

AGENDA
MONTGOMERY TOWNSHIP
BOARD OF SUPERVISORS
April 14, 2014

www.montgomerytwp.org

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

Lawrence J. Grogan
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 the March 24, 2014 Meeting
6. Recognition of Administration Department Promotion
7. Recognition of Employee Retirements
8. Announce Commemoration Day Events – May 17, 2014
9. Presentation of Government Finance Officers Associations Certificate of Achievement for Excellence in Financial Reporting Award
10. Consider Authorization to Execute Side Agreement and Adopt an Amendment to the Police Pension Plan Document – Death Benefits and Vested Benefits
11. Consider Award of General Construction, Electrical, Plumbing, Mechanical and Fire Protection Contracts - Community/Recreation Center
12. Consider Award of Contract – Owners Representative Services Agreement - Community/Recreation Center Building Project
13. Consider Proclamation of Arbor Day for Tree City USA
14. Consider Approval of Conditional Preliminary/Final Plan – LDS 671 Two Lot Subdivision – 127 Stevers Mill Road
15. Consider Approval of Conditional Preliminary/Final Land Development Plan – LDS #673 - BJ's Wholesale Club – 640 Cowpath Road
16. Consider Approval of Sanitary Sewer Facility Planning Modules for:
 - a. LDS 669 - Chick Fil-A Restaurant – 794 Bethlehem Pike
 - b. LDS 673 – BJs Wholesale – 640 Cowpath Road
17. Consider Authorization to Advertise Draft Ordinance - Establishing Stormwater Management Ordinance

NOTICE: Please be advised that all regular and special meetings of the Board of Supervisors are recorded for replay on the Township cable channels, Comcast 22 and Verizon 34.

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18. Consider Payment of Bills
19. Other Business
20. Adjournment

Future Public Hearings/Meetings:

04-15-14 @ 12:30 PM – Business Development Partnership
04-16-14 @ 6:00 PM – Sewer Authority
04-16-14 @ 7:30 PM – Shade Tree Commission
04-16-14 @ 7:30 PM – Public Safety Commission
04-17-14 @ 7:00 PM – Pension Committee
04-17-14 @ 7:30 PM – Planning Commission
04-21-14 @ 7:30 PM – Finance Committee
04-22-14 @ 7:00 PM – Environmental Advisory Committee
04-28-14 @ 8:00 PM – Board of Supervisors

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MONTGOMERY TOWNSHIP BOARD OF SUPERVISORS
BOARD ACTION SUMMARY

SUBJECT: Public Comment

MEETING DATE: April 14, 2014

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: Joseph P. Walsh, Chairman

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: April 14, 2014 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: Joseph P. Walsh, Chairman
 Township Manager *LJG*

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.

TOWNSHIP BOARD OF SUPERVISORS
BOARD ACTION SUMMARY

SUBJECT: Consider Approval of Minutes for March 24, 2014

MEETING DATE: April 14, 2014 ITEM NUMBER: #5

MEETING/AGENDA: WORK SESSION ACTION XX NONE

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

INITIATED BY: Lawrence J. Gregan
Township Manager

BOARD LIAISON: Joseph P. Walsh, Chairman

BACKGROUND:

Just a reminder – Please call Deb Rivas or Shirley Snyder on Monday, April 14, 2014 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
MARCH 24, 2014**

Chairman Joseph Walsh called the action meeting to order at 8:00 p.m. In attendance were Supervisors Candyce Fluehr Chimera and Michael Fox. Supervisors Robert Birch and Jeffrey McDonnell were absent. Also in attendance were Frank Bartle, Esquire, Lawrence Grogan, Chief J. Scott Bendig, Richard Lesniak, Shannon Drosnock, Ann Shade, Stacy Crandell, Kevin Costello, Bruce Shoupe, Vicki Zidek, Lance Allen and Deb Rivas.

Following the Pledge of Allegiance, Chairman Joseph Walsh called for public comment from the audience and there was none.

Chairman Joseph Walsh made a motion and Supervisor Michael Fox seconded the motion to approve the minutes of the March 10, 2014 Board meeting. The minutes of the meeting were unanimously approved as submitted.

Supervisor Michael Fox, Board liaison to the Business Development Partnership, announced that Matthew Roegner, Manager of Outback Steakhouse in Montgomeryville, submitted his resignation from the Montgomery Township Business Development Partnership effective March 14, 2014. Mr. Roegner has relocated to the Lancaster area. Resolution #1 made by Supervisor Michael Fox, seconded by Supervisor Candyce Fluehr Chimera and adopted unanimously, accepted the resignation of Matthew Roegner from his position as a member of the Business Development Partnership and thanked him for his efforts and dedication in serving on the Montgomery Township Business Development Partnership.

Director of Administration and Human Resources Ann Shade announced that Police Dispatcher I Nick Lindsay, has resigned from the Police Department to become a full time career firefighter for the City of Harrisburg. Resolution #2 made by Supervisor Michael Fox, seconded by Supervisor Candyce Fluehr Chimera and adopted unanimously, recognized Nick Lindsay for his dedication and faithful service to the Montgomery Township Police Department and the residents of our community.

Assistant to the Township Manager Stacy Crandell announced that in honor of Montgomery Township's 300th Anniversary Celebration, the Township is organizing a 5k Run on May 17, 2014 at 9:00 a.m. at the William F. Maule Park at Windlestrae. The proceeds of this run will be donated to the Wounded Warrior Project. The Township is appreciative of the many local businesses that have sponsored the run. The Board encouraged residents to sign up for the run and support a great cause.

Public Information Coordinator Kelsey McMeans announced that Montgomery Township would be celebrating Local Government Week from April 7th through the 11th. Local Government Week focuses attention on the need for strong, independent, and active local governments as well as recognizing the valuable contributions made by residents serving their communities in public offices. The week will bring area school children to the Township Building for a tour and demonstrations by the various Township departments. Resolution #3 made by Supervisor Michael Fox, seconded by Supervisor Candyce Fluehr Chimera and adopted unanimously, recognized Local Government Week in Montgomery Township as April 7th through the 11th.

Assistant to the Township Manager Stacy Crandell announced the Spring Leaf and Yard Waste Curbside Collection to be held on Saturday, April 26, 2014. In order to participate, residents must place the collected leaf and yard waste materials in biodegradable paper bags at the curb prior to 7:00 a.m. that day for collection. In addition to the curbside collection, the Township will also be conducting the monthly leaf and yard waste drop off collection at William F. Maule Park at Windlestrae from 8:00 a.m. to Noon. Chairman Joseph Walsh also announced that Rep. Todd Stephens will be hosting a paper shredding and electronics recycling event on Saturday, April 5, 2014 at his office on Stump Road.

Township Manager Lawrence Gegan announced that sealed bids for the construction of an approximately 39,000 square foot Community/Recreation Center were opened and read

aloud on March 6, 2014. The bids are currently being reviewed by the design consultants for compliance with the Bid Specifications in order to provide a recommendation as to the "lowest responsible bidder" for each of the five prime contracts. Mr. Gregan further announced that the consideration for the award of the contracts is proposed to be made at the Board of Supervisors Public Meeting on April 14, 2014 at 8:00 p.m. Resolution #4 made by Supervisor Michael Fox, seconded by Supervisor Candyce Fluehr Chimera and adopted unanimously, authorized the advertisement of the consideration of the bid awards of the five prime contracts to be announced at the April 14, 2014 Board of Supervisors meeting after 8:00 p.m.

Director of Planning Bruce Shoupe presented the DEP Sewage Facilities Planning Module for Giant to Go, LDS #666. Giant Food Stores proposes to construct a 4,900 square foot building, a five double-sided pump fuel island and associated improvements on Bethlehem Pike. Based on the Montgomery Township Municipal Sewer Authority's interpretation of 1 EDU being equal to 250 gallons, the proposed development will be requesting 5 EDU's. The module was reviewed and recommended for approval by the Township Planning Commission. Resolution #5 made by Chairman Joseph Walsh, seconded by Supervisor Michael Fox and adopted unanimously, approved the application for the Giant to Go DEP Sewage Facilities Planning Module.

Director of Planning Bruce Shoupe reported that the Conditional Use Application for Integral Development Associates for 976 Bethlehem Pike was originally scheduled to be held at the April 14, 2014 Board of Supervisors Meeting. The applicant has requested a rescheduling of the hearing and it has been recommended that the date be changed to April 28, 2014. Resolution # 6 made by Supervisor Michael Fox, seconded by Supervisor Candyce Fluehr Chimera and adopted unanimously, set Monday, April 28, 2014, after 8:00 p.m., as the date and time for a Public Hearing to consider the Conditional Use application of Integral Development

Associates, for the leasing of a specialty retail store, The Tile Shop, to be located at 976 Bethlehem Pike.

Director of Finance Shannon Drosnock reported that in accordance with the provisions of Pennsylvania ACT 205, an actuarial valuation of the Township's defined benefit pension plan is required to be performed on a biennial basis and reported to the Public Employee Retirement Commission. In the preparation of the Township's January 1, 2013 Actuarial Valuation Report, the plan actuary, Tom Zimmerman, advised that the Township has the option to continue to value the plan assets on an "actuarial smoothing" basis or change to a "market value" basis. Given the strong performance of the assets of the plan in the market at the end of 2013 and through 2013, Ms. Drosnock indicated that staff is recommending changing the valuation method of the plan assets to a straight "market value" basis. Using this valuation method would actually reduce the increase of the Township's annual Minimum Municipal Obligation (MMO) to the plan for the years 2015 and 2016 from an approximately \$165,000 per year increase to a \$135,000 per year increase. Resolution #7 made by Chairman Joseph Walsh, seconded by Supervisor Michael Fox and adopted unanimously, approved the change to the market value method to determine the actuarial value of assets for the plan as noted above.

Director of Finance Shannon Drosnock reported that the Township Park and Recreation office currently accepts registrations for programs by mail and walk-in traffic only with no option for online registration. Registrations via the internet became a possibility with the implementation of the new Park and Recreation Software, Capturepoint. Staff has researched options for accepting registrations with credit card payments and is requesting authorization to move forward with the first step towards implementing this customer convenience. Ms. Drosnock indicated that a relationship needs to be established with a merchant bank that will be responsible for handling the credit card payments during the online registration and payment processing. After staff analysis, it was determined that Elavon will provide the lowest overall

cost to the Township. Resolution #8 made by Supervisor Michael Fox, seconded by Supervisor Candyce Fluehr Chimera and adopted unanimously, authorized staff to execute the New Merchant Application with Elavon, Inc. for the merchant services relationship that is required for the acceptance of credit card payments associated with the online registration of Park and Recreation programs.

Chairman Joseph Walsh made a motion to approve the payment of bills. Supervisor Michael Fox seconded the motion. The payment of bills was unanimously approved as submitted.

There being no further business to come before the Board, the meeting adjourned at 8:25 p.m.

MONTGOMERY TOWNSHIP BOARD OF SUPERVISORS
BOARD ACTION SUMMARY

SUBJECT: Recognition of Administration Department Promotion

MEETING DATE: April 14, 2014

ITEM NUMBER: #6

MEETING/AGENDA:

ACTION

NONE

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

INITIATED BY: Ann M. Shade

BOARD LIAISON: Joseph P. Walsh, Chairman

Director of Administration & HR



BACKGROUND:

This evening we would like to recognize and congratulate Sharon Tucker, who will be taking on a new role as Human Resources Specialist in the Administration Department, effective April 1, 2014. Ms. Tucker has a background in human resources processes and procedures as she worked in personnel for many years, prior to being hired by Montgomery Township. She joined Montgomery Township on May 9, 2011 as Recreation Coordinator, bringing organization, enthusiasm and excellent customer service skills to the recreation office. In her new position, her duties will include creating training plans and researching new and revised policies, as well as assisting with communication of wellness benefits and new hire recruiting and orientation. While we will miss her in the recreation office, we are looking forward to having her begin her new duties in human resources.

Montgomery Township will be recruiting for a Recreation Director who will be responsible for recreation programs and operations in the Township, including management of the new Community and Recreation Center.

ZONING, SUBDIVISION OR LAND DEVELOPMENT IMPACT:

None.

PREVIOUS BOARD ACTION:

None.

ALTERNATIVES/OPTIONS:

None.

BUDGET IMPACT:

None.

RECOMMENDATION:

Recognition of and congratulations to Sharon Tucker, who has been promoted to Human Resources Specialist, effective April 1, 2014.

MOTION/RESOLUTION:

BE IT RESOLVED by the Board of Supervisors of Montgomery Township that we hereby recognize and congratulate Sharon Tucker and her promotion to Human Resources Specialist in the Administration Department effective April 1, 2014.

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.

MONTGOMERY TOWNSHIP BOARD OF SUPERVISORS
BOARD ACTION SUMMARY

SUBJECT: Recognition of Employee Retirements

MEETING DATE: April 14, 2014


ITEM NUMBER: #7

MEETING/AGENDA:

ACTION XX

NONE

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

INITIATED BY: Ann M. Shade 
Director of Administration & HR

BOARD LIAISON: Joseph P. Walsh, Chairman



BACKGROUND:

Montgomery Township wishes to recognize and acknowledge the upcoming retirements of two long serving employees, Margaret (Peggy) Ferrante and Shirley Snyder. Mrs. Ferrante and Mrs. Snyder will both be retiring from Montgomery Township effective May 1, 2014.

Peggy has served as the Finance Department's Accounts Payable Associate since July 6, 1999 completing almost 15 years of service with the Township. In her role as Accounts Payable Associate, Peggy worked to coordinate the distribution of invoices across the many departments of the Township. She was responsible for ensuring that invoices to the Township were accurate, that they were accounted for in accordance with the Township budget and that expenses were processed in a timely manner. Peggy was known for her thoroughness and attention to deadlines and she will be missed by her colleagues.

Shirley has served as the Administration Department's Administrative Secretary since April 10, 2002, completing just over 12 years of service with the Township. In her role, Shirley served as the Recording Secretary for the Board of Supervisors, coordinated the Board agenda and packets, volunteer committees and also maintained the Township's administrative files and official minute and ordinance books. She provided valuable assistance in human resources, such as coordinating the interview process for new employee candidates, as well as processing training registrations. Shirley was responsible for many special projects over the years, including Township shirts, building signage, map framing, organizing the Volunteer Brunch and other group events. Shirley's talent of meticulous organization will be sorely missed by her department.

Both employees have provided exceptional service to the staff and residents of Montgomery Township and they will be greatly missed. We congratulate them and wish them well in their retirements.

ZONING, SUBDIVISION OR LAND DEVELOPMENT IMPACT:

None.

PREVIOUS BOARD ACTION:

None.

ALTERNATIVES/OPTIONS:

None.

BUDGET IMPACT:

None.

RECOMMENDATION:

Acknowledge the retirements of Margaret Ferrante and Shirley Snyder from their positions with Montgomery Township and thank them for their service to the staff and residents of Montgomery Township.

MOTION/RESOLUTION:

BE IT RESOLVED by the Board of Supervisors of Montgomery Township that we hereby recognize the retirements of Margaret Ferrante and Shirley Snyder and take this opportunity to thank him for their commitment to public service during their employment at Montgomery Township.

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.

MONTGOMERY TOWNSHIP BOARD OF SUPERVISORS
BOARD ACTION SUMMARY

SUBJECT: Announce Commemoration Day Events – May 17, 2014

MEETING DATE: April 14, 2014

ITEM NUMBER: # 8

MEETING/AGENDA:

ACTION

NONE

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

INITIATED BY: Stacy Crandell
Assistant to the Township Manager

BOARD LIAISON: Joseph P. Walsh, Chairman
Board of Supervisors/300th Committee

BACKGROUND:

In honor of Montgomery Township's 300th Anniversary Celebration, the Township is organizing a 5K Run on May 17, 2014 at 9AM at the William F. Maule Park at Windlestrae. The proceeds of this run will be donated to the Wounded Warrior Project®. The run is limited to first 300 runners. The deadline to receive a t-shirt with your registration was extended to April 15th.

The Township would like to thank the following sponsors of the run:

Gold Sponsor

NSM Insurance Group

Bronze Sponsor

Abington Memorial Hospital -Lansdale Hospital

Bee Bergvall & Co.

Deb Grasso- Re/Max Action Realty

Doylestown Hospital

Walsh Pancio, LLC

T-Shirt Sponsor

Hand and Stone Massage & Facial Spa- Montgomeryville

Kenneth Amey, AICP

Wegmans

In-Kind Donations

Arctic Glacier

Barnes & Noble

Fulton Bank

Planet Fitness Montgomeryville

State Representative Todd Stephens

State Senator Stewart Greenleaf

Trader's Joe

Univest Bank

Wawa

ZONING, SUBDIVISION OR LAND DEVELOPMENT IMPACT:

None.

PREVIOUS BOARD ACTION:

None.



CELEBRATE THE MONTGOMERY TOWNSHIP'S 300th ANNIVERSARY BY SUPPORTING THE WOUNDED WARRIOR PROJECT®!

THE GENERAL HANCOCK 5K RUN

Proceeds of the run will be donated to the Wounded Warrior Project®.

Saturday, May 17, 2014 - 9AM – North Wales, PA

LOCATION/REGISTRATION: The run will take place at the William F. Maule Park at Windlestrae (1143 Kenas Road, North Wales, PA 19454) and parking is available at this location. Registration will begin at 8AM.

COURSE: Wheel Measured Course; the run will take place along a paved trail and on a street. A Map of the 5K Run Route is available.

AMENITIES: T-shirt to all pre-registrants of 5K (*If registered by April 15th*); "goodie" bag for all runners. Refreshments for finishers, time clock at finish and instant results. Held rain or shine. No refunds or mailed awards. Results on www.pretzelcitysports.com in 24-72 hours.

AWARDS: Awards for the top male & female winners and runner-ups in 6 age categories plus grab bags for all finishers.

ENTRY: \$25 if postmarked by or registered online by April 15 to receive a t-shirt. Afterwards, inc. day of race, \$15 with no shirt.
REGISTRATION IS LIMITED TO FIRST 300 REGISTRANTS!

MAIL CHECK PAYABLE TO "Montgomery Township 300" & FORM BELOW TO: MONTGOMERY TOWNSHIP, 1001 STUMP ROAD, MONTGOMERYVILLE PA 18936. ATTENTION: Stacy Crandell (215)393-6900, scrandell@montgomerytwp.org. Online registration is available at www.pretzelcitysports.com.

.....Please Print Clearly.....

Last Name: _____ First Name: _____

Address: _____

City/State: _____ Zip: _____ Race day Age: _____ Date of Birth: ____/____/____

Sex: M F Phone: (____) _____

Shirt Size (circle one): S M L XL Email _____

Already Getting Emails from Pretzel City Sports Regularly? _____ Yes _____ No

WAIVER: I know that running a road race is a potentially hazardous activity. I should not enter and run unless I am medically able and properly trained. I also know that there will be traffic on the course and assume the risk for running in traffic. I also assume any or all other risks associated with running or attending the race including but not limited to falls, contact with other participants, the affects of the weather and the condition of the roads, all such risks being known and appreciated by me. Knowing these facts, and in consideration of your accepting my entry fee, I hereby for myself, my heirs, executors, administrators or anyone else who might claim on my behalf, covenant not to sue, and waive, release and discharge Pretzel City Sports, Montgomery Township and any subcontractors it utilizes, all municipalities in which the race is held, the race committee, volunteers, any and all sponsors including their agents, employees, assigns or anyone acting for on their behalf, or anyone else associated in any way with the race, from any or all claims or liability for death, personal injury or property damage of any kind of nature what so ever arising out of, or in the course of, my participation in this event(s). This waiver extends to all claims of every kind or nature what so ever, foreseen or unforeseen, known or unknown. I HAVE READ AND UNDERSTAND THIS WAIVER: (if under 18, legal guardian must sign)

Signature: _____ Date ____/____/ 2014

MONTGOMERY TOWNSHIP BOARD OF SUPERVISORS
BOARD ACTION SUMMARY

SUBJECT: Presentation of Certificate of Achievement for Excellence in Financial Reporting Award

MEETING DATE: April 14, 2014

ITEM NUMBER: #9

MEETING/AGENDA:

ACTION xx

NONE

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

INITIATED BY: Shannon Q. Drosnock
Finance Director

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

BACKGROUND:

The GFOA established the Certificate of Achievement for Excellence in Financial Reporting Program (CAFR Program) in 1945 to encourage and assist state and local governments to go beyond the minimum requirements of generally accepted accounting principles to prepare comprehensive annual financial reports that evidence the spirit of transparency and full disclosure and then to recognize individual governments that succeed in achieving that goal.

Reports submitted to the CAFR program are reviewed by selected members of the GFOA professional staff and the GFOA Special Review Committee (SRC), which comprises individuals with expertise in public-sector financial reporting and includes financial statement preparers, independent auditors, academics, and other finance professionals.

In 2013 for fiscal year 2012, the Township prepared its annual financial report in Comprehensive Annual Financial Report (CAFR) format and applied to GFOA for consideration in the CAFR Program.

In January of 2014, the Township received a letter from the GFOA congratulating the Township for successful completion of its 2012 audit in the CAFR format and awarding the Township the Certificate of Achievement in Financial Reporting for the fiscal year ended December 31, 2012. This is the third consecutive year that the Township has achieved this award.

The Certificate of Achievement in Financial Reporting will be presented to the Township this evening by Dean Dortone. Dean is the Chief Financial Officer of Lower Merion Township and serves as the Pennsylvania National Representative of the Government Finance Officers Association and as a member of the Pennsylvania State Executive Committee of the Government Finance Officers Association.

ZONING, SUBDIVISION OR LAND DEVELOPMENT IMPACT:

None.

PREVIOUS BOARD ACTION:

None.

ALTERNATIVES/OPTIONS:

None.

BUDGET IMPACT:

None.

RECOMMENDATION:

Acknowledge receipt of award.

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.



Government Finance Officers Association
203 N. LaSalle Street - Suite 2700
Chicago, IL 60601

Phone (312) 977-9700 Fax (312) 977-4806

January 3, 2014

Lawrence J. Gregan
Township Manager
Montgomery Township
1001 Stump Road
Montgomeryville PA 18936

Dear Mr. Gregan:

We are pleased to notify you that your comprehensive annual financial report (CAFR) for the fiscal year ended December 31, 2012, qualifies for a Certificate of Achievement for Excellence in Financial Reporting. The Certificate of Achievement is the highest form of recognition in governmental accounting and financial reporting, and its attainment represents a significant accomplishment by a government and its management.

Each entity submitting a report to the Certificate of Achievement review process is provided with a "Summary of Grading" form and a confidential list of comments and suggestions for possible improvements in its financial reporting techniques. Your list has been enclosed. You are strongly encouraged to implement the recommended improvements into the next report and submit it to the program. If it is unclear what must be done to implement a comment or if there appears to be a discrepancy between the comment and the information in the CAFR, please contact the Technical Services Center (312) 977-9700 and ask to speak with a Certificate of Achievement Program in-house reviewer.

Certificate of Achievement program policy requires that written responses to the comments and suggestions for improvement accompany the next fiscal year's submission. Your written responses should provide detail about how you choose to address each item that is contained within this report. These responses will be provided to those Special Review Committee members participating in the review.

When a Certificate of Achievement is awarded to a government, an Award of Financial Reporting Achievement (AFRA) is also presented to the individual(s) or department designated by the government as primarily responsible for its having earned the Certificate. Enclosed is an AFRA for:

Montgomery Township, Pennsylvania

Your Certificate of Achievement plaque will be shipped to you under separate cover in about eight weeks. We hope that you will arrange for a formal presentation of the Certificate and Award of Financial Reporting Achievement, and that appropriate publicity will be given to this notable achievement. A sample news release has been enclosed. We suggest that you provide copies of it to local newspapers, radio stations and television stations. In addition, details of recent recipients of the Certificate of Achievement and other information about Certificate Program results are available in the "Awards Program" area of our website, www.gfoa.org.

A current holder of a Certificate of Achievement may include a reproduction of the award in its immediately subsequent CAFR. A camera ready copy of your Certificate is enclosed for that purpose. If you reproduce your Certificate in your next report, please refer to the enclosed instructions. A Certificate of Achievement is valid for a period of one year. To continue to participate in the Certificate of Achievement Program it will be necessary for you to submit your next CAFR to our review process.

In order to expedite your submission we have enclosed a Certificate of Achievement Program application form to facilitate a timely submission of your next report. This form should be completed and sent (postmarked) with three copies of your report, three copies of your application, three copies of your written responses to the program's comments and suggestions for improvement from the prior year, and any other pertinent material with the appropriate fee by June 30, 2014.

Your continued interest in and support of the Certificate of Achievement Program is most appreciated. If we may be of any further assistance, please contact Delores Smith (dsmith@gfoa.org or (312) 578-5454).

Sincerely,
Government Finance Officers Association

A handwritten signature in cursive script that reads "Stephen J. Gauthier". The signature is written in dark ink and is positioned above the printed name of the signatory.

Stephen J. Gauthier, Director
Technical Services Center

SJG/ds

MONTGOMERY TOWNSHIP BOARD OF SUPERVISORS
BOARD ACTION SUMMARY

SUBJECT: Consider Authorization to Execute Side Agreement and Adopt an Amendment to the Police Pension Plan Document – Death Benefits and Vested Benefits

MEETING DATE: April 14, 2013

ITEM NUMBER: #10.

MEETING/AGENDA: WORK SESSION

ACTION xx

NONE

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

INITIATED BY: Shannon Q. Drosnock
Finance Director

BOARD LIAISON: Joseph P. Walsh, Chairman

BACKGROUND:

During a routine audit of the Police Pension Plan, the Auditor General of Pennsylvania issued a finding explaining that the current 'Death Benefit' and 'Vested Benefit' language in the Police Pension Plan Document was inconsistent with Act 600 which governs police pension plans. They opined that Act 600 required that the surviving spouse of a "vested" member of the Pension Plan should be offered the option to receive a vested benefit at the time the Officer would have reached his/her superannuation retirement date or receive a lump sum payment of his/her contributions plus interest.

To correct the inconsistency and comply with the Auditor General's Finding, the Township needs to revise the language in the Police Pension Plan Document. The Township's labor attorney has prepared revised language to the document in order to more clearly state the options available to a surviving spouse. The language has been reviewed with the Auditor General's Office and found to be consistent with the requirements of Act 600.

In order to adopt the revised language, it is necessary that a Side Agreement be executed between the Police Collective Bargaining Unit (CBU) and the Township in order to authorize the adoption of the changes to the pension document. The Police CBU has executed this agreement attached hereto.

Staff is asking that the Board consider executing the attached Side Agreement with the Police CBU and furthermore, that the Board adopt the attached resolution amending the Montgomery Township Police Pension Plan Document, sections 5.01 (Death Benefit) and 5.02 (Vested Benefit) to ensure compliance with current law.

ZONING, SUBDIVISION OR LAND DEVELOPMENT IMPACT:

None.

PREVIOUS BOARD ACTION:

None.

ALTERNATIVES/OPTIONS:

None.

BUDGET IMPACT:

The impact of the plan language changes will not affect the 2014 budget. The actuarial impact to the plan is expected to be approximately \$11,000/year beginning with the 2015 Minimum Municipal Obligation (MMO).

RECOMMENDATION:

Staff recommends that the Board authorize the execution of the proposed Side Agreement and that the Board amends the Police Pension Plan to reflect the changes to the 'Death Benefit' and 'Vested Benefit' provisions of the Police Pension Plan to ensure compliance with current law.

MOTION/RESOLUTION:

BE IT RESOLVED by the Board of Supervisors of Montgomery Township that we hereby authorize the execution of the 'Side Agreement Between the Township of Montgomery and the Montgomery Township Police Officer's Collective Bargaining Unit' as executed by the Collective Bargaining Unit on March 19, 2014 and

BE IT FURTHER RESOLVED, that we hereby adopt the attached resolution amending the Montgomery Township Police Pension Plan to ensure compliance with current law.

(Detailed Resolution Attached)

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.

SIDE AGREEMENT

This is a Side Agreement Between the Township of Montgomery ("Township") and the Montgomery Township Police Officers Collective Bargaining Unit ("CBU").

BACKGROUND

The Township and the CBU entered into a Side Agreement on or about March 12, 2013, in which the parties memorialized their agreement on revisions to the Montgomery Township Police Pension Plan ("Pension Plan"), effective January 1, 2012. The parties appended the revised Pension Plan to the 2012 – 2016 collective bargaining agreement as Exhibit E.

Thereafter, in 2013, the Commonwealth of Pennsylvania Department of the Auditor General issued a Compliance Audit Report ("Audit Report") related to the Pension Plan for the period January 1, 2010 to December 31, 2011. Based on a Finding in the Audit Report, the parties agree that the provisions of the Pension Plan related to death and vested benefits must be revised in compliance with Act 600, the Police Pension Fund Act, 53 P.S. §761.

NOW THEREFORE, intending to be legally bound hereby, the parties agree as follows:

1. The Township will promptly revise the Pension Plan to provide as follows:

Section 5.01, Death Benefits

a. If a Participant dies prior to providing sufficient service to qualify for a vested pension pursuant to Section 5.02, his surviving spouse or, if no surviving spouse or if the surviving spouse subsequently dies, his/her child(ren) under the age of 18 (under the age of 23 if Attending College), shall be entitled to a single-sum death benefit equal to the Participant's Required Contribution Account, unless the Participant designates a Beneficiary for this purpose.

b. If a Participant dies after rendering sufficient service to qualify for a vested pension benefit pursuant to Section 5.02, the surviving spouse or if the surviving spouse subsequently dies, his/her child(ren) under the age of 18 (under the age of 23 if Attending College), may elect one of the following two options:

(1) Receive a return of the contents of the Participant's Required Contribution Account as set forth in the above subsection "a"; or

(2) Receive fifty percent (50%) of the vested pension benefit for which the Participant had qualified at the time of the Participant's death, which benefit shall be payable beginning on the first day after the deceased Participant's Normal Retirement Date.

In the absence of an election made within ninety (90) days of the date of the Participant's death, the election contained in subsection "a" shall be implemented.

c. If a Participant dies after having become eligible to receive a normal pension or disability pension benefit, a monthly pension or disability benefit equal to 50% of the benefit the Participant was receiving or would have been entitled to receive if he had been retired at the time of his death shall be payable to the surviving spouse until her death and then to the Participant's child(ren) until reaching the age of 18 or 23, if Attending College).

In addition, Section 5.02 shall be amended to provide as follows:

Section 5.02, Vested Benefits

a. A Participant who becomes an Inactive Participant before normal retirement (and, if applicable, before the date of disability payment begins under the DISABILITY BENEFITS SECTION of Article V) will be entitled to a deferred monthly retirement benefit in the Normal Form to begin on his Superannuation Retirement Date. The deferred retirement benefit will be equal to the Participant's Accrued Benefit on the day before the date he became an Inactive Participant, assuming he has completed 12 years of Accrual Service and ceases to be an Eligible Employee before the date he completes the age and service requirements for Normal Retirement Date.

The vested benefit will only be provided for a Participant who files written notification with the Township Supervisors of his intention to vest within 90 days of the date he ceases to be an Eligible Employee.

Payment of the deferred monthly retirement benefit shall be in the Normal Form. The Participant may elect to receive his Required Contribution Account in a Single sum payment at any time after he ceases to be an Employee and before his Retirement Date if no other benefit is payable. Such payment will be a voluntary cash-out and shall eliminate any vested deferred benefit as described in this Section 5.02 or any other monthly pension benefit permitted under the Plan.

2. A copy of this Side Agreement will be appended to Exhibit E of the collective bargaining agreement.

ON BEHALF OF MONTGOMERY
TOWNSHIP:

Date

ON BEHALF OF MONTGOMERY
TOWNSHIP POLICE OFFICERS
COLLECTIVE BARGAINING UNIT:

Daniel E. Mitchell 3-19-17

Date

RESOLUTION No.

THE BOARD OF SUPERVISORS OF MONTGOMERY TOWNSHIP MONTGOMERY COUNTY, PENNSYLVANIA

A RESOLUTION OF THE MONTGOMERY TOWNSHIP BOARD OF SUPERVISORS AMENDING THE MONTGOMERY TOWNSHIP POLICE PENSION PLAN TO ENSURE COMPLIANCE WITH CURRENT LAW.

BE IT RESOLVED by the Board of Supervisors of Montgomery Township (“the Board”), under the authority bestowed upon the Board by the Second Class Township Code, 53 P.S. § 65101 *et seq.*; and

WHEREAS, the Montgomery Township (“the Township”) has established the Montgomery Township Police Pension Plan (“the Plan”) for the benefit the Township’s police officers; and

WHEREAS, the Plan is governed by the terms of the Police Pension Fund Act, Act of May 25, 1956, P.L. (1955) 1804, *as amended*, 53 P.S. § 767 *et seq.*, commonly referred to as “Act 600”; and

WHEREAS, from time to time the Township has amended and/or restated the terms of the Plan with the most recent restatement occurring in 2012; and

WHEREAS, Act 600 permits the survivors of a deceased police officer who dies outside of the line of duty, but while employed by a municipality, with certain survivor options depending upon the length of service rendered prior to death; and

WHEREAS, the Plan currently has no such options for survivors of such officers; and

WHEREAS, it has become necessary to make additional amendments to the Plan in order to ensure that it continues to comply with the provisions of Act 600.

NOW THEREFORE, the Board RESOLVES as follows:

1. Section 5.01 of the Plan shall be amended to provide as follows:

- a. If a Participant dies prior to providing sufficient service to qualify for a vested pension pursuant to Section 5.02, his surviving spouse or, if no surviving spouse or if the surviving spouse subsequently dies, his/her child(ren) under the age of 18 (under the age of 23 if Attending College), shall be entitled to a single-sum death benefit equal to the Participant's Required Contribution Account, unless the Participant designates a Beneficiary for this purpose.
- b. If a Participant dies after rendering sufficient service to qualify for a vested pension benefit pursuant to Section 5.02, the surviving spouse or if the surviving spouse subsequently dies, his/her child(ren) under the age of 18 (under the age of 23 if Attending College), may elect one of the following two options:
 - (1) Receive a return of the contents of the Participant's Required Contribution Account as set forth in the above subsection "a"; or
 - (2) Receive fifty percent (50%) of the vested pension benefit for which the Participant had qualified at the time of the Participant's death, which benefit shall be payable beginning on the first day after the deceased Participant's Normal Retirement Date.

In the absence of an election made within ninety (90) days of the date of the Participant's death, the election contained in subsection "a" shall be implemented.

- c. If a Participant dies after having become eligible to receive a normal pension or disability pension benefit, a monthly pension or disability benefit equal to 50% of the benefit the Participant was receiving or would have been entitled to receive if he had been retired at the time of his death shall be payable to the surviving spouse until her death and then to the Participant's child(ren) until reaching the age of 18 or 23, if Attending College).

2. All provisions of this Resolution shall become effective immediately.

RESOLVED, this 14th day of April, 2014.

ATTEST:

**MONTGOMERY TOWNSHIP
BOARD OF SUPERVISORS**

Secretary	Date
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Chairman
Date

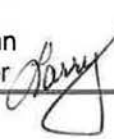
MONTGOMERY TOWNSHIP BOARD OF SUPERVISORS
BOARD ACTION SUMMARY

SUBJECT: Consider Award of General Construction, Electrical, Plumbing, Mechanical and Fire Protection Contracts - Community/Recreation Center Building Project

MEETING DATE: April 14, 2014 ITEM NUMBER: #11,

MEETING/AGENDA: ACTION XX NONE

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

INITIATED BY: Lawrence J. Gregan
Township Manager  BOARD LIAISON: Joseph P. Walsh, Chairman

BACKGROUND:

At the January 27, 2014 Board of Supervisors Meeting, the Board authorized the solicitation of Bids for five (5) prime contracts for the construction of an approximately 39,000 square foot Community/Recreation Center at 1030 Horsham road. Sealed bids were received on March 6, 2014 at 10:00 AM., prevailing time at which time they were publicly opened and read.

In total, ten (10) bids were received for General Construction, six (6) for Electrical, seven (7) for Mechanical (1 withdrawal), nine (9) for Plumbing and three (3) for Fire Protection. The Architect has reviewed the bids from the apparent low bidders for compliance with the specifications. In addition, the Architect has contacted references provided each bidder in their Qualifications Statement and has provided the attached report recommending the award of the contracts to the "lowest responsible bidder" for each of the five prime contracts is attached.

ZONING, SUBDIVISION OR LAND DEVELOPMENT IMPACT:

None.

PREVIOUS BOARD ACTION:

None.

ALTERNATIVES/OPTIONS:

None.

BUDGET IMPACT:

The estimated cost for the construction of the building and site improvements, including all five alternates in the General Construction Contract, is \$9,372,486 including all desired options in the General Construction bid. Funding for the contracts for the construction of the Community /Recreation Center has been procured using Bond Proceeds in the amount of \$7,875,250 plus Reserve Funds in the amount of \$1,497,236.

RECOMMENDATION:

The Board of Supervisors is requested to award the General Construction, Electrical, Plumbing, Mechanical and Fire Protection Contracts for the Community/Recreation Center to the lowest responsible bidder per the recommendations of the Architect.

MOTION/RESOLUTION:

See Attached

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
Michael J. Fox	Aye	Opposed	Abstain	Absent
Joseph P. Walsh	Aye	Opposed	Abstain	Absent

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

Resolution #

WHEREAS, bids were requested by the Montgomery Township Board of Supervisors for the construction of a Community and Recreation Center Building; and

WHEREAS, bids were opened on March 6, 2014, and reviewed by the Township's consultants and staff; and

WHEREAS, the following were found to be the low bidders:

General Construction:	E.R. Stuebner	\$7,185,000 Base Bid
	Option #1: 2 Gym Scoreboards	\$ 9,000
	Option #2: Gym Divider	\$ 13,000
	Option #3: Extended Walking Trail	\$ 55,000
	Option #4: 4 Addl. Folding BB Hoops	\$ 21,000
	Option #5: Additional Parking	\$ 61,000
	Option #6: Gym Skylights	\$ 28,000
	Option #9a: Sanitary to Building	\$ 61,000*
	Option #9b: Extended Sanitary	\$ 15,000*
	Option #10b: 12 inch Loop Water Main	\$ 66,000*
	*Mandatory Options	

Electrical Construction:	Lenni Electric	\$ 919,986 Base Bid
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Plumbing Construction:	Apex Plumbing	\$ 309,500 Base Bid
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Mechanical Construction:	Worth & Co.	\$ 530,000 Base Bid
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Fire Protection:	Apex Plumbing	\$ 99,000 Base Bid
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NOW, THEREFORE, BE IT RESOLVED by the Board of Supervisors of Montgomery Township that we hereby authorize that contracts for the construction of a Community and Recreation Center Building be awarded to E.R. Stuebner at a price of \$7,514,000, Lenni Electric at a price of \$919,986, Apex Plumbing at a price of \$309,500, Worth & Co. at a price of \$530,000 and Apex Plumbing at a price of \$99,000.

NOW, THEREFORE, BE IT ALSO RESOLVED by the Board of Supervisors of Montgomery Township that we hereby authorize issuance of Notices to Proceed to the following contractors for the construction of the Montgomery Township Community and Recreation Center: General Construction: E.R. Stuebner, Electrical Construction: Lenni Electric, Plumbing

Construction: Apex Plumbing, Mechanical Construction: Worth & Co., and Fire Protection: Apex Plumbing. Said Notices to Proceed are contingent upon the execution of the standard contracts and submission of the required bid documents, performance bond, payment bond and certificates of insurance.

MOTION BY:

SECOND BY:

VOTE:

DATE: April 14, 2014

cc: E.R. Stuebner, Lenni Electric, Apex Plumbing, Worth & Co., F. Bartle, Esq.,
J. Trump, D. Rivas, Minute Book, Resolution File, File

Martin D. Kimmel, AIA, NCARB
James F. Bogrette, AIA

KIMMEL BOGRETTE
Architecture + Site

Joseph P. Walsh, Chairman
Montgomery Township Board of Supervisors
1001 Stump Road
Montgomeryville, PA

March 24, 2014

RE: Montgomery Township Community Center
Report of Bid Opening

Dear Mr. Walsh

On March 6, 2014 the bids for the Montgomery Township Community Center were publicly opened and read aloud. Since the Bid Opening, this firm has been conducting a thorough evaluation of the apparent low bidders for each of the five (5) Prime Contracts to determine the qualification of the "lowest responsible bidder". Our evaluation consisted of review of the information provided on each of the Contractor Qualification Statements submitted with the bids (including their licensing), experience, references (Construction, Trade, Bank and Surety) and financial statements. The following is a summary of our recommendation for award of the contracts for the five (5) prime contractors.

General Construction:

The two lowest bidders on the base bid were Penn Builders at \$7,183,000 and E.R. Stuebner at \$7,185,000. A \$2,000 dollar difference. However, at the very minimum the township must select alternates for the site water supply and site sanitary. When selecting the appropriate alternates for water and sanitary E.R. Stuebner becomes the lowest bidder at \$7,327,000 and Penn Builders becomes the second lowest bidder at \$7,399,000. Alternate bids for the site water and sanitary sewer improvements were also requested from the Plumbing Contractors but those bid prices were universally higher than those bid prices provided by the General Contractors.

Kimmel Bogrette has worked with E.R. Stuebner before and we have found them to be a good contractor doing an average of \$80 million in construction per year. The most recent project they completed for KBA was the Haverford Recreation Center which most of the Board has toured. They completed that project on time and within budget.

The company has been incorporated since 1955. Kimmel Bogrette checked 3 of the trade references provided by the bidder and found no issues to report. We received satisfactory

responses from representatives of three projects recently completed by Stuebner as well. An audited financial statement was included with the bid package which shows total assets of approximately \$32 million for 2012.

Acknowledgement of Addenda, Bid Bond with Power of Attorney, Affidavit of Non-Collusion, Contractor's Qualification Statement, References, Status of Work, Proof of Insurance and Proof of Bonding were included with Stuebner's bid as required by the bid specifications.

There were also a number of alternate bid prices requested in the General Construction bid which are listed at the end of this report along with recommendations.

Mechanical Construction:

The low bidder for this contract was Guy M. Cooper with a bid of \$477,000. On the same day as the bid opening Kimmel Bogrette received an email from Cooper's office that they had discovered a math error in their bid and would be withdrawing it. We also received an official letter on March 6, 2014. It is our understanding that under the State of Pennsylvania bidding laws they are within their rights to do so under this time frame and for this reason. The Township Manager and the Township Solicitor have also reviewed the withdraw request. I understand from the Township Manager that the Board of Supervisors has approved the withdraw request.

Since Cooper has withdrawn their proposal the next low bidder is Worth and Company with a bid of \$530,000. Worth's bid is \$53,000 higher than the Cooper bid. Kimmel Bogrette was the architect for the new Life Science's Building at Delaware Valley College which was recently completed and Worth was the mechanical contractor for that project. Kimmel Bogrette had no issues with their work on that project. The project was completed on time and within budget.

The company has been incorporated since 1983 and does approximately \$124 million of construction annually. Kimmel Bogrette checked 3 trade references and found no issues to report. We received satisfactory responses from representatives of three recent projects completed by Worth as well. An audited financial statement was included with the bid package and it shows total assets of approximately \$42 million for 2012.

It should be noted that Worth provided a list of lawsuits (that have been either filed by or filed against) since their inception as requested in the Qualifications Statement. There have been 14 claims filed against Worth and most of these seem to be for insurance reasons. 13 claims filed by Worth and most of these seem to be for non-payment for work performed. Worth states that no liens have been filed against the company.

Acknowledgement of Addenda, Bid Bond with Power of Attorney, Affidavit of Non-Collusion, Contractor's Qualification Statement, References, Status of Work, Proof of Insurance and Proof of Bonding were included with the bid as required by the bid specifications.

There were no alternates for the Mechanical contract.

Electrical Construction:

The low bidder for this contract was Lenni Electric with a base bid of \$919,986. Kimmel Bogrette has not worked with this company before. They appear to do mostly public school work and signal work for PennDOT.

The company has been incorporated since 1983 and does approximately \$11 million of construction annually. Kimmel Bogrette checked 3 trade references and found no issues to report. Calls to three representatives of recent projects completed by Lenni Electric were satisfactory as well. An audited financial statement was included with the bid package and it shows total assets of approximately \$5 million for 2012.

Acknowledgement of Addenda, Bid Bond with Power of Attorney, Affidavit of Non-Collusion, Contractor's Qualification Statement, References, Status of Work, Proof of Insurance and Proof of Bonding were included with the bid as required by the bid specifications.

There were no alternates for the Electrical contract.

Plumbing Construction:

The low bidder for this contract was Apex Plumbing with a base bid of \$309,500. From the Qualifications Statement submitted Apex appears to predominantly do public school projects.

The company has been incorporated since 1994 and does approximately \$5 million of construction annually. Kimmel Bogrette has worked with this contractor before at the Haverford Community Center which members of the Board and Staff have toured. Additionally, one of their references listed previously has served as Director of Facilities for Montgomery County and is currently the Facilities Director at Montgomery County Community College. I spoke with him and he gave Apex a good review. Kimmel Bogrette also called 2 of their other references and found no issues to report. An audited financial statement was included with the bid package and it shows total assets / liabilities of approximately \$89 million for 2012

Acknowledgement of Addenda, Bid Bond with Power of Attorney, Affidavit of Non-Collusion, Contractor's Qualification Statement, References, Status of Work, Proof of Insurance and Proof of Bonding were included with the bid as requested by the specifications.

There were no alternates for the Plumbing contract.

Fire Protection:

The low bidder for this contract was also Apex Plumbing with a base bid of \$99,000. Their review is as per the Plumbing Construction heading above.

Acknowledgement of Addenda, Bid Bond with Power of Attorney, Affidavit of Non-Collusion, Contractor's Qualification Statement, References, Status of Work, Proof of Insurance and Proof of Bonding were included with the bid as requested by the specifications.

There were no alternates for the Fire Protection contract.

Bid Tabulation**General Construction:** E.R. Stuebner

Base Bid:	\$7,185,000
Alternate G-9A (sanitary to bldg):	\$ 61,000
Alternate G-9B (sanitary to MH5):	\$ 15,000
Alternate G-10B (12" water line):	<u>\$ 66,000</u>
Total	\$7,327,000

Mechanical Construction: Worth and Company

Base Bid: \$530,000
(bid from Guy M. Copper of \$477,000 was withdrawn by the contractor)

Electrical Construction: Lenni Electric

Base Bid: \$919,986

Plumbing Construction: Apex Plumbing

Base Bid: \$309,500

Fire Protection: Apex Plumbing

Base Bid: \$99,000

Project Total Base Bids: **\$9,185,486**

KBA and the Township had estimated the construction cost at \$9,260,000.

Alternates that may be selected by the Board. These will add to the base building cost and it is recommended that they be included in the contracts as alternates to be added to the contract at the Township's discretion.

2 scoreboards for the gym:	\$ 9,000
Divider for gymnasium:	\$13,000
Additional walking trail around building:	\$55,000
4 additional basketball backboards in gym:	\$21,000
Additional parking lot as west side of site:	\$61,000
Optional skylights for the gymnasium:	<u>\$28,000</u>
Total of All Alternates	\$187,000

Recommendation:

Based on the information provided by the contractors in their bid submission and reference checks conducted by Kimmel Bogrette there appears to be no reason to legally reject any of the lowest bid prime contractors. Therefore, Kimmel Bogrette would recommend approval of the General, Mechanical, Electrical, Plumbing and Fire Protection Contracts by the Board of Supervisors for the construction of the Montgomery Township Community Center. After the Board has voted to award all contracts KBA+S will assist the Township in the preparation of Contracts and issuing a Notice to Proceed to the five prime contractors.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Jonathan S. Trump". The signature is fluid and cursive, with the first name "Jonathan" written in a more compact, stylized manner, followed by "S." and "Trump".

Jonathan S. Trump, RA
Associate

MONTGOMERY TOWNSHIP BOARD OF SUPERVISORS
BOARD ACTION SUMMARY

SUBJECT: Consider Award of Contract – Owners Representative Services – Community Recreation Center Building Project

MEETING DATE: April 14, 2014

ITEM NUMBER: #12.

MEETING/AGENDA:

ACTION XX NONE

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

INITIATED BY: Lawrence J. Gegan
Township Manager

BOARD LIAISON: Joseph P. Walsh, Chairman

BACKGROUND:

Staff obtained four (4) proposals for Owners Representative Services for the Community/Recreation Center building project. The firm of J. D. Bravo Company provided a "not to exceed" proposal (copy attached) to perform these which was reviewed and found to be acceptable by the staff.

ZONING, SUBDIVISION OR LAND DEVELOPMENT IMPACT: None.

PREVIOUS BOARD ACTION: None.

ALTERNATIVES/OPTIONS: None.

BUDGET IMPACT:

These services are included in the budget for the construction of the Community/Recreation Center.

RECOMMENDATION:

Staff recommends award the contract for Owners Representative Services for the Community/Recreation Center building project to J. D. Bravo Company, Malvern PA as outlined in their proposal for the not to exceed amount of \$109,000.

MOTION/RESOLUTION:

BE IT RESOLVED by the Board of Supervisors of Montgomery Township that we hereby award the contract for Owners Representative Services for the Community/Recreation Center building project to J. D. Bravo Company, Malvern PA as outlined in their proposal for the not to exceed amount of \$109,000.

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.



Montgomery Township
Community and Recreation Center

Proposal For
Owner Representation Services



MONTGOMERY TOWNSHIP
MONTGOMERY COUNTY, PENNSYLVANIA

Presented to:

Mr. Lawrence Gegan, Township Manager
Montgomery Township Building
1001 Stump Road
Montgomeryville, PA

February 13, 2014



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- I. Cover Letter**
- II. Summary of Qualifications**
 - A) Introduction Letter**
 - B) Resumes**
 - C) Project Experience**
 - D) Professional References**
- III. Project Summation**
 - A) Project Approach and Schedule**
 - B) Scope of Services- Tasks and Hours per Phase**
- IV. Fee Proposal**



February 13, 2014

Montgomery Township
1001 Stump Road
Montgomeryville PA 18936-9605

ATTN: Mr. Lawrence Gregan, Township Manager

**RE: Montgomery Township Community and Recreation Center
Owner Representative Services Proposal**

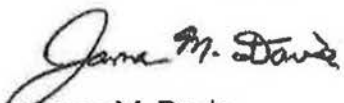
JD Bravo Company, Inc. (Bravo Company) is pleased to present its proposal for Owner's Representative (OR) services to support Montgomery Township's new Community and Recreation Center (CRC) project. Bravo Company is a multi-disciplined construction consulting firm experienced in assisting clients in the management of the construction process from initial budget, through design and construction, to successful project closeout. Bravo Company's senior staff includes a group of highly experienced construction professionals with over 100 years' experience as outlined in our Summary of Qualifications enclosed herein.

Bravo Company proposes Robert Gallant as the Project Manager on this project. Mr. Gallant's extensive construction and program management experience along with his role as the Owner's Representative on the Haverford Township CREC project make him uniquely qualified to serve Montgomery Township on the CRC Project. As an Assistant Public Works Director for Haverford Township, I was fully involved in the development, construction and operational planning of the CREC project and will continually offer my expertise and availability to assist on the CRC project.

Additionally, due to my service with the Marine Corps, the Bravo Company is qualified to operate as a certified Service Disabled Veteran Owned Small Business, (SDVOSB), and Disadvantaged Business Enterprise, (DBE) serving the Federal Government; States of Pennsylvania, New Jersey and Virginia; and the City of Philadelphia.

We are confident that we will provide exceptional support to Montgomery Township. If you have any questions or comments, please contact Rob Gallant or me at 484-320-7600. Thank you for the opportunity to be of service

JD Bravo Company, Inc.


James M. Davie
President

136 Pennsylvania Ave., Malvern, PA 19355 484-320-7600
www.jdbravocompany.com



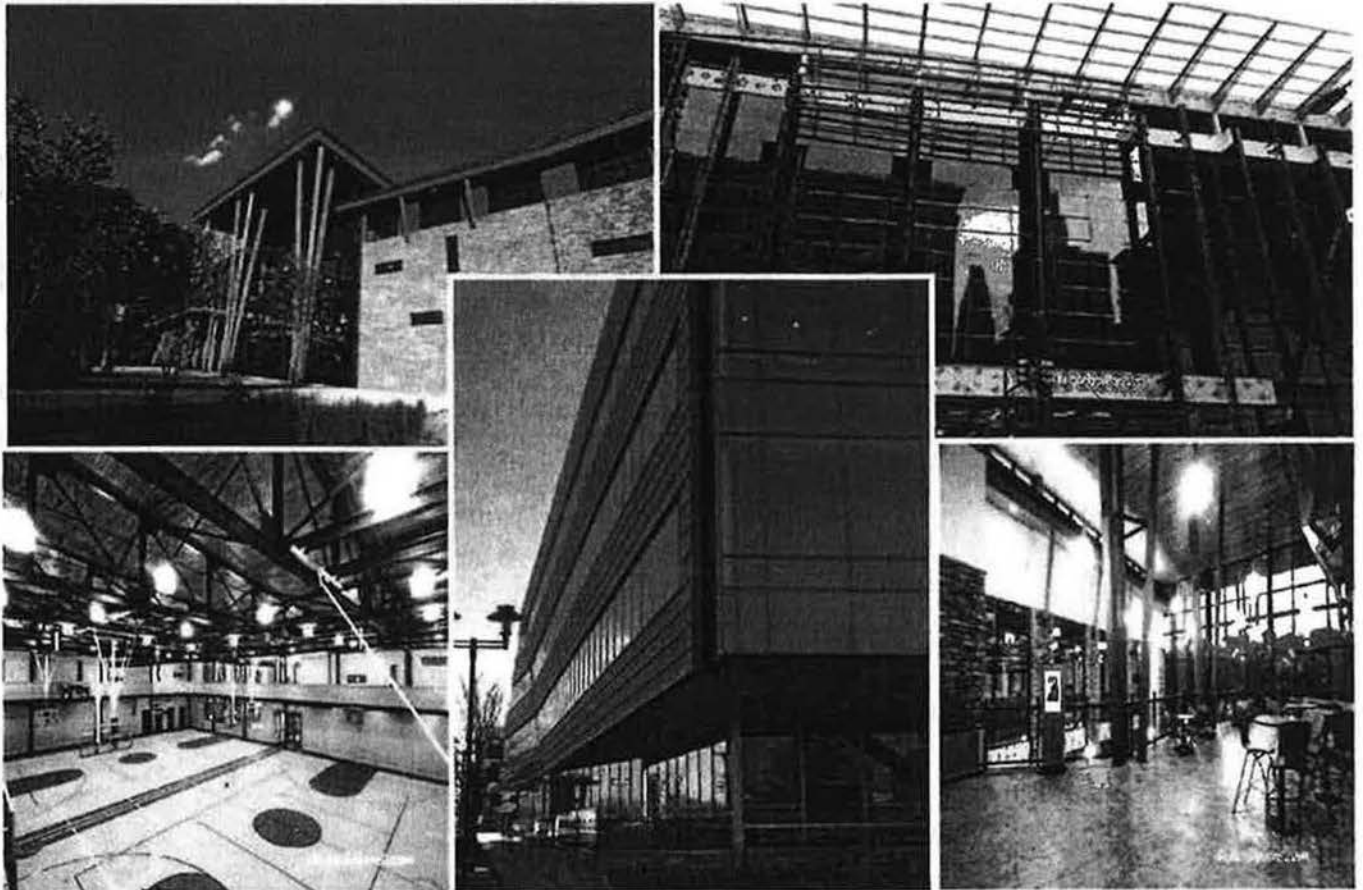
II. Summary of Qualifications

JD BRAVO COMPANY

Complete Construction Services

JD Bravo Company
136 Pennsylvania Avenue
Malvern, PA 19355
www.jdbravocompany.com
484-320-7600

Summary of Qualifications





Summary of Qualifications

Program, Project and Construction Management

Commissioning and Support Services





I am pleased to present the Summary of Qualifications of the JD Bravo Company, Inc. (Bravo) in the hope that our Firm may be of service to you in the near future. Bravo was incorporated in 2011 upon my return to the civilian sector after completion of my two tours of duty with the Marine Corps in Iraq and six years in directing public sector and public/private development work.

My vision for Bravo has been realized through the assembly of a group of highly experienced professionals who have specialized in the provision of Program, Project and Construction Management Services. Bonded and insured, the Firm possesses the capability to serve as a General Contractor where it can self-perform a number of trades. Additionally, and due to the breadth of key staff experience, the Firm offers specialty expertise in estimating, scheduling and commissioning services.

Bravo is no ordinary small business as its key staff possesses more than 100 years' experience in the successful completion of programs and projects having an aggregate value that exceeds \$4 billion. Bravo's depth of capability in the areas of Program, Project and Construction Management was significantly bolstered through the acquisition of Dettore Associates, Inc. (DAI) in 2012. Founded in 1993, DAI provided a wide range of Owner Representation and Construction Management services to Owners of some of the most significant projects constructed in Greater Philadelphia during its twenty year tenure.

Since its founding, Bravo has been Verified by the Center for Veteran's Enterprise as a Service Disabled Veteran Owned Small Business, (SDVOSB), and Certified by the Commonwealth of Pennsylvania, (PennDOT), as a Disadvantaged Business Enterprise, (DBE).

Enclosed herewith is the Firm's Summary of Qualifications. The Summary includes resumes, representative projects and references. I'm certain that in reviewing this material you'll recognize many projects the Bravo Staff has completed.

On behalf of the JD Bravo Company, I would be most interested in gaining an understanding of your ongoing needs and how my Team might assist. Please feel free to contact me with any questions or to arrange a more in-depth discussion. I look forward to the opportunity to speak with you in the near future.

Sincerely,


James M. Davie
President

Table of Contents

Introduction Letter

Resumes

Project Experience

Professional References

Resumes



Robert M. Dettore, CCM
Director, Business Development

EDUCATION

BS, Civil Engineering,
Construction Management,
Spring Garden College

Professional Registrations

Certified Construction Manager (CCM)

PROFESSIONAL ASSOCIATIONS

Member, Construction Management
Association of America (CMAA)

Member, American Arbitration
Association

Member, U.S. Green Building
Council (USGBC)

Publications/Presentations/Awards

Lecturer/Adjunct Faculty Member,
Advanced Construction Management
Courses, Spring Garden College

Co-Author, Revisions to the Philadelphia
Building Code relative to the requirement
for fire sprinkler systems in high rise
Buildings, 1992

Background

Mr. Dettore serves as the Director of Business Development for the JD Bravo Company. Prior to this assignment he headed the firm of Dettore Associates Inc. (DAI). Founded in 1993, DAI specialized in the representation of Owners engaged in the development and construction of major capital projects and programs and has served a wide range of well-known clients in both the public and private sectors. The aggregate value of projects successfully completed by DAI under his direction exceeds \$3 billion.

During his 34-year career, Mr. Dettore has completed hundreds of challenging and complicated urban and infrastructure projects. Recognized nationally for his expertise, Mr. Dettore is often sought out to "rescue" troubled or failing projects and has completed projects in the following industry sectors:

- Federal, State, Municipal, Public Schools
- Industrial, Manufacturing, Petrochemical
- Communications (Public Safety, Defense and Private Enterprise)
- Data, Communications and Control Centers (Public and Private)
- Commercial High Rise (Mixed Use Redevelopment)
- Transportation Infrastructure
- Institutional and Healthcare

Mr. Dettore is one of approximately 1,000 construction managers in the United States who have attained certification as a Certified Construction Manager (CCM) as conferred by CMAA.

Mr. Dettore's broad real estate development and construction management experience is founded on a progression of increasingly responsible positions requiring a mastery of capital, long range and strategic planning, budgeting, cost analysis and reporting, design management, estimating, scheduling, contract and lease negotiations, and labor and tenant relations. This expertise has proven invaluable in the creation of the specialized project teams required to complete the wide array of major projects and programs he has led.

Robert B. Gallant
Director of Operations

EDUCATION

BS, Construction Engineering
Technology, Spring Garden College

Architectural Design, Drexel
University

Leadership Institute, FMI
Management Consulting

Contractor Performance
Management, FMI Management
Consulting

Financial Management, FMI
Management Consulting

PROFESSIONAL ASSOCIATIONS

OSHA Certification

ASHE Certification

International Society of
Pharmaceutical Engineers

Background

Mr. Gallant serves as the Director of Operations for the JD Bravo Company, Inc. Prior to this assignment he served as a Partner, Board Member, and Vice President of Construction for IMC Construction in Malvern, PA. In this role, Mr. Gallant was responsible for the complete oversight of Project Management including hiring, training, and supervision of all project management staff and field superintendents. Additionally, he developed, implemented, and managed IMC's safety program, including OSHA reporting and safety training and was instrumental in the establishment of virtually every aspect of the project management systems employed on numerous projects of all sizes and types.

Throughout Mr. Gallant's more than 30 year career he has been regularly and consistently recognized for his attention to detail and proactive management skills which were the cornerstones of excellent client service and satisfaction offered. His experience spans the private and public sectors where he has completed varied and challenging ground-up, renovation, and brownfield projects in the following sectors:

- Medical (office building, surgical, and MRI)
- Pharmaceutical (including Class 400,000 manufacturing)
- Commercial offices and data centers (mid-rise, low-rise, mixed use)
- Community residential (apartment/assisted living/extended care)
- State, municipal, and public schools
- Private college and university (building expansion and renovations, athletic fields and facilities)
- Retail centers, food courts, and restaurants

Mr. Gallant's thorough knowledge and experience with the entire construction process, from concept through occupancy, serves to create an environment of trust and cooperation among the staffs he has led and the clients he has served. With expertise in every project delivery method (hard bid, cost-plus/design-build/CM at-risk, or agency-CM), Mr. Gallant possesses unmatched skills in the packaging, sub-contracting, and risk management necessary to successfully complete the projects for which he is responsible.

Resumes



Jerome N. Dettore, PE
Director, Planning and Development

EDUCATION

BS, Civil Engineering
Carnegie Mellon University

Professional Registration
Registered Professional Engineer (PA)

PROFESSIONAL ASSOCIATIONS

American Society of Civil Engineers
Engineers Society of Western PA
Urban Land Institute (ULI)
NAIOP, Pittsburgh

Publications/Presentations/Awards

Mount Lebanon Parking Authority
Mount Lebanon Zoning Hearing Board
Mount Washington CDC

Background

Mr. Dettore serves as a Senior Consultant to the JD Bravo Company, specializing in all matters related to Urban Redevelopment, Land Use and Community Development. Prior to his affiliation with JD Bravo, the majority of Mr. Dettore's career saw him in numerous executive positions in the service of the City of Pittsburgh, Pennsylvania where he most notably led the Urban Redevelopment Authority of Pittsburgh as its Executive Director. Concurrently, he served as President for both the Pittsburgh Housing Development Corporation and the Pittsburgh Economic and Industrial Development Corporation.

A Registered Professional Engineer, Mr. Dettore's expertise has been relied on by numerous municipalities in Western Pennsylvania. Key accomplishments include former brownfield redevelopment sites ranging in size from 42 to 238 acres where significant public financing was leveraged to attract significant private development and related economic activity. The most notable of these projects include the South Side Brownfield Redevelopment, Washington's Landing Brownfield Redevelopment, Somerset Frick Park and the Pittsburgh Technology Center. The total and continuing economic value to Metropolitan Pittsburgh will ultimately exceed \$1 billion.

Mr. Dettore is considered an expert in Public-Private Urban Redevelopment and the following related specialties;

1. Negotiated property acquisition
2. Community planning and engagement
3. Organization and management of market-based master plans
4. Coordination with and approvals for planning and zoning
5. Management and oversight of project financing and coordinating the participation of State and Local Legislators to approve a Tax Increment Financing, (TIF), Plan.
6. Managed the solicitation process for private development and completed the economic and comparative analyses thereof.

Resumes



Robert W. Brockway, CPE
Chief Estimator

EDUCATION

BS, Civil Engineering Technology
Temple University

Professional Registrations
Certified Professional Estimator

PROFESSIONAL ASSOCIATIONS

American Society of Professional
Estimators
OSHA Certification

Publications/Presentations/Awards

Lecturer/Adjunct Faculty Member
Community College - Philadelphia

Background

Mr. Brockway serves as Chief Estimator for the JD Bravo Company. His extensive experience as an estimator is rooted in his own experiences operating a general contracting firm for over ten years. In this role he was responsible for all aspects of the business operations which allowed him to develop a keen sense of the perspectives of small and medium sized trade contractors. Superior ability to visualize work at the trade level and the ability to create accurate estimates were key factors in making the decision to provide these services to larger, more diverse construction firms. In the twenty-five years since making that decision, Mr. Brockway has filled positions of ever-increasing responsibility, starting as a Staff Estimator and progressing professionally to arguably become one of the most competent Chief Estimators in the Philadelphia Area market.

Mr. Brockway's project experience is all-encompassing as he has successfully provided conceptual, schematic, design development, budget, hard-bid and GMP estimates to support the full range of delivery methodologies, (GC, CM, CM-at-risk and Design-Build), in the following industry sectors:

- Land Development
- Residential
- Commercial / Retail /Mixed-Use
- Healthcare (MOB, MRI, Surgical)
- Extended Care / Assisted Living Facilities
- College / University / Public Schools K-12

Outstanding technical abilities include the creation of well-defined scopes and bid packages, time and material studies, comparative analyses, value engineering and a working knowledge of LEED certification and commissioning.

Resumes



Woody Van Sciver
Senior Project Manager

EDUCATION

BS Construction Management
Drexel University

Certification, Department of Community
& Economic Development

PROFESSIONAL ASSOCIATIONS

Urban Land Institute

Publications/Presentations/Awards

Borough of Malvern, PA
(Borough Council President)

Background

Mr. Van Sciver serves as a Senior Project Manager for the JD Bravo Company, Inc. Prior to this assignment he served as the founder and Principal of Monument Management Corp. which provided a full range of agency and at-risk construction management services. Mr. Van Sciver's extensive industry experiences, spanning over twenty years, include a progression of increasingly responsible positions on projects of varying complexity and value.

