 0000
SEG. 0041 OFF 0000



COUNT DATE
OCTOBER 2010

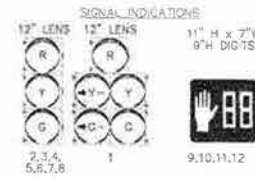
| PLAN SYMBOL | SERIES NUMBER | SIZE | DESCRIPTION |
|-------------|---------------|---------|---|
| A | R8-3 | 18"x18" | NO PEDESTRIAN CROSSING |
| B | R3-7L | 30"x30" | LEFT LANE MUST TURN LEFT |
| C | D3-4 | 96"x16" | MONTGOMERY MALL DR. |
| D | D3-4 | 96"x16" | DEKALB PIKE |
| E | R10-12 | 30"x30" | LEFT TURN YIELD ON GREEN |
| F | R10-3E(L) | 9"x15" | EDUCATIONAL PUSH BUTTON FOR WALKING PERSON, LEFT |
| G | R10-3E(R) | 9"x15" | EDUCATIONAL PUSH BUTTON FOR WALKING PERSON, RIGHT |
| H | R3-BALSR | 30"x30" | LANE USE SIGN, LEFT/STRAIGHT - RIGHT |
| J | R3-7R | 30"x30" | RIGHT LANE MUST TURN RIGHT |
| K | DM-1 | 18"x18" | OBJECT MARKER |
| L | R4-7 | 24"x30" | KEEP RIGHT |
| M | R3-9B | 36"x48" | CENTER LEFT TURN LANE |
| N | R3-9CP | 36"x18" | BEIGN PLAQUE |
| O | R3-6OP | 36"x18" | END PLAQUE |

GENERAL NOTES

- NO MODIFICATION OF THE INFORMATION ON THIS DRAWING IS TO BE MADE WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER.
- ALL SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, 2009 EDITION, SECTION 200.
- THE SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, 2009 EDITION, SECTION 200.
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LEGEND

- 25' - MAST ARM/IDENTIFYING LENGTH
- 18" - SIGNAL HEAD/IDENTIFYING NUMBER
- 18" - PEDESTRIAN SIGNAL HEAD/IDENTIFYING NUMBER
- 18" - PEDESTRIAN PUSHBUTTON/SIGN WITH IDENTIFYING LETTER
- 18" - SIGN/IDENTIFYING LETTER
- 18" - ZONE OF DETECTION
- 18" - EMERGENCY PRE-EMPTION BEACON
- 18" - EMERGENCY PRE-EMPTION DETECTOR
- 18" - VIDEO DETECTION
- 18" - CONTROLLER CABINET
- 18" - DEPRESSION CURB
- 18" - PHASE NUMBER
- 18" - LUMINAIRE/IDENTIFYING LENGTH
- 18" - FENCE
- 18" - SIGN WALL



SCALE IN FEET

SYSTEM REPORT # 10000

PROJECT: MONTGOMERY MALL DRIVEWAY

DATE: 10/10/10

BY: [Signature]

FOR: [Signature]

REVISIONS:

| NO. | DATE | DESCRIPTION |
|-----|----------|--------------------|
| 1 | 10/10/10 | ISSUED FOR BIDDING |

APPROVED:

DATE: 10/10/10

BY: [Signature]

October 28, 2015

Mr. Bruce S. Shoupe
Township Director of Planning and Zoning
Montgomery Township
1001 Stump Road
Montgomeryville, PA 18936-9605

Re: Proposed Burger King Expansion
Amended Waiver of Land Development Request
TPD# MOTO-A-00093

Dear Bruce:

In our role as Township Traffic/Street Lighting Engineer, Traffic Planning and Design, Inc. (TPD) has reviewed the Site Improvement Plans for the above referenced project, prepared by Bohler Engineering and dated January 21, 2015, last revised September 25, 2015.

The plans have been amended to remove a drive-through canopy and provide a 10 foot wide by-pass lane. With the revision made to the plans to provide a single exiting lane at the drive-through, TPD concurs with the design of the by-pass lane.

Additionally, TPD has reviewed the revised traffic signal permit plans for the intersections of DeKalb Pike and Montgomery Mall and DeKalb Pike and Bethlehem Pike. The revisions are found to be consistent with the left turn lane striping modifications proposed along DeKalb Pike. Upon satisfactorily addressing all PennDOT comments, the Applicant should provide a mylar copy of the traffic signal permit plan for signature by Montgomery Township.

We reserve the right to make additional comments as additional information is submitted. Please call if you have any questions.

Sincerely,



Kevin L. Johnson, P.E.
President

cc: Larry Gregan, Township Manager
Marita Stoerrle, Township Development Coordinator
Kevin Costello, Township Public Works Director
Russ Dunlevy, P.E., Township Engineer
Matthew Chartrand, P.E. – Bohler Engineering
Joseph Platt, P.E., TPD

MONTGOMERY TOWNSHIP BOARD OF SUPERVISORS
BOARD ACTION SUMMARY

SUBJECT: Consider Request to Approve Out of State Training– Department of Fire Services

MEETING DATE: November 9, 2015

ITEM NUMBER: #13.

MEETING/AGENDA:

ACTION XX

NONE

REASON FOR CONSIDERATION: Operational: XX Policy: Discussion: Information:

INITIATED BY: Richard M. Lesniak
Director of Fire Services

BOARD LIAISON: Robert J. Birch, Chairman
Liaison – Public Safety Committee

BACKGROUND:

In 1999, Pennsylvania adopted legislation that enacted the Uniform Construction Code (UCC). One aspect of the UCC is the requirement for inspectors to receive and maintain certification based on the type of work performed. Inspectors are required to complete 15 credit hours of continuing education credits in courses relating to the professional competency of code administration. An applicant with multiple certification areas must complete a minimum of 15 credit hours of continuing education credits for each certification but not more than 45 credit hours during each three year certification cycle.

Continuing education credit hours are offered through a variety of means including the attendance at meetings and courses. Most commonly, inspectors attend courses presented by the Pennsylvania Construction Codes Academy. The courses, ranging from one to five days, are held across the state and cost between \$25.00 and \$325.00.

Firefighter Robert Hedden currently holds three certifications in the State of Pennsylvania and has recently submitted an application for renewal of those certifications for a new three year cycle (2013 - 2016). He is requesting approval to take a course titled "2015 Mechanical and Fuel Gas Code" and "The Code and the Internet" courses to satisfy 16 of his required 45 Continuing Education credits. These courses are being offered on November 25, 2015 and December 3, 2015, respectively, through the New Jersey Center for Services at the Robert Wood Johnson Conference Center, Hamilton, NJ and Burlington County Emergency Service Training Center, Westampton, NJ. Courses offered through the Center for Government Services are offered free of charge.

ZONING, SUBDIVISION OR LAND DEVELOPMENT IMPACT:

None.

PREVIOUS BOARD ACTION:

None.

ALTERNATIVES/OPTIONS:

None.

BUDGET IMPACT:

None. There is no charge for courses taken at the NJ Training Center.

RECOMMENDATION:

It is recommended that authorization be given to allow Firefighter Hedden to attend the "2015 Mechanical and Fuel Gas Code" and "The Code and the Internet" on November 25, 2015 and December 3, 2015, respectively.

MOTION/RESOLUTION:

BE IT RESOLVED by the Board of Supervisors of Montgomery Township that we hereby authorize Firefighter Hedden to attend the "2015 Mechanical and Fuel Gas Code" and "The Code and the Internet" on November 25, 2015 and December 3, 2015, respectively, at the Robert Wood Johnson Conference Center, Hamilton, NJ and Burlington County Emergency Service Training Center, Westampton, NJ.

MOTION: _____ SECOND: _____

ROLL CALL:

| | | | | |
|------------------------|-----|---------|---------|--------|
| Robert J. Birch | Aye | Opposed | Abstain | Absent |
| Candyce Fluehr Chimera | Aye | Opposed | Abstain | Absent |
| Jeffrey W. McDonnell | Aye | Opposed | Abstain | Absent |
| Joseph P. Walsh | Aye | Opposed | Abstain | Absent |
| Michael J. Fox | Aye | Opposed | Abstain | Absent |

DISTRIBUTION: Board of Supervisors, Frank R. Bartle, Esq.

