ABINGTON TOWNSHIP

NOVEMBER 22, 2022

PLANNING COMMISSION MEETING

TOWNSHIP OF ABINGTON

PLANNING COMMISSION MEETING

A G E N D A
November 22, 2022
7:30 PM

There are three ways for the public to participate in the meeting: online, by phone, or an in-person viewing room. Residents can access the meeting online, by a computer, iPad, iPhone or Android at https://us06web.zoom.us/j/83637406019. This link will enable residents to hear the meeting and see presentations. There will be no video capabilities. Residents, who are unable to join online, can listen to the meeting by calling 1-929-436-2866 and entering the meeting ID number 836-3740-6019 when prompted. Residents, who are unable to join online or by phone, can watch, hear, and participate in the meeting in a viewing room at the Abington Township Municipal Building located at 1176 Old York Road, Abington, PA 19001.

CALL TO ORDER

ROLL CALL *BROWN, DICELLO, ROBINSON, ROSEN, COOPER, BAKER, STRACKHOUSE*

CONSIDER APPROVAL OF MINUTES

a. Consider Approving Planning Commission Minutes of September 28, 2022.

PRESENTATION

UNFINISHED BUSINESS

a. Motion to approve the major LD-22-02 Huntingdon Valley Shopping Center (Chipotle Pad Site)

b. Motion to approve the major subdivision LD-22-03 - Autozone located at 1318 & 1330 Easton Road.

NEW BUSINESS

PUBLIC COMMENT

ADJOURNMENT

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under *Email Updates* at www.abingtonpa.gov/agendas

BOARD POLICY ON PUBLIC PARTICIPATION

For Information Purposes Only

The Township shall conduct business in accordance with the Commonwealth of Pennsylvania Laws governing the conduct of public meetings and only establish guidelines that shall govern public participation at meetings consistent with the law.

Each commenter shall:

- Direct their comments to the Presiding Officer;
- Speak from the podium or into a microphone designated by the presiding officer;
- State their name for the record;
- Either orally or in writing provide their address for the record;
- Have a maximum of three minutes to make their comments. Each commenter when speaking to a specific agenda item, is to keep their comments relative to that identified agenda item;
- Speak one time per agenda item;
- When commenting on non-agenda items, the commenter is to keep their comments related to matters of the Township of Abington, Montgomery County, Pennsylvania.
- State a question to the Presiding Officer after all commenters have spoken, and;
- Be seated after speaking or upon the request of the presiding officer;
- Not engage in debate, dialogue or discussion;
- Not disrupt the public meeting, and;
- Exercise restraint and sound judgement in avoiding the use of profane language, and the maligning of others.

The stated meeting of the Planning Commission of the Township of Abington was held on Wednesday, September 28, 2022, at the Township Administration Building, Abington, PA, with Chairwoman Lucy Strackhouse presiding.

CALL TO ORDER: 7:30 p.m.

ROLL CALL: Present: BROWN, DiCELLO, COOPER, BAKER, STRACKHOUSE
Excused: ROSEN, ROBINSON

Also Present: County Planner NARCOWICH
Township Engineer LEE

CONSIDER APPROVAL OF MINUTES:

Mr. Baker made a MOTION, seconded by Mr. DiCello to approve the minutes of the Planning Commission Meeting of August 23, 2022.

MOTION was ADOPTED 5-0.

PRESENTATION: None.

UNFINSHED BUSINESS: None.

Review and approve the Minor Land Development Application, LD-22-04 – 521 Moredon Road (Solar Array Panel):

Ms. Strackhouse said that the applicant is proposing to lease a portion of land owned by the Sisters of the Holy Redeemer to install a ground mounted principal solar array and panel system, and associated equipment, conduit, concrete pads along with the solar panels; an extension of the exiting gravel access road; and stormwater runoff control measures. Access to/from the site will be by way of one (1) existing gravel access road currently used by the Sewer Authority located off Moredon Road.

Also, the applicant was granted conditional use approval for the portion of the array and fencing that encroaches within Zone 2 of the Riparian Corridor Conservation District by the Board of Commissioners on August 11, 2022.

Mr. Joseph Catuzzi, Attorney representing the applicant, presented the timeline of the applicant's approval process through the Township, and noted that the applicant will comply with Township Engineer's review letter dated September 9, 2022.

Ms. Allison Lee, Township Engineer, supports the waivers requested by the applicant as follows:

Section 142 – Stormwater Management – the applicant proposes concrete curb level spreaders for the solar panel array that will help reduce the velocities of the flows leaving the site. Stormwater management is provided for the 3,300 sq. ft. of the new gravel area as required by the code.

Section 146-11. B (11) (b) – Existing Features Plan – the applicant proposes to not conduct a tree survey for the entire 85-acre parcel since only two (2) trees are to be removed as part of this project.

Section 146-11. H. (1) – Landscape Plan – the applicant proposes the landscape plan be prepared by the design engineer with the screening and replacement trees being selected by the Redeemer Health System's Director of Landscaping. Also, the landscaping plan has been reviewed by the Shade Tree Commission.

Ms. Strackhouse asked for any comments from members of the Planning Commission.

Mr. DiCello asked for the project start date.

Mr. Mike Bayesa, ESG, representing the applicant, replied that the start date is planned for the end of the first quarter, beginning of the second quarter of next year.

Mr. DiCello asked who owns the equipment?

Mr. Bayesa replied it is owned by Redeemer Village LLC.

Mr. Baker asked about the design as well as the kilowatts of the solar panels.

Mr. Tim Boles, Project Engineer, representing the applicant, replied there will be rows of panels mounted on posts that will be driven into the ground.

Mr. Bayesa added that the solar panels are 1.173 kilowatts.

Mr. Brown asked how tall are the solar panels?

Mr. Boles replied there will be two panels per section that are eight to nine feet tall.

Ms. Strackhouse questioned whether they will be visible from the Tall Trees residential development.

Mr. Boles replied most of the time they will not be visible; however, in the wintertime, there may be some visibility.

Ms. Strackhouse asked for any public comment. There was none.

Mr. Cooper made a MOTION, seconded by Mr. Baker to recommend approval of the minor Land Development Application, LD-22-04 – 521 Moredon Road (Solar Array Panel) and to approve the applicant's requested waivers as listed.

MOTION was ADOPTED 5-0.

ADJOURNMENT: 7:43 p.m.

Respectfully submitted,

Liz Vile, Minutes Secretary

PLANNING COMMISSION MEETING

AGENDA ITEM

November 22, 2022

DATE

AGENDA ITEM NUMBER

Administration

DEPARTMENT

FISCAL IMPACT
Cost > $10,000
Yes ☐ No ☑

PUBLIC BID REQUIRED
Cost > $20,100
Yes ☐ No ☑

AGENDA ITEM:

LD-22-02 - Huntingdon Valley Shopping Center (Chipotle Pad Site)

EXECUTIVE SUMMARY:

The applicant is proposing to remove the existing macadam parking area and associated parking spots located on the 801 Huntingdon Pike parcel (parcel no.30-00-31508-00-7) and construct a new 2,338 SF stand-alone fast-food drive through Chipotle restaurant building with outdoor seating within the Huntingdon Valley Shopping Center.

The Executive Summary, plans and reviews of the application are attached.

PREVIOUS BOARD ACTIONS:

N/A

RECOMMENDED BOARD ACTIONS:

Motion to approve the major LD-22-02 Huntingdon Valley Shopping Center (Chipotle Pad Site)

Pennoni

3100 Horizon Drive
Suite 200
King of Prussia, PA 19406
T: 610-277-2402
F: 610-277-7449

www.pennoni.com

November 11, 2022

ABINT130024

Mr. Richard Manfredi, Township Manager
Abington Township
1176 Old York Road
Abington, PA 19001

RE: Executive Summary - LD-22-02- Huntingdon Valley Shopping Center (Chipotle Pad Site) Preliminary/Final Major Land Development Plans (2nd Submission)

Dear Mr. Manfredi:

We have received a copy of the Preliminary/Final Major Land Development Plans consisting of fourteen (14) sheets dated February 18, 2022, last revised on August 24, 2022, and received on October 13, 2022; as prepared by RL Showalter & Associates, Inc. located at 116 East Butler Avenue, in Chalfont, PA for the above referenced project. A professional services agreement (PSA) was received from the Township on March 2, 2022. This is a joint application from both adjoining owners that comprise the Huntingdon Valley Shopping Center (HVSC), which are the Applicant.

Executive Summary:
Under this Application, the Applicant is proposing to remove the existing macadam parking area and associated parking spots located on the 801 Huntingdon Pike parcel (parcel no. 30-00-31508-00-7) and construct a new 2,338 SF stand-alone fast-food drive through Chipotle restaurant building with outdoor seating within the HVSC. Other site improvements for this site include parking, curbing, sidewalk, landscaping, lighting relocation, and sanitary and stormwater management facilities. Access to/from the site will be by way of three existing HVSC entrances that intersect Huntingdon Pike (S.R. 0232, 70 FT R/W). The new building is proposed to be served by public water and sewer service.

The HVSC is comprised of two (2) separate adjoining parcels as referenced above - 801 Huntingdon Pike is located north of 737 Huntingdon Pike; however, the site improvements are proposed primarily within the northern 801 Huntingdon Pike parcel. The Applicant did not specifically call out for the parcels to be consolidated; however, the Applicant has provided the site plans with the zoning data and parking requirement table referencing both parcels.

This project is located within the BC - Business Center Huntingdon Valley Zoning District and the Huntingdon Valley Shopping Center. The subject parcel is fronted by Huntingdon Pike (S.R.232 70 FT R/W) to the west; an abutting commercial medical facility zoned in the BC - Business Center Huntingdon Valley Zoning District and Rockledge Avenue to the north; Vansant Drive and residential properties zoned in the R-4 High Density Residential Zoning District to the northeast; Scott Park, an vacated portion of Scott Road, and residential properties zoned in the R-4 High Density Residential Zoning District to the southeast; and other commercial properties zoned in the MS-L – Main Street Low Intensity Density Zoning District and Shady Lane to the south. Main Access drive off of Shady Lane to the HVSC is not permitted as noted in Figure 11.9 – Dimensional Requirements Table.

There is an existing drainage channel for an unnamed tributary to Pennypack Creek located along the southern property line paralleling Shady Lane. Therefore, the southern parcel of 737 Huntingdon Pike has been

identified in Figure 15.2 as a parcel intersecting a riparian corridor and is subject to the requirements of Article XV: Riparian Corridor Conservation District.

In accordance with the FEMA, Flood Insurance Rate Map (FIRM) Panel No. 42091C0404G, effective March 2, 2016, the tract is identified to be within Zone X, an area outside the 0.2% chance flood and minimal flood hazard. Therefore, based on the FEMA determination, the tract is not located within the Floodplain Conservation District. Based on the plans and FIRM map, there are no wetlands that exist on site; however, the Applicant shall confirm.

Variances Requested:
The Applicant is not requesting any variances as part of this land development project.

Waivers Requested:
The Applicant is requesting the following waivers as part of this Land Development application:

1. **§146-9.B.2 – Type of Application** - a waiver to permit a one-stage preliminary and final approval process.

2. **§146-11.A.4 – Property Identification Plans** - a waiver to not provide the tract boundaries with tax parcel numbers, owner's names, and approximate acreage of lots surrounding any portion of the site for a distance of 400 feet.

3. **§146-11.B.7 – Existing Features Plans** - a waiver to not provide the location, size, and ownership of all underground and above ground public or private utilities, on the site and within 400 feet of any portion of the site, including waterlines, sanitary sewer lines, storm sewer lines, electric lines, telephone lines, gas mains, fire hydrants, and streetlights.

4. **§146-11.H.1 – Landscaping and Shade Tree Plan** - a waiver from providing a landscape plan prepared by a registered landscape architect.

5. **§142-302.B.2.a – Stormwater Management Site Plan Contents** - a waiver from preparing 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, vernal pools, steam buffers, floodplains, hydrologic soil groups, closed topographic depressions and recharge areas. Land Development, existing recharge areas, and any other requirements specifically outlined in the Municipal SALDO also shall be included.

Issues:
The following issues we have identified from our review is as follows:

- Design Standards:
  - Applicant will provide window area calculations.
- Lighting:
  - Applicant will provide point by point calculations shall be provided to ensure that the site lighting complies with the standards set forth in §2601.H.
- Stormwater:
  - Applicant will provide infiltration tests.
- Traffic comments:
  - Applicant to address TPD 11/7/22 traffic review comments.

Summary:
Although there are outstanding zoning comments, per our correspondence with the design engineer on November 3, 2022, it is our understanding that the zoning comments can be addressed by modifying the plans without having the need to go before the Zoning Hearing Board. The traffic comments from the November 7, 2022 TPD review letter shall be addressed prior to our recommendation for Preliminary/Final Major Subdivision and Land Development Plans approval.

If you have any questions or comments with this submittal, please do not hesitate to contact me.

Sincerely,

PENNONI

Khaled R. Hassan, PE
Township Engineer

cc: Terry Castorina, Executive Assistant to the Township Manager
Ashley McIlvaine, Special Assistant to the Township Manager
Lucy Strackhouse, Chairperson, Abington Township Planning Commission

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Pennoni

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November 11, 2022

ABINT130024

Mr. Richard Manfredi, Township Manager
Abington Township
1176 Old York Road
Abington, PA 19001

RE: LD-22-02- Huntingdon Valley Shopping Center (Chipotle Pad Site)
PARID: 30-00-31500-00-6 / TMID: 30063 008 (a.k.a. 737 Huntingdon Pike – Valley Associates)
PARID: 30-00-31508-00-7 / TMID: 30063 001 (a.k.a. 801 Huntingdon Pike – Huntingdon Pike Co.)
Preliminary/Final Major Land Development Plans Review (2nd Submission)

Dear Mr. Manfredi:

We have received a copy of the Preliminary/Final Major Land Development Plans consisting of fourteen (14) sheets dated February 18, 2022, last revised August 24, 2022, and received on October 13, 2022; as prepared by RL Showalter & Associates, Inc. located at 116 East Butler Avenue, in Chalfont, PA for the above referenced project. This is a join application from both adjoining owners that comprise the Huntingdon Valley Shopping Center (HVSC), which are the Applicant.

Under this Application, the Applicant is proposing to remove the existing macadam parking area and associated parking spots located on the 801 Huntingdon Pike parcel (parcel no. 30-00-31508-00-7) and construct a new 2,338 SF stand-alone fast-food drive through Chipotle restaurant building with outdoor seating within the HVSC. Other site improvements for this site include parking, curbing, sidewalk, landscaping, lighting relocation, and sanitary and stormwater management facilities. Access to/from the site will be by way of three existing HVSC entrances that intersect Huntingdon Pike (S.R. 0232, 70 FT R/W). The new building is proposed to be served by public water and sewer service.

The HVSC is comprised of two (2) separate adjoining parcels as referenced above - 801 Huntingdon Pike is located north of 737 Huntingdon Pike; however, the site improvements are proposed primarily within the northern 801 Huntingdon Pike parcel. The Applicant did not specifically call out for the parcels to be consolidated; however, the Applicant has provided the site plans with the zoning data and parking requirement table referencing both parcels.

This project is located within the BC - Business Center Huntingdon Valley Zoning District and the Huntingdon Valley Shopping Center. The subject parcel is fronted by Huntingdon Pike (S.R.232 70 FT R/W) to the west; an abutting commercial medical facility zoned in the BC - Business Center Huntingdon Valley Zoning District and Rockledge Avenue to the north; Vansant Drive and residential properties zoned in the R-4 High Density Residential Zoning District to the northeast; Scott Park, an vacated portion of Scott Road, and residential properties zoned in the R-4 High Density Residential Zoning District to the southeast; and other commercial properties zoned in the MS-L – Main Street Low Intensity Density Zoning District and Shady Lane to the south. Main Access drive off of Shady Lane to the HVSC is not permitted as noted in Figure 11.9 – Dimensional Requirements Table.
There is an existing drainage channel for an unnamed tributary to Pennypack Creek located along the southern property line paralleling Shady Lane. Therefore, the southern parcel of 737 Huntingdon Pike has been identified in Figure 15.2 as a parcel intersecting a riparian corridor and is subject to the requirements of Article XV: Riparian Corridor Conservation District.

In accordance with the FEMA, Flood Insurance Rate Map (FIRM) Panel No. 42091C0404G, effective March 2, 2016, the tract is identified to be within Zone X, an area outside the 0.2% chance flood and minimal flood hazard. Therefore, based on the FEMA determination, the tract is not located within the Floodplain Conservation District. Based on the plans and FIRM map, there are no wetlands that exist on site; however, the Applicant shall confirm.

The Applicant is not requesting any variances as part of this land development project.

The Applicant is requesting the following waivers as part of this land development project:

WAIVERS REQUESTED:

1. §146-9.B.2, a waiver to permit a one-stage preliminary and final approval process.

2. §146-11.A.4, a waiver to not provide the tract boundaries with tax parcel numbers, owner's names, and approximate acreage of lots surrounding any portion of the site for a distance of 400 feet.

3. §146-11.B.7, a waiver to not provide the location, size, and ownership of all underground and above ground public or private utilities, on the site and within 400 feet of any portion of the site, including waterlines, sanitary sewer lines, storm sewer lines, electric lines, telephone lines, gas mains, fire hydrants, and streetlights.

4. §146-11.H.1, a waiver from providing a landscape plan prepared by a registered landscape architect.

5. §142-302.B.2.a, a waiver from preparing 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, vernal pools, steam buffers, floodplains, hydrologic soil groups, closed topographic depressions and recharge areas. Land Development, existing recharge areas, and any other requirements specifically outlined in the Municipal SALDO also shall be included.

The following documents have been reviewed:

Title	Sheet	Dated	Revised
Record Plan	1 of 14	02/18/22	08/24/22
Site Plan	2 of 14	02/18/22	08/24/22
Overall Existing Features Plan	3 of 14	02/18/22	08/24/22
Existing Features Plan	4 of 14	02/18/22	08/24/22
Grading Plan	5 of 14	02/18/22	08/24/22
Utility Plan	6 of 14	02/18/22	08/24/22
Landscape Plan	7 of 14	02/18/22	08/24/22
Construction Details	8 of 14	02/18/22	08/24/22
Erosion & Sedimentation Control Plan	9 of 14	02/18/22	08/24/22
Erosion & Sedimentation Control Notes	10 of 14	02/18/22	08/24/22
Erosion & Sedimentation Control Details	11 of 14	02/18/22	08/24/22
Post Construction Stormwater Management Plan	12 of 14	02/18/22	08/24/22
Post Construction Stormwater Management Details	13 of 14	02/18/22	08/24/22
Aerial Plan	14 of 14	02/18/22	08/24/22

We have performed a review of the above referenced plans for compliance with the Zoning Ordinance (Chapter 162); Subdivision and Land Development Ordinance (Chapter 146); Stormwater Management Ordinance (Chapter 142) and our previous review letter dated April 8, 2022. We offer the following outstanding comments for your consideration:

ZONING COMMENTS

8. *Per §1104.C.9.c. – Design Standards – Windows – Blank walls shall not be permitted along any exterior wall facing a street or passenger train station. Walls in these locations shall comprise a minimum of 35% window area and a maximum of 75% window area, with windows interspersed across the façade. The Applicant is showing a cluster of window areas located to the north of the building façade facing Huntingdon Pike, and the Applicant is required to intersperse the windows across the façade. The Applicant shall revise the façade or be required to obtain a variance from this code section.*
A window area calculation shall be provided on the plans to ensure the proposed window area is between 35% and 75%. The Applicant has stated they will comply with this requirement.

30. *Per §2402.A.2.a.(4) – Parking Lot Landscaping and Street Trees – Any new or existing parking lots where at least 50% of the parking spaces are being developed or modified, or where 15,000 SF of existing parking area has been altered; and where such parking area has at least 50 stalls, shall be landscaped with planting islands where each planting island shall contain one shade tree plus shrubs and/or groundcover to cover the entire area at maturity. Parking lot trees shall be a minimum of three (3) inches in caliper; branching at six (6) feet to eight (8) feet in height and of the recommended species as listed in "Recommended Plant Materials" list in the SALDO. Parking lot islands shall be planted in lawn or ground cover only.*
Based on our measurements, the Applicant is proposing to alter approximately 19,000 SF of area and approximately 51 stalls; therefore, this project is subject to the requirements of this code section. The Applicant shall provide landscaped planting islands with a shade tree plus shrubs and/or groundcover as specified under this code section. The Applicant is only proposing shrubs for the two (2) new planter islands located east of the proposed Chipotle site.
Planting is being provided for the proposed planting islands; however, the proposed trees are labeled as 2.5-inch caliper trees. Per the above code section, the parking lot trees shall be a minimum of 3 inches in caliper. The landscape schedule shall be updated to shown 3-inch caliper trees. The Applicant has stated they will comply with this requirement.

42. *Per §2601.H.2 – Lighting Standards – All on-lot public parking areas, aisles, and access ways for any nonresidential use shall be provided with a minimum of one-half (0.5) foot candles of light at any point on the ground.*
Point by point calculations shall be provided to ensure that the site lighting complies with the standards set forth in the above section of the code. If all on-lot parking areas, aisles, and access ways are not provided with a minimum of one-half (0.5) foot candles of light at any point on the ground, then the Applicant shall be required to provide additional lighting to comply with the above section. All lighting shall comply with the specifications of §2601.H.
The proposed Chipotle building, and improvements associated with this building are not an existing non-conforming condition and will be required to meet the requirements of the above code section. Point-by-point calculations for the existing light to be relocated shall be provided to ensure that all on-lot parking areas, aisles, and access ways are provided with a minimum of one-half (0.5) foot candles of light at any point on the ground. If all the areas are not provided with the required 0.5 footcandles of light, additional lighting shall be provided to meet the requirement. The Applicant has stated they will comply with this requirement.

43. *Per §2601.N – Trash Containment Standards – When trash containment is located outdoors in the BC - Business Center Zoning District, trash containers shall be located in walled or enclosed enclosures, at least six (6) feet in height.*
The Applicant has not indicated where the trash storage will take place, if the trash storage will be indoors or outdoors. Since this site is located within the BC - Business Center Huntingdon Valley Zoning District, any outdoors trash containers shall be placed inside a six (6) feet enclosure that follows the specifications in §2601.N.3.a thru d. and site element screening requirements per §2403.C.1. through .3 and Figure 24.7 – Site Element Screen Requirements table.

A detail of the trash enclosure has been provided; however, no shrubs are shown surrounding the trash enclosure. A medium intensity site element screen is required which proposed an opaque fence or masonry wall with shrubs. Shrubs shall be provided on the eastern and western sides of the trash enclosure facility. The Applicant has stated they will comply with this requirement.

CHAPTER 146
SUBDIVISION & LAND DEVELOPMENT COMMENTS

45. *Per §146-10.B.(5) – General Requirements – The submission type in accordance with §146-9.D shall be indicated on all the plan sheets as "Preliminary/Final major land development" and noted as land development application number "LD-22-02".*
The land development application number "LD-22-02" shall be shown on all plans.

52. *Per §146-11.B.(2) – Existing Features Plan – The existing features plan shall show the location, names, and widths of all streets, whether including right-of-way, cartway, or centerline.*
The Applicant shall show the cartway widths, right-of-way, and centerlines for all streets shown on the overall existing and existing features plans. The right-of-way line type shall be added to the legend on the plans.
The centerlines of the existing streets shall be shown on the plans.

GENERAL STORMWATER MANAGEMENT COMMENTS

81. *In the PCSM Report, the Applicant is indicating that the basin will be an infiltration basin. The Applicant shall provide results of infiltration testing that was performed on site for review and approval. In addition, the Applicant shall identify and label the areas where infiltration testing occurred on the plans.*
The Applicant has indicated that infiltration results will be provided under separate cover. The results shall be provided for review and approval prior to acceptance of the stormwater design.

82. *On the Record plan, the Applicant is indicating the proposed building area to be 2,338 SF, and on the PSCM Report, the Applicant is indicating the building area to be 2,325 SF. The Applicant shall confirm the proposed building areas and revise accordingly.*
The PCSM report has been updated to reflect a building area of 2,323 SF which is consistent with the architectural plans; however, as indicated on the Record Plan under the zoning data section, the building area is labeled as 2,338 SF. The building areas shall be changed to be consistent on all documents.

GENERAL COMMENTS

91. *A traffic impact analysis shall be provided for the proposed Chipotle site for review and comment to ensure that the trips generated by the proposed site will not adversely impact the existing traffic conditions experienced by the Huntingdon Pike corridor and HVSC site.*
A trip generation analysis has been provided and comments have been provided by the Township Traffic Engineer. The Applicant shall address the comments provided in the review.

We have received the following documents/permits/reviews:

- AQUA Water Will Serve Letter (January 27, 2022)
- Application for SD/LD (February 17, 2022)
- MCPC Request for Review (February 17, 2022)
- Post Construction Stormwater Management Report (February 18, 2022)
- Fire Marshal Review (March 3, 2022)
- Sewer Review (March 18, 2022)
- STC Review (March 21, 2022 via email)
- MCPC Review (March 24, 2022)
- EAC Review (April 8, 2022)

- Traffic Review (November 7, 2022)

We have not received the following documents/permits/reviews:

- MCCD Review
- Waiver Request Letter
- Financial Escrow
- BMP O&M Agreement
- Legal Descriptions & Exhibits

SUMMARY

Although there are outstanding zoning comments, per our correspondence with the design engineer on November 3, 2022, it is our understanding that the zoning comments can be addressed by modifying the plans without having the need to go before the Zoning Hearing Board. The traffic comments from the November 7, 2022 TPD review letter shall be addressed prior to our recommendation for Preliminary/Final Major Subdivision and Land Development Plans approval.

If you have any questions or comments with this submittal, please do not hesitate to contact me.

Sincerely,

PENNONI

Khaled R. Hassan, PE
Township Engineer

cc: Terry Castorina, Executive Assistant to the Township Manager
Ashley McIlvaine, Special Assistant to the Township Manager

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TRAFFIC PLANNING AND DESIGN, INC.

WWW.TRAFFICPD.COM

Memorandum

To: Richard Manfredi, Manager - Abington Township

From: Greg Richardson, P.E.

Date: November 7, 2022

Re: Chipotle – Huntingdon Valley Shopping Center
Traffic Review #1
Abington Township, Montgomery County, PA
TPD No. ABTO.00034

cc: Board of Commissioners
Planning Commission
Tim Clark
Ashley McIlvaine
Terry Castorina
Khal Hassan, P.E.
Allison A. Lee, P.E.

Per your request and on behalf of Abington Township, Traffic Planning and Design, Inc. (TPD) has completed a traffic review of the above-referenced application. TPD reviewed the following documents:

- Trip Generation Assessment prepared by Horner & Canter Associates – Dated July 8, 2022.
- Site Plan, by R.L. Showalter Associates, Inc. – Dated August 24, 2022.

The following are our comments:

1. We generally agree with the methodology provided in the Trip Generation Assessment. As a note and as indicated in the letter, the proposed Chipotle restaurant will increase traffic to/from the shopping center by **26** (2.1% increase) and **76** (6.2%) trips, during the **Weekday P.M.** and **Saturday Midday** peak hours.
2. It is unclear whether the number of trips presented in Table 1 are "new trips" or total trips (including new trips plus "pass-by"). This is important to determine if the drive-thru stacking is adequate to accommodate all trips. See Comment #4 below regarding an additional request for drive-thru queue times.

3. While not a significant typographical error, Table 1 contains columns for the proposed trips as "PM Peak Hour" for both peak hours. This typo does not change the data or conclusions of the report, but the three (3) right-most columns be labeled "Saturday Midday Peak Hour."
4. The Applicant should provide more information on the drive-thru queue times for this proposed and relatively new fast food restaurant land use model. We would like to ensure that the stacking area can accommodate the projected traffic volumes.
5. The Applicant should provide a gap study and a left turn warrant analysis for left turn ingress movements from Huntingdon Pike (S.R. 0232) into the adjacent driveway.
6. The driveway adjacent to the proposed restaurant appears to be prohibit left turn egress movements to Huntingdon Pike (S.R. 0232). This turn restriction is only prohibited via a right turn arrow and ONLY legend on the egress lane of the driveway. While a raised concrete island is preferred, at a minimum, "No Left Turns" signs must be added on the near right radius of the driveway and far left (i.e., on the opposite side of Huntingdon Pike).
7. The Township should consider requiring the Applicant to provide a sidewalk along the adjacent driveway from Huntingdon Pike to the internal frontage road. It should be noted that this request would necessitate the removal of existing landscaping.
8. The adjacent driveway provides pavement markings that indicates "No Parking" on the driveway, in the vicinity of the existing ATM. The provision of this prohibition has resulted in an 8-foot-wide lane on the driveway (i.e., "pinch point). Moreover, it has been observed that even with this prohibition, bank patrons utilizing the ATM stand-by in this area, create a safety hazard by requiring other shopping center patrons to drive around the stopped vehicles and cross the painted centerline. The Applicant should investigate solutions to eliminate this undesirable situation.
9. ADA-compliant ramps should be provided on each radius of the adjacent driveway at the intersection with Huntingdon Pike (S.R. 0232).
10. The Applicant should coordinate with PennDOT to determine if a formal Highway Occupancy Permit (HOP) application must be made for the above-requested signage and ADA ramps. If so, the Township and TPD should be copied on all correspondence to and from the Department.
11. A response letter must be provided with the resubmission detailing how each comment above has been addressed, and where each can be found in the resubmission materials (i.e., plan sheet number(s), page number(s), etc.) to assist in the re-review process.

TPD reserves the right to make additional comments upon receipt of additional documents or changes to the plan and studies.

1. A response letter must be provided with the resubmission detailing how each comment above has been addressed, and where each can be found in the resubmission materials (i.e., plan sheet number(s), page number(s), etc.) to assist in the re-review process.

TPD reserves the right to make additional comments upon receipt of additional documents or changes to the plan and studies

WASTEWATER DEPARTMENT

George Wrigley, Director

October 4, 2022

Mr. Wayne Kiefer, PE.
R. L. Showalter Associates, Inc.
116 East Butler Avenue
Post Office Box 95
Chalfont, PA 18914

RE: Proposed Chipolte Restaurant Huntingdon Valley Shopping: Sanitary Sewer Connection

Dear Mr. Kiefer:

The Township of Abington Wastewater Utilities Department has reviewed the water use information you submitted and the recorded historical monthly water useage from Aqua PA records for the two existing Chipolte Restaurants within Abington Township, to determine the anticipated sanitary sewer generation rates for the proposed restaurant and the associated connection fee.

In order to evaluate the anticipated sanitary flow rates for the proposed building, comparable monthly water useage reports from two similar Chipolte Restaurants located at 1437 Old York Road and 2618 Moreland Road were reviewed along with the monthly water useage from the Exton, PA restaurant. The daily flow rates averaged from the highest monthly water useage for the three existing restaurants is utilized to evaluate the capacity requirements of the existing sanitary sewer collection system. The highest reported daily water useage is 1,709 gallons per day (gpd) during February 2022 at the Exton, PA restaurant, 1,613 gpd at 1437 Old York Road restaurant and 1,470 gpd at the 2618 Moreland Road restaurant. The mean average of these three rates is 1,597 gpd. Considering the Abington Township sanitary rate of 265 gpd/EDU, there are an additional 6.0 EDU's required for the proposed Chipolte restaurant. The connection fees due total $21,000.00 (6.0 EDU X $3,500.00/EDU).

Should you have any questions or require any additional information, please contact me at 215-884-8329 or email at gwrigley@abingtonpa.gov.

Sincerely,

George Wrigley

George Wrigley, Director
Abington Wastewater Utilities Department

pc: Ms. Kimberly Hamm, Abington Director of Code & Community Development

Enclosure: AQUA Pa Water Usage reports and Exton, Pa restaurant table

AVERAGE WATER USAGE

Bill Date	Days	Usage (Gal)	Gal/Day	EDUs (265 Gal/Day)
7/18/2022	30	28,300	943	
6/16/2022	29	31,800	1,097	
5/18/2022	32	30,800	963	
4/18/2022	30	30,100	1,003	
3/17/2022	28	30,100	1,075	
2/17/2022	32	54,700	1,709	MAX
1/19/2022	31	32,700	1,055	
12/16/2021	29	27,900	962	
11/17/2021	31	27,300	881	
10/19/2021	30	29,000	967	
9/17/2021	30	25,000	833	
8/18/2021	32	38,100	1,191	
7/19/2021	30	31,900	1,063	
6/17/2021	29	29,400	1,014	
5/19/2021	32	30,600	956	
4/19/2021	30	25,500	850	
3/18/2021	28	27,600	986	
2/18/2021	33	34,300	1,039	
1/18/2021	30	30,700	1,023	
TOTAL	576	595,800	1,034	4

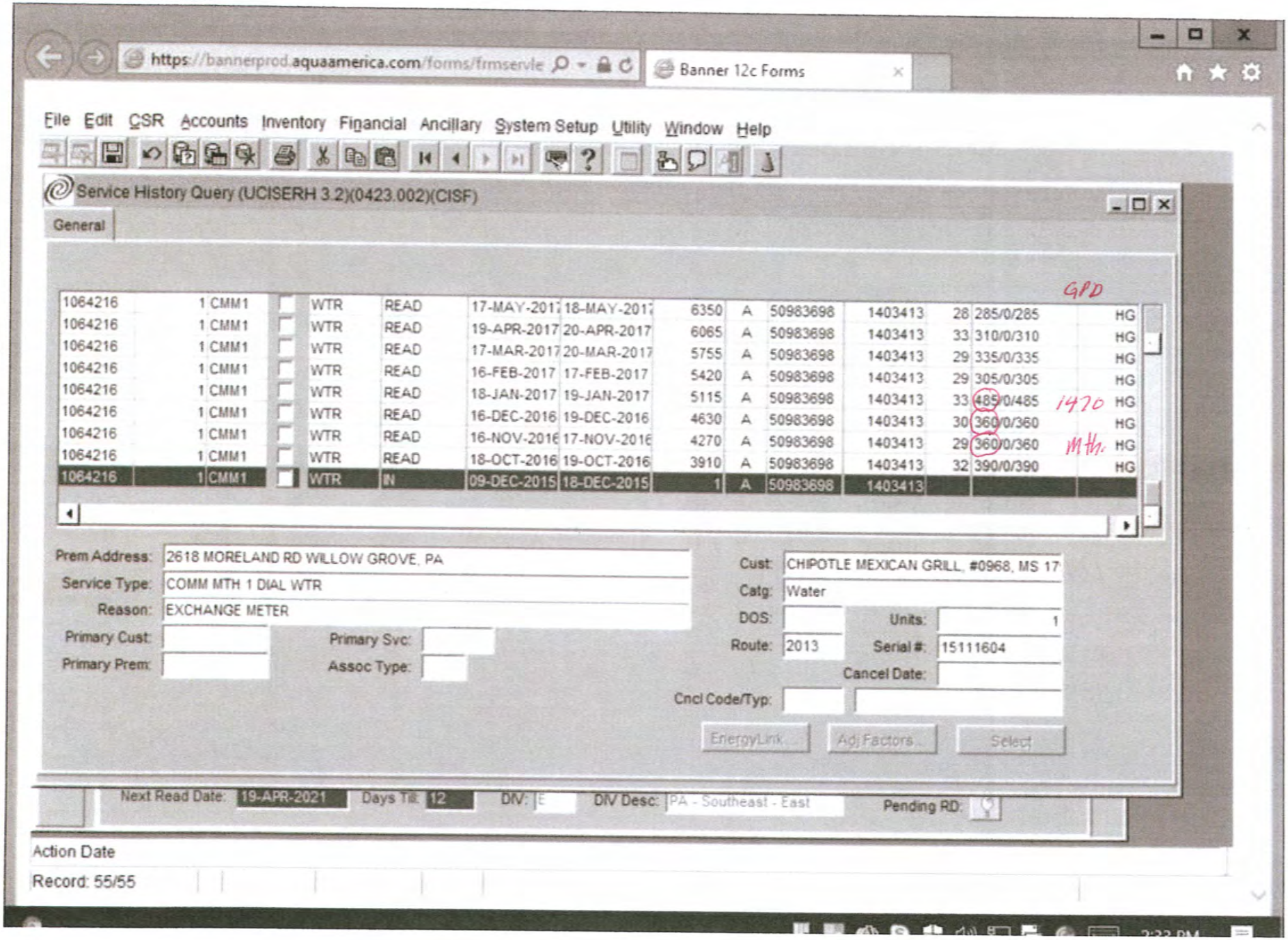
RUN DATE 04/30/2019
SR-1-2 BY ADDRESS

Abington
WATER USAGE REPORT
FOR PERIOD FROM 01-DEC-2017 TO 30-NOV-2018

ACCOUNT NO.	NAME & SERVICE ADDRESS	READ DATE	CODE	METER READING	NR. DAYS	1ST QTR	2ND QTR	3RD QTR	4TH QTR	TOTAL
117896	CHIPOTLE MEXICAN GR	11/15/18	A A	1729	31				310	
CUST: 001745612	1437 OLD YORK RD	10/15/18	A A	1698	28				280	
PREM: 117896	ABINGTON PA 19001-2710	09/17/18	A A	1670	34			330		
UOMS: HG CNSZ:	11/2 MULT: 10.0	08/14/18	A A	1637	29			270		
		07/16/18	A A	1610	32			300		
		06/14/18	A A	1580	31		500			
		05/14/18	A A	1530	31		450			
		04/13/18	A A	1485	30		460			
		03/14/18	A A	1439	28	440				
		02/14/18	A A	1395	30	420				
		01/15/18	A A	1353	32	320				
		12/14/17	A A	1321	29				330	
				ACCOUNT TOTALS		1,180	1,410	900	920	4,410

500 = 50,000/31 = 1613 gpd

Premise **1064216**



23

NOTES:

1. BASE PLAN BASED ON BOUNDARY & TOPOGRAPHIC SURVEY PREPARED BY CONTROL POINTS ASSOCIATES, INC., DATED MAY 18, 2007, PRELIMINARY/FINAL MINOR LAND DEVELOPMENT PLANS FOR HUNTINGDON VALLEY SHOPPING CENTER RENOVATION PREPARED BY BERGMANN ASSOCIATES, DATED AUGUST 20, 2012, LAST REVISED MAY 23, 2013 AND MAY 2021 SURVEY BY R.L. SHOWALTER & ASSOCIATES, INC.
2. SITE DATUM 3.4 FEET ABOVE ABINGTON TOWNSHIP SANITARY SEWER DATUM.

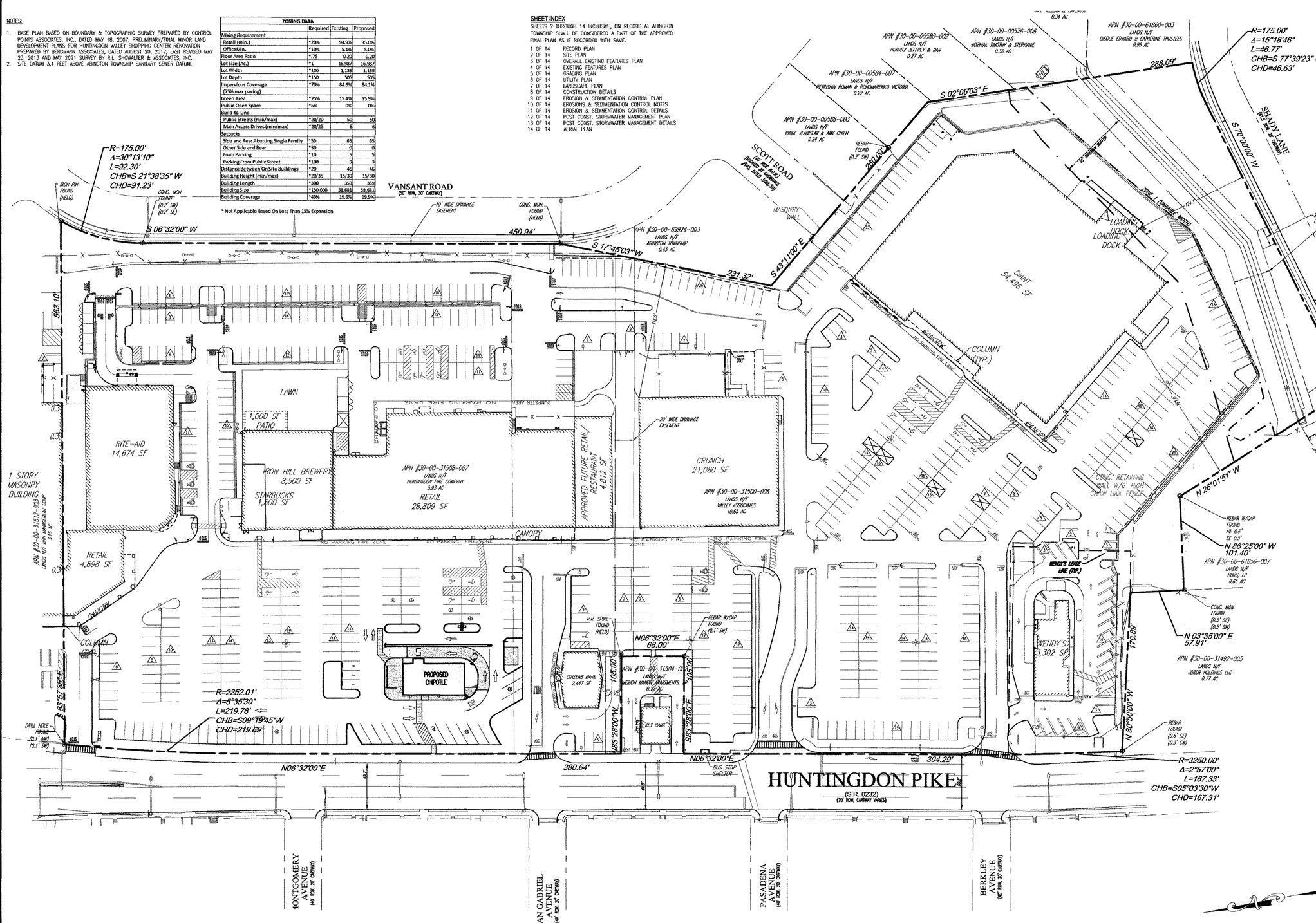
ZONING DATA			
Mixing Requirement	Required	Existing	Proposed
Retail (min.)	*20%	94.9%	95.0%
OfficeMin.	*10%	5.1%	5.0%
Floor Area Ratio	*.75	0.20	0.20
Lot Size (Ac.)	*1	16.987	16.987
Lot Width	*100	1,139	1,139
Lot Depth	*150	505	505
Impervious Coverage (75% max paving)	*70%	84.6%	84.1%
Green Area	*25%	15.4%	15.9%
Public Open Space	*5%	0%	0%
Build-to-Line			
Public Streets (min/max)	*20/20	50	50
Main Access Drives (min/max)	*20/25	6	6
Setbacks			
Side and Rear Abutting Single Family	*50	65	65
Other Side and Rear	*30	0	0
From Parking	*10	3	3
Parking From Public Street	*100	3	3
Distance Between On Site Buildings	*20	46	46
Building Height (min/max)	*20/35	15/30	15/30
Building Length	*300	359	358
Building Size	*150,000	58,681	58,681
Building Coverage	*40%	19.6%	19.9%

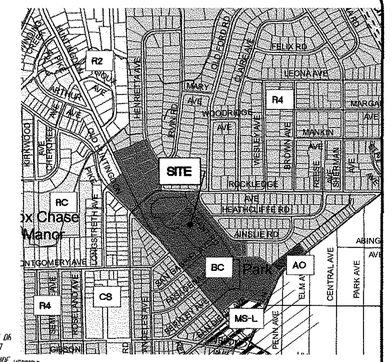
* Not Applicable Based On Less Than 15% Expansion

SHEET INDEX

SHEETS 2 THROUGH 14 INCLUSIVE, ON RECORD AT ABINGTON TOWNSHIP SHALL BE CONSIDERED A PART OF THE APPROVED FINAL PLAN AS IF RECORDED WITH SAME.

1 OF 14 RECORD PLAN
2 OF 14 SITE PLAN
3 OF 14 OVERALL EXISTING FEATURES PLAN
4 OF 14 EXISTING FEATURES PLAN
5 OF 14 GRADING PLAN
6 OF 14 UTILITY PLAN
7 OF 14 LANDSCAPE PLAN
8 OF 14 CONSTRUCTION DETAILS
9 OF 14 EROSION & SEDIMENTATION CONTROL PLAN
10 OF 14 EROSIONS & SEDIMENTATION CONTROL NOTES
11 OF 14 EROSION & SEDIMENTATION CONTROL DETAILS
12 OF 14 POST CONST. STORMWATER MANAGEMENT PLAN
13 OF 14 POST CONST. STORMWATER MANAGEMENT DETAILS
14 OF 14 AERIAL PLAN





LOCATION MAP
SCALE: 1"=800'

OWNER / APPLICANT

30-00-31508-008
VALLEY ASSOCIATES
737 HUNTINGDON PK
DB 3339 PG 317

30-00-31508-007
HUNTINGDON PIKE COMPANY
801 HUNTINGDON PK
DB 3799 PG 251

C/O KRAVCO COMPANY LLC
375 E ELM STREET, SUITE 100
CONSHOHOCKEN, PA 19428
610-854-2800

ZONING

ZONING DISTRICT: BC BUSINESS CENTER DISTRICT
EXISTING/PROPOSED USE: C-33 SHOPPING CENTER
LOT AREA = 16.987 AC.
EXISTING BUILDING AREA = 144,818 SF
PROPOSED BUILDING AREA = 2,338 SF, 1.61% INCREASE

VALLEY ASSOCIATES

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF MONTGOMERY

ON THE _____ DAY OF _____ A.D 20 ____, BEFORE ME, THE SUBSCRIBER, A NOTARY PUBLIC OF THE COMMONWEALTH OF PENNSYLVANIA, RESIDING IN _____, PERSONALLY APPEARED _____ (NAME OF OFFICER OF THE CORPORATION) WHO ACKNOWLEDGED (HIMSELF/HERSELF) TO BE THE _____, BEING AUTHORIZED TO DO SO, (HE/SHE) EXECUTED THE FORGOING PLAN BY SIGNING THAT SAID CORPORATION IS THE OWNER OF THE DESIGNATED LAND, THAT ALL NECESSARY APPROVAL OF THE PLAN HAS BEEN OBTAINED AND IS ENDORSED THEREON AND THAT SAID CORPORATION DESIRES THAT THE FOREGOING PLAN BE DULY RECORDED.

WITNESS MY HAND AND NOTARIAL SEAL, THE DAY AND YEAR AFORESAID.

_____
NOTARY PUBLIC

MY COMMISSION EXPIRES _____

HUNTINGDON PIKE COMPANY

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF MONTGOMERY

ON THE _____ DAY OF _____ A.D 20 ____, BEFORE ME, THE SUBSCRIBER, A NOTARY PUBLIC OF THE COMMONWEALTH OF PENNSYLVANIA, RESIDING IN _____, PERSONALLY APPEARED _____ (NAME OF OFFICER OF THE CORPORATION) WHO ACKNOWLEDGED (HIMSELF/HERSELF) TO BE THE _____, BEING AUTHORIZED TO DO SO, (HE/SHE) EXECUTED THE FORGOING PLAN BY SIGNING THAT SAID CORPORATION IS THE OWNER OF THE DESIGNATED LAND, THAT ALL NECESSARY APPROVAL OF THE PLAN HAS BEEN OBTAINED AND IS ENDORSED THEREON AND THAT SAID CORPORATION DESIRES THAT THE FOREGOING PLAN BE DULY RECORDED.

WITNESS MY HAND AND NOTARIAL SEAL, THE DAY AND YEAR AFORESAID.

_____
NOTARY PUBLIC

MY COMMISSION EXPIRES _____

ABINGTON TOWNSHIP BOARD OF COMMISSIONERS

APPROVED BY THE BOARD OF COMMISSIONERS OF THE TOWNSHIP OF ABINGTON THIS _____DAY OF _____, 20 ____

ATTEST: _____ PRESIDENT

_____ SECRETARY

_____ ENGINEER

MONTGOMERY COUNTY PLANNING COMMISSION

M.C.P.C. FILE #_____

PROCESSED AND REVIEWED. A REPORT HAS BEEN PREPARED BY THE MONTGOMERY COUNTY PLANNING COMMISSION IN ACCORDANCE WITH THE MUNICIPALITIES PLANNING CODE.

CERTIFIED THIS DATE _____

EXECUTIVE DIRECTOR, MONTGOMERY COUNTY PLANNING COMMISSION

RECORDER OF DEEDS NOTATION

RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS, IN MONTGOMERY COUNTY, PENNSYLVANIA, IN PLAN BOOK_____ PAGE_____ON THE_____DAY OF_____, 20____

GRAPHIC SCALE

50 0 50 100 200 400

(IN FEET)
1 inch = 50 ft.

HUNTINGDON VALLEY SHOPPING CENTER PRELIMINARY/FINAL MAJOR LAND DEVELOPMENT

KRAVCO COMPANY LLC

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE-STOP CALL

PENNSYLVANIA ONE CALL SYSTEM, INC.

1-800-242-1776

SERIAL# 20220481229

PLAN NOTATION - THESE DOCUMENTS ARE ESPECIALLY PREPARED FOR THIS PROJECT AND ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE ON ANY EXTENSION OR MODIFICATION OF THIS PROJECT OR FOR ANY OTHER PROJECT. R. L. SHOWALTER & ASSOCIATES, INC. SHALL ONLY CERTIFY THOSE DOCUMENTS THAT CONTAIN A SEAL AND SIGNATURE. ANY REUSE OF THESE DOCUMENTS WITHOUT THE EXPRESS WRITTEN CONSENT OF R. L. SHOWALTER & ASSOCIATES, INC. OR THEIR USE FOR ANY PURPOSE OTHER THAN THE SPECIFIC PURPOSE FOR WHICH THEY WERE PREPARED IS STRICTLY PROHIBITED. IF USED FOR OTHER THAN THIS PROJECT OR OTHER THAN FOR THE PURPOSE FOR WHICH THEY WERE PREPARED, SUCH USE SHALL CONSTITUTE AN AGREEMENT BY THE PARTY USING THE DOCUMENTS AND THE CLIENT TO INDEMNIFY AND HOLD R. L. SHOWALTER & ASSOCIATES, INC. AND ITS SHAREHOLDERS, OFFICERS, DIRECTORS, PRINCIPALS AND EMPLOYEES HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES (INCLUDING REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS) ARISING AS THE RESULT OF SUCH USE, EXCEPTING ONLY THOSE DAMAGES, LIABILITIES AND COSTS ARISING FROM THE SOLE NEGLIGENCE OR WILLFUL MISCONDUCT OF R. L. SHOWALTER & ASSOCIATES, INC.

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NO.	DATE	COMMENT
1	8/24/2022	PER TOWNSHIP REVIEWS AND PC MEETING

REVISIONS

RECORD PLAN

R. L. Showalter & Associates, Inc.
116 East Butler Avenue
Chalfont, PA 18914
(215) 822-2990
FAX (215) 822-5684
• Engineering • Planning • Surveying •

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL WAYNE R. KIEFER ENGINEER NO. 035804

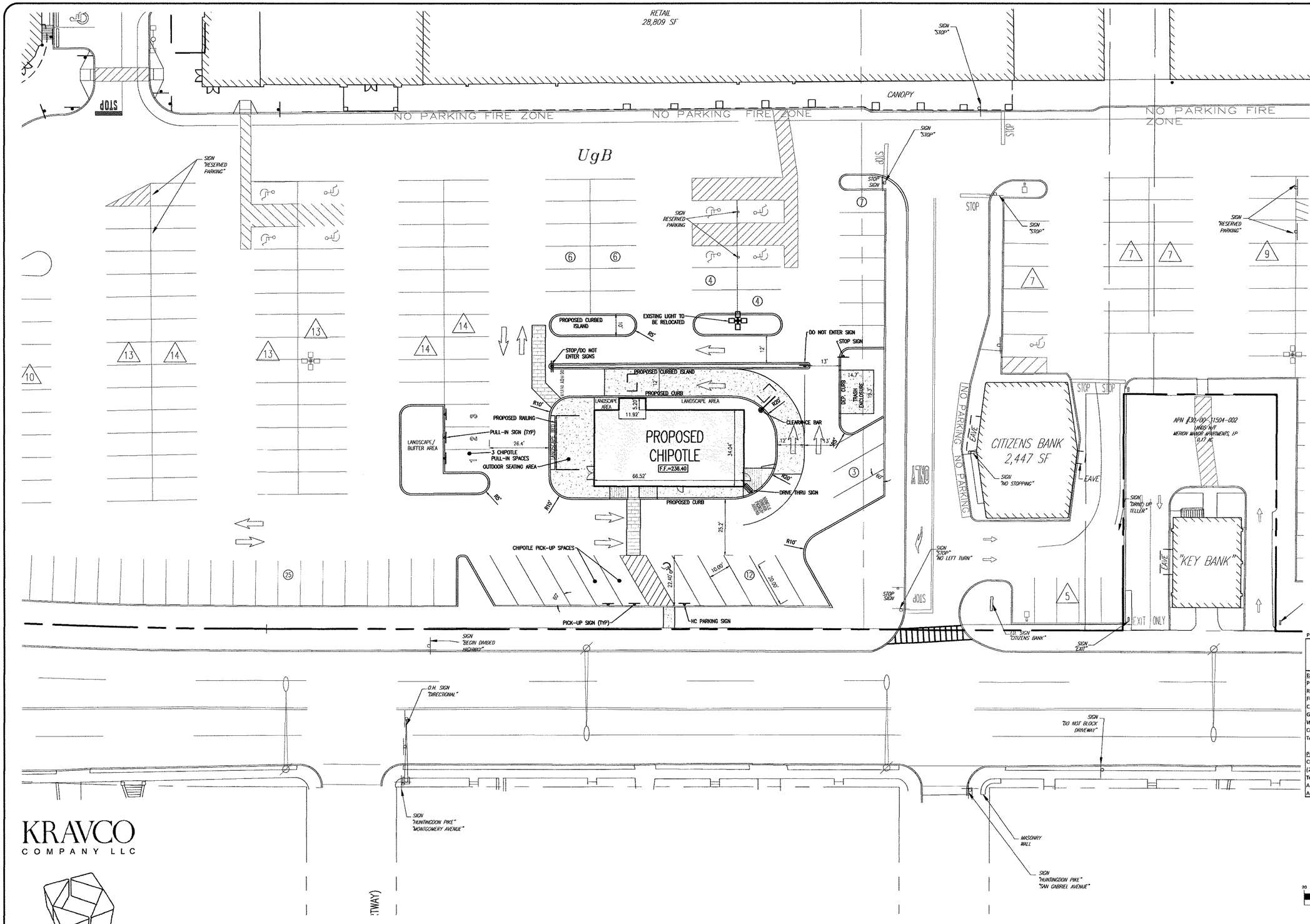
SCALE:	1" = 50'
DATE:	2/18/2022
JOB NO.:	2019-92
DRAWN BY:	LZ
CHECKED BY:	WK

SITUATE: ABINGTON TOWNSHIP
MONTGOMERY COUNTY,PA.

PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET 1 OF 14

Plotted: 08/25/22 - 3:05 PM, By: wkiefer
File: F:\DWG\2019\2019-092 - Kravco HVSC - Abington\ENGINEERING\2019-092_Chiostle Plan.dwg-01-REC
© 2018 R.L. SHOWALTER & ASSOCIATES, INC



SITE NOTES:

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN CONFORMANCE WITH APPLICABLE PENNDOT PUBLICATIONS 408 REQUIREMENTS.
2. BICYCLE SAFE GRATES SHALL BE PROVIDED ON ALL NEW INLETS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL WORK AREAS AND MATERIALS. FENCING SHALL BE PROVIDED TO PROTECT ALL PEDESTRIAN AND VEHICULAR TRAFFIC.
4. ALL PROPOSED WINDOW GLAZING SHALL BE CLEAR.

EXISTING NON-CONFORMITIES:

THE FOLLOWING EXISTING NON-CONFORMITIES ARE TO REMAIN:

1. 1104-B.2.a – ACCESS DRIVES WIDER THAN 28 FEET.
2. 1104.B.6 – PARKING AND VEHICULAR CIRCULATION AREAS LOCATED IN FRONT OF BUILDINGS.
3. 1106.G – LIGHT FIXTURES EXCEEDING 18 FEET IN HEIGHT.
4. 1504.A&E – ENCROACHMENTS INTO RIPARIAN BUFFER.
5. 2103.C – BUILDING LENGTH EXCEEDING 150 FEET WITHOUT 6 FOOT OFFSETS.
6. 2103.C.11 – COMMON USE AREA

REQUESTED WAIVERS:

WAIVERS OF THE FOLLOWING SALDO SECTIONS ARE REQUESTED:

1. 146-9.B.2 – TO PERMIT A ONE STAGE PRELIMINARY AND FINAL APPROVAL PROCESS.
2. 146-11.A.4 – TO NOT REQUIRE ALL PROPERTY INFORMATION WITHIN 400 OF THE SITE TO BE SHOWN ON THE PLAN BASED ON THE LIMITED DEVELOPMENT AREA OF THE SITE.
3. 146-11.B.7 – TO ONLY REQUIRE UTILITIES WITHIN THE DEVELOPMENT AREA TO BE SHOWN ON THE PLANS.
4. 146-11.H.1 – TO NOT REQUIRED THE LANDSCAPE PLAN TO BE PREPARED BY A REGISTERED LANDSCAPE ARCHITECT.
5. 142-302.B.2.a – TO NOT REQUIRE AN ERSAM TO BE SUBMITTED.

PARKING REQUIREMENTS

BUILDING	SQUARE FOOTAGE	SPACE REQUIRED PER SQUARE FOOTAGE	SPACES REQUIRED	SPACES PROVIDED
Existing				
PRIMARY RETAIL	39,109			
RETAIL 2	19,572			
FUTURE RETAIL	4,812			
Crunch	21,080			
Giant	54,496			
Wendy's	3,302			
Citizens Bank	2,447			
Total Existing	144,818	250	580	792
Proposed				
Chipotle	2,323	250	9	
(24 Outdoor Seats)		1 per 3	8	
Total Site	**147,141**	**250**	**597**	**738**
ADA Spaces			15	30
ADA Van Space			3	27

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

KRAVCO COMPANY LLC

CALL BEFORE YOU DIG!
PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE-STOP CALL
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NO.	DATE	COMMENT
1	8/24/2022	PER TOWNSHIP REVIEWS AND PC MEETING

REVISIONS

HUNTINGDON VALLEY SHOPPING CENTER PRELIMINARY/FINAL MAJOR LAND DEVELOPMENT

SITE PLAN

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Chalfont, PA 18914
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• Engineering • Planning • Surveying •

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER WAYNE R. KIEFER NO. 021610-E

SCALE:	1" = 20'
DATE:	2/18/2022
JOB NO.:	2019-92
DRAWN BY:	LZ
CHECKED BY:	WK

SITUATE: ABINGTON TOWNSHIP
MONTGOMERY COUNTY, PA.
PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET 2 OF 14

Plotted: 08/25/22 – 3:05 PM, By: wkiefer
File: I:\DWG\2019\2019-092 – Kravco HVSC – Abington\ENGINEERING\2019-092_Chipotle Plan.dwg-02-SITE
© 2018 R.L. SHOWALTER & ASSOCIATES, INC

SYMBOL	NAME	HSG	DEPTH TO WATER	DEPTH TO BEDROCK	FARMLAND CLASSIFICATION	DEVELOPMENT RATING	HYDRIC SOIL RATING
UgB	URBAN LAND 0 TO 8% SLOPES	NA	>200 CM	> 200 CM	NOT PRIME	NOT RATED	NO

VANSANT ROAD
(50' ROW, 30' CARTWAY)

SCOTT ROAD
(40' ROW, 24' CARTWAY)
PAVING MATERIAL CHANGES

SHADY LANE
(LOCAL ACCESS STREET)

HUNTINGDON PIKE
(S.R. 0232)
(70' ROW, CARTWAY VARIES)

MONTGOMERY AVENUE (40' ROW, 20' CARTWAY)

SAN GABRIEL AVENUE (40' ROW, 20' CARTWAY)

PASADENA AVENUE (40' ROW, 20' CARTWAY)

BERKLEY AVENUE (40' ROW, 20' CARTWAY)

R=175.00'
Δ=30°13'10"
L=92.30'
CHB=S 21°38'35" W
CHD=91.23'

S 06°32'00" W 450.94'

S 17°45'02" W 231.32'

S 43°11'00" E 250.00'

S 02°06'03" E 288.09'

S 70°00'00" W 344.10'

R=175.00'
Δ=15°18'46"
L=46.77'
CHB=S 77°39'23" W
CHD=46.63'

N 26°01'51" W 214.11'

N 86°25'00" W 101.40'

N 03°35'00" E 57.91'

N 80°54'00" W 770.68'

R=3250.00'
Δ=2°57'00"
L=167.33'
CHB=S05°03'30"W
CHD=167.31'

R=2252.01'
Δ=5°35'30"
L=219.78'
CHB=S09°19'45"W
CHD=219.69'

S 83°57'35" E 563.10'

N06°32'00"E 380.64'

N06°32'00"E 68.00'

S83°28'00"E 101.00'

N06°32'00"E 101.00'

S83°28'00"E 74.00'

304.29'

RITE-AID
14,674 SF
FFE 236.35

1 STORY MASONRY BUILDING

RETAIL
4,898 SF

IRON HILL BREWERY
8,500 SF

STARBUCKS
1,800 SF

1,000 SF PATIO

RETAIL
28,809 SF

APPROVED FUTURE RETAIL RESTAURANT
4,612 SF

CRUNCH
21,080 SF

GIANT
54,496 SF

LOADING DOCK

LOADING DOCK

CANOPY

COLUMN (TYP.)

LAWN

UNDERGROUND BASIN

UNDERGROUND BASIN

NO PARKING FIRE LANE

NO PARKING FIRE ZONE

CITIZENS BANK
2,447 SF

KEY BANK

WENDY'S
3,302 SF

WENDY'S LEASE LINE (TYP.)

CONC. RETAINING WALL W/6' HIGH CHAIN LINK FENCE

APN #30-00-31512-003
LANDS N/F HRH MANAGMENT CORP
3.15 AC

APN #30-00-31508-007
LANDS N/F
HUNTINGDON PIKE COMPANY
5.93 AC

APN #30-00-31500-006
LANDS N/F
VALLEY ASSOCIATES
10.65 AC

APN #30-00-31504-003
LANDS N/F
HERMAN MANOR APARTMENTS
0.15 AC

APN #30-00-69824-003
LANDS N/F
ABINGTON TOWNSHIP
0.43 AC

APN #30-00-00580-002
LANDS N/F
HURMTZ JEFFREY & IRAN
0.27 AC

APN #30-00-00576-004
LANDS N/F
WOZNIAK TIMOTHY & STEPHANIE
0.36 AC

APN #30-00-61860-003
LANDS N/F
DISQUE EDWARD & CATHERINE TRUSTEES
0.96 AC

APN #30-00-00584-007
LANDS N/F
PETRISHIN ROMAN & PONOMARENKO VICTORIA
0.22 AC

APN #30-00-00588-003
LANDS N/F
RINGE VLADISLAV & AMY CHIEN
0.24 AC

LANDS N/F
RICE WILLIAM & BARSHANA
0.34 AC

APN #30-00-61856-007
LANDS N/F
FBRG, LP
0.65 AC

APN #30-00-31492-005
LANDS N/F
JOWER HOLDINGS LLC
0.77 AC

UgB

UgD

AmA

IRON PIN FOUND (HELD)

CONC. MON FOUND (0.2' SW) (0.2' SE)

CONC. MON FOUND (HELD)

10' WIDE DRAINAGE EASEMENT

20' WIDE DRAINAGE EASEMENT

40' WIDE DRAINAGE EASEMENT

REBAR FOUND (0.2' SW)

MASONRY WALL

R.R. SPIKE FOUND (HELD)

REBAR W/CAP FOUND (0.1' SW)

DRILL HOLE FOUND (0.1' NW) (0.1' SW)

REBAR FOUND (0.6' SE) (0.1' SW)

REBAR W/CAP FOUND NE 0.6' SE 0.5'

CONC. MON FOUND (0.5' SE) (0.5' SW)

GAS METER

BUS STOP SHELTER

NOTES:

1. BASE PLAN BASED ON BOUNDARY & TOPOGRAPHIC SURVEY PREPARED BY CONTROL POINTS ASSOCIATES, INC., DATED MAY 18, 2007, PRELIMINARY/FINAL MINOR LAND DEVELOPMENT PLANS FOR HUNTINGDON VALLEY SHOPPING CENTER RENOVATION PREPARED BY BERGMANN ASSOCIATES, DATED AUGUST 20, 2012, LAST REVISED MAY 23, 2013 AND MAY 2021 SURVEY BY R.L. SHOWALTER & ASSOCIATES, INC.
2. THE SUBJECT PROPERTY IS NOT LOCATED WITHIN A SPECIAL FLOOD HAZARD AREA (100 YEAR FLOODPLAIN OR FLOODWAY) PER FEMA FIRM 42091C0404G, EFFECTIVE MARCH 2, 2016.

LEGEND

- BOUNDARY LINE
- ADJ. BOUNDARY
- ROW (ULTIMATE & LEGAL)
- PROPERTY SETBACK LINE
- EXISTING CONTOUR
- 340 EXISTING INDEX CONTOUR
- S EXISTING SANITARY SEWER
- EXISTING WATER MAIN
- EXISTING SOILS
- IRON PIN FOUND
- CONC. MONUMENT FOUND
- WV EXISTING UTIL. POLE
- EXISTING WATER VALVE
- S EXISTING SANITARY MANHOLE
- D EXISTING STORM MANHOLE
- EXISTING INLET
- EXISTING TREE
- EVERGREEN TREE

GRAPHIC SCALE
50 0 50 100 200 400
(IN FEET)
1 inch = 50 ft.

HUNTINGDON VALLEY SHOPPING CENTER PRELIMINARY/FINAL MAJOR LAND DEVELOPMENT

CALL BEFORE YOU DIG!
PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE–STOP CALL
PENNSYLVANIA ONE CALL SYSTEM, INC.
1–800–242–1776
SERIAL# 20220481229

PLAN NOTATION – THESE DOCUMENTS ARE ESPECIALLY PREPARED FOR THIS PROJECT AND ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE ON ANY EXTENSION OR MODIFICATION OF THIS PROJECT OR FOR ANY OTHER PROJECT. R. L. SHOWALTER & ASSOCIATES, INC. SHALL ONLY CERTIFY THOSE DOCUMENTS THAT CONTAIN A SEAL AND SIGNATURE. ANY REUSE OF THESE DOCUMENTS WITHOUT THE EXPRESS WRITTEN CONSENT OF R. L. SHOWALTER & ASSOCIATES, INC. OR THEIR USE FOR ANY PURPOSE OTHER THAN THE SPECIFIC PURPOSE FOR WHICH THEY WERE PREPARED IS STRICTLY PROHIBITED. IF USED FOR OTHER THAN THIS PROJECT OR OTHER THAN FOR THE PURPOSE FOR WHICH THEY WERE PREPARED, SUCH USE SHALL CONSTITUTE AN AGREEMENT BY THE PARTY USING THE DOCUMENTS AND THE CLIENT TO INDEMNIFY AND HOLD R. L. SHOWALTER & ASSOCIATES, INC. AND ITS SHAREHOLDERS, OFFICERS, DIRECTORS, PRINCIPALS AND EMPLOYEES HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES (INCLUDING REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS) ARISING AS THE RESULT OF SUCH USE, EXCEPTING ONLY THOSE DAMAGES, LIABILITIES AND COSTS ARISING FROM THE SOLE NEGLIGENCE OR WILLFUL MISCONDUCT OF R. L. SHOWALTER & ASSOCIATES, INC.
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NO.	DATE	COMMENT
1	8/24/2022	PER TOWNSHIP REVIEWS AND PC MEETING

REVISIONS

OVERALL EXISTING FEATURES PLAN

R. L. Showalter & Associates, Inc.
• Engineering • Planning • Surveying •
116 East Butler Avenue
Chalfont, PA 18914
(215) 822–2990
FAX (215) 822–5684

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL WAYNE R. KIEFER ENGINEER NO. 033302-E

SCALE:	1" = 50'
DATE:	2/18/2022
JOB NO.:	2019–92
DRAWN BY:	LZ
CHECKED BY:	WK

SITUATE: ABINGTON TOWNSHIP
MONTGOMERY COUNTY, PA.
PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET 3 OF 14

Plotted: 08/25/22 – 3:06 PM, By: walter
File: F:\DWG\2019\2019–092 – Kravco HVSC – Abington\ENGINEERING\2019–092_Chipotle Plan.dwg–03–OVL EFP
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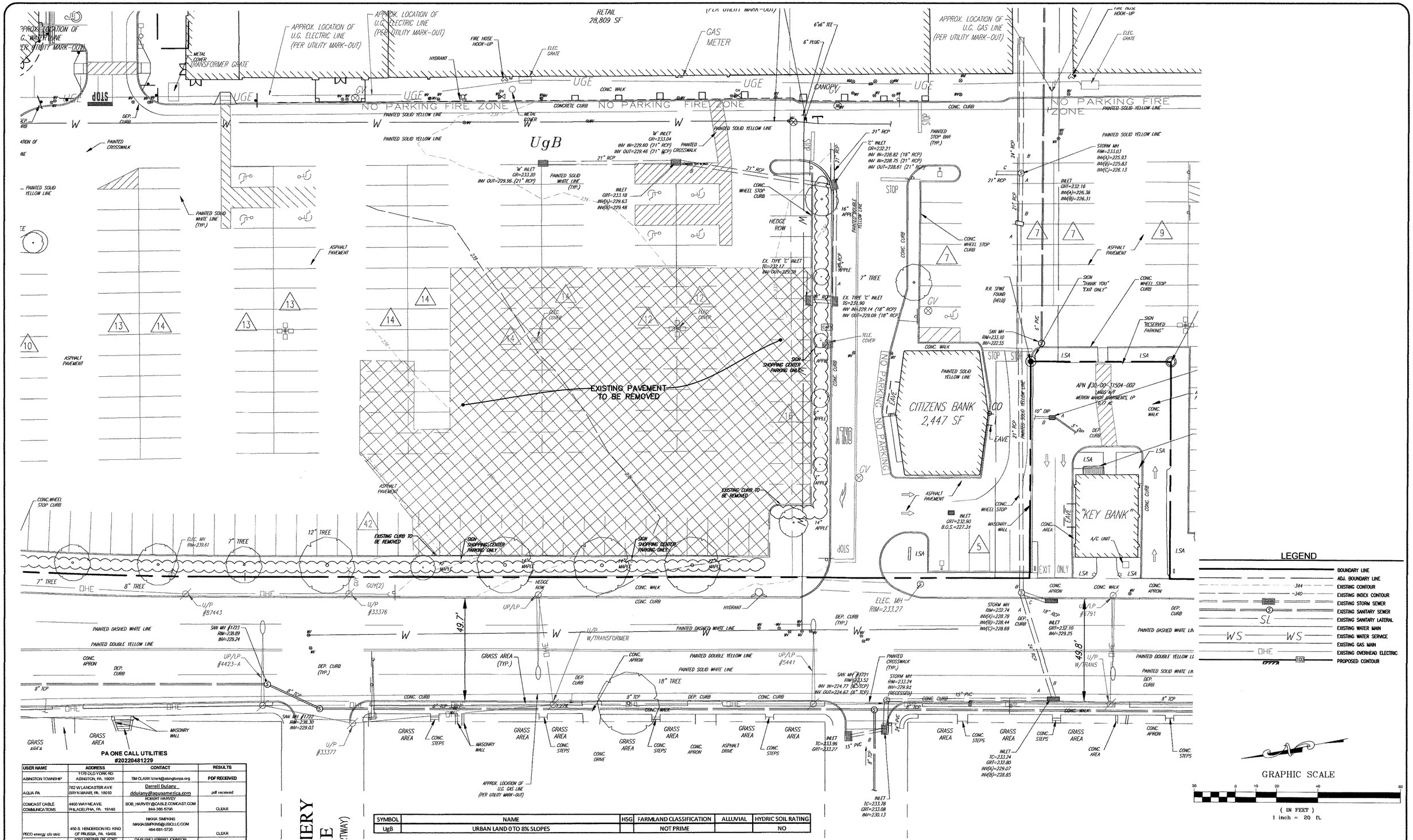

PA ONE CALL UTILITIES
#20220481229

USER NAME	ADDRESS	CONTACT	RESULTS
ABINGTON TOWNSHIP	1176 OLD YORK RD ABINGTON, PA. 19001	TIM CLARK tclark@abingtonpa.org	PDF RECEIVED
AQUA PA	762 W LANCASTER AVE BRYN MAWR, PA. 19010	Darrell Dulany ddulany@aquaamerica.com	pdf received
COMCAST CABLE COMMUNICATIONS	4400 WAY NE AVE. PHILADELPHIA, PA. 19140	ROBERT HARVEY BOB_HARVEY@CABLE.COMCAST.COM 844-366-6796	CLEAR
PECO energy c/o usic	450 S. HENDERSON RD. KING OF PRUSSIA, PA. 19406	NIKKA SIMKINS NIKKA.SIMKINS@USICLLC.COM 484-881-5720	CLEAR
VERIZON PA	1095 TAVERNA DR. FORT WASHINGTON, PA. 19034	DARLENE LISPPARD JOHNSON 215-283-0090	NO RESPONSE
VERIZON BUSINESS FORMERY MCI	400 INTERNATIONAL PARKWAY RICHARDSON, TX. 75081	DEAN BOYERS investigations@verizon.com	NO RESPONSE

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE–STOP CALL

PENNSYLVANIA ONE CALL SYSTEM, INC.

1–800–242–1776

SERIAL# 20220481229

SYMBOL	NAME	HSG	FARMLAND CLASSIFICATION	ALLUVIAL	HYDRIC SOIL RATING
UgB	URBAN LAND 0 TO 8% SLOPES		NOT PRIME		NO

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NO.	DATE	COMMENT
1	8/24/2022	PER TOWNSHIP REVIEWS AND PC MEETING

REVISIONS

HUNTINGDON VALLEY SHOPPING CENTER PRELIMINARY/FINAL MAJOR LAND DEVELOPMENT

EXISTING FEATURES PLAN

R. L. Showalter & Associates, Inc.
• Engineering • Planning • Surveying •
116 East Butler Avenue
Chalfont, PA 18914
(215) 822-2990
FAX (215) 822-5684

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL WAYNE R. KEEFER ENGINEER NO. 035864

SCALE:	1" = 20'
DATE:	2/18/2022
JOB NO.:	2019-92
DRAWN BY:	LZ
CHECKED BY:	WK

SITUATE: ABINGTON TOWNSHIP
MONTGOMERY COUNTY,PA.
PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET 4 OF 14

Plotted: 08/25/22 – 3:06 PM, By: wkeefer
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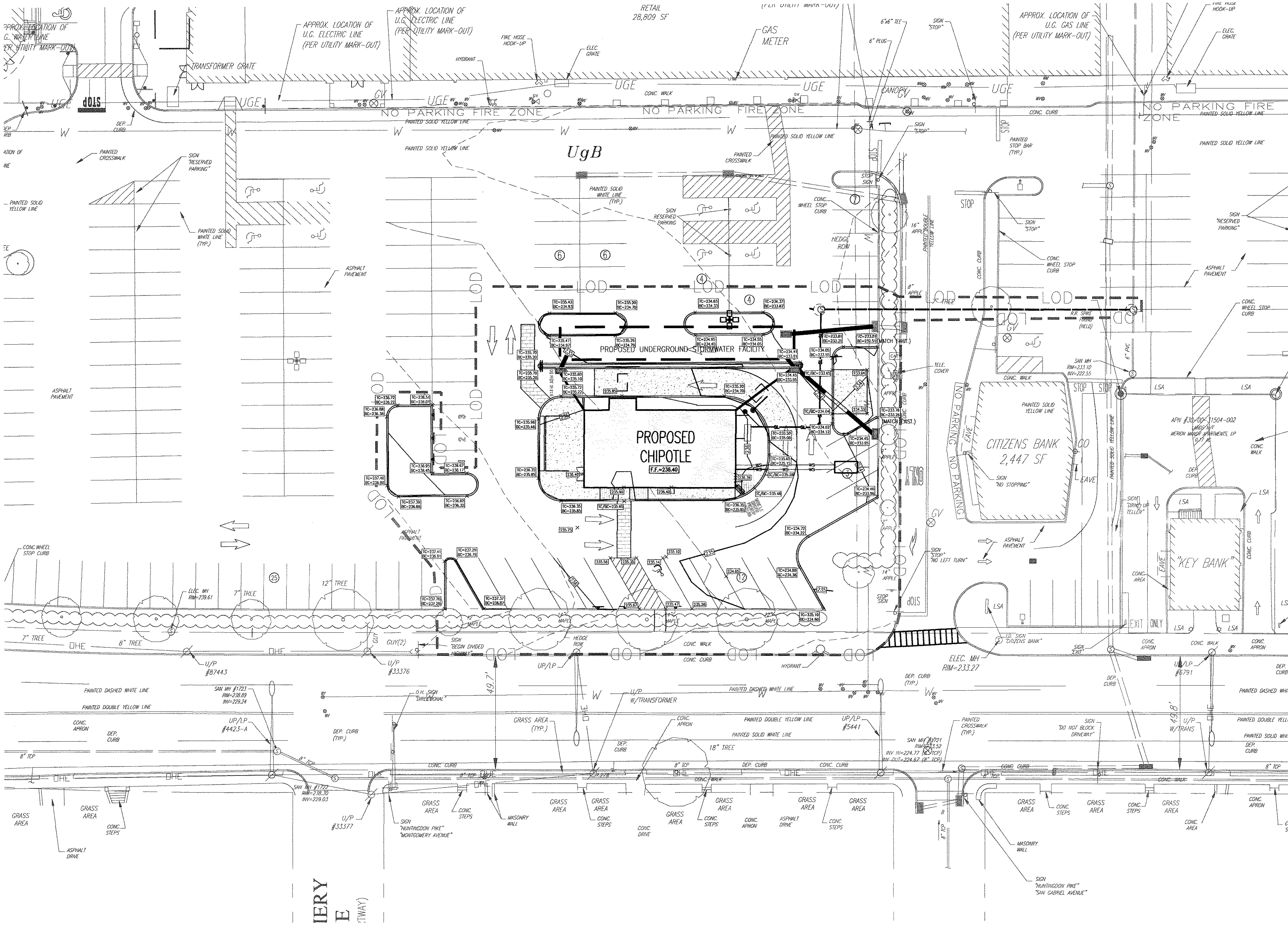

GRADING NOTES:

1. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING ALL SOFT, YIELDING OR UNSUITABLE MATERIALS AND REPLACING WITH SUITABLE MATERIALS. ALL EXCAVATED OR FILLED AREAS SHALL BE COMPACTED TO 95% OF MODIFIED PROCTOR MAXIMUM DENSITY PER A.S.T.M. TEST D-1557. MOISTURE CONTENT AT TIME OF PLACEMENT SHALL BE NO MORE THAN 2% ABOVE NOR 3% BELOW OPTIMUM. CONTRACTOR SHALL SUBMIT A COMPACTION REPORT PREPARED BY A QUALIFIED SOILS ENGINEER, REGISTERED WITHIN THE STATE WHERE THE WORK IS PERFORMED, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS AND SPECS.
2. CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVERT ELEVATIONS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION.
3. SUBBASE MATERIAL FOR SIDEWALKS, CURB, OR ASPHALT SHALL BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SHOULD SUBBASE BE DEEMED UNSUITABLE, SUBBASE IS TO BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL COMPACTED TO 95% OPTIMUM DENSITY (AS DETERMINED BY MODIFIED PROCTOR METHOD).
4. THE MINIMUM SLOPE IN GRASSED AREAS SHALL NOT BE LESS THAN 2% AND THE MINIMUM IN PAVED AREAS SHALL NOT BE LESS THAN 1%.
5. EROSION CONTROL MATTING SHALL BE PROVIDED ON ALL EARTH SLOPES AT 3:1 OR GREATER.
6. BASE PLAN BASED ON BOUNDARY & TOPOGRAPHIC SURVEY PREPARED BY CONTROL POINTS ASSOCIATES, INC., DATED MAY 18, 2007, PRELIMINARY/FINAL MINOR LAND DEVELOPMENT PLANS FOR HUNTINGDON VALLEY SHOPPING CENTER RENOVATION PREPARED BY BERGMANN ASSOCIATES, DATED AUGUST 20, 2012, LAST REVISED MAY 23, 2013 AND MAY 2021 SURVEY BY R.L. SHOWALTER & ASSOCIATES, INC.
7. SITE DATUM 3.4 FEET ABOVE ABINGTON TOWNSHIP SANITARY SEWER DATUM.

LEGEND

- BOUNDARY LINE
- ADJ. BOUNDARY LINE
- EXISTING CONTOUR (344)
- EXISTING INDEX CONTOUR (340)
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING SANITARY LATERAL (SL)
- EXISTING WATER MAIN
- EXISTING WATER SERVICE (WS)
- EXISTING GAS MAIN
- EXISTING OVERHEAD ELECTRIC (OHE)
- PROPOSED CONTOUR (100)
- PROPOSED STORM SEWER
- PROPOSED SANITARY MAIN
- PROPOSED SANITARY LATERAL (SL)
- PROPOSED WATER MAIN
- PROPOSED WATER SERVICE (WS)
- PROPOSED GAS MAIN
- PROPOSED UNDERGROUND ELECTR (UGE)
- EXISTING UTILITY POLE
- EXIST. WATER VALVE
- PROPOSED UTIL. POLE
- PROPOSED WATER VALVE
- PROPOSED FIRE HYDRANT

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

HUNTINGDON VALLEY SHOPPING CENTER PRELIMINARY/FINAL MAJOR LAND DEVELOPMENT

CALL BEFORE YOU DIG!

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PENNSYLVANIA ONE CALL SYSTEM, INC.

1-800-242-1776

SERIAL# 20220481229

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NO.	DATE	COMMENT
1	8/24/2022	PER TOWNSHIP REVIEWS AND PC MEETING

REVISIONS

GRADING PLAN

R. L. Showalter & Associates, Inc.
116 East Butler Avenue
Chalfont, PA 18914
(215) 822-2990
FAX (215) 822-5684
• Engineering • Planning • Surveying •

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL ENGINEER — WAYNE R. KIEFER

SCALE:	1" = 20'
DATE:	2/18/2022
JOB NO.:	2019-92
DRAWN BY:	LZ
CHECKED BY:	WK

SITUATE: ABINGTON TOWNSHIP MONTGOMERY COUNTY, PA.

PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET 5 OF 14

Plotted: 08/25/22 - 3:06 PM, By: wkiefer
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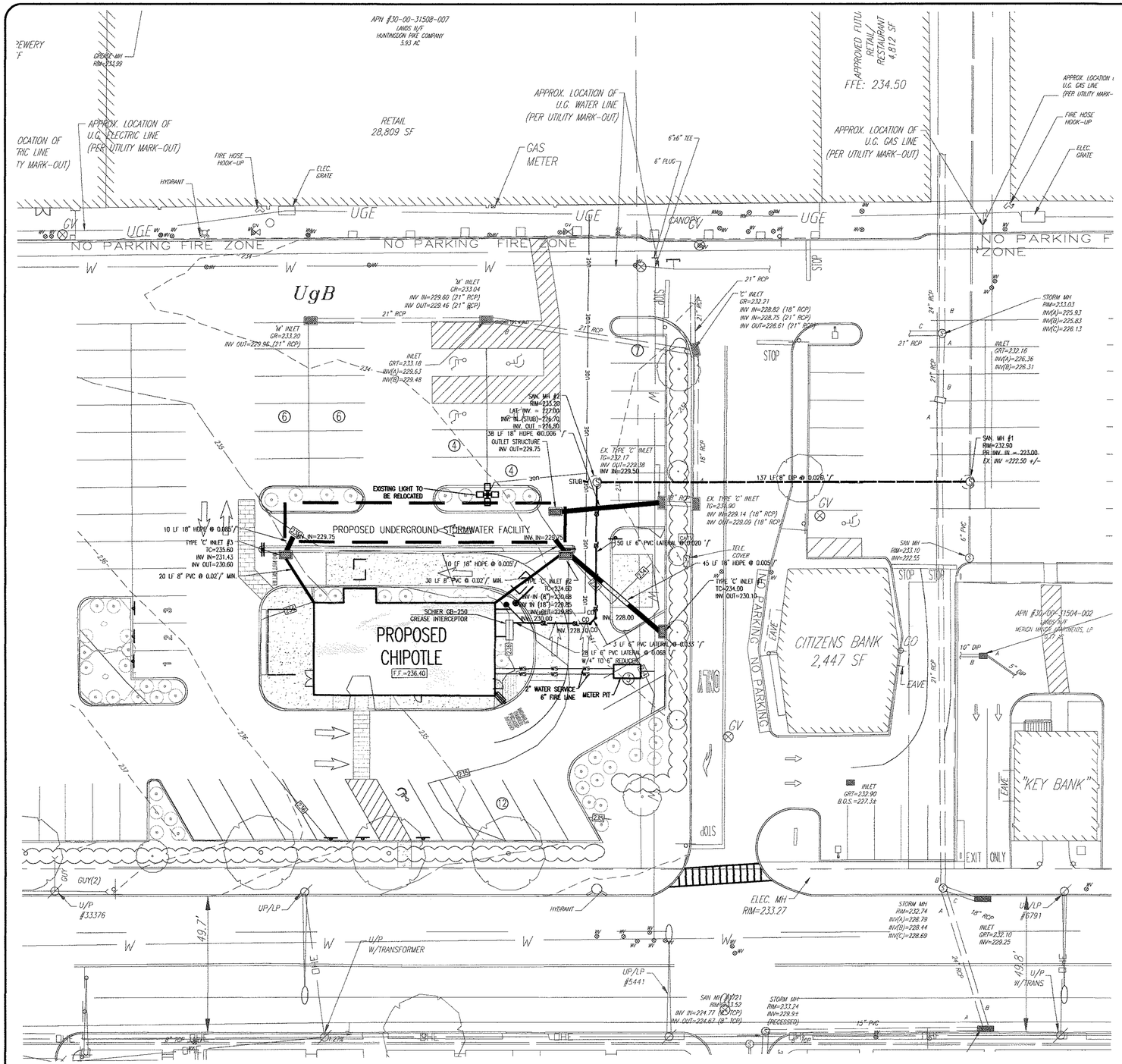

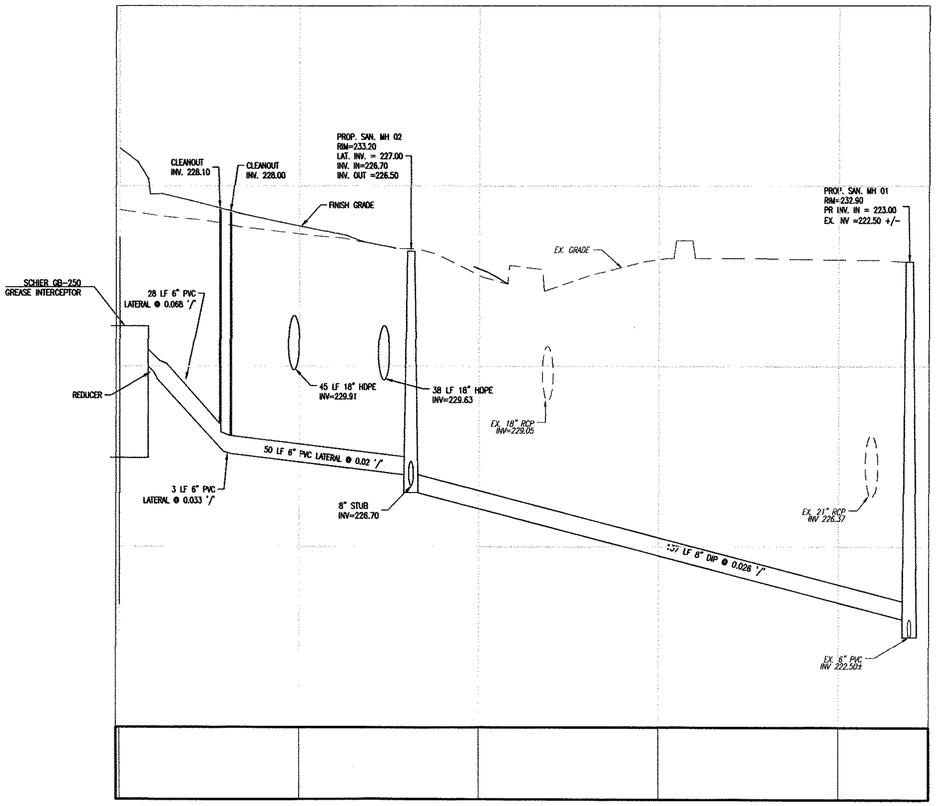

PROFILE - GREASE INTERCEPTOR TO SANITARY MANHOLE 01

SCALE: 1" = 20' HORIZ.
1" = 2' VERT.

LEGEND

- BOUNDARY LINE
- ADJ. BOUNDARY LINE
- 344 EXISTING CONTOUR
- 340 EXISTING INDEX CONTOUR
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- SL EXISTING SANITARY LATERAL
- EXISTING WATER MAIN
- WS EXISTING WATER SERVICE
- EXISTING GAS MAIN
- OHE EXISTING OVERHEAD ELECTRIC
- PROPOSED CONTOUR
- PROPOSED STORM SEWER
- PROPOSED SANITARY MAIN
- SL PROPOSED SANITARY LATERAL
- PROPOSED WATER MAIN
- WS PROPOSED WATER SERVICE
- PROPOSED GAS MAIN
- UGE PROPOSED UNDERGROUND ELECTRIC
- EXISTING UTILITY POLE
- EXIST. WATER VALVE

UTILITY NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES.
2. ALL NEW/RELOCATED UTILITIES TO BE CONSTRUCTED IN ACCORDANCE WITH UTILITY PROVIDER SPECIFICATIONS.
3. ALL EXISTING UTILITIES TO BE RELOCATED OUTSIDE THE PROPOSED UNDERGROUND STORMWATER FACILITY.
4. ALL WORK WILL BE PERFORMED IN STRICT COMPLIANCE WITH THE PROVISIONS OF PENNSYLVANIA STATE ACT 287, GOVERNING THE INSTALLATION OF PUBLIC UTILITIES.
5. ROOF DRAINS TO BE CONNECTED DIRECTLY TO THE UNDERGROUND STORM SEWER SYSTEM.

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE-STOP CALL

PENNSYLVANIA ONE CALL SYSTEM, INC.

1-800-242-1776

SERIAL# 20220481229

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NO.	DATE	COMMENT
1	8/24/2022	PER TOWNSHIP REVIEWS AND PC MEETING

REVISIONS

HUNTINGDON VALLEY SHOPPING CENTER PRELIMINARY/FINAL MAJOR LAND DEVELOPMENT

UTILITY PLAN

R. L. Showalter & Associates, Inc.
116 East Butler Avenue
Chalfont, PA 18914
(215) 822-2990
FAX (215) 822-5684
• Engineering • Planning • Surveying •

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
WAYNE R. KIEFER
ENGINEER
NO. 033804

SCALE:	1" = 20'
DATE:	2/18/2022
JOB NO.:	2019-92
DRAWN BY:	LZ
CHECKED BY:	WK

SITUATE: ABINGTON TOWNSHIP
MONTGOMERY COUNTY,PA.
PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET 6 OF 14

Plotted: 08/25/22 - 3:08 PM, By: wkiefer
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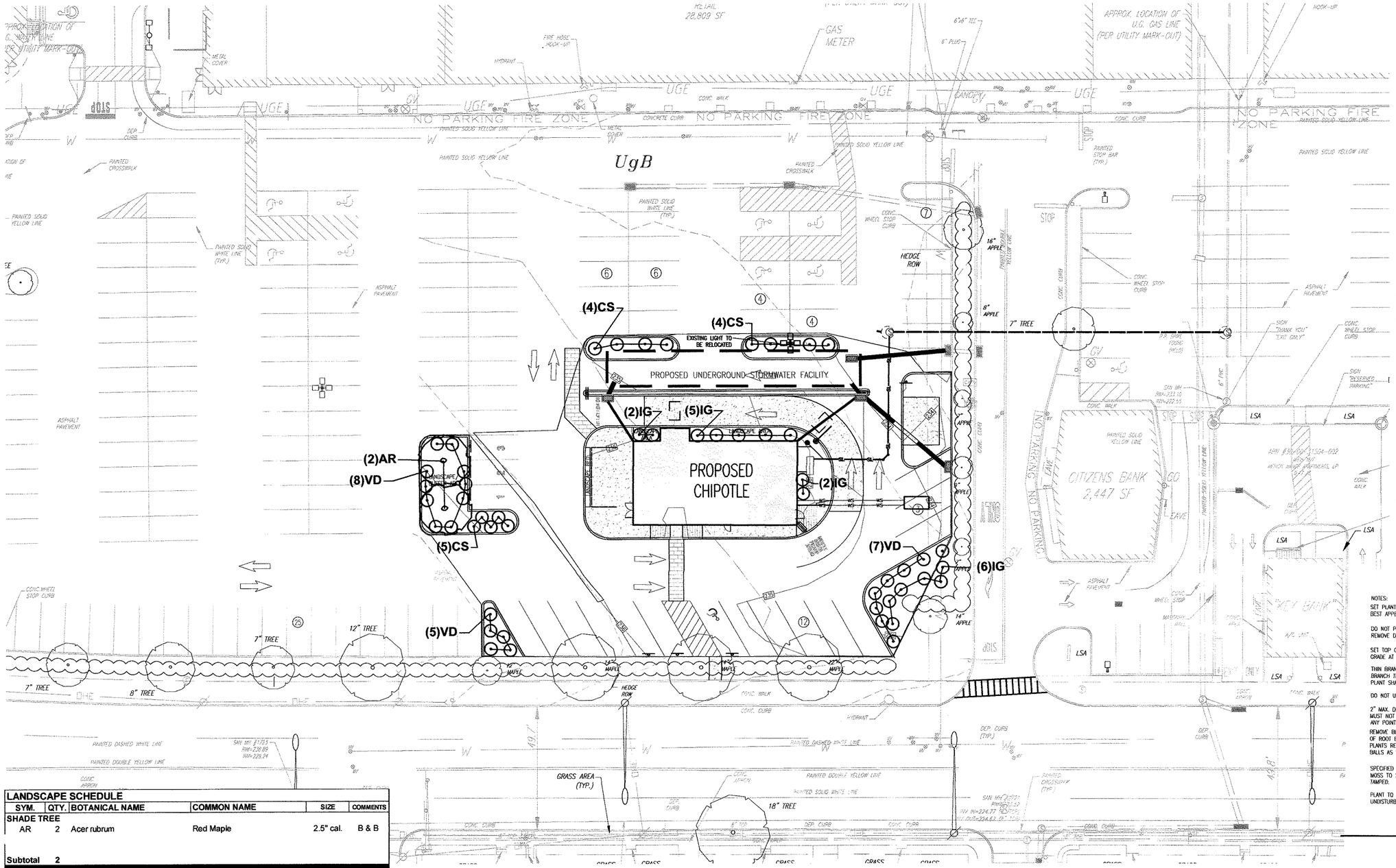


LANDSCAPE SCHEDULE					
SYM.	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	COMMENTS
SHADE TREE					
AR	2	Acer rubrum	Red Maple	2.5" cal.	B & B
Subtotal	**2**				
SHRUBS					
CS	13	Cornus sericea "Arctic Fire"	Arctic Fire Red-Twig Dogwood	24" ht	Cont.
IG	15	Ilex Glabra	Inkberry (native)	18" ht.	Cont.
VD	20	Viburnum Dentatum	Arrow wood (native)	18" ht.	Cont.
Subtotal	**35**				
TOTAL	**37**				

GREEN AREA:

CHIPOTLE DEVELOPMENT AREA = 28,425 SF
CHIPOTLE GREEN AREA = 3,850 SF
CHIPOTLE GREEN AREA RATIO = 13.5%

GROUND COVER:

CHIPOTLE GROUND COVER AREA = 3,850 SF
1 TREE REQUIRED PER 1,000 SF = 4 TREES
3 SHRUBS = 1 TREE
2 TREES AND 6 SHRUBS PROVIDED

NOTES:
SET PLANTS PLUMB, AND FACE TO GIVE THE BEST APPEARANCE OR RELATIONSHIP TO ADJACENT AREAS.

PRUNE AS DIRECTED.
NEVER CUT LEADER.

SET TO OF ROOT BALL ABOVE ADJACENT FINISHED GRADE AT A HEIGHT OF 15-20% OF ROOT BALL.

STAKE TREES OVER 2" CALIPER
SET STAKES VERTICAL AND AT SAME HEIGHT.

DO NOT USE TREE WRAP.

DO NOT USE TOPSOIL SAUCER.

STAYS TO BE SET 2/3 UP TREE OR ABOVE FIRST BRANCHES.

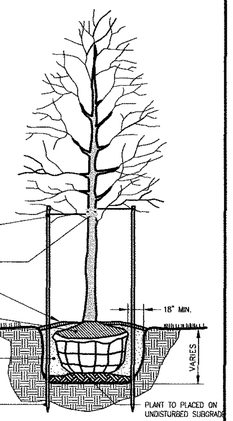
3/4" O.D. REINFORCED RUBBER GARDEN HOSE.

2" MAX DEPTH OF MULCH. MULCH MUST NOT CONTACT THE TRUNK AT ANY POINT.

CUT AWAY ALL BURLAP (NATURAL) FROM TOP 1/3 OF ROOT BALL. INCASE OF SYNTHETIC BURLAP, COMPLETELY REMOVE BURLAP FROM ROOT BALL. REMOVE TOP 18" OF WIRE BASKET.

SPECIFIED PLANT MIX: 1/3 PEAT MOSS TO 2/3 TOPSOIL - LIGHTLY TAMPED.

STAKES TO EXTEND 18" BELOW TREE PIT IN UNDISTURBED GROUND.



DECIDUOUS TREE PLANTING
N.T.S.

NOTES:
SET PLANTS PLUMB, AND FACE TO GIVE BEST APPEARACE TO ADJACENT AREAS.

DO NOT PRUNE EVERGREENS EXCEPT TO REMOVE DEAD AND BROKEN BRANCHES.

SET TOP OF ROOT BALL ABOVE ADJACENT FINISH GRADE AT A HEIGHT OF 15-20% OF ROOT BALL.

THIN BRANCHES AND FOLIAGE (NOT ALL BRANCH TIPS) BY 1/3, RETAINING NORMAL PLANT SHAPE. NEVER CUT LEADER.

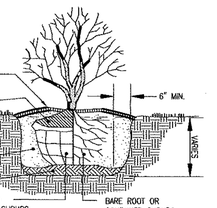
DO NOT USE TOPSOIL SAUCER.

2" MAX. DEPTH OF MULCH. MULCH MUST NOT CONTACT THE TRUNK AT ANY POINT.

REMOVE BURLAP FROM TOP 1/3 OF ROOT BALL, OR WITH CONTAINER PLANTS REMOVE POTS AND SPLIT BALLS AS SPECIFIED.

SPECIFIED PLANT MIX: 1/3 PEAT MOSS TO 2/3 TOPSOIL - LIGHTLY TAMPED.

PLANT TO PLACED ON UNDISTURBED SUBGRADE



SHRUB PLANTING
N.T.S.

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

HUNTINGDON VALLEY SHOPPING CENTER PRELIMINARY/FINAL MAJOR LAND DEVELOPMENT

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1-800-242-1776
SERIAL# 20220481229

PLAN NOTATION - THESE DOCUMENTS ARE ESPECIALLY PREPARED FOR THIS PROJECT AND ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE ON ANY EXTENSION OR MODIFICATION OF THIS PROJECT OR FOR ANY OTHER PROJECT. R. L. SHOWALTER & ASSOCIATES, INC. SHALL ONLY CERTIFY THOSE DOCUMENTS THAT CONTAIN A SEAL AND SIGNATURE. ANY REUSE OF THESE DOCUMENTS WITHOUT THE EXPRESS WRITTEN CONSENT OF R. L. SHOWALTER & ASSOCIATES, INC. OR THEIR USE FOR ANY PURPOSE OTHER THAN THE SPECIFIC PURPOSE FOR WHICH THEY WERE PREPARED IS STRICTLY PROHIBITED. IF USED FOR OTHER THAN THIS PROJECT OR OTHER THAN FOR THE PURPOSE FOR WHICH THEY WERE PREPARED, SUCH USE SHALL CONSTITUTE AN AGREEMENT BY THE PARTY USING THE DOCUMENTS AND THE CLIENT TO INDEMNIFY AND HOLD R. L. SHOWALTER & ASSOCIATES, INC. AND ITS SHAREHOLDERS, OFFICERS, DIRECTORS, PRINCIPALS AND EMPLOYEES HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES (INCLUDING REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS) ARISING AS THE RESULT OF SUCH USE, EXCEPTING ONLY THOSE DAMAGES, LIABILITIES AND COSTS ARISING FROM THE SOLE NEGLIGENCE OR WILLFUL MISCONDUCT OF R. L. SHOWALTER & ASSOCIATES, INC.
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NO.	DATE	COMMENT
1	8/24/2022	PER TOWNSHIP REVIEWS AND PC MEETING

REVISIONS

LANDSCAPING PLAN

R. L. Showalter & Associates, Inc.
116 East Butler Avenue
Chalfont, PA 18914
(215) 822-2990
FAX (215) 822-5684
• Engineering • Planning • Surveying •

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL WAYNE R. KIEFER ENGINEER NO. 033091-E

SCALE:	1" = 20'
DATE:	2/18/2022
JOB NO.:	2019-92
DRAWN BY:	LZ
CHECKED BY:	WK

SITUATE: ABINGTON TOWNSHIP
MONTGOMERY COUNTY,PA.
PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

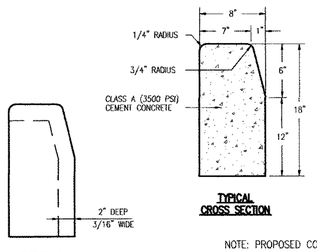
SHEET 7 OF 14

Plotted: 08/25/22 - 3:06 PM, By: wkiefer
File: F:\DWG\2019\2019-092 - Kravco HVSC - Abington\ENGINEERING\2019-092_Chipotle Plan.dwg-07-LP
© 2018 R.L. SHOWALTER & ASSOCIATES, INC

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION BUREAU OF DESIGN		
RC DETAILS	DESCRIPTION	SHEET NO.
RC-31M	ENDWALLS	SHT 2 OF 2
RC-39M	STANDARD MANHOLES COVERS, FRAMES AND ADJUSTMENT RISERS	SHT 1 – 6
RC-45M	INLET TOPS, GRATES AND FRAMES, GENERAL NOTES	SHT 1 OF 20
RC-45M	INLET TOPS, GRATES AND FRAMES, CONCRETE TOP UNITS, TYPE M	SHT 2 OF 20
RC-45M	INLET TOPS, GRATES, AND FRAMES, CAST IRON GRATES – 1	SHT 9 OF 20
RC-46M	INLET BOXES, GENERAL NOTES	SHT 1–3 OF 45
RC-46M	INLET BOXES, INLET ASSEMBLIES	SHT 4 OF 45
RC-46M	INLET BOXES, INLET BOX TYPES	SHT 6 OF 45
RC-39M	STANDARD MANHOLES COVERS, FRAMES AND ADJUSTMENT RISERS	SHT 5 OF 6
RC-45M	INLET TOPS, GRATES AND FRAMES, CONCRETE TOP UNITS, TYPE C	SHT 3 OF 20
RC-45M	INLET TOPS, GRATES, AND FRAMES, STR. STEEL GRATE,BICYCLE SAFE	SHT 8 OF 20
RC-46M	INLET BOXES, INLET BOX TYPES	SHT 6 OF 45
RC-46M	INLET BOXES, TOP SLABS – 2	SHT 8 OF 45
TO BE CONSTRUCTED PER ALL THE LATEST APPLICABLE STANDARDS FOR ROADWAY CONSTRUCTION SPECIFICATIONS INCLUDING BUT NOT LIMITED TO THOSE INDICATED ABOVE.		

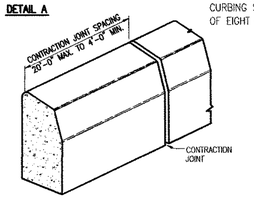
NOTE:
1. *ALL INLETS SHALL BE INSTALLED WITH BICYCLE SAFE GRATES.*

ADDITIONAL STORM STRUCTURE SPECIFICATIONS



TYPICAL CROSS SECTION

DETAIL A

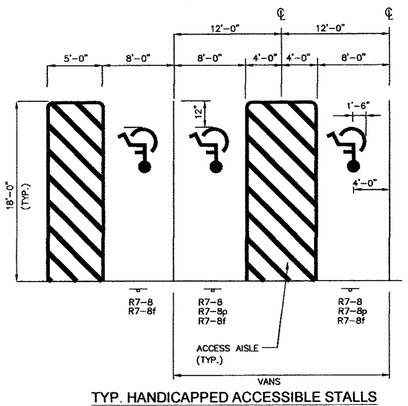


NOTE: PROPOSED CONCRETE CURBING SHALL HAVE A REVEAL OF EIGHT (8) INCHES.

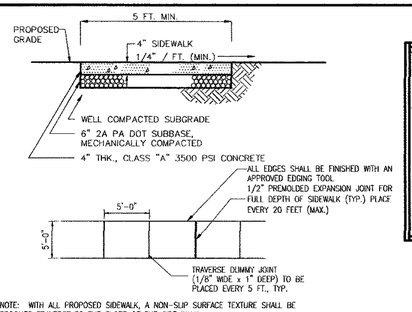
DETAIL NOTES:

1. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PUBLICATION 408, SECTION 630 FOR PLAIN CEMENT CONCRETE CURB AND DEPRESSED CURB.
2. SPACE CONTRACTION JOINTS IN UNIFORM LENGTHS OR SECTIONS.
3. PLACE 3/4–INCH PREMOLDED EXPANSION JOINT FILLER MATERIAL AT STRUCTURES AND AT THE END OF THE WORK DAY. CUT MATERIAL TO CONFORM TO AREA ADJACENT TO CURB OR TO CONFORM TO CROSS SECTIONAL AREA OF CURB.
4. PROPOSED CONCRETE CURBING SHALL HAVE A REVEAL OF EIGHT(8) INCHES.

PLAIN CEMENT CONCRETE CURB
N.T.S.

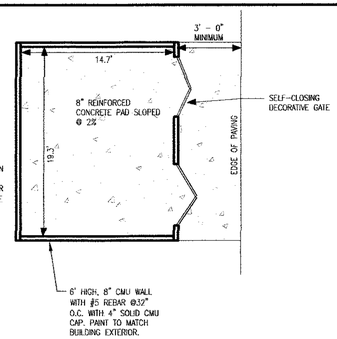


TYP. HANDICAPPED ACCESSIBLE STALLS
N.T.S.

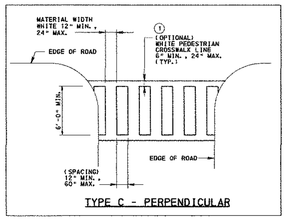


NOTE: WITH ALL PROPOSED SIDEWALK, A NON–SLIP SURFACE TEXTURE SHALL BE BROOMED TRAVERSE TO THE SLOPE OF THE SIDE WALK.

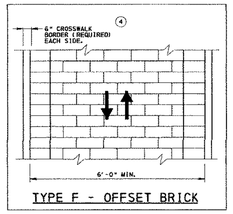
CONCRETE SIDEWALK DETAIL
N.T.S.



DUMPSTER ENCLOSURE DETAIL
N.T.S.



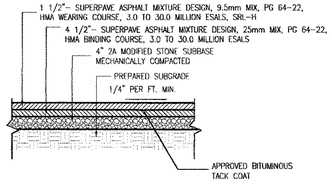
TYPE C – PERPENDICULAR



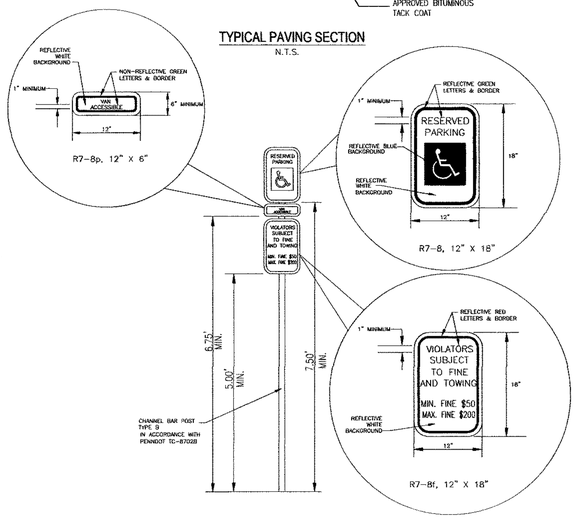
TYPE F – OFFSET BRICK

NOTES:
1. MAKE THE CROSSWALK LINES SOLID WHITE, NOT LESS THAN 6" WIDE.
2. EXTEND THE CROSSWALK ACROSS THE ROADWAY FROM FACE OF CURB TO FACE OF CURB OR EDGE OF SHOULDER AS APPLICABLE.
3. THE MINIMUM WIDTH OF CROSSWALKS SHALL BE 6'.
4. A WHITE BORDER, 6" WIDE, IS REQUIRED ALONG EACH SIDE OF THE DECORATIVE CROSSWALK. THE BORDERS ARE TO BE PARALLEL USING A PENNDOT APPROVED PAVEMENT MARKING MATERIAL AND EXTENDS FROM FACE OF CURB TO FACE OF CURB OR SHOULDER.

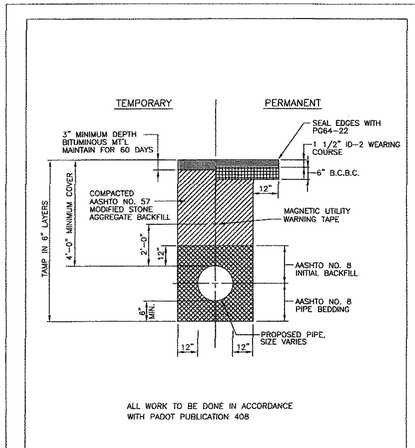
CROSSWALK MARKINGS
NTS



TYPICAL PAVING SECTION
N.T.S.

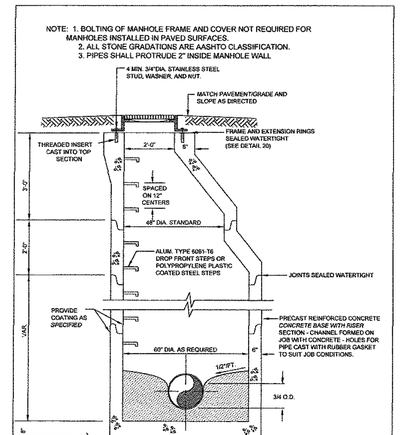


TYP. HANDICAP ACCESSIBLE SIGN PLACEMENT

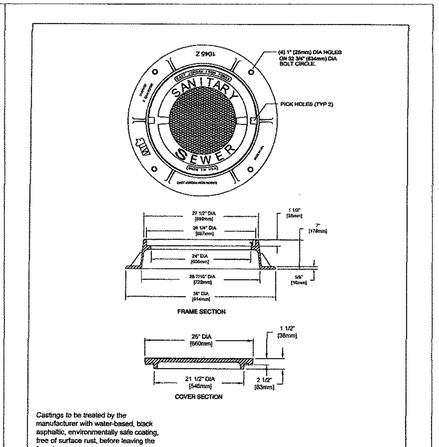


ALL WORK TO BE DONE IN ACCORDANCE WITH PADOT PUBLICATION 408

Township of Abington STANDARD DETAIL - SANITARY SEWER	
BACKFILL AND PAVEMENT RESTORATION DETAIL FOR STATE / TWP. ROADS	DATE: OCTOBER 2015 DETAIL: 1



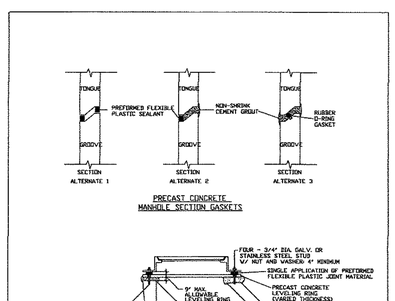
Township of Abington STANDARD DETAIL - SANITARY SEWER	
PRECAST CONCRETE MANHOLE W./ PRECAST CONCRETE BASE	DATE: NOVEMBER 2015 DETAIL: 10



Castings to be treated by the manufacturer with water–based, black asphaltic, environmentally safe coating, free of surface rust, before leaving the foundry.

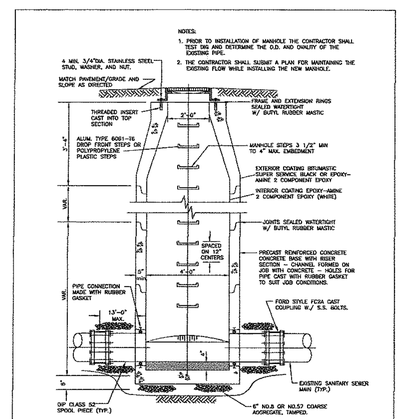
√ MACHINED SURFACE

Township of Abington STANDARD DETAIL - SEWER SYSTEM	REVISED: JANUARY 2021
STANDARD MANHOLE FRAME & COVER DETAIL	DATE: NOVEMBER 2015 DETAIL: 11

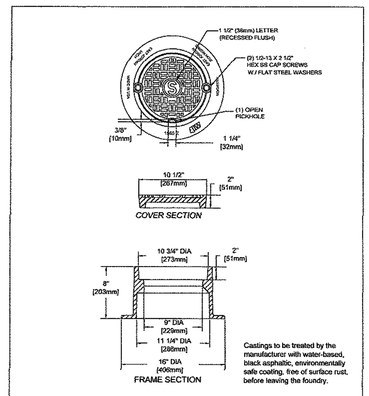


NOTES:
1.) ALL NON–SHRINK CEMENT GROUT SHALL BE TROWLED SMOOTH.
2.) EXCESS PREFORMED FLEXIBLE PLASTIC JOINT SEALANT SHALL BE NEATLY TRIMMED FOR ALL JOINTS.

Township of Abington STANDARD DETAIL - SANITARY SEWER	
MANHOLE GASKETS, LEVELING RINGS, AND BOLTED FRAME DETAIL	DATE: NOVEMBER 2015 DETAIL: 20



Township of Abington STANDARD DETAIL - SANITARY SEWER SYSTEM	
INSERTION OF A PRECAST CONCRETE MANHOLE INTO AN EXISTING SEWER MAIN	DATE: SEPT. 2015 DETAIL: 29



Castings to be treated by the manufacturer with water–based, black asphaltic, environmentally safe coating, free of surface rust, before leaving the foundry.

Township of Abington STANDARD DETAIL - SANITARY SEWER SYSTEM	
CLEAN OUT FRAME AND COVER ASSEMBLY	DATE: SEPT. 2015 DETAIL: 33

HUNTINGDON VALLEY SHOPPING CENTER PRELIMINARY/FINAL MAJOR LAND DEVELOPMENT

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE–STOP CALL

PENNSYLVANIA ONE CALL SYSTEM, INC.

1–800–242–1776

SERIAL# 20220481229

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NO.	DATE	COMMENT
1	8/24/2022	PER TOWNSHIP REVIEWS AND PC MEETING

REVISIONS

CONSTRUCTION DETAILS

R. L. Showalter & Associates, Inc.
116 East Butler Avenue
Chalfont, PA 18914
(215) 822–2990
FAX (215) 822–5684
• Engineering • Planning • Surveying •

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL WAYNE R. KIEFER ENGINEER NO. 070354 PENNSYLVANIA

SCALE:	AS SHOWN
DATE:	2/18/2022
JOB NO.:	2019–92
DRAWN BY:	LZ
CHECKED BY:	WK

SITUATE: ABINGTON TOWNSHIP
MONTGOMERY COUNTY,PA.
PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET 8 OF 14

Plotted: 08/25/22 – 3:07 PM By: wkiefer
File: F:\DWG\2019\2019–092 – Kravco HVSC – Abington\ENGINEERING\2019–092_Chipotle Plan.dwg–08–COVER–DET
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RETAIL
28,809 SF

APPROX. LOCATION OF U.G. GAS LINE (PER UTILITY MARK-OUT)

GAS METER

FIRE HOSE HOOK-UP

HYDRANT

6"x6" TEE

6" PLUG

CANOPY

NO PARKING FIRE ZONE

UgB

ROCK CONSTRUCTION ENTRANCE

LOD 18CS

EXISTING LIGHT TO BE RELOCATED

PROPOSED UNDERGROUND STORMWATER FACILITY

PROPOSED CHIPOTLE
F.F.=236.40

CITIZENS BANK
2,447 SF

"KEY BANK"

APN #30-00-31504-002
LANDS N/F
MERION MANOR APARTMENTS, LP
0.17 AC

SYMBOL	NAME	HSG	DEPTH TO WATER	DEPTH TO BEDROCK	FARMLAND CLASSIFICATION	DEVELOPMENT RATING	HYDRIC SOIL RATING
UgB	URBAN LAND 0 TO 8% SLOPES	NA	>200 CM	> 200 CM	NOT PRIME	NOT RATED	NO

LOCATION MAP
SCALE: 1"=1000'

SITE
Bethel Chapel
Cedar Road Sch
Hollywood
Rockledge
SHADY CORP
ROCKLEDGE
OLD MILL
LEONA
BM 229

NOTES:

1. TOTAL DISTURBED AREA = 0.78 AC.
2. ALL PARKING AREAS AND ROADS SHALL BE KEPT CLEAN OF DIRT AND DEBRIS. DIRT AND SEDIMENT SHALL BE SWEPT FROM PUBLIC AND PRIVATE ROADS AT THE END OF EACH DAY.
3. RECEIVING WATERCOURSE PENNYPACK CREEK (TSF,MF).

LEGEND

- LOD — LIMIT OF DISTURBANCE
- 18CS — COMPOST FILTER SOCK
- INLET PROTECTION
- TEMPORARY CONSTRUCTION ENTRANCE
- TOPSOIL STOCKPILE

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

HUNTINGDON VALLEY SHOPPING CENTER PRELIMINARY/FINAL MAJOR LAND DEVELOPMENT

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE—STOP CALL

PENNSYLVANIA ONE CALL SYSTEM, INC.

1-800-242-1776

SERIAL# 20220481229

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NO.	DATE	COMMENT
1	8/24/2022	PER TOWNSHIP REVIEWS AND PC MEETING

REVISIONS

EROSION & SEDIMENT CONTROL PLAN

R. L. Showalter & Associates, Inc.
116 East Butler Avenue
Chalfont, PA 18914
(215) 822-2990
FAX (215) 822-5684
• Engineering • Planning • Surveying •

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL WAYNE R. KIEFER ENGINEER NO. 420506 ENGINEER

SCALE:	1" = 20'
DATE:	2/18/2022
JOB NO.:	2019-92
DRAWN BY:	LZ
CHECKED BY:	WK

SITUATE: ABINGTON TOWNSHIP
MONTGOMERY COUNTY, PA.
PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET 9 OF 14

Plotted: 08/25/22 - 3:07 PM, By: wkiefer
File: F:\DWG\2019\2019-092 - Kravco hVSC - Abington\ENGINEERING\2019-092_Chipotle Plan.dwg-09-ECP
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KRAVCO COMPANY, LLC.

375 E. ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

PA CODE CH. 102 E&S CONTROL NOTES

SECTION 102.2(a) - SCOPE AND PURPOSE

1. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PREPARED AND COMPLETELY IMPLEMENTED.
2. UNTIL THE SITE ACHIEVES FINAL STABILIZATION, THE OPERATOR SHALL ASSURE THAT THE BEST MANAGEMENT PRACTICES ARE IMPLEMENTED, OPERATED, AND MAINTAINED PROPERLY AND COMPLETELY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL BEST MANAGEMENT PRACTICE FACILITIES. THE OPERATOR WILL MAINTAIN AND MAKE AVAILABLE TO LOCAL COUNTY CONSERVATION DISTRICT COMPLETE, WRITTEN INSPECTION LOGS OF ALL THOSE INSPECTIONS. ALL MAINTENANCE WORK, INCLUDING CLEANING, REPAIR, REPLACEMENT, REGRADING, AND RESTABILIZATION SHALL BE PERFORMED IMMEDIATELY.
3. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
4. BEFORE INITIATING ANY REVISIONS TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E&S CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE LOCAL COUNTY CONSERVATION DISTRICT.
5. OFF-SITE WASTE AND BORROW: THE OPERATOR SHALL ASSURE THAT AN EROSION AND SEDIMENT CONTROL PLAN HAS BEEN PREPARED, APPROVED BY THE LOCAL COUNTY CONSERVATION DISTRICT AND/OR LOCAL MUNICIPALITY IN COMPLIANCE WITH CHAPTER 102 RULES AND REGULATIONS, AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL OFFSITE SOIL AND/OR ROCK SPOIL AND BORROW AREAS, REGARDLESS OF THEIR LOCATIONS.
6. ALL PUMPING OF SEDIMENT LADEN WATER OR POTENTIALLY SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG DISCHARGING OVER NON-DISTURBED AREAS.
7. THE CONTRACTOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS OF APPENDIX 64, EROSION CONTROL RULES AND REGULATIONS, TITLE 25, PART 1, DEPARTMENT OF ENVIRONMENTAL PROTECTION, SUBPART C, PROTECTION OF NATURAL RESOURCES, ARTICLE III, WATER RESOURCES, CHAPTER 102, EROSION CONTROL.
8. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE AT THE SITE AT ALL TIMES.
9. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT TO SCHEDULE A FINAL INSPECTION.

SECTION 102.5(e) - PRE-CONSTRUCTION MEETING

1. AN ONSITE PRE-CONSTRUCTION MEETING IS REQUIRED TO OCCUR NO LESS THAN 7 DAYS PRIOR TO ANY EARTH DISTURBANCE UNLESS OTHERWISE BY SERO DEP OR THE LOCAL COUNTY CONSERVATION DISTRICT. PERMITEES, CO-PERMITEES, OPERATORS, ALL APPROPRIATE MUNICIPAL OFFICIALS, REPRESENTATIVES FROM THE LOCAL COUNTY CONSERVATION DISTRICT AND THE SERO DEP, AND LICENSED PROFESSIONALS OR DESIGNEES RESPONSIBLE FOR THE EARTH DISTURBANCE ACTIVITY, INCLUDING IMPLEMENTATION OF THE E&S AND PCSM PLANS AND CRITICAL STAGES OF IMPLEMENTATION OF THE APPROVED PCSM PLAN, SHALL ATTEND A PRE-CONSTRUCTION MEETING.

CLEAN FILL & ENVIRONMENTAL DUE DILIGENCE

1. IF FILL IS REQUIRED, THE APPLICANT MUST PERFORM ENVIRONMENTAL DUE DILIGENCE TO DETERMINE IF THE FILL MATERIALS ASSOCIATED WITH THE PROJECT QUALIFY AS CLEAN FILL. APPLICANTS AND/OR OPERATORS MUST USE ENVIRONMENTAL DUE DILIGENCE TO ENSURE THAT THE FILL MATERIAL ASSOCIATED WITH THIS PROJECT QUALIFIES AS CLEAN FILL. DEFINITIONS OF CLEAN FILL AND ENVIRONMENTAL DUE DILIGENCE ARE PROVIDED BELOW. ALL FILL MATERIAL MUST BE USED IN ACCORDANCE WITH THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL", DOCUMENT NUMBER 258-2182-773. A COPY OF THIS POLICY IS AVAILABLE ONLINE AT WWW.DEPWEB.STATE.PA.US. UNDER THE HEADING QUICK ACCESS ON THE LEFT SIDE OF THE SCREEN, CLICK ON "FORMS AND PUBLICATIONS." ON THE LEFT SIDE OF THE SCREEN CLICK ON "TECHNICAL GUIDANCE DOCUMENTS-FINAL." THEN TYPE THE DOCUMENT NUMBER 258-2182-773 INTO THE SEARCH WINDOW AND CONDUCT THE SEARCH. CLICK ON "MANAGEMENT OF FILL".
2. CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE.) CLEAN FILL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE: FILL MATERIALS AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE STILL QUALIFIES AS CLEAN FILL PROVIDED THE TESTING REVEALS THAT THE FILL MATERIAL CONTAINS CONCENTRATIONS OF REGULATED SUBSTANCES THAT ARE BELOW THE RESIDENTIAL LIMITS IN TABLES FP-1A AND FP-1B FOUND IN THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL". ANY PERSON PLACING CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE MUST USE FORM FP-001 TO CERTIFY THE ORIGIN OF THE FILL MATERIAL AND THE RESULTS OF THE ANALYTICAL TESTING TO QUALIFY THE MATERIAL AS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE OWNER OF THE PROPERTY RECEIVING THE FILL.
3. ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS: INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF REGULATED SUBSTANCE. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL". FILL MATERIAL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL. REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH THE DEPARTMENT'S MUNICIPAL OR RESIDUAL WASTE REGULATIONS BASED ON 25 PA CODE CHAPTERS 287 RESIDUAL WASTE MANAGEMENT OR 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE.

SECTION 102.4(b)(5)(xi) - RECYCLING OR DISPOSAL OF MATERIALS

1. THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ., AND IN ACCORDANCE WITH ANY ADDITIONAL LOCAL, STATE OR FEDERAL REGULATIONS.
2. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, BURN, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THE SITE.
3. INDIVIDUALS RESPONSIBLE FOR EARTH DISTURBANCE ACTIVITIES MUST ENSURE THAT PROPER MECHANISMS ARE IN PLACE TO CONTROL WASTE MATERIALS. CONSTRUCTION WASTES INCLUDE, BUT ARE NOT LIMITED TO, EXCESS SOIL MATERIALS, BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, ETC. THAT COULD ADVERSELY IMPACT WATER QUALITY. MEASURES SHOULD BE PLANNED AND IMPLEMENTED FOR HOUSEKEEPING, MATERIALS MANAGEMENT, AND LITTER CONTROL. WHENEVER POSSIBLE, RECYCLING OF EXCESS MATERIALS IS PREFERRED, RATHER THAN DISPOSAL.
4. ANY OFFSITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN REVIEWED AND APPROVED BY THE LOCAL COUNTY CONSERVATION DISTRICT PRIOR TO BEING ACTIVATED. THE OPERATOR SHALL ASSURE THE APPROVED E&S PLAN IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL/ROCK SPOIL AND BORROW AREAS ON OR OFFSITE.