A "hands-on" practitioner coupled with a BS in Construction Management allows Mr. Van Sciver to serve as a particularly effective member of the JD Bravo Company project management Staff. A working knowledge of estimating, bidding and procurement to cost control, scheduling and sub-contract development and administration are critical to the JD Bravo Company commitment to Quality Assurance and Project Controls.

Mr. Van Sciver has been responsible for the management and successful completion of literally scores of projects having an aggregate value that runs into several hundred million dollars. Project successes span a diverse range of construction industry sub-sectors as noted below:

- Pharmaceutical
- Commercial Office
- Healthcare
- Food Service
- Commercial Retail
- Entertainment
- Manufacturing
- Warehouse / Distribution Centers

Mr. Van Sciver is also active in his home community of Malvern, Pennsylvania, and provides the benefit of his professional expertise by serving as Borough Council President and spearheading efforts to the revision of Comprehensive Plan and related Sub-division and Zoning Codes. Outstanding interpersonal and communication skills make Mr. Van Sciver a key member of the JD Bravo Team.

Resumes



Scott Parry
Superintendent

EDUCATION

Journeyman Craftsman & Equipment
Operator

PROFESSIONAL ASSOCIATIONS

OSHA Certification

US Green Building Council
Green Advantage Certificate

Background

Mr. Parry serves as a Site Superintendent for the JD Bravo Company, Inc. Prior to this assignment he served as a Construction Superintendent for IMC Construction of Malvern, Pennsylvania. IMC Construction is a large regional general contracting and construction management firm. The diverse nature of the IMC portfolio of projects is reflected in Mr. Parry's twenty-four, (24), year tenure with the firm.

As a highly experienced and seasoned construction professional, whose earliest experiences were those of a tradesman, Mr. Parry brings a practical, common sense approach to the projects for which he is responsible without losing sight of the critical need for safety and quality control.

Functioning as JD Bravo's "boots-on-the-ground", Mr. Parry possesses an outstanding technical ability which when coupled with his diverse project background allows him to achieve project successes with regularity. From daily site safety inspections and knowledge of project plans and specifications to maintaining labor harmony and resolving technical concerns with the Owner and design professionals, Mr. Parry serves as JD Bravo's "go-to" resource on any project to which he is assigned.

Mr. Parry has been responsible for the superintendence and successful completion of dozens of projects having an aggregate value than runs into several hundred million dollars. Project successes span a diverse range of construction industry sub-sectors as noted below:

- Medical and Pharmaceutical
- Commercial Office
- Assisted Living /Healthcare
- Data Centers
- Commercial Retail
- K-12 Educational
- Manufacturing
- Distribution Centers

Mr. Parry maintains a current knowledge of construction means and methods as well as related OSHA and ICRA standards.

Project Experience

GENERAL CONTRACTING

Pennsylvania College of Technology

New Dormitory Building

Automotive, Welding & Child Care Building Renovations

Williamsport, PA

\$26,000,000

Drexel University

Administration Office Renovations

Philadelphia, PA

\$2,400,000

Cedar Cliff High School

Library Addition and Building Renovations

Camp Hill, PA

\$7,000,000

Vertical Screen

Corporate Headquarters

Warminster, PA

\$13,000,000

Red Land High School

Cafeteria Addition and Building Renovations

Lewisberry, PA

\$6,000,000

Kutztown University

Cafeteria Renovations

Kutztown, PA

\$350,000

Muhlenberg College

Rehearsal House Renovation

Allentown, PA

\$1,800,000

Gwynedd Mercy College

Stadium Building and Seating

Gwynedd Valley, PA

\$2,000,000

Project Experience

GENERAL CONTRACTING (continued)

Main Line Health

New Medical Office Building- Core and Shell
Newtown Square, PA
\$8,000,000

Main Line Health

Medical Office Building and LINAC Fitout
Newtown Square, PA
\$5,000,000

200 Tournament Drive

Corporate Office Fitout
Horsham, PA
\$2,400,000

LA Fitness Sports Club

New Construction
South Whitehall, PA
\$6,000,000

University of Pennsylvania

C.M. Kline Animal Surgery Center
Kennett Square, PA
\$1,700,000

University of Pennsylvania

Rhodes Soccer Field Stadium Building
Philadelphia, PA
\$1,200,000

Holiday Inn Hotel at the Philadelphia Airport

Guest Room and Common Area Renovations
Essington, PA
\$2,900,000

Manor Care

Assisted Living Facility
Emerson, NJ
\$6,400,000

Project Experience

GENERAL CONTRACTING (continued)

Commonwealth of Pennsylvania

Statewide Radio System (Public Safety)

Site Development, Towers, Utilities

230 sites statewide

\$75,000,000

RCA Corporation

Government Systems Division

Communications manufacturing and radio systems deployment

Nationwide

\$25,000,000

CM-AT RISK

Physicians Care Surgical Hospital

New Construction

Limerick, PA

\$9,000,000

Great Valley Pet Hotel

New Construction

Frazer, PA

\$3,400,000

South Jersey Federal Credit Union

New Operation Center

Deptford, NJ

\$7,000,000

One Thousand Continental Drive

New Office Building

King of Prussia, PA

\$24,000,000

The Star Group

Corporate Office Building

Voorhees, NJ

\$9,500,000

Project Experience



CM-AT RISK (continued)

The Baldwin School

New Athletic Facility

Bryn Mawr, PA

\$15,000,000

Prince George's Plaza

New Food Court and Mall Renovations

Hyattsville, MD

\$17,000,000

Gateway Center

Site Development and Building Construction

Everett, MA

\$30,000,000

Synthes USA

Medical Manufacturing Addition

West Chester, PA

\$2,800,000

Eden Hall

Assisted Living Facility

Roanoke, VA

\$1,600,000

Mayfair House

Assisted Living Facility

Lynchburg, PA

\$3,400,000

AGENCY CM

Haverford Township

Recreation and Environmental Center

Haverford, PA

\$8,200,000

Morris Crossroads Corporate Complex

Renovation and Redevelopment

Budd Lake, NJ

\$18,000,000

Project Experience



AGENCY CM (continued)

Lower Merion School District

Capital Program, K-12 New Construction and Renovation

Lower Merion Township, PA

Belmont Hill Elementary	\$9,000,000
Cynwyd Elementary	\$14,000,000
Penn Wynn Elementary	\$13,000,000
Merion Elementary	\$7,000,000
Gladwynne Elementary	\$10,000,000
Welsh Valley Middle	\$15,000,000
Bala Cynwyd Middle	\$16,000,000
Harriton High	\$22,000,000
Lower Merion High	\$33,000,000

Southeastern Pennsylvania Transportation Authority

1234 Market Street, Philadelphia PA

Acquisition and complete renovation of 680,000 sf of high rise office building

\$78,000,000

MetLife Real Estate Investments

Centre Square Complex (1.8 million sf), Philadelphia PA

Six year program of Base Building and Tenant Improvements

\$95,000,000

- Plaza-Lobby Renovation
- Subterranean Parking Garage Reconstruction
- HVAC Replacement Program, including chillers
- Replacement of existing IRMA roofing system
- Sprinkler installation program
- Elevator Replacement program (37 traction, 10 hydraulic)
- Restroom reconstruction program (120 separate rooms)
- Tenant Improvements (30 projects ranging in size from 1000 to 580,000sf)

MetLife Real Estate Investments

2000 Market Street, Philadelphia PA

Base Building and Tenant Improvements of 650,000 sf high-rise office building

\$15,000,000

DESIGN-BUILD

Phoenixville Hospital

MRI Renovations and Replacement

Phoenixville, PA

\$2,000,000

Project Experience

DESIGN BUILD (continued)

Springmill Assisted Living Center

New Construction

Kimberton, PA

\$12,500,000

Three Crescent Drive

New Office Building

Philadelphia, PA

\$14,000,000

Barnes & Noble

New Retail Store

Livingston, NJ

\$7,000,000

Bloomfield Park

New Mixed Use Development-Retail/Office/Parking Garages/Residential

Pontiac, MI

\$160,000,000

Comcast Data Center

Facility Renovations

Ontario, Canada

\$600,000

Centre Square Office Building

Common Area, Entrances and Plaza Renovations

Philadelphia, PA

\$6,500,000

Heathergate Adult Living Community

Apartments and Townhomes

Langhorne, PA

\$18,000,000

Lenox Distribution Center and Offices

Building Renovation and Expansion

Langhorne, PA

\$4,800,000

Project Experience

DESIGN BUILD (continued)

Woodbridge Assisted Living Facility

Adult and Extended Care Apartments

Kimberton, PA

\$12,500,000

Siemens, Inc.

Executive Briefing Center Construction

Malvern, PA

\$750,000

Lenox Manufacturing Facility

Silver and Ceramic Fabrication Renovations

Pomona, NJ

\$2,400,000

Siemens, Inc.

Data Center Renovations

Malvern, PA

\$4,000,000

Techni-Tool, Inc.

Distribution Center and Corporate Headquarters

Worcester, PA

\$6,500,000

Shared Medical Systems

Assembly Room Renovation

Malvern, PA

\$1,800,000

SPECIALTY CONSULTING INCLUDING OWNER'S REPRESENTATION

Commonwealth of Pennsylvania

Pennsylvania Convention Center Expansion, Philadelphia, PA

Owner's Representative

\$775,000,000

St. Francis Hospital

Clinical Services Building, Renovation and New Construction

Trenton, NJ

\$18,000,000

Project Experience

SPECIALTY CONSULTING INCLUDING OWNER'S REPRESENTATION (continued)

US Veterans Administration

Nursing Home Addition

Wilkes-Barre, PA

\$7,000,000

United States Postal Service

General Mail Facilities, Vehicle Maintenance Facilities

Scranton, PA

\$8,000,000

New Brunswick, NJ

\$7,000,000

Cleveland, OH

\$7,000,000

Eli Lilly Company

Chemical Plant Expansion

Clinton, IN

\$12,000,000

Pacific Gas and Electric Company

Helms Pumped Water Storage Project (Hydroelectric)

Construction of pump houses and penstocks

\$120,000,000

Philadelphia Department of Public Property

Airport High Speed Line, Contract 35

New Construction

Philadelphia, PA

\$30,000,000

SmithKline Pharmaceuticals

Corporate Office and Laboratory Expansion

New Construction

West Conshohocken, PA

\$15,000,000

Philadelphia Redevelopment Authority

Gallery II Expansion

New Construction

Philadelphia, PA

\$30,000,000

Philadelphia Department of Public Property

Penn's Landing Redevelopment

New Construction, Viaduct, Great Plaza, Utility Infrastructure

Philadelphia, PA

\$140,000,000



Project Experience

SPECIALTY CONSULTING INCLUDING OWNER'S REPRESENTATION (continued)

Haverford State Hospital Grounds Redevelopment

Haverford Township, PA

\$17,500,000

Site Infrastructure and Roadways

Baseball, Soccer and Playfields

Townhouses

Apartments/Condos

Single Family Homes

Professional References

Mr. Timothy Denny
Assistant Township Manager
Haverford Township
599 Glendale Road
Havertown, PA
610-446-9397

Mr. Martin Kimmel
Principal
Kimmel-Bogrette Architects
151 East 10th Avenue, Suite 300
Conshohocken, PA 19428
610-834-7805

Mr. William Kushner
Vice President
Techni-Tool, Inc.
1547 Trooper Road
Worcester, PA 19490
610-940-5444

Mr. Gerald Maier
Director of Real Estate
Southeastern Pennsylvania Transportation Authority
1234 Market Street, 10th Floor
Philadelphia, PA
215-580-7476

Mr. Sam L. Warshawer, Esq.
Venzie, Phillips & Warshawer
2032 Chancellor Street
Philadelphia, PA 19103
215-567-3322



III. Project Summation

Project Approach

I. Background

As part of its continuing efforts to develop a Community and Recreation Center, (CRC), the Montgomery Township Board of Supervisors acting through its Township Manager has determined that the retention of an Owner's Representative throughout the construction process would provide a wide range of practical benefits in the delivery of the completed project. The retention of an Owner's Representative, (OR), will, in effect, allow the Township to extend the Staff of the Township Manager with technical and managerial resources devoted solely to the timely and cost-effective production of the new CRC.

In an effort to secure those services the Township has solicited Proposals to provide the requisite services. The JD Bravo Company, Inc., (Bravo), of Malvern, Pennsylvania was invited to provide a proposal based on the successful efforts of its Key Staff to provide the same range of services to Haverford Township, Pennsylvania on its recently completed Community Recreation and Environmental Center, (CREC). The Montgomery Township CRC has, in many respects, been influenced by the efforts and successes of Haverford.

II. The Project

Montgomery Township has selected a site at the intersection of Horsham and Stump Roads as the location of the new CRC. This site was originally developed for a commercial office purpose which was not constructed due to the economic downturn in 2008. The prior owner of the site did complete a variety of site development tasks which have benefitted the development of the CRC.

Plans and specifications for the 40,000 square foot facility were completed through the efforts of Kimmel Bogrette Site and Architecture. Those plans have been issued for bidding in accordance with the "Separate Prime" requirements under Commonwealth law.

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**Community and Recreation Center
Montgomery Township**

The CRC plans depict the wide range of work required to construct the Community and Recreation Center as required by the Township and generally includes the following;

- Roadway and storm water management
- Utility laterals and services, lighting and landscaping
- Grading, paving, walks, curbs
- Gymnasium, indoor track, cardio and weight rooms
- Community, classrooms, child care and multi-purpose rooms
- Township offices, lobby, lounge and outdoor deck area
- Kitchen, toilet, common and storage rooms/spaces

III. The Approach

As part of its effort to develop this Proposal, the Bravo Team has completed the following tasks;

- Completed a careful review of the Project plans and specifications. (This review was completed by James M. Davie and Robert B. Gallant of the Bravo Staff who played key roles in the completion of the Haverford Township CREC. Mr. Davie was the Assistant Director of Public Works and Mr. Gallant was retained by Haverford as their Owner's Representative. As a result their review was specific and directed based on recent experience...)
- Visited the Project site to integrate its knowledge of the plans and specifications with the actual "on the ground" conditions and logistics
- Discussed the Township's needs and perspectives with the Township Manager.

Based on its extensive experience on similar assignments, there is no "learning curve" to speak of for Bravo's seasoned construction professionals. Bravo clearly understands its role as trusted advisor to the Township and will objectively undertake its assignment in a manner directed to the furtherance of the Township's interests.

Acting as an extension of the Owner's Staff the Bravo Team will assure that that the Township's priorities are reflected in the oversight and day-to-day decision making processes working in concert with the Township Manager. Bravo will provide a continuous effort to assure contractor performance complies with the quality standards set forth in the Contract Documents and that the

**Community and Recreation Center
Montgomery Township**

work of the project is completed in accordance with approved schedules and with a minimization of Change Orders and/or claims.

The Bravo Proposal includes the provision of regular oversight of the Separate Contractors to assure that the work is progressing appropriately from the Township's perspective. This oversight is not provided as a substitute for the contractually required contractors' field supervision, independent inspections or Architectural/Engineering observations. Bravo's oversight activities will consist of quality assurance assessments to verify compliance with contract obligations. When matters of non-compliance arise, Bravo will, acting in concert with the Township, evaluate, plan and spearhead the necessary efforts to resolve the matter-at-hand. Properly timed and regularly scheduled field and documentation checks / reviews will, in many cases, pre-emptively minimize the matters of non-compliance that do arise.

The Bravo effort will be directed to monitor and expedite the timely completion of specific ongoing activities by the contractors thus assuring a timely Project delivery. Those activities will consist of careful monitoring of the procurement, delivery and construction schedule, look-ahead schedules, daily reports, project meeting attendance and meeting minutes, foremen meetings, pre-installation meetings, mock-up reviews, sample and material submittals and timely processing of shop drawings by contractors and design professionals. Assuring the careful management and administration of the Project often results in the realization of economic value that far exceeds the OR fee.

IV. RACP Funding

Based on its review of the Project and its discussions with the Township Manager, Bravo understands that the Township has applied to the Commonwealth for funding from the Redevelopment Assistance Capital Program, (RACP).

The Bravo Team is familiar with this funding process as well as the specific accounting and financial tracking necessary to support post-project auditing conducted by the Commonwealth. As a result of his attention to matters of compliance, Mr. Gallant has managed to make compliance audits on RACP funded projects "non-events" as exemplified by the recent successful audit of the Haverford CREC project.

**Community and Recreation Center
Montgomery Township**

Bravo fully expects to apply its expertise in this area to the Montgomery Township CRC through its guidance and leadership in the production of reports detailing costs associated with the funding and the intended benefits to the grantee and workforce.

Project Schedule

With the understanding that this project has a 360 day construction duration, JDBC anticipates providing Owner's Representative services during the following phases and durations.

Preconstruction - Bid Phase	March through April 2014
Construction Phase	May 2014 through April 2015
Closeout Phase	May 2015
Move-in Phase	April through May 2015

We have estimated the hours necessary to provide Owner's Representative services as described in our Scope of Services for the durations as noted above. Extensions to these durations may require a re-evaluation of hours and costs.

Scope of Services – Tasks and Hours per Phase

As the Owner's Representative (OR), JDBC will be the sole representative with the Owner's agents, contractors and vendors in all phases of the project and report directly to the Township Manager. To meet this requirement, Robert Gallant will be assigned as the project manager for this project and act as the liaison and primary contact for communication between JDBC and Montgomery Township. In addition, due to his operations and construction experience at Haverford Township for the Haverford Reserve development and the Community Environmental and Recreation Center (CREC) construction, James Davie will support Mr. Gallant to provide field inspections during construction; coordinate inspections and testing; and attend meetings as required to provide supplemental oversight and insight to the OR services. To complete these services, the JDBC Team will perform the following tasks as indicated in the descriptive text below.

Preconstruction – Bid Phase

20 hours

- Assist Architect with checking contractor references
- Assist in the solicitation of bids for selection of special inspections or consultants as necessary.
- Assist the Township in the set-up, coordination, record keeping and scheduling of meetings for RACP funds

Construction Phase

780 hours

Project Oversight

- Review and comment on the site plan prepared for the construction phase site logistics by the Prime General Contractor. Plan should identify temporary construction utilities, temporary construction facilities, staging areas, lay down areas, contractor trailer areas, wash down area, storage areas, topsoil stockpile areas, confined or restricted areas, and any special facility or area needs for any of the Prime Contractors. OR will review, comment and re-direct corrections if any items on this plan otherwise affect the building plans or Township's needs as they relate to construction sequencing or Township's ongoing and future operations.

**Community and Recreation Center
Montgomery Township**

- Monitor and observe the progress of the work by the prime Contractors and their subcontractors and comment on current or foreseeable issues of coordination, schedule, cost impact, safety and quality as appropriate for Prime Contractor's correction or action.
- Monitor and observe the progress of work of the Prime Contractors for coordination and integration with the activities, services and material supplied by the Township.
- Monitor the work performed by the Prime Contractors to determine conformity with the contract requirements and schedule. In coordination with the Architect/Engineer's lead, verify compliance with quality and compliance with contract documents of the materials and equipment. Assist in the issuance official notifications to the Prime Contractors of non-compliance issues, quality issues or issues which could significantly impact the construction schedule.
- Monitor the progress of the project by reviewing the Prime General Contractors Daily Reports and/or Log and comment to Prime General Contractor for corrections as appropriate.
- Prepare Monthly Executive Reports which summarize the Project Schedule status, Work in Place, Construction Budget, Prime Contractor's Billings, and 30 day Forecasted Progress of Work and Progress Photos.
- Monitor and coordinate documentation of the performance of all tests required of the Prime Contractors and Independent Testing Laboratories and verify invoice payments of same with Township.
- Advise the Architect and Township of knowledge of any situation, information or detail which has increased or may increase the cost of the project, cause a delay in the project, affects the sequence of work, or may result in the installation of work or material which is not acceptable or in conformance with the contract documents. Work with all parties to resolve any of these issues in a manner acceptable to the Township at the least possible expense.
- Continued coordination and record keeping for the RACP grant

Project Meetings

- In conjunction with the Prime General Contractor (Project Coordinator) and Architect, organize, attend, review and comment on bi-weekly Project Meetings with the Project Team (Township, Architect, Prime Contractors, and Consultants (as necessary)).
- Attend pre-installation meetings and special meetings as required.
- Attend coordination meetings with Pennsylvania RACP Consultant as necessary.
- Attend Bi-Weekly Contractor Foremen's meetings (scheduled on same day as Project Meetings).
- Attend Board of Supervisors Meetings as requested to provide updates on the progress of work.

Approvals

- Work with Montgomery Township's building code officials and notify the Architect and Township of any unauthorized or non-compliant work.
- Monitor Prime Contractor's scheduling of inspections to assure compliance with Township and contract document requirements.
- Monitor Prime Contractors for their scheduling of inspections and obtaining approvals and verify with Building Code Officials on a regular basis that work is progressing satisfactorily.

Change Orders

- Assist the Township and Architect in review of Change Order Requests (COR).
- Confirm legitimacy of request as an item that is not part of base contract obligations and provide cost evaluation as to value of extra work.

Prime Contractor Invoicing

- Review and comment on Prime Contractors schedule of values prior to submission in the monthly payment applications
- Review the Prime Contractors Applications for Payment and make recommendations to Architect for approval, changes or denial as appropriate.

Shop Drawings and Project Documents

- Maintain a record copy of all contracts, drawings, specifications, samples, shop drawings, product data, addenda, change orders and other modifications. Copies shall be provided by the Prime Contractors at no cost to JDB.

As-Built and Record Documentation

- Monitor that Contractors record drawings are being maintained current with the progress of work and periodically check and review Prime Contractors as built document progress.

Closeout Phase

90 hours

- Participate in the preparation of the punch list (prepared and distributed by the Architect) and a schedule for completion of the corrective work. Assist the Architect in conducting inspections (and re-inspections as necessary) to verify which portions of the work are substantially complete.
- Monitor the progress, correction and completion of the work and make recommendations to the Architect for final inspection.
- Monitor any warranty work by the Prime Contractors to verify that obligations are being met and corrective action taken. Assist the Architect in the preparation of any notifications to Contractors of unsatisfactory work.
- Assist and recommend to Architect when issuance of a Certificate of Substantial Completion is appropriate and whether contingent items are necessary.

- Assist in obtaining and reviewing receipt of all required closeout documentation from Prime Contractors including but not limited to Waivers, Releases, Warranties, Bonds, As-built drawings, Certificates, Close-out and Operation manuals, training, etc. prior to final payment.

Move-in Phase

70 hours

- Develop and monitor the schedule for Township move-in.
- Monitor and assist in the coordination between Prime Contractors and Township Vendors as required for the installation of Township furnished furniture and equipment.

Scope Qualifications

- Proposal is based on delineation of responsibilities for Architect, Prime Contractors, Project Coordinator, MEP Coordinator and Owner's representative as detailed in the Specifications and in accordance with JDBC review recommendations summarized in 2/7/14 memo titled "Review and Comment of Specification Sections 00 and 01".
- Price does not include the bidding, purchase or move coordination of Township provided vendors, suppliers or equipment. These services can be provided as an additional cost if requested.



IV. Fee Proposal

Fee Proposal

We have based this proposal on a discounted and blended rate of the individuals that will be working on this project. James Davie (President) and Robert Gallant (Director of Operations) will share duties on this project but will be invoicing at a discounted Senior Project Manager rate.

<i>Preconstruction – Bid Phase</i>	<i>20 hours @ \$110.00</i>	<i>\$2,200.00</i>
<i>Construction Phase</i>	<i>780 hours @ \$110.00</i>	<i>\$85,800.00</i>
<i>Closeout Phase</i>	<i>90 hours @ \$110.00</i>	<i>\$9,900.00</i>
<i>Move-in Phase</i>	<i>70 hours @ \$110.00</i>	<i>\$7,700.00</i>
<i>Reimbursables</i>	<i>Supplies and Copies (Lump Sum)</i>	<i>\$500.00</i>
<i>Reimbursables</i>	<i>Mailing / Misc. Expenses (Lump Sum)</i>	<i>\$500.00</i>
<i>Reimbursables</i>	<i>Travel Expenses (Lump Sum)</i>	<i><u>\$2,500.00</u></i>
TOTAL LUMP SUM PRICE		\$109,100.00

NOTES:

- 1) JD BC proposes to provide the services outlined herein as a Lump Sum Price. Unless scope is substantively changed or construction duration extends by more than 30 days, JD Bravo Company will absorb any additional hours to complete the project.
- 2) Reimbursables will be invoiced as a percentage of completion.

MONTGOMERY TOWNSHIP BOARD OF SUPERVISORS
BOARD ACTION SUMMARY

3/31/2014

SUBJECT: Consider Proclamation of Arbor Day for Tree City USA

MEETING DATE: April 14, 2014

ITEM NUMBER: # 13

MEETING/AGENDA: WORK SESSION ACTION **XX** CONSENT NONE

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

INITIATED BY: Marianne McConnell
Deputy Zoning Officer

BOARD LIAISON: Michael Fox, Liaison
Shade Tree Commission

BACKGROUND:

The Shade Tree Commission sponsors an annual event to celebrate Arbor Day. This year, the Annual Arbor Day Tree Give-Away will be held on Saturday, April 26th, 2014 at the Montgomery Township Building. Montgomery Township has also been named as a 2013 Tree City USA recipient with a presentation of the award by our State Forester scheduled during the event as well. The Shade Tree Commission would request that the Board of Supervisors begin this celebration with the reading of the attached Arbor Day Proclamation.

ZONING, SUBDIVISION OR LAND DEVELOPMENT IMPACT:

None

PREVIOUS BOARD ACTION:

The Board adopted a similar resolution on April 22, 2013.

ALTERNATIVES/OPTIONS:

None

BUDGET IMPACT:

\$7,000 has been budgeted for the event.

RECOMMENDATION:

The members of the Shade Tree Commission would like to extend an invitation to the Board of Supervisors to attend this annual event on Saturday, April 26th to celebrate Arbor Day.

MOTION/RESOLUTION:

Attached

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

Arbor Day Proclamation

Whereas, in 1872 J. Sterling Morton proposed to the Nebraska Board of Agriculture that a special day be set aside for the planting of trees, and

Whereas, this holiday, called Arbor Day, was first observed with the planting of more than a million trees in Nebraska, and

Whereas, Arbor Day is now observed throughout the nation and the world, and

Whereas, trees can reduce the erosion of our precious topsoil by wind and water, cut heating and cooling costs, moderate the temperature, clean the air, produce oxygen and provide habitat for wildlife, and

Whereas, trees are a renewable resource giving us paper, wood for our homes, fuel for our fires and countless other wood products, and

Whereas, trees in our township increase property values, enhance the economic vitality of business areas, and beautify our community, and

Whereas, trees wherever they are planted, are a source of joy and spiritual renewal,

NOW, THEREFORE, the Board of Supervisors of Montgomery Township, Pennsylvania, do hereby proclaim Saturday, April 27, 2013 as

Arbor Day

in Montgomery Township, and we urge all citizens to celebrate Arbor Day and to support efforts to protect our trees and woodlands, and

Further, we urge all citizens to plant trees to gladden the heart and promote the well-being of this and future generations.

Dated this the 26th day of April 2014.

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

xc: Shade Tree Commission, Minute Book, Resolution File, File

MONTGOMERY TOWNSHIP BOARD OF SUPERVISORS
BOARD ACTION SUMMARY

SUBJECT: Consideration - Preliminary/Final Land Development Plan -127 Stevers Mill
Road Subdivision - LDS #671

MEETING DATE: April 14, 2014

ITEM NUMBER: # 14.

MEETING/AGENDA: WORK SESSION

ACTION XX

NONE

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

INITIATED BY: Bruce Shoupe

Director of Planning and Zoning

BOARD LIAISON: Joseph P. Walsh

Chairman

BACKGROUND:

The applicant, Avalon Way, LLC has proposed the subdivision of an existing 1.24 acre parcel into 2 new lots, with the construction of a new dwelling on one lot and the retention of a newly constructed dwelling on the other lot. The 2 new lots will be divided into Lot #1, which would be 27,019 square feet and Lot #2 being 27,188 square feet. This is located on Stevers Mill Road within the R-2 Residential Zoning District.

The Township staff and consultants have reviewed this plan for compliance with Township Codes. Copies of the review letters are attached. Also attached is a letter received from TPD regarding the question of a school bus stop at the intersection of Stevers Mill Road and Nottingham Way.

ZONING, SUBDIVISION OR LAND DEVELOPMENT IMPACT:

The Applicant executed an indefinite extension form, which allows unlimited review time by the Township, unless a notice is received from the Applicant that a decision be rendered within 90 days by the Board of Supervisors.

PREVIOUS BOARD ACTION:

None

ALTERNATIVES/OPTIONS:

The Board could deny this plan or approve this plan with the conditions as outlined in the attached resolution.

BUDGET IMPACT:

None.

RECOMMENDATION:

The resolution be adopted by the Board of Supervisors.

MOTION/RESOLUTION:

The Resolution is attached. (The Chairman needs to read only the highlighted portions of the resolution.)

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 B. Bartle, Esq.

RESOLUTION

MONTGOMERY TOWNSHIP

MONTGOMERY COUNTY, PENNSYLVANIA

A RESOLUTION GRANTING CONDITIONAL PRELIMINARY/FINAL APPROVAL OF THE APPLICATION FOR LAND DEVELOPMENT FOR 127 STEVERS MILL ROAD SUBDIVISION – LDS#671

The Board of Supervisors of Montgomery Township, Montgomery County, Pennsylvania, hereby resolves to grant conditional, preliminary/final approval of the land development application and plan for **127 Stevers Mill Road Subdivision**, as more fully detailed on the plans listed on Exhibit "A" attached hereto and made part hereof and further conditioned upon the following being satisfied by the Applicant prior to the recording of the final plan:

1. Fulfilling all obligations and requirements of the **Gilmore & Associates, Inc. letters** dated March 13, 2014, November 11, 2013; **Boucher & James, Inc. letters** dated February 20, 2014, December 4, 2014, November 7, 2013; **Montgomery Township Planning Commission comments** dated January 16, 2014, December 19, 2013;; **Montgomery County Planning Commission comments** dated November 8, 2013; **Traffic Planning and Design, Inc. letter** dated December 4, 2013; **Montgomery Township Fire Marshal's Office comments** dated November 6, 2013; **Montgomery Township Police Department comments** dated October 10, 2013; **Montgomery Township Zoning Review** dated December 5, 2013; and **Kenneth Amey's letters** dated March 17, 2014, November 11, 2013.
2. The Applicant shall enter into a Land Development Agreement and post financial security for all improvements to the satisfaction of the Township Engineer and Township Solicitor for each phase of this development. The record plan shall indicate each phase.
3. The Applicant shall satisfy the requirements of all Montgomery Township Codes, the Montgomery Township Municipal Sewer Authority and North Wales Water Authority. A copy of the Authorities' permits and/or agreements from the above must be provided to the Township.
4. The Applicant shall be responsible for payment of all Township Consultant fees related to this project.
5. The Applicant shall be responsible for obtaining all other Regulatory Authority Permits having jurisdiction over this project.
6. All storm water inlets and outfall structures shall be identified in accordance with the PADEP Municipal Separate Storm Sewer Systems requirements.
7. The Applicant acknowledges that Section 205-116 of the SALDO provides for the payment of a fee in lieu of the dedication of parkland for park and recreation purposes. The Applicant hereby agrees to accept the provisions of Section 205-116(A)(2) of the SALDO providing for the payment of \$2,000.00 per dwelling unit. This fee must be paid for each individual unit prior to the submission of an application for a building permit for that unit.

8. The Developer shall execute the required Storm water Management Facilities Maintenance and Monitoring Agreement for lot #1 and Landscaping Declaration of Covenants and Restriction for its benefit and its successors and assigns.
9. The Applicant Information block shall be changed to the owner of record at the time of recording

BE IT FURTHER RESOLVED that the following **waivers are granted to the extent that they concur with the recommendation of the consultants:**

1. *Section 205-18.A(3)(a) – the requirement that the minimum internal diameter of a storm drain must be 15 inches. (The consultants have no objection to this waiver provided the minimum diameter of the outlet pipe is 6 inches with outlet control at the yard drain. The applicant proposes the use of an 8 inch pipe.)*
2. *Section 205-49.C – the requirement that the landscaping plan be signed and sealed by a registered Landscape Architect. (As the landscaping is minimal and the applicant has worked with the Township Landscape Architect to devise a plan, there is no objection to this waiver.)*
3. *Section 205-52.B(3)(a) – the requirement for softening buffer. The applicant proposes that buffering is not necessary along the northeastern property line as there is a buffer proposed on the adjacent subdivision. (The consultants have no objection to this waiver request as the required buffer planting material is proposed to be planted elsewhere on the site.)*
4. *Section 205-52.G, Table 1 – the requirement for individual lot landscaping. Three shade trees are required to be provided per lot in order to meet this requirement. Existing preserved shade trees in the front and rear yard of each lot will be utilized to fulfill the requirement for Lot #2. The on lot trees will be provided for Lot #1. (The consultants have no objection to this waiver as the trees will be provided.)*
5. *Section 205-53.C – the requirement for preservation of existing trees on the site. Replacement trees must be provided in accordance with Section 205-53.C(4). (The applicant proposes to plant 11 of the required 17 trees and will provide a fee in lieu of the 6 missing trees. The consultants have no objection to this waiver.)* **6 Replacement Trees @ \$350 = \$2,100 due at recording of plan and agreement.**
6. *Section 205 – Appendix B.B. – the requirement for the minimum water quality criteria for the Little Neshaminy Creek Watershed. The post development runoff volume generated from the one-year, twenty-four hours design storm shall be controlled so that it is released over a minimum of 24 hours. (The consultants recommend a partial waiver of this requirement to allow a reduced dewatering time of 13.5 hours. Given the relative small size of the project, the lack of soils suitable for infiltration and the benefit of the replacement trees; the intent of the ordinance is satisfied.)*
7. *Section 205- Appendix B.C (2) – the requirement for use of the “Cover Complex” method to analyze increase in total runoff and to determine storm water management facility size. The applicant is requesting to use the Modified Rational method in place of the Cover Complex method. (The consultants have no objection to this waiver based on the minimal size of the drainage shed.)*

8. Section 205-78.B (1) – the requirement to show existing features within 400 feet of the site. *The applicant will provide an aerial photo of the site. (The consultants have no objection to this waiver.)*

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, the 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.

DULY PRESENTED AND ADOPTED by the Board of Supervisors of Montgomery Township, Montgomery County, Pennsylvania, at a public meeting held this 14th day of April, 2014.

MOTION BY:

SECOND BY:

VOTE:

The above conditions are agreed to by the applicant and property owner this _____
day of _____, 2014.

Applicant's Signature

Property Owner Signature

EXHIBIT "A"

PLANS-STUDIES

<u>DESCRIPTION</u>	<u>ORIGINAL DATE</u>	<u>REVISED DATE</u>
1. Plan of Subdivision	10-7-13	2-3-14
2. Existing Features Plan	10-7-13	2-3-14
3. Construction Improvement Plan	10-7-13	2-3-14
4. Erosion and Sedimentation Control Plan	10-7-13	2-3-14
5. Landscaping Plan	10-7-13	2-3-14
6. Photo Overlay Plan	10-7-13	2-3-14
7. Detail Sheet	10-7-13	2-3-14
8. Detail Sheet – Erosion Control	10-7-13	2-3-14

Memo

To: Montgomery Township Planning Commission

From: Jason T. Smeland, P.E.

Date: October 3, 2013

Re: 127 Stever's Mill Road – Waiver Requests

Section 205-49.C – Landscape Architect Seal

A waiver is requested from the requirement that the Landscaping Plan be prepared by a registered Landscape Architect. The proposed required landscaping for this project is minimal and strait forward in terms of planting requirements. The applicant believes that special input from a landscape architect is not necessary.

Section 205-52.G – Individual Lot Landscaping

A waiver is requested to permit the use of existing preserved shade trees in the front and rear yards of each lot to fulfill this requirement for Lot 2. The on-lot trees will be provided on Lot 1.

Section 205-52.B(3)(a) – Buffer Plantings

A waiver is requested from the buffering requirements along the northeastern property line as there is a buffer proposed on the adjacent subdivision. The buffering along the property is not necessary.

Section 18.A.(3)(a) – Stormwater Management Pipe diameter

A waiver is requested to permit the use of 8 inch HDPE pipe in lieu of the required 15 inch diameter pipe for the proposed basin and basin outlet pipe. 8 inch pipe is adequate to handle the required flow and will be privately owned and maintained.

Section 205 Appendix B.B. & B.C.(2) – Little Neshaminy Creek Watershed – 1 year storm volume control & SCS method for Stormwater Analysis.

A waiver is requested from the requirements related to the 1 year, 24 hour storm volume control requirements and from the requirements to use the SCS stormwater analysis method. Given the small size of the watershed and the lack of ability of the site soils to infiltrate stormwater volume, it will be impossible to meet the 1 year volume control requirements without providing a design that will be potentially maintenance intensive. The design uses a modified rational method which is a more accurate stormwater management model for drainage small drainage sheds than the SCS method.

Section 205-78.B(1) Existing Features within 400 feet: A waiver is requested to provide an aerial photo in lieu of this requirement.

Marita A. Stoerrle

From: Bruce S. Shoupe
Sent: Friday, April 11, 2014 9:38 AM
To: Marita A. Stoerrle
Subject: FW: 127 Stevers Mill

Please update resolution for my review

Bruce S. Shoupe
Director of Planning and Zoning
Montgomery Township
1001 Stump Road
Montgomeryville, PA 18936
215-393-6920
Bshoupe@Montgomerytp.org



www.montgomerytp.org

From: Jim Dougherty [<mailto:JDOUGHERTY@gilmore-assoc.com>]
Sent: Friday, April 11, 2014 9:34 AM
To: Lenape Valley Engineering Consultants; Bruce S. Shoupe
Subject: Re: 127 Stevers Mill

Thanks, Jason.

Bruce, I can recommend a partial waiver to allow a reduced dewatering time of 13.5 hours.

Given the relative small size of the project, the lack of soils suitable for infiltration and with the benefit of the replacement trees; the intent of the ordinance is satisfied.

Thanks,
Jim

From: Lenape Consultants <lenapeconsultants@yahoo.com>
Reply-To: Lenape Consultants <lenapeconsultants@yahoo.com>
Date: Friday, April 11, 2014 9:13 AM
To: Jim Dougherty <jdougherty@gilmore-assoc.com>, Bruce Shoupe <bshoupe@montgomerytp.org>
Subject: 127 Stevers Mill

Hi Jim - In regard to 127 Stevers Mill Road, I have attached a copy of the basin outflow hydrograph for the water quality storm (2 inches of rainfall for a SCS 24 hour Storm). The Hydrograph shows that the basin will take about 13.5 hours to drain completely from the time that the basin is at peak capacity. In regard to the waiver requested regarding the water quality, we are requesting a waiver to allow a 13.5 hr detention time rather than a 24 hr drainage time.

We have provided a 3" orifice to drain the basin and are not comfortable with decreasing the orifice due to the risk of clogging.

It should be noted however that 13.5 hrs of detention time is adequate to remove a large portion of the suspended solids in the water. Given the small drainage shed, and risk of clogging, this is the best we can do for this project.

Additionally, as discussed, we will be planting 39 new trees. According to DEP each tree equals 6 c.f. of water quality detention through transpiration. In this case, there will be 234 c.f. of water quality of storage as result of the vegetation.

In summary, although we are not meeting the 24 detention requirement, I believe that overall, the design is meeting the intend of the water quality standards of the storm water management ordinance.

It would be greatly appreciated if you could let Bruce know if you can support the partial waiver request of the water quality standards in order that we can stay on the April 14th BOS meeting agenda.

Thanks for calling me on your sick day. Hope you feel better.

Jason T. Smeland, P.E.
Lenape Valley Engineering
P.O. Box 74
Chalfont, PA 18914
Tel - (215) 622-1414
Fax - (267) 308-0524
E-mail: Lenapeconsultants@yahoo.com

Marita A. Stoerrle

From: Jim Dougherty [JDOUGHERTY@gilmore-assoc.com]
Sent: Thursday, April 10, 2014 4:21 PM
To: Marita A. Stoerrle; Valerie Liggett
Cc: Bruce S. Shoupe; Russ Dunlevy
Subject: RE: 127 Stevers Mill Road - Waiver Request

Marita,

Section 18.A (3)(a) – we support

Section 205 Appendix B.B – we do not support. They have not addressed the water quality requirements for the 1-yr storm. *see revised email dated April 11, 2014*

Section 205 Appendix B.C.(2) – we support

Section 205-78.B(1) – we support

Thanks,
Jim

From: Marita A. Stoerrle [<mailto:mstoerrle@montgomerytwp.org>]
Sent: Thursday, April 10, 2014 3:18 PM
To: Valerie Liggett; Jim Dougherty
Cc: Bruce S. Shoupe
Subject: RE: 127 Stevers Mill Road - Waiver Request

Yes, this is the latest revised plan submission.

Marita Stoerrle
Development Coordinator
Montgomery Township
1001 Stump Road
Montgomeryville, PA 18936
215-393-6903 (office)
215-855-1498 (fax)



www.montgomerytwp.org

From: Valerie Liggett [<mailto:vliggett@bjengineers.com>]
Sent: Thursday, April 10, 2014 3:16 PM
To: Marita A. Stoerrle; Jim Dougherty
Cc: Bruce S. Shoupe
Subject: RE: 127 Stevers Mill Road - Waiver Request

Marita - is the last revised date of the plan going before the board 2/3/14?

Boucher & James Waiver Request Responses

127 Stevers Mill Road

Here are the waiver request responses;

Section 205-49.C

A waiver is requested from the requirement that the Landscaping Plan be prepared by a Registered Landscape Architect. The proposed required landscaping for this project is minimal and straight forward in terms of planting requirements. The applicant believes that special input from a landscape architect is not necessary.

We have no objection to this waiver request.

Section 205-52.B

A waiver is requested to permit the use of existing preserved shade trees in the front and rear yards of each lot to fulfill this requirement for Lot 2. The on-lot trees will be provided on Lot 1.

A waiver is not required from this Ordinance Section, as the required trees have been shown on the landscape plan.

Section 205-52.B(3)(a) - Buffer Plantings

A waiver is requested from the buffering requirements along the northeastern property line as there is a buffer proposed on the adjacent subdivision. The buffering along the property is not necessary.

We have no objection to this waiver request, as the required buffer planting material is proposed to be planted elsewhere on the site.

TRAFFIC PLANNING AND DESIGN, INC.



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

April 8, 2014

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

Re: 127 Stevers Mill Road, LD/S# 671
TPD# MOTO-A-00081

Dear Bruce:

In our role as Township Traffic/Street Lighting Engineer, Traffic Planning and Design, Inc. (TPD) has reviewed subdivision and land development plans for the above referenced project prepared by Lenape Valley Engineering on February 3, 2014. It is our understanding that school buses stop at the intersection of Stevers Mill Road and Nottingham Way to pick up and drop off students. TPD has reviewed the location of the proposed driveway access for Lot 1 in relation to the location of existing driveways on Stevers Mill Road and relative to Nottingham Way and offers the following comments:

1. With the construction of Lot 1, there will be two single family home driveways on the north side of Stevers Mill Road and one on the south side all within 80 feet of Nottingham Way with the two existing driveways being closer to the intersection. The layout is not uncommon for suburban residential subdivisions. In fact, within this development, this same situation exists at the intersections of Stevers Mill Road with Copper Leaf Circle and at Davis Drive with Annabel Road.

Each residential driveway will serve an average of five entering and five exiting trips per weekday based on information contained in the Institute of Transportation Engineer's manual, Trip Generation, 2012. Of these trips, an average of one exiting trip will take place in the AM peak hour (four consecutive fifteen minute intervals with the highest traffic volume) and one entering trip will take place in the PM peak hour based on Trip Generation. As a residential local road, Stevers Mill Road will serve a relatively low traffic volume. Therefore, in our opinion, these driveway locations do not create an unsafe situation from a traffic engineering perspective.

2. Prior to the start of each school year, school district transportation coordinators review all routes. If there is a need to adjust the bus stop location, it can be completed at that time. With two driveways already closer to the intersection than that proposed by Lot 1, it is our opinion that the School District will be able to safely adjust the bus stop location if they determine it needs to be.

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
Jason Smeland, P.E., Applicant's Engineer
Joseph Platt, P.E., TPD



GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

March 13, 2014

File No. 13-10042

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

Reference: 127 Stevers Mill Road – LD/S #671
Tax Parcel #46-00-03407-14-7
Tax Block #17E; Tax Unit #40

Dear Bruce:

Pursuant to your request, Gilmore & Associates, Inc. has reviewed the preliminary subdivision plans for the above-referenced project and offers the following comments for consideration by the Montgomery Township Board of Supervisors:

I. SUBMISSION

- A. Response Letter, as prepared by Lenape Valley Engineering, dated February 11, 2014.
- B. Subdivision Plans, as prepared by Lenape Valley Engineering, eight (8) sheets, dated October 7, 2013, last revised February 3, 2014,
- C. Stormwater Management Report, as prepared by Lenape Valley Engineering, dated September 30, 2013, last revised February 3, 2014.
- D. Erosion & Sedimentation Control Narrative, as prepared by Lenape Valley Engineering, dated October 7, 2013.
- E. Letter from the North Wales Water Authority dated January 18, 2014 indicating their willingness to serve and the availability of system capacity for the proposed project.
- F. Approval letter from the Montgomery County Conservation District, dated November 18, 2013.
- G. Property descriptions for proposed lots 1 and 2 as prepared by Dennis M. Litzenberger, PLS, dated February 4, 2014.

II. GENERAL

The subject property (Tax Parcel #46-00-03407-14-7, Block 17E, Unit 40), owned by Edwin J. Goodwin, Jr., is located at 127 Stevers Mill Road and was part of the Montgomery Hollow Subdivision. The site contains an existing dwelling with garage and macadam drive with access onto Stevers Mill Road. The site falls within the Residential (R-2) Zoning District and the intended use is single-family detached dwelling. The total tract area is 54,207.6 S.F. The project proposes to be subdivided into two lots. Lot 1 will contain a new single family detached dwelling, and lot 2 will contain an existing single family dwelling that is currently under construction. Each proposed dwelling will take access from Stevers Mill Road. Also proposed with this application is the construction of an underground stormwater management system on Lot 1. The site will be served by public water and sewer.

BUILDING ON A FOUNDATION OF EXCELLENCE

III. REVIEW COMMENTS

A. Subdivision and Land Development Ordinance

Based on our review, the following items do not appear to comply with the Subdivision and Land Development Ordinance (SALDO). Upon further development of the plans, additional items may become apparent.

1. §205-78.B.(1) – The location, names, and widths of streets, alleys, including existing streets; the location and names of railroads, location of property lines and names of owners; and the location of watercourses, sanitary sewers, storm drains and similar features within 400 feet of any part of the land to be subdivided. The plan must show the location and size of all watercourses and the boundaries of the floodplain areas utilizing base flood level and regulatory flood elevation data available from federal, states and other sources. We support this waiver request. The Applicant has requested a waiver from this requirement and has included a Photo Overlay Plan, sheet 6 of 8.
2. §205-79.B.(2)(d) – Legal descriptions of the proposed lots shall be provided for review and approval.
3. §205-79.B.(2)(e) – Evidence that the plans are in conformity with township ordinances shall be included on the plans. Variance, and waivers, and any conditions thereof, shall be listed on the record plan.

B. Stormwater Management

Based on our review, the following items do not appear to comply with the Subdivision and Land Development Ordinance (SALDO) Sections 205-18, including Appendix B (Ord. No. 97-72-S), and 205-18.1. Upon further development of the plans, additional items may become apparent.

1. §205-18.A.(3)(a) – The minimum internal diameter of storm drains is required to be 15 inches. The Applicant is proposing an 8 inch pipe within the underground basin. The Applicant is also proposing a 3 inch diameter pipe from the underground basin to the proposed outfall. Given the nature of the project, we would support a waiver to permit pipe diameters less than 15 inches. However, we recommend the minimum diameter of the outlet pipe be 6 inches with outlet control at the yard drain.
2. §205-18.D.(4)(b) – The ownership and responsibility for maintenance of the proposed underground stormwater management system should be included in the deed for Lot 1.
3. §205-18.1.D.(1)(e) – The Applicant shall enter into a maintenance agreement with the Township pertaining to the long-term operations and maintenance of any proposed BMPs.
4. §205 Appendix B.B – The minimum water quality criterion for the Little Neshaminy Creek Watershed is as follows: "The post-development runoff volume generated from the one-year, twenty-four-hour design storm shall be controlled so that it is released over a minimum of 24 hours." Calculations demonstrating compliance with this section of the Ordinance should be added to the Stormwater Management Report. The applicant is requesting a waiver from this requirement. We recommend the analysis be provided to quantify the extent of the request.

5. §205 Appendix B.C.(2) – To analyze the potential increase in total runoff and peak flow rate resulting from a proposed site development and to ultimately determine stormwater management facility size, the "Cover Complex" method should be used. The stormwater calculations should be revised using the SCS Method. Provided the development is considered a small project with less than 10,000 sf of impervious coverage on the lot per section C(3) of Appendix B; we would support a waiver to allow use of the Rational Method.
6. An infiltration BMP is not proposed for this project and based on soil investigations would not be a viable option due to a shallow limiting zone. The detail shall be revised to indicate an impermeable liner in the invert and sides of the proposed basin the detail shall also list the specifications for the liner.

C. General

1. The Applicant should obtain all required approvals, permits, declarations of restrictions and covenants, etc. (i.e., MCPC, MCCD, Montgomery Township Municipal Sewer Authority, North Wales Water Authority, MCDH, DRBC, Fire Marshal, etc.). Copies of these approvals and permits should be submitted to the Township and our office with the final application.
2. A copy of the letter confirming available sewer capacity should be provided.

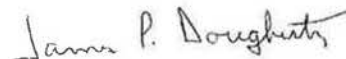
In order to help expedite the review process of the resubmission of the plan, the Applicant should submit a response letter which addresses each of the above comments. Changes that have been made to the application that are unrelated to the review comments should also be identified in the response letter.

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

Sincerely,



Russell S. Dunlevy, P.E.
Executive Vice President
Township Engineers



James P. Dougherty, P.E.
Gilmore & Associates, Inc.
Township Engineers

RSD/jpd/sl

cc: Lawrence J. Gegan, Manager – Montgomery Township
Marita A. Stoerrle, Development Coordinator - Montgomery Township
Frank R. Bartle, Esq., Solicitor – Dischell Bartle & Dooley, PC
Thomas F. Zarko, P.E., Sewer Authority Engineer – CKS Engineers, Inc.
Kevin Johnson, P.E. – Traffic Planning & Design, Inc.
Judith Stern Goldstein, ASLA, R.L.A. – Boucher & James, Inc.
Ken Amey, AICP
Jason T. Smeland, P.E. – Lenape Valley Engineering
Rob Wagner, Applicant – Avalon Way, LLC



GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

November 11, 2013

File No. 13-10042

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

Reference: 127 Stevers Mill Road – LD/S #671
Tax Parcel #46-00-03407-14-7
Tax Block #17E; Tax Unit #40

Dear Bruce:

Pursuant to your request, Gilmore & Associates, Inc. has reviewed the preliminary subdivision plans for the above-referenced project and offers the following comments for consideration by the Montgomery Township Board of Supervisors:

I. SUBMISSION

- A. Subdivision Plans, as prepared by Lenape Valley Engineering, eight (8) sheets, September 30, 2013.
- B. Stormwater Management Report, as prepared by Lenape Valley Engineering, dated September 30, 2013.
- C. Erosion & Sedimentation Control Narrative, as prepared by Lenape Valley Engineering, dated October 7, 2013.
- D. Application for Subdivision & Land Development, October 7, 2013.
- E. Subdivision & Land Development Checklist.

II. GENERAL

The subject property (Tax Parcel #46-00-03407-14-7, Block 17E, Unit 40), owned by Edwin J. Goodwin, Jr., is located at 127 Stevers Mill Road and was part of the Montgomery Hollow Subdivision. The site contains an existing dwelling with garage and macadam drive with access onto Stevers Mill Road. The site falls within the Residential (R-2) Zoning District and the intended use is single-family detached dwelling. The total tract area is 54,207.6 S.F. The project proposes to be subdivided into two lots. Lot 1 will contain a new single family detached dwelling, and lot 2 will contain an existing single family dwelling that is currently under construction. Each proposed dwelling will take access from Stevers Mill Road. Also proposed with this application is the construction of an underground stormwater management system on Lot 1. The site will be served by public water and sewer.

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www.gilmore-assoc.com

III. REVIEW COMMENTS

A. Zoning Ordinance

Based on our review, the following items do not appear to comply with the Zoning Ordinance. Upon further development of the plans, additional items may become apparent.

1. §230-33.H.(1) – A summary of the impervious cover areas for each proposed lot should be added to the Plan of Subdivision in order to verify that the impervious surface ratio is less than 30% on each lot.

B. Subdivision and Land Development Ordinance

Based on our review, the following items do not appear to comply with the Subdivision and Land Development Ordinance (SALDO). Upon further development of the plans, additional items may become apparent.

1. §205-28.A – No person shall commence or perform any grading, excavation, fill, topsoil removal or removal of vegetative cover without first having obtained a grading permit from the Township Zoning Officer upon the recommendation of the Township Engineer. The applicant will need to apply for a grading permit prior to construction.
2. §205-29.B.(9) – Inlet protection shall be installed within the proposed yard drain immediately following installation and should be shown on the erosion and sediment control plan.
3. §205-32.F – At the time the Applicant applies for a building permit, a review of the plan shall be conducted by the Township Engineer to verify conformance with the approved plans.
4. §205-51 – We defer the review of the Landscape Plan to the Montgomery Township Landscaping Consultant.
5. §205-78.B.(1) – The location, names, and widths of streets, alleys, including existing streets; the location and names of railroads, location of property lines and names of owners; and the location of watercourses, sanitary sewers, storm drains and similar features within 400 feet of any part of the land to be subdivided. The plan must show the location and size of all watercourses and the boundaries of the floodplain areas utilizing base flood level and regulatory flood elevation data available from federal, states and other sources. The Applicant has included a Photo Overlay Plan, sheet 6 of 8, depicting this area.
6. §205-78.B.(1) – The location and size of all existing electrical, gas, sanitary sewer, water main, and storm sewer should be added to the plans.
7. §205-78.B.(4) – The location of all existing trees should be shown on the plans. It appears that the site contains significantly more trees than depicted on the plans.
8. §205-78.D.(2)(b) – The location of all proposed utilities, including, should be shown on the plans,.
9. §205-79.B.(2)(d) – Legal descriptions should be provided for all proposed lots.

C. Stormwater Management

Based on our review, the following items do not appear to comply with the Subdivision and Land Development Ordinance (SALDO) Sections 205-18, including Appendix B (Ord. No. 97-72-S), and 205-18.1. Upon further development of the plans, additional items may become apparent.

1. §205-18.A.(3)(a) – The minimum internal diameter of storm drains should be 15 inches. The Applicant is proposing an 8 inch pipe within the underground basin. The Applicant is also proposing a 3 inch diameter pipe from the underground basin to the proposed outfall. Given the nature of the project, we would support a waiver to permit pipe diameters less than 15 inches. However, we recommend the minimum diameter of the outlet pipe be 6 inches with outlet control at the yard drain.
2. §205-18.D.(4)(b) – The ownership and responsibility for maintenance of the proposed underground stormwater management system should be included in the deed for Lot 1.
3. §205-18.1.C.(1) & §205-29 – The Pennsylvania Department of Environmental Protection (DEP) requires that an erosion and sediment control plan be provided for any earth disturbance activity of 5,000 square feet or more. Since the project consists of 19,500 square feet of disturbance, the Applicant should obtain an approval letter from the Montgomery County Conservation District (MCCD) and a copy of the letter should be provided to both the Township and our office.
4. §205-18.1.D.(1)(d)2 – The subject lot is wooded. It is recommended that leaves and other debris be filtered from the collection system to reduce the potential of clogging of the system as well as reducing maintenance to the proposed basin. A detail of the proposed device(s) should be added to the plans.
5. §205-18.1.D.(1)(e) – The Applicant shall enter into a maintenance agreement with the Township pertaining to the long-term operations and maintenance of any proposed BMPs.
6. §205 Appendix B.B – The minimum water quality criterion for the Little Neshaminy Creek Watershed is as follows: "The postdevelopment runoff volume generated from the one-year, twenty-four-hour design storm shall be controlled so that it is released over a minimum of 24 hours." Calculations demonstrating compliance with this section of the Ordinance should be added to the Stormwater Management Report.
7. §205 Appendix B.C.(2) – To analyze the potential increase in total runoff and peak flow rate resulting from a proposed site development and to ultimately determine stormwater management facility size, the "Cover Complex" method should be used. The stormwater calculations should be revised using the SCS Method. Provided the development is considered a small project with less than 10,000 sf of impervious coverage on the lot per section C(3) of Appendix B; we would support a waiver to allow use of the Rational Method.
8. Post-construction stormwater impacts shall be mitigated to replicate pre-construction filtration and runoff conditions. The Township should require the Applicant to conduct testing in the location of any proposed BMPs. A soils evaluation should be conducted in these areas to ensure that there is a minimum soil depth of twenty-four (24") inches between the bottom of the detention basin and the limiting zone. All testing should be witnessed by a representative of Montgomery Township.

9. A storm profile should be added to the plans for the 3 inch pipe from the yard drain to the endwall. All utility crossings and existing and proposed grading should be shown on the profile.
10. The plans should be revised to provide details for the proposed inlet, stormwater trench restoration within unpaved areas, and sanitary trench restoration within paved and unpaved areas.

D. General


1. The Applicant should obtain all required approvals, permits, declarations of restrictions and covenants, etc. (i.e., MCPC, MCDH, Montgomery Township Municipal Sewer Authority, North Wales Water Authority, MCDH, DRBC, Fire Marshal, etc.). Copies of these approvals and permits should be submitted to the Township and our office with the final application.
2. A note should be added to the plans stating that no disturbance is permitted within the wetlands area.
3. A note should be added to the plans stating that the existing wetland boundary shall be staked in the field prior to construction.
4. A copy of the letter confirming available sewer capacity should be provided.

Please note that due to the nature and amount of revisions that will be made to the plans and calculations, additional comments may be forthcoming during future plan reviews.

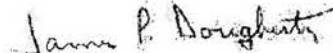
In order to help expedite the review process of the resubmission of the plan, the Applicant should submit a response letter which addresses each of the above comments. Changes that have been made to the application that are unrelated to the review comments should also be identified in the response letter.

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

Sincerely,



Russell S. Dunlevy, P.E.
Executive Vice President
Township Engineers



James P. Dougherty, P.E.
Gilmore & Associates, Inc.
Township Engineers

RSD/jpd/sl

cc: Lawrence J. Grogan, Manager – Montgomery Township
Marita A. Stoerle, Development Coordinator - Montgomery Township
Frank R. Bartle, Esq., Solicitor – Dischell Bartle & Dooley, PC
Thomas F. Zarko, P.E., Sewer Authority Engineer – CKS Engineers, Inc.
Kevin Johnson, P.E. – Traffic Planning & Design, Inc.
Judith Stern Goldstein, ASLA, R.L.A. – Boucher & James, Inc.
Ken Amey, AICP
Jason T. Smeland, P.E. – Lenape Valley Engineering
Rob Wagner, Applicant – Avalon Way, LLC



Boucher & James, Inc.
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Fax 215-345-9401

www.bjengineers.com

February 20, 2014

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

**SUBJECT: 127 STEVERS MILL ROAD
MINOR SUBDIVISION PLANS
TOWNSHIP LD/S NO. 671
PROJECT NO. 1355271R**

Dear Mr. Gregan:

Please be advised that we have reviewed the 127 Stevers Mill Road Minor Subdivision Plans prepared by Lenape Valley Engineering, dated October 7, 2013 and last revised February 3, 2014. The site fronts on Stevers Mill Road, between Nottingham Way and Goodwin Lane, and is located within the R-2 Residential District. An area of wetlands is located through the center of the site, and drains through a culvert beneath Stevers Mill Road to an existing pond.

The plans propose the subdivision of the existing residential parcel into two residential lots. The existing dwelling unit is proposed to remain. One dwelling unit and attached garage are proposed to be constructed on Lot No. 1. Public water and sewer are proposed.

We offer the following comments for your consideration.

1. General Requirements

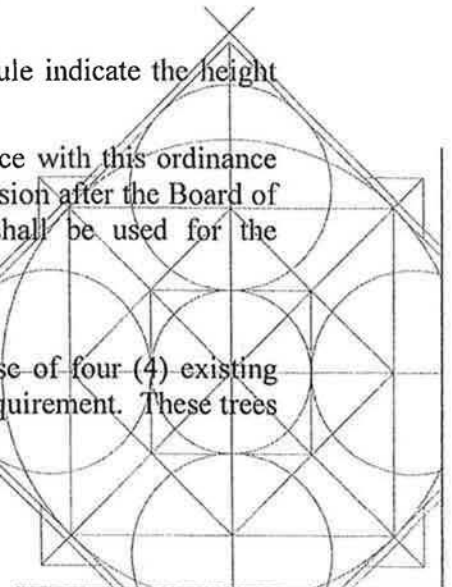
SLDO Section 205-49.C requires that all landscape plans be prepared by a landscape architect registered by the Commonwealth of Pennsylvania. The applicant indicates that a waiver has been requested from this requirement.

2. Landscape Plan Requirements.

- A. SLDO Section 205-51.A(12) requires that the plant schedule indicate the height and spread for all proposed plant materials.
- B. Section 18: A detailed cost estimate provided in accordance with this ordinance section shall be attached to the final landscape plan submission after the Board of Supervisors has ruled on any requested waivers and shall be used for the preparation of the land development agreement.

3. Planting Requirements

- A. SLDO Section 205-52.A(2)(d): The plans propose the use of four (4) existing trees all over 6" in caliper to count toward the street tree requirement. These trees appear to be acceptable to meet the street tree requirement.



- B. SLDO Section 205-52.B(3)(a): The required quantity of softening buffer material has been provided, but has been provided along the northwest and southwest property lines and not along the northeast property line, due to the existing driveway and the need for additional buffering along the other property lines. Softening buffers may be sited on any position of the property if permitted by the Board of Supervisors.
4. Recommended Plant List
- A. SLDO Section 205-56.D requires a minimum height of 30" for deciduous shrubs. The proposed Ilex verticillata are provided at a minimum 24" height. The plans should be revised to demonstrate compliance with the ordinance requirements.

Sincerely,



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



Valerie L. Liggett, ASLA, R.L.A.
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
Frank R. Bartle, Esq., Dischell Bartle & Dooley, PC
James P. Dougherty, P.E., Gilmore & Associates, Inc.
Russell S. Dunlevy, P.E., Gilmore & Associates, Inc.
Kevin Johnson, P.E., Traffic Planning & Design
Ken Amey, AICP
Jason T. Smeland, P.E., Lenape Valley Engineering
Rob Wagner, Avalon Way, LLC



Boucher & James, Inc.
CONSULTING ENGINEERS

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www.bjengineers.com

December 4, 2013

Marita Stoerrle, Development Coordinator
Montgomery Township
1001 Stump Road
Montgomeryville, PA 18936

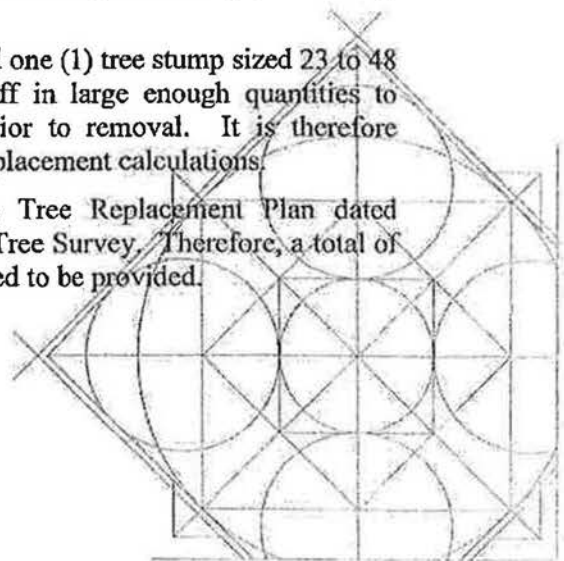
**SUBJECT: 127 STEVERS MILL ROAD TREE COUNTS
MINOR SUBDIVISION PLANS
TOWNSHIP LD/S NO. 671
PROJECT NO. 1355271R**

Dear Marita:

Please be advised that on Tuesday, December 3, 2013 I met Jason Smeland of Lenape Valley Engineering at the 127 Stevers Mill road site in order to conduct a count of the existing and removed trees within the removed woodland area on the site. The site fronts on Stevers Mill Road, between Nottingham Way and Goodwin Lane, and is located within the R-2 Residential District. An area of wetlands is located through the center of the site, and drains through a culvert beneath Stevers Mill Road to an existing pond. A Tree Replacement Plan dated December 3, 2013 was provided at the site meeting, which provided additional information about previously existing trees on the site. The Tree Replacement Plan has been attached for your reference.

My findings are as follows:

1. A tree survey of the subject property dated June 2013, has been provided on the Tree Replacement Plan. Based on the locations and sizes of existing tree stumps, the survey provided appears to be accurate.
2. Three (3) tree stumps sized 8 to 23 inches in caliper and one (1) tree stump sized 23 to 48 inches in caliper were found with bark sloughing off in large enough quantities to presume that the trees were in a state of decay prior to removal. It is therefore permissible for the trees to be excluded from the tree replacement calculations.
3. The tree replacement calculations provided on the Tree Replacement Plan dated December 3, 2013 are correct based on the June 2013 Tree Survey. Therefore, a total of seventeen (17) 2.5" caliper replacement trees are required to be provided.