MONTGOMERY TOWNSHIP BOARD OF SUPERVISORS
BOARD ACTION SUMMARY

SUBJECT: Consider Approval of Out of State Training-Police Department

MEETING DATE: November 9, 2015

ITEM NUMBER: # 14.

MEETING/AGENDA: WORK SESSION

ACTION XX

NONE

REASON FOR CONSIDERATION: Operational: XX

Policy:

Discussion:

Information:

INITIATED BY: J. Scott Bendig Chief of Police

BOARD LIAISON: Michael J. Fox, Chairman

BACKGROUND:

The Montgomery Township Police Department continues to be one of only a handful of agencies in the area that conducts Drug Abuse Resistance Education (DARE) training. DARE is a police officer-led series of classroom lessons that teaches children at the elementary education level how to resist peer pressure and live productive drug and violence-free lives. This program is currently conducted at all elementary schools in Montgomery Township. Currently the Police Department has two officers teaching DARE in our three elementary schools.

In November of 2015, a DARE Instructor Training Program is being held at the Ocean County Police Academy in Lakewood, New Jersey. During the two week program DARE officers receive specialized instruction in public speaking, classroom management techniques, lesson planning, and team building. Officers also learn to teach the DARE curriculum, presenting a mock lesson to instructors prior to completion of the program. Officer Robert Johnson and Detective Ricardo DeJesus have been chosen to attend this training.

ZONING, SUBDIVISION OR LAND DEVELOPMENT IMPACT:

None.

PREVIOUS BOARD ACTION:

None.

ALTERNATIVES/OPTIONS:

None.

BUDGET IMPACT:

There is no cost for the training, training materials and supplies. Funds will be needed for meals and accommodations. Funding for this training is available in the 2015 Approved Final Budget-Police Meetings and Conferences.

RECOMMENDATION:

Approve the out of state training request for Officer Robert Johnson and Detective Ricardo DeJesus.

MOTION/RESOLUTION:

BE IT RESOLVED by the Board of Supervisors of Montgomery Township that we hereby approve the request for Officer Robert Johnson and Detective Ricardo DeJesus to attend DARE training at the Ocean County Police Academy in Lakewood, New Jersey.

MOTION: _____ SECOND: _____

ROLL CALL:

| | | | | |
|------------------------|-----|---------|---------|--------|
| Robert J. Birch | Aye | Opposed | Abstain | Absent |
| Candyce Fluehr Chimera | Aye | Opposed | Abstain | Absent |
| Jeffrey W. McDonnell | Aye | Opposed | Abstain | Absent |
| Joseph P. Walsh | Aye | Opposed | Abstain | Absent |
| Michael J. Fox | Aye | Opposed | Abstain | Absent |

DISTRIBUTION: Board of Supervisors, Frank R. Bartle, Esq.

MONTGOMERY TOWNSHIP BOARD OF SUPERVISORS
BOARD ACTION SUMMARY

SUBJECT: Consider Authorization to Advertise Proposed Ordinance #15-290 – Montgomery County Financing for Purchase of Radios

MEETING DATE: November 9, 2015

ITEM NUMBER: # 15.

MEETING/AGENDA: ACTION XX

NONE

REASON FOR CONSIDERATION: Operational: xx Policy: Discussion: Information:

INITIATED BY: Lawrence J. Gregan, Township Manager

BOARD LIAISON: Robert J. Birch, Supervisor
Liaison – Public Safety Committee

BACKGROUND:

In July the Board authorized the Township's participation in a County program allowing first responders throughout the County to purchase portable and mobile radios for emergency communications under the County's new radio system.

To help reduce the financial burden resulting from the purchase of the new radios, the Montgomery County Commissioners arranged with the Delaware Valley Regional Finance Authority (DVRFA) to allow municipalities to borrow funds through the County to cover the costs of the new radios with repayment of the principal of those loans over a five-year period. Under this financing arrangement, the County will pay the interest and administrative costs for the loans.

The financing program was extended to any fire company, EMS squad or other agency so long as the purchase was made through a sponsoring municipality that would be responsible for repayment. The Department of Fire Services/Office of Emergency Management, Montgomery Township Police Department, Fire Department of Montgomery Township, and Volunteer Medical Service Corps – Lansdale (VMSC) have submitted their purchase requirements to the County which total \$536,651.72

In order to move forward with the purchase it is necessary for the Township to adopt an Ordinance authorizing the Township to borrow the funds through the issuance of a Promissory Note with Montgomery County. In conjunction with the adoption of this ordinance, the Township will enter into separate loan agreements with FDMT and VMSC to secure their obligation for repayment of their share of the loan to the Township.

Attached is Proposed Ordinance #15 – 290 to authorize the issuance of the Promissory Note with Montgomery County which Ordinance is proposed to be considered for adoption at the November 23, 2015 Board of Supervisors Meeting.

ZONING, SUBDIVISION OR LAND DEVELOPMENT IMPACT:

None.

PREVIOUS BOARD ACTION:

None.

ALTERNATIVES/OPTIONS:

None.

BUDGET IMPACT:

The annual Debt Service payment for the full loan will be \$107,330.34. FDMT will be responsible for annual payments in the amount of \$32,745.81 and VMSC will be responsible for annual payments in the amount of \$34,015.03. The balance of the debt payment will be from funds set aside in the Township's Capital Reserve fund for this purchase.

RECOMMENDATION:

It is recommended that the Board of Supervisors authorize the advertisement of Proposed Ordinance - #15 -290 authorizing the borrowing by the Township from Montgomery County in the principal amount of \$536,651.72 with the Proposed Ordinance scheduled for consideration at the Board of Supervisors Meeting on November 23, 2015.

MOTION/RESOLUTION:

BE IT RESOLVED by the Board of Supervisors of Montgomery Township that we hereby authorize the advertisement of Proposed Ordinance #15 -290 authorizing the borrowing by the Township from Montgomery County in the principal amount of \$536,651.72 with the Proposed Ordinance scheduled for consideration at the Board of Supervisors Meeting on November 23, 2015.

MOTION: _____ SECOND: _____

ROLL CALL:

| | | | | |
|------------------------|-----|---------|---------|--------|
| Robert J. Birch | Aye | Opposed | Abstain | Absent |
| Candyce Fluehr Chimera | Aye | Opposed | Abstain | Absent |
| Jeffrey W. McDonnell | Aye | Opposed | Abstain | Absent |
| Joseph P. Walsh | Aye | Opposed | Abstain | Absent |
| Michael J. Fox | Aye | Opposed | Abstain | Absent |

DISTRIBUTION: Board of Supervisors, Frank R. Bartle, Esq.

MONTGOMERY TOWNSHIP

ORDINANCE #15-290

AN ORDINANCE THAT APPROVES CERTAIN CAPITAL PROJECTS; AUTHORIZES A BORROWING BY MONTGOMERY TOWNSHIP (THE "TOWNSHIP") FROM MONTGOMERY COUNTY (THE "COUNTY") AND THE ISSUANCE OF A PROMISSORY NOTE, 2015 SERIES (THE "2015 NOTE"), IN THE MAXIMUM PRINCIPAL AMOUNT OF \$536,651.72; APPROVES THE SUBSTANTIAL FORM OF THE 2015 NOTE AND APPROVES THE EXECUTION OF THE 2015 NOTE AND DELIVERY OF THE 2015 NOTE TO THE COUNTY; AUTHORIZES EXECUTION AND DELIVERY OF ALL OTHER NECESSARY DOCUMENTS; STATES THE AMORTIZATION SCHEDULE FOR THE 2015 NOTE; STATES THAT THE TOWNSHIP IS OBLIGATED TO MAKE PAYMENTS ON THE 2015 NOTE ONLY FROM FUNDS IF AND TO THE EXTENT APPROPRIATED FOR THE THEN CURRENT FISCAL YEAR OF THE TOWNSHIP; AUTHORIZES ANY PAYMENTS MADE ON THE 2015 NOTE TO BE MADE AS DIRECTED BY THE DELAWARE VALLEY REGIONAL FINANCE AUTHORITY WHICH HAS BEEN APPOINTED AS COLLECTION AGENT FOR THE COUNTY; AUTHORIZES ADVERTISEMENT OF ENACTMENT; AND REPEALS INCONSISTENT ORDINANCES.