CONSTRUCTION SEQUENCE & INSTALLATION NOTES FOR UTILITY LINE TRENCH EXCAVATION:

1. LIMIT ADVANCED CLEARING AND GRUBBING OPERATIONS TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY.
2. WORK CREWS AND EQUIPMENT FOR TRENCHING, PLACEMENT OF PIPE, PLUG CONSTRUCTION AND BACKFILLING WILL BE SELF CONTAINED AND SEPARATE FROM CLEARING AND GRUBBING AND SITE RESTORATION AND STABILIZATION OPERATIONS.
3. ALL SOIL EXCAVATED FROM THE TRENCH WILL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.
4. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY.
5. PLACE TEMPORARY EROSION AND SEDIMENT CONTROL BMPS (SILT FENCE OR COMPOST SILT SOCKS AS INDICATED ON THE PLAN) DOWNSLOPE OF THE PROPOSED TRENCHING ACTIVITIES.
6. PLACE EXCAVATED MATERIALS ON THE UPSLOPE SIDE OF THE TRENCH.
7. INSTALL UTILITIES, BACKFILL TRENCH AND STABILIZE IMMEDIATELY.
9. WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING BEFORE PIPE PLACEMENT AND / OR BACKFILLING BEGINS. WATER REMOVED FROM THE TRENCH SHALL BE PUMPED THROUGH A FILTRATION DEVICE.
10. *REMOVE EROSION AND SEDIMENT CONTROL BMPS AFTER AREA IS STABILIZED.* ANY AREAS DISTURBED DURING THE REMOVAL OF THE BMPS SHALL BE RESTABILIZED IMMEDIATELY.
11. ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND IMMEDIATELY STABILIZED.
12. SOILS EXCAVATED FROM EXISTING SURFACE LAYER SHOULD BE STOCKPILED SEPARATELY AND RETURNED AS FINAL SURFACE LAYER FOLLOWING TRENCH BACKFILLING.

UTILITY LINE TRENCH EXCAVATION NOTES:

1. LIMIT ADVANCED CLEARING AND GRUBBING OPERATIONS TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY.
2. WORK CREWS AND EQUIPMENT FOR TRENCHING, PLACEMENT OF PIPE, PLUG CONSTRUCTION AND BACKFILLING WILL BE SELF CONTAINED AND SEPARATE FROM CLEARING AND GRUBBING AND SITE RESTORATION AND STABILIZATION OPERATIONS.
3. ALL SOIL EXCAVATED FROM THE TRENCH WILL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.
4. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY.
5. WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING BEFORE PIPE PLACEMENT AND / OR BACKFILLING BEGINS. WATER REMOVED FROM THE TRENCH SHALL BE PUMPED THROUGH A FILTRATION DEVICE.
6. ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND IMMEDIATELY STABILIZED.
7. SOILS EXCAVATED FROM EXISTING SURFACE LAYER SHOULD BE STOCKPILED SEPARATELY AND RETURNED AS FINAL SURFACE LAYER FOLLOWING TRENCH BACKFILLING.

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SECTION 102.4(b)(5)(vii) - CONSTRUCTION SEQUENCE

1. UPON TEMPORARY CESSATION OF AN EARTH DISTURBANCE ACTIVITY OF ANY STAGE OR PHASE OF AN ACTIVITY WHERE A CESSATION OF EARTH DISTURBANCE ACTIVITIES WILL EXCEED 4 DAYS, THE SITE SHALL BE IMMEDIATELY SEEDED, MULCHED, OR OTHERWISE PROTECTED FROM ACCELERATED EROSION AND SEDIMENTATION PENDING FUTURE EARTH DISTURBANCE ACTIVITIES.
2. CLEARING AND GRUBBING SHALL BE LIMITED TO ONLY THOSE AREAS DESCRIBED IN EACH STAGE.
3. *ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING* SEQUENCE. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED.

THE PROPOSED IMPROVEMENTS CONTAINED HEREIN SHALL BE CONSTRUCTED IN THE FOLLOWING SEQUENCE:

1. THE CONTRACTOR SHALL NOTIFY MONTGOMERY COUNTY CONSERVATION DISTRICT AND TOWNSHIP ENGINEER AT LEAST 3 DAYS BEFORE THE START OF CONSTRUCTION.
2. STAKE OUT LIMITS OF DISTURBANCE.
3. INSTALL TEMPORARY ROCK CONSTRUCTION ENTRANCE.
4. INSTALL COMPOST SOCKS AND INLET PROTECTION WHERE INDICATED ON PLAN.
5. REMOVE EXISITNG PAVEMENT AND FEATURES WITHIN WORK AREA.
6. BEGIN INSTALLATION OF UNDERGROUND UTILITIES, BACKFILL/COMPACT IN ACCORDANCE WITH CONSTRUCTION DETAILS.
7. CONSTRUCT UNDERGROUND STORMWATER FACILITY. CONTROLS MUST BE IN PLACE TO ASSURE SEDIMENT DOES NOT ENTER UNDERGROUND FACILITY.
8. INSTALL STORM SEWER SYSTEM WITH INLET PROTECTION.
9. FINE GRADE AND COMPACT SUBGRADE IN PAVED AREAS. INSTALL BASE COURSE.
10. BEGIN CONSTRUCTION OF THE PROPOSED BUILDING.
11. INSTALL ALL OTHER PUBLIC IMPROVEMENTS.
12. FINISH CONSTRUCTION OF BUILDING.
13. INSTALL PROPOSED PARKING AND RESTORE LAWN AND STABILIZE.
14. INSTALL FINAL WEARING COURSE.
15. ONCE THE ENTIRE SITE HAS REACHED 70% UNIFORM STABILIZATION, REMOVE THE REMAINING EROSION CONTROL DEVICES. ANY AREAS DISTURBED DURING REMOVAL OF REMAINING EROSION CONTROL DEVICES SHALL BE STABILIZED IMMEDIATELY.

SECTION 102.22(a) - PERMANENT SITE STABILIZATION

1. E&S BMPS SHALL REMAIN FUNCTIONAL UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER APPROVED BMP.
2. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.
3. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT CONTROL BMPS MUST BE REMOVED OR CONVERTED TO PERMANENT PCSM BMPS. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMPS MUST BE STABILIZED IMMEDIATELY.
4. *AREAS WHICH AREA TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES* (6 TO 12 INCHES ON COMPACTED SOILS) PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING.
5. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION.
6. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE O/RP SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING PERIODS, MULCH OR PROTECTIVE BLANKETING MUST BE APPLIED AT SPECIFIED RATES. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REDISTURBED WITHIN ONE YEAR, MAY BE STABILIZED IN ACCORDANCE WITH TEMPORARY STABILIZATION SPECIFICATIONS. DISTURBED AREAS THAT ARE AT FINISHED GRADE OR WHICH WILL NOT BE REDISTURBED WITHIN ONE YEAR MUST BE STABILIZED IN ACCORDANCE WITH PERMANENT STABILIZATION SPECIFICATIONS.
7. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE E&S BMPS.
8. MEASURES AND SPECIFICATIONS FOR LONG TERM PROTECTION USE DURING EARTHMOVING:
PERMANENT SEEDING - AREAS NOT PAVED SHALL BE PLANTED WITH PERMANENT SEED MIXTURE AND MULCHED. SEEDBED PREPARATION AND SEEDING METHODS:
(1) LIME - AGRICULTURAL GRADE LIMESTONE
A SOIL TEST FROM A REPUTABLE LABORATORY IS RECOMMENDED. IF SOIL TEST RESULTS ARE NOT AVAILABLE, APPLY LIME AT THE FOLLOWING RATE:
LIME = 6 TONS PER ACRE (240 LBS. PER 1,000 S.F.)
(2) FERTILIZER - COMMERCIAL TYPE 10 - 20 - 20
A SOIL TEST FROM A REPUTABLE LABORATORY IS RECOMMENDED. IF SOIL TEST RESULTS ARE NOT AVAILABLE, APPLY FERTILIZER AT THE FOLLOWING RATE:
FERTILIZER = 1,000 LBS. PER ACRE (25 LBS. PER 1,000 S.F.)
IF TEMPORARY SEEDING IS NECESSARY, DIVIDE THE FERTILIZER AND LIME RECOMMENDATIONS NOTED ABOVE IN HALF. APPLY THE FOLLOWING AS PART OF THE TEMPORARY SEEDING:
LIME = 1.0 TON PER ACRE (40 LBS. PER 1,000 S.F.)
FERTILIZER = 500 LBS. PER ACRE (12.5 LBS. PER 1,000 S.F.)
APPLY THE REMAINDER AT THE TIME OF FINAL SEEDING AT THE FOLLOWING RATE:
LIME = 5.0 TONS PER ACRE (200 LBS. PER 1,000 S.F.)
FERTILIZER = 500 LBS. PER ACRE (12.5 LBS. PER 1,000 S.F.)
(3) PERMANENT SEED MIXTURE
IT IS RECOMMENDED THAT THE PENN STATE UNIVERSITY "AGRONOMY GUIDE" BE CONSULTED. THE FOLLOWING MIXTURE WILL MEET THE REQUIREMENTS OF CHAPTER 102.
(A) ANNUAL RYEGRASS IS TO BE SEEDED WITH ALL PERMANENT SEED MIXES AS COVER/NURSE CROP. SEEDING RATE = 40 LBS. PER ACRE (1 LB. PER 1,000 S.F.)
(B) TURF LAWN AND MOWED AREAS (SUNNY):
60% KENTUCKY BLUEGRASS
20% CHEWINGS FESCUE
20% PERENNIAL RYEGRASS
SEEDING RATE = 170 LBS. PER ACRE (4 LBS. PER 1,000 S.F.)
PLANTING DATES = 4/1 - 5/31 AND 8/6 - 10/15
(C) NOTE: ALL MIXTURES GIVEN ABOVE ARE FOR PURE LIVE SEED 100% (PLS 100%)
EXAMPLE TO DETERMINE HOW MUCH SEED TO PLANT:
CALCULATE PLS%: FOR 85% PURE SEED WITH 72% GERMINATION: 85 X 72 / 100 = 61% PLS
DIVIDE THE PLS% INTO ONE HUNDRED (100): 100 / 61 = 1.63.
THUS, FOR EVERY 1 POUND OF SEED MIXTURE SPECIFIED, 1.63 LBS SHOULD BE APPLIED.
(4) MULCH
ALL AREAS THAT ARE SEEDED SHALL BE MULCHED. MULCH IS A LOOSE LAYER 3/4" TO 1" DEEP OF CLEAN STRAW. STRAW SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN, AND SHALL BE ANCHORED OR TACKIFIED IMMEDIATELY AFTER APPLICATION WITH POLYMERIC OR GUM TACKIFIERS MIXED AND APPLIED ACCORDING TO MANUFACTURE'S RECOMMENDATIONS. MULCH ON SLOPES OF 8% OR GREATER SHOULD BE HELD IN PLACE WITH NETTING OR EROSION CONTROL BLANKET. MULCH SHALL BE APPLIED AT THE FOLLOWING RATE:
STRAW = 3 TONS PER ACRE (140 LBS. PER 1,000 S.F.)
(5) EROSION CONTROL BLANKET
ALL SLOPES 3:1 OR STEEPER, AS WELL AS ALL DISTURBED AREAS WITHIN 50 FEET OF A SURFACE WATER (WITH 100 FEET FOR HQ OR EV WATERS) MUST BE STABILIZED WITH EROSION CONTROL BLANKET.

CONSTRUCTION SEQUENCE & INSTALLATION NOTES FOR SUBSURFACE INFILTRATION BASINS:

1. INSTALL AND MAINTAIN TEMPORARY EROSION AND SEDIMENT CONTROL BMPS (I.E. SILT FENCE OR COMPOST SILT SOCKS AS INDICATED ON THE PLAN) AROUND THE LIMITS OF THE UNDERGROUND INFILTRATION SYSTEM, PRIOR TO EXCAVATION. RUNOFF FROM CONSTRUCTION AREAS SHOULD NEVER BE ALLOWED TO DRAIN TO INFILTRATION BMPS.
2. EXCAVATE INFILTRATION FACILITY TO DESIGN SUBGRADE ELEVATION, WITH EQUIPMENT THAT WILL NOT COMPACT THE BOTTOM OF THE TRENCH/BASIN. THE EXISTING SUBGRADE UNDER THE BED AREAS SHOULD NOT BE COMPACTED OR SUBJECT TO EXCESSIVE CONSTRUCTION EQUIPMENT TRAFFIC PRIOR TO GEOTEXTILE AND STONE BED PLACEMENT.
3. WHERE EROSION OF SUBGRADE HAS CAUSED ACCUMULATION OF FINE MATERIALS AND/OR SURFACE PONDING, THIS MATERIAL SHOULD BE REMOVED WITH LIGHT EQUIPMENT AND THE UNDERLYING SOILS SCARIFIED TO A MINIMUM DEPTH OF 6 INCHES WITH A YORK RAKE (OR EQUIVALENT) AND LIGHT TRACTOR, PRIOR TO PLACEMENT OF THE AGGREGATE. ALL FINE GRADING SHOULD BE DONE BY HAND. ALL BED BOTTOMS SHOULD BE AT A LEVEL GRADE. ONLY CLEAN AGGREGATE WITH DOCUMENTED POROSITY, FREE OF FINES, SHALL BE ALLOWED.
4. INSTALL UPSTREAM AND DOWNSTREAM CONTROL STRUCTURES.
5. BEFORE INSTALLATION OF THE GEOTEXTILE FILTER FABRIC, A GEOTECHNICAL ENGINEER SHALL INSPECT THE BED FLOOR TO CERTIFY ACCEPTANCE OF SUBGRADE CONDITIONS. ADDITIONALLY, AN AS-BUILT SURVEY SHALL BE COMPLETED TO VERIFY BED ELEVATIONS. GEOTEXTILE AND BED AGGREGATE SHALL THEN BE PLACED IMMEDIATELY AFTER APPROVAL OF SUBGRADE PREPARATION AND INSTALLATION OF UPSTREAM AND DOWNSTREAM CONTROL STRUCTURES. GEOTEXTILE SHOULD BE PLACED IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDATIONS. THE TOPS AND SIDES OF ALL SUBSURFACE FACILITIES SHALL BE COVERED WITH FILTER FABRIC THAT MEETS THE SPECIFICATIONS OF PENNDOT PUBLICATION 408, SECTION 735, CONSTRUCTION CLASS 1. ADJACENT STRIPS OF GEOTEXTILE SHOULD OVERLAP A MINIMUM OF 16 INCHES. IT SHOULD ALSO BE SECURED AT LEAST 4 FEET OUTSIDE OF BED IN ORDER TO PREVENT ANY RUNOFF OR SEDIMENT FROM ENTERING THE STORAGE BED. THIS EDGE STRIP SHOULD REMAIN IN PLACE UNTIL ALL BARE SOILS CONTIGUOUS TO BEDS ARE STABILIZED AND VEGETATED. AS THE SITE IS FULLY STABILIZED, EXCESS GEOTEXTILE ALONG BED EDGED CAN BE CUT BACK TO THE EDGE OF THE BED.
6. CLEAN-WASHED UNIFORMLY GRADED AGGREGATE, WITH DOCUMENTED POROSITY, FREE OF FINES, SHOULD BE PLACE IN THE BED IN MAXIMUM 8-INCH LIFTS. EACH LAYER SHOULD BE LIGHTLY COMPACTED, WITH CONSTRUCTION EQUIPMENT KEPT OFF THE BED BOTTOM AS MUCH AS POSSIBLE.
7. *INSTALL PERFORATED DISTRIBUTION PIPES AND CONNECT TO CENTRALIZED CATCH BASINS AND/OR MANHOLES WITH THE PROVISION FOR THE COLLECTION OF DEBRIS.* STORMWATER SHALL BE DISTRIBUTED THROUGHOUT THE ENTIRE FACILITY. PERFORM AN AS-BUILT SURVEY TO VERIFY PIPING ELEVATIONS BEFORE BACKFILLING ABOVE TOP OF PIPE.
8. BACKFILL OVER INFILTRATION BED IN MAXIMUM 6-INCH LIFTS, WITH APPROVED SOIL MEDIA.
9. SEED AND STABILIZE TOPSOIL, WHERE APPLICABLE.
10. DO NOT REMOVE INLET PROTECTION OR OTHER EROSION CONTROL MEASURES UNTIL SITE IS FULLY STABILIZED.
11. TO COMPLETELY DEWATER BASIN, OPEN 2" CAPPED WEEP HOLE ORIFICE AT BOTTOM OF OUTLET STRUCTURE.
12. ALL INLETS SHOULD BE INSPECTED AND CLEANED AT LEAST 2 TIMES PER YEAR.
13. VEHICULAR ACCESS ON SUBSURFACE INFILTRATION BASIN SHOULD BE LIMITED AND CARE SHOULD BE TAKEN TO AVOID EXCESSIVE COMPACTION BY MOWERS.

CONSTRUCTION SEQUENCE & INSTALLATION NOTES FOR SUBSURFACE DETENTION BASIN:

1. INSTALL AND MAINTAIN TEMPORARY EROSION AND SEDIMENT CONTROL BMPS (I.E. SILT FENCE OR COMPOST SILT SOCKS AS INDICATED ON THE PLAN) AROUND THE LIMITS OF THE UNDERGROUND SYSTEM, PRIOR TO EXCAVATION. RUNOFF FROM CONSTRUCTION AREAS SHOULD NEVER BE ALLOWED TO DRAIN TO INFILTRATION BMPS.
2. EXCAVATE FACILITY TO DESIGN SUBGRADE ELEVATION. ALL BED BOTTOMS SHOULD BE AT A LEVEL GRADE.
3. *INSTALL UPSTREAM AND DOWNSTREAM CONTROL STRUCTURES.*
4. BEFORE INSTALLATION OF THE IMPERMEABLE LINER, A GEOTECHNICAL ENGINEER SHALL INSPECT THE BED FLOOR TO CERTIFY ACCEPTANCE OF SUBGRADE CONDITIONS. ADDITIONALLY, AN AS-BUILT SURVEY SHALL BE COMPLETED TO VERIFY BED ELEVATIONS. LINER AND BED AGGREGATE SHALL THEN BE PLACED IMMEDIATELY AFTER APPROVAL OF SUBGRADE PREPARATION AND INSTALLATION OF UPSTREAM AND DOWNSTREAM CONTROL STRUCTURES. LINER SHOULD BE PLACED IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDATIONS.
5. CLEAN-WASHED UNIFORMLY GRADED AGGREGATE, WITH DOCUMENTED POROSITY, FREE OF FINES, SHOULD BE PLACE IN THE BED IN MAXIMUM 8-INCH LIFTS. EACH LAYER SHOULD BE LIGHTLY COMPACTED.
6. INSTALL SOLID DISTRIBUTION PIPES AND CONNECT TO HEADER SYSTEM AND/OR MANHOLES WITH THE PROVISION FOR THE COLLECTION OF DEBRIS. STORMWATER SHALL BE DISTRIBUTED THROUGHOUT THE ENTIRE FACILITY. PERFORM AN AS-BUILT SURVEY TO VERIFY PIPING ELEVATIONS BEFORE BACKFILLING ABOVE TOP OF PIPE.
7. BACKFILL IN MAXIMUM 6-INCH LIFTS, WITH APPROVED SOIL MEDIA.
8. SEED AND STABILIZE TOPSOIL, WHERE APPLICABLE.
9. DO NOT REMOVE INLET PROTECTION OR OTHER EROSION CONTROL MEASURES UNTIL SITE IS FULLY STABILIZED.
10. ALL INLETS SHOULD BE INSPECTED AND CLEANED AT LEAST 2 TIMES PER YEAR.

SECTION 102.22(b) - TEMPORARY SITE STABILIZATION

1. E&S BMPS MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE BMPS.
2. ANY DISTURBED AREA THAT IS NOT AT FINAL GRADE OR WHERE THERE HAS BEEN A CESSATION OF EARTHMOVING ACTIVITY SHALL BE PLANTED WITH A TEMPORARY SEED MIX AND MULCHED. AREAS THAT ARE TO BE EXPOSED FOR MORE THAN ONE YEAR SHALL BE SEEDED WITH PERMANENT SEED MIX AND MULCHED. SEEDBED PREPARATION AND SEEDING METHODS:
(1) LIME - AGRICULTURAL GRADE LIMESTONE
A SOIL TEST FROM A REPUTABLE LABORATORY IS RECOMMENDED. IF SOIL TEST RESULTS ARE NOT AVAILABLE, APPLY LIME AT THE FOLLOWING RATE:
LIME = 1.0 TON PER ACRE (40 LBS. PER 1,000 S.F.)
(2) FERTILIZER - COMMERCIAL TYPE 10 - 10 - 20
A SOIL TEST FROM A REPUTABLE LABORATORY IS RECOMMENDED. IF SOIL TEST RESULTS ARE NOT AVAILABLE, APPLY FERTILIZER AT THE FOLLOWING RATE:
FERTILIZER = 500 LBS. PER ACRE (12.5 LBS. PER 1,000 S.F.)
(3) TEMPORARY SEED MIXTURE
ANNUAL RYEGRASS IS A QUICK GERMINATING SPECIES OF GRASS, WHICH CAN BE SEEDED DURING MOST TIME PERIODS. IF YOU PLAN TO LEAVE THE PROJECT DISTURBED AND INACTIVE FOR MORE THAN TWENTY (20) DAYS, TEMPORARY SEEDING SHALL BE APPLIED IMMEDIATELY. IF THE SITE IS TO REMAIN INACTIVE FOR ONE YEAR OR MORE A PERMANENT SEED MIX IS NECESSARY.
ANNUAL RYEGRASS = 40 LBS. PER ACRE (1 LB. PER 1,000 S.F.)
(4) MULCH
ALL AREAS THAT ARE SEEDED SHALL BE MULCHED. MULCHING MAY BE USED AS A TEMPORARY STABILIZATION IN SOME DISTURBED AREAS IN NON-GERMINATING SEASONS. MULCH IS A LOOSE LAYER 3/4" TO 1" DEEP OF CLEAN STRAW. STRAW SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN, AND SHALL BE ANCHORED OR TACKIFIED IMMEDIATELY AFTER APPLICATION. NETTING OR EROSION CONTROL BLANKETS MUST BE INSTALLED ON SLOPES 3:1 AND STEEPER. MULCH SHALL BE APPLIED AT THE FOLLOWING RATE:
STRAW = 3 TONS PER ACRE (140 LBS. PER 1,000 S.F.)

E&S BMP	MAINTENANCE ACTIVITY	INSPECTION SCHEDULE	ADDITIONAL SPECIFICATIONS
ROCK CONSTRUCTION ENTRANCE	• MAINTAIN THICKNESS TO SPECIFIED DIMENSIONS • REMOVE SEDIMENT DEPOSITED ON PUBLIC ROADWAYS/SIDEWALKS IMMEDIATELY UPON DISCOVERY • IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.	• INSPECT DAILY	• IN HAZARDOUS SITUATIONS WHEN MUD CAUSES SLICK CONDITIONS ON TRAVELED ROADWAYS, PRESSURE WASHING SHALL BE PERFORMED TO THE SATISFACTION OF THE TOWNSHIP. ALL SEDIMENT LADEN WATER GENERATED BY PRESSURE WASHING SHALL BE COLLECTED AND FILTERED THROUGH AN ADEQUATE FILTER CONTROL, SUCH AS A WATER *FILTER BAG, PRIOR TO DISCHARGE TO SEWER OR WATER COURSE.* • REMOVAL OF MUD OR DEBRIS FROM THE HIGHWAY SHALL BE AT THE EXPENSE OF THE RESPONSIBLE CONTRACTOR AND/OR DEVELOPER.
PUMPED WATER FILTER BAG	• REPLACE BAGS WHEN THEY BECOME 1/2 FULL OF SEDIMENT	• INSPECT BAGS DAILY	• IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED
SUPER SILT AND FILTER FABRIC FENCE (18"&30")	• SEDIMENT SHALL BE REMOVED AS REQUIRED TO KEEP FENCE FUNCTIONAL AND WHEN SEDIMENT ACCUMULATIONS REACH ONE-HALF (1/2) THE ABOVE GROUND HEIGHT OF THE FENCE. • ALL UNDERCUTTING OR EROSION OF THE TOE ANCHOR SHALL BE REPAIRED IMMEDIATELY WITH COMPACTED BACKFILL MATERIAL	• INSPECT WEEKLY AND AFTER EACH MEASURABLE RAINFALL EVENT	• ANY NECESSARY REPAIRS SHALL BE MADE IMMEDIATELY. • ADHERE TO ALL MANUFACTURERS' RECOMMENDATIONS FOR REPLACING FILTER FABRIC FENCE DUE TO WEATHERING. • ANY SECTION OF FILTER FABRIC FENCE THAT HAS BEEN UNDERMINED OR TOPPLED MUST BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET.
ROCK FILTER OUTLET	• SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET.	• INSPECT WEEKLY AND AFTER EACH MEASURABLE RAINFALL EVENT	• TO BE INSTALLED UPON FAILURE OF SILT FENCE DUE TO CONCENTRATED FLOW
COMPOST FILTER SOCK	• SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE ABOVEGROUND HEIGHT OF THE SOCK	• INSPECT WEEKLY AND AFTER EACH MEASURABLE RAINFALL EVENT	• *DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S* SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION. BIODEGRADABLE FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
SEEDING AND MULCHING	• SEEDED AREAS THAT HAVE WASHED AWAY SHALL BE FILLED AND REGRADED AS NECESSARY, RESEEDED, AND MULCHED. • PROMPTLY REAPPLY MULCH MATERIALS, WHICH BECOME DISLODGED OR LOST, DUE TO WIND, RAIN, FIRE, OR OTHER CAUSES, AT INITIAL OR MODIFIED RATES, AS DIRECTED.	• PROPERLY MAINTAIN SEEDED AND MULCHED AREAS UNTIL THE ENTIRE PROJECT HAS BEEN COMPLETED. • REFER TO TEMPORARY AND PERMANENT SEEDING SPECIFICATIONS FOR ADDITIONAL DETAIL	• REPAIR/REPLACE ACCORDING TO MANUFACTURER'S SPECIFICATIONS
EROSION CONTROL BLANKET	• DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.	• INSPECT WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE *THROUGHOUT THE BLANKETED AREA.*	• AFTER MULCHING WORK ON A SLOPE HAS BEEN SATISFACTORILY COMPLETED, IF SLOPE FAILURE OCCURS (ONE WHICH REQUIRES REDRESSING, EXCAVATION, OR THE ESTABLISHMENT OF A NEW SLOPE) REPLACE THE MULCH AS DIRECTED.
INLET FILTER BAG	• BAGS SHOULD BE CLEANED AND/OR REPLACED WHEN THE BAG HIS HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET.	• INSPECT WEEKLY AND AFTER EACH MEASURABLE RAINFALL EVENT	• DAMAGED FILTER BAGS SHOULD BE REPLACED.
VEGETATED CHANNELS	• CHANNEL SHALL BE CLEANED WHENEVER TOTAL CHANNEL DEPTH IS REDUCED BY 25% AT ANY LOCATION. • SEDIMENT DEPOSITS SHALL BE REMOVED WITHIN 24 HOURS OF DISCOVERY OR AS SOON AS SOIL CONDITIONS PERMIT ACCESS TO CHANNEL WITHOUT FURTHER DAMAGE. • DAMAGED LININGS SHALL BE REPAIRED/REPLACED WITHIN 48 HOURS OF DISCOVERY.	• INSPECT WEEKLY AND AFTER EACH MEASURABLE RAINFALL EVENT	• CHANNEL DIMENSIONS SHALL BE CONSTANTLY MAINTAINED. • DAMAGED FILTER BAGS SHOULD BE REPLACED.
RIPRAP APRONS AND LEVEL SPREADERS	• DISPLACED RIPRAP SHALL BE REPLACED IMMEDIATELY. • AREAS UNDERCUT BY EROSION SHALL BE REPAIRED AND RESEEDED IMMEDIATELY.	• INSPECT WEEKLY AND AFTER EACH MEASURABLE RAINFALL EVENT	• SEDIMENT DEPOSITS SHALL BE REMOVED WHEN IT REACHES HALF THE HEIGHT OF THE CONCRETE LEVEL SPREADER.
SKIMMERS	• ANY MALFUNCTIONING SKIMMER SHALL BE REPAIRED OR REPLACED WITHIN 24 HOURS OF INSPECTION. • ICE OR SEDIMENT BUILDUP AROUND THE PRINCIPAL SPILLWAY SHALL BE REMOVED IMMEDIATELY.	• INSPECT WEEKLY AND AFTER EACH MEASURABLE RAINFALL EVENT	• REPAIR/REPLACE ACCORDING TO MANUFACTURER'S SPECIFICATIONS
SEDIMENT BASINS AND TRAPS	• SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED THE CLEAN OUT ELEVATION ON THE STAKE AND THE BASIN SHALL BE RESTORED TO ITS ORIGINAL DIMENSIONS. • EMBANKMENTS, SPILLWAYS AND OUTLETS SHALL BE INSPECTED FOR EROSION, PIPING AND SETTLEMENT AND REPAIRS MADE IMMEDIATELY.	• INSPECT WEEKLY AND AFTER EACH MEASURABLE RAINFALL EVENT	• TRASH AND OTHER DEBRIS SHALL BE REMOVED IMMEDIATELY UPON DISCOVERY

PLAN NOTATION - THESE DOCUMENTS ARE ESPECIALLY PREPARED FOR THIS PROJECT AND ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE ON ANY EXTENSION OR MODIFICATION OF THIS PROJECT OR FOR ANY OTHER PROJECT. R. L. SHOWALTER & ASSOCIATES, INC. SHALL ONLY CERTIFY THOSE DOCUMENTS THAT CONTAIN A SEAL AND SIGNATURE. ANY REUSE OF THESE DOCUMENTS WITHOUT THE EXPRESS WRITTEN CONSENT OF R. L. SHOWALTER & ASSOCIATES, INC. OR THEIR USE FOR ANY PURPOSE OTHER THAN THE SPECIFIC PURPOSE FOR WHICH THEY WERE PREPARED IS STRICTLY PROHIBITED. IF USED FOR OTHER THAN THIS PROJECT OR OTHER THAN FOR THE PURPOSE FOR WHICH THEY WERE PREPARED, SUCH USE SHALL CONSTITUTE AN AGREEMENT BY THE PARTY USING THE DOCUMENTS AND THE CLIENT TO INDEMNIFY AND HOLD R. L. SHOWALTER & ASSOCIATES, INC. AND ITS SHAREHOLDERS, OFFICERS, DIRECTORS, PRINCIPALS AND EMPLOYEES HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES (INCLUDING *REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS) ARISING AS THE RESULT OF SUCH* USE, EXCEPTING ONLY THOSE DAMAGES, LIABILITIES AND COSTS ARISING FROM THE SOLE NEGLIGENCE OR WILLFUL MISCONDUCT OF R. L. SHOWALTER & ASSOCIATES, INC.
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NO.	DATE	COMMENT
1 (triangle)	8/24/2022	PER TOWNSHIP REVIEWS AND PC MEETING

REVISIONS

HUNTINGDON VALLEY SHOPPING CENTER PRELIMINARY/FINAL MAJOR LAND DEVELOPMENT

EROSION & SEDIMENT CONTROL NOTES

R. L. Showalter & Associates, Inc.
116 East Butler Avenue
Chalfont, PA 18914
(215) 822-2990
FAX (215) 822-5684
• Engineering • Planning • Surveying •

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
WAYNE R. KIEFER
ENGINEER
NO. 053658-E

SCALE: AS SHOWN
DATE: 2/18/2022
JOB NO.: 2019-92
DRAWN BY: LZ
CHECKED BY: WK

SITUATE: ABINGTON TOWNSHIP
MONTGOMERY COUNTY,PA.
PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET
10 OF 14

Plotted: 08/25/22 - 3:07 PM, By: wkiefer
File: F:\DWG\2019\2019-092 - Kravco HVSC - Abington\ENGINEERING\2019-092_Chipotle Plan.dwg-10-ECP-NTS
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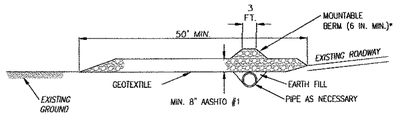
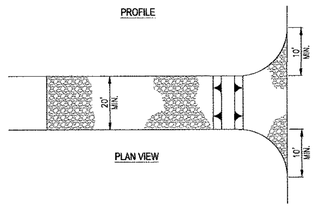


PROFILE



PLAN VIEW

NOTES:

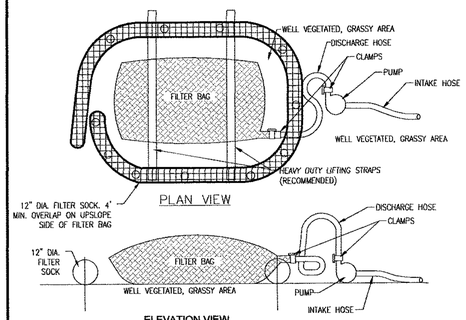
REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.

RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

STANDARD CONSTRUCTION DETAIL #3-1
ROCK CONSTRUCTION ENTRANCE
NOT TO SCALE



ELEVATION VIEW

NOTES:

LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE FOLLOWING STANDARDS:

PROPERTY	TEST METHOD	MINIMUM STANDARD
AVG. WIDE WIDTH STRENGTH	ASTM D-4884	60 LB/IN
GRAB TENSILE	ASTM D-4632	205 LB
PUNCTURE	ASTM D-4833	110 LB
MULLEN BURST	ASTM D-3786	350 PSI
UV RESISTANCE	ASTM D-4355	70%
AOS % RETAINED	ASTM D-4751	80 SIEVE

A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED.

BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED. BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED.

BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%. FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS. NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.

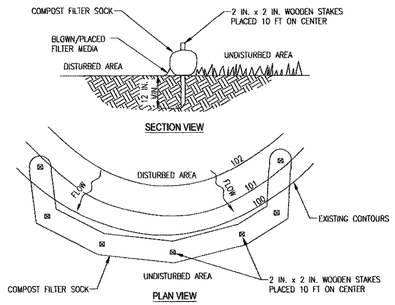
THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.

THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.

FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

STANDARD CONSTRUCTION DETAIL #3-16
PUMPED WATER FILTER BAG
NOT TO SCALE

(FILTER BAG SHALL BE SURROUNDED BY COMPOST SOCK AND OPERATED IN CONJUNCTION WITH A SUMP PIT. SEE DETAIL #3-17)



SECTION VIEW

PLAN VIEW

NOTES:

SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.

COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.

TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.

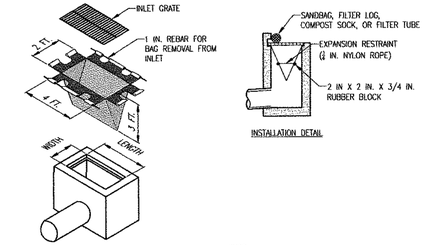
ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.

COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. S SPECIFICATIONS OR DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER REPLACED WITHIN 24 HOURS OF INSPECTION.

BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED S RECOMMENDATIONS.

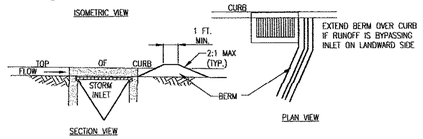
ACCORDING TO MANUFACTURER UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

STANDARD CONSTRUCTION DETAIL #4-1
COMPOST FILTER SOCK
NOT TO SCALE



ISOMETRIC VIEW

INSTALLATION DETAIL



SECTION VIEW

PLAN VIEW

NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

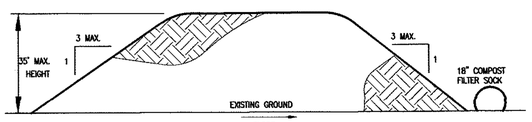
INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT.
AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

STANDARD CONSTRUCTION DETAIL #4-15
FILTER BAG INLET PROTECTION - TYPE C INLET
NOT TO SCALE



1. SILT SOCK SHALL BE PLACED AROUND TOPSOIL STOCKPILES TO PREVENT SEDIMENT FROM LEAVING THE SITE. IT SHOULD BE STAKED PER THE SILT SOCK DETAILS AS SHOWN ON THE PLAN.
2. SEED STOCKPILE PER TEMPORARY SEEDING SPECIFICATIONS.

STANDARD CONSTRUCTION DETAIL
TOPSOIL STOCKPILE
NOT TO SCALE

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE-STOP CALL

PENNSYLVANIA ONE CALL SYSTEM, INC.

1-800-242-1776

SERIAL# 20220481229

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NO.	DATE	COMMENT
1	8/24/2022	PER TOWNSHIP REVIEWS AND PC MEETING

REVISIONS

HUNTINGDON VALLEY SHOPPING CENTER PRELIMINARY/FINAL MAJOR LAND DEVELOPMENT

EROSION & SEDIMENT CONTROL DETAILS

R. L. Showalter & Associates, Inc.
116 East Butler Avenue
Chalfont, PA 18914
(215) 822-2990
FAX (215) 822-5684
• Engineering • Planning • Surveying •

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER WAYNE R. KIEFER NO. 033504E

SCALE:	AS SHOWN
DATE:	2/18/2022
JOB NO.:	2019-92
DRAWN BY:	LZ
CHECKED BY:	WK

SITUATE: ABINGTON TOWNSHIP MONTGOMERY COUNTY,PA.
PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET 11 OF 14

Plotted: 08/25/22 - 3:07 PM, By: wkiefer
File: F:\DWG\2019\2019-092 - Kravco HVSC - Abington\ENGINEERING\2019-092_Chipotle Plan.dwg-11-ECP-DET
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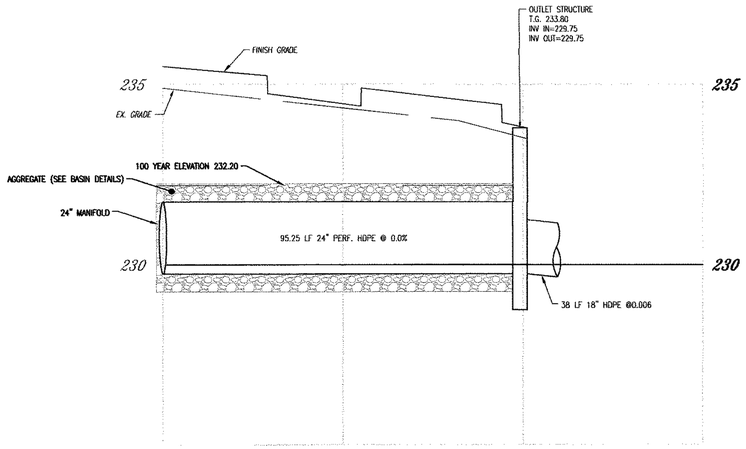
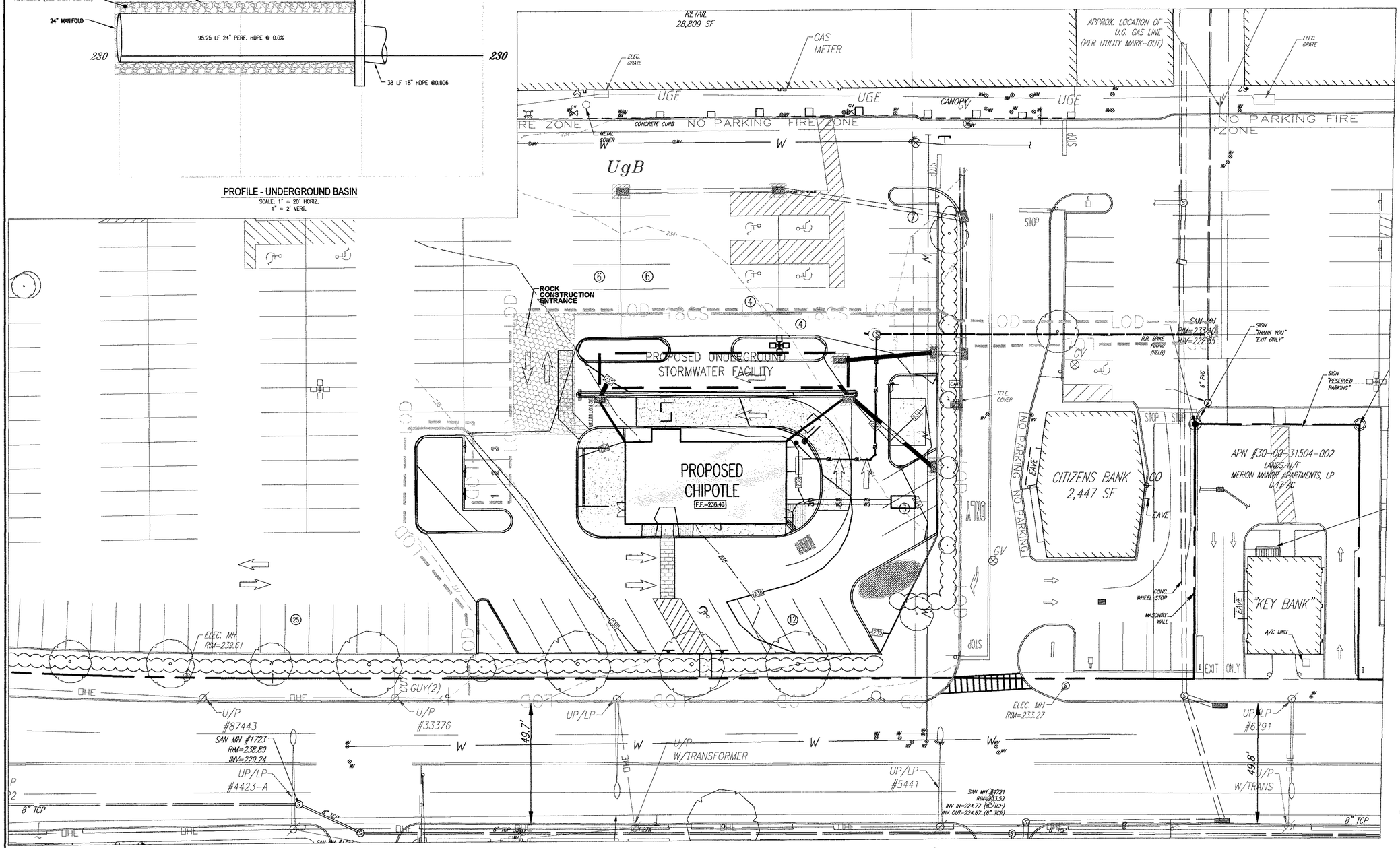


PROFILE - UNDERGROUND BASIN

SCALE: 1" = 20' HORIZ.
1" = 2' VERT.



PROJECT DESCRIPTION

THE PROPOSED PROJECT INCLUDES THE CONSTRUCTION OF A STAND ALONE BUILDING WITHIN THE EXISTING PARKING FILLD AND ASSOCIATED IMPROVEMENTS. STORMWATER RUNOFF WILL BE MANAGED BY A PROPOSED UNDERGROUND DETENTION FACILITY CONNECTED TO THE EXISTING ON SITE STORM SEWER SYSTEM. WATER AND SEWER SHALL BE PROVIDED VIA ON SITE CONNECTIONS.

STORMWATER MANAGEMENT LANDOWNER ACKNOWLEDGEMENT

THE STORMWATER MANAGEMENT SYSTEM SHALL BE A PERMANENT FIXTURE THAT CAN BE ALTERED OR REMOVED ONLY AFTER APPROVAL OF A REVISED PLAN BY ABINGTON TOWNSHIP. I/WE, THE UNDERSIGNED OWNERS ACKNOWLEDGE THE RESPONSIBILITIES ASSOCIATED WITH OWNERSHIP AND MAINTENANCE OF THE STORMWATER MANAGEMENT FACILITY, AND GIVES THE TOWNSHIP THE RIGHT, BUT NOT THE OBLIGATION, TO ACCESS THE SITE TO VERIFY THAT THE STORMWATER FACILITY IS BEING MAINTAINED IN ACCORDANCE WITH THE APPROVED PLAN. THE STORMWATER FACILITY MAY NOT BE REMOVED AND/OR ALTERED WITHOUT WRITTEN APPROVAL OF ABINGTON TOWNSHIP.

VALLEY ASSOCIATES, OWNER/APPLICANT (DATE)

MUNICIPAL CERTIFICATION

(MUNICIPAL OFFICIAL OR DESIGNEE), ON THIS DATE _____ (DATE OF SIGNATURE), HAS REVIEWED AND HEREBY CERTIFIES THAT THE SWM SITE PLAN MEETS ALL DESIGN STANDARDS AND CRITERIA OF THE MUNICIPAL ORDINANCE NO. _____ (NUMBER ASSIGNED TO THE ORDINANCE).

MUNICIPAL OFFICIAL OR DESIGNEE

ENGINEER CERTIFICATION

I, WAYNE KIEFER, PE, ON THIS DATE _____ (DATE OF SIGNATURE), HEREBY CERTIFY THAT THE DRAINAGE PLAN MEETS ALL REQUIREMENTS OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION'S (DEP'S) REGULATIONS AND THIS CHAPTER.

WAYNE KIEFER, PE

GRAPHIC SCALE

20 0 10 30 40 80

(IN FEET)
1 inch = 20 ft.

HUNTINGDON VALLEY SHOPPING CENTER PRELIMINARY/FINAL MAJOR LAND DEVELOPMENT

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE—STOP CALL

PENNSYLVANIA ONE CALL SYSTEM, INC.

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NO.	DATE	COMMENT
1	8/24/2022	PER TOWNSHIP REVIEWS AND PC MEETING

REVISIONS

POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

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116 East Butler Avenue
Chalfont, PA 18914
(215) 822-2990
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• Engineering • Planning • Surveying •

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL WAYNE R. KIEFER ENGINEER NO. 035634

SCALE:	1"=20'
DATE:	2/18/2022
JOB NO.:	2019-92
DRAWN BY:	LZ
CHECKED BY:	WK

SITUATE: ABINGTON TOWNSHIP
MONTGOMERY COUNTY,PA.
PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET 12 OF 14

Plotted: 08/25/22 - 3:07 PM, By: wkiefer
File: F:\DWG\2019\2019-092 - Kravco HVSC - Abington\ENGINEERING\2019-092_Chipotle Plan.dwg-12-PCSM
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KRAVCO COMPANY, LLC.
375 E. ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SECTION 102.8(b) - GENERAL PCSM PLANNING AND DESIGN

THE PCSM PLAN MINIMIZES IMPERVIOUS AREAS
THE SITE HAS EXISTING IMPERVIOUS COVER CONSISTING OF BUILDINGS, DRIVE AISLES AND PARKING AREAS. TO THE FURTHEST EXTENT POSSIBLE, THE EXISTING IMPERVIOUS AREAS WILL BE REUSED, THE PROPOSED IMPERVIOUS COVER WILL NOT CREATE A NET INCREASE OF ADDITIONAL IMPERVIOUS AREA.

THE PCSM PLAN MAXIMIZES PROTECTION OF EXISTING DRAINAGE FEATURES AND VEGETATION.
THE EXISTING DISCHARGE POINTS FROM THE SITE ARE TO REMAIN UNCHANGED AND THEREFORE PROTECTED FROM CONSTRUCTION ACTIVITIES. EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED TO PROTECT THE INTEGRITY OF THE WATER QUALITY. NO TREES ARE PROPOSED TO BE DISTURBED.

THE PCSM PLAN MINIMIZES LAND CLEARING AND GRADING
THE SITE HAS EXISTING IMPERVIOUS COVER CONSISTING OF BUILDINGS, DRIVE AISLES AND PARKING AREAS. NO FURTHER PERVIOUS AREAS ARE TO BE CLEARED AND GRADED. THE AREA TO BE CLEARED AND GRADED HAS BEEN MINIMIZED.

THE PCSM PLAN MINIMIZES SOIL COMPACTION
THE EXTENT OF EARTH DISTURBANCE HAS BEEN LIMITED TO THE GREATEST EXTENT POSSIBLE IN ORDER TO CONSTRUCT THE PROPOSED IMPROVEMENTS. THE EROSION & SEDIMENT CONTROL PLAN MINIMIZES SOIL COMPACTION BY NOT DISTURBING PORTIONS OF THE EXISTING GRASS AREA NOT NECESSARY FOR CONSTRUCTION AND PROTECTING PROPOSED INFILTRATION FACILITIES FROM CONSTRUCTION TRAFFIC; UNDER THE CONSTRUCTION SEQUENCE ON THE EROSION AND SEDIMENT CONTROL PLANS THE CONTRACTOR MUST MARK OUT LIMITS OF THE INFILTRATION BASIN TO PROTECT THEM FROM EXCESSIVE COMPACTION.

THE PCSM PLAN UTILIZES OTHER STRUCTURAL AND NONSTRUCTURAL BMPS THAT PREVENT OR MINIMIZE CHANGES IN STORMWATER RUNOFF
THE PCSM PLAN PROPOSES A VARIETY OF STRUCTURAL AND NONSTRUCTURAL BMPS THAT WILL PROTECT OFF SITE WATERS FROM CONSTRUCTION ACTIVITIES. STORMWATER RUNOFF WILL BE SLOWED AT EACH BMP. IN ADDITION, CONSTRUCTION OF THE INFILTRATION BASIN PRIOR TO THE NEW IMPERVIOUS AREAS WILL ENSURE THAT THE DISCHARGE RATE FROM THE SITE IS LESS THAN IT WAS PRIOR TO THE START OF CONSTRUCTION.

SECTION 102.8(f)(2) - SOIL USE LIMITATIONS AND RESOLUTIONS:

IT IS ANTICIPATED THAT THE ONSITE SOILS WILL BE CAPABLE OF SUPPORTING THE TYPE OF CONSTRUCTION PROPOSED WITH PROPER SITE PREPARATION AND EROSION CONTROL PRACTICE. WHERE SOIL LIMITATION IS ENCOUNTERED, REFER TO THE FOLLOWING RESOLUTIONS:

- CUT BANKS CAVE – TRENCHES AND EXCAVATIONS ARE REQUIRED TO BE SHORED WHEN THEIR DEPTH CREATES A HAZARD. ALL APPLICABLE OSHA STANDARDS AND REGULATIONS MUST BE IMPLEMENTED AT ALL TIMES.
- CORROSIVE TO CONCRETE AND STEEL – PROPOSED PIPES ARE NEARLY ALL HDPE WHICH WILL PROTECT FROM CORROSIVE SOILS. THE CONCRETE INLET BOXES, MANHOLE SAND ELLIPTICAL PIPES SHOULD BE COATED TO PREVENT CORROSION.
- DROUGHTY – DROUGHTY SOILS ARE A LIMITATION TO CROPS SUCH AS CORN AND SOY. SINCE THIS PROJECT PROPOSES NO CROPS, THIS LIMITATION SHOULD NOT HINDER THE PROPOSED IMPROVEMENTS.
- EASILY ERODIBLE – AREAS OF EARTH DISTURBANCE ARE PROTECTED BY EROSION CONTROL BMP'S. IN AREAS OF EASILY ERODIBLE SOILS, EROSION CONTROL BLANKETS MAY BE USED FOR SHORT DURATIONS ALONG WITH TEMPORARY AND/OR PERMANENT VEGETATION AND MULCH AS NEEDED.
- FLOODING – IN CASE OF EXCAVATIONS FILLING WITH WATER, A PUMPED FILTER BAG SHOULD BE USED TO DEWATER THE EXCAVATION.
- DEPTH TO SATURATED ZONE – TESTING SPECIFIC TO THIS SITE SHOWS THAT THE SATURATED ZONE WILL NOT BE ENCOUNTERED DURING CONSTRUCTION OF PROPOSED IMPROVEMENTS.
- HYDRIC INCLUSIONS – THE USDA NRCS WEB SOIL SURVEY LISTS ALL ON SITE SOILS AS NOT MEETING HYDRIC CRITERIA. WHERE IT IS NECESSARY TO CONSTRUCT ON OR NEAR HYDRIC SOILS, SPECIAL CARE SHALL BE TAKEN TO MINIMIZE DISTURBANCE AND CONFIRM WITH APPLICABLE STATE AND FEDERAL PERMIT REQUIREMENTS.
- LAND SLIDE PRONE – THE DEPTH OF EXCAVATIONS AND SLOPES ON SITE WILL NOT BE ENOUGH TO HAVE A LAND SLIDE. TO PROTECT EXCAVATIONS FROM CAVING, SHORING IS REQUIRED WHEN EXCAVATION DEPTHS CREATE A HAZARD.
- SLOW PERCOLATION – DUE TO THE CONTAMINANTS ON THE SITE, INFILTRATION BMPS PERCOLATING INTO THE GROUND ARE NOT PROPOSED THEREFORE, PERCOLATION RATE ARE NOT RELEVANT.
- PIPING – ALL PIPES WILL BE UNDERGROUND. NO PIPES WILL BE INSTALLED THROUGH EMBANKMENTS THEREFORE THE DANGERS OF PIPING ARE NOT PRESENT.
- POOR SOURCE OF TOPSOIL – THE SOILS ON SITE ARE NOT EXPECTED TO BE USED AS TOP SOIL. CONTAMINATED SOILS ENCOUNTERED CAN NOT BE REUSED ON SITE. IF UNSUITABLE TOPSOIL IS NOT PRESENT, SOIL WILL BE IMPORTED.
- FROST ACTION – PAVEMENT AND SIDEWALK SHOULD BE INSTALLED IN ACCORDANCE WITH DETAILS TO LIMIT DAMAGE CAUSED BY FROST ACTION. IF CRACKING OCCURS, REPLACEMENT OR OVERLAY MAY BECOME NECESSARY IN THE FUTURE.
- WETNESS – FOR THE IMPROVEMENTS BEING PROPOSED, SOIL WETNESS SHOULD NOT BE A PROBLEM. IF HOWEVER, PONDING OCCURS, A PUMPED FILTER BAG SHOULD BE USED TO DEWATER THE AREA.

PERMANENT CONTROL MEASURES FOR LONG TERM PROTECTION DURING EARTHMOVING:

A. PERMANENT SEEDING – AREAS NOT PAVED SHALL BE SEEDED WITH PERMANENT SEED MIXTURE AND MULCHED.
SEEDBED PREPARATION AND SEEDING METHODS:
1. LIME – AGRICULTURAL GRADE LIMESTONE
A SOIL TEST FROM A REPUTABLE LABORATORY IS RECOMMENDED. IF SOIL TEST RESULTS ARE NOT AVAILABLE, APPLY LIME AT THE FOLLOWING RATE:
LIME – 6 TONS PER ACRE, 275 LBS. PER 1,000 S.F.
2. FERTILIZER – COMMERCIAL TYPE 10-20-20
A SOIL TEST FROM A REPUTABLE LABORATORY IS RECOMMENDED. IF SOIL TEST RESULTS ARE NOT AVAILABLE, APPLY FERTILIZER AT THE FOLLOWING RATE:
FERTILIZER – 1000 LBS. PER ACRE, 25 LBS. PER 1000 S.F.
3. PERMANENT SEED MIXTURE
NOTE: ANNUAL RYEGRASS IS TO BE SEEDED WITH ALL PERMANENT SEED MIXES AS A COVER/NURSE CROP.
ANNUAL RYEGRASS SEEDING RATE: 40 LBS. PER ACRE, 1 LB. PER 1,000 S.F.
TURF LAWN AND MOWED AREAS (SUNNY):
PERMANENT SEED MIX:
60% KENTUCKY BLUEGRASS
20% CHEWINGS FESCUE
20% PERENNIAL RYEGRASS
SEEDING RATE: 4LBS./1,000 S.F. OR 170 LBS./ACRE
PLANTING DATES: 4/1 – 5/31 AND 8/6 – 10/15
NOTE: ALL MIXTURE GIVEN ABOVE ARE FOR PLS (PURE LIVE SEED) 100%. TO CALCULATE PLS, THE PERCENTAGE OF PURE LIVE SEED IS MULTIPLIED BY THE PERCENTAGE OF GERMINATION, AND THE PRODUCT IS DIVIDED BY ONE HUNDRED (100).
TO DETERMINE HOW MUCH SEED TO PLANT, DIVIDE THE PERCENTAGE INTO ONE HUNDRED (100).
EXAMPLE: 100 DIVIDED BY 61 = 1.63. THUS, EVERY POUND OF SEED MIXTURE CALLED FOR SHOULD THEN BE 1.63 LBS.

B. MULCH – STRAW
ALL AREAS THAT ARE SEEDED SHOULD BE MULCHED. MULCH IS A LOOSE LAYER THREE FOURTHS OF AN INCH TO ONE INCH (3/4" TO 1") DEEP OF CLEAN STRAW. MULCH REDUCES SOIL EROSION, AID SEED GERMINATION, AND CONSERVES MOISTURE. STRAW SHOULD NOT BE CHOPPED OR FINELY BROKEN DURING APPLICATION. MULCH SHOULD BE APPLIED AS FOLLOWS:
MULCH – 3 TONS PER ACRE, 140 LBS. PER 1,000 S.F.

C. VEGETATIVE SURFACE STABILIZATION:
1. REFER TO THE ACCOMPANYING PLAN(S) AND SPECIFICATIONS PERTAINING TO PERMANENT SEEDING.
2. ALL DISTURBED AREAS SHALL BE STABILIZED AS SOON AS POSSIBLE AFTER FINAL GRADES HAVE BEEN ESTABLISHED. REFER TO "STAGING OF EARTHMOVING ACTIVITIES" FOR THE SEQUENCE.
3. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE RECOMMENDED RATES.
4. ON STEEP SLOPES, EROSION CONTROL MATTING SHOULD BE USED TO HOLD SEED AND TOPSOIL IN PLACE. SLOPE STEEPNESS, SLOPE LENGTH, SOIL ERODIBILITY, AND CUT OR FILL CONDITION SHOULD BE CONSIDERED IN DETERMINING NEED FOR MATTING OR THE MULCH TACKING METHODS.
5. SURFACE ROUGHENING SHOULD BE APPLIED TO ALL SLOPES 3:1 OR STEEPER UNLESS A STABLE ROCK FACE IS PROVIDED. SLOPE TRACKING MAY BE USED. PERFORM TRACKING BY RUNNING TRACKED MACHINERY UP AND DOWN THE SLOPE AND LEAVING TRACK MARKS PARALLEL TO THE CONTOUR.

SECTION 102.8(f)(5) - SURFACE WATER CLASSIFICATION

THE SITE IS LOCATED WITHIN THE PENNYPACK CREEK WATERSHED. THE PROJECT'S RECEIVING WATERCOURSE IS AN UNNAMED TRIBUTARY TO THE PENNYPACK CREEK. PER THE PENNSYLVANIA CODE, TITLE 25, CHAPTER 93 WATER QUALITY STANDARDS, THE RECEIVING WATERCOURSE HAS THE FOLLOWING STREAM DESIGNATION:
TSF – TROUT STOCKING
MF – MIGRATORY FISHES

SECTION 102.8(f)(11) - RECYCLING OR DISPOSAL OF MATERIALS

1. THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ., AND IN ACCORDANCE WITH ANY ADDITIONAL LOCAL, STATE OR FEDERAL REGULATIONS.
2. *THE CONTRACTOR SHALL NOT ILLEGALLY BURY, BURN, DUMP, OR DISCHARGE ANY BUILDING MATERIAL* OR WASTES AT THE SITE.
3. INDIVIDUALS RESPONSIBLE FOR EARTH DISTURBANCE ACTIVITIES MUST ENSURE THAT PROPER MECHANISMS ARE IN PLACE TO CONTROL WASTE MATERIALS. CONSTRUCTION WASTES INCLUDE, BUT ARE NOT LIMITED TO, EXCESS SOIL MATERIALS, BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, ETC. THAT COULD ADVERSELY IMPACT WATER QUALITY. MEASURES SHOULD BE PLANNED AND IMPLEMENTED FOR HOUSEKEEPING, MATERIALS MANAGEMENT, AND LITTER CONTROL. WHENEVER POSSIBLE, RECYCLING OF EXCESS MATERIALS IS PREFERRED, RATHER THAN DISPOSAL.
4. ANY OFFSITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN REVIEWED AND APPROVED BY THE LOCAL COUNTY CONSERVATION DISTRICT PRIOR TO BEING ACTIVATED. THE OPERATOR SHALL ASSURE THE APPROVED E&S PLAN IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL/ROCK SPOIL AND BORROW AREAS ON OR OFFSITE.

SECTION 102.8(f)(12) - GEOLOGIC FORMATIONS/SOIL CONDITIONS THAT MAY TO CAUSE POLLUTION

THERE ARE NO KNOWN GEOLOGIC FORMATIONS OR SOILS CONDITIONS ON SITE THAT MAY HAVE THE POTENTIAL TO CAUSE POLLUTION.

SECTION 102.8(f)(13) - POTENTIAL THERMAL IMPACTS

PROPOSED BMPS WILL MITIGATE THE THERMAL IMPACTS CAUSED BY BOTH THE EXISTING AND PROPOSED IMPERVIOUS COVER. THIS PROJECT PROPOSES TWO BIORETENTION BASINS. RUNOFF WILL BE COLLECTED INTO THESE BMPS. THESE BMPS FILTER RUNOFF THROUGH A FILTER MATERIAL INTO THE GROUND AND THEN THROUGH AN UNDERDRAIN BEFORE RELEASING TO SURFACE WATERS. THIS PROCESS WILL MITIGATE THE TEMPERATURE INCREASE OF THE RUNOFF.

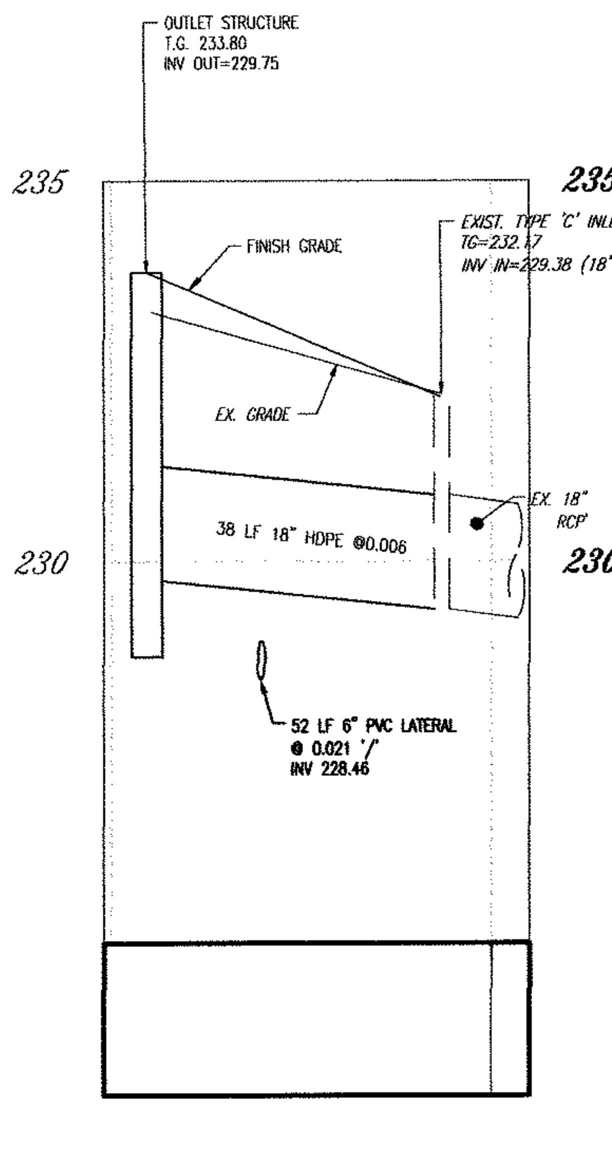
SECTION 102.8(f)(14 - RIPARIAN FOREST BUFFERS

THE SITE DOES NOT DISCHARGE TO AN EV/HQ WATERSHED. THEREFORE, THERE ARE NO EXISTING OR PROPOSED RIPARIAN BUFFERS OR RIPARIAN FOREST BUFFERS IN THE VICINITY OF THE SITE OR WITHIN THE PROPOSED LIMIT OF DISTURBANCE. NO RIPARIAN BUFFER OFFSETS OR EQUIVALENCY *DEMONSTRATIONS ARE REQUIRED.*

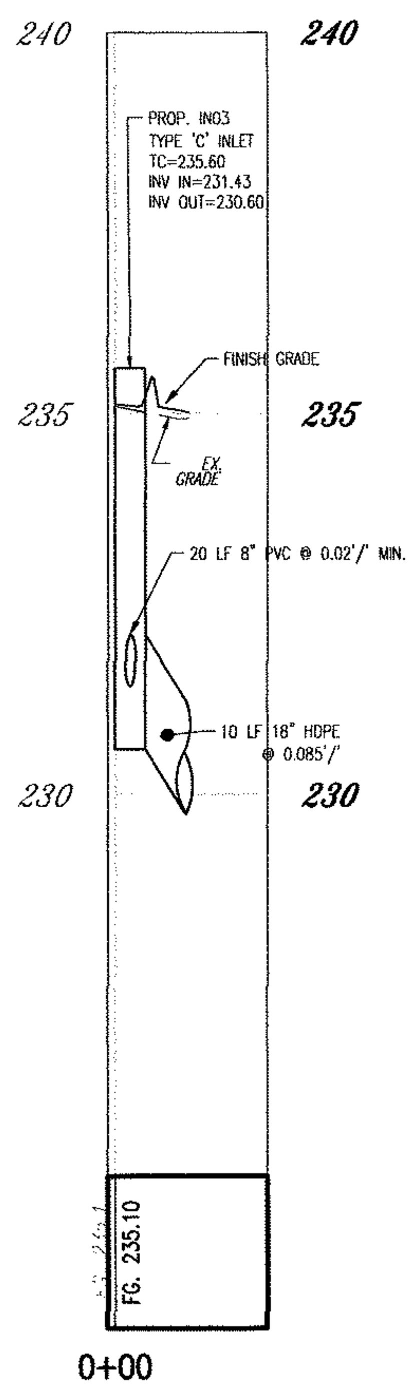
SECTION 102.8(f)(10) - PCSM BMP LONG-TERM OPERATION, MAINTENANCE, AND INSPECTION SCHEDULE

1. STORMWATER MANAGEMENT MAINTENANCE RESPONSIBILITY – THE STORMWATER MANAGEMENT FACILITIES WITHIN PRIVATE RIGHTS-OF-WAY SHALL BE OWNED AND MAINTAINED BY A HOMEOWNERS ASSOCIATION, OR EQUIVALENT, AND ARE ULTIMATELY THE RESPONSIBILITY OF THE PROPERTY OWNER. THE STORMWATER MANAGEMENT FACILITIES WITHIN PUBLIC RIGHTS-OF-WAY SHALL BE OWNED AND MAINTAINED BY THE MUNICIPALITY. ANY STORMWATER FACILITIES LOCATED OUTSIDE OF THE PROPOSED RIGHTS-OF-WAY SHALL BE CONTAINED WITHIN AN EASEMENT AS REQUIRED FOR PROPER ACCESS. THE HOA, OR EQUIVALENT, SHALL BE RESPONSIBLE FOR THE INSPECTION AND MAINTENANCE OF THE STORMWATER FACILITIES LOCATED ON THE BUILDING LOTS. A BLANKET EASEMENT IS HEREBY OFFERED TO THE MUNICIPALITY FOR THE PURPOSE OF INSPECTION, MAINTENANCE, AND ACCESS TO ANY STORMWATER FACILITIES NOT LOCATED WITHIN THEIR PUBLIC RIGHT-OF-WAY.
2. IT IS THE RESPONSIBILITY OF THE PROPERTY OWNER (OR DESIGNEE) TO COMPLETE A WRITTEN REPORT DOCUMENTING EACH INSPECTION AND ALL BMP REPAIR, OR REPLACEMENT AND MAINTENANCE ACTIVITIES. A LOG SHOWING DATES THAT BMPS WERE INSPECTED, AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED, SHALL BE MAINTAINED ON-SITE AND BE MADE AVAILABLE TO THE REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.
3. ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOOD PLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES.
4. IT SHALL BE UNLAWFUL TO ALTER OR REMOVE THE PERMANENT STORMWATER CONTROLS AND BMPS OR TO ALLOW THE PROPERTY TO REMAIN IN A CONDITION WHICH DOES NOT CONFORM TO THE APPROVED POST CONSTRUCTION STORMWATER MANAGEMENT PLAN.
5. THE PROPERTY OWNER OR THEIR DESIGNATED RESPONSIBLE PARTY SHALL NOTIFY THE TOWNSHIPS OF ANY PROBLEMS OR FAILURES OBSERVED IN THE STORMWATER SYSTEM, INCLUDING SURFACE PONDING.

PCSM BMP	MAINTENANCE ACTIVITY	INSPECTION SCHEDULE	ADDITIONAL SPECIFICATIONS, POTENTIAL FAILURES & CORRECTIVE MEASURES
STORM SEWER INLETS AND MANHOLES	• INLET GRATES SHOULD BE PULLED AND THE INSIDE OF THE INLET BOX SHOULD BE VISUALLY INSPECTED FOR SEDIMENT AND DEBRIS. ANY SEDIMENT FOUND SHOULD BE REMOVED AND ANY BLOCKAGE OF THE PIPES SHOULD BE CLEARED.	• INSPECT ANNUALLY AND AFTER EACH MAJOR RAINFALL EVENT	• X
STORM SEWER PIPES	• INSPECT FOR SEDIMENT AND DEBRIS AND FLUSH CLEAN WITH GARDEN HOSE OR OTHER FORM OF A FLUSHING SYSTEM	• INSPECT ANNUALLY AND AFTER EACH MAJOR RAINFALL EVENT	• X
SEEDING AND MULCHING	• SEED OR SOD TO RESTORE DEAD OR DAMAGED GROUND COVER • SEEDED AREAS THAT HAVE WASHED AWAY SHALL BE FILLED AND REGRADED AS NECESSARY, RESEEDED, AND MULCHED.	• ANNUAL MAINTENANCE AS NEEDED	• REPAIR/REPLACE ACCORDING TO MANUFACTURER'S SPECIFICATIONS
VEGETATED CHANNELS	• INSPECT FOR EROSION AND DAMAGE TO VEGETATION. • TRIM OR MOW VEGETATION TO CONTROL WEEDS • RILLS AND GULLIES MAY BE FILLED WITH TOPSOIL, STABILIZED AND SEEDED. RESEED BARE AREAS. • INSPECT FOR SEDIMENT ACCUMULATIONS AND DEBRIS AND REMOVE SEDIMENT AND DEBRIS WHEN TOTAL CHANNEL DEPTH IS REDUCED BY 25% AT ANY LOCATION.	• INSPECT QUARTERLY FOR THE FIRST TWO YEARS FOLLOWING INSTALLATION, AND THEN ON A BI-ANNUAL BASIS THEREAFTER AND AFTER EACH MAJOR RAINFALL EVENT	• CHANNEL DIMENSIONS SHALL BE CONSTANTLY MAINTAINED. • MULCHING OR AERATION MAY BE REQUIRED TO RESTORE SOIL STRUCTURE AND MOISTURE CAPACITY • UNWANTED OR INVASIVE VEGETATION SHOULD BE REMOVED ON AN ANNUAL BASIS
RIPRAP APRONS AND LEVEL SPREADERS	• DISPLACED RIPRAP SHALL BE REPLACED. • AREAS UNDERCUT BY EROSION SHALL BE REPAIRED AND RESEEDED. • INSPECT INLETS AND STRUCTURES DRAINING TO LEVEL SPREADER AND REMOVE SEDIMENT AND DEBRIS	• INSPECT QUARTERLY FOR THE FIRST TWO YEARS FOLLOWING INSTALLATION, AND THEN ON A BI-ANNUAL BASIS THEREAFTER AND AFTER EACH MAJOR RAINFALL EVENT	• SEDIMENT DEPOSITS SHALL BE REMOVED WHEN IT REACHES HALF THE HEIGHT OF THE CONCRETE LEVEL SPREADER. • SHEET FLOW CONDITIONS SHALL BE SUSTAINED THROUGHOUT THE LIFE OF THE LEVEL SPREADER • MAINTAIN VIGOROUS VEGETATIVE COVER ON THE AREAS BELOW THE LEVEL SPREADER
RAIN GARDEN OR BIORETENTION BASIN (BMP 6.4.5)	• WATER PLANTS REGULARLY UNTIL THEY BECOME ESTABLISHED • INSPECT FOR TRASH OR SEDIMENT • INSPECT DRAW-DOWN TIME TO ENSURE BASIN DRAINS BETWEEN 24 AND 72 HOURS • INSPECT GRASS TO ENSURE THERE ARE NO BARE SPOTS • WEED, PRUNE AND REMOVED DEAD VEGETATION IN THE SPRING SEASON	• INSPECT STRUCTURES QUARTERLY FOR THE FIRST TWO YEARS FOLLOWING INSTALLATION, AND THEN ON A BI-ANNUAL BASIS THEREAFTER AND AFTER EACH MAJOR RAINFALL EVENT • INSPECT/REPLACE STONE AND GEOTEXTILE EVERY 5 TO 7 YEARS AS NEEDED	• REMOVE TRASH AND SEDIMENT AND DISPOSE OF IN ACCORDANCE WITH LOCAL AND STATE REGULATIONS • MULCH WITH LEAF COMPOST OR SHREDDED WOOD EVERY 2 TO 3 YEARS. AVOID WOOD CHIPS.
CONSTRUCTED FILTER (BMP 6.4.7)	• REMOVE CLEANOUT CAPS OR INLET GRATES AND INSPECT FOR CLOGGING. REMOVE ACCUMULATED LEAVES, TWIGS, SEDIMENT, AND OTHER DEBRIS AS REQUIRED TO KEEP THE DRAINAGE SYSTEM CLEAN. • IF AFTER INSPECTION IT IS DETERMINED THAT SEDIMENT NEEDS TO BE REMOVED, INJECT SYSTEM WITH WATER, SUSPEND SILT, AND PUMP CHAMBER. • GRASS CLIPPINGS SHALL BE COLLECTED AND REMOVED TO PREVENT CLOGGING OF THE FACILITY. FALLEN LEAVES SHALL BE COLLECTED AND REMOVED WEEKLY DURING THE FALL SEASON. • INSPECT INFLOW AND OUTFLOW STRUCTURES FOR UNDERCUT OR ERODED AREAS, WETNESS OR DAMAGE AND REPAIR AS NEEDED. • REMOVE STONE AND GEOTEXTILE TO EFFECTIVELY REMOVE BUILT UP SEDIMENT. REPLACE GEOTEXTILE AND STONE.	• INSPECT STRUCTURES QUARTERLY FOR THE FIRST TWO YEARS FOLLOWING INSTALLATION, AND THEN ON A BI-ANNUAL BASIS THEREAFTER AND AFTER EACH MAJOR RAINFALL EVENT • INSPECT/REPLACE STONE AND GEOTEXTILE EVERY 5 TO 7 YEARS AS NEEDED	• VEHICULAR ACCESS ON ABSORPTION BED AREA SHALL BE PROHIBITED AND CARE SHALL BE TAKEN TO AVOID EXCESSIVE COMPACTION BY MOWERS. • 100 PERCENT VEGETATIVE COVER BY HERBACEOUS SPECIES SHALL BE MAINTAINED THROUGHOUT ALL EMBANKMENTS AND LAWN AREAS WITH DIRECT DISCHARGE TO THE UNDERGROUND FACILITY. ANY AREA BECOMING VOID OF VEGETATION SHALL BE IMMEDIATELY CORRECTED BY REPLANTING OR OTHER ADEQUATE MEASURES NECESSARY TO PREVENT EROSION THAT MAY JEOPARDIZE THE POROSITY OF THE SYSTEM. AT NO TIME SHALL MULCH BE USED ON SLOPES OF DIRECT DRAINAGE TO THE UNDERGROUND FACILITY. • NOTE SIGNS OF PETROLEUM HYDROCARBON CONTAMINATION AND HANDLE PROPERLY. • MULCH WITH LEAF COMPOST OR SHREDDED WOOD EVERY 2 TO 3 YEARS. AVOID WOOD CHIPS.
LANDSCAPING (REVEGETATE DISTURBED AREAS) (BMP 5.6.3)	• WATERING, CULTIVATING, WEEDING, MULCHING, CONTROL OF INSECTS AND DISEASES, AND PRUNING • RESET TREES TO PROPER GRADES AND/OR VERTICAL POSITION AS REQUIRED	• AS NEEDED TO MAINTAIN PROPER GROWTH AND APPEARANCE OF PLANT MATERIAL • PERFORM APPROPRIATE SEASONAL MAINTENANCE	• SHOULD ANY PLANTS APPEAR TO BE IN POOR HEALTH OR LACK NORMAL GROWTH HABIT, THEY SHALL BE REMOVED AT ONCE AND REPLACED



PROFILE - OS TO EX. INLET
SCALE: 1" = 20' HORIZ.
1" = 2' VERT.



PROFILE - INLET 03 TO BASIN
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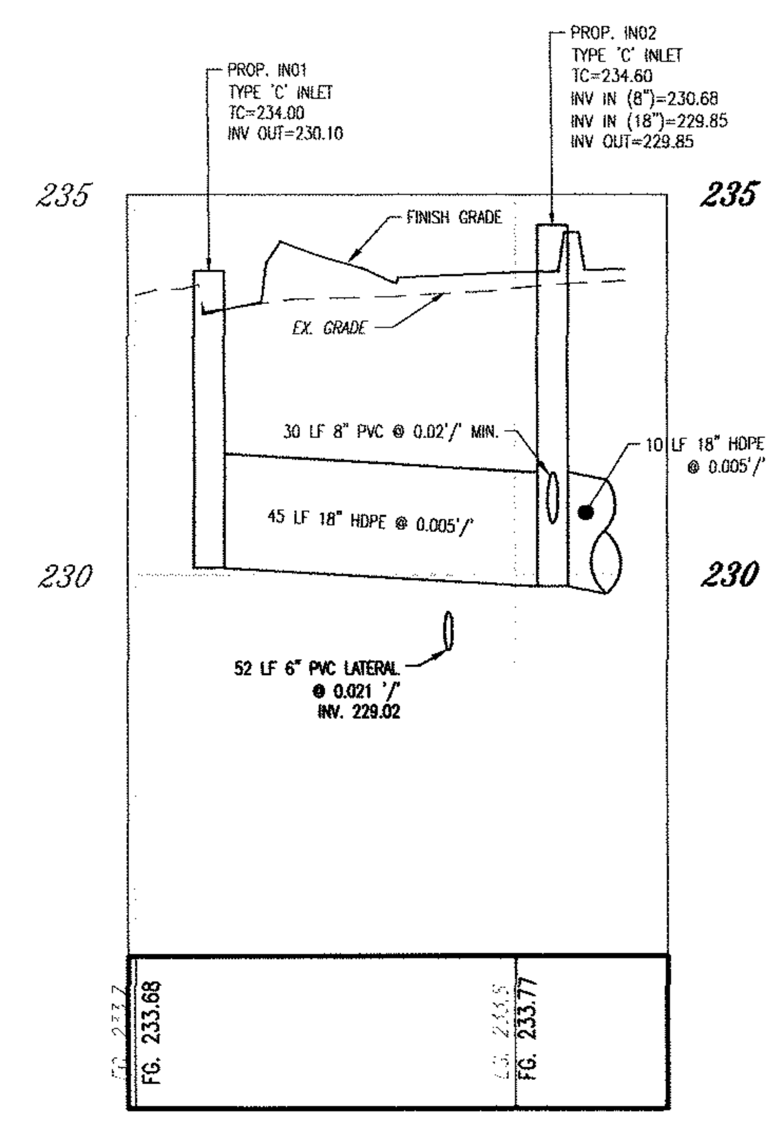
1" = 2' VERT.



PROFILE - INLET 01 TO INLET 02
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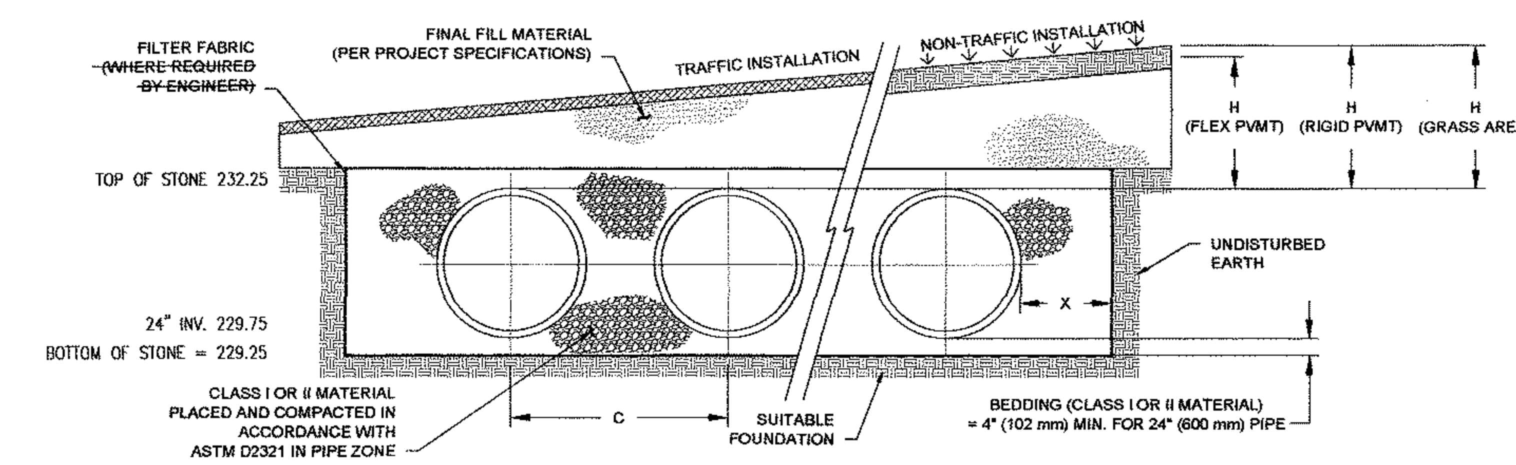
1" = 2' VERT.

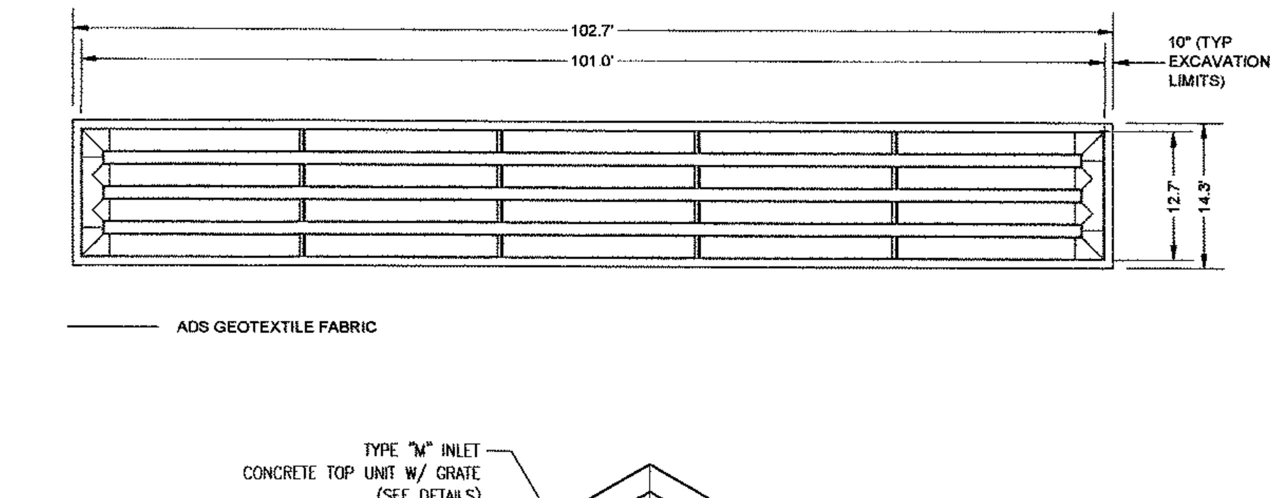


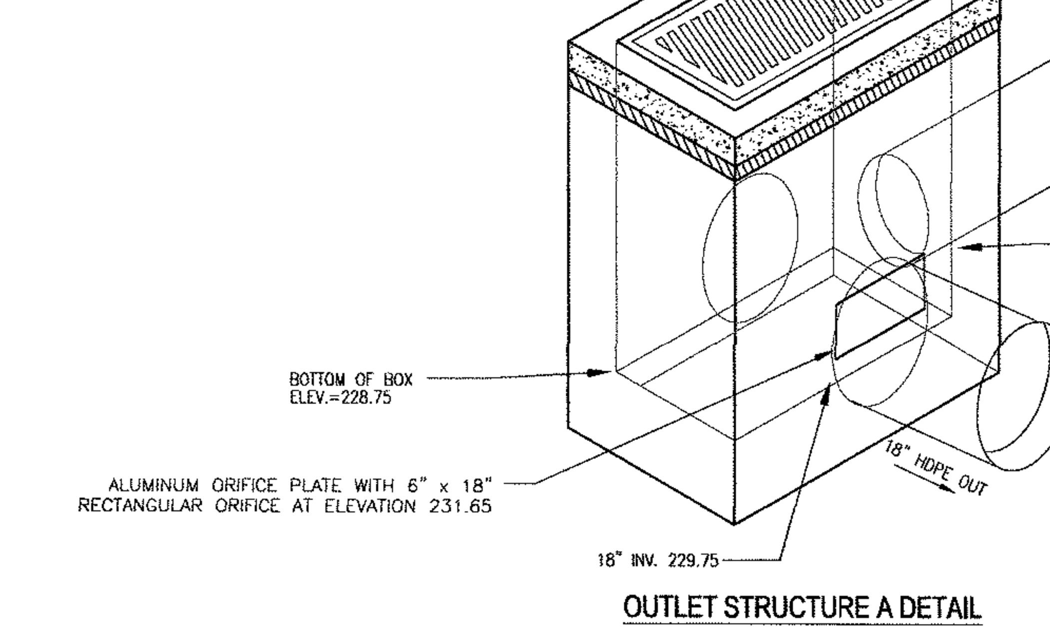
NOMINAL DIAMETER	NOMINAL O.D.	TYPICAL SPACING "C"	TYPICAL SIDE WALL "X"	MIN. H (NON-TRAFFIC)	MIN. H (TRAFFIC)	MAX. H*
24" (600 mm)	28" (711 mm)	41.4" (1052 mm)	10" (254 mm)	12" (305 mm)	12" (305 mm)	8' (2.4 m)

* MAXIMUM FILL HEIGHTS OVER MANIFOLD FITTINGS. CONTACT MANUFACTURER'S REPRESENTATIVE FOR INSTALLATION CONSIDERATIONS WHEN COVER EXCEEDS 8 FT (2.4 m).

NOTES:

1. ALL REFERENCES TO CLASS I OR II MATERIAL ARE PER ASTM D2321 "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION.
2. ALL RETENTION AND DETENTION SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, LATEST EDITION AND THE MANUFACTURER'S PUBLISHED INSTALLATION GUIDELINES.
3. MEASURES SHOULD BE TAKEN TO PREVENT THE MIGRATION OF NATIVE FINES INTO THE BACKFILL MATERIAL, WHEN REQUIRED. SEE ASTM D2321.
4. FILTER FABRIC: A GEOTEXTILE FABRIC MAY BE USED AS SPECIFIED BY THE ENGINEER TO PREVENT THE MIGRATION OF FINES FROM THE NATIVE SOIL INTO THE SELECT BACKFILL MATERIAL.
5. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
6. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I OR II. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (102 mm) FOR 4"-24" (100-600 mm); 6" (152 mm) FOR 30-60" (750-900 mm).
7. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I OR II IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" (152 mm) ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
8. COVER: MINIMUM COVER OVER ALL RETENTION/DETENTION SYSTEMS IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" (305 mm) FROM TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER IS 12" (305 mm) UP TO 36" (900 mm) DIAMETER PIPE AND 24" (610 mm) OF COVER FOR 42-60" (1050-1500 mm) DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT. MAXIMUM FILL HEIGHT LIMITED TO 8 FT (2.4 m) OVER FITTINGS FOR STANDARD INSTALLATIONS. CONTACT A SALES REPRESENTATIVE WHEN MAXIMUM FILL HEIGHTS EXCEED 8 FT (2.4 m) FOR INSTALLATION CONSIDERATIONS.





OUTLET STRUCTURE A DETAIL
N.T.S.

HUNTINGDON VALLEY SHOPPING CENTER PRELIMINARY/FINAL MAJOR LAND DEVELOPMENT

CALL BEFORE YOU DIG!
PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE–STOP CALL
PENNSYLVANIA ONE CALL SYSTEM, INC.
1-800-242-1776
SERIAL# 20220481229

PLAN NOTATION – THESE DOCUMENTS ARE ESPECIALLY PREPARED FOR THIS PROJECT AND ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE ON ANY EXTENSION OR MODIFICATION OF THIS PROJECT OR FOR ANY OTHER PROJECT. R. L. SHOWALTER & ASSOCIATES, INC. SHALL ONLY CERTIFY THOSE DOCUMENTS THAT CONTAIN A SEAL AND SIGNATURE. ANY REUSE OF THESE DOCUMENTS WITHOUT THE EXPRESS WRITTEN CONSENT OF R. L. SHOWALTER & ASSOCIATES, INC. OR THEIR USE FOR ANY PURPOSE OTHER THAN THE SPECIFIC PURPOSE FOR WHICH THEY WERE PREPARED IS STRICTLY PROHIBITED. IF USED FOR OTHER THAN THIS PROJECT OR OTHER THAN FOR THE PURPOSE FOR WHICH THEY WERE PREPARED, SUCH USE SHALL CONSTITUTE AN AGREEMENT BY THE PARTY USING THE DOCUMENTS AND THE CLIENT TO INDEMNIFY AND HOLD R. L. SHOWALTER & ASSOCIATES, INC. AND ITS SHAREHOLDERS, OFFICERS, DIRECTORS, PRINCIPALS AND EMPLOYEES HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES (INCLUDING REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS) ARISING AS THE RESULT OF SUCH USE, EXCEPTING ONLY THOSE DAMAGES, LIABILITIES AND COSTS ARISING FROM THE SOLE NEGLIGENCE OR WILLFUL MISCONDUCT OF R. L. SHOWALTER & ASSOCIATES, INC.
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NO.	DATE	COMMENT
1	8/24/2022	PER TOWNSHIP REVIEWS AND PC MEETING

REVISIONS

POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS

R. L. Showalter & Associates, Inc.
116 East Butler Avenue
Chalfont, PA 18914
(215) 822-2990
FAX (215) 822-5684
• Engineering • Planning • Surveying •

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL WAYNE R. KIEFER ENGINEER NO. 053563-E

SCALE:	AS SHOWN
DATE:	2/18/2022
JOB NO.:	2019-92
DRAWN BY:	LZ
CHECKED BY:	WK

SITUATE: ABINGTON TOWNSHIP
MONTGOMERY COUNTY,PA.
PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET 13 OF 14

Plotted: 08/25/22 – 3:08 PM, By: wkiefer
File: F:\DWG\2019\2019-092 – Kravco HVSC – Abington\ENGINEERING\2019-092_Chipotle Plan.dwg-13-PCSM NTS
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HUNTINGDON VALLEY SHOPPING CENTER PRELIMINARY/FINAL MAJOR LAND DEVELOPMENT

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE–STOP CALL

PENNSYLVANIA ONE CALL SYSTEM, INC.

1–800–242–1776

SERIAL# 20220481229

PLAN NOTATION – THESE DOCUMENTS ARE ESPECIALLY PREPARED FOR THIS PROJECT AND ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE ON ANY EXTENSION OR MODIFICATION OF THIS PROJECT OR FOR ANY OTHER PROJECT. R. L. SHOWALTER & ASSOCIATES, INC. SHALL ONLY CERTIFY THOSE DOCUMENTS THAT CONTAIN A SEAL AND SIGNATURE. ANY REUSE OF THESE DOCUMENTS WITHOUT THE EXPRESS WRITTEN CONSENT OF R. L. SHOWALTER & ASSOCIATES, INC. OR THEIR USE FOR ANY PURPOSE OTHER THAN THE SPECIFIC PURPOSE FOR WHICH THEY WERE PREPARED IS STRICTLY PROHIBITED. IF USED FOR OTHER THAN THIS PROJECT OR OTHER THAN FOR THE PURPOSE FOR WHICH THEY WERE PREPARED, SUCH USE SHALL CONSTITUTE AN AGREEMENT BY THE PARTY USING THE DOCUMENTS AND THE CLIENT TO INDEMNIFY AND HOLD R. L. SHOWALTER & ASSOCIATES, INC. AND ITS SHAREHOLDERS, OFFICERS, DIRECTORS, PRINCIPALS AND EMPLOYEES HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES (INCLUDING REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS) ARISING AS THE RESULT OF SUCH USE, EXCEPTING ONLY THOSE DAMAGES, LIABILITIES AND COSTS ARISING FROM THE SOLE NEGLIGENCE OR WILLFUL MISCONDUCT OF R. L. SHOWALTER & ASSOCIATES, INC.

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INC. ALL RIGHTS RESERVED.

NO.	DATE	COMMENT
1	8/24/2022	PER TOWNSHIP REVIEWS AND PC MEETING

REVISIONS

AERIAL PLAN

R. L. Showalter & Associates, Inc.
116 East Butler Avenue
Chalfont, PA 18914
(215) 822–2990
FAX (215) 822–5684
• Engineering • Planning • Surveying •

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
WAYNE R. KIEFER
ENGINEER
No. 053535-E

SCALE:	1"=50'
DATE:	2/18/2022
JOB NO.:	2019–92
DRAWN BY:	LZ
CHECKED BY:	WK

SITUATE: ABINGTON TOWNSHIP
MONTGOMERY COUNTY, PA.

PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET 14 OF 14

Plotted: 08/25/22 – 3:08 PM, By: wkiefer
File: F:\DWG\2019\2019–092 – Kravco HVSC – Abington\ENGINEERING\2019–092_Chipotle Plan.dwg–14–EPAL
© 2018 R.L. SHOWALTER & ASSOCIATES, INC

MONTGOMERY COUNTY
BOARD OF COMMISSIONERS
VALERIE A. ARKOOSH, MD, MPH, CHAIR
KENNETH E. LAWRENCE, JR., VICE CHAIR
JOSEPH C. GALE, COMMISSIONER

MONTGOMERY COUNTY
PLANNING COMMISSION
MONTGOMERY COUNTY COURTHOUSE • PO BOX 311
NORRISTOWN, PA 19404-0311
610-278-3722
FAX: 610-278-3941
WWW.MONTCOPA.ORG

Scott France, AICP
EXECUTIVE DIRECTOR

November 17, 2022

SUBJECT: Comments on Chipotle Land Development Plans Sent 11-22-2022

TO: Rich Manfredi, Manager
Cc: Terry Castorina, Assistant to the Township Manager

FROM: Mike Narcowich, AICP, Community Planning Assistant Manager
and Abington Township Planning Consultant

---

1. Review letter from Greg Richardson, P.E., TPD and the comment #7 about adding sidewalk to connect the shopping center to Huntingdon Pike.
    a. The major drawback of doing this would be the removal of six trees and a hedge. That would also eliminate its role as screening for the drive-through. As noted in our review letter of March 24th, the drive-through is required by zoning to have a medium-intensity screen [Article XXIV, Figure 24.7], consisting of either an evergreen hedge or an opaque fence or masonry wall with shrubs.
    b. However, the construction of the sidewalk would have benefits for pedestrian safety. Since the Chipotle proposal includes multiple landscaped areas, the removal of the vegetation to create a sidewalk along the main entrance drive would be at least partially offset by the new lansdscaping.
    c. If this is done, we recommend that the applicant connect the restaurant to a new sidewalk along the entrance drive with crosswalks and possibly speed tables.
2. Landscape Bed. The proposed landscape bed along the edge of the patio is so narrow that it may be difficult for plantings to survive. Please describe the planting bed's plantings (species, size, and number) and specify the bed width.
3. Stream Name. The stream is named "Rockledge Branch," according to USGS, and can be labeled accordingly. Domestic Names | U.S. Geological Survey (usgs.gov) https://www.usgs.gov/us-board-on-geographic-names/domestic-names
4. Trash. It looks like there may be a concrete pad for trash planned on the far side of the parking lot from the Chipotle (to the east of the restaurant). Can the applicant verify that this is for trash?

APPLICATION FOR SUBDIVISION/LAND DEVELOPMENT

PROJECT NAME: Huntingdon Valley Shopping Center-Chipolte

APPLICANT NAME: Valley Associates & Huntingdon Pike Company

TO BE COMPLETED BY THE TOWNSHIP
Submission Information:

Application Number: LD-22-02
Project Title: HVSC-Chipotle Pad Site
File Date: 02/18/2022

Date Complete:
90 Day Date: N/A
Ward No.: 2

REQUIRED MATERIAL FOR ALL SUBDIVISION/LAND DEVELOPMENT APPLICATIONS:

1. This form **MUST** be completed and submitted.
2. A Subdivision/ Land Development Application MUST include all of the items listed in the application checklist in Section V to be considered complete.
3. Incomplete application will **NOT** be placed on the Planning Commission agenda. Incomplete applications will be returned to the applicant.
4. Complete applications must be received at least 45 DAYS (see schedule) prior to the Planning Commission meeting at which it will be heard.
5. Ten (10) full size paper copies, and one (1) 11x17 reduced copy of the plans, plus three (3) copies of each report or study are to be submitted in the initial submission of the complete application. A digital copy of all submitted documents must be included with the application.

   ***It is highly encouraged to submit applications in a digital format**

I. CONTACT INFORMATION

Applicant Information

VALLEY ASSOCIATES & HUNTINGDON PIKE COMPANY
Name

C/O KRAUCO CO. LLC 375 E. ELM ST, SUITE 100 CONSHOHOCKEN PA 19428
Address

(610) 854-2800
Phone

Fax

Email Address

Property Owners Information (if different than applicant)

Name

Address

Phone

Fax

Email Address

Architect/ Planner

MARK W. METZGAR, CORNERSTONE CONSULTING ENGINEERS ARCHITECTURE
Name

1176 N. IRVING ST, ALLENTOWN, PA 18109
Address

(610) 820-8200
Phone

(610) 820-3706
Fax

mmetzgar@cornerstonenet.com
Email Address

Engineer/ Surveyor

WAYNE KIEFER, PE, R.L. SHOWALTER & ASSOC. INC
Name

116 E. BUTLER AVE, CHALFONT, PA 18914
Address

Engineer/ Surveyor Cont'd

(215) 822-2490
Phone

(215) 822-5684
Fax

wkiefer@rlshowalter.com
Email Address

Attorney

AMEE S. Farrell, ESQ - KAPLIN-STEWART
Name

Union Meeting Corporate Ctr, 910 Harvest Dr, PO Box 3037
BLUE BELL PA 19422-0765
Address

(215) 718-6697
Phone

(610) 684-2010
Fax

afarrell@kaplaw.com
Email Address

II. PROJECT INFORMATION

Application Type:

_____Minor Subdivision	_____Minor Land Develop.	_____Preliminary Major SD & LD
_____Preliminary Major Subdivision	__X__Prelim. Major Land Develop.	_____Final Major SD & LD
_____Final Major Subdivision	__X__Final Major Land Develop.	

Full street address of the property: _____

Tax Parcel No.: 30-00-31508-006 30-00-31508-007 County Deed Book No.: 3339 2799 Page No.: 317 251

Description of Proposed Work: Proposed Chipo

Total Tract Acreage: 16.987 ac Project Acreage: 0.75 ac

Zoning District: C-3 Existing Number of Lots: _____ Proposed Number of Lots: _____

Existing Sewer Flows: _____ Proposed Sewer Flows: _____

Proposed Land Use:

_____Single Family Detached	_____Single Family Attached		_____Single Family Semi-Detached
_____Multi-Family	__X__Commercial	_____Office	_____Industrial
_____Other (Describe): _____			

III. REVIEW

Please complete the following section by circling a response:

• Have you met with the Zoning Officer regarding this plan?	(Yes)	No
• Are there known variances/any zoning relief necessary for this project?*	Yes	(No)
• If YES, have you submitted an application to the Zoning Hearing Board?	Yes	No
• Has this plan been heard by the Zoning Hearing Board?	Yes	(No)
• Has this plan been submitted to, considered by, or received any formal action by the Planning Commission or Board of Commissioners in the past?	Yes	(No)

*Please be advised that if any variances are found to be necessary during the course of the review of this plan, you will be required to go to the Zoning Hearing Board prior to proceeding to the Planning Commission. In addition, you will be requested to grant the Township a waiver to the 90-day action period or an immediate denial of this application will be made, and you will be required to resubmit the application.

It is recommended that ALL Land Development and Major Subdivision applications have a pre-submission meeting to discuss the project prior to full application submittal.

Minor Subdivision applications may request a pre-submission meeting; if one is desired.

Meetings are typically held the fourth Tuesday of each month at the Township Administrative Offices.

Applicants assume responsibility of any fees associated with this meeting.

Applicant signature Steven M. Powell 2/17/22
Date

To schedule a pre-submission meeting, please contact the Office of the Township Manager at 267-536-1003 or email TCastorina@abingtonpa.gov

IV. WAIVERS

List of Requested Waivers: Attach separate sheet if required.

Section/Requirement:	**Relief Requested:**

V. SUBMISSION

APPLICATION CHECKLIST

The applicant is responsible for the submission of a complete application. This checklist will aid both the applicant and staff in ensuring that all applications are complete. The following is a per item submission checklist for all Subdivision, Land Development and Conditional Use Applications for the Township of Abington.

- ✓ Application Form: completed and signed by the owner/applicant
- ✓ 10 (ten) copies of the proposed plan, folded to legal file size. Plan should not be smaller than 1" = 50' and not exceed a sheet size of 24"x 36"
- ✓ One (1) reduced copy of the proposed plan, no larger than 11"x17"
- ✓ Two (2) sets of tentative architectural plans for all applications proposing construction or land development
- ___ One (1) copy of the Recreation Facilities Plan (if required by §146-40)
- ___ Letter of Sanitary Sewer availability from the Township Wastewater Treatment Department
- ___ Two (2) copies of Sewage Facilities Planning Module Applications
- ✓ Letter of Water availability from AQUA PA
- ___ One (1) copy of any previous Zoning Hearing Board decisions related to the subject property
- ✓ One (1) digital copy of <u>all</u> submitted documents
- ✓ Application Fee: Check made payable to the Township of Abington
- ___ Escrow Fee: Check made payable to the Township of Abington. Separate check from application fee

VI. SIGNATURE

The undersigned represents that to the best of his/her knowledge and belief, all the above statements are true, correct, and complete.

Steven M. Powell
Signature of Applicant

2/17/22
Date

Signature of Property Owner (if different than applicant)

Date

THE FOLLOWING IS FOR INTERNAL USE ONLY:

PAYMENT

___X_ Application Fee Amount: ~~$$1000~~ _____ Check No.: #__14077 _____

____ Review Escrow Fee Amount: $_____ Check No.: #_____

DECISION INFORMATION

Approval _____ Denial_____ Decision Date: _____

Comments/Conditions:_____

_____

_____

_____

_____

PLANNING PROCESS EXTENSION AGREEMENT

FOR

Huntingdon Valley Shopping Center - Chipolte
PROJECT NAME

The Pennsylvania Municipality Planning Code (MPC) and the Abington Township Subdivision and Land Development Ordinance state that action must be taken by the Township within ninety (90) days after a complete application is filed with the Township. In the Township, complicated, unique, and community impactful projects have or may require additional time in order to complete a thorough review before being considered for approval. As such, an applicant may voluntarily waive the timing requirement at any time, but is encouraged to submit this waiver with the completed application.

I, the applicant, hereby voluntarily waive the timing requirement as set forth in the MPC (Section 53 P.S. 10508) and the Abington Township Subdivision and Land Development Ordinance (Section 146-13). Applicant acknowledges that this waiver can be revoked at any time upon written notice to the Township Manager. The time limitations set forth in 53 P.S. 10508 and Section 146-13 of the Abington Township Code shall be calculated from the date that the written revocation is received by the Township Manager.

Signed: Steven M. Powell _____ Date: 2/17/22
Applicant

Received: _____ Date: _____
Township

ESCROW AGREEMENT FOR PROFESSIONAL REVIEW FEES FOR SUBDIVISION/LAND DEVELOPMENT APPLICATIONS

The undersigned hereby agrees to post an escrow to cover the costs of the review of subdivision and land development applications by the Township's Planner, Engineer, and Solicitor. The amount of said escrow shall be according to the attached "Schedule of Fees" and shall be posted at the time of initial submission of an application to the Township. Said fees shall be placed in an escrow account and any balance remaining shall be returned to the applicant subsequent to the receipt of final approval.

The applicant is advised that the "Schedule of Fees" represents only an estimate of the costs associated with plan review. The completeness and quality of the submission, the complexity of the project, the number of revisions and other factors may cause costs to exceed the established escrow amounts. If during the course of a subdivision/land development review an escrow amount falls to 10% of the original escrow amount or $250, whichever is greater, the Township may require the posting of additional escrow.

NOTE: NO FINAL APPROVALS, CONSTRUCTION, BUILDING OR OCCUPANCY PERMITS SHALL BE ISSUED UNTIL ALL OUTSTANDING PROFESSIONAL REVIEW FEES HAVE BEEN SATISFIED.

Signed: Steven J Powell
Applicant

Date: 2/17/22

AQUA SM

An Essential Utilities Company

January 27, 2022

Wayne Kiefer
RL Showalter and Assoc
116 Butler Ave
Chalfont, PA 18914

Re: Water Availability
775 Huntingdon Pike
Abington Twp, Montgomery County

In response to your request, this letter will serve as confirmation that the above referenced property is situated within Aqua Pennsylvania Inc. service territory.

Domestic and fire water service is available to this property and will be provided in accordance with Aqua Pennsylvania, Inc. Rules and Regulations. For further details, visit www.aquaamerica.com.

With regard to our capacity for domestic and fire service for this area, flow data information can be obtained upon written request to Lisa Thomas of our Control Center at LATHOMAS@AQUAAMERICA.COM. Include the address with town or township and the nearest intersecting street.

Should you have any further questions or need to request an application for service, contact me at (610) 541-4160 or dlciotti@aquaamerica.com.

Regards,

Deanna L. Ciotti
Special Services Coordinator-New Business Applications
Aqua Pennsylvania, Inc
700 W Sproul Rd
Springfield, PA 19064
O: 610.541.4160

Applicant Request for County Review

This request should be filled out by the applicant and submitted to the municipality where the application is being filed along with digital copies of all plan sets/information. Municipal staff will electronically file the application with the county, and a notice for the prompt payment of any fees will be emailed to the Applicant's Representative.

MONTGOMERY COUNTY PLANNING COMMISSION
MCPC
P.O. Box 311, Norristown, PA 19404-0311
Phone: 610-278-3722
Business Hours: 8:30 A.M. to 4:15 P.M.
www.planning.montcopa.org

Date: _____
Municipality: ABINGTON TOWNSHIP

Proposal Name: Huntingdon Valley Shopping Ctr - CHIPOLTE

Applicant Name: Valley Associates & Huntingdon Pike Co.
Address: % Kravco Co. LLC, 375 E. Elm St, Suite 100
City/State/Zip: Conshohocken, PA 19428
Phone: (610) 854-2800
Email: _____

Applicant's Representative: RL SHOWALTER & ASSOC INC
Address: 116 E. Butler Ave
City/State/Zip: Chalfont PA 18914
Business Phone (required): (215) 822-2990
Business Email (required): wkiefer@rlshowalter.com

Type of Review Requested:

(Check All Appropriate Boxes)

- ◉ Land Development Plan
- ○ Subdivision Plan
- ○ Residential Lot Line Change
- ○ Nonresidential Lot Line Change
- ○ Zoning Ordinance Amendment
- ○ Zoning Map Amendment
- ○ Subdivision Ordinance Amendment
- ○ Curative Amendment
- ○ Comprehensive / Other Plan
- ○ Special Review*

**(Not included in any other category - includes parking lot or structures that are not associated with new building square footage)*

Type of Plan:

- ○ Tentative (Sketch)
- ◉ Preliminary / Final

Type of Submission:

- ◉ New Proposal
- ○ Resubmission*

** A proposal is NOT a resubmission if A) The proposed land use changes, or B) The amount of residential units or square footage proposed changes more than 40%, or C) The previous submission was over 5 years ago.*

Zoning:

Existing District: C-33
Special Exception Granted ○ Yes ◉ No
Variance Granted ○ Yes ◉ No For _____

Plan Information:

Tax Parcel Number(s) 30-00-31508-006 & 30-00-31508-007

Location *(address or frontage)* Huntingdon Valley Shopping Ctr
Nearest Cross Street Huntingdon Pike
Total Tract Area 16.487
Total Tract Area Impacted By Development 0.75 ac

(If the development is a building expansion, or additional building on existing development, or only impacts a portion of the tract, please provide a rough estimate of the land impacted, including associated yards, drives, and facilities.)

Land Use(s)	Number of New Lots	Number of New Units	Senior Housing Yes	Senior Housing No	Open Space Acres*	Nonresidential New Square Feet
Single-Family						
Townhouses/Twins						
Apartments						
Commercial	✓					
Industrial						
Office						
Institutional						
Other						

**Only indicate Open Space if it will be on a separate lot or deed restricted with an easement shown on the plan.*

Additional Information: _____

Effective 5/1/18

3100 Horizon Drive
Suite 200
King of Prussia, PA 19406
T: 610-277-2402
F: 610-277-7449

www.pennoni.com

DRAFT

April 8, 2022

ABINT130024

Mr. Richard Manfredi, Township Manager
Abington Township
1176 Old York Road
Abington, PA 19001

RE: LD-22-02- Huntingdon Valley Shopping Center (Chipotle Pad Site)
PARID: 30-00-31500-00-6 / TMID: 30063 008 (a.k.a. 737 Huntingdon Pike – Valley Associates)
PARID: 30-00-31508-00-7 / TMID: 30063 001 (a.k.a. 801 Huntingdon Pike – Huntingdon Pike Co.)
Preliminary/Final Major Land Development Plans Review (1st Submission)

Dear Mr. Manfredi:

We have received a copy of the Preliminary/Final Major Land Development Plans consisting of fourteen (14) sheets dated February 18, 2022 and received on February 22, 2022 with a professional services agreement (PSA) being received from the Township on March 2, 2022; as prepared by RL Showalter & Associates, Inc. located at 116 East Butler Avenue, in Chalfont, PA for the above referenced project. This is a join application from both adjoining owners that comprise the Huntingdon Valley Shopping Center (HVSC), which are the Applicant.

Executive Summary:
Under this Application, the Applicant is proposing to remove the existing macadam parking area and associated parking spots located on the 801 Huntingdon Pike parcel (parcel no. 30-00-31508-00-7) and construct a new 2,338 SF stand-alone fast-food drive through Chipotle restaurant building with outdoor seating within the HVSC. Other site improvements for this site include parking, curbing, sidewalk, landscaping, lighting relocation, and sanitary and stormwater management facilities. Access to/from the site will be by way of three existing HVSC entrances that intersect Huntingdon Pike (S.R. 0232, 70 FT R/W). The new building is proposed to be served by public water and sewer service.

The HVSC is comprised of two (2) separate adjoining parcels as referenced above - 801 Huntingdon Pike is located north of 737 Huntingdon Pike; however, the site improvements are proposed primarily within the northern 801 Huntingdon Pike parcel. The Applicant did not specifically call out for the parcels to be consolidated; however, the Applicant has provided the site plans with the zoning data and parking requirement table referencing both parcels.

This project is located within the BC - Business Center Huntingdon Valley Zoning District and the Huntingdon Valley Shopping Center. The subject parcel is fronted by Huntingdon Pike (S.R.232 70 FT R/W) to the west; an abutting commercial medical facility zoned in the BC - Business Center Huntingdon Valley Zoning District and Rockledge Avenue to the north; Vansant Drive and residential properties zoned in the R-4 High Density Residential Zoning District to the northeast; Scott Park, an vacated portion of Scott Road, and residential properties zoned in the R-4 High Density Residential Zoning District to the southeast; and other commercial properties zoned in the MS-L – Main Street Low Intensity Density Zoning District and Shady Lane to the south. Main Access drive off of Shady Lane to the HVSC is not permitted as noted in Figure 11.9 – Dimensional

Requirements Table.

There is an existing drainage channel for an unnamed tributary to Pennypack Creek located along the southern property line paralleling Shady Lane. Therefore, the southern parcel of 737 Huntingdon Pike has been identified in Figure 15.2 as a parcel intersecting a riparian corridor and is subject to the requirements of Article XV: Riparian Corridor Conservation District.

In accordance with the FEMA, Flood Insurance Rate Map (FIRM) Panel No. 42091C0404G, effective March 2, 2016, the tract is identified to be within Zone X, an area outside the 0.2% chance flood and minimal flood hazard. Therefore, based on the FEMA determination, the tract is not located within the Floodplain Conservation District. Based on the plans and FIRM map, there are no wetlands that exist on site; however, the Applicant shall confirm.

Variances Requested:
The Applicant is not requesting any variances as part of this land development project.

The Applicant needs to provide a zoning data table showing the required, existing and proposed dimensional requirements per Figure 11.9: BC – Business Center Districts Dimensional Requirements for the Huntingdon Valley Shopping Center.

Waivers Requested:
The Applicant has not requested any waivers as part of this Land Development application; however, appears that waivers would be needed unless Applicant addresses the items noted in the review.

Issues:
The following issues we have identified from our review is as follows:

- Design Standards:
    - Main Entrance - The front façade to the Chipotle site should face Huntingdon Pike or the access drive. There is a single door building entrance that faces Huntingdon Pike; however, the main entrance appears to be the double doors located to the side of the building facing the proposed outdoor patio dining and the HVSC parking areas. The Applicant should clarify the main entrance to the Chipotle building.
    - Applicant to clarify if proposed site meets the common and coherent architectural theme with remainder of the HVSC
    - Applicant to clarify window type and provide window areas calculation.

- Transit shelter - The nearest existing bus shelter is located along Huntingdon Pike just south of Key Bank. There is also another bus shelter located along Huntingdon Pike at the southeast corner of the Rockledge Avenue intersection. There is a bus stop for the Route 24 and 28 bus routes along Huntingdon Pike located across the proposed Chipotle site. However, there is no existing bus shelter for this site. There is opportunity for the Applicant to consider adding a bus shelter at this bus stop location.

- Outdoor dining – clarification on seating capacity to ensure adequate parking is accounted for to meet parking requirements.

- Parking & drive aisles:
    - Update parking lot to show parking spaces that would be excluded from the total available parking space counts; i.e., spaces by the Giant that are occupied by return shopping carts.

- The area between the edge of the drive-through aisle and the proposed angle parking space is only eleven (11) feet wide, which is less than the required twelve (12) feet or wider requirement for the one-way drive aisle. The Applicant shall revise this area to be at least twelve (12) feet in width and adequately wide enough for the parked vehicles to maneuver in/out of the angle parking spaces without encroaching onto the drive-through aisle. Turning maneuver templates should be shown on the plans.
- The Applicant should relocate the two (2) proposed parking islands located one parking space east of the proposed median strip to provide two-way traffic circulation instead of a one-way traffic pattern in that area. By relocating the proposed planter islands would also allow for better future maintenance of the underground stormwater facility with minimizing above ground conflicts to direct access to the underground stormwater facility.

- Pedestrian network, sidewalks & crosswalks:
  - The plans show a hatched area and crosswalk to access the proposed Chipotle from Huntingdon Pike. However, there is not a defined continuous internal pedestrian network of sidewalks, crosswalks, and paths to directly connect this proposed development and all other buildings within the HVSC, particularly the Giant supermarket, Wendy's, and Citizen's Bank sites. The Applicant shall show and provide the continuous pedestrian links.
  - There is no defined crosswalk at the northern access drive leading to the Rite-Aid along Huntingdon Pike. The Applicant shall be required to provide a minimum 6' to maximum 10' wide crosswalk across the access drive at Huntingdon Pike to accentuate a continuous pedestrian sidewalk network per this code section.
  - There are no defined crosswalks at intersections internal to the development with multiple access drives, particularly from the secondary access drives adjacent the Rite-Aid, Citizen's Bank, and Wendy's. The Applicant should consider adding crosswalks at these locations to provide a continuous and safe pedestrian route to these sites within the HVSC.
  - Applicant is required to provide patterned surface, textured paving, or stone/brick/concrete paver crosswalks since the proposed crosswalks to the new Chipotle building, as well as the existing crosswalks within the HVSC site are only line striping on asphalt pavement.

- Lighting
  - Applicant is proposing to relocate the light fixture located in the planter island closest to the secondary site access adjacent the Citizens Bank. Point by point calculations shall be provided to ensure that the site lighting complies with the standards set forth in §2601.H.

- Trash storage
  - The Applicant has not indicated where the trash storage will take place, if the trash storage will be indoors or outdoors. Any outdoor trash containers shall be placed inside a six (6) feet enclosure with site element screening per §2403.C.1. through .3 and Figure 24.7 – Site Element Screen Requirements table.

- Stormwater:
  - Infiltration tests needs to be provided for review
  - The Applicant should clarify roof drain locations
  - 100-year design storm elevations should be shown in the stormwater infiltration facility detail
  - EAC suggested considerations for green stormwater infrastructure measures for stormwater runoff.

- Sewer - Sewer comments proposed relocation of the proposed sewer lateral connection to the existing sewer line.

- Street trees & Landscaping:
    - The Applicant is not proposing additional street trees along the access drives on the Landscape Plan. Although the access drives are outside the Chipotle site improvements, and are existing non-conformities, the Applicant should consider adding trees to reduce the amount of reflected heat and to improve the aesthetics of the parking lot areas within the entire HVSC site.
    - EAC requested consideration for bioretention areas at the parking islands and maximizing opportunities for shading and greening are encouraged, as well as canopy trees at the parking islands.
    - The Applicant should provide foundation landscaping at the building per code, and also at the outdoor seating area to soften the contrasting view of the parking lot.
    - Ground Cover - The Landscape Plan is showing only eight (8) CS – Comus Sericea 'Artic Fire', 30" high x 24" wide shrubs for the proposed two new planter islands located to the east of the new Chipotle building. Since no trees are provided, the Applicant shall provide a ground cover calculation on the plans to ensure that the proposed shrubs meet the substitution tree requirements. In addition, we suggest that there be at least two (2) shrub species be provided to promote plant resiliency.

Traffic comments:

- A trip generation and traffic impact analysis for the increase in trips generated by the site should be provided for the proposed Chipotle site for review and comment to ensure that the trips generated by the proposed site will not adversely impact the existing traffic conditions experienced by the Huntingdon Pike corridor and HVSC site.

Summary:
We do not recommend Preliminary/Final Major Land Development Plans approval until the Applicant adequately addresses the above referenced comments, in particular the Zoning comments. Once the zoning comments have been adequately addressed, we will be in a better position to recommend Preliminary/Final Major Land Development Plans approval.

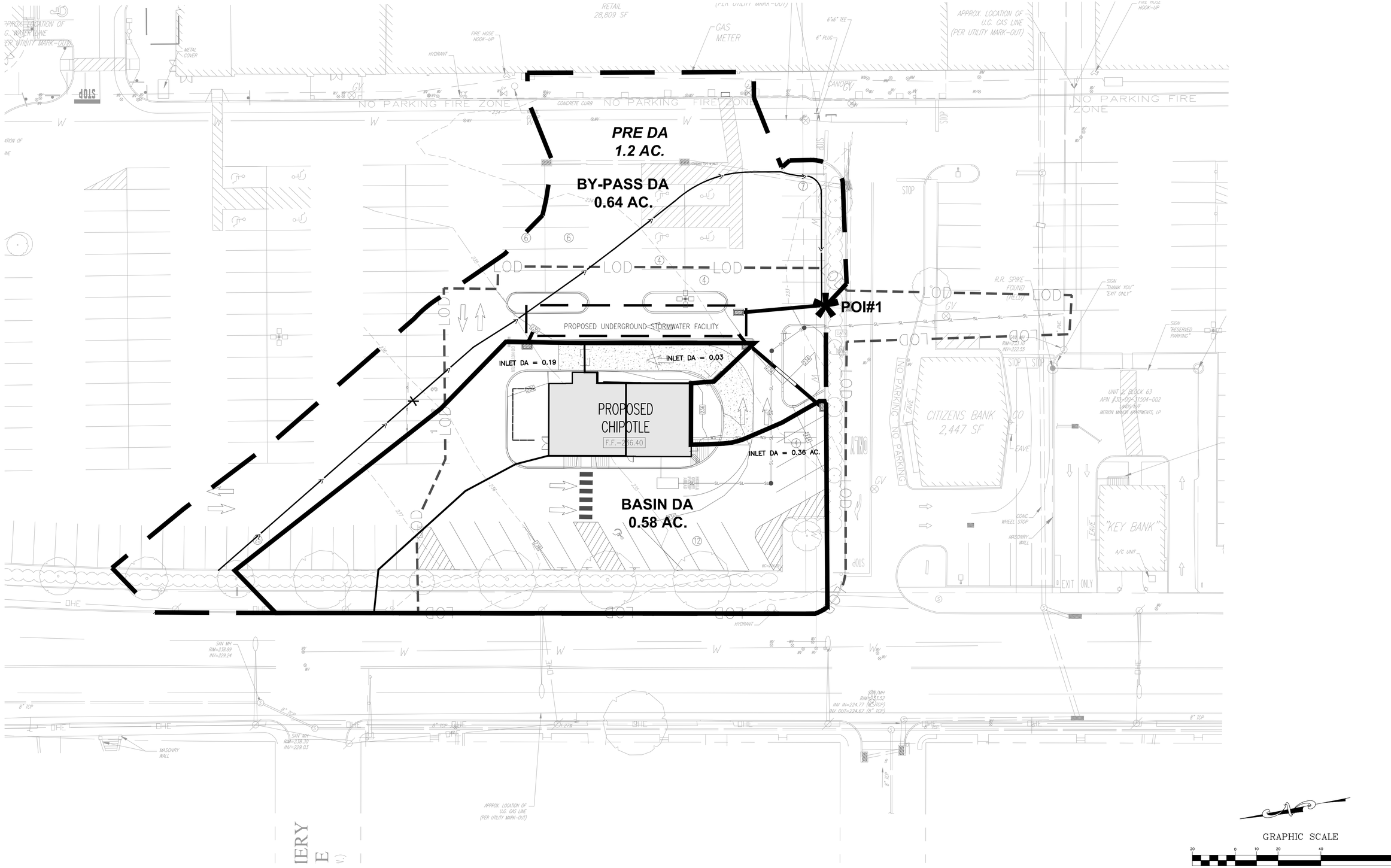
If you have any questions or comments with this submittal, please do not hesitate to contact me.

Sincerely,

PENNONI

Khaled R. Hassan, PE
Township Engineer

cc: Terry Castorina, Executive Assistant to the Township Manager
Ashley McIlvaine, Special Assistant to the Township Manager
Lucy Strackhouse, Chairperson, Abington Township Planning Commission



GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

HUNTINGDON VALLEY SHOPPING CENTER

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE–STOP CALL

PENNSYLVANIA ONE CALL SYSTEM, INC.

1–800–242–1776

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NO.	DATE	COMMENT

REVISIONS

DRAINAGE AREA PLAN

R. L. Showalter & Associates, Inc.
116 East Butler Avenue
Chalfont, PA 18914
(215) 822-2990
FAX (215) 822-5684
• Engineering • Planning • Surveying •

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER WAYNE R. KIEFER NO. 053684E

SCALE:	1" = 20'
DATE:	2/18/2022
JOB NO.:	2019–92
DRAWN BY:	LZ
CHECKED BY:	WK

SITUATE: ABINGTON TOWNSHIP
MONTGOMERY COUNTY,PA.

PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET
1 OF 1

Plotted: 02/17/22 – 5:39 PM, By: wkiefer
File: F:\DWG\2019\2019-092 – Kravco HVSC – Abington\ENGINEERING\2019-092_Chipotle DA Plan.dwg-01-DA

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NOTES

1 BASE PLAN BASED ON BOUNDARY & TOPOGRAPHIC SURVEY PREPARED BY CONTROL POINTS ASSOCIATES, INC DATED MAY 18 2007 PRELIMINARY/FINAL MINOR LAND DEVELOPMENT PLANS FOR HUNTINGDON VALLEY SHOPPING CENTER RENOVATION PREPARED BY BERGMANN ASSOCIATES DATED AUGUST 20 2012, LAST REVISED MAY 23, 2013 AND MAY 2021 SURVEY BY R.L. SHOWALTER & ASSOCIATES, INC

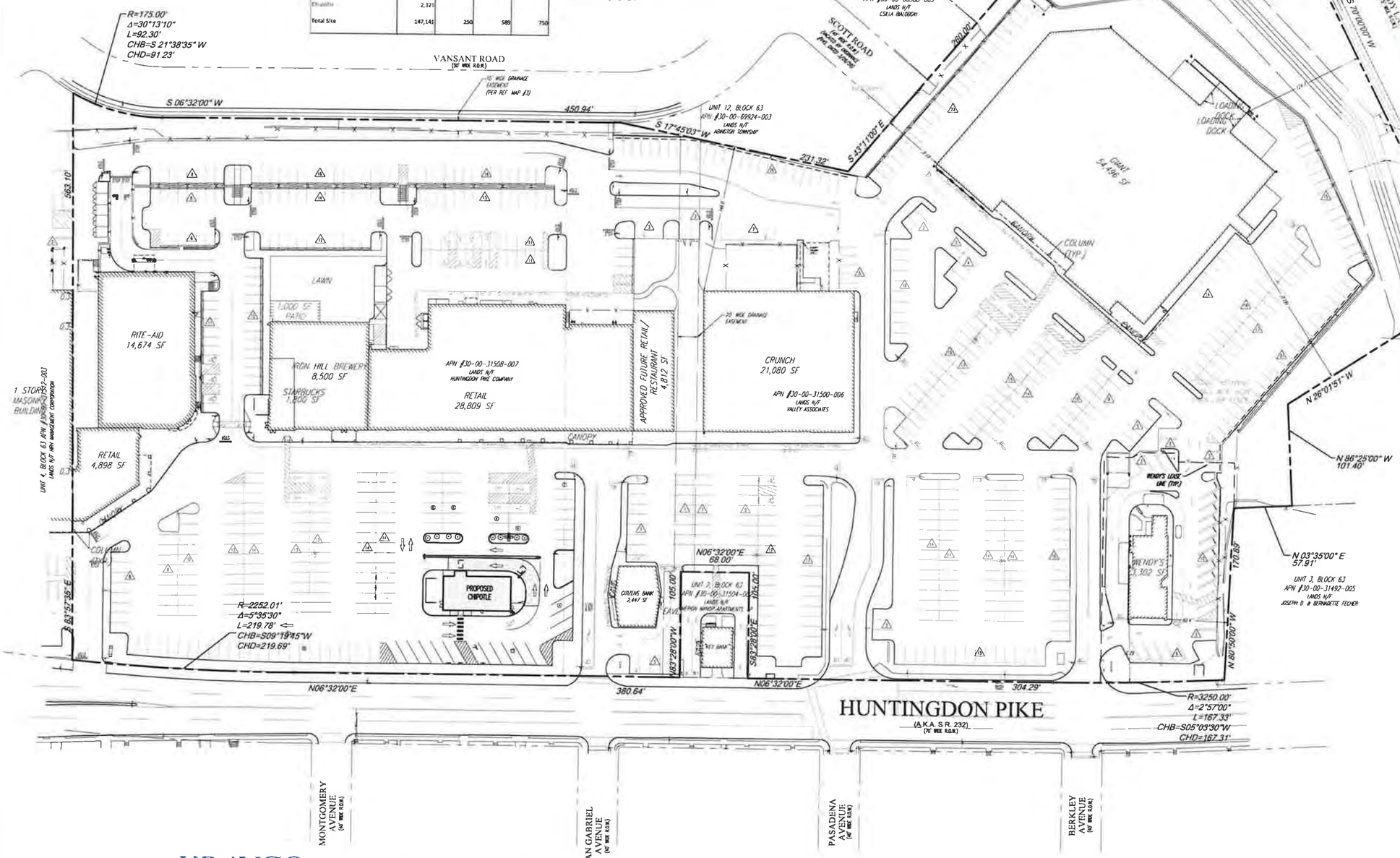
PARKING REQUIREMENTS

BUILDING	SQUARE FOOTAGE	SPACE REQUIRED PER SQUARE FOOTAGE	SPACES REQUIRED	SPACES PROVIDED
Existing				
PRIMARY RETAIL	39,109			
RETAIL 2	19,572			
FUTURE RETAIL	4,812			
Crunch	21,080			
Giant	54,496			
Wendy's	3,302			
Citizens Bank	2,447			
Total Existing	144,818	250	580	793
Proposed				
Chipotle	2,323			
Total Site	147,141	250	589	750

SHEET INDEX

SHEETS 2 THROUGH 14 INCLUSIVE ON RECORD AT ABINGTON TOWNSHIP SHALL BE CONSIDERED A PART OF THE APPROVED FINAL PLAN AS IF RECORDED WITH SAME

1 OF 14 RECORD PLAN
2 OF 14 SITE PLAN
3 OF 14 OVERALL EXISTING FEATURES PLAN
4 OF 14 EXISTING FEATURES PLAN
5 OF 14 GRADING PLAN
6 OF 14 UTILITY PLAN
7 OF 14 LANDSCAPE PLAN
8 OF 14 CONSTRUCTION DETAILS
9 OF 14 EROSION & SEDIMENTATION CONTROL PLAN
10 OF 14 EROSION & SEDIMENTATION CONTROL NOTES
11 OF 14 EROSION & SEDIMENTATION CONTROL DETAILS
12 OF 14 POST CONST STORMWATER MANAGEMENT PLAN
13 OF 14 POST CONST STORMWATER MANAGEMENT DETAILS
14 OF 14 AERIAL PLAN



LOCATION MAP
SCALE 1"=800'

OWNER / APPLICANT

DB 3339 PG 317

DB 2799 PG 251

C/O KRAVCO COMPANY LLC
375 E ELM STREET, SUITE 100
CONSHOHOCKEN, PA 19428
610-834-2800

ZONING

ZONING DISTRICT: BC BUSINESS CENTER DISTRICT
EXISTING/PROPOSED USE: C-33 SHOPPING CENTER
LOT AREA = 16.987 AC
EXISTING BUILDING AREA = 144,818 SF
PROPOSED BUILDING AREA = 2,338 SF 1.61% INCREASE

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF MONTGOMERY

ON THE _____ DAY OF _____ A.D. 20____
BEFORE ME, THE SUBSCRIBER, A NOTARY PUBLIC OF THE COMMONWEALTH OF PENNSYLVANIA, RESIDING IN _____ PERSONALLY APPEARED _____ WHO ACKNOWLEDGED (HIMSELF/HERSELF) TO BE THE _____ (BEING AUTHORIZED TO DO SO, OR SUCH) EXECUTED THE FOREGOING PLAN BY SIGNING THAT SAID CORPORATION IS THE OWNER OF THE DESIGNATED LAND, THAT ALL NECESSARY APPROVAL OF THE PLAN HAS BEEN OBTAINED AND IS ENDORSED THEREON AND THAT SAID CORPORATION DESIRES THAT THE FOREGOING PLAN BE DULY RECORDED

WITNESS MY HAND AND NOTARIAL SEAL THE DAY AND YEAR AFORESAID

_____
NOTARY PUBLIC

MY COMMISSION EXPIRES _____

UNIT
APN #30
1

ABINGTON TOWNSHIP

APPROVED BY THE BOARD OF COMMISSIONERS OF THE TOWNSHIP OF ABINGTON THIS _____ DAY OF _____ 20____

ATTEST: _____ PRESIDENT
_____ SECRETARY
_____ ENGINEER

WILLIAM T. GILDEA-WALKER
SECRETARY

MARK McCOUCH
PRESIDENT

MONTGOMERY COUNTY PLANNING COMMISSION

M.C.P.C. FILE #_____

PROCESSED AND REVIEWED. A REPORT HAS BEEN PREPARED BY THE MONTGOMERY COUNTY PLANNING COMMISSION IN ACCORDANCE WITH THE MUNICIPALITIES PLANNING CODE

CERTIFIED THIS DATE _____

EXECUTIVE DIRECTOR, MONTGOMERY COUNTY PLANNING COMMISSION

RECORDER OF DEEDS NOTATION

RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS, IN MONTGOMERY COUNTY, PENNSYLVANIA, IN PLAN BOOK _____ PAGE _____ ON THE _____ DAY OF _____ 20____

GRAPHIC SCALE

(IN FEET)
1 inch = 50 ft.

KRAVCO COMPANY LLC

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE—STOP CALL

PENNSYLVANIA ONE CALL SYSTEM, INC.

1-800-242-1776

PLAN NOTATION - THESE DOCUMENTS ARE ESPECIALLY PREPARED FOR THIS PROJECT AND ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE ON ANY EXTENSION OR MODIFICATION OF THIS PROJECT OR FOR ANY OTHER PROJECT. R. L. SHOWALTER & ASSOCIATES, INC. SHALL ONLY CERTIFY THOSE DOCUMENTS THAT CONTAIN A SEAL AND SIGNATURE. ANY REUSE OF THESE DOCUMENTS WITHOUT THE EXPRESS WRITTEN CONSENT OF R. L. SHOWALTER & ASSOCIATES, INC. OR THEIR USE FOR ANY PURPOSE OTHER THAN THE SPECIFIC PURPOSE FOR WHICH THEY WERE PREPARED IS STRICTLY PROHIBITED. IF USED FOR OTHER THAN THIS PROJECT OR OTHER THAN FOR THE PURPOSE FOR WHICH THEY WERE PREPARED, SUCH USE SHALL CONSTITUTE AN AGREEMENT BY THE PARTY USING THE DOCUMENTS AND THE CLIENT TO INDEMNIFY AND HOLD R. L. SHOWALTER & ASSOCIATES, INC. AND ITS SHAREHOLDERS, OFFICERS, DIRECTORS, PRINCIPALS AND EMPLOYEES HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES INCLUDING REASONABLE ATTORNEYS FEES AND DEFENSE COSTS ARISING AS THE RESULT OF SUCH USE, EXCEPTING ONLY THOSE DAMAGES, LIABILITIES AND COSTS ARISING FROM THE SOLE NEGLIGENCE OR WILLFUL MISCONDUCT OF R. L. SHOWALTER & ASSOCIATES, INC.

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NO.	DATE	COMMENT
		REVISIONS

HUNTINGDON VALLEY SHOPPING CENTER

RECORD PLAN

R. L. Showalter & Associates, Inc.
118 East Butler Avenue
Chalfont, PA 18914
(215) 822-2990
FAX (215) 822-5684
• Engineering • Planning • Surveying •

SCALE:	1" = 50'
DATE:	2/18/2022
JOB NO.:	2019-92
DRAWN BY:	LZ
CHECKED BY:	WK

SITUATE: ABINGTON TOWNSHIP
MONTGOMERY COUNTY, PA.

PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET
1 OF 14

Plotted: 02/17/22 - 5:27 PM, By: awater
File: F:\DWG\2019\2019-092 - Kravco HVSC - Abington\ENGINEERING\2019-092_Chipotle Plan.dwg-01-REC
© 2018 R.L. SHOWALTER & ASSOCIATES, INC.

RETAIL
28,809 SF

CANOPY

SIGN "STOP"

SIGN "RESERVED PARKING"

STOP

PROPOSED SHRUB (TYP)

PROPOSED CURBED ISLAND

EXISTING LIGHT TO BE RELOCATED

DO NOT ENTER SIGN

STOP SIGN

STOP/DO NOT ENTER SIGNS

PROPOSED CURBED ISLAND

PROPOSED CURB

PROPOSED RAILING

PULL-IN SIGN (TYP)

3 CHIPOTLE PULL-IN SPACES

OUTDOOR SEATING AREA

PROPOSED CHIPOTLE

CLEARANCE BAR

DEP CURB

CONC PAD

DRIVE THRU SIGN

CHIPOTLE PICK-UP SPACES

PICK-UP SIGN (TYP)

HC PARKING SIGN

SIGN "BEGIN DIMOED HIGHWAY"

SIGN "STOP"

SIGN "RESERVED PARKING"

CITIZENS BANK
2,447 SF

SIGN "NO STOPPING"

EAVE

SIGN "DRIVE UP TELLER"

UNIT 2, BLOCK 63
APN #30-00-31504-002
LANDS N/F
MERION MANOR APARTMENTS, LP

"KEY BANK"

SIGN "STOP" "NO LEFT TURN"

STOP SIGN

SIGN "DRIVE UP TELLER"

SIGN "TYP"

SIGN "DIRECTIONAL"

SIGN "HUNTINGDON PIKE" "MONTGOMERY AVENUE"

SIGN "DO NOT BLOCK DRIVEWAY"

MASONRY WALL

SIGN "HUNTINGDON PIKE" "SAN GABRIEL AVENUE"

KRAVCO
COMPANY LLC

CALL BEFORE YOU DIG!
PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE–STOP CALL
PENNSYLVANIA ONE CALL SYSTEM, INC.
1-800-242-1776

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NO.	DATE	COMMENT
		REVISIONS

GRAPHIC SCALE
(IN FEET)
1 inch = 20 ft.

HUNTINGDON VALLEY SHOPPING CENTER

SITE PLAN

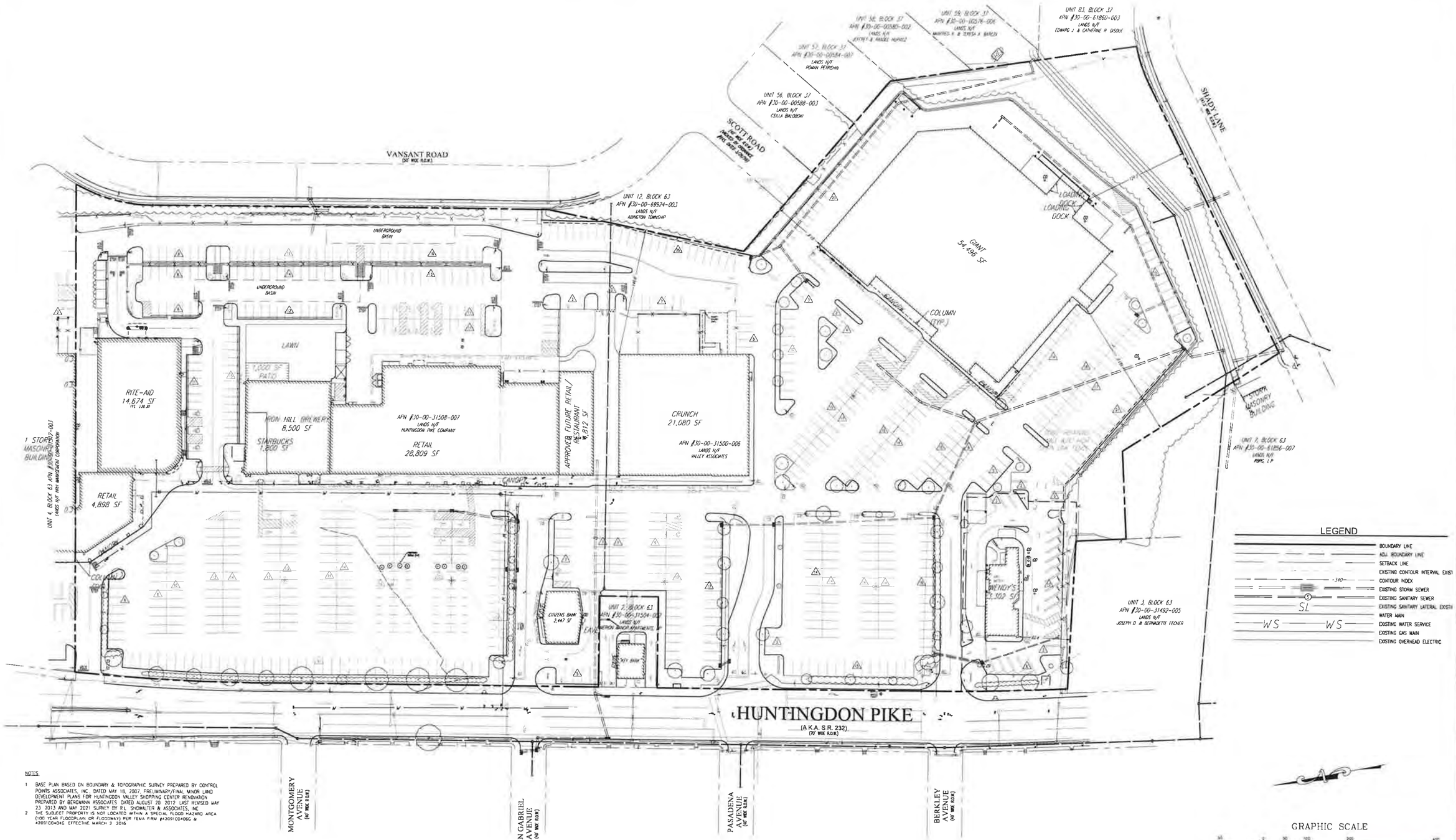
R. L. Showalter & Associates, Inc.
116 East Butler Avenue
Chalfont, PA 18914
(215) 822-2990
FAX (215) 822-5684
• Engineering • Planning • Surveying •

SCALE:	1" = 20'
DATE:	2/18/2022
JOB NO.:	2019-92
DRAWN BY:	LZ
CHECKED BY:	WK

SITUATE: ABINGTON TOWNSHIP
MONTGOMERY COUNTY, PA.
PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET 2 OF 14

Plotted: 02/17/22 - 9:22 AM By: wade
File: I:\WC\2019\2019-092 - Kravco HVSC - Abington\ENGINEERING\2019-092_Chipotle Plan dwg - D2-SITE
© 2018 R.L. SHOWALTER & ASSOCIATES, INC



NOTES:

1. BASE PLAN BASED ON BOUNDARY & TOPOGRAPHIC SURVEY PREPARED BY CONTROL POINTS ASSOCIATES, INC., DATED MAY 18, 2007, PRELIMINARY/FINAL MINOR LAND DEVELOPMENT PLANS FOR HUNTINGDON VALLEY SHOPPING CENTER RENOVATION PREPARED BY BENCHMARK ASSOCIATES, DATED AUGUST 20, 2012, LAST REVISED MAY 23, 2013 AND MAY 2021 SURVEY BY R.L. SHOWALTER & ASSOCIATES, INC.
2. THE SUBJECT PROPERTY IS NOT LOCATED WITHIN A SPECIAL FLOOD HAZARD AREA (100 YEAR FLOODPLAIN OR FLOODWAY) PER FEMA FIRM #42091C0406G & #42091C0404G EFFECTIVE MARCH 2, 2016.

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PENNSYLVANIA ONE CALL SYSTEM, INC.

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NO.	DATE	COMMENT

REVISIONS

HUNTINGDON VALLEY SHOPPING CENTER

OVERALL EXISTING FEATURES PLAN

R. L. Showalter & Associates, Inc.
116 East Butler Avenue
Chalfont, PA 18914
(215) 822-2990
FAX (215) 822-5684
• Engineering • Planning • Surveying •

SCALE:	1" = 50'
DATE:	2/18/2022
JOB NO.:	2019-92
DRAWN BY:	LZ
CHECKED BY:	WK

SITUATE: ABINGTON TOWNSHIP
MONTGOMERY COUNTY, PA.

PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET 3 OF 14

Plotted: 02/17/22 - 3:28 PM By: wwater
File T:\PWGS\2019\2019-092 - Kravco HVSC - Abington\ENGINEERING\2019-092_Chapalte Plan.dwg-03-Ovl ERP
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RETAIL
28,809 SF

CITIZENS BANK
2,447 SF

"KEY BANK"

CANOPY

P.P. SPIKE FOUND (HELD)

UNIT 2, BLOCK 65
APN #30-00-31504-002
MERION SQUARE APARTMENTS, LP

STOP

PAINTED SOLID YELLOW LINE

PAINTED CROSSWALK

PAINTED SOLID WHITE LINE (TYP.)

PAINTED DOUBLE YELLOW LINE

PAINTED DASHED WHITE LINE

PAINTED SOLID WHITE LINE

PAINTED STOP BAR (TYP.)

CONCRETE CURB

CONC. CURB

CONC. WHEEL STOP CURB

DEP. CURB

CONC. APRON

CONC. WALK

CONC. STEPS

ASPHALT PAVEMENT

ASPHALT DRIVE

CONC. DRIVE

GRASS AREA

MASONRY WALL

HEDGE ROW

HYDRANT

FIRE HOSE HOOK-UP

METAL COVER

6"x6" TEE

6" PLUG

7" TREE

8" TREE

12" TREE

18" TREE

LSA

SIGN "THANK YOU" "EXIT ONLY"

SIGN "RESERVED PARKING"

"W" INLET
GR=233.04
INV IN=229.60 (21" RCP)
INV OUT=229.46 (21" RCP)

INLET
GR=233.20
INV OUT=229.96 (21" RCP)

INLET
GR1=233.18
INV(A)=229.63
INV(B)=229.48

"C" INLET
GR=232.21
INV IN=228.82 (18" RCP)
INV IN=228.75 (21" RCP)
INV OUT=228.61 (21" RCP)

INLET
IC=232.85
GR1=232.15
INV=229.30

"C" INLET
GR=233.17
INV IN=229.38 (18" RCP)

INLET
IC=232.49
GR1=231.79
INV(A)=228.94
INV(B)=228.85

"C" INLET
GR=231.90
INV IN=229.14 (18" RCP)
INV OUT=229.09 (18" RCP)

INLET
GR1=232.16
INV(A)=226.36
INV(B)=226.31

STORM MH
RIM=233.03
INV(A)=225.93
INV(B)=225.83
INV(C)=226.12

SAN MH
RIM=233.10
INV=222.53

STORM MH
RIM=232.74
INV(A)=228.79
INV(B)=228.64
INV(C)=228.83

SAN MH
RIM=233.52
INV IN=224.77 (8" PCP)
INV OUT=224.67 (8" PCP)

STORM MH
RIM=232.24
INV=229.94
(RECESSED)

INLET
GR1=233.10
INV=229.25

INLET
IC=233.24
GR1=232.80
INV(A)=229.07
INV(B)=228.85

INLET
IC=233.78
GR1=233.08
INV=230.13

SAN MH
RIM=238.88
INV=229.24

SAN MH
RIM=238.37
INV=229.03

INLET
GR=233.20
INV OUT=229.96 (21" RCP)

APPROX LOCATION OF U.G. GAS LINE (PER UTILITY MARK-OUT)

SYMBOL	NAME	HSG	FARMLAND CLASSIFICATION	ALLUVIAL	HYDRIC SOIL RATING
UgB	URBAN LAND 0 TO 8% SLOPES		NOT PRIME		NO

LEGEND

- BOUNDARY LINE
- ADJ. BOUNDARY LINE
- SETBACK LINE
- 344 EXISTING CONTOUR INTERVAL EXIS
- 340 CONTOUR INDEX
- EXISTING STORM SEWER
- S EXISTING SANITARY SEWER
- SL EXISTING SANITARY LATERAL EXIST
- WATER MAIN
- WS EXISTING WATER SERVICE
- EXISTING GAS MAIN
- EXISTING OVERHEAD ELECTRIC

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE—STOP CALL

PENNSYLVANIA ONE CALL SYSTEM, INC.

1-800-242-1776

PLAN NOTATION – THESE DOCUMENTS ARE ESPECIALLY PREPARED FOR THIS PROJECT AND ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE ON ANY EXTENSION OR MODIFICATION OF THIS PROJECT OR FOR ANY OTHER PROJECT. R. L. SHOWALTER & ASSOCIATES, INC. SHALL ONLY CERTIFY THOSE DOCUMENTS THAT CONTAIN A SEAL AND SIGNATURE. ANY REUSE OF THESE DOCUMENTS WITHOUT THE EXPRESS WRITTEN CONSENT OF R. L. SHOWALTER & ASSOCIATES, INC. OR THEIR USE FOR ANY PURPOSE OTHER THAN THE SPECIFIC PURPOSE FOR WHICH THEY WERE PREPARED IS STRICTLY PROHIBITED. IF USED FOR OTHER THAN THIS PROJECT OR OTHER THAN FOR THE PURPOSE FOR WHICH THEY WERE PREPARED, SUCH USE SHALL CONSTITUTE AN AGREEMENT BY THE PARTY USING THE DOCUMENTS AND THE CLIENT TO INDEMNIFY AND HOLD R. L. SHOWALTER & ASSOCIATES, INC. AND ITS SHAREHOLDERS, OFFICERS, DIRECTORS, PRINCIPALS AND EMPLOYEES HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES (INCLUDING REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS) ARISING AS THE RESULT OF SUCH USE, EXCEPTING ONLY THOSE DAMAGES, LIABILITIES AND COSTS ARISING FROM THE SOLE NEGLIGENCE OR WILLFUL MISCONDUCT OF R. L. SHOWALTER & ASSOCIATES, INC.

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NO.	DATE	COMMENT
		REVISIONS

HUNTINGDON VALLEY SHOPPING CENTER

EXISTING FEATURES PLAN

R. L. Showalter & Associates, Inc.
• Engineering • Planning • Surveying •
118 East Butler Avenue
Chalfont, PA 18914
(215) 822-2990
FAX (215) 822-5684

SCALE:	1" = 20'
DATE:	2/18/2022
JOB NO.:	2019-92
DRAWN BY:	LZ
CHECKED BY:	WK

SITUATE: ABINGTON TOWNSHIP
MONTGOMERY COUNTY, PA.

PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET 4 OF 14

Plotted: 02/17/22 – 5:38 PM By: wwhite
File: F:\ENGR\2019\2019-092 - Abington\ENGINEERING\2019-092_Chapple Plan.dwg-04-EFP
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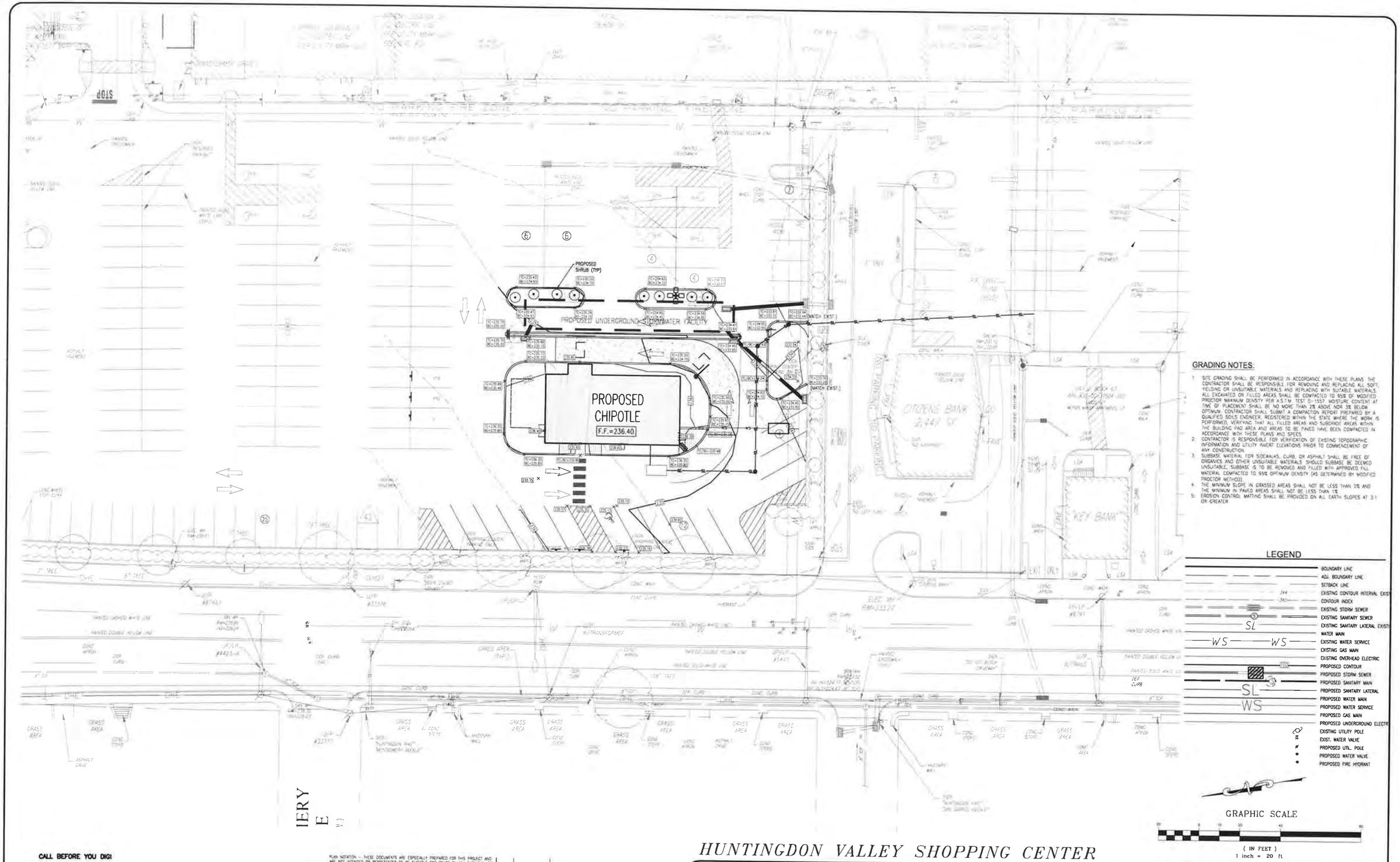

GRADING NOTES:

1. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING ALL SOFT, YIELDING OR UNSUITABLE MATERIALS AND REPLACING WITH SUITABLE MATERIALS. ALL EXCAVATED OR FILLED AREAS SHALL BE COMPACTED TO 95% OF MODIFIED PROCTOR MAXIMUM DENSITY PER A.S.T.M. TEST D-1557. MOISTURE CONTENT AT TIME OF PLACEMENT SHALL BE NO MORE THAN 2% ABOVE NOR 3% BELOW OPTIMUM. CONTRACTOR SHALL SUBMIT A COMPACTION REPORT PREPARED BY A QUALIFIED SOILS ENGINEER, REGISTERED WITHIN THE STATE WHERE THE WORK IS PERFORMED, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS AND SPECS.
2. CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVERT ELEVATIONS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION.
3. SUBBASE MATERIAL FOR SIDEWALKS, CURB, OR ASPHALT SHALL BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SHOULD SUBBASE BE DEEMED UNSUITABLE, SUBBASE IS TO BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL COMPACTED TO 95% OPTIMUM DENSITY (AS DETERMINED BY MODIFIED PROCTOR METHOD).
4. THE MINIMUM SLOPE IN GRASSED AREAS SHALL NOT BE LESS THAN 2% AND THE MINIMUM IN PAVED AREAS SHALL NOT BE LESS THAN 1%.
5. EROSION CONTROL MATTING SHALL BE PROVIDED ON ALL EARTH SLOPES AT 3:1 OR GREATER.

LEGEND

- BOUNDARY LINE
- ADJ. BOUNDARY LINE
- SETBACK LINE
- EXISTING CONTOUR INTERVAL EXIST
- CONTOUR INDEX
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING SANITARY LATERAL EXIST
- WATER MAIN
- EXISTING WATER SERVICE
- EXISTING GAS MAIN
- EXISTING OVERHEAD ELECTRIC
- PROPOSED CONTOUR
- PROPOSED STORM SEWER
- PROPOSED SANITARY MAIN
- PROPOSED SANITARY LATERAL
- PROPOSED WATER MAIN
- PROPOSED WATER SERVICE
- PROPOSED GAS MAIN
- PROPOSED UNDERGROUND ELECTR
- EXISTING UTILITY POLE
- EXIST. WATER VALVE
- PROPOSED UTIL. POLE
- PROPOSED WATER VALVE
- PROPOSED FIRE HYDRANT

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft

CALL BEFORE YOU DIG!

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PENNSYLVANIA ONE CALL SYSTEM, INC.

1-800-242-1776

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		REVISIONS

HUNTINGDON VALLEY SHOPPING CENTER

GRADING PLAN

R. L. Showalter & Associates, Inc.
116 East Butler Avenue
Chalfont, PA 18914
(215) 822-2590
FAX (215) 822-5884
• Engineering • Planning • Surveying •

SCALE:	1" = 20'
DATE:	2/18/2022
JOB NO.:	2019-92
DRAWN BY:	LZ
CHECKED BY:	WK

SITUATE: ABINGTON TOWNSHIP
MONTGOMERY COUNTY, PA.

PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET 5 OF 14

Plotted: 02/17/22 - 5:28 PM By: wkeller
File: F:\DWG\2019\2019-092 - Kravco HVSC - Abington\ENGINEERING\2019-092_Chipotle Plan dwg -DS-GP
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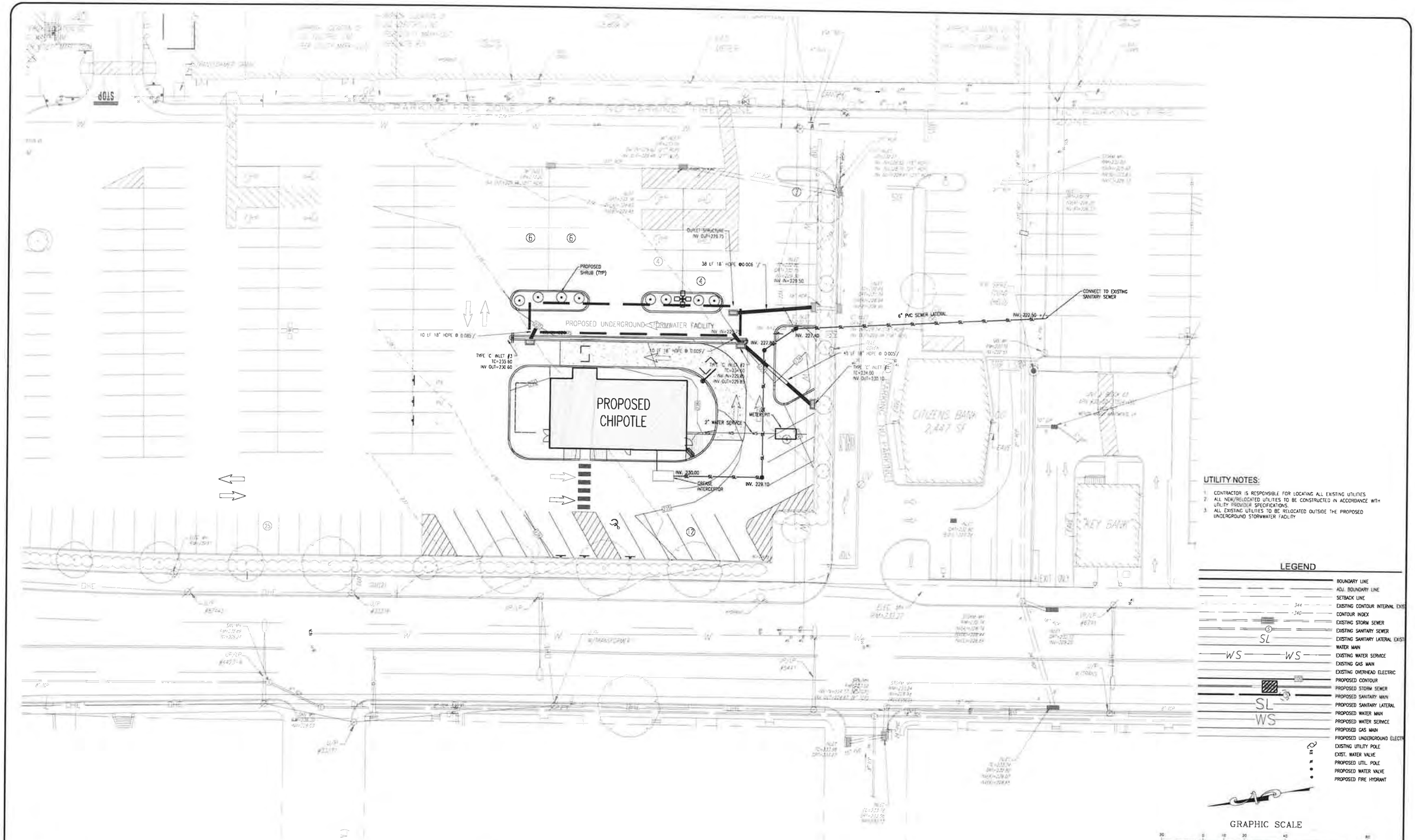

UTILITY NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES
2. ALL NEW/RELOCATED UTILITIES TO BE CONSTRUCTED IN ACCORDANCE WITH UTILITY PROVIDER SPECIFICATIONS.
3. ALL EXISTING UTILITIES TO BE RELOCATED OUTSIDE THE PROPOSED UNDERGROUND STORMWATER FACILITY

LEGEND

- BOUNDARY LINE
- ADJ. BOUNDARY LINE
- SETBACK LINE
- 344 EXISTING CONTOUR INTERVAL EXIST
- 340 CONTOUR INDEX
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- SL EXISTING SANITARY LATERAL EXIST
- WATER MAIN
- WS EXISTING WATER SERVICE
- EXISTING GAS MAIN
- EXISTING OVERHEAD ELECTRIC
- PROPOSED CONTOUR
- PROPOSED STORM SEWER
- PROPOSED SANITARY MAIN
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- EXISTING UTILITY POLE
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1–800–242–1776

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NO.	DATE	COMMENT

REVISIONS

HUNTINGDON VALLEY SHOPPING CENTER

UTILITY PLAN

R. L. Showalter & Associates, Inc.
116 East Butler Avenue
Chalfont, PA 18914
(215) 822-2990
FAX (215) 822-5684
• Engineering • Planning • Surveying •

SCALE:	1" = 20'
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JOB NO.:	2019-92
DRAWN BY:	LZ
CHECKED BY:	WK

SITUATE: ABINGTON TOWNSHIP MONTGOMERY COUNTY, PA.
PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET 6 OF 14

Plotted 02/17/22 – 5:28 PM By wkafer
File T:\DWG\2019\2019-092 – Kravco HVSC – Abington\ENGINEERING\2019-092_Chipotle Plan dwg-08-UTIL
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PROPOSED UNDERGROUND STORMWATER FACILITY

PROPOSED CHIPOTLE

PROPOSED SHRUB (TYP)

HEDGE ROW

16" APPLE

7" TREE

8" APPLE

LSA

7" TREE

12" TREE

8" TREE

GRASS AREA (TYP.)

18" TREE

LANDSCAPE SCHEDULE							
SYM.	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	Inst Ht.	Inst Width	COMMENTS
SHRUBS							
CS	8	Cornus sericea 'Arctic Fire'	Arctic Fire Red-Twig Dogv	30" Ht	30" ht.	24"	Cont
Subtotal	8						

NOTES

SET PLANTS PLUMB AND FACE TO GIVE BEST APPEARACE TO ADJACENT AREAS

DO NOT PRUNE EVERGREENS EXCEPT TO REMOVE DEAD AND BROKEN BRANCHES

SET TOP OF ROOT BALL ABOVE ADJACENT FINISH GRADE AT A HEIGHT OF 15-20% OF ROOT BALL

THIN BRANCHES AND FOLIAGE (NOT ALL BRANCH TIPS) BY 1/3, RETAINING NORMAL PLANT SHAPE. NEVER CUT LEADER

DO NOT USE TOPSOIL SAUCER

2" MAX DEPTH OF MULCH. MULCH MUST NOT CONTACT THE TRUNK AT ANY POINT

REMOVE BURLAP FROM TOP 1/3 OF ROOT BALL, OR WITH CONTAINER PLANTS REMOVE POTS AND SPLIT BALLS AS SPECIFIED

SPECIFIED PLANT MIX 1/3 PEAT MOSS TO 2/3 TOPSOIL - LIGHTLY TAMPED

PLANT TO PLACED ON UNDISTURBED SUBGRADE

6" MIN

BALLED AND BURLAPPED SHRUBS

BARE ROOT OR CONTAINER SHRUBS

SHRUB PLANTING

N.T.S.

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NO.	DATE	COMMENT

REVISIONS

HUNTINGDON VALLEY SHOPPING CENTER

LANDSCAPING PLAN

R. L. Showalter & Associates, Inc.
116 East Butler Avenue
Chalfont, PA 18914
(215) 822-2990
FAX (215) 822-5684
• Engineering • Planning • Surveying •

SCALE:	1" = 20'
DATE:	2/18/2022
JOB NO.:	2019-92
DRAWN BY:	LZ
CHECKED BY:	WK

SITUATE: ABINGTON TOWNSHIP
MONTGOMERY COUNTY, PA.

PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET 7 OF 14

Plotted: 02/17/22 - 5:38 PM, By: walter
File: F:\DWG\2019\2019-092 - Kravco HQ\SC - Abington\ENGINEERING\2019-092_Chapolte Plan.dwg 07-LP
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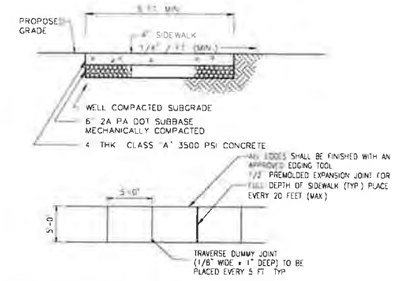
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF DESIGN

RC DETAILS	DESCRIPTION	SHEET NO
RC-31M	ENDWALLS	SHT 2 OF 2
RC-39M	STANDARD MANHOLES COVERS, FRAMES AND ADJUSTMENT RISERS	SHT 1 - 6
RC-45M	INLET TOPS, GRATES AND FRAMES, GENERAL NOTES	SHT 1 OF 20
RC-45M	INLET TOPS, GRATES AND FRAMES, CONCRETE TOP UNITS, TYPE M	SHT 2 OF 20
RC-45M	INLET TOPS, GRATES AND FRAMES, CAST IRON GRATES - 1	SHT 9 OF 20
RC-46M	INLET BOXES, GENERAL NOTES	SHT 1-3 OF 45
RC-46M	INLET BOXES, INLET ASSEMBLIES	SHT 4 OF 45
RC-46M	INLET BOXES, INLET BOX TYPES	SHT 6 OF 45
RC-39M	STANDARD MANHOLES COVERS, FRAMES AND ADJUSTMENT RISERS	SHT 5 OF 6
RC-45M	INLET TOPS, GRATES AND FRAMES, CONCRETE TOP UNITS, TYPE C	SHT 3 OF 20
RC-45M	INLET TOPS, GRATES AND FRAMES, STR. STEEL GRATE BICYCLE SAFE	SHT 8 OF 20
RC-46M	INLET BOXES, INLET BOX TYPES	SHT 6 OF 45
RC-46M	INLET BOXES, TOP SLABS - 2	SHT 8 OF 45

TO BE CONSTRUCTED PER ALL THE LATEST APPLICABLE STANDARDS FOR ROADWAY CONSTRUCTION SPECIFICATIONS INCLUDING BUT NOT LIMITED TO THOSE INDICATED ABOVE.

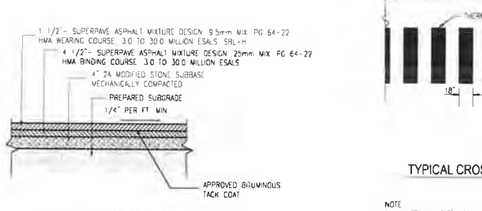
NOTE
1 ALL INLETS SHALL BE INSTALLED WITH BICYCLE SAFE GRATES

ADDITIONAL STORM STRUCTURE SPECIFICATIONS

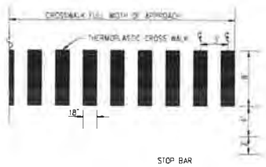


NOTE WITH ALL PROPOSED SIDEWALK, A NON-SLIP SURFACE TEXTURE SHALL BE BROOMED TRAVERSE TO THE SLOPE OF THE SIDE WALK

CONCRETE SIDEWALK DETAIL
N.T.S

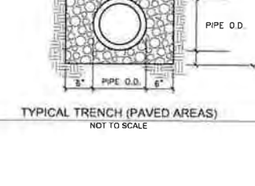


TYPICAL PAVING SECTION
N.T.S



TYPICAL CROSS WALK MARKINGS
NTS

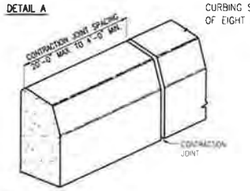
NOTE
1 4 FT MIN. DISTANCE SHALL BE PROVIDED BETWEEN CROSSWALK AND STOP BAR
2 VEHICLE MARKING SHALL BE AT LEAST 20 FT FROM THE INSIDE PEDESTRIAN CROSSWALK LINE
3 THE CURB RAMP, EXCLUSIVE OF FLARES MUST BE LOCATED WITHIN THE LIMITS OF THE CROSSWALK



TYPICAL CROSS SECTION

NOTE PROPOSED CONCRETE CURBING SHALL HAVE A REVEAL OF EIGHT (8) INCHES

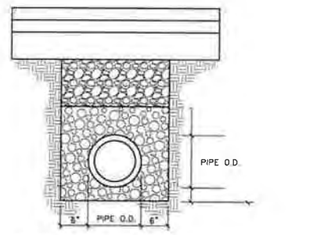
DETAIL A



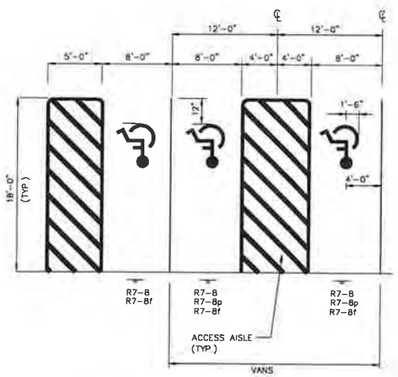
DETAIL NOTES:

1 PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PUBLICATION 408, SECTION 630 FOR PLAIN CEMENT CONCRETE CURB AND DEPRESSED CURB
2 SPACE CONTRACTION JOINTS IN UNIFORM LENGTHS OR SECTIONS
3 PLACE 3/4-INCH PREMOLDED EXPANSION JOINT FILLER MATERIAL AT STRUCTURES AND AT THE END OF THE WORK DAY. CUT MATERIAL TO CONFORM TO AREA ADJACENT TO CURB OR TO CONFORM TO CROSS SECTIONAL AREA OF CURB.
4 PROPOSED CONCRETE CURBING SHALL HAVE A REVEAL OF EIGHT(8) INCHES

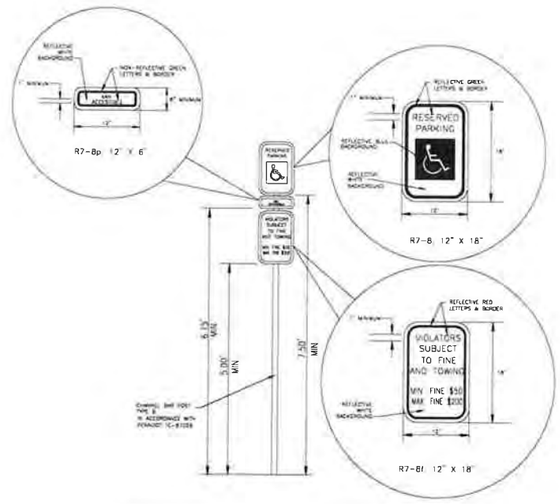
PLAIN CEMENT CONCRETE CURB
NTS



TYPICAL TRENCH (PAVED AREAS)
NOT TO SCALE



TYP. HANDICAPPED ACCESSIBLE STALLS
NTS



TYP. HANDICAP ACCESSIBLE SIGN PLACEMENT

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NO	DATE	COMMENT

REVISIONS

HUNTINGDON VALLEY SHOPPING CENTER

CONSTRUCTION DETAILS

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SHEET 8 OF 14

Plotted: 02/17/22 - 3:38 PM, By: wkeyser
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RETAIL
28,809 SF

PROP. LOCATION OF
G. WATER LINE
ON UNITY DRIVE (SR)

FIRE HOSE
HOOK-UP

HYDRANT

6"x6" TEE

6" PVC

CANOPY

FIRE HOSE
HOOK-UP

W W W W W

ROCK
CONSTRUCTION
ENTRANCE

T8CS T8CS

PROPOSED UNDERGROUND STORMWATER FACILITY

PROPOSED
CHIPOTLE

CITIZENS BANK
2,447 SF

CO

EAVE

UNIT 2, BLOCK 63
APN #30-00-31504-002
LANDS N/F
MERION MANOR APARTMENTS, LP

"KEY BANK"

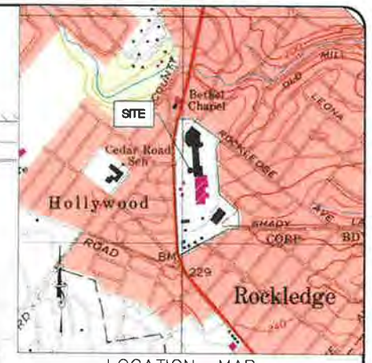
EAVE

HYDRANT

W W W W

8"W

8"W



LOCATION MAP
SCALE: 1"=1000'

NOTES:

1. TOTAL DISTURBED AREA = 0.75 AC

SYMBOL	NAME	HSG	FARMLAND CLASSIFICATION	ALLUVIAL	HYDRIC SOIL RATING
UgB	URBAN LAND 0 TO 8% SLOPES		NOT PRIME		NO

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft

HUNTINGDON VALLEY SHOPPING CENTER

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PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE—STOP CALL

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NO.	DATE	COMMENT

REVISIONS

EROSION & SEDIMENT CONTROL PLAN

R. L. Showalter & Associates, Inc.
118 East Butler Avenue
Chalfont, PA 18914
(215) 822-2990
FAX (215) 822-5684
• Engineering • Planning • Surveying •

SCALE: 1" = 20'
DATE: 2/18/2022
JOB NO.: 2019-92
DRAWN BY: LZ
CHECKED BY: WK

SITUATE: ABINGTON TOWNSHIP
MONTGOMERY COUNTY, PA.

PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET
9 OF 14

Plotted: 02/17/22 - 5:29 PM By: wyeter
File: F:\DWG\2019\2019-092 - Kravco HVSC - Abington\ENGINEERING\2019-092_Chipotle Plan.dwg 09-ECP
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KRAVCO COMPANY, LLC.
375 E ELM ST SUITE 100
CONSHOHOCKEN PA 19428

PA CODE CH. 102 E&S CONTROL NOTES

SECTION 102.2(a) - SCOPE AND PURPOSE

1 THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PREPARED AND COMPLETELY IMPLEMENTED
2 UNTIL THE SITE ACHIEVES FINAL STABILIZATION THE OPERATOR SHALL ASSURE THAT THE BEST MANAGEMENT PRACTICES ARE IMPLEMENTED OPERATED AND MAINTAINED PROPERLY AND COMPLETELY MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL BEST MANAGEMENT PRACTICE FACILITIES THE OPERATOR WILL MAINTAIN AND MAKE AVAILABLE TO LOCAL COUNTY CONSERVATION DISTRICT COMPLETE WRITTEN INSPECTION LOGS OF ALL THOSE INSPECTIONS ALL MAINTENANCE WORK INCLUDING CLEANING REPAIR, REPLACEMENT, REGRADING, AND RESTABILIZATION SHALL BE PERFORMED IMMEDIATELY
3 IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION
4 BEFORE INITIATING ANY REVISIONS TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E&S CONTROL PLAN THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE LOCAL COUNTY CONSERVATION DISTRICT
5 OFF-SITE WASTE AND BORROW THE OPERATOR SHALL ASSURE THAT AN EROSION AND SEDIMENT CONTROL PLAN HAS BEEN PREPARED APPROVED BY THE LOCAL COUNTY CONSERVATION DISTRICT AND/OR LOCAL MUNICIPALITY IN COMPLIANCE WITH CHAPTER 102 RULES AND REGULATIONS AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL OFFSITE SOIL AND/OR ROCK SPOIL AND BORROW AREAS REGARDLESS OF THEIR LOCATIONS
6 ALL PUMPING OF SEDIMENT LADEN WATER OR POTENTIALLY SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG DISCHARGING OVER NON-DISTURBED AREAS
7 THE CONTRACTOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS OF APPENDIX 64 EROSION CONTROL RULES AND REGULATIONS TITLE 25, PART 1 DEPARTMENT OF ENVIRONMENTAL PROTECTION, SUBPART C, PROTECTION OF NATURAL RESOURCES, ARTICLE III WATER RESOURCES, CHAPTER 102, EROSION CONTROL
8 A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE AT THE SITE AT ALL TIMES
9 UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT TO SCHEDULE A FINAL INSPECTION

SECTION 102.5(e) - PRE-CONSTRUCTION MEETING

1 AN ONSITE PRE-CONSTRUCTION MEETING IS REQUIRED TO OCCUR NO LESS THAN 7 DAYS PRIOR TO ANY EARTH DISTURBANCE UNLESS OTHERWISE BY SERO DEP OR THE LOCAL COUNTY CONSERVATION DISTRICT PERMITEES, CO-PERMITEES, OPERATORS ALL APPROPRIATE MUNICIPAL OFFICIALS REPRESENTATIVES FROM THE LOCAL COUNTY CONSERVATION DISTRICT AND THE SERO DEP AND LICENSED PROFESSIONALS OR DESIGNEES RESPONSIBLE FOR THE EARTH DISTURBANCE ACTIVITY, INCLUDING IMPLEMENTATION OF THE E&S AND PCSM PLANS AND CRITICAL STAGES OF IMPLEMENTATION OF THE APPROVED PCSM PLAN, SHALL ATTEND A PRE-CONSTRUCTION MEETING

CLEAN FILL & ENVIRONMENTAL DUE DILIGENCE

1 IF FILL IS REQUIRED THE APPLICANT MUST PERFORM ENVIRONMENTAL DUE DILIGENCE TO DETERMINE IF THE FILL MATERIALS ASSOCIATED WITH THE PROJECT QUALIFY AS CLEAN FILL APPLICANTS AND/OR OPERATORS MUST USE ENVIRONMENTAL DUE DILIGENCE TO ENSURE THAT THE FILL MATERIAL ASSOCIATED WITH THIS PROJECT QUALIFIES AS CLEAN FILL DEFINITIONS OF CLEAN FILL AND ENVIRONMENTAL DUE DILIGENCE ARE PROVIDED BELOW ALL FILL MATERIAL MUST BE USED IN ACCORDANCE WITH THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL" DOCUMENT NUMBER 258-2182-773 A COPY OF THIS POLICY IS AVAILABLE ONLINE AT WWW DEPWEB STATE PA US UNDER THE HEADING QUICK ACCESS ON THE LEFT SIDE OF THE SCREEN, CLICK ON "FORMS AND PUBLICATIONS" ON THE LEFT SIDE OF THE SCREEN CLICK ON "TECHNICAL GUIDANCE DOCUMENTS-FINAL" THEN TYPE THE DOCUMENT NUMBER 258-2182-773 INTO THE SEARCH WINDOW AND CONDUCT THE SEARCH CLICK ON "MANAGEMENT OF FILL"
2 CLEAN FILL IS DEFINED AS UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED (THE TERM "USED ASPHALT DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE) CLEAN FILL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE: FILL MATERIALS AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE STILL QUALIFIES AS CLEAN FILL PROVIDED THE TESTING REVEALS THAT THE FILL MATERIAL CONTAINS CONCENTRATIONS OF REGULATED SUBSTANCES THAT ARE BELOW THE RESIDENTIAL LIMITS IN TABLES FP-1A AND FP-1B FOUND IN THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL" ANY PERSON PLACING CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE MUST USE FORM FP-001 TO CERTIFY THE ORIGIN OF THE FILL MATERIAL AND THE RESULTS OF THE ANALYTICAL TESTING TO QUALIFY THE MATERIAL AS CLEAN FILL FORM FP-001 MUST BE RETAINED BY THE OWNER OF THE PROPERTY RECEIVING THE FILL
3 ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS INVESTIGATIVE TECHNIQUES INCLUDING, BUT NOT LIMITED TO VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF REGULATED SUBSTANCE IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL" FILL MATERIAL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH THE DEPARTMENT'S MUNICIPAL OR RESIDUAL WASTE REGULATIONS BASED ON 25 PA CODE CHAPTERS 287 RESIDUAL WASTE MANAGEMENT OR 271 MUNICIPAL WASTE MANAGEMENT WHICHEVER IS APPLICABLE

SECTION 102.4(b)(5)(xi) - RECYCLING OR DISPOSAL OF MATERIALS

1 THE OPERATOR SHALL REMOVE FROM THE SITE RECYCLE OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260 1 ET SEQ, 271 1 ET SEQ AND 287 1 ET SEQ AND IN ACCORDANCE WITH ANY ADDITIONAL LOCAL, STATE OR FEDERAL REGULATIONS
2 THE CONTRACTOR SHALL NOT ILLEGALLY BURY BURN, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THE SITE
3 INDIVIDUALS RESPONSIBLE FOR EARTH DISTURBANCE ACTIVITIES MUST ENSURE THAT PROPER MECHANISMS ARE IN PLACE TO CONTROL WASTE MATERIALS CONSTRUCTION WASTES INCLUDE BUT ARE NOT LIMITED TO EXCESS SOIL MATERIALS, BUILDING MATERIALS, CONCRETE WASH WATER SANITARY WASTES ETC THAT COULD ADVERSELY IMPACT WATER QUALITY MEASURES SHOULD BE PLANNED AND IMPLEMENTED FOR HOUSEKEEPING, MATERIALS MANAGEMENT, AND LITTER CONTROL WHENEVER POSSIBLE RECYCLING OF EXCESS MATERIALS IS PREFERRED RATHER THAN DISPOSAL
4 ANY OFFSITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN REVIEWED AND APPROVED BY THE LOCAL COUNTY CONSERVATION DISTRICT PRIOR TO BEING ACTIVATED THE OPERATOR SHALL ASSURE THE APPROVED E&S PLAN IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL/ROCK SPOIL AND BORROW AREAS ON OR OFFSITE

CONSTRUCTION SEQUENCE & INSTALLATION NOTES FOR UTILITY LINE TRENCH EXCAVATION

1 LIMIT ADVANCED CLEARING AND GRUBBING OPERATIONS TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY
2 WORK CREWS AND EQUIPMENT FOR TRENCHING PLACEMENT OF PIPE, PLUG CONSTRUCTION AND BACKFILLING WILL BE SELF CONTAINED AND SEPARATE FROM CLEARING AND GRUBBING AND SITE RESTORATION AND STABILIZATION OPERATIONS
3 ALL SOIL EXCAVATED FROM THE TRENCH WILL BE PLACED ON THE UPHILL SIDE OF THE TRENCH
4 LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY.
5 PLACE TEMPORARY EROSION AND SEDIMENT CONTROL BMPS (SILT FENCE OR COMPOST SILT SOCKS AS INDICATED ON THE PLAN) DOWNSLOPE OF THE PROPOSED TRENCHING ACTIVITIES
6 PLACE EXCAVATED MATERIALS ON THE UPSLOPE SIDE OF THE TRENCH
7 INSTALL UTILITIES, BACKFILL TRENCH AND STABILIZE IMMEDIATELY
8 WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING BEFORE PIPE PLACEMENT AND / OR BACKFILLING BEGINS WATER REMOVED FROM THE TRENCH SHALL BE PUMPED THROUGH A FILTRATION DEVICE
10 REMOVE EROSION AND SEDIMENT CONTROL BMPS AFTER AREA IS STABILIZED ANY AREAS DISTURBED DURING THE REMOVAL OF THE BMPS SHALL BE RESTABILIZED IMMEDIATELY
11 ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND IMMEDIATELY STABILIZED
12 SOILS EXCAVATED FROM EXISTING SURFACE LAYER SHOULD BE STOCKPILED SEPARATELY AND RETURNED AS FINAL SURFACE LAYER FOLLOWING TRENCH BACKFILLING

UTILITY LINE TRENCH EXCAVATION NOTES

1 LIMIT ADVANCED CLEARING AND GRUBBING OPERATIONS TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY
2 WORK CREWS AND EQUIPMENT FOR TRENCHING PLACEMENT OF PIPE PLUG CONSTRUCTION AND BACKFILLING WILL BE SELF CONTAINED AND SEPARATE FROM CLEARING AND GRUBBING AND SITE RESTORATION AND STABILIZATION OPERATIONS
3 ALL SOIL EXCAVATED FROM THE TRENCH WILL BE PLACED ON THE UPHILL SIDE OF THE TRENCH
4 LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT PLUG INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY
5 WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING BEFORE PIPE PLACEMENT AND / OR BACKFILLING BEGINS WATER REMOVED FROM THE TRENCH SHALL BE PUMPED THROUGH A FILTRATION DEVICE
6 ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND IMMEDIATELY STABILIZED
7 SOILS EXCAVATED FROM EXISTING SURFACE LAYER SHOULD BE STOCKPILED SEPARATELY AND RETURNED AS FINAL SURFACE LAYER FOLLOWING TRENCH BACKFILLING

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SECTION 102.4(b)(5)(vii) - CONSTRUCTION SEQUENCE

1 UPON TEMPORARY CESSATION OF AN EARTH DISTURBANCE ACTIVITY OF ANY STAGE OR PHASE OF AN ACTIVITY WHERE A CESSATION OF EARTH DISTURBANCE ACTIVITIES WILL EXCEED 4 DAYS THE SITE SHALL BE IMMEDIATELY SEEDED, MULCHED, OR OTHERWISE PROTECTED FROM ACCELERATED EROSION AND SEDIMENTATION PENDING FUTURE EARTH DISTURBANCE ACTIVITIES
2 CLEARING AND GRUBBING SHALL BE LIMITED TO ONLY THOSE AREAS DESCRIBED IN EACH STAGE
3 ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED

THE PROPOSED IMPROVEMENTS CONTAINED HEREIN SHALL BE CONSTRUCTED IN THE FOLLOWING SEQUENCE:

1 THE CONTRACTOR SHALL NOTIFY MONTGOMERY COUNTY CONSERVATION DISTRICT AND TOWNSHIP ENGINEER AT LEAST 3 DAYS BEFORE THE START OF CONSTRUCTION
2 STAKE OUT LIMITS OF DISTURBANCE
3 INSTALL TEMPORARY ROCK CONSTRUCTION ENTRANCE
4 INSTALL COMPOST SOCKS AND INLET PROTECTION WHERE INDICATED ON PLAN
5 REMOVE EXISITNG PAVEMENT AND FEATURES WITHIN WORK AREA
6 BEGIN INSTALLATION OF UNDERGROUND UTILITIES BACKFILL/COMPACT IN ACCORDANCE WITH CONSTRUCTION DETAILS.
7 CONSTRUCT UNDERGROUND STORMWATER FACILITY CONTROLS MUST BE IN PLACE TO ASSURE SEDIMENT DOES NOT ENTER UNDERGROUND FACILITY
8 INSTALL STORM SEWER SYSTEM WITH INLET PROTECTION
9 FINE GRADE AND COMPACT SUBGRADE IN PAVED AREAS INSTALL BASE COURSE
10 BEGIN CONSTRUCTION OF THE PROPOSED BUILDING
11 INSTALL ALL OTHER PUBLIC IMPROVEMENTS
12 FINISH CONSTRUCTION OF BUILDING
13 INSTALL PROPOSED PARKING AND RESTORE LAWN AND STABILIZE
14 INSTALL FINAL WEARING COURSE
15 ONCE THE ENTIRE SITE HAS REACHED 70% UNIFORM STABILIZATION AND THE MONTGOMERY COUNTY CONSERVATION DISTRICT APPROVES, REMOVE THE REMAINING EROSION CONTROL DEVICES ANY AREAS DISTURBED DURING REMOVAL OF REMAINING EROSION CONTROL DEVICES SHALL BE STABILIZED IMMEDIATELY

SECTION 102.22(a) - PERMANENT SITE STABILIZATION

1 E&S BMPS SHALL REMAIN FUNCTIONAL UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER APPROVED BMP
2 AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS
3 AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED TEMPORARY EROSION AND SEDIMENT CONTROL BMPS MUST BE REMOVED OR CONVERTED TO PERMANENT PCSM BMPS AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMPS MUST BE STABILIZED IMMEDIATELY
4 AREAS WHICH AREA TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES (6 TO 12 INCHES ON COMPACTED SOILS) PRIOR TO PLACEMENT OF TOPSOIL AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING
5 TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION
6 IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE O/RP SHALL STABILIZE ALL DISTURBED AREAS DURING NON-GERMINATING PERIODS, MULCH OR PROTECTIVE BLANKETING MUST BE APPLIED AT SPECIFIED RATES AREAS NOT AT FINISHED GRADE, WHICH WILL BE REDISTURBED WITHIN ONE YEAR MAY BE STABILIZED IN ACCORDANCE WITH TEMPORARY STABILIZATION SPECIFICATIONS DISTURBED AREAS THAT ARE AT FINISHED GRADE OR WHICH WILL NOT BE REDISTURBED WITHIN ONE YEAR MUST BE STABILIZED IN ACCORDANCE WITH PERMANENT STABILIZATION SPECIFICATIONS
7 UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE E&S BMPS
8 MEASURES AND SPECIFICATIONS FOR LONG TERM PROTECTION USE DURING EARTHMOVING PERMANENT SEEDING - AREAS NOT PAVED SHALL BE PLANTED WITH PERMANENT SEED MIXTURE AND MULCHED SEEDBED PREPARATION AND SEEDING METHODS:

(1) LIME - AGRICULTURAL GRADE LIMESTONE
A SOIL TEST FROM A REPUTABLE LABORATORY IS RECOMMENDED IF SOIL TEST RESULTS ARE NOT AVAILABLE, APPLY LIME AT THE FOLLOWING RATE
LIME = 6 TONS PER ACRE (240 LBS PER 1,000 S F)

(2) FERTILIZER - COMMERCIAL TYPE 10 - 20 - 20
A SOIL TEST FROM A REPUTABLE LABORATORY IS RECOMMENDED IF SOIL TEST RESULTS ARE NOT AVAILABLE, APPLY FERTILIZER AT THE FOLLOWING RATE
FERTILIZER = 1,000 LBS. PER ACRE (25 LBS. PER 1,000 S F.)
IF TEMPORARY SEEDING IS NECESSARY, DIVIDE THE FERTILIZER AND LIME RECOMMENDATIONS NOTED ABOVE IN HALF APPLY THE FOLLOWING AS PART OF THE TEMPORARY SEEDING
LIME = 1 0 TON PER ACRE (40 LBS PER 1 000 S F)
FERTILIZER = 500 LBS PER ACRE (12 5 LBS. PER 1,000 S.F.)
APPLY THE REMAINDER AT THE TIME OF FINAL SEEDING AT THE FOLLOWING RATE
LIME = 5 0 TONS PER ACRE (200 LBS PER 1,000 S F)
FERTILIZER = 500 LBS PER ACRE (12 5 LBS PER 1,000 S F)

(3) PERMANENT SEED MIXTURE
IT IS RECOMMENDED THAT THE PENN STATE UNIVERSITY "AGRONOMY GUIDE" BE CONSULTED THE FOLLOWING MIXTURE WILL MEET THE REQUIREMENTS OF CHAPTER 102
(A) ANNUAL RYEGRASS IS TO BE SEEDED WITH ALL PERMANENT SEED MIXES AS COVER/NURSE CROP SEEDING RATE = 40 LBS PER ACRE (1 LB PER 1 000 S F)
(B) TURF LAWN AND MOWED AREAS (SUNNY)
60% KENTUCKY BLUEGRASS
20% CHEWINGS FESCUE
20% PERENNIAL RYEGRASS
SEEDING RATE = 170 LBS PER ACRE (4 LBS PER 1,000 S F)
PLANTING DATES = 4/1 - 5/31 AND 8/6 - 10/15
(C) NOTE. ALL MIXTURES GIVEN ABOVE ARE FOR PURE LIVE SEED 100% (PLS 100%)
EXAMPLE TO DETERMINE HOW MUCH SEED TO PLANT
CALCULATE PLS% FOR 85% PURE SEED WITH 72% GERMINATION 85 X 72 / 100 = 61% PLS
DIVIDE THE PLS% INTO ONE HUNDRED (100) 100 / 61 = 1 63
THUS FOR EVERY 1 POUND OF SEED MIXTURE SPECIFIED 1 63 LBS SHOULD BE APPLIED

(4) MULCH
ALL AREAS THAT ARE SEEDED SHALL BE MULCHED MULCH IS A LOOSE LAYER 3/4" TO 1" DEEP OF CLEAN STRAW STRAW SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN AND SHALL BE ANCHORED OR TACKIFIED IMMEDIATELY AFTER APPLICATION WITH POLYMERIC OR GUM TACKIFIERS MIXED AND APPLIED ACCORDING TO MANUFACTURE S RECOMMENDATIONS MULCH ON SLOPES OF 8% OR GREATER SHOULD BE HELD IN PLACE WITH NETTING OR EROSION CONTROL BLANKET MULCH SHALL BE APPLIED AT THE FOLLOWING RATE
STRAW = 3 TONS PER ACRE (140 LBS PER 1,000 S F)

(5) EROSION CONTROL BLANKET
ALL SLOPES 3 1 OR STEEPER AS WELL AS ALL DISTURBED AREAS WITHIN 50 FEET OF A SURFACE WATER (WITH 100 FEET FOR HQ OR EV WATERS) MUST BE STABILIZED WITH EROSION CONTROL BLANKET

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CONSTRUCTION SEQUENCE & INSTALLATION NOTES FOR SUBSURFACE INFILTRATION BASINS:

1 INSTALL AND MAINTAIN TEMPORARY EROSION AND SEDIMENT CONTROL BMPS (I.E. SILT FENCE OR COMPOST SILT SOCKS AS INDICATED ON THE PLAN) AROUND THE LIMITS OF THE UNDERGROUND INFILTRATION SYSTEM PRIOR TO EXCAVATION RUNOFF FROM CONSTRUCTION AREAS SHOULD NEVER BE ALLOWED TO DRAIN TO INFILTRATION BMPS
2 EXCAVATE INFILTRATION FACILITY TO DESIGN SUBGRADE ELEVATION WITH EQUIPMENT THAT WILL NOT COMPACT THE BOTTOM OF THE TRENCH/BASIN THE EXISTING SUBGRADE UNDER THE BED AREAS SHOULD NOT BE COMPACTED OR SUBJECT TO EXCESSIVE CONSTRUCTION EQUIPMENT TRAFFIC PRIOR TO GEOTEXTILE AND STONE BED PLACEMENT
3 WHERE EROSION OF SUBGRADE HAS CAUSED ACCUMULATION OF FINE MATERIALS AND/OR SURFACE PONDING THIS MATERIAL SHOULD BE REMOVED WITH LIGHT EQUIPMENT AND THE UNDERLYING SOILS SCARIFIED TO A MINIMUM DEPTH OF 6 INCHES WITH A YORK RAKE (OR EQUIVALENT) AND LIGHT TRACTOR PRIOR TO PLACEMENT OF THE AGGREGATE ALL FINE GRADING SHOULD BE DONE BY HAND ALL BED BOTTOMS SHOULD BE AT A LEVEL GRADE ONLY CLEAN AGGREGATE WITH DOCUMENTED POROSITY, FREE OF FINES, SHALL BE ALLOWED
4 INSTALL UPSTREAM AND DOWNSTREAM CONTROL STRUCTURES
5 BEFORE INSTALLATION OF THE GEOTEXTILE FILTER FABRIC, A GEOTECHNICAL ENGINEER SHALL INSPECT THE BED FLOOR TO CERTIFY ACCEPTANCE OF SUBGRADE CONDITIONS ADDITIONALLY, AN AS-BUILT SURVEY SHALL BE COMPLETED TO VERIFY BED ELEVATIONS GEOTEXTILE AND BED AGGREGATE SHALL THEN BE PLACED IMMEDIATELY AFTER APPROVAL OF SUBGRADE PREPARATION AND INSTALLATION OF UPSTREAM AND DOWNSTREAM CONTROL STRUCTURES GEOTEXTILE SHOULD BE PLACED IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDATIONS THE TOPS AND SIDES OF ALL SUBSURFACE FACILITIES SHALL BE COVERED WITH FILTER FABRIC THAT MEETS THE SPECIFICATIONS OF PENNDOT PUBLICATION 408, SECTION 735, CONSTRUCTION CLASS 1 ADJACENT STRIPS OF GEOTEXTILE SHOULD OVERLAP A MINIMUM OF 16 INCHES IT SHOULD ALSO BE SECURED AT LEAST 4 FEET OUTSIDE OF BED IN ORDER TO PREVENT ANY RUNOFF OR SEDIMENT FROM ENTERING THE STORAGE BED THIS EDGE STRIP SHOULD REMAIN IN PLACE UNTIL ALL BARE SOILS CONTIGUOUS TO BEDS ARE STABILIZED AND VEGETATED AS THE SITE IS FULLY STABILIZED, EXCESS GEOTEXTILE ALONG BED EDGES CAN BE CUT BACK TO THE EDGE OF THE BED
6 CLEAN-WASHED UNIFORMLY GRADED AGGREGATE, WITH DOCUMENTED POROSITY, FREE OF FINES, SHOULD BE PLACE IN THE BED IN MAXIMUM 8-INCH LIFTS EACH LAYER SHOULD BE LIGHTLY COMPACTED, WITH CONSTRUCTION EQUIPMENT KEPT OFF THE BED BOTTOM AS MUCH AS POSSIBLE
7 INSTALL PERFORATED DISTRIBUTION PIPES AND CONNECT TO CENTRALIZED CATCH BASINS AND/OR MANHOLES WITH THE PROVISION FOR THE COLLECTION OF DEBRIS STORMWATER SHALL BE DISTRIBUTED THROUGHOUT THE ENTIRE FACILITY PERFORM AN AS-BUILT SURVEY TO VERIFY PIPING ELEVATIONS BEFORE BACKFILLING ABOVE TOP OF PIPE
8 BACKFILL OVER INFILTRATION BED IN MAXIMUM 6-INCH LIFTS WITH APPROVED SOIL MEDIA
9 SEED AND STABILIZE TOPSOIL, WHERE APPLICABLE.
10 DO NOT REMOVE INLET PROTECTION OR OTHER EROSION CONTROL MEASURES UNTIL SITE IS FULLY STABILIZED
11 TO COMPLETELY DEWATER BASIN, OPEN 2" CAPPED WEEP HOLE ORIFICE AT BOTTOM OF OUTLET STRUCTURE
12 ALL INLETS SHOULD BE INSPECTED AND CLEANED AT LEAST 2 TIMES PER YEAR
13 VEHICULAR ACCESS ON SUBSURFACE INFILTRATION BASIN SHOULD BE LIMITED AND CARE SHOULD BE TAKEN TO AVOID EXCESSIVE COMPACTION BY MOWERS

CONSTRUCTION SEQUENCE & INSTALLATION NOTES FOR SUBSURFACE DETENTION BASIN:

1 INSTALL AND MAINTAIN TEMPORARY EROSION AND SEDIMENT CONTROL BMPS (I.E. SILT FENCE OR COMPOST SILT SOCKS AS INDICATED ON THE PLAN) AROUND THE LIMITS OF THE UNDERGROUND SYSTEM, PRIOR TO EXCAVATION RUNOFF FROM CONSTRUCTION AREAS SHOULD NEVER BE ALLOWED TO DRAIN TO INFILTRATION BMPS
2 EXCAVATE FACILITY TO DESIGN SUBGRADE ELEVATION ALL BED BOTTOMS SHOULD BE AT A LEVEL GRADE
3 INSTALL UPSTREAM AND DOWNSTREAM CONTROL STRUCTURES
4 BEFORE INSTALLATION OF THE IMPERMEABLE LINER, A GEOTECHNICAL ENGINEER SHALL INSPECT THE BED FLOOR TO CERTIFY ACCEPTANCE OF SUBGRADE CONDITIONS ADDITIONALLY, AN AS-BUILT SURVEY SHALL BE COMPLETED TO VERIFY BED ELEVATIONS LINER AND BED AGGREGATE SHALL THEN BE PLACED IMMEDIATELY AFTER APPROVAL OF SUBGRADE PREPARATION AND INSTALLATION OF UPSTREAM AND DOWNSTREAM CONTROL STRUCTURES LINER SHOULD BE PLACED IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDATIONS
5 CLEAN-WASHED UNIFORMLY GRADED AGGREGATE WITH DOCUMENTED POROSITY FREE OF FINES SHOULD BE PLACE IN THE BED IN MAXIMUM 8-INCH LIFTS EACH LAYER SHOULD BE LIGHTLY COMPACTED
6 INSTALL SOLID DISTRIBUTION PIPES AND CONNECT TO HEADER SYSTEM AND/OR MANHOLES WITH THE PROVISION FOR THE COLLECTION OF DEBRIS STORMWATER SHALL BE DISTRIBUTED THROUGHOUT THE ENTIRE FACILITY PERFORM AN AS-BUILT SURVEY TO VERIFY PIPING ELEVATIONS BEFORE BACKFILLING ABOVE TOP OF PIPE
7 BACKFILL IN MAXIMUM 6-INCH LIFTS, WITH APPROVED SOIL MEDIA
8 SEED AND STABILIZE TOPSOIL WHERE APPLICABLE
9 DO NOT REMOVE INLET PROTECTION OR OTHER EROSION CONTROL MEASURES UNTIL SITE IS FULLY STABILIZED
10 ALL INLETS SHOULD BE INSPECTED AND CLEANED AT LEAST 2 TIMES PER YEAR

SECTION 102.22(b) - TEMPORARY SITE STABILIZATION

1 E&S BMPS MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE BMPS
2 ANY DISTURBED AREA THAT IS NOT AT FINAL GRADE OR WHERE THERE HAS BEEN A CESSATION OF EARTHMOVING ACTIVITY SHALL BE PLANTED WITH A TEMPORARY SEED MIX AND MULCHED AREAS THAT ARE TO BE EXPOSED FOR MORE THAN ONE YEAR SHALL BE SEEDED WITH PERMANENT SEED MIX AND MULCHED SEEDBED PREPARATION AND SEEDING METHODS

(1) LIME - AGRICULTURAL GRADE LIMESTONE
A SOIL TEST FROM A REPUTABLE LABORATORY IS RECOMMENDED IF SOIL TEST RESULTS ARE NOT AVAILABLE, APPLY LIME AT THE FOLLOWING RATE:
LIME = 1 0 TON PER ACRE (40 LBS PER 1 000 S F)

(2) FERTILIZER - COMMERCIAL TYPE 10 - 10 - 20
A SOIL TEST FROM A REPUTABLE LABORATORY IS RECOMMENDED IF SOIL TEST RESULTS ARE NOT AVAILABLE, APPLY FERTILIZER AT THE FOLLOWING RATE
FERTILIZER = 500 LBS PER ACRE (12 5 LBS PER 1 000 S F)

(3) TEMPORARY SEED MIXTURE
ANNUAL RYEGRASS IS A QUICK GERMINATING SPECIES OF GRASS, WHICH CAN BE SEEDED DURING MOST TIME PERIODS IF YOU PLAN TO LEAVE THE PROJECT DISTURBED AND INACTIVE FOR MORE THAN TWENTY (20) DAYS, TEMPORARY SEEDING SHALL BE APPLIED IMMEDIATELY IF THE SITE IS TO REMAIN INACTIVE FOR ONE YEAR OR MORE A PERMANENT SEED MIX IS NECESSARY
ANNUAL RYEGRASS = 40 LBS PER ACRE (1 LB PER 1 000 S F)

(4) MULCH
ALL AREAS THAT ARE SEEDED SHALL BE MULCHED MULCHING MAY BE USED AS A TEMPORARY STABILIZATION IN SOME DISTURBED AREAS IN NON-GERMINATING SEASONS MULCH IS A LOOSE LAYER 3/4" TO 1" DEEP OF CLEAN STRAW STRAW SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN, AND SHALL BE ANCHORED OR TACKIFIED IMMEDIATELY AFTER APPLICATION NETTING OR EROSION CONTROL BLANKETS MUST BE INSTALLED ON SLOPES 3:1 AND STEEPER MULCH SHALL BE APPLIED AT THE FOLLOWING RATE
STRAW = 3 TONS PER ACRE (140 LBS PER 1 000 S F)

E&S BMP	MAINTENANCE ACTIVITY	INSPECTION SCHEDULE	ADDITIONAL SPECIFICATIONS
ROCK CONSTRUCTION ENTRANCE	• MAINTAIN THICKNESS TO SPECIFIED DIMENSIONS • REMOVE SEDIMENT DEPOSITED ON PUBLIC ROADWAYS/SIDEWALKS IMMEDIATELY UPON DISCOVERY • IN NO CASE SHALL THE SEDIMENT BE WASHED SHOVELED OR SWEPT INTO ANY ROADSIDE DITCH STORM SEWER OR SURFACE WATER	• INSPECT DAILY	• IN HAZARDOUS SITUATIONS WHEN MUD CAUSES SLICK CONDITIONS ON TRAVELED ROADWAYS PRESSURE WASHING SHALL BE PERFORMED TO THE SATISFACTION OF THE TOWNSHIP ALL SEDIMENT LADEN WATER GENERATED BY PRESSURE WASHING SHALL BE COLLECTED AND FILTERED THROUGH AN ADEQUATE FILTER CONTROL SUCH AS A WATER FILTER BAG PRIOR TO DISCHARGE TO SEWER OR WATER COURSE • REMOVAL OF MUD OR DEBRIS FROM THE HIGHWAY SHALL BE AT THE EXPENSE OF THE RESPONSIBLE CONTRACTOR AND/OR DEVELOPER
PUMPED WATER FILTER BAG	• REPLACE BAGS WHEN THEY BECOME 1/2 FULL OF SEDIMENT	• INSPECT BAGS DAILY	• IF ANY PROBLEM IS DETECTED PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED
SUPER SILT AND FILTER FABRIC FENCE (18"&30")	• SEDIMENT SHALL BE REMOVED AS REQUIRED TO KEEP FENCE FUNCTIONAL AND WHEN SEDIMENT ACCUMULATIONS REACH ONE-HALF (1/2) THE ABOVE GROUND HEIGHT OF THE FENCE • ALL UNDERCUTTING OR EROSION OF THE TOE ANCHOR SHALL BE REPAIRED IMMEDIATELY WITH COMPACTED BACKFILL MATERIAL	• INSPECT WEEKLY AND AFTER EACH MEASURABLE RAINFALL EVENT	• ANY NECESSARY REPAIRS SHALL BE MADE IMMEDIATELY • ADHERE TO ALL MANUFACTURERS RECOMMENDATIONS FOR REPLACING FILTER FABRIC FENCE DUE TO WEATHERING • ANY SECTION OF FILTER FABRIC FENCE THAT HAS BEEN UNDERMINED OR TOPPLED MUST BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET
ROCK FILTER OUTLET	• SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET	• INSPECT WEEKLY AND AFTER EACH MEASURABLE RAINFALL EVENT	• TO BE INSTALLED UPON FAILURE OF SILT FENCE DUE TO CONCENTRATED FLOW
COMPOST FILTER SOCK	• SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE ABOVEGROUND HEIGHT OF THE SOCK	• INSPECT WEEKLY AND AFTER EACH MEASURABLE RAINFALL EVENT	• DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION BIODEGRADABLE FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS PHOTODEGRADABLE SOCKS AFTER 1 YEAR POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S SPECIFICATIONS
SEEDING AND MULCHING	• SEEDED AREAS THAT HAVE WASHED AWAY SHALL BE FILLED AND REGRADED AS NECESSARY RESEEDED AND MULCHED • PROMPTLY REAPPLY MULCH MATERIALS WHICH BECOME DISLODGED OR LOST DUE TO WIND RAIN FIRE OR OTHER CAUSES AT INITIAL OR MODIFIED RATES AS DIRECTED	• PROPERLY MAINTAIN SEEDED AND MULCHED AREAS UNTIL THE ENTIRE PROJECT HAS BEEN COMPLETED • REFER TO TEMPORARY AND PERMANENT SEEDING SPECIFICATIONS FOR ADDITIONAL DETAIL	• REPAIR/REPLACE ACCORDING TO MANUFACTURER'S SPECIFICATIONS
EROSION CONTROL BLANKET	• DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS	• INSPECT WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA	• AFTER MULCHING WORK ON A SLOPE HAS BEEN SATISFACTORILY COMPLETED IF SLOPE FAILURE OCCURS (ONE WHICH REQUIRES REDRESSING, EXCAVATION, OR THE ESTABLISHMENT OF A NEW SLOPE) REPLACE THE MULCH AS DIRECTED
INLET FILTER BAG	• BAGS SHOULD BE CLEANED AND/OR REPLACED WHEN THE BAG HIS HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET	• INSPECT WEEKLY AND AFTER EACH MEASURABLE RAINFALL EVENT	• DAMAGED FILTER BAGS SHOULD BE REPLACED
VEGETATED CHANNELS	• CHANNEL SHALL BE CLEANED WHENEVER TOTAL CHANNEL DEPTH IS REDUCED BY 25% AT ANY LOCATION • SEDIMENT DEPOSITS SHALL BE REMOVED WITHIN 24 HOURS OF DISCOVERY OR AS SOON AS SOIL CONDITIONS PERMIT ACCESS TO CHANNEL WITHOUT FURTHER DAMAGE • DAMAGED LININGS SHALL BE REPAIRED/REPLACED WITHIN 48 HOURS OF DISCOVERY	• INSPECT WEEKLY AND AFTER EACH MEASURABLE RAINFALL EVENT	• CHANNEL DIMENSIONS SHALL BE CONSTANTLY MAINTAINED • DAMAGED FILTER BAGS SHOULD BE REPLACED
RIPRAP APRONS AND LEVEL SPREADERS	• DISPLACED RIPRAP SHALL BE REPLACED IMMEDIATELY • AREAS UNDERCUT BY EROSION SHALL BE REPAIRED AND RESEEDED IMMEDIATELY	• INSPECT WEEKLY AND AFTER EACH MEASURABLE RAINFALL EVENT	• SEDIMENT DEPOSITS SHALL BE REMOVED WHEN IT REACHES HALF THE HEIGHT OF THE CONCRETE LEVEL SPREADER
SKIMMERS	• ANY MALFUNCTIONING SKIMMER SHALL BE REPAIRED OR REPLACED WITHIN 24 HOURS OF INSPECTION • ICE OR SEDIMENT BUILDUP AROUND THE PRINCIPAL SPILLWAY SHALL BE REMOVED IMMEDIATELY	• INSPECT WEEKLY AND AFTER EACH MEASURABLE RAINFALL EVENT	• REPAIR/REPLACE ACCORDING TO MANUFACTURER'S SPECIFICATIONS
SEDIMENT BASINS AND TRAPS	• SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED THE CLEAN OUT ELEVATION ON THE STAKE AND THE BASIN SHALL BE RESTORED TO ITS ORIGINAL DIMENSIONS • EMBANKMENTS SPILLWAYS AND OUTLETS SHALL BE INSPECTED FOR EROSION PIPING AND SETTLEMENT AND REPAIRS MADE IMMEDIATELY	• INSPECT WEEKLY AND AFTER EACH MEASURABLE RAINFALL EVENT	• TRASH AND OTHER DEBRIS SHALL BE REMOVED IMMEDIATELY UPON DISCOVERY

HUNTINGDON VALLEY SHOPPING CENTER

NO.	DATE	COMMENT

REVISIONS

EROSION & SEDIMENT CONTROL NOTES

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• Engineering • Planning • Surveying •

SCALE: AS SHOWN
DATE: 2/18/2022
JOB NO.: 2019-92
DRAWN BY: LZ
CHECKED BY: WK

SITUATE: ABINGTON TOWNSHIP MONTGOMERY COUNTY,PA.
PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET 10 OF 14

Plotted 02/17/22 - 5 29 PM, By wkiefer
File F \DWG\2019\2019-092 - Kravco HVSC - Abington\ENGINEERING\2019-092_Chipotle Plan dwg-10-ECP-NTS
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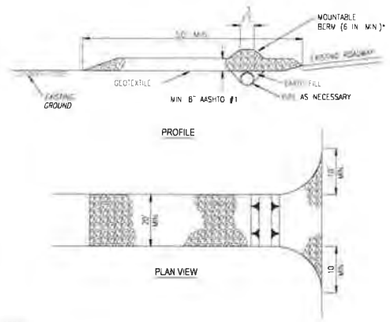


NOTES

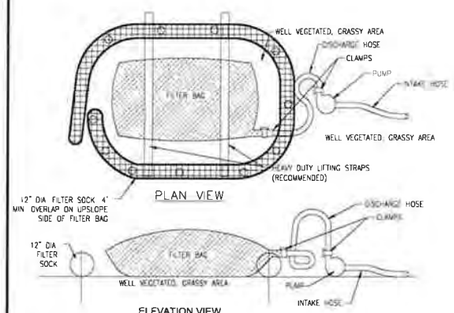
REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.

RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

STANDARD CONSTRUCTION DETAIL #3-1
ROCK CONSTRUCTION ENTRANCE
NOT TO SCALE



NOTES:

LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "U" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE FOLLOWING STANDARDS:

PROPERTY	TEST METHOD	MINIMUM STANDARD
AVG. WIDE WIDTH STRENGTH	ASTM D-4884	60 LB/IN
GRAB TENSILE	ASTM D-4632	205 LB
PUNCTURE	ASTM D-4833	110 LB
MULLEN BURST	ASTM D-3786	350 PSI
UV RESISTANCE	ASTM D-4355	70%
AOS % RETAINED	ASTM D-4751	60 SIEVE

A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED.

BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED. BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED.

BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%. FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS. NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.

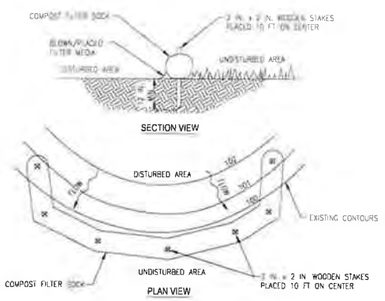
THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.

THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.

FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

STANDARD CONSTRUCTION DETAIL #3-16
PUMPED WATER FILTER BAG
NOT TO SCALE

(FILTER BAG SHALL BE SURROUNDED BY COMPOST SOCK AND OPERATED IN CONJUNCTION WITH A SUMP PIT. SEE DETAIL #3-17)



NOTES

SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.

COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.

TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.

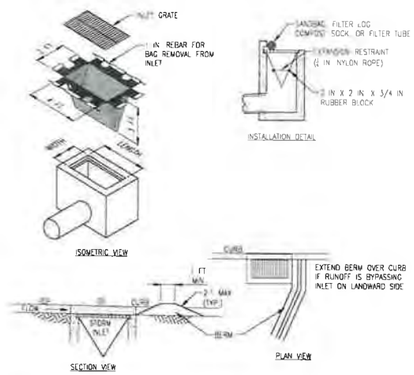
ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.

COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. 5. SPECIFICATIONS OR DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER. REPLACED WITHIN 24 HOURS OF INSPECTION.

BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED 5. RECOMMENDATIONS.

ACCORDING TO MANUFACTURER. UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

STANDARD CONSTRUCTION DETAIL #4-1
COMPOST FILTER SOCK
NOT TO SCALE



NOTES

MAXIMUM DRAINAGE AREA = 1/2 ACRE

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

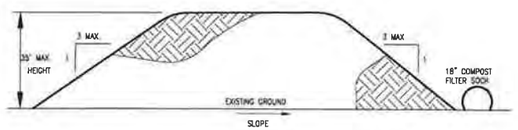
ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE. BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT.

AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RAISED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

STANDARD CONSTRUCTION DETAIL #4-15
FILTER BAG INLET PROTECTION - TYPE C INLET
NOT TO SCALE



1. SILT SOCK SHALL BE PLACED AROUND TOPSOIL STOCKPILES TO PREVENT SEDIMENT FROM LEAVING THE SITE. IT SHOULD BE STAKED PER THE SILT SOCK DETAILS AS SHOWN ON THE PLAN.
2. SEED STOCKPILE PER TEMPORARY SEEDING SPECIFICATIONS.

STANDARD CONSTRUCTION DETAIL
TOPSOIL STOCKPILE
NOT TO SCALE

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE—STOP CALL

PENNSYLVANIA ONE CALL SYSTEM, INC.

1-800-242-1776

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NO.	DATE	COMMENT
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HUNTINGDON VALLEY SHOPPING CENTER

EROSION & SEDIMENT CONTROL DETAILS

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SCALE: AS SHOWN
DATE: 2/18/2022
JOB NO.: 2019-92
DRAWN BY: LZ
CHECKED BY: WK

SITUATE: ABINGTON TOWNSHIP MONTGOMERY COUNTY, PA.
PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET 11 OF 14

Plotted: 02/17/22 - 5:39 PM By: wkeyser
File: F:\DWGS\2019\2019-092 - Kravco HASC - Abington\ENGINEERING\2019-092_Chipotle Plan.dwg-11-ECP-DET
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RETAIL
28,809 SF

METAL COPING

STOP

CONCRETE CURB

CANOPY

PROPOSED UNDERGROUND STORMWATER FACILITY

PROPOSED CHIPOTLE
F.F.=236.40

R.R. SPIKE FOUND (HELD)

SAN MH
INV=227.10
INV=227.10

SIGN "THANK YOU" "EXIT ONLY"

SIGN "RESERVED PARKING"

CITIZENS BANK
2,447 SF

UNIT 2, BLOCK 63
APN #30-00-31504-002
LANDS N/F
MEPHON MANOR APARTMENTS, LP

CONC. STOP

WHEEL STOP

MASONRY WALL

"KEY BANK"

A/C UNIT

LEAVE

SAN MH
RIM=238.89
INV=229.24

TRANSFORMER

8" DIP

8" ICP

SAN MH
RIM=238.30
INV=229.63

MASONRY WALL

APPROX LOCATION OF U.G. GAS LINE (PER UTILITY MARK-OUT)

SAN MH
RIM=233.93
INV IN=224.11 (8" ICP)
INV OUT=224.63 (8" ICP)

W. TRAVIS

6" DIP

6" ICP

IERY
E
V.)

STORMWATER MANAGEMENT LANDOWNER ACKNOWLEDGEMENT

THE STORMWATER MANAGEMENT SYSTEM SHALL BE A PERMANENT FIXTURE THAT CAN BE ALTERED OR REMOVED ONLY AFTER APPROVAL OF A REVISED PLAN BY ABINGTON TOWNSHIP. I/WE, THE UNDERSIGNED OWNER'S ACKNOWLEDGE, THE RESPONSIBILITIES ASSOCIATED WITH OWNERSHIP AND MAINTENANCE OF THE STORMWATER MANAGEMENT FACILITY, AND GIVES THE TOWNSHIP THE RIGHT, BUT NOT THE OBLIGATION, TO ACCESS THE SITE TO VERIFY THAT THE STORMWATER FACILITY IS BEING MAINTAINED IN ACCORDANCE WITH THE APPROVED PLAN. THE STORMWATER FACILITY MAY NOT BE REMOVED AND/OR ALTERED WITHOUT WRITTEN APPROVAL OF ABINGTON TOWNSHIP.

KRAVCO COMPANY, LLC. APPLICANT (DATE)

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

HUNTINGDON VALLEY SHOPPING CENTER

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PLAN NOTATION – THESE DOCUMENTS ARE ESPECIALLY PREPARED FOR THIS PROJECT AND ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE ON ANY EXTENSION OR MODIFICATION OF THIS PROJECT OR FOR ANY OTHER PROJECT. R. L. SHOWALTER & ASSOCIATES, INC. SHALL NOT EXECUTE THOSE DOCUMENTS THAT CONTAIN A SEAL AND SIGNATURE. ANY REUSE OF THESE DOCUMENTS WITHOUT THE EXPRESS WRITTEN CONSENT OF R. L. SHOWALTER & ASSOCIATES, INC OR THEIR USE FOR ANY PURPOSE OTHER THAN THE SPECIFIC PURPOSE FOR WHICH THEY WERE PREPARED IS STRICTLY PROHIBITED. IF USED FOR OTHER THAN THIS PROJECT OR OTHER THAN FOR THE PURPOSE FOR WHICH THEY WERE PREPARED SUCH USE SHALL CONSTITUTE AN AGREEMENT BY THE PARTY USING THE DOCUMENTS AND THE CLIENT TO INDEMNIFY AND HOLD R. L. SHOWALTER & ASSOCIATES, INC. AND ITS SHAREHOLDERS, OFFICERS, DIRECTORS, PRINCIPALS AND EMPLOYEES HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES (INCLUDING REASONABLE ATTORNEYS, FEES AND DEFENSE COSTS) ARISING AS THE RESULT OF SUCH USE EXCEPTING ONLY THOSE DAMAGES, LIABILITIES AND COSTS ARISING FROM THE SOLE NEGLIGENCE OR WILLFUL MISCONDUCT OF R. L. SHOWALTER & ASSOCIATES INC.

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NO.	DATE	COMMENT
		REVISIONS

POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

R. L. Showalter & Associates, Inc.
116 East Butler Avenue
Chalfont, PA 18914
(215) 822-2990
FAX (215) 822-5684
• Engineering • Planning • Surveying •

SCALE:	1"=20'
DATE:	2/16/2022
JOB NO.:	2019-92
DRAWN BY:	LZ
CHECKED BY:	WK

SITUATE: ABINGTON TOWNSHIP
MONTGOMERY COUNTY, PA.
PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET 12 OF 14

Plotted: 02/17/22 – 3:29 PM By: wkuter
File: I:\DWG\2019\2019-092 – Kravco HVSC – Abington\ENGINEERING\2019-092_Chipotle Plan dwg-12-PCSM
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KRAVCO COMPANY, LLC.
375 E ELM ST SUITE 100
CONSHOHOCKEN PA 19428

SECTION 102.8(b) - GENERAL PCSM PLANNING AND DESIGN

THE PCSM PLAN MINIMIZES IMPERVIOUS AREAS

THE SITE HAS EXISTING IMPERVIOUS COVER CONSISTING OF BUILDINGS DRIVE AISLES AND PARKING AREAS TO THE FURTHEST EXTENT POSSIBLE, THE EXISTING IMPERVIOUS AREAS WILL BE REUSED THE PROPOSED IMPERVIOUS COVER WILL NOT CREATE A NET INCREASE OF ADDITIONAL IMPERVIOUS AREA

THE PCSM PLAN MAXIMIZES PROTECTION OF EXISTING DRAINAGE FEATURES AND VEGETATION

THE EXISTING DISCHARGE POINTS FROM THE SITE ARE TO REMAIN UNCHANGED AND THEREFORE PROTECTED FROM CONSTRUCTION ACTIVITIES EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED TO PROTECT THE INTEGRITY OF THE WATER QUALITY NO TREES ARE PROPOSED TO BE DISTURBED

THE PCSM PLAN MINIMIZES LAND CLEARING AND GRADING

THE SITE HAS EXISTING IMPERVIOUS COVER CONSISTING OF BUILDINGS DRIVE AISLES AND PARKING AREAS NO FURTHER PERVIOUS AREAS ARE TO BE CLEARED AND GRADED THE AREA TO BE CLEARED AND GRADED HAS BEEN MINIMIZED

THE PCSM PLAN MINIMIZES SOIL COMPACTION

THE EXTENT OF EARTH DISTURBANCE HAS BEEN LIMITED TO THE GREATEST EXTENT POSSIBLE IN ORDER TO CONSTRUCT THE PROPOSED IMPROVEMENTS THE EROSION & SEDIMENT CONTROL PLAN MINIMIZES SOIL COMPACTION BY NOT DISTURBING PORTIONS OF THE EXISTING GRASS AREA NOT NECESSARY FOR CONSTRUCTION AND PROTECTING PROPOSED INFILTRATION FACILITIES FROM CONSTRUCTION TRAFFIC, UNDER THE CONSTRUCTION SEQUENCE ON THE EROSION AND SEDIMENT CONTROL PLANS THE CONTRACTOR MUST MARK OUT LIMITS OF THE INFILTRATION BASIN TO PROTECT THEM FROM EXCESSIVE COMPACTION

THE PCSM PLAN UTILIZES OTHER STRUCTURAL AND NONSTRUCTURAL BMPS THAT PREVENT OR MINIMIZE CHANGES IN STORMWATER RUNOFF

THE PCSM PLAN PROPOSES A VARIETY OF STRUCTURAL AND NONSTRUCTURAL BMPS THAT WILL PROTECT OFF SITE WATERS FROM CONSTRUCTION ACTIVITIES. STORMWATER RUNOFF WILL BE SLOWED AT EACH BMP IN ADDITION CONSTRUCTION OF THE INFILTRATION BASIN PRIOR TO THE NEW IMPERVIOUS AREAS WILL ENSURE THAT THE DISCHARGE RATE FROM THE SITE IS LESS THAN IT WAS PRIOR TO THE START OF CONSTRUCTION

SECTION 102.8(f)(2) - SOIL USE LIMITATIONS AND RESOLUTIONS

IT IS ANTICIPATED THAT THE ONSITE SOILS WILL BE CAPABLE OF SUPPORTING THE TYPE OF CONSTRUCTION PROPOSED WITH PROPER SITE PREPARATION AND EROSION CONTROL PRACTICE WHERE SOIL LIMITATION IS ENCOUNTERED REFER TO THE FOLLOWING RESOLUTIONS

- CUT BANKS CAVE – TRENCHES AND EXCAVATIONS ARE REQUIRED TO BE SHORED WHEN THEIR DEPTH CREATES A HAZARD ALL APPLICABLE OSHA STANDARDS AND REGULATIONS MUST BE IMPLEMENTED AT ALL TIMES
- CORROSIVE TO CONCRETE AND STEEL – PROPOSED PIPES ARE NEARLY ALL HDPE WHICH WILL PROTECT FROM CORROSIVE SOILS THE CONCRETE INLET BOXES MANHOLE SAND ELLIPTICAL PIPES SHOULD BE COATED TO PREVENT CORROSION
- DROUGHTY – DROUGHTY SOILS ARE A LIMITATION TO CROPS SUCH AS CORN AND SOY SINCE THIS PROJECT PROPOSES NO CROPS THIS LIMITATION SHOULD NOT HINDER THE PROPOSED IMPROVEMENTS
- EASILY ERODIBLE – AREAS OF EARTH DISTURBANCE ARE PROTECTED BY EROSION CONTROL BMP'S IN AREAS OF EASILY ERODIBLE SOILS, EROSION CONTROL BLANKETS MAY BE USED FOR SHORT DURATIONS ALONG WITH TEMPORARY AND/OR PERMANENT VEGETATION AND MULCH AS NEEDED
- FLOODING – IN CASE OF EXCAVATIONS FILLING WITH WATER A PUMPED FILTER BAG SHOULD BE USED TO DEWATER THE EXCAVATION
- DEPTH TO SATURATED ZONE – TESTING SPECIFIC TO THIS SITE SHOWS THAT THE SATURATED ZONE WILL NOT BE ENCOUNTERED DURING CONSTRUCTION OF PROPOSED IMPROVEMENTS
- HYDRIC INCLUSIONS – THE USDA NRCS WEB SOIL SURVEY LISTS ALL ON SITE SOILS AS NOT MEETING HYDRIC CRITERIA WHERE IT IS NECESSARY TO CONSTRUCT ON OR NEAR HYDRIC SOILS, SPECIAL CARE SHALL BE TAKEN TO MINIMIZE DISTURBANCE AND CONFIRM WITH APPLICABLE STATE AND FEDERAL PERMIT REQUIREMENTS
- LAND SLIDE PRONE – THE DEPTH OF EXCAVATIONS AND SLOPES ON SITE WILL NOT BE ENOUGH TO HAVE A LAND SLIDE TO PROTECT EXCAVATIONS FROM CAVING SHORING IS REQUIRED WHEN EXCAVATION DEPTHS CREATE A HAZARD
- SLOW PERCOLATION – DUE TO THE CONTAMINANTS ON THE SITE INFILTRATION BMPS PERCOLATING INTO THE GROUND ARE NOT PROPOSED THEREFORE PERCOLATION RATE ARE NOT RELEVANT
- PIPING – ALL PIPES WILL BE UNDERGROUND NO PIPES WILL BE INSTALLED THROUGH EMBANKMENTS THEREFORE THE DANGERS OF PIPING ARE NOT PRESENT
- POOR SOURCE OF TOPSOIL – THE SOILS ON SITE ARE NOT EXPECTED TO BE USED AS TOP SOIL CONTAMINATED SOILS ENCOUNTERED CAN NOT BE REUSED ON SITE IF UNSUITABLE TOPSOIL IS NOT PRESENT SOIL WILL BE IMPORTED
- FROST ACTION – PAVEMENT AND SIDEWALK SHOULD BE INSTALLED IN ACCORDANCE WITH DETAILS TO LIMIT DAMAGE CAUSED BY FROST ACTION IF CRACKING OCCURS REPLACEMENT OR OVERLAY MAY BECOME NECESSARY IN THE FUTURE
- WETNESS – FOR THE IMPROVEMENTS BEING PROPOSED SOIL WETNESS SHOULD NOT BE A PROBLEM IF HOWEVER, PONDING OCCURS, A PUMPED FILTER BAG SHOULD BE USED TO DEWATER THE AREA

SECTION 102.8(f)(5) - SURFACE WATER CLASSIFICATION

THE SITE IS LOCATED WITHIN THE PENNYPACK CREEK WATERSHED THE PROJECT'S RECEIVING WATERCOURSE IS AN UNNAMED TRIBUTARY TO THE PENNYPACK CREEK PER THE PENNSYLVANIA CODE TITLE 25, CHAPTER 93 WATER QUALITY STANDARDS THE RECEIVING WATERCOURSE HAS THE FOLLOWING STREAM DESIGNATION:
TSF – TROUT STOCKING
MF – MIGRATORY FISHES

SECTION 102.8(f)(11) - RECYCLING OR DISPOSAL OF MATERIALS

1. THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260 1 ET SEQ 271 I ET SEQ AND 287 I ET SEQ, AND IN ACCORDANCE WITH ANY ADDITIONAL LOCAL, STATE OR FEDERAL REGULATIONS
2. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, BURN, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THE SITE
3. INDIVIDUALS RESPONSIBLE FOR EARTH DISTURBANCE ACTIVITIES MUST ENSURE THAT PROPER MECHANISMS ARE IN PLACE TO CONTROL WASTE MATERIALS CONSTRUCTION WASTES INCLUDE, BUT ARE NOT LIMITED TO, EXCESS SOIL MATERIALS, BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, ETC THAT COULD ADVERSELY IMPACT WATER QUALITY MEASURES SHOULD BE PLANNED AND IMPLEMENTED FOR HOUSEKEEPING, MATERIALS MANAGEMENT, AND LITTER CONTROL WHENEVER POSSIBLE RECYCLING OF EXCESS MATERIALS IS PREFERRED RATHER THAN DISPOSAL
4. ANY OFFSITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN REVIEWED AND APPROVED BY THE LOCAL COUNTY CONSERVATION DISTRICT PRIOR TO BEING ACTIVATED THE OPERATOR SHALL ASSURE THE APPROVED E&S PLAN IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL/ROCK SPOIL AND BORROW AREAS ON OR OFFSITE

SECTION 102.8(f)(12) - GEOLOGIC FORMATIONS/SOIL CONDITIONS THAT MAY TO CAUSE POLLUTION

THERE ARE NO KNOWN GEOLOGIC FORMATIONS OR SOILS CONDITIONS ON SITE THAT MAY HAVE THE POTENTIAL TO CAUSE POLLUTION

SECTION 102.8(f)(13) - POTENTIAL THERMAL IMPACTS

PROPOSED BMPS WILL MITIGATE THE THERMAL IMPACTS CAUSED BY BOTH THE EXISTING AND PROPOSED IMPERVIOUS COVER THIS PROJECT PROPOSES TWO BIORETENTION BASINS RUNOFF WILL BE COLLECTED INTO THESE BMPS THESE BMPS FILTER RUNOFF THROUGH A FILTER MATERIAL INTO THE GROUND AND THEN THROUGH AN UNDERDRAIN BEFORE RELEASING TO SURFACE WATERS THIS PROCESS WILL MITIGATE THE TEMPERATURE INCREASE OF THE RUNOFF

SECTION 102.8(f)(14 - RIPARIAN FOREST BUFFERS

THE SITE DOES NOT DISCHARGE TO AN EV/HQ WATERSHED THEREFORE, THERE ARE NO EXISTING OR PROPOSED RIPARIAN BUFFERS OR RIPARIAN FOREST BUFFERS IN THE VICINITY OF THE SITE OR WITHIN THE PROPOSED LIMIT OF DISTURBANCE NO RIPARIAN BUFFER OFFSETS OR EQUIVALENCY DEMONSTRATIONS ARE REQUIRED

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PERMANENT CONTROL MEASURES FOR LONG TERM PROTECTION DURING EARTHMOVING

A PERMANENT SEEDING – AREAS NOT PAVED SHALL BE SEEDED WITH PERMANENT SEED MIXTURE AND MULCHED SEEDBED PREPARATION AND SEEDING METHODS

1 LIME – AGRICULTURAL GRADE LIMESTONE
A SOIL TEST FROM A REPUTABLE LABORATORY IS RECOMMENDED IF SOIL TEST RESULTS ARE NOT AVAILABLE APPLY LIME AT THE FOLLOWING RATE
LIME – 6 TONS PER ACRE 275 LBS PER 1 000 S F

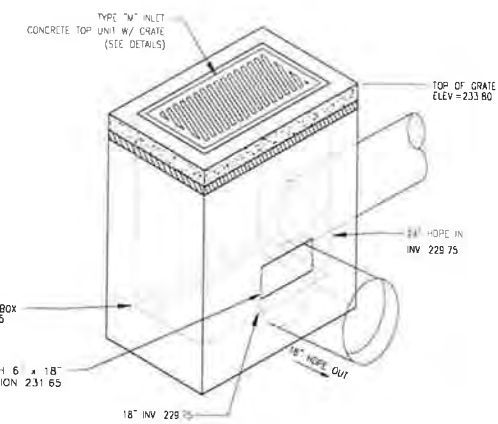
2 FERTILIZER – COMMERCIAL TYPE 10–20–20
A SOIL TEST FROM A REPUTABLE LABORATORY IS RECOMMENDED IF SOIL TEST RESULTS ARE NOT AVAILABLE APPLY FERTILIZER AT THE FOLLOWING RATE
FERTILIZER – 1000 LBS PER ACRE 25 LBS PER 1000 S F

3 PERMANENT SEED MIXTURE
NOTE ANNUAL RYEGRASS IS TO BE SEEDED WITH ALL PERMANENT SEED MIXES AS A COVER/NURSE CROP
ANNUAL RYEGRASS SEEDING RATE 40 LBS PER ACRE 1 LB PER 1,000 S F
TURF LAWN AND MOWED AREAS (SUNNY)
PERMANENT SEED MIX
60% KENTUCKY BLUEGRASS
20% CHEWINGS FESCUE
20% PERENNIAL RYEGRASS
SEEDING RATE 4LBS /1 000 S F OR 170 LBS /ACRE
PLANTING DATES 4/1 – 5/31 AND 8/6 – 10/15

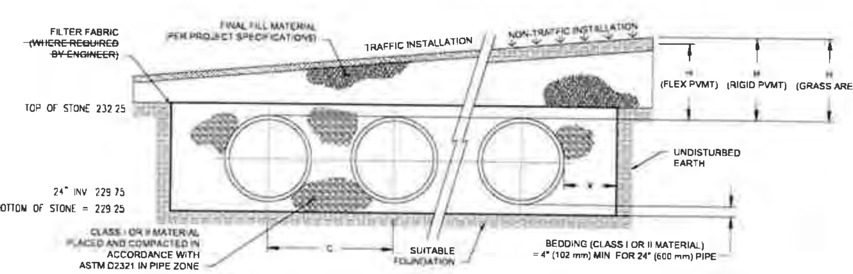
NOTE ALL MIXTURE GIVEN ABOVE ARE FOR PLS (PURE LIVE SEED) 100% TO CALCULATE PLS, THE PERCENTAGE OF PURE LIVE SEED IS MULTIPLIED BY THE PERCENTAGE OF GERMINATION AND THE PRODUCT IS DIVIDED BY ONE HUNDRED (100)
TO DETERMINE HOW MUCH SEED TO PLANT, DIVIDE THE PERCENTAGE INTO ONE HUNDRED (100)
EXAMPLE 100 DIVIDED BY 61 = 1 63 THUS, EVERY POUND OF SEED MIXTURE CALLED FOR SHOULD THEN BE 1 63 LBS

B MULCH – STRAW
ALL AREAS THAT ARE SEEDED SHOULD BE MULCHED MULCH IS A LOOSE LAYER THREE FOURTHS OF AN INCH TO ONE INCH (3/4" TO 1") DEEP OF CLEAN STRAW MULCH REDUCES SOIL EROSION, AID SEED GERMINATION, AND CONSERVES MOISTURE STRAW SHOULD NOT BE CHOPPED OR FINELY BROKEN DURING APPLICATION MULCH SHOULD BE APPLIED AS FOLLOWS
MULCH – 3 TONS PER ACRE, 140 LBS PER 1,000 S F

C VEGETATIVE SURFACE STABILIZATION
1 REFER TO THE ACCOMPANYING PLAN(S) AND SPECIFICATIONS PERTAINING TO PERMANENT SEEDING
2 ALL DISTURBED AREAS SHALL BE STABILIZED AS SOON AS POSSIBLE AFTER FINAL GRADES HAVE BEEN ESTABLISHED REFER TO "STAGING OF EARTHMOVING ACTIVITIES" FOR THE SEQUENCE
3 DURING NON–GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE RECOMMENDED RATES
4 ON STEEP SLOPES, EROSION CONTROL MATTING SHOULD BE USED TO HOLD SEED AND TOPSOIL IN PLACE. SLOPE STEEPNESS, SLOPE LENGTH, SOIL ERODIBILITY, AND CUT OR FILL CONDITION SHOULD BE CONSIDERED IN DETERMINING NEED FOR MATTING OR THE MULCH TACKING METHODS
5 SURFACE ROUGHENING SHOULD BE APPLIED TO ALL SLOPES 3 1 OR STEEPER UNLESS A STABLE ROCK FACE IS PROVIDED SLOPE TRACKING MAY BE USED PERFORM TRACKING BY RUNNING TRACKED MACHINERY UP AND DOWN THE SLOPE AND LEAVING TRACK MARKS PARALLEL TO THE CONTOUR



OUTLET STRUCTURE A DETAIL
NTS



NOMINAL DIAMETER	NOMINAL O D	TYPICAL SPACING "C"	TYPICAL SIDE WALL "X"	MIN H (NON-TRAFFIC)	MIN H (TRAFFIC)	MAX H*
24" (600 mm)	28" (711 mm)	41 4" (1052 mm)	10" (254 mm)	12" (305 mm)	12" (305 mm)	8 (2 4 m)

* MAXIMUM FILL HEIGHTS OVER MANIFOLD FITTINGS CONTACT MANUFACTURER'S REPRESENTATIVE FOR INSTALLATION CONSIDERATIONS WHEN COVER EXCEEDS 8 FT (2 4 m)

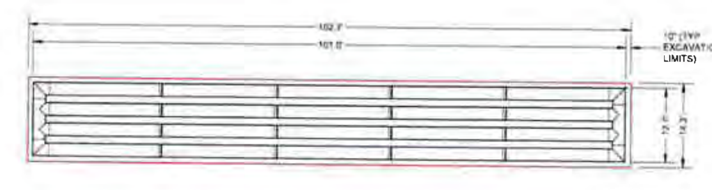
NOTES

1. ALL REFERENCES TO CLASS I OR II MATERIAL ARE PER ASTM D2321 "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS" LATEST EDITION
2. ALL RETENTION AND DETENTION SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, LATEST EDITION AND THE MANUFACTURER'S PUBLISHED INSTALLATION GUIDELINES
3. MEASURES SHOULD BE TAKEN TO PREVENT THE MIGRATION OF NATIVE FINES INTO THE BACKFILL MATERIAL WHEN REQUIRED SEE ASTM D2321
4. FILTER FABRIC A GEOTEXTILE FABRIC MAY BE USED AS SPECIFIED BY THE ENGINEER TO PREVENT THE MIGRATION OF FINES FROM THE NATIVE SOIL INTO THE SELECT BACKFILL MATERIAL
5. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL
6. BEDDING SUITABLE MATERIAL SHALL BE CLASS I OR II THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (102 mm) FOR 4"-24" (100-600 mm) 6" (152 mm) FOR 30-60" (750-900 mm)
7. INITIAL BACKFILL SUITABLE MATERIAL SHALL BE CLASS I OR II IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" (152 mm) ABOVE CROWN OF PIPE THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321 LATEST EDITION
8. COVER: MINIMUM COVER OVER ALL RETENTION/DETENTION SYSTEMS IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" (305 mm) FROM TOP OF PIPE TO GROUND SURFACE ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATATION FOR TRAFFIC APPLICATIONS, MINIMUM COVER IS 12" (305 mm) UP TO 36" (900 mm) DIAMETER PIPE AND 24" (610 mm) OF COVER FOR 42-60" (1050-1500 mm) DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT MAXIMUM FILL HEIGHT LIMITED TO 8 FT (2 4 m) OVER FITTINGS FOR STANDARD INSTALLATIONS CONTACT A SALES REPRESENTATIVE WHEN MAXIMUM FILL HEIGHTS EXCEED 8 FT (2 4 m) FOR INSTALLATION CONSIDERATIONS

SECTION 102.8(f)(10) - PCSM BMP LONG-TERM OPERATION, MAINTENANCE, AND INSPECTION SCHEDULE

1. STORMWATER MANAGEMENT MAINTENANCE RESPONSIBILITY – THE STORMWATER MANAGEMENT FACILITIES WITHIN PRIVATE RIGHTS–OF–WAY SHALL BE OWNED AND MAINTAINED BY A HOMEOWNERS ASSOCIATION, OR EQUIVALENT, AND ARE ULTIMATELY THE RESPONSIBILITY OF THE PROPERTY OWNER THE STORMWATER MANAGEMENT FACILITIES WITHIN PUBLIC RIGHTS–OF–WAY SHALL BE OWNED AND MAINTAINED BY THE MUNICIPALITY ANY STORMWATER FACILITIES LOCATED OUTSIDE OF THE PROPOSED RIGHTS–OF–WAY SHALL BE CONTAINED WITHIN AN EASEMENT AS REQUIRED FOR PROPER ACCESS THE HOA OR EQUIVALENT SHALL BE RESPONSIBLE FOR THE INSPECTION AND MAINTENANCE OF THE STORMWATER FACILITIES LOCATED ON THE BUILDING LOTS A BLANKET EASEMENT IS HEREBY OFFERED TO THE MUNICIPALITY FOR THE PURPOSE OF INSPECTION MAINTENANCE AND ACCESS TO ANY STORMWATER FACILITIES NOT LOCATED WITHIN THEIR PUBLIC RIGHT–OF–WAY
2. IT IS THE RESPONSIBILITY OF THE PROPERTY OWNER (OR DESIGNEE) TO COMPLETE A WRITTEN REPORT DOCUMENTING EACH INSPECTION AND ALL BMP REPAIR, OR REPLACEMENT AND MAINTENANCE ACTIVITIES A LOG SHOWING DATES THAT BMPS WERE INSPECTED, AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED, SHALL BE MAINTAINED ON–SITE AND BE MADE AVAILABLE TO THE REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION
3. ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOOD PLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES
4. IT SHALL BE UNLAWFUL TO ALTER OR REMOVE THE PERMANENT STORMWATER CONTROLS AND BMPS OR TO ALLOW THE PROPERTY TO REMAIN IN A CONDITION WHICH DOES NOT CONFORM TO THE APPROVED POST CONSTRUCTION STORMWATER MANAGEMENT PLAN
5. THE PROPERTY OWNER OR THEIR DESIGNATED RESPONSIBLE PARTY SHALL NOTIFY THE TOWNSHIPS OF ANY PROBLEMS OR FAILURES OBSERVED IN THE STORMWATER SYSTEM, INCLUDING SURFACE PONDING

PCSM BMP	MAINTENANCE ACTIVITY	INSPECTION SCHEDULE	ADDITIONAL SPECIFICATIONS: POTENTIAL FAILURES & CORRECTIVE MEASURES
STORM SEWER INLETS AND MANHOLES	• INLET GRATES SHOULD BE PULLED AND THE INSIDE OF THE INLET BOX SHOULD BE VISUALLY INSPECTED FOR SEDIMENT AND DEBRIS ANY SEDIMENT FOUND SHOULD BE REMOVED AND ANY BLOCKAGE OF THE PIPES SHOULD BE CLEARED	• INSPECT ANNUALLY AND AFTER EACH MAJOR RAINFALL EVENT	• N
STORM SEWER PIPES	• INSPECT FOR SEDIMENT AND DEBRIS AND FLUSH CLEAN WITH GARDEN HOSE OR OTHER FORM OF A FLUSHING SYSTEM	• INSPECT ANNUALLY AND AFTER EACH MAJOR RAINFALL EVENT	• N
SEEDING AND MULCHING	• SEED OR SOD TO RESTORE DEAD OR DAMAGED GROUND COVER • SEEDED AREAS THAT HAVE WASHED AWAY SHALL BE FILLED AND REGRADED AS NECESSARY RESEEDED AND MULCHED	• ANNUAL MAINTENANCE AS NEEDED	• REPAIR/REPLACE ACCORDING TO MANUFACTURER'S SPECIFICATIONS
VEGETATED CHANNELS	• INSPECT FOR EROSION AND DAMAGE TO VEGETATION • TRIM OR MOW VEGETATION TO CONTROL WEEDS • RILLS AND GULLIES MAY BE FILLED WITH TOPSOIL STABILIZED AND SEEDED RESEED BARE AREAS • INSPECT FOR SEDIMENT ACCUMULATIONS AND DEBRIS AND REMOVE SEDIMENT AND DEBRIS WHEN TOTAL CHANNEL DEPTH IS REDUCED BY 25% AT ANY LOCATION	• INSPECT QUARTERLY FOR THE FIRST TWO YEARS FOLLOWING INSTALLATION, AND THEN ON A BI–ANNUAL BASIS THEREAFTER AND AFTER EACH MAJOR RAINFALL EVENT	• CHANNEL DIMENSIONS SHALL BE CONSTANTLY MAINTAINED • MULCHING OR AERATION MAY BE REQUIRED TO RESTORE SOIL STRUCTURE AND MOISTURE CAPACITY • UNWANTED OR INVASIVE VEGETATION SHOULD BE REMOVED ON AN ANNUAL BASIS
RIPRAP APRONS AND LEVEL SPREADERS	• DISPLACED RIPRAP SHALL BE REPLACED • AREAS UNDERCUT BY EROSION SHALL BE REPAIRED AND RESEEDED • INSPECT INLETS AND STRUCTURES DRAINING TO LEVEL SPREADER AND REMOVE SEDIMENT AND DEBRIS	• INSPECT QUARTERLY FOR THE FIRST TWO YEARS FOLLOWING INSTALLATION AND THEN ON A BI–ANNUAL BASIS THEREAFTER AND AFTER EACH MAJOR RAINFALL EVENT	• SEDIMENT DEPOSITS SHALL BE REMOVED WHEN IT REACHES HALF THE HEIGHT OF THE CONCRETE LEVEL SPREADER • SHEET FLOW CONDITIONS SHALL BE SUSTAINED THROUGHOUT THE LIFE OF THE LEVEL SPREADER • MAINTAIN VIGOROUS VEGETATIVE COVER ON THE AREAS BELOW THE LEVEL SPREADER
RAIN GARDEN OR BIORETENTION BASIN (BMP 6 4 5)	• WATER PLANTS REGULARLY UNTIL THEY BECOME ESTABLISHED • INSPECT FOR TRASH OR SEDIMENT • INSPECT DRAW–DOWN TIME TO ENSURE BASIN DRAINS BETWEEN 24 AND 72 HOURS • INSPECT GRASS TO ENSURE THERE ARE NO BARE SPOTS • WEED, PRUNE AND REMOVED DEAD VEGETATION IN THE SPRING SEASON	• INSPECT STRUCTURES QUARTERLY FOR THE FIRST TWO YEARS FOLLOWING INSTALLATION AND THEN ON A BI–ANNUAL BASIS THEREAFTER AND AFTER EACH MAJOR RAINFALL EVENT • INSPECT/REPLACE STONE AND GEOTEXTILE EVERY 5 TO 7 YEARS AS NEEDED	• REMOVE TRASH AND SEDIMENT AND DISPOSE OF IN ACCORDANCE WITH LOCAL AND STATE REGULATIONS • MULCH WITH LEAF COMPOST OR SHREDDED WOOD EVERY 2 TO 3 YEARS AVOID WOOD CHIPS
CONSTRUCTED FILTER (BMP 6 4 7)	• REMOVE CLEANOUT CAPS OR INLET GRATES AND INSPECT FOR CLOGGING REMOVE ACCUMULATED LEAVES TWIGS SEDIMENT AND OTHER DEBRIS AS REQUIRED TO KEEP THE DRAINAGE SYSTEM CLEAN • IF AFTER INSPECTION IT IS DETERMINED THAT SEDIMENT NEEDS TO BE REMOVED, INJECT SYSTEM WITH WATER SUSPEND SILT AND PUMP CHAMBER • GRASS CLIPPINGS SHALL BE COLLECTED AND REMOVED TO PREVENT CLOGGING OF THE FACILITY FALLEN LEAVES SHALL BE COLLECTED AND REMOVED WEEKLY DURING THE FALL SEASON • INSPECT INFLOW AND OUTFLOW STRUCTURES FOR UNDERCUT OR ERODED AREAS WETNESS OR DAMAGE AND REPAIR AS NEEDED • REMOVE STONE AND GEOTEXTILE TO EFFECTIVELY REMOVE BUILT UP SEDIMENT REPLACE GEOTEXTILE AND STONE	• INSPECT STRUCTURES QUARTERLY FOR THE FIRST TWO YEARS FOLLOWING INSTALLATION AND THEN ON A BI–ANNUAL BASIS THEREAFTER AND AFTER EACH MAJOR RAINFALL EVENT • INSPECT/REPLACE STONE AND GEOTEXTILE EVERY 5 TO 7 YEARS AS NEEDED	• VEHICULAR ACCESS ON ABSORPTION BED AREA SHALL BE PROHIBITED AND CARE SHALL BE TAKEN TO AVOID EXCESSIVE COMPACTION BY MOWERS • 100 PERCENT VEGETATIVE COVER BY HERBACEOUS SPECIES SHALL BE MAINTAINED THROUGHOUT ALL EMBANKMENTS AND LAWN AREAS WITH DIRECT DISCHARGE TO THE UNDERGROUND FACILITY ANY AREA BECOMING VOID OF VEGETATION SHALL BE IMMEDIATELY CORRECTED BY REPLANTING OR OTHER ADEQUATE MEASURES NECESSARY TO PREVENT EROSION THAT MAY JEOPARDIZE THE POROSITY OF THE SYSTEM AT NO TIME SHALL MULCH BE USED ON SLOPES OF DIRECT DRAINAGE TO THE UNDERGROUND FACILITY • NOTE SIGNS OF PETROLEUM HYDROCARBON CONTAMINATION AND HANDLE PROPERLY • MULCH WITH LEAF COMPOST OR SHREDDED WOOD EVERY 2 TO 3 YEARS AVOID WOOD CHIPS
LANDSCAPING (REVEGETATE DISTURBED AREAS) (BMP 5 6 3)	• WATERING, CULTIVATING WEEDING MULCHING, CONTROL OF INSECTS AND DISEASES, AND PRUNING • RESET TREES TO PROPER GRADES AND/OR VERTICAL POSITION AS REQUIRED	• AS NEEDED TO MAINTAIN PROPER GROWTH AND APPEARANCE OF PLANT MATERIAL • PERFORM APPROPRIATE SEASONAL MAINTENANCE	• SHOULD ANY PLANTS APPEAR TO BE IN POOR HEALTH OR LACK NORMAL GROWTH HABIT THEY SHALL BE REMOVED AT ONCE AND REPLACED



PLAN NOTATION – THESE DOCUMENTS ARE ESPECIALLY PREPARED FOR THIS PROJECT AND ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE ON ANY EXTENSION OR MODIFICATION OF THIS PROJECT OR FOR ANY OTHER PROJECT. R. L. SHOWALTER & ASSOCIATES, INC. SHALL ONLY CERTIFY THOSE DOCUMENTS THAT CONTAIN A SEAL AND SIGNATURE. ANY REUSE OF THESE DOCUMENTS WITHOUT THE EXPRESS WRITTEN CONSENT OF R. L. SHOWALTER & ASSOCIATES, INC. OR THEIR USE FOR ANY PURPOSE OTHER THAN THE SPECIFIC PURPOSE FOR WHICH THEY WERE PREPARED IS STRICTLY PROHIBITED. IF USED FOR OTHER THAN THIS PROJECT OR OTHER THAN FOR THE PURPOSE FOR WHICH THEY WERE PREPARED, SUCH USE SHALL CONSTITUTE AN AGREEMENT BY THE PARTY USING THE DOCUMENTS AND THE CLIENT TO INDEMNIFY AND HOLD R. L. SHOWALTER & ASSOCIATES, INC. AND ITS SHAREHOLDERS, OFFICERS, DIRECTORS, PRINCIPALS AND EMPLOYEES HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES (INCLUDING REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS) ARISING AS THE RESULT OF SUCH USE, EXCEPTING ONLY THOSE DAMAGES, LIABILITIES AND COSTS ARISING FROM THE SOLE NEGLIGENCE OR WILLFUL MISCONDUCT OF R. L. SHOWALTER & ASSOCIATES, INC.
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NO	DATE	COMMENT

REVISIONS

HUNTINGDON VALLEY SHOPPING CENTER

POST CONSTRUCTION STORMWATER MANAGEMENT NOTES

R. L. Showalter & Associates, Inc.
116 East Butler Avenue
Chalfont, PA 18914
(215) 822-2990
FAX (215) 822-5684
• Engineering • Planning • Surveying •

SCALE:	AS SHOWN
DATE:	2/18/2022
JOB NO.:	2019–92
DRAWN BY:	LZ
CHECKED BY:	WK

SITUATE: ABINGTON TOWNSHIP MONTGOMERY COUNTY,PA.
PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET 13 OF 14

Plotted 02/17/22 - 5 29 PM By wkiefer
File F:\DWG\2019\2019-092 - Kravco HVSC - Abington\ENGINEERING\2019-092_Chipotle Plan dwg-13-PCSM NTS
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NOTES:

1. BASE PLAN BASED ON BOUNDARY & TOPOGRAPHIC SURVEY PREPARED BY CONTROL POINTS ASSOCIATES, INC., DATED MAY 18, 2007, PRELIMINARY/FINAL MINOR LAND DEVELOPMENT PLANS FOR HUNTINGDON VALLEY SHOPPING CENTER RENOVATION PREPARED BY BERGMANN ASSOCIATES, DATED AUGUST 20, 2012, LAST REVISED MAY 23, 2013 AND MAY 2021 SURVEY BY R.L. SHOWALTER & ASSOCIATES, INC.