Marita Stoerrle, Development Coordinator
127 Stevers Mill Road Tree Counts
December 4, 2013
Page 2

Please do not hesitate to contact me if you have any questions or require further information.

Sincerely,



Valerie L. Liggett, ASLA, R.L.A.
Planner/Landscape Architect

VLL/kam

Enclosure

cc: Board of Supervisors
Planning Commission
Bruce Shoupe, Director of Planning and Zoning
Marianne McConnell, Deputy Zoning Officer
Frank R. Bartle, Esq., Dischell Bartle & Dooley, PC
James P. Dougherty, P.E., Gilmore & Associates, Inc.
Russell S. Dunlevy, P.E., Gilmore & Associates, Inc.
Kevin Johnson, P.E., Traffic Planning & Design
Ken Amey, AICP
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Fax 215-345-9401

www.bjengineers.com

November 7, 2013

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

**SUBJECT: 127 STEVERS MILL ROAD
MINOR SUBDIVISION PLANS
TOWNSHIP LD/S NO. 671
PROJECT NO. 1355271R**

Dear Mr. Gregan:

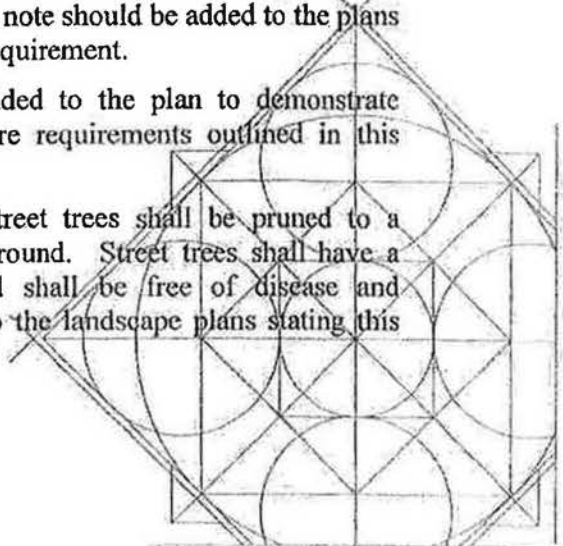
Please be advised that we have reviewed the 127 Stevers Mill Road Minor Subdivision Plans prepared by Lenape Valley Engineering, dated October 7, 2013. The site fronts on Stevers Mill Road, between Nottingham Way and Goodwin Lane, and is located within the R-2 Residential District. An area of wetlands is located through the center of the site, and drains through a culvert beneath Stevers Mill Road to an existing pond.

The plans propose the subdivision of the existing residential parcel into two residential lots. The existing dwelling unit is proposed to remain. One dwelling unit and attached garage are proposed to be constructed on Lot No. 1. Public water and sewer are proposed.

We offer the following comments for your consideration.

1. General Requirements

- A. SLDO Section 205-49.C requires that all landscape plans be prepared by a landscape architect registered by the Commonwealth of Pennsylvania. The plans must be signed and sealed by a landscape architect registered within the Commonwealth of Pennsylvania.
- B. SLDO Section 205-49.F requires that all plant material shall be pruned in accordance with ANSI A300 pruning details. A note should be added to the plans to demonstrate compliance with the ordinance requirement.
- C. SLDO Section 205-49.H: notes should be added to the plan to demonstrate compliance with the final inspection procedure requirements outlined in this sections of the ordinance.
- D. SLDO Section 205-48.J: main branches of street trees shall be pruned to a clearance height of eight (8) feet above the ground. Street trees shall have a single, straight trunk and central leader and shall be free of disease and mechanical damage. A note shall be added to the landscape plans stating this information.



2. Landscape Plan Requirements.

SLDO Section 205-51.A requires that the following information shall be provided in the landscape plan, or a waiver would be required:

1. Section 1: Location map with zoning district designations for adjacent properties.
2. Section 2: adjacent zoning district(s).
3. Section 8: Location of existing and proposed underground, surface, and above-ground utilities including electrical lines.
4. Section 18: A detailed cost estimate provided in accordance with this ordinance section shall be attached to the final landscape plan submission after the Board of Supervisors has ruled on any requested waivers and shall be used for the preparation of the land development agreement.

3. Planting Requirements

- A. SLDO Section 205-52.A(2)(d): The plans propose the use of four (4) existing trees all over 6" in caliper to count toward the street tree requirement. These trees appear to be acceptable to meet the street tree requirement.
- B. SLDO Section 205-52.B(3)(a): the plans should be revised to provide the required softening buffer along the northeastern property line, or a waiver would be required.
- C. SLDO Section 205-52.G, Table 1: within the R-2 District, three (3) shade trees are required to be provided per lot in order to meet the individual lot landscaping requirements. The plans should be revised to demonstrate compliance with the ordinance requirements, or a waiver would be required.

4. Preservation, Protection and Replacement of Trees

SLDO Section 205-53.C requires the preservation of existing trees on the site in accordance with the ratios provided in SLDO Section 205-53.C(1). Where an applicant removes more than the permitted amount of trees, a replacement tree must be provided in accordance with SLDO Section 205-53.C(4).


Tree protection calculations have been provided for existing trees on the site. However, a visit to the site on November 5, 2013 showed that many large caliper trees on site have been cut down, including in the wetlands area. An aerial photograph of the site dated from October 2011 shows the site to be wooded. The pattern of tree removal, plus the presence of silt fence around the wetlands on the site, indicates that the trees may have been removed from proposed new lot in anticipation of construction. Therefore, these trees must be included in the Tree Preservation Calculations.

As the trees have been removed, the size of the trees must be estimated based on the diameter of the stumps left on the site. A site visit should be scheduled with the Township Landscape Architect to conduct a survey of the tree stumps on the site. The plans should be revised to demonstrate compliance with the ordinance requirements, or a waiver would be required.


5. General Comments

- A. It appears that the Twin Maple adjacent to the proposed drive will be removed. The Landscape Plan and the tree removal calculations should be revised to correct this discrepancy. Tree protection fence should be provided around the dripline of the Maple located on the adjacent Bloomer property.
- B. The tree removal notes indicate that twenty-one (21) trees between 8 and 23 caliper inches are located on the site. However, it appears that only nineteen (19) are shown on the existing features plan. The plans should be revised to correct this discrepancy.
- C. The tree removal notes indicate that one hundred and seven (107) caliper inches of trees over 23 to 48 caliper inches are located on the site. However, it appears that the plans show approximately 132 caliper inches. The plans should be revised to correct this discrepancy.
- D. The tree caliper and species labels are difficult to read. The plans should be revised for the purposes of legibility.
- E. A detailed response letter addressing the above noted comments and any other changes to the plans should be included with future submissions.

Sincerely,



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

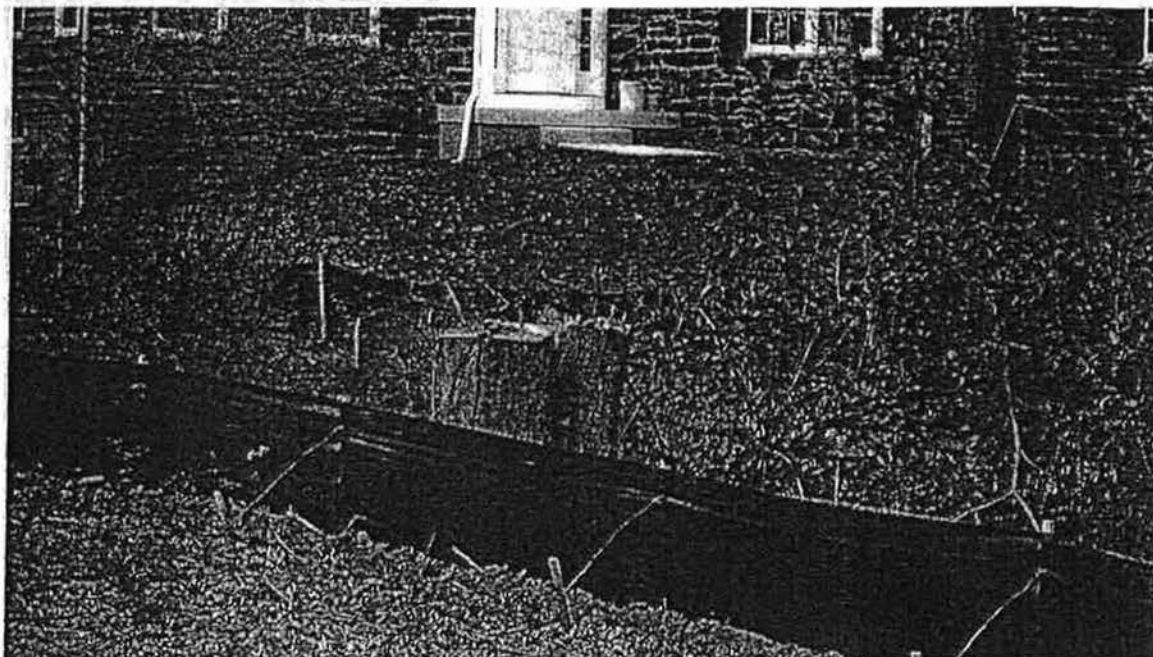


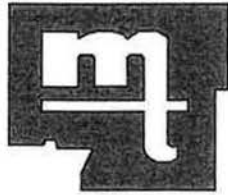
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Planner/Landscape Architect

JSG/vll/kam

cc: Board of Supervisors
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Kevin Johnson, P.E., Traffic Planning & Design
Ken Amey, AICP
Jason T. Smeland, P.E., Lenape Valley Engineering
Rob Wagner, Avalon Way, LLC

Mr. Lawrence Gegan, Township Manager
127 Stevers Mill Road
November 6, 2013
Page 4





MEMORANDUM

TO: Board of Supervisors

FROM: Planning Commission
Jonathan Trump, Chairman

DATE: January 16, 2014

RE: 127 Stevers Mill Road

The Planning Commission has reviewed the Subdivision plan for 127 Stevers Mill Road and would like to recommend to the Board of Supervisors that the plan be approved, subject to satisfactory compliance with all comments of the Township review agencies.

The Planning Commission had recommended approval of the waiver requests at their last meeting, with the exception of the buffer requirements.

The motion further indicated that the revised landscape plan, presented at this meeting, be approved, and that the Board accept a fee in lieu of the seven trees not planted on the site. Motion carried unanimously.

**MONTGOMERY COUNTY
BOARD OF COMMISSIONERS**

JOSHUA D. SHAPIRO, CHAIR

LESLIE S. RICHARDS, VICE CHAIR

BRUCE L. CASTOR, JR., COMMISSIONER



**MONTGOMERY COUNTY
PLANNING COMMISSION**

MONTGOMERY COUNTY COURTHOUSE • PO Box 311
NORRISTOWN, PA 19404-0311

610-278-3722

FAX: 610-278-3941 • TDD: 610-631-1211

WWW.MONTCOPA.ORG/PLANNING

JODY HOLTON, AICP
EXECUTIVE DIRECTOR

November 8, 2013

Mr. Larry Gregan, Manager
Montgomery Township
1001 Stump Road
Montgomeryville, Pennsylvania 18936

Re: MCPC #13-0205-001
Plan Name: 127 Stevers Mill Road
(2 lots/2 dus comprising 1.24 acres)
Situate: Stevers Mill Road (west)/
South of Goodwin Lane
Montgomery Township

Applicant's Name and Address

Avalon Way, LLC
2526 West Broad Street
Colmar, PA 18915

Contact: Jason T. Smeland, PE
Phone: 215-622-1414

Dear Mr. Gregan:

We have reviewed the above referenced subdivision and land development application in accordance with Section 502 of Act 247, "the Pennsylvania Municipalities Planning Code", as you requested on October 11, 2013. We forward this letter as a report of our review and recommendations.

Background

The application is a new submission which proposes the subdivision of an existing 1.24 acre (54,207 sq. ft.) parcel into 2 new lots, with the construction of a new dwelling on one lot and the retention of an existing dwelling on the other lot. The parcel will be subdivided into two lots, with a new dwelling proposed for Lot #1, a 27,019 sq. ft. lot and an existing house and access driveway will be preserved on a new 27,188 sq. ft. Lot #2.

The proposed development site appears from aerial photography to be one of the few remaining undeveloped, wooded lots within a residential neighborhood of homes, the majority of which were developed in the early 2000s. The site plan notes state that the entire site is composed of UusB-'Urban Land Soils'- which are "moderately well-drained, moderate to moderately -low permeability." An area of wetlands identified on the plan is proposed to be shared by both lots and is 6,383 square feet in area, or 0.1465 acres. The subdivision and land development is proposed for Tax Parcel #46-0003407-14-7; which is situated along Stevers Mill Road in township's R-2 Residential Zoning District.

Comments

1. Erosion and Sedimentation Plan. While we recognize the applicant has prepared a plan to address erosion and sedimentation control, which will occur. We recommend the township and applicant consider additional monitoring of the proposed devices and the site, which we suggest is needed

given the setting of the site development. Immediately across the street from the applicant's site is an existing pond (Tax Parcel #46-00-03013-02-8, Avalon Way, LLC), which receives drainage from the applicant's tract and could be negatively impacted by any failure of the erosion and sedimentation control measures. We suggest that the applicant be aware that additional monitoring is needed especially during storms so that the erosion and sedimentation measures are effective.

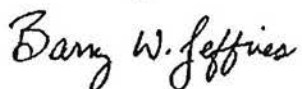
Recommendation

We have not identified any additional significant land use, transportation, design, or other issues that should be addressed in this plan other than the above mentioned comment. We recommend approval of this proposal provided this comment is addressed to the satisfaction of the township and the proposed plan complies with your land use and development requirements and any other municipal code regulations.

Please note that the review comments and recommendations contained in this report are advisory to the municipality and final disposition for the approval of any proposal will be made by the municipality.

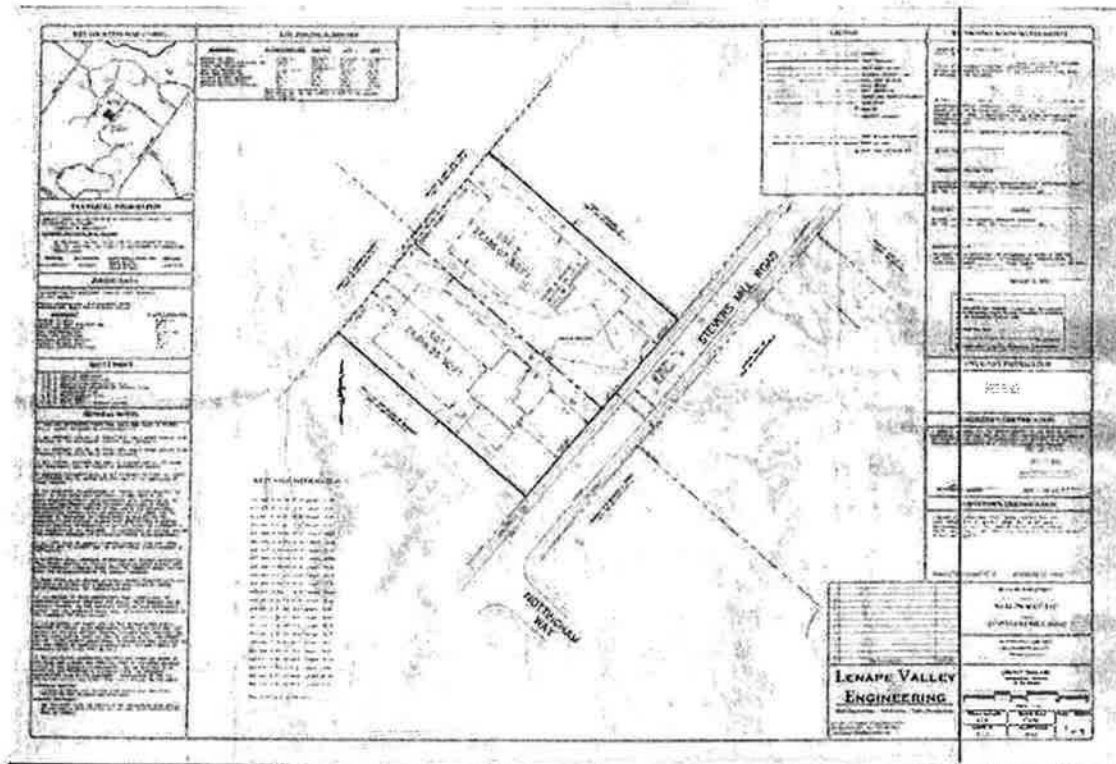
Should the governing body approve a final plat of this proposal, the applicant must present the plan to our office for seal and signature prior to recording with the Recorder of Deeds office. A paper copy bearing the municipal seal and signature of approval must be supplied for our files.

Sincerely,



Barry W. Jeffries, ASLA, Senior Design Planner
610-278-3444, Email: bjeffrie@montcopa.org

c: Avalon Way, LLC, Applicant
Lenape Valley Engineers, Applicant's Engineer
Marita Stoerle, Township Development Coordinator
Jonathan Trump, Chr. Township Planning Commission
Bruce Shoupe, Township Zoning Officer
Frank A. Bartle, Township Solicitor
Kenneth Amey, AICP, Township Planning Consultant

Reduction of Applicant's Proposed Plan**Aerial view of applicant's development tract (2008 view from the north)**

TRAFFIC PLANNING AND DESIGN, INC.



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

December 4, 2013

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

Re: 127 Stevers Mill Rd
Montgomery Township LD/S# 671
TPD# MOTO-A-00081

Dear Bruce:

In our role as Township Traffic/Street Lighting Engineer, Traffic Planning and Design, Inc. (TPD) has reviewed subdivision and land development plans for the above referenced project prepared by Lenape Valley Engineering dated October 7, 2013

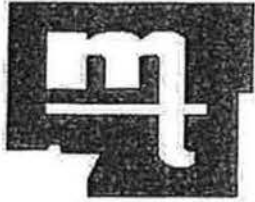
Based on this review, TPD has no traffic engineering or street lighting comments to offer at this time.

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
Jason Smeland, P.E., Applicant's Engineer
Joseph Platt, P.E., TPD



**MONTGOMERY TOWNSHIP
FIRE SERVICES DEPARTMENT**
1001 STUMP ROAD
MONTGOMERYVILLE, PA 18936-9605
Telephone: 215-393-6935 • Fax: 215-699-1560
www.montgomerytp.org

Richard Lesniak
DIRECTOR OF FIRE SERVICES
CHIEF FIRE MARSHAL
EMERGENCY PREPAREDNESS
DIRECTOR
FIRE MARSHAL OFFICE:
215-393-6936

TO: Bruce Shoupe, Director of Planning and Zoning

FROM: Richard Lesniak, Chief Fire Marshal

REVIEW DATE: 11-6-13

DEVELOPMENT NAME: 127 Stevers Mill Rd

LD/S#: 671

LOCATION: Stevers Mill Road **PLANS DATE:** 10-7-13

REVISION DATE: N/A **#OF LOTS:** 2

In the interest of *Public Safety* and *Hazard Mitigation*, the following requirements shall be evaluated. All requirements listed below are to be referenced to the plan named above.

All requirements shall meet Township Ordinance(s).

SUBDIVISION AND LAND DEVELOPMENT

1. Using the 2009 International Fire Code as guidance, Section 503.1.1 states, "Approved fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility". The fire code official is authorized to increase the dimension of 150 feet where:
 - a. The building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3.
 - b. Fire apparatus access roads cannot be installed because of location on property, topography, waterways, nonnegotiable grades or other similar conditions, and an approved alternative means of fire protection is provided.
 - c. There are not more than two Group R-3 or Group U occupancies.

GENERAL BUILDING CONSTRUCTION

2. All buildings of truss construction SHALL comply with the Montgomery Township Ordinance #72-5.B.(2). Truss emblems can be obtained through the Fire Marshal's Office or Code Enforcement Office. The Fire Marshal's Office SHALL be contacted in regards to placement of truss placard.
3. All buildings that are 5,000 square feet or more shall be fully sprinklered and the Fire Department Connection shall be shown to indicate exact location.

4. ALL revisions of the above named plan SHALL be reviewed by the Fire Marshal's Office for approval.

Conclusion:

Based upon our evaluation, the Fire Marshal's Office is recommending to the Montgomery Township Planning and Zoning Department that the current plans be **APPROVED** as submitted.

If there are any questions regarding the review notes, please contact the Fire Marshal's Office at 215-393-6936 or 215-393-6935

Thank You,

Richard Lesniak, Chief Fire Marshal

Reviewed by: John Scheiter
Captain/Assistant Fire Marshal

Cc:TO FILE



MONTGOMERY TOWNSHIP POLICE DEPARTMENT

J. Scott Bendig
Chief of Police

1001 Stump Road • P.O. Box 68 • Montgomeryville, PA 18936
215-362-2301 • Fax 215-362-6383

To: Montgomery Township Board of Supervisors
Marita Stoerrle, Development Coordinator

From: Scott Bendig, Chief of Police *JSB*

Date: October 10, 2013

Re: LD/S #: 671
127 Stevers Mill Road
Date of Plan: 10/7/13

A review of the above referenced subdivision/land development has been conducted on this date. There are no major areas of concern to the Police Department at this time.

Thank you for the opportunity to review this subdivision/land development. Please contact me if you have any issues or concerns.

ZONING ORDINANCE PLAN REVIEW

DATE: December 5, 2013

PLAN REVIEW – Avalon Way LLC 2-Lot Subdivision
LD/S # 671

DEVELOPMENT NAME: Avalon Way LLC - 2 - Lot Subdivision

LOCATION: Stevers Mill Road

LOT NUMBER & SUBDIVISION: 2

ZONING DISTRICT: R2

PROPOSED USE: 1 new Single Family homes

ZONING HEARING BOARD APPROVAL REQUIRED? NO

CONDITIONAL USE APPROVAL REQUIRED? NO

	APPROVED	NOT APPROVED	NOT APPLICABLE
USE	X		
HEIGHT	X		
LOT SIZE	X		
SETBACKS: FRONT	X		
SIDE	X		
BACK	X		
BUILDING COVERAGE	X		
IMPERVIOUS / GREEN SPACE	X		
VARIANCE / SPECIAL EXCEPTION			X
NONCONFORMITY			X
OTHER:			

COMMENTS

If Lot # 2 is an existing condition then approximate locations should not be used, provide accurate measurements for existing conditions.

The on-lot storm water maintenance shall be the responsibility of the owner of Lot #1. A Post Storm Water Maintenance agreement shall be recorded at the Montgomery County Recorder of Deeds.


ZONING OFFICER

12.5.13
DATE

KENNETH AMEY, AICP
professional land planner

March 17, 2014

(via e-mail)

Lawrence J. Gregan, Township Manager
MONTGOMERY TOWNSHIP
1001 Stump Road
Montgomeryville, PA 18936

Re: 127 Stevers Mill Road
Township File #LD/S-671

Dear Mr. Gregan:

I have completed my second review of the subdivision plans for the above referenced project, consisting of 8 sheets, prepared by Lenape Valley Engineering, dated October 7, 2013, and last revised February 3, 2014. The property is zoned R-2 Residential and currently consists of a single family dwelling with attached garage and residential driveway. This home is presently under construction and will remain. A new home is proposed for the second lot of the subdivision.

Based upon the plans referenced above, all of my concerns have been satisfactorily addressed.

Please let me know if there are any questions.

Very truly yours,



Kenneth Amey

cc: Bruce S. Shoupe, Township Director of Planning and Zoning
Marita Stoerrle, Development Coordinator
Marianne McConnell, Deputy Zoning Officer
Russell Dunlevy, PE, Township Engineer
Frank Bartle, Esq., Township Solicitor
Jason Smeland, PE, Applicant's Engineer

1122 Old Bethlehem Pike
Lower Gwynedd, PA 19002



phone: 215.283.9619
fax: 215.646.3458
kenamey@aol.com

KENNETH AMEY, AICP
professional land planner

November 11, 2013

(via e-mail)

Lawrence J. Gegan, Township Manager
MONTGOMERY TOWNSHIP
1001 Stump Road
Montgomeryville, PA 18936

Re: 127 Stevers Mill Road
Township File #LD/S-671

Dear Mr. Gegan:

I have completed my review of the subdivision plans for the above referenced project, consisting of 8 sheets, prepared by Lenape Valley Engineering, dated October 7, 2013, with no revisions noted. The property is zoned R-2 Residential and currently consists of a single family dwelling with attached garage and residential driveway. This home is presently under construction and will remain. A new home is proposed for the second lot of the subdivision.

There is a substantial area of wetlands shown on the plan which should be afforded appropriate environmental protections. So long as these protections are in place, the proposed subdivision appears to conform to the requirements of the R-2 zoning district and general planning objectives of Montgomery Township.

Please let me know if there are any questions.

Very truly yours,



Kenneth Amey

cc: Bruce S. Shoupe, Township Director of Planning and Zoning
Marita Stoerle, Development Coordinator
Marianne McConnell, Deputy Zoning Officer
Russell Dunlevy, PE, Township Engineer
Frank Bartle, Esq., Township Solicitor
Jason Smeland, PE, Applicant's Engineer

1122 Old Bethlehem Pike
Lower Gwynedd, PA 19002



phone: 215.283.9619
fax: 215.646.3458
kenamey@aol.com



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY

PHILADELPHIA DISTRICT CORPS OF ENGINEERS
WANAMAKER BUILDING, 100 PENN SQUARE EAST
PHILADELPHIA, PENNSYLVANIA 19107-3390

APR 29 2013

Regulatory Branch
Application Section II

SUBJECT: CENAP-OP-R 2013-70-24 (Preliminary JD)
Project Name: Montgomery Hollow – Lots 40 and 42 (Better Living Custom Homes)
Latitude and Longitude: 40.231476° North, -75.203134° West

Dr. John F. Szczepanski
Nova Consultants Ltd.
251 Burgundy Lane
Newtown, Pennsylvania 18940

Dear Dr. Szczepanski:

This letter is written with regard to your request for verification of a preliminary jurisdictional determination (JD) on behalf of Better Living Custom Homes. The property associated with your request is located in Montgomery Township, Montgomery County, Pennsylvania. The property location and survey are described in detail on the following page.

Pursuant to Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act, a Department of the Army permit is required for work or structures in navigable waters of the United States and the discharge of dredged and/or fill material into waters of the United States, including adjacent and isolated wetlands. Any proposal to perform the above activities within any waters of the United States, including wetlands, requires the prior approval of this office.

The plans identified on the following page depict all delineated waters and wetlands on the subject site that may be jurisdictional under Section 10 of the Rivers and Harbor Act and/or Section 404 of the Clean Water Act. This preliminary determination has been conducted to identify the location(s) of waters and wetlands that may be waters of the United States for the particular site identified in this request. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985, as amended. If you or your tenant are U.S. Department of Agriculture (USDA) program participants, or anticipate participating in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to starting work.

This preliminary jurisdictional determination is non-binding and indicates that there may be waters of the United States, including wetlands, on the parcel. Preliminary JDs are advisory in nature and may not be appealed (See attached Notification of Appeal Form (Enclosure 1)); however, the applicant retains the right to request an approved Jurisdictional Determination,

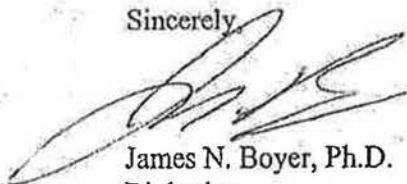
SUBJECT: CENAP-OP-R 2013-70-24 (Preliminary JD)

which may be appealed, for the site. Also enclosed (Enclosure 2) is a copy of the Preliminary Jurisdictional Determination Form signed by the applicant or their agent agreeing to accept a preliminary jurisdictional determination. Please be aware that for purposes of computation of impacts, compensatory mitigation requirements, and other resource protection measures, a permit decision made on the basis of a preliminary JD will treat all waters and wetlands that would be affected in any way by the permitted activity on the site as if they are jurisdictional waters of the U.S.

This letter is valid for a period of five (5) years. This preliminary jurisdictional determination is issued in accordance with current Federal regulations and is based upon the existing site conditions and information provided by you in your application. This office reserves the right to reevaluate and modify the preliminary jurisdictional determination at any time should existing site conditions or Federal regulations change, or should the information provided by you prove to be false, incomplete, or inaccurate.

If you have any questions regarding this matter, please contact me at (215) 656-5826, by electronic mail to James.N.Boyer@usace.army.mil, or by writing to the above address.

Sincerely,



James N. Boyer, Ph.D.
Biologist

SUBJECT PROPERTY: Better Living Custom Homes, "Montgomery Hollow;" two residential lots located on either side of Stevers Mill Road, approximately 300-600 feet southwest of Goodwin Lane, approximately 1,200 feet northwest of Lower State Road, in Montgomery Township, Montgomery County, Pennsylvania: a) Lot 40, Tax Parcel 46-00-03407-14-7, 1.2444 acres; and b) Lot 42, Tax Parcel 46-00-03013-02-8, 1.6405 acres.

SURVEY DESCRIPTION: Plan prepared by Lenape Valley Engineering, Sheet 1 of 1, dated 11-05-2012, last revised 04-12-2013, entitled "EXISTING FEATURES PLAN Prepared for BETTER LIVING CUSTOM HOMES As part of LOT 40 & 42 - MONTGOMERY HOLLOW."

COMMENTS: Site inspections by this office on March 4, 15 and 22, 2013.

Enclosures

Copies Furnished:

PADEP, SERO (Mr. Greg Kauffman)
Montgomery County Conservation District

Applicant:

Mr. Robert Wagner
Better Living Custom Homes
2526 North Broad Street
Colmar, PA 18915

Engineer:

Mr. Jason T. Smeland
Lenape Valley Engineering
P. O. Box 74
Chalfont, PA 18914

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PRELIMINARY JURISDICTIONAL DETERMINATION (JD): April 26, 2013

B. NAME AND ADDRESS OF PERSON REQUESTING PRELIMINARY JD: Better Living Custom Homes; 2526 N. Broad Street; Colmar, PA 18915

C. DISTRICT OFFICE, FILE NAME, AND NUMBER: CENAP-OP-R-2013-70-24

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION: Two residential lots located on either side of Stevers Mill Road, approximately 300-600 feet southwest of Goodwin Lane, approximately 1,200 feet northwest of Lower State Road, in Montgomery Township, Montgomery County, Pennsylvania: a) Lot 40, Tax Parcel 46-00-03407-14-7, 1.2444 acres; and b) Lot 42, Tax Parcel 46-00-03013-02-8, 1.6405 acres.

(USE THE ATTACHED TABLE TO DOCUMENT MULTIPLE WATERBODIES AT DIFFERENT SITES)

State: Pennsylvania County: Montgomery Mun.: Montgomery Twp.

Center coordinates of site (lat/long in degree decimal format):

Lat. 40.231476° N, Long. -75.203134° W

Universal Transverse Mercator: Easting (x) Northing (y)

Name of nearest waterbody: Little Neshaminy Creek

Identify (estimate) amount of waters in the review area:

Non-wetland waters: linear feet: width (ft) and/or 0.1566 acres.

Cowardin Class: POW

Stream Flow: N/A

Wetlands: 0.4423 acres.

Cowardin Class: PFO1

Name of any water bodies on the site that have been identified as Section 10 waters:

Tidal:

Non-Tidal:

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☐ Office (Desk) Determination.

Date:

☒ Field Determination.

Date(s):

04, 15 and 22 March 2013

1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.

2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable.

This preliminary JD finds that there "may be" waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA: Data reviewed for preliminary JD (check all that apply - checked items should be included in case file and, where checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Plan prepared by Lenape Valley Engineering, Sheet 1 of 1, dated 11-05-2012, last revised 04-12-2013, entitled "EXISTING FEATURES PLAN Prepared for BETTER LIVING CUSTOM HOMES As part of LOT 40 & 42 - MONTGOMERY HOLLOW."

☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.

☐ Office concurs with data sheets/delineation report.

☒ Office does not concur with data sheets/delineation report.

☒ Data sheets prepared by the Corps: dated 04 and 22 March 2013.

☐ Corps navigable waters' study:

☐ U.S. Geological Survey Hydrologic Atlas:

☐ USGS NHD data.

☐ USGS 8 and 12 digit HUC maps.

☒ U.S. Geological Survey map(s). Cite scale & quad name: Ambler, PA 1:24000.

☒ USDA Natural Resources Conservation Service Soil Survey. Citation: Mont. Co.

☒ National wetlands inventory map(s). Cite name: Ambler.

☐ State/Local wetland inventory map(s):

☐ FEMA/FIRM maps:

☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)


☒ Photographs: ☒ Aerial (Name & Date): Google Earth 2011.

☒ Other (Name & Date): Ground photos (agent & Corps).

☒ Previous determination(s). File no. and date of response letter: 1995-2535, dated 25 June 1996.

☐ Other information (please specify):

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

 26-APR-2013
Signature and date of
Regulatory Project Manager

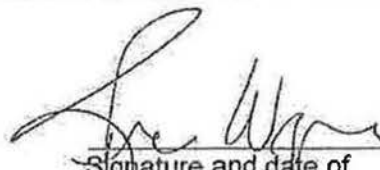
 26-APR-2013
Signature and date of
person requesting preliminary JD

TABLE 1

Site number	Latitude	Longitude	Cowardin Class	Estimated amount of aquatic resource in review area	Class of aquatic resource
1	40.231740	-75.203439	PFO1	0.1465 acre	Non-Section 10, wetland
2	40.231134	-75.202275	PFO1	0.2958 acre	Non-Section 10, wetland
3	40.231320	-75.202679	POW	0.1566 acre	Non-Section 10, non-wetland

1. Wetland on Lot 40
2. Wetland on Lot 42
3. Pond on Lot 42

MONTGOMERY TOWNSHIP BOARD OF SUPERVISORS
BOARD ACTION SUMMARY

SUBJECT: Consideration - Preliminary/Final Land Development Plan – Sommerville
Montgomery – BJ's Warehouse – Five Points Plaza - 640 Cowpath Road - LDS #673

MEETING DATE: April 14, 2014

ITEM NUMBER: **#15.**

MEETING/AGENDA: WORK SESSION

ACTION XX

NONE

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

INITIATED BY: Bruce Shoupe
Director of Planning and Zoning

BOARD LIAISON: Joseph P. Walsh
Chairman

BACKGROUND:

This property is located at 640 Cowpath Road within the Five Points Plaza Shopping Center. This is in the S-Shopping Center Zoning District. The plans propose the expansion of the existing 79,135 square foot building (former American Signature Furniture) to a total of 89,732 square feet to accommodate the proposed BJ's Warehouse retail store. This would add an additional 2,787 square feet of base building area, a 1,748 square foot breezeway, a 2,657 square foot receiving area and a 3,405 square foot tire center. The project also proposes to demolish the majority of the interior appurtenances associated with the existing store.

The applicant received relief from the Zoning Hearing Board on November 13, 2013, for the parapet wall height, signage, building coverage, above-ground diesel and propane storage tanks, and for the automobile accessory and tire sales use within the S-Shopping Center District.

The Township staff and consultants have reviewed this plan for compliance with Township Codes. Copies of the review letters are attached.

ZONING, SUBDIVISION OR LAND DEVELOPMENT IMPACT:

The Applicant executed an indefinite extension form, which allows unlimited review time by the Township, unless a notice is received from the Applicant that a decision be rendered within 90 days by the Board of Supervisors.

PREVIOUS BOARD ACTION:

None

ALTERNATIVES/OPTIONS:

The Board could deny this plan or approve this plan with the conditions as outlined in the attached resolution.

BUDGET IMPACT:

None.

RECOMMENDATION:

The resolution be adopted by the Board of Supervisors.

MOTION/RESOLUTION:

The Resolution is attached. (The Chairman needs to read only the highlighted portions of the resolution.)

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 B. Bartle, Esq.

[illegible]

The site plan illustrates the proposed development at the intersection of Cowardin Road and Highway 101. The plan includes a large parking lot, a building footprint, and surrounding streets including Highway 101, Cowardin Road, and Highway 101. A north arrow is located in the bottom right corner.

REVISIONS		REVISIONS	
Date	Description	Date	Description
		12/2/14	REVISED PLANS PER REVIEW COMMENTS
		1/15/14	REVISED PLANS PER REVIEW COMMENTS
		1/21/14	REVISED PLANS PER REVIEW COMMENTS
		2/10/14	REVISED PLANS PER REVIEW COMMENTS

100' 0' 50' 0'

100 0 50 0

SCALE = 1"=100'

RESOLUTION

MONTGOMERY TOWNSHIP

MONTGOMERY COUNTY, PENNSYLVANIA

A RESOLUTION GRANTING CONDITIONAL PRELIMINARY/FINAL APPROVAL OF THE APPLICATION FOR LAND DEVELOPMENT FOR SOMERVILLE MONTGOMERY LP, FOR BJ'S WHOLESALE CLUB AT FIVE POINTS PLAZA – LDS#673

The Board of Supervisors of Montgomery Township, Montgomery County, Pennsylvania, hereby resolves to grant conditional, preliminary/final approval of the land development application and plan for **Somerville Montgomery, LP, for BJ's Wholesale Club at Five Points Plaza**, as more fully detailed on the plans listed on Exhibit "A" attached hereto and made part hereof and further conditioned upon the following being satisfied by the Applicant prior to the recording of the final plan:

1. Fulfilling all obligations and requirements of the **Gilmore & Associates, Inc.** letters dated March 18, 2014, January 29, 2014; **Boucher & James, Inc.** letters dated March 10, 2014, January 15, 2014; **Montgomery Township Planning Commission** comments dated March 20, 2014; **Montgomery County Planning Commission** comments dated February 11, 2014; **Traffic Planning and Design, Inc.** letters dated March 10, 2014, January 27, 2014; **Montgomery Township Fire Marshal's Office** comments dated January 27, 2014; **Montgomery Township Police Department** comments dated February 27, 2014, December 31, 2013; **Montgomery Township Zoning Officer** comments dated January 30, 2014, updated April 4, 2014; **Montgomery Township Fire Marshal's comments** dated April 10, 2014, January 27, 2014; and **Kenneth Amey's** letter dated March 16, 2014.
2. The Applicant shall enter into a Land Development Agreement and post financial security for all improvements to the satisfaction of the Township Engineer and Township Solicitor.
3. The Applicant shall satisfy the requirements of all Montgomery Township Codes, the Montgomery Township Municipal Sewer Authority and North Wales Water Authority. A copy of the Authorities' permits and/or agreements from the above must be provided to the Township.
4. The Applicant shall be responsible for payment of all Township Consultant fees related to this project.
5. The Applicant shall be responsible for obtaining all other Regulatory Authority Permits having jurisdiction over this project.
6. All future development of this parcel shall be subject to new application and approval by the Board of Supervisors.
7. All storm water inlets and outfall structures shall be identified in accordance with the PADEP Municipal Separate Storm Sewer Systems requirements.

8. The applicant must comply with the Opinion and Order of the Zoning Hearing Board dated November 13, 2013.
9. The Applicant acknowledges that Section 205-116 of the SALDO provides for the payment of a fee in lieu of the dedication of parkland for park and recreation purposes. The Applicant hereby agrees to accept the provisions of Section 205-116(A) (2) of the SALDO providing for the payment of \$.50 per square foot for nonresidential development or use up to 10,000 square feet and \$.25 per square foot over 10,000 square feet. This fee must be paid prior to the submission of an application for a building permit.
10. The Applicant shall execute the Township's reasonable and customary Storm Water Management Facilities Maintenance and Monitoring Agreement and Landscaping Declaration of Covenants and Restriction for its benefit and its successors and assigns.
11. All signage identified on the plan is not approved unless it conforms to the Township Zoning code or has been granted prior relief from the Zoning Hearing Board.

BE IT FURTHER RESOLVED that the following **waivers have been requested by the applicant and are granted to the extent that they concur with the recommendation of the consultants:**

1. Section 205-10.H.(6)(e) – A waiver is requested from the requirement that in the case of shopping centers having frequent truck deliveries or pickups, the circulation pattern for service vehicles shall be physically separated from automobile parking areas and parking access driveways. The current design requires service vehicles to utilize a parking access aisle for maneuverability. Also, the two (2) proposed parking spaces at the southeast corner of the building are located in the loading dock area.

A waiver is requested for the following locations:

- a. There are six proposed parking spaces located in the vicinity of the loading dock area along the eastern wall of the building. These parking spaces are designated as "employee parking only" spaces, will contain accompanying signage stating "Employee Parking Only" and are necessary for BJ's operations. The man door / grade door entrance area is the only location where BJ's employees can enter the building. Locating parking adjacent to this entrance is not only convenient; it allows BJ's employees who work in the Club during "off-hours" a safe, physically close and well lit area to park their vehicle. These spaces are not permitted to be used by customers. **(The consultants have no objection to this waiver request.)**
- b. There are two proposed parking spaces located in the vicinity of the service area at the southeastern corner of the building. These parking spaces are also designated as "employee parking only" with the accompanying signage and are necessary for BJ's operations. These spaces are not permitted to be used by customers. **(The consultants have no objection to this waiver request.)**

2. Section 205-10.H. (7) (b) – A waiver is requested from the requirement that off-street parking spaces for the physically handicapped be a minimum of 12 feet wide. The accessible parking stalls have a proposed width of 8 feet.

The proposed 8 foot wide accessible parking stalls comply with current ADA requirements. **(The consultants have no objection to this waiver request.)**

3. Section 205-17.A. (3) – A waiver is requested from the requirement for paving thicknesses of commercial car parking areas.

The Applicant is requesting to use the pavement section design as specified in the site-specific Geotechnical Investigation that was performed for the project for the Standard Duty Pavement. The Geotechnical Investigation produced a stronger pavement thickness than the Township requirement. **(The consultants have no objection to this waiver request.)**

4. Section 205-25.A. (4) (b) – A waiver is requested from the prohibition to provide parking along storefront driveways.

The Applicant is requesting a waiver to allow accessible parking spaces along the front of the store. These spaces are convenient to persons with disabilities to more easily maneuver themselves and their shopping carts to and from their parked cars, rather than having their route of travel to cross the storefront driveway. Furthermore, the grades in the parking lot exceed ADA regulations and preclude the placement of these spaces at any location in the main parking field. Through coordination with Traffic Planning and Design, in response to their review comment #2 from their March 10, 2014 review letter, we have proposed a modification to the plans to provide five accessible parking stalls along the storefront which have adequate sight distances from vehicles approaching from both directions along the storefront driveway. Refer to the sketch titled "Sight Distance Sketch" dated 3/20/14. **(The consultants have no objection to this waiver request.)**

5. Section 205-17.A. (5) (b) – A waiver is requested from the requirement for paving thicknesses of the alternative for commercial driveways and loading areas.

The Applicant is requesting to use the pavement section design as specified in the site-specific Geotechnical Investigation that was performed for the project for the Heavy Duty Pavement. The pavement section in the Geotechnical Investigation results in a higher strength section than the Township's alternate requirement. **(The consultants have no objection to this waiver request.)**

6. Section 205-25.B. (1) – A waiver is requested from the requirement that for safety, efficiency and appearance, parking lots shall be divided into units of not more than 150 parking spaces each as follows:

The existing parking lot including the location of the access drives on all sides of that lot which exist on the north side of the building is an existing non-conformity that does not meet several of the requirements listed for which a waiver is being requested.

Accommodating these requirements would add a significant amount of unnecessary reconstruction work in the entire parking lot and would result in the loss of a significant amount of parking spaces. The Applicant is proposing to maintain the existing parking arrangement, and install landscaping improvements to the existing parking lot which will supplement the existing landscaping in and around the parking field.

Furthermore, the Applicant is proposing replacement of the site lights to bring the site lighting for the parking lot into conformance with the current ordinance. The current existing arrangement, with the Applicant's proposed landscaping and lighting and enhancements, continues to allow for a safe and efficient parking arrangement in the existing parking lot north of the building. **(The consultants have no objection to this waiver request.)**

7. Section 205-25.C.(1)(a) – A waiver is requested from the requirement that the parking area be divided by continuous islands perpendicular to the parking spaces every 186 feet with the divider islands a minimum of 25 feet wide.

See the response to item #6 above, the justification for this requirement is the same as for that item. *SLDO Section 205-52.B (4) and (5) outlines required plantings for these areas. Two continuous islands every 186' totaling approximately 500 LF would be required. SLDO Section 205-52.B(4)(a) requires 4 shade trees and 8 shrubs for each 100 LF. Therefore, an additional twenty (20) shade trees and forty (40) shrubs would be required or the applicant could provide a fee in lieu of the trees (\$7,000) and shrubs (\$2,600). (The consultants have no objection to a partial waiver from this requirement so long as the required plant material is planted elsewhere on the site or a fee-in-lieu is provided).*

8. Section 205-25.C. (1) (b) – A waiver is requested from the requirement that one additional large landscaped area (1,800 square feet minimum) be provided per 250 parking spaces to provide attractive focal points within the parking lots.

See the response to item #6 above, the justification for this requirement is the same as for that item. *Section 205-25.C (1) (b) requires each landscaped area to contain a minimum of 5 shade trees or flowering trees, plus 10 flowering shrubs. 338 parking spaces are to be located around the proposed Retail a Warehouse Club. Therefore, two large landscaped areas and an additional ten (10) shade trees and twenty (20) shrubs would be required or the applicant could provide a fee in lieu of the trees (\$3,500) and shrubs (\$1,300). (The consultants have no objection to a partial waiver from this requirement so long as the required plant material is planted elsewhere on the site or a fee-in-lieu is provided.)*

9. Section 205-25.C. (2) – A waiver is requested from the requirement that a minimum of 25% of the area between the curblineline of the storefront driveway and the principal buildings be landscaped with ornamental plant materials, including flowering and evergreen trees and shrubs.

See the response to item #6 above, the justification for this requirement is the same as for that item. ***(The consultants have no objection to this waiver request.)***

10. Section 205-52.D.(1)(c) – A waiver is requested from the requirement that a maximum of 15 parking spaces be permitted in a row without a landscape island of 15 feet in width. This island shall contain not less than 290 square feet of planting area. Fourteen (14) 290 SF planting islands are missing from parking aisles within the parking area, therefore an additional fourteen (14) shade trees would be required.

See the response to item #6 above, the justification for this requirement is the same as for that item. ***(The consultants have no objection to this waiver request so long as plant material that would be required within these islands in accordance with the requirements of SLDO Section 205-52.D(1)(e) are planted elsewhere on the site or a fee-in-lieu is provided for \$4,900.)***

11. Section 205-52.D.(1)(g) – A waiver is requested from the requirement that for any land use where the total number of parking spaces exceeds 100, the parking area shall be divided by continuous islands perpendicular to the parking spaces every 124 feet

See the response to item #6 above, the justification for this requirement is the same as for that item. ***(No waiver is required from this section; it is superseded by the ordinance requirements of SLDO Section 205-25.C for Shopping Centers with parking lots containing 500 or more spaces.)***

12. Section 205-52.E. (1) – A waiver is requested from the requirement that one shade tree, one ornamental/flowering tree, and four deciduous and/or evergreen shrubs be required per 100 linear feet of street frontage.

There are no improvements proposed along or near the property frontages; street planting already exist along those frontages. ***(The consultants have no objection to this waiver request.)***

13. Section 205-78.C. (1) (f) – A waiver is requested from the requirement that preliminary plans contain tentative grades to an existing street or to a point 400 feet beyond the boundaries of the subdivision.

The Applicant provided grades within the limit of disturbance and surrounding area and provided an Area Map. ***(The consultants have no objection to this waiver request.)***

Resolution #
Page 6 of 7

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, the 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.

DULY PRESENTED AND ADOPTED by the Board of Supervisors of Montgomery Township, Montgomery County, Pennsylvania, at a public meeting held this 14th day of April, 2014.

MOTION BY:

SECOND BY:

VOTE:

Resolution #
Page 6 of 6

The above conditions are agreed to by the applicant this _____
day of _____, 2014.

Applicant Signature

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. Cover Sheet	12/20/13	2/21/14
2. Area Map	12/20/13	2/21/14
3. Demolition Plan	12/20/13	2/21/14
4. Master Site Plan (Record Plan)	12/20/13	2/21/14
5. Site Plan	12/20/13	2/21/14
6. Pavement Plan	12/20/13	2/21/14
7. Truck Circulation Plan	12/20/13	2/21/14
8. Construction Details	12/20/13	2/21/14
9. Construction Details	12/20/13	2/21/14
10. Post Construction Stormwater Management Plan	12/20/13	2/21/14
11. Grading and Drainage Plan	12/20/13	2/21/14
12. Building Perimeter Grading Plan	12/20/13	2/21/14
13. Storm Sewer Profiles	12/20/13	2/21/14
14. Post Construction Stormwater Management Plan Details	12/20/13	2/21/14
15. Post Construction Stormwater Management Plan Details	12/20/13	2/21/14
16. Soil Erosion and Sediment Control Notes and Details	12/20/13	2/21/14
17. Soil Erosion and Sediment Control Notes and Details	12/20/13	2/21/14
18. Soil Erosion and Sediment Control Notes and Details	12/20/13	2/21/14
19. Utility Plan	12/20/13	2/21/14
20. Sanitary Sewer Profiles	12/20/13	2/21/14
21. Utility Details	12/20/13	2/21/14
22. Post Construction Stormwater Management Landscape Plan	12/21/13	2/21/14
23. Post Construction Stormwater Management Landscape Notes and Details	12/22/13	2/21/14
24. Site Lighting Plan	12/20/13	2/21/14
25. Site Lighting Notes and Details	12/20/13	2/21/14

Marita A. Stoerrle

From: Valerie Liggett [vliggett@bjengineers.com]
Sent: Monday, March 31, 2014 3:29 PM
To: Marita A. Stoerrle
Cc: Judy Stern Goldstein
Subject: RE: BJ's Waivers

Marita -

We have no objection to the waiver request.

Val

From: Marita A. Stoerrle [mailto:mstoerrle@montgomerytp.org]
Sent: Monday, March 31, 2014 3:21 PM
To: Valerie Liggett
Subject: BJ's Waivers

Hi Val -

Would you be able to respond to this waiver request for BJ's.

6. Section 205-25.B.(1) – A waiver is requested from the requirement that for safety, efficiency and appearance, parking lots shall be divided into units of not more than 150 parking spaces each.

The existing parking lot including the location of the access drives on all sides of that lot which exist on the north side of the building is an existing non-conformity that does not meet several of the requirements listed for which a waiver is being requested. Accommodating these requirements would add a significant amount of unnecessary reconstruction work in the entire parking lot and would result in the loss of a significant amount of parking spaces. The Applicant is proposing to maintain the existing parking arrangement, and install landscaping improvements to the existing parking lot which will supplement the existing landscaping in and around the parking field. Furthermore, the Applicant is proposing replacement of the site lights to bring the site lighting for the parking lot into conformance with the ordinance. The current existing arrangement, with the Applicant's proposed landscaping and lighting and enhancements, continues to allow for a safe and efficient parking arrangement in the existing parking lot north of the building.

Thanks,
Marita

Marita Stoerrle
Development Coordinator
Montgomery Township
1001 Stump Road
Montgomeryville, PA 18936
215-393-6903 (office)
215-855-1498 (fax)



Marita A. Stoerrle

From: Valerie Liggett [vliggett@bjengineers.com]
Sent: Monday, March 31, 2014 2:53 PM
To: Marita A. Stoerrle
Cc: Bruce S. Shoupe; Judy Stern Goldstein
Subject: BJ's Waiver Letter

Marita - Here are our responses to the BJ's Waiver Request Letter.

7. SLDO Section 205-25.C(1)(a) - A waiver is requested from the requirement from that the parking area be divided by continuous islands perpendicular to the parking spaces every 186 feet with the divider islands a minimum of 25 feet wide.

We have no objection to a partial waiver from this requirement so long as the required plant material is planted elsewhere on the site or a fee-in-lieu is provided. SLDO Section 205-52.B(4) and (5) outlines required plantings for these areas. Two continuous islands every 186' totaling approximately 500 LF would be required. SLDO Section 205-52.B(4)(a) requires 4 shade trees and 8 shrubs for each 100 LF, therefore, an additional twenty (20) shade trees and forty (40) shrubs would be required.

8. SLDO Sections 205-25.C(1)(b) and 205-52.D(1)(i) - A waiver is requested from the requirement that one additional large landscaped area (1,800 SF minimum) be provided per 250 parking spaces to provide attractive focal points within the parking lots.

No waiver is required from SLDO Section 205-52.D(1)(i), as this section references parking areas smaller than 500 spaces and is therefore superseded in this instance by the first ordinance section referenced.

*We have no objection to a partial waiver request from the SLDO Section 205-25.C(1)(b) requirement so long as the required plant material is planted elsewhere on the site or a fee-in-lieu is provided. Each landscaped area is required to contain a minimum of 5 shade trees or flowering trees, plus 10 flowering shrubs. 338 parking spaces are to be located around the proposed Retail A Warehouse Club. Therefore, two large landscaped areas and **an additional ten (10) shade trees and twenty (20) shrubs** would be required.*

9. SLDO Section 205-24.C(2) - A waiver is requested from the requirement that a minimum of 25% of the area between the curblin of the storefront driveway and the principal buildings be landscaped with ornamental plant materials, including flowering and evergreen trees and shrubs.

We have no objection to this waiver request.

10. SLDO Section 205-52.D(1)(c) - a waiver is requested from the requirement that a maximum of 15 parking spaces be permitted in a row without a landscape island of 15' in width. This island shall contain not less than 290 SF of planting area.

*We have no objection to this waiver request so long as plant material that would be required within those islands in accordance with the requirements of SLDO Section 205-52.D(1)(e) are planted elsewhere on the site or a fee-in-lieu is provided. Fourteen (14) additional 290 SF planting islands and, **an additional 14 shade trees would be required.***

11. SLDO Section 205-52.D(1)(g) - A waiver is requested from the requirement that for any land use where the total number of parking spaces exceeds 100, the parking area shall be divided by continuous islands perpendicular to the parking spaces every 124 feet.

No waiver is required from this section; it is superseded by the ordinance requirements of SLDO Section 205-25.C for Shopping Centers with parking lots containing 500 or more spaces.

12. SLDO Section 205-52.E(1) - A waiver is requested from the requirement that one shade tree, one ornamental/flowering tree, and four deciduous and/or evergreen shrubs be required per 100 linear feet of street frontage.

We have no objection to this waiver request.



Valerie L. Liggett, ASLA, R.L.A.
Planner / Landscape Architect
Boucher & James, Inc.

1456 Ferry Road
Doylestown, PA 18901
E-mail: vliggett@bjengineers.com
Internet: www.bjengineers.com
Tel: 215-345-9400 - Fax: 215-345-9401

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Marita A. Stoerrle

From: Johnson, Kevin [kjohnson@trafficpd.com]
Sent: Monday, March 24, 2014 3:41 PM
To: Jim Dougherty; Marita A. Stoerrle; Judy Stern Goldstein; Valerie Liggett; Russ Dunlevy; Platt, Joe
Cc: Bruce S. Shoupe
Subject: RE: BJ's - Montgomeryville - Waiver request letter

Based on the information supplied in the 3/20/14 letter from Langan, it is our opinion that waivers 1 and 4 are reasonable. Waivers 6 – 12 fall under the purview of Boucher and James.

From: Jim Dougherty [mailto:JDOUGHERTY@gilmore-assoc.com]
Sent: Monday, March 24, 2014 10:06 AM
To: Marita A. Stoerrle; Judy Stern Goldstein; Valerie Liggett; Russ Dunlevy; Johnson, Kevin; Platt, Joe
Cc: Bruce S. Shoupe
Subject: RE: BJ's - Montgomeryville - Waiver request letter

Marita,

We support waivers 2, 3, 5 & 13.
We think the others are for TPD's or B&J's consideration.

Thanks,
Jim

From: Marita A. Stoerrle [mailto:mstoerrle@montgomerytwp.org]
Sent: Friday, March 21, 2014 12:02 PM
To: Judy Stern Goldstein; Valerie Liggett; Russ Dunlevy; Jim Dougherty; Johnson, Kevin; Platt, Joe
Cc: Bruce S. Shoupe
Subject: FW: BJ's - Montgomeryville - Waiver request letter

Hi -

Attached is a waiver request letter for BJ's that was presented at the Planning Commission meeting last night. Please review and advise of your recommendations on those which would relate to your area of expertise.

Thank you.
Marita

*Marita Stoerrle
Development Coordinator
Montgomery Township
1001 Stump Road
Montgomeryville, PA 18936
215-393-6903 (office)
215-855-1498 (fax)*

Marita A. Stoerrle

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Sent: Monday, March 24, 2014 10:06 AM
To: Marita A. Stoerrle; Judy Stern Goldstein; Valerie Liggett; Russ Dunlevy; Johnson, Kevin; Platt, Joe
Cc: Bruce S. Shoupe
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Jim

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Cc: Bruce S. Shoupe
Subject: FW: BJ's - Montgomeryville - Waiver request letter

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Thank you.
Marita

*Marita Stoerrle
Development Coordinator
Montgomery Township
1001 Stump Road
Montgomeryville, PA 18936
215-393-6903 (office)
215-855-1498 (fax)*



www.montgomerytpw.org

From: Bruce S. Shoupe
Sent: Friday, March 21, 2014 11:54 AM
To: Marita A. Stoerrle
Subject: FW: Montgomeryville - Waiver request letter

March 20, 2014

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

**Re: Waiver Request Letter to Accompany
Application for Preliminary and Final Land Development
Montgomeryville Five Points Plaza
Montgomery Township, Montgomery County, PA
Langan Project No.: 200018801**

Dear Bruce:

This letter is intended to accompany the application for Preliminary and Final Land Development approval for the above referenced project. This letter provides justifications for each of the requested waivers from the requirements of the Montgomery Township Subdivision and Land Development Ordinance. The requested waivers are as follows:

1. §205-10.H.(6)(e) — A waiver is requested from the requirement that in the case of shopping centers having frequent truck deliveries or pickups, the circulation pattern for service vehicles shall be physically separated from automobile parking areas and parking access driveways. The current design requires service vehicles to utilize a parking access aisle for maneuverability. Also, the two (2) proposed parking spaces at the southeast corner of the building are located in the loading dock area.

Response: a waiver is requested for the following locations:

- a. There are six proposed parking spaces located in the vicinity of the loading dock area along the eastern wall of the building. These parking spaces are designated as "employee parking only" spaces, will contain accompanying signage stating "Employee Parking Only" and are necessary for BJ's operations. The man door / grade door entrance area is the only location where BJ's employees can enter the building. Locating parking adjacent to this entrance is not only convenient; it allows BJ's employees who work in the Club during "off-hours" a safe, physically close and well lit area to park their vehicle. These spaces are not permitted to be used by customers.
 - b. There are two proposed parking spaces located in the vicinity of the service area at the southeastern corner of the building. These parking spaces are also designated as "employee parking only" with the accompanying signage and are necessary for BJ's operations. These spaces are not permitted to be used by customers.
2. §205-10.H.(7)(b) — A waiver is requested from the requirement that off-street parking spaces for the physically handicapped be a minimum of 12 feet wide. The accessible parking stalls have a proposed width of 8 feet.

Response: The proposed 8 foot wide accessible parking stalls comply with current ADA requirements.

3. §205-17.A.(3) — A waiver is requested from the requirement for paving thicknesses of commercial car parking areas.

Response: the Applicant is requesting to use the pavement section design as specified in the site-specific Geotechnical Investigation that was performed for the project for the Standard Duty Pavement. The Geotechnical Investigation produced a stronger pavement thickness than the Township requirement.

4. §205-25.A.(4)(b) — A waiver is requested from the prohibition to provide parking along storefront driveways.

Response: the Applicant is requesting a waiver to allow accessible parking spaces along the front of the store. These spaces are convenient to persons with disabilities to more easily maneuver themselves and their shopping carts to and from their parked cars, rather than having their route of travel to cross the storefront driveway. Furthermore, the grades in the parking lot exceed ADA regulations and preclude the placement of these spaces at any location in the main parking field. Through coordination with Traffic Planning and Design, in response to their review comment #2 from their March 10, 2014 review letter, we have proposed a modification to the plans to provide five accessible parking stalls along the storefront which have adequate sight distances from vehicles approaching from both directions along the storefront driveway. Refer to the attached sketch titled "Sight Distance Sketch" dated 3/20/14.

5. §205-17.A.(5)(b) — A waiver is requested from the requirement for paving thicknesses of the alternative for commercial driveways and loading areas.

Response: the Applicant is requesting to use the pavement section design as specified in the site-specific Geotechnical Investigation that was performed for the project for the Heavy Duty Pavement. The pavement section in the Geotechnical Investigation results in a higher strength section than the Township's alternate requirement.

6. §205-25.B.(1) — A waiver is requested from the requirement that for safety, efficiency and appearance, parking lots shall be divided into units of not more than 150 parking spaces each.

Response: The existing parking lot including the location of the access drives on all sides of that lot which exist on the north side of the building is an existing non-conformity that does not meet several of the requirements listed for which a waiver is being requested. Accommodating these requirements would add a significant amount of unnecessary reconstruction work in the entire parking lot and would result in the loss of a significant amount of parking spaces. The Applicant is proposing to maintain the existing parking arrangement, and install landscaping improvements to the existing parking lot which will supplement the existing landscaping in and around the parking field. Furthermore, the Applicant is proposing replacement of the site lights to bring the site lighting for the parking lot into conformance with the ordinance. The current existing arrangement, with the Applicant's proposed landscaping and lighting and enhancements, continues to allow for a safe and efficient parking arrangement in the existing parking lot north of the building.

7. §205-25.C.(1)(a) — A waiver is requested from the requirement that the parking area be divided by continuous islands perpendicular to the parking spaces every 186 feet with the divider islands a minimum of 25 feet wide.

Response: see our response to item #6 above, the justification for this requirement is the same as for that item.

8. §205-25.C.(1)(b) & §205-52.D.(1)(i) — A waiver is requested from the requirement that one additional large landscaped area (1,800 square feet minimum) be provided per 250 parking spaces to provide attractive focal points within the parking lots.

Response: see our response to item #6 above, the justification for this requirement is the same as for that item.

9. §205-25.C.(2) — A waiver is requested from the requirement that a minimum of 25% of the area between the curbline of the storefront driveway and the principal buildings be landscaped with ornamental plant materials, including flowering and evergreen trees and shrubs.

Response: see our response to item #6 above, the justification for this requirement is the same as for that item.

10. §205-52.D.(1)(c) — A waiver is requested from the requirement that a maximum of 15 parking spaces be permitted in a row without a landscape island of 15 feet in width. This island shall contain not less than 290 square feet of planting area.

Response: see our response to item #6 above, the justification for this requirement is the same as for that item.

11. §205-52.D.(1)(g) — A waiver is requested from the requirement that for any land use where the total number of parking spaces exceeds 100, the parking area shall be divided by continuous islands perpendicular to the parking spaces every 124 feet

Response: see our response to item #6 above, the justification for this requirement is the same as for that item.

12. §205-52.E.(1) — A waiver is requested from the requirement that one shade tree, one ornamental/flowering tree, and four deciduous and/or evergreen shrubs be required per 100 linear feet of street frontage.

Response: There are no improvements proposed along or near the property frontages; street planting already exists along those frontages.


13. §205-78.C.(1)(f) — A waiver is requested from the requirement that preliminary plans contain tentative grades to an existing street or to a point 400 feet beyond the boundaries of the subdivision.

Response: The Applicant provided grades within the limit of disturbance and surrounding area and provided an Area Map.

We note that the previously requested waiver from Section 205-10.H.(6)(c) is no longer needed since the applicant agrees to the recommendation from Gilmore Associates to add a note to the plan which states: "Service vehicles shall enter and exit the loading area only during off-peak hours."

Please let us know if you have any questions or require additional information.

Sincerely,
Langan Engineering and Environmental Services, Inc.


Gregory Elko, P.E., LEED® AP
Executive Vice President

cc: Rick Birdoff, Al Rossi, Mike Rossi — Somerville Montgomery LP
Robert Brant, Esq. — Robert L. Brant & Associates

Rich Loeschke, Yongjae Park — Bignell Watkins Hasser Architects, P.C.
Luke Teller, Chirag Thakkar, Nate Burns - Langan

NJ Certificate of Authorization No. 24GA27996400
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GILMORE & ASSOCIATES, INC.

ENGINEERING & CONSULTING SERVICES

March 18, 2014

File No. 13-11069

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

Reference: Montgomeryville Five Points Plaza Preliminary/Final Land Development – LD/S #673
640 Cowpath Road
Tax Block #46-006B Tax Units #162, 194, 195 & 270

Dear Bruce:

Pursuant to your request, Gilmore & Associates, Inc. has reviewed the Preliminary/Final Land Development Plans for the above-referenced project and offers the following comments for consideration by the Montgomery Township Board of Supervisors:

I. SUBMISSION

- A. Preliminary/Final Land Development Plans, as prepared by Langan Engineering & Environmental Services, twenty-six (26) sheets, dated December 20, 2013 and last revised February 21, 2014.
- B. ALTA/ACSM Land Title Survey of Units 6 & 7, as prepared by Langan Engineering & Environmental Services, two (2) sheets, dated January 10, 2012 and last revised December 20, 2013.
- C. Post-Construction Stormwater Management (PCSM) Narrative, as prepared by Langan Engineering & Environmental Services, dated December 20, 2013 and last revised February 21, 2014.
- D. Response Letter.