ENACTED: _____

MONTGOMERY TOWNSHIP

ORDINANCE #15- 290

AN ORDINANCE THAT APPROVES CERTAIN CAPITAL PROJECTS; AUTHORIZES A BORROWING BY MONTGOMERY TOWNSHIP (THE "TOWNSHIP") FROM MONTGOMERY COUNTY (THE "COUNTY") AND THE ISSUANCE OF A PROMISSORY NOTE, 2015 SERIES (THE "2015 NOTE"), IN THE MAXIMUM PRINCIPAL AMOUNT OF \$536,651.72; APPROVES THE SUBSTANTIAL FORM OF THE 2015 NOTE AND APPROVES THE EXECUTION OF THE 2015 NOTE AND DELIVERY OF THE 2015 NOTE TO THE COUNTY; AUTHORIZES EXECUTION AND DELIVERY OF ALL OTHER NECESSARY DOCUMENTS; STATES THE AMORTIZATION SCHEDULE FOR THE 2015 NOTE; STATES THAT THE TOWNSHIP IS OBLIGATED TO MAKE PAYMENTS ON THE 2015 NOTE ONLY FROM FUNDS IF AND TO THE EXTENT APPROPRIATED FOR THE THEN CURRENT FISCAL YEAR OF THE TOWNSHIP; AUTHORIZES ANY PAYMENTS MADE ON THE 2015 NOTE TO BE MADE AS DIRECTED BY THE DELAWARE VALLEY REGIONAL FINANCE AUTHORITY WHICH HAS BEEN APPOINTED AS COLLECTION AGENT FOR THE COUNTY; AUTHORIZES ADVERTISEMENT OF ENACTMENT; AND REPEALS INCONSISTENT ORDINANCES.

WHEREAS, Montgomery Township (the "Township") is a second class township and a local government unit of the Commonwealth of Pennsylvania (the "Commonwealth"); and

WHEREAS, Montgomery County (the "County") has entered into a Bulk Purchasing Agreement with Motorola Solutions, Inc. ("Motorola") with respect to emergency radio equipment and services; and

WHEREAS, the County has made available to municipalities within the County, the ability to purchase from Motorola emergency radio equipment at a discount, and has further agreed to provide an interest-free loan (the "Loan") from funds borrowed by the County from the Delaware Valley Regional Finance Authority ("DelVal") to any municipality that desires to purchase such emergency radio equipment through the County-arranged Bulk Purchasing Agreement; and

WHEREAS, the Township desires to receive the Loan from the County and issue a Promissory Note, Series 2015 (the "2015 Note") to the County to evidence its obligations under the Loan in order to: (i) purchase certain radio equipment and services for the Township police, fire and emergency personnel; and (ii) pay the costs of issuance incurred by the Township in connection with the Bulk Purchasing Agreement and the 2015 Note (collectively, the "2015 Project"); and

WHEREAS, the payments due on the 2015 Note are subject to annual appropriation by the Township, will not constitute a debt or general obligation of the Township and will be a current expense solely payable from funds appropriated and lawfully available for such use during the then current fiscal year of the Township; and

WHEREAS, the 2015 Project will benefit the health and welfare of the residents of the Township; and

WHEREAS, the 2015 Project shall be for the benefit and use of the general public, and no private party shall have any special legal entitlement to the beneficial use of the 2015 Project, through a lease, management contract, or any other arrangement that would result in a private business use under the *Internal Revenue Code of 1986*, as amended; and

NOW, THEREFORE, BE IT ORDAINED AND ENACTED BY THE MONTGOMERY TOWNSHIP BOARD OF SUPERVISORS, AND IT IS HEREBY ORDAINED AND ENACTED BY THE AUTHORITY OF SAID BOARD OF SUPERVISORS THAT:

SECTION 1. APPROVAL OF THE 2015 PROJECT AND AUTHORIZATION TO ISSUE THE 2015 NOTE

The Montgomery Township Board of Supervisors (the "Board") hereby authorizes and approves the 2015 Project. The Board hereby authorizes and approves the Loan from the County in the maximum principal amount of \$536,651.72 as evidenced by the issuance of the 2015 Note.

SECTION 2. APPROVAL OF THE FORM OF THE 2015 NOTE AND AUTHORIZATION TO EXECUTE AND DELIVER ALL NECESSARY DOCUMENTS

The substantial form of the 2015 Note attached hereto as Exhibit A is hereby approved. The Chairman of the Board and the Secretary (collectively, the "Authorized Officers") are hereby authorized and directed to execute and deliver the 2015 Note, in the substantial form attached hereto, but with such alterations, deletions and additions as the Authorized Officers may approve (such approval to be conclusively established by the execution of the 2015 Note by the Authorized Officers). The Authorized Officers also are hereby authorized and directed (i) to execute and deliver such other certificates, instruments, and agreements (including those required by DelVal or otherwise related to the 2015 Note) and (ii) to take all actions that may be necessary or beneficial to issue the 2015 Note.

SECTION 3. AMORTIZATION SCHEDULE

The indebtedness of the 2015 Note shall be a current expense subject to annual appropriation by the Township and payable solely from funds lawfully available for such use during the then current fiscal year of the Township and shall be evidenced by the 2015 Note in the maximum principal amount of \$536,651.72. The 2015 Note shall not bear interest. The 2015 Note shall be subject to optional redemption by the Township as set forth in the 2015 Note. The amortization schedule of the principal payments under the 2015 Note (the "Loan Principal") are shown below:

| <u>Payment Date</u> | <u>Payment Amount</u> |
|---------------------|-----------------------|
| January 25, 2016 | \$107,330.34 |
| January 25, 2017 | \$107,330.34 |
| January 25, 2018 | \$107,330.34 |
| January 25, 2019 | \$107,330.35 |
| January 25, 2020 | \$107,330.35 |

SECTION 4. CURRENT EXPENSE

Payments due on the 2015 Notes are a current expense, subject to annual appropriation by the Township, payable solely from funds lawfully available to

the Township for such purpose during the then current fiscal year of the Township. The obligations of the Township to pay the Loan Principal under the 2015 Note (and any other sums due thereunder) do not constitute a lien or charge upon the funds of the Township beyond the fiscal year for which the Township has appropriated money to pay the Loan Principal (and any other sums due thereunder) and that the obligations of the Township under the 2015 Note do not constitute a debt or general obligation of the Township. Neither the full faith and credit nor the taxing power of the Township or of any other political subdivision of the Commonwealth has been or will be pledged to the payment of the Loan Principal (and any other sums due thereunder).

SECTION 5. ACH DEBIT AUTHORIZATION

The Township hereby authorizes payments on the 2015 Note to be made by ACH Debit Authorization to Wells Fargo Bank, N.A., acting as co-Trustee for DelVal, the collection agent of the County with respect to the 2015 Note. The Authorized Officers are hereby authorized and directed to execute and deliver the ACH Debit Authorization form, the IRS Form W-9, and such other certificates, instruments, and agreements as may be required for purposes of making payments on the 2015 Note.

SECTION 6. CONFLICTING ORDINANCES

All Ordinances or parts of Ordinances not in accord with this Ordinance are hereby repealed insofar as they conflict herewith.

IN WITNESS WHEREOF, we, the undersigned Authorized Officers, have hereunto set our signatures and affixed hereto the Seal of Montgomery Township, Montgomery County, Pennsylvania.

Dated: _____, 2015

MICHAEL J. FOX, *Chairman*

[Seal]

ATTEST:

LAWRENCE J. GREGAN, *Secretary*

EXHIBIT A

Form of 2015 Note

\$536,651.72

MONTGOMERY TOWNSHIP,

PROMISSORY NOTE, 2015 SERIES

MONTGOMERY TOWNSHIP (the "Borrower"), existing by and under the laws of the Commonwealth of Pennsylvania, for value received, hereby acknowledges itself indebted and promises to pay to the order of **MONTGOMERY COUNTY, PENNSYLVANIA**, a county of the second class A, its successors and assigns (the "County"), in lawful money of the United States of America, the principal amount of **\$536,651.72**, without interest, on the dates and in the amounts set forth on **Schedule A** attached hereto (the "Borrower Note").