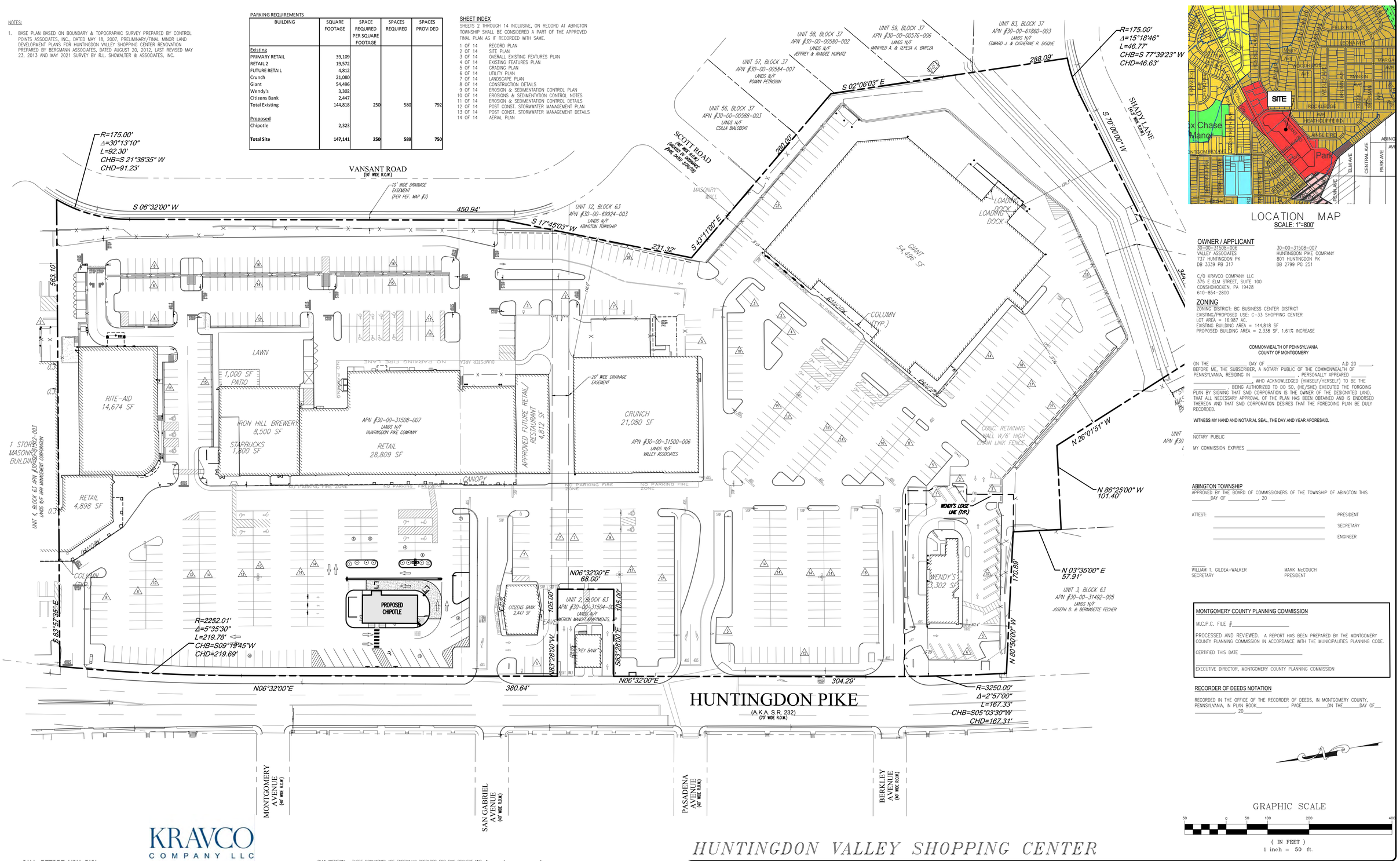
PARKING REQUIREMENTS

BUILDING	SQUARE FOOTAGE	SPACE REQUIRED PER SQUARE FOOTAGE	SPACES REQUIRED	SPACES PROVIDED
Existing				
PRIMARY RETAIL	39,109			
RETAIL 2	19,572			
FUTURE RETAIL	4,812			
Crunch	21,080			
Giant	54,496			
Wendy's	3,302			
Citizens Bank	2,447			
Total Existing	144,818	250	580	792
Proposed				
Chipotle	2,323			
Total Site	**147,141**	**250**	**589**	**750**

SHEET INDEX

SHEETS 2 THROUGH 14 INCLUSIVE, ON RECORD AT ABINGTON TOWNSHIP SHALL BE CONSIDERED A PART OF THE APPROVED FINAL PLAN AS IF RECORDED WITH SAME..

1 OF 14 RECORD PLAN
2 OF 14 SITE PLAN
3 OF 14 OVERALL EXISTING FEATURES PLAN
4 OF 14 EXISTING FEATURES PLAN
5 OF 14 GRADING PLAN
6 OF 14 UTILITY PLAN
7 OF 14 LANDSCAPE PLAN
8 OF 14 CONSTRUCTION DETAILS
9 OF 14 EROSION & SEDIMENTATION CONTROL PLAN
10 OF 14 EROSIONS & SEDIMENTATION CONTROL NOTES
11 OF 14 EROSION & SEDIMENTATION CONTROL DETAILS
12 OF 14 POST CONST. STORMWATER MANAGEMENT PLAN
13 OF 14 POST CONST. STORMWATER MANAGEMENT DETAILS
14 OF 14 AERIAL PLAN



LOCATION MAP
SCALE: 1"=800'

OWNER / APPLICANT

30-00-31508-006
VALLEY ASSOCIATES
737 HUNTINGDON PK
DB 3339 PB 317

30-00-31508-007
HUNTINGDON PIKE COMPANY
801 HUNTINGDON PK
DB 2799 PG 251

C/O KRAVCO COMPANY LLC
375 E ELM STREET, SUITE 100
CONSHOHOCKEN, PA 19428
610-854-2800

ZONING

ZONING DISTRICT: BC BUSINESS CENTER DISTRICT
EXISTING/PROPOSED USE: C-33 SHOPPING CENTER
LOT AREA = 16.987 AC.
EXISTING BUILDING AREA = 144,818 SF
PROPOSED BUILDING AREA = 2,338 SF, 1.61% INCREASE

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF MONTGOMERY

ON THE _____ DAY OF _____ A.D 20 ____,
BEFORE ME, THE SUBSCRIBER, A NOTARY PUBLIC OF THE COMMONWEALTH OF PENNSYLVANIA, RESIDING IN _____, PERSONALLY APPEARED _____, WHO ACKNOWLEDGED (HIMSELF/HERSELF) TO BE THE _____ BEING AUTHORIZED TO DO SO, (HE/SHE) EXECUTED THE FORGOING PLAN BY SIGNING THAT SAID CORPORATION IS THE OWNER OF THE DESIGNATED LAND, THAT ALL NECESSARY APPROVAL OF THE PLAN HAS BEEN OBTAINED AND IS ENDORSED THEREON AND THAT SAID CORPORATION DESIRES THAT THE FOREGOING PLAN BE DULY RECORDED.

WITNESS MY HAND AND NOTARIAL SEAL, THE DAY AND YEAR AFORESAID.

_____
NOTARY PUBLIC

MY COMMISSION EXPIRES _____

UNIT
APN #30
L

ABINGTON TOWNSHIP
APPROVED BY THE BOARD OF COMMISSIONERS OF THE TOWNSHIP OF ABINGTON THIS _____ DAY OF _____, 20 ____.

ATTEST: _____ PRESIDENT
_____ SECRETARY
_____ ENGINEER

WILLIAM T. GILDEA-WALKER
SECRETARY

MARK McCOUCH
PRESIDENT

MONTGOMERY COUNTY PLANNING COMMISSION

M.C.P.C. FILE # _____

PROCESSED AND REVIEWED. A REPORT HAS BEEN PREPARED BY THE MONTGOMERY COUNTY PLANNING COMMISSION IN ACCORDANCE WITH THE MUNICIPALITIES PLANNING CODE.

CERTIFIED THIS DATE _____

EXECUTIVE DIRECTOR, MONTGOMERY COUNTY PLANNING COMMISSION

RECORDER OF DEEDS NOTATION

RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS, IN MONTGOMERY COUNTY, PENNSYLVANIA, IN PLAN BOOK_____, PAGE_____ON THE_____DAY OF_____, 20_____

GRAPHIC SCALE

50 0 50 100 200 400
(IN FEET)
1 inch = 50 ft.

KRAVCO COMPANY LLC

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE—STOP CALL

PENNSYLVANIA ONE CALL SYSTEM, INC.

1-800-242-1776

PLAN NOTATION – THESE DOCUMENTS ARE ESPECIALLY PREPARED FOR THIS PROJECT AND ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE ON ANY EXTENSION OR MODIFICATION OF THIS PROJECT OR FOR ANY OTHER PROJECT. R. L. SHOWALTER & ASSOCIATES, INC. SHALL ONLY CERTIFY THOSE DOCUMENTS THAT CONTAIN A SEAL AND SIGNATURE. ANY REUSE OF THESE DOCUMENTS WITHOUT THE EXPRESS WRITTEN CONSENT OF R. L. SHOWALTER & ASSOCIATES, INC. OR THEIR USE FOR ANY PURPOSE OTHER THAN THE SPECIFIC PURPOSE FOR WHICH THEY WERE PREPARED IS STRICTLY PROHIBITED. IF USED FOR OTHER THAN THIS PROJECT OR OTHER THAN FOR THE PURPOSE FOR WHICH THEY WERE PREPARED, SUCH USE SHALL CONSTITUTE AN AGREEMENT BY THE PARTY USING THE DOCUMENTS AND THE CLIENT TO INDEMNIFY AND HOLD R. L. SHOWALTER & ASSOCIATES, INC. AND ITS SHAREHOLDERS, OFFICERS, DIRECTORS, PRINCIPALS AND EMPLOYEES HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES (INCLUDING REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS) ARISING AS THE RESULT OF SUCH USE, EXCEPTING ONLY THOSE DAMAGES, LIABILITIES AND COSTS ARISING FROM THE SOLE NEGLIGENCE OR WILLFUL MISCONDUCT OF R. L. SHOWALTER & ASSOCIATES, INC.
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NO.	DATE	COMMENT
REVISIONS		

HUNTINGDON VALLEY SHOPPING CENTER

RECORD PLAN

R. L. Showalter & Associates, Inc.
116 East Butler Avenue
Chalfont, PA 18914
(215) 822-2990
FAX (215) 822-5684
• Engineering • Planning • Surveying •

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL WAYNE R. KIEFER ENGINEER NO. 059894E

SCALE:	1" = 50'
DATE:	2/18/2022
JOB NO.:	2019-92
DRAWN BY:	LZ
CHECKED BY:	WK

SITUATE: ABINGTON TOWNSHIP
MONTGOMERY COUNTY,PA.
PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET
1 OF 14

Plotted: 02/17/22 – 5:27 PM, By: wkiefer
File: F:\DWG\2019\2019-092 – Kravco HVSC – Abington\ENGINEERING\2019-092_Chipotle Plan.dwg-01-REC
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RETAIL
28,809 SF

CANOPY

NO PARKING FIRE ZONE

NO PARKING FIRE ZONE

NO PARKING FIRE ZONE

STOP

SIGN "STOP"

SIGN "RESERVED PARKING"

SIGN "RESERVED PARKING"

SIGN "RESERVED PARKING"

PROPOSED SHRUB (TYP)

PROPOSED CURBED ISLAND

EXISTING LIGHT TO BE RELOCATED

ELEC. COVER

ELEC. COVER

DO NOT ENTER SIGN

STOP SIGN

STOP/DO NOT ENTER SIGNS

PROPOSED CURBED ISLAND

PROPOSED CURB

DEP. CURB CONC. PAD

PROPOSED RAILING

PULL-IN SIGN (TYP)

3 CHIPOTLE PULL-IN SPACES

OUTDOOR SEATING AREA

PROPOSED CHIPOTLE

CLEARANCE BAR

DRIVE-THRU SIGN

PROPOSED CURB

CHIPOTLE PICK-UP SPACES

PICK-UP SIGN (TYP)

HC PARKING SIGN

SIGN "BEGIN DIVIDED HIGHWAY"

ONE WAY

SIGN "STOP" "NO LEFT TURN"

STOP SIGN

STOP

SIGN "STOP"

NO PARKING

LEAVE

CITIZENS BANK 2,447 SF

SIGN "NO STOPPING"

LEAVE

STOP STOP

UNIT 2, BLOCK 63
APN #30-00-31504-002
LANDS N/F
MERION MANOR APARTMENTS, LP

SIGN "DRIVE-UP TELLER"

"KEY BANK"

LEAVE

EXIT ONLY

LED SIGN "CITIZENS BANK"

SIGN "EXIT"

SIGN "RESERVED PARKING"

O.H. SIGN "DIRECTIONAL"

SIGN "HUNTINGDON PIKE" "MONTGOMERY AVENUE"

SIGN "DO NOT BLOCK DRIVEWAY"

MASONRY WALL

SIGN "HUNTINGDON PIKE" "SAN GABRIEL AVENUE"

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

HUNTINGDON VALLEY SHOPPING CENTER

KRAVCO COMPANY LLC

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE–STOP CALL

PENNSYLVANIA ONE CALL SYSTEM, INC.

1–800–242–1776

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NO.	DATE	COMMENT
		REVISIONS

SITE PLAN

R. L. Showalter & Associates, Inc.
116 East Butler Avenue
Chalfont, PA 18914
(215) 822-2990
FAX (215) 822-5684
• Engineering • Planning • Surveying •

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL WAYNE R. KIEFER ENGINEER NO. 055880E

SCALE:	1" = 20'
DATE:	2/18/2022
JOB NO.:	2019-92
DRAWN BY:	LZ
CHECKED BY:	WK

SITUATE: ABINGTON TOWNSHIP
MONTGOMERY COUNTY, PA.
PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET 2 OF 14

Plotted: 02/17/22 – 5:27 PM By: wiefer
File: F:\DWG\2019\2019-092 – Kravco HVSC – Abington\ENGINEERING\2019-092_Chipotle Plan.dwg-02-SITE
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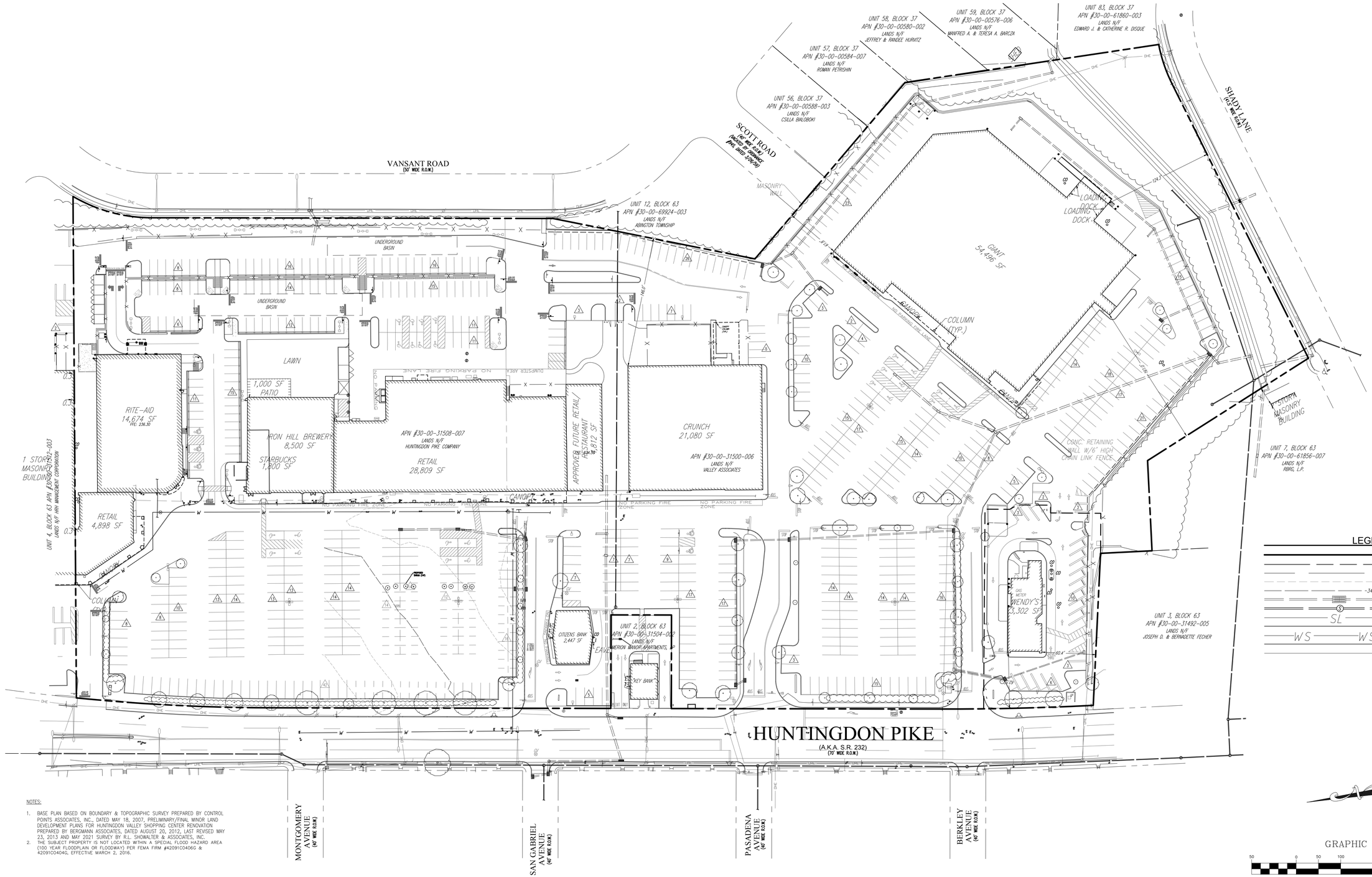

LEGEND

- BOUNDARY LINE
- ADJ. BOUNDARY LINE
- SETBACK LINE
- EXISTING CONTOUR INTERVAL EXIST
- -340- CONTOUR INDEX
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- SL EXISTING SANITARY LATERAL EXISTI
- WATER MAIN
- WS WS EXISTING WATER SERVICE
- EXISTING GAS MAIN
- EXISTING OVERHEAD ELECTRIC

GRAPHIC SCALE

50 0 50 100 200 400

(IN FEET)
1 inch = 50 ft.

NOTES:

1. BASE PLAN BASED ON BOUNDARY & TOPOGRAPHIC SURVEY PREPARED BY CONTROL POINTS ASSOCIATES, INC., DATED MAY 18, 2007, PRELIMINARY/FINAL MINOR LAND DEVELOPMENT PLANS FOR HUNTINGDON VALLEY SHOPPING CENTER RENOVATION PREPARED BY BERGMANN ASSOCIATES, DATED AUGUST 20, 2012, LAST REVISED MAY 23, 2013 AND MAY 2021 SURVEY BY R.L. SHOWALTER & ASSOCIATES, INC.
2. THE SUBJECT PROPERTY IS NOT LOCATED WITHIN A SPECIAL FLOOD HAZARD AREA (100 YEAR FLOODPLAIN OR FLOODWAY) PER FEMA FIRM #42091C0406G & 42091C0404G, EFFECTIVE MARCH 2, 2016.

HUNTINGDON VALLEY SHOPPING CENTER

CALL BEFORE YOU DIG!

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NO.	DATE	COMMENT

REVISIONS

OVERALL EXISTING FEATURES PLAN

R. L. Showalter & Associates, Inc.
116 East Butler Avenue
Chalfont, PA 18914
(215) 822-2990
FAX (215) 822-5684
• Engineering • Planning • Surveying •

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
Robert Lawrence Showalter
LAND SURVEYOR
SU-41174

SCALE:	1" = 50'
DATE:	2/18/2022
JOB NO.:	2019–92
DRAWN BY:	LZ
CHECKED BY:	WK

SITUATE: ABINGTON TOWNSHIP
MONTGOMERY COUNTY,PA.

PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET
3 OF 14

Plotted: 02/17/22 – 5:28 PM, By: wkiefer
File: F:\DWG\2019\2019–092 – Kravco HVSC – Abington\ENGINEERING\2019–092_Chipotle Plan.dwg–03–OVL EFP
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SYMBOL	NAME	HSG	FARMLAND CLASSIFICATION	ALLUVIAL	HYDRIC SOIL RATING
UgB	URBAN LAND 0 TO 8% SLOPES		NOT PRIME		NO

HUNTINGDON VALLEY SHOPPING CENTER

LEGEND

- BOUNDARY LINE
- ADJ. BOUNDARY LINE
- SETBACK LINE
- 344 EXISTING CONTOUR INTERVAL EXIS
- 340 CONTOUR INDEX
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- SL EXISTING SANITARY LATERAL EXIST
- WATER MAIN
- WS EXISTING WATER SERVICE
- EXISTING GAS MAIN
- EXISTING OVERHEAD ELECTRIC

GRAPHIC SCALE

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(IN FEET)
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1–800–242–1776

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NO.	DATE	COMMENT
		REVISIONS

EXISTING FEATURES PLAN

R. L. Showalter & Associates, Inc.
116 East Butler Avenue
Chalfont, PA 18914
(215) 822-2990
FAX (215) 822-5684
• Engineering • Planning • Surveying •

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL LAND SURVEYOR Robert Lawrence Showalter SU-41517-A

SCALE: 1" = 20'
DATE: 2/18/2022
JOB NO.: 2019-92
DRAWN BY: LZ
CHECKED BY: WK

SITUATE: ABINGTON TOWNSHIP
MONTGOMERY COUNTY,PA.
PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET 4 OF 14

Plotted: 02/17/22 – 5:28 PM, By: wkefer
File: F:\DWG\2019\2019-092 – Kravco HVSC – Abington\ENGINEERING\2019-092_Chipotle Plan.dwg–04–EFP
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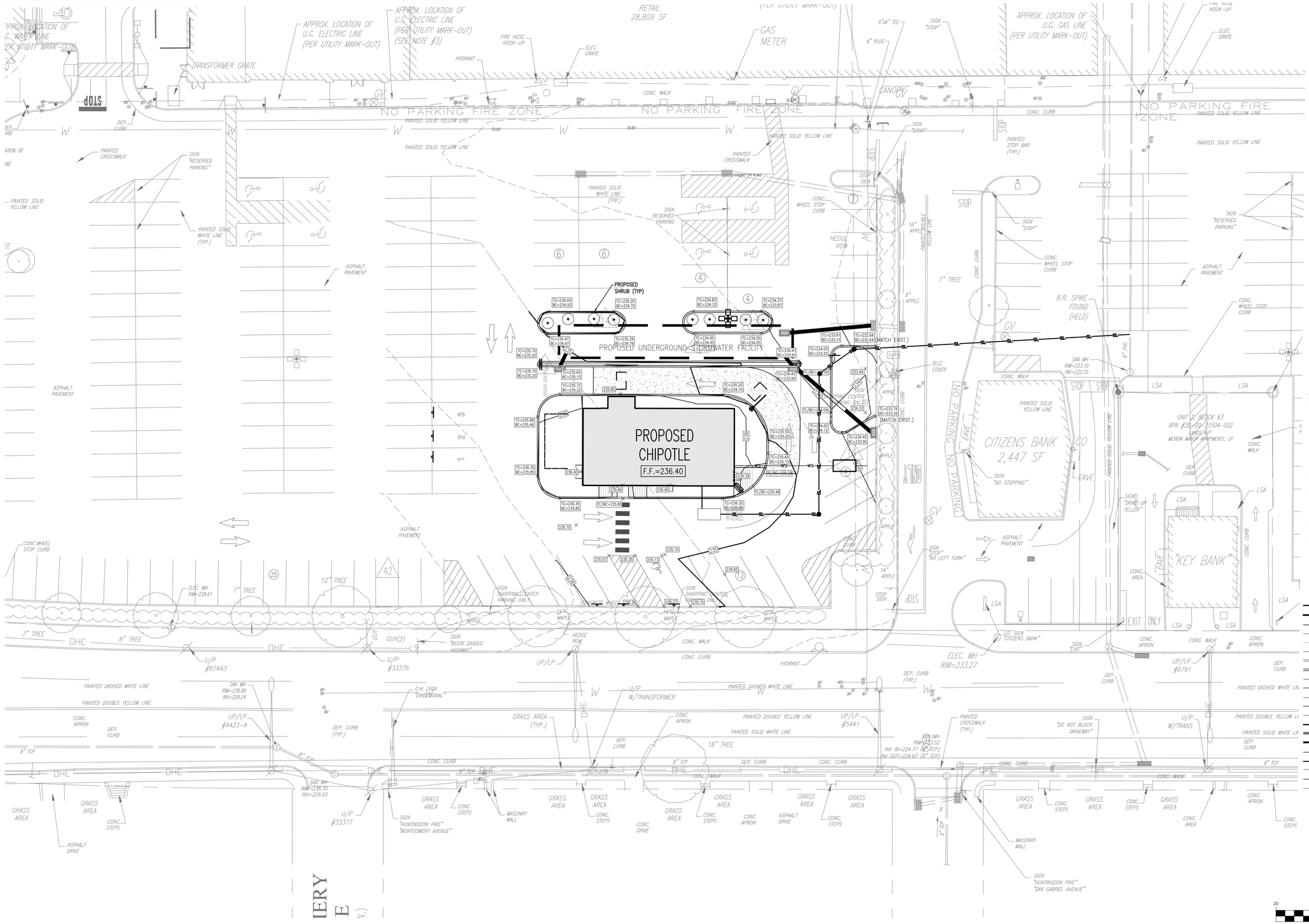

GRADING NOTES:

1. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING ALL SOFT, YIELDING OR UNSUITABLE MATERIALS AND REPLACING WITH SUITABLE MATERIALS. ALL EXCAVATED OR FILLED AREAS SHALL BE COMPACTED TO 95% OF MODIFIED PROCTOR MAXIMUM DENSITY PER A.S.T.M. TEST D-1557. MOISTURE CONTENT AT TIME OF PLACEMENT SHALL BE NO MORE THAN 2% ABOVE NOR 3% BELOW OPTIMUM. CONTRACTOR SHALL SUBMIT A COMPACTION REPORT PREPARED BY A QUALIFIED SOILS ENGINEER, REGISTERED WITHIN THE STATE WHERE THE WORK IS PERFORMED, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS AND SPECS.
2. CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVERT ELEVATIONS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION.
3. SUBBASE MATERIAL FOR SIDEWALKS, CURB, OR ASPHALT SHALL BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SHOULD SUBBASE BE DEEMED UNSUITABLE, SUBBASE IS TO BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL COMPACTED TO 95% OPTIMUM DENSITY (AS DETERMINED BY MODIFIED PROCTOR METHOD).
4. THE MINIMUM SLOPE IN GRASSED AREAS SHALL NOT BE LESS THAN 2% AND THE MINIMUM IN PAVED AREAS SHALL NOT BE LESS THAN 1%.
5. EROSION CONTROL MATTING SHALL BE PROVIDED ON ALL EARTH SLOPES AT 3:1 OR GREATER.

LEGEND

- BOUNDARY LINE
- ADJ. BOUNDARY LINE
- SETBACK LINE
- 344 EXISTING CONTOUR INTERVAL EXIST
- 340 CONTOUR INDEX
- EXISTING STORM SEWER
- S EXISTING SANITARY SEWER
- SL EXISTING SANITARY LATERAL EXISTI
- W WATER MAIN
- WS EXISTING WATER SERVICE
- G EXISTING GAS MAIN
- OHE EXISTING OVERHEAD ELECTRIC
- 108 PROPOSED CONTOUR
- PROPOSED STORM SEWER
- S PROPOSED SANITARY MAIN
- SL PROPOSED SANITARY LATERAL
- W PROPOSED WATER MAIN
- WS PROPOSED WATER SERVICE
- G PROPOSED GAS MAIN
- PROPOSED UNDERGROUND ELECTR
- EXISTING UTILITY POLE
- EXIST. WATER VALVE
- PROPOSED UTIL. POLE
- PROPOSED WATER VALVE
- PROPOSED FIRE HYDRANT

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

HUNTINGDON VALLEY SHOPPING CENTER

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE—STOP CALL

PENNSYLVANIA ONE CALL SYSTEM, INC.

1-800-242-1776

PLAN NOTATION – THESE DOCUMENTS ARE ESPECIALLY PREPARED FOR THIS PROJECT AND ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE ON ANY EXTENSION OR MODIFICATION OF THIS PROJECT OR FOR ANY OTHER PROJECT. R. L. SHOWALTER & ASSOCIATES, INC. SHALL ONLY CERTIFY THOSE DOCUMENTS THAT CONTAIN A SEAL AND SIGNATURE. ANY REUSE OF THESE DOCUMENTS WITHOUT THE EXPRESS WRITTEN CONSENT OF R. L. SHOWALTER & ASSOCIATES, INC. OR THEIR USE FOR ANY PURPOSE OTHER THAN THE SPECIFIC PURPOSE FOR WHICH THEY WERE PREPARED IS STRICTLY PROHIBITED. IF USED FOR OTHER THAN THIS PROJECT OR OTHER THAN FOR THE PURPOSE FOR WHICH THEY WERE PREPARED, SUCH USE SHALL CONSTITUTE AN AGREEMENT BY THE PARTY USING THE DOCUMENTS AND THE CLIENT TO INDEMNIFY AND HOLD R. L. SHOWALTER & ASSOCIATES, INC. AND ITS SHAREHOLDERS, OFFICERS, DIRECTORS, PRINCIPALS AND EMPLOYEES HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES (INCLUDING REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS) ARISING AS THE RESULT OF SUCH USE, EXCEPTING ONLY THOSE DAMAGES, LIABILITIES AND COSTS ARISING FROM THE SOLE NEGLIGENCE OR WILLFUL MISCONDUCT OF R. L. SHOWALTER & ASSOCIATES, INC.

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NO.	DATE	COMMENT
		REVISIONS

GRADING PLAN

R. L. Showalter & Associates, Inc.
116 East Butler Avenue
Chalfont, PA 18914
(215) 822-2990
FAX (215) 822-5684
• Engineering • Planning • Surveying •

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL WAYNE R. KIEFER ENGINEER NO. 053680-E

SCALE:	1" = 20'
DATE:	2/18/2022
JOB NO.:	2019-92
DRAWN BY:	LZ
CHECKED BY:	WK

SITUATE: ABINGTON TOWNSHIP
MONTGOMERY COUNTY, PA.

PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET 5 OF 14

Plotted: 02/17/22 – 5:28 PM, By: wkiefer
File: F:\DWG\2019\2019-092 – Kravco HVSC – Abington\ENGINEERING\2019-092_Chipotle Plan.dwg-05-GP
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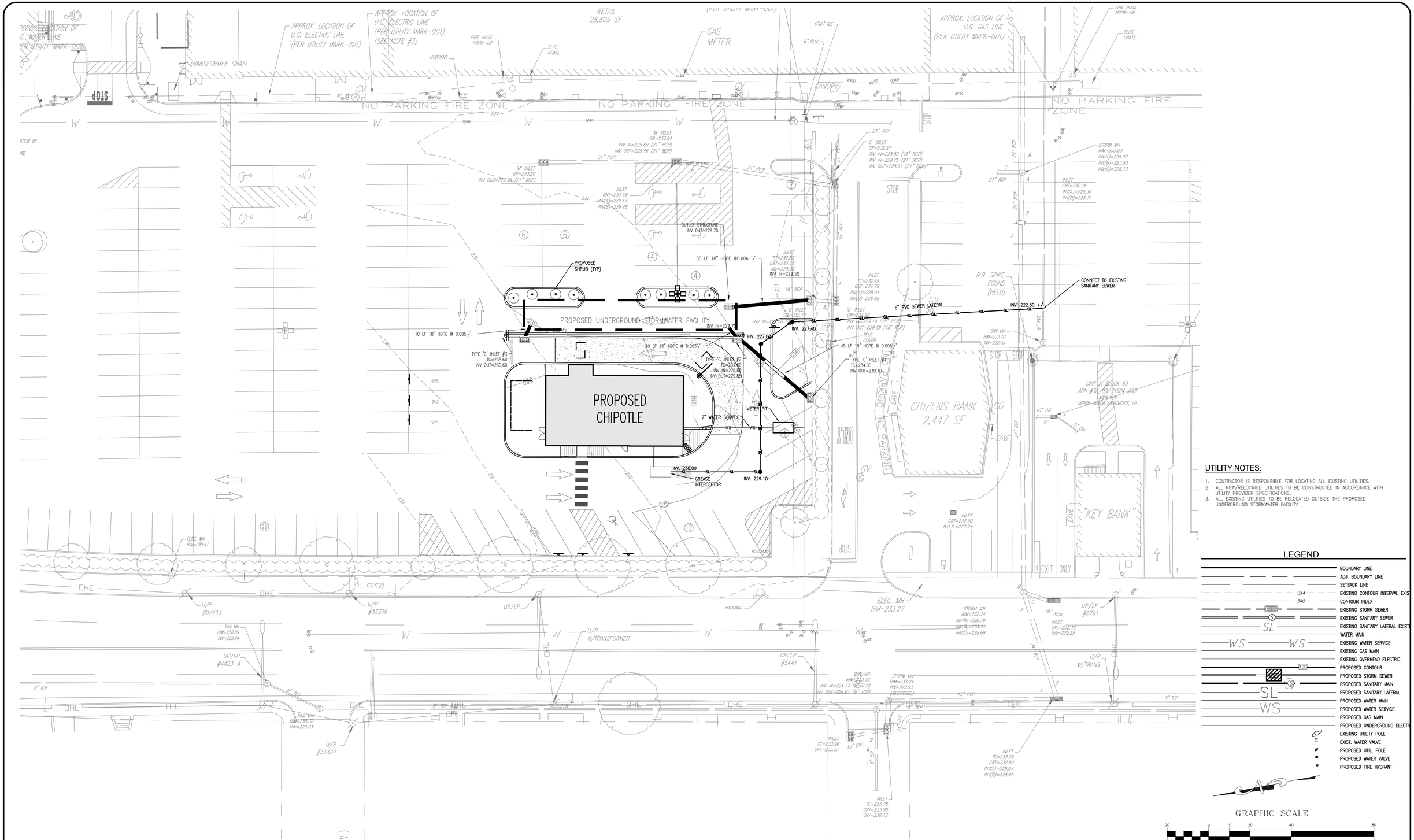

UTILITY NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES.
2. ALL NEW/RELOCATED UTILITIES TO BE CONSTRUCTED IN ACCORDANCE WITH UTILITY PROVIDER SPECIFICATIONS.
3. ALL EXISTING UTILITIES TO BE RELOCATED OUTSIDE THE PROPOSED UNDERGROUND STORMWATER FACILITY.

LEGEND

- BOUNDARY LINE
- ADJ. BOUNDARY LINE
- SETBACK LINE
- 344 EXISTING CONTOUR INTERVAL EXIST
- 340 CONTOUR INDEX
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
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- PROPOSED GAS MAIN
- PROPOSED UNDERGROUND ELECTR
- EXISTING UTILITY POLE
- EXIST. WATER VALVE
- PROPOSED UTIL. POLE
- PROPOSED WATER VALVE
- PROPOSED FIRE HYDRANT

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

HUNTINGDON VALLEY SHOPPING CENTER

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE–STOP CALL

PENNSYLVANIA ONE CALL SYSTEM, INC.

1–800–242–1776

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NO.	DATE	COMMENT
		REVISIONS

UTILITY PLAN

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116 East Butler Avenue
Chalfont, PA 18914
(215) 822–2990
FAX (215) 822–5684

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL ENGINEER — WAYNE R. KIEFER — NO. 055690E

SCALE:	1" = 20'
DATE:	2/18/2022
JOB NO.:	2019–92
DRAWN BY:	LZ
CHECKED BY:	WK

SITUATE: ABINGTON TOWNSHIP
MONTGOMERY COUNTY,PA.
PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET 6 OF 14

Plotted: 02/17/22 – 5:28 PM By: wkiefer
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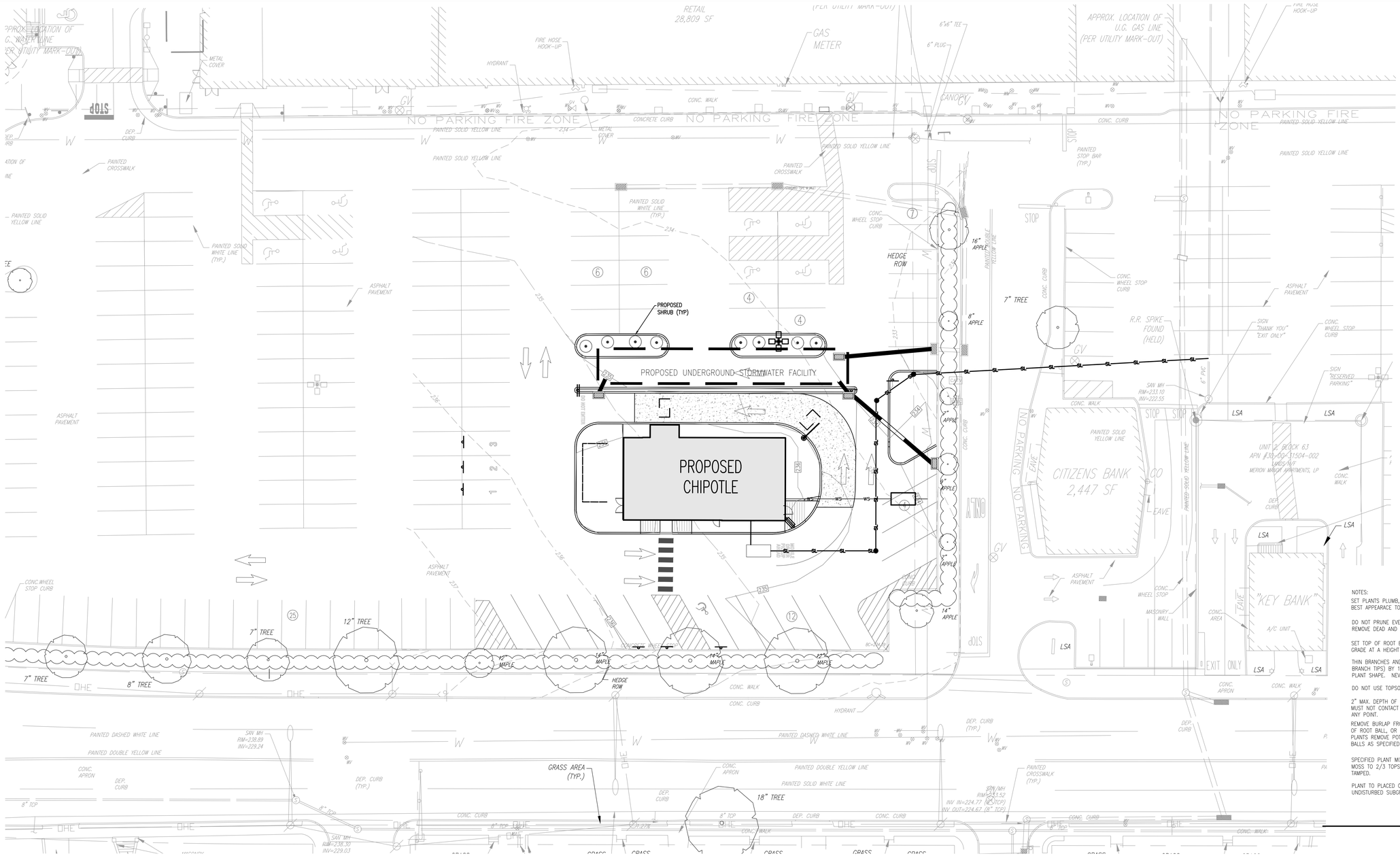


NOTES:
SET PLANTS PLUMB, AND FACE TO GIVE BEST APPEARACE TO ADJACENT AREAS.

DO NOT PRUNE EVERGREENS EXCEPT TO REMOVE DEAD AND BROKEN BRANCHES.

SET TOP OF ROOT BALL ABOVE ADJACENT FINISH GRADE AT A HEIGHT OF 15-20% OF ROOT BALL.

THIN BRANCHES AND FOLIAGE (NOT ALL BRANCH TIPS) BY 1/3, RETAINING NORMAL PLANT SHAPE. NEVER CUT LEADER.

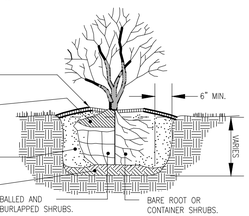
DO NOT USE TOPSOIL SAUCER.

2" MAX. DEPTH OF MULCH. MULCH MUST NOT CONTACT THE TRUNK AT ANY POINT.

REMOVE BURLAP FROM TOP 1/3 OF ROOT BALL, OR WITH CONTAINER PLANTS REMOVE POTS AND SPLIT BALLS AS SPECIFIED.

SPECIFIED PLANT MIX: 1/3 PEAT MOSS TO 2/3 TOPSOIL - LIGHTLY TAMPED.

PLANT TO PLACED ON UNDISTURBED SUBGRADE



SHRUB PLANTING
N.T.S.

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

LANDSCAPE SCHEDULE							
SYM.	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	Inst Ht.	Inst Width	COMMENTS
SHRUBS							
CS	8	Cornus sericea 'Arctic Fire'	Arctic Fire Red-Twig Dogv	30" ht.	30" ht.	24"	Cont.
Subtotal	8						

HUNTINGDON VALLEY SHOPPING CENTER

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PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE-STOP CALL
PENNSYLVANIA ONE CALL SYSTEM, INC.
1-800-242-1776

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NO.	DATE	COMMENT
REVISIONS		

LANDSCAPING PLAN

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(215) 822-2990
FAX (215) 822-5684
• Engineering • Planning • Surveying •

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER WAYNE R. KIEFER NO. 059864E

SCALE: 1" = 20'
DATE: 2/18/2022
JOB NO.: 2019-92
DRAWN BY: LZ
CHECKED BY: WK

SITUATE: ABINGTON TOWNSHIP MONTGOMERY COUNTY,PA.
PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET 7 OF 14

Plotted: 02/17/22 - 5:28 PM, By: wkiefer
File: F:\DWG\2019\2019-092 - Kravco HVSC - Abington\ENGINEERING\2019-092_Chipotle Plan.dwg-07-LP
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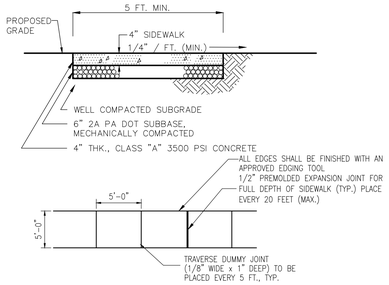
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF DESIGN

RC DETAILS	DESCRIPTION	SHEET NO.
RC-31M	ENDWALLS	SHT 2 OF 2
RC-39M	STANDARD MANHOLES COVERS, FRAMES AND ADJUSTMENT RISERS	SHT 1 – 6
RC-45M	INLET TOPS, GRATES AND FRAMES, GENERAL NOTES	SHT 1 OF 20
RC-45M	INLET TOPS, GRATES AND FRAMES, CONCRETE TOP UNITS, TYPE M	SHT 2 OF 20
RC-45M	INLET TOPS, GRATES, AND FRAMES, CAST IRON GRATES – 1	SHT 9 OF 20
RC-46M	INLET BOXES, GENERAL NOTES	SHT 1–3 OF 45
RC-46M	INLET BOXES, INLET ASSEMBLIES	SHT 4 OF 45
RC-46M	INLET BOXES, INLET BOX TYPES	SHT 6 OF 45
RC-39M	STANDARD MANHOLES COVERS, FRAMES AND ADJUSTMENT RISERS	SHT 5 OF 6
RC-45M	INLET TOPS, GRATES AND FRAMES, CONCRETE TOP UNITS, TYPE C	SHT 3 OF 20
RC-45M	INLET TOPS, GRATES, AND FRAMES, STR. STEEL GRATE,BICYCLE SAFE	SHT 8 OF 20
RC-46M	INLET BOXES, INLET BOX TYPES	SHT 6 OF 45
RC-46M	INLET BOXES, TOP SLABS – 2	SHT 8 OF 45

TO BE CONSTRUCTED PER ALL THE LATEST APPLICABLE STANDARDS FOR ROADWAY CONSTRUCTION SPECIFICATIONS INCLUDING BUT NOT LIMITED TO THOSE INDICATED ABOVE.

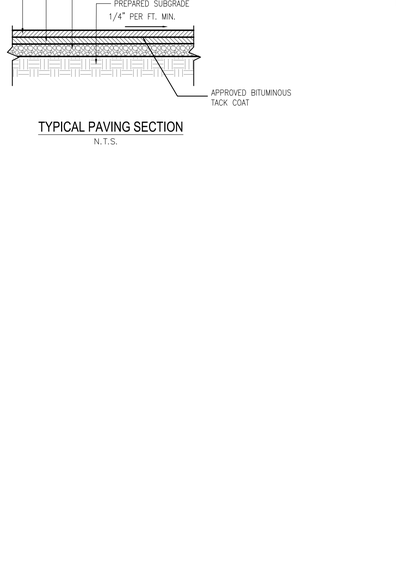
NOTE:
1. ALL INLETS SHALL BE INSTALLED WITH BICYCLE SAFE GRATES.

ADDITIONAL STORM STRUCTURE SPECIFICATIONS

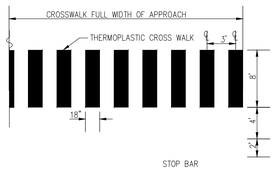


NOTE: WITH ALL PROPOSED SIDEWALK, A NON-SLIP SURFACE TEXTURE SHALL BE BROOMED TRAVERSE TO THE SLOPE OF THE SIDE WALK.

CONCRETE SIDEWALK DETAIL
N.T.S.

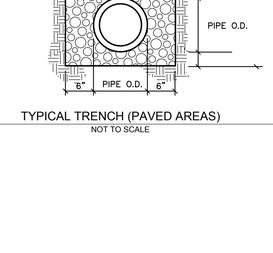


TYPICAL PAVING SECTION
N.T.S.

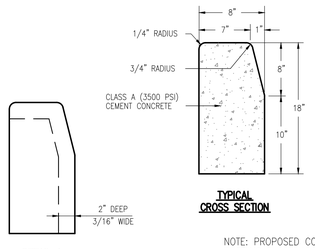


TYPICAL CROSS WALK MARKINGS
NTS

NOTE:
1. 4 FT MIN. DISTANCE SHALL BE PROVIDED BETWEEN CROSSWALK AND STOP BAR.
2. VEHICLE MARKING SHALL BE AT LEAST 20 FT FROM THE INSIDE PEDESTRIAN CROSSWALK LINE.
3. THE CURB RAMP, EXCLUSIVE OF FLARES MUST BE LOCATED WITHIN THE LIMITS OF THE CROSSWALK.

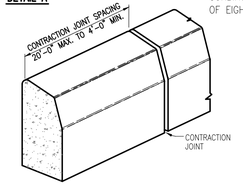


TYPICAL TRENCH (PAVED AREAS)
NOT TO SCALE



TYPICAL CROSS SECTION

DETAIL A

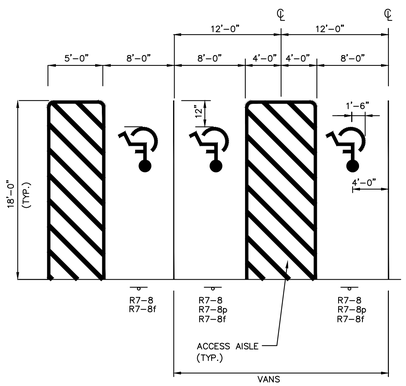


NOTE: PROPOSED CONCRETE CURBING SHALL HAVE A REVEAL OF EIGHT (8) INCHES.

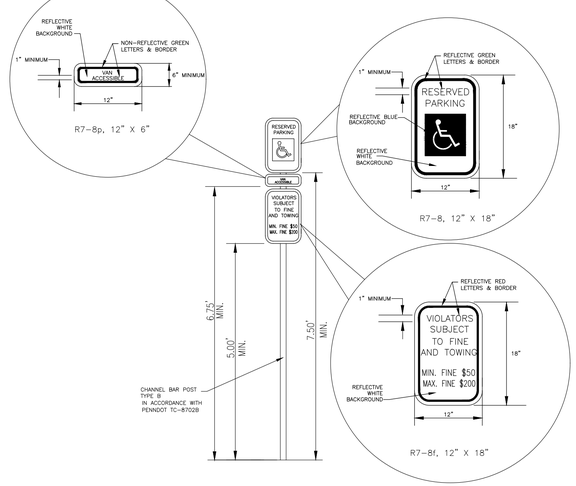
DETAIL NOTES:

1. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PUBLICATION 408, SECTION 630 FOR PLAIN CEMENT CONCRETE CURB AND DEPRESSED CURB.
2. SPACE CONTRACTION JOINTS IN UNIFORM LENGTHS OR SECTIONS.
3. PLACE 3/4-INCH PREMOLDED EXPANSION JOINT FILLER MATERIAL AT STRUCTURES AND AT THE END OF THE WORK DAY. CUT MATERIAL TO CONFORM TO AREA ADJACENT TO CURB OR TO CONFORM TO CROSS SECTIONAL AREA OF CURB.
4. PROPOSED CONCRETE CURBING SHALL HAVE A REVEAL OF EIGHT(8) INCHES.

PLAIN CEMENT CONCRETE CURB
N.T.S.



TYP. HANDICAPPED ACCESSIBLE STALLS
N.T.S.



TYP. HANDICAP ACCESSIBLE SIGN PLACEMENT

Plotted: 02/17/22 – 5:28 PM, By: wkiefer
File: F:\DWG\2019\2019-092 – Kravco HVSC – Abington\ENGINEERING\2019-092_Chipotle Plan.dwg-08-CON-DET
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PENNSYLVANIA ONE CALL SYSTEM, INC.

1-800-242-1776

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NO.	DATE	COMMENT

REVISIONS

HUNTINGDON VALLEY SHOPPING CENTER

CONSTRUCTION DETAILS

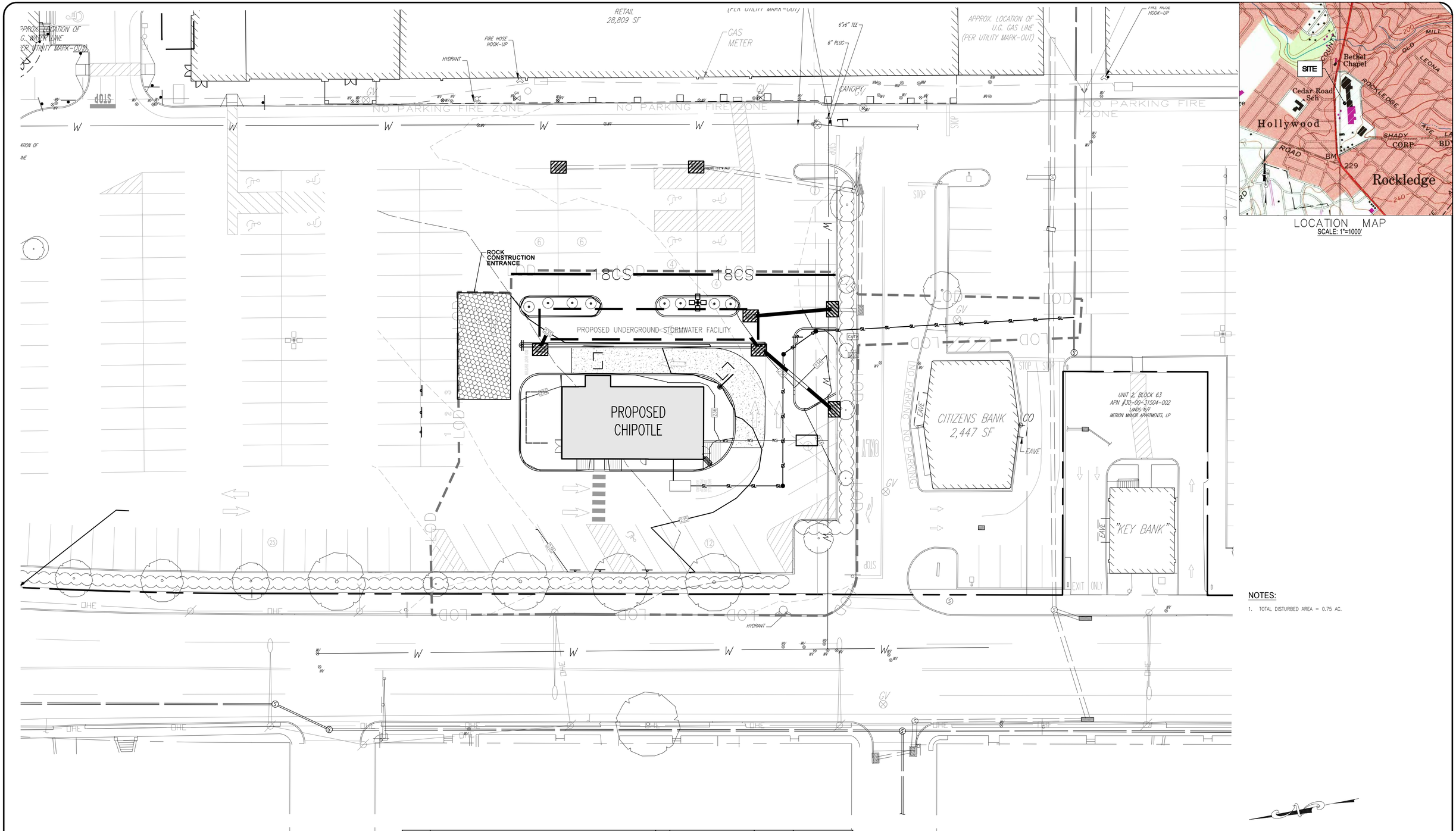
R. L. Showalter & Associates, Inc.
116 East Butler Avenue
Chalfont, PA 18914
(215) 822-2990
FAX (215) 822-5684
• Engineering • Planning • Surveying •

COMMONWEALTH OF PENNSYLVANIA – REGISTERED PROFESSIONAL – WAYNE R. KIEFER – ENGINEER – NO. 059804

SCALE:	AS SHOWN
DATE:	2/18/2022
JOB NO.:	2019-92
DRAWN BY:	LZ
CHECKED BY:	WK

SITUATE: ABINGTON TOWNSHIP
MONTGOMERY COUNTY,PA.
PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET 8 OF 14



LOCATION MAP
SCALE: 1"=1000'

NOTES:

1. TOTAL DISTURBED AREA = 0.75 AC.

SYMBOL	NAME	HSG	FARMLAND CLASSIFICATION	ALLUVIAL	HYDRIC SOIL RATING
UgB	URBAN LAND 0 TO 8% SLOPES		NOT PRIME		NO

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

HUNTINGDON VALLEY SHOPPING CENTER

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PENNSYLVANIA ONE CALL SYSTEM, INC.

1–800–242–1776

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NO.	DATE	COMMENT
		REVISIONS

EROSION & SEDIMENT CONTROL PLAN

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116 East Butler Avenue
Chalfont, PA 18914
(215) 822-2990
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• Engineering • Planning • Surveying •

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL WAYNE R. KIEFER ENGINEER NO. 053664

SCALE:	1" = 20'
DATE:	2/18/2022
JOB NO.:	2019–92
DRAWN BY:	LZ
CHECKED BY:	WK

SITUATE: ABINGTON TOWNSHIP
MONTGOMERY COUNTY,PA.
PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET
9 OF 14

Plotted: 02/17/22 – 5:29 PM, By: wkiefer
File: F:\DWG\2019\2019-092 – Kravco HVSC – Abington\ENGINEERING\2019-092_Chipotle Plan.dwg–09–ECP
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PA CODE CH. 102 E&S CONTROL NOTES

SECTION 102.2(a) - SCOPE AND PURPOSE

1. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PREPARED AND COMPLETELY IMPLEMENTED.
2. UNTIL THE SITE ACHIEVES FINAL STABILIZATION, THE OPERATOR SHALL ASSURE THAT THE BEST MANAGEMENT PRACTICES ARE IMPLEMENTED, OPERATED, AND MAINTAINED PROPERLY AND COMPLETELY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL BEST MANAGEMENT PRACTICE FACILITIES. THE OPERATOR WILL MAINTAIN AND MAKE AVAILABLE TO LOCAL COUNTY CONSERVATION DISTRICT COMPLETE, WRITTEN INSPECTION LOGS OF ALL THOSE INSPECTIONS. ALL MAINTENANCE WORK, INCLUDING CLEANING, REPAIR, REPLACEMENT, REGRADING, AND RESTABILIZATION SHALL BE PERFORMED IMMEDIATELY.
3. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
4. BEFORE INITIATING ANY REVISIONS TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E&S CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE LOCAL COUNTY CONSERVATION DISTRICT.
5. OFF-SITE WASTE AND BORROW: THE OPERATOR SHALL ASSURE THAT AN EROSION AND SEDIMENT CONTROL PLAN HAS BEEN PREPARED, APPROVED BY THE LOCAL COUNTY CONSERVATION DISTRICT AND/OR LOCAL MUNICIPALITY IN COMPLIANCE WITH CHAPTER 102 RULES AND REGULATIONS, AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL OFFSITE SOIL AND/OR ROCK SPOIL AND BORROW AREAS, REGARDLESS OF THEIR LOCATIONS.
6. ALL PUMPING OF SEDIMENT LADEN WATER OR POTENTIALLY SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG DISCHARGING OVER NON-DISTURBED AREAS.
7. THE CONTRACTOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS OF APPENDIX 64, EROSION CONTROL RULES AND REGULATIONS, TITLE 25, PART 1, DEPARTMENT OF ENVIRONMENTAL PROTECTION, SUBPART C, PROTECTION OF NATURAL RESOURCES, ARTICLE III, WATER RESOURCES, CHAPTER 102, EROSION CONTROL.
8. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE AT THE SITE AT ALL TIMES.
9. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT TO SCHEDULE A FINAL INSPECTION.

SECTION 102.5(e) - PRE-CONSTRUCTION MEETING

1. AN ONSITE PRE-CONSTRUCTION MEETING IS REQUIRED TO OCCUR NO LESS THAN 7 DAYS PRIOR TO ANY EARTH DISTURBANCE UNLESS OTHERWISE BY SERO DEP OR THE LOCAL COUNTY CONSERVATION DISTRICT. PERMITEES, CO-PERMITEES, OPERATORS, ALL APPROPRIATE MUNICIPAL OFFICIALS, REPRESENTATIVES FROM THE LOCAL COUNTY CONSERVATION DISTRICT AND THE SERO DEP, AND LICENSED PROFESSIONALS OR DESIGNEES RESPONSIBLE FOR THE EARTH DISTURBANCE ACTIVITY, INCLUDING IMPLEMENTATION OF THE E&S AND PCSM PLANS AND CRITICAL STAGES OF IMPLEMENTATION OF THE APPROVED PCSM PLAN, SHALL ATTEND A PRE-CONSTRUCTION MEETING.

CLEAN FILL & ENVIRONMENTAL DUE DILIGENCE

1. IF FILL IS REQUIRED, THE APPLICANT MUST PERFORM ENVIRONMENTAL DUE DILIGENCE TO DETERMINE IF THE FILL MATERIALS ASSOCIATED WITH THE PROJECT QUALIFY AS CLEAN FILL. APPLICANTS AND/OR OPERATORS MUST USE ENVIRONMENTAL DUE DILIGENCE TO ENSURE THAT THE FILL MATERIAL ASSOCIATED WITH THIS PROJECT QUALIFIES AS CLEAN FILL. DEFINITIONS OF CLEAN FILL AND ENVIRONMENTAL DUE DILIGENCE ARE PROVIDED BELOW. ALL FILL MATERIAL MUST BE USED IN ACCORDANCE WITH THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL", DOCUMENT NUMBER 258-2182-773. A COPY OF THIS POLICY IS AVAILABLE ONLINE AT WWW.DEPWEB.STATE.PA.US. UNDER THE HEADING QUICK ACCESS ON THE LEFT SIDE OF THE SCREEN, CLICK ON "FORMS AND PUBLICATIONS." ON THE LEFT SIDE OF THE SCREEN CLICK ON "TECHNICAL GUIDANCE DOCUMENTS-FINAL." THEN TYPE THE DOCUMENT NUMBER 258-2182-773 INTO THE SEARCH WINDOW AND CONDUCT THE SEARCH. CLICK ON "MANAGEMENT OF FILL".
2. CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE.) CLEAN FILL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE: FILL MATERIALS AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE STILL QUALIFIES AS CLEAN FILL PROVIDED THE TESTING REVEALS THAT THE FILL MATERIAL CONTAINS CONCENTRATIONS OF REGULATED SUBSTANCES THAT ARE BELOW THE RESIDENTIAL LIMITS IN TABLES FP-1A AND FP-1B FOUND IN THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL". ANY PERSON PLACING CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE MUST USE FORM FP-001 TO CERTIFY THE ORIGIN OF THE FILL MATERIAL AND THE RESULTS OF THE ANALYTICAL TESTING TO QUALIFY THE MATERIAL AS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE OWNER OF THE PROPERTY RECEIVING THE FILL.
3. ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS: INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF REGULATED SUBSTANCE. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL". FILL MATERIAL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL. REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH THE DEPARTMENT'S MUNICIPAL OR RESIDUAL WASTE REGULATIONS BASED ON 25 PA CODE CHAPTERS 287 RESIDUAL WASTE MANAGEMENT OR 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE.

SECTION 102.4(b)(5)(xi) - RECYCLING OR DISPOSAL OF MATERIALS

1. THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ., AND IN ACCORDANCE WITH ANY ADDITIONAL LOCAL, STATE OR FEDERAL REGULATIONS.
2. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, BURN, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THE SITE.
3. INDIVIDUALS RESPONSIBLE FOR EARTH DISTURBANCE ACTIVITIES MUST ENSURE THAT PROPER MECHANISMS ARE IN PLACE TO CONTROL WASTE MATERIALS. CONSTRUCTION WASTES INCLUDE, BUT ARE NOT LIMITED TO, EXCESS SOIL MATERIALS, BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, ETC. THAT COULD ADVERSELY IMPACT WATER QUALITY. MEASURES SHOULD BE PLANNED AND IMPLEMENTED FOR HOUSEKEEPING, MATERIALS MANAGEMENT, AND LITTER CONTROL. WHENEVER POSSIBLE, RECYCLING OF EXCESS MATERIALS IS PREFERRED, RATHER THAN DISPOSAL.
4. ANY OFFSITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN REVIEWED AND APPROVED BY THE LOCAL COUNTY CONSERVATION DISTRICT PRIOR TO BEING ACTIVATED. THE OPERATOR SHALL ASSURE THE APPROVED E&S PLAN IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL/ROCK SPOIL AND BORROW AREAS ON OR OFFSITE.

CONSTRUCTION SEQUENCE & INSTALLATION NOTES FOR UTILITY LINE TRENCH EXCAVATION:

1. LIMIT ADVANCED CLEARING AND GRUBBING OPERATIONS TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY.
2. WORK CREWS AND EQUIPMENT FOR TRENCHING, PLACEMENT OF PIPE, PLUG CONSTRUCTION AND BACKFILLING WILL BE SELF CONTAINED AND SEPARATE FROM CLEARING AND GRUBBING AND SITE RESTORATION AND STABILIZATION OPERATIONS.
3. ALL SOIL EXCAVATED FROM THE TRENCH WILL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.
4. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY.
5. PLACE TEMPORARY EROSION AND SEDIMENT CONTROL BMPS (SILT FENCE OR COMPOST SILT SOCKS AS INDICATED ON THE PLAN) DOWNSLOPE OF THE PROPOSED TRENCHING ACTIVITIES.
6. PLACE EXCAVATED MATERIALS ON THE UPSLOPE SIDE OF THE TRENCH.
7. INSTALL UTILITIES, BACKFILL TRENCH AND STABILIZE IMMEDIATELY.
9. WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING BEFORE PIPE PLACEMENT AND / OR BACKFILLING BEGINS. WATER REMOVED FROM THE TRENCH SHALL BE PUMPED THROUGH A FILTRATION DEVICE.
10. REMOVE EROSION AND SEDIMENT CONTROL BMPS AFTER AREA IS STABILIZED. ANY AREAS DISTURBED DURING THE REMOVAL OF THE BMPS SHALL BE RESTABILIZED IMMEDIATELY.
11. ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND IMMEDIATELY STABILIZED.
12. SOILS EXCAVATED FROM EXISTING SURFACE LAYER SHOULD BE STOCKPILED SEPARATELY AND RETURNED AS FINAL SURFACE LAYER FOLLOWING TRENCH BACKFILLING.

UTILITY LINE TRENCH EXCAVATION NOTES:

1. LIMIT ADVANCED CLEARING AND GRUBBING OPERATIONS TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY.
2. WORK CREWS AND EQUIPMENT FOR TRENCHING, PLACEMENT OF PIPE, PLUG CONSTRUCTION AND BACKFILLING WILL BE SELF CONTAINED AND SEPARATE FROM CLEARING AND GRUBBING AND SITE RESTORATION AND STABILIZATION OPERATIONS.
3. ALL SOIL EXCAVATED FROM THE TRENCH WILL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.
4. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY.
5. WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING BEFORE PIPE PLACEMENT AND / OR BACKFILLING BEGINS. WATER REMOVED FROM THE TRENCH SHALL BE PUMPED THROUGH A FILTRATION DEVICE.
6. ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND IMMEDIATELY STABILIZED.
7. SOILS EXCAVATED FROM EXISTING SURFACE LAYER SHOULD BE STOCKPILED SEPARATELY AND RETURNED AS FINAL SURFACE LAYER FOLLOWING TRENCH BACKFILLING.

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SECTION 102.4(b)(5)(vii) - CONSTRUCTION SEQUENCE

1. UPON TEMPORARY CESSATION OF AN EARTH DISTURBANCE ACTIVITY OF ANY STAGE OR PHASE OF AN ACTIVITY WHERE A CESSATION OF EARTH DISTURBANCE ACTIVITIES WILL EXCEED 4 DAYS, THE SITE SHALL BE IMMEDIATELY SEEDED, MULCHED, OR OTHERWISE PROTECTED FROM ACCELERATED EROSION AND SEDIMENTATION PENDING FUTURE EARTH DISTURBANCE ACTIVITIES.
2. CLEARING AND GRUBBING SHALL BE LIMITED TO ONLY THOSE AREAS DESCRIBED IN EACH STAGE.
3. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED.

THE PROPOSED IMPROVEMENTS CONTAINED HEREIN SHALL BE CONSTRUCTED IN THE FOLLOWING SEQUENCE:

1. THE CONTRACTOR SHALL NOTIFY MONTGOMERY COUNTY CONSERVATION DISTRICT AND TOWNSHIP ENGINEER AT LEAST 3 DAYS BEFORE THE START OF CONSTRUCTION.
2. STAKE OUT LIMITS OF DISTURBANCE.
3. INSTALL TEMPORARY ROCK CONSTRUCTION ENTRANCE.
4. INSTALL COMPOST SOCKS AND INLET PROTECTION WHERE INDICATED ON PLAN.
5. REMOVE EXISITNG PAVEMENT AND FEATURES WITHIN WORK AREA.
6. BEGIN INSTALLATION OF UNDERGROUND UTILITIES, BACKFILL/COMPACT IN ACCORDANCE WITH CONSTRUCTION DETAILS.
7. CONSTRUCT UNDERGROUND STORMWATER FACILITY. CONTROLS MUST BE IN PLACE TO ASSURE SEDIMENT DOES NOT ENTER UNDERGROUND FACILITY.
8. INSTALL STORM SEWER SYSTEM WITH INLET PROTECTION.
9. FINE GRADE AND COMPACT SUBGRADE IN PAVED AREAS. INSTALL BASE COURSE.
10. BEGIN CONSTRUCTION OF THE PROPOSED BUILDING.
11. INSTALL ALL OTHER PUBLIC IMPROVEMENTS.
12. FINISH CONSTRUCTION OF BUILDING.
13. INSTALL PROPOSED PARKING AND RESTORE LAWN AND STABILIZE.
14. INSTALL FINAL WEARING COURSE.
15. ONCE THE ENTIRE SITE HAS REACHED 70% UNIFORM STABILIZATION AND THE MONTGOMERY COUNTY CONSERVATION DISTRICT APPROVES, REMOVE THE REMAINING EROSION CONTROL DEVICES. ANY AREAS DISTURBED DURING REMOVAL OF REMAINING EROSION CONTROL DEVICES SHALL BE STABILIZED IMMEDIATELY.

SECTION 102.22(a) - PERMANENT SITE STABILIZATION

1. E&S BMPS SHALL REMAIN FUNCTIONAL UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER APPROVED BMP.
2. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.
3. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT CONTROL BMPS MUST BE REMOVED OR CONVERTED TO PERMANENT PCSM BMPS. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMPS MUST BE STABILIZED IMMEDIATELY.
4. AREAS WHICH AREA TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES (6 TO 12 INCHES ON COMPACTED SOILS) PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING.
5. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION.
6. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE O/RP SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING PERIODS, MULCH OR PROTECTIVE BLANKETING MUST BE APPLIED AT SPECIFIED RATES. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REDISTURBED WITHIN ONE YEAR, MAY BE STABILIZED IN ACCORDANCE WITH TEMPORARY STABILIZATION SPECIFICATIONS. DISTURBED AREAS THAT ARE AT FINISHED GRADE OR WHICH WILL NOT BE REDISTURBED WITHIN ONE YEAR MUST BE STABILIZED IN ACCORDANCE WITH PERMANENT STABILIZATION SPECIFICATIONS.
7. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE E&S BMPS.
8. MEASURES AND SPECIFICATIONS FOR LONG TERM PROTECTION USE DURING EARTHMOVING:
   PERMANENT SEEDING – AREAS NOT PAVED SHALL BE PLANTED WITH PERMANENT SEED MIXTURE AND MULCHED. SEEDBED PREPARATION AND SEEDING METHODS:
   (1) LIME – AGRICULTURAL GRADE LIMESTONE
   A SOIL TEST FROM A REPUTABLE LABORATORY IS RECOMMENDED. IF SOIL TEST RESULTS ARE NOT AVAILABLE, APPLY LIME AT THE FOLLOWING RATE:
   LIME = 6 TONS PER ACRE (240 LBS. PER 1,000 S.F.)
   (2) FERTILIZER – COMMERCIAL TYPE 10 – 20 – 20
   A SOIL TEST FROM A REPUTABLE LABORATORY IS RECOMMENDED. IF SOIL TEST RESULTS ARE NOT AVAILABLE, APPLY FERTILIZER AT THE FOLLOWING RATE:
   FERTILIZER = 1,000 LBS. PER ACRE (25 LBS. PER 1,000 S.F.)
   IF TEMPORARY SEEDING IS NECESSARY, DIVIDE THE FERTILIZER AND LIME RECOMMENDATIONS NOTED ABOVE IN HALF. APPLY THE FOLLOWING AS PART OF THE TEMPORARY SEEDING:
   LIME = 1.0 TON PER ACRE (40 LBS. PER 1,000 S.F.)
   FERTILIZER = 500 LBS. PER ACRE (12.5 LBS. PER 1,000 S.F.)
   APPLY THE REMAINDER AT THE TIME OF FINAL SEEDING AT THE FOLLOWING RATE:
   LIME = 5.0 TONS PER ACRE (200 LBS. PER 1,000 S.F.)
   FERTILIZER = 500 LBS. PER ACRE (12.5 LBS. PER 1,000 S.F.)
   (3) PERMANENT SEED MIXTURE
   IT IS RECOMMENDED THAT THE PENN STATE UNIVERSITY "AGRONOMY GUIDE" BE CONSULTED. THE FOLLOWING MIXTURE WILL MEET THE REQUIREMENTS OF CHAPTER 102.
   (A) ANNUAL RYEGRASS IS TO BE SEEDED WITH ALL PERMANENT SEED MIXES AS COVER/NURSE CROP. SEEDING RATE = 40 LBS. PER ACRE (1 LB. PER 1,000 S.F.)
   (B) TURF LAWN AND MOWED AREAS (SUNNY):
   60% KENTUCKY BLUEGRASS
   20% CHEWINGS FESCUE
   20% PERENNIAL RYEGRASS
   SEEDING RATE = 170 LBS. PER ACRE (4 LBS. PER 1,000 S.F.)
   PLANTING DATES = 4/1 – 5/31 AND 8/6 – 10/15
   (C) NOTE: ALL MIXTURES GIVEN ABOVE ARE FOR PURE LIVE SEED 100% (PLS 100%)
   EXAMPLE TO DETERMINE HOW MUCH SEED TO PLANT:
   CALCULATE PLS%: FOR 85% PURE SEED WITH 72% GERMINATION: 85 X 72 / 100 = 61% PLS
   DIVIDE THE PLS% INTO ONE HUNDRED (100): 100 / 61 = 1.63.
   THUS, FOR EVERY 1 POUND OF SEED MIXTURE SPECIFIED, 1.63 LBS SHOULD BE APPLIED.
   (4) MULCH
   ALL AREAS THAT ARE SEEDED SHALL BE MULCHED. MULCH IS A LOOSE LAYER 3/4" TO 1" DEEP OF CLEAN STRAW. STRAW SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN, AND SHALL BE ANCHORED OR TACKIFIED IMMEDIATELY AFTER APPLICATION WITH POLYMERIC OR GUM TACKIFIERS MIXED AND APPLIED ACCORDING TO MANUFACTURE'S RECOMMENDATIONS. MULCH ON SLOPES OF 8% OR GREATER SHOULD BE HELD IN PLACE WITH NETTING OR EROSION CONTROL BLANKET. MULCH SHALL BE APPLIED AT THE FOLLOWING RATE:
   STRAW = 3 TONS PER ACRE (140 LBS. PER 1,000 S.F.)
   (5) EROSION CONTROL BLANKET
   ALL SLOPES 3:1 OR STEEPER, AS WELL AS ALL DISTURBED AREAS WITHIN 50 FEET OF A SURFACE WATER (WITH 100 FEET FOR HQ OR EV WATERS) MUST BE STABILIZED WITH EROSION CONTROL BLANKET.

CONSTRUCTION SEQUENCE & INSTALLATION NOTES FOR SUBSURFACE INFILTRATION BASINS:

1. INSTALL AND MAINTAIN TEMPORARY EROSION AND SEDIMENT CONTROL BMPS (I.E. SILT FENCE OR COMPOST SILT SOCKS AS INDICATED ON THE PLAN) AROUND THE LIMITS OF THE UNDERGROUND INFILTRATION SYSTEM, PRIOR TO EXCAVATION. RUNOFF FROM CONSTRUCTION AREAS SHOULD NEVER BE ALLOWED TO DRAIN TO INFILTRATION BMPS.
2. EXCAVATE INFILTRATION FACILITY TO DESIGN SUBGRADE ELEVATION, WITH EQUIPMENT THAT WILL NOT COMPACT THE BOTTOM OF THE TRENCH/BASIN. THE EXISTING SUBGRADE UNDER THE BED AREAS SHOULD NOT BE COMPACTED OR SUBJECT TO EXCESSIVE CONSTRUCTION EQUIPMENT TRAFFIC PRIOR TO GEOTEXTILE AND STONE BED PLACEMENT.
3. WHERE EROSION OF SUBGRADE HAS CAUSED ACCUMULATION OF FINE MATERIALS AND/OR SURFACE PONDING, THIS MATERIAL SHOULD BE REMOVED WITH LIGHT EQUIPMENT AND THE UNDERLYING SOILS SCARIFIED TO A MINIMUM DEPTH OF 6 INCHES WITH A YORK RAKE (OR EQUIVALENT) AND LIGHT TRACTOR, PRIOR TO PLACEMENT OF THE AGGREGATE. ALL FINE GRADING SHOULD BE DONE BY HAND. ALL BED BOTTOMS SHOULD BE AT A LEVEL GRADE. ONLY CLEAN AGGREGATE WITH DOCUMENTED POROSITY, FREE OF FINES, SHALL BE ALLOWED.
4. INSTALL UPSTREAM AND DOWNSTREAM CONTROL STRUCTURES.
5. BEFORE INSTALLATION OF THE GEOTEXTILE FILTER FABRIC, A GEOTECHNICAL ENGINEER SHALL INSPECT THE BED FLOOR TO CERTIFY ACCEPTANCE OF SUBGRADE CONDITIONS. ADDITIONALLY, AN AS-BUILT SURVEY SHALL BE COMPLETED TO VERIFY BED ELEVATIONS. GEOTEXTILE AND BED AGGREGATE SHALL THEN BE PLACED IMMEDIATELY AFTER APPROVAL OF SUBGRADE PREPARATION AND INSTALLATION OF UPSTREAM AND DOWNSTREAM CONTROL STRUCTURES. GEOTEXTILE SHOULD BE PLACED IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDATIONS. THE TOPS AND SIDES OF ALL SUBSURFACE FACILITIES SHALL BE COVERED WITH FILTER FABRIC THAT MEETS THE SPECIFICATIONS OF PENNDOT PUBLICATION 408, SECTION 735, CONSTRUCTION CLASS 1. ADJACENT STRIPS OF GEOTEXTILE SHOULD OVERLAP A MINIMUM OF 16 INCHES. IT SHOULD ALSO BE SECURED AT LEAST 4 FEET OUTSIDE OF BED IN ORDER TO PREVENT ANY RUNOFF OR SEDIMENT FROM ENTERING THE STORAGE BED. THIS EDGE STRIP SHOULD REMAIN IN PLACE UNTIL ALL BARE SOILS CONTIGUOUS TO BEDS ARE STABILIZED AND VEGETATED. AS THE SITE IS FULLY STABILIZED, EXCESS GEOTEXTILE ALONG BED EDGED CAN BE CUT BACK TO THE EDGE OF THE BED.
6. CLEAN-WASHED UNIFORMLY GRADED AGGREGATE, WITH DOCUMENTED POROSITY, FREE OF FINES, SHOULD BE PLACE IN THE BED IN MAXIMUM 8-INCH LIFTS. EACH LAYER SHOULD BE LIGHTLY COMPACTED, WITH CONSTRUCTION EQUIPMENT KEPT OFF THE BED BOTTOM AS MUCH AS POSSIBLE.
7. INSTALL PERFORATED DISTRIBUTION PIPES AND CONNECT TO CENTRALIZED CATCH BASINS AND/OR MANHOLES WITH THE PROVISION FOR THE COLLECTION OF DEBRIS. STORMWATER SHALL BE DISTRIBUTED THROUGHOUT THE ENTIRE FACILITY. PERFORM AN AS-BUILT SURVEY TO VERIFY PIPING ELEVATIONS BEFORE BACKFILLING ABOVE TOP OF PIPE.
8. BACKFILL OVER INFILTRATION BED IN MAXIMUM 6-INCH LIFTS, WITH APPROVED SOIL MEDIA.
9. SEED AND STABILIZE TOPSOIL, WHERE APPLICABLE.
10. DO NOT REMOVE INLET PROTECTION OR OTHER EROSION CONTROL MEASURES UNTIL SITE IS FULLY STABILIZED.
11. TO COMPLETELY DEWATER BASIN, OPEN 2" CAPPED WEEP HOLE ORIFICE AT BOTTOM OF OUTLET STRUCTURE.
12. ALL INLETS SHOULD BE INSPECTED AND CLEANED AT LEAST 2 TIMES PER YEAR.
13. VEHICULAR ACCESS ON SUBSURFACE INFILTRATION BASIN SHOULD BE LIMITED AND CARE SHOULD BE TAKEN TO AVOID EXCESSIVE COMPACTION BY MOWERS.

CONSTRUCTION SEQUENCE & INSTALLATION NOTES FOR SUBSURFACE DETENTION BASIN:

1. INSTALL AND MAINTAIN TEMPORARY EROSION AND SEDIMENT CONTROL BMPS (I.E. SILT FENCE OR COMPOST SILT SOCKS AS INDICATED ON THE PLAN) AROUND THE LIMITS OF THE UNDERGROUND SYSTEM, PRIOR TO EXCAVATION. RUNOFF FROM CONSTRUCTION AREAS SHOULD NEVER BE ALLOWED TO DRAIN TO INFILTRATION BMPS.
2. EXCAVATE FACILITY TO DESIGN SUBGRADE ELEVATION. ALL BED BOTTOMS SHOULD BE AT A LEVEL GRADE.
3. INSTALL UPSTREAM AND DOWNSTREAM CONTROL STRUCTURES.
4. BEFORE INSTALLATION OF THE IMPERMEABLE LINER, A GEOTECHNICAL ENGINEER SHALL INSPECT THE BED FLOOR TO CERTIFY ACCEPTANCE OF SUBGRADE CONDITIONS. ADDITIONALLY, AN AS-BUILT SURVEY SHALL BE COMPLETED TO VERIFY BED ELEVATIONS. LINER AND BED AGGREGATE SHALL THEN BE PLACED IMMEDIATELY AFTER APPROVAL OF SUBGRADE PREPARATION AND INSTALLATION OF UPSTREAM AND DOWNSTREAM CONTROL STRUCTURES. LINER SHOULD BE PLACED IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDATIONS.
5. CLEAN-WASHED UNIFORMLY GRADED AGGREGATE, WITH DOCUMENTED POROSITY, FREE OF FINES, SHOULD BE PLACE IN THE BED IN MAXIMUM 8-INCH LIFTS. EACH LAYER SHOULD BE LIGHTLY COMPACTED.
6. INSTALL SOLID DISTRIBUTION PIPES AND CONNECT TO HEADER SYSTEM AND/OR MANHOLES WITH THE PROVISION FOR THE COLLECTION OF DEBRIS. STORMWATER SHALL BE DISTRIBUTED THROUGHOUT THE ENTIRE FACILITY. PERFORM AN AS-BUILT SURVEY TO VERIFY PIPING ELEVATIONS BEFORE BACKFILLING ABOVE TOP OF PIPE.
7. BACKFILL IN MAXIMUM 6-INCH LIFTS, WITH APPROVED SOIL MEDIA.
8. SEED AND STABILIZE TOPSOIL, WHERE APPLICABLE.
9. DO NOT REMOVE INLET PROTECTION OR OTHER EROSION CONTROL MEASURES UNTIL SITE IS FULLY STABILIZED.
10. ALL INLETS SHOULD BE INSPECTED AND CLEANED AT LEAST 2 TIMES PER YEAR.

SECTION 102.22(b) - TEMPORARY SITE STABILIZATION

1. E&S BMPS MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE BMPS.
2. ANY DISTURBED AREA THAT IS NOT AT FINAL GRADE OR WHERE THERE HAS BEEN A CESSATION OF EARTHMOVING ACTIVITY SHALL BE PLANTED WITH A TEMPORARY SEED MIX AND MULCHED. AREAS THAT ARE TO BE EXPOSED FOR MORE THAN ONE YEAR SHALL BE SEEDED WITH PERMANENT SEED MIX AND MULCHED. SEEDBED PREPARATION AND SEEDING METHODS:
   (1) LIME – AGRICULTURAL GRADE LIMESTONE
   A SOIL TEST FROM A REPUTABLE LABORATORY IS RECOMMENDED. IF SOIL TEST RESULTS ARE NOT AVAILABLE, APPLY LIME AT THE FOLLOWING RATE:
   LIME = 1.0 TON PER ACRE (40 LBS. PER 1,000 S.F.)
   (2) FERTILIZER – COMMERCIAL TYPE 10 – 10 – 20
   A SOIL TEST FROM A REPUTABLE LABORATORY IS RECOMMENDED. IF SOIL TEST RESULTS ARE NOT AVAILABLE, APPLY FERTILIZER AT THE FOLLOWING RATE:
   FERTILIZER = 500 LBS. PER ACRE (12.5 LBS. PER 1,000 S.F.)
   (3) TEMPORARY SEED MIXTURE
   ANNUAL RYEGRASS IS A QUICK GERMINATING SPECIES OF GRASS, WHICH CAN BE SEEDED DURING MOST TIME PERIODS. IF YOU PLAN TO LEAVE THE PROJECT DISTURBED AND INACTIVE FOR MORE THAN TWENTY (20) DAYS, TEMPORARY SEEDING SHALL BE APPLIED IMMEDIATELY. IF THE SITE IS TO REMAIN INACTIVE FOR ONE YEAR OR MORE A PERMANENT SEED MIX IS NECESSARY.
   ANNUAL RYEGRASS = 40 LBS. PER ACRE (1 LB. PER 1,000 S.F.)
   (4) MULCH
   ALL AREAS THAT ARE SEEDED SHALL BE MULCHED. MULCHING MAY BE USED AS A TEMPORARY STABILIZATION IN SOME DISTURBED AREAS IN NON-GERMINATING SEASONS. MULCH IS A LOOSE LAYER 3/4" TO 1" DEEP OF CLEAN STRAW. STRAW SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN, AND SHALL BE ANCHORED OR TACKIFIED IMMEDIATELY AFTER APPLICATION. NETTING OR EROSION CONTROL BLANKETS MUST BE INSTALLED ON SLOPES 3:1 AND STEEPER. MULCH SHALL BE APPLIED AT THE FOLLOWING RATE:
   STRAW = 3 TONS PER ACRE (140 LBS. PER 1,000 S.F.)

E&S BMP	MAINTENANCE ACTIVITY	INSPECTION SCHEDULE	ADDITIONAL SPECIFICATIONS
ROCK CONSTRUCTION ENTRANCE	• MAINTAIN THICKNESS TO SPECIFIED DIMENSIONS • REMOVE SEDIMENT DEPOSITED ON PUBLIC ROADWAYS/SIDEWALKS IMMEDIATELY UPON DISCOVERY • IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.	• INSPECT DAILY	• IN HAZARDOUS SITUATIONS WHEN MUD CAUSES SLICK CONDITIONS ON TRAVELED ROADWAYS, PRESSURE WASHING SHALL BE PERFORMED TO THE SATISFACTION OF THE TOWNSHIP. ALL SEDIMENT LADEN WATER GENERATED BY PRESSURE WASHING SHALL BE COLLECTED AND FILTERED THROUGH AN ADEQUATE FILTER CONTROL, SUCH AS A WATER FILTER BAG, PRIOR TO DISCHARGE TO SEWER OR WATER COURSE. • REMOVAL OF MUD OR DEBRIS FROM THE HIGHWAY SHALL BE AT THE EXPENSE OF THE RESPONSIBLE CONTRACTOR AND/OR DEVELOPER.
PUMPED WATER FILTER BAG	• REPLACE BAGS WHEN THEY BECOME 1/2 FULL OF SEDIMENT	• INSPECT BAGS DAILY	• IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED
SUPER SILT AND FILTER FABRIC FENCE (18"&30")	• SEDIMENT SHALL BE REMOVED AS REQUIRED TO KEEP FENCE FUNCTIONAL AND WHEN SEDIMENT ACCUMULATIONS REACH ONE-HALF (1/2) THE ABOVE GROUND HEIGHT OF THE FENCE. • ALL UNDERCUTTING OR EROSION OF THE TOE ANCHOR SHALL BE REPAIRED IMMEDIATELY WITH COMPACTED BACKFILL MATERIAL	• INSPECT WEEKLY AND AFTER EACH MEASURABLE RAINFALL EVENT	• ANY NECESSARY REPAIRS SHALL BE MADE IMMEDIATELY. • ADHERE TO ALL MANUFACTURERS' RECOMMENDATIONS FOR REPLACING FILTER FABRIC FENCE DUE TO WEATHERING. • ANY SECTION OF FILTER FABRIC FENCE THAT HAS BEEN UNDERMINED OR TOPPLED MUST BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET.
ROCK FILTER OUTLET	• SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET.	• INSPECT WEEKLY AND AFTER EACH MEASURABLE RAINFALL EVENT	• TO BE INSTALLED UPON FAILURE OF SILT FENCE DUE TO CONCENTRATED FLOW
COMPOST FILTER SOCK	• SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE ABOVEGROUND HEIGHT OF THE SOCK	• INSPECT WEEKLY AND AFTER EACH MEASURABLE RAINFALL EVENT	• DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION. BIODEGRADABLE FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
SEEDING AND MULCHING	• SEEDED AREAS THAT HAVE WASHED AWAY SHALL BE FILLED AND REGRADED AS NECESSARY, RESEEDED, AND MULCHED. • PROMPTLY REAPPLY MULCH MATERIALS, WHICH BECOME DISLODGED OR LOST, DUE TO WIND, RAIN, FIRE, OR OTHER CAUSES, AT INITIAL OR MODIFIED RATES, AS DIRECTED.	• PROPERLY MAINTAIN SEEDED AND MULCHED AREAS UNTIL THE ENTIRE PROJECT HAS BEEN COMPLETED. • REFER TO TEMPORARY AND PERMANENT SEEDING SPECIFICATIONS FOR ADDITIONAL DETAIL	• REPAIR/REPLACE ACCORDING TO MANUFACTURER'S SPECIFICATIONS
EROSION CONTROL BLANKET	• DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.	• INSPECT WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA.	• AFTER MULCHING WORK ON A SLOPE HAS BEEN SATISFACTORILY COMPLETED, IF SLOPE FAILURE OCCURS (ONE WHICH REQUIRES REDRESSING, EXCAVATION, OR THE ESTABLISHMENT OF A NEW SLOPE) REPLACE THE MULCH AS DIRECTED.
INLET FILTER BAG	• BAGS SHOULD BE CLEANED AND/OR REPLACED WHEN THE BAG HIS HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET.	• INSPECT WEEKLY AND AFTER EACH MEASURABLE RAINFALL EVENT	• DAMAGED FILTER BAGS SHOULD BE REPLACED.
VEGETATED CHANNELS	• CHANNEL SHALL BE CLEANED WHENEVER TOTAL CHANNEL DEPTH IS REDUCED BY 25% AT ANY LOCATION. • SEDIMENT DEPOSITS SHALL BE REMOVED WITHIN 24 HOURS OF DISCOVERY OR AS SOON AS SOIL CONDITIONS PERMIT ACCESS TO CHANNEL WITHOUT FURTHER DAMAGE. • DAMAGED LININGS SHALL BE REPAIRED/REPLACED WITHIN 48 HOURS OF DISCOVERY.	• INSPECT WEEKLY AND AFTER EACH MEASURABLE RAINFALL EVENT	• CHANNEL DIMENSIONS SHALL BE CONSTANTLY MAINTAINED. • DAMAGED FILTER BAGS SHOULD BE REPLACED.
RIPRAP APRONS AND LEVEL SPREADERS	• DISPLACED RIPRAP SHALL BE REPLACED IMMEDIATELY. • AREAS UNDERCUT BY EROSION SHALL BE REPAIRED AND RESEEDED IMMEDIATELY.	• INSPECT WEEKLY AND AFTER EACH MEASURABLE RAINFALL EVENT	• SEDIMENT DEPOSITS SHALL BE REMOVED WHEN IT REACHES HALF THE HEIGHT OF THE CONCRETE LEVEL SPREADER.
SKIMMERS	• ANY MALFUNCTIONING SKIMMER SHALL BE REPAIRED OR REPLACED WITHIN 24 HOURS OF INSPECTION. • ICE OR SEDIMENT BUILDUP AROUND THE PRINCIPAL SPILLWAY SHALL BE REMOVED IMMEDIATELY.	• INSPECT WEEKLY AND AFTER EACH MEASURABLE RAINFALL EVENT	• REPAIR/REPLACE ACCORDING TO MANUFACTURER'S SPECIFICATIONS
SEDIMENT BASINS AND TRAPS	• SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED THE CLEAN OUT ELEVATION ON THE STAKE AND THE BASIN SHALL BE RESTORED TO ITS ORIGINAL DIMENSIONS. • EMBANKMENTS, SPILLWAYS AND OUTLETS SHALL BE INSPECTED FOR EROSION, PIPING AND SETTLEMENT AND REPAIRS MADE IMMEDIATELY.	• INSPECT WEEKLY AND AFTER EACH MEASURABLE RAINFALL EVENT	• TRASH AND OTHER DEBRIS SHALL BE REMOVED IMMEDIATELY UPON DISCOVERY

HUNTINGDON VALLEY SHOPPING CENTER

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NO.	DATE	COMMENT

REVISIONS

EROSION & SEDIMENT CONTROL NOTES

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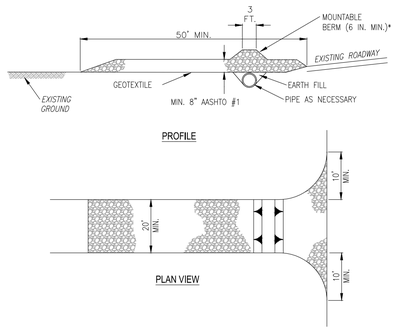
COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL ENGINEER
WAYNE R. KIEFER
NO. 053680-E

SCALE: AS SHOWN
DATE: 2/18/2022
JOB NO.: 2019–92
DRAWN BY: LZ
CHECKED BY: WK

SITUATE: ABINGTON TOWNSHIP
MONTGOMERY COUNTY,PA.
PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET
10 OF 14



NOTES:

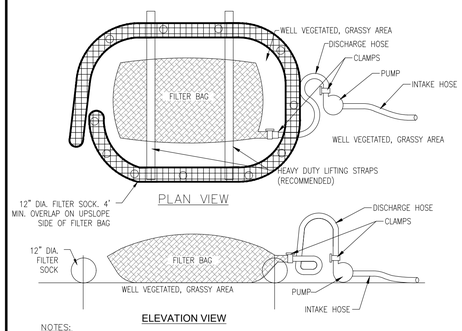
REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.

RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

STANDARD CONSTRUCTION DETAIL #3-1
ROCK CONSTRUCTION ENTRANCE
NOT TO SCALE



NOTES:

LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE FOLLOWING STANDARDS:

PROPERTY	TEST METHOD	MINIMUM STANDARD
AVG. WIDE WIDTH STRENGTH	ASTM D-4884	60 LB/IN
GRAB TENSILE	ASTM D-4632	205 LB
PUNCTURE	ASTM D-4833	110 LB
MULLEN BURST	ASTM D-3786	350 PSI
UV RESISTANCE	ASTM D-4355	70%
AOS % RETAINED	ASTM D-4751	80 SIEVE

A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED.

BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED. BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED.

BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%. FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS. NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.

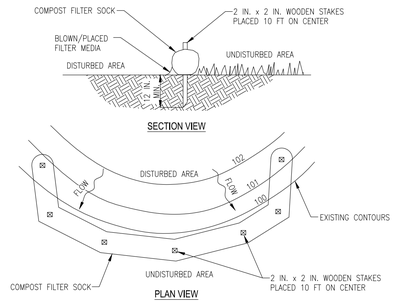
THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.

THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.

FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

STANDARD CONSTRUCTION DETAIL #3-16
PUMPED WATER FILTER BAG
NOT TO SCALE

(FILTER BAG SHALL BE SURROUNDED BY COMPOST SOCK AND OPERATED IN CONJUNCTION WITH A SUMP PIT. SEE DETAIL #3-17)



NOTES:

SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.

COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.

TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.

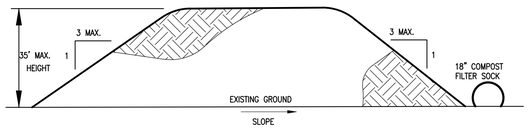
ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.

COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. S SPECIFICATIONS OR DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER REPLACED WITHIN 24 HOURS OF INSPECTION.

BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED S RECOMMENDATIONS.

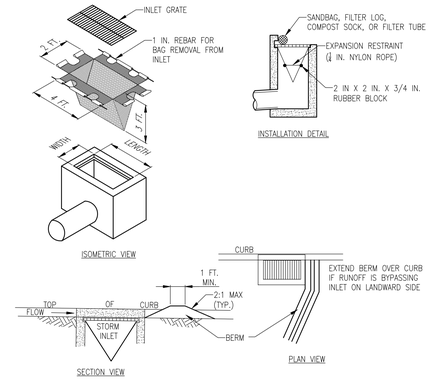
ACCORDING TO MANUFACTURER UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

STANDARD CONSTRUCTION DETAIL #4-1
COMPOST FILTER SOCK
NOT TO SCALE



1. SILT SOCK SHALL BE PLACED AROUND TOPSOIL STOCKPILES TO PREVENT SEDIMENT FROM LEAVING THE SITE. IT SHOULD BE STAKED PER THE SILT SOCK DETAILS AS SHOWN ON THE PLAN.
2. SEED STOCKPILE PER TEMPORARY SEEDING SPECIFICATIONS.

STANDARD CONSTRUCTION DETAIL
TOPSOIL STOCKPILE
NOT TO SCALE



NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT.
AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

STANDARD CONSTRUCTION DETAIL #4-15
FILTER BAG INLET PROTECTION - TYPE C INLET
NOT TO SCALE

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE-STOP CALL

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NO.	DATE	COMMENT

REVISIONS

HUNTINGDON VALLEY SHOPPING CENTER

EROSION & SEDIMENT CONTROL DETAILS

R. L. Showalter & Associates, Inc.
116 East Butler Avenue
Chalfont, PA 18914
(215) 822-2990
FAX (215) 822-5684
• Engineering • Planning • Surveying •

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
WAYNE R. KIEFER
ENGINEER
NO. 053680-E

SCALE: AS SHOWN
DATE: 2/18/2022
JOB NO.: 2019-92
DRAWN BY: LZ
CHECKED BY: WK

SITUATE: ABINGTON TOWNSHIP
MONTGOMERY COUNTY,PA.
PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET
11 OF 14

Plotted: 02/17/22 - 5:29 PM, By: wkiefer
File: F:\DWG\2019\2019-092 - Kravco HVSC - Abington\ENGINEERING\2019-092_Chipotle Plan.dwg-11-ECP-DET
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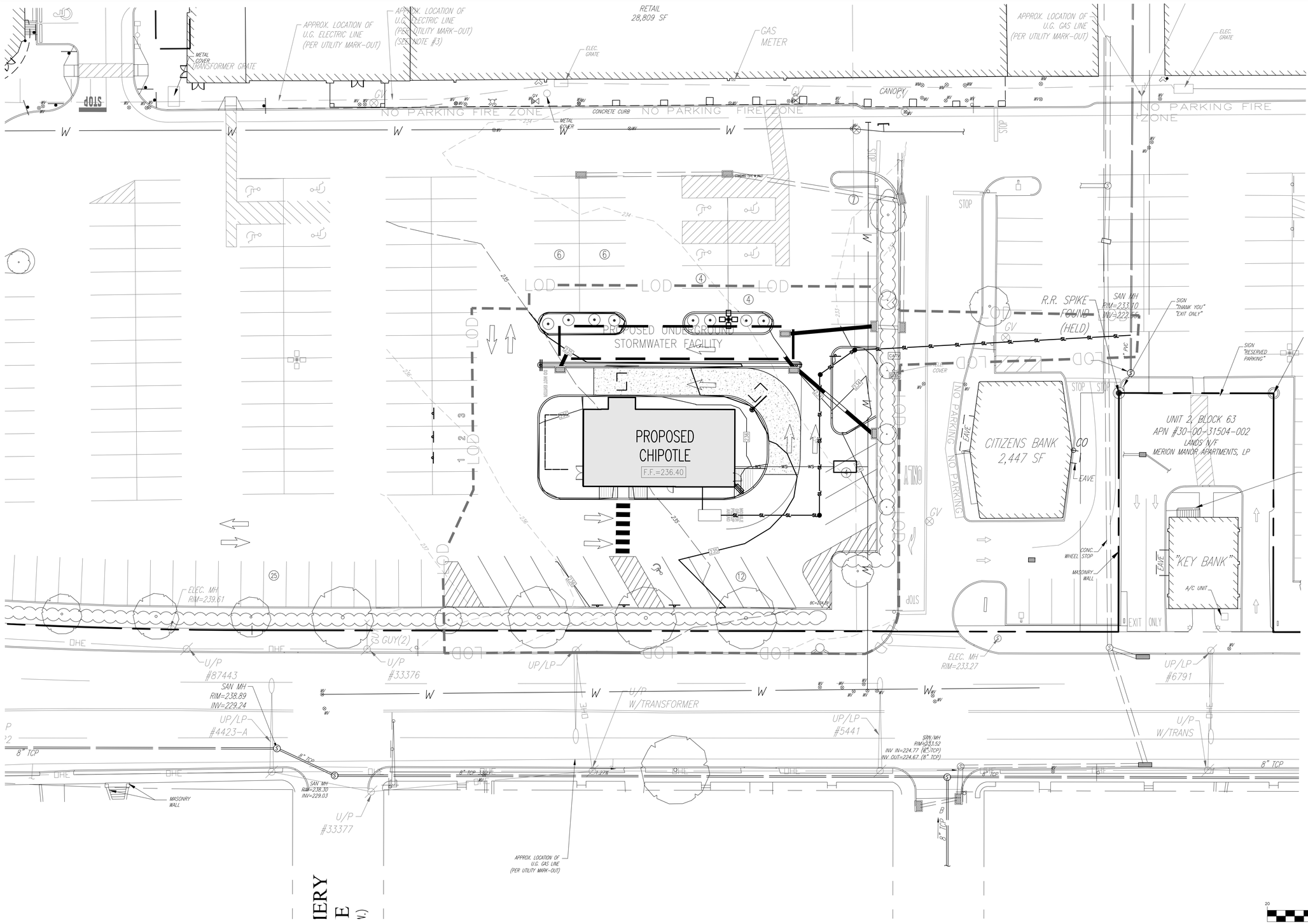

STORMWATER MANAGEMENT LANDOWNER ACKNOWLEDGEMENT

THE STORMWATER MANAGEMENT SYSTEM SHALL BE A PERMANENT FIXTURE THAT CAN BE ALTERED OR REMOVED ONLY AFTER APPROVAL OF A REVISED PLAN BY ABINGTON TOWNSHIP. I/WE, THE UNDERSIGNED OWNER'S ACKNOWLEDGE THE RESPONSIBILITIES ASSOCIATED WITH OWNERSHIP AND MAINTENANCE OF THE STORMWATER MANAGEMENT FACILITY; AND GIVES THE TOWNSHIP THE RIGHT, BUT NOT THE OBLIGATION, TO ACCESS THE SITE TO VERIFY THAT THE STORMWATER FACILITY IS BEING MAINTAINED IN ACCORDANCE WITH THE APPROVED PLAN. THE STORMWATER FACILITY MAY NOT BE REMOVED AND/OR ALTERED WITHOUT WRITTEN APPROVAL OF ABINGTON TOWNSHIP.

KRAVCO COMPANY, LLC, APPLICANT (DATE)

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

HUNTINGDON VALLEY SHOPPING CENTER

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE–STOP CALL

PENNSYLVANIA ONE CALL SYSTEM, INC.

1–800–242–1776

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NO.	DATE	COMMENT

REVISIONS

POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

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COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL WAYNE R. KIEFER ENGINEER NO. 059804

SCALE:	1"=20'
DATE:	2/18/2022
JOB NO.:	2019–92
DRAWN BY:	LZ
CHECKED BY:	WK

SITUATE: ABINGTON TOWNSHIP
MONTGOMERY COUNTY,PA.
PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET 12 OF 14

Plotted: 02/17/22 – 5:29 PM, By: ekiefer
File: F:\DWG\2019\2019-092 – Kravco HVSC – Abington\ENGINEERING\2019-092_Chipotle Plan.dwg=12-PCSM
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KRAVCO COMPANY, LLC.
375 E. ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SECTION 102.8(b) - GENERAL PCSM PLANNING AND DESIGN

THE PCSM PLAN MINIMIZES IMPERVIOUS AREAS
THE SITE HAS EXISTING IMPERVIOUS COVER CONSISTING OF BUILDINGS, DRIVE AISLES AND PARKING AREAS. TO THE FURTHEST EXTENT POSSIBLE, THE EXISTING IMPERVIOUS AREAS WILL BE REUSED, THE PROPOSED IMPERVIOUS COVER WILL NOT CREATE A NET INCREASE OF ADDITIONAL IMPERVIOUS AREA.

THE PCSM PLAN MAXIMIZES PROTECTION OF EXISTING DRAINAGE FEATURES AND VEGETATION.
THE EXISTING DISCHARGE POINTS FROM THE SITE ARE TO REMAIN UNCHANGED AND THEREFORE PROTECTED FROM CONSTRUCTION ACTIVITIES. EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED TO PROTECT THE INTEGRITY OF THE WATER QUALITY. NO TREES ARE PROPOSED TO BE DISTURBED.

THE PCSM PLAN MINIMIZES LAND CLEARING AND GRADING
THE SITE HAS EXISTING IMPERVIOUS COVER CONSISTING OF BUILDINGS, DRIVE AISLES AND PARKING AREAS. NO FURTHER PERVIOUS AREAS ARE TO BE CLEARED AND GRADED. THE AREA TO BE CLEARED AND GRADED HAS BEEN MINIMIZED.

THE PCSM PLAN MINIMIZES SOIL COMPACTION
THE EXTENT OF EARTH DISTURBANCE HAS BEEN LIMITED TO THE GREATEST EXTENT POSSIBLE IN ORDER TO CONSTRUCT THE PROPOSED IMPROVEMENTS. THE EROSION & SEDIMENT CONTROL PLAN MINIMIZES SOIL COMPACTION BY NOT DISTURBING PORTIONS OF THE EXISTING GRASS AREA NOT NECESSARY FOR CONSTRUCTION AND PROTECTING PROPOSED INFILTRATION FACILITIES FROM CONSTRUCTION TRAFFIC. UNDER THE CONSTRUCTION SEQUENCE ON THE EROSION AND SEDIMENT CONTROL PLANS THE CONTRACTOR MUST MARK OUT LIMITS OF THE INFILTRATION BASIN TO PROTECT THEM FROM EXCESSIVE COMPACTION.

THE PCSM PLAN UTILIZES OTHER STRUCTURAL AND NONSTRUCTURAL BMPS THAT PREVENT OR MINIMIZE CHANGES IN STORMWATER RUNOFF
THE PCSM PLAN PROPOSES A VARIETY OF STRUCTURAL AND NONSTRUCTURAL BMPS THAT WILL PROTECT OFF SITE WATERS FROM CONSTRUCTION ACTIVITIES. STORMWATER RUNOFF WILL BE SLOWED AT EACH BMP. IN ADDITION, CONSTRUCTION OF THE INFILTRATION BASIN PRIOR TO THE NEW IMPERVIOUS AREAS WILL ENSURE THAT THE DISCHARGE RATE FROM THE SITE IS LESS THAN IT WAS PRIOR TO THE START OF CONSTRUCTION.

SECTION 102.8(f)(2) - SOIL USE LIMITATIONS AND RESOLUTIONS:

IT IS ANTICIPATED THAT THE ONSITE SOILS WILL BE CAPABLE OF SUPPORTING THE TYPE OF CONSTRUCTION PROPOSED WITH PROPER SITE PREPARATION AND EROSION CONTROL PRACTICE. WHERE SOIL LIMITATION IS ENCOUNTERED, REFER TO THE FOLLOWING RESOLUTIONS:

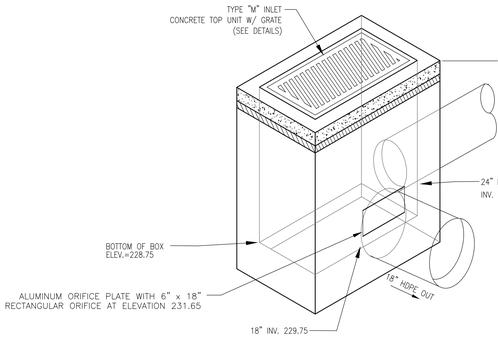
- CUT BANKS CAVE – TRENCHES AND EXCAVATIONS ARE REQUIRED TO BE SHORED WHEN THEIR DEPTH CREATES A HAZARD. ALL APPLICABLE OSHA STANDARDS AND REGULATIONS MUST BE IMPLEMENTED AT ALL TIMES.
- CORROSIVE TO CONCRETE AND STEEL – PROPOSED PIPES ARE NEARLY ALL HDPE WHICH WILL PROTECT FROM CORROSIVE SOILS. THE CONCRETE INLET BOXES, MANHOLE SAND ELLIPTICAL PIPES SHOULD BE COATED TO PREVENT CORROSION.
- DROUGHTY – DROUGHTY SOILS ARE A LIMITATION TO CROPS SUCH AS CORN AND SOY. SINCE THIS PROJECT PROPOSES NO CROPS, THIS LIMITATION SHOULD NOT HINDER THE PROPOSED IMPROVEMENTS.
- EASILY ERODIBLE – AREAS OF EARTH DISTURBANCE ARE PROTECTED BY EROSION CONTROL BMP'S. IN AREAS OF EASILY ERODIBLE SOILS, EROSION CONTROL BLANKETS MAY BE USED FOR SHORT DURATIONS ALONG WITH TEMPORARY AND/OR PERMANENT VEGETATION AND MULCH AS NEEDED.
- FLOODING – IN CASE OF EXCAVATIONS FILLING WITH WATER, A PUMPED FILTER BAG SHOULD BE USED TO DEWATER THE EXCAVATION.
- DEPTH TO SATURATED ZONE – TESTING SPECIFIC TO THIS SITE SHOWS THAT THE SATURATED ZONE WILL NOT BE ENCOUNTERED DURING CONSTRUCTION OF PROPOSED IMPROVEMENTS.
- HYDRIC INCLUSIONS – THE USDA NRCS WEB SOIL SURVEY LISTS ALL ON SITE SOILS AS NOT MEETING HYDRIC CRITERIA. WHERE IT IS NECESSARY TO CONSTRUCT ON OR NEAR HYDRIC SOILS, SPECIAL CARE SHALL BE TAKEN TO MINIMIZE DISTURBANCE AND CONFIRM WITH APPLICABLE STATE AND FEDERAL PERMIT REQUIREMENTS.
- LAND SLIDE PRONE – THE DEPTH OF EXCAVATIONS AND SLOPES ON SITE WILL NOT BE ENOUGH TO HAVE A LAND SLIDE. TO PROTECT EXCAVATIONS FROM CAVING, SHORING IS REQUIRED WHEN EXCAVATION DEPTHS CREATE A HAZARD.
- SLOW PERCOLATION – DUE TO THE CONTAMINANTS ON THE SITE, INFILTRATION BMPS PERCOLATING INTO THE GROUND ARE NOT PROPOSED THEREFORE, PERCOLATION RATE ARE NOT RELEVANT.
- PIPING – ALL PIPES WILL BE UNDERGROUND. NO PIPES WILL BE INSTALLED THROUGH EMBANKMENTS THEREFORE THE DANGERS OF PIPING ARE NOT PRESENT.
- POOR SOURCE OF TOPSOIL – THE SOILS ON SITE ARE NOT EXPECTED TO BE USED AS TOP SOIL. CONTAMINATED SOILS ENCOUNTERED CAN NOT BE REUSED ON SITE. IF UNSUITABLE TOPSOIL IS NOT PRESENT, SOIL WILL BE IMPORTED.
- FROST ACTION – PAVEMENT AND SIDEWALK SHOULD BE INSTALLED IN ACCORDANCE WITH DETAILS TO LIMIT DAMAGE CAUSED BY FROST ACTION. IF CRACKING OCCURS, REPLACEMENT OR OVERLAY MAY BECOME NECESSARY IN THE FUTURE.
- WETNESS – FOR THE IMPROVEMENTS BEING PROPOSED, SOIL WETNESS SHOULD NOT BE A PROBLEM. IF HOWEVER, PONDING OCCURS, A PUMPED FILTER BAG SHOULD BE USED TO DEWATER THE AREA.

PERMANENT CONTROL MEASURES FOR LONG TERM PROTECTION DURING EARTHMOVING:

A. PERMANENT SEEDING – AREAS NOT PAVED SHALL BE SEEDED WITH PERMANENT SEED MIXTURE AND MULCHED.
SEEDBED PREPARATION AND SEEDING METHODS:
1. LIME – AGRICULTURAL GRADE LIMESTONE
A SOIL TEST FROM A REPUTABLE LABORATORY IS RECOMMENDED. IF SOIL TEST RESULTS ARE NOT AVAILABLE, APPLY LIME AT THE FOLLOWING RATE:
LIME – 6 TONS PER ACRE, 275 LBS. PER 1,000 S.F.
2. FERTILIZER – COMMERCIAL TYPE 10–20–20
A SOIL TEST FROM A REPUTABLE LABORATORY IS RECOMMENDED. IF SOIL TEST RESULTS ARE NOT AVAILABLE, APPLY FERTILIZER AT THE FOLLOWING RATE:
FERTILIZER – 1000 LBS. PER ACRE, 25 LBS. PER 1000 S.F.
3. PERMANENT SEED MIXTURE
NOTE: ANNUAL RYEGRASS IS TO BE SEEDED WITH ALL PERMANENT SEED MIXES AS A COVER/NURSE CROP.
ANNUAL RYEGRASS SEEDING RATE: 40 LBS. PER ACRE, 1 LB. PER 1,000 S.F.
TURF LAWN AND MOWED AREAS (SUNNY):
PERMANENT SEED MIX:
60% KENTUCKY BLUEGRASS
20% CHEWINGS FESCUE
20% PERENNIAL RYEGRASS
SEEDING RATE: 4LBS./1,000 S.F. OR 170 LBS./ACRE
PLANTING DATES: 4/1 – 5/31 AND 8/6 – 10/15
NOTE: ALL MIXTURE GIVEN ABOVE ARE FOR PLS (PURE LIVE SEED) 100%. TO CALCULATE PLS, THE PERCENTAGE OF PURE LIVE SEED IS MULTIPLIED BY THE PERCENTAGE OF GERMINATION, AND THE PRODUCT IS DIVIDED BY ONE HUNDRED (100).
TO DETERMINE HOW MUCH SEED TO PLANT, DIVIDE THE PERCENTAGE INTO ONE HUNDRED (100).
EXAMPLE: 100 DIVIDED BY 61 = 1.63. THUS, EVERY POUND OF SEED MIXTURE CALLED FOR SHOULD THEN BE 1.63 LBS.

B. MULCH – STRAW
ALL AREAS THAT ARE SEEDED SHOULD BE MULCHED. MULCH IS A LOOSE LAYER THREE FOURTHS OF AN INCH TO ONE INCH (3/4" TO 1") DEEP OF CLEAN STRAW. MULCH REDUCES SOIL EROSION, AID SEED GERMINATION, AND CONSERVES MOISTURE. STRAW SHOULD NOT BE CHOPPED OR FINELY BROKEN DURING APPLICATION. MULCH SHOULD BE APPLIED AS FOLLOWS:
MULCH – 3 TONS PER ACRE, 140 LBS. PER 1,000 S.F.

C. VEGETATIVE SURFACE STABILIZATION:
1. REFER TO THE ACCOMPANYING PLAN(S) AND SPECIFICATIONS PERTAINING TO PERMANENT SEEDING.
2. ALL DISTURBED AREAS SHALL BE STABILIZED AS SOON AS POSSIBLE AFTER FINAL GRADES HAVE BEEN ESTABLISHED. REFER TO "STAGING OF EARTHMOVING ACTIVITIES" FOR THE SEQUENCE.
3. DURING NON–GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE RECOMMENDED RATES.
4. ON STEEP SLOPES, EROSION CONTROL MATTING SHOULD BE USED TO HOLD SEED AND TOPSOIL IN PLACE. SLOPE STEEPNESS, SLOPE LENGTH, SOIL ERODIBILITY, AND CUT OR FILL CONDITION SHOULD BE CONSIDERED IN DETERMINING NEED FOR MATTING OR THE MULCH TACKING METHODS.
5. SURFACE ROUGHENING SHOULD BE APPLIED TO ALL SLOPES 3:1 OR STEEPER UNLESS A STABLE ROCK FACE IS PROVIDED. SLOPE TRACKING MAY BE USED. PERFORM TRACKING BY RUNNING TRACKED MACHINERY UP AND DOWN THE SLOPE AND LEAVING TRACK MARKS PARALLEL TO THE CONTOUR.

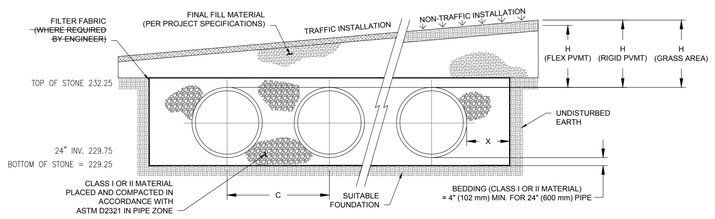


OUTLET STRUCTURE A DETAIL
N.T.S.

SECTION 102.8(f)(10) - PCSM BMP LONG-TERM OPERATION, MAINTENANCE, AND INSPECTION SCHEDULE

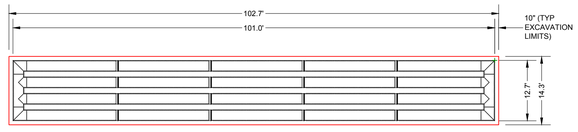
1. STORMWATER MANAGEMENT MAINTENANCE RESPONSIBILITY – THE STORMWATER MANAGEMENT FACILITIES WITHIN PRIVATE RIGHTS–OF–WAY SHALL BE OWNED AND MAINTAINED BY A HOMEOWNERS ASSOCIATION, OR EQUIVALENT, AND ARE ULTIMATELY THE RESPONSIBILITY OF THE PROPERTY OWNER. THE STORMWATER MANAGEMENT FACILITIES WITHIN PUBLIC RIGHTS–OF–WAY SHALL BE OWNED AND MAINTAINED BY THE MUNICIPALITY. ANY STORMWATER FACILITIES LOCATED OUTSIDE OF THE PROPOSED RIGHTS–OF–WAY SHALL BE CONTAINED WITHIN AN EASEMENT AS REQUIRED FOR PROPER ACCESS. THE HOA, OR EQUIVALENT, SHALL BE RESPONSIBLE FOR THE INSPECTION AND MAINTENANCE OF THE STORMWATER FACILITIES LOCATED ON THE BUILDING LOTS. A BLANKET EASEMENT IS HEREBY OFFERED TO THE MUNICIPALITY FOR THE PURPOSE OF INSPECTION, MAINTENANCE, AND ACCESS TO ANY STORMWATER FACILITIES NOT LOCATED WITHIN THEIR PUBLIC RIGHT–OF–WAY.
2. IT IS THE RESPONSIBILITY OF THE PROPERTY OWNER (OR DESIGNEE) TO COMPLETE A WRITTEN REPORT DOCUMENTING EACH INSPECTION AND ALL BMP REPAIR, OR REPLACEMENT AND MAINTENANCE ACTIVITIES. A LOG SHOWING DATES THAT BMPS WERE INSPECTED, AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED, SHALL BE MAINTAINED ON–SITE AND BE MADE AVAILABLE TO THE REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.
3. ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOOD PLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES.
4. IT SHALL BE UNLAWFUL TO ALTER OR REMOVE THE PERMANENT STORMWATER CONTROLS AND BMPS OR TO ALLOW THE PROPERTY TO REMAIN IN A CONDITION WHICH DOES NOT CONFORM TO THE APPROVED POST CONSTRUCTION STORMWATER MANAGEMENT PLAN.
5. THE PROPERTY OWNER OR THEIR DESIGNATED RESPONSIBLE PARTY SHALL NOTIFY THE TOWNSHIPS OF ANY PROBLEMS OR FAILURES OBSERVED IN THE STORMWATER SYSTEM, INCLUDING SURFACE PONDING.

PCSM BMP	MAINTENANCE ACTIVITY	INSPECTION SCHEDULE	ADDITIONAL SPECIFICATIONS, POTENTIAL FAILURES & CORRECTIVE MEASURES
STORM SEWER INLETS AND MANHOLES	• INLET GRATES SHOULD BE PULLED AND THE INSIDE OF THE INLET BOX SHOULD BE VISUALLY INSPECTED FOR SEDIMENT AND DEBRIS. ANY SEDIMENT FOUND SHOULD BE REMOVED AND ANY BLOCKAGE OF THE PIPES SHOULD BE CLEARED.	• INSPECT ANNUALLY AND AFTER EACH MAJOR RAINFALL EVENT	• X
STORM SEWER PIPES	• INSPECT FOR SEDIMENT AND DEBRIS AND FLUSH CLEAN WITH GARDEN HOSE OR OTHER FORM OF A FLUSHING SYSTEM	• INSPECT ANNUALLY AND AFTER EACH MAJOR RAINFALL EVENT	• X
SEEDING AND MULCHING	• SEED OR SOD TO RESTORE DEAD OR DAMAGED GROUND COVER • SEEDED AREAS THAT HAVE WASHED AWAY SHALL BE FILLED AND REGRADED AS NECESSARY, RESEEDED, AND MULCHED.	• ANNUAL MAINTENANCE AS NEEDED	• REPAIR/REPLACE ACCORDING TO MANUFACTURER'S SPECIFICATIONS
VEGETATED CHANNELS	• INSPECT FOR EROSION AND DAMAGE TO VEGETATION. • TRIM OR MOW VEGETATION TO CONTROL WEEDS • RILLS AND GULLIES MAY BE FILLED WITH TOPSOIL, STABILIZED AND SEEDED. RESEED BARE AREAS. • INSPECT FOR SEDIMENT ACCUMULATIONS AND DEBRIS AND REMOVE SEDIMENT AND DEBRIS WHEN TOTAL CHANNEL DEPTH IS REDUCED BY 25% AT ANY LOCATION.	• INSPECT QUARTERLY FOR THE FIRST TWO YEARS FOLLOWING INSTALLATION, AND THEN ON A BI–ANNUAL BASIS THEREAFTER AND AFTER EACH MAJOR RAINFALL EVENT	• CHANNEL DIMENSIONS SHALL BE CONSTANTLY MAINTAINED. • MULCHING OR AERATION MAY BE REQUIRED TO RESTORE SOIL STRUCTURE AND MOISTURE CAPACITY • UNWANTED OR INVASIVE VEGETATION SHOULD BE REMOVED ON AN ANNUAL BASIS
RIPRAP APRONS AND LEVEL SPREADERS	• DISPLACED RIPRAP SHALL BE REPLACED. • AREAS UNDERCUT BY EROSION SHALL BE REPAIRED AND RESEEDED. • INSPECT INLETS AND STRUCTURES DRAINING TO LEVEL SPREADER AND REMOVE SEDIMENT AND DEBRIS	• INSPECT QUARTERLY FOR THE FIRST TWO YEARS FOLLOWING INSTALLATION, AND THEN ON A BI–ANNUAL BASIS THEREAFTER AND AFTER EACH MAJOR RAINFALL EVENT	• SEDIMENT DEPOSITS SHALL BE REMOVED WHEN IT REACHES HALF THE HEIGHT OF THE CONCRETE LEVEL SPREADER. • SHEET FLOW CONDITIONS SHALL BE SUSTAINED THROUGHOUT THE LIFE OF THE LEVEL SPREADER • MAINTAIN VIGOROUS VEGETATIVE COVER ON THE AREAS BELOW THE LEVEL SPREADER
RAIN GARDEN OR BIORETENTION BASIN **(BMP 6.4.5)**	• WATER PLANTS REGULARLY UNTIL THEY BECOME ESTABLISHED • INSPECT FOR TRASH OR SEDIMENT • INSPECT DRAW–DOWN TIME TO ENSURE BASIN DRAINS BETWEEN 24 AND 72 HOURS • INSPECT GRASS TO ENSURE THERE ARE NO BARE SPOTS • WEED, PRUNE AND REMOVED DEAD VEGETATION IN THE SPRING SEASON	• INSPECT STRUCTURES QUARTERLY FOR THE FIRST TWO YEARS FOLLOWING INSTALLATION, AND THEN ON A BI–ANNUAL BASIS THEREAFTER AND AFTER EACH MAJOR RAINFALL EVENT • INSPECT/REPLACE STONE AND GEOTEXTILE EVERY 5 TO 7 YEARS AS NEEDED	• REMOVE TRASH AND SEDIMENT AND DISPOSE OF IN ACCORDANCE WITH LOCAL AND STATE REGULATIONS • MULCH WITH LEAF COMPOST OR SHREDDED WOOD EVERY 2 TO 3 YEARS. AVOID WOOD CHIPS.
CONSTRUCTED FILTER **(BMP 6.4.7)**	• REMOVE CLEANOUT CAPS OR INLET GRATES AND INSPECT FOR CLOGGING. REMOVE ACCUMULATED LEAVES, TWIGS, SEDIMENT, AND OTHER DEBRIS AS REQUIRED TO KEEP THE DRAINAGE SYSTEM CLEAN. • IF AFTER INSPECTION IT IS DETERMINED THAT SEDIMENT NEEDS TO BE REMOVED, INJECT SYSTEM WITH WATER, SUSPEND SILT, AND PUMP CHAMBER. • GRASS CLIPPINGS SHALL BE COLLECTED AND REMOVED TO PREVENT CLOGGING OF THE FACILITY. FALLEN LEAVES SHALL BE COLLECTED AND REMOVED WEEKLY DURING THE FALL SEASON. • INSPECT INFLOW AND OUTFLOW STRUCTURES FOR UNDERCUT OR ERODED AREAS, WETNESS OR DAMAGE AND REPAIR AS NEEDED. • REMOVE STONE AND GEOTEXTILE TO EFFECTIVELY REMOVE BUILT UP SEDIMENT. REPLACE GEOTEXTILE AND STONE.	• INSPECT STRUCTURES QUARTERLY FOR THE FIRST TWO YEARS FOLLOWING INSTALLATION, AND THEN ON A BI–ANNUAL BASIS THEREAFTER AND AFTER EACH MAJOR RAINFALL EVENT • INSPECT/REPLACE STONE AND GEOTEXTILE EVERY 5 TO 7 YEARS AS NEEDED	• VEHICULAR ACCESS ON ABSORPTION BED AREA SHALL BE PROHIBITED AND CARE SHALL BE TAKEN TO AVOID EXCESSIVE COMPACTION BY MOWERS. • 100 PERCENT VEGETATIVE COVER BY HERBACEOUS SPECIES SHALL BE MAINTAINED THROUGHOUT ALL EMBANKMENTS AND LAWN AREAS WITH DIRECT DISCHARGE TO THE UNDERGROUND FACILITY. ANY AREA BECOMING VOID OF VEGETATION SHALL BE IMMEDIATELY CORRECTED BY REPLANTING OR OTHER ADEQUATE MEASURES NECESSARY TO PREVENT EROSION THAT MAY JEOPARDIZE THE POROSITY OF THE SYSTEM. AT NO TIME SHALL MULCH BE USED ON SLOPES OF DIRECT DRAINAGE TO THE UNDERGROUND FACILITY. • NOTE SIGNS OF PETROLEUM HYDROCARBON CONTAMINATION AND HANDLE PROPERLY. • MULCH WITH LEAF COMPOST OR SHREDDED WOOD EVERY 2 TO 3 YEARS. AVOID WOOD CHIPS.
LANDSCAPING (REVEGETATE DISTURBED AREAS) **(BMP 5.6.3)**	• WATERING, CULTIVATING, WEEDING, MULCHING, CONTROL OF INSECTS AND DISEASES, AND PRUNING • RESET TREES TO PROPER GRADES AND/OR VERTICAL POSITION AS REQUIRED	• AS NEEDED TO MAINTAIN PROPER GROWTH AND APPEARANCE OF PLANT MATERIAL • PERFORM APPROPRIATE SEASONAL MAINTENANCE	• SHOULD ANY PLANTS APPEAR TO BE IN POOR HEALTH OR LACK NORMAL GROWTH HABIT, THEY SHALL BE REMOVED AT ONCE AND REPLACED



NOMINAL DIAMETER	NOMINAL O.D.	TYPICAL SPACING "C"	TYPICAL SIDE WALL "X"	MIN. H (NON-TRAFFIC)	MIN. H (TRAFFIC)	MAX. H*
24" (600 mm)	28" (711 mm)	41.4" (1052 mm)	10" (254 mm)	12" (305 mm)	12" (305 mm)	8' (2.4 m)

* MAXIMUM FILL HEIGHTS OVER MANIFOLD FITTINGS. CONTACT MANUFACTURER'S REPRESENTATIVE FOR INSTALLATION CONSIDERATIONS WHEN COVER EXCEEDS 8 FT (2.4 m).