II. GENERAL

The subject site is located at 640 Cowpath Road, Lansdale, PA within the Montgomeryville Five Points Plaza Shopping Center. The site has access on the north to Cowpath Road (S.R. 0463) and on the east to Bethlehem Pike (S.R. 0309 & 0202). The site is within the Shopping Center (S) Zoning District. The intended use is a retail store. The site is approximately 45.85 acres. The project proposes to remove the majority of the exterior appurtenances associated with the existing 'American Signature Furniture Store', such as stoops and steps, wall mounted lights, sconces, storm structures, trash compactor, etc., and remove appurtenances associated with the surrounding parking, such as storm structures, lighting, curbing, curbed islands, speed bumps, pavement sections, concrete sections, waterline features, etc. Following the demolition of these features, the Applicant proposes an addition to the base building, as well as, a 'Receiving', 'Breezeway', and 'Tire Center' additions, which will create a total proposed building area of 89,732 sf. Also proposed with this application is the construction of other related appurtenances, such as a compactor, transformer, generators, propane tanks, loading dock, concrete stoops, stormwater management features, and reconstruction of the surrounding parking areas. A concrete sidewalk for pedestrian use exists along Cowpath Road and Bethlehem Pike with no internal site connections. No improvements to this sidewalk nor any consolidation or subdivision of the site are proposed with this application.

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

www.gilmore-assoc.com

III. REVIEW COMMENTS

A. Zoning Ordinance

The Applicant was granted the following variances and special exception from the Zoning Ordinance by the Zoning Hearing Board of Montgomery Township on November 13, 2013 as Appeal No. 13100004. The title 'List of Approved Variances' on the Master Site Plan, sheet CS-101, should be revised to 'List of Approved Variances & Special Exception'.

1. §230-1123.A – A variance was granted from the requirement that a parapet wall not exceed six (6) feet above the building roofline. The proposed parapet wall will extend approximately 10.34 feet above the building roofline.
2. §230-86 – A variance was granted to permit the Use of 'Tire, Battery and Automotive Accessories Sales' within the Shopping Center (S) Zoning District. The Applicant proposes to add automobile accessory sales and tire sales/installation center. The Zoning Hearing Board has granted the variance provided that full automotive services, such as oil changes, repairs of anything other than tires, or the installation of automobile batteries, or any other limits stated by the Applicant during the public hearing would not be included.
3. §230-88.C – A variance was granted from the requirement that not more than 15% of the area of any lot be occupied by buildings. The Five Points Plaza, including the area of Lowe's Garden Center and expansion of Retail A, would increase the building coverage to 15.9%.
4. §230-127.A.(4)(b)[2] – A variance was granted from the requirement that for a lot with multiple buildings a maximum sign area of 100 square feet is permitted. The Applicant seeks to add an additional panel to each of the two (2) existing free standing business signs which would increase the size of the signs from 100 square feet to 136.2 square feet.
5. §230-150.A – A special exception was granted to permit two above-ground propane storage tanks and two above-ground diesel storage tanks in excess of 550 gallons capacity.

Based on our review the following items do not appear to comply with the Zoning Ordinance:

1. §230-148.F – Temporary fence. Temporary construction fence has been added to the plans in order to ensure pedestrian safety and assist with traffic circulation. However, temporary construction fence should also be added in the existing parking area on the north side of the building to ensure that vehicular traffic does not enter the work zone during non-working hours.
2. The label for the existing number of parking spaces per row appears to be incorrect for the third double parking row (26/25) from the west side of the parking area associated with Retail A on the Site Plan, sheet CS-102.

B. Subdivision and Land Development Ordinance

The Applicant is requesting the following waivers from the Subdivision and Land Development Ordinance (SALDO). A Waiver Request Letter should be submitted to the Township and our Office which includes all requested waivers with explanation of undue hardship.

1. §205-10.H.(6)(c) – A waiver is requested from the requirement that the loading spaces be compatible with vehicular circulation in adjacent areas based upon its location and the schedule of its use. Since the loading area requires trucks to utilize a parking access aisle for maneuverability, we do not recommend this waiver, but instead, recommend that a note be added to the Master Site Plan, sheet CS-101, which states: "Service vehicles shall enter and exit the loading area only

during off-peak hours." Also, the Ordinance section listed in Waiver #8 under 'List of Requested Waivers' on the Master Site Plan, sheet CS-101, should be revised to match the above listed section.

2. §205-10.H.(6)(e) – A waiver is requested from the requirement that in the case of shopping centers having frequent truck deliveries or pickups, the circulation pattern for service vehicles shall be physically separated from automobile parking areas and parking access driveways. The current design requires service vehicles to utilize a parking access aisle for maneuverability. Also, the two (2) proposed parking spaces at the southeast corner of the building are located in the loading dock area.
3. §205-10.H.(7)(b) – A waiver is requested from the requirement that off-street parking spaces for the physically handicapped be a minimum of 12 feet wide. The accessible parking stalls have a proposed width of 8 feet. We recommend consideration of this waiver conditioned upon the construction of the accessible parking stalls meeting all current ADA regulations at the time of construction.
4. §205-17.A.(3) – A waiver is requested from the requirement for paving thicknesses of commercial car parking areas. The Applicant is requesting to use the pavement section design as specified in the site-specific Geotechnical Investigation that was performed for the project for the Standard Duty Pavement. We recommend consideration of this waiver since the Geotechnical Investigation produced a stronger pavement thickness than the Township requirement.
5. §205-17.A.(5)(b) – A waiver is requested from the requirement for paving thicknesses of the alternative for commercial driveways and loading areas. The Applicant is requesting to use the pavement section design as specified in the site-specific Geotechnical Investigation that was performed for the project for the Heavy Duty Pavement. We recommend consideration of this waiver since the pavement section in the Geotechnical Investigation results in a higher strength section than the Township's alternate requirement. Also, the Ordinance section listed in Waiver #13 under 'List of Requested Waivers' on the Master Site Plan, sheet CS-101, should be revised to match the above listed section.
6. §205-25.B.(1) – A waiver is requested from the requirement that for safety, efficiency and appearance, parking lots shall be divided into units of not more than 150 parking spaces each. The existing parking lot on the north side of the building is an existing non-conformity that exceeds the maximum allowable parking spaces.
7. §205-25.C.(1)(a) – A waiver is requested from the requirement that the parking area be divided by continuous islands perpendicular to the parking spaces every 186 feet with the divider islands a minimum of 25 feet wide. We defer the recommendation of this waiver to the Montgomery Township Landscaping Consultant.
8. §205-25.C.(1)(b) & §205-52.D.(1)(i) – A waiver is requested from the requirement that one additional large landscaped area (1,800 square feet minimum) be provided per 250 parking spaces to provide attractive focal points within the parking lots. We defer the recommendation of this waiver to the Montgomery Township Landscaping Consultant.
9. §205-25.C.(2) – A waiver is requested from the requirement that a minimum of 25% of the area between the curbline of the storefront driveway and the principal buildings be landscaped with ornamental plant materials, including flowering and evergreen trees and shrubs. We defer the recommendation of this waiver to the Montgomery Township Landscaping Consultant. Also, the Ordinance section listed in Waiver #6 under 'List of Requested Waivers' on the Master Site Plan, sheet CS-101, should be revised to only include the above listed section.

10. §205-52.D.(1)(c) – A waiver is requested from the requirement that a maximum of 15 parking spaces be permitted in a row without a landscape island of 15 feet in width. This island shall contain not less than 290 square feet of planting area. We defer the recommendation of this waiver to the Montgomery Township Landscaping Consultant.
11. §205-52.D.(1)(g) – A waiver is requested from the requirement that for any land use where the total number of parking spaces exceeds 100, the parking area shall be divided by continuous islands perpendicular to the parking spaces every 124 feet. We defer the recommendation of this waiver to the Montgomery Township Landscaping Consultant.
12. §205-52.E.(1) – A waiver is requested from the requirement that one shade tree, one ornamental/flowering tree, and four deciduous and/or evergreen shrubs be required per 100 linear feet of street frontage. We defer the recommendation of this waiver to the Montgomery Township Landscaping Consultant.
13. §205-78.C.(1)(f) – A waiver is requested from the requirement that preliminary plans contain tentative grades to an existing street or to a point 400 feet beyond the boundaries of the subdivision. We recommend consideration of this waiver since the Applicant provided grades within the limit of disturbance and surrounding area and provided an Area Map.

This application satisfies all requirements and provisions of the current Montgomery Township Subdivision and Land Development Ordinance, with the following exceptions:

1. §205-10.H.(7)(a) – There should be 2% of total spaces designated for handicap parking spaces. The handicap parking space calculations on the Master Site Plan, CS-101, should be revised so that the 'Total Proposed Parking Spaces' is equivalent to the addition of the building area of Retail A and Condominium Unit No. 5 times 4.5/1,000 SF (566 spaces). Then, the 'Required Handicap Spaces' should be recalculated (12 spaces).
2. §205-17.A.(3) – The base course in the 'Standard Duty Pavement Section' detail on the Pavement Plan, sheet CP-101, should be revised so that it is labeled "6" Crushed Aggregate Base Course (2A Modified)".
3. §205-17.A.(5)(b) – The base course in the 'Heavy Duty Pavement Section' detail on the Pavement Plan, sheet CP-101, should be revised so that it is labeled "8" Crushed Aggregate Base Course (2A Modified)".
4. §205-18.1.C & §205-29 – An Erosion and Sedimentation Control Plan should be submitted to the Montgomery County Conservation District (MCCD). No permit shall be approved unless there has been a plan approved by the MCCD. A NPDES permit must be obtained since the earth disturbance is over one (1) acre.
5. §205-19 – We defer the review of the sanitary sewer design and details to the Montgomery Township Sewer Authority Engineers. However, we note that the main 6-inch PVC pipe run in the western sanitary system appears to be labeled with the wrong length (149 LF) in the plan view on the Utility Plan, sheet CU-101.
6. §205-25.A.(4)(b) – Parking is prohibited along storefront driveways. The Applicant is proposing eight (8) parking spaces (5 handicap) along the storefront driveway. The parking spaces should be removed to meet the requirements of this section of the Ordinance or a waiver should be requested. Also, the information under the proposed column for 'Minimum Storefront Driveways' in the 'Montgomery Township Zoning Data Table' on the Master Site Plan, sheet CS-101, should be revised based on this comment.

C. Stormwater Management (West Branch Neshaminy Creek)

Stormwater runoff from the Montgomeryville Five Points Plaza Shopping Center currently drains to the West Branch Neshaminy Creek, via on-site stormwater management basins. There are two (2) above-ground stormwater management basins located on-site, one in the northern corner and one in the western corner of the site. These basins appear to have been designed in series with the western basin discharging to the northern basin and the northern basin ultimately discharging off-site. The majority of the proposed construction will take place within the portion of the site that drains to the western basin.

With this application, the Applicant proposes to discharge additional runoff due to the increase in impervious surfaces created by the proposed construction to the western basin via the existing storm sewer system. In order to reduce the additional volume created by the increase in runoff, the Applicant is proposing three (3) landscape restoration areas and a subsurface infiltration bed. In order to improve the water quality of the runoff, a Snout oil/water separator is proposed in two (2) of the catch basins along with street sweeping and a soil restoration area. We support the method of volume control and water quality treatment that are proposed by the Applicant.

This application satisfies all requirements and provisions of the Montgomery Township Subdivision and Land Development Ordinance (SALDO) Sections 205-18, including Appendix B (Ord. No. 97-72-S), and 205-18.1, with the following exceptions:

1. §205-18.D.(2) – Developers are encouraged to investigate all measures to reduce and retain water. The Applicant has included in the Post-Construction Stormwater Management (PCSM) Narrative an analysis of the pre- vs. post-development discharge from the existing stormwater management basin located in the northern corner of the shopping center. The analysis indicates that the post-development runoff release rate is less than the pre-development runoff rate in all storms ranging from the one-year to the one-hundred-year storm indicating no increase in runoff from the shopping center, which meets the standards and criteria for stormwater management in the Neshaminy Creek Watershed.
2. §205-18.1.D.(1)(e) – A maintenance agreement pertaining to the long-term operations and maintenance of the installed stormwater BMPs on the site, including the Snout Devices, street sweeping, subsurface infiltration bed, landscape restoration areas, and soil restoration area, should be provided. The Applicant has acknowledged that a new maintenance agreement will be provided.
3. The following comments pertain to the Grading and Drainage Plan, sheet CG-101:
 - a. Existing catch basin #105 (Ex CB-105) should be shown on the plan and the label "Existing Catch Basin to Remain - See Note #19" should be redirected from EX CB-104 to EX CB-105. Also, both catch basins should have their numbers added to the labels.
 - b. The slope of the 6 foot long 15" HDPE pipe from the cleanout to MH-1 appears incorrect.
 - c. Trench Drain-1 should have a minimum slope of 0.5%.
4. 'Ex. CB-13 to Front Canopy Roof Leader Profile' on Storm Sewer Profiles, sheet CG-201, should be revised based on the following comment:
 - a. The slope of the 6 foot long 15" HDPE pipe from the cleanout to MH-1 appears incorrect.
5. 'MH-1 to TD-1 Profile' on Storm Sewer Profiles, sheet CG-201, should be revised based on the following comments:
 - a. The slope of the 6 foot long 15" HDPE pipe from the cleanout to MH-1 appears incorrect.
 - b. Trench Drain-1 should have a minimum slope of 0.5%.

6. 'CO to TD-2 Profile' on Storm Sewer Profiles, sheet CG-201, should be revised based on the following comment:
 - a. The invert of the cleanout within the 10-inch HDPE pipe near trench drain-2 appears incorrect.
7. The 'Sanitary and Storm Sewer Trench' detail on Post Construction Stormwater Management Details, sheet CG-502, should be revised based on the following comment:
 - a. Pipes in paved areas should be completely backfilled with 2A Modified Stone not suitable native material.

D. General


1. Based on the renovations to Condominium Unit No.7, it appears that a new Condominium Plat may be required to document the modified condominium units (Block 6B, Units 162, 194, 195 and 270). The Applicant shall coordinate review and approval of the Condominium Association documents with the Township Solicitor. The Applicant has requested that this requirement be a condition of the land development approval.
2. The dimensions of the concrete pad for the propane tank area should be revised in the 'Propane Tank Detail' on Construction Details, sheet CS-502, in order to represent the actual pad to be constructed.
3. The Applicant should obtain all required approvals, permits, declarations of restrictions and covenants, etc. (i.e., PaDEP, PennDOT, Montgomery Township Traffic Engineer & Lighting Consultant, MCPC, Montgomery County Conservation District, Montgomery Township Landscape Consultant, Montgomery Township Municipal Sewer Authority, North Wales Water Authority, MCDH, DRBC, HARB, Fire Marshal, etc.). Copies of these approvals and permits should be submitted to the Township and our office.
4. A Site Accessibility Review has been provided under separate cover.

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

Sincerely,



Russell S. Dunlevy, P.E.
Executive Vice President
Township Engineers



James P. Dougherty, P.E.
Project Manager
Township Engineers

RSD/jpd/dcr

cc: Lawrence J. Grogan, Manager – Montgomery Township
Marita A. Stoerrle, Development Coordinator - Montgomery Township
Marianne McConnell, Deputy Zoning Officer – Montgomery Township
Frank R. Bartle, Esq., Solicitor – Dischell Bartle & Dooley, PC
Kenneth Amey, AICP, Township Planning Consultant
Barry W. Jeffries, Senior Design Planner – Montgomery County Planning Commission
Thomas F. Zarko, P.E., Sewer Authority Engineer – CKS Engineers, Inc.
Kevin Johnson, P.E., Traffic Engineer – Traffic Planning & Design, Inc.
Judith Stern Goldstein, ASLA, R.L.A., Landscape Architect – Boucher & James, Inc.
Richard Birdoff – Somerville Montgomery LP
Gregory Elko, P.E. – Langan Engineering & Environmental Services
Douglas C. Rossino, P.E. – Gilmore & Associates, Inc.



GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

January 29, 2014

File No. 13-11069

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

Reference: Montgomeryville Five Points Plaza Preliminary/Final Land Development – LD/S #673
640 Cowpath Road
Tax Block #46-006B Tax Units #162, 194, 195 & 270

Dear Bruce:

Pursuant to your request, Gilmore & Associates, Inc. has reviewed the Preliminary/Final Land Development Plans for the above-referenced project and offers the following comments for consideration by the Montgomery Township Board of Supervisors:

I. SUBMISSION

- A. Preliminary/Final Land Development Plans, as prepared by Langan Engineering & Environmental Services, twenty-three (23) sheets, dated December 20, 2013.
- B. ALTA/ACSM Land Title Survey of Units 6 & 7, as prepared by Langan Engineering & Environmental Services, two (2) sheets, dated January 10, 2012 and last revised December 20, 2013.
- C. Site Details, as prepared by Greenberg Farrow, one (1) sheet, dated May 15, 2009 and last revised September 8, 2011.
- D. Post-Construction Stormwater Management (PCSM) Narrative, as prepared by Langan Engineering & Environmental Services, dated December 20, 2013.
- E. Erosion and Sediment Pollution Control Narrative Report and Calculations, as prepared by Langan Engineering & Environmental Services, dated December 20, 2013.
- F. Township and County Applications and Site Photographs.

II. GENERAL

The subject site is located at 640 Cowpath Road, Lansdale, PA within the Montgomeryville Five Points Plaza Shopping Center. The site has access on the north to Cowpath Road (S.R. 0463) and on the east to Bethlehem Pike (S.R. 0309 & 0202). The site is within the Shopping Center (S) Zoning District. The intended use is a retail store. The site is approximately 45.85 acres. The project proposes to remove the majority of the exterior appurtenances associated with the existing 'American Signature Furniture Store', such as stoops and steps, wall mounted lights, sconces, storm structures, trash compactor, etc., and remove appurtenances associated with the surrounding parking, such as storm structures, lighting, curbing, curbed islands, speed bumps, pavement sections, concrete sections, waterline features, etc. Following the demolition of these features, the Applicant proposes an addition to the base building, as well

BUILDING ON A FOUNDATION OF EXCELLENCE

as, a 'Receiving', 'Breezeway', and 'Tire Center' additions, which will create a total proposed building area of 89,680 sf. Also proposed with this application is the construction of other related appurtenances, such as a compactor, transformer, generators, propane tanks, loading dock, concrete stoops, stormwater management features, and reconstruction of the surrounding parking areas. A concrete sidewalk for pedestrian use exists along Cowpath Road and Bethlehem Pike with no internal site connections. No improvements to this sidewalk nor any consolidation or subdivision of the site are proposed with this application.

III. REVIEW COMMENTS

A. Zoning Ordinance

The Applicant was granted the following variances and special exception from the Zoning Ordinance by the Zoning Hearing Board of Montgomery Township on November 13, 2013 as Appeal No. 13100004. The title 'List of Approved Variances' on the Master Site Plan, sheet CS-101, should be revised to 'List of Approved Variances & Special Exception'.

1. §230-1123.A – A variance was granted from the requirement that a parapet wall not exceed six (6) feet above the building roofline. The proposed parapet wall will extend approximately 10.34 feet above the building roofline. Variance #1 under 'List of Approved Variances' on the Master Site Plan, sheet CS-101, should be revised in order to provide this Ordinance section and information which was granted based on the Township 'Order'. The information provided on the plan was not granted in the 'Order'. This should be discussed with the Township Zoning Officer to ensure compliance with the Zoning Hearing Board Order.
2. §230-86 – A variance was granted to permit the Use of 'Tire, Battery and Automotive Accessories Sales' within the Shopping Center (S) Zoning District. The Applicant proposes to add automobile accessory sales and tire sales/installation center. The Zoning Hearing Board has granted the variance provided that full automotive services, such as oil changes, repairs of anything other than tires, or the installation of automobile batteries, or any other limits stated by the Applicant during the public hearing would not be included. Variance #5 under 'List of Approved Variances' on the Master Site Plan, sheet CS-101, should be revised to include "provided that the limits stated by the Applicant are observed" at the end of the statement.
3. §230-88.C – A variance was granted from the requirement that not more than 15% of the area of any lot be occupied by buildings. The Five Points Plaza, including the area of Lowe's Garden Center and expansion of Retail A, would increase the building coverage to 15.9%. Variance #3 under 'List of Approved Variances' on the Master Site Plan, sheet CS-101, should be revised to include "to 15.9%" at the end of the statement.
4. §230-127.A.(4)(b)[2] – A variance was granted from the requirement that for a lot with multiple buildings a maximum sign area of 100 square feet is permitted. The Applicant seeks to add an additional panel to each of the two (2) existing free standing business signs which would increase the size of the signs from 100 square feet to 136.2 square feet. Variance #2 under 'List of Approved Variances' on the Master Site Plan, sheet CS-101, should be revised to include "to a maximum of 136.2 square feet" at the end of the statement.
5. §230-150.A – A special exception was granted to permit two above-ground propane storage tanks and two above-ground diesel storage tanks in excess of 550 gallons capacity.

Based on our review the following items do not appear to comply with the Zoning Ordinance. Upon further development of the plans additional items may become apparent.

1. §230-91.B.(1) – No waste, rubbish and discarded materials should be stored outside of the building unless it is placed within a completely fenced-in area so as to conceal the materials. There appears to be an unlabeled slab surrounded by bollards within the loading dock on the south side of the 'Receiving' addition. The Applicant should clarify the use of this area and identify any other areas to be used for trash/recycling. If this area or any other area is proposed to be a trash/recycling enclosure, then the area should be completely fenced-in and a detail added to the plans. No trash/recycling enclosure is currently identified on the plans.
2. §230-131 – It shall be unlawful to erect, construct or alter any sign in the Township of Montgomery without first filing with the Building Department of Montgomery Township an application in order to obtain a formal permit and receiving such a permit. The Applicant should apply for a sign permit for the proposed alteration to the two (2) existing free standing business signs and any proposed building wall sign.
3. §230-148.F – Temporary fence. Temporary security fence should be shown on the plans in order to ensure pedestrian safety and assist with traffic circulation. The time duration for temporary fences shall be established by the Zoning Officer. Temporary fence should consist of one of the materials identified in this section of the Ordinance. A detail of the temporary security fence should be added to the plans.
4. The following revisions should be made to the 'Montgomery Township Zoning Data Table' on the Master Site Plan, sheet CS-101:
 - a. The 'Ordinance Section' for the 'Permitted Use, By Right' should be revised to 230-86.
 - b. The 'Proposed' Building Height (39 FT) and variance granted does not appear to match the information provided in the Table. This discrepancy should be clarified.
5. The information provided in the 'Building Summary' table on the Master Site Plan, sheet CS-101, in reference to the current and future expansion to Ruby Tuesday does not appear to match the information shown in the plan view.
6. The information provided in the 'Parking Summary' table on the Master Site Plan, sheet CS-101, in reference to the 'Future Ruby Tuesday Expansion' (4,015 SF) does not appear to match the information provided in the 'Building Summary' table.
7. The label for the number of parking spaces per row should be added to the parking area associated with the Ruby Tuesdays Restaurant and the parking row furthest to the west in the parking area associated with Retail A on the Site Plan, sheet CS-102.

B. Subdivision and Land Development Ordinance

The Applicant is requesting the following waivers from the Subdivision and Land Development Ordinance (SALDO). A Waiver Request Letter should be submitted to the Township and our Office which includes all requested waivers with explanation of undue hardship.

1. §205-25.C.(1)(a) – A waiver is requested from the requirement that the parking area be divided by continuous islands perpendicular to the parking spaces every 186 feet with the divider islands a minimum of 25 feet wide. We defer the recommendation of this waiver to the Montgomery Township Landscaping Consultant. Also, the Ordinance section listed in Waiver #3 under 'List of Requested Waivers' on the Master Site Plan, sheet CS-101, should be revised to match the above listed section.

2. §205-25.C.(1)(b) & §205-52.D.(1)(i) – A waiver is requested from the requirement that one additional large landscaped area (1,800 square feet minimum) be provided per 250 parking spaces to provide attractive focal points within the parking lots. We defer the recommendation of this waiver to the Montgomery Township Landscaping Consultant. Also, the Ordinance section listed in Waiver #4 under 'List of Requested Waivers' on the Master Site Plan, sheet CS-101, should be revised to match the above listed sections.
3. §205-25.C.(2) – A waiver is requested from the requirement that a minimum of 25% of the area between the curbline of the storefront driveway and the principal buildings be landscaped with ornamental plant materials, including flowering and evergreen trees and shrubs. We defer the recommendation of this waiver to the Montgomery Township Landscaping Consultant.
4. §205-52.D.(1)(c) – A waiver is requested from the requirement that a maximum of 15 parking spaces be permitted in a row without a landscape island of 15 feet in width. This island shall contain not less than 290 square feet of planting area. We defer the recommendation of this waiver to the Montgomery Township Landscaping Consultant. Also, the square footage (300) listed in Waiver #2 under 'List of Requested Waivers' on the Master Site Plan, sheet CS-101, should be revised to 290 square feet, as per the Ordinance requirement.
5. §205-52.E.(1) – A waiver is requested from the requirement that one shade tree, one ornamental/flowering tree, and four deciduous and/or evergreen shrubs be required per 100 linear feet of street frontage. We defer the recommendation of this waiver to the Montgomery Township Landscaping Consultant. Also, this waiver should be listed separately under 'List of Requested Waivers' on the Master Site Plan, sheet CS-101.
6. §205-78.C.(1)(f) – A waiver is requested from the requirement that preliminary plans contain tentative grades to an existing street or to a point 400 feet beyond the boundaries of the subdivision. We recommend consideration of this waiver since the Applicant provided grades within the limit of disturbance and surrounding area and provided an Area Map. Also, the Ordinance section listed in Waiver #1 under 'List of Requested Waivers' on the Master Site Plan, sheet CS-101, should be revised to match the above listed section.

This application satisfies all requirements and provisions of the current Montgomery Township Subdivision and Land Development Ordinance, with the following exceptions. Upon further development of the plans additional items may become apparent.

1. §205-10.G. – Driveway access to state highways should be subject to the permit process of the Pennsylvania Department of Transportation (PennDOT). Due to the change in Use of Condominium Unit No. 7, a Highway Occupancy Permit may be required by PennDOT. We defer this comment to the Montgomery Township Traffic Engineer.
2. §205-10.H.(4) – All parking spaces should be marked with all-weather paint with double parallel lines to be a minimum of six inches apart to separate each space. The site plans and the 'Parking Space Striping' detail on Construction Details, sheet CS-501, indicate all parking spaces to be marked with single lines. The plan views and detail should be updated.
3. §205-10.H.(5) – Aisles where illegal parallel parking is possible should be posted "No Parking by Order of Fire Marshal." Illegal parallel parking is possible along the drive aisle in Condominium Unit No. 6, and therefore, should be posted with "No parking by Order of the Fire Marshal". We defer this comment to the Township Fire Marshal. A copy of the Fire Marshal's Letter should be submitted to our office.

4. §205-10.H.(6)(c) – The loading spaces should be compatible with vehicular circulation in adjacent areas based upon its location and the schedule of its use. Since the loading area requires trucks to utilize a parking access aisle for maneuverability, a note should be added to the Master Site Plan, sheet CS-101, which states: "Service vehicles shall enter and exit the loading area only during off-peak hours."
5. §205-10.H.(6)(e) – In the case of shopping centers having frequent truck deliveries or pickups, the circulation pattern for service vehicles should be physically separated from automobile parking areas and parking access driveways. The current design requires service vehicles to utilize a parking access aisle for maneuverability. The loading dock configuration should be revised to meet the requirements of this section of the Ordinance or a waiver should be requested. Also, the loading dock area should be physically separated from automobile parking areas, and therefore, the two (2) proposed parking spaces at the southeast corner of the building should be removed from the loading dock area.
6. §205-10.H.(6)(e) – The circulation pattern for the largest service vehicle to utilize the loading dock on the south side of the 'Receiving' addition should be added to the Truck Circulation Plan, sheet CP-102.
7. §205-10.H.(7) – Due to lack of proper visibility, a 'Stop' sign should be installed at both ends of the proposed handicap parking area on the north side of Retail A.
8. §205-10.H.(7)(a) – A shopping center should be designed in accordance with an overall plan. The future planned features along the south side of Condominium Unit No. 5 should be shown on the plans in order to verify that the required number of handicap parking spaces will be provided for the building.
9. §205-10.H.(7)(a) – There should be 2% of total spaces designated for handicap parking spaces. A calculation should be added to the Master Site Plan, CS-101, to demonstrate compliance with this requirement.
10. §205-10.H.(7)(b) & (d) – A handicap parking space striping detail should be added to Construction Details, sheet CS-501, and include the requirements in these sections of the Ordinance. The aboveground sign for a handicap parking space should be in accordance with Pennsylvania Department of Transportation (PennDOT) Publication 236M. Sign R7-8F should be used as a supplemental sign to the R7-8 sign as shown on the 'Handicap Parking Sign' detail on Construction Details, sheet CS-501. For spaces that are van accessible, sign R7-8P should be used as a supplemental sign to the R7-8 and R7-8F.
11. §205-10.H.(7)(c) – Ramps should be provided for convenient access from parking spaces to sidewalks. A curb ramp should be provided in the island at the southwest corner of the building with a crosswalk provided across the access aisle. A curb ramp design should be provided for the proposed curb ramp.
12. §205-17.A – The Applicant should clarify the type of service vehicle that will utilize the loading dock on the south side of the 'Receiving' addition. If tractor trailers will utilize this loading dock, then we recommend the installation of heavy duty concrete paving in this location. The Pavement Plan, sheet CP-101, should be revised accordingly.
13. §205-17.A.(3) – The note in the 'Standard Duty Pavement Section' detail on the Pavement Plan, sheet CP-101, should be revised so that it references this section of the Ordinance.

14. §205-17.A.(5)(b) – The 'Heavy Duty Pavement Section' detail on the Pavement Plan, sheet CP-101, should illustrate the thicknesses stated in this section of the Ordinance. Also, the note should be revised so that it references this section of the Ordinance.
15. §205-17.D.(3) – In accordance with Appendix A of this Ordinance, a note should be added to all curb details stating that Aquaron 2000 Sealing and Curing or approved equal must be applied to concrete curbing immediately upon the removal of the formwork.
16. §205-17.D.(4) – Concrete curbs should be constructed in accordance with the standard detail design specifications set forth in Appendix A of this Ordinance. The 'Concrete Curb Detail' on Site Details, sheet C0010, should be revised to meet the minimum specification of seven-by-eight-by-eighteen-inch concrete curb. Also, a depressed curb detail and curb cut detail should be added to the plans.
17. §205-18.1.C & §205-29 – An Erosion and Sedimentation Control Plan should be submitted to the Montgomery County Conservation District (MCCD). No permit shall be approved unless there has been a plan approved by the MCCD. A NPDES permit must be obtained since the earth disturbance is over one (1) acre.
18. §205-19 – We defer the review of the sanitary sewer design and details to the Montgomery Township Sewer Authority Engineers. However, we note it appears the proposed lateral information for the last two pipe runs in both profiles on Sanitary Sewer Profiles, sheet CU-201, are switched. Also, a copy of the letter confirming available sewer capacity should be provided to the Township.
19. §205-20 – We defer the review of the waterline relocations, installations and details to the North Wales Water Authority.
20. §205-21 – Fire hydrants should be located at accessible points throughout the shopping center. The Applicant should obtain the approval of the Township Fire Marshal for the relocation of the existing fire hydrant and valve. An approval letter from the Fire Marshal should be submitted to the Township and our office.
21. §205-22.C – In accordance with Appendix A of this Ordinance, a note should be added to all concrete sidewalk details stating that Aquaron 2000 Sealing and Curing or approved equal must be applied to concrete sidewalk immediately upon the removal of the formwork.
22. §205-22.D – Concrete sidewalks should be constructed in accordance with the standard detail design specifications set forth in Appendix A of this Ordinance. A sidewalk detail should be added to the plans which includes all of the construction requirements as specified in §205-22.B.
23. §205-24 – We defer the review of the Lighting Plans to the Montgomery Township Lighting Consultant.
24. §205-25.A.(4)(b) – Parking is prohibited along storefront driveways. The Applicant is proposing eight (8) parking spaces (7 handicap) along the storefront driveway. The parking spaces should be removed to meet the requirements of this section of the Ordinance or a waiver should be requested. Also, the information under the proposed column for 'Minimum Storefront Driveways' in the 'Montgomery Township Zoning Data Table' on the Master Site Plan, sheet CS-101, should be revised based on this comment.
25. §205-25.A.(5)(b) – Only employee parking may be located along service driveways, to the side of principle buildings. The six (6) proposed parking spaces at the northeast corner of the building are

located within the service driveway of the loading docks. Therefore, these parking spaces should be posted "Employee Parking Only".

26. §205-25.B.(1) – For safety, efficiency and appearance, parking lots should be divided into units of not more than 150 parking spaces each. The information under the proposed column for 'Minimum Parking Lot Units' in the 'Montgomery Township Zoning Data Table' on the Master Site Plan, sheet CS-101, indicates that a waiver was requested from this section of the Ordinance. However, no waiver related to this section of the Ordinance is listed under the 'List of Requested Waivers' on the Master Site Plan. The Applicant should clarify this discrepancy.
27. §205-28.A – No person shall commence or perform any grading, excavation, fill, topsoil removal or removal of vegetative cover without first having obtained a grading permit from the Township Zoning Officer upon the recommendation of the Township Engineer. The applicant will need to apply for a grading permit prior to construction.
28. §205-28.D.(2) – After final grading there should be a minimum of eight inches of topsoil on the entire site other than that portion of the site where there are buildings or other impervious surface coverage. There shall be no release of excess topsoil from the site until examination by the Township Engineer. A note stating the above should be added to the Grading and Drainage Plan, sheet CG-101.
29. §205-29.B.(4) – The NPDES Limit/Limit of Disturbance should be revised to include all disturbed areas, including all of the curb replacement around the island near the northeast corner of the disturbed area, the grading at contour 450 in the southeast corner of the disturbed area, and the 600 SF of building which extends outside of the Unit No. 7 boundary.
30. §205-29.B.(9) – An 18-inch silt fence detail should be added to Soil Erosion and Sediment Control Notes and Details, sheet CE-501.
31. §205-29.C – The following comments pertain to the Grading and Drainage Plan, sheet CG-101, and Building Perimeter Grading Plan, sheet CG-102:
 - a. Additional grading is required in the distribution driveway near the southeast corner of the building. The existing 449 contour appears to conflict with the proposed 449 contour.
 - b. It appears that a low point should be shown in the grass island southwest of the existing catch basin to remain near the compactor wall.
 - c. It appears that a high and low point should be shown near the southeast corner of the 'Receiving' addition.
 - d. One of the spot grades shown near the northeast corner of the loading ramp indicates a top and bottom of curb but is not located on a curb line. This discrepancy should be clarified.
 - e. The 449 contour located on the east side of the propane storage tank area should be revised in order to allow proper drainage around the pad.
 - f. In reference to the spot grade near the northwest corner of the building which represents the start of the transition from flush curb to 6" curb, the elevation of the top and bottom of curb should be equal.
32. §205-51 – We defer the review of the Landscape Plans to the Montgomery Township Landscaping Consultant.

33. §205-78.C.(1)(a) – The floor in the Applicant/Record Owner's address appears incorrect on sheets GI-101, CG-100, and CG-101. Also, the Township Engineer's address is incorrect on the Cover Sheet.
34. §205-78.E.(1) & §205-79.B.(3)(b) – Based on the tax map information for the lease areas that will be effected by the land development, it appears that there are three (3) different property owners. All three (3) property owners shall sign and date the Master Site Plan, sheet CS-101. Additional signature blocks should be added to the Master Site Plan for the other two (2) property owners.
35. §205-100 – A Traffic Management Study is required. We defer this requirement along with the extent of the study area to the Montgomery Township Traffic Engineer.

C. Stormwater Management (West Branch Neshaminy Creek)

Stormwater runoff from the Montgomeryville Five Points Plaza Shopping Center currently drains to the West Branch Neshaminy Creek, via on-site stormwater management basins. There are two (2) above-ground stormwater management basins located on-site, one in the northern corner and one in the western corner of the site. These basins appear to have been designed in series with the western basin discharging to the northern basin and the northern basin ultimately discharging off-site. The majority of the proposed construction will take place within the portion of the site that drains to the western basin.

With this application, the Applicant proposes to discharge additional runoff due to the increase in impervious surfaces created by the proposed construction to the western basin via the existing storm sewer system. In order to reduce the additional volume created by the increase in runoff, the applicant is proposing three (3) landscape restoration areas and a subsurface infiltration bed. In order to improve the water quality of the runoff, a Snout oil/water separator is proposed in two (2) of the catch basins. We support the method of volume control and water quality treatment that are proposed by the Applicant.

This application satisfies all requirements and provisions of the Montgomery Township Subdivision and Land Development Ordinance (SALDO) Sections 205-18, including Appendix B (Ord. No. 97-72-S), and 205-18.1, with the following exceptions. Upon further development of the plans, additional items may become apparent.

1. §205-18.A.(1) – The Applicant has submitted stormwater conveyance calculations, as shown in Appendix B of the Post-Construction Stormwater Management (PCSM) Narrative. The calculations were performed using the 10-year frequency design storm, which is noted in this section of the Ordinance. However, Appendix B of the Ordinance, Standards and Criteria for Stormwater Management in the Neshaminy Creek Watershed, requires the design storm for the Neshaminy Creek Watershed to be the one-hundred-year storm event. Therefore, the stormwater conveyance calculations should be revised using the 100-year frequency design storm to ensure that the proposed/existing storm sewer can convey the entire 100-year storm without surcharging the inlets. The requirement stated on page 7 of the Narrative should also be revised accordingly. Also, the Rip-Rap Apron design for the existing 42-inch basin inflow should be revised using the 100-year frequency design storm results.
2. §205-18.A.(7) – Inlet castings, together with their gratings, should conform to Township standards as may be currently in effect. The following detail should be added to the plans: bicycle safe structural steel grate.
3. §205-18.A.(8) – According to the Catch Basin Watershed Map, the proposed roof drain system in the front of the building is only receiving runoff from the Breezeway and Tire Center additions.

However, the Grading and Drainage Plan indicates that there are eight (8) proposed laterals, ranging in size from 3" to 8", across the front of the Base Building, Breezeway and Tire Center that drain into the proposed drainage system. The Applicant should clarify the use of all of the laterals to ensure that if they are draining a portion of the base building, this runoff is accounted for in the sizing of the drainage system. Also, if any of these laterals are proposed to be connected to floor drains within the building, we do not recommend that design due to the higher potential for non-stormwater discharges to the floor drains.

4. §205-18.A.(8) – One of the four (4) laterals proposed across the front of the Tire Center addition is not labeled on the Grading and Drainage Plan, sheet CG-101, and should be labeled accordingly.
5. §205-18.D.(2) – Developers are encouraged to investigate all measures to reduce and retain water. The Applicant should include in the Post-Construction Stormwater Management (PCSM) Narrative an analysis of the pre- vs. post-development discharge from the existing stormwater management basin located in the northern corner of the shopping center. We recommend inclusion of this analysis in order to ensure that there is no increase in runoff from the shopping center.
6. §205-18.1.D.(1)(d)[1] – Upon review of the 'Volume Reduction Calculation for Subsurface Infiltration Bed Areas' in Appendix E of the Post-Construction Stormwater Management (PCSM) Narrative, it appears that the proposed subsurface infiltration bed is not large enough. The *Pennsylvania Stormwater Best Management Practices Manual* states that the infiltration period to be used in the infiltration volume calculation for subsurface infiltration beds (BMP 6.4.3) should be equal to 2 hours or the time of concentration, whichever is larger. Based on the results of the time of concentration, the 2 hours is larger. Therefore, the actual infiltration volume of the proposed bed is considerable less than the volume calculated in the Narrative. The subsurface infiltration bed should be enlarged to meet this criteria and the structural volume requirement listed on NOI Worksheet No. 5.
7. §205-18.1.D.(1)(e) – The original maintenance agreement that was entered into with the Township pertaining to the long-term operations and maintenance of the installed BMPs on the site should be revised to include the new BMPs, such as the Snout Devices, street sweeping, subsurface infiltration bed, and landscape restoration areas. The new maintenance agreement should be signed and recorded with the Township.
8. The following comments pertain to the Grading and Drainage Plan, sheet CG-101:
 - a. The existing catch basin numbers should be added to the labels.
 - b. The pipe run from Trench Drain 2 to Manhole 1 is labeled as ductile iron pipe (DIP). The remainder of all other proposed piping is HDPE. The Applicant should verify that this pipe material is correct.
 - c. The material of the pipe run from CB-1 to the existing RCP pipe should be revised to RCP.
 - d. The proposed grate elevation of Ex CB-9 appears to be set too high. This grate elevation will create ponding around the catch basin.
 - e. The labels for the two (2) proposed snouts should reference the correct drawing number for which the detail is located. Also, the bottom invert of CB-9, as shown in the Snout label, should equal the elevation of the 24" outlet pipe (443.63) minus the sump depth (5.63).
9. The Applicant is proposing as part of the stormwater management design to remove the temporary riser structure within the detention basin and install a headwall at the end of the existing 18-inch CMP pipe. Since it is our understanding that this 18-inch pipe was originally designed as part of the temporary outlet control for the basin, the condition of this pipe is unknown. Therefore,

we recommend that the Applicant remove the existing 18-inch CMP pipe and replace the pipe with 18-inch RCP pipe. Also, RCP pipe is recommended for use within detention basin berms or side slopes. The 'Existing Detention Basin Inset' on the plans should be revised accordingly, as well as, the 'Existing Basin Outlet Control Modification' detail on Post Construction Stormwater Management Details.

10. Upon review of the Stormwater Conveyance Calculations in Appendix B of the Post-Construction Stormwater Management (PCSM) Narrative, it appears that the drainage area for RD-1 is not included in the calculations. The calculations should be revised accordingly.
11. A storm sewer profile from Trench Drain 1 to Trench Drain 2 should be added to Storm Sewer Profiles, sheet CG-201.
12. The location of all existing and proposed utility crossings should be shown on the storm profiles.
13. 'Ex. CB-5 to CB-2 Profile' on Storm Sewer Profiles, sheet CG-201, should be revised based on the following comment:
 - a. The size of the existing RCP pipe at EX. CB-5 does not appear correct.
 - b. The following additional information should be added to the label for CB-1: the sump depth (439.95), and reference to a Snout Device.
14. 'Ex. CB-13 to Front Canopy Roof Leader Profile' on Storm Sewer Profiles, sheet CG-201, should be revised based on the following comments:
 - a. The length of the pipe run from MH-1 to CB-9 does not appear correct.
 - b. The following additional information should be added to the label for CB-9: the Inv. 'IN' should be labeled "(Prop. 24" & Ex. 12)": 443.63", the sump depth (438.00), and reference to a Snout Device. Also, the grate elevation appears incorrect. The current elevation would create a ponding condition around the catch basin.
15. The 'Subsurface Infiltration Bed Detail' on Post Construction Stormwater Management Details, sheet CG-502, should be revised so that there is a minimum of 8-inch thick amended soil as required per §205-28.D.(2).
16. The 'Sanitary and Storm Sewer Trench' detail on Post Construction Stormwater Management Details, sheet CG-502, should be revised based on the following comments:
 - a. The topsoil should be a minimum of 8-inches thick as required per §205-28.D.(2).
 - b. Pipes in paved areas should be completely backfilled with 2A Modified Stone with either 2A or 2B stone used as the pipe bedding material.
 - c. The note near the bottom right hand corner of the detail appears to be missing text.
17. A detail of the Landscape Restoration Areas should be added to the Post Construction Stormwater Management Details, including a small stone apron at each curb cut and thickness of each layer of material installed beneath finished grade.

D. General

1. Under the 'Drawing List' on the Cover Sheet, the drawing number for sheet 1 does not match the drawing number identified on the sheet. Also, the scale listed for sheet 6 does not match the scale identified on sheet 6.

2. Under 'Supplemental Plans' on the Cover Sheet, the drawing number for sheets 1 and 2 do not match the drawing numbers identified on the sheets. Also, the drawing title listed for sheet 1 does not match the drawing title on sheet 1.
3. The Block number for parcel Block 6D – Lot 157 should be revised to 6B on the Area Map, sheet GI-100.
4. Based on the renovations to Condominium Unit No.7, it appears that a new Condominium Plat may be required to document the modified condominium units (Block 6B, Units 162, 194, 195 and 270). The Applicant shall coordinate review and approval of the Condominium Association documents with the Township Solicitor. Also, the boundaries for several condominium units shown on the plans are inconsistent across the plans, the ALTA/ACSM Land Title Survey and with County Tax Maps. The boundaries shall be verified and corrected as needed.
5. The Base Building, Receiving, and Breezeway square footages noted on the Site Plan, sheet CS-102, do not correlate to the areas calculated using the dimensions labeled on the plan. The square footages and/or dimensions should be revised accordingly.
6. The "Receiving" addition to the existing building should be labeled on the plans.
7. A 'Stop' sign should be installed at the proposed stop bar near the northwest corner of Unit No.8.
8. A 'Stop' sign and stop bar should be installed at the following locations: 1) on the entrance driveway at the second intersection from Bethlehem Pike, 2) at both ends of the parking area in Unit No. 6, and 3) at all the proposed islands along the storefront driveway.
9. The pavement markings for the parking area on the north side of Retail A and the parking area associated with the Ruby Tuesdays Restaurant should be added to sheets CP-101, CP-102, CG-100, CG-101, CG-102, CE-101, and CU-101.
10. Based on the 'Propane Tank Detail' on Site Details, sheet C0010, it appears that 6-inch bollards, a 6-foot chain link fence, and two (2) 2" rigid PVC conduit are to be installed in the propane tank area. These features should be shown on the plans. Also, a 6-foot chain link fence detail should be added to Construction Details, sheet CS-501.
11. The 'Typical Pavement Markings' detail on Construction Details, sheet CS-501, should be enlarged so that the dimensional information is readable. Also, cross-walk striping should be added to the detail.
12. Sequence of Construction #25 on Soil Erosion and Sediment Control Notes and Details, sheet CE-503, should reference the correct drawing number (CS-102).
13. The 'Member with Infant Sign Detail' on Site Details, sheet C0010, should be revised to illustrate the actual appearance of the sign.
14. The following sign details should be added to the Construction Plan: 'Stop' sign, 'Do Not Enter' sign, 'No Parking – Fire Zone', and pedestrian crossing sign.
15. The following detail should be added to the plans: wheel stop.
16. The developer should provide signed and sealed retaining wall design drawings suitable for construction and quality control. Supporting calculations also need to be provided. The design drawing should include location plans, elevation plans, construction details, material, backfill and

foundation requirements, and any necessary construction specifications. The details need to clearly indicate the grading configuration, wall batter, and proposed site features (railings, pavements, etc.) as they relate to their alignment and location on the site. Utility locations and sequencing also needs to be indicated, as required. The segmental retaining wall design submittals should be in accordance with NCMA requirements and standards. The reinforced concrete wall designs should be in accordance with applicable ACI and Building Code requirements and standards.

17. The Applicant should obtain all required approvals, permits, declarations of restrictions and covenants, etc. (i.e., PaDEP, PennDOT, MCPC, Montgomery County Conservation District, Montgomery Township Municipal Sewer Authority, North Wales Water Authority, MCDH, DRBC, HARB, Fire Marshal, etc.). Copies of these approvals and permits should be submitted to the Township and our office.

18. A Site Accessibility Review will be provided under separate cover.


Please note that due to the nature and amount of revisions that will be made to the plans and calculations, additional comments may be forthcoming during future plan reviews.

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

Sincerely,



Russell S. Dunlevy, P.E.
Executive Vice President
Township Engineers



James P. Dougherty, P.E.
Project Manager
Township Engineers

RSD/jpd/dcr

cc: Lawrence J. Gregan, Manager – Montgomery Township
Marita A. Stoerle, Development Coordinator - Montgomery Township
Marianne McConnell, Deputy Zoning Officer – Montgomery Township
Frank R. Bartle, Esq., Solicitor – Dischell Bartle & Dooley, PC
Kenneth Amey, AICP, Township Planning Consultant
Barry W. Jeffries, Senior Design Planner – Montgomery County Planning Commission
Thomas F. Zarko, P.E., Sewer Authority Engineer – CKS Engineers, Inc.
Kevin Johnson, P.E., Traffic Engineer – Traffic Planning & Design, Inc.
Judith Stern Goldstein, ASLA, R.L.A., Landscape Architect – Boucher & James, Inc.
Richard Birdoff – Somerville Montgomery LP
Gregory Elko, P.E. – Langan Engineering & Environmental Services
Douglas C. Rossino, P.E. – Gilmore & Associates, Inc.



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March 10, 2014

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

**SUBJECT: BJ'S FIVE POINTS PLAZA
PRELIMINARY/FINAL LAND DEVELOPMENT PLANS
TOWNSHIP LD/S NO. 673
PROJECT NO. 1355270R**

Dear Mr. Gregan:

Please be advised that we have reviewed the BJ's Five Points Plaza Preliminary/Final Land Development Plan prepared by Langan Engineering & Environmental Services, dated December 20, 2013 and last revised February 21, 2014. The site fronts on Cowpath Road and Bethlehem Pike at the Five Points intersection, and is located within the S Shopping Center District.

The plans propose the expansion of the existing 79,135 SF Condominium Unit No. 7 to a total of 89,732 SF to accommodate the proposed BJ's Warehouse Club, which would add an additional 2,787 SF of base building area, a 1,748 SF breezeway, a 2,657 SF receiving area, and a 3,405 SF tire center. Additional proposed improvements include nine (9) parking spaces adjacent to the neighboring retail strip (Condominium Unit no. 8,) parking spaces around the exterior of the Warehouse Club, parking lot improvements, parking corrals, a loading dock, compactor, generator, propane and diesel tanks, and stormwater management improvements.

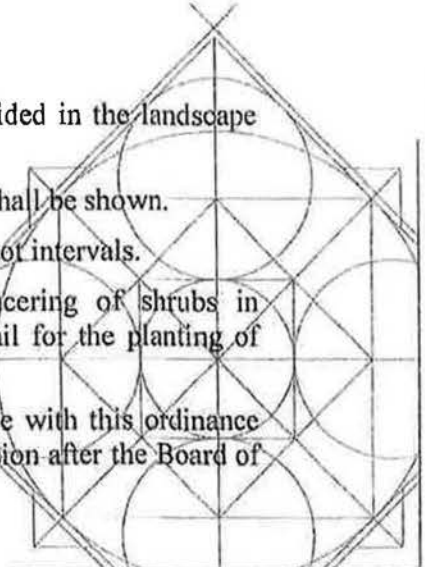
On November 13, 2013, the Zoning Hearing Board of Montgomery Township granted relief with respect to a number of issues, including signage area, parapet height, building coverage, above ground diesel storage tanks, and permitting automobile accessory sales and tire sales within the S Shopping Center District.

We offer the following comments for your consideration.

1. Landscape Plan Requirements

SLDO Section 205-51.A: the following information shall be provided in the landscape plan, or a waiver would be required:

- A. Section 4: all proposed parking lines for new parking areas shall be shown.
- B. Section 13: existing contours shown at a minimum of two-foot intervals.
- C. Section 14: details for the planting, mulching and saucering of shrubs in accordance with the requirements of Appendix C. A detail for the planting of shrubs has not been provided.
- D. Section 18: a detailed cost estimate provided in accordance with this ordinance section shall be attached to the final landscape plan submission after the Board of



Supervisors has ruled on any requested waivers and shall be used for the preparation of the land development agreement.

2. Planting Requirements

- A. SLDO Section 205-25.C: The proposed land development is part of a shopping center of 50,000 SF or more requiring more than 500 parking spaces. The applicant has requested waivers from the following sections:
- A. SLDO Section 205-25.C(1)(a): Section 205-52.D(1)(g) shall be modified so that the parking area shall be divided by continuous islands perpendicular to the parking spaces every 186 feet. The reference to 205-52.D(1)(g) in the List of Requested Waivers should be removed, as this section takes precedence.
 - B. SLDO Section 205-25.C(1)(b): one additional large landscaped area shall be provided per 250 parking spaces. Reference to 205-52.D(1)(i) should be removed from the List of Requested Waivers, as the sections duplicate each other.
 - C. SLDO Section 205-25.C(2): a minimum of 25% of the area between the curblin of the storefront driveway and the principal buildings shall be landscaped. Reference to 205-52.E(1) should be removed from No. 6 in the List of Requested Waivers, as these sections are not equivalent in their requirements.
- B. SLDO Section 205-52.C(2)(b): all truck loading, outside storage areas, mechanical equipment and trash receptacles are required to be screened from view with screen buffers. The February 25, 2014 response letter from Langan Engineering states that "Additional plant material has been added to this area to augment the screening provided by the screen wall also proposed for this area. No waiver is required." Thirty-four (34) deciduous *Viburnum rhytidophyllum* shrubs at 3-4' height are proposed along the exterior of the sound wall between the receiving area and Condominium 8. SLDO 205-52.B.4(c) requires that evergreen trees placed in double rows shall be used for screen buffering; evergreen or deciduous shrubs may be used supplementally. The required plant material shall be arranged so as to provide an immediate visual screen of 50% at least 8 feet in height. The plans should be revised to demonstrate compliance, or a waiver would be required.
- C. SLDO Section 205-52.D(1)(c): a maximum of 15 parking spaces shall be permitted in a row without a landscape island of 15 feet in width. A waiver has been requested.
- D. SLDO Section 205-52.E(1): storefront landscaping - one (1) shade tree, one (1) ornamental/flowering tree, and four (4) deciduous and/or evergreen shrubs shall be required per 100 linear feet of street frontage. A waiver has been requested.

4. Preservation, Protection and Replacement of Trees

1. SLDO Section 205-53.B: tree protection fencing near Condominium Unit 8 should be adjusted to match the locations of proposed temporary construction

fencing. TPF along the rear screen buffer should encompass all of the evergreen trees. For the remainder of the site, TPF should be provided for all existing trees to remain within 100' of any proposed construction activity, where there is no temporary construction fencing between the tree and proposed construction activity.

2. The Tree Protection Detail should be revised to indicate that tree protection fencing should be located 15' from the trunk of the tree or at the dripline, whichever is greater.

5. Recommended Plant List and Planting Standards and Guidelines

- A. SLDO Section 205-56 provides a list of recommended trees, shrubs, and ground cover for use in Montgomery Township. *Miscanthus sinensis* (Chinese silvergrass) is considered to be invasive by PA DCNR and we do not recommend its use. The plan should be revised to specify a more appropriate plant.
- B. SLDO Section 205-56 The Plant Schedule should be revised to provide all of the required specific sizing information as outlined within the ordinance section, or a waiver would be required.
- C. SLDO Appendix C Section A(8): General Landscape Planting Notes - Installation Note 10 should be revised to provide the following required information: mulch shall not be applied to the trunks of trees or to the trunks or branches of shrubs. 'Volcano Mulching' shall not be permitted.
- D. SLDO Section 205-49.F: The planting details should be revised to demonstrate compliance with the requirements of Appendix C, e.g. flagging tree straps, planting root balls on undisturbed soil, root ball elevation requirements and exposure of trunk flares. Staking is permitted to be specified at the direction of the Landscape Architect.

6. General Comments

- A. References to Seed Mixtures No. 4, 5, 6, 7 and 9 in Table 11.4 on Sheet CE-502 should be removed, as Crownvetch and Reed Canarygrass are considered invasive by PA DCNR.
- B. The name and licensing information provided beneath the Landscape Architect's seal on Sheets LP-101 and LP 501 shall be made to be legible.
- C. The Landscape Ordinance Compliance Chart indicates that replacement trees are to be provided at 2 1/2" caliper, which is permitted by the ordinance, but the plant schedule specifies all shade trees at 3 1/2" caliper. The plans should be revised to correct this discrepancy.
- D. The Landscape Ordinance Compliance Chart should be revised to indicate that 10,597 SF of additional building coverage is proposed.
- E. The Plant Schedule lists both Northern Bayberry and Leatherleaf Viburnum, which are deciduous in this hardiness zone, under the Evergreen Shrubs category. The schedule should be revised to correct this discrepancy.

- F. The 'X' should be removed from *Viburnum rhytidophyllum*, as this plant is not a hybrid.
- G. One label on the Landscape Plan for Bayberry indicates five (5) plants, but three (3) are shown. The plans should be revised to correct this discrepancy.
- H. The Plant Schedule indicates that seven (7) Maiden Grass are proposed, but six (6) are shown in the plan. The plans should be revised to correct this discrepancy.
- I. Nine (9) Leatherleaf *Viburnum* and one (1) *Zelkova* are proposed to be planted to the south of the generator and diesel storage pads, in the same area that the Pavement Plan (CP-101) indicates is the location for heavy duty concrete paving. The plans should be revised to provide a more favorable location for these plants.
- J. Two (2) *Zelkova* are proposed within parking islands adjacent to Condominium Unit No. 8, in the same area that the Pavement Plan (CP-101) indicates is the location for standard duty pavement. The plans should be revised to provide a more favorable location for these trees.
- K. General Landscape Planting Notes - Planting Materials Note 5 should be revised to indicate that plant substitution requests shall be submitted to the Township Landscape Consultant for review.
- L. General Landscape Planting Notes - Delivery, Storage and Handling Note 4 should be revised to require that all synthetic materials be removed from root balls, and that all wire baskets that are not low-profile baskets be cut from the top 1/3 of the root ball.
- M. General Landscape Planting Notes - Delivery, Storage and Handling Note 6 should be revised to indicate the maximum time that planting is permitted to be delayed, and measures to be taken to prevent desiccation and reduce transplant shock.
- N. We recommend Note No. 3 in the Tree Staking and Guying detail be revised to indicate that if tree stakes are used, they be removed immediately after the first growing season.
- O. Reference to weed barrier fabric should be removed from the plan details. We do not recommend the use of this material, as it will limit the availability of moisture and oxygen to trees and plants that will already be stressed on this site.
- P. Notes on CG-100 indicate that Landscape Maintenance Notes and Construction Sequence for the Landscape Restoration Areas are provided in the Landscape Plan. The plans should be revised to provide this information.
- Q. The Landscape Restoration Detail on sheet CG-502 indicates that standard landscaping within the Landscape Restoration Areas will be groundcover and trees. Sargent Juniper and Crabapple are shown within the Landscape Restoration Areas on the Landscape Plan. Due to the probability of high concentrations of salts and other chemicals, fluctuations between high water saturation, possible flooding and drought, and heat and cold stress, we recommend that plantings more appropriate for use within these BMP areas are selected.

Mr. Lawrence Gregan, Township Manager
BJ's Five Points Plaza
March 10, 2014
Page 5

- R. We recommend that the Landscape Restoration Detail be revised to provide soil amendments and infiltration improvement in order to assist with the functioning of these areas as BMPs.
- S. It appears that a lighting fixture is proposed to be located within one of the Landscape Restoration areas. The applicant may wish to reconsider locating an electrical fixture within an infiltration area.
- T. Several of the proposed Triple Square Pole Mounted 25' height Spaulding Lights are shown in conflict with existing or proposed shade trees. Both Acer rubrum 'Autumn Flame' and Zelkova serrata 'Village Green' have the potential to reach 40' in height. We recommend that the Site Lighting Plan be adjusted to account for existing and required shade tree locations and potential mature tree sizes.
- U. Note No. 5 on the Site Lighting Plan states "Contractor shall locate conduit runs along parking "spines" as indicated in plans, or within areas already disturbed by other activities." It is unclear which spines are indicated in this note, as they do not appear to be indicated in the plan. In addition, it is unclear if the note means that no conduit runs will be dug outside of the current limit of disturbance, or that nothing will be disturbed outside of already constructed areas. Additional clarification is needed, as re-trenching within the vicinity of established trees could disrupt their root systems, and additional protection measures may be needed.
- V. A detailed response letter addressing the above noted comments and any other changes to the plans should be included with future submissions.

Sincerely,



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



Valerie L. Liggett, ASLA, R.L.A.
Planner/Landscape Architect

JSG/vll/kam

ec: Board of Supervisors
Planning Commission
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James P. Dougherty, P.E., Gilmore & Associates, Inc.
Kevin Johnson, P.E., Traffic Planning & Design
Ken Amey, AICP
Richard Birdoff, Somerville Montgomery LP
Gregory Elko, PE, Langan Engineering & Environmental Services



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Morgantown, PA 19543
610-913-1212
Fax 215 345-9401

www.bjengineers.com

January 15, 2014

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

**SUBJECT: BJ'S FIVE POINTS PLAZA
PRELIMINARY/FINAL LAND DEVELOPMENT PLANS
TOWNSHIP LD/S NO. 673
PROJECT NO. 1355270R**

Dear Mr. Gegan:

Please be advised that we have reviewed the BJ's Five Points Plaza Preliminary/Final Land Development Plan prepared by Langan Engineering & Consulting, dated December 20, 2013. The site fronts on Cowpath Road and Bethlehem Pike at the Five Points intersection, and is located within the S Shopping Center District.

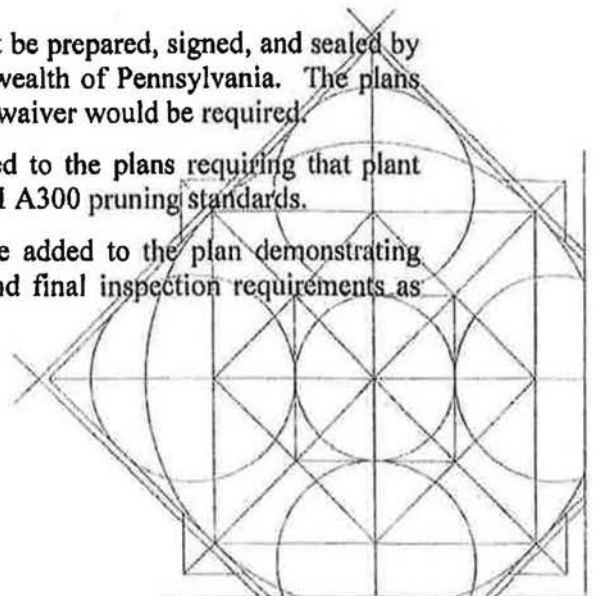
The plans propose the expansion of the existing 79,135 SF Condominium Unit No. 7 to a total of 89,680 SF to accommodate the proposed BJ's Warehouse Club, which would include an additional 2,739 SF of base building area, a 1,755 SF breezeway, a 2,646 SF receiving area, and a 3,405 SF tire center. Additional proposed improvements include the addition of eight (8) parking spaces adjacent to the neighboring retail strip (Condominium Unit no. 8,) parking spaces around the exterior of the expanded Warehouse Club, parking corrals, and other parking lot improvements.

On November 13, 2013, the Zoning Hearing Board of Montgomery Township granted relief with respect to a number of issues, including signage area, parapet height, building coverage, above ground diesel storage tanks, and permitting automobile accessory sales and tire sales within the S Shopping Center District.

We offer the following comments for your consideration.

I. General Requirements

- A. SLDO Section 205-49.C: all landscape plans must be prepared, signed, and sealed by a landscape architect registered by the Commonwealth of Pennsylvania. The plans should be revised to demonstrate compliance or a waiver would be required.
- B. SLDO Section 205-49.F: A note should be added to the plans requiring that plant materials shall be pruned in accordance with ANSI A300 pruning standards.
- C. SLDO Section 205-49.G and H: notes should be added to the plan demonstrating compliance with the eighteen-month guaranty and final inspection requirements as stated in these ordinance sections.



2. Landscape Plan Requirements

SLDO Section 205-51.A: the following information shall be provided in the landscape plan, or a waiver would be required:

- A. Section 2: adjacent zoning district(s).
- B. Section 4: proposed parking.
- C. Section 6: location of all freestanding signs.
- D. Section 9: location of existing individual trees with trunks eight inches in diameter or more, measured at four and one half feet (diameter at breast height – DBH) above the ground.
- E. Section 11: replacement tree plant schedule.
- F. Section 13: proposed contours shown at a minimum of two-foot intervals.
- G. Section 18: a detailed cost estimate provided in accordance with this ordinance section shall be attached to the final landscape plan submission after the Board of Supervisors has ruled on any requested waivers and shall be used for the preparation of the land development agreement.
- H. Section 19: limits and details of temporary fencing to be used for protection of existing trees and shrubs during construction.

3. Planting Requirements

- A. ZO Section 230-90.I: a planting area no less than 25 feet in width shall be planted in accordance with Montgomery Township SLDO requirements along all side and rear boundary lines. The required 25' landscape buffer has been shown on the landscape plan. However, no existing or proposed landscape material has been shown within this buffer area between the proposed improvements and the residential district. The plan should be revised to demonstrate compliance.
- B. ZO Section 230-127.A(8)(a): two square feet of landscaped area are to be provided for each square foot of freestanding sign area. The plan should be revised to demonstrate compliance with the ordinance requirement or a variance would be required.
- C. SLDO Section 205-52.C(2)(a) and Table 2: a screen buffer is required within the 25' landscape buffer between the S Shopping District and the R-2 Residential District. Existing evergreen trees and a fence installed along the property line may be adequate to meet this requirement. However, the plan does not show this existing landscaping, and does not indicate how this existing landscaping is to be protected during construction. The plans should be revised to demonstrate compliance with the ordinance requirements, or a waiver would be required.
- D. SLDO Section 205-52.C(2)(b): all truck loading, outside storage areas, mechanical equipment and trash receptacles are required to be screened from view with screen buffers. The plans should be revised to demonstrate compliance, or a waiver would be required.