This Borrower Note evidences the payment obligation of the Borrower to repay the loan (the "Loan") made by the County to the Borrower on the date hereof for the purposes of: (i) purchasing certain radio equipment and services for the Borrower police, fire and emergency personnel; and (ii) paying of costs of issuance incurred by the County in making the Loan or by the Borrower in connection with this Borrower Note (collectively, the "2015 Project").

The Borrower hereby certifies that all of the proceeds of the Loan will be used solely for payment of the costs of the 2015 Project and not for any other purpose. The County shall have no obligation to provide any additional amounts to the Borrower, whether by loan or otherwise, for the costs of the 2015 Project if the proceeds of this Borrower Note are not sufficient to pay all the costs of the 2015 Project, and all such costs shall be paid by the Borrower. The Borrower shall not be entitled to any reimbursement, abatement, diminution or postponement of the repayments of the principal amount of this Borrower Note if the Borrower cannot fund all of the costs of the 2015 Project.

The amounts payable under this Borrower Note are payable in immediately available funds on or before the 25th day of January of each year, commencing 2016, at the corporate trust office of Wells Fargo Bank, N.A. (the "Trustee"), account number _____, or any other account, designated by the Delaware Valley Regional Finance Authority ("DelVal"), which the County has appointed as the collection agent for payments due to the County hereunder. The Borrower agrees to execute an authorization for Wells Fargo Bank, N.A. to use the Automated Clearing House (the "ACH") System, or any successor to the ACH System that may be used by financial institutions in the future, to collect amounts payable hereunder.

The amounts payable under this Borrower Note are payable without deduction for any tax or taxes now or hereafter levied, or assessed thereon under any present or future laws of the Commonwealth of Pennsylvania, all of which taxes the Borrower assumes and agrees to pay.

This Borrower Note is issued pursuant to Montgomery Township Ordinance #15- 290 duly enacted on November 23, 2015.

The Borrower represents that it is a second class township of the Commonwealth of Pennsylvania and has all requisite power and authority to own and operate its properties, to carry on its activities as now conducted and as presently proposed to be conducted, to execute and deliver this Borrower Note and to carry out and consummate the 2015 Project. The execution and delivery of this Borrower Note and all other documents and instruments and the consummation of the 2015 Project and compliance by the Borrower with the provisions hereof, have been duly authorized, executed and delivered by the Borrower and constitute valid and binding obligations of the Borrower, enforceable against the Borrower in accordance with their respective terms.

The Borrower hereby certifies that all acts, conditions and things required by the laws of the Commonwealth of Pennsylvania to exist, to have happened or to have been performed, precedent to or in the issuance of this Borrower Note or in the creation of the obligation of which this Borrower Note is evidence, exist, have happened and have been performed in regular and due form and manner as required by law, and the Borrower is in compliance with all laws, ordinances, resolutions, governmental rules and regulations to which it is subject.

THE BORROWER AND THE COUNTY EACH ACKNOWLEDGE AND AGREE THAT PAYMENT OF THIS BORROWER NOTE IS SUBJECT TO ANNUAL APPROPRIATION OF FUNDS BY THE BORROWER FOR SUCH PURPOSE AND THAT THE BORROWER IS OBLIGATED TO MAKE PAYMENTS UNDER THIS BORROWER NOTE ONLY FROM FUNDS IF AND TO THE EXTENT APPROPRIATED FOR THE THEN CURRENT FISCAL YEAR OF THE BORROWER. THE OBLIGATION OF THE BORROWER TO MAKE PAYMENTS UNDER THIS BORROWER NOTE IS A CURRENT EXPENSE, PAYABLE SOLELY FROM FUNDS LAWFULLY AVAILABLE FOR SUCH USE DURING THE THEN CURRENT FISCAL YEAR OF THE BORROWER. THIS BORROWER NOTE AND THE OBLIGATIONS OF THE BORROWER HEREUNDER DO NOT CONSTITUTE A LIEN OR A CHARGE UPON THE FUNDS OF THE BORROWER BEYOND THE FISCAL PERIOD FOR WHICH THE BORROWER HAS APPROPRIATED MONEY TO MAKE SUCH PAYMENTS. THIS BORROWER NOTE AND THE OBLIGATIONS OF THE BORROWER HEREUNDER DO NOT AND WILL NOT CONSTITUTE A DEBT OR GENERAL OBLIGATION OF THE BORROWER.

This Borrower Note may be prepaid, in whole or in part, on the 25th day of each month (or if not a Business Day (hereinafter defined) the next date that is a Business Day) commencing January 25, 2018, upon not less than thirty (30) days prior written notice (the "Prepayment Notice") to the County and DelVal at the addresses provided by such parties. The Prepayment Notice shall specify (i)

the amount to be prepaid; (ii) if a partial prepayment, the maturities or installments of the Loan to which such prepayment is to be applied, which shall be in inverse order of maturities or installments; and (iii) the date of the prepayment. No prepayment shall postpone the next installments of principal becoming due under this Borrower Note. The Borrower may withdraw a Prepayment Notice at any time at no penalty. Any partial prepayment shall not operate to abate or postpone repayments otherwise becoming due.

“Business Day” shall mean any day other than (a) a Saturday or Sunday, (b) a day on which commercial banks in New York, New York, or the city or cities in which the corporate trust office of the Trustee is authorized by law or executive order to close or (c) a day on which the New York Stock Exchange is closed.

It shall constitute an “Event of Default” hereunder if the Borrower fails to make any payment due hereunder after such payment due hereunder has been appropriated for in its annual budget.

If an Event of Default shall have occurred and be continuing, the County may declare all amounts due under this Borrower Note due and payable and may pursue any and all remedies now or hereafter existing at law or in equity to collect all amounts then due and thereafter to become due under this Borrower Note.

No remedy conferred upon or reserved to the County is intended to be exclusive of any other available remedy or remedies, but each and every such remedy shall be cumulative and shall be in addition to every other remedy given under this Borrower Note, or now or hereafter existing at law or in equity. No delay or omission to exercise any right or power accruing upon any default shall impair that right or power or shall be construed to be a waiver thereof, but any such right and power may be exercised from time to time and as often as may be deemed expedient. In order to entitle the County to exercise any remedy reserved to it herein, it shall not be necessary to give any notice, other than any notice required by law or for which express provision is made herein.

If an Event of Default should occur and the County should incur expenses, including attorneys’ fees and expenses, in connection with the enforcement of this Borrower Note or the collection of sums due hereunder, the Borrower shall reimburse the County for the expenses so incurred, upon demand.

No failure by the County to insist upon the strict performance by the Borrower of any provision hereof shall constitute a waiver of their right to strict performance and no express waiver shall be deemed to apply to any other existing or subsequent right to remedy the failure by the Borrower to observe or comply with any provision hereof.

No covenant or agreement contained in this Borrower Note shall be deemed to be the covenant or agreement of any officer, agent or employee of the Borrower in his or her individual capacity, and no official executing this Borrower Note shall be liable personally on this Borrower Note or be subject to any personal liability or accountability by reason of the issuance of this Borrower Note.

This Borrower Note may not be amended, modified, terminated or assigned by the Borrower without, in each case, the written consent of the County.

This Borrower Note and all matters arising hereunder shall be governed by and construed in accordance with the laws of the Commonwealth of Pennsylvania.

[Signature Page Follows]

IN WITNESS WHEREOF, we, the undersigned authorized officials, have hereunto set our signatures and affixed hereto the Seal of Montgomery Township, Montgomery County, Pennsylvania.