ADS GEOTEXTILE FABRIC

NOTES:

1. ALL REFERENCES TO CLASS I OR II MATERIAL ARE PER ASTM D2321 "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION.
2. ALL RETENTION AND DETENTION SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, LATEST EDITION AND THE MANUFACTURER'S PUBLISHED INSTALLATION GUIDELINES.
3. MEASURES SHOULD BE TAKEN TO PREVENT THE MIGRATION OF NATIVE FINES INTO THE BACKFILL MATERIAL, WHEN REQUIRED. SEE ASTM D2321.
4. FILTER FABRIC: A GEOTEXTILE FABRIC MAY BE USED AS SPECIFIED BY THE ENGINEER TO PREVENT THE MIGRATION OF FINES FROM THE NATIVE SOIL INTO THE SELECT BACKFILL MATERIAL.
5. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE. THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
6. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I OR II. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (102 mm) FOR 4"-24" (100-600 mm); 6" (152 mm) FOR 30-60" (750-900 mm).
7. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I OR II IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" (152 mm) ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
8. COVER: MINIMUM COVER OVER ALL RETENTION/DETENTION SYSTEMS IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" (305 mm) FROM TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER IS 12" (305 mm) UP TO 36" (900 mm) DIAMETER PIPE AND 24" (610 mm) OF COVER FOR 42-60" (1050-1500 mm) DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT. MAXIMUM FILL HEIGHT LIMITED TO 8 FT (2.4 m) OVER FITTINGS FOR STANDARD INSTALLATIONS. CONTACT A SALES REPRESENTATIVE WHEN MAXIMUM FILL HEIGHTS EXCEED 8 FT (2.4 m) FOR INSTALLATION CONSIDERATIONS.

SECTION 102.8(f)(5) - SURFACE WATER CLASSIFICATION

THE SITE IS LOCATED WITHIN THE PENNYPACK CREEK WATERSHED. THE PROJECT'S RECEIVING WATERCOURSE IS AN UNNAMED TRIBUTARY TO THE PENNYPACK CREEK. PER THE PENNSYLVANIA CODE, TITLE 25, CHAPTER 93 WATER QUALITY STANDARDS, THE RECEIVING WATERCOURSE HAS THE FOLLOWING STREAM DESIGNATION:
TSF – TROUT STOCKING
MF – MIGRATORY FISHES

SECTION 102.8(f)(11) - RECYCLING OR DISPOSAL OF MATERIALS

1. THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ., AND IN ACCORDANCE WITH ANY ADDITIONAL LOCAL, STATE OR FEDERAL REGULATIONS.
2. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, BURN, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THE SITE.
3. INDIVIDUALS RESPONSIBLE FOR EARTH DISTURBANCE ACTIVITIES MUST ENSURE THAT PROPER MECHANISMS ARE IN PLACE TO CONTROL WASTE MATERIALS. CONSTRUCTION WASTES INCLUDE, BUT ARE NOT LIMITED TO, EXCESS SOIL MATERIALS, BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, ETC. THAT COULD ADVERSELY IMPACT WATER QUALITY. MEASURES SHOULD BE PLANNED AND IMPLEMENTED FOR HOUSEKEEPING, MATERIALS MANAGEMENT, AND LITTER CONTROL. WHENEVER POSSIBLE, RECYCLING OF EXCESS MATERIALS IS PREFERRED, RATHER THAN DISPOSAL.
4. ANY OFFSITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN REVIEWED AND APPROVED BY THE LOCAL COUNTY CONSERVATION DISTRICT PRIOR TO BEING ACTIVATED. THE OPERATOR SHALL ASSURE THE APPROVED E&S PLAN IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL/ROCK SPOIL AND BORROW AREAS ON OR OFFSITE.

SECTION 102.8(f)(12) - GEOLOGIC FORMATIONS/SOIL CONDITIONS THAT MAY TO CAUSE POLLUTION

THERE ARE NO KNOWN GEOLOGIC FORMATIONS OR SOILS CONDITIONS ON SITE THAT MAY HAVE THE POTENTIAL TO CAUSE POLLUTION.

SECTION 102.8(f)(13) - POTENTIAL THERMAL IMPACTS

PROPOSED BMPS WILL MITIGATE THE THERMAL IMPACTS CAUSED BY BOTH THE EXISTING AND PROPOSED IMPERVIOUS COVER. THIS PROJECT PROPOSES TWO BIORETENTION BASINS. RUNOFF WILL BE COLLECTED INTO THESE BMPS. THESE BMPS FILTER RUNOFF THROUGH A FILTER MATERIAL INTO THE GROUND AND THEN THROUGH AN UNDERDRAIN BEFORE RELEASING TO SURFACE WATERS. THIS PROCESS WILL MITIGATE THE TEMPERATURE INCREASE OF THE RUNOFF.

SECTION 102.8(f)(14 - RIPARIAN FOREST BUFFERS

THE SITE DOES NOT DISCHARGE TO AN EV/HQ WATERSHED. THEREFORE, THERE ARE NO EXISTING OR PROPOSED RIPARIAN BUFFERS OR RIPARIAN FOREST BUFFERS IN THE VICINITY OF THE SITE OR WITHIN THE PROPOSED LIMIT OF DISTURBANCE. NO RIPARIAN BUFFER OFFSETS OR EQUIVALENCY DEMONSTRATIONS ARE REQUIRED.

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE–STOP CALL

PENNSYLVANIA ONE CALL SYSTEM, INC.

1–800–242–1776

PLAN NOTATION – THESE DOCUMENTS ARE ESPECIALLY PREPARED FOR THIS PROJECT AND ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE ON ANY EXTENSION OR MODIFICATION OF THIS PROJECT OR FOR ANY OTHER PROJECT. R. L. SHOWALTER & ASSOCIATES, INC. SHALL ONLY CERTIFY THOSE DOCUMENTS THAT CONTAIN A SEAL AND SIGNATURE. ANY REUSE OF THESE DOCUMENTS WITHOUT THE EXPRESS WRITTEN CONSENT OF R. L. SHOWALTER & ASSOCIATES, INC. OR THEIR USE FOR ANY PURPOSE OTHER THAN THE SPECIFIC PURPOSE FOR WHICH THEY WERE PREPARED IS STRICTLY PROHIBITED. IF USED FOR OTHER THAN THIS PROJECT OR OTHER THAN FOR THE PURPOSE FOR WHICH THEY WERE PREPARED, SUCH USE SHALL CONSTITUTE AN AGREEMENT BY THE PARTY USING THE DOCUMENTS AND THE CLIENT TO INDEMNIFY AND HOLD R. L. SHOWALTER & ASSOCIATES, INC. AND ITS SHAREHOLDERS, OFFICERS, DIRECTORS, PRINCIPALS AND EMPLOYEES HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES (INCLUDING REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS) ARISING AS THE RESULT OF SUCH USE, EXCEPTING ONLY THOSE DAMAGES, LIABILITIES AND COSTS ARISING FROM THE SOLE NEGLIGENCE OR WILLFUL MISCONDUCT OF R. L. SHOWALTER & ASSOCIATES, INC.
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R. L. SHOWALTER AND ASSOCIATES, INC. ALL RIGHTS RESERVED.

NO.	DATE	COMMENT
		REVISIONS

Plotted: 02/17/22 – 5:29 PM, By: wkiefer
File: F:\DWG\2019\2019–092 – Kravco HVSC – Abington\ENGINEERING\2019–092_Chipotle Plan.dwg–13–PCSM NTS
© 2018 R.L. SHOWALTER & ASSOCIATES, INC

HUNTINGDON VALLEY SHOPPING CENTER

POST CONSTRUCTION STORMWATER MANAGEMENT NOTES

R. L. Showalter & Associates, Inc.
116 East Butler Avenue
Chalfont, PA 18914
(215) 822–2990
FAX (215) 822–5684
• Engineering • Planning • Surveying •

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER WAYNE R. KIEFER NO. 053604

SCALE: AS SHOWN
DATE: 2/18/2022
JOB NO.: 2019–92
DRAWN BY: LZ
CHECKED BY: WK

SITUATE: ABINGTON TOWNSHIP
MONTGOMERY COUNTY,PA.
PREPARED FOR:
KRAVCO COMPANY, LLC.
375 EAST ELM ST., SUITE 100
CONSHOHOCKEN, PA. 19428

SHEET
13 OF 14

NORTHEASTERN VIEW

NORTHWESTERN VIEW

CLIENT DATA

KRAVCO COMPANY LLC

Cornerstone
Consulting Engineers & Architectural, Inc.
1176 N. Irving Street Allentown, PA 18109
Phone: 610-820-8200 Fax: 610-820-3706
WWW.CORNERSTONENET.COM
Dallas, TX Leesburg, VA Orlando, FL Philadelphia, PA

REVISIONS

NO	BY	DESCRIPTION	DATE

REGISTERED ARCHITECT
CHRISTOPHER R. STRESS No. RA404022

PROJECT LOCATION

CHIPOTLE
SHELL BUILDING
HUNTINGDON VALLEY
SHOPPING CENTER
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

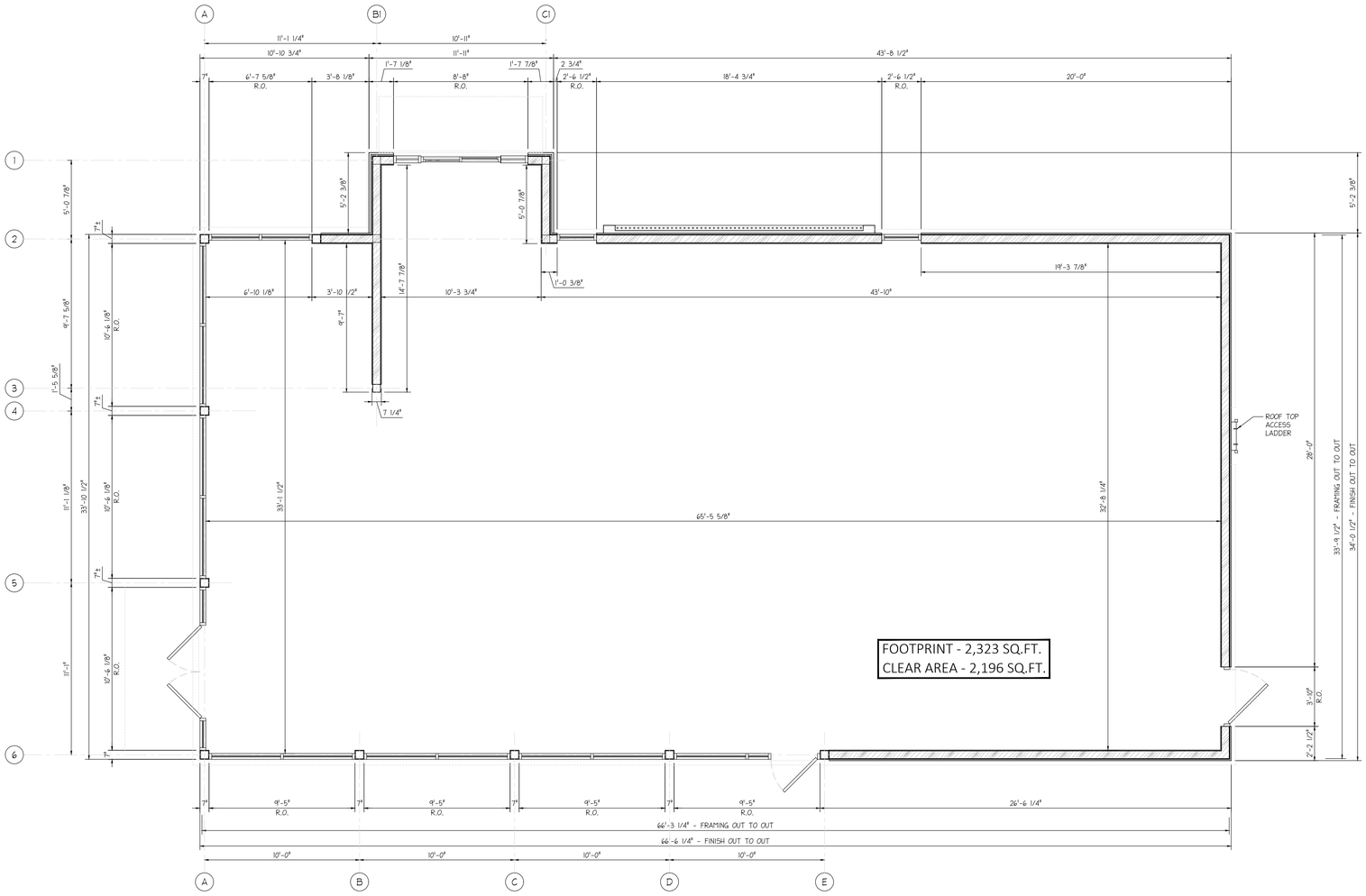
TITLE

EXTERIOR
VIEWS

PROJ. #	21-0863	DATE	11/11/2021
CAD ID.	210863	DRN BY	SAE
SCALE	AS NOTED	CHK BY	MWM

A-0.0

FIRST ISSUE



1 DIMENSIONAL FLOOR PLAN

SCALE: 1/4"=1'-0"

NORTH

CLIENT DATA

KRAVCO COMPANY LLC

Cornerstone
Consulting Engineers & Architectural, Inc.
1176 N. Irving Street . Allentown, PA 18109
Phone: 610-820-8200 . Fax: 610-820-3706
WWW.CORNERSTONENET.COM
Dallas, TX Leesburg, VA Orlando, FL Philadelphia, PA

REVISIONS

NO	BY	DESCRIPTION	DATE

REGISTERED PROFESSIONAL ENGINEER
CHRISTOPHER R. STRESS
NO. PA044022

PROJECT LOCATION

CHIPOTLE
SHELL BUILDING
HUNTINGDON VALLEY
SHOPPING CENTER
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

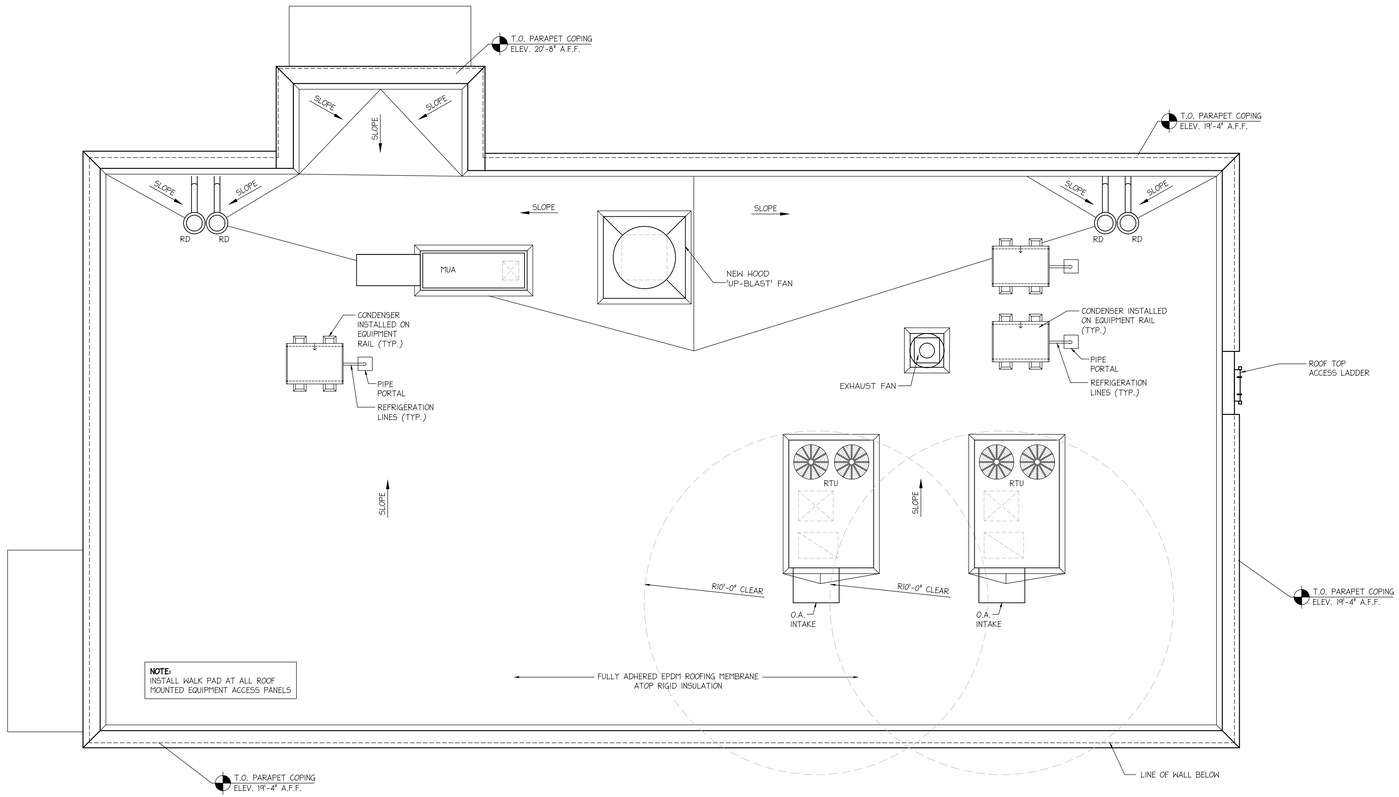
TITLE

DIMENSIONAL
FLOOR PLAN

PROJ. #	21-0863	DATE	11/11/2021
CAD ID.	210863	DRN BY	SAE
SCALE	AS NOTED	CHK BY	MWM

A-1.0

FIRST ISSUE



1 ROOF PLAN

SCALE: 1/4"=1'-0"

NORTH

CLIENT DATA

KRAVCO COMPANY LLC

Cornerstone
Consulting Engineers & Architectural, Inc.
1176 N. Irving Street . Allentown, PA 18109
Phone: 610-820-8200 . Fax: 610-820-3706
WWW.CORNERSTONENET.COM
Dallas, TX Leesburg, VA Orlando, FL Philadelphia, PA

REVISIONS

NO	BY	DESCRIPTION	DATE

REGISTERED PROFESSIONAL ENGINEER
CHRISTOPHER R. STRESS
No. PA040022

PROJECT LOCATION

CHIPOTLE
SHELL BUILDING
HUNTINGDON VALLEY
SHOPPING CENTER
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

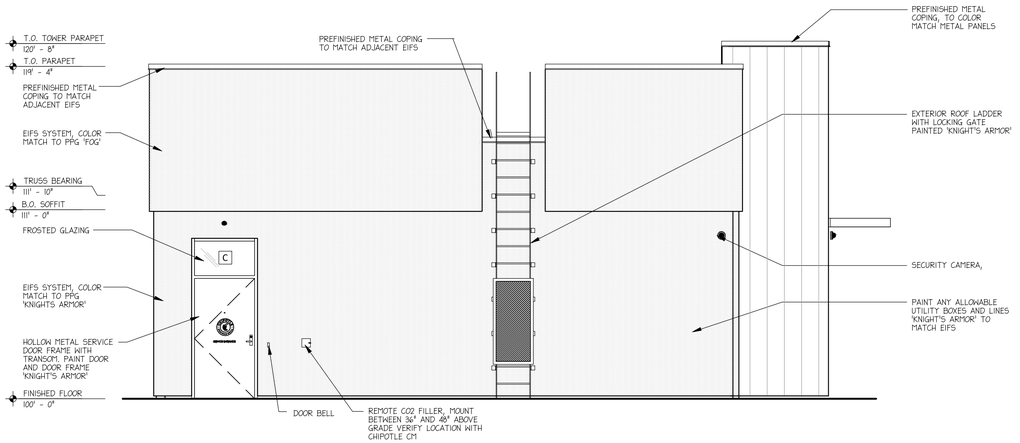
TITLE

ROOF PLAN

PROJ. #	21-0863	DATE	11/11/2021
CAD ID.	210863	DRN BY	SAE
SCALE	AS NOTED	CHK BY	MWM

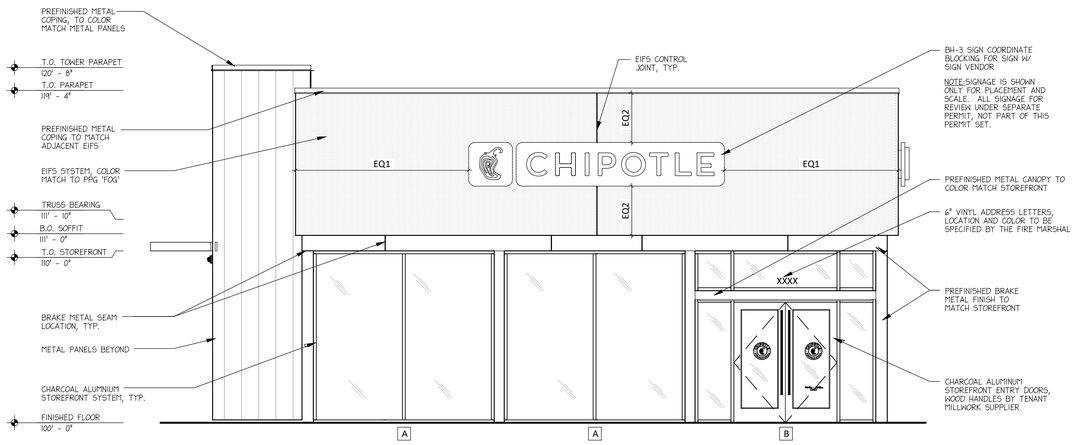
A-2.0

FIRST ISSUE



1 SOUTHERN ELEVATION

SCALE: 1/4"=1'-0"



2 NORTHERN ELEVATION

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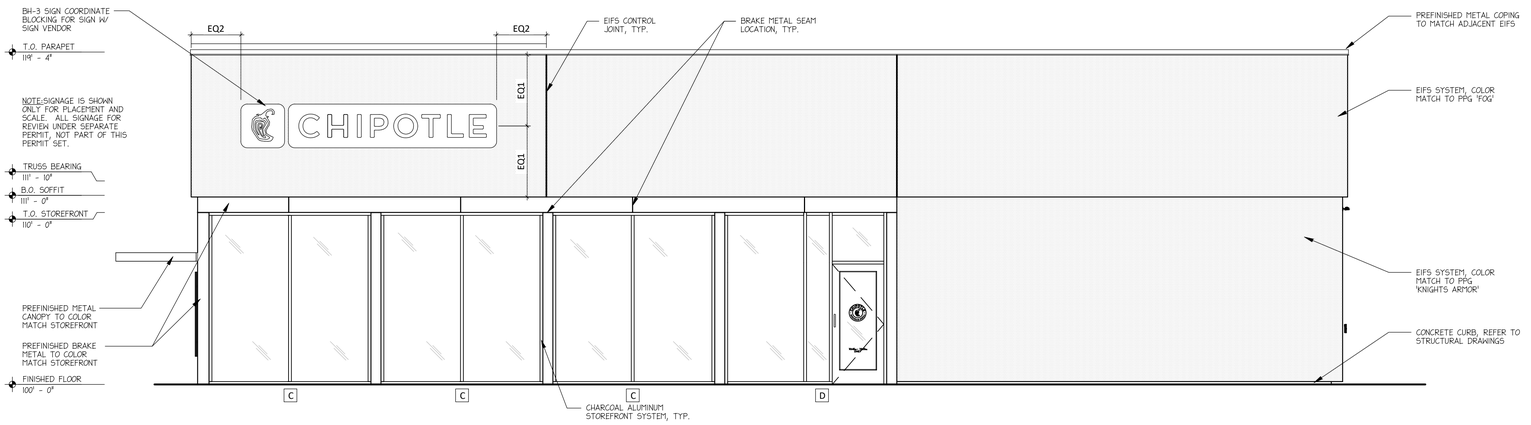
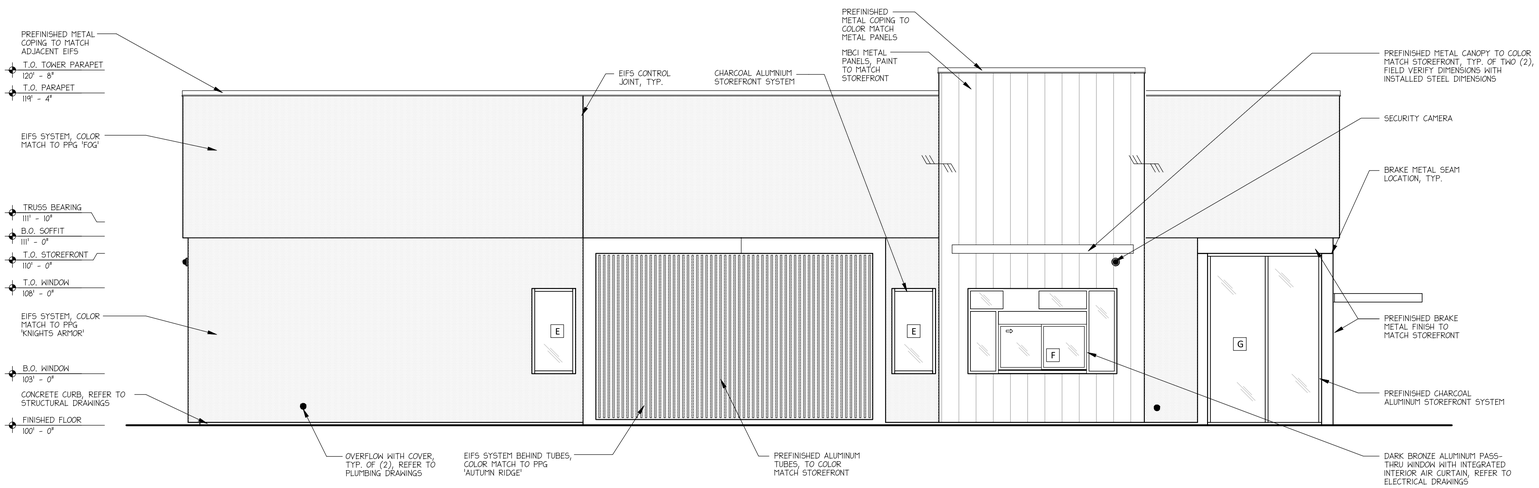


3 WESTERN ELEVATION

SCALE: 1/4"=1'-0"



4 EASTERN ELEVATION

SCALE: 1/4"=1'-0"

CLIENT DATA

KRAVCO COMPANY LLC

Cornerstone
Consulting Engineers & Architectural, Inc.
1176 N. Irving Street Allentown, PA 18109
Phone: 610-820-8200 Fax: 610-820-3706
WWW.CORNERSTONENET.COM
Philadelphia, PA
Orlando, FL
Leesburg, VA
Dallas, TX

NO	BY	DESCRIPTION	DATE

REVISIONS

REGISTERED ARCHITECT
CHRISTOPHER R. STRESS
No. RA042027

PROJECT LOCATION

CHIPOTLE
SHELL BUILDING
HUNTINGDON VALLEY
SHOPPING CENTER
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

TITLE

EXTERIOR ELEVATIONS & SCHEDULES

PROJ. #	21-0863	DATE	11/11/2021
CAD ID.	210863	DRN BY	SAE
SCALE	AS NOTED	CHK BY	MWM

A-3.0

FIRST ISSUE

WASTEWATER DEPARTMENT

George Wrigley, Director

March 18, 2022

Mr. Wayne Kiefer, PE.
R. L. Showalter & Associates, Inc.
116 East Butler Avenue
Chalfont, PA 18914

RE: Proposed Chipolte in the Huntingdon Valley Shopping Center: Sanitary Sewer

Dear Mr. Kiefer:

The Township of Abington Wastewater Utilities Department has reviewed the land development plans for the proposed Chipolte Restaurant to be located at the Huntingdon Valley Shopping Center on Huntingdon Pike across from San Gabriel Avenue, as prepared by R. L. Showalter & Associates, Inc. dated February 18, 2022 consisting of Sheets No. 1 to 14. We have the following comments:

Development plan review:

1) Sheet No.6 of 14 "Utility Plan": The proposed new Chipolte Restaurant shall be connected into the existing sanitary sewer system by installing a four (4) foot diameter precast insert manhole (see enclosed Detail No. 29) into the existing sanitary sewer line located south from the Citizens Bank, which is routed through the vacant parking area adjacent to Crunch Fitness to the rear of the shopping center. An eight (8) inch diameter ductile iron pipe should be routed from this inserted manhole north into the Chipolte site and terminated with a four (4) foot diameter precast concrete manhole with an 8" stub for future connections, as indicated on the enclosed marked up plan.
2) The sanitary sewer lateral as indicated leaving the front of Chipolte (Huntingdon Pike side) should be routed such that there are a minimum quantity of bends. The lateral pipe should be 6" diameter and utilize 45° elbows and double wye cleanouts adjacent to bends and at a maximum of 50 foot intervals.
3) To reduce the length of the sanitary lateral pipe and the quantity of bends, relocating the exit point leaving the building at the front to the south side or rear should be considered.
4) The rectangle shown at the front of the building which incorporates the proposed sanitary lateral, may represent a holding tank or grease interceptor. All fats, oil and grease capturing devices should be located withing the building and comply with current plumbing codes utilizing a 2 minute detention time and air intake. Calculations should be submitted for the proper sizing of the separator with a minimum 25% excess capacity.
5) In order to evaluate the anticipated sanitary flow rates for the proposed building, comparable water useage reports from two (2) similar type and size restaurants for a period of 24 months shall be submitted. The existing Chipolte Restaurant, located at 2618 Moreland Road in Abington, will be used as one of the two restaurants in our

WASTEWATER DEPARTMENT

George Wrigley, Director

determination, therefore, the area of this restaurant should be provided. Similar information from a second restaurant in the nearby area will be required to be submitted. The Abington flow rate for 1 EDU is 265 gallons per day, with a connection fee cost of $3,500 per EDU.

6) A PaDEP Sewage Facilities Planning Module Mailer form (digital WORD file) document and the PNDI response, along with a revised site plan (digital PDF format) that shows the proposed restaurant sanitary sewer connecting into the existing sanitary system are required to be submitted electronically.

7) Abington sanitary sewer Detail No. 1 (Backfill and Pavement Restoration), Detail No. 10 (Precast Concrete Manhole with Precast Concrete Base), Detail No. 11 (Standard Manhole Frame & Cover), Detail No. 20 (Manhole Gaskets, Leveling Rings, and Bolted Frame), Detail No. 29 (Insertion of a Precast Concrete Manhole into an Existing Sewer Main) and Detail No. 30 (Cleanout Frame and Cover Assembly) are enclosed and should be made part of the development plans.

Should you have any questions or require any additional information relating to sanitary sewers, please contact me at 215-884-8329 or email at gwrigley@abingtonPA.gov.

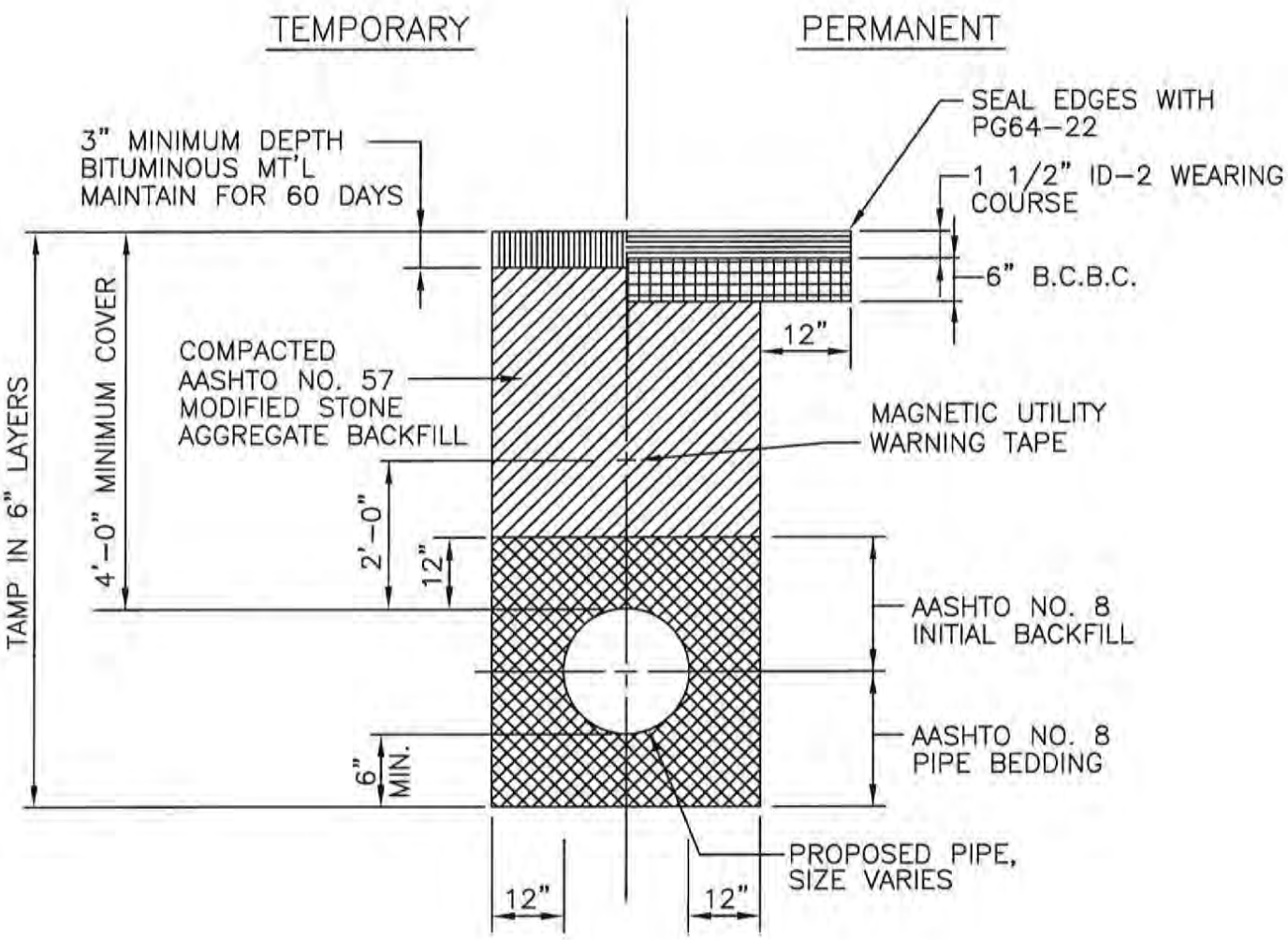
Sincerely,

George R. Wrigley

George R. Wrigley, Director
Abington Township Wastewater Utilities Department

pc: Ms. Kimberly Ham, Abington Director of Code & Community Development
Mr. Khaled R. Hassan, P.E., Pennoni, Abington Township Consulting Engineers
Ms. Allison Lee, P.E., Pennoni, Abington Township Consulting Engineers

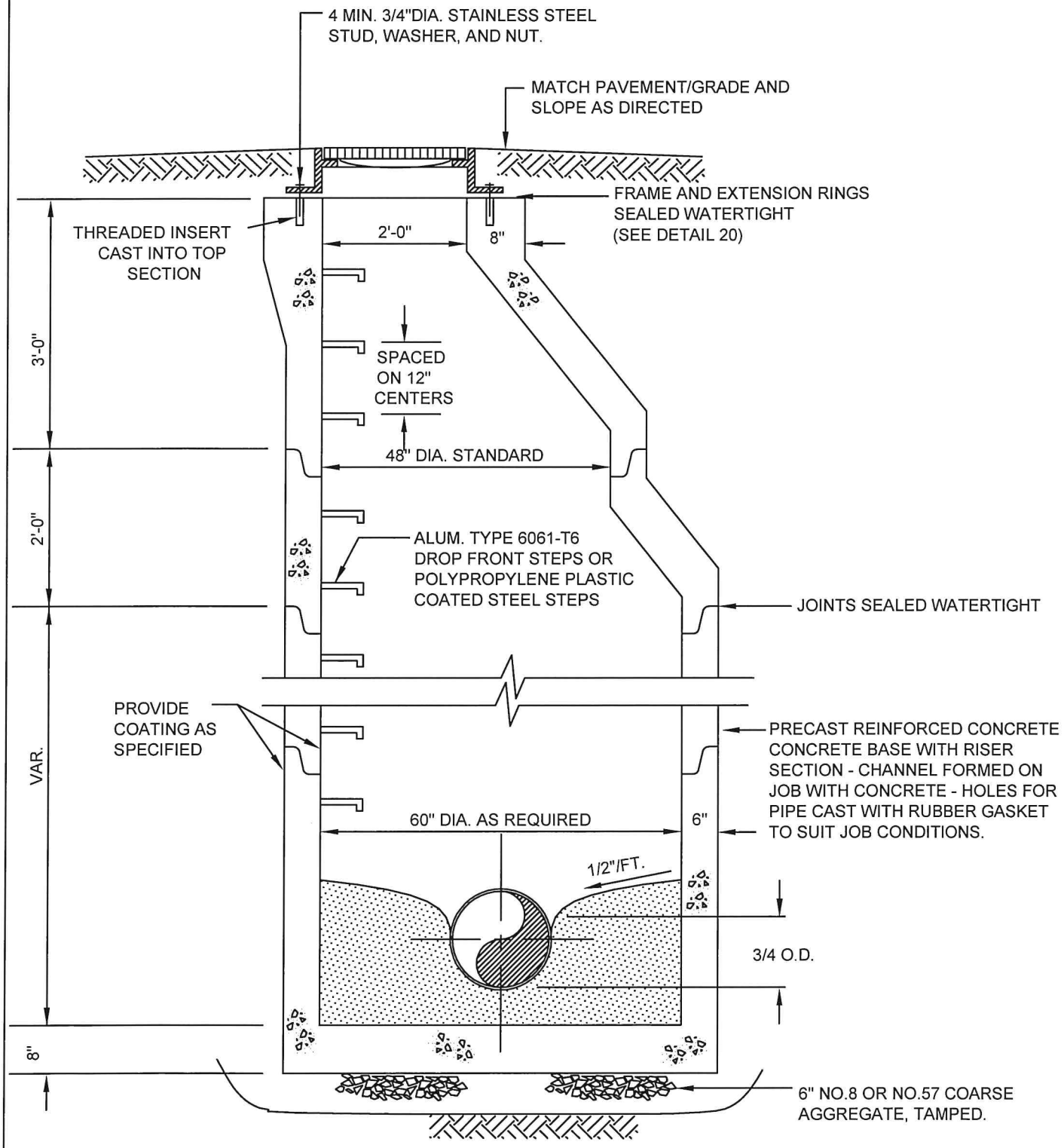
Enclosures



ALL WORK TO BE DONE IN ACCORDANCE
WITH PADOT PUBLICATION 408

Township of Abington STANDARD DETAIL - SANITARY SEWER	
BACKFILL AND PAVEMENT RESTORATION DETAIL FOR STATE / TWP. ROADS	DATE: OCTOBER 2015 DETAIL: 1

NOTE: 1. BOLTING OF MANHOLE FRAME AND COVER NOT REQUIRED FOR MANHOLES INSTALLED IN PAVED SURFACES.
2. ALL STONE GRADATIONS ARE AASHTO CLASSIFICATION.
3. PIPES SHALL PROTRUDE 2" INSIDE MANHOLE WALL

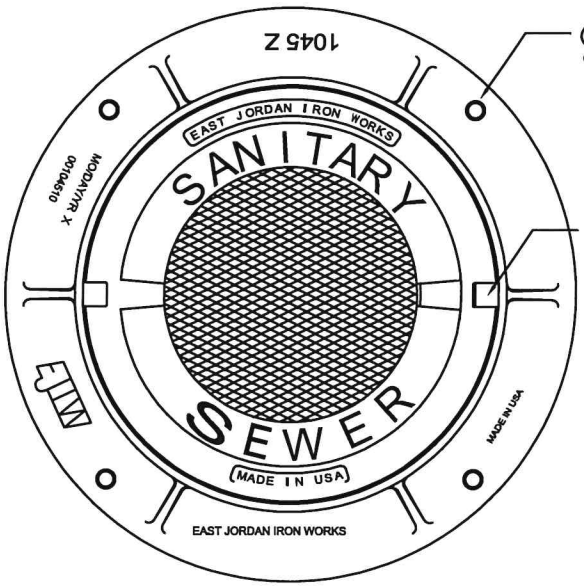


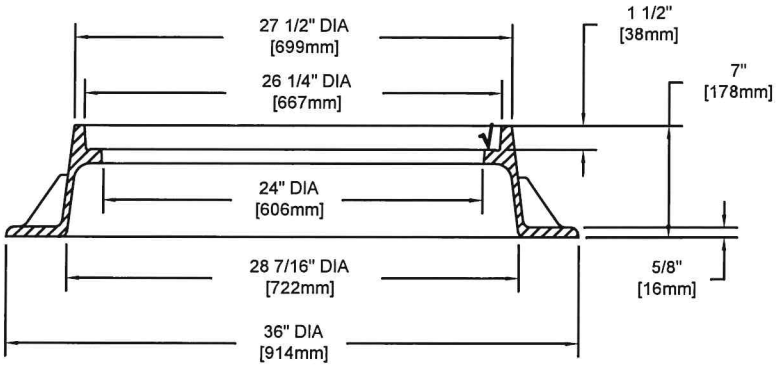
Township of Abington
STANDARD DETAIL - SANITARY SEWER

PRECAST CONCRETE MANHOLE W./ PRECAST CONCRETE BASE

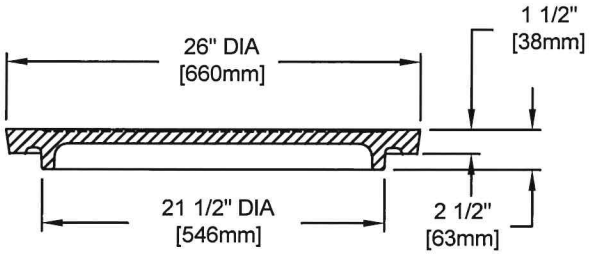
DATE: NOVEMBER 2015

DETAIL: 10





FRAME SECTION

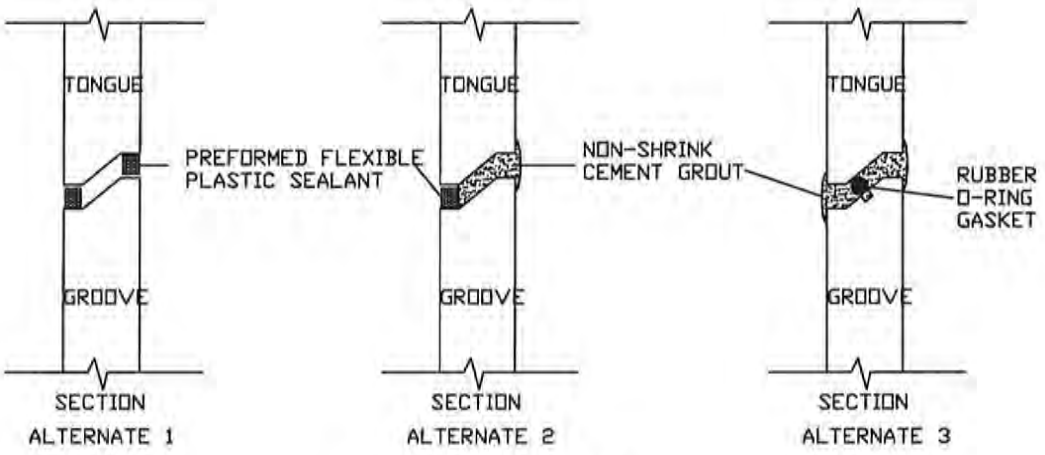


COVER SECTION

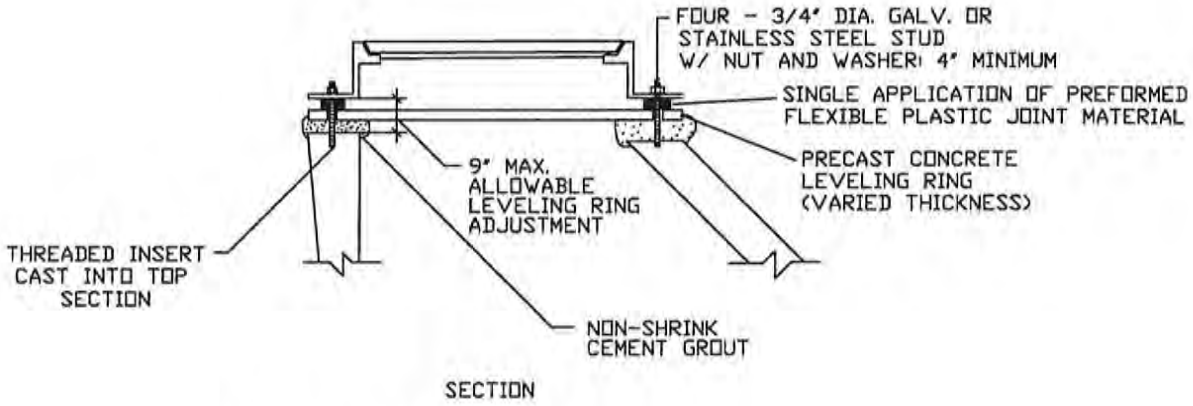
Castings to be treated by the manufacturer with water-based, black asphaltic, environmentally safe coating, free of surface rust, before leaving the foundry.

√ MACHINED SURFACE

Township of Abington STANDARD DETAIL - SEWER SYSTEM	REVISED: JANUARY 2021
STANDARD MANHOLE FRAME & COVER DETAIL	DATE: NOVEMBER 2015
	DETAIL: 11



PRECAST CONCRETE
MANHOLE SECTION GASKETS



MANHOLE FRAME & LEVELING RINGS

NOTES:

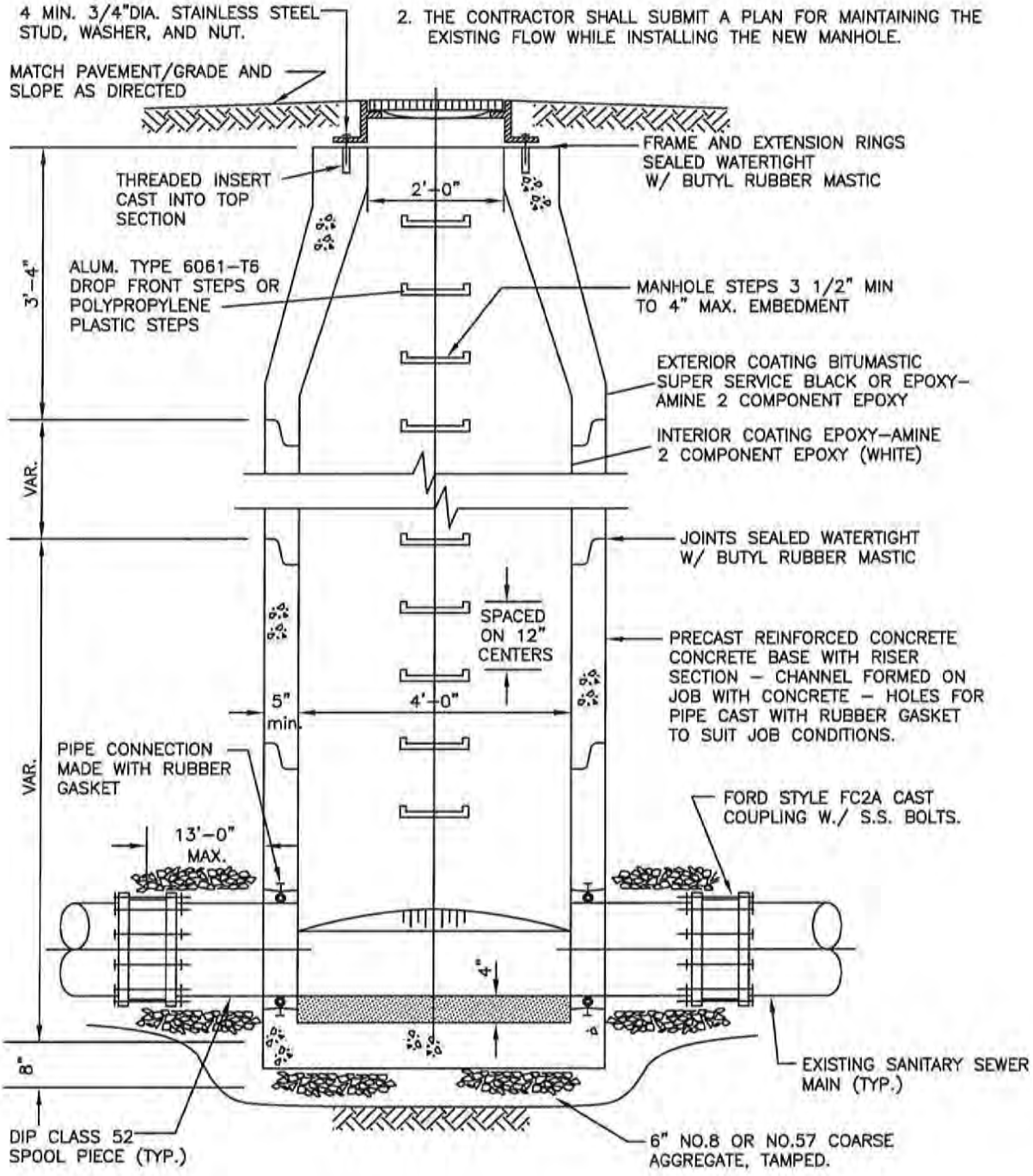
1.) ALL NON-SHRINK CEMENT GROUT SHALL BE TROWLED SMOOTH.

2.) EXCESS PREFORMED FLEXIBLE PLASTIC JOINT SEALANT SHALL BE NEATLY TRIMMED FOR ALL JOINTS.

Township of Abington STANDARD DETAIL - SANITARY SEWER	
MANHOLE GASKETS, LEVELING RINGS, AND BOLTED FRAME DETAIL	DATE: NOVEMBER 2015
	DETAIL: 20

NOTES:

1. PRIOR TO INSTALLATION OF MANHOLE THE CONTRACTOR SHALL TEST DIG AND DETERMINE THE O.D. AND OVALITY OF THE EXISTING PIPE.
2. THE CONTRACTOR SHALL SUBMIT A PLAN FOR MAINTAINING THE EXISTING FLOW WHILE INSTALLING THE NEW MANHOLE.



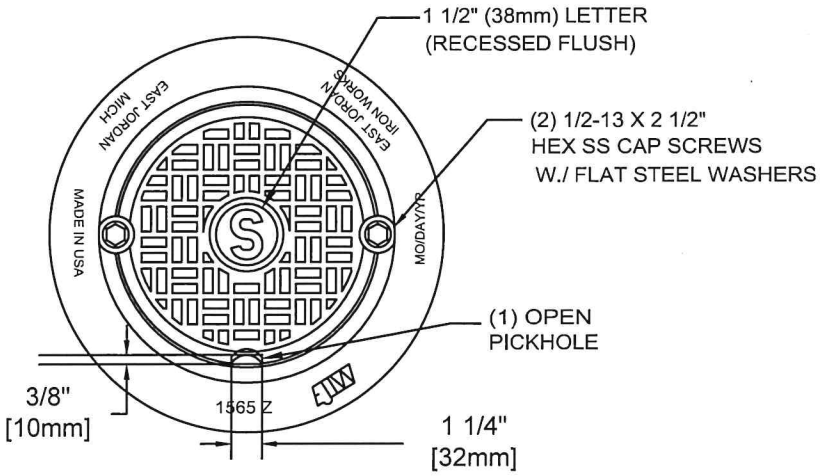
Township of Abington

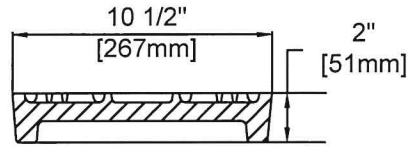
STANDARD DETAIL - SANITARY SEWER SYSTEM

INSERTION OF A PRECAST CONCRETE MANHOLE INTO AN EXISTING SEWER MAIN

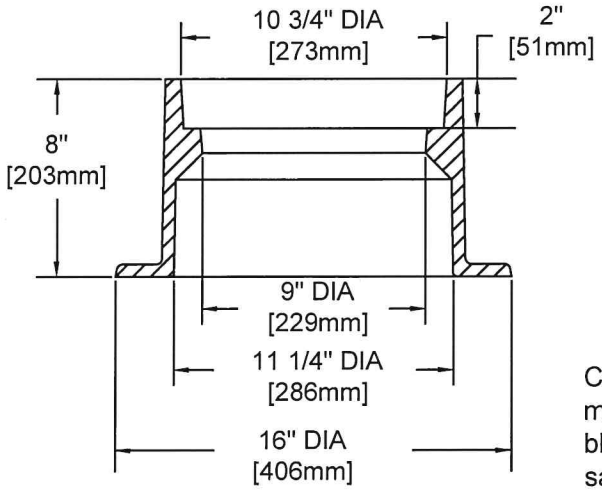
DATE: SEPT. 2015

DETAIL: 29





COVER SECTION



FRAME SECTION

Castings to be treated by the manufacturer with water-based, black asphaltic, environmentally safe coating, free of surface rust, before leaving the foundry.

Township of Abington STANDARD DETAIL - SANITARY SEWER SYSTEM	
CLEAN OUT FRAME AND COVER ASSEMBLY	DATE: SEPT. 2015 DETAIL: 30

MONTGOMERY COUNTY
BOARD OF COMMISSIONERS

VALERIE A. ARKOOSH, MD, MPH, CHAIR
KENNETH E. LAWRENCE, JR., VICE CHAIR
JOSEPH C. GALE, 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

SCOTT FRANCE, AICP
EXECUTIVE DIRECTOR

March 24, 2022

Mr. Rich Manfredi, Manager
Abington Township
1176 Old York Road
Abington, Pennsylvania 19001-3713

Re: MCPC #22-0050-001
Plan Name: Chipotle
(2,338 square feet on 0.75 acres)
Situate: 737 & 801 Huntingdon Pike
Abington Township

Dear Mr. Manfredi:

We have reviewed the above-referenced land development plan in accordance with Section 502 of Act 247, "The Pennsylvania Municipalities Planning Code," as you requested on February 24, 2022. We forward this letter as a report of our review.

BACKGROUND

Valley Associates and Huntingdon Pike Company, the applicants, have submitted a preliminary land development plan for a freestanding restaurant at Huntingdon Valley Shopping Center. The site is located in the BC Business Center zoning district, and is served by public water and sewer. The applicant submitted a preliminary plan dated February 18, 2022.

CONSISTENCY WITH COMPREHENSIVE AND OTHER PLANS

The proposed improvements are generally consistent with *MONTCO 2040: A Shared Vision, The Montgomery County Comprehensive Plan*. The comprehensive plan shows the project is located in the "Community Mixed Use" future land use area, which includes shopping centers. The plan says that developments should be interconnected and designed for walking and the development should be compatible with residential areas.

The *Abington Master Bicycle Plan (2015, p.54)* recommends that a bicycle route "23B" be implemented along Rockledge Avenue (Route #23 – Pennypack Connector). On this road it would consist of "use full lane" markings and wayfinding signage[1].

[1] Abington Master Bicycle Plan:
https://www.abingtonpa.gov/home/showpublisheddocument/2246/637002480385370000

The proposed improvements are also consistent with the Abington Comprehensive Plan of 2007, which places the location in the "Retail, Commercial, Office Use" future land use category.

RECOMMENDATION

The Montgomery County Planning Commission (MCPC) generally supports the applicant's proposal, however, in the course of our review we have identified the following issues that the applicant and township may wish to consider prior to final plan approval. Our comments are as follows:

REVIEW COMMENTS

TRANSPORTATION AND PARKING

A. Pedestrian Accommodations –

1. The proposed crosswalk leading from the proposed restaurant towards Huntingdon Pike would not reach the sidewalk along the Pike; it would end at the grass area between the parking lot and Huntingdon Pike sidewalk. We recommend adding a paved path or sidewalk connecting these two features (a desire path would otherwise form from people walking through the grass or mulch). The path or sidewalk should not lead to a street tree being removed, nor to the tree's roots being damaged.
2. The proposed crosswalk mentioned in #1, above, could be designed so that it doesn't lead to a street tree. The angle of the crosswalk could be changed, the point where it reaches Chipotle could be moved, or the entire crosswalk could be shifted. The hatched area that it leads to could also be swapped with a proposed parking space to facilitate pedestrian access to the sidewalk.
3. We recommend that the proposed restaurant be connected with a continuous pedestrian walkway to the main shopping center.
4. The crosswalk over the main access drive at Huntingdon Pike appears to have faded out. It should be restored and meet the requirements of [§2504.F.2]: six feet wide and of patterned surface dressing, textured paving, or

There is no visible crosswalk over the main access drive.

stone/brick/concrete pavers that are easily seen and distinguished from the roadway. Crosswalk borders shall be highlighted with a contrasting color and/or texture at least six inches (6") in width. Installation and selected materials shall be durable and able to withstand vehicular traffic.

B. Parking – The site is overparked (after development of the restaurant, there would be 161 more spaces than required).

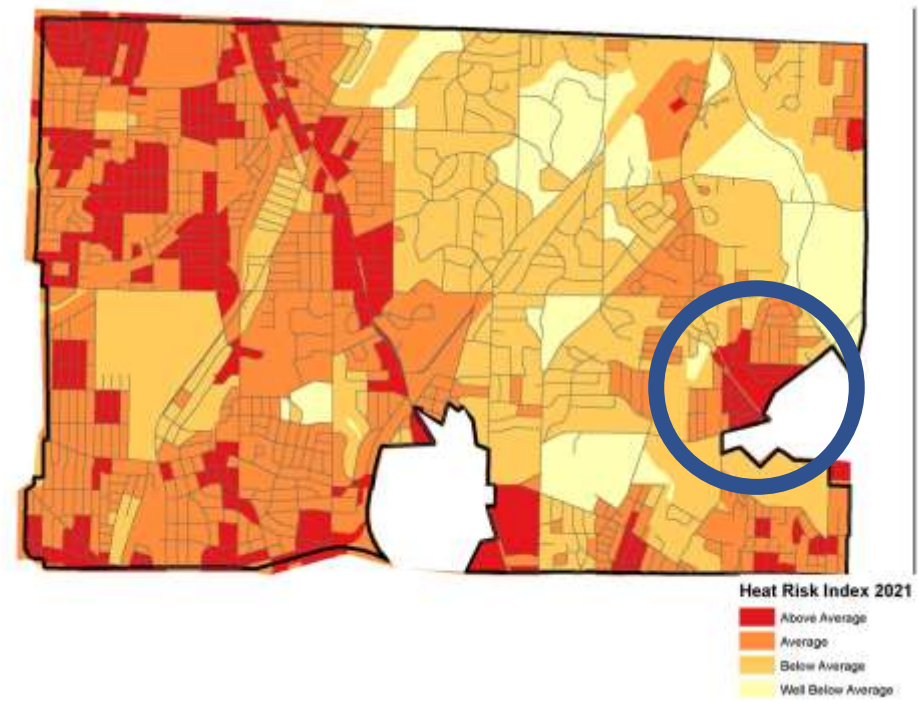
1. Some of the parking area should be used to provide the required common use area [Article XXI Use Regulations, C-33: Shopping Center, Subsection 11]. Shopping centers with 100,000 square feet or more of gross building area shall contain such an area, the area which shall contain walkways, seating, and landscaping. The area shall be at least 5 percent of the size of the gross floor area of the shopping center.

2. We suggest converting some of the excess parking area into pervious, landscaped area to make the site less nonconforming regarding green area and impervious surface coverage, while improving natural stormwater management, the site's appearance, and providing canopy trees. A landscaped plaza or small green could provide an amenity for the site's users.

LANDSCAPING AND STORMWATER MANAGEMENT

A. Planting Island – We recommend adding a tree to the planting island that does not have a lighting fixture proposed for it, even if this means shifting the location of the underground stormwater management basin. The architectural renderings submitted with the plans shows a tree on that planting island (see image, below).

B. Drive-Through Screening – The drive-through requires a medium intensity screen [Article XXIV, Figure 24.7], consisting



Shade trees, such as those in planting islands are important for combating the heat island effect. Huntingdon Valley Shopping Center is the largest heat island in the eastern half of the township.

of either (1) an evergreen hedge or (2) an opaque fence or masonry wall with shrubs.

C. Foundation Landscaping – Is required between the building foundation and sidewalks [2403.D]. The renderings do not show landscaping between the foundation and the sidewalk.

D. Patio – We suggest using ornamental trees and/or shrubs on the patio to provide greenery and visual interest.

NORTHWESTERN VIEW

Rendering Showing Tree on Planting Island

BUILDING AND SITE DESIGN

A. Facades. What would the façade look like that would face the main access drive? Will it have windows or the features listed in subsection 9.b? [§146-11.L].
B. Door Facing Main Access Drive. A door facing the main access drive is shown on the plans; would that be a public door?
C. Trash. Where will trash storage be placed? [§2601.N]

OTHER PLAN INFORMATION

The following additional information is required [§146-11]:

A. Streets. The cartway, right-of-way, and ultimate right-of-way [Subsection A]
B. Zoning District Requirements. This includes dimensional and coverage requirements [Subsection A].
C. Landscaping. This includes a proposed planting schedule, including, size and type of plantings [Subsection H].

CONCLUSION

We wish to reiterate that MCPC generally supports the applicant's proposal but we believe that our suggested revisions will better achieve the township's planning objectives for commercial development.

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

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.

Please print the assigned MCPC number (#22-0050-001) on any plans submitted for final recording.

Sincerely,

Mike Narcowich, AICP
Community Planning Assistant Manager
610.278.5238 - mnarcowi@montcopa.org

c: Valley Associates and Huntingdon Pike Company, Applicants
R.L. Showalter & Associates, Inc., Applicant's Representative
Khaled R. Hassan, P.E., Pennoni, Township Engineer
Michael P. Clarke, Esq., Rudolph Clarke, LLC, Township Solicitor

Attachments: APPENDIX 1: Aerial Image, Project Site
APPENDIX 2: Applicant's Plan

APPENDIX 1: AERIAL IMAGE, PROJECT SITE

HVSC - Chipotle Pad Site
MCPC #220050001

Montgomery County Planning Commission

April 08, 2022

MEMO

To: Lucy Strackhouse, Chair – Abington Township Planning Commission
From: Abington Township Environmental Advisory Council
RE: LD-22-02 - HVSC – Proposed Chipotle PAD Site
Plan Set Date: 02-18-2022

EAC Review Date: April 2022

Site Summary:
Owner: Kravco Company
Zone – BC – Business Center – Use C-33 shopping center
Watershed – Pennypack Creek Watershed
Land Development: Addition of free-standing Chipotle Restaurant in parking lot area of Huntingdon Valley Shopping Center

Dear Chairperson Strackhouse,

The members of the Abington Township Environmental Advisory Council (EAC) have reviewed the above referenced site development plan and offer the following comments/questions:

Stormwater Management Questions:

- Plans consistently indicate an underground stormwater facility. However, information on Sheet 13 notes that there are two bioretention basins proposed. Would the applicant clarify?

- Would the applicant clarify how rooftop runoff will be managed?

- In addition to the new building, plans indicate the addition of two new landscaped islands. This provides a great opportunity for co-design as vegetated bioretention areas (rain gardens) that could be used to capture, slow, clean and infiltrate runoff from a portion of parking lot area. Would the applicant consider redesigning these islands as a bioretention area? Considering the lack of interior parking lot landscaping, maximizing opportunities for shading and greening are encouraged.

- At a minimum, the EAC recommends that the islands provide space for canopy trees that can provide shading. As per recommendations of Montgomery County Planning Commission's Sustainable Green Parking Lots Guide tree islands should be a minimum width of nine feet with a minimum area of 340 square feet. To ensure adequate soil volume for tree health and growth, planting islands, strips, and bioretention areas should have soils improved to a depth of 30 inches.

- Would the applicant clarify where dumpster/trash storage will be provided for the restaurant? On sheet 6, Utility Plan, it appears that a concrete pad is shown directly adjacent to one of the stormwater inlets, which is not recommended. If this is a trash storage area, it should be screened and protected from the elements.

Considering that Abington's draft stormwater management study has identified the HVSC as a priority flood-prone area, and recommendations of the draft stormwater study include green stormwater infrastructure, the EAC strongly recommends that GSI measures be the preferred option for stormwater runoff for this development.

As part of the Township's aspirations for climate planning and resiliency, the EAC encourages that the building's operations do not depend on natural gas. It would be preferable instead, to have the HVAC and hot water heating systems to be air sourced heat pumps to minimize the carbon footprint. In addition, please consider pursuing "Designed to Achieve the Energy Star" to reduce greenhouse gas emissions and increase the building's efficiency or using another green building certification such as LEED New Construction or Commercial Interiors.

Respectfully submitted,

Susan S. Myerov

Susan Myerov,
Member, Abington Township EAC

cc: Richard Manfredi
Michael Narcowich
Shaun Littlefield
Planning Commission Members
EAC Members
Abington Shade Tree Commission Members

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April 8, 2022

ABINT130024

Mr. Richard Manfredi, Township Manager
Abington Township
1176 Old York Road
Abington, PA 19001

RE: LD-22-02- Huntingdon Valley Shopping Center (Chipotle Pad Site)
PARID: 30-00-31500-00-6 / TMID: 30063 008 (a.k.a. 737 Huntingdon Pike – Valley Associates)
PARID: 30-00-31508-00-7 / TMID: 30063 001 (a.k.a. 801 Huntingdon Pike – Huntingdon Pike Co.)
Preliminary/Final Major Land Development Plans Review (1st Submission)

Dear Mr. Manfredi:

We have received a copy of the Preliminary/Final Major Land Development Plans consisting of fourteen (14) sheets dated February 18, 2022 and received on February 22, 2022 with a professional services agreement (PSA) being received from the Township on March 2, 2022; as prepared by RL Showalter & Associates, Inc. located at 116 East Butler Avenue, in Chalfont, PA for the above referenced project. This is a join application from both adjoining owners that comprise the Huntingdon Valley Shopping Center (HVSC), which are the Applicant.

Under this Application, the Applicant is proposing to remove the existing macadam parking area and associated parking spots located on the 801 Huntingdon Pike parcel (parcel no. 30-00-31508-00-7) and construct a new 2,338 SF stand-alone fast-food drive through Chipotle restaurant building with outdoor seating within the HVSC. Other site improvements for this site include parking, curbing, sidewalk, landscaping, lighting relocation, and sanitary and stormwater management facilities. Access to/from the site will be by way of three existing HVSC entrances that intersect Huntingdon Pike (S.R. 0232, 70 FT R/W). The new building is proposed to be served by public water and sewer service.

The HVSC is comprised of two (2) separate adjoining parcels as referenced above - 801 Huntingdon Pike is located north of 737 Huntingdon Pike; however, the site improvements are proposed primarily within the northern 801 Huntingdon Pike parcel. The Applicant did not specifically call out for the parcels to be consolidated; however, the Applicant has provided the site plans with the zoning data and parking requirement table referencing both parcels.

This project is located within the BC - Business Center Huntingdon Valley Zoning District and the Huntingdon Valley Shopping Center. The subject parcel is fronted by Huntingdon Pike (S.R.232 70 FT R/W) to the west; an abutting commercial medical facility zoned in the BC - Business Center Huntingdon Valley Zoning District and Rockledge Avenue to the north; Vansant Drive and residential properties zoned in the R-4 High Density Residential Zoning District to the northeast; Scott Park, an vacated portion of Scott Road, and residential properties zoned in the R-4 High Density Residential Zoning District to the southeast; and other commercial properties zoned in the MS-L – Main Street Low Intensity Density Zoning District and Shady Lane to the south. Main Access drive off of Shady Lane to the HVSC is not permitted as noted in Figure 11.9 – Dimensional Requirements Table.

There is an existing drainage channel for an unnamed tributary to Pennypack Creek located along the southern property line paralleling Shady Lane. Therefore, the southern parcel of 737 Huntingdon Pike has been identified in Figure 15.2 as a parcel intersecting a riparian corridor and is subject to the requirements of Article XV: Riparian Corridor Conservation District.

In accordance with the FEMA, Flood Insurance Rate Map (FIRM) Panel No. 42091C0404G, effective March 2, 2016, the tract is identified to be within Zone X, an area outside the 0.2% chance flood and minimal flood hazard. Therefore, based on the FEMA determination, the tract is not located within the Floodplain Conservation District. Based on the plans and FIRM map, there are no wetlands that exist on site; however, the Applicant shall confirm.

The Applicant is not requesting any variances as part of this land development project.

The Applicant is not requesting any waivers as part of this land development project.

The following documents have been reviewed:

Title	Sheet	Dated	Revised
Record Plan	1 of 14	02/18/22	-----
Site Plan	2 of 14	02/18/22	-----
Overall Existing Features Plan	3 of 14	02/18/22	-----
Existing Features Plan	4 of 14	02/18/22	-----
Grading Plan	5 of 14	02/18/22	-----
Utility Plan	6 of 14	02/18/22	-----
Landscape Plan	7 of 14	02/18/22	-----
Construction Details	8 of 14	02/18/22	-----
Erosion & Sedimentation Control Plan	9 of 14	02/18/22	-----
Erosion & Sedimentation Control Notes	10 of 14	02/18/22	-----
Erosion & Sedimentation Control Details	11 of 14	02/18/22	-----
Post Construction Stormwater Management Plan	12 of 14	02/18/22	-----
Post Construction Stormwater Management Details	13 of 14	02/18/22	-----
Aerial Plan	14 of 14	02/18/22	-----
Stormwater Management Report	69 pages	02/18/22	-----

We have performed a review of the above referenced plans for compliance with the Zoning Ordinance (Chapter 162); Subdivision and Land Development Ordinance (Chapter 146); Stormwater Management Ordinance (Chapter 142). We offer the following comments for your consideration:

ZONING COMMENTS

1. Based on the Abington Comprehensive Use Matrix, Use C-25 fast food restaurant is a permitted use in the BC – Business Center Huntingdon Valley Zoning District. Use C-33 Shopping Center is also a permitted use in the BC – Business Center Huntingdon Valley Zoning District.

2. The Applicant shall provide a zoning data table showing the required, existing and proposed dimensional requirements per Figure 11.9: BC – Business Center Districts Dimensional Requirements for the Huntingdon Valley Shopping Center. This includes, but is not limited to:

a. Mixing requirement - minimum 20% retail and a minimum of 10% office
b. Maximum intensity - Floor-to-Area ratio (FAR) of 0.75 or 1.00 with bonus.
c. Maximum impervious coverage - 70% (75% max paving).
d. Minimum green area - 25%.
e. Minimum public open space - 5% of the gross floor area.
f. Minimum build-to-line - for public streets shall be twenty (20) feet and the maximum build to line shall be twenty (20) feet or sixty (60) feet when parking is in front of the building.
g. Minimum build-to-line - Secondary Access Drives shall be sixteen (16) feet and the maximum build to line shall be twenty-five (25).
h. Minimum setback from side and rear property lines, abutting a district permitting single family detached residential - fifty (50) feet.
i. Minimum setback from side and rear property lines, abutting other districts is thirty (30) feet.
j. Minimum building setback from parking - 10 feet.
k. Minimum parking lot setback from public streets - 100 feet, unless a principal building lies between the public street and parking.
l. Minimum separation distance between on-site buildings - twenty (20) feet, if both buildings are less than 40 feet tall; otherwise, 40 feet.
m. Minimum building height - twenty (20) feet, and if a pitched roof, twenty-five (25) feet to the median height of the roof
n. Maximum building height - thirty-five (35) feet.
o. Maximum building length - three hundred (300) feet.
p. Maximum building coverage is 40%; or 50% with bonus.

3. **Per §1104.B.2.a. – Design Standards – Access Drives** – Width. To promote a pedestrian friendly environment and discourage excessive impervious coverage, access drives shall have a maximum width, exclusive of any median, of: 28 feet + 8 additional feet for each side having parallel parking.
Based on our measurements, the existing main access drive into the HVSC is located across from the Pasadena Avenue intersection, and is measured at approximately 35 feet wide. There is no parallel parking along the main access drive. The width of the main access drive is an existing non-conformity and the Applicant should be noted as such on the plans.

4. **Per §1104.B.6 – Design Standards** – Parking and vehicular circulation areas are not permitted in front of buildings, with the exception of the built-to street or access drive.
The Applicant is proposing vehicular circulation area beginning to the southwest front side of the Chipotle building for the drive-through service. The Applicant shall be required to obtain a variance for the drive-through service to be located as proposed in front of the building.

5. **Per §1104.C.3.a – Design Standards –** The front façade of any building in a build-to-zone must face the street or access drive which that build-to-zone abuts.
There is a single door building entrance that faces Huntingdon Pike; however, the main entrance appears to be the double doors located to the side of the building facing the proposed outdoor patio dining and the HVSC parking areas. The Applicant shall clarify the main entrance to the Chipotle building and comply with this code section, or obtain a variance to not have the front façade facing Huntingdon Pike or the access drive.

6. **Per §1104.C.7 – Design Standards –** any development with more than one building on site should have a common and coherent architectural theme throughout the development.
The Chipotle brand with the proposed darker "Knights armor" and "Fog" color schemes as shown in

the Architectural plans does not appear to have a common and coherent architectural theme with the remainder of the development; however, the Applicant shall confirm. The Applicant shall be required to obtain a variance for the proposed color schemes that are distinct to the Chipotle brand and that would otherwise not have a common and coherent architectural theme with the remainder of the HVSC.

7. **Per §1104.C.9.a. – Design Standards – Windows** – Smoked, reflective, or black glass in windows is prohibited.
The Applicant shall clarify the window type being proposed for the Chipotle building since the window type is not specifically called out on the Architectural plans.

8. **Per §1104.C.9.c. – Design Standards – Windows** – Blank walls shall not be permitted along any exterior wall facing a street or passenger train station. Walls in these locations shall comprise a minimum of 35% window area and a maximum of 75% window area, with windows interspersed across the façade.
The Applicant is showing a cluster of window areas located to the north of the building façade facing Huntingdon Pike, and the Applicant is required to intersperse the windows across the façade. The Applicant shall revise the façade or be required to obtain a variance from this code section.

9. **Per §1105.A – Transit Shelters** – Each BC Business Center District lot greater than ten (10) acres must provide a transit or shuttle shelter. Each shelter shall be at least 13.5 feet long, 6.5 feet deep and 8 feet tall. Each shelter shall be accompanied by a bus pull-off, cut-out, or other area at least 40 feet line. This area must be sufficiently separated from the cartway so as to not block traffic and shall not block the sidewalk. Shelters shall contain at least five (5) linear feet of seating. Safety lighting shall be provided under the roof of the shelter but shall not cast illumination on adjacent toads or properties.
The nearest existing bus shelter is located along Huntingdon Pike just south of Key Bank. There is also another bus shelter located along Huntingdon Pike at the southeast corner of the Rockledge Avenue intersection. There is a bus stop for the Route 24 and 28 bus routes along Huntingdon Pike located across the proposed Chipotle site. However, there is no existing bus shelter for this site. The Applicant should consider adding a bus shelter at this bus stop location.

10. **Per §1105.B.1 – Street Furniture** – The following street furniture shall be provided; benches, trash and recycling receptacles, planters, and bike racks.
There are planter and trash receptacles within the HSVC retail and businesses. However, there does not appear to be any other street furniture along the site frontage of Huntingdon Pike. The Applicant shall clarify and confirm. If none exists, the Applicant shall be required to provide street furniture in conformance with the specifications of §1105.B.2 thru 5.

11. **Per §1106.G – Lighting** – No parking lot lighting standard or building fixture designed to illuminate the ground shall exceed eighteen (18) feet in height.
The Applicant is proposing to relocate the light fixture located in the planter island closest to the secondary site access adjacent the Citizens Bank. The Applicant shall indicate the height of the lights to be moved and replaced. A detail for the lights shall be provided as well as a detail for the proposed mounting and base.

12. **Per §1107.A.** - The storage of refuse shall be provided inside the building(s) or within an outdoor area completely enclosed by either walls or opaque fencing at least 6 feet in height with self-closing and self-latching gates. No chain link fences, or cinder block shall be used for such enclosures. It is recommended that refuse areas be designed to match or be compatible (in color and material) with the site's building(s). If the enclosure is painted, it shall be painted the same (or predominant) color as that of the building it serves.

There is no refuse facility shown for the proposed Chipotle facility. The Applicant shall clarify if the refuse will be stored inside the building, or if an outdoor area will be used. If an outdoor area is to be used, the storage refuse shall be provided in conformance with this code section.

13. **Per §1502.A.2.a. & b. – Riparian Corridor Conservation District – Width** - The Riparian Corridor Conservation District shall extend a minimum of 75 feet from the defined edge of an identified waterway at bankfull flow, or shall equal the extent of the one-hundred year floodplain, whichever is greater. The District will consist of two distinct zones designated as Zone one and Zone two.
Since there is the drainage channel located south of the Giant supermarket building paralleling Shady Lane for the unnamed tributary to Pennypack Creek, the Applicant shall identify Zones 1 and 2 along the riparian corridor for this portion of the HVSC, and these zones shall be shown and dimensioned on the plans in accordance with these code sections.

14. **Per §1504.A & E – Uses Specifically Prohibited** – Any use or activity not specifically authorized in **§1503** – Permitted uses shall be prohibited within the Riparian Corridor Conservation District. By way of example, the following activities and facilities are specifically prohibited: Buildings and any other type of permanent structure, with the exception of recreational uses identified in §1503 – Permitted Uses, and Parking Lots.
Based on our measurements, the existing Giant supermarket building is located approximately 72.5' from the edge of the existing drainage channel; however, the Applicant shall verify and confirm. Since it appears that portions of the existing Giant supermarket is located within the Riparian Corridor Conservation District and no site improvements are being proposed for this area, the Applicant shall note this as an existing non-conforming condition; and in accordance with §1505 – Nonconformities, the existing building footprint encroaching within the riparian corridor conservation district may not be permitted to be expanded or enlarged.

15. **Per §2103.A, Use A-17 - Outdoor Dining** - An outdoor eating area shall meet the requirements of the Use A-17: Outdoor Dining 1 thru 14.
Outdoor dining as an accessory use in the BC – Business Center Huntingdon Valley zoning district is a permitted use. The Applicant is proposing an outdoor dining area located adjacent to the northern side of the proposed Chipotle building which is shown on Sheet A0.0 of the Architectural plans. The site plans shall call out the outdoor dining area. The outdoor dining area shall conform to the requirements of this code section for the outdoor dining accessory use. The Applicant shall provide a seating calculation for the outdoor dining area to ensure the parking requirements are being met. Per §2304.A, the parking use requirement for outdoor dining Use A-17 requires 1 space for every 3 outdoor seats.

16. **Per §2103.C., Use C-33.2. – Shopping Center** – Ownership and easements. The shopping center shall be under common ownership, or be subject to reciprocal parking and ingress and egress agreements or easements.
The Applicant shall furnish copies of existing written ingress and egress agreements or easements for the HVSC since the HVSC does not appear to be under the same ownership although it is under a common management company.

17. **Per §2103.C., Use C-33.7. – Shopping Center** – Architectural Offsets. In order to provide an architectural variety, no individual section or strip of stores shall exceed 150 feet in length without an offset greater than 6 feet in depth.
The existing strip of stores between the Starbucks and the Approved future retail/restaurant exceeds 150 feet in length and does not have an offset greater than 6 feet in depth. This is an existing non-conformity, and the Applicant shall note this as such on the plans.

18. **Per §2103.C., Use C-33.9. – Shopping Center – Green Buffer.** Anchor stores, large retail stores, banks, supermarkets, and other spaces which constitute a separate or detached building on the lot or premises of the Shopping Center, shall provide a 10-foot green buffer along all walls of the building not identified as a main entrance, or containing drive-through facilities.
The Applicant shall provide a 10-foot green buffer area along all walls of the building not identified as a main entrance, or containing drive through facilities as there are no 10-foot green buffer area shown or identified on the plans.

19. **Per §2103.C., Use C-33.11.a.(1) thru (5)** – Shopping centers with 100,000 SF or more of gross building flood area shall contain a common use area that will serve as a focal point for the center and provide walkways, seating, and landscaping. Water features, courtyards, minipark , and plaza are encouraged. The common area shall meet the requirements of Use C-33.11.a.(1) thru (5).
Since the HVSC site will consist of a total 147,156 SF of building area including the new Chipotle building, a common use area that will serve as a focal point for the center and provide walkways, seating, and landscaping is required. The Applicant shall clarify and identify the focal point for the center on the plans in conformance with this code section requirement.

20. **Per §2103.C., Use C-22.11.b.(1) & (2)** – Transit. A pickup area for public transportation located between the street and the front façade of the large retail use or shopping center shall meet the requirements of the above section of the code.
The Applicant shall indicate on the plans the pickup areas on or adjacent the site in conformance with this code section requirement.

21. **Per Article XXII Signs** – All signage proposed as part of this land development shall meet the requirements of this section of the chapter.

22. **Per §2307.A – Parking for Individuals with Disabilities** – Accessible parking spaces shall be provided for any place of public accommodation or any commercial facility, pursuant to the Americans with Disabilities Act of 1990, as amended, and shall be designed in accordance with the Rules and Regulations of said Act, as amended in accordance with the following table.
For total parking space in lot of 501 to 1,000, the required minimum number of accessible spaces is 2% of the total spaces. Based on the total number of 750 parking spaces, 2% of the total spaces or 15 ADA parking spaces shall be required. Of the 15 required ADA parking spaces, 2 of the ADA parking spaces shall be van accessible. The Applicant shall clarify the total number of ADA accessible and van accessible parking spaces provided in the parking requirements table on Sheet 1 for the HVSC.

23. **Per §2308 – Electric Vehicles** – In parking lots or garages with over 100 spaces, at least 3 spaces out of each 100 spaces shall be reserved for electric or hybrid vehicles
Since there is a total of 750 parking spaces provided for the HVSC, a total of 23 spaces shall be reserved for electric or hybrid vehicles. The Applicant shall clarify and show the locations within the parking lot that is reserved for electric or hybrid vehicles as required under this code section.

24. **Per §2310.A – Parking Lot and Frontage Development Standards** – The minimum width of drives and parking aisles shall be twenty-four (24) feet for two-way travel and twelve (12) feet for one-way travel.
The parking area on the southern side of the new building adjacent to the drive-through and drive aisles is dimensioned as twenty-five (25) feet wide from edge of curb to the edge of the proposed angle parking space. However, the area between the edge of the drive-through aisle and the proposed angle parking space is only eleven (11) feet wide, which is less than the required twelve (12) feet or wider requirement for the one-way drive aisle. The Applicant shall revise this area to be at

least twelve (12) feet in width and adequately wide enough for the parked vehicles to maneuver in/out of the angle parking spaces without encroaching onto the drive-through aisle.

25. **Per §2310.C. – Parking Lot and Frontage Development Standards –** Drives and parking aisles shall be designed so that each motor vehicle may proceed to and from a parking space without requiring the moving of any other motor vehicle.
The Applicant shall provide turning templates to ensure that the proposed parking spaces located adjacent the drive-through aisle have adequate maneuverability to/from the angle parking space.

26. **Per §2310.G.1. – Parking Lot and Frontage Development Standards –** Shopping Cart Storage: The cart storage area shall be clearly marked as such with signage consistent with this Ordinance.
The Applicant shall show the existing shopping cart storage areas within the parking lot for the Giant supermarket located along the southern portion of the HVSC to ensure the total number of parking spaces would not be impacted by the existing shopping cart storage areas that are occupying the existing parking spaces.

27. **Per §2312.A – Off-Street Loading Requirements –** Areas provided for loading and unloading of delivery trucks and other vehicles, and for the servicing of shops by refuse collection, fuels, and other service vehicles, shall be arranged so that they may be used without blocking or interfering with traffic lanes, access drives, parking aisles, parking facilities, or pedestrian ways, or require backing out into a street.
The Applicant shall clarify and indicate where the proposed loading and unloading of delivery trucks, as well as, the refuse collection facility, if any, will be located. Loading/unloading zones, dumpsters, and service structures may not be located in the front of the store building façade, and shall not face the public streets surrounding the shopping center in conformance to §2103.C, Use-33: Shopping Center requirements.

28. **Per §2312.F – Off-Street Loading Requirements –** A required loading berth shall be at least fifteen (15) feet in width by at least fifty (50) feet in length, exclusive of aisle and maneuvering space, and shall have a vertical clearance of at least sixteen (16) feet. Exception: where it can be demonstrated that loading and unloading will only be performed by small trucks or vans, the loading berth size may be reduced upon agreement with the Township. The approved plan shall contain a note which so restricts the type of loading permitted, and subsequent uses shall be restricted as necessary.
The Applicant did not show any loading or unloading areas on the plans for the proposed Chipotle site. The Applicant shall clarify how and where loading and unloading will take place for the proposed site. Any loading or unloading area shall meet the specifications of §2312 of the zoning code.

29. **Per §2402.A.2.a.(1) – Parking Lot Landscaping and Street Trees –** One planting island (or peninsula, where a parking row is at the periphery of the parking area) shall be provided for every 15 parking stalls.
The Applicant shall add parking islands and show on the plans a 10' wide x 18' long landscaped parking island for every row of 15 contiguous parking stalls or at the ends of the parking rows.

30. **Per §2402.A.2.a.(4) – Parking Lot Landscaping and Street Trees –** Any new or existing parking lots where at least 50% of the parking spaces are being developed or modified, or where 15,000 SF of existing parking area has been altered; and where such parking area has at least 50 stalls, shall be landscaped with planting islands where each planting island shall contain one shade tree plus shrubs and/or groundcover to cover the entire area at maturity. Parking lot trees shall be a minimum of three (3) inches in caliper; branching at six (6) feet to eight (8) feet in height and of the recommended species as listed in "Recommended Plant Materials" list in the SALDO. Parking lot islands shall be planted in lawn or ground cover only.
Based on our measurements, the Applicant is proposing to alter approximately 19,000 SF of area and

approximately 51 stalls; therefore, this project is subject to the requirements of this code section. The Applicant shall provide landscaped planting islands with a shade tree plus shrubs and/or groundcover as specified under this code section. The Applicant is only proposing shrubs for the two (2) new planter islands located east of the proposed Chipotle site.

31. **Per §2402.A.2.a.(5) – Parking Lot Landscaping and Street Trees –** Shade trees located within any parking island which is less than 300 square feet measured from outside curb to outside curb will require permanently installed irrigation.
The Applicant shall comply and show on the permanent irrigation system on the plans in conformance with this code section; or be required to obtain a waiver from this code section.

32. **Per §2402.A.2.b.(2) – Parking Lot Landscaping and Street Trees –** In nonresidential or mixed-use developments, parking lots shall be divided by planting strips into smaller parking areas of no more than 100 stalls.
The Applicant shall provide minimum 8' wide planting strips to divide the parking lot into smaller parking areas in conformance with this code section; or the Applicant will be required to obtain a variance for relief from this code section.

33. **Per §2402.A.2.b.(4) – Parking Lot Landscaping and Street Trees –** At least half of the planting strips shall contain a 5-foot paved walkway leading towards the building, with 3 feet provided for plantings on one side of the walkways.
The Applicant shall provide a 5-foot paved walkway running the entire length of the parking row leading from the Chipotle site to the remainder of the HVSC site as required by this code section.

34. **Per §2402.A.2.b.(7) – Parking Lot Landscaping and Street Trees** – Planting strips shall contain plantings of one canopy tree every 25 feet, with two shrubs per tree, and pervious area (consisting of green area, mulch, or pervious paving) to cover the entire remaining unplanted area at maturity.
The Applicant shall provide a canopy tree with two shrubs every 25 feet of the planting strips as required by this code section. The canopy trees and shrubs shall be added to the landscaping schedule on the Landscape Plan.

35. **Per §2402.A.6. – Parking Lot Landscaping and Street Trees –** Minimum Green Area. In addition to the vegetation required for buffers and screens, a minimum of 10% of any parking area over 15,000 square feet in gross area, outside curb to outside curb, shall be devoted to landscaping. This may be counted towards meeting any minimum green area requirement of the respective zoning district which the parking is located.
The Applicant shall provide a green area calculation on the plans to ensure that a minimum of 10% of the parking area is met per this code section.

36. **Per §2402.B.1.d. – Street Trees –** Street trees shall be required along both sides of access drives that serve two or more nonresidential properties.
The site plans show only one side of the access drives with street trees, and the Applicant is not proposing additional street trees along the access drives on the Landscape Plan. Although the access drives are outside the Chipotle site improvements, and are existing non-conformities, the Applicant should consider complying with this code section to reduce the amount of reflected heat and to improve the aesthetics of the parking lot areas within the entire HVSC site.

37. **Per §2403.D.1.– Building Foundation Landscaping –** Building foundation landscaping shall be provided between (a) the foundations of principal buildings' facades and (b) sidewalks, access drives, or parking areas.

The site plans do not show proposed foundation landscaping for the new Chipotle building; therefore, the Applicant shall be required to show the foundation landscaping on the plans as required by this code section, and show the additional plantings in the Landscape schedule on the Landscape Plan in conformance to Per §2403.D.2. and .3. We also recommend that foundation landscaping be provided adjacent the proposed outdoor seating area to soften the contrasting view of the parking lot area and outdoor seating area.

38. **Per §2403.D.4.a.– Ground Cover –** Required Tree/Shrub Plantings. For nonresidential land uses, the tree/shrub plantings for the area in ground cover shall include a minimum of one deciduous or evergreen tree of two and one-half (2-1/3") caliper, measured at a height of one foot above grade, for each 1,000 square feet of ground cover area. Three evergreen shrubs of 2 ½" feet in height may be substituted for one tree for a maximum of 50% of the tree requirement.
The Landscape Plan is showing only eight (8) CS – Comus Sericea 'Artic Fire', 30" high x 24" wide shrubs for the proposed two new planter islands located to the east of the new Chipotle building. Since no trees are provided, the Applicant shall provide a ground cover calculation on the plans to ensure that the proposed shrubs meet the substitution tree requirements. In addition, we suggest that there be at least two (2) shrub species be provided to promote plant resiliency.

39. **Per §2504.C.1. – Sidewalks Internal to a Development –** Pedestrian Links. All buildings must be connected, via a continuous pedestrian network of sidewalks, crosswalks, and paths, to:
    a. Parking, streets and public transportation.
    b. All other on-site buildings.
    c. Public open space areas.
    d. On-site transit stops.

The plans show a hatched area and crosswalk to access the proposed Chipotle from Huntingdon Pike. However, there is not a defined continuous internal pedestrian network of sidewalks, crosswalks, and paths to directly connect this proposed development and all other buildings within the HVSC, particularly the Giant supermarket, Wendy's, and Citizen's Bank sites. The Applicant shall show and provide the continuous pedestrian links as required by this code section on the plans.

40. **Per §2504.F.1.a. & b. – Crosswalks –** Crosswalks shall be provided at all intersections of streets with access drives or other curb cuts in public streets (including those for private streets and parking areas) and at intersections of multiple access drives.
Currently, there is no defined crosswalk at the northern access drive leading to the Rite-Aid along Huntingdon Pike. The Applicant shall be required to provide a minimum 6' to maximum 10' wide crosswalk across the access drive at Huntingdon Pike to accentuate a continuous pedestrian sidewalk network per this code section. In addition, there are no defined crosswalks at intersections internal to the development with multiple access drives, particularly from the secondary access drives adjacent the Rite-Aid, Citizen's Bank, and Wendy's. The Applicant should consider adding crosswalks at these locations to provide a continuous and safe pedestrian route to these sites within the HVSC.

41. **Per §2504.F.2.c. – Crosswalks – Design –** For the BC – Business Center crosswalks shall be constructed of patterned surface dressing, textured paving, or stone/brick/concrete pavers that are easily seen and distinguished from the roadway. Crosswalk borders shall be highlighted with a contrasting color and/or texture at least six inches (6") in width. Installation and selected materials shall be durable and able to withstand vehicular traffic.
Applicant shall be required to provide patterned surface, textured paving, or stone/brick/concrete paver crosswalks to comply with this code section since the proposed crosswalks to the new Chipotle building, as well as the existing crosswalks within the HVSC site are only line striping on asphalt pavement.

42. **Per §2601.H.2 – Lighting Standards –** All on-lot public parking areas, aisles, and access ways for any nonresidential use shall be provided with a minimum of one-half (0.5) foot candles of light at any point on the ground.
Point by point calculations shall be provided to ensure that the site lighting complies with the standards set forth in the above section of the code. If all on-lot parking areas, aisles, and access ways are not provided with a minimum of one-half (0.5) foot candles of light at any point on the ground, then the Applicant shall be required to provide additional lighting to comply with the above section. All lighting shall comply with the specifications of §2601.H.

43. **Per §2601.N – Trash Containment Standards –** When trash containment is located outdoors in the BC - Business Center Zoning District, trash containers shall be located in walled or enclosed enclosures, at least six (6) feet in height.
The Applicant has not indicated where the trash storage will take place, if the trash storage will be indoors or outdoors. Since this site is located within the BC - Business Center Huntingdon Valley Zoning District, any outdoors trash containers shall be placed inside a six (6) feet enclosure that follows the specifications in §2601.N.3.a thru d. and site element screening requirements per §2403.C.1. through .3 and Figure 24.7 – Site Element Screen Requirements table.

CHAPTER 146
SUBDIVISION & LAND DEVELOPMENT COMMENTS

44. **Per §146-9.B.(2) – Types of Application – Major Plan**. A major plan is a plan for subdivision or land development, which will require a two-stage approval process because public improvements are proposed or because subdivision is occurring simultaneously with land development.
The Applicant has submitted for a Preliminary and Final Major land development application; therefore, a waiver of the two-stage approval process is required.

45. **Per §146-10.B.(5) – General Requirements –** The submission type in accordance with §146-9.D shall be indicated on all the plan sheets as "Preliminary/Final major land development" and noted as land development application number "LD-22-02".

46. **Per §146-11.A.(4) – Property Identification Plans –** The property identification plans shall contain tract boundaries with tax parcel numbers, owner's names, and approximate acreage of lots surrounding any portion of the site for a distance of 400 feet.
The Applicant has provided an aerial photograph plan, but the aerial plan does not clearly identify the 400 feet distance surrounding the HVSC site. The Applicant may wish to consider requesting a partial waiver from this code section requirement. Due to the size and scope of the project, we would support this request contingent the Applicant provides the parcel information for the immediately adjacent parcels abutting the HSVC tract boundary.

47. **Per §146-11.A.(6) – Property Identification Plans –** The property identification plans shall contain the location of all existing monuments and iron pins on or defining the site.

48. **Per §146-11.A.(7) – Property Identification Plans –** The property identification plans shall contain an indication that the elevations are based upon sanitary sewer datum of the Township of Abington.
The Applicant shall provide a note on the plan stating the reference to the sanitary sewer datum of Abington Township. The Applicant may contact the Abington Township sewer department for the sewer datum reference.

49. **Per §146-11.A.(8) – Property Identification Plans –** The property identification plans shall contain the existing cartways of streets and on adjoining the site, with existing and ultimate rights-of-ways and legislative and traffic route numbers.
The Applicant shall show the cartway widths for Huntingdon Pike, Vansant Road, Shady Lane, Montgomery Avenue, San Gabriel Avenue, Pasadena Avenue, and Berkley Avenue; as well as the legal right-of-ways and, ultimate right-of-ways, if any, for the public streets.

50. **Per §146-11.A.(10) – Property Identification Plans –** The property identification plans shall show the zoning classification applicable to the tract along with all zoning boundaries that traverse or are within 400 feet of the tract.
The Applicant shall show the zoning classifications for the tract and all zoning boundaries within 400 feet of the tract.

51. **Per §146-11.B.(1) – Existing Features Plan –** The existing features plan shall show the complete boundary survey of the property to be subdivided or developed, showing all courses, distances, areas, and tie-ins to all adjacent street intersections.
The Applicant has provided the courses and distances on the record plan; however, the Applicant shall also provide the courses and distances on the existing features plan for the proposed site to be developed.

52. **Per §146-11.B.(2) – Existing Features Plan –** The existing features plan shall show the location, names, and widths of all streets, whether including right-of-way, cartway, or centerline.
The Applicant shall show the cartway widths, right-of-way, and centerlines for all streets shown on the overall existing and existing features plans. The right-of-way line type shall be added to the legend on the plans.

53. **Per §146-11.B.(4) – Existing Features Plan –** The existing features plan shall show the location and type of all existing survey monuments.
The Applicant shall show the location of all existing survey monuments and iron pins located on site. These symbols shall also be added to the legend on the plans.

54. **Per §146-11.B.(5) – Existing Features Plan –** The existing features plan shall show the location and dimension of all existing buildings and man-made structures, or surfaces located on site, with notations as to which ones will remain and which ones will be removed.
The Applicant shall provide a hatching for the area of pavement to be removed as part of the proposed Chipotle building.

55. **Per §146-11.B.(7) – Existing Features Plan –** The existing features plan shall show the location, size, and ownership of all underground and above ground public or private utilities, on the site and within 400 feet of any portion of the site, including waterlines, sanitary sewer lines, storm sewer lines, electric lines, telephone lines, gas mains, fire hydrants, and streetlights.
The Applicant has not provided the location, size, and ownership of all underground and above ground public or private utilities on site and within 400 feet of any portion of the site. The Applicant shall provide this information, otherwise, a waiver from this section of the code will be required.

56. **Per §146-11.B.(9).(a) – Existing Features Plan –** The existing features plan shall show the soil types, within the site, based on maps contained in the Soil Survey of Montgomery County, United States Department of Agriculture, Soil Conservation Service 1967, as amended. An attached table shall indicate each soils development limitation, i.e., bearing value, depth to bedrock, seasonal water table, etc.
The Applicant shall provide the soil delineation on the existing features plan as well as a table showing

the information required in the above section of the code.

57. **Per §146-11.C.(6) – Proposed Layout Plans –** The proposed layout plans shall show the location, dimension, height, type, and first-floor elevation of all proposed buildings and structures.
The Applicant shall show the first-floor elevation of the proposed Chipotle building on the Site Plan (Sheet 2).

58. **Per §146-11.D.(4) – Grading Plans –** The grading plans shall provide a note stating the datum to which contour lines refer shall be based on the Abington Township sanitary sewer datum.
The Applicant shall add a note on the plan stating the above information.

59. **Per §146-11.D.(7) – Grading Plans –** The grading plan shall show a delineation of the limits of work areas and the portions to remain undisturbed.
The Applicant shall provide a limit of disturbance delineation on the grading plan.

60. **Per §146-11.F.(1).(a) – Stormwater Management Plans –** The stormwater management plan shall show mapping of the watershed areas in which the site is located.
The Applicant shall provide pre and post development drainage area maps for review and approval.

61. **Per §146-11.F.(4).(b).[1] thru [6] – Storm Sewer Facilities –** The profile plan shall contain the information required in the above section of the code.
The Applicant shall provide profiles for the proposed storm sewer pipes and inlets as well as a profile for the proposed underground infiltration facility. The 100-year stormwater elevation shall be shown on the underground infiltration facility profile.

62. **Per §146-11.G.(1).(e) – Utility Plan –** The utility plan shall be superimposed on the basic layout plan and shall include the location, size, type and, where applicable, elevations of the following above and below ground, existing and proposed features, and structures.
The Applicant is not showing any electrical lines to the lighting fixture to be relocated and the proposed building. The Applicant shall show all existing and proposed electrical lines, junctions, vaults, and other related appurtenances on the utility plan.

63. **Per §146-11.G.(3) – Utility Plan –** The plan shall contain a notation that all work will be performed in strict compliance with the provisions of Pennsylvania State Act 287, governing the installation of public streets.
The Applicant shall add this notation on the Utility Plan.

64. **Per §146-11.H.(1) – Landscaping and Shade Tree Plan –** The landscaping plan shall be prepared by a registered landscape architect.
The Applicant shall have the landscaping plan prepared by a registered landscape architect as required under this code section.

65. **Per §146-11.M.(1).(a) & (b) – Documentations –** a letter certifying the availability of public sanitary sewer facilities and central water supply systems from the appropriate utilities shall be provided.
The Applicant shall provide these letters prior to the recording of these plans.

66. **Per §146-12.D – Record Plan Requirements –** The Applicant has provided the required notations and signature lines, however, sufficient room for the signature and seal of the Township Engineer should be provided to ensure that there are no text overlaps.

67. **Per §146-12.E.(2) thru (7) – Record Plan Requirements –** The Applicant shall provide the notations on the record plan as indicated in the above section of the code.

68. **Per §146-28.A – Off-Street Parking Areas –** All parking spaces for vehicles shall be ten (10) feet wide by twenty (20) feet long. All spaces shall have adequate maneuvering room with clear access at all times entering and existing the space.
The Applicant is proposing new angled parking spaces as part of this project. The Applicant shall provide an angle dimension for these parking spots on the plans. In addition, the Applicant shall provide a vehicular circulation template to ensure that there is adequate maneuvering room with clear access at all times.

69. **Per §146-28.B – Off-Street Parking Areas –** Entrances, exits, and driveways in a parking lot shall be a minimum of twenty-four (24) feet wide, excluding parking areas designated for parking vehicles.
The Applicant is proposing an exit of only thirteen (13) feet width adjacent to the concrete pad and drive-thru area.

70. **Per §146-33.I – Drainage –** Stormwater roof drains and pipes shall not discharge water over a sidewalk but shall extend under the sidewalk to the gutter. Where storm drains are accessible, the roof drain shall be connected thereto.
The Applicant shall show the location of the roof leader lines and drains on the plans to ensure compliance with this code requirement.

71. **Per §146-35.C.(2) – Sanitary Sewers and On-site Disposals –** Sanitary sewers shall have a minimum inside diameter of eight (8) inches and a minimum grade of ½%. Ductile Iron Pipe shall be used in all cases.
The Applicant is proposing 6" PVC as opposed to the required 8" Ductile Iron Pipe. The Applicant shall provide the required 8" ductile iron pipe, otherwise a waiver from this section of the code will be required.

72. **Per §146-43.A.(1) – Erosion and Sediment Control –** No change shall be made in the contour of the land nor shall grading, excavating, removal, or destruction of the topsoil, trees, or other vegetative cover of the land can be commenced until such time that a grading permit is applied for and approved.

CHAPTER 142
STORMWATER MANAGEMENT COMMENTS

73. **Per §142-302.B.(1).(a) – SWM Site Plan Contents –** The Applicant shall include a general description of the project.
The Applicant shall include a general description of the project on the SWM Plan.

74. **Per §142-302.B.(1).(m) – SWM Site Plan Contents –** The Applicant shall include the statement in this section of the code on the Stormwater Management Plan.
The Applicant has included a statement on the plan but shall revise the statement to reflect the exact wording as shown in the above section of the code.

75. **Per §142-302.B.(2).(a) – SWM Site Plan Requirements –** The Applicant shall prepare an existing resources and site analysis map (ERSAM) showing environmentally sensitive areas including, but not limited to, steep slopes, ponds, lakes, streams, wetlands, hydric soils, vernal pools, stream buffers, floodplains, hydrologic soil groups, topographic depressions, and recharge areas.

The Applicant shall prepare an ERSAM plan; or be required to obtain a waiver from this section of the code due to the size and scope of the project.

76. **Per §142-302.B.(2).(b).[23] – SWM Site Plan Requirements –** The PCSM Plan shall the location of all erosion and sediment control facilities.
The Applicant shall show all E&S control measures on the PCSM Plan.

77. **Per §142-302.B.(2).(b).[26] – SWM Site Plan Requirements –** The Following Signature block for the Design Engineer shall be shown on the PCSM Plan:
"I, (Design Engineer), on this date (date of signature), hereby certify that the drainage plan meets all requirements of the Department of Environmental Protection's (DEP's) regulations and this chapter."
The Applicant shall add this statement to the Post-Construction Stormwater Management Plan.

78. **Per §142-401.L – General Requirements –** Storage facilities should completely drain both the volume control and rate control capacities over a period of time not less than twenty-four (24) and not more than seventy-two (72) hours from the end of the design storm.
The Applicant shall provide dewatering calculations to ensure that the proposed underground stormwater facility meets the dewatering specifications as indicated above.

GENERAL STORMWATER MANAGEMENT COMMENTS

79. On the E&S Plan, the Applicant is indicating the limit of disturbance to be 0.75 acres. Since this project will be disturbing about 0.75 acre, which is less than one acre of land, an NPDES permit will not be required for this project.

80. On the E&S Plan, the Applicant is indicating the limit of disturbance to be 0.75 acres, and on the PCSM Report, the Applicant is indicating a limit of disturbance of 0.6 acres. The Applicant shall confirm the limit of disturbance areas and revise accordingly.

81. In the PCSM Report, the Applicant is indicating that the basin will be an infiltration basin. The Applicant shall provide results of infiltration testing that was performed on site for review and approval. In addition, the Applicant shall identify and label the areas where infiltration testing occurred on the plans.

82. On the Record plan, the Applicant is indicating the proposed building area to be 2,338 SF, and on the PSCM Report, the Applicant is indicating the building area to be 2,325 SF. The Applicant shall confirm the proposed building areas and revise accordingly.

83. On page 69 of the PSCM Report, the Applicant is indicating a line size of 15" for line 1 from Type C Inlet #2 into the underground stormwater facility; however, the line size is called out as 18" HDPE on the plans. In addition, in the PCSM Plan, the inverts upstream and downstream for line 1 is called out as 230.10 and 230.00, respectively; whereas, on the plans, the inverts upstream and downstream for this line are labeled as 229.85 and 229.75, respectively. The Applicant shall confirm the correct line size and inverts, and revise accordingly.

84. On page 69 of the PCSM Report, the Applicant shall provide the missing 38 LF 18" HDPE pipe information that will convey the stormwater flows from the underground stormwater facility outlet structure to the existing inlet adjacent the secondary access drive across from the Existing Citizens Bank building.

85. On the PCSM Plan, the Applicant shall move all leader lines to point to the correct object. For example, the Type 'C' inlet #3 leader line is not pointing to the proposed inlet. Also, all inverts should be clearly labeled on the plan without overlapping. The invert in elevation for inlet #3 is being occluded by the line type for the proposed underground stormwater facility.

GENERAL COMMENTS

86. The Applicant shall provide maneuverability plans showing the fire truck for Abington Township as well as delivery and refuse collection vehicles are able adequately maneuver to/from and within the proposed site.

87. The Applicant shall provide a note on the Erosion & Sediment Control plan that all parking areas and roads shall be kept clean of dirt and debris. The public and private access roads shall be swept and/or mechanically broom cleaned at the end of each day.

88. The Applicant shall remove the existing light fixture located between the proposed median strip and parking island from the Site Plan (Sheet 2). This existing light fixture will be relocated to the proposed planter island which is located to the east of the existing light fixture's current position.

89. The Applicant should relocate the two (2) proposed parking islands located one parking space east of the proposed median strip to provide two-way traffic circulation instead of a one-way traffic pattern in that area. By relocating the proposed planter islands would also allow for better future maintenance of the underground stormwater facility with minimizing above ground conflicts to direct access to the underground stormwater facility.

90. The proposed sanitary sewer lateral should tie into the existing 6" PVC sanitary sewer at the sanitary manhole just west of the tie-in location of the existing 6" PVC sanitary sewer pipe. However, we defer to the Abington Township Wastewater Utilities department for further sewer related review comments.

91. A traffic impact analysis shall be provided for the proposed Chipotle site for review and comment to ensure that the trips generated by the proposed site will not adversely impact the existing traffic conditions experienced by the Huntingdon Pike corridor and HVSC site.

We have received the following documents/permits/reviews:

- AQUA Water Will Serve Letter (January 27, 2022)
- Application for SD/LD (February 17, 2022)
- MCPC Request for Review (February 17, 2022)
- Post Construction Stormwater Management Report (February 18, 2022)
- Fire Marshal Review (March 3, 2022)
- Sewer Review (March 18, 2022)
- STC Review (March 21, 2022 via email)
- MCPC Review (March 24, 2022)
- Traffic Review (April 7, 2022)
- EAC Review (April 8, 2022)

We have not received the following documents/permits/reviews:

- MCCD Review
- Waiver Request Letter

PLANNING COMMISSION MEETING

AGENDA ITEM

November 22, 2022

DATE

AGENDA ITEM NUMBER

Administration

DEPARTMENT

FISCAL IMPACT
Cost > $10,000
Yes ☐ No ☑

PUBLIC BID REQUIRED
Cost > $20,100
Yes ☐ No ☑

AGENDA ITEM:

LD-22-03 - Autozone located at 1318 & 1330 Easton Road

EXECUTIVE SUMMARY:

The applicant is proposing to consolidate the 2 adjoining corner parcels at 1318 and 1330 Easton Road to a single triple frontage parcel , the applicant is proposing to demolish the existing buildings, structures and features with the site to construct a new approximately 6,816 SF AutoZone retail store; as well as associated internal sidewalk curbing adjacent the building; internal curbing along the parking areas; driveway aprons; off-street parking; and stormwater management facilities.

The Executive Summary, plans and reviews of the application are attached.

PREVIOUS BOARD ACTIONS:

N/A

RECOMMENDED BOARD ACTIONS:

Motion to approve the major subdivision LD-22-03 - Autozone located at 1318 & 1330 Easton Road.

2215 Kimberton Road
P.O. Box 958
Kimberton, PA 19442
P: 610-983-9200
F: 610-983-9202
www.cmceng.com

320 Fayette Street, Suite 1
Conshohocken, PA 19428
P: 610-983-9200

413 Main Street
Kingston, PA 18704
P: 610-983-9200

August 8, 2022

VIA Hand Delivery

Richard Manfredi
Township Manager
Abington Township
1176 Old York Road
Abington, PA 19001

Re: AZ Abington, LLC – Preliminary/Final Major Land Development Resubmission Letter
CMC Project #1482-21-02-PA

Dear Mr. Manfredi:

In support of our Client, AZ Abington, LLC and their proposed project to redevelop 1318 and 1330 Easton Road to build a new AutoZone retail facility, please find enclosed the following materials:

1. Revised Preliminary/Final Major Land Development Plans dated 4/5/22 and last revised 8/2/22 (10 copies);
2. Reduced copy of the revised Preliminary/Final Major Land Development Plans dated 4/5/22 and last revised 8/2/22 (1 copy);
3. Stormwater Management Report Supplement dated 4/5/22 and last revised 8/2/22 (1 copy);
4. Digital copy of the above documents (1 copy).

In response to the Township Engineer Review letter dated 7/14/2022, we offer the following responses:

Zoning Comments

3. The Applicant will be requesting a variance for the currently proposed window areas.
4. The Applicant is currently working with the Township Engineer regarding the sloped roof calculations and will potentially be requesting a variance for this requirement.
6. We have added the pre and post development impervious coverages to the plan. There is an approximate increase of impervious surfaces of 4,300 SF. We have previously provided tree replacement requirements for this zoning section on the Landscaping Plan.
8. We have provided irrigation for the landscaping island adjacent to the ADA parking spaces.
9. We have provided the 4’ x 6’ tree pits for the street trees located in the verge.

12. The finish for the masonry wall for the trash enclosure will be the same to match the finish of the building and is noted as such on the Trash Enclosure Detail.
14. We have added a verge consisting of brick extending to the tangent section of the curb, similar to existing conditions, along Brookdale Avenue and Woodland Road and then landscaping for the remaining section.
15. We have relocated the existing streetlamps along Easton Road and Woodland Avenue into the proposed verge.

Subdivision and Land Development Comments

19. We have added the submission type to Stormwater Management Pipe Profiles Plan.
20. We have updated the note number to be note 8 on the Existing Features Plan
22. Acknowledged – Partial Waiver Request.
23. Refer to response 20.
25. Acknowledged – Partial Waiver Request.
39. We have provided curb ramps and have added additional details to the plans for the ramps.
40. We have updated the curb detail to provide the dimensions in inches instead of feet.
41. We have added concrete monuments to be set instead of iron pins.
42. Acknowledged – Waiver Request.
43. Please refer to response 15 under Zoning Comments.
45. Acknowledged – Partial Waiver Request.

Stormwater Management Ordinance Comments

48. Acknowledged – Waiver Request.
52. We have provided a supplement to the Stormwater calculations for the requested dewatering calculations.
53. Acknowledged – Waiver Request.

General Stormwater Management Comments

59. Acknowledged – no response needed.
60. The raingarden in this location is being provided to add to the stormwater management controls and is not intended for infiltration but as a pipe outlet control.

General Comments

67. We have provided the vehicle dimension templates for each vehicle used in the turning templates.

We trust that these revisions satisfy the Township and their consultant's concerns. We look forward to further discussing the plans at the August 23, 2022 Planning Commission Meeting. Please feel free to contact us at 610-983-9200 if you should have any question or need additional information.

Respectfully Submitted,
CMC Engineering

Keith J. Marshall, PE
Manager of Engineering Services

CC via Email: William J. Rountree
Alyson J. Fritzges

M:\Small Jobs\Wright Partners\AZ - Abington\Submissions\22-08-05_Township_Resubmission\22-08-05_Resubmission_Letter.docx

Alyson J. Fritzges, Esquire
alysonf@rrhc.com
Extension: 234

RILEY RIPER HOLLIN & COLAGRECO
ATTORNEYS AT LAW

August 11, 2022

Via email - rmandredi@AbingtonPA.gov
and Overnight Mail Delivery
Richard Manfredi
Township Manager
Abington Township
1176 Old York Road
Abington, PA 19001

Re: **AZ Abington, LLC**
1318 Easton Road & 1330 Easton Road
Waiver Request – Combined Preliminary/Final Approval

Dear Rich:

As you are aware, AZ Abington, LLC ("Applicant") has a pending land development application before Abington Township (the "Application"). Please allow this correspondence to serve as a request for a waiver from Section 146-9 of the Abington Township Subdivision and Land Development Ordinance to allow the Application to be considered for a combined preliminary/final land development approval. The Applicant has incorporated all requirements for preliminary and final approval into the plan, there are minimal outstanding comments, all of which Applicant will comply, and there will not be any substantive changes to the plan.

Should you there be anything additional you need in furtherance of this request, please let us know.

Thank you.

Very truly yours,

ALYSON J. FRITZGES

AJF/kh
cc: Khal Hassan, P.E. *(via email only)*
Allison Lee, P.E. *(via email only)*
Bill Rountree *(via email only)*
Keith Marshall, P.E. *(via email only)*
Denise Yarnoff, Esquire *(via email only)*

August 3, 2022

Mr. Bill Rountree
Wright Partners
20 South Olive Street, Suite 203
Media, PA 19063

Re: Stormwater Infiltration Basins
1318 and 1330 Easton Road
Abington, Pennsylvania 19001
VERTEX Project Number: 74650

Dear Mr. Rountree,

The Vertex Companies, LLC (VERTEX) is pleased to submit this letter to discuss the stormwater infiltration basins proposed as part of redevelopment activities at the above referenced property (the site).

Based on the findings of a Phase II Limited Subsurface Investigation (LSI) performed in January and February 2022, groundwater in monitoring well MW-103 (located at the western corner of the site) was found to exhibit concentrations of vinyl chloride exceeding the Pennsylvania Department of Environmental Protection (PADEP) Non-Residential Used-Aquifer Groundwater Medium Specific Concentrations (MSCs). Additional sampling performed in June 2022 confirmed the elevated concentration of vinyl chloride in MW-103.

Based on the location of MW-103 hydraulically upgradient of the adjacent residential properties, it is our professional option that on-site recharge of stormwater utilizing proposed subsurface infiltration basins should not be conducted at the site. The use of infiltration basins could potentially add additional static pressure to the current groundwater conditions at the site and cause the migration of impacted groundwater off-site, towards the downgradient residential properties. We recommend any stormwater basins proposed for the site be lined with an impervious liner to minimize infiltration.

Please do not hesitate to contact us at your convenience should you have any questions or comments regarding this report or our recommendations. It has been a pleasure working with you on this project.

Sincerely,

The Vertex Companies, LLC

Glennon Graham, Jr., PG
Regional Service Area Lead

Jessica Fox, PE
Executive Vice President

KUHLS LAW LLC

Joseph C. Kuhls
Attorney at Law

November 16, 2022

AZ Abington, LLC
P.O. Box 1908
Media PA 19063

Denise R. Yarnoff, Esquire
717 Constitution Drive, Suite 201
Exton, PA 19341

denise@rrhc.com

Re: Abington Township Zoning Hearing Board Application 22-27

This firm serves as Solicitor to the Abington Township Zoning Hearing Board. This will confirm that the Board, at its Public Meeting last evening, voted to approve the above-named amended Application for the following relief from and pursuant to the Abington Township Zoning Ordinance (the "Ordinance") relative to real property identified as 1318 and 1330 Easton Road (the "Subject Property"), and necessary for construction of an AutoZone retail store and associated improvements:

1. a reversal of the Zoning Officer's Determination, and a Board finding that Ordinance §1006, Figure 10.20 requires not less than 25% window area on each street-facing façade of the proposed one-story building;
2. Variances from Ordinance §1006, Figure 10.20 necessary to allow the proposed window area on any street façade where such percentage is less than required; and
3. a variance from Ordinance §1007.C to allow less than 80% of the proposed building's roof to be pitched.

This approval is granted subject to the condition that development and use of the Subject Property, and construction of the proposed one-story building, shall be in substantial conformance with the testimony, exhibits, and other evidence presented at the Public Hearing on this matter, including (without limitation) the "Proposed Elevations" Plan attached hereto.

Any aggrieved party may file an appeal to the Court contesting this decision within thirty (30) days. Anyone acting on this decision within that appeal period does so at their own risk. Please remember that this Zoning Approval does not relieve the Applicant of the obligation to obtain a building permit and/or other related approvals.

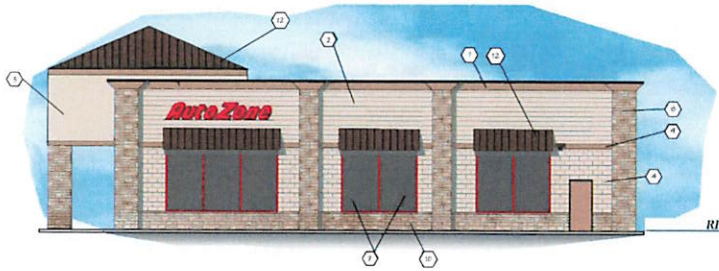
This correspondence constitutes the written decision of the Board to approve the uncontested Application, and no further findings, conclusions, or reasons will be issued.

JC Kuhls

Joseph C. Kuhls

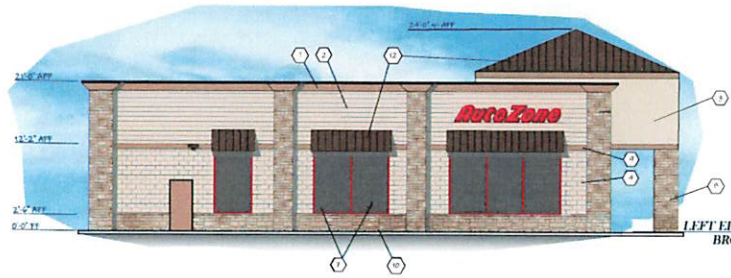
PRECEDENT IMAGES IN ABINGTON TOWNSHIP

FRONT ELEVATION (EAST)
EASTON ROAD



RIGHT ELEVATION (NORTH)
WOODLAND ROAD

REAR ELEVATION (WEST)



LEFT ELEVATION (SOUTH)
BROOKDALE AVENUE

1. DECORATIVE CORNICE W/ STUCCO FINISH COLOR: SW6088 -NUTHATCH
2. HARDIE PLANK SIDING COLOR: SW6086 SAND DUNE
3. 11 STUCCO FINISH OVER STOREFRONT - COLOR: SW6086 -SAND DUNE
4. SPLIT FACE CMU - INTEGRAL COLOR -MEDIUM BEIGE
5. CLERESTORY WINDOW - EVERGREEN GLASS
6. ALUMINUM STOREFRONT - RED KYNAR FINISH
7. FAUX WINDOW - OPAQUE BLACK GLASS
8. 8" DP. PILASTER - THIN STONE VENEER FULL HEIGHT
9. 8" STUCCO ACCENT BAND COLOR: SW6088 NUTHATCH
10. STONE VENEER W/ CAP -ENVIRONMENTAL STONEWORK COLOR: TAUPE MOUNTAIN LEDGESTONE
11. ~~METAL TRELLIS CANOPY COLOR: BRONZE~~
12. STANDING SEAM METAL COLOR: DARK BRONZE

AutoZone

PROPOSED ELEVATIONS V1.2
AUTOZONE STORE #5707
ABINGTON TWP, PA
06/08/22

PRELIMINARY/FINAL MAJOR SUBDIVISION & LAND DEVELOPMENT PLAN FOR

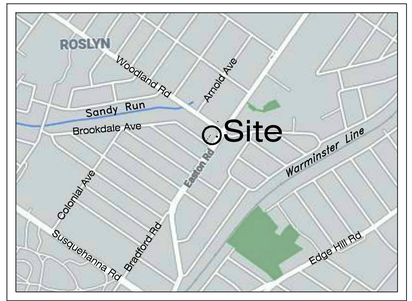
PROPOSED AUTOZONE

SITUATED IN
ABINGTON TOWNSHIP,
MONTGOMERY COUNTY, PENNSYLVANIA

PLAN INDEX

RELATION	DWG NO.	SHEET TITLE	START DATE	REVISION DATE
1 OF 15	T-1	TITLE SHEET*	04/05/22	08/02/22
2 OF 15	EX-1	EXISTING FEATURES PLAN	04/05/22	08/02/22
3 OF 15	S-1	LOT CONSOLIDATION / SITE PLAN*	04/05/22	08/02/22
4 OF 15	G-1	GRADING/UTILITY PLAN	04/05/22	08/02/22
5 OF 15	SWM-1	STORMWATER MANAGEMENT SITE PLAN**	04/05/22	08/02/22
6 OF 15	SWM-2	STORMWATER MANAGEMENT PIPE PROFILES	04/05/22	08/02/22
7 OF 15	SWM-3	STORMWATER MANAGEMENT DETAILS #1**	04/05/22	08/02/22
8 OF 15	SWM-4	STORMWATER MANAGEMENT DETAILS #2**	04/05/22	08/02/22
9 OF 15	ECS-1	EROSION CONTROL PLAN	04/05/22	08/02/22
10 OF 15	ECS-2	EROSION CONTROL DETAILS	04/05/22	08/02/22
11 OF 15	L-1	LANDSCAPING PLAN	04/05/22	08/02/22
12 OF 15	D-1	DETAILS PLAN	04/05/22	08/02/22
13 OF 15	D-2	DETAILS PLAN	07/01/22	08/02/22
14 OF 15	D-3	ADA RAMP DETAIL PLAN	07/01/22	08/02/22
15 OF 15	E-1	LIGHTING PLAN	07/01/22	08/02/22

* PLANS TO BE RECORDED
** PLANS TO BE RECORDED AS PART OF THE BMP OPERATIONS AND MAINTENANCE AGREEMENT



LOCATION MAP
SCALE: 1"=1000'

OWNER/APPLICANT:
AZ ABINGTON, LLC
PO BOX 1908
MEDIA, PA 19063

ENGINEER:
CMC ENGINEERING
2215 KIMBERTON ROAD
KIMBERTON, PA 19442
ATTN: KEITH J. MARSHALL, PE
TEL: 610-983-9200

SURVEYOR:
CMC ENGINEERING
2215 KIMBERTON ROAD
KIMBERTON, PA 19442
ATTN: JOSEPH S. RAGUSA, P.L.S.
TEL: 610-983-9200

DEVELOPER:
AZ ABINGTON, LLC
PO BOX 1908
MEDIA, PA 19063

LANDSCAPE ARCHITECT:
CMC ENGINEERING
2215 KIMBERTON ROAD
KIMBERTON, PA 19442
ATTN: ALOYSIUS GRYGA, RLA
TEL: 610-983-9200

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF THE RESPONSIBLE LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

SEAL: COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL KEITH J. MARSHALL ENGINEER P.E. PENNSYLVANIA

KEITH J. MARSHALL
PROFESSIONAL ENGINEER
PENNSYLVANIA
No. PE073328

CMC ENGINEERING
2215 Kimberton Road
P.O. Box 958 Kimberton, PA 19442
Phone (610) 983-9200 Fax (610) 983-9202
EMail: Contact@CMCEng.com

REV.	DATE	DESCRIPTION	CHK'D:	BY:
1	07/01/2022	REVISED PER TOWNSHIP COMMENTS	K.J.M.	J.S.D.
2	08/02/2022	REVISED PER TOWNSHIP COMMENTS	K.J.M.	A.C.K.

DRAWING NAME: TITLE SHEET

PROPOSED AUTOZONE LOCATION
1318 AND 1330 EASTON ROAD
ABINGTON, PA 19001

LOCATION: ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PA

ONE CALL SYSTEM 1-800-242-1776 PENNSYLVANIA

811 Know what's below. Call before you dig.

UTILITY NOTE:

PA ONE CALL SERIAL #20212700875
TICKET IS PRELIMINARY DESIGN TICKET
(A NOTIFICATION OF EXCAVATION OR DEMOLITION WORK GIVING NOT LESS THAN 10 NOR MORE THAN 90 BUSINESS DAYS NOTICE).
PA ONE CALL MUST BE NOTIFIED OF STATUS CHANGE FOR EXCAVATION AND/OR DEMOLITION.
THE FOLLOWING UTILITIES WERE CONTACTED PER PA ACT 287, AS AMENDED BY ACT 187 OF 1996:

ABINGTON TOWNSHIP
AQUA PA
COMCAST CABLE WILLOW GROVE
COMCAST CABLE
PECO ENERGY
VERIZON PA

ACKNOWLEDGEMENTS:

Commonwealth of Pennsylvania

County of Montgomery

On the _____ day of _____, A.D. 20 _____, before me, the subscriber, a Notary Public of the Commonwealth of Pennsylvania, residing in _____, personally appeared _____ (name of officer of the corporation), who acknowledged (himself/herself) to be the (president or secretary), being authorized to do so, (he/she) executed the foregoing plan by signing that said corporation is the owner of the designated land, that all necessary approval of the plan has been obtained and is endorsed thereon and that said corporation desires that the foregoing plan may be duly recorded.