- E. SLDO Section 205-52.D(1)(a) and Table 1: one shade tree is required to be provided per 10 parking spaces to meet parking lot landscaping requirements. A total of 34 additional parking spaces are proposed, and one existing parking lot landscaping tree is proposed to be removed (from the previously installed Lowe's landscaping.) Therefore, four (4) shade trees are required to meet the parking lot landscaping requirements. Three (3) of these four (4) required trees have been provided. The plans should be revised to demonstrate compliance with the parking lot landscaping requirements, or a waiver would be required.
- F. SLDO Section 205-52.D(1)(c): a maximum of 15 parking spaces shall be permitted in a row without a landscape island of 15 feet in width. A waiver has been requested.
- G. SLDO Section 205-52.D(1)(e): one shade tree shall be placed in each 290 square feet of planting island. The plans should be revised to demonstrate compliance with the ordinance requirement, or a waiver would be required.
- H. SLDO Section 205-52.D(1)(g): parking areas shall be divided by continuous islands perpendicular to the parking spaces every 124 feet. A waiver is requested, however, the ordinance section and spacing and dimensional requirements have been referenced incorrectly on the list of requested waivers on sheet 4 of 23. The plans should be revised to correct this discrepancy.
- I. SLDO Section 205-52.D(1)(i): one additional large landscaped island is required per 250 parking spaces. A waiver is being requested, however, the ordinance section has been referenced incorrectly in the list of requested waivers on sheet 4 of 23. The plans should be revised to correct this discrepancy.
- J. SLDO Section 205-52.E(1): storefront landscaping requirements. A waiver is being requested, however, one of the ordinance sections listed has been referenced incorrectly in the list of requested waivers on sheet 4 of 23. The plans should be revised to correct this discrepancy.
- K. SLDO Section 205-52.G(1)(b) and Table 1: one (1) shade tree is required per 5,000 SF of gross floor area to meet individual lot landscaping requirements. Six (6) existing shade trees within the American Signature Furniture parking lot that were counted toward individual lot landscape requirements during the Lowe's land development process are proposed to be removed. Therefore, these trees are required to be replaced. In addition, another 10,545 SF of building area is proposed to be added. Therefore, a total of eight (8) individual lot shade trees are required. The plans should be revised to demonstrate compliance with the ordinance requirement, or a waiver would be required.

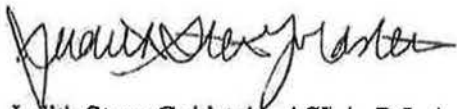
4. Preservation, Protection and Replacement of Trees

The plans indicate that four (4) shade trees used to meet parking lot landscaping requirements for the adjacent Condominium Unit No. 8 are to be disturbed in association with the proposed improvements. The four (4) trees proposed to be removed are shown as being replaced. However, protection for other trees that will also be in the vicinity of construction activity has not been provided:

- A. SLDO Section 205-53.B: trees and shrubs in the vicinity of proposed construction activity must be protected from damage and encroachment through installation of tree protection fencing in accordance with the requirements of this ordinance section. The plans should be revised to demonstrate compliance with the ordinance requirements, or a waiver would be required.
 - B. SLDO Section 205-53.B(3): at the direction of the Township Engineer, Township Shade Tree Commission, or Township Landscape Architect, existing trees which have not been adequately protected are to be removed and replaced. The plans should be revised to provide a note demonstrating compliance with this ordinance requirement.
 - C. SLDO Sections 205-53.C and 205-54 outline the requirements for the preservation of trees and the replacement of trees destroyed by development. Trees greater than 8" in caliper are proposed to be removed from the site. However, tree replacement calculations have not been provided on the plans. The plans should be revised to clearly demonstrate compliance with the tree preservation, protection, and replacement requirements.
5. Recommended Plant List and Planting Standards and Guidelines
- A. SLDO Section 205-56 provides a list of recommended trees, shrubs, and ground cover for use in Montgomery Township. The following plants do not meet the requirements of this section and we recommend that they not be used in the landscape plan: *Prunus x incam* 'Okame' (Okame Cherry) is not appropriate for use within parking lots and is short-lived; *Juniperus sabina* 'Tamariscifolia' (Tam Juniper) is susceptible to a number of diseases. We recommend that plant species be selected from the recommended plant list.
 - B. SLDO Section 205-56 indicates minimum sizing requirements for plant material. The plans should be revised to demonstrate compliance with the ordinance requirements, or a waiver would be required.
 - C. SLDO Appendix C. requires that plant material shall be shown on the plans in accordance with the standards provided in subsections (1) through (12) and the shrub and tree planting details. The plans should be revised to provide the notes listed in this appendix, and to ensure that the details provided in the plan set match those shown in this appendix in order to demonstrate compliance with the ordinance requirements.
6. General Comments
- A. It appears that at least one of the proposed trees is proposed to be located in conflict with an existing storm drain. The plans should be revised to eliminate any conflicts between trees and existing and proposed utilities.
 - B. A number of existing trees on the site have not been shown on the landscape plans, including evergreen trees within the landscape buffer to the rear of the proposed warehouse club, and existing trees within the large grassy area between Condominium Units 7 and 8. The plans should be revised to accurately show all existing trees surrounding the subject building.

- C. The plans should be revised to provide a note indicating that substantial changes to the approved Landscape Plans must be approved by the Township through plan resubmission. If substantial changes to the landscaping are made without prior approval from the Township, the changes will be rejected upon inspection.
- D. The plans should be revised to provide a note indicating that if a plant species or other substitution is made without receiving prior substitution request approval from the Township, the unapproved plants will be rejected upon inspection. All plant substitution requests should be forwarded in writing to this office for review.
- E. A detailed response letter addressing the above noted comments and any other changes to the plans should be included with future submissions.

Sincerely,



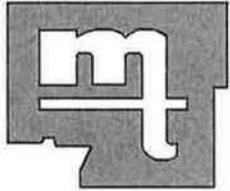
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Kevin Johnson, P.E., Traffic Planning & Design
Ken Arney, AICP
Richard Birdoff, Somerville Montgomery LP
Gregory Elko, PE, Langan Engineering & Environmental Services



MEMORANDUM

TO: Board of Supervisors

FROM: Planning Commission
Jonathan Trump, Chairman

DATE: March 20, 2014

RE: BJ's at Five Points Plaza

The Planning Commission has reviewed the Land Development plan for BJ's at Five Points Plaza and would like to recommend to the Board of Supervisors that the plan be approved, subject to satisfactory compliance with all comments of the Township review agencies.

The motion further recommended that the requested waivers be approved.

AGENDA ITEMS

BJ's – Five Points Plaza
Conditional Use - Integral
County Comprehensive Plan 2040

cc:	R. Birch	K. Johnson
	M. Fox	Sewer Authority
	J. McDonnell	F. Bartle
	J. Walsh	B. Shoupe
	C. Chimera	E. Reynolds
	L. McGuire	M. Beatty
	J. Glickman	K. Amey
	J. Goldstein	J. Trump
	J. Rall	S. Krumenacker

MONTGOMERY TOWNSHIP PLANNING COMMISSION
March 20, 2014

The March 20, 2014, meeting of the Montgomery Township Planning Commission was called to order by Chairman Jonathan Trump at 7:30 p.m. In attendance were Commissioners Jay Glickman, Steven Krumenacker, Leon McGuire, James Rall and Ellen Reynolds. Commissioner Michael Beatty was absent. Also present were Bruce Shoupe, Director of Planning and Zoning, and Candyce Fluehr Chimera, Supervisor Liaison.

The minutes of February 20, 2014, were approved as submitted.

There were no public comments.

The first item on the agenda was a presentation for a BJ's Wholesale Club to be located at Five Points Plaza. Robert Brant, attorney, and Gregory Elko, engineer, were present to discuss this plan. Mr. Brant explained that they would be utilizing the former American Signature Furniture store. They would renovate and expand the existing structure. Mr. Brant stated that the existing store was approximately 7,900 square feet and the new store would be 8,900 square feet. The back wall of the building would remain the same. They have obtained a long term lease with the property owners. Mr. Kerns further advised that the applicant received relief from the Zoning Hearing Board on November 13, 2013, for building height, signage, building coverage, above ground diesel storage tanks, and for permitting automobile accessory sales and tire sales within the S-Shopping Center District. He also stated that they had met with neighbors of the site and that they felt that many issues had been worked out and that the residents were satisfied. Several residents were present at this meeting. The residents agreed that it had been a productive meeting, but just wanted the Township to be aware of what was discussed so that the applicant would keep all of their promises. Mr. Kerns advised that what had been agreed upon at that meeting would be done by the applicant. Mr. Elko

presented the plan for the BJ's store. He stated that the entire shopping center is approximately 45 acres and is adjacent to commercial on one side and residential on another side. He stated that the plan was to renovate and expand the existing structure. They would enhance the existing landscaping and bring the lighting into conformity with the current standards. Mr. Elko advised that they had received the review letters from the Township consultants and would comply with most comments. However, due to the nature of the plan, there were numerous waivers that were being requested. The following is a list of the waivers and reasoning for the request as presented by the applicant:

1. Section 205-10.H.(6)(e) – A waiver is requested from the requirement that in the case of shopping centers having frequent truck deliveries or pickups, the circulation pattern for service vehicles shall be physically separated from automobile parking areas and parking access driveways. The current design requires service vehicles to utilize a parking access aisle for maneuverability. Also, the two (2) proposed parking spaces at the southeast corner of the building are located in the loading dock area.

Response: a waiver is requested for the following locations:

- a. There are six proposed parking spaces located in the vicinity of the loading dock area along the eastern wall of the building. These parking spaces are designated as "employee parking only" spaces, will contain accompanying signage stating "Employee Parking Only" and are necessary for BJ's operations. The man door / grade door entrance area is the only location where BJ's employees can enter the building. Locating parking adjacent to this entrance is not only convenient; it allows BJ's employees who work in the Club during "off-hours" a safe, physically close and well lit area to park their vehicle. These spaces are not permitted to be used by customers.
 - b. There are two proposed parking spaces located in the vicinity of the service area at the southeastern corner of the building. These parking spaces are also designated as "employee parking only" with the accompanying signage and are necessary for BJ's operations. These spaces are not permitted to be used by customers.
2. Section 205-10.H.(7)(b) – A waiver is requested from the requirement that off-street parking spaces for the physically handicapped be a minimum of 12 feet wide. The accessible parking stalls have a proposed width of 8 feet.

Response: The proposed 8 foot wide accessible parking stalls comply with current ADA requirements.

3. Section 205-17.A.(3) – A waiver is requested from the requirement for paving thicknesses of commercial car parking areas.

Response: the Applicant is requesting to use the pavement section design as specified in the site-specific Geotechnical Investigation that was performed for the project for the Standard Duty Pavement. The Geotechnical Investigation produced a stronger pavement thickness than the Township requirement.

4. Section 205-25.A.(4)(b) – A waiver is requested from the prohibition to provide parking along storefront driveways.

Response: the Applicant is requesting a waiver to allow accessible parking spaces along the front of the store. These spaces are convenient to persons with disabilities to more easily maneuver themselves and their shopping carts to and from their parked cars, rather than having their route of travel to cross the storefront driveway. Furthermore, the grades in the parking lot exceed ADA regulations and preclude the placement of these spaces at any location in the main parking field. Through coordination with Traffic Planning and Design, in response to their review comment #2 from their March 10, 2014 review letter, we have proposed a modification to the plans to provide five accessible parking stalls along the storefront which have adequate sight distances from vehicles approaching from both directions along the storefront driveway. Refer to the attached sketch titled "Sight Distance Sketch" dated 3/20/14.

5. Section 205-17.A.(5)(b) – A waiver is requested from the requirement for paving thicknesses of the alternative for commercial driveways and loading areas.

Response: the Applicant is requesting to use the pavement section design as specified in the site-specific Geotechnical Investigation that was performed for the project for the Heavy Duty Pavement. The pavement section in the Geotechnical Investigation results in a higher strength section than the Township's alternate requirement.

6. Section 205-25.B.(1) – A waiver is requested from the requirement that for safety, efficiency and appearance, parking lots shall be divided into units of not more than 150 parking spaces each.

Response: The existing parking lot including the location of the access drives on all sides of that lot which exist on the north side of the building is an existing non-conformity that does not meet several of the requirements listed for which a waiver is being requested. Accommodating these requirements would add a significant amount of unnecessary reconstruction work in the entire parking lot and would result in the loss of a significant amount of parking spaces. The Applicant is proposing to maintain the existing parking arrangement, and install landscaping improvements to the existing parking lot which will supplement the existing landscaping in and around the parking field. Furthermore, the Applicant is proposing replacement of the site lights to bring the site lighting for the parking lot into conformance with the ordinance. The current existing arrangement, with the Applicant's proposed landscaping and lighting and enhancements, continues to allow for a safe and efficient parking arrangement in the existing parking lot north of the building.

7. Section 205-25.C.(1)(a) – A waiver is requested from the requirement that the parking area be divided by continuous islands perpendicular to the parking spaces every 186 feet with the divider islands a minimum of 25 feet wide.

Response: see the response to item #6 above, the justification for this requirement is the same as for that item.

8. Section 205-25.C.(1)(b) & §205-52.D.(1)(i) – A waiver is requested from the requirement that one additional large landscaped area (1,800 square feet minimum) be provided per 250 parking spaces to provide attractive focal points within the parking lots.

Response: see the response to item #6 above, the justification for this requirement is the same as for that item.

9. Section 205-25.C.(2) – A waiver is requested from the requirement that a minimum of 25% of the area between the curblineline of the storefront driveway and the principal buildings be landscaped with ornamental plant materials, including flowering and evergreen trees and shrubs.

Response: see the response to item #6 above, the justification for this requirement is the same as for that item.

10. Section 205-52.D.(1)(c) – A waiver is requested from the requirement that a maximum of 15 parking spaces be permitted in a row without a landscape island of 15 feet in width. This island shall contain not less than 290 square feet of planting area.

Response: see the response to item #6 above, the justification for this requirement is the same as for that item.

11. Section 205-52.D.(1)(g) – A waiver is requested from the requirement that for any land use where the total number of parking spaces exceeds 100, the parking area shall be divided by continuous islands perpendicular to the parking spaces every 124 feet

Response: see the response to item #6 above, the justification for this requirement is the same as for that item.

12. Section 205-52.E.(1) – A waiver is requested from the requirement that one shade tree, one ornamental/flowering tree, and four deciduous and/or evergreen shrubs be required per 100 linear feet of street frontage.

Response: There are no improvements proposed along or near the property frontages; street planting already exist along those frontages.

13. Section 205-78.C.(1)(f) – A waiver is requested from the requirement that preliminary plans contain tentative grades to an existing street or to a point 400 feet beyond the boundaries of the subdivision.

Response: The Applicant provided grades within the limit of disturbance and surrounding area and provided an Area Map.

The applicant further noted that the previously requested waiver from Section 205-10.H.(6)(c) is no longer needed since they agreed to the recommendation from Gilmore Associates to add a note to the plan which states: "Service vehicles shall enter and exit the loading area only during off-peak hours."

The consensus of the Planning Commission was that they felt that this was a good plan for the area. It was felt that BJ's and the Shopping Center had really tried to do a good job on answering the residents' concerns and were willing to take action to assure that items would be addressed. Those residents in attendance seemed pleased with the response they received. After some further discussion, a motion was made by Mr. Glickman, seconded by Mr. McGuire, to recommend to the Board of Supervisors that this plan be approved, subject to satisfactory compliance with all comments of the Township review agencies. The motion further recommended that all waivers be approved. Motion carried unanimously.

The next item on the agenda was a presentation of the Conditional use application for Integral Development Associates. Mitchell Russell, attorney and owner, was present to address this application. He advised that they wished to lease the building previously occupied by Lane Furniture, located at 976 Bethlehem Pike, to The Tile Shop. They had obtained a 10 year lease. Mr. Russell advised that this was located within the HLI-II - Highway Limited Industrial II District, which allowed for specialty retail. He further advised that they would not be requiring any additions to the building or any changes to the existing parking fields, landscaping or loading areas. This would be considered a specialty retail store, which is permitted in the HLI-II District as a conditional use. Mr. Russell stated that this would be a store for homeowners and not contractors. They expected approximately 20/30 customers per day. The consensus of the Planning Commission was that this store would be a good addition to the Township and that it did fit the description of specialty retail. A motion was made by Mr. Glickman, seconded by Mr. Krumenacker, to recommend to the Board of Supervisors that this conditional use application be approved. Motion carried unanimously.

Next on the agenda was a discussion of the Montgomery County Comprehensive Plan 2040. The County had asked for input regarding their themes and goals. The Members of the Planning Commission had reviewed the plan prior to the meeting and felt that the plan themes and goals were very inclusive. They would be in support of the plan. A motion was made by Mr. Glickman, seconded by Mr. Rall, to notify the Montgomery County Planning Commission that Montgomery Township Planning Commission is in support of the Comprehensive Plan 2040 Themes and Goals. Motion carried unanimously.

The next meeting of Planning Commission will be held on Thursday, April 17, 2014.

This meeting was adjourned at 8:20 p.m.

Respectfully submitted:

Marita Stoerrle
Development Coordinator/
Recording Secretary

**MONTGOMERY COUNTY
BOARD OF COMMISSIONERS**

JOSHUA D. SHAPIRO, CHAIR

LESLIE S. RICHARDS, VICE CHAIR

BRUCE L. CASTOR, JR., COMMISSIONER



**MONTGOMERY COUNTY
PLANNING COMMISSION**

MONTGOMERY COUNTY COURTHOUSE • PO Box 311
NORRISTOWN, PA 19404-0311
610-278-3722

FAX: 610-278-3941 • TDD: 610-631-1211
WWW.MONTCOPA.ORG/PLANNING

JODY HOLTON, AICP
EXECUTIVE DIRECTOR

February 11, 2014

Mr. Larry Gregan, Manager
Montgomery Township
1001 Stump Road
Montgomeryville, Pennsylvania 18936

Re: MCPC #14-0006-001
Plan Name: Montgomeryville Five Points Plaza
(1 lot/89,699 sq. ft. comprising 1.99 acres)
Situate: Bethlehem Pike (W)/South of Cowpath Road
Montgomery Township

Applicant's Name and Address

Somerville Montgomery, LP
810 Seventh Avenue, 10th Fl.
New York City, NY 10019

Contact: Richard Birdoff
Phone: 212-265-6600

Dear Mr. Gregan:

We have reviewed the above-referenced land development in accordance with Section 502 of Act 247, "The Pennsylvania Municipalities Planning Code," as you requested on January 8, 2014. We forward this letter as a report of our review and recommendations.

Background

The application is a new proposal seeking preliminary and final land development approval for the development of an 89,699 square foot BJ's Wholesale Club on a 1.99 acre parcel. A portion of the building will be devoted to tires sales and a service center (3,405 sq. ft.); and a dedicated area for warehouse receiving (2,646 sq. ft.). The plan shows a previously approved 36,501 sq. ft. commercial building adjacent to the proposed warehouse club site.

The development is proposed for an area within an existing 286,503 sq. ft. shopping center initially constructed in 1986- the Five Points Plaza. The 79,135 sq. ft. American Signature Furniture Store will be demolished for this development which is approximately 1.99 acres. The development lies within the shopping center's 45.835 acre parcel - Tax Parcel 46-00-00393-101; and Tax Parcel 46-00-00393-002. The center is anchored by a 134,544 sq. ft. Lowes Home Improvement Store and is in the "S"- Shopping Zoning District.

The applicant was granted relief with the following zoning variances by the Montgomery Township Zoning Board on December 20, 2013 (mailing date):

- From Section 230-1123.A to permit a parapet wall that extends +/- 10.34 ft. above the building roofline instead of the permitted 6 feet

- From Section 230-88.C to permit building coverage in excess of 15% to 15.9%
- From Section 230-127.A.(4)(b)(2) to permit two freestanding business signs with an area of 136.2 square feet instead of the permitted 100 sq. ft.
- From Section 230-86 to permit automobile accessory sales and tire sales/installation center, including the sale of batteries, but not the installation of automobile batteries
- A special exception pursuant to Section 230-150.A. to permit two above-ground propane storage tanks
- A special exception pursuant to Section 230-150.A. to permit two above-ground diesel storage tanks in excess of 550 gallons of capacity

Review Comments

Parking Lot Greening Opportunity in the Site Design

The applicant's site development plan shows limited improvements for greening the existing parking lot area (336 spaces) -- situated in the front of the new development site. Most of the greening improvement is slated for the eastern side of the building. The tree-greening in the front parking lot area consists of the addition of only four Okame Cherry trees. The proposed greening improvements appears to be in distinct contrast and deficient in parking lot islands and greening spaces provided in the front parking area of the new BJ's Store. The deficiency is most apparent when compared to the greater number of islands and interior greening strips in the front parking lot of the Lowes Home Improvement Store. We suggest the two parking areas should look more alike than different. Additional greening with islands and trees is an important component of re-developing a site to contemporary environmental and landscape code standards. A greater number of parking lot islands to parking spaces (parking space/islands ratio) provides many environmental benefits, including shading the parking surface in the depths of summer heating and stormwater infiltration in the islands.

We recommend the township examine the frontage of the site -- both parking lot and building façade areas -- and encourage the applicant to look for opportunities to incorporate additional greening into the site's redevelopment. In addition, the township may wish to examine this deficiency more closely to ensure that a redeveloped site within the shopping center fully addresses all of its landscape code- greening requirements. The township may wish to examine its landscape code's greening and parking requirements relative to site redevelopment and to up-date its standards for the regulatory threshold or what triggers an applicant's compliance to contemporary parking lot standards.

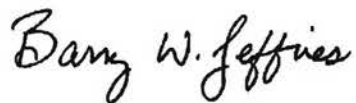
Recommendation

We recommend approval of the proposed land development plan provided the above-mentioned review comment is addressed to the satisfaction of the township and all local regulations are met.

Please note that the review comments and recommendations contained in this report are advisory to the municipality and the final disposition for the approval of any proposal will be made by the municipality.

Should the governing body approve a final plat of this proposal, the applicant must present the plan to our office for stamp and signatures prior to recording with the Record of Deeds Office. A paper copy bearing the municipal seal and signature of approvals must be supplied for our files.

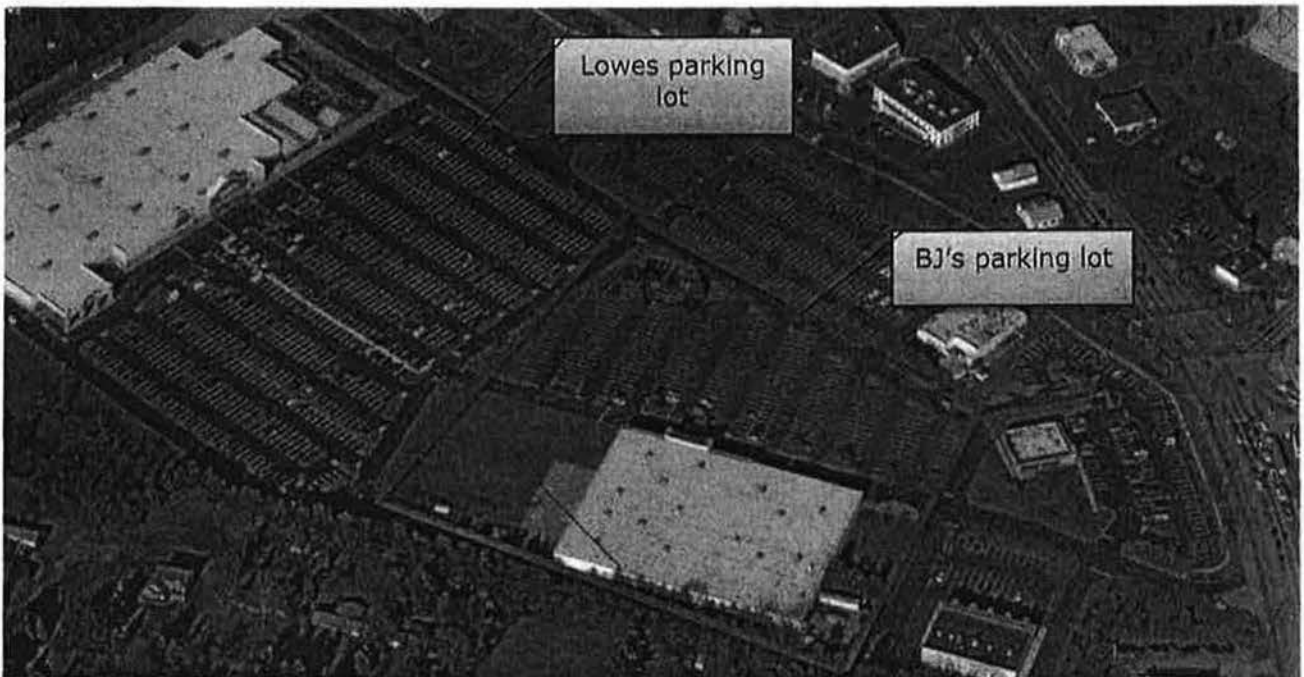
Sincerely,



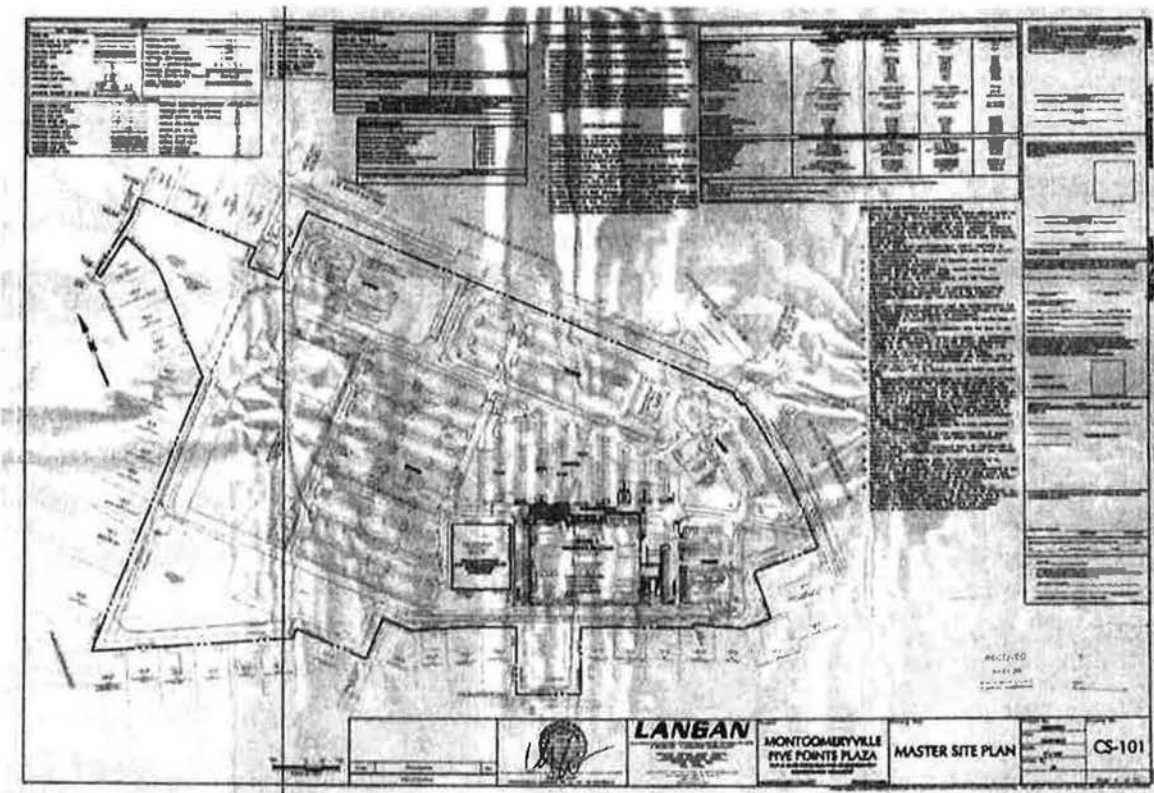
Barry W. Jeffries, ASLA, Senior Design Planner
610-278-3444, Email: bjeffrie@montcopa.org

c: Somerville Montgomery, LP, Applicant
Langan Engineering, Applicant's Engineer
Marita Stoerle, Twp. Development Coordinator
Jonathan Trump, Chrm., Twp. Planning Commission
Bruce Shoupe, Twp. Zoning Officer/Planning Staff
Frank A. Bartle, Twp. Solicitor
Russell Dunlevy, Twp. Engineer

Attachment: Reduced Copy of Applicant's Plan
Aerial view of the development site



Aerial view of BJ's site development area



Applicant's site plan

TRAFFIC PLANNING AND DESIGN, INC.



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

March 10, 2014

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

Re: Montgomeryville Five Points Plaza
BJ's Wholesale Club
Montgomery Township LD/S# 673
TPD# MOTO-A-00056

Dear Bruce:

In our role as Township Traffic/Street Lighting Engineer, Traffic Planning and Design, Inc. (TPD) has reviewed the Preliminary/Final plan submission and Traffic Management Study for the above referenced project, prepared by Langan Engineering and Environmental Services and last revised February 21, 2014.

Based on our review, we offer the following comments using the same numbering system as our January 27, 2014 review letter for those comments not yet addressed. Comments that have been addressed are not shown below. Any expansion on the previous comments is shown in bold:

Previous Traffic Engineering Comments

2. The proposed parking aisle in front of the Retail A building should be relocated elsewhere on site. The concern is that even without the parking, the potential conflict between pedestrians and vehicles is high. Parking that requires vehicles to enter the main drive aisle across the front of the store will create even more conflict points for other vehicles and pedestrians to mitigate.

A waiver is required from §205-25.A(4)(b) to permit parking along the front of the storefront. As previously stated, in TPD's opinion, this parking creates greater potential conflict between pedestrians and vehicles. In our opinion, the STOP signs added by the Applicant on either end of the parking will lead to confusion among drivers, especially those exiting the main parking fields.

6. The intersections of Cowpath Road and Five Points Plaza and Cowpath Road and Lansdale Avenue should be integrated in the Township's traffic adaptive network (InSync). It will be necessary for the Applicant to coordinate installation of this equipment with PennDOT Project 63-ITS, which will install Centracks and the fiber optic infrastructure.

As discussed at the February 11, 2014 meeting with PennDOT, the Applicant has agreed to install InSync at the intersections of Cowpath Road and Five Points Plaza and Cowpath Road and Lansdale Avenue. Additionally, at the request of PennDOT, the Applicant has agreed to provide hand/man pedestrian signals with countdown timers as well as latching ADA push buttons for the intersection of Cowpath Road and Five Points Plaza.

A copy of the approved meeting minutes has been included with this review.

Previous Street Lighting Comments

9. The following notes shall be added to the Lighting Plan.

- "Per the Montgomery Township Street Lighting Specifications, lighting proposed for use after 10:00 P.M., or after normal hours of operation of a business, whichever is earlier, for commercial industrial, institutional, or municipal application, shall be reduced by at least 50% from then until dawn, unless supporting a specific purpose and approved by the appropriate officers or agents of the Municipality."

Note 19 on Sheet LL-501 should be revised to remove "or within one hour".

New Street Lighting Comments

18. Verify that the Catalog Nos. detailed within the Site Lighting Schedule match what is called out in the cut sheets on plan LL-501. For example Light "E" should be revised to state Catalog No. WL2-400MH-TT since Metal Halide is being proposed.

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
Gregory Elko, P.E., Applicant's Engineer
Joseph Platt, P.E., TPD

2700 Kelly Road, Suite 200 Warrington, PA 18976 T: 215.491.6500 F: 215.491.6501
Mailing Address: P.O. Box 1569 Doylestown, PA 18901

Meeting: Montgomeryville Five Points Plaza
Montgomery Township, Montgomery County, PA
Langan Project No.: 200018801

Date / Location: Meeting Date: February 11, 2014
PennDOT District 6-0

Attendees: Fran Hanney, PennDOT
See Attached Sign-In Sheet for Others

Prepared By: Alan W. Lothian
AnnMarie Vigilante

Date Prepared: February 12, 2014

The following is a summary of items discussed at the meeting to discuss the PennDOT-related responsibilities for the redevelopment of the Montgomeryville Five Points Plaza to include a discount club.

Fran Hanney began the meeting restating that the Department stands by their comment in the review letter that states that they will not accept an analysis that accounts for additional trips that a full retail use would have generated (as opposed to a furniture store) when in reality they do not exist and therefore are irrelevant in trying to determine what impacts the wholesale Club will produce in the real world.

AnnMarie Vigilante and Alan Lothian agreed with the Department on the comparison of the two different uses, but explained that their point was that the site was originally approved for a certain amount of "shopping center" space, not specifically identified as any one particular retail use (furniture store).

F. Hanney expressed concern that any approvals that were obtained are well over 10 years old at this point and that the Department is concerned about the actual difference between the existing conditions and what will occur on the state highway intersections as a result of the proposed discount club. He wanted to see analyses showing that the existing site driveway infrastructure, specifically the westbound exclusive left-turn lanes, will be sufficient to handle the increase in traffic.

A. Lothian suggested preparing a traffic assessment that will include the existing traffic volume at the site driveways with the additional trips associated with the proposed discount club and any other retail anticipated in the future. Including the additional retail should allow the developer to construct the retail in the future without having to revisit PennDOT for any approvals, unless there is a significant change that would warrant PennDOT involvement.

F. Hanney and Jeremy Chrzan agreed and said that the traffic volume associated with the existing furniture store should be removed from the analysis.

Meeting Minutes

Montgomeryville Five Points Plaza
Montgomery Township, Montgomery County, PA
Langan Project No.: 200018801
February 12, 2014 - Page 2 of 2

It was agreed that the only intersections that would be analyzed are the site driveways on Cowpath Road and Bethlehem Pike.

F. Hanney stated that as long as the traffic analyses at the site driveway does not show any queuing issues there should not be a problem and no roadway improvements would be required.

F. Hanney and David Adams identified that this area is moving to adaptive signals and that the developer would be responsible for upgrading both the signal at the site driveway and the intersection of Cowpath Road and Lansdale Avenue with adaptive equipment. D. Adams explained that all of the electrical and fiber optic will be in place as part of a PennDOT project.

D. Adams suggested that the existing pedestrian equipment be replaced by the developer to provide new countdown man/hand indicators and latching ADA push buttons. F. Hanney agreed.

Joe Platt agreed with the requests of PennDOT for the traffic analyses and the equipment upgrades.

F. Hanney recommended that a new HOP for the signal upgrades be obtained from the Department. F. Hanney suggested that the HOP could be completed within 3 months.

A. Vigilante asked about the ADA comment in the PennDOT letter.

J. Platt and D. Adams stated that there are approved projects in place that will be addressing the ADA compliance at the two Montgomeryville Five Points Plaza driveways. No additional action is required from the developer at these locations.

Al Rossi asked for clarification that the proposed modifications to the signal would not require any road work of any kind.

F. Hanney agreed, stating that it was only traffic signal equipment that could be installed with no disruption to the roadway unless the analysis came back that the existing left turn lanes could not handle the proposed traffic.

At the conclusion of the meeting it was clarified that the following be submitted to PennDOT: Traffic Assessment showing analyses at the site driveways, revised traffic signal plans and accompanying HOP application.

F. Hanney also confirmed that the only items the developer is responsible for, provided the analyses show no mitigation is necessary, are the adaptive signal units at the Site Driveway and Lansdale Avenue intersections on Cowpath Road and new countdown man/hand indicators and latching ADA push buttons at the Site Driveway intersection with Cowpath Road.

5-Points Montgomeryville Mtg

2-11-2014

Name	Company	Phone	Email
Ann Marie Viglante	Langan	215 491-6551	AViglante@Langan.com
Alan Lofgren	Langan	609 282-8021	alofgren@langan.com
DAVE ADAMS	PENNDOT SIGNALS	610-205-6576	DAVIDADAMS@PA.GOV
Jeremy Chrzan	PENNONI	215-254-7709	jchrzan@pennoni.com
AIFILED T. Rossi	Somerville Montgomery LP	212-265-6600 X 305	ARossi@LDMANAGEMENT.com
Chirag Thakkar	Langan	215-491-6500	cthakkar@langan.com
Joe Platt	TPD for Montgomery Twp	610-326-3100	jplatt@trufficpd.com
Susan LaPenta	PennDOT - TRAFFIC	610-205-6595	slapenta@pa.gov

TRAFFIC PLANNING AND DESIGN, INC.



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

January 27, 2014

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

Re: Montgomeryville Five Points Plaza
BJ's Wholesale Club
Montgomery Township LD/S# 673
TPD# MOTO-A-00056

Dear Bruce:

In our role as Township Traffic/Street Lighting Engineer, Traffic Planning and Design, Inc. (TPD) has reviewed the Preliminary/Final plan submission and Traffic Management Study for the above referenced project, prepared by Langan Engineering and Environmental Services and dated December 20, 2013

Based on this review, we offer the following comments:

Traffic Engineering Comments

1. The following comments pertain to the December 20, 2013 Traffic Management Study submitted with this application
 - a. By not applying land use interaction rates or vehicle pass-by percentages, the submitted traffic study takes a conservative (highest volume) approach to analyzing the impacts to the surrounding roadway network.
 - b. The traffic study assumes the intersection of Cowpath Road and Five Points Plaza operates as a 3-way intersection. While it should not have a significant impact on the ultimate results of the traffic study, it should be noted that the residential driveway opposite the Five Points Plaza driveway is incorporated into the signal as a fourth leg.
 - c. The traffic signal split times should be verified. The study uses a cycle length of 85 seconds, while the current PennDOT permit plan has 60 second cycle lengths for all time periods. Additionally, the study assumes coordination with an adjacent signal. According the PennDOT permit plan, this intersection runs free (uncoordinated).
 - d. The vehicle clearance times (yellow and all red times) do not match the current PennDOT permit plan.
 - e. The side street recall should be set to None.
 - f. Based on a review of the timings provided, the Applicant should determine if timing changes can be proposed to reduce the queue lengths from spilling out of the available storage. In particular, the westbound left turn in the PM peak hour and the northbound left turn lane in the Saturday Midday peak hour should be re-evaluated. This comment may no longer apply with the Applicant addressing the above comments.
2. The proposed parking aisle in front of the Retail A building should be relocated elsewhere on site. The concern is that even without the parking, the potential conflict between pedestrians and vehicles is high. Parking that requires vehicles to enter the main drive aisle across the front of the store will create even more conflict points for other vehicles and pedestrians to mitigate.
3. Per §205-10.H(7)(b), the handicapped parking spaces must be increased to 12 feet (from the proposed 8 feet) or a waiver must be requested. TPD would support a waiver of this requirement because an 8-foot parking stall for handicapped parking is the applicable federal standard.

4. A STOP sign and stop bar should be added to the northbound drive aisle approach between Retail Building A and Condominium Unit 5.
5. Details of all proposed site signage related to traffic control/circulation (STOP, Accessible Parking, etc.) should be shown on the plans.
6. The intersections of Cowpath Road and Five Points Plaza and Cowpath Road and Lansdale Avenue should be integrated in the Township's traffic adaptive network (InSync). It will be necessary for the Applicant to coordinate installation of this equipment with PennDOT Project 63-ITS, which will install the fiber optic infrastructure.

Street Lighting Comments

7. The "Recommended Maintained Illuminance Values for Parking Lots," according to the *IESNA Lighting Handbook* (Figure 22-21), indicates a Uniformity (Max:Min) Ratio of 20:1. The provided values for the "Statistics" summary indicate a Uniformity Ratio that exceeds the recommended ratio for the Main Parking Field and East Parking areas. Please verify the calculation areas and/or reconfigure lighting locations to achieve a 20:1 ratio or less.
8. As stated in The Montgomery Township Street Lighting Specifications, lighting for commercial, industrial, public recreational, and institutional applications shall be controlled by automatic switching devices such as time clocks or combination motion detectors and photocells, to permit extinguishing outdoor lighting fixtures between 10:00 P.M. and dawn. As such, please indicate the method of control of the lighting and hours of operation (e.g. usage of a photocell, etc.) on the lighting plan.
9. The following notes shall be added to the Lighting Plan.
 - "Per the Montgomery Township Street Lighting Specifications, lighting proposed for use after 10:00 P.M., or after normal hours of operation of a business, whichever is earlier, for commercial industrial, institutional, or municipal application, shall be reduced by at least 50% from then until dawn, unless supporting a specific purpose and approved by the appropriate officers or agents of the Municipality."
 - "The Developer shall be responsible for contacting the Lighting Consultant/Inspector for Montgomery Township at least 48 hours prior to the start of any site electric work. The Township's Lighting Consultant/Inspector must be contacted during both "rough" and "final" stages of construction. The Township's Consultant/Inspector must be given the opportunity to observe open trench and conduit prior to backfill. The Township's Consultant/Inspector shall also be contacted again at completion of site electrical construction (i.e. Final). The Developer shall make arrangements for the necessary electrical inspections at both phases of construction and provide evidence of same to Township."
10. During a site visit (at approximately 4:30 P.M.), it was observed that the parking lot lighting for the Retail A-Warehouse Club and Lowe's parking lot was extinguished while the parking lot lighting for the adjacent strip mall was operational. Please investigate coordinating the lighting throughout the Five Points Plaza to operate on identical schedules.
11. During a site visit, an existing light fixture was observed within the island at the eastern side of the Retail A-Warehouse Club drive aisle, but the provided lighting plan indicated that a Type "C" fixture was to be installed. Please verify that a proposed pole and fixture are needed at this location
12. Please revise the included lighting plan (LL-101) to indicate or delineate the limits of each calculation area within the "Statistics" summary.

13. On plan LL-501, Light Fixture Details 3, 4, 5, and 6 should be verified that the Fixture Type indication matches the key provided in the "Site Lighting Schedule" on plan LL-101. For Example, Detail #3 indicates Light Fixtures Types "A"- "E", where the "Site Lighting Schedule" indicates that Types "A"- "C*" are to utilize the MSV Series Light.
14. On plan LL-101 within the "Site Lighting Schedule" the pole length is indicated to be 25' for fixtures "A" through "C*." Please verify the 25' pole length will result in a fixture mounting height of 25' as indicated, while utilizing the 2'-6" high Light Pole Foundation on Concrete Base detail as provided on plan LL-501.
15. Proposed lighting under Labels "C" and "C*" differs between what is displayed on the horizontal lighting plan and is tabulated in the "Site Lighting Schedule." Please verify and revise plan LL-101 as needed.
16. All outside lighting, including sign lighting, shall be arranged, designed and shielded or directed so as to protect the abutting streets and highways and adjoining property from the glare of lights. Please verify that the proposed lighting is shielded from adjacent properties to prevent light spillover.
17. Verify that the proposed lighting locations are situated such that interference from the proposed landscaping does not result in an inefficient design.

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
Gregory Elko, P.E., Applicant's Engineer
Joseph Platt, P.E., TPD



MONTGOMERY TOWNSHIP POLICE DEPARTMENT

J. Scott Bendig
Chief of Police

1001 Stump Road • P.O. Box 68 • Montgomeryville, PA 18936
215-362-2301 • Fax 215-362-6383

To: Montgomery Township Board of Supervisors
Marita Stoerrle, Development Coordinator

From: Scott Bendig, Chief of Police *JSB*

Date: February 27, 2014

Re: LD/S #: 673
Montgomeryville Five Points Plaza
Date of Plan: 12/20/13

A review of the above referenced subdivision/land development has been conducted on this date. There are no major areas of concern to the Police Department at this time.

Thank you for the opportunity to review this subdivision/land development. Please contact me if you have any issues or concerns.



MONTGOMERY TOWNSHIP POLICE DEPARTMENT

J. Scott Bendig
Chief of Police

1001 Stump Road • P.O. Box 68 • Montgomeryville, PA 18936
215-362-2301 • Fax 215-362-6383

To: Montgomery Township Board of Supervisors
Marita Stoerrle, Development Coordinator

From: Scott Bendig, Chief of Police

Date: December 31, 2013

Re: LD/S #: 673
Montgomeryville Five Points Plaza
Date of Plan: 12/2/13

A review of the above referenced subdivision/land development has been conducted on this date. There are no major areas of concern to the Police Department at this time.

Thank you for the opportunity to review this subdivision/land development. Please contact me if you have any issues or concerns.

ZONING ORDINANCE PLAN REVIEW

DATE: January 30, 2014

Updated April 4, 2014

PLAN REVIEW – BJ's Warehouse/Five Points Plaza
LD/S # 673

DEVELOPMENT NAME: BJ's Wholesale Warehouse

LOCATION: 640 Cowpath Road

LOT NUMBER & SUBDIVISION:

ZONING DISTRICT: S – Shopping Center

PROPOSED USE: Retail Sales with Tire Sales Installation

ZONING HEARING BOARD APPROVAL REQUIRED? NO

CONDITIONAL USE APPROVAL REQUIRED? NO

	Proposed	Required	Approved	Not Approved	N/A
USE			ZHB - V		
HEIGHT	39 ft	35 ft	See # 3 below		
LOT SIZE	48.85 acres	5 acres	X		
SETBACKS					
FRONT	>50	50 ft	X		
SIDES	>50	50 ft	X		
REAR	>50	50 ft	X		
BUFFER		25 ft			
BUILDING COVERAGE	15.9	15	ZHB - V		
IMPERVIOUS COVERAGE	62.9%	Max 75%			
GREEN AREA		Min 25%			
LOT WIDTH AT BLDG LINE	> 300	300 ft			
HEIGHT OF PARAPET ABOVE BLDG WALL TO 39'	10.34 ft	Max 6 ft	ZHB - V		
ABOVE GROUND PROPANE AND DIESEL TANKS	(2) Propane – 1000 gallons each (2) Diesel – 700 gallons each	Max 550 gal	ZHB - SE		

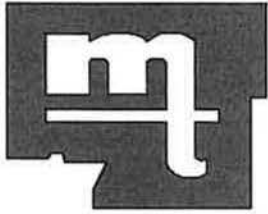
COMMENTS

ADDITIONAL COMMENTS:

1. There is a discrepancy with the Receiving Area calculations. The measurements provided total 2656 sf (65.33 ft x 40.66 ft). The plan states the square footage is 2646 sf.

2. Ruby Tuesday's square footage is inconsistent on the CS-101 and CS-102 drawings. The building summary and parking charts indicate 4985 sf, the plan indicates 5152 sf. The total of 9000 is consistent, however the future expansion should be reduced to 3848 sf, should Ruby Tuesday's actual square footage be 5152.
3. The height of the building on the Zoning Data Table states 39 feet with ZHB relief granted. Relief was not granted in regards to building height. The building height should state < 35 feet or 28 ft 8 inches. The parapet measures 39 feet in height, with a variance granting relief to allow the proposed parapet to extend approximately 10.34 feet above the building roofline instead of the permitted 6 feet.
4. The text "Condo Unit #3" Alternate 8,000 sf should be removed from CS-101 as the 2,925 sf has been utilized in calculations for parking, building coverage, impervious coverage... "Condo Unit #8 11,048 sf" should be removed from CS-101 as the 9,661 sf has been utilized in calculations for parking, building coverage, impervious coverage... The text "Condo Unit 6 18,840 sf and Condo Unit 7 79,135sf" should be removed from the drawings.
5. The plans indicate to refer to architectural plans for details in numerous areas. No architectural details or plans have been provided for review.
6. Remove the renderings for the proposed freestanding signs from CS-501 as signage is not a part of the Land Development review and approval process. Building permits shall be submitted for all proposed signage.
7. The List of Approved Variances on CS-101 should detail the specific relief granted and any conditions especially in regards to the tire sales and installation relief. The property is subject to Conditional Use approval granted April 8, 2013.


ZONING OFFICER
DATE



MONTGOMERY TOWNSHIP
DEPARTMENT OF FIRE SERVICES
1001 STUMP ROAD
MONTGOMERYVILLE, PA 18936-9605
Telephone: 215-393-6935 • Fax: 215-699-1560
email: rlesniak@montgomerytp.org
www.montgomerytp.org

RICHARD M. LESNIAK
DIRECTOR OF FIRE SERVICES
FIRE MARSHAL
EMERGENCY MANAGEMENT
COORDINATOR
FIRE MARSHALS OFFICE:
215-393-6936

April 10, 2014

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

Re: Montgomeryville Five Points Plaza: BJ's Wholesale Club

Dear Bruce:

Thank you for allowing the Fire Marshal's Office to comment on the proposed construction of the: Montgomeryville Five Points Plaza: BJ's Wholesale Club. The applicant proposes to construct a wholesale shopping club in an existing building, with several additions.

The proposed building is a one-story, approximately 90,000 square foot building. The building will be equipped with a NFPA 13 compliant sprinkler system.

Using the 2009 edition of the International Fire Code for guidance, the Fire Marshal's Office offers the following comments:

1. **D105.1 Where required.** Buildings or portions of buildings or facilities exceeding 30 feet (9144 mm) in height above the lowest level of fire department vehicle access shall be provided with *approved* fire apparatus access roads capable of accommodating fire department aerial apparatus. Overhead utility power lines shall not be located within the aerial fire apparatus access roadway.
2. **D105.2 Width.** Aerial fire apparatus access roads shall have a minimum unobstructed width of 26 feet (7925 mm), exclusive of shoulders, in the immediate vicinity of any building or portion of building more than 30 feet (9144 m) in height.
Comment: The architect should verify whether the building is more than 30 feet in height.
3. **503.2.1 Dimensions.** If the building is less than 30 feet in height, fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm) exclusive of shoulders, except for *approved* security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm).
Comment: Provide on plan, the width of any/all fire apparatus access roads to and around the building. Also detail that there is no obstructed vertical clearance of not less than 13 feet 6 inches (4115 mm).

4. **503.3 Marking.** Where required by the *fire code official*, *approved* signs or other *approved* notices or markings that include the words NO PARKING – FIRE LANE shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. The means by which fire lanes are designated shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility. “NO PARKING FIRE LANE” signage SHALL be provided at all fire lanes at intervals of not more than 50 ft. or as otherwise directed by the Fire Marshal’s Office.
- Fire apparatus roads 20 to 26 feet wide (6096 to 7925 mm) shall be posted on both sides as a *fire lane*.
 - Fire apparatus access roads more than 26 feet wide (7925 mm) to 32 feet wide (9754 mm) shall be posted on one side of the road as a *fire lane*.

Comment: The fire apparatus access roads and internal driving lanes shall have signage as prescribed above. Provide details of such on plans. The plans shall be revised to show Montgomery Township’s fire truck turn path plan. Dimensions can be obtained by the Township Planning and Zoning Office

5. **B105.2 Buildings other than one-and two-family dwellings.** The minimum fire-flow and flow duration for buildings other than one- and two-family dwellings shall be as specified in Table B105.1.

Exception: A reduction in required fire-flow of up to 75 percent, as *approved*, allowed when the building is provided with an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.1.2. The resulting fire-flow shall not be less than 1,500 gallons per minute (5678 L/min) for the prescribed duration as specified in Table B105.1.

Comment: Table B105.1 states that a 92,000 square foot, Type IIB constructed building shall have a fire flow of 3,250 gallons per minute. Given the code exception, the resulting fire-flow shall not be less than 1,500 gallons per minute. Provide recent water flow test to confirm this.

6. **C103.1 Fire hydrants available.** The minimum number of hydrants available to a building shall not be less than that listed in Table C105.1. The number of fire hydrants available to a complex or subdivision shall not be less than that determined by spacing requirements listed in Table C105.1 when applied to fire apparatus access roads and perimeter public streets from which fire operations could be conducted.

Comment: Table C105.1 states that one (1) fire hydrant is required for a fire-flow requirement of 1,750 gpm or less. The plans show an “existing fire hydrant and valve to be removed and relocated” Show the existing Fire Hydrant and valve in the relocated position. Also, please detail on the plan, the location of any/all existing fire hydrants and the distance between them.

7. **3804.3 Location of LP-Gas Containers.** LP-Gas Containers shall be located with respect to buildings, public ways, and lot lines of adjoining properties that can be built upon, in accordance with Table 3804.3.

Comment: Show on plan, and in detail, all distances of the proposed tank location as per Table 3804.3. Also show Safety Protection of Tanks as per 3807

8. **912.0 Fire Department Connection(s).** Fire department connections shall be installed in accordance with the NFPA standard applicable to the system design and shall comply with Sections 912.2 through 912.6.

Comment: Show on plan, and in detail, that the existing FDC, as well as any additional FDC that may be added during construction, are installed, identified and maintained as per Section 912.0

The above referenced comments have been addressed in the revised plans dated March 10, 2014. The Fire Marshal's Office recommends that the development be approved as submitted.

Should you have any questions or need additional information, please do not hesitate to contact me.

Sincerely,

Richard M. Lesniak
Director of Fire Services



**MONTGOMERY TOWNSHIP
DEPARTMENT OF FIRE SERVICES
1001 STUMP ROAD
MONTGOMERYVILLE, PA 18936-9605**
Telephone: 215-393-6935 • Fax: 215-699-1580
Email: rlesniak@montgomerytp.org
www.montgomerytp.org

RICHARD M. LESNIAK
DIRECTOR OF FIRE SERVICES
FIRE MARSHAL
EMERGENCY MANAGEMENT
COORDINATOR
FIRE MARSHALS OFFICE:
215-393-6936

January 27, 2014

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

Re: Montgomeryville Five Points Plaza: BJ's Wholesale Club

Dear Bruce:

Thank you for allowing the Fire Marshal's Office to comment on the proposed construction of the: Montgomeryville Five Points Plaza: BJ's Wholesale Club. The applicant proposes to construct a wholesale shopping club in an existing building, with several additions.

The proposed building is a one-story, approximately 90,000 square foot building. The building will be equipped with a NFPA 13 compliant sprinkler system.

Using the 2009 edition of the International Fire Code for guidance, the Fire Marshal's Office offers the following comments:

1. **D105.1 Where required.** Buildings or portions of buildings or facilities exceeding 30 feet (9144 mm) in height above the lowest level of fire department vehicle access shall be provided with *approved* fire apparatus access roads capable of accommodating fire department aerial apparatus. Overhead utility power lines shall not be located within the aerial fire apparatus access roadway.
2. **D105.2 Width.** Aerial fire apparatus access roads shall have a minimum unobstructed width of 26 feet (7925 mm), exclusive of shoulders, in the immediate vicinity of any building or portion of building more than 30 feet (9144 m) in height.
Comment: The architect should verify whether the building is more than 30 feet in height.
3. **503.2.1 Dimensions.** If the building is less than 30 feet in height, fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm) exclusive of shoulders, except for *approved* security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm).
Comment: Provide on plan, the width of any/all fire apparatus access roads to and around the building. Also detail that there is no obstructed vertical clearance of not less than 13 feet 6 inches (4115 mm).

4. **503.3 Marking.** Where required by the *fire code official*, *approved* signs or other *approved* notices or markings that include the words NO PARKING – FIRE LANE shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. The means by which fire lanes are designated shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility. “NO PARKING FIRE LANE” signage SHALL be provided at all fire lanes at intervals of not more than 50 ft. or as otherwise directed by the Fire Marshal’s Office.
- Fire apparatus roads 20 to 26 feet wide (6096 to 7925 mm) shall be posted on both sides as a *fire lane*.
 - Fire apparatus access roads more than 26 feet wide (7925 mm) to 32 feet wide (9754 mm) shall be posted on one side of the road as a *fire lane*.

Comment: The fire apparatus access roads and internal driving lanes shall have signage as prescribed above. Provide details of such on plans. The plans shall be revised to show Montgomery Township’s fire truck turn path plan. Dimensions can be obtained by the Township Planning and Zoning Office

5. **B105.2 Buildings other than one-and two-family dwellings.** The minimum fire-flow and flow duration for buildings other than one- and two-family dwellings shall be as specified in Table B105.1.
- Exception:** A reduction in required fire-flow of up to 75 percent, as *approved*, allowed when the building is provided with an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.1.2. The resulting fire-flow shall not be less than 1,500 gallons per minute (5678 L/min) for the prescribed duration as specified in Table B105.1.

Comment: Table B105.1 states that a 92,000 square foot, Type IIB constructed building shall have a fire flow of 3,250 gallons per minute. Given the code exception, the resulting fire-flow shall not be less than 1,500 gallons per minute. Provide recent water flow test to confirm this.

6. **C103.1 Fire hydrants available.** The minimum number of hydrants available to a building shall not be less than that listed in Table C105.1. The number of fire hydrants available to a complex or subdivision shall not be less than that determined by spacing requirements listed in Table C105.1 when applied to fire apparatus access roads and perimeter public streets from which fire operations could be conducted.

Comment: Table C105.1 states that one (1) fire hydrant is required for a fire-flow requirement of 1,750 gpm or less. The plans show an “existing fire hydrant and valve to be removed and relocated” Show the existing Fire Hydrant and valve in the relocated position. Also, please detail on the plan, the location of any/all existing fire hydrants and the distance between them.

7. **3804.3 Location of LP-Gas Containers.** LP-Gas Containers shall be located with respect to buildings, public ways, and lot lines of adjoining properties that can be built upon, in accordance with Table 3804.3.

Comment: Show on plan, and in detail, all distances of the proposed tank location as per Table 3804.3. Also show Safety Protection of Tanks as per 3807

8. **912.0 Fire Department Connection(s).** Fire department connections shall be installed in accordance with the NFPA standard applicable to the system design and shall comply with Sections 912.2 through 912.6.

Comment: Show on plan, and in detail, that the existing FDC, as well as any additional FDC that may be added during construction, are installed, identified and maintained as per Section 912.0

Should you have any questions or need additional information, please do not hesitate to contact me.

Sincerely,



Richard M. Lesniak
Director of Fire Services

KENNETH AMEY, AICP
professional land planner

March 16, 2014

(via e-mail)

Lawrence J. Grogan, Township Manager
MONTGOMERY TOWNSHIP
1001 Stump Road
Montgomeryville, PA 18936

Re: Montgomeryville Five Points Plaza
Proposed Warehouse Club (BJ's)
Preliminary/Final Land Development Plans
Township File #LD/S 673

Dear Mr. Grogan:

I have reviewed the above referenced plan, prepared by Langan Engineering & Environmental Services, dated December 20, 2013 and last revised February 21, 2014. The subject property is located within the Five Points Plaza at the intersection of Cowpath Road and Bethlehem Pike, and is currently zoned S-Shopping Center.

This proposal would expand the existing 79,135sf Condominium Unit 7 to a new area of 89,732sf. Other minor changes are proposed to the existing parking field, the stormwater management plan, and loading areas to accommodate a new BJ's Warehouse Club.

Zoning relief to allow this use was granted by the Montgomery Township ZHB on November 13, 2013.

Based upon this latest submission, all of my concerns have been adequately addressed.

If there are any questions, please let me know.

Very truly yours,



Kenneth Amey

1122 Old Bethlehem Pike
Lower Gwynedd, PA 19002



phone: 215.283.9619
fax: 215.646.3458
kenamey@aol.com

cc: Bruce S. Shoupe, Township Director of Planning and Zoning
Marita Stoerle, Development Coordinator
Marianne McConnell, Deputy Zoning Officer
Russell Dunlevy, PE, Township Engineer
Frank Bartle, Esq., Township Solicitor
Greg Elko, PE, Langan Engineering

**ZONING HEARING BOARD OF MONTGOMERY TOWNSHIP
APPEAL NO. 13100004**

**APPLICATION OF SOMERVILLE MONTGOMERY LP
640 COWPATH ROAD, CONDO UNITS 6 & 7**

OPINION AND ORDER

Pursuant to proper legal advertising, a public hearing was held on November 13, 2013 commencing at 7:30 p.m. at the Montgomery Township Administration Building, 1001 Stump Road, Montgomeryville, Pennsylvania. The Notes of Testimony for the hearing were taken by Mark Manjardi, an Official Court Reporter.

Present for the Zoning Hearing Board at the hearing were Mary Kay Kelm, Chairperson, Kenneth Souder, Member and Laurence Poli, Alternate. George B. Ditter, Esquire was present as Solicitor at the hearing. Also present was Bruce S. Shoupe, Director of the Township's Planning and Zoning Department.

The applicant was represented by Robert Brant, Esquire.

EXHIBITS

The following Exhibits were marked and received in evidence:

- B-1 Proof of Publication on October 29, 2013 and November 5, 2013
- B-2 Posting on October 29, 2013
- B-3 Notification to Residents on October 29, 2013
- A-1 Curriculum Vitae of Gregory M. Elko, PE, LEED AP
- A-2 Deeds
- A-3 Zoning Plan dated 10/12/13
- A-4 Existing Site Photos

A-5 Site Plan – Montgomeryville Lowe's dated 6/7/2001

A-6 Email from Bruce Shoupe, Zoning Officer

A-7 Plan dated 11/11/13

A-8 Signage Plan dated 10/24/13

A-9 BJ's Tire Center Photos

A-10 Fuel Tank Photos

FINDINGS OF FACT

1. Somerville Montgomery, LP ("Applicant") is the owner of premises known as Units 6 and 7 at Five Points Plaza, 640 Cowpath Road, Montgomeryville (the "Premises").

2. The Premises are a part of the Five Points Shopping Center and includes a 79,135 square foot retail sales building presently used for furniture sales.

3. The Premises are zoned S-Shopping Center District.

4. The Applicant proposes, among other things, to increase the area of the building to 89,699 square feet for use as a BJ's Wholesale Club, including a portion of the building for use as a tires sales and service center.

5. The Five Points Plaza, in addition, has a Lowe's Home Improvement Store, two restaurants and an 11,000 square foot retail building.

6. At the time of the original development the area of Lowe's Garden Center (27,099 square feet) would not have been considered part of the building coverage for the site. (Exhibit A-6).

7. The Applicant has requested the following relief: (a) An interpretation of the definition of "height of buildings" in Section 230-5 or in the alternative a variance from Section 230-87 to a permit a roof height of 26.25 feet with a parapet of 39 feet or in the alternative a

variance from Section 230-1123.A to permit a parapet wall that extends approximately 10.34 feet above the building roofline instead of the permitted 6 feet; (b) An interpretation that the Lowe's Garden Center consisting of approximately 27,099 square feet is a non-conforming building or structure and is not to be included in the calculation of building coverage; (c) A variance from Section 230-88.C to permit building coverage in excess of 15%; (d) A variance from Section 230-127.A .(4)(b)(2) to permit two free standing business signs with an area of 136.2 square feet instead of permitted 100 square feet; (e) A variance from Section 230- 86 to permit automobile accessory sales and tire sales/installation center; and (f) A special exception pursuant to Section 230-150.A to permit two above-ground propane storage tanks and two above-ground diesel storage tanks in excess of 550 gallons of capacity.

DISCUSSION

A small portion of the front façade of the proposed renovated building includes a peaked part that is 39 feet to the top of the peak. This exceeds the allowed 35 feet. In addition, the same peaked area as a parapet wall is higher than 6 feet above the building roofline. In Lench v. Zoning Hearing Board of Adjustment of the City of Pittsburgh, 13 A.2d 576, 581 (Pa. Cmwlth, 2011), the Commonwealth Court discussed the concept of a de minimis variance being one where "the variation requested is minor and rigid compliance is not necessary to protect the public concerns of the ordinance." Here, while the peak portion exceeding the maximum height requirement is a minor portion of the façade and has no adverse impact.

At the time of the original development of the Five Points Plaza, the area of Lowe's Garden Center (27,099 square feet) would not have been considered part of the building coverage for the site. (Exhibit A-6). If it is excluded then the building area including the

expansion for the Premises is 14.6 percent, if is included then the building coverage area is 15.9 percent. (N.T. November 13, 2013, pp. 14-15, Exhibit A-3). The Board finds that the circumstances warrants a de minimis variance for the building coverage even including the Garden Center in the calculations.

The Applicant seeks to add an additional panel to each pylon sign which would increase the size of the sign from 100 square feet to 136.2 square feet. . A lesser degree of hardship is required to permit a dimensional variance than for a use variance. Hetzberg v. Zoning Hearing Board of Adjustment of the City of Pittsburgh, 554 Pa 249 (1998). Under Hertzberg, there is a "... more relaxed standard for establishing unnecessary hardship for a dimensional variance, as opposed to a use variance." Mitchell v. Zoning Hearing Board, 838 A.2d 819, 828 (Pa. Cmwlth. 2003). The Board finds that the additional sign panel located within the pylons of the Lowe's Sign would not be detrimental to the public interest or alter the essential character of the District and the Applicant has supported this request with adequate evidence.

The Applicant seeks a special exception for two different types of above ground tanks, an above ground propane tank for propane sales and two diesel storage tanks associated with an emergency generator. Section 230-150.A. prohibits above ground tanks in excess of 550 gallons, except when authorized by special exception. Section 230-150.A. does not set forth any specific criteria for such special exception and accordingly the Board applies the general standards of Section 230-185, among other things, as to any adverse effect to the public health, safety and general welfare. Assuming that the appropriate fire officials of the Township review the placement and safety features of the tanks as described by the Applicant (N.T. November 13, 2013, pp 38-42), the Board finds no adverse effect associated with the proposed tanks. The

diesel tanks will be beneficial in allowing the store to be open at times of power failure to allow residents to have access to supplies. (N.T. November 13, 2013, p. 42).

"Tire, battery and automotive accessories sales" are not permitted in the S Shopping Center District. See Table 230-A. The Applicant proposes to add a tire sales and service center for its customers. Full automotive services, such as oil changes, or repairs of anything other than tires, would not be included. (N.T. November 13, 2013, p. 33). This proposed use is clearly subordinate to the general sale of productions at a BJ's Wholesale Club and is customarily incidental to a BJ's (N.T. November 13, 2013, p. 36). The Board views the limited use as being appropriate for a variance provided that the limits stated by the Applicant are observed.

Accordingly the following order will be entered.

ORDER

AND NOW, this ____ day of November, 2013, at a duly advertised meeting of the Zoning Hearing Board of Montgomery Township, upon the application of Somerville Montgomery LP the following relief is granted:

(1) A variance from Section 230-1123.A to permit a parapet wall that extends approximately 10.34 feet above the building roofline instead of the permitted 6 feet; and

(2) A variance from Section 230-88.C to permit building coverage in excess of 15% to 15.9%; and

(3) A variance from Section 230-127.A .(4)(b)(2) to permit two free standing business signs with an area of 136.2 square feet instead of permitted 100 square feet; and

(4) A variance from Section 230- 86 to permit automobile accessory sales and tire sales/installation center (including the sale of automobile batteries, but not the installation of automobile batteries; and

(5) A special exception pursuant to Section 230-150.A to permit two above-ground propane storage tanks; and

(6) A special exception pursuant to Section 230-150.A to permit two and two above-ground diesel storage tanks in excess of 550 gallons of capacity.

This relief is subject to the condition that all material representations made at the hearing to induce the grant of the relief requested, are deemed to be conditions of the grant of such relief.