Dated: _____, 2015

MICHAEL J. FOX, *Chairman*

[Seal]

ATTEST:

LAWRENCE J. GREGAN, *Secretary*

Schedule A

**Montgomery Township
Promissory Note, 2015 Series
Principal Amortization Schedule**

| <u>Payment Date</u> | <u>Payment Amount</u> |
|----------------------------|------------------------------|
| January 25, 2016 | \$107,330.34 |
| January 25, 2017 | \$107,330.34 |
| January 25, 2018 | \$107,330.34 |
| January 25, 2019 | \$107,330.35 |
| January 25, 2020 | \$107,330.35 |

MONTGOMERY TOWNSHIP BOARD OF SUPERVISORS
BOARD ACTION SUMMARY

SUBJECT: Consider the Establishment the Community & Recreation Center Advisory Committee & Approval of Bylaws.

MEETING DATE: November 9, 2015

ITEM NUMBER: #16.

MEETING/AGENDA:

ACTION

NONE

REASON FOR CONSIDERATION: Operational: xx Policy: Discussion: Information:

INITIATED BY: Lawrence J. Grogan
Township Manager

BOARD LIAISON: Michael J. Fox, Board Chairman

BACKGROUND:

With the opening of the Community and Recreation Center, it is proposed that the Board of Supervisors form a Community and Recreation Center Advisory Committee. This Committee would be able to assist with identifying the needs of the Community and Recreation Center, recommend activities & programming, and recommend plans and policies regarding the programs and services of the Community and Recreation Center.

This Committee would meet on a monthly basis. The Recreation and Community Center Director will serve as Staff Liaison for the Committee. Attached is a set of proposed bylaws that would govern the activities of the Committee. An open question for consideration is the number of members that will serve on the Committee.

ZONING, SUBDIVISION OR LAND DEVELOPMENT IMPACT:

None.

PREVIOUS BOARD ACTION:

None.

ALTERNATIVES/OPTIONS:

None.

BUDGET IMPACT:

None.

RECOMMENDATION:

It is recommended that the Board of Supervisors approve the formation of the Community and Recreation Center Advisory Committee and approve the Bylaws for governing the Committee.

MOTION/RESOLUTION:

BE IT RESOLVED by the Board of Supervisors of Montgomery Township that we hereby approve the formation of the Community and Recreation Center Advisory Committee

FURTHERMORE BE IT RESOLVED, that the Board approves the Community and Recreation Center Advisory Committee Bylaws that will govern the responsibilities and duties of the Committee.

MOTION: _____ SECOND: _____

ROLL CALL:

| | | | | |
|------------------------|-----|---------|---------|--------|
| Robert J. Birch | Aye | Opposed | Abstain | Absent |
| Candyce Fluehr Chimera | Aye | Opposed | Abstain | Absent |
| Jeffrey W. McDonnell | Aye | Opposed | Abstain | Absent |
| Joseph P. Walsh | Aye | Opposed | Abstain | Absent |
| Michael J. Fox | Aye | Opposed | Abstain | Absent |

DISTRIBUTION: Board of Supervisors, Frank R. Bartle, Esq.

MONTGOMERY TOWNSHIP

COMMUNITY AND RECREATION CENTER ADVISORY COMMITTEE

BYLAWS

A. AUTHORIZATION

The Montgomery Township Community and Recreation Center Advisory Committee was formally established (Resolution# [INSERT]) by the Board of Supervisors of Montgomery Township on [INSERT], 2015

B. PURPOSE

The purpose of the Community and Recreation Center Advisory Committee is to help identify the needs of the Community and Recreation Center. The Committee's goals include recommending recreational activities and programming as well as recommending plans and policies regarding the programs and services of the Community and Recreation Center.

The Community and Recreation Center Advisory Committee shall also perform other duties and responsibilities as directed by the Supervisors.

C. MEMBERSHIP

The Committee shall consist of [REDACTED] residents of Montgomery Township. All members shall be appointed by the Supervisors. All members shall have voting rights.

Staff may serve as a liaison to the Committee. A member of the Supervisors may also serve as liaison to the Committee. Only Resident Committee Members shall have voting rights. Neither the Staff liaison, nor the Supervisor liaison shall have voting rights.

Members shall attend regularly scheduled meetings and actively participate discussions, particularly those requiring consensus Committee recommendations.

After three consecutive absences, without reasonable excuse, the Supervisors shall declare that the Committee member has been derelict and /neglectful and his/her seat vacant and appoint another member to the Committee. The Chairman of the Committee shall be responsible for reporting the attendance of all meetings, in writing, to the Township Manager.

An agenda will be distributed to the Committee Members prior to each meeting. Committee Members are expected to prepare in advance for all meetings, including reading of agenda packet materials.

D. TERMS

Members of the Committee shall be appointed by the Supervisors to serve one-year term from the first meeting of the Supervisors in January to the first meeting of the Supervisors in January of the subsequent year. At the expiration of the term of any Committee member, the Supervisors shall appoint a successor. A Committee member may be reappointed annually by the Supervisors.

A copy of the By-laws shall be presented to and acknowledged by the member at the time of appointment.

The position of any member of the Committee residing within the Township at the time of appointment who thereafter moves his/her residence from the Township shall automatically become vacant. An appointment to fill a vacancy shall be only for the unexpired portion of the term.

E. OFFICERS

Officers shall be elected at the first meeting in January. Officers will serve for one year and until their successors have been duly elected and qualified. Rotation of officers among the members is strongly recommended.

The officers of the Committee shall consist of:

- Chairman: The Chairman shall preside at meetings of the Committee and perform all other duties required by law and these bylaws.
- Vice-Chairman: The Vice-Chairman shall preside at meetings of the Committee in the absence of the Chairman.

A staff representative shall prepare the agenda and record the minutes of regular and special meetings under the direction of the Chairman, provide notice of all meetings to Committee members, attend to correspondence of the Committee, and such other duties as are normally carried out by a staff representative. In the absence of the staff liaison, the Vice-Chairman shall assume the duties associated with the staff liaison, as detailed within this section.

F. CONFLICTS OF INTEREST

Members shall not participate in matters in which they have a direct or indirect financial interest.

Members shall also refrain from any use of their membership that gives the appearance of being motivated by a desire for private gain.

Members are not permitted to submit a proposal for services on their behalf or on their employer's behalf.

Members are required to disclose any possible conflicts of interest to a Chairman or Board Liaison immediately and shall recuse themselves from discussion or voting on the item.

G. MEETINGS

The Supervisors recommend that the Committee meet on the [INSERT] of every month, but meetings can be bimonthly or quarterly depending upon the Board's work load.

All regular and special meetings of the Committee shall be scheduled, advertised, and conducted in accordance with the requirements of the provisions of the Pennsylvania Sunshine Act. The schedule of the regular monthly meetings shall be advertised annually by the Township Manager in accordance with the requirements of Pennsylvania law.

A quorum of the Committee shall consist of a simple majority of the appointed non-staff members and no action of the Committee shall be valid unless taken at a duly convened public meeting at which a quorum is present and a majority of those present vote in concurrence therewith. Any vote of any member required to abstain by reason of a conflict of interest shall not be counted and the presence of a member with such conflict shall not be included for purposes of determining the presence of a quorum.

The minutes shall include all motions presented to the Committee, including the vote tally, for and against a motion, listing the number of Resident Committee Member votes. The Chairman will deliver all recommendations to the Supervisors.

Meetings are advertised and open to the public. Executive sessions can be conducted as are authorized by Pennsylvania law. Minutes of the meeting shall be prepared and forwarded to all members of the Committee prior to the date of any scheduled meeting. In all matters of parliamentary procedure not specifically governed by the bylaws, Roberts Rules of Order shall prevail.

A special meeting may be called by the Chairman or by the Township Manager upon appropriate compliance with the provisions of Pennsylvania law.

H. RULES AND REGULATIONS

All members of the Committee are required to follow the rules, regulations and procedures as set forth by the Township with respect to, but not limited to, ordinances,

resolutions and adopted policies.

All members of the Committee must comply with state and federal laws.

I. CONDUCT AND PERFORMANCE

The Township has certain expectations for volunteer conduct and performance. When behavior and performance falls below these expectations, a Committee Member may be relieved of his/her advisory position. The Committee Chairman is responsible for the conduct and performance of Committee Members. At least on an annual basis, the Committee Chairman is responsible for evaluating the conduct and performance of all Committee Members. The Committee Chairmen shall ensure that the Township Manager is forwarded copies of these evaluations. Decisions to relieve Committee Members of their appointments shall be made by the Supervisors, in accordance with applicable law.