_____
Notary Public

_____
My Commission Expires

Approval notation and signatures is as follows:

Approved by the Board of Commissioners of the Township of Abington this _____ day of _____, 20_____

_____ President

Attest _____ Secretary

_____ Engineer

SEAL:

_____
TOWNSHIP ENGINEER

MONTGOMERY COUNTY PLANNING COMMISSION CERTIFICATION:

MCPC FILE NO._____.

PROCESSED AND REVIEWED. A REPORT HAS BEEN PREPARED BY THE MONTGOMERY COUNTY PLANNING COMMISSION IN ACCORDANCE WITH THE MUNICIPALITIES PLANNING CODE.

CERTIFIED THIS DATE

_____
FOR THE DIRECTOR

_____
MONTGOMERY COUNTY PLANNING COMMISSION

RECORDED IN THE OFFICE OF THE RECORDED OF DEEDS IN NORRISTOWN, PENNSYLVANIA IN PLAN BOOK ____PAGE ____, ON THE ____DAY OF ____, ____.

MCPC NO.

APPLICATION NUMBER AND TYPE: LD-22-03-PRELIMINARY/FINAL MAJOR SUBDIVISION AND LAND DEVELOPMENT PLANS

DATE: 04/05/22	DRAWN BY: STAFF
SCALE: N/A	CHK'D BY: K.J.M.
PROJ. NUMBER: 1482-21-02-PA	
DRAWING NUMBER: T-1	
SHEET NUMBER: 1 OF 15	

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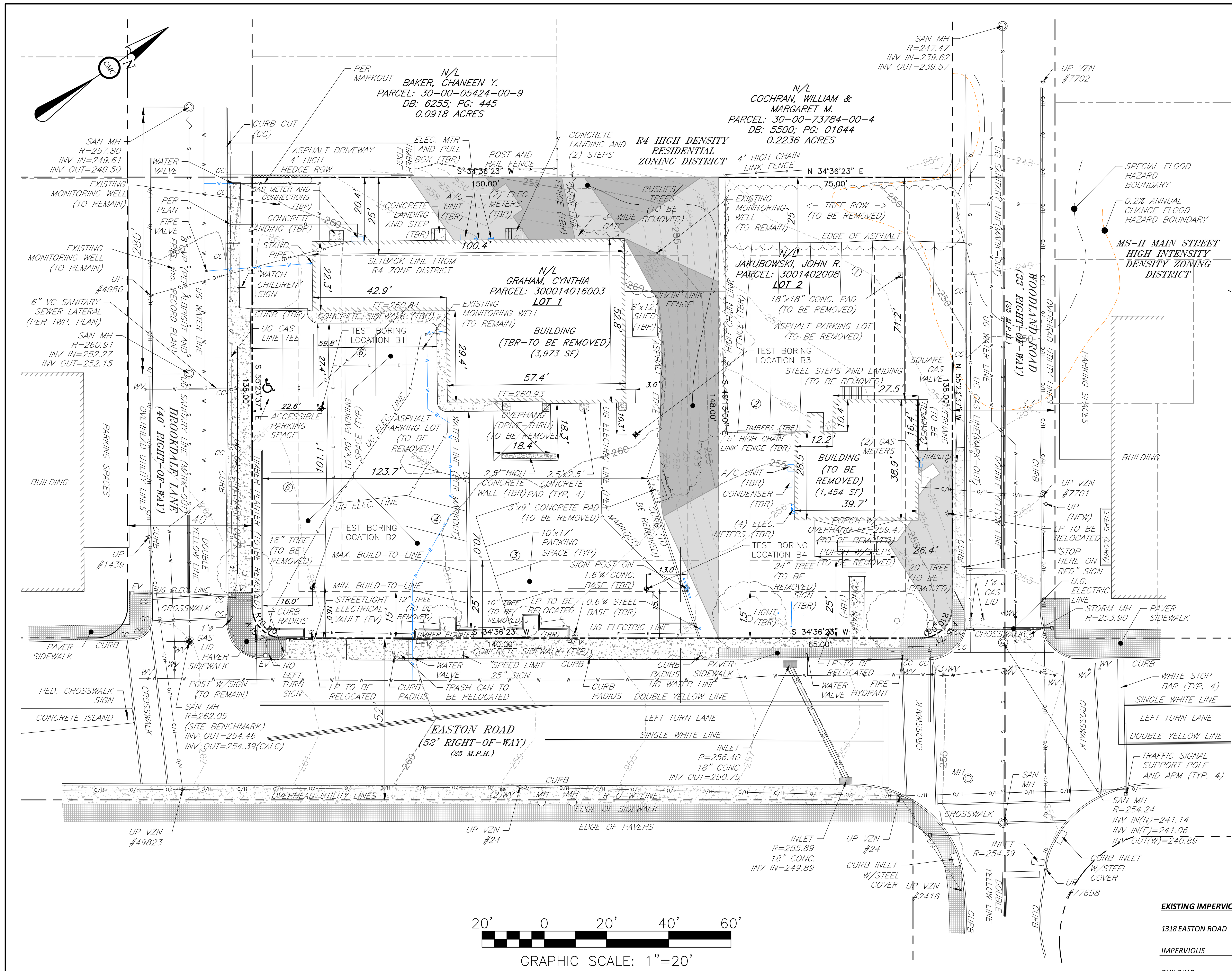

LOCATION MAP
SCALE: 1"=1000'

GENERAL NOTES:

1. BOUNDARY AND TOPOGRAPHIC FEATURES TAKEN FROM A FIELD SURVEY PERFORMED BY CMC ENGINEERING ON SEPTEMBER 20, 2021.
2. THE SUBJECT PROPERTYS ARE WITHIN THE MS-VC MAIN STREET-VILLAGE CENTER DISTRICT.
3. THE SUBJECT PROPERTYS CAN BE FOUND AT THE MONTGOMERY COUNTY COURTHOUSE

   UNDER OWNER OF RECORD:

   LOT 1
   GRAHAM, CYNTHIA — PROPERTY ADDRESS: 1318 EASTON RD, ABINGTON, PA 19001
   961 RED COAT FARM DR
   CHALFONT, PA 18914
   TAXMAPID: 30389 023
   PARID #: 30-00-14016-00-3

   LOT 2
   JAKUBOWSKI, JOHN R. — PROPERTY ADDRESS: 1330 EASTON RD, ABINGTON, PA 19001
   1330 EASTON RD
   ABINGTON, PA 19001
   TAXMAPID: 30389 022
   PARID #: 30-00-14020-00-8
4. SITE CONTOURS ARE ON U.S.G.S. DATUM NAVD 88.
5. 1318 EASTON RD PROPERTY IS LOCATED IN FLOOD ZONE "X", AREAS OF MINIMAL FLOOD HAZARD. REFERENCE PER FEMA MAP #42091C0294G, DATED MARCH 2, 2016.
6. 1330 EASTON RD PROPERTY IS LOCATED IN FLOOD ZONE "X", AREAS OF MINIMAL FLOOD HAZARD, IN ZONE "X" WITH AREAS OF 0.2% ANNUAL CHANCE FLOOD HAZARD, AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTH LESS THAN ONE FOOT OR WITH DRAINAGE AREAS LESS THAN ONE SQUARE MILE. THE BASE FLOOD ELEVATION IS APPROXIMATELY 249.8 IN THE VICINITY OF THE PROPERTY. REFERENCE PER FEMA MAP #42091C0294G, DATED MARCH 2, 2016.
7. SITE BENCHMARK IS A FOUND SANITARY MANHOLE ON BROOKDALE AVENUE AT EASTON ROAD.
   RIM ELEVATION = 262.05' (NAVD 88 DATUM)
   RIM ELEVATION = 263.02' (NGVD 29 DATUM – ABINGTON TOWNSHIP SANITARY SEWER DATUM)
8. EXISTING BOUNDARY MARKERS HAVE NOT BEEN FOUND.

SLOPE LEGEND:

- PRECAUTIONARY SLOPE: THOSE SLOPES GREATER THAN 15% AND LESS THAN OR EQUAL TO 25%
- PROHIBITIVE SLOPE: THOSE SLOPES GREATER THAN 25%

SLOPE PERCENTAGE:

AREA = 2,439 SF /33,257 SF (CONSOLIDATED PROPERTY AREA) -> 7.33%

AREA = 2,182 SF /33,257 SF (CONSOLIDATED PROPERTY AREA) -> 6.56%

SOILS LEGEND

WEB SOIL SURVEY, NATIONAL COOPERATIVE SOIL SURVEY, NATIONAL RESOURCES CONSERVATION SERVICE

SYMBOL	SOIL NAME	SLOPES	DEPTH TO WATER TABLE	DEPTH TO RESTRICTIVE LAYER	HYDRIC SOIL
UrhB	URBAN LAND-DUFFIELD COMPLEX (WHOLE PROJECT SITE)	3 TO 8 PERCENT	NONE LISTED (URBAN LAND)	10 TO 100 INCHES TO LITHIC BEDROCK (URBAN LAND)	NO
			MORE THAN 80 INCHES (DUFFIELD)	48 TO 120 INCHES TO LITHIC BEDROCK (DUFFIELD)	NO

SURFACE WATERS, PENNSYLVANIA CODE CHAPTER 93 DESIGNATION, AND WATERSHED
SANDY RUN — TSF, MF — WISSAHICKEN CREEK WATERSHED

UTILITY NOTE:

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AQUA PA
COMCAST CABLE WILLOW GROVE
COMCAST CABLE
PECO ENERGY
VERIZON PA

ONE CALL SYSTEM 1-800-242-1776 PENNSYLVANIA

811 Know what's below. Call before you dig.

LEGEND

- EXISTING PROPERTY LINE
- ZONING DISTRICT BOUNDARY LINE
- BUILDING SETBACK LINES
- EXISTING EDGE OF ROAD
- EXISTING BUILDING/WALKWAY
- EXISTING WATER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING SANITARY LINE
- EXISTING OVERHEAD UTILITY LINE
- EXISTING CHAIN LINK FENCE
- EXISTING POST AND RAIL FENCE
- EXISTING CONTOUR LINE
- EXISTING BUILDING
- EXISTING PAVER SIDEWALK
- EXISTING CONCRETE
- EXISTING TREE
- EXISTING STREET LAMP (LP)
- EXISTING ELECTRIC VAULT
- EXISTING GAS VALVE
- EXISTING WATER VALVE
- EXISTING MANHOLE

EXISTING IMPERVIOUS

1318 EASTON ROAD (LOT 1)

IMPERVIOUS	*AREA*
BUILDING	4,069 SF
CONCRETE	420 SF
ASPHALT	11,398 SF
TOTAL	15,887 SF
PROPERTY	22,178.5 SF
IMPERVIOUS	72 %
GREEN AREA	28 %

1330 EASTON ROAD (LOT 2)

IMPERVIOUS	*AREA*
BUILDING	1,454 SF
MISC.	381 SF
ASPHALT	3,803 SF
TOTAL	5,638 SF
PROPERTY	11,078.5 SF
IMPERVIOUS	51 %
GREEN AREA	49 %

LOTS 1 AND 2

IMPERVIOUS	*AREA*
TOTAL	21,525 SF
PROPERTIES	33,257.0 SF
IMPERVIOUS	65 %
GREEN AREA	35 %

ZONING DISTRICT DIMENSIONAL REQUIREMENTS

MS-VC MAIN STREET VILLAGE CENTER DISTRICT

	REQUIRED	1318 EASTON RD. (LOT 1) EXISTING	1330 EASTON RD. (LOT 2) EXISTING
MINIMUM LOT AREA	10,000 SF	22,178.5 SF	11,078.5 SF
MINIMUM LOT WIDTH	50 FT	150.0 FT	75.0 FT
MINIMUM GREEN AREA	20 %	28.0 % (6,210 SF)	49.0 % (5,428 SF)
MINIMUM BUILDING SEPARATION	20 FT	2.3 FT	N/A
MINIMUM BUILD-TO-LINE	15 FT	N/A	N/A
MAXIMUM BUILD-TO-LINE	25 FT	75.4 FT*	37.9 FT*
MINIMUM SIDE YARD SETBACK	10 FT	29.8 FT	24.5 FT
MINIMUM BUILDING SETBACK FROM ABUTTING R4	25 FT	20.1 FT	71.2 FT
MINIMUM TRASH STORAGE SETBACK ABUTTING R4	20 FT	N/A	N/A
MAXIMUM BUILDING FOOTPRINT	10,000 SF	4,070.0 SF	1,454.0 SF
MINIMUM FAÇADE HEIGHT	20 FT	N/A	N/A
MAXIMUM BUILDING HEIGHT	35 FT	<35 FT	<35 FT
MINIMUM WINDOW AREA	45 %	N/A	N/A
PARKING SETBACK FROM STREET WALL AND LANDSCAPING	5 FT	3 FT*	N/A
MAXIMUM WIDTH, PARKING BETWEEN PRINCIPAL BUILDING AND SIDE LOT LINE (FOR BUILDING IN BUILD-TO-ZONE)	70 FT	N/A	N/A
MINIMUM PARKING SETBACK FROM ABUTTING R4 PROPERTIES	20 FT	42.7 FT	20.5 FT
MAXIMUM WIDTH, STREET ACCESS POINT TWO-WAY	35 FT	33.8	20.1 FT

* EXISTING, NON-CONFORMING

APPLICATION NUMBER AND TYPE: LD-22-03-PRELIMINARY/FINAL MAJOR SUBDIVISION AND LAND DEVELOPMENT PLANS

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SEAL: COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER KEITH JOSEPH MARSHALL No. PE073528

KEITH J. MARSHALL
PROFESSIONAL ENGINEER
PENNSYLVANIA
No. PE073528

CMC ENGINEERING
2215 Kimberton Road
P.O. Box 958 Kimberton, PA 19442
Phone (610) 983-9200 Fax (610) 983-9202
EMail: Contact@CMCEng.com

REV.	DATE	DESCRIPTION	CHK'D:	BY:
1	07/01/22	REVISED PER TOWNSHIP COMMENTS	K.J.M.	J.S.D.
2	08/02/22	REVISED PER TOWNSHIP COMMENTS	K.J.M.	A.C.K.

DRAWING NAME: EXISTING FEATURES PLAN

PROPOSED AUTOZONE LOCATION
1318 AND 1330 EASTON ROAD
ABINGTON, PA 19001

LOCATION: ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PA

DATE: 04/05/22	DRAWN BY: A.C.K.
SCALE: 1"=20'	CHK'D BY: K.J.M.
PROJ. NUMBER: 1482-21-02-PA	
DRAWING NUMBER: EX-1	
SHEET NUMBER: 2 OF 15	

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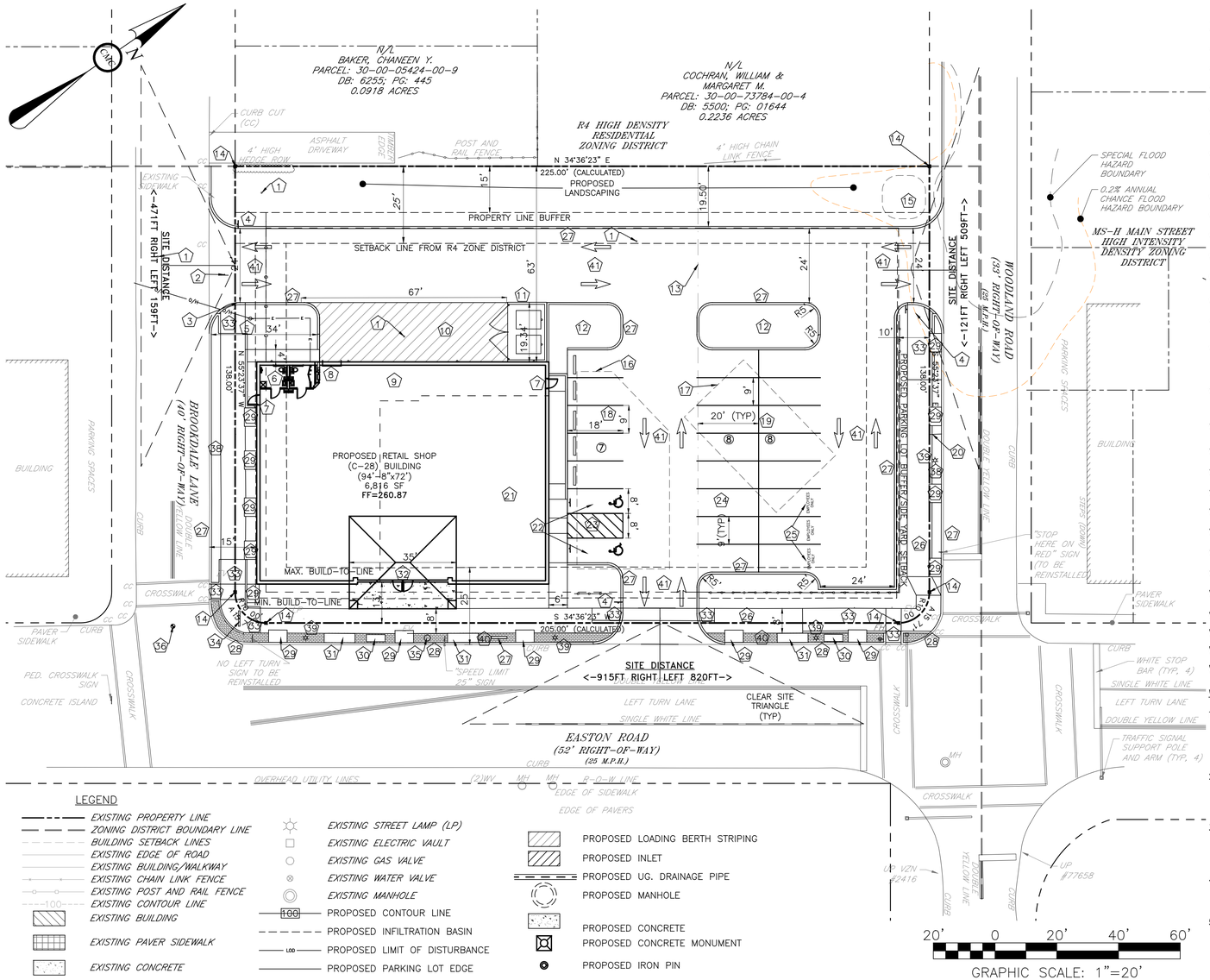
SEAL: COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER KEITH J. MARSHALL

KEITH J. MARSHALL
PROFESSIONAL ENGINEER
PENNSYLVANIA
No. PE073528

CMC ENGINEERING
2215 Kimberton Road
P.O. Box 958 Kimberton, PA 19442
Phone (610) 983-9200 Fax (610) 983-9202
EMail: Contact@CMCEng.com



LEGEND

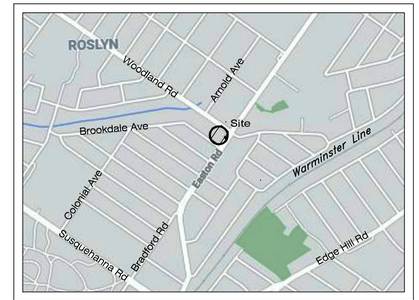
- EXISTING PROPERTY LINE
- ZONING DISTRICT BOUNDARY LINE
- BUILDING SETBACK LINES
- EXISTING EDGE OF ROAD
- EXISTING BUILDING/WALKWAY
- EXISTING CHAIN LINK FENCE
- EXISTING POST AND RAIL FENCE
- 100 EXISTING CONTOUR LINE
- EXISTING BUILDING
- EXISTING PAVER SIDEWALK
- EXISTING CONCRETE
- EXISTING STREET LAMP (LP)
- EXISTING ELECTRIC VAULT
- EXISTING GAS VALVE
- EXISTING WATER VALVE
- EXISTING MANHOLE
- 100 PROPOSED CONTOUR LINE
- PROPOSED INFILTRATION BASIN
- LOD PROPOSED LIMIT OF DISTURBANCE
- PROPOSED PARKING LOT EDGE
- PROPOSED LOADING BERTH STRIPING
- PROPOSED INLET
- PROPOSED UG. DRAINAGE PIPE
- PROPOSED MANHOLE
- PROPOSED CONCRETE
- PROPOSED CONCRETE MONUMENT
- PROPOSED IRON PIN

KEYNOTES:

1. EXISTING MONITORING WELL
2. "WATCH CHILDREN SIGN" TO BE RELOCATED
3. PROPOSED CURB TRANSITION (TYP.)
4. PROPOSED STOP SIGN
5. PROPOSED UTILITY POLE WITH SWEEP
6. PROPOSED REST ROOMS (187 SF)
7. PROPOSED ACCESS DOOR
8. PROPOSED LOADING ACCESS DOOR
9. PROPOSED STORAGE AREA (3,509 SF)
10. PROPOSED LOADING BERTH
11. PROPOSED TRASH ENCLOSURE
12. PROPOSED PLANTING ISLAND WITH CURB
13. EXISTING LOT LINE TO BE REMOVED
14. PROPOSED CONCRETE MONUMENT
15. PROPOSED RAIN GARDEN
16. PROPOSED 64'X30'X44.5'X3.5'(H) DETENTION BASIN (DB1) BOTTOM ELEV=250.75' (36)SC-740 STORMTECH CHAMBERS ELEV=252.25'
17. PROPOSED 42'X26'X2.5' DETENTION BASIN (DB2) BOTTOM ELEV=249.50' (28)SC-310 STORMTECH CHAMBERS ELEV=250.00'
18. PROPOSED 9'X18' PARKING SPACE (TYP.)
19. PROPOSED 9'X20' PARKING SPACE (TYP.)
20. END OF EXISTING SIDEWALK
21. PROPOSED RETAIL AREA (3,160 SF)
22. PROPOSED (2) 8'X18' ADA PARKING SPACES
23. PROPOSED 8'X18' ACCESS AISLE
24. PROPOSED ASPHALT PARKING LOT (23 SPACES)
25. PROPOSED EMPLOYEE PARKING
26. PROPOSED 8' WIDE CONCRETE SIDEWALK
27. PROPOSED 6" HIGH CURB
28. PROPOSED 8" HIGH CURB
29. PROPOSED 4'X6' PLANTER (TYP.)
30. PROPOSED DUMOR BENCH MODEL 57-60PL
31. PROPOSED 3'X10' PLANTER (TYP.)
32. PROPOSED ENTRANCE
33. PROPOSED ADA RAMP
34. EXISTING SIGN TO REMAIN AND BE REUSED
35. PROPOSED RELOCATION OF EXISTING TRASH CAN
36. SAN MH RIM=262.05' (SITE BENCHMARK) INV OUT=254.46'
37. PROPOSED DUMOR BIKE RACK MODEL 125-30
38. PROPOSED 3' WIDE LANDSCAPED VERGE
39. NEW LOCATION OF RELOCATED LAMP POST
40. PROPOSED 3' WIDE BRICK VERGE
41. PROPOSED DIRECTIONAL ARROWS

WAIVER REQUEST:

1. A PARTIAL WAIVER FROM SECTION 146-11.B(3) AND SECTION 146-11.B(7) OF THE ABINGTON TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE TO PROVIDE AN AERIAL CONTEXT PLAN IN SUPPORT OF THE PARTIAL WAIVER TO SHOW PROPERTY LINES AND NAMES OF LANDOWNERS AND OTHER EXISTING FEATURES WITHIN 400 FEET OF THE SITE.
2. A PARTIAL WAIVER FROM SECTION 146-28.A OF THE ABINGTON TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE IS REQUESTED FOR A REDUCTION OF THE PARKING SPACE DIMENSIONS FROM 10 FEET WIDE BY 20 FEET LONG, TO 9 FEET WIDE BY 18 FEET LONG.
3. A WAIVER FROM SECTION 146-33.D OF THE ABINGTON TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE IS REQUESTED TO ALLOW A REDUCTION OF PIPE SIZES TO SMALLER THAN THOSE REQUIRED. PIPE CAPACITY CALCULATIONS HAVE BEEN PROVIDED.
4. A WAIVER FROM SECTION 146-43.C(3)(a) OF THE ABINGTON TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE TO ALLOW SLOPES GREATER THAN 15%.
5. A WAIVER FROM SECTION 142-302.B(2)(a) OF THE ABINGTON TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE IS REQUESTED SINCE THERE ARE NO ENVIRONMENTALLY SENSITIVE AREAS ON THE SITE OTHER THAN THE STEEP SLOPES THAT ARE SHOWN ON THE EXISTING FEATURES PLAN.
6. A WAIVER FROM SECTION 142-405.A(1)(a) OF THE ABINGTON TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE IS REQUESTED AS INFILTRATION IS NOT POSSIBLE ON THE SITE DUE TO GROUNDWATER CONTAMINATION CONDITIONS.



LOCATION MAP
SCALE: 1"=1000'

GENERAL NOTES:

1. BOUNDARY AND TOPOGRAPHIC FEATURES TAKEN FROM A FIELD SURVEY PERFORMED BY CMC ENGINEERING ON SEPTEMBER 20, 2021.
2. THE SUBJECT PROPERTYS ARE WITHIN THE MS-VC MAIN STREET-VILLAGE CENTER DISTRICT.
3. THE SUBJECT PROPERTYS CAN BE FOUND AT THE MONTGOMERY COUNTY COURTHOUSE UNDER OWNER OF RECORD:

   GRAHAM, CYNTHIA
   PROPERTY ADDRESS: 1318 EASTON RD
   961 RED COAT FARM DR
   ABINGTON, PA 19001
   CHALFONT, PA 18914
   TAXMAPID: 30389 023
   PARID #: 30-00-14016-00-3

   JAKUBOWSKI, JOHN R.
   PROPERTY ADDRESS: 1330 EASTON RD
   1330 EASTON RD
   ABINGTON, PA 19001
   ABINGTON, PA 19001
   TAXMAPID: 30389 022
   PARID #: 30-00-14020-00-8

3. SITE CONTOURS ARE ON U.S.G.S. DATUM NAVD 88.
4. 1318 EASTON RD PROPERTY IS LOCATED IN FLOOD ZONE "X", AREAS OF MINIMAL FLOOD HAZARD. REFERENCE PER FEMA MAP #42091C0294G, DATED MARCH 2, 2016.
5. 1330 EASTON RD PROPERTY IS LOCATED IN FLOOD ZONE "X", AREAS OF MINIMAL FLOOD HAZARD, IN ZONE "X" WITH AREAS OF 0.2% ANNUAL CHANCE FLOOD HAZARD, AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTH LESS THAN ONE FOOT OR WITH DRAINAGE AREAS LESS THAN ONE SQUARE MILE: THE BASE FLOOD ELEVATION IS APPROXIMATELY 249.8 IN THE VICINITY OF THE PROPERTY. REFERENCE PER FEMA MAP #42091C0294G, DATED MARCH 2, 2016.
6. SITE BENCHMARK IS A FOUND SANITARY MANHOLE ON BROOKDALE AVENUE AT EASTON ROAD.
   RIM ELEVATION = 262.05' (NAVD 88 DATUM)
   RIM ELEVATION = 263.02' (NGVD 29 DATUM - ABINGTON TOWNSHIP SANITARY SEWER DATUM)
7. PROPOSED USE: RETAIL SHOP (C-28)
8. ALL EXISTING SITE FEATURES ARE TO BE DEMOLISHED UNLESS OTHERWISE SHOWN ON THESE PLANS.
9. ALL EXISTING TRAFFIC CONTROL SIGNS ARE TO BE REINSTALLED IN THEIR EXISTING LOCATIONS UNLESS OTHERWISE STATED ON THE PLAN.
10. NO VEHICLE REPAIRS OR FABRICATION SHALL TAKE PLACE OUTSIDE OF THE BUILDING.
11. ALL MECHANICAL ROOF TOP UNITS SHALL BE SCREENED AND MUFFLED PER SECTIONS 162-2601.J(1) & 162-2601.J(2).
12. THE APPLICANT A BLANKET EASEMENT TO THE TOWNSHIP FOR PURPOSES OF STORMWATER MANAGEMENT FACILITIES INSPECTION.

PARKING USE REQUIREMENT

PER USE C-28 RETAIL SHOP (LESS THAN 10,000 SF), 1 PARKING SPACE PER 200 SF GROSS LEASABLE FLOOR AREA

PROPOSED BUILDING AREA	6,816 SF
PROPOSED STORAGE AREA	-3,509
PROPOSED RESTROOM AREA	-147 SF
PROPOSED GROSS LEASABLE FLOOR AREA (RETAIL AREA)	3,160 SF

3,160 SF / 200 SF = 15.80 SPACES ~ 16 SPACES

PARKING SPACE REDUTION FACTORS:

USE IS WITHIN 200 FT OF A BUS SHELTER STATION; THEREFORE, A 2% REDUCTION IS PERMITTED.

USE WITH DEFINED PEDESTRIAN WALKWAY (AND BICYCLE TRAIL SYSTEMS) LEADING TO SURROUNDING RESIDENTIAL NEIGHBORHOODS; THEREFORE, A 3% REDUCTION IS PERMITTED.

TOTAL PUBLIC TRANSPORTATION REDUCTION FACTORS 5 %

15.80 SPACES x 0.05 = 0.79

15.80 SPACES - 0.79 = 15.0 SPACES ~ 15 SPACES

PARKING SPACES PROVIDED = 23 SPACES

PARKING FOR INDIVIDUALS WITH DISIBILITIES

ACCESSIBLE PARKING SPACE REQUIREMENT — TOTAL PARKING SPACES IN LOT 1 TO 25 = REQUIRED MIN. OF ACCESSIBLE SPACES = 1

ACCESSIBLE PARKING SPACES PROVIDED = 2 SPACES

ZONING DISTRICT DIMENSIONAL REQUIREMENTS

MS-VC MAIN STREET VILLAGE CENTER DISTRICT

	REQUIRED	1318 EASTON RD. (LOT 1) EXISTING	1330 EASTON RD. (LOT 2) EXISTING	PROPOSED
MINIMUM LOT AREA	10,000 SF	22,178.5 SF	11,078.5 SF	33,257.0 SF
MINIMUM LOT WIDTH	50 FT	150.0 FT	75.0 FT	225.0 FT
MINIMUM GREEN AREA	20 %	28.0 % (6,210 SF)	49.0 % (5,428 SF)	22.5 % (7482.8 SF)
MINIMUM BUILDING SEPARATION	20 FT	2.3 FT	N/A	N/A
MINIMUM BUILD-TO-LINE	15 FT	N/A	N/A	15.3 FT
MAXIMUM BUILD-TO-LINE	25 FT	75.4 FT*	37.9 FT*	15.3 FT
MINIMUM SIDE YARD SETBACK	10 FT	29.8 FT	24.5 FT	N/A
MINIMUM BUILDING SETBACK FROM ABUTTING R4	25 FT	20.1 FT	71.2 FT	59.5 FT
MINIMUM TRASH STORAGE SETBACK ABUTTING R4	20 FT	N/A	N/A	44.2 FT
MAXIMUM BUILDING FOOTPRINT	10,000 SF	4,070.0 SF	1,454.0 SF	6,816.0 SF
MINIMUM FAÇADE HEIGHT	20 FT	N/A	N/A	24.0 FT
MAXIMUM BUILDING HEIGHT	35 FT	<35 FT	<35 FT	<35 FT
MINIMUM WINDOW AREA	45 %	N/A	N/A	TBD
PARKING SETBACK FROM STREET WALL AND LANDSCAPING	5 FT	3 FT*	N/A	5 FT
MAXIMUM WIDTH, PARKING BETWEEN PRINCIPAL BUILDING AND SIDE LOT LINE (FOR BUILDING IN BUILD-TO-ZONE)	70 FT	N/A	N/A	60 FT
MINIMUM PARKING SETBACK FROM ABUTTING R4 PROPERTIES	20 FT	42.7 FT	20.5 FT	54.5 FT
MAXIMUM WIDTH, STREET ACCESS POINT TWO-WAY	35 FT	33.8	20.1 FT	24.0 FT

* EXISTING, NON-CONFORMING

PROPOSED GREEN AREA CALCULATION:

PROPOSED GREEN AREA = 7,483 SF

PROPOSED (CONSOLIDATED) PROPERTY AREA = 33,257 SF

PROPOSED GREEN AREA PERCENTAGE = (7,483/33,257) x 100 = 22.5%

WINDOW AREA CALCULATION:

FRONT FACADE

LENGTH OF BUILDING: 94.8 FT x 45% = 42.7 FT

WIDTH OF WINDOWS: 62 FT

SIDE FACADE

LENGTH OF BUILDING: 72 FT x 45% = 32.4 FT

WIDTH OF WINDOWS: 32.5 FT

PROPOSED IMPERVIOUS

PROPERTY CONSOLIDATED

IMPERVIOUS	AREA
BUILDING	6,816 SF
ASPHALT	15,834 SF
MISC.	3,136 SF
TOTAL	25,786 SF
PROPERTY (NEW)	33,257 SF
IMPERVIOUS	77.5 %
GREEN AREA	22.5 %
	7,482.8 SF

UTILITY NOTE:

PA ONE CALL SERIAL #20212700875
TICKET IS PRELIMINARY DESIGN TICKET
(A NOTIFICATION OF EXCAVATION OR DEMOLITION WORK GIVING NOT LESS THAN 10 NOR MORE THAN 90 BUSINESS DAYS NOTICE).
PA ONE CALL MUST BE NOTIFIED OF STATUS CHANGE FOR EXCAVATION AND/OR DEMOLITION.
THE FOLLOWING UTILITIES WERE CONTACTED PER PA ACT 287, AS AMENDED BY ACT 187 OF 1996:

ABINGTON TOWNSHIP
AQUA PA
COMCAST CABLE WILLOW GROVE
COMCAST CABLE
PECO ENERGY
VERIZON PA

APPLICATION NUMBER AND TYPE: LD-22-03-PRELIMINARY/FINAL MAJOR SUBDIVISION AND LAND DEVELOPMENT PLANS

REV.	DATE	DESCRIPTION	CHK'D:	BY:
1	07/01/22	REVISED PER TOWNSHIP ENGINEER REVIEW LETTERS	K.J.M.	J.S.D.
2	07/05/22	REVISED PER CLIENT COMMENTS	K.J.M.	J.S.D.
3	08/02/22	REVISED PER TOWNSHIP COMMENTS	K.J.M.	A.C.K.

DRAWING NAME: LOT CONSOLIDATION/SITE PLAN

PROPOSED AUTOZONE LOCATION
1318 AND 1330 EASTON ROAD
ABINGTON, PA 19001

LOCATION: ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PA

DATE: 04/05/22	DRAWN BY: A.C.K.
SCALE: 1"=20'	CHK'D BY: K.J.M.
PROJ. NUMBER: 1482-21-02-PA	
DRAWING NUMBER: S-1	
SHEET NUMBER: 3 OF 15	

M:\Small Jobs\Wright Partners\AZ - Abington\CAD\Plan Set\3-Site Plan S-1 AZ.dwg

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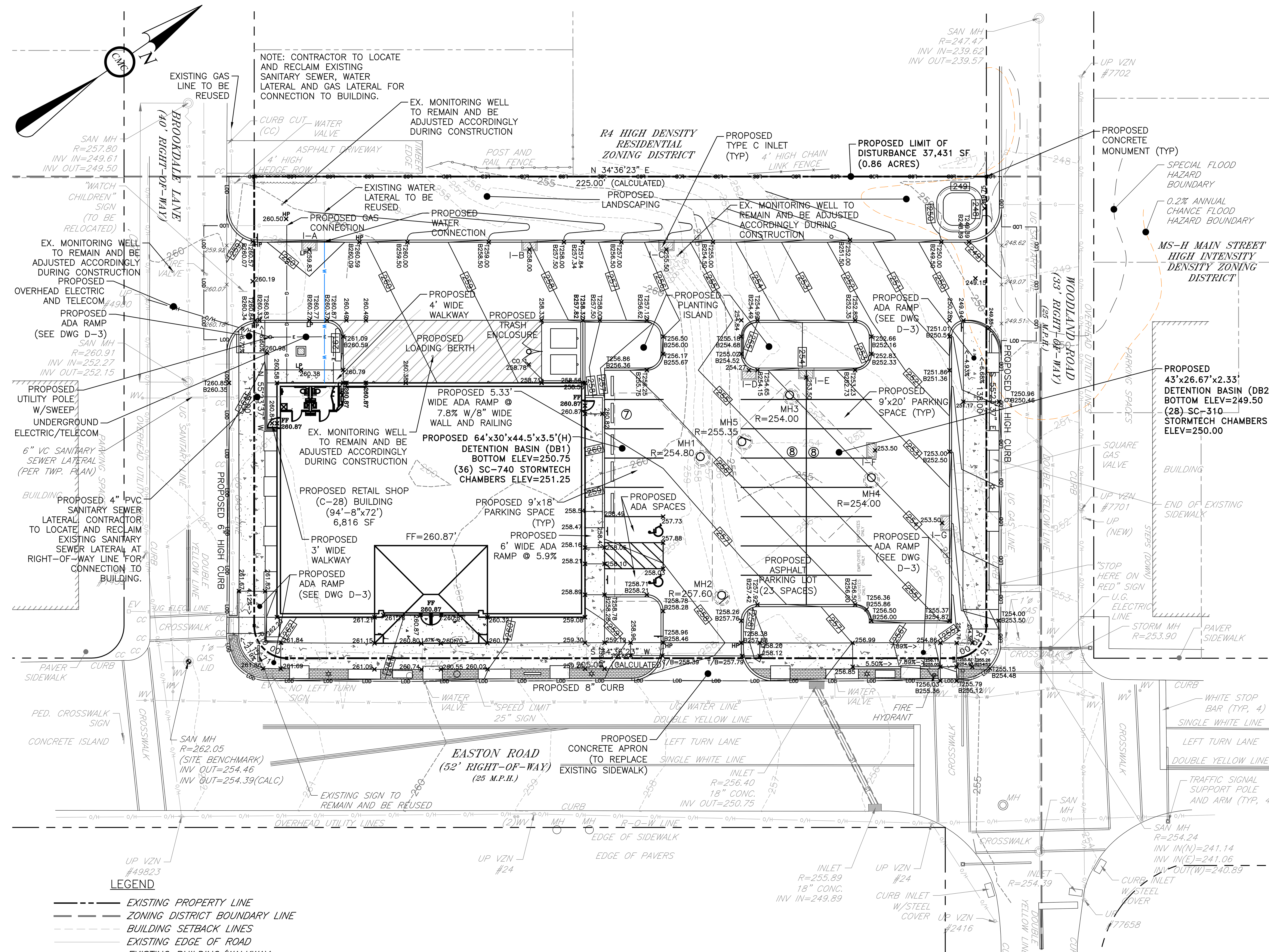


20' 0 20' 40' 60'

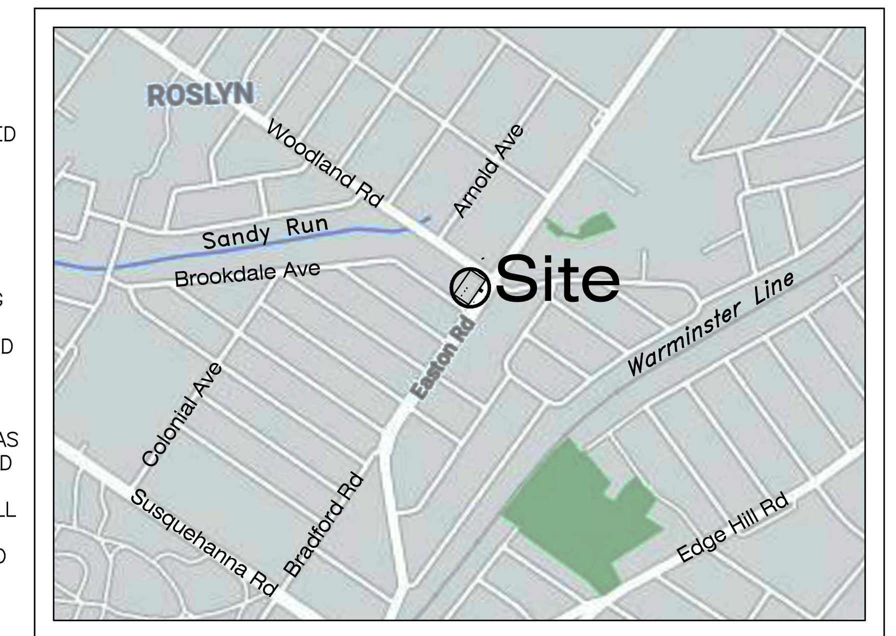
GRAPHIC SCALE: 1"=20'

LEGEND

- EXISTING PROPERTY LINE
- ZONING DISTRICT BOUNDARY LINE
- BUILDING SETBACK LINES
- EXISTING EDGE OF ROAD
- EXISTING BUILDING/WALKWAY
- EXISTING WATER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING SANITARY LINE
- EXISTING OVERHEAD UTILITY LINE
- EXISTING CHAIN LINK FENCE
- EXISTING POST AND RAIL FENCE
- EXISTING CONTOUR LINE
- EXISTING BUILDING
- EXISTING PAVER SIDEWALK
- EXISTING CONCRETE
- EXISTING STREET LAMP (LP)
- EXISTING ELECTRIC VAULT
- EXISTING GAS VALVE
- EXISTING WATER VALVE
- EXISTING MANHOLE
- PROPOSED CONTOUR LINE
- PROPOSED INFILTRATION BASIN
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED PARKING LOT EDGE
- PROPOSED LOADING BERTH STRIPING
- PROPOSED INLET
- PROPOSED UG. DRAINAGE PIPE
- PROPOSED MANHOLE
- PROPOSED CONCRETE
- PROPOSED MONUMENT
- PROPOSED IRON PIN

CONSTRUCTION NOTES:

1. SEE ARCHITECTURAL DRAWINGS FOR DETAILED BUILDING, STRUCTURAL, ELECTRICAL, LIGHTING, ELEVATORS, STAIRWELLS AND SIDEWALK INFORMATION AND DETAILS, INCLUDING PAVEMENT FINISHES SHOWN AS ANYTHING OTHER THAN ASPHALT.
2. CONTRACTOR IS TO ENSURE THAT ALL ACCESSIBLE FACILITIES SHALL BE CONSTRUCTED IN CONFORMANCE WITH CURRENT A.D.A. REQUIREMENTS.
3. ALL INTERNAL CURB IS TO BE 6" REVEAL. REFER TO DETAIL SHEET.
4. NO REVIEW OF THE PROPERTY REGARDING THE PRESENCE OF HAZARDOUS MATERIAL WAS ACCOMPLISHED AS A PART OF THIS PLAN.
5. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH BY THE GEOTECHNICAL ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING ALL SOFT, YIELDING OR UNSUITABLE MATERIALS AND REPLACING WITH SUITABLE MATERIALS AS SPECIFIED BY THE GEOTECHNICAL ENGINEER. ALL EXCAVATED OR FILLED AREAS SHALL BE COMPACTED TO A MINIMUM 95% OF MODIFIED PROCTOR MAXIMUM DENSITY PER A.S.T.M. TEST D-1557.
6. CONTRACTOR IS RESPONSIBLE FOR ALL SHORING REQUIRED DURING EXCAVATION AND SHALL BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS, AS WELL AS ADDITIONAL PROVISIONS TO ASSURE STABILITY OF CONTIGUOUS STRUCTURES, AS FIELD CONDITIONS DICTATE.
7. IN CASE OF DISCREPANCIES BETWEEN PLANS, THE SITE PLAN WILL SUPERSEDE IN ALL CASES. NOTIFY ENGINEER OF RECORD OF ANY CONFLICT IN WRITING.
8. SUBBASE MATERIAL FOR SIDEWALKS AND ASPHALT SHALL BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SHOULD SUBBASE BE DEEMED UNSUITABLE, SUBBASE IS TO BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL COMPACTED TO 95% OPTIMUM DENSITY (AS DETERMINED BY MODIFIED PROCTOR METHOD).
9. ALL EXCAVATED UNSUITABLE MATERIAL MUST BE TRANSPORTED TO AN APPROVED DISPOSAL LOCATION.
10. ANY PROPOSED RETAINING WALLS GREATER THAN 4 FT IN HEIGHT SHALL BE STRUCTURALLY ENGINEERED. CONTRACTOR TO VERIFY WHETHER OR NOT SHOP DRAWINGS MUST BE SUBMITTED TO LOWER SALFORD TOWNSHIP FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
11. CONTRACTOR TO MATCH EXISTING PAVEMENT, CURB, AND SIDEWALK ELEVATIONS/LOCATIONS WHERE THE PROPOSED IMPROVEMENTS TIE INTO EXISTING FEATURES.
12. INSTALLATION OF ALL UTILITIES SHALL BE IN ACCORDANCE WITH THE ENGINEERING STANDARDS AND SPECIFICATIONS OF THE TOWNSHIP ENGINEER, MONTGOMERY COUNTY, OR OTHER PUBLIC UTILITY CONCERNS.
13. ALL BUILDINGS AND ASSOCIATED UTILITY CONNECTIONS, AS SHOWN, HAVE BEEN BASED UPON SCHEMATIC ARCHITECTURAL PLANS. CONTRACTOR SHALL REFER TO ARCHITECT'S FINAL PLANS FOR EXACT BUILDING DIMENSIONS, UTILITY CONNECTION LOCATIONS & UTILITY SERVICE SIZING AND MATERIAL.
14. THE PROPOSED SEWER AND WATER SERVICE CONNECTIONS ARE TO BE INTERNAL TO THE ADDITION AND COORDINATED WITH THE ARCHITECTURAL PLANS TO ENSURE CORRECT LOCATION. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL UTILITY CONNECTION LOCATIONS, AND SHOULD NOTIFY THE OWNER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
15. SITE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE THE DISCONNECTION, ABANDONMENT, RELOCATION AND/OR REMOVAL OF ALL APPLICABLE ONSITE UTILITIES, IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS AS WELL AS ANY REQUIREMENTS FROM THE RELEVANT UTILITY COMPANY.
16. ALL UTILITIES AND STRUCTURES WITHIN PUBLIC RIGHTS-OF-WAY OR EASEMENTS SHALL REMAIN UNLESS OTHERWISE NOTED.
17. ANY UTILITIES, TO REMAIN, THAT ARE DAMAGED DURING DEMOLITION AND/OR CONSTRUCTION SHALL BE REPAIRED AND/OR REPLACED IN KIND BY THE CONTRACTOR AT HIS OWN EXPENSE.
18. CONTRACTOR SHALL ADHERE TO ALL SAFETY REGULATIONS AS REQUIRED BY "OSHA", THE PROPERTY OWNER, OR ANY LOCAL, STATE & FEDERAL AUTHORITY.
19. CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHY INFORMATION AND UTILITY INVERT ELEVATIONS, PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION. ANY DISCREPANCIES THAT MAY AFFECT PUBLIC SAFETY AND/OR PROJECT COST MUST BE IDENTIFIED IMMEDIATELY TO THE ENGINEER OF RECORD IN WRITING. PROCEEDING WITH CONSTRUCTION WITH DESIGN DISCREPANCIES IS DONE SO AT THE CONTRACTOR'S OWN RISK.
20. CONSTRUCTION OF PROPOSED UTILITIES SHALL COMMENCE AT THE LOWEST INVERT (POINT OF CONNECTION) AND PROGRESS UP GRADIENT. INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND INSTALLATIONS SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO COMMENCEMENT OF CONSTRUCTION.
21. CLEAN OUTS AND CURB BOXES WITHIN PAVED AREAS MUST HAVE TRAFFIC LOADING FRAMES AND COVERS.
22. PRIOR TO STORM DRAINAGE NETWORK CONSTRUCTION, SANITARY SEWER RELOCATION, OR EXCAVATION ACTIVITIES, A SOFT DIG EXPLORATION SHALL BE CONDUCTED TO VERIFY LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES. THE DESIGN ENGINEER SHALL BE INFORMED OF ANY CONFLICTS IDENTIFIED IN THE FIELD, PRIOR TO CONSTRUCTION.
23. EXISTING STORM STRUCTURES AND PIPES TO BE INSPECTED BY CONTRACTOR PRIOR TO CONSTRUCTION AND ANY DEFICIENCIES FOUND SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
24. ALL UTILITY CONNECTIONS SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY.
25. UTILITY LOCATIONS SHALL BE COORDINATED WITH PROPOSED AND EXISTING STRUCTURAL COLUMNS TO ASSURE THERE ARE NO CONFLICTS.
26. ALL WET UTILITIES SHALL HAVE WATERPROOF JOINTS.
27. ALL UTILITIES SHALL BE CONSTRUCTED UNDERGROUND.
28. CONTRACTOR TO REMOVE EXCESS DIRT AND DEBRIS FROM PROJECT AREAS TO ENSURE IT IS NOT TRACKED INTO PUBLIC RIGHT-OF-WAYS.
29. ALL PAVEMENT MARKINGS SHALL CONFORM TO CURRENT PENNDOT SPECIFICATIONS.
30. UNLESS OTHERWISE NOTED, ALL CONSTRUCTION IS TO BE COMPLETED PER ABINGTON TOWNSHIP AND PENNDOT CONSTRUCTION STANDARDS.
31. CONCRETE MONUMENTS TO BE SET AT ALL LOCATIONS SHOWN ON THE PLAN. THE MONUMENT SHALL BE CONCRETE 20 INCHES BY 4 INCHES BY 4 INCHES WITH 45-DEGREE BEVELED EDGES AND SHALL BE SET BY SUBDIVIDER / LAND DEVELOPER OR BUILDER.
32. SITE BENCHMARK IS A FOUND SANITARY MANHOLE ON BROOKDALE AVENUE AT EASTON ROAD.
    RIM ELEVATION = 262.05' (NAVD 88 DATUM)
    RIM ELEVATION = 263.02' (NGVD 29 DATUM – ABINGTON TOWNSHIP SANITARY SEWER DATUM)



LOCATION MAP
SCALE: 1"=1000'

DEMOLITION NOTES:

1. LOCATIONS OF EXISTING UTILITIES AS SHOWN HEREIN HAVE BEEN DEVELOPED FROM EXISTING UTILITY RECORDS, PLANS BY OTHERS, ABOVE GROUND EXAMINATION OF THE SITE AND/OR PRIVATE UTILITY LOCATION COMPANY. THE COMPLETENESS OR ACCURACY OF THE LOCATIONS ARE NOT GUARANTEED. THE CONTRACTOR MUST VERIFY LOCATIONS AND DEPTHS OF ALL UTILITIES BEFORE START OF WORK.
2. PRIOR TO STARTING CONSTRUCTION, ALL UTILITY SERVICES IN THE AREA ARE TO BE LOCATED, THE USER NOTIFIED, AND MEASURES TAKEN TO PROTECT THE LINES IN ACCORDANCE WITH PA ACT 287, AS AMENDED. CONTRACTORS ARE TO IMMEDIATELY NOTIFY THE ENGINEER OF ANY DEVIATIONS FROM THE PLAN INFORMATION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT PA "ONE-CALL" AT LEAST 72 HOURS TO ANY EXCAVATION OR DEMOLITION ON-SITE.
3. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO THE START OF DEMOLITION.
4. THE EXISTING ASPHALT TO BE RESURFACED SHALL BE PATCHED, FILLED AND/OR REPAIRED AS NECESSARY PRIOR TO THE APPLICATION OF THE WEARING COURSE.
5. IN ALL AREAS WHERE FINISHED PAVING IS TO BE PROVIDED, THE CONTRACTOR IS TO MILL EXISTING ASPHALT TO EXISTING SUBBASE STONE. FOLLOWING MILLING, THE EXPOSED SUBGRADE SHALL BE INSPECTED FOR ITS SUITABILITY AS PAVEMENT SUBBASE. IN AREAS WHERE EXISTING ASPHALT WILL BE CONVERTED TO GREEN SPACE OR BUILDING, THE CONTRACTOR IS TO MILL OUT THE EXISTING ASPHALT FOR ITS REUSE ON-SITE AS SUBBASE IN PROPOSED ASPHALT PAVEMENT AREAS. ALL FILL MEASURES TO BE COMPACTED IN ACCORDANCE WITH THE GEOTECHNICAL SPECIFICATIONS.
6. WHERE IMPROVEMENTS ARE PROPOSED TO TIE INTO EXISTING FEATURES, THE EXISTING FEATURES SHALL BE FIELD VERIFIED FOR ELEVATION AND LOCATION. IF FIELD LOCATED DATA IS DIFFERENT THAN THE DATA CONTAINED WITH THE CONSTRUCTION DOCUMENTS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD PRIOR TO ANY DESIGN CHANGES.
7. THE PAVEMENT SECTION AREA DELINEATED ON THE PLANS TO BE MODIFIED SHALL BE USED AS GUIDANCE. EXPAND OR CONTRACT THIS AREA AT THE TIE IN LOCATION TO EXISTING PAVEMENT, SIDEWALK, DRIVEWAY APRONS, AND LOADING AREAS AS THE FIELD CONDITIONS WARRANT. ALL PAVEMENT SEAMS SHALL BE SEALED.
8. SITE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE THE DISCONNECTION ABANDONMENT, RELOCATION AND/OR REMOVAL OF ALL APPLICABLE ON-SITE UTILITIES, IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS AS WELL AS ANY REQUIREMENTS FROM THE RELEVANT UTILITY COMPANY.
9. ALL DEMOLITION SHALL BE PERFORMED BY A QUALIFIED, LICENSED CONTRACTOR IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.
10. THIS PLAN IS NOT INTENDED TO DEPICT ALL FACETS AND ITEMS TO BE ADDRESSED DURING THE COURSE OF DEMOLITION ACTIVITIES. THIS PLAN IS INTENDED TO REPRESENT ONLY THE READILY VISIBLE, EXISTING IMPROVEMENTS ON-SITE. CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE SITE CONDITION PRIOR TO FINALIZING HIS BID AND PROVIDE ALL NECESSARY DEMOLITION SERVICES REQUIRED TO COMPLETE THE SCOPE OF WORK OUTLINED ON THESE DRAWINGS. UPON INITIATION OF DEMOLITION, CONTRACTOR SHALL ADVISE THE ENGINEER OF RECORD IMMEDIATELY, SHOULD CONFLICTS ARISE IN THE FIELD.
11. CONTRACTOR TO EXERCISE CARE WHEN REMOVING PAVEMENT OVER EXISTING PIPES TO REMAIN DURING CONSTRUCTION, CONTRACTOR SHALL TAKE STEPS TO MAINTAIN ADEQUATE COVER OVER ALL EXISTING PIPES TO REMAIN AND TO PREVENT CONSTRUCTION TRAFFIC FROM DAMAGING SAID PIPES. IF THE EXISTING PIPES ARE DAMAGED, THE CONTRACTOR SHALL REPLACE THEM IN KIND AT THEIR COST.
12. ALL PAVEMENT WITHIN THE LIMITS OF DISTURBANCE NOT SCHEDULED TO BE REMOVED SHALL BE MILLED AND OVERLAID WITH SUPERPAVE ASPHALT MIXTURE DESIGN, HMA WEARING COARSE, PG 64-22, 0.3 TO 23.0 MILLION ESALS, 9.5 MM MIX, 1.5" DEPTH. MILLING AND OVERLAYING SHALL BE PERFORMED TO MAKE PATCHING NON-VISUAL WHEN COMPLETED.
13. CONTRACTOR SHALL USE EXTREME CAUTION WHEN REMOVING EXISTING UTILITIES TO PREVENT ANY DISTURBANCE TO UTILITIES THAT ARE TO REMAIN. IF SAID REMAINING UTILITY IS DAMAGED, THE CONTRACTOR SHALL REPAIR THE UTILITY AT THEIR COST.
14. ALL UTILITIES TO BE ABANDONED AND LEFT IN PLACE SHALL BE PLUGGED AND FILLED WITH FLOWABLE CONCRETE.
15. CONTRACTOR TO LOCATE AND RECLAIM EXISTING WATER, GAS, AND SANITARY SEWER LATERALS FOR CONNECTION TO BUILDING.

ONE CALL SYSTEM 1-800-242-1776 PENNSYLVANIA

811 Know what's below. Call before you dig.

UTILITY NOTE:

PA ONE CALL SERIAL #20212700875
TICKET IS PRELIMINARY DESIGN TICKET

(A NOTIFICATION OF EXCAVATION OR DEMOLITION WORK GIVING NOT LESS THAN 10 NOR MORE THAN 90 BUSINESS DAYS NOTICE).

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THE FOLLOWING UTILITIES WERE CONTACTED PER PA ACT 287, AS AMENDED BY ACT 187 OF 1996:

ABINGTON TOWNSHIP
AQUA PA
COMCAST CABLE WILLOW GROVE
COMCAST CABLE
PECO ENERGY
VERIZON PA

APPLICATION NUMBER AND TYPE: LD-22-03-PRELIMINARY/FINAL MAJOR SUBDIVISION AND LAND DEVELOPMENT PLANS

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF THE RESPONSIBLE LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

SEAL: COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER KEITH JOSEPH MARSHALL No. PE073528

KEITH J. MARSHALL
PROFESSIONAL ENGINEER
PENNSYLVANIA
No. PE073528

CMC ENGINEERING
2215 Kimberton Road
P.O. Box 958 Kimberton, PA 19442
Phone (610) 983-9200 Fax (610) 983-9202
EMail: Contact@CMCEng.com

REV.	DATE	DESCRIPTION	CHK'D:	BY:
1	07/01/22	REVISED PER TOWNSHIP COMMENTS	K.J.M.	J.S.D.
2	08/02/22	REVISED PER TOWNSHIP COMMENTS	K.J.M.	A.C.K.

DRAWING NAME: GRADING/UTILITY PLAN

PROPOSED AUTOZONE LOCATION
1318 AND 1330 EASTON ROAD
ABINGTON, PA 19001

LOCATION: ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PA

DATE: 04/05/22	DRAWN BY: A.C.K.
SCALE: 1"=20'	CHK'D BY: K.J.M.
PROJ. NUMBER: 1482-21-02-PA	
DRAWING NUMBER: G-1	
SHEET NUMBER: 4 OF 15	

M:\Small Jobs\Wright Partners\AZ - Abington\CAD\Plan Set\4-Grading Plan G-1.dwg

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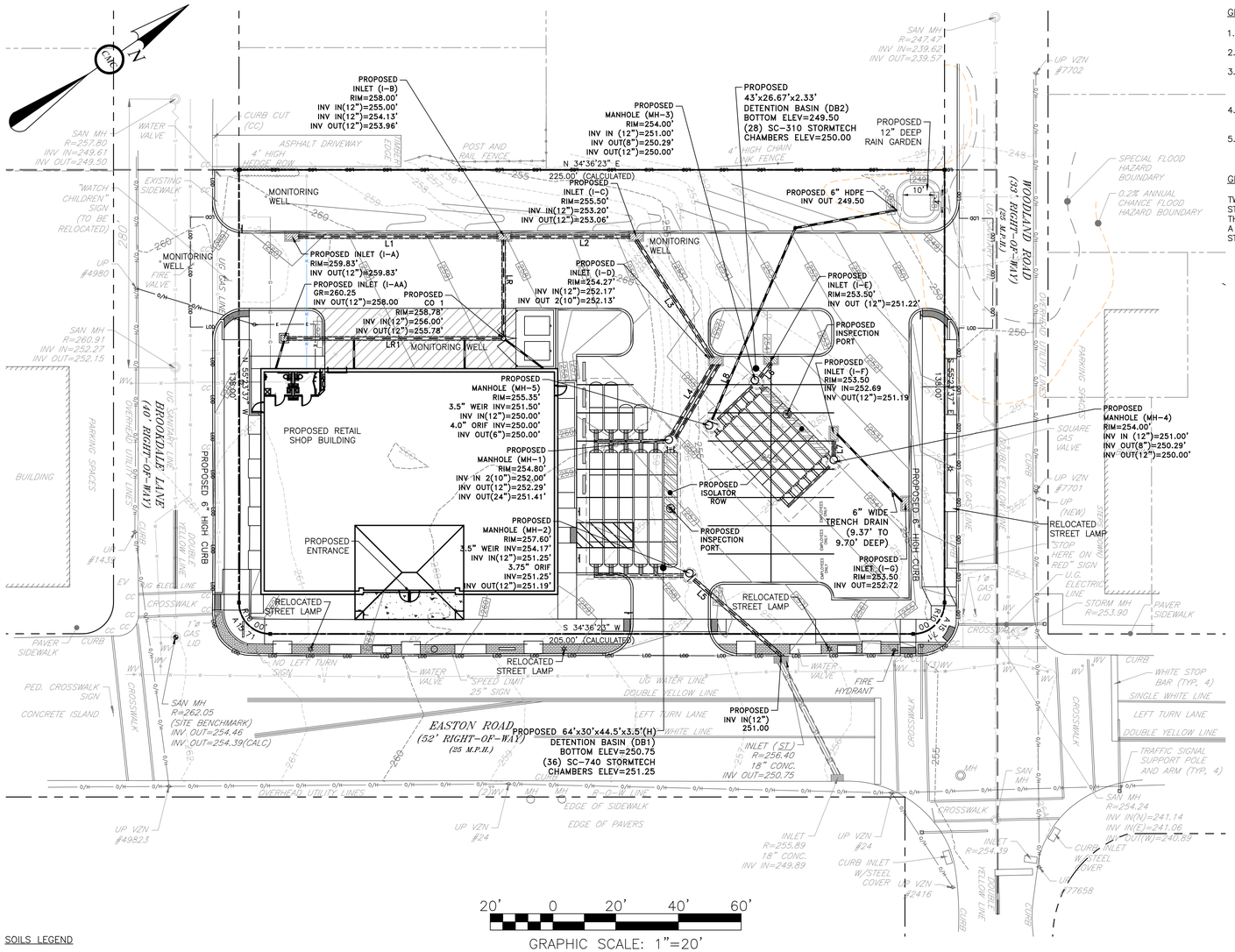
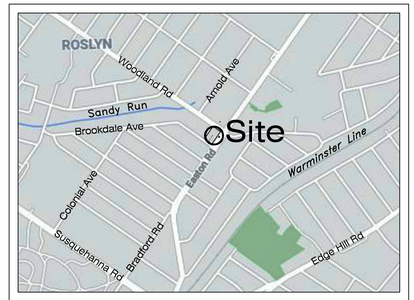


GENERAL NOTES:

1. PROPOSED USE: RETAIL SHOP (C-28)
2. PROPOSED LIMIT OF DISTURBANCE = 34,815 SF.
3. A BLANKET EASEMENT FOR ACCESS TO THE STORMWATER MANAGEMENT FACILITIES SHALL BE PROVIDED OVER THE ENTIRE PROPERTY FOR INGRESS AND EGRESS FROM THE PUBLIC RIGHT-OF-WAY.
4. PROVIDE A CONSTRUCTION FENCE AROUND THE PERIMETER OF THE INFILTRATION BASIN DURING CONSTRUCTION OF THE STORMWATER FACILITY.
5. EROSION AND SEDIMENT CONTROL MEASURES ARE SHOWN ON DWG. EC-1, SHEET 7 OF 10.

GENERAL DESCRIPTION:

TWO EXISTING LOTS SHALL BE CONSOLIDATED INTO ONE LOT. THE EXISTING STRUCTURES, INCLUDING A ONE STORY BUILDING AND OFFICE, AND PARKING LOTS THAT SERVE BOTH, SHALL BE DEMOLISHED TO ALLOW FOR THE CONSTRUCTION OF A NEW RETAIL BUILDING AND PARKING LOT, UTILITIES, LANDSCAPING & STORMWATER MANAGEMENT BMPs.



LOCATION MAP
SCALE: 1"=1000'

LEGEND

- EXISTING PROPERTY LINE
- ZONING DISTRICT BOUNDARY LINE
- BUILDING SETBACK LINES
- EXISTING EDGE OF ROAD
- EXISTING BUILDING/WALKWAY
- EXISTING WATER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING SANITARY LINE
- EXISTING OVERHEAD UTILITY LINE
- EXISTING CHAIN LINK FENCE
- EXISTING POST AND RAIL FENCE
- EXISTING CONTOUR LINE
- EXISTING BUILDING
- EXISTING PAVER SIDEWALK
- EXISTING CONCRETE
- EXISTING STREET LAMP (LP)
- EXISTING ELECTRIC VAULT
- EXISTING GAS VALVE
- EXISTING WATER VALVE
- EXISTING MANHOLE
- PROPOSED CONSTRUCTION FENCE
- PROPOSED CONTOUR LINE
- PROPOSED INFILTRATION BASIN
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED PARKING LOT EDGE
- PROPOSED INLET
- PROPOSED UG. DRAINAGE PIPE
- PROPOSED MANHOLE
- PROPOSED CONCRETE
- PROPOSED STORMTECH CHAMBER
- PROPOSED ISOLATOR ROW

MAINTENANCE:

SUBSURFACE STORMWATER MANAGEMENT BMP

ALL CATCH BASINS AND INLETS SHOULD BE INSPECTED AND CLEANED AT LEAST 2 TIMES PER YEAR. INSPECT AND CLEAN AS NEEDED ALL COMPONENTS OF AND CONNECTIONS TO SUBSURFACE STORMWATER MANAGEMENT SYSTEMS. REMOVE SEDIMENT AND DEBRIS. DISPOSE OF PROPERLY. EVALUATE DRAIN-DOWN TIME TO ENSURE THAT TIME IS BETWEEN 24 AND 72 HOURS AFTER THE RAIN EVENT HAS STOPPED. MAINTAIN RECORDS OF ALL INSPECTIONS AND MAINTENANCE ACTIVITY. INSPECT AREA ABOVE SUBSURFACE BMP FOR ANY NEW DEPRESSIONS THAT MAY CAUSE PONDING. INSPECT BMP. REPAIR IMMEDIATELY.

SOILS LEGEND

WEB SOIL SURVEY, NATIONAL COOPERATIVE SOIL SURVEY, NATIONAL RESOURCES CONSERVATION SERVICE

SYMBOL	SOIL NAME	SLOPES	DEPTH TO WATER TABLE	DEPTH TO RESTRICTIVE LAYER	HYDRIC SOIL
UrhB	URBAN LAND-DUFFIELD COMPLEX (WHOLE PROJECT SITE)	3 TO 8 PERCENT	NONE LISTED (URBAN LAND) MORE THAN 80 INCHES (DUFFIELD)	10 TO 100 INCHES TO LITHIC BEDROCK (URBAN LAND) 48 TO 120 INCHES TO LITHIC BEDROCK (DUFFIELD)	NO NO

SURFACE WATERS, PENNSYLVANIA CODE CHAPTER 93 DESIGNATION, AND WATERSHED
SANDY RUN TSF, MF WISSAHICKEN CREEK WATERSHED

TOWNSHIP CERTIFICATION:

I, _____, THE MUNICIPAL OFFICIAL OR DESIGNEE, ON THIS DATE _____, HAS REVIEWED AND HEREBY CERTIFIES THAT THE SWM SITE PLAN MEETS ALL DESIGN STANDARDS AND CRITERIA OF THE MUNICIPAL ORDINANCE NO. _____.

APPLICANT PLAN REVISION ACKNOWLEDGEMENT:

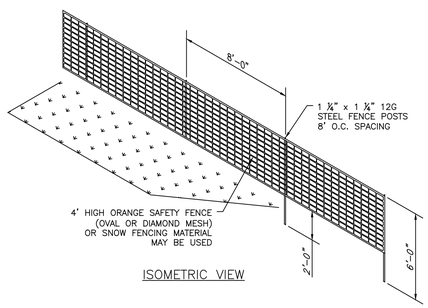
I, _____, THE APPLICANT, ACKNOWLEDGE THAT ANY REVISION TO THE APPROVED DRAINAGE PLAN MUST BE APPROVED BY THE MUNICIPALITY, AND THAT A REVISED EROSION AND SEDIMENT CONTROL PLAN MUST BE SUBMITTED TO THE MUNICIPALITY OR CONSERVATION DISTRICT FOR APPROVAL.

_____
APPLICANT SIGNATURE

ENGINEER CERTIFICATION:

I, _____, THE DESIGN ENGINEER, ON THIS DATE _____, HEREBY CERTIFY THAT THE DRAINAGE PLAN MEETS ALL REQUIREMENTS OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION'S (DEP'S) REGULATIONS AND THIS CHAPTER.

_____
ENGINEER SIGNATURE



ISOMETRIC VIEW

NOTES

1. FENCE TO BE INSTALLED AROUND PERIMETER OF RAIN GARDEN DURING EXCAVATION AND INSTALLATION. IT SHALL BE REMOVED UPON ITS COMPLETION.
2. SECURE FENCING MATERIAL TO STEEL POSTS WITH GALVANIZED WIRE AT 1'-0" INTERVALS.
3. ALL UNDERGROUND UTILITIES AND STRUCTURES MUST BE LOCATED PRIOR TO INSTALLATION.

CONSTRUCTION/TREE PROTECTION FENCE DETAIL
NOT TO SCALE

DRAINAGE PIPE IDENTIFICATION

I.D. #	LENGTH (FT)	DIAMETER (IN)	INL/MH OUT I.D. #	INL/MH OUT ELEVATION	INL/MH IN ELEVATION	INL/MH IN I.D. #	HEIGHT DIFF. (FT)	SLOPE (FT/FT)	SLOPE (%)
L1	63.60	12	INL A	255.41	254.13	INL B	1.28	0.0201	2.01
L2	38.00	12	INL B	253.96	253.20	INL C	0.76	0.0200	2.00
L3	44.60	12	INLC	253.06	252.17	INL D	0.89	0.0200	2.00
L4	26.36	10(x2)	INL D	252.13	252.00	MH 1	0.13	0.0049	0.49
LR1	68.33	12	INL AA	258.00	256.00	CO 1	2.00	0.0293	2.93
LR	30.70	12	CO 1	255.78	255.00	INL B	0.78	0.0254	2.54
L5	37.00	12	MH 2	251.19	251.00	IN ST	0.19	0.0051	0.51
L6	5.50	12	INL E	251.22	251.00	MH 3	0.22	0.0400	4.00
L7	4.75	12	INL F	251.19	251.00	MH 4	0.19	0.0400	4.00
L8	100.00	6	MH 5	250.00	249.50	OUT	0.50	0.0050	0.50

ONE CALL SYSTEM 1-800-242-1776 PENNSYLVANIA

811 Know what's below. Call before you dig.

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COMMONWEALTH OF PENNSYLVANIA REGISTERED KEITH J. MARSHALL ENGINEER No. PE073328

KEITH J. MARSHALL, P.E.
PROFESSIONAL ENGINEER
PENNSYLVANIA
No. PE073328

CMC ENGINEERING
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EMail: Contact@CMCEng.com

REV.	DATE	DESCRIPTION	CHK'D:	BY:
1	07/01/22	REVISED PER TOWNSHIP COMMENTS	K.J.M.	J.S.D.
2	08/02/22	REVISED PER TOWNSHIP COMMENTS	K.J.M.	A.C.K.

DRAWING NAME: STORMWATER MANAGEMENT SITE PLAN

PROPOSED AUTOZONE LOCATION
1318 AND 1330 EASTON ROAD
ABINGTON, PA 19001

LOCATION: ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PA

DATE: 04/05/22	DRAWN BY: A.C.K.
SCALE: 1"=20'	CHK'D BY: K.J.M.
PROJ. NUMBER: 1482-21-02-PA	
DRAWING NUMBER: SWM-1	
SHEET NUMBER: 5 OF 15	

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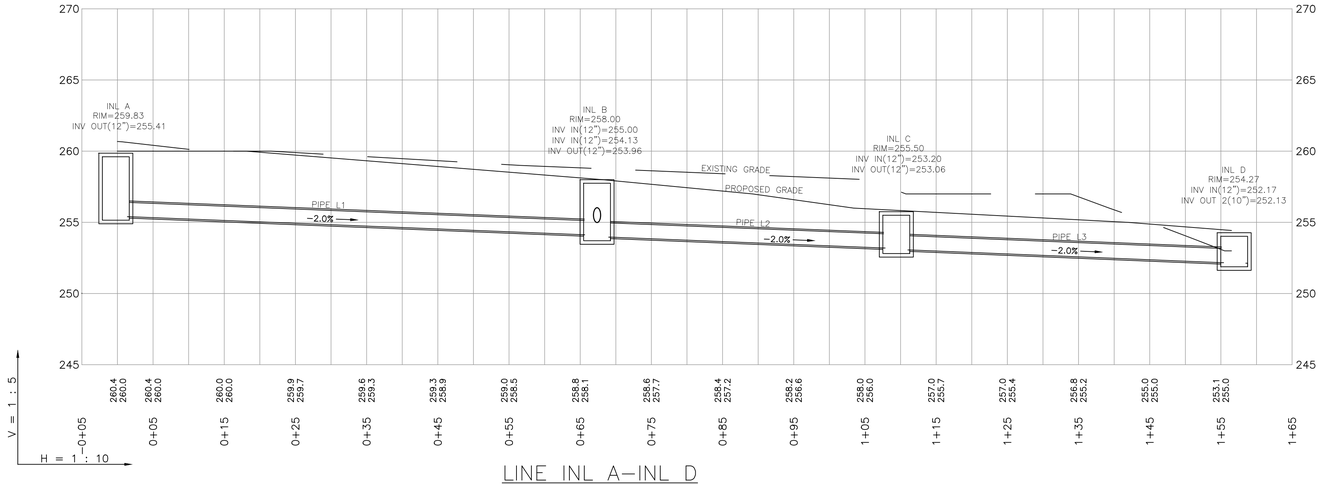
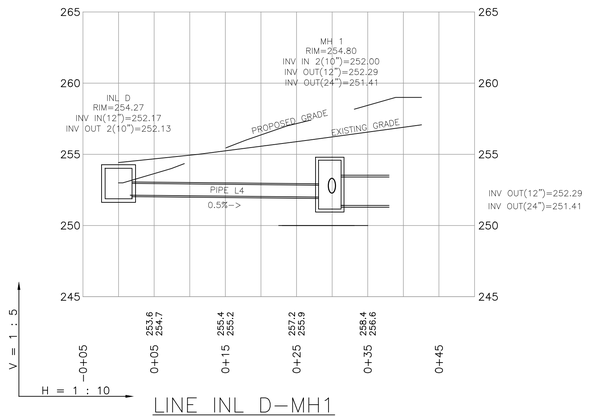
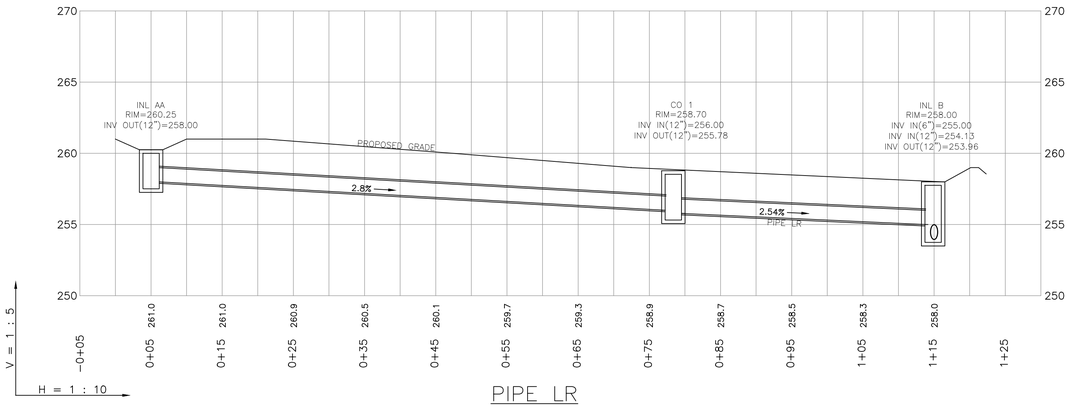


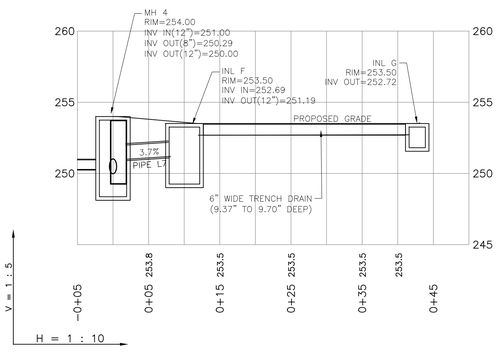
LINE INL A–INL D
1" = 10'



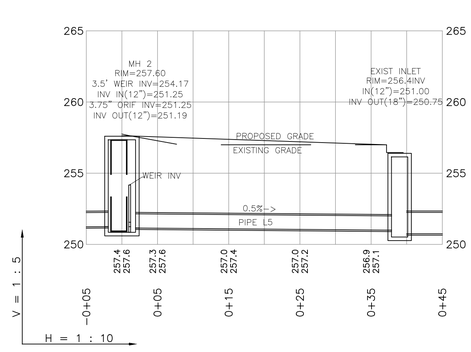
LINE INL D–MH1
1" = 10'



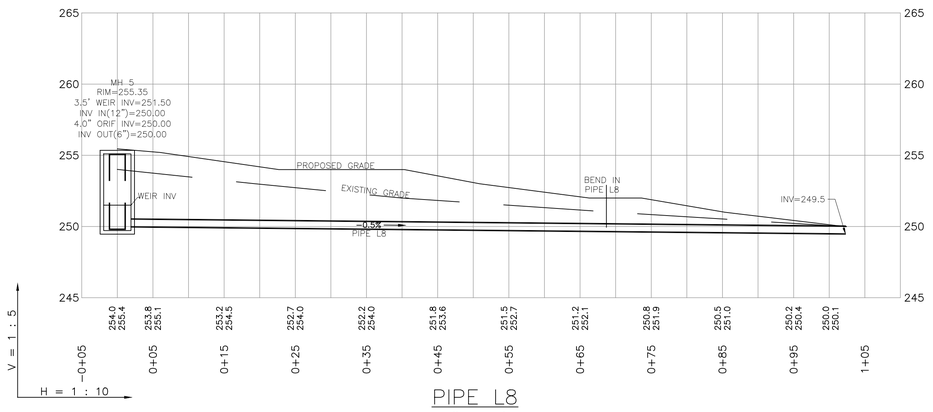
PIPE LR
1" = 10'



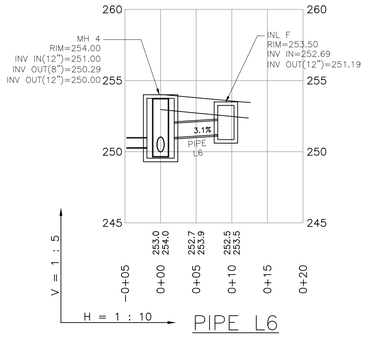
PIPE L7
1" = 10'



PIPE L5
1" = 10'



PIPE L8
1" = 10'



PIPE L6
1" = 10'

APPLICATION NUMBER AND TYPE: **LD–22–03–PRELIMINARY/FINAL MAJOR SUBDIVISION AND LAND DEVELOPMENT PLANS**

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2	08/02/22	REVISED PER TOWNSHIP COMMENTS	K.J.M.	A.C.K.

DRAWING NAME: STORMWATER MANAGEMENT PIPE PROFILES

LOCATION: PROPOSED AUTOZONE LOCATION
1318 AND 1330 EASTON ROAD
ABINGTON, PA 19001
ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PA

DATE: 04/05/22	DRAWN BY: A.C.K.
SCALE: 1"=20'	CHK'D BY: K.J.M.
PROJ. NUMBER: 1482–21–02–PA	
DRAWING NUMBER: SWM–2	
SHEET NUMBER: 6 OF 15	

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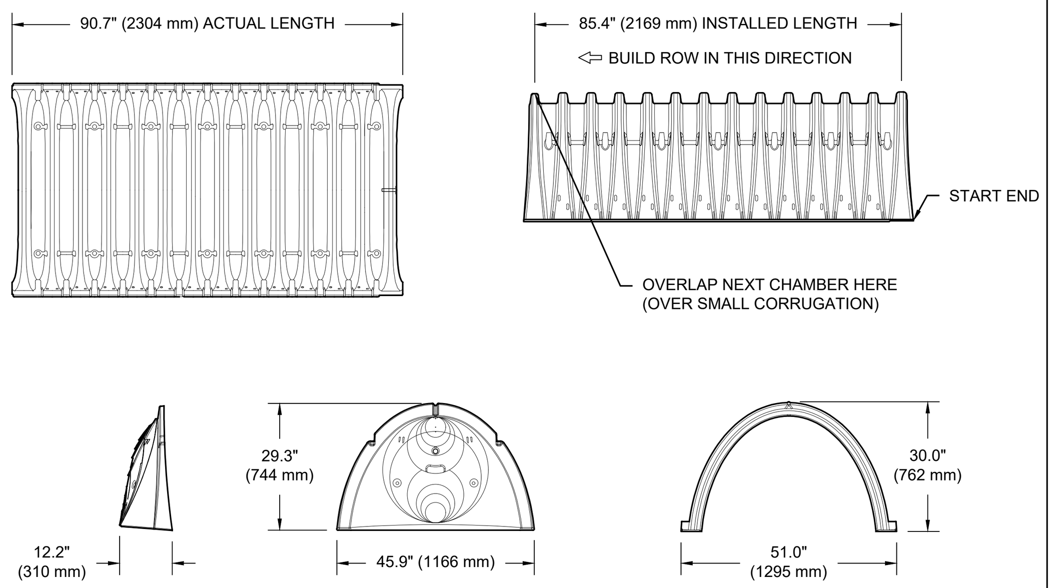
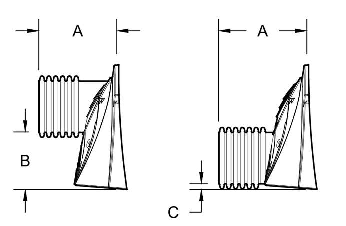


NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	51.0" X 30.0" X 85.4"	(1295 mm X 762 mm X 2169 mm)
CHAMBER STORAGE	45.9 CUBIC FEET	(1.30 m³)
MINIMUM INSTALLED STORAGE*	74.9 CUBIC FEET	(2.12 m³)
WEIGHT	75.0 lbs.	(33.6 kg)

*ASSUMES 6" (152 mm) STONE ABOVE, BELOW, AND BETWEEN CHAMBERS



PRE-FAB STUB AT BOTTOM OF END CAP WITH FLAMP END WITH "BR"
PRE-FAB STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
PRE-FAB STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
PRE-CORED END CAPS END WITH "PC"

PART #	STUB	A	B	C
SC740EPE06T / SC740EPE06TPC	6" (150 mm)	10.9" (277 mm)	18.5" (470 mm)	---
SC740EPE06B / SC740EPE06BPC			---	0.5" (13 mm)
SC740EPE08T /SC740EPE08TPC	8" (200 mm)	12.2" (310 mm)	16.5" (419 mm)	---
SC740EPE08B / SC740EPE08BPC			---	0.6" (15 mm)
SC740EPE10T / SC740EPE10TPC	10" (250 mm)	13.4" (340 mm)	14.5" (368 mm)	---
SC740EPE10B / SC740EPE10BPC			---	0.7" (18 mm)
SC740EPE12T / SC740EPE12TPC	12" (300 mm)	14.7" (373 mm)	12.5" (318 mm)	---
SC740EPE12B / SC740EPE12BPC			---	1.2" (30 mm)
SC740EPE15T / SC740EPE15TPC	15" (375 mm)	18.4" (467 mm)	9.0" (229 mm)	---
SC740EPE15B / SC740EPE15BPC			---	1.3" (33 mm)
SC740EPE18T / SC740EPE18TPC	18" (450 mm)	19.7" (500 mm)	5.0" (127 mm)	---
SC740EPE18B / SC740EPE18BPC			---	1.6" (41 mm)
SC740EPE24B*	24" (600 mm)	18.5" (470 mm)	---	0.1" (3 mm)
SC740EPE24BR*	24" (600 mm)	18.5" (470 mm)	---	0.1" (3 mm)

ALL STUBS, EXCEPT FOR THE SC740EPE24B/SC740EPE24BR ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

* FOR THE SC740EPE24B/SC740EPE24BR THE 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75" (44 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

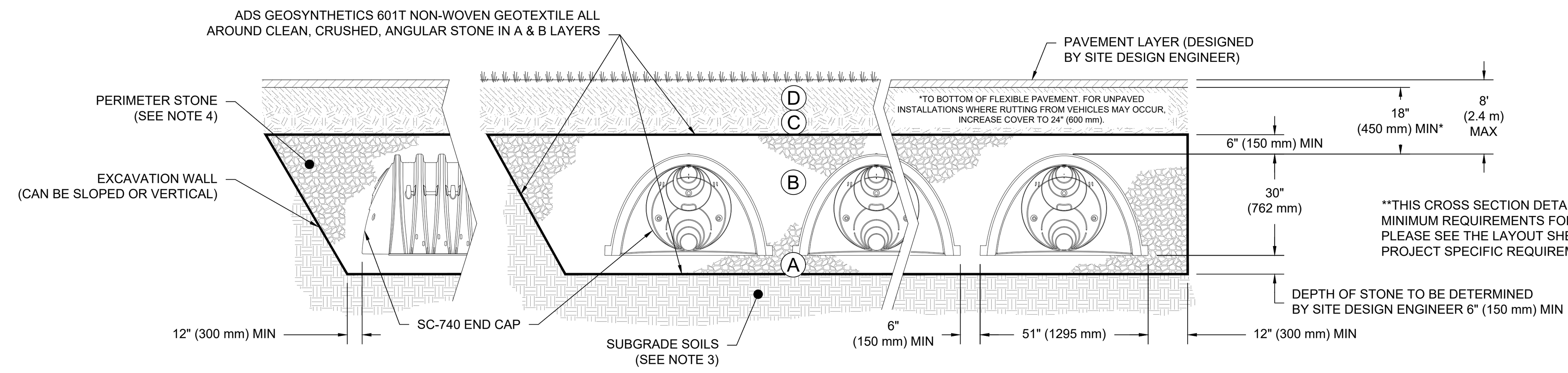
NOTE: ALL DIMENSIONS ARE NOMINAL

STORMTECH SC-740 TECHNICAL SPECIFICATIONS
N.T.S.

ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

MATERIAL LOCATION		DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

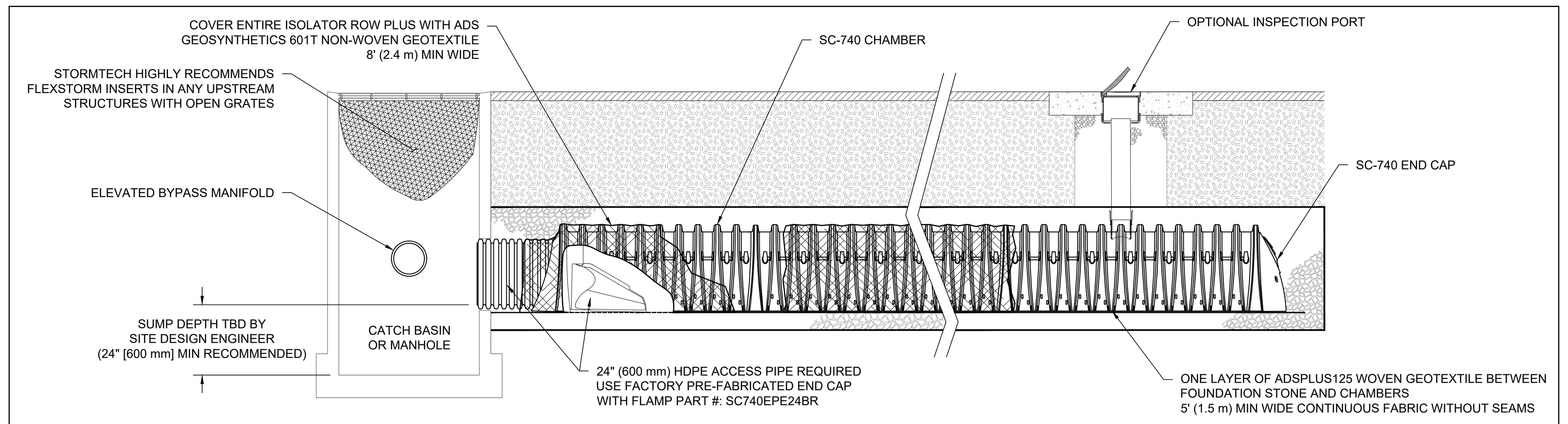
PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



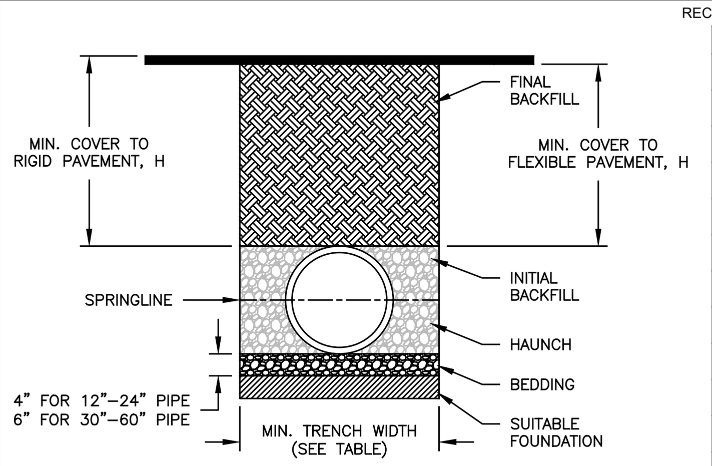
NOTES:

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 550 LBS/IN/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

STORMTECH SC-740 CROSS SECTION DETAIL
N.T.S



STORMTECH SC-740 ISOLATOR ROW PLUS DETAIL
N.T.S.



RECOMMENDED MINIMUM TRENCH WIDTHS

PIPE DIAM.	MIN. TRENCH WIDTH
4" (100mm)	21" (533mm)
6" (150mm)	23" (584mm)
8" (200mm)	26" (660mm)
10" (250mm)	28" (711mm)
12" (300mm)	30" (762mm)
15" (375mm)	34" (864mm)
18" (450mm)	39" (991mm)
24" (600mm)	48" (1219mm)
30" (750mm)	56" (1422mm)
36" (900mm)	64" (1626mm)
42" (1050mm)	72" (1829mm)
48" (1200mm)	80" (2032mm)
60" (1500mm)	96" (2438mm)

MINIMUM RECOMMENDED COVER BASED ON VEHICLE LOADING CONDITIONS**

PIPE DIAM.	SURFACE LIVE LOADING CONDITION	
	H–25	HEAVY CONSTRUCTION (75T AXLE LAOD) *
12" – 48" (300mm – 1200mm)	12" (305mm)	48" (1219mm)
60" (1500mm)	24" (610mm)	60" (1524mm)

* VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER
**SEE BACKFILL REQUIREMENTS IN NOTE 6.

MAXIMUM RECOMMENDED COVER BASED ON VEHICLE LOADING CONDITIONS

PIPE DIAM.	CLASS I		CLASS II		CLASS III
	COMPACTED	DUMPED	95%	90%	95%
4" (100mm)	34 (10.4m)	16 (4.9m)	23 (7.0m)	16 (4.9m)	17 (5.2m)
6" (150mm)	40 (12.2m)	19 (5.8m)	27 (8.2m)	19 (5.8m)	20 (6.1m)
8" (200mm)	30 (9.1m)	14 (4.3m)	21 (6.4m)	14 (4.3m)	15 (4.6m)
10" (250mm)	34 (10.4m)	16 (4.9m)	23 (7.0m)	16 (4.9m)	17 (5.2m)
12" (300mm)	35 (10.7m)	17 (5.2m)	24 (7.3m)	17 (5.2m)	18 (5.5m)
15" (375mm)	37 (11.3m)	18 (5.5m)	25 (7.6m)	18 (5.5m)	19 (5.8m)
18" (450mm)	32 (9.8m)	15 (4.6m)	22 (6.7m)	15 (4.6m)	16 (4.9m)
24" (600mm)	27 (8.2m)	13 (4.0m)	19 (5.8m)	13 (4.0m)	14 (4.3m)
30" (750mm)	22 (6.7m)	11 (3.4m)	16 (4.9m)	11 (3.4m)	11 (3.4m)
36" (900mm)	26 (7.9m)	12 (3.7m)	18 (5.5m)	12 (3.7m)	13 (4.0m)
42" (1050mm)	24 (7.3m)	11 (3.4m)	17 (5.2m)	11 (3.4m)	12 (3.7m)
48" (1200mm)	23 (7.0m)	11 (3.4m)	16 (4.9m)	11 (3.4m)	12 (3.7m)
60" (1500mm)	26 (7.9m)	12 (3.7m)	18 (5.5m)	12 (3.7m)	13 (4.0m)

FILL HEIGHT TABLE GENERATED USING AASHTO SECTION 12, LOAD RESISTANCE FACTOR DESIGN (LRFD) PROCEDURE WITH THE FOLLOWING ASSUMPTIONS:
NO HYDROSTATIC PRESSURE,
UNIT WEIGHT OF SOIL (Ys) = 120 PCF

NOTES:

1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST ADDITION

2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.

3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.

4. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-1500mm).

5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDINGTO THE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.

6. MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOTATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT. FOR TRAFFIC APPLICATIONS WITH LESS THAN FOUR FEET OF COVER, EMBEDMENT OF THE PIPE SHALL BE USING ONLY A CLASS I OR CLASS II BACKFILL.

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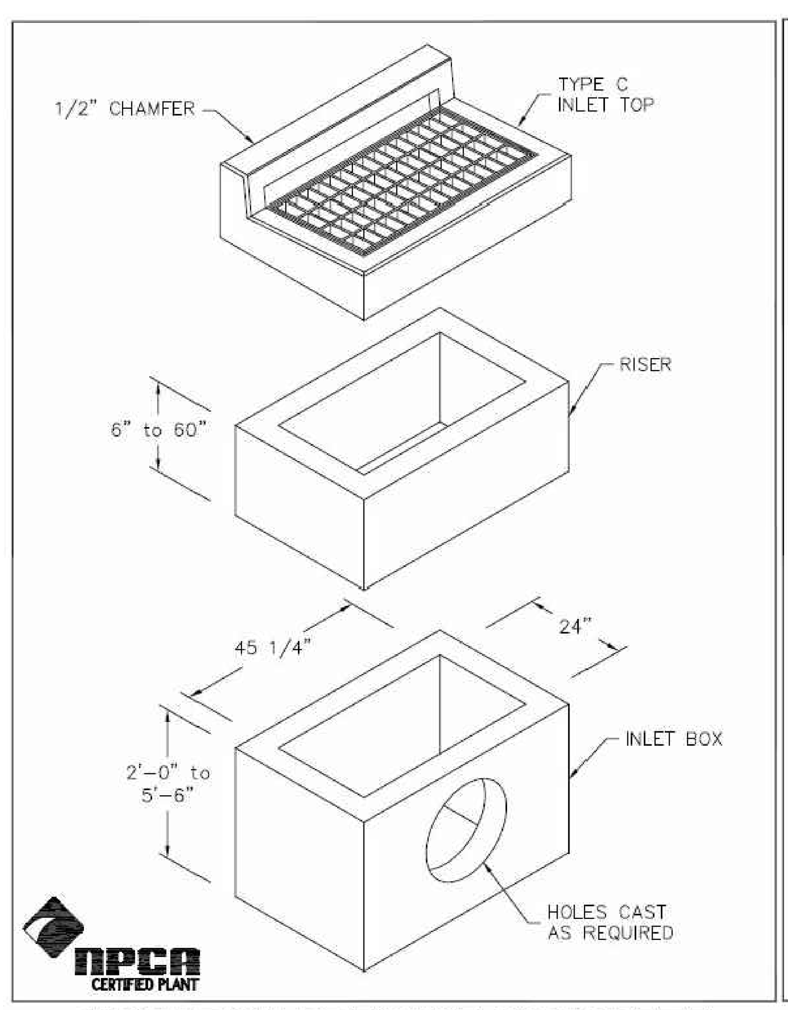
ADVANCED DRAINAGE SYSTEMS, INC. ("ADS") HAS PREPARED THIS DETAIL BASED ON INFORMATION PROVIDED TO ADS. THIS DRAWING IS INTENDED TO DEPICT THE COMPONENTS AS REQUESTED. ADS HAS NOT PERFORMED ANY ENGINEERING OR DESIGN SERVICES FOR THIS PROJECT, NOR HAS ADS INDEPENDENTLY VERIFIED THE INFORMATION SUPPLIED. THE INSTALLATION DETAILS PROVIDED HEREIN ARE GENERAL RECOMMENDATIONS AND ARE NOT SPECIFIC FOR THIS PROJECT. THE DESIGN ENGINEER SHALL REVIEW THESE DETAILS PRIOR TO CONSTRUCTION. IT IS THE DESIGN ENGINEERS RESPONSIBILITY TO ENSURE THE DETAILS PROVIDED HEREIN MEETS OR EXCEEDS THE APPLICABLE NATIONAL, STATE, OR LOCAL REQUIREMENTS AND TO ENSURE THAT THE DETAILS PROVIDED HEREIN ARE ACCEPTABLE FOR THIS PROJECT.

5	INITIAL BACKFILL	JAB	04/02/20		NOTE: ALL DIMENSIONS ARE ± 1/2 FOOT.
REV.	DESCRIPTION	BY	MM/DD/YY	CHK'D	

DIA. DET/RET SYSTEM
TRENCH INSTALLATION DETAIL (ASTM F2648)
DRAWING NUMBER: STD–101A
ADVANCED DRAINAGE SYSTEMS, INC. 4640 TRUEMAN BLVD HILLIARD, OHIO 43026
DRAWN BY: JLE DATE: 8/15/13 SCALE: NTS SHEET: 1 OF 1

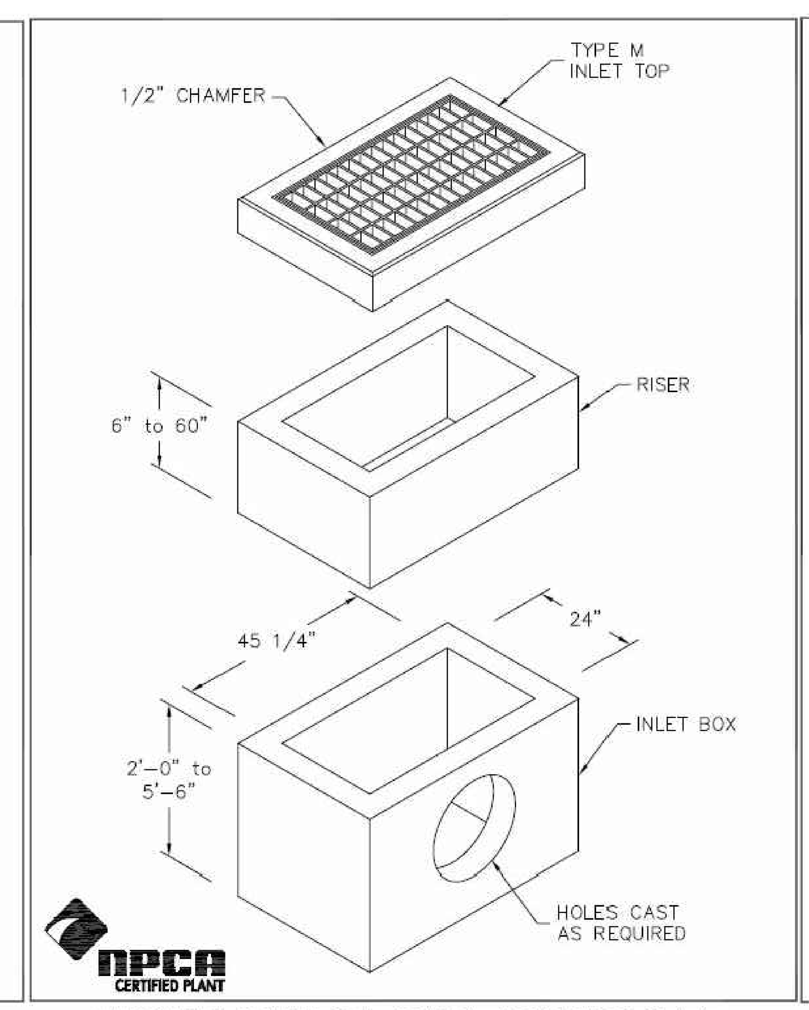
NOTES:

1. PROPOSED INLETS SHALL HAVE NO INTERIOR SUMP.



MONARCH PRECAST CONCRETE
425 NORTH DAUPHIN STREET ALLENTOWN, PA. 18109 PHONE (610) 435-6746
WWW.MONARCHPRECAST.COM FAX (610) 437-7133

24"x45" INLET BOX w/ TYPE C INLET TOP



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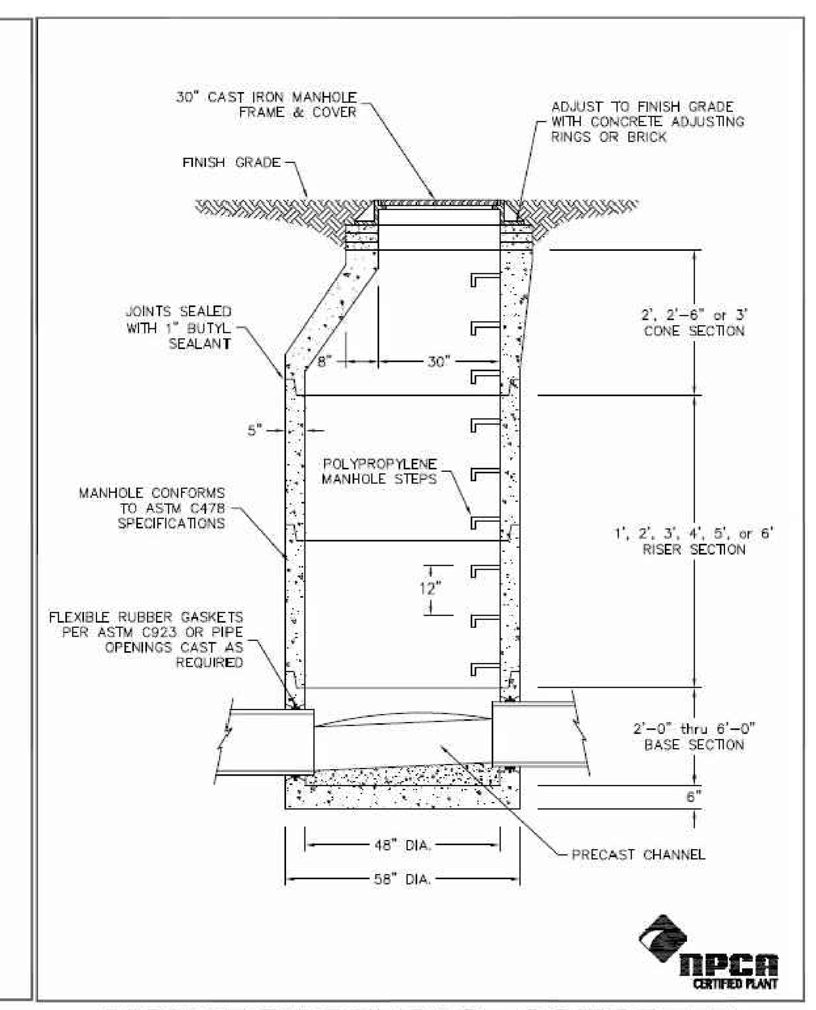
24"x45" INLET BOX w/ TYPE M INLET TOP



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48" DIA. MANHOLE w/ 30" DIA. CONE

SC-740 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH SC-740.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 550 LBS/IN/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
   - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
   - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-740 SYSTEM

1. STORMTECH SC-740 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS.
   STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONESHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4-2" (20-50 mm).
8. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
9. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

1. STORMTECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
2. THE USE OF CONSTRUCTION EQUIPMENT OVER SC-740 CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

STORMTECH SC–740 STANDARD DETAILS AND NOTES PER ADS, Inc.

PRECAST DETAILS PER MONARCH PRECAST CONCRETE

ADVANCED DRAINAGE SYSTEMS, INC.

APPLICATION NUMBER AND TYPE: LD–22–03–PRELIMINARY/FINAL MAJOR SUBDIVISION AND LAND DEVELOPMENT PLANS

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF THE RESPONSIBLE LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

SEAL: COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER KEITH JOSEPH MARSHALL No. PE073528

KEITH J. MARSHALL
PROFESSIONAL ENGINEER
PENNSYLVANIA
No. PE073528

CMC ENGINEERING
2215 Kimberton Road
P.O. Box 958 Kimberton, PA 19442
Phone (610) 983-9200 Fax (610) 983-9202
EMail: Contact@CMCEng.com

REV.	DATE	DESCRIPTION	CHK'D:	BY:
1	07/01/22	REVISED PER TOWNSHIP COMMENTS	K.J.M.	J.S.D.
2	08/02/22	REVISED PER TOWNSHIP COMMENTS	K.J.M.	A.C.K.

DRAWING NAME: STORMWATER MANAGEMENT DETAILS #1

PROPOSED AUTOZONE LOCATION
1318 AND 1330 EASTON ROAD
ABINGTON, PA 19001

LOCATION: ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PA

DATE: 04/05/22	DRAWN BY: A.C.K.
SCALE: N/A	CHK'D BY: K.J.M.
PROJ. NUMBER: 1482–21–02–PA	
DRAWING NUMBER: SWM–3	
SHEET NUMBER: 7 OF 15	

M:\Small Jobs\Wright Partners\AZ – Abington\CAD\Plan Set\7–Stormwater Details SWM–3.dwg

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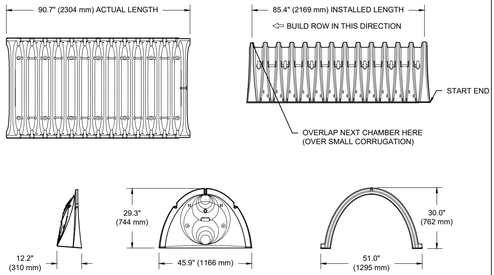
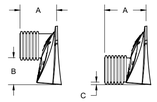


NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	51.0" X 30.0" X 85.4"	(1295 mm X 762 mm X 2169 mm)
CHAMBER STORAGE	45.9 CUBIC FEET	(1.30 m³)
MINIMUM INSTALLED STORAGE*	74.9 CUBIC FEET	(2.12 m³)
WEIGHT	75.0 lbs.	(33.6 kg)

*ASSUMES 6" (152 mm) STONE ABOVE, BELOW, AND BETWEEN CHAMBERS



PRE-FAB STUB AT BOTTOM OF END CAP WITH FLAMP END WITH "BR"
PRE-FAB STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
PRE-FAB STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
PRE-CORED END CAPS END WITH "PC"

PART #	STUB	A	B	C
SC740EPE06T / SC740EPE06TPC	6" (150 mm)	10.9" (277 mm)	18.5" (470 mm)	---
SC740EPE06B / SC740EPE06BPC			---	0.5" (13 mm)
SC740EPE08T /SC740EPE08TPC	8" (200 mm)	12.2" (310 mm)	16.5" (419 mm)	---
SC740EPE08B / SC740EPE08BPC			---	0.6" (15 mm)
SC740EPE10T / SC740EPE10TPC	10" (250 mm)	13.4" (340 mm)	14.5" (368 mm)	---
SC740EPE10B / SC740EPE10BPC			---	0.7" (18 mm)
SC740EPE12T / SC740EPE12TPC	12" (300 mm)	14.7" (373 mm)	12.5" (318 mm)	---
SC740EPE12B / SC740EPE12BPC			---	1.2" (30 mm)
SC740EPE15T / SC740EPE15TPC	15" (375 mm)	18.4" (467 mm)	9.0" (229 mm)	---
SC740EPE15B / SC740EPE15BPC			---	1.3" (33 mm)
SC740EPE18T / SC740EPE18TPC	18" (450 mm)	19.7" (500 mm)	5.0" (127 mm)	---
SC740EPE18B / SC740EPE18BPC			---	1.6" (41 mm)
SC740EPE24B*	24" (600 mm)	18.5" (470 mm)	---	0.1" (3 mm)
SC740EPE24BR*	24" (600 mm)	18.5" (470 mm)	---	0.1" (3 mm)

ALL STUBS, EXCEPT FOR THE SC740EPE24B/SC740EPE24BR ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

* FOR THE SC740EPE24B/SC740EPE24BR THE 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75" (44 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

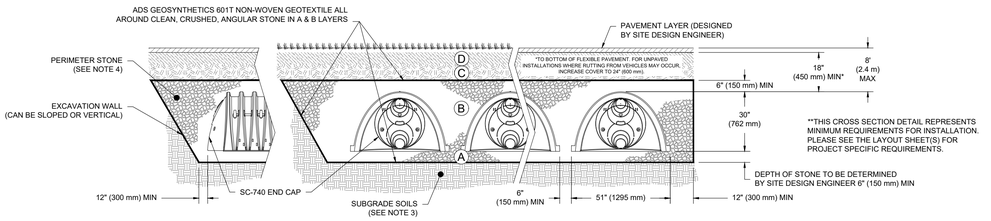
NOTE: ALL DIMENSIONS ARE NOMINAL

STORMTECH SC-310 TECHNICAL SPECIFICATIONS
N.T.S.

ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

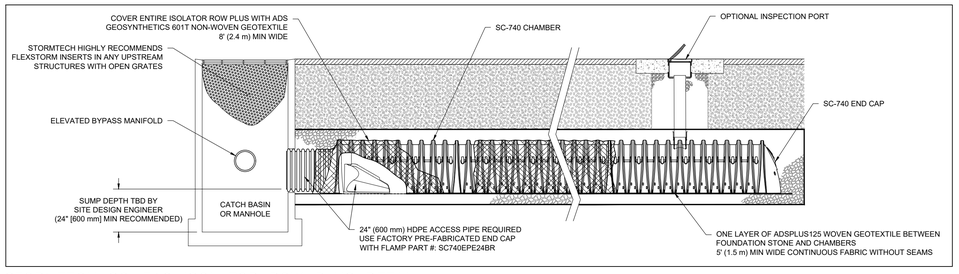
MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



NOTES:
1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 550 LBS/IN/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

STORMTECH SC-310 CROSS SECTION DETAIL
N.T.S



STORMTECH SC-310 ISOLATOR ROW PLUS DETAIL
N.T.S.

SC-310 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH SC-310.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE OR POLYETHYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2922 (POLETHYLENE) OR ASTM F2418-16a (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2922 SHALL BE GREATER THAN OR EQUAL TO 400 LBS/IN/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
   - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
   - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2922 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-310 SYSTEM

1. STORMTECH SC-310 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH SC-310 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS.
   STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONESHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4-2" (20-50 mm).
8. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
9. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

1. STORMTECH SC-310 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
2. THE USE OF CONSTRUCTION EQUIPMENT OVER SC-310 & SC-740 CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

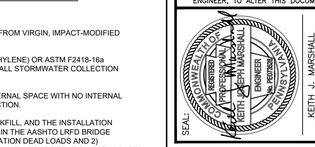
1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

STORMTECH SC-310 STANDARD DETAILS AND NOTES PER ADS, Inc.

ADVANCED DRAINAGE SYSTEMS, INC.

APPLICATION NUMBER AND TYPE: LD-22-03-PRELIMINARY/FINAL MAJOR SUBDIVISION AND LAND DEVELOPMENT PLANS

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF THE RESPONSIBLE LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT



CMC ENGINEERING
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P.O. Box 958 Kimberton, PA 19442
Phone (610) 983-9200 Fax (610) 983-9202
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REV.	DATE	DESCRIPTION	CHK'D:
1	07/01/22	REVISED PER TOWNSHIP COMMENTS	K.J.M.
2	08/02/22	REVISED PER TOWNSHIP COMMENTS	K.J.M.
			J.S.D.
			A.C.K.

DRAWING NAME: STORMWATER MANAGEMENT DETAILS #2

PROPOSED AUTOZONE LOCATION
1318 AND 1330 EASTON ROAD
ABINGTON, PA 19001

LOCATION: ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PA

DATE: 04/05/22	DRAWN BY: A.C.K.
SCALE: N/A	CHK'D BY: K.J.M.
PROJ. NUMBER: 1482-21-02-PA	
DRAWING NUMBER: SWM-4	
SHEET NUMBER: 8 OF 15	

M:\Small Jobs\Wright Partners\AE - Abington\CAD\Plan Set\8-Stormwater Details SWM-4.dwg

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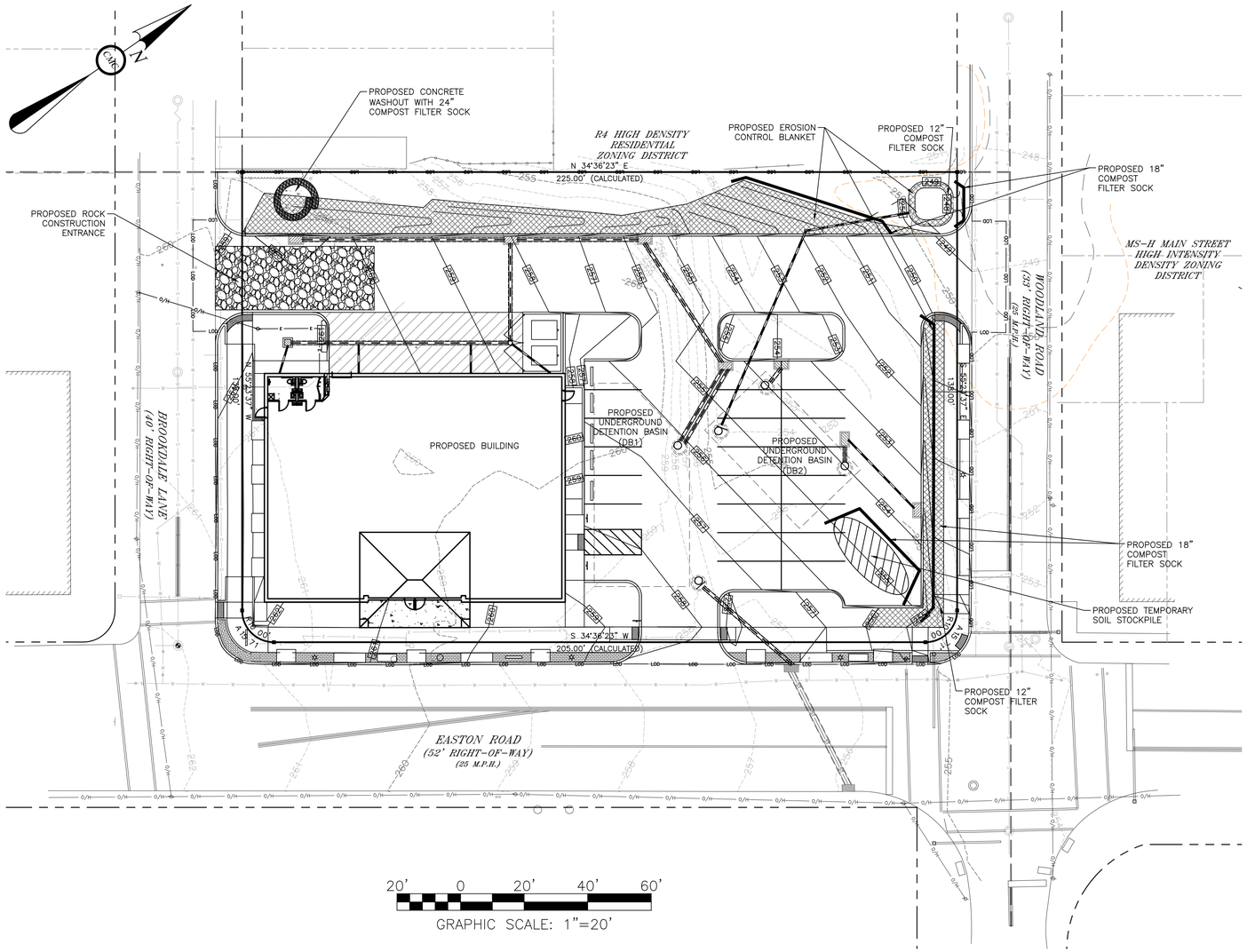
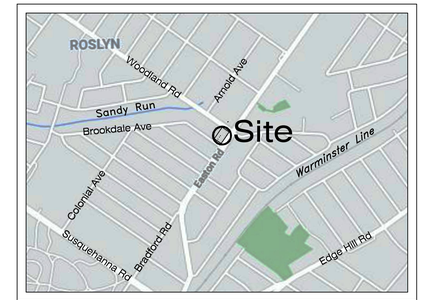


ZONING DISTRICT LINE
LEGAL RIGHT-OF-WAY
PROPERTY LINE
EXISTING CURB
INLET PROTECTION
CONCRETE WASHOUT
TEMPORARY SOIL STOCKPILE
EROSION CONTROL BLANKET
COMPOST FILTER SOCK



LOCATION MAP
SCALE: 1"=1000'

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF THE RESPONSIBLE LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

SEAL: COMMONWEALTH OF PENNSYLVANIA KEITH J. MARSHALL REGISTERED PROFESSIONAL ENGINEER

KEITH J. MARSHALL
PROFESSIONAL ENGINEER
PENNSYLVANIA
No. PE073328

CMC ENGINEERING
2215 Kimberton Road
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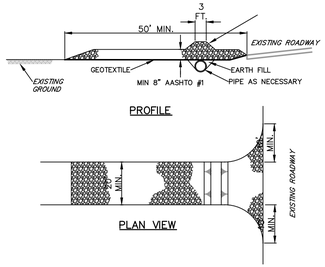
EMail: Contact@CMCEng.com

REV.	DATE	DESCRIPTION	CHK'D:	BY:
1	07/01/22	REVISED PER TOWNSHIP COMMENTS	K.J.M.	J.S.D.
2	08/02/22	REVISED PER TOWNSHIP COMMENTS	K.J.M.	A.C.K.

DRAWING NAME: EROSION CONTROL PLAN

PROPOSED AUTOZONE STORE
1318 AND 1330 EASTON ROAD
ABINGTON, PA 19001

LOCATION: ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PA



* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

NOTES:

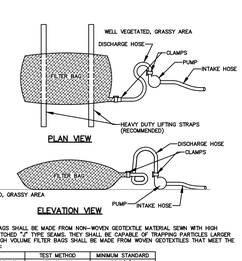
REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.

RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

STANDARD CONSTRUCTION DETAIL #3-1
ROCK CONSTRUCTION ENTRANCE
NOT TO SCALE



NOTES:

LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE FOLLOWING STANDARDS:

PROPERTY	TEST METHOD	MINIMUM STANDARD
AVG. WIDE WIDTH STRENGTH	ASTM D-4884	60 LB/IN
GRAB TENSILE	ASTM D-4632	205 LB
PUNCTURE	ASTM D-4833	110 LB
MULLEN BURST	ASTM D-3786	350 PSI
UV RESISTANCE	ASTM D-4355	70%
AOS, % RETAINED	ASTM D-4751	80 SIEVE

A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE STOCKPILED ON SITE FOR IMMEDIATE REPLACEMENT. ALL USED BAGS SHALL BE DISPOSED OF AS DIRECTED BY THE ENGINEER OR STORAGE TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.

BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%, FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.

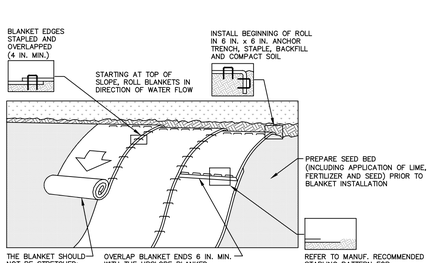
NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED WHEN BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.

THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.

THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING.

FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

STANDARD CONSTRUCTION DETAIL #3-16
PUMPED WATER FILTER BAG
NOT TO SCALE



NOTES:

SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET.

PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE.

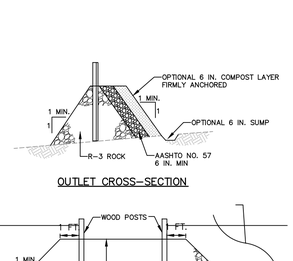
SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.

BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.

THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.

STANDARD CONSTRUCTION DETAIL #11-1
EROSION CONTROL BLANKET INSTALLATION
NOT TO SCALE

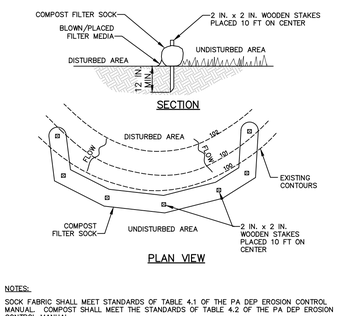


NOTES:

A ROCK FILTER OUTLET SHALL BE INSTALLED WHERE FAILURE OF A SILT FENCE OR STRAW BALE BARRIER HAS OCCURRED DUE TO CONCENTRATED FLOW. ANCHORED COMPOST LAYER SHALL BE USED ON UPSLOPE FACE IN HQ AND EV WATERSHEDS.

SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET.

STANDARD CONSTRUCTION DETAIL #4-6
ROCK FILTER OUTLET
NOT TO SCALE



NOTES:

SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.

COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.

TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.

ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.

COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.

BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

STANDARD CONSTRUCTION DETAIL #4-1
COMPOST FILTER SOCK
NOT TO SCALE

ONE CALL SYSTEM 1-800-242-1776 PENNSYLVANIA

811 Know what's below. Call before you dig.

UTILITY NOTE:

PA ONE CALL SERIAL #20212700875
TICKET IS PRELIMINARY DESIGN TICKET
(A NOTIFICATION OF EXCAVATION OR DEMOLITION WORK GIVING NOT LESS THAN 10 NOR MORE THAN 90 BUSINESS DAYS NOTICE).

PA ONE CALL MUST BE NOTIFIED OF STATUS CHANGE FOR EXCAVATION AND/OR DEMOLITION.

THE FOLLOWING UTILITIES WERE CONTACTED PER PA ACT 287, AS AMENDED BY ACT 187 OF 1996:

ABINGTON TOWNSHIP
AQUA PA
COMCAST CABLE WILLOW GROVE
COMCAST CABLE
PECO ENERGY
VERIZON PA

DATE:	DRAWN BY:
04/05/22	J.S.D.
SCALE: AS SHOWN	CHK'D BY: K.J.M.
PROJ. NUMBER: 1482-21-02-PA	
DRAWING NUMBER: EC-1	
SHEET NUMBER: 9 OF 15	

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THIS PLAN IS FOR EROSION AND SEDIMENTATION CONTROL PURPOSES ONLY.

APPLICATION NUMBER AND TYPE: LD-22-03-PRELIMINARY/FINAL MAJOR SUBDIVISION AND LAND DEVELOPMENT PLANS

M:\Small Jobs\Wright Portnerv2 - Abington\CAD\Plan Set\LP-Erosion and Sediment Control Plan ES-1.dwg

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STANDARD EROSION & SEDIMENT PLAN NOTES

1. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.
2. AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE E&S PLAN PREPARER, THE PCSM PLAN PREPARER, THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE PCSM PLAN, AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON–SITE PRECONSTRUCTION MEETING.
3. AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1–800–242–1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
4. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO IMPLEMENTATION.
5. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.
6. CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMPS SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E&S PLAN.
7. AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN.
8. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAPS(S) IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2H:1V OR FLATTER.
9. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE LOCAL CONSERVATION DISTRICT AND/OR THE REGIONAL OFFICE OF THE DEPARTMENT.
10. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1, AND 287.1 ET. SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.
11. ALL OFF–SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.
12. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM FP–001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING.
13. ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS.
14. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPS SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMPS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
15. A LOG SHOWING DATES THAT E&S BMPS WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.
16. **SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.**
17. ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS.
18. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES –– 6 TO 12 INCHES ON COMPACTED SOILS –– PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.
19. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
20. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
21. FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
22. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
23. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
24. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
25. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDED AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN.
26. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON–GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN 1 YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN 1 YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.
27. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON–VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.
28. E&S BMPS SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.
29. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE E&S BMPS.
30. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPS MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION STORMWATER MANAGEMENT BMPS. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMPS SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON.
31. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT TO SCHEDULE A FINAL INSPECTION.
32. FAILURE TO CORRECTLY INSTALL E&S BMPS, FAILURE TO PREVENT SEDIMENT–LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPS MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO $10,000 PER DAY IN CIVIL PENALTIES, UP TO $10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO $25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.

CONSTRUCTION SEQUENCE

1. ALL EARTH DISTURBANCE SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE.
2. AT LEAST 7 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES, THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, AND THE EROSION AND SEDIMENT CONTROL PLAN PREPARER TO AN ON–SITE MEETING.
3. AT LEAST 3 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INCORPORATED AT 1–800–242–1776 FOR BURIED UTILITIES LOCATIONS.
4. INSTALL PERIMETER EROSION AND SEDIMENT CONTROL BMPS: COMPOST FILTER SOCK AND CONSTRUCTION FENCE.
5. DEMOLISH AND/OR REMOVE ITEMS NOTED WITHIN THIS PLAN SET. CONTRACTOR TO LOCATE AND MAINTAIN EXISTING SANITARY LATERALS, WATER SERVICE, AND GAS SERVICE FOR 1318/1380 EASTON ROAD FOR FUTURE CONNECTIONS.
6. BEGIN GRADING OPERATIONS.
7. INSTALL THE UNDERGROUND DETENTION SYSTEMS.
8. INSTALL THE STORM DRAINAGE MANHOLES AND PIPES. PROVIDE TEMPORARY INLET PROTECTION AS REQUIRED.
9. EXCAVATE FOR PROPOSED BUILDING FOUNDATION AND WALKWAYS.
10. BEGIN CONSTRUCTION OF BUILDING AND INSTALL PROPOSED UTILITIES TO CONNECTIONS MAINTAINED DURING DEMOLITION.
11. INSTALL CURB AND SITE PAVEMENT BASECOURSE.
12. INSTALL SIDEWALKS AND DECORATIVE WALKS.
13. INSTALL LANDSCAPING AND SEEDING.
14. INSTALL WEARING COURSE WHEN SITE STABILIZATION IS COMPLETE. PROVIDE PAVEMENT MARKINGS.
15. UPON COMPLETION OF ALL CONSTRUCTION AND AFTER ALL AREAS HAVE ACHIEVED FINAL STABILIZATION, REMOVE ALL EROSION AND SEDIMENT CONTROL BMPS. IMMEDIATELY STABILIZE ANY AFFECTED AREAS. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON–VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION.

EXCAVATION AND FILLS NOTES

1. CUT AND FILL SLOPES SHALL NOT BE STEEPER THAN A 3:1 SLOPE.
2. ADEQUATE PROVISIONS SHALL BE MADE TO PREVENT SURFACE WATER FROM DAMAGING THE CUT FACE OF EXCAVATIONS OF THE SLOPING SURFACES OF FILLS.
3. CUT AND FILLS SHALL NOT ENDANGER ENJOINING PROPERTY.
4. NO INCREASED SURFACE RUNOFF WILL BE PERMITTED TO LEAVE THE PROPERTY BEING SUBDIVIDED OR DEVELOPED BY WAY OF NATURAL WATERCOURSES OR STORM DRAINAGE PIPES WITHOUT FIRST BEING SUITABLY RETAINED IN SUCH A WAY AS TO MAINTAIN RUNOFF VOLUME EXISTING ON THE SITE PREVIOUS TO SUBDIVISION OR DEVELOPMENT.
5. FILL SHALL BE PLACED AND COMPACTED SO AS TO MINIMIZE SLIDING OR EROSION OF THE SOIL.
6. FILLS SHALL NOT ENCROACH ON NATURAL WATERCOURSES OR CONSTRUCTED CHANNELS.
7. FILLS PLACED ADJACENT TO NATURAL WATERCOURSES OR CONSTRUCTED CHANNELS SHALL HAVE SUITABLE PROTECTION AGAINST EROSION DURING PERIODS OF FLOODING.
8. GRADING WILL NOT BE DONE IN SUCH A WAY SO AS TO DIVERT WATER ONTO THE PROPERTY OF ANOTHER LANDOWNER WITHOUT THE EXPRESSED CONSENT OF THE BOARD.
9. DURING GRADING OPERATIONS, NECESSARY MEASURES FOR DUST CONTROL WILL BE EXERCISED.