**MONTGOMERY TOWNSHIP
ZONING HEARING BOARD**

By: _____
Mary Kay Kelm, Chairperson

By: _____
Kenneth Souder, Member

Mailing Date _____

By: _____
Laurence Poli, Alternate

(4) A variance from Section 230- 86 to permit automobile accessory sales and tire sales/installation center (including the sale of automobile batteries, but not the installation of automobile batteries; and

(5) A special exception pursuant to Section 230-150.A to permit two above-ground propane storage tanks; and

(6) A special exception pursuant to Section 230-150.A to permit two and two above-ground diesel storage tanks in excess of 550 gallons of capacity.

This relief is subject to the condition that all material representations made at the hearing to induce the grant of the relief requested, are deemed to be conditions of the grant of such relief.

**MONTGOMERY TOWNSHIP
ZONING HEARING BOARD**

By: Mary Kay Kohn
Mary Kay Kohn, Chairperson

By: Kenneth Souder
Kenneth Souder, Member

By: Laurence Poll
Laurence Poll, alternate

Mailing Date 12/20/2013

MONTGOMERY TOWNSHIP BOARD OF SUPERVISORS
BOARD ACTION SUMMARY

SUBJECT: Consider Approval of DEP Sewage Facilities Planning Module – Chick Fil A – LDS#669

MEETING DATE: April 14, 2014

ITEM NUMBER: # 16a.

MEETING/AGENDA: WORK SESSION ACTION XX NONE

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

INITIATED BY: Bruce Shoupe

Director of Planning and Zoning

BOARD LIAISON:

Joseph P. Walsh

Chairman

BACKGROUND:

This application is for the Chick Fil A development. The Township's Act 537 Plan is its plan for sewer service and the MTMSA is responsible for the implementation of this plan. Occasionally, the plan must be changed due to development and a planning module must be submitted to DEP.

Chick Fil A proposes to construct a 4,900 square foot fast food restaurant that will replace the currently vacant, former K&G retail store near the northeasterly portion of the Montgomery Mall site. It also includes a separate 5,500 square foot retail store as part of the development. The proposed restaurant will generate 5,320 gallons per day of sewage flow that will be treated by the Hatfield Township Municipal Authority. This project will use approximately 13.3 EDU's.

The Module was reviewed and recommended for approval by the Township Planning Commission at its meeting on January 16, 2014.

ZONING, SUBDIVISION OR LAND DEVELOPMENT IMPACT:

None

PREVIOUS BOARD ACTION:

None

ALTERNATIVES/OPTIONS:

Approve the DEP Sewage Facilities Planning Module.

BUDGET IMPACT:

None.

RECOMMENDATION:

Acceptance of the DEP Sewage Facilities Planning Module.

MOTION/RESOLUTION:

The resolution is attached.

MOTION _____

SECOND _____

ROLL CALL:

Robert J. Birch	Aye	Opposed	Abstain	Absent
Candyce 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 #

WHEREAS, the Department of Environmental Protection requires that a municipality amend its Sewage Facilities Plan for any new development; and

WHEREAS, an application has been submitted to DEP for the Chick Fil A project, located at 794 and 798 Bethlehem Pike; and

WHEREAS, this Planning Module has been reviewed by the Montgomery Township Municipal Sewer Authority and found to be acceptable.

NOW, THEREFORE, BE IT RESOLVED, by the Board of Supervisors of Montgomery Township that we hereby approve the application for the Chick Fil A development.

MOTION BY:

SECOND BY:

VOTE:

DATE:

xc: Applicant, F. Bartle, MTMSA, B. Shoupe, M. Stoerrle, Minute Book, Resolution File, File



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

Completeness Checklist

The individual completing the component should use the checklist below to assure that all items are included in the module package. The municipality should confirm that the required items have been included within 10 days of receipt, and if complete, sign and date the checklist.

Sewage Collection and Treatment Facilities

- ☒ Name and Address of land development project.
- ☒ U.S.G.S. 7.5 minute topographic map with development area plotted.
- ☒ Project Narrative.
- ☒ Letter from water company (if applicable).
- ☒ Alternative Analysis Narrative.
- ☒ Details of chosen financial assurance method.
- N/A ☐ Proof of Public Notification (if applicable).
- ☒ Name of existing collection and conveyance facilities.
- ☒ Name and NPDES number of existing treatment facility to serve proposed development.
- ☒ Plot plan of project with required information.
- ☒ Total sewage flows to facilities table.
- ☒ Signature of existing collection and/or conveyance Chapter 94 report preparer.
- ☒ Signature of existing treatment facility Chapter 94 report preparer.
- ☒ Letter granting allocation to project (if applicable).
- ☒ Signature acknowledging False Swearing Statement.
- ☒ Completed Component 4 (Planning Agency Review) for each existing planning agency and health department.
- ☒ Information on selected treatment and disposal option.
- N/A ☐ Permeability information (if applicable).
- N/A ☐ Preliminary hydrogeology (if applicable).
- N/A ☐ Detailed hydrogeology (if applicable).

Municipal Action

- ☐ Component 3 (Sewage Collection and Treatment Facilities).
- ☐ Component 4 (Planning Agency Comments and Responses).
- ☐ Proof of Public Notification.
- ☐ Long-term operation and maintenance option selection.
- ☐ Comments, and responses to comments generated by public notification.
- ☐ Transmittal Letter

Signature of Municipal Official

Date submittal determined complete



pennsylvania
DEPARTMENT OF ENVIRONMENTAL
PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

**TRANSMITTAL LETTER
FOR SEWAGE FACILITIES PLANNING MODULE**

DEP USE ONLY				
DEP CODE #	APS ID #	CLIENT ID #	SITE ID #	AUTH. ID #

TO: Approving Agency (DEP or delegated local agency)

Date _____

Dear Sir:

Attached please find a completed Sewage Facilities Planning Module prepared by MASEK Consulting (Name)
Agent (Title) for Chick Kila (Name)
 a subdivision, commercial, or industrial facility located in Montgomery Township
Montgomery County.
 (City, Borough, Township)

Check one

- ☒ (i) The Planning Module, as prepared and submitted by the applicant, is approved by the municipality as a proposed ☐ revision ☐ supplement for new land development to its "Official Sewage Facilities Plan", and is ☐ adopted for submission to the Department of Environmental Protection ☐ transmitted to the delegated local agency for approval in accordance with the requirements of Chapter 71 and the Sewage Facilities Act, OR
- ☐ (ii) The Planning Module will not be approved by the municipality as a proposed revision or supplement for new land development to its "Official Sewage Facilities Plan" because the project described therein is unacceptable for the reason(s) checked below.

Check Boxes

- ☐ Additional studies are being performed by or on behalf of this municipality which may have an effect on the Planning Module as prepared and submitted by the applicant. Attached hereto is the scope of services to be performed and the time schedule for completion of said studies.
- ☐ The Planning Module as submitted by the applicant fails to meet limitations imposed by other laws or ordinances, officially adopted comprehensive plans and/or environmental plans (e.g., zoning, land use, Chapter 71). Specific reference or applicable segments of such laws or plans are attached hereto.
- ☐ Other (attach additional sheet giving specifics)

Municipal Secretary: Indicate below by checking appropriate boxes which components are being transmitted to the Approving Agency.

- | | | |
|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Resolution of Adoption | <input checked="" type="checkbox"/> 3. Sewage Collection/Treatment Facilities | <input checked="" type="checkbox"/> 4.A. Municipal Planning Agency Review |
| <input type="checkbox"/> 2. Individual and Community Onlot Disposal of Sewage | <input type="checkbox"/> 3s Small Flow Treatment Facilities | <input checked="" type="checkbox"/> 4.B. County Planning Agency Review |
| <input type="checkbox"/> 2m. Sewage Management Program | | <input checked="" type="checkbox"/> 4.C. County or Joint Health Department Review |

Municipal Secretary (print)

Signature

Date

Note: Please remove and recycle the Instructions portion of the Sewage Facilities Planning Module prior to mailing the appropriate completed components and supporting documents to the approving agency.



RESOLUTION FOR PLAN REVISION FOR NEW LAND DEVELOPMENT

RESOLUTION OF THE (SUPERVISORS) (~~COMMISSIONERS~~) (~~COUNCILMEN~~) of MONTGOMERY
(TOWNSHIP) (~~BOROUGH~~) (~~CITY~~), MONTGOMERY COUNTY, PENNSYLVANIA (hereinafter "the municipality").

WHEREAS Section 5 of the Act of January 24, 1966, P.L. 1535, No. 537, known as the "Pennsylvania Sewage Facilities Act", as Amended, and the rules and Regulations of the Pennsylvania Department of Environmental Protection (Department) adopted thereunder, Chapter 71 of Title 25 of the Pennsylvania Code, require the municipality to adopt an Official Sewage Facilities Plan providing for sewage services adequate to prevent contamination of waters of the Commonwealth and/or environmental health hazards from sewage wastes, and to revise said plan whenever it is necessary to determine whether a proposed method of sewage disposal for a new land development conforms to a comprehensive program of pollution control and water quality management, and

WHEREAS Chick-Fil-A has proposed the development of a parcel of land identified as
land developer

794 Bethlehem Pike, and described in the attached Sewage Facilities Planning Module, and
name of subdivision

proposes that such subdivision be served by: (check all that apply), ☐ sewer tap-ins, ☐ sewer extension, ☐ new treatment facility, ☐ individual onlot systems, ☐ community onlot systems, ☐ spray irrigation, ☐ retaining tanks, ☐ other, (please specify).

WHEREAS, MONTGOMERY TOWNSHIP finds that the subdivision described in the attached
municipality

Sewage Facilities Planning Module conforms to applicable sewage related zoning and other sewage related municipal ordinances and plans, and to a comprehensive program of pollution control and water quality management.

NOW, THEREFORE, BE IT RESOLVED that the (Supervisors) (~~Commissioners~~) (~~Councilmen~~) of the (Township) (~~Borough~~) (~~City~~) of MONTGOMERY hereby adopt and submit to the Department of Environmental Protection for its approval as a revision to the "Official Sewage Facilities Plan" of the municipality the above referenced Sewage Facilities Planning Module which is attached hereto.

I _____, Secretary,
(Signature)

Township Board of Supervisors (~~Borough Council~~) (~~City Councilmen~~), hereby certify that the foregoing is a true copy of the Township (~~Borough~~) (~~City~~) Resolution # _____, adopted, _____, 20____.

Municipal Address:

Telephone _____

Seal of

Governing Body

PROJECT ALTERNATIVES ANALYSIS

With the understanding that the Hatfield Township treatment facility has adequate capacity to service the proposed development (capacity letter received), three (3) distinct alternatives have been identified for the subject site which are as follows:

Alternative #1 (No Build Alternative)

Alternative #1 for the proposed development has been identified as the “no build” alternative. This alternative involves no modifications to the subject site. This would not impact the treatment facility as the existing building is currently vacant and therefore is generating no sanitary sewer effluent. This alternative, although not impacting the treatment facility, maintains a vacant building which can be considered aesthetically unattractive and provides no benefit to the public in area. For these reasons, the proposed development was determined to be a better option than Alternative #1.

Alternative #2 (Change of Use Alternative)

Alternative #2 for the proposed development has been identified as the “change of use” alternative. This alternative involves no modifications to the subject site other than the internal renovations of the existing building to service a new tenant. This would slightly impact the treatment facility as the existing building is currently vacant and the reoccupied building would generate a small amount of sanitary sewer effluent. This alternative would require a tenant to renovate and retrofit the existing building for their needs. This existing building has been vacant for a period of time over which time no tenant has attempted these renovations. It is most likely that this building would not be suitable for most tenants. For these reasons, the proposed development was determined to be a better option than Alternative #2.

Alternative #3 (Decrease in Scale Alternative)

Alternative #3 for the proposed development has been identified as the “decrease in scale” alternative. This alternative involves the removal of the second retail/restaurant

use currently proposed leaving Chick-fil-A as the sole user on the site. This would impact the treatment facility more than existing conditions but would have a lesser impact than the currently proposed development. This alternative would require one tenant to occupy a 2.2 acre lot where only 1.1 acres would be required for their development. This would result in an underutilized development in a heavily commercialized area to serve the public as well as an excessive price per acre since one user will be on the subject site. For these reasons, the proposed development was determined to be a better option than Alternative #3.

MONTGOMERY TOWNSHIP BOARD OF SUPERVISORS
BOARD ACTION SUMMARY

SUBJECT: Consider Approval of DEP Sewage Facilities Planning Module – BJ's Wholesale Club at Five Points Plaza – 640 Cowpath Road - LDS#673

MEETING DATE: April 14, 2014

ITEM NUMBER: #166.

MEETING/AGENDA: WORK SESSION ACTION XX NONE

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

INITIATED BY: Bruce Shoupe

Director of Planning and Zoning

BOARD LIAISON:

Joseph P. Walsh

Chairman

BACKGROUND:

This application is for the BJ's at Five Points Plaza project. The Township's Act 537 Plan is its plan for sewer service and the MTMSA is responsible for the implementation of this plan. Occasionally, the plan must be changed due to development and a planning module must be submitted to DEP.

Somerville Montgomery LP is proposing to construct an additional 10,000 sf onto the existing building formerly occupied by American Signature Furniture which will create a proposed sewage flow of 2100 gallons per day flow or 9 EDU's which will be treated by the Hatfield Township Municipal Authority. Two gravity sewer lateral connections are proposed to the public sewer at the rear of the proposed building.

The Module was reviewed and recommended for approval by the Township Planning Commission at its meeting on February 20, 2014.

ZONING, SUBDIVISION OR LAND DEVELOPMENT IMPACT:

None

PREVIOUS BOARD ACTION:

None

ALTERNATIVES/OPTIONS:

Approve the DEP Sewage Facilities Planning Module.

BUDGET IMPACT:

None.

RECOMMENDATION:

Acceptance of the DEP Sewage Facilities Planning Module.

MOTION/RESOLUTION:

The resolution is attached.

MOTION _____

SECOND _____

ROLL CALL:

Robert J. Birch	Aye	Opposed	Abstain	Absent
Candyce 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 #

WHEREAS, the Department of Environmental Protection requires that a municipality amend its Sewage Facilities Plan for any new development; and

WHEREAS, an application has been submitted to DEP for the BJ's Wholesale Club development, located at Five Points Plaza; and

WHEREAS, this Planning Module has been reviewed by the Montgomery Township Municipal Sewer Authority and found to be acceptable.

NOW, THEREFORE, BE IT RESOLVED, by the Board of Supervisors of Montgomery Township that we hereby approve the application for the BJ's Wholesale Club development.

MOTION BY:

SECOND BY:

VOTE:

DATE:

xc: Applicant, F. Bartle, MTMSA, B. Shoupe, M. Stoerrle, Minute Book, Resolution File, File

Checklist



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

Completeness Checklist

The individual completing the component should use the checklist below to assure that all items are included in the module package. The municipality should confirm that the required items have been included within 10 days of receipt, and if complete, sign and date the checklist.

Sewage Collection and Treatment Facilities

- ☒ Name and Address of land development project.
- ☒ U.S.G.S. 7.5 minute topographic map with development area plotted.
- ☒ Project Narrative.
- ☐ Letter from water company (if applicable).
- ☒ Alternative Analysis Narrative.
- ☒ Details of chosen financial assurance method.
- ☐ Proof of Public Notification (if applicable).
- ☒ Name of existing collection and conveyance facilities.
- ☒ Name and NPDES number of existing treatment facility to serve proposed development.
- ☒ Plot plan of project with required information.
- ☒ Total sewage flows to facilities table.
- ☒ Signature of existing collection and/or conveyance Chapter 94 report preparer.
- ☒ Signature of existing treatment facility Chapter 94 report preparer.
- ☒ Letter granting allocation to project (if applicable).
- ☒ Signature acknowledging False Swearing Statement.
- ☒ Completed Component 4 (Planning Agency Review) for each existing planning agency and health department.
- ☒ Information on selected treatment and disposal option.
- ☐ Permeability information (if applicable).
- ☐ Preliminary hydrogeology (if applicable).
- ☐ Detailed hydrogeology (if applicable).

Municipal Action

- ☒ Component 3 (Sewage Collection and Treatment Facilities).
- ☒ Component 4 (Planning Agency Comments and Responses).
- ☐ Proof of Public Notification.
- ☐ Long-term operation and maintenance option selection.
- ☐ Comments, and responses to comments generated by public notification.
- ☒ Transmittal Letter

Signature of Municipal Official

Date submittal determined complete



TRANSMITTAL LETTER FOR SEWAGE FACILITIES PLANNING MODULE

DEP USE ONLY				
DEP CODE #	APS ID #	CLIENT ID #	SITE ID #	AUTH. ID #

TO: Approving Agency (DEP or delegated local agency)

Date _____

PADEP - Attn: Stephanie Rittenhouse

2 East Main Street

Norristown, PA 19401-4915

Dear Sir:

Attached please find a completed Sewage Facilities Planning Module prepared by Langan Engineering

(Name)

Agent

for Montgomeryville Five Points Plaza

(Title)

(Name)

a subdivision, commercial, or industrial facility located in Montgomery Township

Montgomery

County.

(City, Borough, Township)

Check one

- ☒ (i) The Planning Module, as prepared and submitted by the applicant, is approved by the municipality as a proposed ☐ revision ☒ supplement for new land development to its "Official Sewage Facilities Plan", and is ☒ adopted for submission to the Department of Environmental Protection ☐ transmitted to the delegated local agency for approval in accordance with the requirements of Chapter 71 and the Sewage Facilities Act, OR
- ☐ (ii) The Planning Module will not be approved by the municipality as a proposed revision or supplement for new land development to its "Official Sewage Facilities Plan" because the project described therein is unacceptable for the reason(s) checked below.

Check Boxes

- ☐ Additional studies are being performed by or on behalf of this municipality which may have an effect on the Planning Module as prepared and submitted by the applicant. Attached hereto is the scope of services to be performed and the time schedule for completion of said studies.
- ☐ The Planning Module as submitted by the applicant fails to meet limitations imposed by other laws or ordinances, officially adopted comprehensive plans and/or environmental plans (e.g., zoning, land use, Chapter 71). Specific reference or applicable segments of such laws or plans are attached hereto.
- ☐ Other (attach additional sheet giving specifics)

Municipal Secretary: Indicate below by checking appropriate boxes which components are being transmitted to the Approving Agency.

- | | | |
|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Resolution of Adoption | <input checked="" type="checkbox"/> 3. Sewage Collection/Treatment Facilities | <input checked="" type="checkbox"/> 4.A. Municipal Planning Agency Review |
| <input type="checkbox"/> 2. Individual and Community Onlot Disposal of Sewage | <input type="checkbox"/> 3s Small Flow Treatment Facilities | <input checked="" type="checkbox"/> 4.B. County Planning Agency Review |
| <input type="checkbox"/> 2m. Sewage Management Program | | <input checked="" type="checkbox"/> 4.C. County or Joint Health Department Review |

Municipal Secretary (print)

Signature

Date

Note: Please remove and recycle the Instructions portion of the Sewage Facilities Planning Module prior to mailing the appropriate completed components and supporting documents to the approving agency.

**RESOLUTION FOR PLAN REVISION
FOR NEW LAND DEVELOPMENT**

RESOLUTION OF THE (SUPERVISORS) (~~COMMISSIONERS~~) (~~COUNCILMEN~~) of Montgomery
(TOWNSHIP) (~~BOROUGH~~) (~~CITY~~), Montgomery COUNTY, PENNSYLVANIA (hereinafter "the municipality").

WHEREAS Section 5 of the Act of January 24, 1966, P.L. 1535, No. 537, known as the "Pennsylvania Sewage Facilities Act", as Amended, and the rules and Regulations of the Pennsylvania Department of Environmental Protection (Department) adopted thereunder, Chapter 71 of Title 25 of the Pennsylvania Code, require the municipality to adopt an Official Sewage Facilities Plan providing for sewage services adequate to prevent contamination of waters of the Commonwealth and/or environmental health hazards from sewage wastes, and to revise said plan whenever it is necessary to determine whether a proposed method of sewage disposal for a new land development conforms to a comprehensive program of pollution control and water quality management, and

WHEREAS Somerville Montgomery LP has proposed the development of a parcel of land identified as
land developer

Montgomeryville Five Points Plaza, and described in the attached Sewage Facilities Planning Module, and
name of subdivision

proposes that such subdivision be served by: (check all that apply), ☒ sewer tap-ins, ☐ sewer extension, ☐ new treatment facility, ☐ individual onlot systems, ☐ community onlot systems, ☐ spray irrigation, ☐ retaining tanks, ☒ other, (please specify) _____

WHEREAS, Montgomery Township finds that the subdivision described in the attached
municipality

Sewage Facilities Planning Module conforms to applicable sewage related zoning and other sewage related municipal ordinances and plans, and to a comprehensive program of pollution control and water quality management.

NOW, THEREFORE, BE IT RESOLVED that the (Supervisors) (~~Commissioners~~) (~~Councilmen~~) of the (Township) (~~Borough~~) (~~City~~) of Montgomery hereby adopt and submit to the Department of Environmental Protection for its approval as a revision to the "Official Sewage Facilities Plan" of the municipality the above referenced Sewage Facilities Planning Module which is attached hereto.

I _____, Secretary, _____
(Signature)

Township Board of Supervisors (~~Borough Council~~) (~~City Councilmen~~), hereby certify that the foregoing is a true copy of the Township (~~Borough~~) (~~City~~) Resolution # _____, adopted, _____, 20____.

Municipal Address:

Montgomery Township

1001 Stump Road

Montgomeryville, PA 18936-9605

Telephone 215-393-6900

Seal of

Governing Body

COMPONENT 3, SECTION F
DEP PLANNING MODULE

PROJECT – MONTGOMERYVILLE FIVE POINTS PLAZA

PROJECT NARRATIVE

(Numbering corresponds to "Instructions for Completing Component 3 Sewage Collection and Treatment Facilities" 1/2013)

1. *Indicate the nature of the development project. (Residential, Commercial, Institutional, Industrial, etc.) If the project is commercial, institutional or industrial, describe the activity, such as light manufacturing, private hospital, or heavy manufacturing.*

Montgomeryville Five Points Plaza is a proposed commercial development. The existing American Signature Furniture Store will be renovated to accommodate a proposed Warehouse Club store.

2. *Enter the number of lots or EDUs in the development project. Lots refer to single family residential dwellings and for purposes of flow calculation are assumed to generate a minimum of 400 gallons per day (gpd). If larger residential flows are anticipated, these flows should be used. The residual tract, if any, is also counted as a lot. For commercial, industrial, and institutional facilities, the number of lots in a subdivision is determined by using EDUs. Divide the total flow for these facilities by 400 to determine the number of EDUs.*

Based on historical usage date, the existing usage at the American Signature Furniture Store was 109 GPD. The projected wastewater flows for the proposed Warehouse Club is 2,200 GPD. Therefore an additional 2,091 GPD, or 9 EDUs is proposed for this project.

3. *Describe the proposed sewage disposal method (municipal treatment facility, package plant, etc.) including a description of collection and conveyance facilities, if applicable. Include a general map showing the path of the sewage to the treatment facility.*

Two gravity sewer laterals are proposed to tie into the existing sewer main behind the proposed Warehouse Club store.

4. *Specify the projected population to be served and sewage flows in gpd and how these figures were calculated. Flow figures should be consistent with those found in DEP's Domestic Wastewater Facilities Manual available on the DEP website at www.dep.state.pa.us, Keyword: "Wastewater" unless adequate justification for lower per capita flows is provided and/or has been previously approved by DEP.*

Based on historical usage date, the existing usage at the American Signature Furniture Store was 109 GPD. The projected wastewater flows for the proposed Warehouse Club is 2,200 GPD. Therefore an additional 2,091 GPD, or 9 EDUs is proposed for this project.

The proposed sewage flows are consistent with DEP's Domestic Wastewater Facilities Manual of flows of 225 gpd/EDU (gallons per day per dwelling unit).

5. *Describe the location of the discharge, disposal point or land application, if applicable.*

As discussed in Item 3 above, two gravity sewer laterals are proposed to connect to the existing sewer main behind the proposed Warehouse Club store and will ultimately convey wastewater to the Hatfield Township Municipal Authority WWTP Facility.

6. *List the total acreage of the proposed land development project.*

The total acreage of the site is approximately 45.85 acres. The disturbed area for this project is approximately 3.4 acres.

7. *Describe the use of any acreage or parcels under the same ownership and adjacent to the property. (Such as: for future development, recreational, agriculture, open space, etc.) If the land is proposed for future development, or is part of a phased project, determine if there will be adequate sewage disposal facilities to serve those phases.*

The applicant owns several of the adjacent condominium units. The units are all part of the existing Montgomeryville Five Points Plaza shopping center.

8. *Provide information on any previous Act 537 planning completed for the site and any other information that the applicant believes is important for the Department's review of the project.*

This project has been designed to comply with the local land development and/or zoning ordinances of Montgomery Township. Final Land Development and NPDES permit approval is pending.

MONTGOMERY TOWNSHIP BOARD OF SUPERVISORS
BOARD ACTION SUMMARY

SUBJECT: Consider Authorization to Advertise Draft Ordinance Establishing a Township Stormwater Management Ordinance

MEETING DATE: April 14, 2014

ITEM NUMBER: #17.

MEETING/AGENDA:

ACTION XX

NONE

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

INITIATED BY: Lawrence J. Gregan
Township Manager

BOARD LIAISON: Michael J. Fox, Supervisor

BACKGROUND:

In late 2010, a Draft Act 167 Stormwater Management Plan for the Neshaminy Creek Watershed was completed and adopted by the Bucks County Commissioners. The Plan was forwarded to Montgomery County Commissioners for their approval prior to submission to DEP. Upon approval and implementation by DEP, Montgomery Township would have been required to adopt a new standardized stormwater management ordinance that would have managed additional stormwater resulting from increases in impervious coverage for approximately 90% of the Township located within the Neshaminy Creek Watershed.

At that time, Township Engineer John Chambers, PE, advised the Board of Supervisors that the impact of the new ordinance provisions would be difficult to enforce by the Township and cumbersome/expensive for small projects. The Board of Supervisors voiced this objection to the Montgomery County Commissioners which resulted in the Commissioners removing the plan from consideration pending satisfaction of the Township's objections. Specifically, the Township's objections were that the application of these standardized regulations would make relatively small projects very expensive, especially for single family residential property owners, and would provide little in the way of worthwhile stormwater management improvements.

Since Montgomery Township owns the majority of the stormwater basins in the Township, John Chambers proposed the addition of a "Fee in lieu of option" (FILO), for small projects with the FILO funds to be used for stormwater basin improvement projects that would provide an environmental benefit to the watersheds serving the Township.

Following several negotiation sessions between County Planning Staff, John Chambers, Supervisor Mike Fox and current Township Engineer Russ Dunlevy, a FILO amendment to the 167 Plan was drafted. This amendment was submitted to both County Planning Commissions, and with the support and advocacy of County Planning Commission Staff Planners Drew Shaw (Montgomery) and Alice Lambert (Bucks) was subsequently endorsed by both Bucks and Montgomery Commissioners. The Plan, with the recommended FILO alternative, was submitted to DEP for their approval. DEP granted approval of this final plan on November 22, 2013.

To comply with that approval, the Township is obligated to adopt a Stormwater Management Ordinance by May 22, 2014. Attached is a draft ordinance, subject to final revisions by the Township Solicitor, which we are recommending be advertised for consideration at the May 12, 2014 meeting. The FILO option is provided for in Section 206-23 of the draft ordinance.

ZONING, SUBDIVISION OR LAND DEVELOPMENT IMPACT:

The new Stormwater Ordinance provision will be applicable to activities identified in Section 206-5 of the draft ordinance.

PREVIOUS BOARD ACTION:

None.

ALTERNATIVES/OPTIONS:

None, the adoption of the draft ordinance is required to comply with the appropriate Act 167 Plans for all watersheds serving the Township

BUDGET IMPACT:

Applications for permits for applicable activities would be subject to payment of application and escrow fees to be adopted by Resolution in the Township Fee Schedule.

RECOMMENDATION:

Authorize advertisement of the Draft Ordinance establishing a Township Stormwater Management Ordinance, subject to final revisions by the Township Solicitor, for consideration at the Board of Supervisors Meeting on May 12, 2014.

MOTION/RESOLUTION:

BE IT RESOLVED by the Board of Supervisors of Montgomery Township that we hereby authorize advertisement of the Draft Ordinance establishing a Township Stormwater Management Ordinance, subject to final revisions by the Township Solicitor, for consideration at the Board of Supervisors Meeting on May 12, 2014.

.*

MOTION: _____ SECOND: _____

ROLL CALL:

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
Robert J. Birch	Aye	Opposed	Abstain	Absent

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

STORMWATER MANAGEMENT ORDINANCE

ORDINANCE NO. _____

**MONTGOMERY TOWNSHIP, MONTGOMERY COUNTY,
PENNSYLVANIA**

Adopted at a Public Meeting Held on

_____, 20__

Chapter 206 STORMWATER MANAGEMENT

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ARTICLE I

General Provisions

§206-1. Short Title.

This Ordinance shall be known and may be cited as the “Montgomery Township Stormwater Management Ordinance.”

§206-2. Statement of Findings

The Board of Supervisors finds that:

- A. Inadequate management of accelerated stormwater runoff resulting from development and redevelopment throughout a watershed increases flood flows and velocities, contributes to erosion and sedimentation, overtaxes the carrying capacity of streams and storm sewers, greatly increases the cost of public facilities to convey and manage stormwater, undermines floodplain management and flood reduction efforts in upstream and downstream communities, reduces groundwater recharge, and threatens public health and safety.
- B. Inadequate planning and management of stormwater runoff resulting from land development and redevelopment throughout a watershed can also harm surface water resources by changing the natural hydrologic patterns, accelerating stream flows (which increase scour and erosion of streambeds and streambanks, thereby elevating sedimentation), destroying aquatic habitat, and elevating aquatic pollutant concentrations and loadings such as sediments, nutrients, heavy metals, and pathogens.
- C. A comprehensive program of stormwater management (SWM), including reasonable regulation of development and activities causing accelerated runoff, is fundamental to the public health, safety, welfare, and the protection of the people of the Township and all the people of the Commonwealth, their resources, and the environment.
- D. Stormwater is an important water resource by providing groundwater recharge for water supplies and base flow of streams, which also protects and maintains surface water quality.
- E. Public education on the control of pollution from stormwater is an essential component in successfully addressing stormwater.
- F. Federal and state regulations require certain municipalities to implement a program of stormwater controls. These municipalities are required to obtain a permit for stormwater discharges from their separate storm sewer systems under the National Pollutant Discharge Elimination System (NPDES).

§206-3. Purpose

The purpose of this Ordinance is to promote the public health, safety, and welfare within the Township by maintaining the natural hydrologic regime and by minimizing the harms and maximizing the benefits described in Section 206-2, through provisions designed to:

- A. Meet legal water quality requirements under state law, including regulations at 25 Pa. Code 93 to protect, maintain, reclaim, and restore the existing and designated uses of the waters of this Commonwealth.
- B. Minimize increases in stormwater volume and control peak flows.
- C. Minimize impervious surfaces.
- D. Provide review procedures and performance standards for stormwater planning and management.

STORMWATER MANAGEMENT

- E. Preserve the natural drainage systems as much as possible.
- F. Manage stormwater impacts close to the runoff source, requiring a minimum of structures and relying on natural processes.
- G. Focus on infiltration of stormwater to maintain groundwater recharge, to prevent degradation of surface and groundwater quality, and to otherwise protect water resources.
- H. Preserve and restore the flood-carrying capacity of streams.
- I. Prevent scour and erosion of streambanks and stream beds.
- J. Provide standards to meet National Pollution Discharge Elimination System (NPDES) permit requirements.
- K. Address certain requirements of the Municipal Separate Stormwater Sewer System (MS4) NPDES Phase II Stormwater Regulations.
- L. Provide for proper operation and maintenance of all stormwater management facilities and Best Management Practices (BMPs) that are implemented in the Township.
- M. Implement the requirements of the Neshaminy Creek Watershed Act 167 Stormwater Management Plan (includes Little Neshaminy Creek Watershed).

§206-4. Statutory Authority

The Township is empowered to regulate land use activities that affect runoff, surface, and groundwater quality and quantity by the authority of:

- A. Pennsylvania Municipalities Planning Code, Act 247, as amended.
- B. Second Class Township Code (Act 69 of 1933, P.L. 103; 53 P.S. § 65101, as amended).

§206-5. Applicability/Regulated Activities

All Regulated Activities and all activities that may affect stormwater runoff, including Land Development and Earth Disturbance Activity, are subject to regulation by this Ordinance.

Regulated activities include, but are not limited to;

1. Land development,
2. Subdivisions,
3. Prohibited or polluted discharges,
4. Alteration of the natural hydrologic regime,
5. Construction or reconstruction of, or addition of new impervious or semi-pervious surfaces (i.e., driveways, parking lots, roads, etc.), except for reconstruction of roads where there is no increase in impervious surface,
6. Construction of new buildings or additions to existing buildings,
7. Redevelopment,
8. Diversion piping or encroachments in any natural or man-made channel, and
9. Nonstructural and structural stormwater management Best Management Practices (BMPs) or appurtenances thereto.

§206-6. Exemptions

- A. Regulated Activities that create impervious surfaces smaller than or equal to 1,000 square feet do not have to apply the volume control requirements of this Ordinance. Regulated Activities of this size are exempt from the peak rate control requirements and the SWM Site Plan preparation located in Article IV. If the activity is found to be a significant contributor of pollution to the waters of this Commonwealth, the Township may enforce any of the above requirements.
- B. Regulated Activities that create impervious surfaces greater than 1,000 square feet up to and including 5,000 square feet are exempt only from the peak rate control requirements of this Ordinance.

Table 206-6.1: Impervious Surface Exemption Thresholds

Ordinance Article or Section	Type of Project	Proposed Impervious Surface		
		0 to 1,000 sq. ft.	>1,000 to 5,000 sq. ft.	>5,000 sq. ft.
Article IV SWM Site Plan Requirements	All Development	Exempt	Not Exempt (except residential activity)	Not Exempt
Appendix F Non-Engineered Small Project Site Plan	Only Residential Development Applicable	Exempt	Not Exempt	Not Applicable
Section 206-15 Volume Control Requirements	All Development	Not Applicable	Not Exempt	Not Exempt
Section 206-16 Peak Rate Control Requirements	All Development	Exempt	Exempt	Not Exempt
Section 206-14 Erosion and Sediment Pollution Control Requirements	See Table 206-6.2			
Article V Inspections	All Development	Exempt	Not Exempt	Not Exempt
Article VII Maintenance Responsibilities	All Development	Exempt	Not Exempt	Not Exempt

Table 206-6.2: Erosion and Sediment Pollution Control Exemption Thresholds

Disturbed	Written E&S	E&S Plan Review for	E&S Plan Review for	NPDES	Written PCSM Plan
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STORMWATER MANAGEMENT

Area	Plan	Adequacy by MCCD	Adequacy by the Township	Permit	Required
0 – 1,000 sq. ft.	Not required unless in HQ or EV watershed, or is a condition of other State permit.	Exempt	Exempt	Exempt	Exempt
1,000 - 5,000 sq. ft.	Required by the Township	Exempt	Not Exempt	Exempt	Per Table 206-6.1
5,000 sq. ft. to < 1 acre	Required by the Township	Required by Township	Not Exempt	Exempt	Per Table 206-6.1
1 acre or greater	Required by MCCD	Required by MCCD	Not Exempt	Not Exempt	Per Table 206-6.1

- C. Agricultural activity is exempt from the peak rate control requirements and SWM Site Plan preparation requirements of this Ordinance provided the activities are performed according to the requirements of 25 Pa. Code 102.
- D. Forest management and timber operations are exempt from the peak rate control requirements and SWM Site Plan preparation requirements of this Ordinance provided the activities are performed according to the requirements of 25 Pa. Code 102.
- E. Any aspect of BMP maintenance to an existing SWM system made in accordance with plans and specifications approved by the Township is exempt.
- F. The use of land for gardening and/or landscaping for home consumption is exempt from the requirements of this ordinance.
- G. Exemptions from any provisions of this Ordinance shall not relieve the applicant from the requirements in Section 206-12.D through L.
- H. Additional Exemption Criteria:
 - (1) Exemption Responsibilities – An exemption shall not relieve the Applicant from implementing such measures as are necessary to protect public health, safety, and property.
 - (2) Drainage Problems – Where drainage problems are documented or known to exist downstream of or is expected from the proposed activity, the Township may deny exemptions.
 - (3) Exemptions are limited to specific portions of this Ordinance.
 - (4) HQ and EV Streams – The Township may deny exemptions in high quality (HQ) or exceptional value (EV) waters and Source Water Protection Areas (SWPA).

§206-7. Repealer

Any other Ordinance or Ordinance provision of the Township inconsistent with any of the provisions of this Ordinance is hereby repealed to the extent of the inconsistency only.

§206-8. Severability

Should any section or provision of this Ordinance be declared invalid by a court of competent jurisdiction, such decision shall not affect the validity of any of the remaining provisions of this Ordinance.

§206-9. Compatibility with Other Ordinance or Legal Requirements

Approvals issued pursuant to this Ordinance do not relieve the Applicant of the responsibility to secure required permits or approvals for activities regulated by any other applicable code, rule, act, or ordinance.

§206-10. Change of Appendices

A. The Appendices listed below are incorporated herein by reference and as may be amended from time to time by Resolution of the Board of Supervisors.

- (1) Appendix A – Stormwater Management Design Criteria
- (2) Appendix B – Low Impact Development Practices
- (3) Appendix C – Disconnected Impervious Area
- (4) Appendix D – Hot Spots
- (5) Appendix E – West Nile Virus Guidance
- (6) Appendix F – Small Project Stormwater Management Site Plan
- (7) Appendix G – References

ARTICLE II Definitions

§206-11. Interpretation

For the purposes of this Ordinance, certain terms and words used herein shall be interpreted as follows:

- A. Words used in the present tense include the future tense; the singular number includes the plural, and the plural number includes the singular; words of masculine gender include feminine gender; and words of feminine gender include masculine gender.
- B. The word “includes” or “including” shall not limit the term to the specific example, but is intended to extend its meaning to all other instances of like kind and character.
- C. The word “person” includes an individual, firm, association, organization, partnership, trust, company, corporation, unit of government, or any other similar entity.
- D. The words “shall” and “must” are mandatory; the words “may” and “should” are permissive.
- E. The words “used” or “occupied” include the words “intended, designed, maintained, or arranged to be used, occupied or maintained.”

§206-12. Definitions

Accelerated Erosion – The removal of the surface of the land through the combined action of man’s activity and the natural processes of a rate greater than would occur because of the natural process alone.

Agricultural Activity – Activities associated with agriculture such as agricultural cultivation, agricultural operation, and animal heavy use areas. This includes the work of producing crops including tillage, land clearing, plowing, disking, harrowing, planting, harvesting crops or pasturing and raising of livestock and installation of conservation measures. Construction of new buildings or impervious area is not considered an agricultural activity.

Alteration – As applied to land, a change in topography as a result of the moving of soil and rock from one location or position to another; also the changing of surface conditions by causing the surface to be more or less impervious as the result of changing the land cover including the water, vegetation and bare soil.

Annual Exceedence Probability – See Return Period.

Applicant – A person who has filed an application for approval to engage in any Regulated Activity defined in Section 206-5.

As-built Drawings – Engineering or site drawings maintained by the Contractor as he constructs the project and upon which he documents the actual locations of the building components and changes to the original contract documents. These documents, or a copy of same, are turned over to the Qualified Professional at the completion of the project.

Average Recurrence Interval – See Return Period.

Bankfull – The channel at the top-of-bank, or point from where water begins to overflow onto a floodplain.

Base Flow – Portion of stream discharge derived from groundwater; the sustained discharge that does not result from direct runoff or from water diversions, reservoir releases, piped discharges, or other human activities.

Best Management Practices (BMP) – Activities, facilities, designs, measures, or procedures used to manage stormwater impacts from regulated activities, to meet state water quality requirements, to promote groundwater recharge, and to otherwise meet the purposes of this Ordinance. Stormwater BMPs are commonly grouped into one of two broad categories or measures: “structural” or “nonstructural.” In this Ordinance, nonstructural BMPs or measures refer to operational and/or behavior-related practices that attempt to minimize the contact of pollutants with stormwater runoff whereas structural BMPs or measures are those that consist of a physical device or practice that is installed to capture and treat stormwater runoff. Structural BMPs include, but are not limited to, a wide variety of practices and devices, from large-scale retention ponds and constructed wetlands, to small-scale underground treatment systems, infiltration facilities, filter strips, low impact design, bioretention, wet ponds, permeable paving, grassed swales, riparian or forested buffers, sand filters, detention basins, and manufactured devices. Structural stormwater BMPs are permanent appurtenances to the project site.

Bioretention – A stormwater retention area that utilizes woody and herbaceous plants and soils to remove pollutants before infiltration occurs.

Buffer – The area of land immediately adjacent to any stream, measured perpendicular to and horizontally from the top-of-bank on both sides of a stream (see Top-of-bank).

Channel – An open drainage feature through which stormwater flows. Channels include, but shall not be limited to, natural and man-made watercourses, swales, streams, ditches, canals, and pipes that convey continuously or periodically flowing water.

Cistern – An underground reservoir or tank for storing rainwater.

Conservation District – The Montgomery County Conservation District (MCCD).

Culvert – A structure with its appurtenant works, which carries water under or through an embankment or fill.

Curve Number – Value used in the Soil Cover Complex Method. It is a measure of the percentage of precipitation which is expected to run off from the watershed and is a function of the soil, vegetative cover, and tillage method.

Dam – A man-made barrier, together with its appurtenant works, constructed for the purpose of impounding or storing water or another fluid or semifluid. A dam may include a refuse bank, fill or structure for highway, railroad or other purposes which impounds or may impound water or another fluid or semifluid.

Department – The Pennsylvania Department of Environmental Protection (PADEP).

Design Professional (Qualified) – A Pennsylvania Registered Professional Engineer, Registered Landscape Architect or Registered Professional Land Surveyor trained to develop stormwater management plans.

Design Storm – The magnitude and temporal distribution of precipitation from a storm event measured in probability of occurrence (e.g., a 5-year storm) and duration (e.g., 24-hours), used in the design and evaluation of stormwater management systems. See Return Period.

Detention Basin – An impoundment designed to collect and retard stormwater runoff by temporarily storing the runoff and releasing it at a predetermined rate. Detention basins are designed to drain completely soon after a rainfall event and become dry until the next rainfall event.

Detention Volume - The volume of runoff that is captured and released into the Waters of the Commonwealth at a controlled rate.

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Developer – Any landowner, agent of such landowner or tenant with the permission of such landowner who makes or causes to be made a subdivision of land or a land development or who seeks to undertake any regulated earth disturbance activity.

Development – Any human-induced change to improved or unimproved real estate, whether public or private, including but not limited to land development, construction, installation, or expansion of a building or other structure, land division, street construction, drilling, and site alteration such as embankments, dredging, grubbing, grading, paving, parking or storage facilities, excavation, filling, stockpiling, or clearing. As used in this ordinance, development encompasses both new development and redevelopment.

Development Site – The specific tract or parcel of land where any regulated activity set forth in 206-5 is planned, conducted or maintained.

Diffused Drainage Discharge – Drainage discharge that is not confined to a single point location or channel, including sheet flow or shallow concentrated flow.

Discharge – 1. (verb) To release water from a project, site, aquifer, drainage basin or other point of interest (verb); 2. (noun) The rate and volume of flow of water such as in a stream, generally expressed in cubic feet per second. See also Peak Discharge.

Discharge Point – The point of discharge for a stormwater facility.

Disconnected Impervious Area (DIA) – An impervious or impermeable surface that is disconnected from any stormwater drainage or conveyance system and is redirected or directed to a pervious area, which allows for infiltration, filtration, and increased time of concentration as specified in Appendix C, Disconnected Impervious Area.

Disturbed Areas – Unstabilized land area where an earth disturbance activity is occurring or has occurred.

Ditch – A man-made waterway constructed for irrigation or stormwater conveyance purposes.

Drainage Conveyance Facility – A stormwater management facility designed to transport stormwater runoff that includes channels, swales, pipes, conduits, culverts, and storm sewers.

Drainage Easement – A right granted by a landowner to a grantee, allowing the use of private land for stormwater management purposes.

Drainage Permit – A permit issued by the Township after the SWM Site Plan has been approved.

Earth Disturbance Activity – A construction or other human activity that disturbs the surface of land, including, but not limited to, clearing and grubbing, grading, excavations, embankments, land development, agricultural plowing or tilling, timber harvesting activities, road maintenance activities, mineral extraction, and the moving, depositing, stockpiling, or storing of soil, rock or earth materials.

Emergency Spillway – A conveyance area that is used to pass peak discharge greater than the maximum design storm controlled by the stormwater facility.

Encroachment – A structure or activity that changes, expands or diminishes the course, current or cross section of a watercourse, floodway or body of water.

Existing Resources and Site Analysis Map – A base map which identifies fundamental environmental site information including floodplains, wetlands, topography, vegetative site features, natural areas, prime agricultural land and areas supportive of endangered species.

Erosion – The process by which the surface of the land, including water/stream channels, is worn away by water, wind, or chemical action.

Erosion and Sediment Control Plan – A site-specific plan identifying BMPs to minimize accelerated erosion and sedimentation. For agricultural plowing or tilling activities, the Erosion and Sediment Control Plan is that portion of a conservation plan identifying BMPs to minimize accelerated erosion and sedimentation.

Exceptional Value Waters – Surface waters of high quality which satisfy Pennsylvania Code Title 25 Environmental Protection, Chapter 93, Water Quality Standards, §93.4b(b) (relating to antidegradation).

Existing Conditions – The initial condition of a project site prior to the proposed alteration.

Existing Recharge Area – Undisturbed surface area or depression where stormwater collects and a portion of which infiltrates and replenishes the groundwater.

Flood – A temporary condition of partial or complete inundation of land areas from the overflow of streams, rivers, and other waters of the Commonwealth.

Floodplain – Any land area susceptible to inundation by water from any natural source or as delineated by applicable Department of Housing and Urban Development, Federal Insurance Administration Flood Hazard Boundary Map as being a special flood hazard area. That area defined in the Township Zoning Ordinance as the Floodplain Conservation District; the floodplain definition contained therein is made part of this chapter by reference.

Floodway – The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

Forest Management/Timber Operations – Planning and associated activities necessary for the management of forestland. These include timber inventory and preparation of forest management plans, silvicultural treatment, cutting budgets, logging road design and construction, timber harvesting, and reforestation.

Freeboard – A vertical distance between the elevation of the design high-water and the top of a dam, levee, tank, basin, swale, or diversion berm. The space is required as a safety margin in a pond or basin.

Grade – 1. (noun) A slope, usually of a road, channel or natural ground specified in percent and shown on plans as specified herein. 2. (verb) To finish the surface of a roadbed, the top of an embankment, or the bottom of excavation.

Groundwater – Water beneath the earth's surface that supplies wells and springs, and is often between saturated soil and rock.

Groundwater Recharge – The replenishment of existing natural underground water supplies from rain or overland flow.

HEC-HMS – The U.S. Army Corps of Engineers, Hydrologic Engineering Center (HEC) - Hydrologic Modeling System (HMS). This model was used to model the Neshaminy Creek watershed during the Act 167 Plan development and was the basis for the Standards and Criteria of this Ordinance.

High Quality Waters – Surface waters having quality which exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water by satisfying Pennsylvania Code Title 25 Environmental Protection, Chapter 93 Water Quality Standards, § 93.4b(a).

Hot spot – An area where land use or activity generates highly contaminated runoff, with concentrations of pollutants in excess of those typically found in stormwater. Typical pollutant loadings in stormwater may be found in Chapter 8 Section 6 of the *Pennsylvania Stormwater Best Management Practices Manual, Pennsylvania Department of Environmental Protection (PADEP) no. 363-0300-002 (2006)*. More information concerning hot spots may be found in Section 206-18.A.

Hydrograph – A graph representing the discharge of water versus time for a selected point in the drainage system.

Hydrologic Regime – The hydrologic cycle or balance that sustains quality and quantity of stormwater, baseflow, storage, and groundwater supplies under natural conditions.

Hydrologic Soil Group – A classification of soils by the Natural Resources Conservation Service, formerly the Soil Conservation Service, into four runoff potential groups. The groups range from A soils, which are very permeable and produce little runoff, to D soils, which are not very permeable and produce much more runoff.

Impervious Material – Any materials that do not permit the natural absorption and permeation by soils of rain or other surface water, to include but not be limited to all concrete, asphalt, and similar paving products, earthen materials (brick, stone), chemical treatment of soils or artificial ground covers as may be used in the construction of roads, walks, driveways, parking areas, patios and recreation facilities.

Impervious Surface – A surface that prevents the infiltration of water into the ground. Impervious surfaces include, but are not limited to, streets, sidewalks, pavement roofs, or driveway areas. Any surface areas designed to be gravel or crushed stone shall be regarded as impervious surfaces.

Impoundment – A retention or detention basin designed to retain stormwater runoff and release it at a controlled rate.

Infill development – Development that occurs on smaller parcels that remain undeveloped but are within or very close proximity to urban or densely developed areas. Infill development usually relies on existing infrastructure and does not require an extension of water, sewer or other public utilities.

Infiltration – Movement of surface water into the soil, where it is absorbed by plant roots, evaporated into the atmosphere, or percolated downward to recharge groundwater.

Infiltration Structures – A structure designed to direct runoff into the underground water (e.g., French drains, seepage pits, or seepage trenches).

Initial Abstraction (I_a) – The value used to calculate the volume or peak rate of runoff in the soil cover complex method. It represents the depth of rain retained on vegetation plus the depth of rain stored on the soil surface plus the depth of rain infiltrated prior to the start of runoff.

Inlet – The upstream end of any structure through which water may flow.

Intermittent Stream – A stream that flows only part of the time. Flow generally occurs for several weeks or months in response to seasonal precipitation or groundwater discharge.

Karst – A type of topography or landscape characterized by surface depressions, sinkholes, rock pinnacles/uneven bedrock surface, underground drainage, and caves. Karst is formed on carbonate rocks, such as limestone or dolomite.

Land Development – Any of the following activities:

- a) The improvement of one lot or two or more contiguous lots, tracts, or parcels of land for any purpose involving:
 - (1) A group of two or more residential or nonresidential buildings, whether proposed initially or cumulatively, or a single nonresidential building on a lot or lots regardless of the number of occupants or tenure, or
 - (2) The division or allocation of land or space, whether initially or cumulatively, between or among two or more existing or prospective occupants by means of, or for the purpose of streets, common areas, leaseholds, condominiums, building groups, or other features;
- b) A subdivision of land;

c) Development in accordance with Section 503(1.1) of the PA Municipalities Planning Code.

Lot – A designated parcel, tract or area of land established by a plat or otherwise as permitted by law and to be used, developed or built upon as a unit.

Low Impact Development (LID) Practices – Practices that will minimize proposed conditions runoff rates and volumes, which will minimize needs for artificial conveyance and storage facilities.

Main Stem (Main Channel) – Any stream segment or other runoff conveyance used as a reach in the applicable watershed hydrologic model.

Manning Equation (Manning Formula) – A method for calculation of velocity of flow (e.g., feet per second) and flow rate (e.g., cubic feet per second) in open channels based upon channel shape, roughness, depth of flow and slope. “Open channels” may include closed conduits so long as the flow is not under pressure.

MCCD – The Montgomery County Conservation District.

Municipality – Montgomery Township, Montgomery County, Pennsylvania.

Natural Hydrologic Regime (see Hydrologic Regime).

Neshaminy Creek Watershed Act 167 Stormwater Management Plan – The watershed plan for managing those land use activities that will influence stormwater runoff quality and quantity and that would impact the Neshaminy Creek watershed adopted by Bucks and Montgomery Counties as required by the Act of October 4, 1978, P.L. 864 (Act 167).

Nonpoint Source Pollution – Pollution that enters a water body from diffuse origins in the watershed and does not result from discernible, confined, or discrete conveyances.

Nonstormwater Discharges – Water flowing in stormwater collection facilities, such as pipes or swales, which is not the result of a rainfall event or snowmelt.

NPDES – National Pollutant Discharge Elimination System, the federal government’s system for issuance of permits under the Clean Water Act, which is delegated to PADEP in Pennsylvania.

NRCS – Natural Resource Conservation Service (previously Soil Conservation Service).

Outfall – “Point source” as described in 40 CFR § 122.2 at the point where the Township’s storm sewer system discharges to surface Waters of the Commonwealth.

Outlet – Points of water disposal to a stream, river, lake, tidewater or artificial drain.

PADEP – The Pennsylvania Department of Environmental Protection.

Parent Tract – The parcel of land from which a land development or subdivision originates, determined from the date of Township adoption of this ordinance.

Peak Discharge – The maximum rate of stormwater runoff from a specific storm event.

Penn State Runoff Model (PSRM) – The computer-based hydrologic model developed at the Pennsylvania State University.

Perennial Stream – A stream which contains water at all times except during extreme drought.

Pipe – A culvert, closed conduit, or similar structure (including appurtenances) that conveys stormwater.

Planning Commission – The planning commission of Montgomery Township.

Point Source – Any discernible, confined and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, or conduit from which stormwater is or may be discharged, as defined in State regulations at 25 Pa. Code § 92.1.

Post Construction – Period after construction during which disturbed areas are stabilized, stormwater controls are in place and functioning and all proposed improvements in the approved land development plan are completed.

Predevelopment – (see Existing Condition)

Pretreatment – Techniques employed in stormwater BMPs to provide storage or filtering to trap coarse materials and other pollutants before they enter the system, but not necessarily designed to meet the volume requirements of Section 206-15.

Pervious Surface – A surface that allows the infiltration of water into the ground.

Project Site – The specific area of land where any Regulated Activities in the Township are planned, conducted or maintained.

Qualified Professional - Any person licensed by the Pennsylvania Department of State or otherwise qualified by law to perform the work required by the Ordinance.

Rational Method – A rainfall-runoff relation used to estimate peak flow.

Recharge – The replenishment of groundwater through the infiltration of rainfall, other surface waters, or land application of water or treated wastewater.

Record Drawings – Original documents revised to suit the as-built conditions and subsequently provided by the Engineer to the Client. The Engineer reviews the Contractor's as-built drawings against his/her own records for completeness, then either turns these over to the Client or transfers the information to a set of reproduces, in both cases for the Client's permanent records. Record drawings are not the same as record plans submitted for recording with the County in accordance with the PA Municipalities Planning Code (Act 247).

Redevelopment – Any development that requires demolition or removal of existing structures or impervious surfaces at a site and replacement with new impervious surfaces. Maintenance activities such as top-layer grinding and re-paving are not considered to be redevelopment. Interior remodeling projects and tenant improvements are also not considered to be redevelopment. Utility trenches in streets are not considered redevelopment unless more than 50 percent of the street width including shoulders is removed and re-paved.

Regulated Activities – Any earth disturbance activities or any activities that involve the alteration or development of land in a manner that may affect stormwater runoff.

Regulated Earth Disturbance Activity – Activity involving earth disturbance subject to regulation under 25 Pa. Code 92, 25 Pa. Code 102, or the Clean Streams Law.

Release Rate – The percentage of existing conditions peak rate of runoff from a site or subarea to which the proposed conditions peak rate of runoff must be reduced to protect downstream areas.

Repaving – Replacement of the impervious surface that does not involve reconstruction of an existing paved (impervious) surface.

Replacement Paving – Reconstruction of and full replacement of an existing paved (impervious) surface.

Retention Basin – A structure in which stormwater is stored and not released during the storm event. Retention basins are designed for infiltration purposes, and do not have an outlet. The retention basin must infiltrate stored water in 4 days or less.

Retention Volume/Removed Runoff – The volume of runoff that is captured and not released directly into the surface Waters of the Commonwealth during or after a storm event.

Return Period (or Average Recurrence Interval) – The average interval, in years, within which a storm event of a given or greater magnitude can be expected to recur. The reciprocal of the return period is the

annual exceedance probability of the storm event, that is, the probability that the storm event is equaled or exceeded in any one year period. For example, the 25-year return period rainfall would be expected to recur on the average of once every twenty-five (25) years, or conversely would have a 1/25 or four percent (4%) chance of occurrence or exceedance in any given year.

Road Maintenance – Earth disturbance activities within the existing road cross-section, such as grading and repairing existing unpaved road surfaces, cutting road banks, cleaning or clearing drainage ditches and other similar activities.

Roof Drains – A drainage conduit or pipe that collects water runoff from a roof and leads it away from the structure.

Runoff – Any part of precipitation, as well as any other flow contributions, that flows over the land surface.

SALDO – Subdivision and land development ordinance.

Sediment - Soils or other materials transported by water, air or gravity as a product of erosion.

Sediment Pollution – The placement, discharge or any other introduction of sediment into the Waters of the Commonwealth.

Sedimentation – The process by which mineral or organic matter is accumulated or deposited by the movement of water, air or gravity. Once this matter is deposited (or remains suspended), it is usually referred to as "sediment."

Seepage Pit/Seepage Trench – An area of excavated earth filled with loose stone or similar coarse material, into which surface water is directed for infiltration into the underground water. More information on Seepage Pits may be found in the PA BMP Manual, December 2006, Chapter 6, Section 4.

Separate Storm Sewer System – A conveyance or system of conveyances (including roads with drainage systems, Township streets, catch basins, curbs, gutters, ditches, man-made channels or storm drains) primarily used for collecting and conveying stormwater runoff.

Shallow Concentrated Flow – Stormwater runoff flowing in shallow, defined ruts prior to entering a defined channel or waterway.

Sheet Flow – A flow process associated with broad, shallow water movement on sloping ground surfaces that is not channelized or concentrated.

Soil Cover Complex Method – A method of runoff computation developed by the NRCS that is based on relating soil type and land use/cover to a runoff parameter called Curve Number (CN).

Source Water Protection Areas (SWPA) – The zone through which contaminants, if present, are likely to migrate and reach a drinking water well or surface water intake.

Special Protection Subwatersheds – Watersheds that have been designated in Pennsylvania Code Title 25 Environmental Protection, Chapter 93 Water Quality Standards as exceptional value (EV) or high quality (HQ) waters.

Spillway – A conveyance that is used to pass the peak discharge of the maximum design storm that is controlled by the stormwater facility.

State Water Quality Requirements – The regulatory requirements to protect, maintain, reclaim, and restore water quality under Title 25 of the Pennsylvania Code and the Clean Streams Law.

Storm Frequency – The number of times that a given storm "event" occurs or is exceeded on the average in a stated period of years. See "Return Period".

STORMWATER MANAGEMENT

Storm Sewer – A system of pipes and/or open channels that convey intercepted runoff and stormwater from other sources, but excludes domestic sewage and industrial wastes.

Stormwater – The surface runoff generated by precipitation reaching the ground surface.

Stormwater Management Best Management Practices – Is abbreviated as **BMPs** or **SWM BMPs** throughout this Ordinance.

Stormwater Management Facility – Any structure, natural or man-made, that, due to its condition, design, or construction, conveys, stores, or otherwise affects stormwater runoff quality, rate or quantity. Typical stormwater management facilities include, but are not limited to, detention and retention basins, open channels, storm sewers, pipes, and infiltration structures.

Stormwater Management Plan – The watershed plan or plans for managing those land use activities that will influence stormwater runoff quality and quantity and that would impact the watershed adopted Montgomery County as required by the Act of October 4, 1978, P.L. 864 (Act 167).

Stormwater SWM Site Plan – The plan prepared by the Applicant or his representative indicating how stormwater runoff will be managed at the particular site of interest according to this ordinance.

Stream – A flow of water in a natural channel or bed, as a brook, rivulet, or a small river.

Stream Buffer – The land area adjacent to each side of a stream, essential to maintaining water quality. (See Buffer)

Stream Enclosure – A bridge, culvert, or other structure in excess of 100 feet in length upstream to downstream which encloses a regulated water of the Commonwealth.

Streambank Erosion – The widening, deepening, or headward cutting of channels and waterways, caused by stormwater runoff or bankfull flows.

Subarea (Subwatershed) – The smallest drainage unit of a watershed for which stormwater management criteria have been established in the Stormwater Management Plan.

Subdivision – The division or redivision of a lot, tract, or parcel of land by any means into two or more lots, tracts, parcels, or other divisions of land including changes in existing lot lines for the purpose, whether immediate or future, of lease, partition by the court for distribution to heirs or devisees, transfer of ownership, or building or lot development, provided the subdivision by lease of land for agricultural purposes into parcels of more than ten acres, not involving any new street or easement of access or any residential dwelling, shall be exempted. Refer to Land Development

Surface Waters of the Commonwealth – Any and all rivers, streams, creeks, rivulets, ditches, watercourses, storm sewers, lakes, dammed water, wetlands, ponds, springs, and all other bodies or channels of conveyance of surface waters, or parts thereof, whether natural or artificial, within or on the boundaries of the Commonwealth.

Swale – A low lying stretch of land that gathers or carries surface water runoff.

SWM Site Plan – The documentation of the stormwater management system to be used for a given development site, the contents of which are established in Section 206-20.

Timber Operations – See Forest Management.

Time-of-Concentration (Tc) – The time required for surface runoff to travel from the hydraulically most distant point of the watershed to a point of interest within the watershed. This time is the combined total of overland flow time and flow time in pipes or channels, if any.

Top-of-Bank – Highest point of elevation in a stream channel cross-section at which a rising water level just begins to flow out of the channel and over the floodplain.

STORMWATER MANAGEMENT

Township – Montgomery Township, Montgomery County, Pennsylvania.

Township Engineer – A professional engineer licensed as such in the Commonwealth of Pennsylvania, duly appointed as the engineer for Montgomery Township.

Vegetated swale – A natural or man-made waterway, usually broad and shallow, covered with erosion-resistant grasses, used to convey surface water.

Vernal Pool – Seasonal depressional wetlands that are covered by shallow water for variable periods from winter to spring, but may be completely dry for most of the summer and fall.

Watercourse – A channel or conveyance of surface water having a defined bed and banks, whether natural or artificial, with perennial or intermittent flow.

Waters of the Commonwealth – Any and all rivers, streams, creeks, rivulets, ditches, watercourses, storm sewers, lakes, dammed water, wetlands, ponds, springs, and all other bodies or channels of conveyance of surface and underground water, or parts thereof, whether natural or artificial, within or on the boundaries of the Commonwealth.

Watershed – Region or area drained by a river, watercourse, or other body of water, whether natural or artificial.

Wet Basin – Pond for urban runoff management that is designed to detain urban runoff and always contains water.

Wetland – Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, fens, and similar areas.

ARTICLE III Stormwater Management

§206-13. General Requirements

- A. Applicants proposing Regulated Activities in Township that do not fall under the exemption criteria shown in Section 206-6 shall submit a Stormwater Management (SWM) Site Plan consistent with the Watershed SWM Plan to the Township for review. The SWM criteria of this Ordinance shall apply to the total proposed development even if development is to take place in stages. Preparation and implementation of an approved SWM Site Plan is required. No Regulated Activities shall commence until the Township issues written approval of a SWM Site Plan, which demonstrates compliance with the requirements of this Ordinance.
- B. SWM Site Plans approved by the Township, in accordance with Article IV, shall be on-site throughout the duration of the Regulated Activity.
- C. The Township may, after consultation with the Department of Environmental Protection (PADEP), approve measures for meeting the state water quality requirements other than those in this Ordinance, provided that they meet the minimum requirements of, and do not conflict with, state law including but not limited to the Clean Streams Law.
- D. For all regulated earth disturbance activities, Erosion and Sediment (E&S) Control Best Management Practices (BMPs) shall be designed, implemented, operated, and maintained during the Regulated Earth Disturbance Activities (e.g., during construction) to meet the purposes and requirements of this Ordinance and to meet all requirements under Title 25 of the Pennsylvania Code and the Clean Streams Law. Various BMPs and their design standards are listed in the Erosion and Sediment Pollution Control Program Manual, No. 363-2134-008 (April 15, 2000), as amended and updated.
- E. For all Regulated Activities, implementation of the volume controls in Section 206-15 is required.
- F. Impervious areas:
 - (1) The measurement of impervious areas shall include all of the impervious areas in the total proposed development even if development is to take place in stages.
 - (2) For development taking place in stages, the entire development plan must be used in determining conformance with this Ordinance.
 - (3) For projects that add impervious area to a parcel, the total impervious area on the parcel is subject to the requirements of this Ordinance.
- G. Stormwater flows onto adjacent property shall not be created, increased, decreased, relocated, or otherwise altered without written notification of the adjacent property owner(s) from the developer. Such stormwater flows shall be subject to the requirements of this Ordinance.
- H. All Regulated Activities shall include such measures as necessary to:
 - (1) Protect health, safety, and property;
 - (2) Meet the water quality goals of this Ordinance by implementing measures to:
 - (a) Minimize disturbance to floodplains, wetlands, and wooded areas.
 - (b) Create, maintain, repair or extend riparian buffers.
 - (c) Avoid erosive flow conditions in natural flow pathways.
 - (d) Minimize thermal impacts to waters of this Commonwealth.

- (e) Disconnect impervious surfaces (i.e. Disconnected Impervious Areas, DIAs) by directing runoff to pervious areas, wherever possible. See Appendix C for detail on DIAs.
- (3) To the maximum extent practicable, incorporate the techniques for Low Impact Development Practices (e.g. protecting existing trees, reducing area of impervious surface, cluster development, and protecting open space) described in the *Pennsylvania Stormwater Best Management Practices Manual*, Pennsylvania Department of Environmental Protection (PADEP) no. 363-0300-002 (2006). See Appendix B for a summary description.
- I. Infiltration BMPs should be spread out, made as shallow as practicable, and located to maximize the use of natural on-site infiltration features while still meeting the other requirements of this Ordinance.
- J. The design of all facilities over karst shall include an evaluation of measures to minimize the risk of adverse effects.
- K. Storage facilities should completely drain both the volume control and rate control capacities over a period of time not less than 24 and not more than 72 hours from the end of the design storm.
- L. The design storms to be used in the analysis of peak rates of discharge are listed in Table A-1.
- M. For all regulated activities, SWM BMPs shall be designed, implemented, operated, and maintained to meet the purposes and requirements of this Ordinance and to meet all requirements under Title 25 of the Pennsylvania Code, the Clean Streams Law, and the Storm Water Management Act.
- N. Various BMPs and their design standards are listed in the *Pennsylvania Stormwater Best Management Practices Manual* (PA BMP Manual).