The Township's Rules of Conduct at all regular and special meetings of the Committee shall apply to all matters under consideration by the Committee except for ceremonial matters and are as follows:

1. Committee Members shall treat staff members, each other and members of the public with respect and courtesy.
2. Disagreements shall not result in personal comments or attacks against a staff member, another Committee member, or members of the public.
3. When any Committee member is recognized to speak at a Committee meeting, the Board member shall address the Chair.
4. When two or more members address the Chair at the same time, the Chair shall name the member who is to be the first to speak.
5. When speaking, a member shall confine his or her remarks to the topic under debate or discussion.

Participation by members of the public shall be governed by the Township's Guidelines for Public Participation in Board of Supervisors meetings. As is noted in those Guidelines, members of the public are asked to refrain from making personal attacks or statements about Committee members, other members of the public or Township staff. Members of the public shall treat Committee members, staff members and each other with respect and courtesy.

J. AMENDMENTS

Amendments to these bylaws may be adopted revised or replaced by a majority vote of the Supervisors, following a recommendation by the Township Staff or the Committee.

K. REPEALER

Any bylaws that previously may have been adopted and approved for the Committee are hereby repealed.

Board of Supervisors Chairman

Committee Representative

Date

Date

MONTGOMERY TOWNSHIP BOARD OF SUPERVISORS
BOARD ACTION SUMMARY

SUBJECT: Consider Payment of Bills for November 9, 2015

MEETING DATE: November 9, 2015 ITEM NUMBER: # 17.

MEETING/AGENDA: WORK SESSION ACTION XX NONE

REASON FOR CONSIDERATION: Operational: XX Information: Discussion: Policy:

INITIATED BY: Lawrence J. Gregan
Township Manager

BOARD LIAISON: Michael J. Fox, Chairman
of the Board of Supervisors

BACKGROUND:

Please find attached a list of the November 9, 2015 bills for your review.

ZONING, SUBDIVISION OR LAND DEVELOPMENT IMPACT:

None.

PREVIOUS BOARD ACTION:

None.

ALTERNATIVES/OPTIONS:

None.

BUDGET IMPACT:

None.

RECOMMENDATION:

Approval all bills as presented.

MOTION/RESOLUTION:

None.

DISTRIBUTION: Board of Supervisors, Frank R. Bartle, Esq.

| Check Date | Bank | Check | Vendor | Vendor Name | Amount | |
|--------------------------|------|-------|-----------|-------------------------------------|------------|---|
| Bank 01 UNIVEST CHECKING | | | | | | |
| 11/06/2015 | 01 | 3(S) | 00000161 | EUREKA STONE QUARRY, INC. | 0.00 | |
| 10/27/2015 | 01 | 62422 | 00001663 | FIRE DEPARTMENT OF MONTGOMERY | 181,959.48 | |
| 10/27/2015 | 01 | 62423 | 00906141 | MONTGOMERYVILLE INVESTORS, LP | 35,000.00 | |
| 10/27/2015 | 01 | 62424 | 00001394 | STANDARD INSURANCE COMPANY | 7,584.54 | |
| 10/30/2015 | 01 | 62425 | 00000031 | AT&T | 187.23 | |
| 10/30/2015 | 01 | 62426 | 00000209 | BOUCHER & JAMES, INC. | 15,177.89 | |
| 10/30/2015 | 01 | 62427 | 00000085 | CHAMBERS ASSOCIATES, INC. | 722.80 | |
| 10/30/2015 | 01 | 62428 | 00000125 | DISCHELL, BARTLE DOOLEY | 29,614.25 | |
| 10/30/2015 | 01 | 62429 | 00000125 | VOID | 0.00 | V |
| 10/30/2015 | 01 | 62430 | 00001520 | DVIT - DELAWARE VALLEY INSURANCE | 173,317.16 | |
| 10/30/2015 | 01 | 62431 | 00002082 | ECOMM TECHNOLOGIES | 711.25 | |
| 10/30/2015 | 01 | 62432 | 00000015 | SPRINT | 417.38 | |
| 10/30/2015 | 01 | 62433 | 00001847 | STAPLES CONTRACT & COMMERCIAL, INC. | 68.25 | |
| 10/30/2015 | 01 | 62434 | 00000040 | VERIZON | 238.68 | |
| 11/04/2015 | 01 | 62435 | 00000363 | COMCAST | 415.04 | |
| 11/06/2015 | 01 | 62436 | 00000496 | 21ST CENTURY MEDIA NEWSPAPERS LLC | 479.92 | |
| 11/06/2015 | 01 | 62437 | 00000006 | ACME UNIFORMS FOR INDUSTRY | 360.73 | |
| 11/06/2015 | 01 | 62438 | 00000340 | ADVENT SECURITY CORPORATION | 515.58 | |
| 11/06/2015 | 01 | 62439 | MISC-FIRE | ALEXANDER J DEANGELIS | 75.00 | |
| 11/06/2015 | 01 | 62440 | 00000553 | AMERICAN PUBLIC WORKS ASSOC. | 179.00 | |
| 11/06/2015 | 01 | 62441 | 00000027 | ARMOUR & SONS ELECTRIC, INC. | 1,203.21 | |
| 11/06/2015 | 01 | 62442 | 00000031 | AT&T | 134.32 | |
| 11/06/2015 | 01 | 62443 | 00002061 | AT&T MOBILITY | 270.83 | |
| 11/06/2015 | 01 | 62444 | 00001997 | AUTOMATIC SYNC TECHNOLOGIES, LLC | 323.40 | |
| 11/06/2015 | 01 | 62445 | 00001917 | AWCKLANDS PRODUCE | 1,755.00 | |
| 11/06/2015 | 01 | 62446 | 00000043 | BERGEY'S | 297.35 | |
| 11/06/2015 | 01 | 62447 | 00000739 | BERGEY'S ELECTRIC, INC. | 129.86 | |
| 11/06/2015 | 01 | 62448 | 00000466 | BILL MITCHELL'S AUTO SERVICE, INC. | 59.94 | |
| 11/06/2015 | 01 | 62449 | MISC-FIRE | BILL WIEGMAN | 60.00 | |
| 11/06/2015 | 01 | 62450 | 00000209 | BOUCHER & JAMES, INC. | 21,487.46 | |
| 11/06/2015 | 01 | 62451 | 00000209 | VOID | 0.00 | V |
| 11/06/2015 | 01 | 62452 | 03214581 | BRACCIA, VINCE | 1,200.00 | |
| 11/06/2015 | 01 | 62453 | 00000072 | CANON FINANCIAL SERVICES, INC | 1,450.90 | |
| 11/06/2015 | 01 | 62454 | 00001601 | CDW GOVERNMENT, INC. | 4,110.07 | |
| 11/06/2015 | 01 | 62455 | 00091234 | CENERO, LLC | 47,236.75 | |
| 11/06/2015 | 01 | 62456 | MISC-FIRE | CHRIS MAGEE | 45.00 | |
| 11/06/2015 | 01 | 62457 | 03214572 | CITY SIGN SERVICE INC | 150.00 | |
| 11/06/2015 | 01 | 62458 | 00002048 | COLONIAL ELECTRIC SUPPLY CO, INC. | 17.08 | |
| 11/06/2015 | 01 | 62459 | 00000363 | COMCAST | 300.61 | |
| 11/06/2015 | 01 | 62460 | MISC-FIRE | DAVID P BENNETT | 30.00 | |
| 11/06/2015 | 01 | 62461 | 03214587 | DAVID P. ROLLER JR | 1,200.00 | |
| 11/06/2015 | 01 | 62462 | MISC-REC | DEBRA HOWARD | 24.00 | |
| 11/06/2015 | 01 | 62463 | 00000118 | DEL-VAL INTERNATIONAL TRUCKS, INC. | 357.63 | |
| 11/06/2015 | 01 | 62464 | 03214577 | DIVISION OF MUNICIPAL WASTE | 50.00 | |
| 11/06/2015 | 01 | 62465 | 00001166 | DRUMHELLER CONSTRUCTION, INC. | 6,950.00 | |
| 11/06/2015 | 01 | 62466 | 00000152 | ECKERT SEAMANS CHERIN & | 3,337.50 | |
| 11/06/2015 | 01 | 62467 | 00002082 | ECOMM TECHNOLOGIES | 120.00 | |
| 11/06/2015 | 01 | 62468 | MISC-REC | ERA CONTINENTAL REALTY | 70.00 | |
| 11/06/2015 | 01 | 62469 | 00903110 | ESTABLISHED TRAFFIC CONTROL | 330.00 | |
| 11/06/2015 | 01 | 62470 | 00000171 | FAST SIGNS | 1,658.19 | |
| 11/06/2015 | 01 | 62471 | 00001034 | FASTENAL | 394.81 | |
| 11/06/2015 | 01 | 62472 | 00001466 | FEDEX OFFICE | 110.00 | |
| 11/06/2015 | 01 | 62473 | 00001669 | FIRST HOSPITAL LABORATORIES, INC. | 182.85 | |
| 11/06/2015 | 01 | 62474 | 00000174 | FISHER & SON COMPANY, INC. | 1,984.00 | |
| 11/06/2015 | 01 | 62475 | 00002052 | FOREMOST PROMOTIONS | 410.06 | |
| 11/06/2015 | 01 | 62476 | MISC-REC | FRANCES MORDELL | 70.00 | |
| 11/06/2015 | 01 | 62477 | 03214582 | FRUGAL FRAMES | 214.00 | |
| 11/06/2015 | 01 | 62478 | 00000191 | GENERAL CODE, LLC | 1,195.00 | |
| 11/06/2015 | 01 | 62479 | 00000817 | GILMORE & ASSOCIATES, INC. | 42,944.63 | |
| 11/06/2015 | 01 | 62480 | 00000817 | VOID | 0.00 | V |
| 11/06/2015 | 01 | 62481 | 00000198 | GLASGOW, INC. | 55.00 | |
| 11/06/2015 | 01 | 62482 | MISC-FIRE | GLEN ROETMAN | 60.00 | |
| 11/06/2015 | 01 | 62483 | 00001323 | GLICK FIRE EQUIPMENT COMPANY INC | 2,531.50 | |
| 11/06/2015 | 01 | 62484 | 00001784 | GOOGLE INC. | 94.00 | |
| 11/06/2015 | 01 | 62485 | 00000229 | GRAINGER | 16.12 | |
| 11/06/2015 | 01 | 62486 | 00000213 | HAJOCA CORPORATION | 22.74 | |
| 11/06/2015 | 01 | 62487 | 03214586 | HECKLER, JOHN & CLAYTON | 23.29 | |
| 11/06/2015 | 01 | 62488 | 00001793 | HILLTOWN TOWNSHIP | 539.28 | |
| 11/06/2015 | 01 | 62489 | 00000903 | HOME DEPOT CREDIT SERVICES | 1,218.36 | |
| 11/06/2015 | 01 | 62490 | 00000903 | VOID | 0.00 | V |
| 11/06/2015 | 01 | 62491 | 00906110 | ID CLOTHING COMPANY, LLC | 1,970.94 | |
| 11/06/2015 | 01 | 62492 | 00000102 | INTERSTATE BATTERY SYSTEMS OF | 607.70 | |
| 11/06/2015 | 01 | 62493 | 00001388 | IPMA-HR INTERNATIONAL PUBLIC | 390.00 | |
| 11/06/2015 | 01 | 62494 | MISC-FIRE | JOE BIFOLCO | 140.00 | |
| 11/06/2015 | 01 | 62495 | MISC-FIRE | JOHN H. MOGENSEN | 45.00 | |
| 11/06/2015 | 01 | 62496 | 03214571 | JOHN SCHEITER | 50.00 | |
| 11/06/2015 | 01 | 62497 | MISC-FIRE | JOSEPH J. SIMES | 120.00 | |
| 11/06/2015 | 01 | 62498 | MISC | KEIM ROBERT D & WENDY | 1,200.00 | |