UTILITY LINE TRENCH EXCAVATION NOTES

1. LIMIT ADVANCED CLEARING AND GRUBBING OPERATIONS TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY.
2. WORK CREWS AND EQUIPMENT FOR TRENCHING, PLACEMENT OF PIPE, PLUG CONSTRUCTION AND BACKFILLING WILL BE SELF CONTAINED AND SEPARATE FROM CLEARING AND GRUBBING AND SITE RESTORATION AND STABILIZATION OPERATIONS.
3. ALL SOIL EXCAVATED FROM THE TRENCH WILL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.
4. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY.
5. WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING BEFORE PIPE PLACEMENT AND / OR BACKFILLING BEGINS. WATER REMOVED FROM THE TRENCH SHALL BE PUMPED THROUGH A FILTRATION DEVICE.
6. ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND IMMEDIATELY STABILIZED.

RESPONSIBILITY NOTES

1. WHENEVER SEDIMENTATION IS CAUSED BY STRIPPING VEGETATION, REGRADING OR OTHER DEVELOPMENT, IT SHALL BE THE RESPONSIBILITY OF THE PERSON, CORPORATION OR OTHER ENTITY CAUSING SUCH SEDIMENTATION TO REMOVE IT FROM ALL ADJOINING SURFACES, DRAINAGE SYSTEMS AND WATERCOURSES AND TO REPAIR ANY DAMAGE AT HIS EXPENSE AS QUICKLY AS POSSIBLE.
2. THE MAINTENANCE OF ALL DRAINAGE FACILITIES AND WATERCOURSES WITHIN ANY SUBDIVISION OR LAND DEVELOPMENT IS THE RESPONSIBILITY OF THE DEVELOPER UNTIL THEY ARE ACCEPTED BY THE TOWNSHIP OR SOME OTHER OFFICIAL AGENCY, AFTER WHICH THEY BECOME THE RESPONSIBILITY OF THE ACCEPTING AGENCY.
3. IT IS THE RESPONSIBILITY OF ANY PERSON, CORPORATION OR OTHER ENTITY DOING ANY ACT ON OR ACROSS A COMMUNAL STREAM, WATERCOURSE OR SWALE OR UPON THE FLOODPLAIN OR RIGHT–OF–WAY THEREOF TO MAINTAIN, AS NEARLY AS POSSIBLE IN ITS PRESENT STATE, THE STREAM, WATERCOURSE, SWALE, FLOODPLAIN OR RIGHT–OF–WAY DURING THE PENDENCY OF THE ACTIVITY AND TO RETURN IT TO ITS ORIGINAL OR EQUAL CONDITION AFTER SUCH ACTIVITY IS COMPLETED.
4. THE MAINTENANCE OF DRAINAGE FACILITIES OR WATERCOURSES ORIGINATING AND COMPLETELY ON PRIVATE PROPERTY IS THE RESPONSIBILITY OF THE OWNER TO THEIR POINT OF OPEN DISCHARGE AT THE PROPERTY LINE OR AT A COMMUNAL WATERCOURSE WITHIN THE PROPERTY.
5. NO PERSON, CORPORATION OR OTHER ENTITY SHALL BLOCK, IMPEDE THE FLOW OF, ALTER, CONSTRUCT ANY STRUCTURE ON OR DEPOSIT ANY MATERIAL OR THING ON OR COMMIT ANY ACT WHICH WILL AFFECT NORMAL OR FLOOD FLOW IN ANY COMMUNAL STREAM OR WATERCOURSE WITHOUT HAVING OBTAINED PRIOR APPROVAL FROM THE TOWNSHIP OR THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, WHICHEVER IS APPLICABLE.

SEEDING REQUIREMENTS:

AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON–VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE, THE OPERATOR SHALL STABILIZE ANY AREAS DISTURBED BY THE ACTIVITIES. DURING NON–GERMANATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY VEGETATIVE STABILIZATION SPECIFICATIONS. DISTURBED AREAS WHICH ARE AT FINISHED GRADE OR WILL NOT BE REDISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.

(TEMPORARY)	SPECIES:	ANNUAL RYEGRASS
	% PURE LIVE SEED:	10 %
	APPLICATION RATE:	40 LB./ACRE
	TYPE:	10-10-10 (X-X-X)
	FERTILIZER APPL. RATE:	500 LB./ACRE
	LIMING RATE:	1 T./ACRE
	MULCH TYPE:	STRAW OR HAY
	MULCHING RATE:	3 T./ACRE
(PERMANENT)	TOPSOIL PLACEMENT DEPTH:	VARIES
	SPECIES:	BIRDSFOOT TREFOIL PLUS TALL FESCUE
	% PURE LIVE SEED:	60 %
	APPLICATION RATE:	40 LB./ACRE
	FERTILIZER TYPE:	10-20-20 (X-X-X)
	FERTILIZER APPL. RATE:	1000 LB./ACRE
	LIMING RATE:	6 T./ACRE
	MULCH TYPE:	STRAW OR HAY
	MULCHING RATE:	3 T./ACRE
	ANCHOR MATERIAL:	TACKIFIER
	ANCHORING METHOD:	SPRAY
	RATE OF ANCHOR MATERIAL APPL.:	3 LB./ACRE
	SEEDING SEASON DATES:	MAR 1 TO MAY 15; AUG 1 TO OCT 15

- SEEDING AND MULCHING OPERATIONS ARE TO BE DONE IN CONFORMANCE WITH PADOT PUBLICATION FORM 408, SECTION 800.
- SITE PREPARATION INCLUDES WORKING THE LIME AND FERTILIZER INTO THE TOP 24" OR MORE, IF POSSIBLE.
- GRASS HAY AND CEREAL STRAW ARE PREFERRED MULCHES AND SHOULD BE APPLIED TO PRODUCE A LOOSE LAYER 0.75 TO 1 INCHES DEEP. AS A GUIDELINE, A THICKNESS OF 5 TO 6 OVERLAPPING STRAW OR HAY STEMS IS ACCEPTABLE.
- UNTIL THE SITE IS PERMANENTLY STABILIZED WITH VEGETATION, INTERIM STABILIZATION MEASURES AND TEMPORARY EROSION AND SEDIMENTATION CONTROL FACILITIES MUST BE MAINTAINED.
- DIVERSIONS, CHANNELS, SEDIMENTATION BASINS, SEDIMENT TRAPS, AND STOCKPILES MUST BE SEEDED AND MULCHED IMMEDIATELY.

TEMPORARY STABILIZATION AND PERMANENT STABILIZATION

1. HAY OR STRAW MULCH MUST BE APPLIED AT 3.0 TONS PER ACRE.
2. MULCH WITH MULCH CONTROL NETTING OR EROSION CONTROL BLANKETS MUST BE INSTALLED ON ALL SLOPES 3:1 OR STEEPER.
3. STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN.
4. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMP'S MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL BMP'S AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGARDING, RESEEDING, REMULCHING, AND RENETTING, MUST BE DONE IMMEDIATELY. IF EROSION AND SEDIMENT CONTROL BMP'S FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMP'S, OR MODIFICATIONS TO THOSE INSTALLED WILL BE REQUIRED. E&SPCPM P. 168
5. SEDIMENT REMOVED FROM BMP'S SHALL BE DISPOSED OF IN LANDSCAPE AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES.
6. THE OPERATOR SHALL REMOVE FROM THIS SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THIS SITE.
7. THE LIMITS OF DISTURBANCE OF THE SITE AND ANY OFF–SITE AREAS WITHIN THE LIMITS OF DISTURBANCE THAT ARE THE RESPONSIBILITY OF THE DEVELOPER TO INSTALL. OFF–SITE FACILITIES SUCH AS: UTILITIES AND ROADWAYS.

GENERAL E&S NOTES

1. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1., AND 287.1 ET SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.
2. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL OF ANY EXCESS MATERIAL AND MAKE SURE THE SITE(S) RECEIVING THE EXCESS HAS AN APPROVED AND FULLY IMPLEMENTED EROSION AND SEDIMENT CONTROL PLAN THAT MEETS THE CONDITIONS OF CHAPTER 102 AND/OR OTHER STATE OR FEDERAL REGULATIONS.
3. CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON–WATER SOLUBLE, NON–DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE–USE.).
4. ANY PLACEMENT OF CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE MUST USE FORM FP–001 TO CERTIFY THE ORIGIN OF THE FILL MATERIAL AND THE RESULTS OF THE ANALYTICAL TESTING TO QUALIFY THE MATERIAL AS CLEAN FILL. FORM FP–001 MUST BE RETAINED BY THE OWNER OF THE PROPERTY RECEIVING THE FILL.
5. ENVIRONMENTAL DUE DILIGENCE MUST BE PERFORMED TO DETERMINE IF THE FILL MATERIALS ASSOCIATED WITH THE PROJECT QUALIFY AS CLEAN FILL. ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS: INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF A REGULATED SUBSTANCE. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF THE DEPARTMENT'S POLICY "MANAGEMENT OF CLEAN FILL."
6. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES.
7. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION AND NOTIFY THE YORK COUNTY CONSERVATION DISTRICT.
8. ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG OR EQUIVALENT SEDIMENT REMOVAL FACILITY, OVER UNDISTURBED VEGETATED AREAS.
9. FAILURE TO CORRECTLY INSTALL E&S BMPS, FAILURE TO PREVENT SEDIMENT–LADEN RUNOFF FROM LEAVING THE EARTH DISTURBANCE ACTIVITY, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPS MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO $10,000 PER DAY IN CIVIL PENALTIES, UP TO $10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO $25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.
10. TOPSOIL MAY NOT BE REMOVED FROM THE SITE WITHOUT PRIOR APPROVAL OF LOWER SALFORD TOWNSHIP.

RECYCLING/DISPOSAL OF WASTES NOTES

DESCRIPTION

BUILDING MATERIALS AND OTHER CONSTRUCTION SITE WASTES MUST BE PROPERLY MANAGED AND DISPOSED OF TO REDUCE THE RISK OF POLLUTION FROM MATERIALS SUCH AS SURPLUS OR REFUSE BUILDING MATERIALS OR HAZARDOUS WASTES. PRACTICES SUCH AS TRASH DISPOSAL, RECYCLING, PROPER MATERIAL HANDLING, AND SPILL PREVENTION AND CLEANUP MEASURES CAN REDUCE THE POTENTIAL FOR STORMWATER RUNOFF TO MOBILIZE CONSTRUCTION SITE WASTES AND CONTAMINATE SURFACE OR GROUND WATER.

APPLICABILITY

THE PROPER MANAGEMENT AND DISPOSAL OF WASTES SHOULD BE PRACTICED AT EVERY CONSTRUCTION SITE TO REDUCE STORMWATER RUNOFF. USE WASTE MANAGEMENT PRACTICES TO PROPERLY LOCATE REFUSE PILES, TO COVER MATERIALS THAT MIGHT BE DISPLACED BY RAINFALL OR STORMWATER RUNOFF, AND TO PREVENT SPILLS AND LEAKS FROM HAZARDOUS MATERIALS THAT WERE IMPROPERLY STORED.

SITING AND DESIGN CONSIDERATIONS

SOLID WASTES:

- DESIGNATE A WASTE COLLECTION AREA ON THE SITE THAT DOES NOT RECEIVE A SUBSTANTIAL AMOUNT OF RUNOFF FROM UPLAND AREAS AND DOES NOT DRAIN DIRECTLY TO A WATERBODY.
- ENSURE THAT CONTAINERS HAVE LIDS SO THEY CAN BE COVERED BEFORE PERIODS OF RAIN, AND KEEP CONTAINERS IN A COVERED AREA WHENEVER POSSIBLE.
- SCHEDULE WASTE COLLECTION TO PREVENT THE CONTAINERS FROM OVERFILLING.
- CLEAN UP SPILLS IMMEDIATELY. FOR HAZARDOUS MATERIALS, FOLLOW CLEANUP INSTRUCTIONS ON THE PACKAGE. USE AN ABSORBENT MATERIAL SUCH AS SAWDUST OR KITTY LITTER TO CONTAIN THE SPILL.
- DURING THE DEMOLITION PHASE OF CONSTRUCTION, PROVIDE EXTRA CONTAINERS AND SCHEDULE MORE FREQUENT PICKUPS.
- COLLECT, REMOVE, AND DISPOSE OF ALL CONSTRUCTION SITE WASTES AT AUTHORIZED DISPOSAL AREAS. CONTACT A LOCAL ENVIRONMENTAL AGENCY TO IDENTIFY THESE DISPOSAL SITES.

HAZARDOUS MATERIALS AND WASTES:

- CONSULT WITH LOCAL WASTE MANAGEMENT AUTHORITIES ABOUT THE REQUIREMENTS FOR DISPOSING OF HAZARDOUS MATERIALS.
- TO PREVENT LEAKS, EMPTY AND CLEAN HAZARDOUS WASTE CONTAINERS BEFORE DISPOSING OF THEM.
- NEVER REMOVE THE ORIGINAL PRODUCT LABEL FROM THE CONTAINER BECAUSE IT CONTAINS IMPORTANT SAFETY INFORMATION. FOLLOW THE MANUFACTURER'S RECOMMENDED METHOD OF DISPOSAL, WHICH SHOULD BE PRINTED ON THE LABEL.
- NEVER MIX EXCESS PRODUCTS WHEN DISPOSING OF THEM, UNLESS SPECIFICALLY RECOMMENDED BY THE MANUFACTURER.

TO ENSURE THE PROPER DISPOSAL OF CONTAMINATED SOILS THAT HAVE BEEN EXPOSED TO AND STILL CONTAIN HAZARDOUS SUBSTANCES, CONSULT WITH STATE OR LOCAL SOLID WASTE REGULATORY AGENCIES OR PRIVATE FIRMS. SOME LANDFILLS MIGHT ACCEPT CONTAMINATED SOILS, BUT THEY REQUIRE LABORATORY TESTS FIRST.

PAINT AND DIRT ARE OFTEN REMOVED FROM SURFACES BY SANDBLASTING. SANDBLASTING GRITS ARE THE BYPRODUCTS OF THIS PROCEDURE AND CONSIST OF THE SAND USED AND THE PAINT AND DIRT PARTICLES THAT ARE REMOVED FROM THE SURFACE. THESE MATERIALS ARE CONSIDERED HAZARDOUS IF THEY ARE REMOVED FROM OLDER STRUCTURES BECAUSE THEY ARE MORE LIKELY TO CONTAIN LEAD–, CADMIUM–, OR CHROME–BASED PAINTS. TO ENSURE PROPER DISPOSAL OF SANDBLASTING GRITS, CONTRACT WITH A LICENSED WASTE MANAGEMENT OR TRANSPORT AND DISPOSAL FIRM.

PESTICIDES AND FERTILIZERS:

- FOLLOW ALL FEDERAL, STATE, AND LOCAL REGULATIONS THAT APPLY TO THE USE, HANDLING, OR DISPOSAL OF PESTICIDES AND FERTILIZERS.
- DO NOT HANDLE THE MATERIALS ANY MORE THAN NECESSARY.
- STORE PESTICIDES AND FERTILIZERS IN A DRY, COVERED AREA.
- CONSTRUCT BERMS OR DIKES TO CONTAIN STORED PESTICIDES AND FERTILIZERS IN CASE OF SPILLAGE.
- FOLLOW THE RECOMMENDED APPLICATION RATES AND METHODS.
- HAVE EQUIPMENT AND ABSORBENT MATERIALS AVAILABLE IN STORAGE AND APPLICATION AREAS TO CONTAIN AND CLEAN UP ANY SPILLS THAT OCCUR.

PETROLEUM PRODUCTS:

- STORE NEW AND USED PETROLEUM PRODUCTS FOR VEHICLES IN COVERED AREAS WITH BERMS OR DIKES IN PLACE TO CONTAIN ANY SPILLS.
- IMMEDIATELY CONTAIN AND CLEAN UP ANY SPILLS WITH ABSORBENT MATERIALS.
- HAVE EQUIPMENT AVAILABLE IN FUEL STORAGE AREAS AND IN VEHICLES TO CONTAIN AND CLEAN UP ANY SPILLS THAT OCCUR.

DETERGENTS:

PHOSPHOROUS– AND NITROGEN–CONTAINING DETERGENTS ARE USED IN WASH WATER FOR CLEANING VEHICLES. EXCESSES OF THESE NUTRIENTS CAN BE A MAJOR SOURCE OF WATER POLLUTION. USE DETERGENTS ONLY AS RECOMMENDED, AND LIMIT THEIR USE ON THE SITE. DO NOT DUMP WASH WATER CONTAINING DETERGENTS INTO THE STORM DRAIN SYSTEM; DIRECT IT TO A SANITARY SEWER OR CONTAIN IT SO THAT IT CAN BE TREATED AT A WASTEWATER TREATMENT PLANT.

LIMITATIONS

AN EFFECTIVE WASTE MANAGEMENT SYSTEM REQUIRES TRAINING AND SIGNAGE TO PROMOTE AWARENESS OF THE HAZARDS OF IMPROPER STORAGE, HANDLING, AND DISPOSAL OF WASTES. THE ONLY WAY TO BE SURE THAT WASTE MANAGEMENT PRACTICES ARE BEING FOLLOWED IS TO BE AWARE OF WORKER HABITS AND TO INSPECT STORAGE AREAS REGULARLY. EXTRA MANAGEMENT TIME MAY BE REQUIRED TO ENSURE THAT ALL WORKERS ARE FOLLOWING THE PROPER PROCEDURES.

MAINTENANCE CONSIDERATIONS

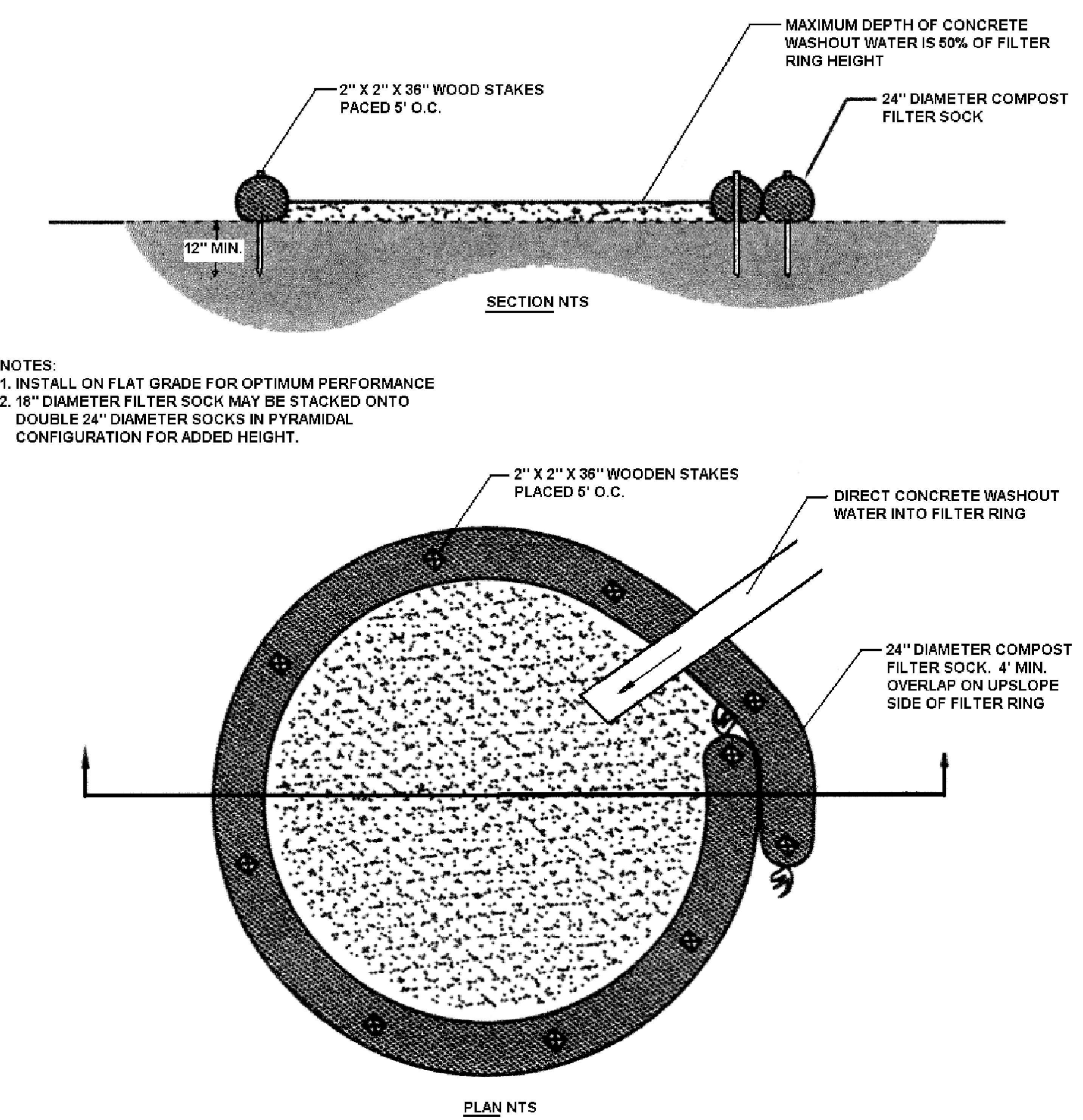
INSPECT STORAGE AND USE AREAS AND IDENTIFY CONTAINERS OR EQUIPMENT THAT COULD MALFUNCTION AND CAUSE LEAKS OR SPILLS. CHECK EQUIPMENT AND CONTAINERS FOR LEAKS, CORROSION, SUPPORT OR FOUNDATION FAILURE, OR OTHER SIGNS OF DETERIORATION, AND TEST THEM FOR SOUNDNESS. IMMEDIATELY REPAIR OR REPLACE ANY THAT ARE FOUND TO BE DEFECTIVE.

EFFECTIVENESS

WASTE MANAGEMENT PRACTICES ARE EFFECTIVE ONLY WHEN THEY ARE REGULARLY PRACTICED AT A CONSTRUCTION SITE. IN STORAGE AND USE AREAS, POST THE GUIDELINES FOR PROPER HANDLING, STORAGE, AND DISPOSAL OF CONSTRUCTION SITE WASTES; TRAIN WORKERS IN THESE PRACTICES TO ENSURE THAT EVERYONE IS KNOWLEDGEABLE ENOUGH TO PARTICIPATE.

COST CONSIDERATIONS

THE COSTS ASSOCIATED WITH CONSTRUCTION SITE WASTE MANAGEMENT ARE MAINLY ATTRIBUTED TO PURCHASING AND POSTING SIGNS, INCREASED MANAGEMENT TIME FOR OVERSIGHT, ADDITIONAL LABOR REQUIRED FOR SPECIAL HANDLING OF WASTES, TRANSPORTATION COSTS FOR WASTE HAULING, AND FEES CHARGED BY DISPOSAL FACILITIES TO TAKE THE WASTES.



NOTES:

WASHOUT SHALL NOT BE PLACED WITHIN 50 FEET OF STORM DRAINS, OPEN DITCHES, OR SURFACE WATERS. LOCATION SHALL BE CLOSE TO CONCRETE POUR, AND IF POSSIBLE, ON SLOPES NOT EXCEEDING 2% GRADE.

A SUITABLE IMPERVIOUS GEOMEMBRANE SHALL BE PLACED AT THE LOCATION OF THE WASHOUT PRIOR TO INSTALLING THE SOCKS. COMPOST SOCKS SHOULD BE STAKED IN THE MANNER RECOMMENDED BY THE MANUFACTURER AROUND PERIMETER OF THE GEOMEMBRANE SO AS TO FORM A RING WITH THE ENDS OF THE SOCK LOCATED AT THE UPSLOPE CORNER (FIGURE 3.18). CARE SHOULD BE TAKEN TO ENSURE CONTINUOUS CONTACT OF THE SOCK WITH THE GEOMEMBRANE AT ALL LOCATIONS. WHERE NECESSARY, SOCKS MAY BE STACKED AND STAKED SO AS TO FORM A TRIANGULAR CROSS–SECTION.

TYPICAL COMPOST SOCK WASHOUT INSTALLATION

NOT TO SCALE

STREET SWEEPING AND VACUUMING

PUBLIC STREET SWEEPING WITH A VACUUM SWEEPER AT THE END OF EACH WORKDAY AND DURING DRY CONDITIONS (OR MORE FREQUENTLY AS NEEDED); MANUAL CLEANING OF TIRES PRIOR TO SITE EGRESS.

SWEEPERS MUST MEET ALL FEDERAL, STATE, AND LOCAL AIR QUALITY REGULATIONS.

INSPECT INGRESS/EGRESS ACCESS POINTS DAILY AND SWEEP TRACKED SEDIMENT AS NEEDED.

BE CAREFUL NOT TO SWEEP UP ANY UNKNOWN SUBSTANCE OR ANY OBJECT THAT MAY BE POTENTIALLY HAZARDOUS.

ADJUST BROOMS FREQUENTLY TO MAINTAIN PROPER CONTACT WITH THE GROUND AND MAXIMIZE EFFICIENCY OF SWEEPING OPERATIONS.

AFTER SWEEPING IS FINISHED, DISPOSE OF WASTE MATERIALS IN ACCORDANCE WITH ALL LAWS, RULES, AND APPLICABLE REGULATIONS.

TYPE OF EQUIPMENT USED SHALL BE DEPENDENT UPON TYPE AND SEVERITY OF DIRT, SEDIMENT, AND DEBRIS TO BE REMOVED FROM SURFACES.

REMOVAL
PLAN FOR PROPER DISPOSAL OF WASTES AT AN APPROVED DUMPSITE OR CONSIDER INCORPORATING SEDIMENT BACK INTO PROJECT SITE IF FREE OF DEBRIS AND TRASH.

APPLICATION NUMBER AND TYPE: LD–22–03–PRELIMINARY/FINAL MAJOR SUBDIVISION AND LAND DEVELOPMENT PLANS

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF THE RESPONSIBLE LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

SEAL:
COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER KEITH JOSEPH MARSHALL No. PE073528

KEITH J. MARSHALL
PROFESSIONAL ENGINEER
PENNSYLVANIA
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Plan Prepared by Adam C. Kaminski

REV.	DATE	DESCRIPTION	CHK'D:	BY:
1	07/01/22	REVISED PER TOWNSHIP COMMENTS	K.J.M.	J.S.D.
2	08/02/22	REVISED PER TOWNSHIP COMMENTS	K.J.M.	A.C.K.

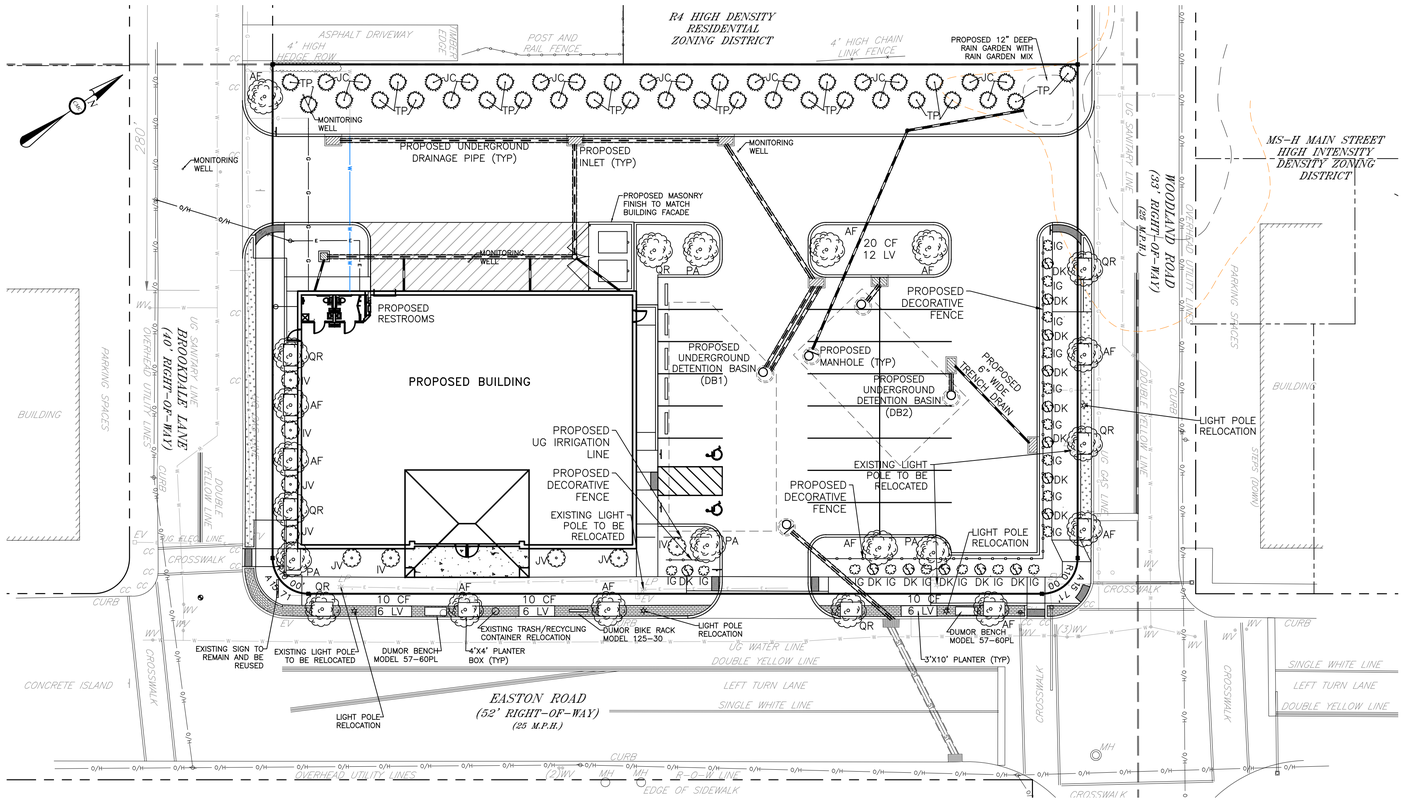
DRAWING NAME: EROSION CONTROL NOTES AND DETAILS

PROPOSED AUTOZONE LOCATION
1318 AND 1330 EASTON ROAD
ABINGTON, PA 19001

LOCATION: ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PA

DATE: 04/05/22	DRAWN BY: J.S.D.
SCALE: N/A	CHK'D BY: K.J.M.
PROJ. NUMBER: 1482–21–02–PA	
DRAWING NUMBER: EC–2	
SHEET NUMBER: 10 OF 15	

M:\Small Jobs\Wright Partners\AZ – Abington\CAD\Plan Set\10–Erosion and Sediment Control Notes ES–2.dwg



GRAPHIC SCALE: 1"=20'

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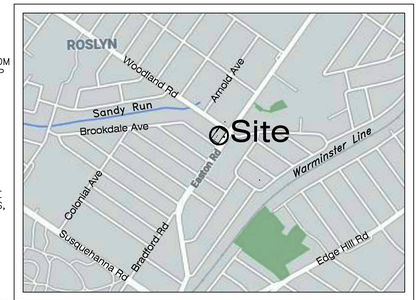
LANDSCAPE NOTES:

1. ALL PLANT MATERIALS SHALL MEET THE STANDARDS OF THE AMERICAN STANDARD FOR NURSERY STOCK BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION (2004), OR MORE RECENT EDITION.
2. ALL PLANT MATERIALS SHALL BE GUARANTEED FOR A PERIOD OF 18 MONTHS FROM THE DAY OF FINAL APPROVAL OF THE LANDSCAPE INSTALLATION BY THE TOWNSHIP LANDSCAPE ARCHITECT. ANY PLANT MATERIAL 25% OR MORE OF WHICH IS DEAD SHALL BE CONSIDERED DEAD. A TREE SHALL BE CONSIDERED WHEN THE MAIN LEADER HAS DIED OR 25% OF THE CROWN IS DEAD. ANY DEAD PLANT MATERIAL SHALL BE REPLACED AND INSTALLED ACCORDING TO THE APPROVED PLANTING PRACTICES.
3. SHADE TREES WHEN ADJACENT TO PARKING STALLS AND PEDESTRIAN USE AREAS, SHALL BE LIMBED TO 6' ABOVE GRADE.
4. THIS PLAN IS FOR LANDSCAPING ONLY. ALL SITE IMPROVEMENTS INCLUDING, BUT NOT LIMITED TO, BUILDING LOCATIONS, CURBING, SIDEWALK, UTILITIES, AND THEIR ANCILLARY APPURTENANCES, ARE SHOWN FOR INFORMATION PURPOSES ONLY AND ARE SUBJECT TO MODIFICATION AND REVISION. CONTRACTOR SHALL REFER TO THE SITE PLAN, GRADING PLAN, AND UTILITY PLAN, AND THEIR RELATED DETAIL SHEETS, FOR ALL SITE IMPROVEMENTS OTHER THAN LANDSCAPING.
5. TREES SHALL NOT BE PLANTED WITHIN 3 FEET OF ANY PROPERTY LINE.
6. ALL SHRUBS SHALL BE PLACED IN CONTINUOUSLY MULCHED BEDS.
7. UNLESS OTHERWISE NOTED, ALL DISTURBED AREAS SHALL BE SEEDED.
8. PLANT SUBSTITUTIONS ARE REQUIRED TO BE SUBMITTED TO THE TOWNSHIP LANDSCAPE ARCHITECT IN WRITING FOR APPROVAL.
9. A MINIMUM OF 4" OF SCREENED TOP SOIL MUST BE PLACED IN ALL PLANTING AREAS.
10. ALL TREES TO BE REMOVED AND ARE VIABLE TO BE REPLANTED ARE TO BE MOVED TO OTHER AREAS OF THE PROPERTY TO BE COORDINATED WITH OWNER PRIOR TO CONSTRUCTION.
11. REFER TO THE POST CONSTRUCTION STORMWATER MANAGEMENT PLAN FOR LOCATION OF SOIL AMENDMENTS.
12. ALL ISLANDS LESS THAN 300 SF SHALL HAVE PERMANENT IRRIGATION INSTALLED. DESIGN OF IRRIGATION SYSTEM TO BE DONE AT TIME OF BUILDING PERMIT.



LOCATION MAP
SCALE: 1"=1000'

LANDSCAPING REQUIREMENTS

ZONING

	REQUIRED	PROPOSED
REPLACEMENT LANDSCAPING 6" CALIPER OR GREATER (5)	2 3-3.5" EACH	10 TREES *
* (REPLACEMENT TREE REQUIREMENT MET W/ STREET TREES)	6" REMOVED	
PARKING LOT LANDSCAPING		
PLANTING ISLAND LANDSCAPING	1 SHADE TREE	1/ISLAND
	LAWN	1/LAWN
	GROUND COVER	
STREET TREES		
SPACING RATIO ALONG FRONTAGE (513 LF)	ONE (1)/40 LF	13 TREES
BUFFER REQUIREMENTS		
PROPERTY LINE BUFFER WIDTH	15 FT	15 FT

BUFFER SPECIFICATIONS (PER 100 LF OF PROPERTY LINE)	REQUIRED (PER 100 LF)	PROPOSED
LOW INTENSITY	1 CANOPY TREE	5 CANOPY TREE **
	2 UNDERSTORY TREES	10 UNDERSTORY TREES
	2 EVERGREEN TREES	10 EVERGREEN TREES

**(CANOPY TREE REQUIREMENT MET PER SPACING RATIO ALONG FRONTAGE AND INCLUDES GREEN AREA TREES)

HIGH INTENSITY (ALONG PROPERTY LINE ADJACENT TO R4 ZONING DISTRICT)	DOUBLE ROW EVERGREEN TREES 10 FT O.C. (STAGGERED)	DOUBLE ROW EVERGREEN TREES 10 FT O.C. (STAGGERED)

	REQUIRED	PROPOSED
SITE ELEMENT SCREENS		
DUMPSTER OR TRASH CONTAINMENT AREA	MED. INTENSITY (6 FT HIGH FENCE)	MED. INTENSITY (6 FT HIGH FENCE)
GROUND COVER (APPLIES TO "GREEN AREAS")	GRASS/	GRASS/
ALL SEASON GROUND COVER	MANICURED LAWN AREA W/MULCH	MANICURED LAWN AREA W/MULCH

	REQUIRED	PROPOSED
SUBDIVISION AND LAND DEVELOPMENT		
GENERAL LANDSCAPING		
BUSINESS / COMMERCIAL USE: PER 1,000 SF OF GREEN AREA	TWO (2) DECIDUOUS OR EVERGREEN TREE	22 DECIDUOUS *** TREES (GREEN AREA 8,469 SF)
*** SATISIFIED BY ZONING REQUIREMENTS		

LEGEND:

- CANOPY/SHADE/STREET TREE
- UNDERSTORY TREE
- EVERGREEN TREE
- SHRUB (BUILDING FOUNDATION)
- SHRUB (ALL-WEATHER FENCE)

LANDSCAPE SCHEDULE

QTY.	SYM.	SCIENTIFIC NAME (COMMON NAME)	HEIGHT	SPREAD	CALLIPER	COMMENT
SHADE / STREET/ UNDERSTORY TREES						
8	AF	ACER FREEMAN "ARMSTRONG" (ARMSTRONG MAPLE)	8' MIN	2 1/2" CAL AT 1' ABOVE BALL	3"	UNIFORM SHAPE/SIZE
8	QR	QUERCUS ROBUR X BICOLOR (FASTIGIATA)	8' MIN	2 1/2" CAL AT 1' ABOVE BALL	3"	UNIFORM SHAPE/SIZE
4	PA	PRUNUS AMANAGOWA AMANAGOWA CHERRY	8-10'			MULTI-STEM MIN 5 STEMS
5	JV	JUNIPEROUS VIRGINICUS EASTERN RED CEDAR	8' MIN			BRANCHED FULLY TO GROUND
SHRUBS						
22	TP	THUJA PILCATA (WESTERN ARBORVITAE)	8' MIN			BRANCHED FULLY TO GROUND
21	JC	JUNIPEROUS CHINENSIS CHINESE JUPITER	8' MIN			BRANCHED FULL TO GROUND
17	IG	ILEX GCABRA "COMPACTA" (COMPACT INKBERRY)	18" MIN			UNIFROM SHAPE/SIZE
14	DK	DEUTZA X KALMIFLORA (KALMA FLOWERED DEUTZIA)	18" MIN			UNIFROM SHAPE/SIZE
2	IC	ILEX CRENATA "SKY PENCIL" (SKY PENCIL HOLLY)	30" MIN			UNIFROM SHAPE/SIZE
4	IV	ILEX VERTICILLATA (WINTERBERRY)	24" MIN			UNIFROM SHAPE/SIZE
2	IL	ILEX CRENATA "SOFT TOUCH" (SOFT TOUCH COMPACT HOLLY)	30" MIN			UNIFROM SHAPE/SIZE
PERENNIALS						
40	CF	CALAMAGRASTIS X ACUTIFLORA 'KARL FOERSTER' (FEATHER REED GRASS)			1 GAL	1 GALLON, PLANT 18" ON CENTER
30	LV	LAVANDULA ANGUSTIFOLIA LAVENDER			1 GAL	1 GALLON, PLANT 18" ON CENTER

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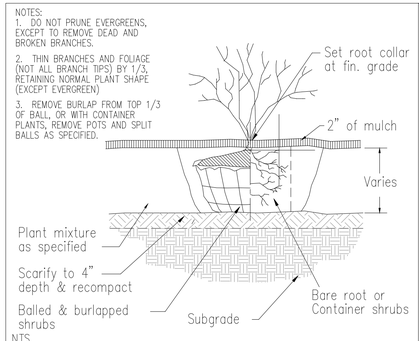
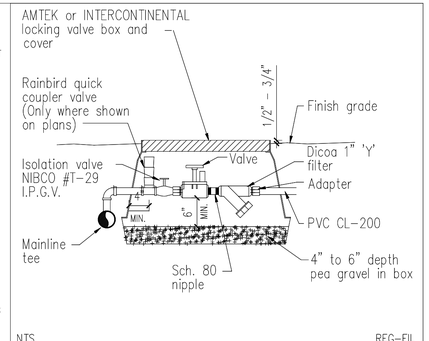


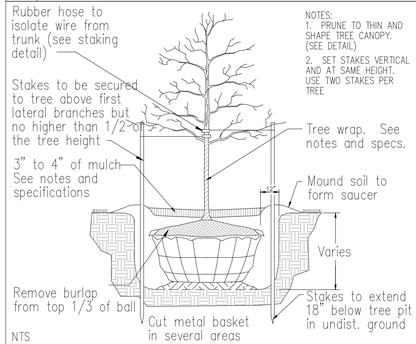
NTS

1 SHRUB PLANTING



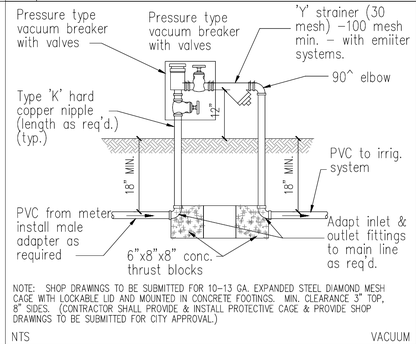
NTS REG-FIL

4 VALVE, REGULATOR, & FILTER



NTS

2 TREE PLANTING TREE-PL



NOTE: SHOP DRAWINGS TO BE SUBMITTED FOR 10-13 GA. EXPANDED STEEL DIAMOND MESH CAGE WITH LOCKABLE LID AND MOUNTED IN CONCRETE FOOTINGS. MIN. CLEARANCE 3" TOP, 8" SIDES. (CONTRACTOR SHALL PROVIDE & INSTALL PROTECTIVE CAGE & PROVIDE SHOP DRAWINGS TO BE SUBMITTED FOR CITY APPROVAL.)

NTS VACUUM

5 PRESSURE TYPE VACUUM BRKR.

GENERAL IRRIGATION NOTES

1. Contractor to provide design drawings for approval prior to installation.
2. Irrigation to extend from property lines to back of city sidewalks and / or curbs.
3. Install 1 1/2" dia. PVC pipe sleeves where irrigations lines cross or are under pavement.

UTILITY NOTE:

PA ONE CALL SERIAL #20212700875
TICKET IS PRELIMINARY DESIGN TICKET
(A NOTIFICATION OF EXCAVATION OR DEMOLITION WORK GIVING NOT LESS THAN 10 NOR MORE THAN 90 BUSINESS DAYS NOTICE).
PA ONE CALL MUST BE NOTIFIED OF STATUS CHANGE FOR EXCAVATION AND/OR DEMOLITION.
THE FOLLOWING UTILITIES WERE CONTACTED PER PA ACT 287, AS AMENDED BY ACT 187 OF 1996:

ABINGTON TOWNSHIP
AQUA PA
COMCAST CABLE WILLOW GROVE
COMCAST CABLE
PECO ENERGY
VERIZON PA

Know what's below. Call before you dig.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF THE RESPONSIBLE LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

COMMONWEALTH OF PENNSYLVANIA — REGISTERED LANDSCAPE ARCHITECT

Alyssa E. Boyd, PLA
PROFESSIONAL
LANDSCAPE ARCHITECT
LICENSE NO. LA001517

CMC ENGINEERING
2215 Kimberton Road
P.O. Box 958 Kimberton, PA 19442
Phone (610) 983-9200 Fax (610) 983-9202
EMail: Contact@CMCEng.com

REV.	DATE	DESCRIPTION	CHK'D:
1	07/01/22	REVISED PER TOWNSHIP COMMENTS	K.J.M. J.S.D.
2	08/02/22	REVISED PER TOWNSHIP COMMENTS	K.J.M. A.C.K.

DRAWING NAME: LANDSCAPING PLAN

LOCATION: PROPOSED AUTOZONE STORE
1318 AND 1330 EASTON ROAD
ABINGTON, PA 19001
ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PA

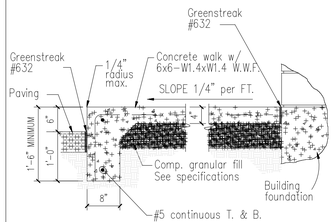
DATE: 04/05/22 | DRAWN BY: J.S.D.
SCALE: 1"=20' | CHK'D BY: K.J.M.
PROJ. NUMBER: 1482-21-02-PA
DRAWING NUMBER: L-1
SHEET NUMBER: 11 OF 15

M:\Small Jobs\Wright Partners\XZ - Abington\CAD\Plan Set\11-Landscaping Plan L-1.dwg

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF THE RESPONSIBLE LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

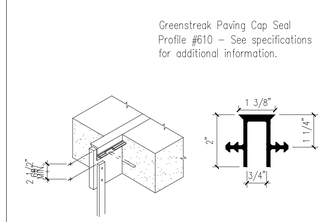
KEITH J. MARSHALL
PROFESSIONAL ENGINEER
PENNSYLVANIA
No. PE073328

CMC ENGINEERING
2215 Kimberton Road
P.O. Box 958 Kimberton, PA 19442
Phone (610) 983-9200 Fax (610) 983-9202
EMail: Contact@CMCEng.com



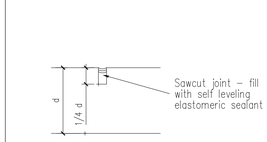
3/4" = 1'-0"

22 TYPICAL WALK SECTION



NO SCALE

23 TYPICAL EXPANSION JOINT



NOTE: SEE SITE PLAN FOR SPACING REQUIREMENTS

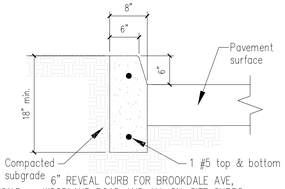
NO SCALE

24 TYPICAL CONTROL JOINT

Notes:

1. Install expansion joints in the curb at a maximum spacing of 20' o.c.
2. Landscaping materials, grass, sod, mulch, etc. shall be flush to 1" below top of curb/paving/drainage openings.

*** NOTE THIS DETAIL ONLY TO BE USED AS NOTED ON SITE PLAN ***

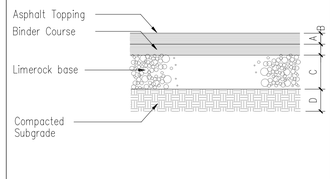


NO SCALE WOODLAND ROAD AND ALL ON-SITE CURBS

CONCRETE VERTICAL CURB

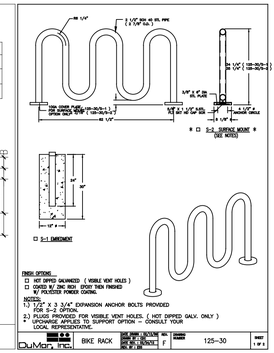
DIMENSION & TYPE

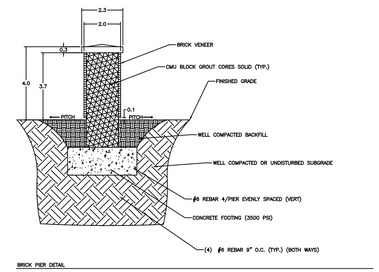
Paving Area	A	B	C	D
Drive Aisle	2"	2"	6"	6"
Parking	2"	2"	6"	6"



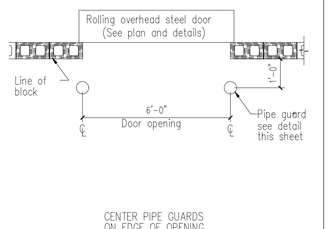
NO SCALE

ASPHALT PAVING SECTION



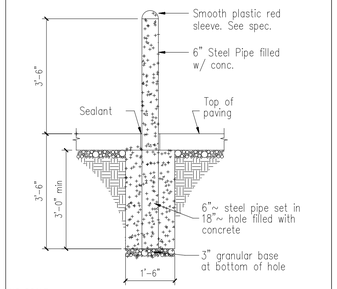


BRICK PIER DETAIL



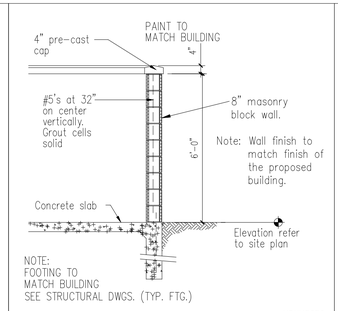
NO SCALE

15 PIPE GUARD @ SERVICE DOOR



NO SCALE

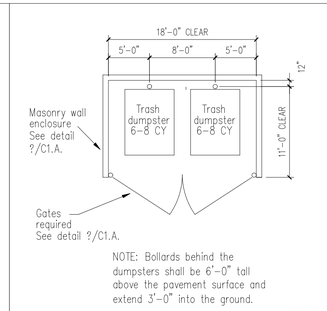
16 TYPICAL PIPE GUARD SECTION



NOTE: FOOTING TO MATCH BUILDING SEE STRUCTURAL DWGS. (TYP. FTG.)

NO SCALE MDUMPSEC

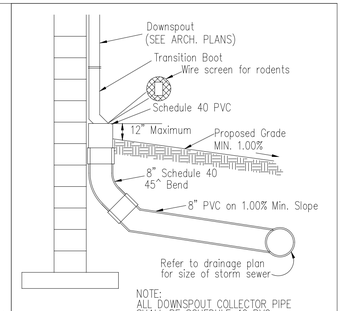
DUMPSTER SECTION



NOTE: Bollards behind the dumpsters shall be 6'-0" tall above the pavement surface and extend 3'-0" into the ground.

NO SCALE SEC-C17M

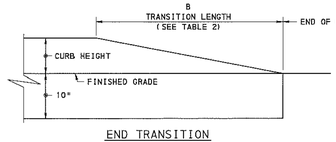
DUMPSTER LAYOUT



NOTE: ALL DOWNSPOUT COLLECTOR PIPE SHALL BE SCHEDULE 40 PVC.

NO SCALE

21 DOWNSPOUT DETAIL



END TRANSITION

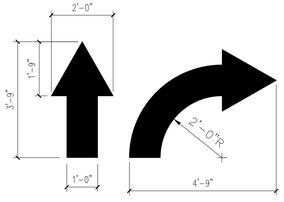
PLAIN CEMENT CONCRETE CURB - TRANSITIONS

NOTES:

1. CURB WIDTH SHALL BE 8 INCHES.
2. CURB HEIGHT ABOVE GRADE SHALL BE 6 INCHES.
3. TRANSITION CURBS SHALL BE INSTALLED AT ALL ACCESS DRIVES.

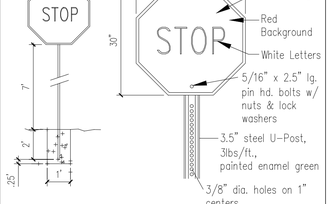
TABLE 2	
CURB HEIGHT	B
8" CURB TO 0" CURB	7'-0"
6" CURB TO 0" CURB	5'-0"
4" CURB TO 0" CURB	3'-6"

Note: All traffic flow arrows to be solid white reflective traffic paint as per dimensions below.



NO SCALE

18 TYPICAL PAVEMENT MARKINGS



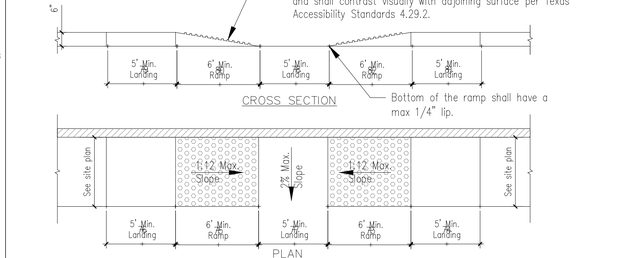
Note: All regulatory and warning signs shall be high intensity reflective sheeting.

NO SCALE

20 STOP SIGN DETAIL

NOTE:

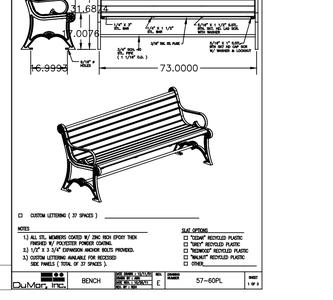
Surface texture of ramp shall consist of raised truncated domes with a diameter of nominal 0.9 in (23mm), a height of nominal 0.2 in (5mm) and a center to center spacing of nominal 2.35 in (60 mm) and shall contrast visually with adjoining surface per Texas Accessibility Standards 4.29.2.

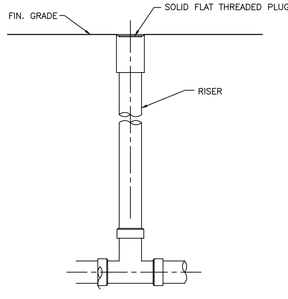


CROSS SECTION

PLAN

2 HANDICAP PARKING RAMP

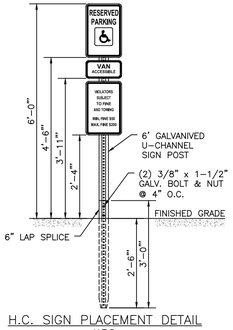




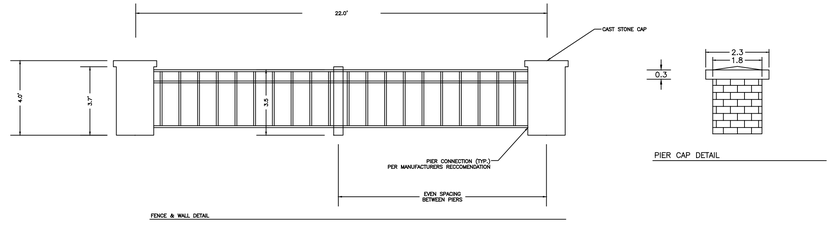
NOTES:

1. ALL RISER PIPES & FITTINGS TO BE SCH. 40 PVC (DIAMETER TO MATCH PIPE)
2. SEE PLANS FOR PIPE SIZES

CLEANOUT DETAIL
N.T.S.



H.C. SIGN PLACEMENT DETAIL
N.T.S.

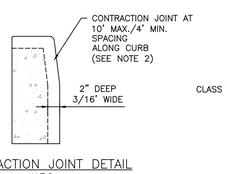


FENCE & WALL DETAIL

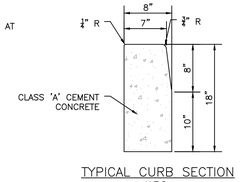
PIER CAP DETAIL

NOTES:

1. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PUBLICATION 408, SECTION 630 FOR PLAIN CONCRETE CURB AND DEPRESSED CURB, SECTION 640 FOR PLAIN CONCRETE CURB AND FOR PLAIN CONCRETE CURB GUTTER.
2. SPACE CONTRACTION JOINTS IN UNIFORM LENGTHS OR SECTIONS. 10' MAX / 4' MIN. SPACING, $\frac{3}{16}$" WIDE.
3. PLACE $\frac{3}{4}$-INCH PREMOLDED EXPANSION JOINT FILLER MATERIAL AT STRUCTURES AND AT THE END OF THE WORK DAY. CUT MATERIAL TO CONFORM TO AREA ADJACENT TO CURB OR CONFORM TO CROSS SECTIONAL AREA OF CURB.
4. FOR EASTON ROAD ONLY.

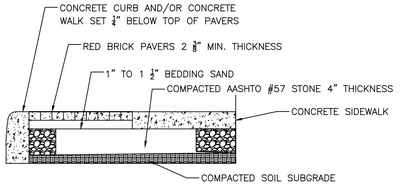


CONTRACTION JOINT DETAIL
N.T.S.



TYPICAL CURB SECTION
N.T.S.

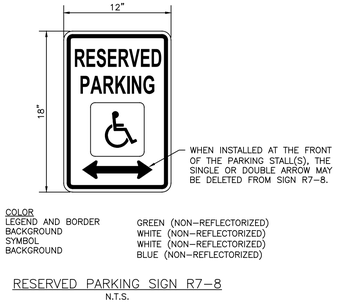
8" PLAIN CEMENT CONCRETE CURB DETAIL
N.T.S.



RED BRICK PAVER BLOCK CROSS SECTION

NOTES:

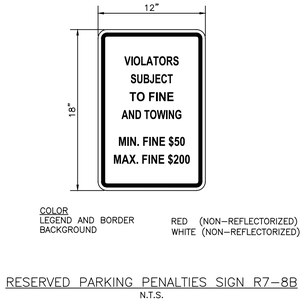
1. PAVER SURFACE AND JOINTS MUST COMPLY WITH ICC/ANSI A117.1–2009 SECTIONS 302 AND 303 AND THE SURFACE WILL BE STABLE, FIRM, AND SLIP RESISTANT.
2. VERTICAL CHANGES IN LEVEL WILL BE $\frac{1}{4}$ INCH MAXIMUM IN HEIGHT.
3. BEVELED CHANGES IN LEVEL WILL BE $\frac{1}{2}$ INCH MAXIMUM IN HEIGHT AND WILL HAVE A SLOPE NOT STEEPER THAN 1:2.
4. AY CHANGES IN LEVEL GREATER THAN $\frac{1}{2}$ INCH WILL BE RAMPED IN ACCORDANCE WITH THE REQUIREMENTS OF ICC/ANSI A117.1–2009 SECTIONS 405 OR 406.
5. THICKNESS OF BASE WILL VARY WITH SUBGRADE CONDITIONS AND CLIMATE. COLDER CLIMATES MAY REQUIRE THICKER BASES.



WHEN INSTALLED AT THE FRONT OF THE PARKING STALL(S), THE SINGLE OR DOUBLE ARROW MAY BE DELETED FROM SIGN R7-8.

COLOR	
LEGEND AND BORDER	GREEN (NON-REFLECTORIZED)
BACKGROUND	WHITE (NON-REFLECTORIZED)
SYMBOL	WHITE (NON-REFLECTORIZED)
BACKGROUND	BLUE (NON-REFLECTORIZED)

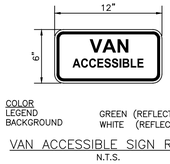
RESERVED PARKING SIGN R7-8
N.T.S.



COLOR	
LEGEND AND BORDER	RED (NON-REFLECTORIZED)
BACKGROUND	WHITE (NON-REFLECTORIZED)

RESERVED PARKING PENALTIES SIGN R7-8B
N.T.S.

PLACE SIGN IMMEDIATELY BELOW THE RESERVED PARKING SIGN (R7-8)



COLOR	
LEGEND	GREEN (REFLECTORIZED)
BACKGROUND	WHITE (REFLECTORIZED)

VAN ACCESSIBLE SIGN R7-8A
N.T.S.

REV.	DATE	DESCRIPTION	CHK'D:
1	07/01/22	REVISED PER TOWNSHIP COMMENTS	BY: K.J.M. J.S.D.
2	08/02/22	REVISED PER TOWNSHIP COMMENTS	K.J.M. A.C.K.

DRAWING NAME: DETAIL PLAN

PROPOSED AUTOZONE LOCATION
1318 AND 1330 EASTON ROAD
ABINGTON, PA 19001

LOCATION: ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PA

DATE: 04/05/22	DRAWN BY: A.C.K.
SCALE: N/A	CHK'D BY: K.J.M.
PROJ. NUMBER: 1482-21-02-PA	
DRAWING NUMBER: D-1	
SHEET NUMBER: 12 OF 15	

M:\Small Jobs\Wright Partners\AZ - Abington\CAD\Plan Set\12-Detail Plan D-1.dwg

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APPLICATION NUMBER AND TYPE: LD-22-03-PRELIMINARY/FINAL MAJOR SUBDIVISION AND LAND DEVELOPMENT PLANS

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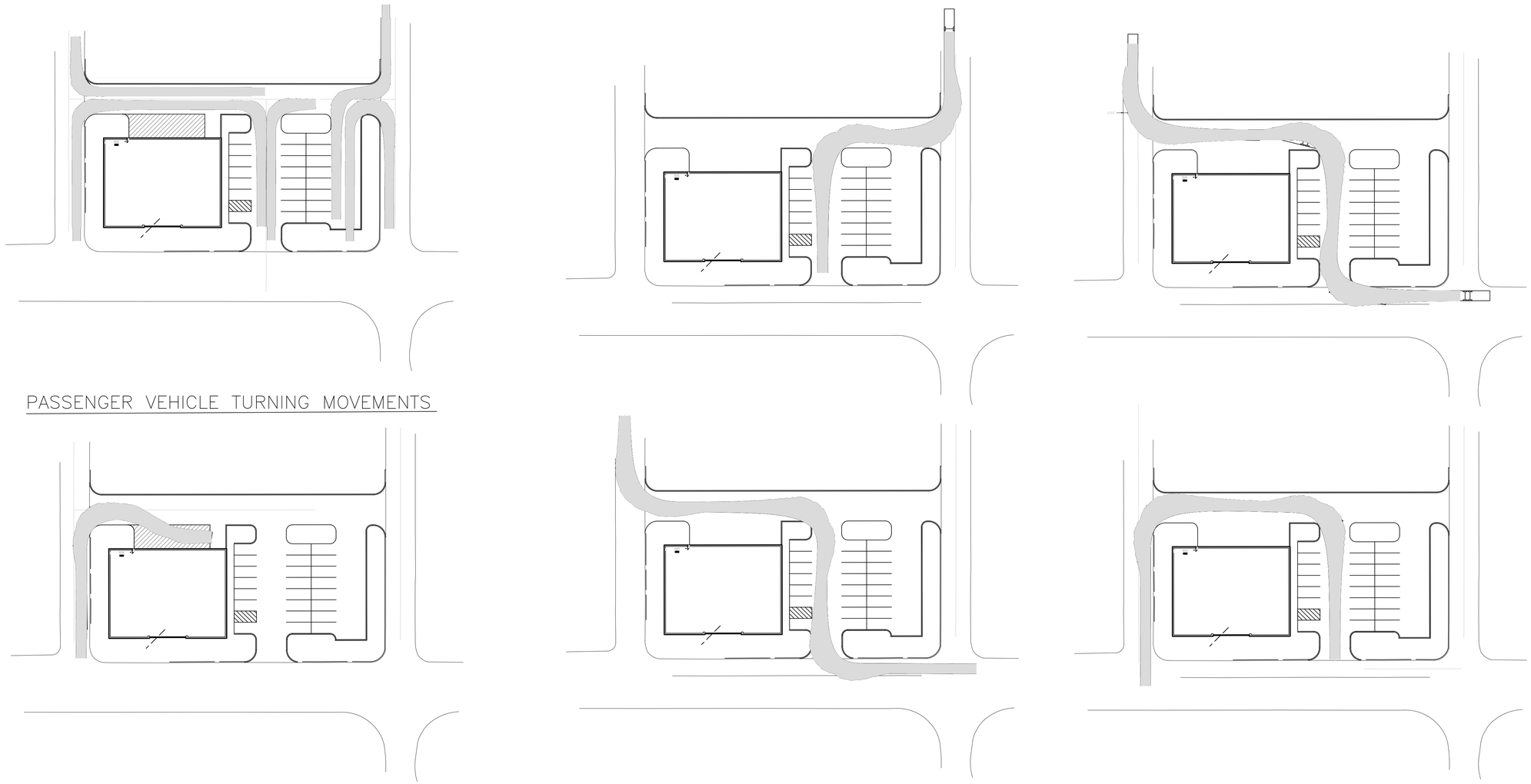
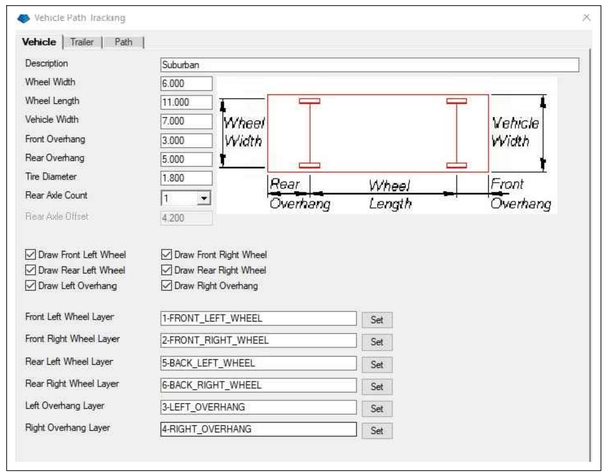


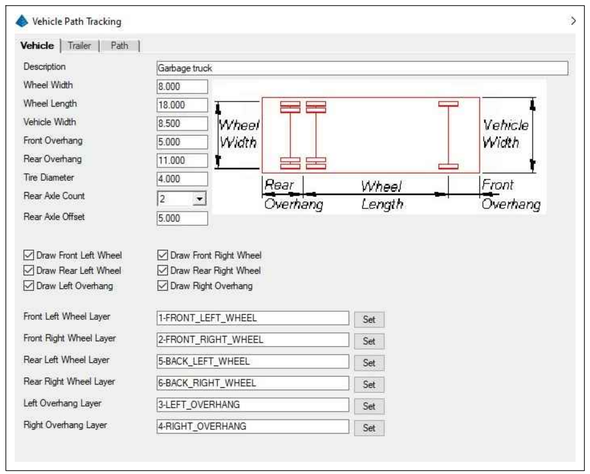
PASSENGER VEHICLE TURNING MOVEMENTS

GARBAGE TRUCK TURNING MOVEMENTS

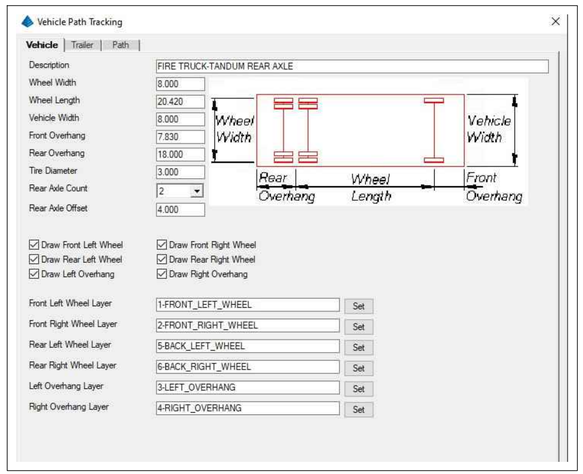
FIRE TRUCK TURNING MOVEMENTS



PASSENGER VEHICLE TEMPLATE



GARBAGE TRUCK TEMPLATE



FIRE TRUCK TEMPLATE

APPLICATION NUMBER AND TYPE: LD-22-03-PRELIMINARY/FINAL MAJOR SUBDIVISION AND LAND DEVELOPMENT PLANS

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SEAL: COMMONWEALTH OF PENNSYLVANIA REGISTERED KEITH J. MARSHALL ENGINEER

KEITH J. MARSHALL
PROFESSIONAL ENGINEER
PENNSYLVANIA
No. PE073228

CMC ENGINEERING
2215 Kimberton Road
P.O. Box 958 Kimberton, PA 19442
Phone (610) 983-9200 Fax (610) 983-9202
EMail: Contact@CMCEng.com

REV.	DATE	DESCRIPTION	CHK'D:	BY:
1	07/01/22	REVISED PER TOWNSHIP COMMENTS	K.J.M.	J.S.D.
2	08/02/22	REVISED PER TOWNSHIP COMMENTS	K.J.M.	A.C.K.

DRAWING NAME: DETAIL PLAN

PROPOSED AUTOZONE LOCATION
1318 AND 1330 EASTON ROAD
ABINGTON, PA 19001

LOCATION: ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PA

DATE: 7/1/22	DRAWN BY: J.S.D.
SCALE: N/A	CHK'D BY: K.J.M.
PROJ. NUMBER: 1482-21-02-PA	
DRAWING NUMBER: D-2	
SHEET NUMBER: 13 OF 15	

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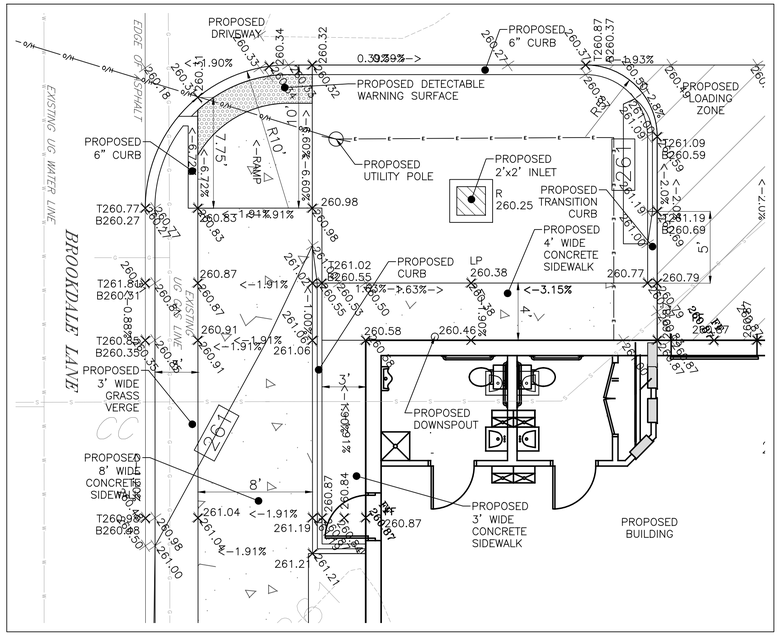
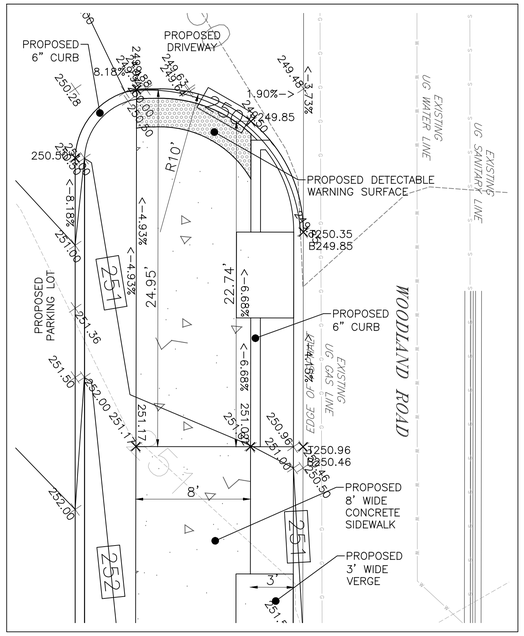
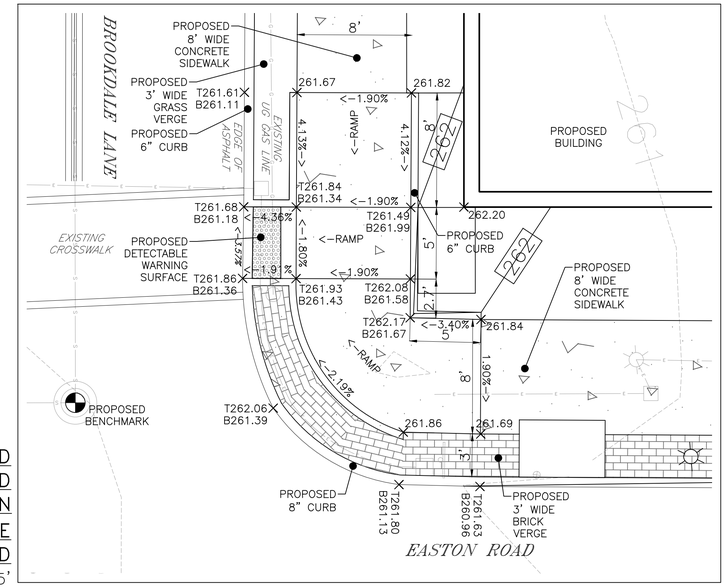


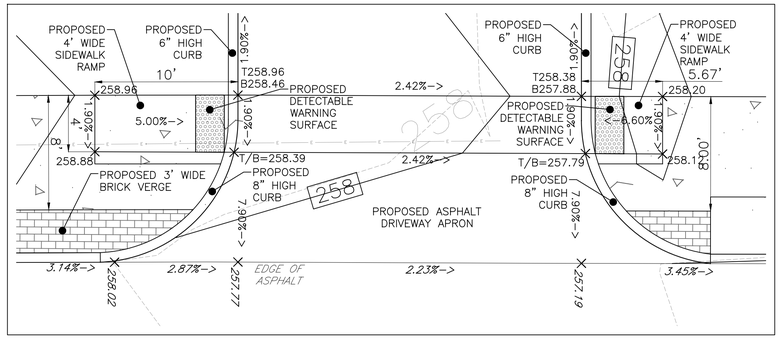
ADA RAMP AND SIDEWALK ENLARGED GRADING PLAN
(BROOKDALE LANE @ PROPOSED DRIVEWAY)
SCALE: 1"=5'



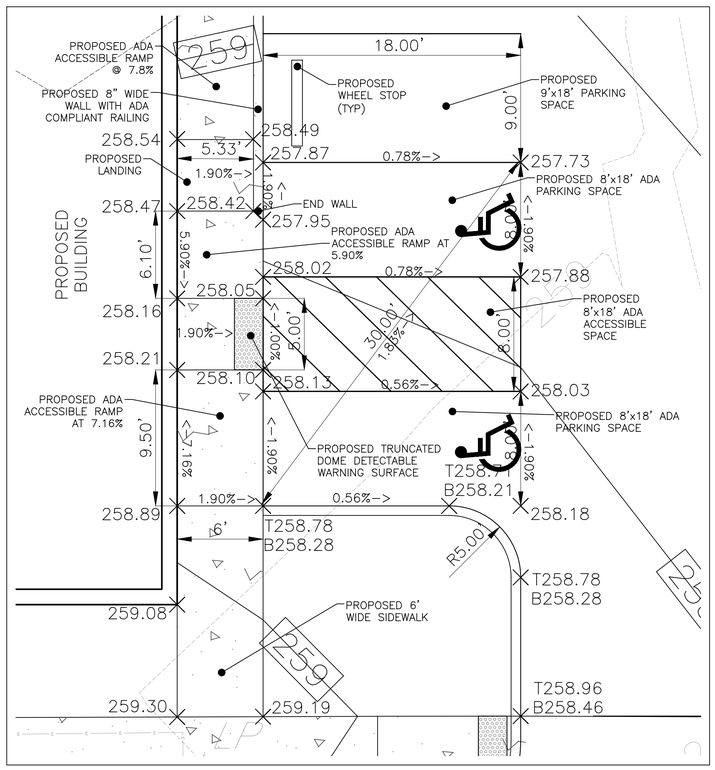
ADA RAMP AND SIDEWALK ENLARGED GRADING PLAN
(WOODLAND ROAD @ PROPOSED DRIVEWAY)
SCALE: 1"=5'



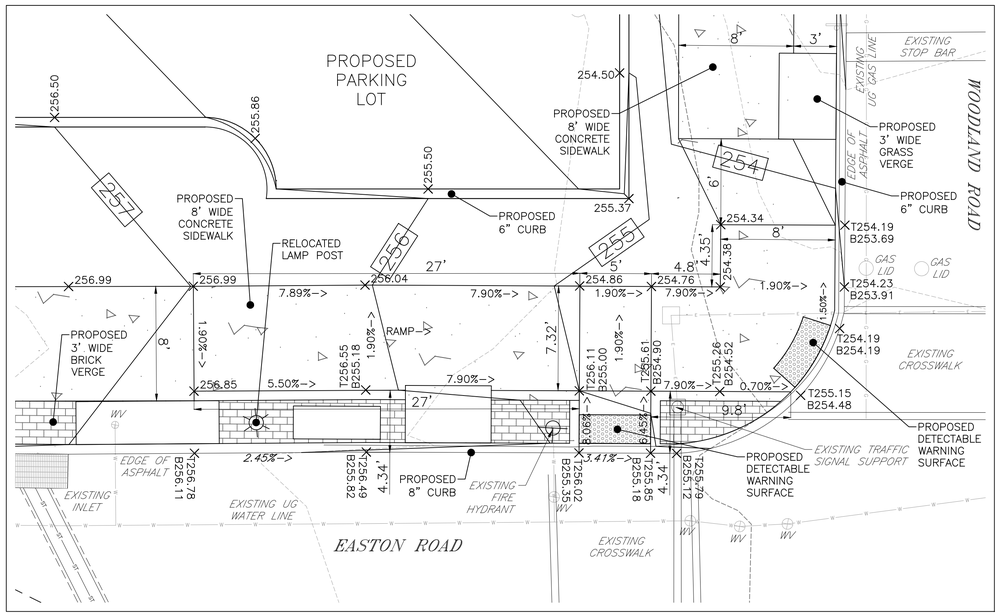
ADA RAMP AND SIDEWALK ENLARGED GRADING PLAN
(BROOKDALE LANE AND EASTON ROAD)
SCALE: 1"=5'



ADA RAMP AND SIDEWALK ENLARGED GRADING PLAN
(EASTON ROAD @ PROPOSED DRIVEWAY)
SCALE: 1"=5'



ADA RAMP AND PARKING SPACE
ENLARGED GRADING PLAN
SCALE: 1"=5'



ADA RAMP AND
SIDEWALK ENLARGED
GRADING PLAN
(WOODLAND ROAD
AND EASTON ROAD)
SCALE: 1"=5'

APPLICATION NUMBER AND TYPE:
LD-22-03-PRELIMINARY/FINAL
MAJOR SUBDIVISION AND LAND
DEVELOPMENT PLANS

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SEAL: COMMONWEALTH OF PENNSYLVANIA — KEITH J. MARSHALL — REGISTERED ENGINEER — No. PE073328

KEITH J. MARSHALL
PROFESSIONAL ENGINEER
PENNSYLVANIA
No. PE073328

CMC ENGINEERING
2215 Kimberton Road
P.O. Box 958 Kimberton, PA 19442
Phone (610) 983-9200 Fax (610) 983-9202
EMail: Contact@CMCEng.com

REV.	DATE	DESCRIPTION	CHK'D:
1	07/01/22	REVISED PER TOWNSHIP COMMENTS	J.S.D.
2	08/02/22	REVISED PER TOWNSHIP COMMENTS	A.C.K.
			K.J.M.
			K.J.M.

DRAWING NAME: ADA RAMP DETAIL PLAN

LOCATION: PROPOSED AUTOZONE LOCATION
1318 AND 1330 EASTON ROAD
ABINGTON, PA 19001
ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PA

DATE: 04/05/22	DRAWN BY: A.C.K.
SCALE: N/A	CHK'D BY: K.J.M.
PROJ. NUMBER: 1482-21-02-PA	
DRAWING NUMBER: D-3	
SHEET NUMBER: 14 OF 15	

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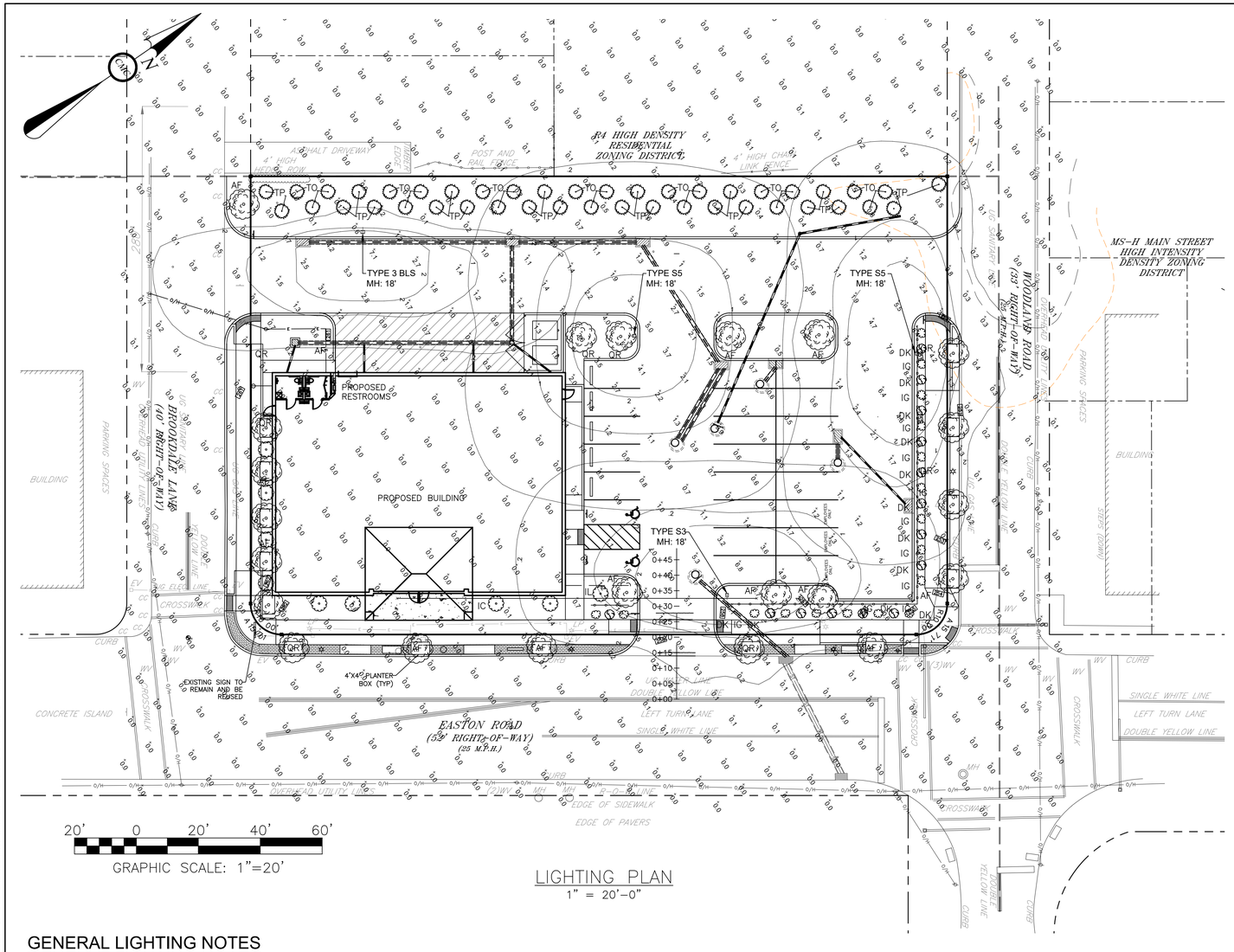


GRAPHIC SCALE: 1"=20'

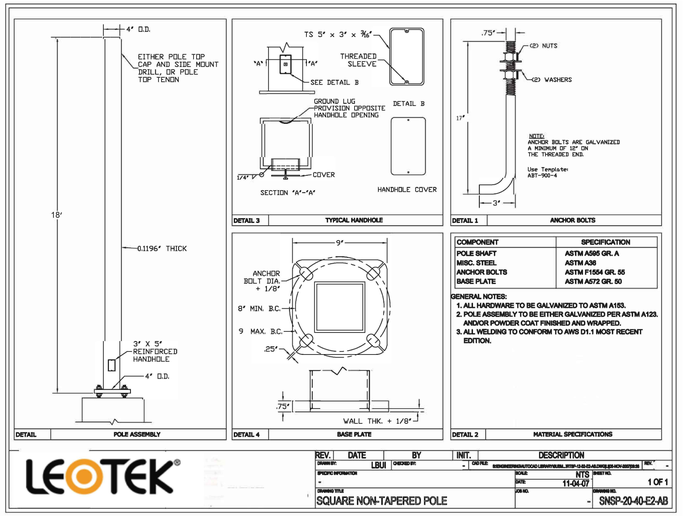
LIGHTING PLAN
1" = 20'-0"

Luminaire Schedule

Symbol	Qty	Label	[MANUFAC]	Description	Arrangement	LLD	LDD	LLF
	2	Type S3	Leotek Electronics USA LLC	AR13-48N-MV-NW-3-BK-160-PCR7-CR/RWL-S/RME-XBP	SINGLE	0.900	0.800	0.720
	1	Type S3 BLS	Leotek Electronics USA LLC	AR13-48N-MV-NW-3-BK-160-BLS-PCR7-CR/RWL-S/RME-XBP	SINGLE	0.900	0.800	0.720
	1	Type S5	Leotek Electronics USA LLC	AR13-48N-MV-NW-5-BK-160-PCR7-CR/RWL-S/RME-XBP	SINGLE	0.900	0.800	0.720

Calculation Summary

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	LVRatio	Grid Z
Beyond Property Line R4 Side	Illuminance	Fc	0.12	0.4	0.0	N.A.	N.A.	N.A.	5
Beyond Property Line Street Side	Illuminance	Fc	0.33	1.0	0.0	N.A.	N.A.	N.A.	5
Parking Areas	Illuminance	Fc	1.71	7.9	0.5	3.42	15.80	N.A.	0
Paved Areas	Illuminance	Fc	1.95	8.2	0.5	3.90	16.40	N.A.	0



COMPONENT	SPECIFICATION
POLE SHAFT	ASTM A595 GR. A
MISC. STEEL	ASTM A36
ANCHOR BOLTS	ASTM F1554 GR. 55
BASE PLATE	ASTM A572 GR. 50

DETAIL 2 MATERIAL SPECIFICATIONS

GENERAL NOTES:
1. ALL HARDWARE TO BE GALVANIZED TO ASTM A153.
2. POLE ASSEMBLY TO BE EITHER GALVANIZED PER ASTM A123. AND/OR POWDER COAT FINISHED AND WRAPPED.
3. ALL WELDING TO CONFORM TO AWS D1.1 MOST RECENT EDITION.

LEOTEK

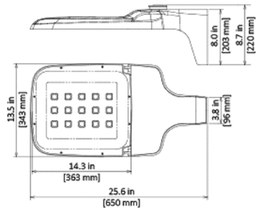
REV.	DATE	BY	INT.	DESCRIPTION
DRAWN BY:	LBU	CHECKED BY:	-	DATE:

SPECIFIC INFORMATION: -
DRAWING TITLE: SQUARE NON-TAPERED POLE
SCALE: NTS
DATE: 11-04-07
SHEET NO.: 1 OF 1
JOB NO.: -
DRAWING NO.: SNSP-20-40-E2-AB

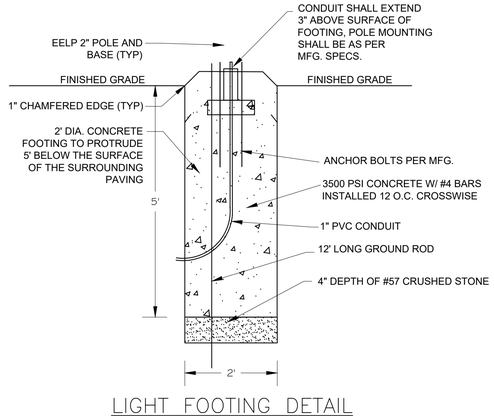
LIGHT POLE DETAILS
N.T.S.

PARKING LOT LUMINARY SPECIFICATIONS

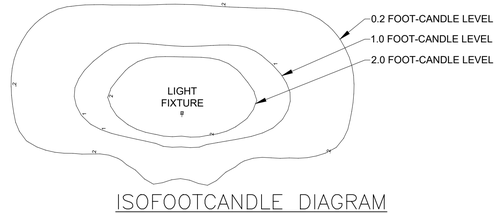
LEOTEK ARIETA LUMINARE
- MODEL: (SEE LUMINAIRE SCHEDULE)
- IES FULL CUTOFF
- DISTRIBUTION TYPE (SEE LUMINAIRE SCHEDULE)
- COLOR TEMPERATURE: 3,000K
- COLOR: BLACK
- OPTIONS: DIMONOFF PHOTOCELL & RWL-S SURGE DEVICE



LIGHT FIXTURE DETAIL
N.T.S.



LIGHT FOOTING DETAIL
N.T.S.



ISOFOOTCANDLE DIAGRAM
N.T.S.

GENERAL LIGHTING NOTES

THIS LIGHTING PLAN DEPICTS PROPOSED SUSTAINED ILLUMINATION LEVELS CALCULATED USING DATA PROVIDED BY THE NOTED MANUFACTURERS.

INSTALLATION NOTES:

1.) THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FIELD VERIFICATION OF ALL EXISTING UNDERGROUND STRUCTURES AND UTILITIES, SUCH AS WATER MAINS, SANITARY AND STORM SEWERS, TELEPHONE AND ELECTRIC CONDUITS, AND GAS LINES, ETC. AND ABOVE GROUND UTILITIES WHICH MAY BE ENCOUNTERED DURING CONSTRUCTION OPERATIONS.
2.) DIMENSIONS ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL ELEVATIONS, INVERTS, AND DIMENSIONS IN THE FIELD PRIOR TO THE COMMENCEMENT OF WORK.
3.) THE PENNSYLVANIA ONE CALL NUMBER IS 1-800-242-1776. THE CONTRACTOR IS REQUIRED TO SUBMIT VERIFICATION TO THE MUNICIPALITY THAT A ONE "ONE-CALL" HAS BEEN PLACED PRIOR TO THE START OF DEMOLITION WORK.
4.) THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS FROM THE MUNICIPALITY RELATIVE TO THE PROPOSED PROJECT.
5.) THE CONTRACTOR SHALL REPAIR ALL UTILITY TRENCHING WORK LOCATED WITHIN EXISTING PAVED STREETS.
6.) THE CONTRACTOR SHALL COMPLY WITH ALL CITY, STATE, AND FEDERAL REGULATIONS IN EFFECT AT THE TIME OF CONSTRUCTION.
7.) THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL.
8.) THE CONTRACTOR SHALL REMOVE ALL TEMPORARY FENCING, GATES, COVERED PEDESTRIAN WALKWAYS, TRAFFIC BARRIERS, AND SIGNAGE AT THE COMPLETION OF THE PROJECT. ALL AREAS DISTURBED AS A RESULT OF THE INSTALLATION OF THESE TEMPORARY CONTROLS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION.
9.) THE LIGHT LEVELS DEPICTED ON THIS PLAN WERE CALCULATED BASED ON THE LLF SHOWN IN THE LUMINAIRE SCHEDULE.
10.) THE LIGHTING VALUES AND CALCULATION POINTS DEPICTED ON THIS PLAN ARE ANALYZED ON A HORIZONTAL GEOMETRIC PLANE AT GROUND LEVEL UNLESS OTHERWISE NOTED.
11.) ILLUMINATION LEVELS ARE SHOWN IN FOOT-CANDLES (FC).
12.) THE ELECTRICAL CONTRACTOR IS RESPONSIBLE TO ENSURE THAT SHIELDING AND OR ROTATED OPTICS ARE INSTALLED AS INDICATED ON THE PLAN IN ORDER TO ACHIEVE THE LIGHTING LEVELS THE REVIEWING AGENCY APPROVED.

LIGHTING CONTROLS AND SURGE PROTECTION: ALL NEW FIXTURES ARE TO BE EQUIPPED WITH DIMONOFF RME-XBP PHOTOCELLS AND ABLE POWER PRODUCTS RWL-S SURGE DEVICE. FIXTURES MUST BE EQUIPPED WITH ALL-MODE PROTECTION (L-N, L-G, N-G). SURGE PROTECTION INTEGRAL TO THE PHOTOCONTROL SHOULD HAVE 3 MODES OF PROTECTION, LINE-TO-NEUTRAL, LINE-TO-GROUND AND NEUTRAL-TO-GROUND. THE MINIMUM SURGE PROTECTION SPECIFICATIONS SHOULD BE 10KA IN, 25KA IMAX AND 20KV UOC.

SET ONE SMART PHOTOCELL TO CONTROL ALL OTHER SITE LIGHTING FIXTURES (DIMONOFF #RME-XBP).

POLE NOTES:
18' SQUARE STRAIGHT STEEL POLES SHALL BE SUPPLIED BY LEOTEK ELECTRONICS, USA.

PLEASE CONTACT INDEPENDENCE LIGHTING FOR PRICING:
KENT LAZOR
DIRECT: 610-363-5271

UTILITY NOTE:

PA ONE CALL SERIAL #20212700875
TICKET IS PRELIMINARY DESIGN TICKET
(A NOTIFICATION OF EXCAVATION OR DEMOLITION WORK GIVING NOT LESS THAN 10 NOR MORE THAN 90 BUSINESS DAYS NOTICE).
PA ONE CALL MUST BE NOTIFIED OF STATUS CHANGE FOR EXCAVATION AND/OR DEMOLITION.
THE FOLLOWING UTILITIES WERE CONTACTED PER PA ACT 287, AS AMENDED BY ACT 187 OF 1996:

ABINGTON TOWNSHIP
AQUA PA
COMCAST CABLE WILLOW GROVE
COMCAST CABLE
PECO ENERGY
VERIZON PA

APPLICATION NUMBER AND TYPE: LD-22-03-PRELIMINARY/FINAL MAJOR SUBDIVISION AND LAND DEVELOPMENT PLANS

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COMMONWEALTH OF PENNSYLVANIA REGISTERED LANDSCAPE ARCHITECT
Aloysius J. Oyoyo, PLA, PRINCIPAL LANDSCAPE ARCHITECT
LICENSE NO. LA001517

CMC ENGINEERING
2215 Kimberton Road
P.O. Box 958 Kimberton, PA 19442
Phone (610) 983-9200 Fax (610) 983-9202
EMail: Contact@CMCEng.com

REV.	DATE	DESCRIPTION	CHK'D: BY:
1	07/01/22	REVISED PER TOWNSHIP COMMENTS	K.J.M. J.S.D.
2	08/02/22	REVISED PER TOWNSHIP COMMENTS	K.J.M. A.C.K.

DRAWING NAME: LIGHTING PLAN

PROPOSED AUTOZONE STORE
1318 AND 1330 EASTON ROAD
ABINGTON, PA 19001

LOCATION: ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PA

DATE: 7/1/22 | DRAWN BY: J.S.D.
SCALE: 1"=20' | CHK'D BY: K.J.M.
PROJ. NUMBER: 1482-21-02-PA
DRAWING NUMBER: E-1
SHEET NUMBER: 15 OF 15

M:\Small Jobs\Wright Portners\Viz - Abington\CAD\Plan Set\15-Lighting Plan E-1.dwg

MONTGOMERY COUNTY
BOARD OF COMMISSIONERS
VALERIE A. ARKOOSH, MD, MPH, CHAIR
KENNETH E. LAWRENCE, JR., VICE CHAIR
JOSEPH C. GALE, COMMISSIONER

MONTGOMERY COUNTY
PLANNING COMMISSION
MONTGOMERY COUNTY COURTHOUSE • PO BOX 311
NORRISTOWN, PA 19404-0311
610-278-3722
FAX: 610-278-3941
WWW.MONTCOPA.ORG

SCOTT FRANCE, AICP
EXECUTIVE DIRECTOR

November 18, 2022

SUBJECT: Preliminary Comments on Auto Zone Land Development Plans (Dated 8-2-2022, 11-5-2022, and 11-17-2022, Received 11-17-2022)

TO: Rich Manfredi, Manager
Cc: Terry Castorina, Assistant to the Township Manager

FROM: Mike Narcowich, AICP, Community Planning Assistant Manager
and Abington Township Planning Consultant

We received updated plans for Auto Zone (dated 8-2-2022) on 11-17-2022. Although not submitted for a formal review under the Act 247 process, we offer the following informal, preliminary comments:

1. Sidewalks and Crosswalks [Zoning §2504]. We recommend that the crosswalks over Easton, Brookdale, and Woodland be upgraded to highly visible crosswalks using a continental design.
2. Street Furniture.
    a. As noted in our review letter dated June 6, 2022, benches, and trash and recycling receptacles are required at least once every one hundred feet of street frontage. The applicant has 481 feet of street frontage and has proposed one trash receptacle and two benches [Zoning §2502].
    b. Plan sheet S-1, last revised 8-2-2022, lists "Proposed Dumor Bike Rack Model" in the legend as #37, but does not appear to show it on the plan. It is shown on plan sheet L-1, revised on the same date.
3. Street Trees. Where a verge is present, trees may be planted either in a tree pit of a minimum of four feet by six feet in width, or may be planted on the far side of the sidewalk from the curb [Zoning §2402.A]. The applicant proposes tree boxes that are four feet by four feet in width. We have concerns about the adequacy of the soil volume. We suggest consulting with the shade tree commission about this.
4. Please note that our most recent 247 review letter was dated June 6, 2022. As noted in that letter,
    a. The applicant should coordinate with Montgomery County Department of Roads and Bridges for the Highway Occupancy Permit (HOP), since Easton Road is owned by the county.
    b. There is currently a bus stop on the opposite side of Woodland Road from the proposed land development. The application should coordinate with Mark Cassel, SEPTA's

Director of Service Planning, to determine if any changes to the existing stop and its location would be advisable.

c. All loading areas shall be adequately screened from adjacent streets and properties, and landscaped in accordance with an overall plan, designed according to the provisions herein [Zoning §2312].
d. Splitter Island – An island is required to separate inbound and outbound traffic at parking lot entrances [Zoning Figure 10.20].

3100 Horizon Drive
Suite 200
King of Prussia, PA 19406
T: 610-277-2402
F: 610-277-7449

www.pennoni.com

May 6, 2022

ABINT130024

Mr. Richard Manfredi, Township Manager
Abington Township
1176 Old York Road
Abington, PA 19001

RE: Executive Summary for LD-22-03 – 1318 & 1330 Easton Road (AutoZone)

Dear Mr. Manfredi:

We have received a copy of the Preliminary/Final Major Subdivision and Land Development Plans consisting of ten (10) sheets dated April 5, 2022, as well as a Stormwater Analysis report dated the same, and received on April 6, 2022; as prepared by CMC Engineering, located at 2215 Kimberton Road in Kimberton, PA for the above referenced project.

Executive Summary:
Under this Application, the Applicant is proposing to consolidate the above referenced two (2) adjoining corner parcels to a single triple frontage parcel comprising of approximately 33,257.1 SF (or approx. 0.76 acre). In addition, the Applicant is proposing to demolish the existing buildings, structures and features within the site to construct a new approximately 6,816 SF AutoZone retail store; as well as associated internal sidewalk curbing adjacent the building; internal curbing along the parking areas; driveway aprons; off-street parking; and stormwater management facilities. A new internal traffic circulation and access to the site by way of four (4) new or relocated driveway entrances are proposed. There will be one site entrance intersecting Brookdale Lane (40 FT R/W); one entrance intersecting Woodland Road (33 FT R/W); and two entrances intersecting Easton Road (52 FT R/W), of which one of the site entrance will be for egress only.

The new AutoZone building is proposed to be serviced by public water and sewer.

This project is located within the MS-VC Main Street Village Center Zoning District and is fronted by Easton Road (52 FT R/W) to the southeast; Woodland Road (33 FT R/W) to the northeast; Brookdale Lane (40 FT R/W) to the southwest; and residential properties zoned in the R-4 - Medium-High Density Residential Zoning District to the northwest.

In accordance with the FEMA, Flood Insurance Rate Map (FIRM) Panel No. 42091C0294G, effective March 2, 2016, a tiny piece of the site located at the curb and portion of sidewalk adjacent and within the Woodland Road right-of-way, is identified by the FEMA FIRM to be located within Zone AE, which is determined to be special flood hazard areas of Sandy Run subject to inundation by the 1% annual chance flood (100-year flood) with base flood elevations or depths defined. Abutting flood Zone AE is a corner piece of the tract that has been identified by the FEMA FIRM to be located within Zone X, which are areas located within the 0.2% annual chance flood (or 500-year floodplain). The remaining portions of the site are located in Zone X, which are areas determined by the FEMA FIRM as areas outside of the flood hazard areas or areas of minimal flood hazard. Therefore, based on the FEMA determination, the areas located within the tract are not located within the Floodplain Conservation District and is therefore not subject to the floodplain regulations of the Floodplain Conservation District.

Based on the existing contours shown on the plan, there are areas of precautionary steep slopes (greater than

15% to 25%) and prohibitive steep slopes (greater than 25%), located primarily in the center and rear of the site. Although there are existing steep slopes identified on the site, these areas do not span five contiguous 10-foot contour intervals; and therefore, the site is determined to be located outside the steep slope conservation overlay district.

Based on our measurements, this project will be disturbing approximately 0.76 acres, which is less than an acre of land; and therefore, a NPDES permit will not be required for this project.

Variances Requested:
The Applicant is not requesting any variances as part of this lot consolidation and land development project.

Waivers Requested:
The Applicant has requested two (2) waivers as part of this Land Development application; however, additional waivers would be needed unless Applicant addresses the items noted in the review.
The Applicant is requesting the following waivers as part of this lot consolidation and land development project:

1. **§146-28.A – Off-Street Parking Areas –** A waiver from the requirements for parking spaces to be ten (10) feet wide by twenty (20) feet long.
   The Applicant has requested a waiver to allow the parking spaces to be nine (9) feet wide by eighteen (18) feet long. We would support this dimensional waiver request for the parking areas fronting the planter strips which would permit the front of the vehicles to overhang onto the planter strips with relocation of the proposed fencing to permit the overhang. However, the parking spaces adjacent the eastern side of the proposed building will be in front of a 5.3' wide sidewalk and if the fronts of the vehicles overhang would encroach onto the proposed sidewalk. Therefore, we do not support this waiver request for the site plan as currently shown unless the Applicant revises the site plan to accommodate for the overhang.

2. **§146-28.B – Off-Street Parking Areas** – A waiver from the requirements to provide entrances, exits and driveways in a parking lot to have a minimum width of twenty-four (24) feet.
   The Applicant is proposing a sixteen (16) feet wide drive aisle for the angle parking spaces located along the western side of the proposed building. We support this waiver request contingent the Applicant provides turning temple showing adequate maneuverability into and out of the angle parking spaces.

Issues:
The following issues we have identified from our review is as follows:

- Design Standards:
  - Applicant should replace the poor sidewalk and curb condition surrounding the site and provide a decorative verge.
  - A site lighting plan should be provided.
  - Applicant to clarify the rooftop mechanical equipment to ensure screening.
  - A pitched roof is required due to proximity to existing residential zoning district.
  - Site distances and site triangles required to ensure proper site clearance.

- Landscaping:
  - A third tree species is required.
  - Certification by a registered landscape architect required.

- Street Furniture:
  - Street furniture is required.

- Traffic:
  - A traffic impact analysis should be provided for review to ensure the trips generated from the proposed land use will not adversely impact the existing traffic on Easton Rd and adjacent side streets.
  - The Applicant shall provide turning templates showing emergency vehicles, sanitation vehicles, and passenger vehicles to ensure that proper maneuverability is accounted for on the site.

- Stormwater Management:
  - A more efficient stormwater management facilities should be considered for this site; e.g., combining infiltration basins IB2 and IB3.
  - Suggest relocation of proposed inlets to maximize the stormwater runoff stemming from the site.
  - Overflow discharge onto an identified flood zone should be avoided.

Summary:
We do not recommend Preliminary Major Subdivision and Land Development Plans approval until the Applicant addresses the above referenced comments, in particular the Zoning comments. Once the zoning comments have been addressed, we will be in a better position to recommend Preliminary Major Subdivision and Land Development Plans approval.

If you have any questions or comments with this submittal, please do not hesitate to contact me.

Sincerely,

PENNONI

Khaled R. Hassan, PE
Township Engineer

cc: Terry Castorina, Executive Assistant to the Township Manager
Ashley McIlvaine, Special Assistant to the Township Manager
Lucy Strackhouse, Chairperson, Abington Township Planning Commission

U:\ACCOUNTS\ABINT\ABINT130025 - LD-22-03 Û 1318 & 1330 EASTON RD (AZ ABI\ADMIN\ LD-22-03-PC MTG EXEC SUMMARY - 1318&1330 EASTON RD (AUTOZONE).DOCX

APPLICATION FOR SUBDIVISION/LAND DEVELOPMENT

PROJECT NAME: AutoZone Abington

APPLICANT NAME: AZ Abington, LLC

TO BE COMPLETED BY THE TOWNSHIP
Submission Information:

Application Number: LD-22-03
Project Title: 1318-1330 EASTON RD AUTOZONE
File Date: 4/5/22
Date Complete:
90 Day Date:
Ward No.:

REQUIRED MATERIAL FOR ALL SUBDIVISION/LAND DEVELOPMENT APPLICATIONS:

1. This form **MUST** be completed and submitted.
2. A Subdivision/ Land Development Application MUST include all of the items listed in the application checklist in Section V to be considered complete.
3. Incomplete application will **NOT** be placed on the Planning Commission agenda. Incomplete applications will be returned to the applicant.
4. Complete applications must be received at least 45 DAYS (see schedule) prior to the Planning Commission meeting at which it will be heard.
5. Ten (10) full size paper copies, and one (1) 11x17 reduced copy of the plans, plus three (3) copies of each report or study are to be submitted in the initial submission of the complete application. A digital copy of all submitted documents must be included with the application.

   ***It is highly encouraged to submit applications in a digital format**

I. CONTACT INFORMATION

Applicant Information

AZ Abington, LLC
Name
P.O. Box 1908
Media, PA 19063
Address
610-324-4842
Phone
Fax
bill@wrightld.com
Email Address

Property Owners Information (if different than applicant)

Cynthia Graham / John R. Jakubowski
Name
1318 Easton Road / 1330 Easton Road
Abington, PA 19001 / Abington, PA 19001
Address
Phone
Fax
Email Address

Architect/ Planner

N/A
Name
Address
Phone
Fax
Email Address

Engineer/ Surveyor	Keith J. Marshall, P.E. CMC Engineering Name 2215 Kimberton Road, P.O. Box 958 Kimberton, PA 19442 Address
Engineer/ Surveyor Cont'd	610-983-9200 Phone 610-983-9202 Fax kmarshall@cmceng.com Email Address
Attorney	Alyson J. Fritzges, Esquire Name 717 Constitution Drive, Suite 201, Exton, PA 19341 Address 570-778-5246 610-458-4400 Phone 610-458-4441 Fax alysonf@rrhc.com Email Address

II. PROJECT INFORMATION

Application Type:

_____Minor Subdivision	_____Minor Land Develop.	_____Preliminary Major SD & LD
_____Preliminary Major Subdivision	__X__Prelim. Major Land Develop.	_____Final Major SD & LD
_____Final Major Subdivision	_____Final Major Land Develop.	

Full street address of the property: 1318 Easton Road & 1330 Easton Road

Tax Parcel No.: 30-00-14016-00-3
30-00-14020-00-8 County Deed Book No.: 5838/5930 Page No.: 01414/01886

Description of Proposed Work: redevelopment of the above-referenced parcels to include the demolition of the two (2) existing commercial buildings and construction of an AutoZone building and related improvements.

Total Tract Acreage: .76 acres (33, 257.1 s.f.) Project Acreage: .76 acres

Zoning District: MS-VC Existing Number of Lots: 2 Proposed Number of Lots: 1

Existing Sewer Flows: 777 GPD Proposed Sewer Flows: 44 GPD

Proposed Land Use:

_____Single Family Detached	_____Single Family Attached		_____Single Family Semi-Detached
_____Multi-Family	__X__Commercial	_____Office	_____Industrial

_____Other (Describe): _____

III. REVIEW

Please complete the following section by circling a response:

• Have you met with the Zoning Officer regarding this plan?	(Yes)	No
• Are there known variances/any zoning relief necessary for this project?*	Yes	(No)
• If YES, have you submitted an application to the Zoning Hearing Board?	Yes	(No)
• Has this plan been heard by the Zoning Hearing Board?	Yes	(No)
• Has this plan been submitted to, considered by, or received any formal action by the Planning Commission or Board of Commissioners in the past?	Yes	(No)

*Please be advised that if any variances are found to be necessary during the course of the review of this plan, you will be required to go to the Zoning Hearing Board prior to proceeding to the Planning Commission. In addition, you will be requested to grant the Township a waiver to the 90-day action period or an immediate denial of this application will be made, and you will be required to resubmit the application.

It is recommended that ALL Land Development and Major Subdivision applications have a pre-submission meeting to discuss the project prior to full application submittal.

Minor Subdivision applications may request a pre-submission meeting; if one is desired.

Meetings are typically held the fourth Tuesday of each month at the Township Administrative Offices.

Applicants assume responsibility of any fees associated with this meeting.

Alyson J. Fritzges, Esq. TRAP

Applicant signature

Alyson J. Fritzges, Esq. Attorney for Applicant

4/5/22

Date

To schedule a pre-submission meeting, please contact the Office of the Township Manager at 267-536-1003 or email TCastorina@abingtonpa.gov

IV. WAIVERS

List of Requested Waivers: Attach separate sheet if required.

Section/Requirement:	Relief Requested:
146-28.A	Reduction of parking space dimensions from 10 feet wide by 20 feet long to 9 ft wide by 18 ft. long.
146-28.B	Reduce the one-way ingress drive aisle from 24 feet to 20 feet.

V. SUBMISSION

APPLICATION CHECKLIST

The applicant is responsible for the submission of a complete application. This checklist will aid both the applicant and staff in ensuring that all applications are complete. The following is a per item submission checklist for all Subdivision, Land Development and Conditional Use Applications for the Township of Abington.

- X Application Form: completed and signed by the owner/applicant
- X 10 (ten) copies of the proposed plan, folded to legal file size. Plan should not be smaller than 1" = 50' and not exceed a sheet size of 24"x 36"
- X One (1) reduced copy of the proposed plan, no larger than 11"x17"
- X Two (2) sets of tentative architectural plans for all applications proposing construction or land development
- N/A One (1) copy of the Recreation Facilities Plan (if required by §146-40)
- X Letter of Sanitary Sewer availability from the Township Wastewater Treatment Department
- X Two (2) copies of Sewage Facilities Planning Module Applications
- X Letter of Water availability from AQUA PA
- *N/A One (1) copy of any previous Zoning Hearing Board decisions related to the subject property
- X One (1) digital copy of all submitted documents
- X Application Fee: Check made payable to the Township of Abington
- ** Escrow Fee: Check made payable to the Township of Abington. Separate check from application fee

VI. SIGNATURE

The undersigned represents that to the best of his/her knowledge and belief, all the above statements are true, correct, and complete.

Alyson J. Fritzges, Attorney for Applicant — Date: 4/5/22

Signature of Property Owner (if different than applicant) — Date: 4/1/2022

*none known **submitted with pre-application

DocuSign Envelope ID: 1E02847A-7468-44EC-B1CF-98A6B554166D

V. SUBMISSION

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VI. SIGNATURE

The undersigned represents that to the best of his/her knowledge and belief, all the above statements are true, correct, and complete.

Alyson J. Fritzges — 4/5/22

Signature of Applicant
Alyson J. Fritzges, Attorney for Applicant

Date

Sign Here

DocuSigned by: Cynthia Graham C19E2F1F7A4B4E0...

3/31/2022

Signature of Property Owner (if different than applicant)

Date

*none known **submitted with pre-application

THE FOLLOWING IS FOR INTERNAL USE ONLY:

PAYMENT

____ Application Fee Amount: $ 1000 Check No.: # 1001

____ Review Escrow Fee Amount: $ 10,000 Check No.: # 1165

DECISION INFORMATION

Approval _____ Denial_____ Decision Date: _____

Comments/Conditions:_____

_____

_____

_____

_____

Applicant Request for County Review

This request should be filled out by the applicant and submitted to the municipality where the application is being filed along with digital copies of all plan sets/information. Municipal staff will electronically file the application with the county, and a notice for the prompt payment of any fees will be emailed to the Applicant's Representative.

MONTGOMERY COUNTY PLANNING COMMISSION
MCPC
P.O. Box 311, Norristown, PA 19404-0311
Phone: 610-278-3722
Business Hours: 8:30 A.M. to 4:15 P.M.
www.planning.montcopa.org

Date: 4/3/2022
Municipality: Abington Township

Proposal Name: AutoZone Abington

Applicant Name: AZ Abington, LLC
Address: P.O. Box 1908
City/State/Zip: Media, PA 19063
Phone: 610-324-4842
Email: bill@wrightld.com

Applicant's Representative: Alyson J. Fritzges, Esq.
Address: 717 Constitution Drive
Suite 201
City/State/Zip: Exton, PA 19341
Business Phone (required): 610-458-4400
Business Email (required): alysonf@rrhc.com

Type of Review Requested:

(Check All Appropriate Boxes)

- [x] Land Development Plan
- [ ] Subdivision Plan
- [ ] Residential Lot Line Change
- [ ] Nonresidential Lot Line Change
- [ ] Zoning Ordinance Amendment
- [ ] Zoning Map Amendment
- [ ] Subdivision Ordinance Amendment
- [ ] Curative Amendment
- [ ] Comprehensive / Other Plan
- [ ] Special Review*

**(Not included in any other category - includes parking lot or structures that are not associated with new building square footage)*

Type of Plan:

- [ ] Tentative (Sketch)
- [x] Preliminary / Final

Type of Submission:

- [x] New Proposal
- [ ] Resubmission*

** A proposal is NOT a resubmission if A) The proposed land use changes, or B) The amount of residential units or square footage proposed changes more than 40%, or C) The previous submission was over 5 years ago.*

Zoning:

Existing District: MS-VC Main Street Village Center
Special Exception Granted ○ Yes ☒ No
Varian Granted ○ Yes ☒ No For _____

Plan Information:

Tax Parcel Number(s)
30-00-14016-00-3
30-00-14020-00-8

Location *(address or frontage)* 1318 & 1330 Easton Road
Nearest Cross Street Woodland Rd./Brookdale Ave.
Total Tract Area .76 acre (33,257.1 sf)
Total Tract Area Impacted By Development .76 acres (33,257.1 s.f.)

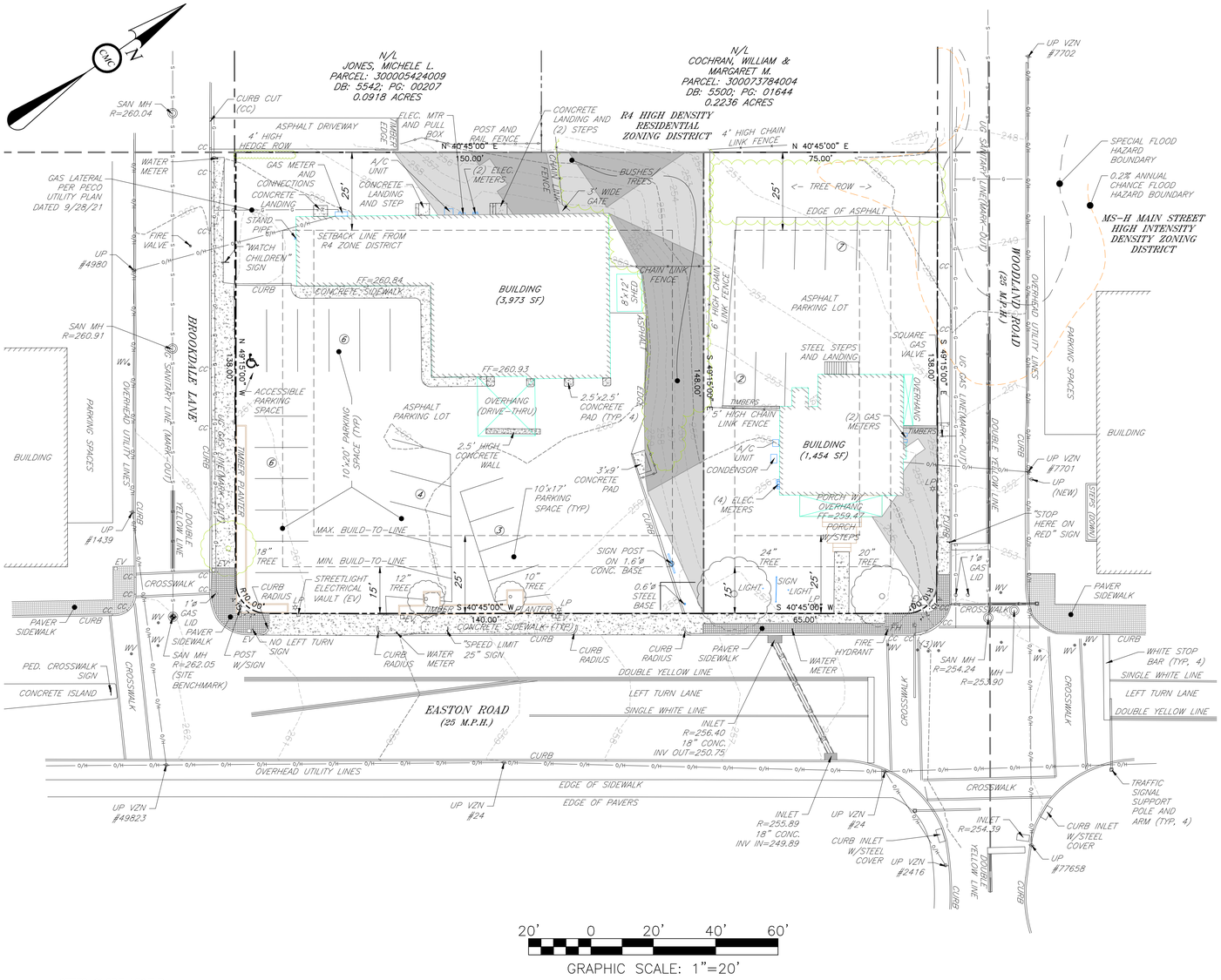
(If the development is a building expansion, or additional building on existing development, or only impacts a portion of the tract, please provide a rough estimate of the land impacted, including associated yards, drives, and facilities.)

Land Use(s)	Number of New Lots	Number of New Units	Senior Housing Yes	Senior Housing No	Open Space Acres*	Nonresidential New Square Feet
Single-Family						
Townhouses/Twins						
Apartments						
Commercial	2					33,257.1 total tract
Industrial						
Office						
Institutional						
Other						

**Only indicate Open Space if it will be on a separate lot or deed restricted with an easement shown on the plan.*

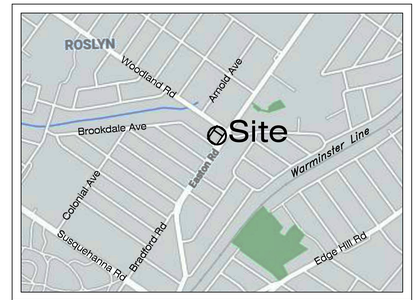
Additional Information:

Effective 5/1/18



20' 0 20' 40' 60'

GRAPHIC SCALE: 1"=20'



LOCATION MAP
SCALE: 1"=1000'

GENERAL NOTES:

1. BOUNDARY AND TOPOGRAPHIC FEATURES TAKEN FROM A FIELD SURVEY PERFORMED BY CMC ENGINEERING ON SEPTEMBER 20, 2021.
2. THE SUBJECT PROPERTYS ARE WITHIN THE MS-VC MAIN STREET-VILLAGE CENTER DISTRICT.
3. THE SUBJECT PROPERTYS CAN BE FOUND AT THE MONTGOMERY COUNTY COURTHOUSE UNDER OWNER OF RECORD:

   GRAHAM, CYNTHIA — PROPERTY ADDRESS: 1318 EASTON RD, ABINGTON, PA 19001
   961 RED COAT FARM DR
   CHALFONT, PA 18914
   TAXMAPID: 30389 023
   PARID #: 30-00-14016-00-3

   JAKUBOWSKI, JOHN R. — PROPERTY ADDRESS: 1330 EASTON RD, ABINGTON, PA 19001
   1330 EASTON RD
   ABINGTON, PA 19001
   TAXMAPID: 30389 022
   PARID #: 30-00-14020-00-8

4. SITE CONTOURS ARE ON U.S.G.S. DATUM NAVD 88.
5. 1318 EASTON RD PROPERTY IS LOCATED IN FLOOD ZONE "X", AREAS OF MINIMAL FLOOD HAZARD. REFERENCE PER FEMA MAP #42091C0294G, DATED MARCH 2, 2016.
6. 1330 EASTON RD PROPERTY IS LOCATED IN FLOOD ZONE "X", AREAS OF MINIMAL FLOOD HAZARD, IN ZONE "X" WITH AREAS OF 0.2% ANNUAL CHANCE FLOOD HAZARD, AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTH LESS THAN ONE FOOT OR WITH DRAINAGE AREAS LESS THAN ONE SQUARE MILE: REFERENCE PER FEMA MAP #42091C0294G, DATED MARCH 2, 2016.
7. SITE BENCHMARK IS A FOUND SANITARY MANHOLE ON BROOKDALE AVENUE AT EASTON ROAD. RIM ELEVATION = 262.05'

STEEP SLOPE LEGEND:

PRECAUTIONARY SLOPE: THOSE SLOPES GREATER THAN 15% AND LESS THAN OR EQUAL TO 25%

PROHIBITIVE SLOPE: THOSE SLOPES GREATER THAN 25%

SOILS LEGEND

WEB SOIL SURVEY, NATIONAL COOPERATIVE SOIL SURVEY, NATIONAL RESOURCES CONSERVATION SERVICE

SYMBOL	SOIL NAME	SLOPES	DEPTH TO WATER TABLE	DEPTH TO RESTRICTIVE LAYER	HYDRIC SOIL
UrhB	URBAN LAND-DUFFIELD COMPLEX (WHOLE PROJECT SITE)	3 TO 8 PERCENT	NONE LISTED (URBAN LAND) MORE THAN 80 INCHES (DUFFIELD)	10 TO 100 INCHES TO LITHIC BEDROCK (URBAN LAND) 48 TO 120 INCHES TO LITHIC BEDROCK (DUFFIELD)	NO NO

SURFACE WATERS, PENNSYLVANIA CODE CHAPTER 93 DESIGNATION, AND WATERSHED
SANDY RUN TSF, MF WISSAHICKEN CREEK WATERSHED

UTILITY NOTE:

PA ONE CALL SERIAL #20212700875
TICKET IS PRELIMINARY DESIGN TICKET
(A NOTIFICATION OF EXCAVATION OR DEMOLITION WORK GIVING NOT LESS THAN 10 NOR MORE THAN 90 BUSINESS DAYS NOTICE).
PA ONE CALL MUST BE NOTIFIED OF STATUS CHANGE FOR EXCAVATION AND/OR DEMOLITION.
THE FOLLOWING UTILITIES WERE CONTACTED PER PA ACT 287, AS AMENDED BY ACT 187 OF 1996:

ABINGTON TOWNSHIP
AQUA PA
COMCAST CABLE WILLOW GROVE
COMCAST CABLE
PECO ENERGY
VERIZON PA

Know what's below. Call before you dig.

ZONING DISTRICT DIMENSIONAL REQUIREMENTS
MS-VC MAIN STREET VILLAGE CENTER DISTRICT

	REQUIRED	1318 EASTON RD. EXISTING	1330 EASTON RD. EXISTING
MINIMUM LOT AREA	10,000 SF	22,178.5 SF	11,078.5 SF
MINIMUM LOT WIDTH	50 FT	150.0 FT	75.0 FT
MINIMUM GREEN AREA	20 %	28.0 %	49.0 %
MINIMUM BUILDING SEPARATION	20 FT	2.3 FT	N/A
MINIMUM BUILD-TO-LINE	15 FT	N/A	N/A
MAXIMUM BUILD-TO-LINE	25 FT	75.4 FT*	37.9 FT*
MINIMUM SIDE YARD SETBACK	10 FT	29.8 FT	24.5 FT
MINIMUM BUILDING SETBACK FROM ABUTTING R4	25 FT	20.1 FT	71.2 FT
MINIMUM TRASH STORAGE SETBACK ABUTTING R4	20 FT	N/A	N/A
MAXIMUM BUILDING FOOTPRINT	10,000 SF	4,070.0 SF	1,454.0 SF
MINIMUM FAÇADE HEIGHT	20 FT	N/A	N/A
MAXIMUM BUILDING HEIGHT	35 FT	<35 FT	<35 FT
MINIMUM WINDOW AREA	45 %	N/A	N/A
PARKING SETBACK FROM STREET WALL AND LANDSCAPING	5 FT	3 FT*	N/A
MAXIMUM WIDTH, PARKING BETWEEN PRINCIPAL BUILDING AND SIDE LOT LINE (FOR BUILDING IN BUILD-TO-ZONE)	70 FT	N/A	N/A
MINIMUM PARKING SETBACK FROM ABUTTING R4 PROPERTIES	20 FT	42.7 FT	20.5 FT
MAXIMUM WIDTH, STREET ACCESS POINT (TWO-WAY)	35 FT	33.8 FT	20.1 FT

* EXISTING, NON-CONFORMING

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF THE RESPONSIBLE LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

SEAL:

CMC ENGINEERING
2215 Kimberton Road
P.O. Box 958 Kimberton, PA 19442
Phone (610) 983-9200 Fax (610) 983-9202
EMail: Contact@CMCEng.com

REV.	DATE	DESCRIPTION	CHK'D:	BY:

DRAWING NAME: EXISTING FEATURES PLAN

LOCATION: PROPOSED AUTOZONE LOCATION
1318 AND 1330 EASTON ROAD
ABINGTON, PA 19001
ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PA

DATE: 9/27/21	DRAWN BY: A.C.K.
SCALE: 1"=20'	CHK'D BY: K.J.M.
PROJ. NUMBER: 1482-21-02-PA	
SHEET NUMBER: EX-1	

M:\Small Jobs\Wright Partners\AZ - Abington\Cad\Plan Set\Existing Features Plan EX-1.dwg

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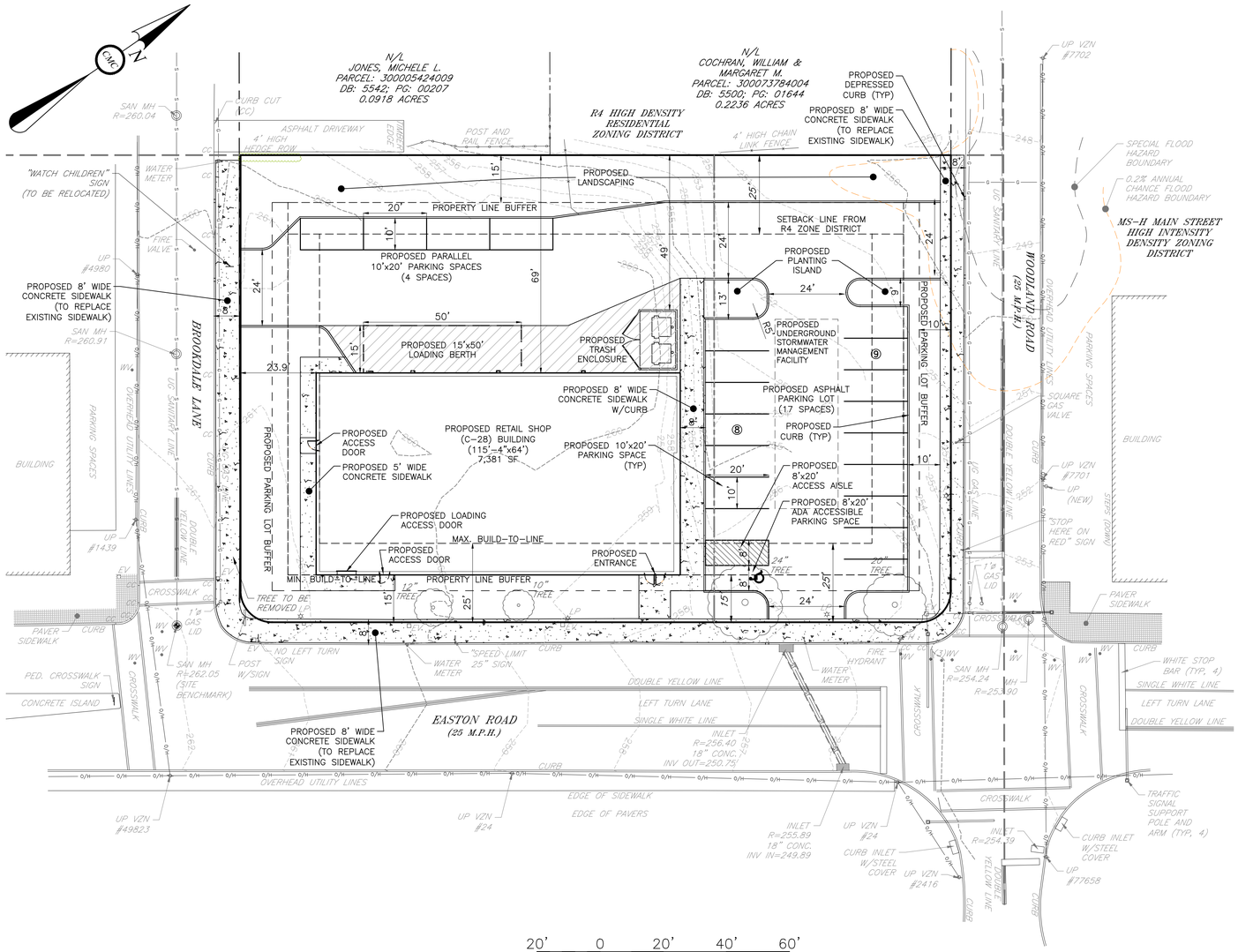

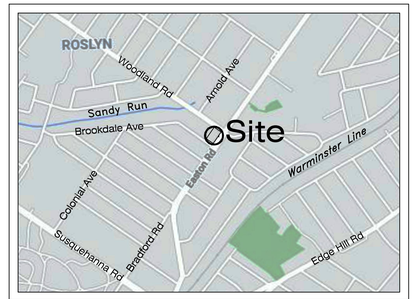

LOCATION MAP
SCALE: 1"=1000'

GENERAL NOTES:

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6. 1330 EASTON RD PROPERTY IS LOCATED IN FLOOD ZONE "X", AREAS OF MINIMAL FLOOD HAZARD, IN ZONE "X" WITH AREAS OF 0.2% ANNUAL CHANCE FLOOD HAZARD, AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTH LESS THAN ONE FOOT OR WITH DRAINAGE AREAS LESS THAN ONE SQUARE MILE: REFERENCE PER FEMA MAP #42091C0294G, DATED MARCH 2, 2016.
7. SITE BENCHMARK IS A FOUND SANITARY MANHOLE ON BROOKDALE AVENUE AT EASTON ROAD. RIM ELEVATION = 262.05'
8. PROPOSED USE: RETAIL SHOP (C-28)

PARKING USE REQUIREMENT

PER USE C-28 RETAIL SHOP (LESS THAN 10,000 SF), 1 PARKING SPACE PER 200 SF GROSS LEASABLE FLOOR AREA
PROPOSED GROSS LEASABLE FLOOR AREA OF 6,818 SF

6,818 SF / 200 SF = 34 SPACES

PARKING SPACE REDUTION FACTORS:

USE IS WITHIN 200 FT OF A BUS SHELTER STATION; THEREFORE, A 2% REDUCTION IS PERMITTED.