§206-14. Permit Requirements by Other Governmental Entities

Approvals issued and actions taken under this Ordinance do not relieve the Applicant of the responsibility to secure required permits or approvals for activities regulated by any other code, law, regulation or ordinance.

§206-15. Erosion and Sediment Pollution Control

- A. Must comply with Title 25, Chapter 102 of the PA Code and any other applicable state, county and Township codes. PADEP requires an engineered post-construction SWM Plan with projects proposing earth disturbance greater than 1 acre.
- B. Evidence of any necessary permit(s) for regulated earth disturbance activities from the appropriate DEP regional office or County Conservation District must be provided to the Township.
- C. Approval of earth disturbance activities is required by the Township per Table 206-6.2.
- D. Additional erosion and sediment control design standards and criteria are recommended to be applied where infiltration BMPs are proposed. They shall include the following:
 - (1) Areas proposed for infiltration BMPs shall be protected from sedimentation and compaction during the construction phase to maintain maximum infiltration capacity.
 - (2) Infiltration BMPs shall not be constructed nor receive runoff until the entire drainage area contributory to the infiltration BMP has achieved final stabilization.

§206-16. Volume Control

Volume controls will mitigate increased runoff impacts, protect stream channel morphology, maintain groundwater recharge, and contribute to water quality improvements. Stormwater runoff volume control methods are based on the net change in runoff volume for the two-year storm event.

Volume controls shall be implemented using the Design Storm Method in subsection A or the Simplified Method in subsection B below. For Regulated Activities equal to or less than one (1) acre, this Ordinance establishes no preference for either methodology; therefore, the applicant may select either methodology on the basis of economic considerations, the intrinsic limitations of the procedures associated with each methodology, and other factors. All regulated activities greater than one (1) acre must use the Design Storm Method.

A. Design-Storm Method (Any Regulated Activity): This method requires detailed modeling based on site conditions. For modeling assumptions refer to Section 206-18.A.

- (1) Post-development total runoff should not be increased from pre-development total runoff for all storms equal to or less than the 2-year 24-hour duration precipitation.
- (2) The following applies in order to estimate the increased volume of runoff for the 2-year 24-hour duration precipitation event:

To calculate the runoff volume (cubic feet) for existing site conditions (pre-development) and for the proposed developed site conditions (post-development), it is recommended to use the soil cover complex method as shown on the following page. Table A-3 in Appendix A is available to guide a qualified professional and/or an applicant to calculate the stormwater runoff volume. The calculated volume shall be either reused, evapotranspired, or infiltrated through structural or nonstructural means.

Soil Cover Complex Method:

$$\text{Step 1: Runoff (in)} = Q = (P - 0.2S)^2 / (P + 0.8S)$$

where

P = 2-year Rainfall (in)

S = the potential maximum retention (including initial abstraction, Ia)

$$S = (1000 / CN) - 10$$

$$\text{Step 2: Runoff Volume (Cubic Feet)} = Q \times \text{Area} \times 1/12$$

where

Q = Runoff (in)

Area = SWM Area (sq ft)

B. Simplified Method (Regulated activities less than or equal to 1 acre):

- (1) Stormwater facilities shall capture the runoff volume from at least the first two inches (2") of runoff from all new impervious surfaces.

$$\text{Volume (cubic feet)} = (2'' \text{ runoff} / 12 \text{ inches}) * \text{impervious surface (sq ft)}$$

- (2) At least the first inch (1") of runoff volume from the new impervious surfaces shall be permanently removed from the runoff flow—i.e., it shall not be released into the surface waters of the Commonwealth. The calculated volume shall be either reused, evapotranspired or infiltrated through structural or nonstructural means.

$$\text{Volume (cubic feet)} = (1'' \text{ runoff} / 12 \text{ inches}) * \text{impervious surface (sq ft)}$$

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- (3) Infiltration facilities should be designed to accommodate the first half inch (0.5") of the permanently removed runoff.
- (4) No more than one inch (1") of runoff volume from impervious surfaces shall be released from the site. The release time must be over 24 to 72 hours.

C. Stormwater Control Measures:

The applicant must demonstrate how the required volume is controlled through Stormwater Best Management Practices (BMPs) which shall provide the means necessary to capture, reuse, evaporate, transpire or infiltrate the total runoff volume.

- (1) If natural resources exist on the site and a SWM Site Plan submission is required for the regulated activity, the applicant shall determine and display the total acreage of protected area where no disturbance is proposed on the plan. The acreage of the protected area should be subtracted from the total site area and not included in the stormwater management site area acreage used in determining the volume controls.

Stormwater Management Site Area =

{Total Site Area (for both pre and post development conditions) – Protected Area}

Natural Resource Areas should be calculated based upon the Township's own natural resource protection ordinance. If no ordinance exists, see Table A-2 in Appendix A for guidance to assess the total protected area. For additional reference see Chapter 5 Section 5.4.1 of the PA BMP manual.

- (2) Calculate the volume controls provided through nonstructural BMPs. Table A-5 in Appendix A is recommended as guidance.
- (3) Volume controls provided through nonstructural BMPs should be subtracted from the required volume to determine the necessary structural BMPs.

$$\begin{array}{rcccl} \text{Required Volume} & & \text{Nonstructural} & & \text{Structural} \\ \text{Control (ft}^3\text{)} & - & \text{Volume} & = & \text{Volume} \\ & & \text{Control (ft}^3\text{)} & & \text{Requirement (ft}^3\text{)} \end{array}$$

- (4) Calculate the volume controls provided through structural BMPs. Table A-6 in Appendix A is recommended as guidance. See PA BMP manual Chapter 6 for description of the BMPs.
- (5) Infiltration BMPs intended to receive runoff from developed areas shall be selected based on the suitability of soils and site conditions (see Table A-6 in Appendix A for a list of Infiltration BMPs). Infiltration BMPs shall be constructed on soils that have the following characteristics:
 - (a) A minimum soil depth of twenty-four inches (24") between the bottom of the infiltration BMPs and the top of bedrock or seasonally high water table.
 - (b) An infiltration rate sufficient to accept the additional stormwater load and dewater completely as determined by field tests. A minimum of 0.2 inches/hour (in/hr) should be utilized and for acceptable rates a safety factor of 50% should be applied for design purposes (e.g., for soil which measured 0.4 in/hr, the BMP design should use 0.2 in/hr to insure safe infiltration rates after construction).
 - (c) All open-air infiltration facilities shall be designed to completely infiltrate runoff volume within three (3) days (72 hours) from the start of the design storm.
- (6) Soils – A soils evaluation of the project site shall be required to determine the suitability of infiltration facilities. All regulated activities are required to perform a detailed soils evaluation by

a qualified design professional which at minimum address' soil permeability, depth to bedrock, and subgrade stability. The general process for designing the infiltration BMP shall be:

- (a) Analyze hydrologic soil groups as well as natural and man-made features within the site to determine general areas of suitability for infiltration practices. In areas where development on fill material is under consideration, conduct geotechnical investigations of sub-grade stability; infiltration may not be ruled out without conducting these tests.
- (b) Provide field tests such as double ring infiltrometer or hydraulic conductivity tests (at the level of the proposed infiltration surface) to determine the appropriate hydraulic conductivity rate. Percolation tests are not recommended for design purposes.
- (c) Design the infiltration structure based on field determined capacity at the level of the proposed infiltration surface and based on the safety factor of 50%.
- (d) If on-lot infiltration structures are proposed, it must be demonstrated to the Township that the soils are conducive to infiltrate on the lots identified.
- (e) An impermeable liner will be required in detention basins where the possibility of groundwater contamination exists. A detailed hydrogeologic investigation may be required by the Township.

§206-17. Stormwater Peak Rate Control and Management Districts

- A. District Boundaries – For the purposes of this Chapter the Township is divided in Stormwater Management Districts as listed in Table 206-17.1. The boundaries of the Stormwater Management Districts are shown on official maps attached to and made part of this Chapter, which shall be designated “Stormwater Management District Map.” The exact location of the Stormwater Management District boundaries as they apply to a given development site shall be determined by mapping the boundaries using the two-foot topographic contours (or most accurate data required) provided as part of the SWM Site Plan.
- B. General – Proposed conditions rates of runoff from any Regulated Activity shall not exceed the peak release rates of runoff from existing conditions for the design storms specified on the Stormwater Management District Watershed Map and in this section of the Ordinance.
- C. Standards for managing runoff from each subarea in the Watershed for the 2-, 5-, 10-, 25-, 50-, and 100-year design storms are shown in Table 206-17.1. Development sites located in each of the management districts must control proposed development conditions runoff rates to existing conditions runoff rates for the design storms in accordance with Table 206-17.1 on the following page.

Table 206-17.1: Peak Rate Runoff Control Standards by Stormwater Management Districts

District	Design Storm Postdevelopment (Proposed Conditions)	Design Storm Predevelopment (Existing Conditions)
Neshaminy A	2-year	1-year
	5-year	5-year
	10-year	10-year
	25-year	25-year
	50-year	50-year
	100-year	100-year

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Neshaminy B	2-year	1-year
	5-year	2-year
	10-year	5-year
	25- year	10-year
	50-year	25-year
	100-year	50-year
Neshaminy C	2-year	2-year
	5-year	5-year
	10-year	10-year
	25- year	25- year
	50-year	50-year
	100-year	100-year
Wissahickon	2-year	2-year
	5-year	5-year
	10-year	2-year
	25- year	25- year
	50-year	10-year
	100-year	100-year

NOTE:

The Neshaminy Creek Watershed includes the Little Neshaminy Creek.

- D. Sites Located in More Than One District – For a proposed development site located within two or more stormwater management district category subareas, the peak discharge rate from any subarea shall meet the Management District Criteria for the district in which the discharge is located.
- E. Off-Site Areas – When calculating the allowable peak runoff rates, developers do not have to account for runoff draining into the subject development site from an off-site area. On-site drainage facilities shall be designed to safely convey off-site flows through the development site.
- F. Site Areas – The stormwater management site area is the only area subject to the management district criteria. Non-impacted areas or non-regulated activities bypassing the stormwater management facilities would not be subject to the management district criteria.
- G. Alternate Criteria for Redevelopment Sites – For redevelopment sites, one of the following minimum design parameters shall be accomplished, whichever is most appropriate for the given site conditions as determined by the Township:
 - (1) Meet the full requirements specified by Table 206-17.1 and Sections 206-18.A through 206-18.F or
 - (2) Reduce the total impervious surface on the site by at least twenty (20) percent based upon a comparison of existing impervious surface to proposed impervious surface.
- H. Areas covered by a release rate map from an alternative approved Act 167 Stormwater Management Plan

For the 1-, 2-, 5-, 10-, 25-, 50-, and 100-year storms, the postdevelopment peak discharge rates will follow the applicable approved release rate maps. For any areas not shown on the release rate maps, the postdevelopment discharge rates shall not exceed the predevelopment discharge rates.

§206-18. Calculation Methodology

A. The following criteria shall be used for runoff calculations:

- (1) For development sites not considered redevelopment, the ground cover used to determine the existing conditions runoff volume and flow rate shall be as follows:
 - (a) Wooded sites shall use a ground cover of “woods in good condition.” A site is classified as wooded if a continuous canopy of trees exists over a ¼ acre.
 - (b) The undeveloped portion of the site including agriculture, bare earth, and fallow ground shall be considered as “meadow in good condition,” unless the natural ground cover generates a lower curve number (CN) or Rational “c” value (i.e., woods) as listed in Tables A-4 or A-7 in Appendix A.
- (2) For development and redevelopment sites, the ground cover used to determine the existing conditions runoff volume and flow rate for the developed portion of the site shall be based upon actual land cover conditions. If the developed site contains impervious surfaces, 20 percent of the impervious surface area shall be considered meadow in the model for existing conditions.

B. Stormwater runoff peak discharges from all development sites with a drainage area equal to or greater than 2 acres shall be calculated using a generally accepted calculation technique that is based on the NRCS Soil Cover Complex Method. Table 206-18.1 summarizes acceptable computation methods. The method selected by the design professional shall be based on the individual limitations and suitability of each method for a particular site. The Township may allow the use of the Rational Method ($Q=CIA$) to estimate peak discharges from drainage areas that contain less than 2 acres.

Q = Peak flow rate, cubic feet per second (CFS)

C = Runoff coefficient, dependent on land use/cover

I = Design rainfall intensity, inches per hour

A = Drainage Area, acres.

C. All calculations consistent with this ordinance using the Soil Cover Complex Method shall use the appropriate design rainfall depths for the various return period storms according to Table A-1 in Appendix A. If a hydrologic computer model such as PSRM or HEC-1 / HEC-HMS is used for stormwater runoff calculations, then the duration of rainfall shall be 24 hours.

Table 206-18.1: Acceptable Computation Methodologies For Stormwater Management Plans

METHOD	METHOD DEVELOPED BY	APPLICABILITY
TR-20 (or commercial computer package based on TR-20)	USDA NRCS	Applicable where use of full hydrology computer model is desirable or necessary.
TR-55 (or commercial computer package based on TR-55)	USDA NRCS	Applicable for land development plans within limitations described in TR-55.
HEC-1 / HEC-HMS	U.S. Army Corps of Engineers	Applicable where use of full hydrology computer model is desirable or necessary.
PSRM	Penn State University	Applicable where use of full hydrology computer model is desirable or necessary; simpler than TR-20 or HEC-1.

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Rational Method (or commercial computer package based on the Rational Method)	Emil Kuichling (1889)	For sites less than 2 acres, or as approved by the Township and/or Township Engineer.
Other Methods	Varies	Other computation methodologies approved by the Township and/or Township Engineer

- D. All calculations using the Rational Method shall use rainfall intensities consistent with appropriate times-of-concentration for overland flow and return periods from Table A-1 in Appendix A. Times-of-concentration for overland flow shall be calculated using the methodology presented in Chapter 3 of *Urban Hydrology for Small Watersheds*, NRCS, TR-55 (as amended or replaced from time to time by NRCS). Times-of-concentration for channel and pipe flow shall be computed using Manning's equation.
- E. Runoff Curve Numbers (CN) for both existing and proposed conditions to be used in the soil cover complex method shall be based on Table A-4 in Appendix A.
- F. Runoff coefficients (C) for both existing and proposed conditions for use in the Rational Method shall be consistent with Table A-7 in Appendix A.
- G. Runoff from proposed sites graded to the subsoil will not have the same runoff conditions as the site under existing conditions because of soil compaction, even after top-soiling or seeding. The proposed condition "CN" or "C" shall increase by 5% to better reflect proposed soil conditions.
- H. The Manning equation is preferred for one-dimensional, gradually-varied, open channel flow. In other cases, appropriate, applicable methods should be applied, however, early coordination with the Township is necessary.
- I. Outlet structures for stormwater management facilities shall be designed to meet the performance standards of this Ordinance using the generally accepted hydraulic analysis technique or method of the Township.
- J. The design of any stormwater detention facilities intended to meet the performance standards of this Ordinance shall be verified by routing the design storm hydrograph through these facilities using the Storage-Indication Method. For drainage areas greater than 2 acres in size, the design storm hydrograph shall be computed using a calculation method that produces a full hydrograph. The Township may approve the use of any generally accepted full hydrograph approximation technique that shall use a total runoff volume that is consistent with the volume from a method that produces a full hydrograph.

§206-19. Other Requirements

A. Hot Spots

- (1) The use of infiltration BMPs is prohibited on hot spot land use areas. Examples of hot spots are listed in Appendix D.
- (2) Stormwater runoff from hot spot land uses shall be pretreated. In no case may the same BMP be employed consecutively to meet this requirement. Guidance regarding acceptable methods of pre-treatment is located in Appendix D.

B. West Nile Guidance Requirements

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All wet basin designs shall incorporate biologic controls consistent with the West Nile Guidance found in Appendix E.

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ARTICLE IV Stormwater Management (SWM) Site Plan Requirements

§206-20. General Requirements

For any of the activities regulated by this Ordinance, the preliminary or final approval of subdivision and/or land development plans, the issuance of any building or occupancy permit, the commencement of any earth disturbance, or activity may not proceed until the Property Owner or Applicant or his/her agent has received written approval of a SWM Site Plan from the Township and an approval of an adequate Erosion and Sediment (E&S) Control Plan review from the Township or County Conservation District.

§206-21. SWM Site Plan Requirements

The SWM Site Plan shall consist of a general description of the project, including calculations, maps, and plans. A note on the maps shall refer to the associated computations and E&S Control Plan by title and date. The cover sheet of the computations and E&S Control Plan shall refer to the associated maps by title and date. All SWM Site Plan materials shall be submitted to the Township in a format that is clear, concise, legible, neat, and well organized; otherwise, the SWM Site Plan shall not be accepted for review and shall be returned to the Applicant.

The following items shall be included in the SWM Site Plan:

A. General

- (1) General description of the project including plan contents described in Section 206-21.B.
- (2) General description of proposed SWM techniques to be used for SWM facilities.
- (3) Complete hydrologic and hydraulic computations for all SWM facilities.
- (4) All reviews and letters of adequacy from the Conservation District for the Erosion & Sedimentation Plan as required by Township, county or state regulations.
- (5) A general description of proposed nonpoint source pollution controls.
- (6) The SWM Site Plan Application and completed fee schedule form and associated fee *for all regulated activities not already paying pay fees by under the SALDO regulations.*
- (7) The SWM Site Plan Checklist
- (8) Appropriate sections from the Township's Subdivision and Land Development Ordinance, and other applicable local ordinances, shall be followed in preparing the SWM Site Plan.

B. Plans: SWM Site Plan shall provide the following information;

- (1) The overall stormwater management concept for the project.
- (2) A determination of natural site conditions and stormwater management needs. This shall include, but not be limited to:
 - (a) Site Features:
 - [1] The location of the project relative to highways, Township boundaries or other identifiable landmarks.
 - [2] The locations of all existing and proposed utilities, sanitary sewers, and water lines on site and to within fifty (50) feet of property lines.
 - [3] Proposed structures, roads, paved areas, and buildings.

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- [4] The total tract boundary and size with distances marked to the nearest foot and bearings to the nearest degree.
- [5] Plan and profile drawings of all SWM BMP's, including drainage structures, pipes, open channels, and swales. At a minimum this should include pre- and post-drainage area maps, an overall post construction stormwater management plan, stormwater details sheets, and landscape plans (if proposing bio-retention facilities, low impact development, bioretention, or vegetative basins).
- [6] The locations and minimum setback distances of existing and proposed on-lot wastewater facilities and water supply wells.
- [7] The location of all erosion and sediment control facilities.
- [8] The location of proposed septic tank infiltration areas and wells in cases where groundwater recharge measures such as seepage pits, beds or trenches are proposed.

(b) Natural Site Conditions:

- [1] An Existing Resource and Site Analysis Map (ERSAM) showing environmentally sensitive areas including, but not limited to;
 - steep slopes,
 - ponds,
 - lakes,
 - streams,
 - wetlands,
 - hydric soils,
 - hydrologic soil groups A and B,
 - vernal pools,
 - stream buffers,
 - open channels,
 - existing recharge areas, and
 - floodplains.

The area of each of these sensitive areas shall be calculated and should be consistent with the runoff volume calculation Section 206-16.C.1.

- [2] A detailed site evaluation for projects proposed in areas of frequent flooding, karst topography, and other environmentally sensitive areas, such as brownfields and source water protection areas.
- [3] Existing and proposed contour lines (2 ft).
- [4] The total extent of the drainage area upstream from the site and all down gradient receiving channels, swales and waters to which stormwater runoff or drainage will be discharged.

(c) Stormwater runoff design computations and documentation as specified in this Ordinance, or as otherwise necessary to demonstrate that the maximum practicable measures have been taken to meet the requirements of this Ordinance, including the recommendations and general requirements in Section 206-13.

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- (d) The effect of the project (in terms of runoff volumes, water quality, and peak flows) on surrounding properties and aquatic features and on any existing stormwater conveyance system that may be affected by the project.
- (3) The format of the Plan shall include the following:
 - (a) The expected project time schedule.
 - (b) The name of the development, the name and address of the owner of the property, and the name of the individual or firm preparing the plan.
 - (c) The date of submission.
 - (d) A graphic and written scale of one (1) inch equals no more than fifty (50) feet; for tracts of twenty (20) acres or more, the scale shall be one (1) inch equals no more than one hundred (100) feet.
 - (e) A north arrow.
 - (f) An access easement around all stormwater management facilities is required that would provide ingress to and egress from a public right-of-way. The size of the easement shall commensurate with the maintenance and access requirements determined in the design of the BMP.
 - (g) A key map showing all existing man-made features beyond the property boundary that would be affected by the project.
 - (h) A note on the plan indicating the location and responsibility for maintenance of stormwater management facilities. All facilities shall meet the performance standards and design criteria specified in this ordinance.
 - (i) The following signature block for the Design Engineer: "I, (Design Engineer), on this date (date of signature), hereby certify that the SWM Site Plan meets all design standards and criteria of Montgomery Township Stormwater Management Ordinance or Plan."
 - (j) A statement, signed by the Applicant, acknowledging that any revision to the approved SWM Site Plan must be approved by the Township and that a revised E&S Plan must be submitted to the Conservation District.
- (4) A soil erosion and sediment control plan, where applicable, as prepared for and submitted to the approval authority.
- (5) The SWM Site Plan shall include an Operations & Maintenance (O&M) Plan for all existing and proposed physical stormwater management facilities, as well as schedules and costs for O&M activities. This plan shall address long-term ownership and responsibilities for O&M.

§206-22. Plan Submission

The Township requires submission of a complete SWM Site Plan, as specified in this Ordinance.

- A. Proof of application or documentation of required permit(s) or approvals for the programs listed below shall be part of the plan:
 - (1) NPDES Permit for Stormwater Discharges from Construction Activities.
 - (2) Any other permit under applicable state or federal regulations.
- B. The SWM Site Plan shall be submitted to the following agencies. Refer to the Township Application for the number of copies.

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- (1) the Township accompanied by the requisite Township review fee.
- (2) the County Conservation District.
- (3) the Township Engineer (where applicable).
- C. When the SWM Site Plan is associated with a subdivision and/or land development; the submission requirements of the Township Subdivision and Land Development Ordinance shall be followed.
- D. Any submissions to the agencies listed above that are found to be incomplete shall not be accepted for review and shall be returned to the Applicant with a notification in writing of the specific manner in which the submission is incomplete.
- E. Additional copies shall be submitted as requested by the Township or PADEP.

§206-23. Small Project Stormwater Management Site Plan

- A. Residential projects proposing less than or equal to 5,000 square feet of impervious surface and less than 1 acre of earth disturbance qualify as a small project. The requirements of a Small Project Stormwater Management Plan are presented in Appendix F.
- B. Fee-In-Lieu Of Alternative for Small Projects:
 - (1) In order to address flooding and erosion problems found in the Township, applicants proposing a small project, as defined in the Montgomery Township Stormwater Management Ordinance, may pay a fee-in-lieu of stormwater conveyance/detention/storage facilities as an alternative to the construction of stormwater conveyance/detention/storage facilities, with the approval of the Board of Supervisors. When fees are offered by an applicant, the Township may, but shall not be required to, accept the fees, provided that the proposed stormwater solution meets the requirements in the Township Stormwater Management Ordinance.
 - (2) These fees shall be used to construct or make improvements to stormwater facilities that are either Township-owned or have a perpetual easement or deed restriction that would ensure access, and that are located in the Township within the same watershed as the project paying the fee. Additionally, such fees may be used for the acquisition of land and rights-of-way, engineering, legal and planning costs and all other costs, including debt service, related to the construction or improvement of necessary stormwater control facilities.
 - (a) Applicability
 - [1] In order to ensure that water quality protection and stormwater management is provided during and after the construction of the proposed activity, the FILO alternative shall be available where the following conditions apply:
 - (a) The proposed activity is located in a residential zoning district.
 - (b) The project site is located in a watershed for which an Act 167 stormwater management plan has been prepared by the county and approved by PADEP.
 - [2] In addition to the criteria in [1](a), the project site must meet at least one of the following two criteria:
 - (a) The project site is located in a subdivision that is served by storm sewers discharging to a stormwater basin or other stormwater management facility which infiltrates, evaporates or detains stormwater for a period of time prior to discharge, or
 - (b) The following conditions exist on the site, in the opinion of the Township Engineer:

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- (i) The surface conditions on the site will encourage overland sheet flow of stormwater, as opposed to concentrated flow, and
- (ii) The project site is located at a sufficient distance from the receiving stream such that runoff from the project will be filtered by vegetation and given opportunity to infiltrate as it flows across the land to the stream.

(b) Fees:

[1] Applicants shall pay the following fees-in-lieu of stormwater facilities:

- (a) Fees-in-lieu of stormwater detention/storage facilities on a single-family dwelling lot shall be based on the cubic feet of required storage capacity generated by the entire area of the proposed impervious surface, when that area is greater than 1,000 square feet and less than 5,000 square feet, in accordance with the Township Stormwater Management Ordinance. Such fee shall be established and updated periodically by resolution of the Board of Supervisors and shall be based on an average cost of providing stormwater control facilities per cubic foot of storage capacity.
- (b) Fees collected by the Township shall be deposited in an interest-bearing account in a bank authorized to receive deposits of Township funds. Interest earned by the account shall be credited to that account and shall be used for the same purposes as money deposited in the account.
- (c) Fee-in-lieu payments shall be collected when the land development agreement is finalized or, if no land development agreement is required, before final permits are issued.

(c) Fee-in-lieu credit:

[1] Each cubic foot of stormwater storage capacity compensated by a fee-in-lieu payment shall be credited as the actual construction of this stormwater storage when sites are proposed for development in the future.

§206-24. Stormwater Management Site Plan Review

- A. The Stormwater Management (SWM) Site Plan shall be reviewed by a Qualified Professional on behalf of the Township for consistency with the provisions of this Ordinance. After review, the Qualified Professional shall provide a written recommendation for the Township to approve or disapprove the SWM Site Plan. If it is recommended to disapprove the SWM Site Plan, the Qualified Professional shall state the reasons for the disapproval in writing. The Qualified Professional also may recommend approval of the SWM Site Plan with conditions and, if so, shall provide the acceptable conditions for approval in writing. The SWM Site Plan review and recommendations shall be completed within the time allowed by the Municipalities Planning Code for reviewing subdivision plans.
- B. The Township will notify the applicant in writing within 45 days whether the SWM Site Plan is approved or disapproved. If the SWM Site Plan involves a Subdivision and Land Development Plan, the notification period is 90 days. If a longer notification period is provided by other statute, regulation, or ordinance, the applicant will be so notified by the Township. If the Township disapproves the SWM Site Plan, the Township shall cite the reasons for disapproval in writing.

§206-25. Modification of Plans

A modification to a submitted SWM Site Plan that involves a change in SWM BMPs or techniques, or that involves the relocation or redesign of SWM BMPs, or that is necessary because soil or other

conditions are not as stated on the SWM Site Plan as determined by the Township shall require a resubmission of the modified SWM Site Plan in accordance with this Article.

§206-26. Resubmission of Disapproved SWM Site Plans

A disapproved SWM Site Plan may be resubmitted, with the revisions addressing the Township's concerns, to the Township in accordance with this Article. The applicable review fee must accompany a resubmission of a disapproved SWM Site Plan.

§206-27. Authorization to Construct and Term of Validity

The Township's approval of an SWM Site Plan authorizes the regulated activities contained in the SWM Site Plan for a maximum term of validity of 5 years following the date of approval. The Township may specify a term of validity shorter than 5 years in the approval for any specific SWM Site Plan. Terms of validity shall commence on the date the Township signs the approval for an SWM Site Plan. If an approved SWM Site Plan is not completed according to Section 206-28 within the term of validity, the Township may consider the SWM Site Plan disapproved and may revoke any and all permits. SWM Site Plans that are considered disapproved by the Township shall be resubmitted in accordance with Section 206-26.

ARTICLE V
Inspections

§206-28. Inspections

- A. The Township shall inspect all phases of the installation of the Best Management Practices (BMPs) and/or stormwater management (SWM) facilities as deemed appropriate by the Township.
- B. During any stage of the work, if the Township determines that the BMPs and/or stormwater management facilities are not being installed in accordance with the approved SWM Site Plan, the Township shall revoke any existing permits or other approvals and issue a cease and desist order until a revised SWM Site Plan is submitted and approved, as specified in this Ordinance and until the deficiencies are corrected.
- C. A final inspection of all BMPs and/or stormwater management facilities may be conducted by the Township to confirm compliance with the approved SWM Site Plan prior to the issuance of any Occupancy Permit.
- D. The applicant and/or developer shall be responsible for providing as-built plans of all SWM BMPs included in the approved SWM Site Plan. The as-built plans and an explanation of any discrepancies, which were reviewed and received approval by the Township, shall be submitted to the Township.
- E. The as-built submission shall include a certification of completion signed by a Qualified Professional verifying that all SWM BMPs have been constructed according to the approved plans and specifications. If any Qualified Professionals contributed to the construction plans, they must sign and seal the completion certificate.

ARTICLE VI Fees and Expenses

§206-29. Stormwater Management Site Plan Review and Inspection Fee

Fees shall be established by the Township to cover plan review and construction inspection costs incurred by the Township. All fees shall be paid by the Applicant at the time of SWM Site Plan submission. A review and inspection fee schedule shall be established by Township resolution. The Township shall periodically update the review and inspection fee schedule to ensure that review costs are adequately reimbursed.

§206-30. Expenses Covered by Fees

The fees required by this Ordinance (unless otherwise waived by the Township) shall, at a minimum, cover:

- A. Township Administrative costs.
- B. Township legal costs.
- C. Township engineering costs
- D. The review of the Stormwater (SWM) Site Plan by the Township.
- E. The review of As-built Drawings.
- F. The site inspections.
- G. The inspection of SWM facilities and drainage improvements during construction.
- H. The final inspection at the completion of the construction of the SWM facilities and drainage improvements presented in the SWM Site Plan.
- I. Any additional work required to enforce any permit provisions regulated by this Ordinance, correct violations, and assure proper completion of stipulated remedial actions.

ARTICLE VII

Maintenance Responsibilities

§206-31. Performance Guarantee

- A. For subdivisions and land developments, the Applicant shall provide a financial guarantee to the Township for the timely installation and proper construction of all stormwater management (SWM) facilities as:
- (1) Required by the approved SWM Site Plan equal to or greater than the full construction cost of the required controls; or
 - (2) The amount and method of payment provided for in the subdivision and land development ordinance.
- B. For other regulated activities, the Township shall require a financial guarantee from the Applicant.

§206-32. Responsibilities for Operations and Maintenance of Stormwater Facilities and BMPs

- A. The owner of any land upon which stormwater facilities and BMPs will be placed, constructed, or implemented, as described in the stormwater facility and BMP Operations and Maintenance (O&M) plan, shall record the following documents in the Office of the Recorder of Deeds for Montgomery County, within ninety (90) days of approval of the stormwater facility and BMP O&M plan by the Township:

- (1) The O&M plan, or a summary thereof,
- (2) O&M agreements under Section 206-34, and
- (3) Easements under Section 206-35.

The developer or builder shall immediately notify the Township Secretary of the book and page wherein said documents are recorded and shall supply a copy of the recorded documents. If such information is not received within 100 days of the approval of the stormwater facility and BMP O&M plan by the Township, the stormwater facilities and BMP O&M plan shall not be considered an approved plan for the purpose of this article.

- B. The Township may suspend or revoke any approvals granted for the project site upon discovery of failure on the part of the owner to comply with this section.
- C. The following items shall be included in the Stormwater Facility and BMP O&M Plan:
- (1) Map(s) of the project area, in a form that meets the requirements for recording at the offices of the Recorder of Deeds of Montgomery County, and shall be submitted on 24-inch x 36-inch sheets. The contents of the maps(s) shall include, but not be limited to:
 - (a) Clear identification of the location and nature of stormwater facilities and BMPs.
 - (b) The location of the project site relative to highways, Township boundaries or other identifiable landmarks.
 - (c) Existing and final contours at intervals of two (2) feet, or others as appropriate.
 - (d) Existing streams, lakes, ponds, or other bodies of water within the project site area.
 - (e) Other physical features including flood hazard boundaries, sinkholes, streams, existing drainage courses, and areas of natural vegetation to be preserved.

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- (f) The locations of all existing and proposed utilities, sanitary sewers, and water lines on site and within 50 feet of property lines of the project site.
- (g) Proposed final changes to the land surface and vegetative cover, including the type and amount of impervious area that would be added.
- (h) Proposed final structures, roads, paved areas, and buildings, and
- (i) A twenty (20)-foot-wide access easement around all stormwater facilities and BMPs that would provide ingress to and egress from a public right-of-way.
- (2) A description of how each stormwater facility and BMP will be operated and maintained, and the identity and contact information associated with the person(s) responsible for O&M.
- (3) The name of the project site, the name and address of the owner of the property, and the name of the individual or firm preparing the plan, and
- (4) A statement, signed by the facility owner, acknowledging that the stormwater facilities and BMPs are fixtures that can be altered or removed only after approval by the Township.
- D. The Stormwater Facility and BMP O&M Plan for the project site shall establish responsibilities for the continuing O&M of all stormwater facilities and BMPs, as follows:
 - (1) If a plan includes structures or lots which are to be separately owned and in which streets, sewers and other public improvements are to be dedicated to the Township, stormwater facilities and BMPs may also be offered for dedication to and maintained by the Township.
 - (2) If a plan includes O&M by single ownership, or if sewers and other public improvements are to be privately owned and maintained, the O&M of stormwater facilities and BMPs shall be the responsibility of the owner or private management entity.
- E. The Township shall make the final determination on the continuing O&M responsibilities. The Township reserves the right to accept or reject the O&M responsibility for any or all of the stormwater facilities and BMPs.
- F. Facilities, areas, or structures used as BMPs shall be enumerated as permanent real estate appurtenances and recorded as deed restrictions or conservation easements that run with the land.
- G. The O&M Plan shall be recorded as a restrictive deed covenant that runs with the land.
- H. The Township may take enforcement actions against an owner for any failure to satisfy the provisions of this Article and this Ordinance.

§206-33. Township Review of Stormwater Facilities and BMP Operations and Maintenance Plan

- A. The Township shall review the Stormwater Facilities and BMP O&M Plan for consistency with the purposes and requirements of this ordinance, and any permits issued by PADEP.
- B. The Township shall notify the Applicant in writing whether the Stormwater Facility and BMP O&M Plan is approved.
- C. The Township shall require a "Record Drawing" of all stormwater facilities and BMPs.

§206-34. Operations and Maintenance Agreement for Privately Owned Stormwater Facilities and BMPs

- A. The owner shall sign an O&M agreement with the Township covering all stormwater facilities and BMPs that are to be privately owned. The O&M agreement shall be transferred with transfer of ownership. The agreement shall be subject to the review and approval of the Township.
- B. Other items may be included in the O&M agreement where determined necessary to guarantee the satisfactory O&M of all stormwater controls and BMPs. The O&M agreement shall be subject to the review and approval of the Township.
- C. The owner is responsible for the O&M of the SWM BMPs. If the owner fails to adhere to the O&M Agreement, the Township may perform the services required and charge the owner appropriate fees. Nonpayment of fees may result in a lien against the property.

§206-35. Stormwater Management Easements

- A. The owner must obtain all necessary real estate rights to install, operate, and maintain all stormwater facilities in the SWM Site Plan.
- B. The owner must provide the Township easements, or other appropriate real estate rights, to perform inspections and maintenance for the preservation of stormwater runoff conveyance, infiltration, and detention areas.

ARTICLE VIII Prohibitions

§206-36. Prohibited Discharges

- A. Any drain or conveyance, whether on the surface or subsurface, that allows any non-stormwater discharge, including sewage, process wastewater, and wash water to enter the waters of the Commonwealth is prohibited.
- B. No person shall allow, or cause to allow, discharges into surface waters of this Commonwealth which are not composed entirely of stormwater, except (1) as provided in Subsection C below, and (2) discharges allowed under a state or federal permit.
- C. The following discharges are authorized unless they are determined to be significant contributors to pollution to the waters of the Commonwealth:
 - (1) Discharges from firefighting activities,
 - (2) Potable water sources including water line flushing,
 - (3) Irrigation drainage,
 - (4) Air conditioning condensate,
 - (5) Springs,
 - (6) Water from crawl space pumps,
 - (7) Flows from riparian habitats and wetlands,
 - (8) Uncontaminated water from foundations or from footing drains,
 - (9) Lawn watering,
 - (10) De-chlorinated swimming pool discharges (per Department of Environmental Protection (PADEP) requirements),
 - (11) Uncontaminated groundwater,
 - (12) Water from individual residential car washing, and/or
 - (13) Routine external building wash down (which does not use detergents or other compounds)
- D. In the event that the Township or PADEP determines that any of the discharges identified in Subsection C significantly contribute to pollution of the waters of this Commonwealth, the Township or PADEP will notify the responsible person(s) to cease the discharge.

§206-37. Roof Drains

- A. Roof Drains and sump pumps shall not be connected to sanitary sewers.
- B. Roof drains and sump pumps may be connected to streets, storm sewers or roadside ditches only when permitted by the Township.
- C. Roof drains and sump pumps shall discharge to infiltration or vegetative BMPs to the maximum extent practicable.

§206-38. Alteration of Stormwater Management BMPs

- A. No person shall modify, remove, fill, landscape, or alter any Stormwater Management (SWM) Best Management Practices (BMPs), facilities, areas, or structures unless it is part of an approved maintenance program and written approval of the Township has been obtained.
- B. No person shall place any structure, fill, landscaping, or vegetation into a stormwater facility or BMP or within a drainage easement which would limit or alter the functioning of the stormwater facility or BMP without the written approval of the Township.

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ARTICLE IX

Enforcement and Penalties

§206-39. Right-of-Entry

- A. Upon presentation of proper credentials, duly authorized Township representatives may enter at reasonable times upon any property within the Township to inspect the implementation, condition, or operation and maintenance of the stormwater facilities or Best Management Practices (BMPs) in regard to any aspect governed by this Ordinance.
- B. Landowners with stormwater facilities and BMPs on their property shall allow persons working on behalf of the Township ready access to all parts of the premises for the purposes of determining compliance with this Ordinance.
- C. Persons working on behalf of the Township shall have the right to temporarily locate on any stormwater facility or BMP in the Township such devices as are necessary to conduct monitoring and/or sampling of the discharges from such stormwater facilities or BMP.

§206-40. Inspection

Stormwater Management (SWM) Best Management Practices (BMPs) should be inspected for proper operation by the landowner, or the owner's designee (including the Township for dedicated and owned facilities), according to the following list of minimum frequencies:

- 1. Annually for the first 5 years,
- 2. Once every 3 years thereafter,
- 3. During or immediately after the cessation of a 10-year or greater storm, and/or
- 4. As specified in the Operations and Maintenance (O&M) agreement.

§206-41. Enforcement

All inspections regarding compliance with the Stormwater Management (SWM) Site Plan and this Ordinance shall be the responsibility of the Township.

- A. Public nuisance.
 - (1) The violation of any provision of this section is hereby deemed a public nuisance.
 - (2) Each day that a violation continues shall constitute a separate violation.
- B. Whenever the Township finds that a person has violated a prohibition or failed to meet a requirement of this Ordinance, the Township may order compliance by written notice to the responsible person. Such notice may, without limitation, require the following remedies:
 - (1) Performance of monitoring, analyses, and reporting;
 - (2) Elimination of prohibited connections or discharges;
 - (3) Cessation of any violating discharges, practices, or operations;
 - (4) Abatement or remediation of stormwater pollution or contamination hazards and the restoration of any affected property;
 - (5) Payment of a fine to cover administrative and remediation costs;
 - (6) Implementation of stormwater facilities and Best Management Practices (BMPs); and

- (7) Operation and Maintenance (O&M) of stormwater facilities and BMPs.
- C. Such notification shall set forth the nature of the violation(s) and establish a time limit for correction of these violations(s). Said notice may further advise that, if applicable, should the violator fail to take the required action within the established deadline, the work will be done by the Township and the and the expense may be charged to the violator.
- D. Failure to comply within the time specified may subject a violator to the penalty provisions of this Ordinance. All such penalties shall be deemed cumulative and shall not prevent the Township from pursuing any and all other remedies available in law or equity.

§206-42. Suspension and Revocation of Permits and Approvals

- A. Any building, land development, or other permit or approval issued by the Township may be suspended or revoked, in whole or in part, by the Township for:
 - (1) Noncompliance with or failure to implement any provision of the permit;
 - (2) A violation of any provision of this ordinance; or
 - (3) The creation of any condition or the commission of any act during construction or development which constitutes or creates a hazard or nuisance, pollution or which endangers the life, health, or property of others.
- B. A suspended permit may be reinstated by the Township when:
 - (1) The Township has inspected and approved the corrections to the stormwater facilities and BMPs or the elimination of the hazard or nuisance, and;
 - (2) The Township is satisfied that all applicable violations in this Ordinance have been corrected.
- C. Any permit or approval that has been revoked by the Township cannot be reinstated. The Applicant may apply for a new permit under the procedures outlined of this Ordinance.

§206-43. Penalties

- A. Any person violating the provisions of this Ordinance shall be subject to penalties that may range from liens against the property to fines for each violation, recoverable with costs. Each day that the violation continues shall constitute a separate offense and the applicable fines are cumulative.
- B. In addition, the Township may institute injunctive, mandamus or any other appropriate action or proceeding at law or in equity for the enforcement of this ordinance. Any court of competent jurisdiction shall have the right to issue restraining orders, temporary or permanent injunctions, mandamus, or other appropriate forms of remedy or relief.

§206-44. Appeals

- A. As per the Pennsylvania Municipalities Planning Code (MPC), Section 909.1(9), any person aggrieved by any action pursuant to this Ordinance may appeal to [*the municipality's Zoning Hearing Board*] within thirty (30) days of that action.
- B. Any person aggrieved by any decision of the Board of Supervisors, relevant to the provisions of this Ordinance may appeal to the County Court of Common Pleas in the County where the activity has taken place within thirty (30) days of the Township decision.

**MONTGOMERY TOWNSHIP STORMWATER MANAGEMENT PLAN ORDINANCE
ENACTMENT**

This Ordinance will become effective five (5) days after enactment.

ENACTED and ORDAINED at a regular meeting of Montgomery Township Board of Supervisors on the
12th of May, 2014.

[Name]

[Title]

ATTEST:

Secretary

I hereby certify that the foregoing Ordinance was advertised in the

(name of publication) on _____, 20____, a newspaper of general
circulation in the Township and was duly enacted and approved as set forth at a regular meeting of the Board of
Supervisors held on _____, 20____.

Secretary

APPENDIX A: STORMWATER MANAGEMENT DESIGN CRITERIA

TABLE A-1

DESIGN STORM RAINFALL AMOUNT

Source: NOAA Atlas 14 website, Doylestown Gage (36-2221)

http://hdsc.nws.noaa.gov/hdsc/pfds/orb/pa_pfds.html.

TABLE A-2

NATURAL RESOURCE PROTECTION STORMWATER MANAGEMENT CONTROLS

Source: PA BMP Manual Chapter 8, pg 33

TABLE A-3

GUIDANCE TO CALCULATE THE 2-YEAR, 24-HOUR VOLUME INCREASE FROM PRE-DEVELOPMENT TO POST-DEVELOPMENT CONDITIONS

Source: PA BMP Manual Chapter 8, pg 37

TABLE A-4

RUNOFF CURVE NUMBERS

Source: NRCS (SCS) TR-55

TABLE A-5

VOLUME CONTROL CALCULATION GUIDANCE FOR NONSTRUCTURAL BMPS

Source: PA BMP Manual Chapter 8, pg 34

TABLE A-6

VOLUME CONTROL CALCULATION GUIDANCE FOR STRUCTURAL BMPS

Source: PA BMP Manual Chapter 8, pg 38

TABLE A-7

RATIONAL RUNOFF COEFFICIENTS

Source: New Jersey Department of Transportation, Technical Manual for Stream Encroachment, August, 1984

TABLE A-8

MANNING ROUGHNESS COEFFICIENTS

STORMWATER MANAGEMENT

TABLE A-1

DESIGN STORM RAINFALL

DEPTH (INCHES)

Frequency		Rainfall Depth (P) (inch)
Return Period	Annual Exceedence Probability	
1	1.0	2.71
2	0.5	3.26
5	0.2	4.11
10	0.1	4.8
25	0.04	5.82
50	0.02	6.68
100	0.01	7.61

Reference: 90% Confidence Interval Precipitation Frequency Estimates – Partial Duration (inches), NOAA National Weather Service Hydrometeorological Design Studies Center Atlas 14 Precipitation Frequency Data Server (http://hdsc.nws.noaa.gov/hdsc/pfds/orb/pa_pfds.html) for Doylestown Gauge (36-2221), PA latitude 40°17'60"N longitude 75°7'59.88"W (40.3000, -75.1333). Last Revised April 9, 2014.

INTENSITY (IN/HR)

Duration	Average Recurrence Interval (years)						
	1	2	5	10	25	50	100
5-min	4.06	4.82	5.69	6.30	7.04	7.56	8.06
10-min	3.24	3.86	4.55	5.04	5.62	6.02	6.41
15-min	2.70	3.23	3.84	4.25	4.74	5.08	5.40
30-min	1.85	2.23	2.73	3.08	3.51	3.83	4.14
60-min	1.15	1.4	1.75	2.00	2.34	2.59	2.85
2-hr	0.69	0.84	1.05	1.21	1.43	1.60	1.78
3-hr	0.50	0.61	0.76	0.89	1.05	1.18	1.31
6-hr	0.31	0.38	0.48	0.55	0.66	0.75	0.85
12-hr	0.19	0.23	0.29	0.34	0.41	0.48	0.54
24-hr	0.11	0.14	0.17	0.20	0.24	0.28	0.32

Reference: 90% Confidence Interval Precipitation Frequency Estimates – Partial Duration (inches/hour), NOAA National Weather Service Hydrometeorological Design Studies Center Atlas 14 Precipitation Frequency Data Server (http://hdsc.nws.noaa.gov/hdsc/pfds/orb/pa_pfds.html) for Doylestown Gauge (36-2221), PA latitude 40°17'60"N longitude 75°7'59.88"W (40.3000, -75.1333). Last Revised April 9, 2014.

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**TABLE A-2: NATURAL RESOURCE PROTECTION
STORMWATER MANAGEMENT CONTROLS**

Existing Natural Sensitive Resource	Mapped in the ERSAM? Yes/No/n/a	Total Area (Ac.)	Area to be Protected (Ac.)
Waterbodies			
Floodplains			
Riparian Areas / Buffers			
Wetlands			
Vernal Pools			
Woodlands			
Natural Drainage Ways			
Steep Slopes, 15%-25%			
Steep Slopes, over 25%			
Other:			
Other:			
Total Existing:			

STORMWATER MANAGEMENT

TABLE A-3: GUIDANCE TO CALCULATE THE 2-YEAR, 24-HOUR VOLUME INCREASE FROM PRE-DEVELOPMENT TO POST-DEVELOPMENT CONDITIONS

Existing Conditions: Cover Type/Condition	Soil Type	Area (sf)	Area (ac)	CN	S	Ia (0.2*S)	Q Runoff (in)	Runoff Volume (ft3)
Woodland								
Meadow								
Impervious								
Total:								

Developed Conditions: Cover Type/Condition	Soil Type	Area (sf)	Area (ac)	CN	S	Ia (0.2*S)	Q Runoff (in)	Runoff Volume (ft3)
Total:								

2-year Volume Increase (ft3):

STORMWATER MANAGEMENT

TABLE A-4. Runoff Curve Numbers (from NRCS (SCS) TR-55)

LAND USE DESCRIPTION	Hydrologic Condition	HYDROLOGIC SOIL GROUP			
		A	B	C	D
Open Space					
Grass cover < 50%	Poor	68	79	86	89
Grass cover 50% to 75%	Fair	49	69	79	84
Grass cover > 75%	Good	39	61	74	80
Meadow		30	58	71	78
Agricultural					
Pasture, grassland, or range – Continuous forage for grazing	Poor	68	79	86	89
Pasture, grassland, or range – Continuous forage for grazing.	Fair	49	69	79	84
Pasture, grassland, or range – Continuous forage for grazing	Good	39	61	74	80
Brush-weed-grass mixture with brush the major element.	Poor	48	67	77	83
Brush-weed-grass mixture with brush the major element.	Fair	35	56	70	77
Brush-weed-grass mixture with brush the major element.	Good	30	48	65	73
Fallow Bare soil	-----	77	86	91	94
Crop residue cover (CR)	Poor	76	85	90	93
	Good	74	83	88	90
Woods – grass combination (orchard or tree farm)	Poor	57	73	82	86
	Fair	43	65	76	82
	Good	32	58	72	79
Woods	Poor	45	66	77	83
	Fair	36	60	73	79
	Good	30	55	70	77
Commercial (85% Impervious) 89		92	94	95	
Industrial (72% Impervious) 81		88	91	93	
Institutional (50% Impervious) 71		82	88	90	
Residential districts by average lot size:					
	% Impervious				
1/8 acre or less * (town houses)	65	77	85	90	92
1/4 acre	38	61	75	83	87
1/3 acre	30	57	72	81	86
1/2 acre	25	54	70	80	85
1 acre	20	51	68	79	84
2 acres	12	46	65	77	82
Farmstead		59	74	82	86
Smooth Surfaces (Concrete, Asphalt, Gravel or Bare Compacted Soil)	98	98	98	98	
Water	98	98	98	98	
Mining/Newly Graded Areas (Pervious Areas Only)	77	86	91	94	

* Includes Multi-Family Housing unless justified lower density can be provided.

Note: Existing site conditions of bare earth or fallow ground shall be considered as meadow when choosing a CN value.

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TABLE A-5: VOLUME CONTROL CALCULATION GUIDANCE FOR NONSTRUCTURAL BMPs

Type of Nonstructural BMP

AREA (sq ft) * Runoff * 1/12 = Volume Reduction(ft³)
Volume (in)

Use of Natural Drainage Feature

Utilize natural flow pathways _____ sq ft * 1/4" * 1/12 = _____ cu ft

Minimum Soil Compaction

Lawn _____ sq ft * 1/3" * 1/12 = _____ cu ft

Meadow _____ sq ft * 1/3" * 1/12 = _____ cu ft

Protecting existing trees (not located in protected area)

For trees within 20 feet of impervious cover:

Tree Canopy _____ sq ft * 1" * 1/12 = _____ cu ft

For trees within 20-100 feet of impervious cover:

Tree Canopy _____ sq ft * 1/2" * 1/12 = _____ cu ft

Rooftop Disconnection

For runoff directed to pervious and/or vegetative areas where infiltration occurs

Roof Area _____ sq ft * 1/4" * 1/12 = _____ cu ft

Impervious Disconnection

For runoff from impervious surfaces such as streets and concrete directed to pervious and/or vegetative areas where infiltration occurs

Impervious Area _____ sq ft * 1/4" * 1/12 = _____ cu ft

Total Volume Reduction

_____ cu ft

* represents multiply

STORMWATER MANAGEMENT

TABLE A-6: VOLUME CONTROL CALCULATION GUIDANCE FOR STRUCTURAL BMPS

$$\begin{array}{c} \text{Required} \\ \text{Volume Control (ft}^3\text{)} \\ \text{Table A-3} \end{array} - \begin{array}{c} \text{Nonstructural} \\ \text{Volume Control (ft}^3\text{)} \\ \text{Table A-5} \end{array} = \begin{array}{c} \text{Structural Volume} \\ \text{Requirement (ft}^3\text{)} \end{array}$$

Type	Proposed Structural BMP	Section in BMP Manual	Area (sq ft)	Storage Volume (cu ft)
Infiltration and / or Evapotranspiration	Porous Pavement	6.4.1		
	Infiltration Basin	6.4.2		
	Infiltration Bed	6.4.3		
	Infiltration Trench	6.4.4		
	Rain Garden/Bioretenention	6.4.5		
	Dry Well/Seepage Pit	6.4.6		
	Constructed Filter	6.4.7		
	Vegetative Swale	6.4.8		
	Vegetative Filter Strip	6.4.9		
	Infiltration Berm	6.4.10		
Evaporation and / or Reuse	Vegetative Roof	6.5.1		
	Capture and Reuse	6.5.2		
Runoff Quality	Constructed Wetlands	6.6.1		
	Wet Pond / Retention Basin	6.6.2		
	Dry Extended Detention Basin	6.6.3		
	Water Quality Filters	6.6.4		
Restoration	Riparian Buffer Restoration	6.7.1		
	Landscape Restoration / Reforestation	6.7.2		
	Soil Amendment	6.7.3		
Other	Level Spreader	6.8.1		
	Special Storage Areas	6.8.2		
	other			

Total Volume Control from Structural BMPS:

STORMWATER MANAGEMENT

TABLE A-7: RATIONAL RUNOFF COEFFICIENTS
By Hydrologic Soil Group and Overland Slope

Storms less than 25-year

Land Use	HSG A			HSG B			HSG C			HSG D		
	0-2%	2-6%	6%+	0-2%	2-6%	6%+	0-2%	2-6%	6%+	0-2%	2-6%	6%+
Residential												
1/8 acre lots	0.25	0.28	0.31	0.27	0.30	0.35	0.30	0.33	0.38	0.33	0.36	0.42
1/4 acre lots	0.22	0.26	0.29	0.24	0.29	0.33	0.27	0.31	0.36	0.30	0.34	0.40
1/3 acre lots	0.19	0.23	0.26	0.22	0.26	0.30	0.25	0.29	0.34	0.28	0.32	0.39
1/2 acre lots	0.16	0.20	0.24	0.19	0.23	0.28	0.22	0.27	0.32	0.26	0.30	0.37
1 acre lots	0.14	0.19	0.22	0.17	0.21	0.26	0.20	0.25	0.31	0.24	0.29	0.35
Industrial	0.67	0.68	0.68	0.68	0.68	0.69	0.68	0.69	0.69	0.69	0.69	0.70
Commercial	0.71	0.71	0.72	0.71	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Streets	0.85	0.86	0.87	0.85	0.86	0.87	0.85	0.86	0.87	0.85	0.86	0.87
Cultivated Land	0.08	0.13	0.16	0.11	0.15	0.21	0.14	0.19	0.26	0.18	0.23	0.31
Pasture	0.12	0.20	0.30	0.18	0.28	0.37	0.24	0.34	0.44	0.30	0.40	0.50
Meadow	0.10	0.16	0.25	0.14	0.22	0.30	0.20	0.28	0.36	0.24	0.30	0.40
Forest	0.05	0.08	0.11	0.08	0.11	0.14	0.10	0.13	0.16	0.12	0.16	0.20
Open space, lawns	0.05	0.10	0.14	0.08	0.13	0.19	0.12	0.17	0.24	0.16	0.21	0.28
Parking, impervious	0.85	0.86	0.87	0.85	0.86	0.87	0.85	0.86	0.87	0.85	0.86	0.87

Storms 25-year & over

Land Use	HSG A			HSG B			HSG C			HSG D		
	0-2%	2-6%	6%+	0-2%	2-6%	6%+	0-2%	2-6%	6%+	0-2%	2-6%	6%+
Residential												
1/8 acre lots	0.33	0.37	0.40	0.35	0.39	0.44	0.38	0.42	0.49	0.41	0.45	0.54
1/4 acre lots	0.30	0.34	0.37	0.33	0.37	0.42	0.36	0.40	0.47	0.38	0.42	0.52
1/3 acre lots	0.28	0.32	0.35	0.30	0.35	0.39	0.33	0.38	0.45	0.36	0.40	0.50
1/2 acre lots	0.25	0.29	0.32	0.28	0.32	0.36	0.31	0.35	0.42	0.34	0.38	0.40
1 acre lots	0.22	0.26	0.29	0.24	0.28	0.34	0.28	0.32	0.40	0.31	0.35	0.46
Industrial	0.85	0.85	0.86	0.85	0.86	0.86	0.86	0.86	0.87	0.86	0.86	0.88
Commercial	0.88	0.88	0.89	0.89	0.89	0.89	0.89	0.89	0.90	0.89	0.89	0.90
Streets	0.95	0.96	0.97	0.95	0.96	0.97	0.95	0.96	0.97	0.95	0.96	0.97
Cultivated Land	0.14	0.18	0.22	0.16	0.21	0.28	0.2	0.25	0.34	0.24	0.29	0.41
Pasture	0.15	0.25	0.37	0.23	0.34	0.45	0.30	0.42	0.52	0.37	0.50	0.62
Meadow	0.14	0.22	0.30	0.20	0.28	0.37	0.26	0.35	0.44	0.30	0.40	0.50
Forest	0.08	0.11	0.14	0.10	0.14	0.18	0.12	0.16	0.20	0.15	0.20	0.25
Open space, lawns	0.11	0.18	0.20	0.14	0.19	0.26	0.18	0.23	0.32	0.22	0.27	0.39
Parking, impervious	0.95	0.96	0.97	0.95	0.96	0.97	0.95	0.96	0.97	0.95	0.96	0.97

Runoff Coefficients for general cover conditions (Residential, Industrial and Commercial) are applicable to drainage areas under 1 acre. For drainage areas 1 acre or more, a composite runoff coefficient shall be calculated.

Reference: Rauls, W.J., S.L. Wong and R.H., McCuen, 1981, "Comparison of Urban Flood Frequency Procedures," Preliminary Draft, U.S. Department of Agriculture, Soil Conservation Service, Beltsville, MD

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TABLE A-8. MANNING'S ROUGHNESS COEFFICIENTS

DESCRIPTION	Manning's n-value
Smooth-wall Plastic Pipe	0.011
Concrete Pipe	0.012
Smooth-lined Corrugated Metal Pipe	0.012
Corrugated Plastic Pipe	0.024
Annular Corrugated Steel And Aluminum Alloy Pipe (Plain or polymer coated)	
68 mm × 13 mm (2 2/3 in × 1/2 in) Corrugations	0.024
75 mm × 25 mm (3 in × 1 in) Corrugations	0.027
125 mm × 25 mm (5 in × 1 in) Corrugations	0.025
150 mm × 50 mm (6 in × 2 in) Corrugations	0.033
Helically Corrugated Steel And Aluminum Alloy Pipe (Plain or polymer coated)	
75 mm × 25 mm (3 in × 1 in), 125 mm × 25 mm (5 in × 1 in), or 150 mm × 50 mm (6 in × 2 in) Corrugations	0.024
Helically Corrugated Steel And Aluminum Alloy Pipe (Plain or polymer coated)	
68 mm × 13 mm (2 2/3 in × 1/2 in) Corrugations	
a. Lower Coefficients*	
450 mm (18 in) Diameter	0.014
600 mm (24 in) Diameter	0.016
900 mm (36 in) Diameter	0.019
1200 mm (48 in) Diameter	0.020
1500 mm (60 in) Diameter or larger	0.021
b. Higher Coefficients**	0.024
Annular or Helically Corrugated Steel or Aluminum Alloy Pipe Arches or Other Non-Circular Metal Conduit (Plain or Polymer coated)	0.024
Vitrified Clay Pipe	0.012
Ductile Iron Pipe	0.013
Asphalt Pavement	0.015
Concrete Pavement	0.014
Grass Medians	0.050
Grass – Residential	0.30
Earth	0.020
Gravel	0.030
Rock	0.035
Cultivated Areas	0.030 - 0.050
Dense Brush	0.070 - 0.140
Heavy Timber (Little undergrowth)	0.100 - 0.150
Heavy Timber (w/underbrush)	0.40
Streams:	
a. Some Grass And Weeds (Little or no brush)	0.030 - 0.035
b. Dense Growth of Weeds	0.035 - 0.050
c. Some Weeds (Heavy brush on banks)	0.050 - 0.070

Notes:

* Use the lower coefficient if any one of the following conditions apply:

- A storm pipe longer than 20 diameters, which directly or indirectly connects to an inlet or manhole, located in swales adjacent to shoulders in cut areas or depressed medians.
- A storm pipe which is specially designed to perform under pressure.

**Use the higher coefficient if any one of the following conditions apply:

- A storm pipe which directly or indirectly connects to an inlet or manhole located in highway pavement sections or adjacent to curb or concrete median barrier.
- A storm pipe which is shorter than 20 diameters long.
- A storm pipe which is partly lined helically corrugated metal pipe.

APPENDIX B LOW IMPACT DEVELOPMENT (LID) PRACTICES

ALTERNATIVE APPROACH FOR MANAGING STORMWATER RUNOFF

Natural hydrologic conditions can be altered radically by poorly planned development practices, such as introducing unnecessary impervious surfaces, destroying existing drainage swales, constructing unnecessary storm sewers, and changing local topography. A traditional drainage approach of development has been to remove runoff from a site as quickly as possible and capture it in a detention basin. This approach leads ultimately to the degradation of water quality as well as expenditure of additional resources for detaining and managing concentrated runoff at some downstream location.

The recommended alternative approach is to promote practices that will minimize post-development runoff rates and volumes and will minimize needs for artificial conveyance and storage facilities. To simulate predevelopment hydrologic conditions, infiltration is often necessary to offset the loss of infiltration by the creation of impervious surfaces. Preserving natural hydrologic conditions requires careful alternative site design considerations. Site design practices include preserving natural drainage features, minimizing impervious surface area, reducing the hydraulic connectivity of impervious surfaces, and protecting natural depression storage. A well-designed site will contain a mix of all those features.

Sometimes regulations create obstacles for an applicant interested in implementing low impact development techniques on their site. A municipality should consider examining their ordinances and amending the sections which limit LID techniques. For example, a municipality could remove parking space minimums and establish parking space maximums to reduce the area of impervious surface required. Other allowable regulations to promote LID includes permitting curb cuts or wheel stops instead of requiring curbs and allowing sumped landscaping where the runoff can drain instead of requiring raised beds. These small changes to ordinances can remove the barriers which prevent applicants from pursuing LID practices.

The following describes various LID techniques:

1. **Protect Sensitive and Special Value Resources:** See Section 5.4 of the *Pennsylvania Stormwater Best Management Practices Manual, Pennsylvania Department of Environmental Protection (PADEP) no. 363-0300-002 (2006)*.
 - a. **Preserving Natural Drainage Features.** Protecting natural drainage features, particularly vegetated drainage swales and channels, is desirable because of their ability to infiltrate and attenuate flows and to filter pollutants. However, this objective is often not accomplished in land development. In fact, commonly held drainage philosophy encourages just the opposite pattern—streets and adjacent storm sewers are typically located in the natural headwater valleys and swales, thereby replacing natural drainage functions with a completely impervious system. As a result, runoff and pollutants generated from impervious surfaces flow directly into storm sewers with no opportunity for attenuation, infiltration, or filtration. Developments designed to fit site topography also minimizes the amount of grading on site.
 - b. **Protecting Natural Depression Storage Areas.** Depressional storage areas either have no surface outlet or drain very slowly following a storm event. They can be commonly seen as

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ponded areas in farm fields during the wet season or after large runoff events. Traditional development practices eliminate these depressions by filling or draining, thereby obliterating their ability to reduce surface runoff volumes and trap pollutants. The volume and release rate characteristics of depressions should be protected in the design of the development site. The depressions can be protected by simply avoiding the depression or by incorporating its storage as additional capacity in required detention facilities.

2. **Reduce Impervious Coverage:** See Section 5.7 of the *Pennsylvania Stormwater Best Management Practices Manual, Pennsylvania Department of Environmental Protection (PADEP) no. 363-0300-002 (2006)*.
 - a. **Avoiding Introduction of Impervious Areas.** Careful site planning should consider reducing impervious coverage to the maximum extent possible. Building footprints, sidewalks, driveways, and other features producing impervious surfaces should be evaluated to minimize impacts of runoff.
 - b. **Disconnecting Impervious Surfaces (DIA's):** Impervious surfaces are significantly less of a problem if they are not directly connected to an impervious conveyance system (such as storm sewer). Two basic ways to reduce hydraulic connectivity are routing of roof runoff over lawns and reducing the use of storm sewers. Site grading should promote increasing travel time of stormwater runoff, and should help reduce concentration of runoff to a single point in the development. (See Appendix D for additional description)
 - c. **Reducing Street Widths.** Street widths can be reduced by either eliminating on-street parking or by reducing roadway widths. Municipal planners and traffic designers should encourage narrower neighborhood streets which ultimately could lower maintenance.
 - d. **Limiting Sidewalks to One Side of the Street.** A sidewalk on one side of the street may suffice in low-traffic neighborhoods. The lost sidewalk could be replaced with bicycle/recreational trails that follow back-of-lot lines. Where appropriate, backyard trails should be constructed using pervious materials.
 - e. **Reducing Building Setbacks.** Reducing building setbacks reduces impervious cover associated with driveway and entry walks and is most readily accomplished along low-traffic streets where traffic noise is not a problem.
1. **Disconnect/Distribute/Decentralize:** See Section 5.8 of the *Pennsylvania Stormwater Best Management Practices Manual, Pennsylvania Department of Environmental Protection (PADEP) no. 363-0300-002 (2006)*.
 - a. **Routing Roof Runoff Over Lawns.** Roof runoff can be easily routed over lawns in most site designs. The practice discourages direct connections of downspouts to storm sewers or parking lots. The practice also discourages sloping driveways and parking lots to the street. By routing roof drains and crowning the driveway to run off to the lawn, the lawn is essentially used as a filter strip.
 - b. **Reducing the Use of Storm Sewers.** By reducing use of storm sewers for draining streets, parking lots, and back yards, the potential for accelerating runoff from the development can be

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greatly reduced. The practice requires greater use of swales and may not be practical for some development sites, especially if there are concerns for areas that do not drain in a “reasonable” time. The practice requires educating local citizens and public works officials, who expect runoff to disappear shortly after a rainfall event.