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| 11/06/2015 | 01 | 62499 | 00000372 | KEMA | 30.00 |
| 11/06/2015 | 01 | 62500 | 00000264 | KENCO HYDRAULICS, INC. | 489.82 |
| 11/06/2015 | 01 | 62501 | 03214580 | KOLLMAR, KEVIN | 1,200.00 |
| 11/06/2015 | 01 | 62502 | 00000201 | LAWRENCE J. MURPHY | 1,060.31 |
| 11/06/2015 | 01 | 62503 | 03214574 | LEHIGH VALLEY IRON PIGS | 294.00 |
| 11/06/2015 | 01 | 62504 | 00000284 | LIZELL OFFICE FURNITURE | 1,925.00 |
| 11/06/2015 | 01 | 62505 | MISC | LOWRY SERVICES | 170.00 |
| 11/06/2015 | 01 | 62506 | 00906082 | MANCINO MANUFACTURING CO., INC. | 5,170.00 |
| 11/06/2015 | 01 | 62507 | 00000055 | MARK MANJARDI | 530.00 |
| 11/06/2015 | 01 | 62508 | 00000687 | MARLANE GRAPHICS, INC. | 290.00 |
| 11/06/2015 | 01 | 62509 | 00001170 | MARTIN STONE QUARRIES, INC. | 775.13 |
| 11/06/2015 | 01 | 62510 | 00001170 | MARTIN STONE QUARRIES, INC. | 1,546.36 |
| 11/06/2015 | 01 | 62511 | 00000689 | MARY KAY KELM, ESQUIRE | 750.00 |
| 11/06/2015 | 01 | 62512 | MISC-FIRE | MARY NEWELL | 45.00 |
| 11/06/2015 | 01 | 62513 | MISC-FIRE | MATT SHINTON | 45.00 |
| 11/06/2015 | 01 | 62514 | MISC-FIRE | MATTHEW VITUCCI | 15.00 |
| 11/06/2015 | 01 | 62515 | MISC | MERGEN CO. INC. | 304.00 |
| 11/06/2015 | 01 | 62516 | 00000743 | MES - PENNSYLVANIA | 6,711.98 |
| 11/06/2015 | 01 | 62517 | MISC-FIRE | MICHAEL D. SHINTON | 40.00 |
| 11/06/2015 | 01 | 62518 | MISC-FIRE | MICHAEL SHEARER | 15.00 |
| 11/06/2015 | 01 | 62519 | 00905057 | MICROSOFT CORPORATION | 1,548.00 |
| 11/06/2015 | 01 | 62520 | 00000715 | MID-ATLANTIC FIRE AND AIR | 868.90 |
| 11/06/2015 | 01 | 62521 | MISC-FIRE | MIKE BEAN | 15.00 |
| 11/06/2015 | 01 | 62522 | 00000326 | MONTGOMERY COUNTY | 47.82 |
| 11/06/2015 | 01 | 62523 | 00000540 | MYSTIC PIZZA | 350.00 |
| 11/06/2015 | 01 | 62524 | 00000417 | NANCY J. LARKIN | 2,430.00 |
| 11/06/2015 | 01 | 62525 | MISC-REC | NORTH PENN PEDIATRIC DENTAL | 70.00 |
| 11/06/2015 | 01 | 62526 | 00000356 | NORTH WALES WATER AUTHORITY | 117.03 |
| 11/06/2015 | 01 | 62527 | 00000270 | NYCE CRETE AND LANDIS CONCRETE | 165.00 |
| 11/06/2015 | 01 | 62528 | MISC-REC | PATIENT FIRST | 500.00 |
| 11/06/2015 | 01 | 62529 | MISC-FIRE | PAUL R. MOGENSEN | 75.00 |
| 11/06/2015 | 01 | 62530 | MISC-FIRE | PAUL SMITH | 40.00 |
| 11/06/2015 | 01 | 62531 | 00000397 | PECO ENERGY | 81.65 |
| 11/06/2015 | 01 | 62532 | 03214578 | PEG AZARIAN | 192.00 |
| 11/06/2015 | 01 | 62533 | 00000595 | PENN VALLEY CHEMICAL COMPANY | 1,546.56 |
| 11/06/2015 | 01 | 62534 | 00000595 | PENN VALLEY CHEMICAL COMPANY | 533.82 |
| 11/06/2015 | 01 | 62535 | 00000726 | PENN-HOLO SALES & SERVICES | 102.34 |
| 11/06/2015 | 01 | 62536 | 00000388 | PENNSYLVANIA ONE CALL SYSTEM, INC. | 181.37 |
| 11/06/2015 | 01 | 62537 | 00001358 | PENNSYLVANIA RECREATION AND PARK | 936.00 |
| 11/06/2015 | 01 | 62538 | 00002025 | PET DINER, THE | 206.07 |
| 11/06/2015 | 01 | 62539 | 00000009 | PETTY CASH | 879.00 |
| 11/06/2015 | 01 | 62540 | 00000447 | PETTY CASH - POLICE | 170.54 |
| 11/06/2015 | 01 | 62541 | MISC-FIRE | PHIL STUMP | 135.00 |
| 11/06/2015 | 01 | 62542 | 00001171 | PHILA OCCHEALTH/DEA WORKNET OCC | 698.85 |
| 11/06/2015 | 01 | 62543 | 00001791 | PHILADELPHIA PROTECTION BUREAU, INC | 2,500.00 |
| 11/06/2015 | 01 | 62544 | 00000446 | PHISCON ENTERPRISES, INC. | 150.00 |
| 11/06/2015 | 01 | 62545 | 00000945 | PIPERSVILLE GARDEN CENTER, INC. | 169.64 |
| 11/06/2015 | 01 | 62546 | MISC-FIRE | RACHEL TROUTMAN | 100.00 |
| 11/06/2015 | 01 | 62547 | MISC-REC | REBECCA MOYER | 580.00 |
| 11/06/2015 | 01 | 62548 | 00002033 | REPUBLIC SERVICES NO. 320 | 1,129.34 |
| 11/06/2015 | 01 | 62549 | 00000117 | RIGGINS INC | 2,590.63 |
| 11/06/2015 | 01 | 62550 | 00000115 | RIGGINS, INC | 5,121.36 |
| 11/06/2015 | 01 | 62551 | 03214576 | ROBERT ADAMS SR. | 500.00 |
| 11/06/2015 | 01 | 62552 | 00001972 | ROBERT L. BRANT | 1,365.00 |
| 11/06/2015 | 01 | 62553 | MISC-FIRE | ROBERT MCMONAGLE | 15.00 |
| 11/06/2015 | 01 | 62554 | 00906144 | ROLLING SUDS, INC. | 1,272.00 |
| 11/06/2015 | 01 | 62555 | MISC-FIRE | RYAN CROUTHAMEL | 15.00 |
| 11/06/2015 | 01 | 62556 | 00000452 | S&S WORLDWIDE | 516.25 |
| 11/06/2015 | 01 | 62557 | 03214573 | SAR AUTOMOTIVE EQUIPMENT | 350.00 |
| 11/06/2015 | 01 | 62558 | 00001939 | SERVICE TIRE TRUCK CENTERS | 1,233.86 |
| 11/06/2015 | 01 | 62559 | 03214588 | SIMPLEXGRINNELL | 1,688.50 |
| 11/06/2015 | 01 | 62560 | 00000468 | SIRCHIE FINGER PRINT | 300.00 |
| 11/06/2015 | 01 | 62561 | 00000467 | SNAP-ON INDUSTRIAL | 407.52 |
| 11/06/2015 | 01 | 62562 | 00000328 | SPOK | 208.53 |
| 11/06/2015 | 01 | 62563 | 00001847 | STAPLES CONTRACT & COMMERCIAL, INC. | 1,624.31 |
| 11/06/2015 | 01 | 62564 | MISC-FIRE | STEVE SPLENDIDO | 30.00 |
| 11/06/2015 | 01 | 62565 | MISC-REC | STEVEN JONESQ | 60.00 |
| 11/06/2015 | 01 | 62566 | 00000485 | SYRENA COLLISION CENTER, INC. | 1,293.40 |
| 11/06/2015 | 01 | 62567 | MISC-REC | THE K9 SPIRIT | 60.00 |
| 11/06/2015 | 01 | 62568 | 00002020 | THOMSON REUTERS | 110.25 |
| 11/06/2015 | 01 | 62569 | 00001984 | TRAFFIC PLANNING AND DESIGN, INC. | 14,857.75 |
| 11/06/2015 | 01 | 62570 | 00000506 | TRANS UNION LLC | 40.00 |
| 11/06/2015 | 01 | 62571 | 00002031 | TRI-COUNTY ELECTRICAL SUPPLY | 742.16 |
| 11/06/2015 | 01 | 62572 | 00000077 | TRISTATE ENVIRONMENTAL | 292.50 |
| 11/06/2015 | 01 | 62573 | 00000500 | U.S. BANK | 137,696.88 |
| 11/06/2015 | 01 | 62574 | 00000327 | U.S. MUNICIPAL SUPPLY INC. | 846.80 |
| 11/06/2015 | 01 | 62575 | 00000040 | VERIZON | 98.82 |
| 11/06/2015 | 01 | 62576 | 00000040 | VERIZON | 38.05 |
| 11/06/2015 | 01 | 62577 | 00000040 | VERIZON | 173.13 |
| 11/06/2015 | 01 | 62578 | 00001033 | VERIZON CABS | 552.89 |
| 11/06/2015 | 01 | 62579 | 00000170 | VERIZON COMMUNICATIONS, INC. | 124.99 |