2. **Cluster and Concentrate:** See Section 5.5 of the *Pennsylvania Stormwater Best Management Practices Manual*, Pennsylvania Department of Environmental Protection (PADEP) no. 363-0300-002 (2006). Cluster developments can also reduce the amount of impervious area for a given number of lots. The biggest savings occurs with street length, which also will reduce costs of the development. Cluster development “clusters” the construction activity onto less sensitive areas without substantially affecting the gross density of development.

In summary, a careful consideration of the existing topography and implementation of a combination of the above mentioned techniques may avoid construction of costly stormwater control measures. Benefits include reduced potential of downstream flooding, water quality improvement of receiving streams/water bodies and enhancement of aesthetics and reduction of development costs. Other benefits include more stable baseflows in receiving streams, improved groundwater recharge, reduced flood flows, reduced pollutant loads, and reduced costs for conveyance and storage.

APPENDIX C: DISCONNECTED IMPERVIOUS AREA (DIA)

ROOFTOP DISCONNECTION

When rooftop downspouts are directed to a pervious area that allows for infiltration, filtration, and increased time of concentration, the rooftop may qualify as completely or partially DIA and a portion of the impervious rooftop area may be excluded from the calculation of total impervious area.

A rooftop is considered to be completely or partially disconnected if it meets the requirements listed below:

- The contributing area of a rooftop to each disconnected discharge is 500 square feet or less, and
- The soil, in proximity of the roof water discharge area, is not designated as hydrologic soil group “D” or equivalent, and
- The overland flow path from roof water discharge area has a positive slope of 5% or less.

For designs that meet these requirements, the portion of the roof that may be considered disconnected depends on the length of the overland path as designated in Table C.1.

Table C.1: Partial Rooftop Disconnection

Length of Pervious Flow Path *	Roof Area Treated as Disconnected
(ft)	(% of contributing area)
0 – 14	0
15 – 29	20
30 – 44	40
45 – 59	60
60 – 74	80
75 or more	100

* Flow path cannot include impervious surfaces and must be at least 15 feet from any impervious surfaces.

If the discharge is concentrated at one or more discrete points, no more than 1,000 square feet may discharge to any one point. In addition, a gravel strip or other spreading device is required for concentrated discharges. For non-concentrated discharges along the edge of the pavement, this requirement is waived; however, there must be a provision for the establishment of vegetation along the pavement edge and temporary stabilization of the area until vegetation becomes stabilized.

REFERENCE

Philadelphia Water Department. 2006. *Stormwater Management Guidance Manual*. Section 4.2.2: Integrated Site Design. Philadelphia, PA.

APPENDIX D: HOT SPOTS

Hot spots are sites where the land use or activity produces a higher concentration of trace metals, hydrocarbons, or priority pollutants than normally found in urban runoff.

1. EXAMPLES OF STORMWATER HOT SPOTS

- vehicle salvage yards and recycling facilities
- vehicle fueling stations
- vehicle service and maintenance facilities
- vehicle and equipment cleaning facilities
- fleet storage areas (bus, truck, etc.)
- industrial sites (based on Standard Industrial Codes defined by the U.S. Department of Labor)
- marinas (service and maintenance)
- outdoor liquid container storage
- outdoor loading/unloading facilities
- public works storage areas
- facilities that generate or store hazardous materials
- commercial container nursery
- other land uses and activities as designated by an appropriate review authority

2. LAND USE AND ACTIVITIES NOT NORMALLY CONSIDERED HOT SPOTS

- residential streets and rural highways
- residential development
- institutional development
- office developments
- nonindustrial rooftops
- pervious areas, except golf courses and nurseries (which may need an Integrated Pest Management (IPM) Plan).

3. **LIST OF ACCEPTABLE BMPs for Hot Spot Treatment:** The following BMP's listed under the Best Management Practice column are BMPs appropriate for application on hot spot sites. BMPs which facilitate infiltration are prohibited by this ordinance. In many design manuals the BMPs with a * designation are designed with infiltration, however it is possible to design these without infiltration.

The numbers listed under the Design Reference Number column correlate with the Reference Table which lists materials that can be used for design guidance.

Best Management Practice	Design Reference Number
Bioretention*	4, 5, 11, 16
Capture/Reuse	4, 14
Constructed Wetlands	4, 5, 8, 10, 16
Dry Extended Detention Ponds	4, 5, 8, 12, 18
Minimum Disturbance/ Minimum Maintenance Practices	1, 9

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Significant Reduction of Existing Impervious Cover	N/A
Stormwater Filters* (Sand, Peat, Compost, etc.)	4, 5, 10, 16
Vegetated Buffers/Filter Strips	2, 3, 5, 11, 16, 17
Vegetated Roofs	4, 13
Vegetated Swales*	2, 3, 5, 11, 16, 17
Water Quality Inlets (Oil/Water Separators, Sediment Traps/Catch Basin Sumps, and Trash/Debris Collectors in Catch Basins)	4, 7, 15, 16, 19
Wet Detention Ponds	4, 5, 6, 8

Reference Table

Number	Design Reference Title
1	"Conservation Design For Stormwater Management – A Design Approach to Reduce Stormwater Impacts From Land Development and Achieve Multiple Objectives Related to Land Use", Delaware Department of Natural Resources and Environmental Control, The Environmental Management Center of the Brandywine Conservancy, September 1997
2	"A Current Assessment of Urban Best Management Practices: Techniques for Reducing Nonpoint Source Pollution in the Coastal Zone", Schueler, T. R., Kumble, P. and Heraty, M., Metropolitan Washington Council of Governments, 1992.
3	"Design of Roadside Channels with Flexible Linings", Federal Highway Administration, Chen, Y. H. and Cotton, G. K., Hydraulic Engineering Circular 15, FHWA-IP-87-7, McLean, Virginia, 1988.
4	"Draft Stormwater Best Management Practices Manual", Pennsylvania Department of Environmental Protection, January 2005.
5	"Evaluation and Management of Highway Runoff Water Quality", Federal Highway Administration, FHWA-PD-96-032, Washington, D.C., 1996.
6	"Evaporation Maps of the United States", U.S. Weather Bureau (now NOAA/National Weather Service) Technical Paper 37, Published by Department of Commerce, Washington D.C., 1959.
7	"Georgia Stormwater Manual", AMEC Earth and Environmental, Center for Watershed Protection, Debo and Associates, Jordan Jones and Goulding, Atlanta Regional Commission, Atlanta, Georgia, 2001.
8	"Hydraulic Design of Highway Culverts", Federal Highway Administration, FHWA HDS 5, Washington, D.C., 1985 (revised May 2005).
9	"Low Impact Development Design Strategies <i>An Integrated Design Approach</i> ", Prince Georges County, Maryland Department of Environmental Resources, June 1999.
10	"Maryland Stormwater Design Manual", Maryland Department of the Environment, Baltimore, Maryland, 2000.
11	"Pennsylvania Handbook of Best Management Practices for Developing Areas", Pennsylvania Department of Environmental Protection, 1998.
12	"Recommended Procedures for Act 167 Drainage Plan Design", LVPC, Revised 1997.
13	"Roof Gardens History, Design, and Construction", Osmundson, Theodore. New York: W.W. Norton & Company, 1999.
14	"The Texas Manual on Rainwater Harvesting", Texas Water Development Board, Austin, Texas, Third Edition, 2005.
15	"VDOT Manual of Practice for Stormwater Management", Virginia

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	Transportation Research Council, Charlottesville, Virginia, 2004.
16	"Virginia Stormwater Management Handbook", Virginia Department of Conservation and Recreation, Richmond, Virginia, 1999.
17	"Water Resources Engineering", Mays, L. W., John Wiley & Sons, Inc., 2005.
18	"Urban Hydrology for Small Watersheds", Technical Report 55, US Department of Agriculture, Natural Resources Conservation Service, 1986.
19	US EPA, Region 1 New England web site (as of August 2005) http://www.epa.gov/NE/assistance/ceitts/stormwater/techs/html .

4. **RECOMMENDED PRE-TREATMENT METHODS FOR "HOT SPOT" LAND USES:** The following table recommends what is considered the best pre-treatment option for the listed land use. These methods are either a BMP or can be applied in conjunction with BMPs.

Hot Spot Land Use	Pre-treatment Method(s)
Vehicle Maintenance and Repair Facilities including Auto Parts Stores	-Water Quality Inlets -Use of Drip Pans and/or Dry Sweep Material Under Vehicles/Equipment -Use of Absorbent Devices to Reduce Liquid Releases -Spill Prevention and Response Program
Vehicle Fueling Stations	-Water Quality Inlets -Spill Prevention and Response Program
Storage Areas for Public Works	-Water Quality Inlets -Use of Drip Pans and/or Dry Sweep Material Under Vehicles/Equipment -Use of Absorbent Devices to Reduce Liquid Releases -Spill Prevention and Response Program -Diversion of Stormwater away from Potential Contamination Areas
Outdoor Storage of Liquids	-Spill Prevention and Response Program
Commercial Nursery Operations	-Vegetated Swales/Filter Strips -Constructed Wetlands -Stormwater Collection and Reuse
Salvage Yards and Recycling Facilities*	-BMPs that are a part of a Stormwater Pollution Prevention Plan under an NPDES Permit
Fleet Storage Yards and Vehicle Cleaning Facilities*	-BMPs that are a part of a Stormwater Pollution Prevention Plan under an NPDES Permit
Facilities that Store or Generate Regulated Substances*	-BMPs that are a part of a Stormwater Pollution Prevention Plan under an NPDES Permit
Marinas*	-BMPs that are a part of a Stormwater Pollution Prevention Plan under an NPDES Permit
Certain Industrial Uses (listed under NPDES)*	-BMPs that are a part of a Stormwater Pollution Prevention Plan under an NPDES Permit

*Regulated under the NPDES Stormwater Program

APPENDIX E: WEST NILE VIRUS GUIDANCE

(This source is from the Monroe County, PA Conservation District, who researched the potential of West Nile Virus problems from BMPs due to a number of calls they were receiving.)

Monroe County Conservation District Guidance: Stormwater Management and West Nile Virus

**Source: Brodhead McMichaels Creeks Watershed Act 167 Stormwater Management Ordinance Final Draft
2/23/04**

The Monroe County Conservation District recognizes the need to address the problem of nonpoint source pollution impacts caused by runoff from impervious surfaces. The new stormwater policy being integrated into Act 167 Stormwater Management regulations by the PA Department of Environmental Protection (PADEP) will make nonpoint pollution controls an important component of all future plans and updates to existing plans. In addition, to meet post-construction anti-degradation standards under the state National Pollution Discharge Elimination System (NPDES) permitting program, applicants will be required to employ Best Management Practices (BMPs) to address non-point pollution concerns.

Studies conducted throughout the United States have shown that wet basins and in particular constructed wetlands are effective in traditional stormwater management areas such as channel stability and flood control, and are one of the most effective ways to remove stormwater pollutants (United States Environmental Protection Agency 1991, Center for Watershed Protection 2000). From Maryland to Oregon, studies have shown that as urbanization and impervious surface increase in a watershed, the streams in those watersheds become degraded (CWP 2000). Although there is debate over the threshold of impervious cover when degradation becomes apparent (some studies show as little as 6% while others show closer to 20%), there is agreement that impervious surfaces cause non-point pollution in urban and urbanizing watersheds, and that degradation is ensured if stormwater BMPs are not implemented.

Although constructed wetlands and ponds are desirable from a water quality perspective there may be concerns about the possibility of these stormwater management structures becoming breeding grounds for mosquitoes. The Conservation District feels that although it may be a valid concern, **municipalities should not adopt ordinance provisions prohibiting wet basins for stormwater management.**

Mosquitoes

The questions surrounding mosquito production in wetlands and ponds have intensified in recent years by the outbreak of the mosquito-borne West Nile Virus. As is the case with all vector-borne maladies, the life cycle of West Nile Virus is complicated, traveling from mosquito to bird, back to mosquito and then to other animals including humans. *Culex pipiens* was identified as the vector species in the first documented cases from New York in 1999. This species is still considered the primary transmitter of the disease across its range. Today there are some 60 species of mosquitoes that inhabit Pennsylvania. Along with *C. pipiens*, three other species have been identified as vectors of West Nile Virus while four more have been identified as potential vectors.

The four known vectors in NE Pennsylvania are *Culex pipiens*, *C. restuans*, *C. salinarius* and *Ochlerotatus japonicus*. All four of these species prefer, and almost exclusively use, artificial containers (old tires, rain gutters, birdbaths, etc.) as larval habitats. In the case of *C. pipiens*, the most notorious of the vector mosquitoes, the dirtier the water the better they like it. The important factor is that these species do not thrive in functioning wetlands where competition for resources and predation by larger aquatic and terrestrial organisms is high.

The remaining four species, *Aedes vexans*, *Ochlerotatus Canadensis*, *O. triseriatus* and *O. trivittatus* are currently considered potential vectors due to laboratory tests (except the *O. trivittatus*, which did have one confirmed vector pool for West Nile Virus in PA during 2002). All four of these species prefer vernal habitats and ponded woodland areas following heavy summer rains. These species may be the greatest threat of disease transmission around

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stormwater basins that pond water for more than four days. This can be mitigated however by establishing ecologically functioning wetlands.

Stormwater Facilities

If a stormwater wetland or pond is constructed properly and a diverse ecological community develops, mosquitoes should not become a problem. Wet basins and wetlands constructed as stormwater management facilities, should be designed to attract a diverse wildlife community. If a wetland is planned, proper hydrologic soil conditions and the establishment of hydrophytic vegetation will promote the population of the wetland by amphibians and other mosquito predators. In natural wetlands, predatory insects and amphibians are effective at keeping mosquito populations in check during the larval stage of development while birds and bats prey on adult mosquitoes.

The design of a stormwater wetland must include the selection of hydrophytic plant species for their pollutant uptake capabilities and for not contributing to the potential for vector mosquito breeding. In particular, species of emergent vegetation with little submerged growth are preferable. By limiting the vegetation growing below the water surface, larvae lose protective cover and there is less chance of anaerobic conditions occurring in the water.

Stormwater ponds can be designed for multiple purposes. When incorporated into an open space design a pond can serve as a stormwater management facility and a community amenity. Aeration fountains and stocked fish should be added to keep larval mosquito populations in check.

Publications from the PA Department of Health and the Penn State Cooperative Extension concerning West Nile Virus identify aggressive public education about the risks posed by standing water in artificial containers (tires, trash cans, rain gutters, bird baths) as the most effective method to control vector mosquitoes.

Conclusion

The Conservation District understands the pressure faced by municipalities when dealing with multifaceted issues such as stormwater management and encourages the incorporation of water quality management techniques into stormwater designs. As Bucks and Montgomery Counties continue to grow, conservation design, groundwater recharge and constructed wetlands and ponds should be among the preferred design options to reduce the impacts of increases in impervious surfaces. When designed and constructed appropriately, the runoff mitigation benefits to the community from these design options will far out-weigh their potential to become breeding grounds for mosquitoes.

APPENDIX F: SMALL PROJECT STORMWATER MANAGEMENT SITE PLAN

This small project stormwater site plan has been developed to assist those proposing residential projects to meet the requirements of the Stormwater Management Ordinance without having to hire professional services to draft a formal stormwater management plan. This small project site plan is only permitted for residential projects proposing less than or equal to 5,000 square feet of impervious surface and less than 1 acre of earth disturbance.

A. What is an applicant required to submit?

A brief description of the proposed stormwater facilities, including types of materials to be used, total square footage of proposed impervious areas, volume calculations, and a simple sketch plan showing the following information:

- Location of proposed structures, driveways, or other paved areas with approximate surface area in square feet.
- Location of any existing or proposed onsite septic system and/or potable water wells showing proximity to infiltration facilities.
- Bucks or Montgomery County Conservation District erosion and sediment control "Adequacy" letter as required by Township, County or State regulations.

B. Determination of Required Volume Control and Sizing Stormwater Facilities

By following the simple steps outlined below in the provided example, an applicant can determine the runoff volume that is required to be controlled and how to choose the appropriate stormwater facility to permanently remove the runoff volume from the site. Impervious area calculations must include all areas on the lot proposed to be covered by roof area or pavement which would prevent rain from naturally percolating into the ground, including impervious surfaces such as sidewalks, driveways, parking areas, patios or swimming pools. Sidewalks, driveways or patios that are designed and constructed to allow for infiltration are not included in this calculation.

Site Plan Example: Controlling runoff volume from a proposed home site

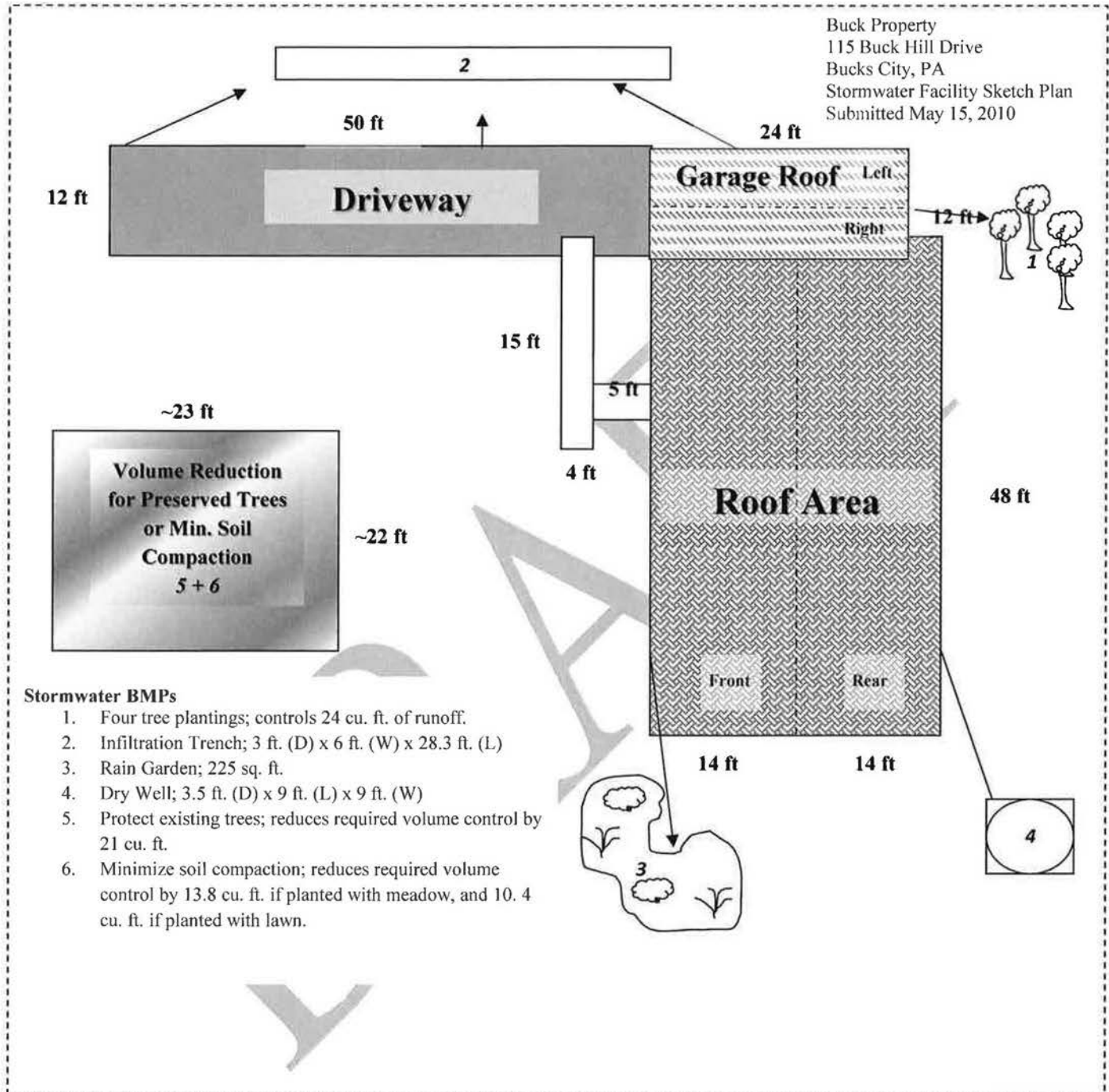
Step 1: Determine Total Impervious Surfaces

Impervious Surface			Area (sq. ft.)
House Roof (Front)	14 ft. x 48 ft.	=	672 sq. ft.
House Roof (Rear)	14 ft. x 48 ft.	=	672 sq. ft.
Garage Roof (Left)	6 ft. x 24 ft.	=	144 sq. ft.
Garage Roof (Right)	6 ft. x 24 ft.	=	144 sq. ft.
Driveway	12 ft. x 50 ft.	=	1000 sq. ft.
Walkway	4 ft. x 20 ft.	=	80 sq. ft.

	Total Impervious		3000 sq ft

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Figure 1: Sample Site Sketch Plan



Step 2: Determine Required Volume Control (cubic feet) using the following equation:

$$\text{Volume (cu. ft.)} = (\text{Total impervious area in square feet} \times 2 \text{ inches of runoff}) / 12 \text{ inches}$$

$$(3,000 \text{ sq. ft.} \times 2 \text{ inches of runoff}) / 12 \text{ inches} = 500 \text{ cu. ft.}$$

Step 3: Sizing the Selected Volume Control BMP

Several Best Management Practices (BMPs), as described below, are suitable for small stormwater management projects. However, their application depends on the volume required to be controlled, how much land is available, and the site constraints. Proposed residential development activities can apply both non-structural and structural BMPs to control the volume of runoff from the site. A number of different volume control BMPs are described below. Note that Figure 1 is an example of how these BMPs can be utilized in conjunction to control the total required volume on one site.

Structural BMPs

1. Infiltration Trench

An Infiltration Trench is a linear stormwater BMP consisting of a continuously perforated pipe at a minimum slope in a stone-filled trench. During small storm events, infiltration trenches can significantly reduce volume and serve in the removal of fine sediments and pollutants. Runoff is stored between the stones and infiltrates through the bottom of the facility and into the soil matrix. Runoff should be pretreated using vegetative buffer strips or swales to limit the amount of coarse sediment entering the trench which can clog and render the trench ineffective. In all cases, an infiltration trench should be designed with a positive overflow.

Design Considerations:

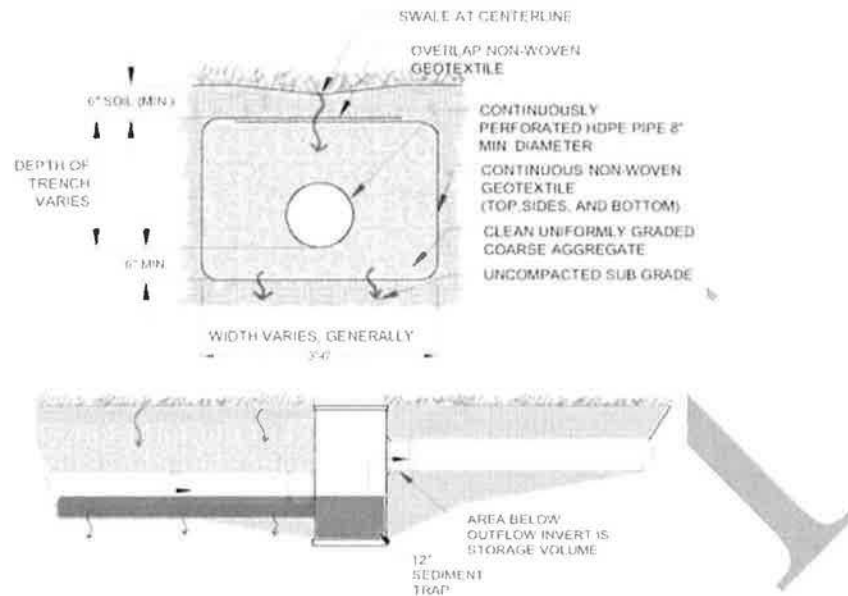
- Although the width and depth can vary, it is recommended that Infiltration Trenches be limited in depth to not more than six (6) feet of stone.
- Trench is wrapped in nonwoven geotextile (top, sides, and bottom).
- Trench needs to be placed on uncompacted soils.
- Slope of the Trench bottom should be level or with a slope no greater than 1%.
- A minimum of 6" of topsoil is placed over trench and vegetated.
- The discharge or overflow from the Infiltration Trench should be properly designed for anticipated flows.
- Cleanouts or inlets should be installed at both ends of the Infiltration Trench and at appropriate intervals to allow access to the perforated pipe.
- Volume of facility = Depth x Width x Length x Void Space of the gravel bed (assume 40%).

Maintenance:

- Catch basins and inlets should be inspected and cleaned at least two times a year.
- The vegetation along the surface of the infiltration trench should be maintained in good condition and any bare spots should be re-vegetated as soon as possible.
- Vehicles should not be parked or driven on the trench and care should be taken to avoid soil compaction by lawn mowers.

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Figure 3: Infiltration Trench Diagram



Source: PA BMP Guidance Manual, Chapter 6, page 42.

Figure 4: Example of Infiltration Trench Installation



Source: PA BMP Guidance Manual, Chapter 6, Page 46.

Sizing Example for Infiltration Trench

1. Determine Total Impervious Surface to drain to Infiltration Trench:

Garage Roof (Left)	6 ft. x 24 ft.	=	144 sq ft
Driveway	12 ft. x 50 ft.	=	1000 sq ft
Walkway	4 ft. x 20 ft.	=	80 sq ft

2. Determine the required infiltration volume:

$$(1224 \text{ sq. ft.} \times 2 \text{ inches of runoff}) / 12 \text{ ft.} = 204 \text{ cu. ft.} / 0.4^* = 510 \text{ cu. ft.} \quad (*0.4 \text{ assumes 40\% void ratio in gravel bed})$$

3. Sizing the infiltration trench facility:

Volume of Facility = Depth x Width x Length

Set Depth to 3 feet and determine required surface area of trench.

$$510 \text{ cu. ft.} / 3 \text{ ft.} = 170 \text{ sq ft.}$$

The width of the trench should be greater than 2 times its depth (2 x D), therefore in this example the trench width of 6 feet selected.

$$\text{Determine trench length: } L = 170 \text{ sq. ft.} / 6 \text{ ft.} = 28.3 \text{ ft.}$$

Final infiltration trench dimensions: 3 ft. (D) x 6 ft. (W) x 28.3 ft. (L)

2. Rain Garden

A Rain Garden is a planted shallow depression designed to catch and filter rainfall runoff. The garden captures rain from a downspout or a paved surface. The water sinks into the ground, aided by deep rooted plants that like both wet and dry conditions. The ideal location for a rain garden is between the source of runoff (roofs and driveways) and the runoff destination (drains, stream, low spots, etc).

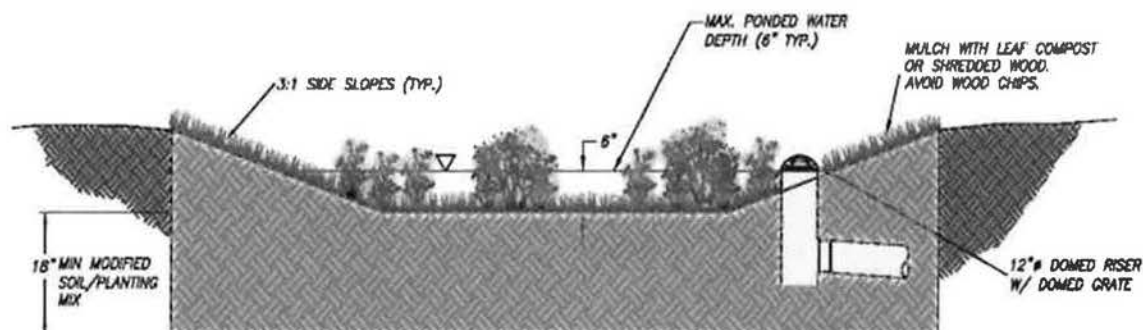
Design Considerations:

- A maximum of 3:1 side slope is recommended.
- The depth of a rain garden can range from 6 - 8 inches. Ponded water should not exceed 6 inches.
- The rain garden should drain within 72 hours.
- The garden should be at least 10-20 feet from a building's foundation and 25 feet from septic system drainfields and wellheads.
- If the site has clay soils, soil should be amended with compost or organic material.
- Choose native plants. See http://pa.audubon.org/habitat/PDFs/RGBrochure_complete.pdf for a native plant list. To find native plant sources go to www.pawildflower.org.
- At the rain garden location, the water table should be at least 2' below the soil level. If water stands in an area for more than one day after a heavy rain you can assume it has a higher water table and is not a good choice for a rain garden.

Maintenance:

- Water plants regularly until they become established.
- Inspect twice a year for sediment buildup, erosion and vegetative conditions.
- Mulch with hardwood when erosion is evident and replenish annually.
- Prune and remove dead vegetation in the spring season.
- Weed as you would any garden.
- Move plants around if some plants would grow better in the drier or wetter parts of the garden.

Figure 5: Rain Garden Diagram



Source: PA BMP Guidance Manual, Chapter 6 Page 50

Sizing Example for Rain Garden

1. Pick a site for the rain garden between the source of runoff and between a low lying area, a.k.a., a drainage area.
2. Perform an infiltration test to determine the depth of the rain garden:
 - Dig a hole 8" x 8"
 - Fill with water and put a popsicle stick at the top of the water level.
 - Measure how far it drains down after a few hours (ideally 4).
 - Calculate the depth of water that will drain out over 24 hours.
3. Determine total impervious surface area to drain to rain garden:

House Roof (Front)	14 ft. x 48 ft.	=	672 sq ft
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4. Sizing the rain garden:

For this example the infiltration test determined 6" of water drained out of a hole in 24 hours. The depth of the rain garden should be set to the results of the infiltration test so 6" is the depth of the rain garden. The sizing calculation below is based on controlling 1" of runoff. First divide the impervious surface by the depth of the rain garden.

$$(672 \text{ sq ft} / 6 \text{ ft.}) = 112 \text{ sq. ft.}$$

In order to control 2" of runoff volume, the rain garden area needs to be multiplied by 2.

$$112 \text{ sq. ft.} * 2 = 224 \text{ sq. ft.}$$

The rain garden should be about 225 sq. ft. in size and 6" deep.

3. Dry Well (a.k.a., Seepage Pit)

A Dry Well, sometimes called a Seepage Pit, is a subsurface storage facility that temporarily stores and infiltrates stormwater runoff from the roofs of structures. By capturing runoff at the source, Dry Wells can dramatically reduce the increased volume of stormwater generated by the roofs of structures. Roof leaders connect directly into the Dry Well, which may be either an excavated pit filled with uniformly graded aggregate wrapped in geotextile, or a prefabricated storage chamber or pipe segment. Dry Wells discharge the stored runoff via infiltration into the

STORMWATER MANAGEMENT

surrounding soils. In the event that the Dry Well is overwhelmed in an intense storm event, an overflow mechanism (surcharge pipe, connection to a larger infiltration area, etc.) will ensure that additional runoff is safely conveyed downstream.

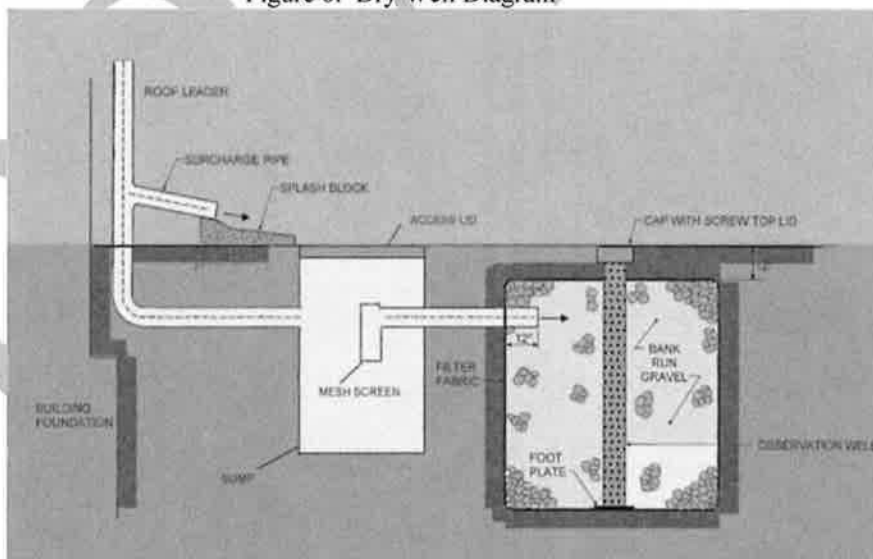
Design Considerations:

- Dry Wells typically consist of 18 to 48 inches of clean washed, uniformly graded aggregate with 40% void capacity (AASHTO No. 3, or similar). “Clean” gravel fill should average one and one-half to three (1.5 – 3.0) inches in diameter.
- Dry Wells are not recommended when their installation would create a significant risk for basement seepage or flooding. In general, 10 - 20 feet of separation is recommended between Dry Wells and building foundations.
- The facility may be either a structural prefabricated chamber or an excavated pit filled with aggregate.
- Depth of dry wells in excess of three-and-a-half (3.5) feet should be avoided unless warranted by soil conditions.
- Stormwater dry wells must never be combined with existing, rehabilitated, or new septic system seepage pits. Discharge of sewage to stormwater dry wells is strictly prohibited.

Maintenance:

- Dry wells should be inspected at least four (4) times annually as well as after large storm events.
- Remove sediment, debris/trash, and any other waste material from a dry well.
- Regularly clean out gutters and ensure proper connections to the dry well.
- Replace the filter screen that intercepts the roof runoff as necessary.

Figure 6: Dry Well Diagram



Source: PA BMP Guidance Manual, Chapter 6, Page 65.

Sizing Example for Dry Wells:

1. Determine contributing impervious surface area:

House Roof (Rear)	14 ft. x 48 ft.	=	672 sq. ft.
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2. Determine required volume control:

$$(672 \text{ sq. ft.} * 2 \text{ inches of runoff}) / 12 \text{ inches} = 112 \text{ cu. ft.}$$

$$112 \text{ cu ft} / 0.4 = 280 \text{ cu. ft. (assuming the 40\% void ratio in the gravel bed)}$$

3. Sizing the dry well:

Set depth to 3.5 ft; Set width equal to length for a square chamber.

$$280 \text{ cu. ft.} = 3.5 \text{ ft.} \times L \times L; L = 9 \text{ ft.}$$

$$\text{Dimensions} = 3.5 \text{ ft. (D)} \times 9 \text{ ft. (L)} \times 9 \text{ ft. (W)}$$

Non-Structural BMPs**1. Tree Plantings and Preservation**

Trees and forests reduce stormwater runoff by capturing and storing rainfall in the canopy and releasing water into the atmosphere through evapotranspiration. Tree roots and leaf litter also create soil conditions that promote the infiltration of rainwater into the soil. In addition, trees and forests reduce pollutants by taking up nutrients and other pollutants from soils and water through their root systems. A development site can reduce runoff volume by planting new trees or by preserving trees which existed on the site prior to development. The volume reduction calculations either determine the cubic feet to be directed to the area under the tree canopy for infiltration or determine a volume reduction credit which can be used to reduce the size of any one of the planned structural BMPs on the site.

Tree Considerations:

- Existing trees must have at least a 4" trunk caliper or larger.
- Existing tree canopy must be within 100 ft. of impervious surfaces.
- A tree canopy is classified as the continuous cover of branches and foliage formed by a single tree or collectively by the crowns of adjacent trees.
- New tree plantings must be at least 6 ft. in height and have a 2" trunk caliper.
- All existing and newly planted trees must be native to Pennsylvania. See <http://www.dcnr.state.pa.us/forestry/commontr/commontrees.pdf> for a guide book titled *Common Trees of Pennsylvania* for a native tree list.
- When using trees as volume control BMPs, runoff from impervious areas should be directed to drain under the tree canopy.

Determining the required number of planted trees to reduce the runoff volume:

1. Determine contributing impervious surface area:

Garage Roof (Right)	6 ft. x 24 ft.	=	144 Sq ft
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2. Calculate the required control volume:

$$(144 \text{ sq. ft.} \times 2 \text{ inches of runoff}) / 12 \text{ inches} = 24 \text{ cu. ft.}$$

3. Determine the number of tree plantings:

- A newly planted deciduous tree can reduce runoff volume by 6 cu. ft.
- A newly planted evergreen tree can reduce runoff volume by 10 cu. ft.

$$24 \text{ cu. ft.} / 6 \text{ cu. ft.} = 4 \text{ Deciduous Trees}$$

Determining the volume reduction for preserving existing trees:

1. Calculate approximate area of the existing tree canopy:

$$\sim 22 \text{ sq. ft.} \times \sim 23 \text{ sq. ft.} = 500 \text{ sq. ft.}$$

2. Measure distance from impervious surface to tree canopy: 35 ft.

3. Calculate the volume reduction credit by preserving existing trees:

- For Trees within 20 feet of impervious cover:
Volume Reduction cu. ft. = (Existing Tree Canopy sq. ft. x 1 inch) / 12

STORMWATER MANAGEMENT

- For Trees beyond 20 feet but not farther than 100 feet from impervious cover:
Volume Reduction cu. ft. = (Existing Tree Canopy sq. ft. x 0.5 inch) / 12

$$(500 \text{ sq. ft.} \times 0.5 \text{ inches}) / 12 = 21 \text{ cu. ft.}$$

This volume credit can be utilized in reducing the size of any one of the structural BMPs planned on the site. For example, the 21 cu. ft. could be subtracted from the required infiltration volume when sizing the infiltration trench;

$$510 \text{ cu. ft.} - 21 \text{ cu. ft.} = 489 \text{ cu. ft.}$$

$$489 \text{ cu. ft.} / 3 \text{ ft (Depth)} = 163 / 6 \text{ ft. (Width)} = 27.1 \text{ ft (Length)}$$

Using the existing trees for a volume credit would decrease the length of the infiltration trench to 27.1 ft. instead of 28.3 ft.

2. Minimize Soil Compaction and Replant with Lawn or Meadow

When soil is overly compacted during construction it can cause a drastic reduction in the permeability of the soil and rarely is the soil profile completely restored. Runoff from vegetative areas with highly compacted soils similarly resembles runoff from an impervious surface. Minimizing soil compaction and re-planting with a vegetative cover like meadow or lawn, not only increases the infiltration on the site, but also creates a friendly habitat for a variety of wildlife species.

Design Considerations:

- Area shall not be stripped of topsoil.
- Vehicle movement, storage, or equipment/material lay down shall not be permitted in areas preserved for minimum soil compaction.
- The use of soil amendments and additional topsoil is permitted.
- Meadow should be planted with native grasses. Refer to *Meadows and Prairies: Wildlife-Friendly Alternatives to Lawn* at <http://pubs.cas.psu.edu/FreePubs/pdfs/UH128.pdf> for reference on how to properly plant the meadow and for a list of native species.

Determining the volume reduction by minimizing soil compaction and planting a meadow:

1. Calculate approximate area of preserved meadow:

$$\sim 22 \text{ sq. ft.} \times \sim 23 \text{ sq. ft.} = 500 \text{ sq. ft.}$$

2. Calculate the volume reduction credit by minimizing the soil compaction and planting a lawn/meadow:

- For Meadow Areas: Volume Reduction (cu. ft.) = (Area of Min. Soil Compaction (sq. ft.) x 1/3 inch of runoff) / 12

$$(500 \text{ sq. ft.} \times 1/3 \text{ inch of runoff}) / 12 = 13.8 \text{ cu. ft.}$$

- For Lawn Areas: Volume Reduction (cu. ft.) = (Area of Min. Soil Compaction (sq. ft.) x 1/4 inch of runoff) / 12

$$(500 \text{ sq. ft.} \times 1/4 \text{ inch of runoff}) / 12 = 10.4 \text{ cu. ft.}$$

This volume credit can be used to reduce the size of any one of the structural BMPs on the site. See explanation under the volume credit for preserving existing trees for details.

Alternative BMP to Capture and Reuse Stormwater

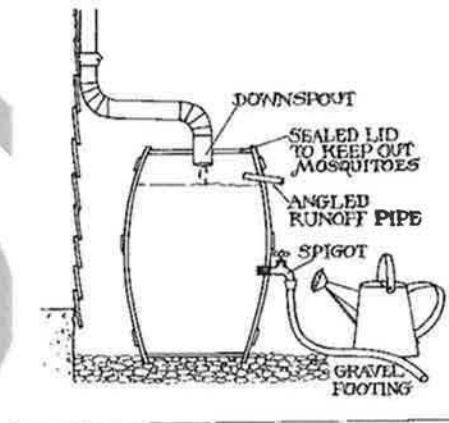
Rain Barrels

Rain barrels are large containers that collect drainage from roof leaders and temporarily store water to be released to lawns, gardens, and other landscaped areas after the rainfall has ended. Rain barrels are typically between 50 and 200 gallons in size. It is not recommended for rain barrels to be used as a volume control BMP because infiltration is not guaranteed after each storm event. For this reason, a rain barrel is not utilized in the site plan example. However, the information is included to provide an alternative for a homeowner to utilize when considering capture and reuse stormwater methods.

Design Considerations:

- Rain barrels should be directly connected to the roof gutter/spout.
- There must be a means to release the water stored between storm events to provide the necessary storage volume for the next storm.
- When calculating rain barrel size, rain barrels are typically assumed to be 25% full because they are not always emptied before the next storm.
- Use screens to filter debris and cover lids to prevent mosquitoes.
- An overflow outlet should be placed a few inches below the top with an overflow pipe to divert flow away from structures.
- It is possible to use a number of rain barrels jointly for an area.

Figure 2: Rain Barrel Diagram and Examples



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Sources: (top picture) <http://www.citywindsor.ca/DisplayAttach.asp?AttachID=12348>
 (bottom picture on left) <http://repurposinglife.blogspot.com/2009/05/rainwater-harvesting.html>
 (bottom picture on right) <http://www.floridata.com/tracks/transplantedgardener/Rainbarrels.cfm>

Sizing Example for a Rain Barrel

1. Determine contributing impervious surface area:

Garage Roof (Right)	6 ft. x 24 ft.	=	144 sq ft
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2. Determine the amount of rainfall to be captured by the Rain Barrel. A smaller storm, no more than 2", is recommended to calculate the runoff to be captured. This example chose the 1" storm event.
3. Calculate the volume to be captured and reused:
 $(144 \text{ sq. ft.} \times 1 \text{ inch of runoff}) / 12 \text{ inches} = 12 \text{ cu. ft.}$
4. Size the rain barrel:

1 cu. ft. = 7.48 gallons

12 cu. ft. x 7.48 = 90 gallons

90 gallons x (0.25*) = 22.5 gallons (*assuming that the rain barrel is always at least 25% full)

90 gallons + 22.5 gallons = 112 gallons

The rain barrel or barrels should be large enough hold at least 112 gallons of water.

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REFERENCES:

- Center for Watershed Protection and US Forest Service. (2008). *Watershed Forestry Resource Guide*. Retrieved on May 26, 2010 from <http://www.forestsforwatersheds.org/reduce-stormwater/>.
- Department of Environmental Protection. (2006). *Pennsylvania Stormwater Best Management Practices Manual*.
- Wissahickon Watershed Partnership. *Pennsylvania Rain Garden Guide*. Retrieved on May 4, 2010 from http://pa.audubon.org/habitat/PDFs/RGBrochure_complete.pdf.
- Building a Backyard Rain Garden. North Carolina Cooperative Extension. Retrieved on May 4, 2010 from <http://www.bae.ncsu.edu/topic/raingarden/Building.htm>
- Delaware County Planning Commission. (2010). *Draft Crum Creek Watershed Act 167 Stormwater Management Plan. Ordinance Appendix B. Simplified Approach to Stormwater Management for Small Projects*.
- Solebury Township. (2008). *Solebury Township Stormwater Management Ordinance. "Appendix J Simplified Stormwater Management Procedures for Existing Single Family Dwelling Lots"*

APPENDIX G: REFERENCES

Articles / Books

- DeBarry, P.A., Yang, E., Traver, R. G., Newman, B., *Determination of Appropriate Infiltration Requirements For Land Development Using the Water Budget Approach – the Darby – Cobbs Experience.*
- Low, D.J., Hippie, D.J., Yannacci, D. (2002). *Geohydrology of Southeastern Pennsylvania.* Water-Resources Investigations Report 00-4166.
- Jarrett, A.R. (1995). *Water Management.* Dubuque, Iowa. Kendall/Hunt Publishing Co.
- Olmsted, F. H. & Hely, A.G. (1962). *Relation between Ground Water and Surface Water in Brandywine Creek Basin, Pennsylvania.* Geological Survey Professional Paper, 417-A, A-1-A-21
- Risser, D. W., Cogner, R. W. Ulrich, J.E., and Asmussen, M.P. (2005). *Estimates of Ground-Water Recharge Based on Streamflow - Hydrograph methods, Pennsylvania.* U.S. Geological Survey Open File Report 1005-1333.
- United States Environmental Protection Agency. (rev December 2005). *Stormwater Phase II Final Rule Small MS4 Stormwater Program Review.* Fact Sheet 2.0. EPA 833-F-00-002. <http://www.epa.gov/npdes/pubs/fact2-0.pdf>

Act 167 Plans

- Bucks County Planning Commission & Bucks County Conservation District. (1992). *Neshaminy Creek Watershed Stormwater Management Plan*, Volume I.
- Bucks County Planning Commission & Montgomery County Planning Commission. (2013). *Neshaminy Creek Watershed Act 167 Stormwater Management Plan (includes Little Neshaminy Creek Watershed).*
- Lehigh Valley Planning Commission. (2009). *Perkiomen Creek Headwaters Stormwater Management Plan.*

BMP Manuals

- California
California Stormwater BMP Handbook: New Development and Redevelopment (January 2003) – separate file available at <http://www.cabmphandbooks.org/Development.asp>
- Georgia
Georgia Stormwater Management Manual Volume 2: Technical Handbook (August 2001) separate file (<http://www.georgiastormwater.com/>)
- Maryland
2000 Maryland Stormwater Design Manual – http://www.mde.state.md.us/Programs/WaterPrograms/SedimentandStormwater/stormwater_design/index.asp
- Massachusetts
Stormwater Management, Volume Two: Stormwater Technical Handbook (Massachusetts, 1997) – separate file available at <http://www.mass.gov/dep/water/laws/swmpolv2.pdf>
- Minnesota
Minnesota Urban Small Sites BMP Manual: Stormwater Best Management Practices for Cold Climates (July 2001) – <http://www.metrocouncil.org/environment/Watershed/BMP/manual.htm>
- New Jersey

STORMWATER MANAGEMENT

STORMWATER Best Management Practices Manual http://www.nj.gov/dep/stormwater/bmp_manual2.htm

New York

New York State Stormwater Management Design Manual (2001) – <http://www.dec.ny.gov/chemical/29072.html>

Pennsylvania

Pennsylvania Stormwater Best Management Practices (2006) –

<http://164.156.71.80/WXOD.aspx?fs=2087d8407c0e00008000071900000719&ft=1>

Washington

Stormwater Management Manual for Western Washington (August 2001) –

<http://www.ecy.wa.gov/programs/wq/stormwater/manual.html>

Federal

Stormwater Best Management Practices in an Ultra-Urban Setting: Selection and Monitoring (FHWA) – <http://www.fhwa.dot.gov/environment/ultraurb/3fs1.htm>

USEPA Infiltration Trench Fact Sheet (September 1999) –

<http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm>

Riparian Buffer References

Alliance for the Chesapeake Bay, Pennsylvania Department of Environmental Protection, September 2000. *Forest Buffer Toolkit*, Stream ReLeaf Program.

Fike, Jean, June 1999. *Terrestrial & Palustrine Plant Communities of Pennsylvania*, Pennsylvania Natural Diversity Inventory, The Nature Conservancy, Western Pennsylvania Conservancy, and Pennsylvania Department of Conservation and Natural Resources.

Palone, R. S. and A. H. Todd (eds), 1997. *Chesapeake Bay Riparian Handbook: A Guide for Establishing and Maintaining Riparian Forest Buffers*. Chesapeake Bay Program and Northeastern Area State and Private Forestry. Natural Resources Conservation Service Cooperative State Research Education and Extension Services.

Penn State College of Agricultural Sciences, 1996. *Establishing Vegetative Buffer Strips Along Streams to Improve Water Quality*. Publication # AGRS-67.

Pennsylvania Association of Conservation Districts, Inc., Keystone Chapter, Soil and Water Conservation Society, Pennsylvania Department of Environmental Protection, Natural Resources Conservation Service, 1998. *Pennsylvania Handbook of Best Management Practices for Developing Areas*. Prepared by CH2MHill.

The Federal Interagency Stream Restoration Working Group (FISRWG, 10/1998). *Stream Corridor Restoration Principles, Processes, and Practices*. GPO Item No. 0120-A; SuDocs No. A57.6/2:EN3/PT.653. ISBN-0-934213-59-3. Published October 1998. Revised August 2000.

Modeling Data

The SCS Type II rainfall curve ~ National Oceanic and Atmospheric Administration (NOAA) Atlas 14 rain data corresponding to the Doylestown rain gage. This data may be retrieved from the Atlas 14 website: http://hdsc.nws.noaa.gov/hdsc/pfds/orb/pa_pfds.html

MONTGOMERY TOWNSHIP BOARD OF SUPERVISORS
BOARD ACTION SUMMARY

SUBJECT: Consider Payment of Bills

MEETING DATE: April 14, 2014

ITEM NUMBER: #18

MEETING/AGENDA: WORK SESSION

ACTION XX NONE

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

INITIATED BY: Lawrence J. Gregan
Township Manager

BOARD LIAISON: Joseph P. Walsh, Chairman

BACKGROUND:

Please find attached a list of bills for your review.

ZONING, SUBDIVISION OR LAND DEVELOPMENT IMPACT:

None.

PREVIOUS BOARD ACTION:

None.

ALTERNATIVES/OPTIONS:

None.

BUDGET IMPACT:

None.

RECOMMENDATION:

Approve all bills as presented.

MOTION/RESOLUTION:

None.

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

Montgomery Township Check Register

Check Number	Check Date	Vendor No	Payee	Amount
25735	3/27/14	671	MONTGOMERY TOWNSHIP	1,284.00
25736	3/27/14	00000499	MONTGOMERY TWP. PROFESSIONAL	170.26
25737	3/27/14	1264	MORGAN STANLEY SMITH BARNEY INC	6,088.54
25761	4/9/14	00000967	DELAWARE VALLEY HEALTH INSURANCE	1,055.92
25762	4/9/14	00000499	MONTGOMERY TWP. PROFESSIONAL	183.26
25763	4/9/14	1264	MORGAN STANLEY SMITH BARNEY INC	5,878.62
57050	4/14/14	00000677	ABINGTON MEMORIAL HOSPITAL	35.00
57051	4/14/14	00000006	ACME UNIFORMS FOR INDUSTRY	701.82
57052	4/14/14	00000340	ADVENT SECURITY CORPORATION	217.50
57053	4/14/14	00001020	AIR CLEANING SYSTEMS INC.	1,490.00
57054	4/14/14	00000075	ALDERFER GLASS COMPANY, INC.	50.73
57055	4/14/14	00000683	ALEXANDER J. DEANGELIS	60.00
57056	4/14/14	00000053	ALLIED WASTE SERVICES #320	1,080.00
57057	4/14/14	LST00045	ANALYTICAL BIOLOGICAL SERVICES	13.02
57058	4/14/14	00001866	ANGEL M. JOHNSON	1,784.00
57059	4/14/14	00000528	ANYWHERE MINATURE GOLF	100.00
57060	4/14/14	BT006454	APPATURE INC.	25.00
57061	4/14/14	00000027	ARMOUR & SONS ELECTRIC, INC.	1,121.72
57062	4/14/14	00001997	AUTOMATIC SYNC TECHNOLOGIES, LLC	129.36
57063	4/14/14	00000043	BERGEY'S	455.46
57064	4/14/14	00001938	BILL WIEGMAN	150.00
57065	4/14/14	00000544	BRANDI MCCOY	2,137.78
57066	4/14/14	LST00040	BREANA A. YOST	24.10
57067	4/14/14	00000101	BRIAN GERRARD	202.22
57068	4/14/14	00001903	BRIAN JANSSENS	45.00
57069	4/14/14	00001691	BRIDLE PATH ELEMENTARY SCHOOL	500.00
57070	4/14/14	00000423	FAMILY DINING, INC.	76.64
57071	4/14/14	00000076	GREGORY BENCSIK	110.00
57072	4/14/14	00000069	C L WEBER CO INC.	233.81
57073	4/14/14	00000072	CANON FINANCIAL SERVICES, INC	1,263.90
57074	4/14/14	LST00002	ROBERT MCADAMS	38.00
57075	4/14/14	00001601	CDW GOVERNMENT, INC.	997.66
57076	4/14/14	00000686	CHILD, HOME & COMMUNITY	780.00
57077	4/14/14	00902354	CHRISTOPHER SIMON	940.50
57078	4/14/14	00000602	CONRAD SIEGEL	12,900.00
57079	4/14/14	00000108	COUNTY ELECTRIC SUPPLY COMPANY, INC	911.22
57080	4/14/14	00000326	COUNTY OF MONTGOMERY	46.98
57081	4/14/14	00000086	DAVID D. DUNLAP	444.13
57082	4/14/14	00000111	DAVID H. LIGHTKEP, INC.	30.20
57083	4/14/14	00000024	DAVID P. BENNETT	45.00
57084	4/14/14	00001945	DAVID S. WOLFE	45.00
57085	4/14/14	00001941	DAVID W. VASCONEZ	15.00
57086	4/14/14	00001627	DEER PARK DIRECT	107.59
57087	4/14/14	00001520	DELAWARE VALLEY INSURANCE TRUST	46,159.00

Montgomery Township Check Register

Check Number	Check Date	Vendor No	Payee	Amount
57088	4/14/14	00000120	DELAWARE VALLEY WORKERS	45,715.00
57089	4/14/14	00000208	DELL MARKETING L.P.	4,900.33
57090	4/14/14	00000599	DEPARTMENT OF PUBLIC WELFARE	50.00
57091	4/14/14	00000967	DELAWARE VALLEY HEALTH INSURANCE	149,574.32
57092	4/14/14	00000146	E.A. DAGES, INC.	132.80
57093	4/14/14	00000092	E.M. KUTZ, INC.	1,859.97
57094	4/14/14	00001332	EAGLE POWER & EQUIPMENT CORP	617.67
57095	4/14/14	00000169	FEDEX	18.70
57096	4/14/14	00001466	FEDEX OFFICE	46.95
57097	4/14/14	00001669	FIRST HOSPITAL LABORATORIES, INC.	282.75
57098	4/14/14	BT006456	FRANKCRUM N11, INC.	25.00
57099	4/14/14	00001504	GALETON GLOVES	596.85
57100	4/14/14	00000193	GEORGE ALLEN PORTABLE TOILETS, INC.	552.00
57101	4/14/14	00001842	GLEN ROETMAN	105.00
57102	4/14/14	00000608	GOOSE SQUAD L.L.C.	250.00
57103	4/14/14	00000060	GRAF ENGINEERING, LLC	4,750.00
57104	4/14/14	00000203	GRANTURK EQUIPMENT CO., INC.	686.01
57105	4/14/14	00000213	HAJOCA CORPORATION	103.69
57106	4/14/14	00000215	HAVIS, INC.	3,433.52
57107	4/14/14	BT005940	HILL INTERNATIONAL	1,029.31
57108	4/14/14	00000216	HORSHAM CAR WASH	305.00
57109	4/14/14	BT006420	HUNTINGDON VALLEY BANK	23.00
57110	4/14/14	00000691	INDIAN VALLEY BIKEWORKS	180.20
57111	4/14/14	BT006447	INTEPROS	25.00
57112	4/14/14	00000103	INTERNATIONAL SALT COMPANY, LLC	2,303.55
57113	4/14/14	00000102	INTERSTATE BATTERY SYSTEMS OF	36.00
57114	4/14/14	00000531	INTERSTATE FLEETS, INC.	375.00
57115	4/14/14	00000148	JONATHAN S. BEER	400.00
57116	4/14/14	LST00048	JENNIFER FLAHERTY	52.00
57117	4/14/14	00902852	JL FREED HONDA	80.00
57118	4/14/14	00000522	JOE BIFOLCO	60.00
57119	4/14/14	00001964	JOHN CATALDI	30.00
57120	4/14/14	LST00051	JOHN GERHART	52.00
57121	4/14/14	00000890	JOHN H. MOGENSEN	60.00
57122	4/14/14	BT003191	JOHN VAN DAME	1,297.17
57123	4/14/14	00001581	JOSEPH J. SIMES	150.00
57124	4/14/14	00001843	JOSEPH M. BENNETT	135.00
57125	4/14/14	00000740	K.J. DOOR SERVICES INC.	793.00
57126	4/14/14	00902851	KEITH MILLER	140.00
57127	4/14/14	LST00046	KIMBERLY BROWN	16.00
57128	4/14/14	00000932	KIMMEL BOGRETTE	16,468.47
57129	4/14/14	00001858	LAURIE ROBBINS	624.00
57130	4/14/14	00000057	LAWN AND GOLF SUPPLY COMPANY, INC.	79,417.89
57131	4/14/14	00000313	LEXISNEXIS MATTHEW BENDER	68.08

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Check Number	Check Date	Vendor No	Payee	Amount
57132	4/14/14	00902853	LINDA BAKER	12.00
57133	4/14/14	00902266	LORI KENICK	22.00
57134	4/14/14	00001706	LOWE'S COMPANIES INC.	561.71
57135	4/14/14	BT005412	M & A TIG INC.	162.35
57136	4/14/14	00000687	MARLANE GRAPHICS, INC.	180.00
57137	4/14/14	00002021	MARRIOTT'S EMERGENCY EQUIPMENT	157.00
57138	4/14/14	00000578	MARVIN MOSEBY	75.00
57139	4/14/14	00000689	MARY KAY KELM, ESQUIRE	975.00
57140	4/14/14	00000440	MARY NEWELL	30.00
57141	4/14/14	00000201	LAWRENCE J. MURPHY	771.34
57142	4/14/14	00001968	MATTHEW VITUCCI	15.00
57143	4/14/14	00001330	MCCALLION STAFFING SPECIALISTS	1,134.00
57144	4/14/14	00902849	MICHAEL D. KRISTOFKO	1,200.00
57145	4/14/14	LST00052	MICHAEL GERHART	52.00
57146	4/14/14	00001920	MICHAEL H. BEAN	120.00
57147	4/14/14	00000867	MICHAEL SHEARER	45.00
57148	4/14/14	00002016	MICHAEL SHINTON	80.00
57149	4/14/14	00000771	MONTGOMERY TOWNSHIP HISTORICAL	13,730.00
57150	4/14/14	00001247	NELSON WIRE ROPE CORPORATION	81.20
57151	4/14/14	00901543	NORTH PENN CHURCH OF CHRIST	25.00
57152	4/14/14	BT000072	NOVIRA THERAPEUTICS, INC.	54.86
57153	4/14/14	00000356	NORTH WALES WATER AUTHORITY	233.24
57154	4/14/14	00001134	OFFICE DEPOT, INC	297.54
57155	4/14/14	00001400	PA CHIEFS OF POLICE ASSOCIATION	100.00
57156	4/14/14	00001987	PACIFIC INTERPRETERS, INC	178.12
57157	4/14/14	00001840	PAUL R. MOGENSEN	75.00
57158	4/14/14	00000095	PAUL SMITH	80.00
57159	4/14/14	00000397	PECO ENERGY	6,555.55
57160	4/14/14	00000679	PENN COMMERCIAL VEHICLE SOLUTIONS	7,383.26
57161	4/14/14	00000595	PENN VALLEY CHEMICAL COMPANY	929.13
57162	4/14/14	00000388	PENNSYLVANIA ONE CALL SYSTEM, INC.	149.40
57163	4/14/14	00001358	PENNSYLVANIA RECREATION AND PARK	546.00
57164	4/14/14	00000009	PETTY CASH	200.00
57165	4/14/14	00000447	PETTY CASH - POLICE	194.81
57166	4/14/14	00001880	PHILIP C. STUMP	75.00
57167	4/14/14	00000446	PHISCON ENTERPRISES, INC.	250.00
57168	4/14/14	LST00047	PHOENIX BROADBAND	208.00
57169	4/14/14	00000409	POLICE CHIEFS' ASSOCIATION OF	150.00
57170	4/14/14	00000345	PRINTWORKS & COMPANY, INC.	249.61
57171	4/14/14	00001055	PROMO DIRECT	8,357.74
57172	4/14/14	00001630	PSI - PROTECTION SERVICES INC.	521.00
57173	4/14/14	00000252	SUNG K. KIM	638.25
57174	4/14/14	00000519	RACHEL TROUTMAN	90.00
57175	4/14/14	00000439	RED THE UNIFORM TAILOR	7,073.39

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Check Number	Check Date	Vendor No	Payee	Amount
57176	4/14/14	00000430	REM-ARK ALLOYS, INC.	140.31
57177	4/14/14	00001591	RHOMAR INDUSTRIES, INC.	540.09
57178	4/14/14	00001662	RICHARD GRIER	169.59
57179	4/14/14	00000117	RIGGINS INC	1,491.13
57180	4/14/14	00000115	RIGGINS, INC	6,233.63
57181	4/14/14	00000441	ROBERT HART	75.00
57182	4/14/14	00000061	ROBERT MCMONAGLE	15.00
57183	4/14/14	00000610	RUBIN, GLICKMAN, STEINBERG AND	39.00
57184	4/14/14	00000653	SCATTON'S HEATING & COOLING, INC.	505.75
57185	4/14/14	00000465	SHAPIRO FIRE PROTECTION COMPANY	521.15
57186	4/14/14	LST00049	SIMA DOYLE	34.00
57187	4/14/14	00001745	SONIA ISABEL THOMSON	1,687.20
57188	4/14/14	BT006142	SSDS HOLDINGS	25.00
57189	4/14/14	00001847	STAPLES CONTRACT & COMMERCIAL, INC	107.62
57190	4/14/14	00000593	SUBURBAN SALES & SERVICE, INC.	725.63
57191	4/14/14	00001200	SYNATEK	3,170.00
57192	4/14/14	00000485	SYRENA COLLISION CENTER, INC.	2,282.52
57193	4/14/14	LST00050	TERESA J. MITTMAN	51.96
57194	4/14/14	00000690	THE GIVING TREE	500.00
57195	4/14/14	00000496	21ST CENTURY MEDIA NEWSPAPER LLC	689.07
57196	4/14/14	00000496	21ST CENTURY MEDIA NEWSPAPER LLC	389.00
57197	4/14/14	00001273	TIM KUREK	409.00
57198	4/14/14	00000506	TRANS UNION LLC	25.00
57199	4/14/14	00000327	U.S. MUNICIPAL SUPPLY INC.	756.20
57200	4/14/14	00000542	COMMONWEALTH OF PENNSYLVANIA	406.78
57201	4/14/14	00000520	VALLEY POWER, INC.	762.34
57202	4/14/14	00000040	VERIZON	924.60
57203	4/14/14	00001033	VERIZON CABS	545.95
57204	4/14/14	00000170	VERIZON COMMUNICATIONS, INC.	129.99
57205	4/14/14	00000038	VERIZON WIRELESS SERVICES, LLC	1,315.54
57206	4/14/14	00000038	VERIZON WIRELESS SERVICES, LLC	480.26
57207	4/14/14	00902850	VICKI RODRIGUEZ	60.00
57208	4/14/14	00001839	VINAY SETTY	190.00
57209	4/14/14	00000442	VINCENT ZIRPOLI	235.00
57210	4/14/14	BT006163	WANG JIAN HUI	2,679.95
57211	4/14/14	00001191	WARREN FUCHS	30.00
57212	4/14/14	00000760	WASTE MANAGEMENT OF	551.50
57213	4/14/14	00001329	WELDON AUTO PARTS - LANSDALE (NAPA)	650.77
57214	4/14/14	00000632	WEST GENERATOR SERVICES INC.	1,642.16
57215	4/14/14	00000649	WEST POINT TOURS INC.	1,448.00
57216	4/14/14	00001948	WILLIAM H. FLUCK IV	30.00
57217	4/14/14	00000249	WILLIAM R. GOLTZ	195.00
57218	4/14/14	00001546	WILSON'S HARDWARE & LOCKSMITHS	145.00
57219	4/14/14	00000590	YOCUM FORD	2,511.57

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Check Number	Check Date	Vendor No	Payee	Amount
57220	4/14/14	00000550	ZEP MANUFACTURING COMPANY	358.27
57221	4/14/14	00000209	BOUCHER & JAMES, INC.	11,066.00
57222	4/14/14	00000152	ECKERT SEAMANS CHERIN &	2,312.07
57223	4/14/14	00000817	GILMORE & ASSOCIATES, INC.	19,062.60
TOTAL				530,283.87

MONTGOMERY TOWNSHIP ELECTRONIC PAYROLL TAX PAYMENTS

<u>DATE</u>	<u>VENDOR NAME</u>	<u>REASON FOR PAYMENT</u>	<u>AMOUNT</u>
03/27/2014	IRS	941 Payment	\$73,855.37
03/27/2014	BCG	401/457 Plan Payment	\$24,579.52
03/27/2014	PA-SCDU	Withholding Payment	\$2,907.06
04/01/2014	IRS	945 Payment	\$3,795.12
04/01/2014	ICMA	DROP Plan Payment	\$21,795.10
04/02/2014	City of Philadelphia	Mar Wage Tax Payment	\$570.04
04/02/2014	Commonwealth of PA	State Tax Payment	\$7,845.00
04/10/2014	IRS	941 Payment	\$74,612.51
04/10/2014	BCG	401/457 Plan Payment	\$24,270.96
04/10/2014	PA-SCDU	Withholding Payment	\$2,907.06
Total Paid as of 04/14/2014			\$237,137.74