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User: msanders
DB: Montgomery Twp

CHECK REGISTER FOR MONTGOMERY TOWNSHIP
CHECK DATE FROM 10/27/2015 - 11/09/2015

Page: 3/3

| Check Date | Bank | Check | Vendor | Vendor Name | Amount |
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| 11/06/2015 | 01 | 62580 | 00000038 | VERIZON WIRELESS SERVICES, LLC | 480.12 |
| 11/06/2015 | 01 | 62581 | 00000038 | VERIZON WIRELESS SERVICES, LLC | 849.75 |
| 11/06/2015 | 01 | 62582 | MISC-FIRE | VINAY SETTY | 120.00 |
| 11/06/2015 | 01 | 62583 | MISC-FIRE | VINCE ZIRPOLI | 195.00 |
| 11/06/2015 | 01 | 62584 | MISC-FIRE | WARREN FUCHS | 30.00 |
| 11/06/2015 | 01 | 62585 | 00001329 | WELDON AUTO PARTS | 1,443.21 |
| 11/06/2015 | 01 | 62586 | 00001329 | VOID | 0.00 V |
| 11/06/2015 | 01 | 62587 | 00001157 | YOUNGS | 206.80 |

01 TOTALS:

(5 Checks Voided)

Total of 162 Disbursements:

813,448.55

11/06/2015

Check List

For Check Dates 10/27/2015 to 11/09/2015

Check

| Date | Name | Amount |
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| 10/28/2015 | PA UC Fund | 3rd Qtr UC-2 Payment \$ 1,411.24 |
| 10/28/2015 | Berkheimer LST | 3rd Qtr LST Payment \$ 1,368.00 |
| 10/29/2015 | Berkheimer EIT | 3rd Qtr EIT Payment \$ 22,508.86 |
| 11/02/2015 | ICMA RC | DROP Plan Payment \$ 17,827.41 |
| 11/02/2015 | UNITED STATES TREASURY | 945 Tax Payment \$ 4,680.00 |
| 11/05/2015 | PA SCDU | Withholding Payment \$ 2,717.28 |
| 11/05/2015 | UNITED STATES TREASURY | 941 Tax Payment \$ 79,495.91 |
| 11/05/2015 | BCG 401 | 401 Payment \$ 14,102.88 |
| 11/05/2015 | BCG 457 | 457 Payment \$ 10,236.80 |
| 11/05/2015 | PBA | PBA Payment \$ 811.71 |
| Total Checks: 10 | | \$ 155,160.09 |