USE WITH DEFINED PEDESTRIAN WALKWAY (AND BICYCLE TRAIL SYSTEMS) LEADING TO SURROUNDING RESIDENTIAL NEIGHBORHOODS; THEREFORE, A 3% REDUCTION IS PERMITTED.

TOTAL PUBLIC TRANSPORTATION REDUCTION FACTORS 5 %

34 SPACES * 0.05 = 1.70 -> 32.39 ~ 33 SPACES

PARKING BASED ON RETAIL FLOOR AREA OF 3,320 SF

3,320 SF / 200 SF = 17 SPACES

TOTAL PUBLIC TRANSPORTATION REDUCTION FACTORS 5 %

17 SPACES * 0.05 = 0.83 -> 15.77 ~ 16 SPACES

PARKING SPACES PROVIDED = 21 SPACES

PARKING FOR INDIVIDUALS WITH DISIBILITIES

ACCESSIBLE PARKING SPACE REQUIREMENT — TOTAL PARKING SPACES IN LOT 1 TO 25
REQUIRED MIN. OF ACCESSIBLE SPACES = 1
ACCESSIBLE PARKING SPACES PROVIDED = 1 SPACE

ZONING DISTRICT DIMENSIONAL REQUIREMENTS

MS-VC MAIN STREET VILLAGE CENTER DISTRICT

	REQUIRED	1318 EASTON RD. EXISTING	1330 EASTON RD. EXISTING	PROPOSED
MINIMUM LOT AREA	10,000 SF	22,178.5 SF	11,078.5 SF	33,257.1 SF
MINIMUM LOT WIDTH	50 FT	150.0 FT	75.0 FT	225.0 FT
MINIMUM GREEN AREA	20 %	28.0 %	49.0 %	27.4 %
MINIMUM BUILDING SEPARATION	20 FT	2.3 FT	N/A	N/A
MINIMUM BUILD-TO-LINE	15 FT	N/A	N/A	15.0 FT
MAXIMUM BUILD-TO-LINE	25 FT	75.4 FT*	37.9 FT*	23.9 FT
MINIMUM SIDE YARD SETBACK	10 FT	29.8 FT	24.5 FT	N/A
MINIMUM BUILDING SETBACK FROM ABUTTING R4	25 FT	20.1 FT	71.2 FT	69.0 FT
MINIMUM TRASH STORAGE SETBACK ABUTTING R4	20 FT	N/A	N/A	49.0 FT
MAXIMUM BUILDING FOOTPRINT	10,000 SF	4,070.0 SF	1,454.0 SF	7,381.0 SF
MINIMUM FAÇADE HEIGHT	20 FT	N/A	N/A	TBD
MAXIMUM BUILDING HEIGHT	35 FT	<35 FT	<35 FT	<35 FT
MINIMUM WINDOW AREA	45 %	N/A	N/A	TBD
PARKING SETBACK FROM STREET WALL AND LANDSCAPING	5 FT	3 FT*	N/A	TBD
MAXIMUM WIDTH, PARKING BETWEEN PRINCIPAL BUILDING AND SIDE LOT LINE (FOR BUILDING IN BUILD-TO-ZONE)	70 FT	N/A	N/A	8.0 FT
MINIMUM PARKING SETBACK FROM ABUTTING R4 PROPERTIES	20 FT	42.7 FT	20.5 FT	48.0 FT
MAXIMUM WIDTH, STREET ACCESS POINT (TWO-WAY)	35 FT	33.8 FT	20.1 FT	24.0 FT

* EXISTING, NON-CONFORMING

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ABINGTON TOWNSHIP
AQUA PA
COMCAST CABLE WILLOW GROVE
COMCAST CABLE
PECO ENERGY
VERIZON PA

ONE CALL SYSTEM 1-800-242-1776 PENNSYLVANIA

811 Know what's below. Call before you dig.

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SEAL: COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL ENGINEER — KEITH J. MARSHALL — No. PE073328

KEITH J. MARSHALL
PROFESSIONAL ENGINEER
PENNSYLVANIA
No. PE073328

CMC ENGINEERING
2215 Kimberton Road
P.O. Box 958 Kimberton, PA 19442
Phone (610) 983-9200 Fax (610) 983-9202
EMail: Contact@CMCEng.com

REV.	DATE	DESCRIPTION	CHK'D:	BY:

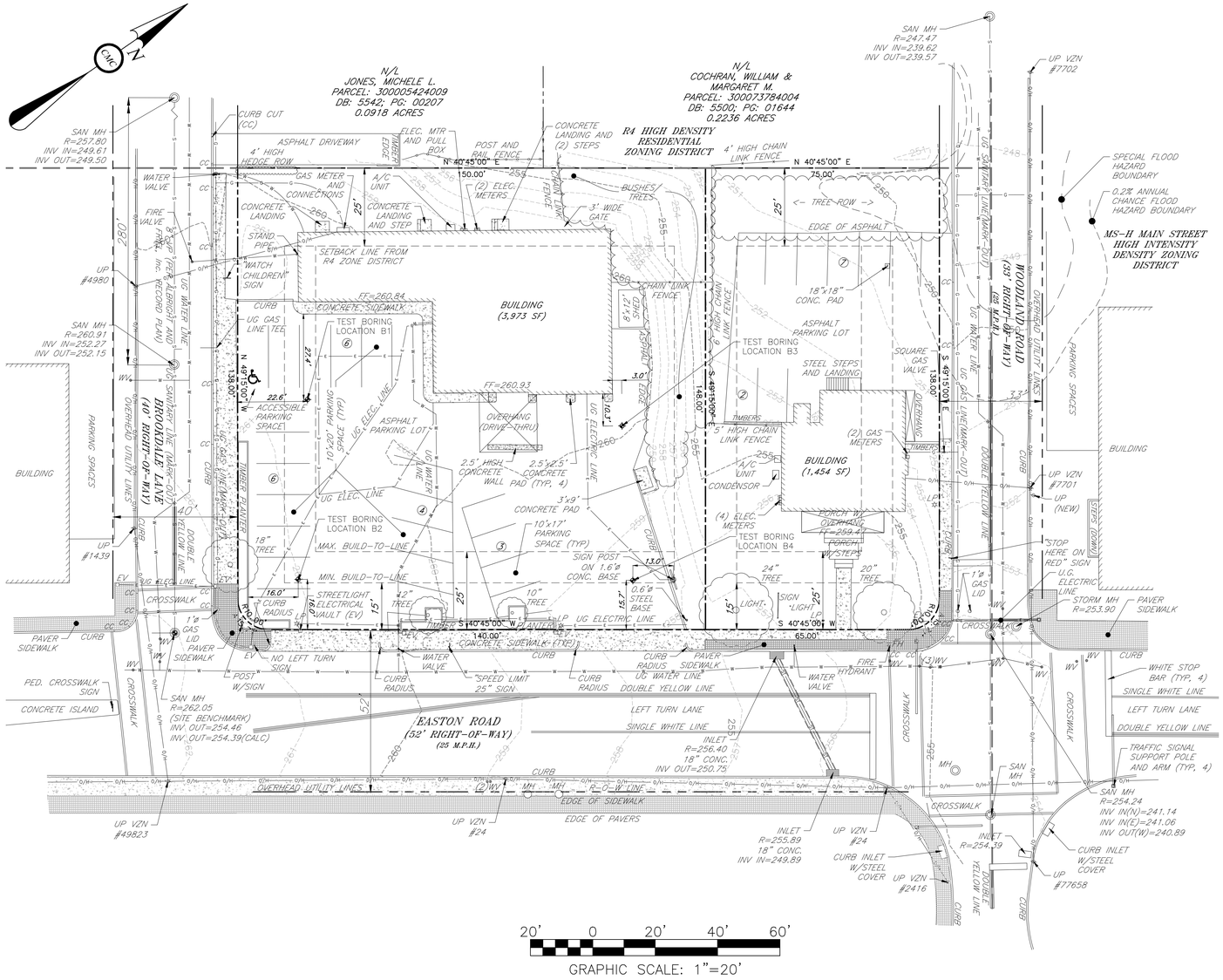
DRAWING NAME: TENTATIVE SKETCH PLAN

PROPOSED AUTOZONE LOCATION
1318 AND 1330 EASTON ROAD
ABINGTON, PA 19001

LOCATION: ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PA

DATE: 11/5/21	DRAWN BY: A.C.K.
SCALE: 1"=20'	CHK'D BY: K.J.M.
PROJ. NUMBER: 1482-21-02-PA	
SHEET NUMBER: SK-1	

M:\Small Jobs\Wright Partners\AZ - Abington\CAD\Sketches\Tentative Sketch Plan SK-1.dwg



LOCATION MAP
SCALE: 1"=1000'

GENERAL NOTES:

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2. THE SUBJECT PROPERTYS ARE WITHIN THE MS-VC MAIN STREET-VILLAGE CENTER DISTRICT.
3. THE SUBJECT PROPERTYS CAN BE FOUND AT THE MONTGOMERY COUNTY COURTHOUSE UNDER OWNER OF RECORD:

   GRAHAM, CYNTHIA — PROPERTY ADDRESS: 1318 EASTON RD
   961 RED COAT FARM DR — ABINGTON, PA 19001
   CHALFONT, PA 18914
   TAXMAPID: 30389 023
   PARID #: 30-00-14016-00-3

   JAKUBOWSKI, JOHN R. — PROPERTY ADDRESS: 1330 EASTON RD
   1330 EASTON RD — ABINGTON, PA 19001
   ABINGTON, PA 19001
   TAXMAPID: 30389 022
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6. 1330 EASTON RD PROPERTY IS LOCATED IN FLOOD ZONE "X", AREAS OF MINIMAL FLOOD HAZARD, IN ZONE "X" WITH AREAS OF 0.2% ANNUAL CHANCE FLOOD HAZARD, AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTH LESS THAN ONE FOOT OR WITH DRAINAGE AREAS LESS THAN ONE SQUARE MILE: REFERENCE PER FEMA MAP #42091C0294G, DATED MARCH 2, 2016.
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ZONING DISTRICT DIMENSIONAL REQUIREMENTS

MS-VC MAIN STREET VILLAGE CENTER DISTRICT

	REQUIRED	1318 EASTON RD. EXISTING	1330 EASTON RD. EXISTING
MINIMUM LOT AREA	10,000 SF	22,178.5 SF	11,078.5 SF
MINIMUM LOT WIDTH	50 FT	150.0 FT	75.0 FT
MINIMUM GREEN AREA	20 %	28.0 %	49.0 %
MINIMUM BUILDING SEPARATION	20 FT	2.3 FT	N/A
MINIMUM BUILD-TO-LINE	15 FT	N/A	N/A
MAXIMUM BUILD-TO-LINE	25 FT	75.4 FT*	37.9 FT*
MINIMUM SIDE YARD SETBACK	10 FT	29.8 FT	24.5 FT
MINIMUM BUILDING SETBACK FROM ABUTTING R4	25 FT	20.1 FT	71.2 FT
MINIMUM TRASH STORAGE SETBACK ABUTTING R4	20 FT	N/A	N/A
MAXIMUM BUILDING FOOTPRINT	10,000 SF	4,070.0 SF	1,454.0 SF
MINIMUM FAÇADE HEIGHT	20 FT	N/A	N/A
MAXIMUM BUILDING HEIGHT	35 FT	<35 FT	<35 FT
MINIMUM WINDOW AREA	45 %	N/A	N/A
PARKING SETBACK FROM STREET WALL AND LANDSCAPING	5 FT	3 FT*	N/A
MAXIMUM WIDTH, PARKING BETWEEN PRINCIPAL BUILDING AND SIDE LOT LINE (FOR BUILDING IN BUILD-TO-ZONE)	70 FT	N/A	N/A
MINIMUM PARKING SETBACK FROM ABUTTING R4 PROPERTIES	20 FT	42.7 FT	20.5 FT
MAXIMUM WIDTH, STREET ACCESS POINT (TWO-WAY)	35 FT	33.8 FT	20.1 FT

* EXISTING, NON-CONFORMING

SOILS LEGEND

WEB SOIL SURVEY, NATIONAL COOPERATIVE SOIL SURVEY, NATIONAL RESOURCES CONSERVATION SERVICE

SYMBOL	SOIL NAME	SLOPES	DEPTH TO WATER TABLE	DEPTH TO RESTRICTIVE LAYER	HYDRIC SOIL
UrhB	URBAN LAND-DUFFIELD COMPLEX (WHOLE PROJECT SITE)	3 TO 8 PERCENT	NONE LISTED (URBAN LAND) MORE THAN 80 INCHES (DUFFIELD)	10 TO 100 INCHES TO LITHIC BEDROCK (URBAN LAND) 48 TO 120 INCHES TO LITHIC BEDROCK (DUFFIELD)	NO NO

SURFACE WATERS, PENNSYLVANIA CODE CHAPTER 93 DESIGNATION, AND WATERSHED
SANDY RUN TSF, MF WISSAHICKEN CREEK WATERSHED

UTILITY NOTE:

PA ONE CALL SERIAL #20212700875
TICKET IS PRELIMINARY DESIGN TICKET
(A NOTIFICATION OF EXCAVATION OR DEMOLITION WORK GIVING NOT LESS THAN 10 NOR MORE THAN 90 BUSINESS DAYS NOTICE).
PA ONE CALL MUST BE NOTIFIED OF STATUS CHANGE FOR EXCAVATION AND/OR DEMOLITION.
THE FOLLOWING UTILITIES WERE CONTACTED PER PA ACT 287, AS AMENDED BY ACT 187 OF 1996:

ABINGTON TOWNSHIP
AQUA PA
COMCAST CABLE WILLOW GROVE
COMCAST CABLE
PECO ENERGY
VERIZON PA

Know what's below. Call before you dig.

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IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF THE RESPONSIBLE LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

SEAL:

CMC ENGINEERING
2215 Kimberton Road
P.O. Box 958 Kimberton, PA 19442
Phone (610) 983-9200 Fax (610) 983-9202
EMail: Contact@CMCEng.com

REV.	DATE	DESCRIPTION	CHK'D:	BY:

DRAWING NAME: EXISTING FEATURES PLAN

PROPOSED AUTOZONE LOCATION
1318 AND 1330 EASTON ROAD
ABINGTON, PA 19001

LOCATION: ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PA

DATE: 11/17/21	DRAWN BY: A.C.K.
SCALE: 1"=20'	CHK'D BY: K.J.M.
PROJ. NUMBER: 1482-21-02-PA	
SHEET NUMBER: EX-1	

M:\Small Jobs\Wright Partners\AZ - Abington\CAD\Plan Set\Existing Features Plan Ex-1.dwg

PRELIMINARY/FINAL SUBDIVISION & LAND DEVELOPMENT PLAN FOR

PROPOSED AUTOZONE

SITUATED IN
ABINGTON TOWNSHIP,
MONTGOMERY COUNTY, PENNSYLVANIA

PLAN INDEX

RELATION	DWG NO.	SHEET TITLE	START DATE	REVISION DATE
1 OF 10	T-1	TITLE SHEET	04/05/22	
2 OF 10	EX-1	EXISTING FEATURES PLAN	04/05/22	
3 OF 10	S-1	SITE PLAN	04/05/22	
4 OF 10	G-1	GRADING PLAN	04/05/22	
5 OF 10	SWM-1	STORMWATER MANAGEMENT SITE PLAN	04/05/22	
6 OF 10	SWM-2	STORMWATER MANAGEMENT DETAILS	04/05/22	
7 OF 10	ECS-1	EROSION CONTROL PLAN	04/05/22	
8 OF 10	ECS-2	EROSION CONTROL DETAILS	04/05/22	
9 OF 10	L-1	LANDSCAPING PLAN	04/05/22	
10 OF 10	D-1	DETAILS SHEET	04/05/22	

LOCATION MAP
SCALE: 1"=1000'

OWNER/APPLICANT:
ABINGTON AUTOZONE LLC
20 S OLIVE ST
#203
MEDIA, PA 19063

ENGINEER:
CMC ENGINEERING
2215 KIMBERTON ROAD
KIMBERTON, PA 19442
ATTN: KEITH J. MARSHALL, PE
TEL: 610-983-9200

SURVEYOR:
CMC ENGINEERING
2215 KIMBERTON ROAD
KIMBERTON, PA 19442
ATTN: JOSEPH S. RAGUSA, P.L.S.
TEL: 610-983-9200

DEVELOPER:
ABINGTON AUTOZONE LLC
20 S OLIVE ST
#203
MEDIA, PA 19063

LANDSCAPE ARCHITECT:
CMC ENGINEERING
2215 KIMBERTON ROAD
KIMBERTON, PA 19442
TEL: 610-983-9200

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[redacted]

KEITH J. MARSHALL
PROFESSIONAL ENGINEER
PENNSYLVANIA
No. PE073228

CMC ENGINEERING
2215 Kimberton Road
P.O. Box 958 Kimberton, PA 19442
Phone (610) 983-9200 Fax (610) 983-9202
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REV.	DATE	DESCRIPTION	CHK'D:	BY:

DRAWING NAME: TITLE SHEET

PROPOSED AUTOZONE LOCATION
1318 AND 1330 EASTON ROAD
ABINGTON, PA 19001

LOCATION: ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PA

DATE: 04/05/22	DRAWN BY: STAFF
SCALE: N/A	CHK'D BY: K.J.M.
PROJ. NUMBER: 1482-21-02-PA	
DRAWING NUMBER: T-1	
SHEET NUMBER: 1 OF 10	

M:\Civil Jobs\Wright Partners\AE - Abington\CAD\Plan Set\1-Title Sheet 1-1.dwg

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ONE CALL SYSTEM PENNSYLVANIA 800-242-1776

811 Know what's below. Call before you dig.

UTILITY NOTE:

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AQUA PA
COMCAST CABLE WILLOW GROVE
COMCAST CABLE
PECO ENERGY
VERIZON PA

ACKNOWLEDGEMENTS

Commonwealth of Pennsylvania

County of Montgomery

On the _____ day of _____, A.D. 19 _____, before me, the subscriber, a Notary Public of the Commonwealth of Pennsylvania, residing in _____, personally appeared _____ (names of all owners), known to me (or satisfactorily proven) to be the person(s) whose name(s) (is/are) subscribed to the foregoing plan and acknowledged that (he, she, they) (is/are) the owner(s) of the designated land, that all necessary approval of the plan has been obtained and is endorsed thereon and that (he, she, they) desire that the foregoing plan may be duly recorded.

_____
Notary Public

_____
My Commission Expires

Commonwealth of Pennsylvania

County of Montgomery

On the _____ day of _____, A.D. 19 _____, before me, the subscriber, a Notary Public of the Commonwealth of Pennsylvania, residing in _____, personally appeared _____ (name of officer of the corporation), who acknowledged (himself/herself) to be the (president or secretary), being authorized to do so, (he/she) executed the foregoing plan by signing that said corporation is the owner of the designated land, that all necessary approval of the plan has been obtained and is endorsed thereon and that said corporation desires that the foregoing plan may be duly recorded.

_____
Notary Public

_____
My Commission Expires

Approval notation and signatures is as follows:

Approved by the Board of Commissioners of the Township of Abington this _____ day of _____, 19_____

Attest _____ President
_____ Secretary
_____ Engineer

Certified by the Montgomery County Planning Commission this _____ day of _____, 20_____.
File No. _____

Attest _____ Secretary

MONTGOMERY COUNTY PLANNING COMMISSION CERTIFICATION:

MCPC FILE NO._____.

PROCESSED AND REVIEWED. A REPORT HAS BEEN PREPARED BY THE MONTGOMERY COUNTY PLANNING COMMISSION IN ACCORDANCE WITH THE MUNICIPALITIES PLANNING CODE.

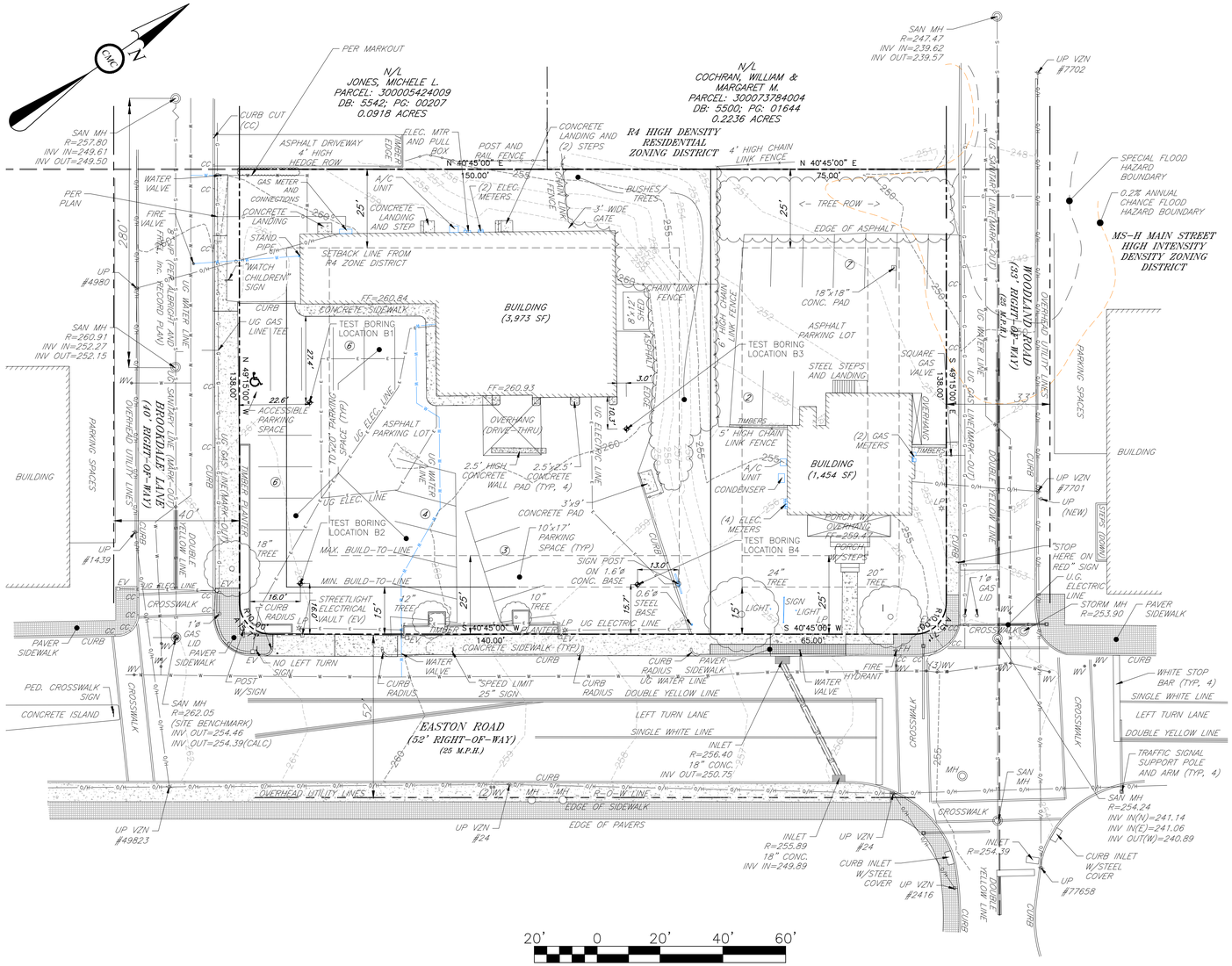
CERTIFIED THIS DATE

_____
FOR THE DIRECTOR

_____
MONTGOMERY COUNTY PLANNING COMMISSION

RECORDED IN THE OFFICE OF THE RECORDED OF DEEDS IN NORRISTOWN, PENNSYLVANIA IN PLAN BOOK _____PAGE _____ , ON THE _____DAY OF _____ ,_____.

MCPC NO.



LOCATION MAP
SCALE: 1"=1000'

GENERAL NOTES:

1. BOUNDARY AND TOPOGRAPHIC FEATURES TAKEN FROM A FIELD SURVEY PERFORMED BY CMC ENGINEERING ON SEPTEMBER 20, 2021.
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LEGEND

- EXISTING PROPERTY LINE
- ZONING DISTRICT BOUNDARY LINE
- BUILDING SETBACK LINES
- EXISTING EDGE OF ROAD
- EXISTING BUILDING/WALKWAY
- EXISTING WATER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING SANITARY LINE
- EXISTING OVERHEAD UTILITY LINE
- EXISTING CHAIN LINK FENCE
- EXISTING POST AND RAIL FENCE
- EXISTING CONTOUR LINE
- EXISTING BUILDING
- EXISTING PAVER SIDEWALK
- EXISTING CONCRETE
- EXISTING TREE
- EXISTING STREET LAMP (LP)
- EXISTING ELECTRIC VAULT
- EXISTING GAS VALVE
- EXISTING WATER VALVE
- EXISTING MANHOLE

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MS-VC MAIN STREET VILLAGE CENTER DISTRICT

	REQUIRED	1318 EASTON RD. EXISTING	1330 EASTON RD. EXISTING
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SEAL:

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P.O. Box 958 Kimberton, PA 19442
Phone (610) 983-9200 Fax (610) 983-9202
EMail: Contact@CMCEng.com

REV.	DATE	DESCRIPTION	CHK'D:	BY:

DRAWING NAME: EXISTING FEATURES PLAN

PROPOSED AUTOZONE LOCATION
1318 AND 1330 EASTON ROAD
ABINGTON, PA 19001

LOCATION: ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PA

DATE: 04/05/22	DRAWN BY: A.C.K.
SCALE: 1"=20'	CHK'D BY: K.J.M.
PROJ. NUMBER: 1482-21-02-PA	
DRAWING NUMBER: EX-1	
SHEET NUMBER: 2 OF 10	

M:\Small Jobs\Wright Partners\AZ - Abington\CAD\Plan Set\2-Existing Features Plan EX-1.dwg

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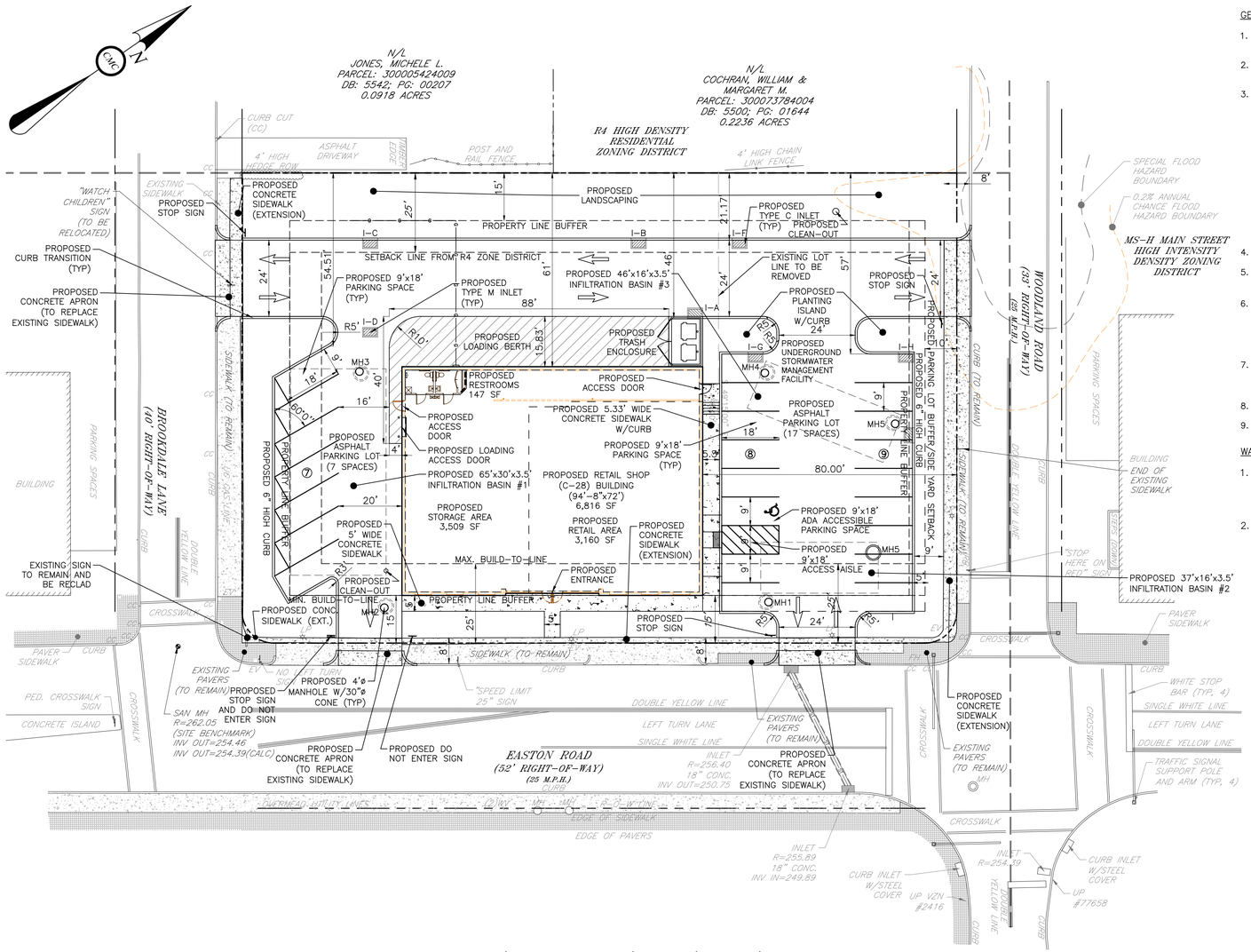

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GENERAL NOTES:

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3. THE SUBJECT PROPERTYS CAN BE FOUND AT THE MONTGOMERY COUNTY COURTHOUSE
   UNDER OWNER OF RECORD:

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7. SITE BENCHMARK IS A FOUND SANITARY MANHOLE ON BROOKDALE AVENUE AT EASTON ROAD.
   RIM ELEVATION = 262.05'
8. PROPOSED USE: RETAIL SHOP (C-28)
9. ALL EXISTING SITE FEATURES ARE TO BE DEMOLISHED UNLESS OTHERWISE SHOWN ON THESE PLANS.

WAIVER REQUEST:

1. A WAIVER FROM SECTION 146-28.A OF THE ABINGTON TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE IS REQUESTED FOR A REDUCTION OF THE PARKING SPACE DIMENSIONS FROM 10 FEET WIDE BY 20 FEET LONG, TO 9 FEET WIDE BY 18 FEET LONG.
2. A WAIVER FROM SECTION 146-28.B OF THE ABINGTON TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE IS REQUESTED TO REDUCE THE ONE-WAY INGRESS DRIVE AISLE FROM 24 FEET TO 20 FEET.

LOCATION MAP
SCALE: 1"=1000'

PARKING USE REQUIREMENT

PER USE C-28 RETAIL SHOP (LESS THAN 10,000 SF), 1 PARKING SPACE PER 200 SF GROSS LEASABLE FLOOR AREA

PROPOSED BUILDING AREA	6,816 SF
PROPOSED STORAGE AREA	-3,509
PROPOSED RESTROOM AREA	-147 SF
PROPOSED GROSS LEASABLE FLOOR AREA (RETAIL AREA)	3,160 SF

3,160 SF / 200 SF = 15.80 SPACES ~ 16 SPACES

PARKING SPACE REDUTION FACTORS:

USE IS WITHIN 200 FT OF A BUS SHELTER STATION; THEREFORE, A 2% REDUCTION IS PERMITTED.

USE WITH DEFINED PEDESTRIAN WALKWAY (AND BICYCLE TRAIL SYSTEMS) LEADING TO SURROUNDING RESIDENTIAL NEIGHBORHOODS; THEREFORE, A 3% REDUCTION IS PERMITTED.

TOTAL PUBLIC TRANSPORTATION REDUCTION FACTORS 5 %

15.80 SPACES x 0.05 = 0.79

15.80 SPACES - 0.79 = 15.0 SPACES ~ 15 SPACES

PARKING SPACES PROVIDED = 24 SPACES

PARKING FOR INDIVIDUALS WITH DISIBILITIES

ACCESSIBLE PARKING SPACE REQUIREMENT — TOTAL PARKING SPACES IN LOT 1 TO 25 — REQUIRED MIN. OF ACCESSIBLE SPACES = 1

ACCESSIBLE PARKING SPACES PROVIDED = 1 SPACE

ZONING DISTRICT DIMENSIONAL REQUIREMENTS

MS-VC MAIN STREET VILLAGE CENTER DISTRICT

	REQUIRED	1318 EASTON RD. EXISTING	1330 EASTON RD. EXISTING	PROPOSED
MINIMUM LOT AREA	10,000 SF	22,178.5 SF	11,078.5 SF	33,257.1 SF
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MINIMUM FAÇADE HEIGHT	20 FT	N/A	N/A	TBD
MAXIMUM BUILDING HEIGHT	35 FT	<35 FT	<35 FT	<35 FT
MINIMUM WINDOW AREA	45 %	N/A	N/A	TBD
PARKING SETBACK FROM STREET WALL AND LANDSCAPING	5 FT	3 FT*	N/A	5 FT
MAXIMUM WIDTH, PARKING BETWEEN PRINCIPAL BUILDING AND SIDE LOT LINE (FOR BUILDING IN BUILD-TO-ZONE)	70 FT	N/A	N/A	60.0 FT
MINIMUM PARKING SETBACK FROM ABUTTING R4 PROPERTIES	20 FT	42.7 FT	20.5 FT	54.5 FT
MAXIMUM WIDTH, STREET ACCESS POINT (TWO-WAY)	35 FT	33.8 FT	20.1 FT	24.0 FT

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- EXISTING CHAIN LINK FENCE
- EXISTING POST AND RAIL FENCE
- 100 EXISTING CONTOUR LINE
- EXISTING BUILDING
- EXISTING PAVER SIDEWALK
- EXISTING CONCRETE
- EXISTING STREET LAMP (LP)
- EXISTING ELECTRIC VAULT
- EXISTING GAS VALVE
- EXISTING WATER VALVE
- EXISTING MANHOLE
- 100 PROPOSED CONTOUR LINE
- PROPOSED INFILTRATION BASIN
- LOD PROPOSED LIMIT OF DISTURBANCE
- PROPOSED PARKING LOT EDGE
- PROPOSED LOADING BERTH STRIPING
- PROPOSED INLET
- PROPOSED UG. DRAINAGE PIPE
- PROPOSED MANHOLE
- PROPOSED CONCRETE

ONE CALL SYSTEM 1-800-242-1776 PENNSYLVANIA

811 Know what's below. Call before you dig.

UTILITY NOTE:

PA ONE CALL SERIAL #20212700875
TICKET IS PRELIMINARY DESIGN TICKET
(A NOTIFICATION OF EXCAVATION OR DEMOLITION WORK GIVING NOT LESS THAN 10 NOR MORE THAN 90 BUSINESS DAYS NOTICE).
PA ONE CALL MUST BE NOTIFIED OF STATUS CHANGE FOR EXCAVATION AND/OR DEMOLITION.
THE FOLLOWING UTILITIES WERE CONTACTED PER PA ACT 287, AS AMENDED BY ACT 187 OF 1996:

ABINGTON TOWNSHIP
AQUA PA
COMCAST CABLE WILLOW GROVE
COMCAST CABLE
PECO ENERGY
VERIZON PA

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KEITH J. MARSHALL
PROFESSIONAL ENGINEER
PENNSYLVANIA
No. PE073528

CMC ENGINEERING
2215 Kimberton Road
P.O. Box 958 Kimberton, PA 19442
Phone (610) 983-9200 Fax (610) 983-9202
EMail: Contact@CMCEng.com

REV.	DATE	DESCRIPTION	CHK'D:	BY:

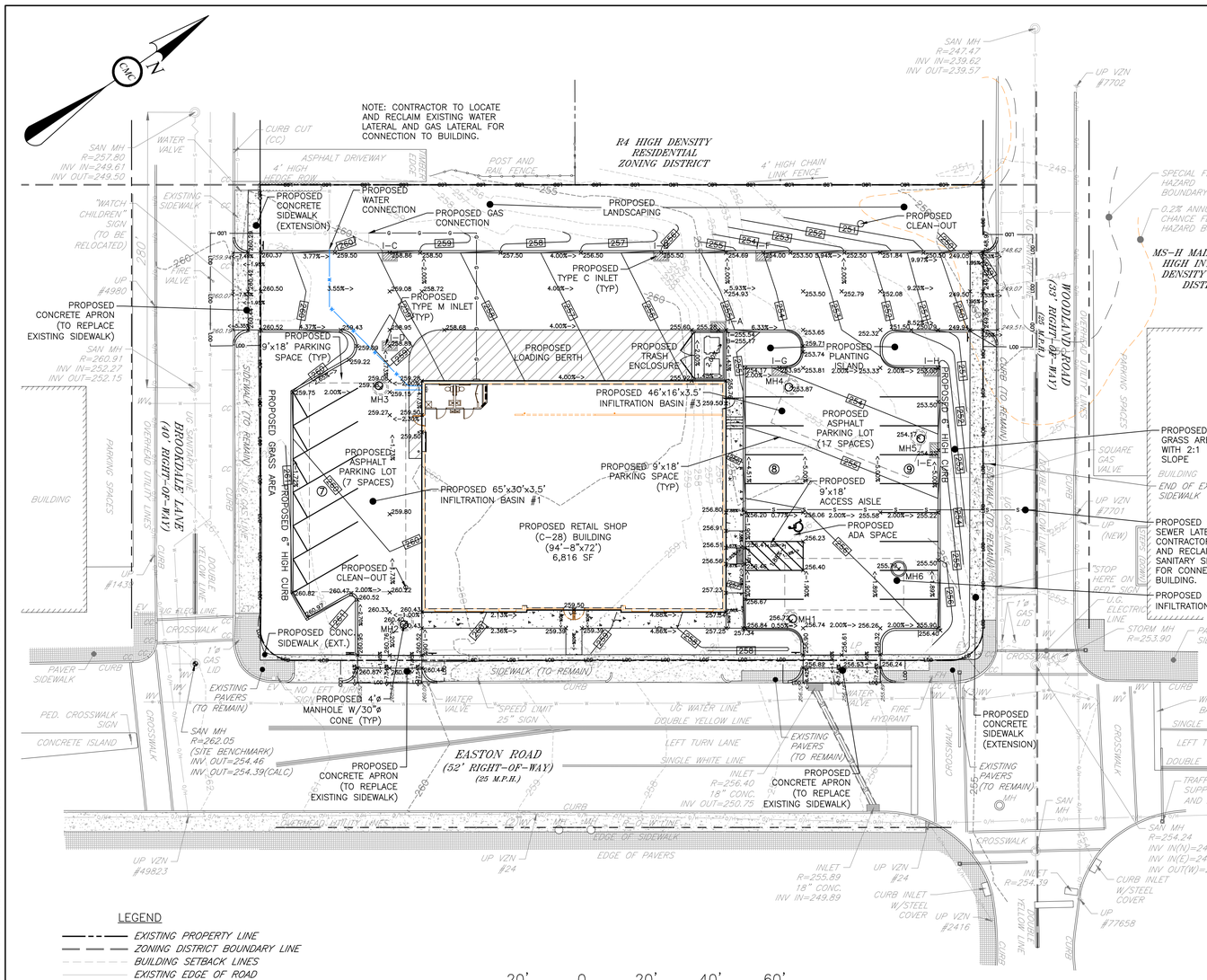
DRAWING NAME: LOT CONSOLIDATION/SITE PLAN

PROPOSED AUTOZONE LOCATION
1318 AND 1330 EASTON ROAD
ABINGTON, PA 19001

LOCATION: ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PA

DATE: 04/05/22	DRAWN BY: A.C.K.
SCALE: 1"=20'	CHK'D BY: K.J.M.
PROJ. NUMBER: 1482-21-02-PA	
DRAWING NUMBER: S-1	
SHEET NUMBER: 3 OF 10	

M:\Gmcdl Jobs\Wright Partners\AZ - Abington\CAD\Plan Set\S-Site Plan S-1.dwg



LEGEND

- EXISTING PROPERTY LINE
- ZONING DISTRICT BOUNDARY LINE
- BUILDING SETBACK LINES
- EXISTING EDGE OF ROAD
- EXISTING BUILDING/WALKWAY
- EXISTING WATER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING SANITARY LINE
- EXISTING OVERHEAD UTILITY LINE
- EXISTING CHAIN LINK FENCE
- EXISTING POST AND RAIL FENCE
- EXISTING CONTOUR LINE
- EXISTING BUILDING
- EXISTING PAVER SIDEWALK
- EXISTING CONCRETE
- EXISTING STREET LAMP (LP)
- EXISTING ELECTRIC VAULT
- EXISTING GAS VALVE
- EXISTING WATER VALVE
- EXISTING MANHOLE
- PROPOSED CONTOUR LINE
- PROPOSED INFILTRATION BASIN
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED PARKING LOT EDGE
- PROPOSED LOADING BERTH STRIPING
- PROPOSED INLET
- PROPOSED UG. DRAINAGE PIPE
- PROPOSED MANHOLE
- PROPOSED CONCRETE

CONSTRUCTION NOTES:

1. SEE ARCHITECTURAL DRAWINGS FOR DETAILED BUILDING, STRUCTURAL, ELECTRICAL, LIGHTING, ELEVATORS, STAIRWELLS AND SIDEWALK INFORMATION AND DETAILS, INCLUDING PAVEMENT FINISHES SHOWN AS ANYTHING OTHER THAN ASPHALT.
2. CONTRACTOR IS TO ENSURE THAT ALL ACCESSIBLE FACILITIES SHALL BE CONSTRUCTED IN CONFORMANCE WITH CURRENT A.D.A. REQUIREMENTS.
3. ALL INTERNAL CURB IS TO BE 6" REVEAL. REFER TO DETAIL SHEET.
4. NO REVIEW OF THE PROPERTY REGARDING THE PRESENCE OF HAZARDOUS MATERIAL WAS ACCOMPLISHED AS A PART OF THIS PLAN.
5. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH BY THE GEOTECHNICAL ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING ALL SOFT, YIELDING OR UNSUITABLE MATERIALS AND REPLACING WITH SUITABLE MATERIALS AS SPECIFIED BY THE GEOTECHNICAL ENGINEER. ALL EXCAVATED OR FILLED AREAS SHALL BE COMPACTED TO A MINIMUM 95% OF MODIFIED PROCTOR MAXIMUM DENSITY PER A.S.T.M. TEST D–1557.
6. CONTRACTOR IS RESPONSIBLE FOR ALL SHORING REQUIRED DURING EXCAVATION AND SHALL BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS, AS WELL AS ADDITIONAL PROVISIONS TO ASSURE STABILITY OF CONTIGUOUS STRUCTURES, AS FIELD CONDITIONS DICTATE.
7. IN CASE OF DISCREPANCIES BETWEEN PLANS, THE SITE PLAN WILL SUPERSEDE IN ALL CASES. NOTIFY ENGINEER OF RECORD OF ANY CONFLICT IN WRITING.
8. SUBBASE MATERIAL FOR SIDEWALKS AND ASPHALT SHALL BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SHOULD SUBBASE BE DEEMED UNSUITABLE, SUBBASE IS TO BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL COMPACTED TO 95% OPTIMUM DENSITY (AS DETERMINED BY MODIFIED PROCTOR METHOD).
9. ALL EXCAVATED UNSUITABLE MATERIAL MUST BE TRANSPORTED TO AN APPROVED DISPOSAL LOCATION.
10. ANY PROPOSED RETAINING WALLS GREATER THAN 4 FT IN HEIGHT SHALL BE STRUCTURALLY ENGINEERED. CONTRACTOR TO VERIFY WHETHER OR NOT SHOP DRAWINGS MUST BE SUBMITTED TO LOWER SALFORD TOWNSHIP FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
11. CONTRACTOR TO MATCH EXISTING PAVEMENT, CURB, AND SIDEWALK ELEVATIONS/LOCATIONS WHERE THE PROPOSED IMPROVEMENTS TIE INTO EXISTING FEATURES.
12. INSTALLATION OF ALL UTILITIES SHALL BE IN ACCORDANCE WITH THE ENGINEERING STANDARDS AND SPECIFICATIONS OF THE TOWNSHIP ENGINEER, MONTGOMERY COUNTY, OR OTHER PUBLIC UTILITY CONCERNS.
13. ALL BUILDINGS AND ASSOCIATED UTILITY CONNECTIONS, AS SHOWN, HAVE BEEN BASED UPON SCHEMATIC ARCHITECTURAL PLANS. CONTRACTOR SHALL REFER TO ARCHITECT'S FINAL PLANS FOR EXACT BUILDING DIMENSIONS, UTILITY CONNECTION LOCATIONS & UTILITY SERVICE SIZING AND MATERIAL.
14. THE PROPOSED SEWER AND WATER SERVICE CONNECTIONS ARE TO BE INTERNAL TO THE ADDITION AND COORDINATED WITH THE ARCHITECTURAL PLANS TO ENSURE CORRECT LOCATION. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL UTILITY CONNECTION LOCATIONS, AND SHOULD NOTIFY THE OWNER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
15. SITE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE THE DISCONNECTION, ABANDONMENT, RELOCATION AND/OR REMOVAL OF ALL APPLICABLE ONSITE UTILITIES, IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS AS WELL AS ANY REQUIREMENTS FROM THE RELEVANT UTILITY COMPANY.
16. ALL UTILITIES AND STRUCTURES WITHIN PUBLIC RIGHTS–OF–WAY OR EASEMENTS SHALL REMAIN UNLESS OTHERWISE NOTED.
17. ANY UTILITIES, TO REMAIN, THAT ARE DAMAGED DURING DEMOLITION AND/OR CONSTRUCTION SHALL BE REPAIRED AND/OR REPLACED IN KIND BY THE CONTRACTOR AT HIS OWN EXPENSE.
18. CONTRACTOR SHALL ADHERE TO ALL SAFETY REGULATIONS AS REQUIRED BY OSHA , THE PROPERTY OWNER, OR ANY LOCAL, STATE & FEDERAL AUTHORITY.
19. CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHY INFORMATION AND UTILITY INVERT ELEVATIONS, PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION. ANY DISCREPANCIES THAT MAY AFFECT PUBLIC SAFETY AND/OR PROJECT COST MUST BE IDENTIFIED IMMEDIATELY TO THE ENGINEER OF RECORD IN WRITING. PROCEEDING WITH CONSTRUCTION WITH DESIGN DISCREPANCIES IS DONE SO AT THE CONTRACTOR'S OWN RISK.
20. CONSTRUCTION OF PROPOSED UTILITIES SHALL COMMENCE AT THE LOWEST INVERT (POINT OF CONNECTION) AND PROGRESS UP GRADIENT. INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND INSTALLATIONS SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO COMMENCEMENT OF CONSTRUCTION.
21. CLEAN OUTS AND CURB BOXES WITHIN PAVED AREAS MUST HAVE TRAFFIC LOADING FRAMES AND COVERS.
22. PRIOR TO STORM DRAINAGE NETWORK CONSTRUCTION, SANITARY SEWER RELOCATION, OR EXCAVATION ACTIVITIES, A SOFT DIG EXPLORATION SHALL BE CONDUCTED TO VERIFY LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES. THE DESIGN ENGINEER SHALL BE INFORMED OF ANY CONFLICTS IDENTIFIED IN THE FIELD, PRIOR TO CONSTRUCTION.
23. EXISTING STORM STRUCTURES AND PIPES TO BE INSPECTED BY CONTRACTOR PRIOR TO CONSTRUCTION AND ANY DEFICIENCIES FOUND SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
24. ALL UTILITY CONNECTIONS SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY.
25. UTILITY LOCATIONS SHALL BE COORDINATED WITH PROPOSED AND EXISTING STRUCTURAL COLUMNS TO ASSURE THERE ARE NO CONFLICTS.
26. ALL WET UTILITIES SHALL HAVE WATERPROOF JOINTS.
27. ALL UTILITIES SHALL BE CONSTRUCTED UNDERGROUND.
28. CONTRACTOR TO REMOVE EXCESS DIRT AND DEBRIS FROM PROJECT AREAS TO ENSURE IT IS NOT TRACKED INTO PUBLIC RIGHT–OF–WAYS.
29. ALL PAVEMENT MARKINGS SHALL CONFORM TO CURRENT PENNDOT SPECIFICATIONS.
30. UNLESS OTHERWISE NOTED, ALL CONSTRUCTION IS TO BE COMPLETED PER ABINGTON TOWNSHIP AND PENNDOT CONSTRUCTION STANDARDS.

DEMOLITION NOTES:

1. LOCATIONS OF EXISTING UTILITIES AS SHOWN HEREIN HAVE BEEN DEVELOPED FROM EXISTING UTILITY RECORDS, PLANS BY OTHERS, ABOVE GROUND EXAMINATION OF THE SITE AND/OR PRIVATE UTILITY LOCATION COMPANY. THE COMPLETENESS OR ACCURACY OF THE LOCATIONS ARE NOT GUARANTEED. THE CONTRACTOR MUST VERIFY LOCATIONS AND DEPTHS OF ALL UTILITIES BEFORE START OF WORK.
2. PRIOR TO STARTING CONSTRUCTION, ALL UTILITY SERVICES IN THE AREA ARE TO BE LOCATED, THE USER NOTIFIED, AND MEASURES TAKEN TO PROTECT THE LINES IN ACCORDANCE WITH PA ACT 287, AS AMENDED. CONTRACTORS ARE TO IMMEDIATELY NOTIFY THE ENGINEER OF ANY DEVIATIONS FROM THE PLAN INFORMATION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT PA "ONE–CALL" AT LEAST 72 HOURS TO ANY EXCAVATION OR DEMOLITION ON–SITE.
3. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO THE START OF DEMOLITION.
4. THE EXISTING ASPHALT TO BE RESURFACED SHALL BE PATCHED, FILLED AND/OR REPAIRED AS NECESSARY PRIOR TO THE APPLICATION OF THE WEARING COURSE.
5. IN ALL AREAS WHERE FINISHED PAVING IS TO BE PROVIDED, THE CONTRACTOR IS TO MILL EXISTING ASPHALT TO EXISTING SUBBASE STONE. FOLLOWING MILLING, THE EXPOSED SUBGRADE SHALL BE INSPECTED FOR ITS SUITABILITY AS PAVEMENT SUBBASE. IN AREAS WHERE EXISTING ASPHALT WILL BE CONVERTED TO GREEN SPACE OR BUILDING, THE CONTRACTOR IS TO MILL OUT THE EXISTING ASPHALT FOR ITS REUSE ON–SITE AS SUBBASE IN PROPOSED ASPHALT PAVEMENT AREAS. ALL FILL MEASURES TO BE COMPACTED IN ACCORDANCE WITH THE GEOTECHNICAL SPECIFICATIONS.
6. WHERE IMPROVEMENTS ARE PROPOSED TO TIE INTO EXISTING FEATURES, THE EXISTING FEATURES SHALL BE FIELD VERIFIED FOR ELEVATION AND LOCATION. IF FIELD LOCATED DATA IS DIFFERENT THAN THE DATA CONTAINED WITH THE CONSTRUCTION DOCUMENTS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD PRIOR TO ANY DESIGN CHANGES.
7. THE PAVEMENT SECTION AREA DELINEATED ON THE PLANS TO BE MODIFIED SHALL BE USED AS GUIDANCE. EXPAND OR CONTRACT THIS AREA AT THE TIE IN LOCATION TO EXISTING PAVEMENT, SIDEWALK, DRIVEWAY APRONS, AND LOADING AREAS AS THE FIELD CONDITIONS WARRANT. ALL PAVEMENT SEAMS SHALL BE SEALED.
8. SITE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE THE DISCONNECTION ABANDONMENT, RELOCATION AND/OR REMOVAL OF ALL APPLICABLE ON–SITE UTILITIES, IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS AS WELL AS ANY REQUIREMENTS FROM THE RELEVANT UTILITY COMPANY.
9. ALL DEMOLITION SHALL BE PERFORMED BY A QUALIFIED, LICENSED CONTRACTOR IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.
10. THIS PLAN IS NOT INTENDED TO DEPICT ALL FACETS AND ITEMS TO BE ADDRESSED DURING THE COURSE OF DEMOLITION ACTIVITIES. THIS PLAN IS INTENDED TO REPRESENT ONLY THE READILY VISIBLE, EXISTING IMPROVEMENTS ON–SITE. CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE SITE CONDITION PRIOR TO FINALIZING HIS BID AND PROVIDE ALL NECESSARY DEMOLITION SERVICES REQUIRED TO COMPLETE THE SCOPE OF WORK OUTLINED ON THESE DRAWINGS. UPON INITIATION OF DEMOLITION, CONTRACTOR SHALL ADVISE THE ENGINEER OF RECORD IMMEDIATELY, SHOULD CONFLICTS ARISE IN THE FIELD.
11. CONTRACTOR TO EXERCISE CARE WHEN REMOVING PAVEMENT OVER EXISTING PIPES TO REMAIN DURING CONSTRUCTION, CONTRACTOR SHALL TAKE STEPS TO MAINTAIN ADEQUATE COVER OVER ALL EXISTING PIPES TO REMAIN AND TO PREVENT CONSTRUCTION TRAFFIC FROM DAMAGING SAID PIPES. IF THE EXISTING PIPES ARE DAMAGED, THE CONTRACTOR SHALL REPLACE THEM IN KIND AT THEIR COST.
12. ALL PAVEMENT WITHIN THE LIMITS OF DISTURBANCE NOT SCHEDULED TO BE REMOVED SHALL BE MILLED AND OVERLAID WITH SUPERPAVE ASPHALT MIXTURE DESIGN, HMA WEARING COARSE, PG 64–22, 0.3 TO 23.0 MILLION ESALS, 9.5 MM MIX, 1.5" DEPTH. MILLING AND OVERLAYING SHALL BE PERFORMED TO MAKE PATCHING NON–VISUAL WHEN COMPLETED.
13. CONTRACTOR SHALL USE EXTREME CAUTION WHEN REMOVING EXISTING UTILITIES TO PREVENT ANY DISTURBANCE TO UTILITIES THAT ARE TO REMAIN. IF SAID REMAINING UTILITY IS DAMAGED, THE CONTRACTOR SHALL REPAIR THE UTILITY AT THEIR COST.
14. ALL UTILITIES TO BE ABANDONED AND LEFT IN PLACE SHALL BE PLUGGED AND FILLED WITH FLOWABLE CONCRETE.
15. CONTRACTOR TO LOCATE AND RECLAIM EXISTING WATER, GAS, AND SANITARY SEWER LATERALS FOR CONNECTION TO BUILDING.

LOCATION MAP
SCALE: 1"=1000'

ONE CALL SYSTEM 1–800–242–1776 PENNSYLVANIA

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AQUA PA
COMCAST CABLE WILLOW GROVE
COMCAST CABLE
PECO ENERGY
VERIZON PA

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KEITH J. MARSHALL
PROFESSIONAL ENGINEER
PENNSYLVANIA
No. PE073328

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P.O. Box 958 Kimberton, PA 19442
Phone (610) 983-9200 Fax (610) 983-9202
EMail: Contact@CMCEng.com

REV.	DATE	DESCRIPTION	CHK'D:	BY:

DRAWING NAME: GRADING PLAN

PROPOSED AUTOZONE LOCATION
1318 AND 1330 EASTON ROAD
ABINGTON, PA 19001

LOCATION: ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PA

DATE: 04/05/22	DRAWN BY: A.C.K.
SCALE: 1"=20'	CHK'D BY: K.J.M.
PROJ. NUMBER: 1482–21–02–PA	
DRAWING NUMBER: G–1	
SHEET NUMBER: 4 OF 10	

M:\Small Jobs\Wright Partners\AZ – Abington\CAD\Plan Set\4–Grading Plan G–1.dwg

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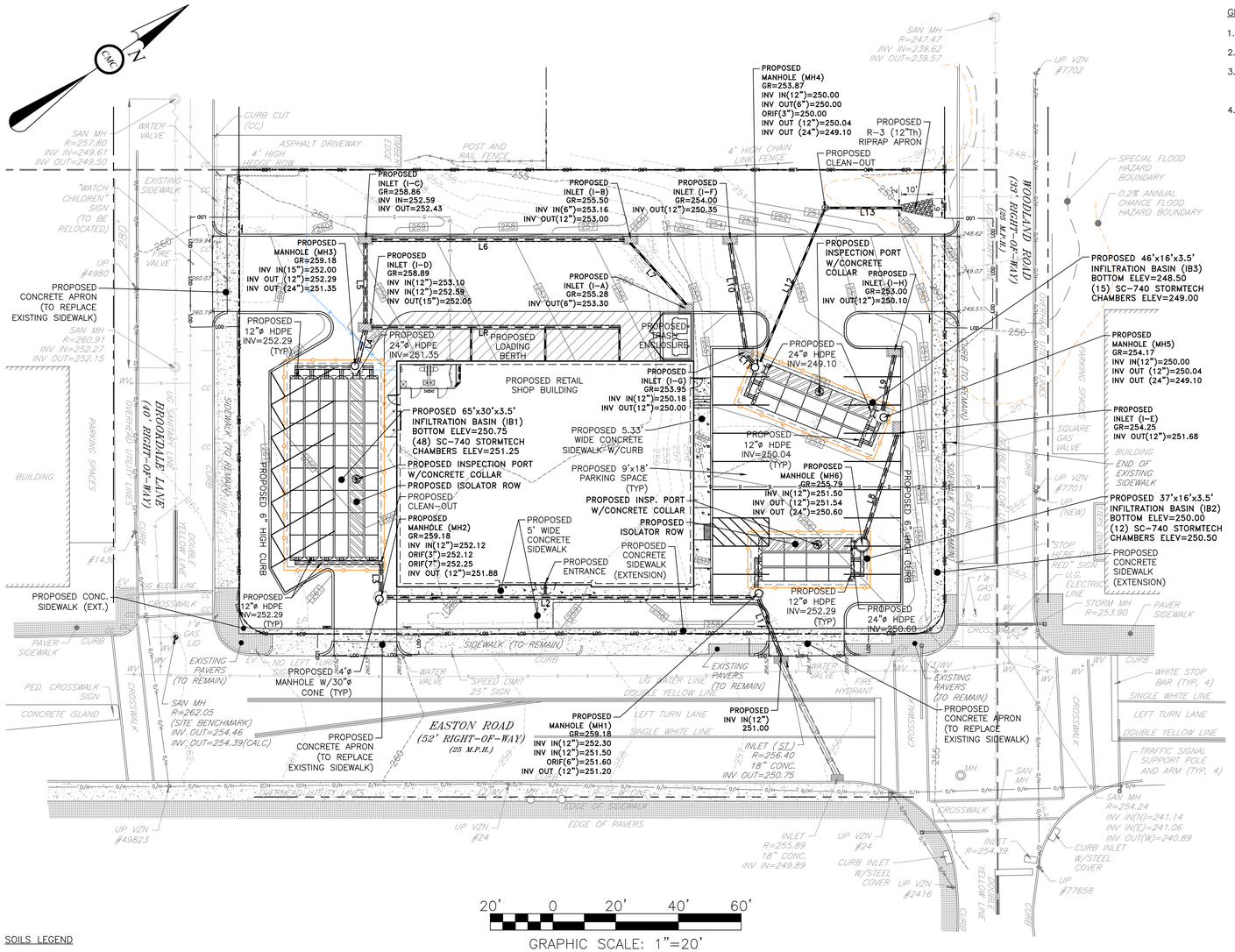

20' 0 20' 40' 60'

GRAPHIC SCALE: 1"=20'

GENERAL NOTES:

1. PROPOSED USE: RETAIL SHOP (C-28)
2. PROPOSED LIMIT OF DISTURBANCE = 34,807 SF.
3. A BLANKET EASEMENT FOR ACCESS TO THE STORMWATER MANAGEMENT FACILITIES SHALL BE PROVIDED OVER THE ENTIRE PROPERTY FOR INGRESS AND EGRESS FROM THE PUBLIC RIGHT-OF-WAY.
4. PROVIDE A CONSTRUCTION FENCE AROUND THE PERIMETER OF THE INFILTRATION BASIN DURING CONSTRUCTION OF THE STORMWATER FACILITY.

LOCATION MAP
SCALE: 1"=1000'

LEGEND

- EXISTING PROPERTY LINE
- ZONING DISTRICT BOUNDARY LINE
- BUILDING SETBACK LINES
- EXISTING EDGE OF ROAD
- EXISTING BUILDING/WALKWAY
- EXISTING WATER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING SANITARY LINE
- EXISTING OVERHEAD UTILITY LINE
- EXISTING CHAIN LINK FENCE
- EXISTING POST AND RAIL FENCE
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- PROPOSED INLET
- PROPOSED UG. DRAINAGE PIPE
- PROPOSED MANHOLE
- PROPOSED CONCRETE
- PROPOSED STORMTECH CHAMBER
- PROPOSED ISOLATOR ROW

SOILS LEGEND

WEB SOIL SURVEY, NATIONAL COOPERATIVE SOIL SURVEY, NATIONAL RESOURCES CONSERVATION SERVICE

SYMBOL	SOIL NAME	SLOPES	DEPTH TO WATER TABLE	DEPTH TO RESTRICTIVE LAYER	HYDRIC SOIL
UrhB	URBAN LAND-DUFFIELD COMPLEX (WHOLE PROJECT SITE)	3 TO 8 PERCENT	NONE LISTED (URBAN LAND) MORE THAN 80 INCHES (DUFFIELD)	10 TO 100 INCHES TO LITHIC BEDROCK (URBAN LAND) 48 TO 120 INCHES TO LITHIC BEDROCK (DUFFIELD)	NO NO

SURFACE WATERS, PENNSYLVANIA CODE CHAPTER 93 DESIGNATION, AND WATERSHED
SANDY RUN TSF, MF WISSAHICKEN CREEK WATERSHED

DRAINAGE PIPE IDENTIFICATION

I.D. #	LENGTH (FT)	DIAMETER (IN)	INL/MH OUT I.D. #	INL/MH OUT ELEVATION	INL/MH IN ELEVATION	INL/MH IN I.D. #	HEIGHT DIFF. (FT)	SLOPE (FT/FT)	SLOPE (%)
L1	19.50	12	MH1	251.20	251.00	INL ST	0.20	0.0103	1.03
L2	116.00	12	MH2	251.88	251.30	MH1	0.58	0.005	0.50
L3	9.00	12	CLEANOUT	252.29	252.12	MH2	0.17	0.0189	1.89
L4	10.15	15	INL D	252.05	252.00	MH3	0.05	0.0049	0.49
LR	79.25	12	@ bend	253.50	253.10	INL D	0.40	0.0050	0.50
L5	25.67	12	INL C	252.43	252.30	INL D	0.13	0.0051	0.51
L6	80.50	12	INL B	253.00	252.59	INL C	0.41	0.0051	0.51
L7	26.50	12	INL A	253.30	253.16	INL B	0.14	0.0053	0.53
L8	34.67	12	INL E	251.68	251.50	MH6	0.18	0.0052	0.52
L9	17.87	12	INL H	250.10	250.00	MH 5	0.10	0.0056	0.56
L10	34.00	12	INL F	250.35	250.18	INL G	0.17	0.0050	0.50
L11	2.50	12	INL G	250.00	250.00	MH4	0.00	0.0000	0.00
L12	77.50	6	MH4	250.00	249.50	OUTLET O	0.50	0.0065	0.65

TOWNSHIP CERTIFICATION:

I, _____, THE MUNICIPAL OFFICIAL OR DESIGNEE, ON THIS DATE _____, HAS REVIEWED AND HEREBY CERTIFIES THAT THE SWM SITE PLAN MEETS ALL DESIGN STANDARDS AND CRITERIA OF THE MUNICIPAL ORDINANCE NO. _____.

APPLICANT PLAN REVISION ACKNOWLEDGEMENT:

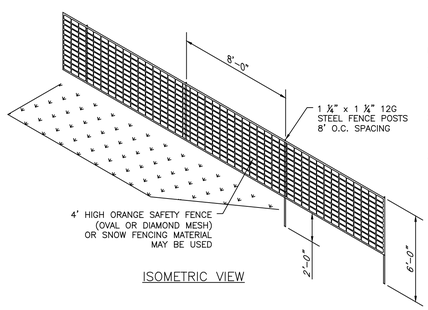
I, _____, THE APPLICANT, ACKNOWLEDGE THAT ANY REVISION TO THE APPROVED DRAINAGE PLAN MUST BE APPROVED BY THE MUNICIPALITY, AND THAT A REVISED EROSION AND SEDIMENT CONTROL PLAN MUST BE SUBMITTED TO THE MUNICIPALITY OR CONSERVATION DISTRICT FOR APPROVAL.

_____
APPLICANT SIGNATURE

ENGINEER CERTIFICATION:

I, _____, THE DESIGN ENGINEER, ON THIS DATE _____, HEREBY CERTIFY THAT THE DRAINAGE PLAN MEETS ALL REQUIREMENTS OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION'S (DEP'S) REGULATIONS AND THIS CHAPTER.

_____
ENGINEER SIGNATURE



ISOMETRIC VIEW

NOTES

1. FENCE TO BE INSTALLED AROUND PERIMETER OF RAIN GARDEN DURING EXCAVATION AND INSTALLATION. IT SHALL BE REMOVED UPON ITS COMPLETION.
2. SECURE FENCING MATERIAL TO STEEL POSTS WITH GALVANIZED WIRE AT 1'-0" INTERVALS.
3. ALL UNDERGROUND UTILITIES AND STRUCTURES MUST BE LOCATED PRIOR TO INSTALLATION.

CONSTRUCTION/TREE PROTECTION FENCE DETAIL
NOT TO SCALE

ONE CALL SYSTEM 1-800-242-1776 PENNSYLVANIA

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KEITH J. MARSHALL PROFESSIONAL ENGINEER PENNSYLVANIA No. PE073528

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2215 Kimberton Road
P.O. Box 958 Kimberton, PA 19442
Phone (610) 983-9200 Fax (610) 983-9202
EMail: Contact@CMCEng.com

REV.	DATE	DESCRIPTION	CHK'D: BY:

DRAWING NAME: STORMWATER MANAGEMENT SITE PLAN

PROPOSED AUTOZONE LOCATION
1318 AND 1330 EASTON ROAD
ABINGTON, PA 19001

LOCATION: ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PA

DATE: 04/05/22	DRAWN BY: A.C.K.
SCALE: 1"=20'	CHK'D BY: K.J.M.
PROJ. NUMBER: 1482-21-02-PA	
DRAWING NUMBER: SWM-1	
SHEET NUMBER: 5 OF 10	

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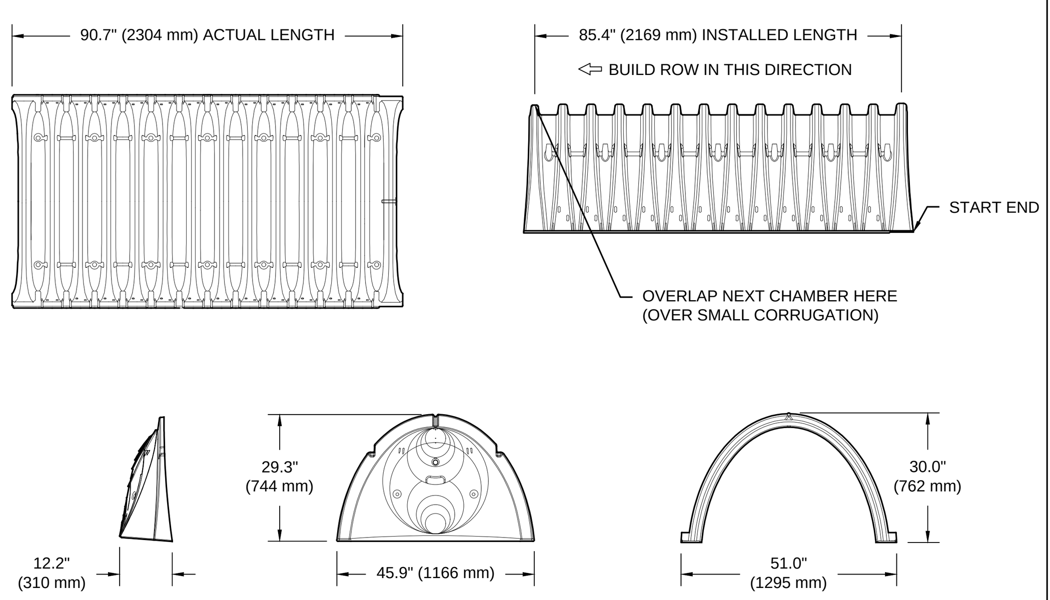
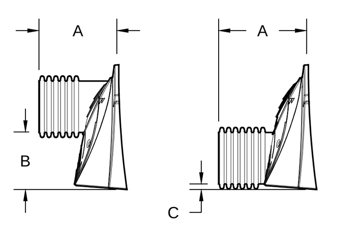


NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	51.0" X 30.0" X 85.4"	(1295 mm X 762 mm X 2169 mm)
CHAMBER STORAGE	45.9 CUBIC FEET	
MINIMUM INSTALLED STORAGE*	74.9 CUBIC FEET	
WEIGHT	75.0 lbs.	(33.6 kg)

*ASSUMES 6" (152 mm) STONE ABOVE, BELOW, AND BETWEEN CHAMBERS



PRE-FAB STUB AT BOTTOM OF END CAP WITH FLAMP END WITH "BR"
PRE-FAB STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
PRE-FAB STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
PRE-CORED END CAPS END WITH "PC"

PART #	STUB	A	B	C
SC740EPE06T / SC740EPE06TPC	6" (150 mm)	10.9" (277 mm)	18.5" (470 mm)	---
SC740EPE06B / SC740EPE06BPC			---	0.5" (13 mm)
SC740EPE08T /SC740EPE08TPC	8" (200 mm)	12.2" (310 mm)	16.5" (419 mm)	---
SC740EPE08B / SC740EPE08BPC			---	0.6" (15 mm)
SC740EPE10T / SC740EPE10TPC	10" (250 mm)	13.4" (340 mm)	14.5" (368 mm)	---
SC740EPE10B / SC740EPE10BPC			---	0.7" (18 mm)
SC740EPE12T / SC740EPE12TPC	12" (300 mm)	14.7" (373 mm)	12.5" (318 mm)	---
SC740EPE12B / SC740EPE12BPC			---	1.2" (30 mm)
SC740EPE15T / SC740EPE15TPC	15" (375 mm)	18.4" (467 mm)	9.0" (229 mm)	---
SC740EPE15B / SC740EPE15BPC			---	1.3" (33 mm)
SC740EPE18T / SC740EPE18TPC	18" (450 mm)	19.7" (500 mm)	5.0" (127 mm)	---
SC740EPE18B / SC740EPE18BPC			---	1.6" (41 mm)
SC740EPE24B*	24" (600 mm)	18.5" (470 mm)	---	0.1" (3 mm)
SC740EPE24BR*	24" (600 mm)	18.5" (470 mm)	---	0.1" (3 mm)

ALL STUBS, EXCEPT FOR THE SC740EPE24B/SC740EPE24BR ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

* FOR THE SC740EPE24B/SC740EPE24BR THE 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75" (44 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

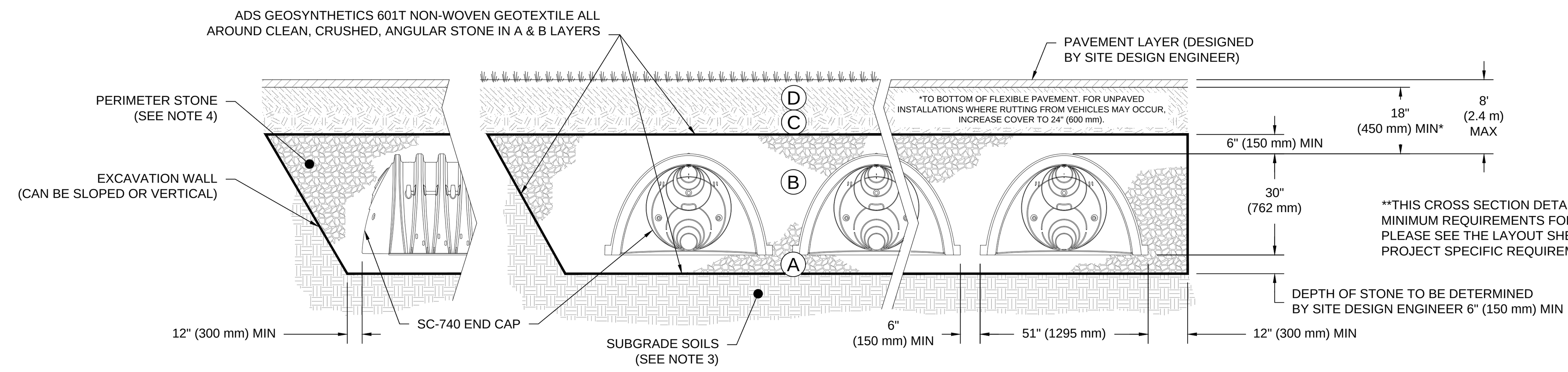
NOTE: ALL DIMENSIONS ARE NOMINAL

STORMTECH SC−740 TECHNICAL SPECIFICATIONS
N.T.S.

ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

MATERIAL LOCATION		DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145 A-1, A-2-4, A-3 OR AASHTO M43 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

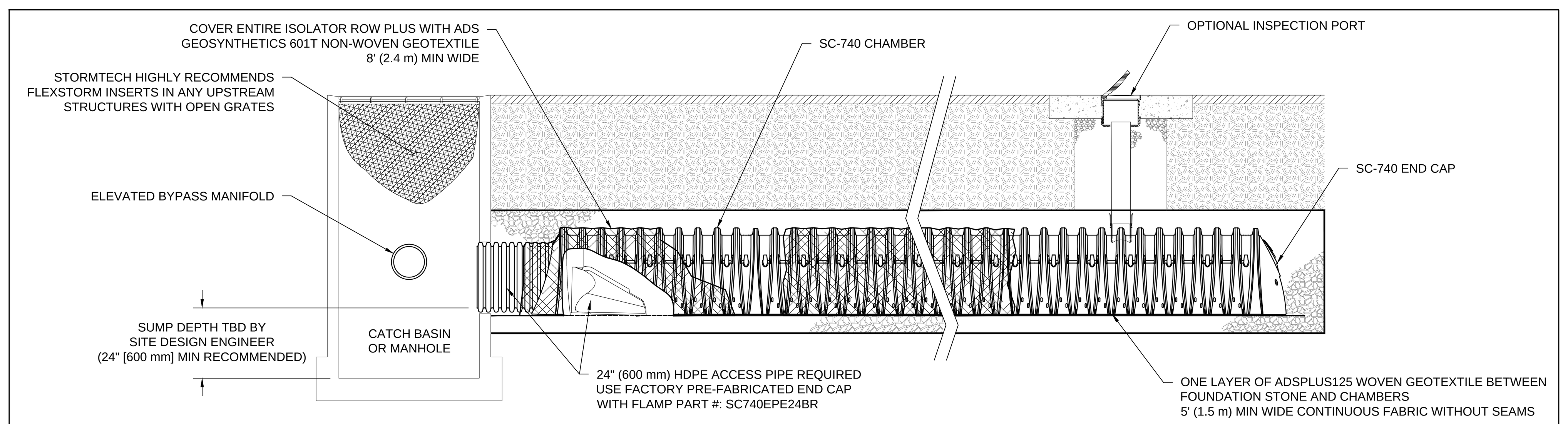
PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



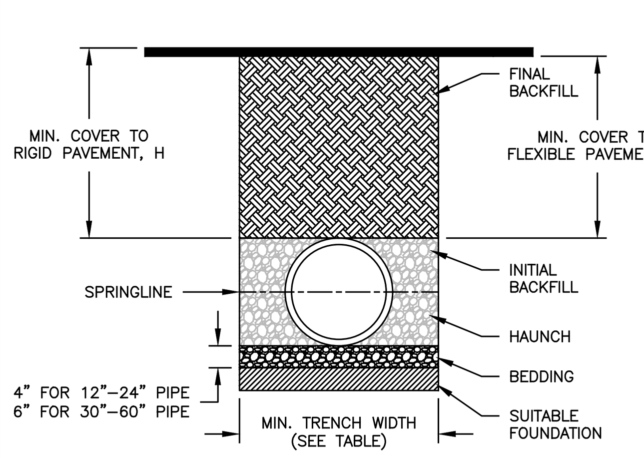
NOTES:

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - R R D R D M R
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 550 D R M RD RM D R D M R R M R R D D R MR D R COLORS.

STORMTECH SC−740 CROSS SECTION DETAIL
N.T.S



STORMTECH SC−740 ISOLATOR ROW PLUS DETAIL
N.T.S.



RECOMMENDED MINIMUM TRENCH WIDTHS

PIPE DIAM.	MIN. TRENCH WIDTH
4" (100mm)	21" (533mm)
6" (150mm)	23" (584mm)
8" (200mm)	26" (660mm)
10" (250mm)	28" (711mm)
12" (300mm)	30" (762mm)
15" (375mm)	34" (864mm)
18" (450mm)	39" (991mm)
24" (600mm)	48" (1219mm)
30" (750mm)	56" (1422mm)
36" (900mm)	64" (1626mm)
42" (1050mm)	72" (1829mm)
48" (1200mm)	80" (2032mm)
60" (1500mm)	96" (2438mm)

MINIMUM RECOMMENDED COVER BASED ON VEHICLE LOADING CONDITIONS**

PIPE DIAM.	SURFACE LIVE LOADING CONDITION: H–25	HEAVY CONSTRUCTION (75T AXLE LAOD) *
12" – 48" (300mm – 1200mm)	12" (305mm)	48" (1219mm)
60" (1500mm)	24" (610mm)	60" (1524mm)

* VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER
**SEE BACKFILL REQUIREMENTS IN NOTE 6.

MAXIMUM RECOMMENDED COVER BASED ON VEHICLE LOADING CONDITIONS

PIPE DIAM.	CLASS I		CLASS II		CLASS III
	COMPACTED	DUMPED	95%	90%	95%
4" (100mm)	34 (10.4m)	16 (4.9m)	23 (7.0m)	16 (4.9m)	17 (5.2m)
6" (150mm)	40 (12.2m)	19 (5.8m)	27 (8.2m)	19 (5.8m)	20 (6.1m)
8" (200mm)	30 (9.1m)	14 (4.3m)	21 (6.4m)	14 (4.3m)	15 (4.6m)
10" (250mm)	34 (10.4m)	16 (4.9m)	23 (7.0m)	16 (4.9m)	17 (5.2m)
12" (300mm)	35 (10.7m)	17 (5.2m)	24 (7.3m)	17 (5.2m)	18 (5.5m)
15" (375mm)	37 (11.3m)	18 (5.5m)	25 (7.6m)	18 (5.5m)	19 (5.8m)
18" (450mm)	32 (9.8m)	15 (4.6m)	22 (6.7m)	15 (4.6m)	16 (4.9m)
24" (600mm)	27 (8.2m)	13 (4.0m)	19 (5.8m)	13 (4.0m)	14 (4.3m)
30" (750mm)	22 (6.7m)	11 (3.4m)	16 (4.9m)	11 (3.4m)	11 (3.4m)
36" (900mm)	26 (7.9m)	12 (3.7m)	18 (5.5m)	12 (3.7m)	13 (4.0m)
42" (1050mm)	24 (7.3m)	11 (3.4m)	17 (5.2m)	11 (3.4m)	12 (3.7m)
48" (1200mm)	23 (7.0m)	11 (3.4m)	16 (4.9m)	11 (3.4m)	12 (3.7m)
60" (1500mm)	26 (7.9m)	12 (3.7m)	18 (5.5m)	12 (3.7m)	13 (4.0m)

FILL HEIGHT TABLE GENERATED USING AASHTO SECTION 12, LOAD RESISTANCE FACTOR DESIGN (LRFD) PROCEDURE WITH THE FOLLOWING ASSUMPTIONS:
NO HYDROSTATIC PRESSURE,
UNIT WEIGHT OF SOIL (Ys) = 120 PCF

NOTES:

1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST ADDITION

2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.

3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.

4. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-1500mm).

5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDINGTO THE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.

6. MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOTATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT. FOR TRAFFIC APPLICATIONS WITH LESS THAN FOUR FEET OF COVER, EMBEDMENT OF THE PIPE SHALL BE USING ONLY A CLASS I OR CLASS II BACKFILL.

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ADVANCED DRAINAGE SYSTEMS, INC. ("ADS") HAS PREPARED THIS DETAIL BASED ON INFORMATION PROVIDED TO ADS. THIS DRAWING IS INTENDED TO DEPICT THE COMPONENTS AS REQUESTED. ADS HAS NOT PERFORMED ANY ENGINEERING OR DESIGN SERVICES FOR THIS PROJECT, NOR HAS ADS INDEPENDENTLY VERIFIED THE INFORMATION SUPPLIED. THE INSTALLATION DETAILS PROVIDED HEREIN ARE GENERAL RECOMMENDATIONS AND ARE NOT SPECIFIC FOR THIS PROJECT. THE DESIGN ENGINEER SHALL REVIEW THESE DETAILS PRIOR TO CONSTRUCTION. IT IS THE DESIGN ENGINEERS RESPONSIBILITY TO ENSURE THE DETAILS PROVIDED HEREIN MEETS OR EXCEEDS THE APPLICABLE NATIONAL, STATE, OR LOCAL REQUIREMENTS AND TO ENSURE THAT THE DETAILS PROVIDED HEREIN ARE ACCEPTABLE FOR THIS PROJECT.

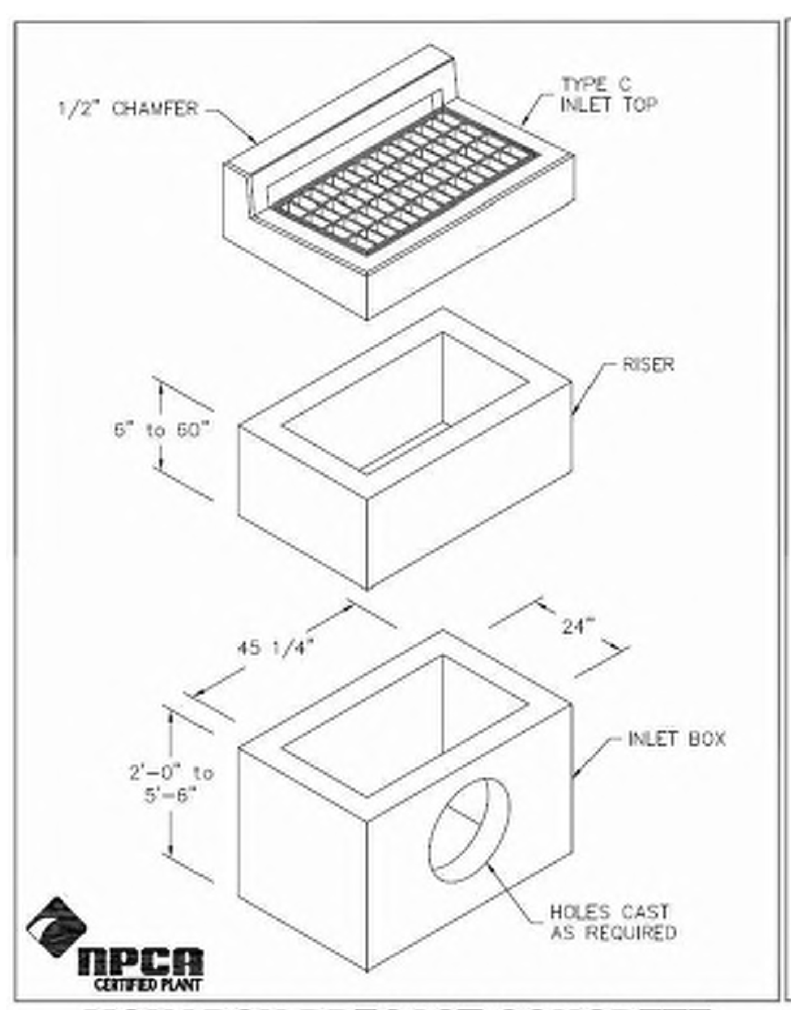
REV.	DESCRIPTION	BY	MM/DD/YY	CHK'D
5	INITIAL BACKFILL	JAB	04/02/20	

NOTE: ALL DIMENSIONS ARE ± 1/2 FOOT.

DIA. DET/RET SYSTEM
TRENCH INSTALLATION DETAIL (ASTM F2648)
DRAWING NUMBER: STD–101A
ADS ADVANCED DRAINAGE SYSTEMS, INC. 4640 TRUEMAN BLVD HILLIARD, OHIO 43026
DRAWN BY JLE; DATE 8/15/13; SCALE NTS; SHEET 1 OF 1

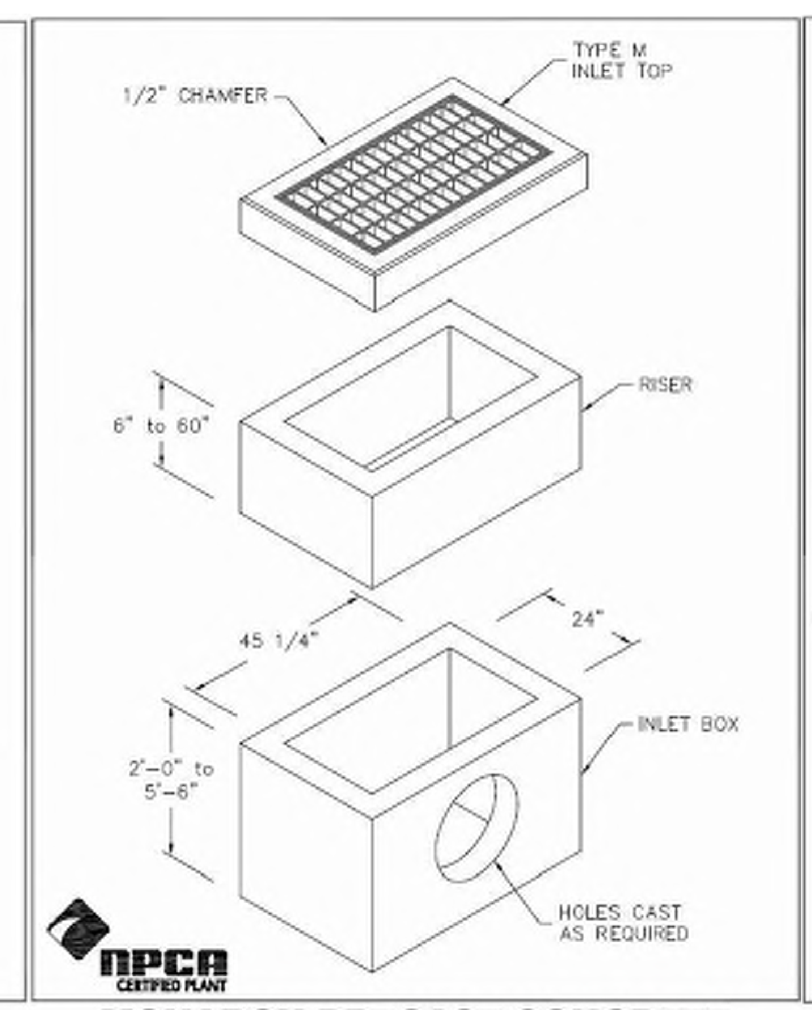
NOTES:

1. PROPOSED INLETS SHALL HAVE NO INTERIOR SUMP.



MONARCH PRECAST CONCRETE
425 NORTH DAUPHIN STREET ALLENTOWN, PA. 18109 PHONE (610) 435-6746
WWW.MONARCHPRECAST.COM FAX (610) 437-7133

24"x45" INLET BOX w/ TYPE C INLET TOP



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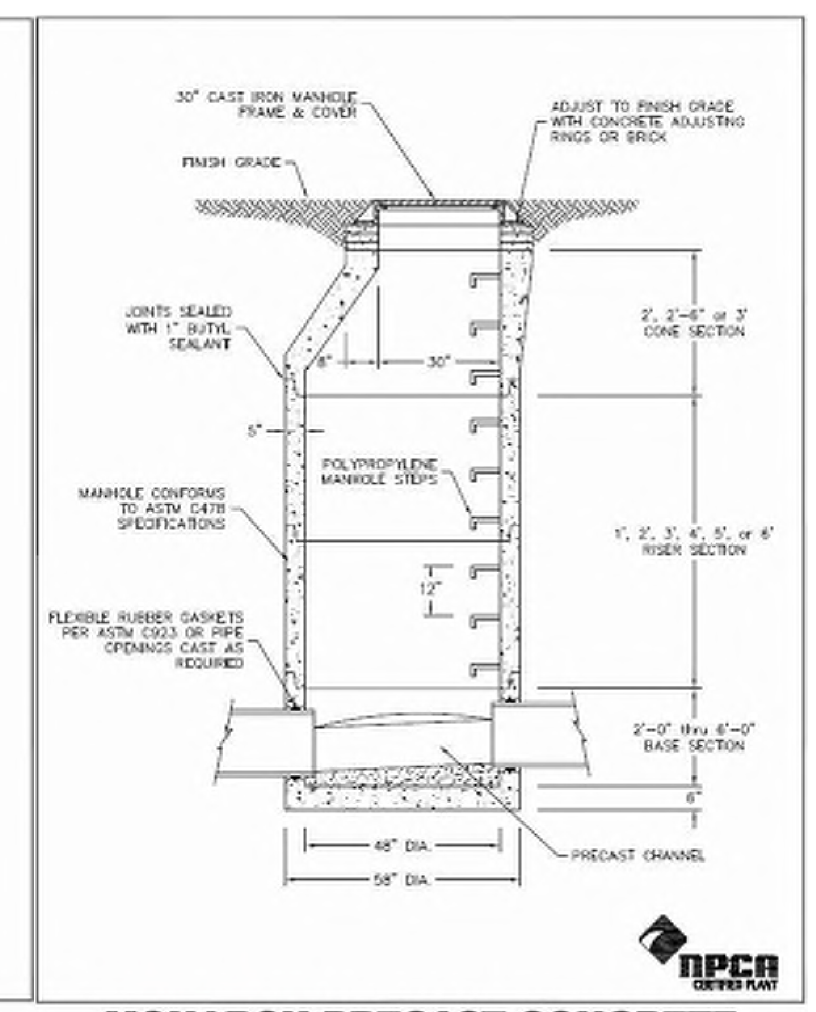
24"x45" INLET BOX w/ TYPE M INLET TOP



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48" DIA. MANHOLE w/ 30" DIA. CONE

SC-740 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH SC-740.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 550 LBS/IN/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED M R R M R R D D R MR D OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
   - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
   - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-740 SYSTEM

1. STORMTECH SC-740 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS.
   STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONESHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4-2" (20-50 mm).
8. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
9. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

1. STORMTECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
2. THE USE OF CONSTRUCTION EQUIPMENT OVER SC-740 CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

STORMTECH SC−740 STANDARD DETAILS AND NOTES PER ADS, Inc.

PRECAST DETAILS PER MONARCH PRECAST CONCRETE

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF THE RESPONSIBLE LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

[redacted]

KEITH J. MARSHALL
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Phone (610) 983-9200 Fax (610) 983-9202
EMail: Contact@CMCEng.com

REV.	DATE	DESCRIPTION	CHK'D:	BY:

DRAWING NAME: STORMWATER MANAGEMENT DETAILS

PROPOSED AUTOZONE LOCATION
1318 AND 1330 EASTON ROAD
ABINGTON, PA 19001

LOCATION: ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PA

DATE: 04/05/22	DRAWN BY: A.C.K.
SCALE: N/A	CHK'D BY: K.J.M.
PROJ. NUMBER: 1482–21–02–PA	
DRAWING NUMBER: SWM–2	
SHEET NUMBER: 6 OF 10	

M:\Small Jobs\Wright Partners\AZ – Abington\CAD\Plan Set\6–Stormwater Details SWM–2.dwg

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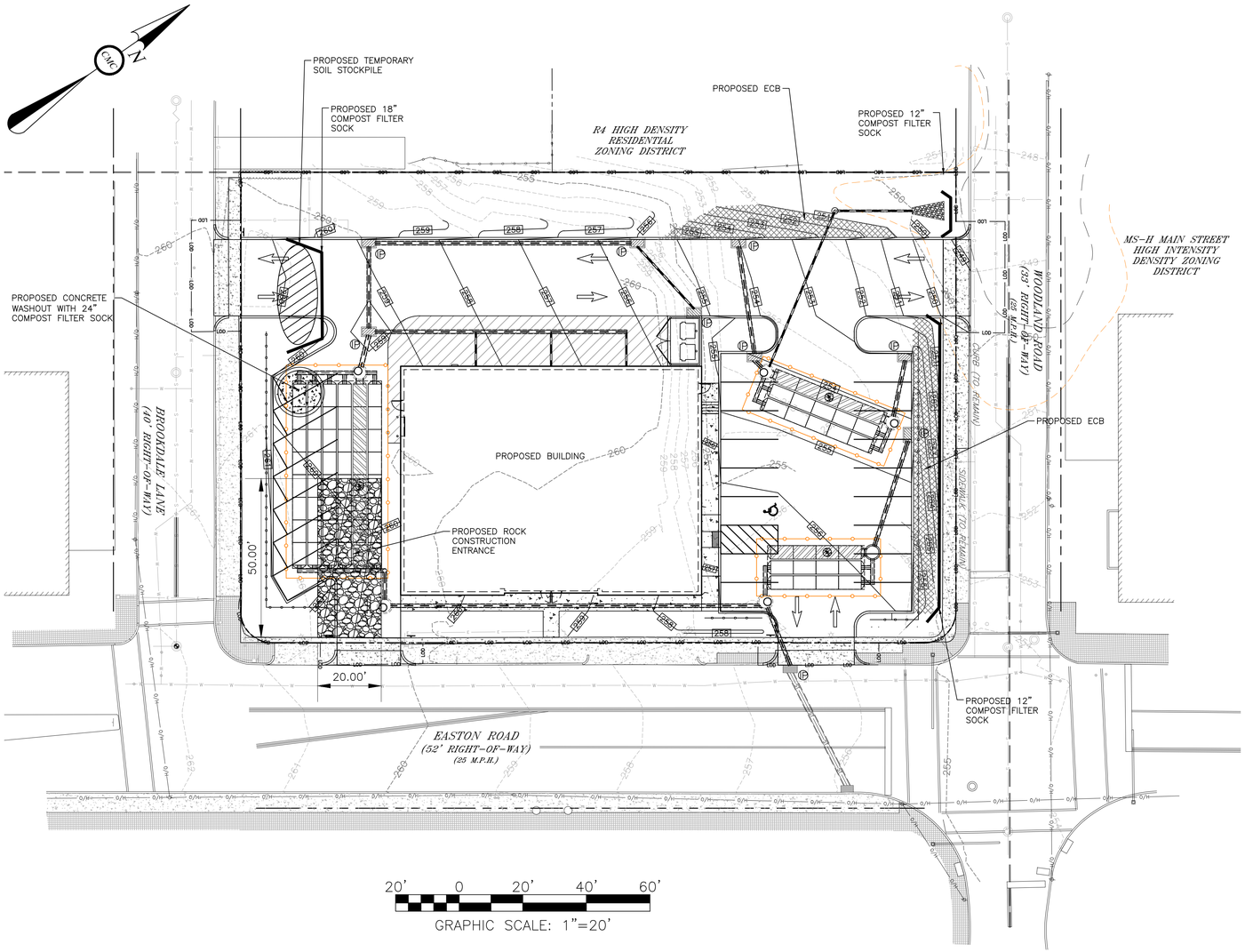
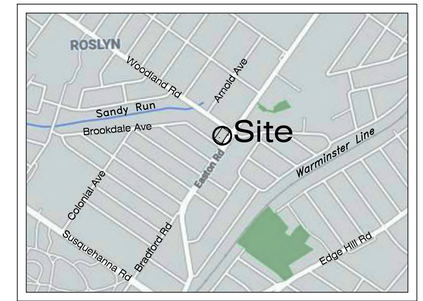


LEGEND

- ZONING DISTRICT LINE
- LEGAL RIGHT-OF-WAY
- PROPERTY LINE
- EXISTING CURB
- INLET PROTECTION
- CONCRETE WASHOUT
- TEMPORARY SOIL STOCKPILE
- EROSION CONTROL BLANKET
- COMPOST FILTER SOCK



LOCATION MAP
SCALE: 1"=1000'

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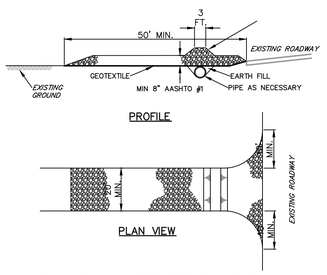
REV.	DATE	DESCRIPTION	CHK'D:	BY:

DRAWING NAME: EROSION CONTROL PLAN

PROPOSED AUTOZONE STORE
1318 AND 1330 EASTON ROAD
ABINGTON, PA 19001

LOCATION: ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PA



PROFILE

PLAN VIEW

* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

NOTES:

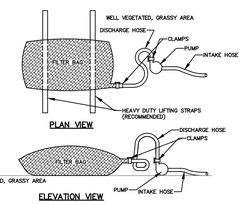
REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.

RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

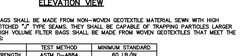
MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

STANDARD CONSTRUCTION DETAIL #3-1
ROCK CONSTRUCTION ENTRANCE
NOT TO SCALE



PLAN VIEW



ELEVATION VIEW

NOTES:

LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE FOLLOWING STANDARDS:

PROPERTY	TEST METHOD	MINIMUM STANDARD
AVG. WIDE WIDTH STRENGTH	ASTM D-4884	60 LB/IN
GRAB TENSILE	ASTM D-4632	205 LB
PUNCTURE	ASTM D-4833	110 LB
MULLEN BURST	ASTM D-3786	350 PSI
UV RESISTANCE	ASTM D-4355	70%
AOS % RETAINED	ASTM D-4751	80 SIEVE

A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT. BAGS THAT HAVE BEEN CUT OPEN OR DAMAGED SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.

BAGS SHALL BE LOCATED IN WELL-VEGETATED GRASSY AREA AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5% FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.

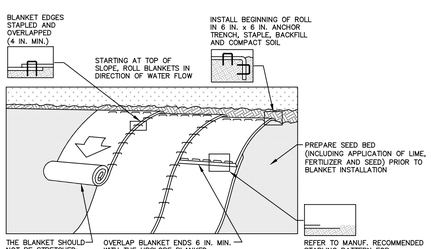
NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.

THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAG IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.

THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.

FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEMS IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

STANDARD CONSTRUCTION DETAIL #3-16
PUMPED WATER FILTER BAG
NOT TO SCALE



NOTES:

SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET.

PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE.

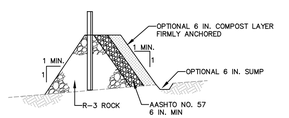
SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.

BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.

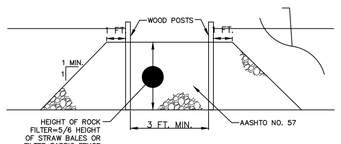
THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.

STANDARD CONSTRUCTION DETAIL #11-1
EROSION CONTROL BLANKET INSTALLATION
NOT TO SCALE



OUTLET CROSS-SECTION



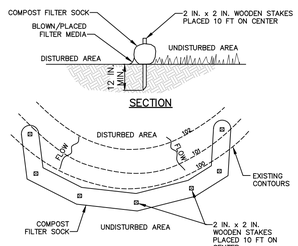
UP-SLOPE FACE

NOTES:

A ROCK FILTER OUTLET SHALL BE INSTALLED WHERE FAILURE OF A SILT FENCE OR STRAW BALE BARRIER HAS OCCURRED DUE TO CONCENTRATED FLOW. ANCHORED COMPOST LAYER SHALL BE USED ON UPSLOPE FACE IN HQ AND EV WATERSHEDS.

SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET.

STANDARD CONSTRUCTION DETAIL #4-6
ROCK FILTER OUTLET
NOT TO SCALE



SECTION

PLAN VIEW

NOTES:

SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.

COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.

TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.

ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.

COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.

BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

STANDARD CONSTRUCTION DETAIL #4-1
COMPOST FILTER SOCK
NOT TO SCALE

ONE CALL SYSTEM 1-800-242-1776 PENNSYLVANIA

811 Know what's below. Call before you dig.

UTILITY NOTE:

PA ONE CALL SERIAL #20212700875
TICKET IS PRELIMINARY DESIGN TICKET

(A NOTIFICATION OF EXCAVATION OR DEMOLITION WORK GIVING NOT LESS THAN 10 NOR MORE THAN 90 BUSINESS DAYS NOTICE).

PA ONE CALL MUST BE NOTIFIED OF STATUS CHANGE FOR EXCAVATION AND/OR DEMOLITION.

THE FOLLOWING UTILITIES WERE CONTACTED PER PA ACT 287, AS AMENDED BY ACT 187 OF 1996:

ABINGTON TOWNSHIP
AQUA PA
COMCAST CABLE WILLOW GROVE
COMCAST CABLE
PECO ENERGY
VERIZON PA

DATE:	DRAWN BY:
04/05/22	J.S.D.
SCALE:	CHK'D BY:
AS SHOWN	K.J.M.

PROJ. NUMBER: 1482-21-02-PA

DRAWING NUMBER: EC-1

SHEET NUMBER: 7 OF 10

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STANDARD EROSION & SEDIMENT PLAN NOTES

1. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.
2. AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE E&S PLAN PREPARER, THE PCSM PLAN PREPARER, THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE PCSM PLAN, AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON–SITE PRECONSTRUCTION MEETING.
3. AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1–800–242–1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
4. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO IMPLEMENTATION.
5. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.
6. CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMPS SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E&S PLAN.
7. AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN.
8. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAPS(S) IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2H:1V OR FLATTER.
9. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE LOCAL CONSERVATION DISTRICT AND/OR THE REGIONAL OFFICE OF THE DEPARTMENT.
10. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1, AND 287.1 ET. SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.
11. ALL OFF–SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.
12. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM FP–001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING.
13. ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS.
14. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPS SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMPS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
15. A LOG SHOWING DATES THAT E&S BMPS WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.
16. **SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.**
17. ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS.
18. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES –– 6 TO 12 INCHES ON COMPACTED SOILS –– PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.
19. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
20. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
21. FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
22. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
23. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
24. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
25. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDED AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN.
26. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON–GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN 1 YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN 1 YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.
27. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON–VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.
28. E&S BMPS SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.
29. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE E&S BMPS.
30. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPS MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION STORMWATER MANAGEMENT BMPS. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMPS SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON.
31. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT TO SCHEDULE A FINAL INSPECTION.
32. FAILURE TO CORRECTLY INSTALL E&S BMPS, FAILURE TO PREVENT SEDIMENT–LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPS MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO $10,000 PER DAY IN CIVIL PENALTIES, UP TO $10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO $25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.

CONSTRUCTION SEQUENCE

1. ALL EARTH DISTURBANCE SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE.
2. AT LEAST 7 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES, THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, AND THE EROSION AND SEDIMENT CONTROL PLAN PREPARER TO AN ON–SITE MEETING.
3. AT LEAST 3 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INCORPORATED AT 1–800–242–1776 FOR BURIED UTILITIES LOCATIONS.
4. INSTALL PERIMETER EROSION AND SEDIMENT CONTROL BMPS: COMPOST FILTER SOCK AND CONSTRUCTION FENCE.
5. DEMOLISH AND/OR REMOVE ITEMS NOTED WITHIN THIS PLAN SET. CONTRACTOR TO LOCATE AND MAINTAIN EXISTING SANITARY LATERALS, WATER SERVICE, AND GAS SERVICE FOR 1318/1380 EASTON ROAD FOR FUTURE CONNECTIONS.
6. BEGIN GRADING OPERATIONS.
7. INSTALL THE UNDERGROUND DETENTION SYSTEMS.
8. INSTALL THE STORM DRAINAGE MANHOLES AND PIPES. PROVIDE TEMPORARY INLET PROTECTION AS REQUIRED.
9. EXCAVATE FOR PROPOSED BUILDING FOUNDATION AND WALKWAYS.
10. BEGIN CONSTRUCTION OF BUILDING AND INSTALL PROPOSED UTILITIES TO CONNECTIONS MAINTAINED DURING DEMOLITION.
11. INSTALL CURB AND SITE PAVEMENT BASECOURSE.
12. INSTALL SIDEWALKS AND DECORATIVE WALKS.
13. INSTALL LANDSCAPING AND SEEDING.
14. INSTALL WEARING COURSE WHEN SITE STABILIZATION IS COMPLETE. PROVIDE PAVEMENT MARKINGS.
15. UPON COMPLETION OF ALL CONSTRUCTION AND AFTER ALL AREAS HAVE ACHIEVED FINAL STABILIZATION, REMOVE ALL EROSION AND SEDIMENT CONTROL BMPS. IMMEDIATELY STABILIZE ANY AFFECTED AREAS. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON–VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION.

EXCAVATION AND FILLS NOTES

1. CUT AND FILL SLOPES SHALL NOT BE STEEPER THAN A 3:1 SLOPE.
2. ADEQUATE PROVISIONS SHALL BE MADE TO PREVENT SURFACE WATER FROM DAMAGING THE CUT FACE OF EXCAVATIONS OF THE SLOPING SURFACES OF FILLS.
3. CUT AND FILLS SHALL NOT ENDANGER ENJOINING PROPERTY.
4. NO INCREASED SURFACE RUNOFF WILL BE PERMITTED TO LEAVE THE PROPERTY BEING SUBDIVIDED OR DEVELOPED BY WAY OF NATURAL WATERCOURSES OR STORM DRAINAGE PIPES WITHOUT FIRST BEING SUITABLY RETAINED IN SUCH A WAY AS TO MAINTAIN RUNOFF VOLUME EXISTING ON THE SITE PREVIOUS TO SUBDIVISION OR DEVELOPMENT.
5. FILL SHALL BE PLACED AND COMPACTED SO AS TO MINIMIZE SLIDING OR EROSION OF THE SOIL.
6. FILLS SHALL NOT ENCROACH ON NATURAL WATERCOURSES OR CONSTRUCTED CHANNELS.
7. FILLS PLACED ADJACENT TO NATURAL WATERCOURSES OR CONSTRUCTED CHANNELS SHALL HAVE SUITABLE PROTECTION AGAINST EROSION DURING PERIODS OF FLOODING.
8. GRADING WILL NOT BE DONE IN SUCH A WAY SO AS TO DIVERT WATER ONTO THE PROPERTY OF ANOTHER LANDOWNER WITHOUT THE EXPRESSED CONSENT OF THE BOARD.
9. DURING GRADING OPERATIONS, NECESSARY MEASURES FOR DUST CONTROL WILL BE EXERCISED.

UTILITY LINE TRENCH EXCAVATION NOTES

1. LIMIT ADVANCED CLEARING AND GRUBBING OPERATIONS TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY.
2. WORK CREWS AND EQUIPMENT FOR TRENCHING, PLACEMENT OF PIPE, PLUG CONSTRUCTION AND BACKFILLING WILL BE SELF CONTAINED AND SEPARATE FROM CLEARING AND GRUBBING AND SITE RESTORATION AND STABILIZATION OPERATIONS.
3. ALL SOIL EXCAVATED FROM THE TRENCH WILL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.
4. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY.
5. WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING BEFORE PIPE PLACEMENT AND / OR BACKFILLING BEGINS. WATER REMOVED FROM THE TRENCH SHALL BE PUMPED THROUGH A FILTRATION DEVICE.
6. ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND IMMEDIATELY STABILIZED.

RESPONSIBILITY NOTES

1. WHENEVER SEDIMENTATION IS CAUSED BY STRIPPING VEGETATION, REGRADING OR OTHER DEVELOPMENT, IT SHALL BE THE RESPONSIBILITY OF THE PERSON, CORPORATION OR OTHER ENTITY CAUSING SUCH SEDIMENTATION TO REMOVE IT FROM ALL ADJOINING SURFACES, DRAINAGE SYSTEMS AND WATERCOURSES AND TO REPAIR ANY DAMAGE AT HIS EXPENSE AS QUICKLY AS POSSIBLE.
2. THE MAINTENANCE OF ALL DRAINAGE FACILITIES AND WATERCOURSES WITHIN ANY SUBDIVISION OR LAND DEVELOPMENT IS THE RESPONSIBILITY OF THE DEVELOPER UNTIL THEY ARE ACCEPTED BY THE TOWNSHIP OR SOME OTHER OFFICIAL AGENCY, AFTER WHICH THEY BECOME THE RESPONSIBILITY OF THE ACCEPTING AGENCY.
3. IT IS THE RESPONSIBILITY OF ANY PERSON, CORPORATION OR OTHER ENTITY DOING ANY ACT ON OR ACROSS A COMMUNAL STREAM, WATERCOURSE OR SWALE OR UPON THE FLOODPLAIN OR RIGHT–OF–WAY THEREOF TO MAINTAIN, AS NEARLY AS POSSIBLE IN ITS PRESENT STATE, THE STREAM, WATERCOURSE, SWALE, FLOODPLAIN OR RIGHT–OF–WAY DURING THE PENDENCY OF THE ACTIVITY AND TO RETURN IT TO ITS ORIGINAL OR EQUAL CONDITION AFTER SUCH ACTIVITY IS COMPLETED.
4. THE MAINTENANCE OF DRAINAGE FACILITIES OR WATERCOURSES ORIGINATING AND COMPLETELY ON PRIVATE PROPERTY IS THE RESPONSIBILITY OF THE OWNER TO THEIR POINT OF OPEN DISCHARGE AT THE PROPERTY LINE OR AT A COMMUNAL WATERCOURSE WITHIN THE PROPERTY.
5. NO PERSON, CORPORATION OR OTHER ENTITY SHALL BLOCK, IMPEDE THE FLOW OF, ALTER, CONSTRUCT ANY STRUCTURE ON OR DEPOSIT ANY MATERIAL OR THING ON OR COMMIT ANY ACT WHICH WILL AFFECT NORMAL OR FLOOD FLOW IN ANY COMMUNAL STREAM OR WATERCOURSE WITHOUT HAVING OBTAINED PRIOR APPROVAL FROM THE TOWNSHIP OR THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, WHICHEVER IS APPLICABLE.

SEEDING REQUIREMENTS:

AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON–VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE, THE OPERATOR SHALL STABILIZE ANY AREAS DISTURBED BY THE ACTIVITIES. DURING NON–GERMANATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY VEGETATIVE STABILIZATION SPECIFICATIONS. DISTURBED AREAS WHICH ARE AT FINISHED GRADE OR WILL NOT BE REDISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.

(TEMPORARY)	SPECIES:	ANNUAL RYEGRASS
	% PURE LIVE SEED:	10 %
	APPLICATION RATE:	40 LB./ACRE
	TYPE:	10-10-10 (X-X-X)
	FERTILIZER APPL. RATE:	500 LB./ACRE
	LIMING RATE:	1 T./ACRE
	MULCH TYPE:	STRAW OR HAY
	MULCHING RATE:	3 T./ACRE
(PERMANENT)	TOPSOIL PLACEMENT DEPTH:	VARIES
	SPECIES:	BIRDSFOOT TREFOIL PLUS TALL FESCUE
	% PURE LIVE SEED:	60 %
	APPLICATION RATE:	40 LB./ACRE
	FERTILIZER TYPE:	10-20-20 (X-X-X)
	FERTILIZER APPL. RATE:	1000 LB./ACRE
	LIMING RATE:	6 T./ACRE
	MULCH TYPE:	STRAW OR HAY
	MULCHING RATE:	3 T./ACRE
	ANCHOR MATERIAL:	TACKIFIER
	ANCHORING METHOD:	SPRAY
	RATE OF ANCHOR MATERIAL APPL.:	3 LB./ACRE
	SEEDING SEASON DATES:	MAR 1 TO MAY 15; AUG 1 TO OCT 15

- SEEDING AND MULCHING OPERATIONS ARE TO BE DONE IN CONFORMANCE WITH PADOT PUBLICATION FORM 408, SECTION 800.
- SITE PREPARATION INCLUDES WORKING THE LIME AND FERTILIZER INTO THE TOP 24" OR MORE, IF POSSIBLE.
- GRASS HAY AND CEREAL STRAW ARE PREFERRED MULCHES AND SHOULD BE APPLIED TO PRODUCE A LOOSE LAYER 0.75 TO 1 INCHES DEEP. AS A GUIDELINE, A THICKNESS OF 5 TO 6 OVERLAPPING STRAW OR HAY STEMS IS ACCEPTABLE.
- UNTIL THE SITE IS PERMANENTLY STABILIZED WITH VEGETATION, INTERIM STABILIZATION MEASURES AND TEMPORARY EROSION AND SEDIMENTATION CONTROL FACILITIES MUST BE MAINTAINED.
- DIVERSIONS, CHANNELS, SEDIMENTATION BASINS, SEDIMENT TRAPS, AND STOCKPILES MUST BE SEEDED AND MULCHED IMMEDIATELY.

TEMPORARY STABILIZATION AND PERMANENT STABILIZATION

1. HAY OR STRAW MULCH MUST BE APPLIED AT 3.0 TONS PER ACRE.
2. MULCH WITH MULCH CONTROL NETTING OR EROSION CONTROL BLANKETS MUST BE INSTALLED ON ALL SLOPES 3:1 OR STEEPER.
3. STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN.
4. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMP'S MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL BMP'S AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGARDING, RESEEDING, REMULCHING, AND RENETTING, MUST BE DONE IMMEDIATELY. IF EROSION AND SEDIMENT CONTROL BMP'S FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMP'S, OR MODIFICATIONS TO THOSE INSTALLED WILL BE REQUIRED. E&SPCPM P. 168
5. SEDIMENT REMOVED FROM BMP'S SHALL BE DISPOSED OF IN LANDSCAPE AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES.
6. THE OPERATOR SHALL REMOVE FROM THIS SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THIS SITE.
7. THE LIMITS OF DISTURBANCE OF THE SITE AND ANY OFF–SITE AREAS WITHIN THE LIMITS OF DISTURBANCE THAT ARE THE RESPONSIBILITY OF THE DEVELOPER TO INSTALL. OFF–SITE FACILITIES SUCH AS: UTILITIES AND ROADWAYS.

GENERAL E&S NOTES

1. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1., AND 287.1 ET SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.
2. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL OF ANY EXCESS MATERIAL AND MAKE SURE THE SITE(S) RECEIVING THE EXCESS HAS AN APPROVED AND FULLY IMPLEMENTED EROSION AND SEDIMENT CONTROL PLAN THAT MEETS THE CONDITIONS OF CHAPTER 102 AND/OR OTHER STATE OR FEDERAL REGULATIONS.
3. CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON–WATER SOLUBLE, NON–DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM USED ASPHALT DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE–USE.).
4. ANY PLACEMENT OF CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE MUST USE FORM FP–001 TO CERTIFY THE ORIGIN OF THE FILL MATERIAL AND THE RESULTS OF THE ANALYTICAL TESTING TO QUALIFY THE MATERIAL AS CLEAN FILL. FORM FP–001 MUST BE RETAINED BY THE OWNER OF THE PROPERTY RECEIVING THE FILL.
5. ENVIRONMENTAL DUE DILIGENCE MUST BE PERFORMED TO DETERMINE IF THE FILL MATERIALS ASSOCIATED WITH THE PROJECT QUALIFY AS CLEAN FILL. ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS: INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF A REGULATED SUBSTANCE. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF THE DEPARTMENT S POLICY MANAGEMENT OF CLEAN FILL.
6. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES.
7. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION AND NOTIFY THE YORK COUNTY CONSERVATION DISTRICT.
8. ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG OR EQUIVALENT SEDIMENT REMOVAL FACILITY, OVER UNDISTURBED VEGETATED AREAS.
9. FAILURE TO CORRECTLY INSTALL E&S BMPS, FAILURE TO PREVENT SEDIMENT–LADEN RUNOFF FROM LEAVING THE EARTH DISTURBANCE ACTIVITY, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPS MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO $10,000 PER DAY IN CIVIL PENALTIES, UP TO $10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO $25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.
10. TOPSOIL MAY NOT BE REMOVED FROM THE SITE WITHOUT PRIOR APPROVAL OF LOWER SALFORD TOWNSHIP.

RECYCLING/DISPOSAL OF WASTES NOTES

DESCRIPTION

BUILDING MATERIALS AND OTHER CONSTRUCTION SITE WASTES MUST BE PROPERLY MANAGED AND DISPOSED OF TO REDUCE THE RISK OF POLLUTION FROM MATERIALS SUCH AS SURPLUS OR REFUSE BUILDING MATERIALS OR HAZARDOUS WASTES. PRACTICES SUCH AS TRASH DISPOSAL, RECYCLING, PROPER MATERIAL HANDLING, AND SPILL PREVENTION AND CLEANUP MEASURES CAN REDUCE THE POTENTIAL FOR STORMWATER RUNOFF TO MOBILIZE CONSTRUCTION SITE WASTES AND CONTAMINATE SURFACE OR GROUND WATER.

APPLICABILITY

THE PROPER MANAGEMENT AND DISPOSAL OF WASTES SHOULD BE PRACTICED AT EVERY CONSTRUCTION SITE TO REDUCE STORMWATER RUNOFF. USE WASTE MANAGEMENT PRACTICES TO PROPERLY LOCATE REFUSE PILES, TO COVER MATERIALS THAT MIGHT BE DISPLACED BY RAINFALL OR STORMWATER RUNOFF, AND TO PREVENT SPILLS AND LEAKS FROM HAZARDOUS MATERIALS THAT WERE IMPROPERLY STORED.

SITING AND DESIGN CONSIDERATIONS

SOLID WASTES:

- DESIGNATE A WASTE COLLECTION AREA ON THE SITE THAT DOES NOT RECEIVE A SUBSTANTIAL AMOUNT OF RUNOFF FROM UPLAND AREAS AND DOES NOT DRAIN DIRECTLY TO A WATERBODY.
- ENSURE THAT CONTAINERS HAVE LIDS SO THEY CAN BE COVERED BEFORE PERIODS OF RAIN, AND KEEP CONTAINERS IN A COVERED AREA WHENEVER POSSIBLE.
- SCHEDULE WASTE COLLECTION TO PREVENT THE CONTAINERS FROM OVERFILLING.
- CLEAN UP SPILLS IMMEDIATELY. FOR HAZARDOUS MATERIALS, FOLLOW CLEANUP INSTRUCTIONS ON THE PACKAGE. USE AN ABSORBENT MATERIAL SUCH AS SAWDUST OR KITTY LITTER TO CONTAIN THE SPILL.
- DURING THE DEMOLITION PHASE OF CONSTRUCTION, PROVIDE EXTRA CONTAINERS AND SCHEDULE MORE FREQUENT PICKUPS.
- COLLECT, REMOVE, AND DISPOSE OF ALL CONSTRUCTION SITE WASTES AT AUTHORIZED DISPOSAL AREAS. CONTACT A LOCAL ENVIRONMENTAL AGENCY TO IDENTIFY THESE DISPOSAL SITES.

HAZARDOUS MATERIALS AND WASTES:

- CONSULT WITH LOCAL WASTE MANAGEMENT AUTHORITIES ABOUT THE REQUIREMENTS FOR DISPOSING OF HAZARDOUS MATERIALS.
- TO PREVENT LEAKS, EMPTY AND CLEAN HAZARDOUS WASTE CONTAINERS BEFORE DISPOSING OF THEM.
- NEVER REMOVE THE ORIGINAL PRODUCT LABEL FROM THE CONTAINER BECAUSE IT CONTAINS IMPORTANT SAFETY INFORMATION. FOLLOW THE MANUFACTURER'S RECOMMENDED METHOD OF DISPOSAL, WHICH SHOULD BE PRINTED ON THE LABEL.
- NEVER MIX EXCESS PRODUCTS WHEN DISPOSING OF THEM, UNLESS SPECIFICALLY RECOMMENDED BY THE MANUFACTURER.

TO ENSURE THE PROPER DISPOSAL OF CONTAMINATED SOILS THAT HAVE BEEN EXPOSED TO AND STILL CONTAIN HAZARDOUS SUBSTANCES, CONSULT WITH STATE OR LOCAL SOLID WASTE REGULATORY AGENCIES OR PRIVATE FIRMS. SOME LANDFILLS MIGHT ACCEPT CONTAMINATED SOILS, BUT THEY REQUIRE LABORATORY TESTS FIRST.

PAINT AND DIRT ARE OFTEN REMOVED FROM SURFACES BY SANDBLASTING. SANDBLASTING GRITS ARE THE BYPRODUCTS OF THIS PROCEDURE AND CONSIST OF THE SAND USED AND THE PAINT AND DIRT PARTICLES THAT ARE REMOVED FROM THE SURFACE. THESE MATERIALS ARE CONSIDERED HAZARDOUS IF THEY ARE REMOVED FROM OLDER STRUCTURES BECAUSE THEY ARE MORE LIKELY TO CONTAIN LEAD–, CADMIUM–, OR CHROME–BASED PAINTS. TO ENSURE PROPER DISPOSAL OF SANDBLASTING GRITS, CONTRACT WITH A LICENSED WASTE MANAGEMENT OR TRANSPORT AND DISPOSAL FIRM.

PESTICIDES AND FERTILIZERS:

- FOLLOW ALL FEDERAL, STATE, AND LOCAL REGULATIONS THAT APPLY TO THE USE, HANDLING, OR DISPOSAL OF PESTICIDES AND FERTILIZERS.
- DO NOT HANDLE THE MATERIALS ANY MORE THAN NECESSARY.
- STORE PESTICIDES AND FERTILIZERS IN A DRY, COVERED AREA.
- CONSTRUCT BERMS OR DIKES TO CONTAIN STORED PESTICIDES AND FERTILIZERS IN CASE OF SPILLAGE.
- FOLLOW THE RECOMMENDED APPLICATION RATES AND METHODS.
- HAVE EQUIPMENT AND ABSORBENT MATERIALS AVAILABLE IN STORAGE AND APPLICATION AREAS TO CONTAIN AND CLEAN UP ANY SPILLS THAT OCCUR.
-

PETROLEUM PRODUCTS:

- STORE NEW AND USED PETROLEUM PRODUCTS FOR VEHICLES IN COVERED AREAS WITH BERMS OR DIKES IN PLACE TO CONTAIN ANY SPILLS.
- IMMEDIATELY CONTAIN AND CLEAN UP ANY SPILLS WITH ABSORBENT MATERIALS.
- HAVE EQUIPMENT AVAILABLE IN FUEL STORAGE AREAS AND IN VEHICLES TO CONTAIN AND CLEAN UP ANY SPILLS THAT OCCUR.

DETERGENTS:

PHOSPHOROUS– AND NITROGEN–CONTAINING DETERGENTS ARE USED IN WASH WATER FOR CLEANING VEHICLES. EXCESSES OF THESE NUTRIENTS CAN BE A MAJOR SOURCE OF WATER POLLUTION. USE DETERGENTS ONLY AS RECOMMENDED, AND LIMIT THEIR USE ON THE SITE. DO NOT DUMP WASH WATER CONTAINING DETERGENTS INTO THE STORM DRAIN SYSTEM; DIRECT IT TO A SANITARY SEWER OR CONTAIN IT SO THAT IT CAN BE TREATED AT A WASTEWATER TREATMENT PLANT.

LIMITATIONS

AN EFFECTIVE WASTE MANAGEMENT SYSTEM REQUIRES TRAINING AND SIGNAGE TO PROMOTE AWARENESS OF THE HAZARDS OF IMPROPER STORAGE, HANDLING, AND DISPOSAL OF WASTES. THE ONLY WAY TO BE SURE THAT WASTE MANAGEMENT PRACTICES ARE BEING FOLLOWED IS TO BE AWARE OF WORKER HABITS AND TO INSPECT STORAGE AREAS REGULARLY. EXTRA MANAGEMENT TIME MAY BE REQUIRED TO ENSURE THAT ALL WORKERS ARE FOLLOWING THE PROPER PROCEDURES.

MAINTENANCE CONSIDERATIONS

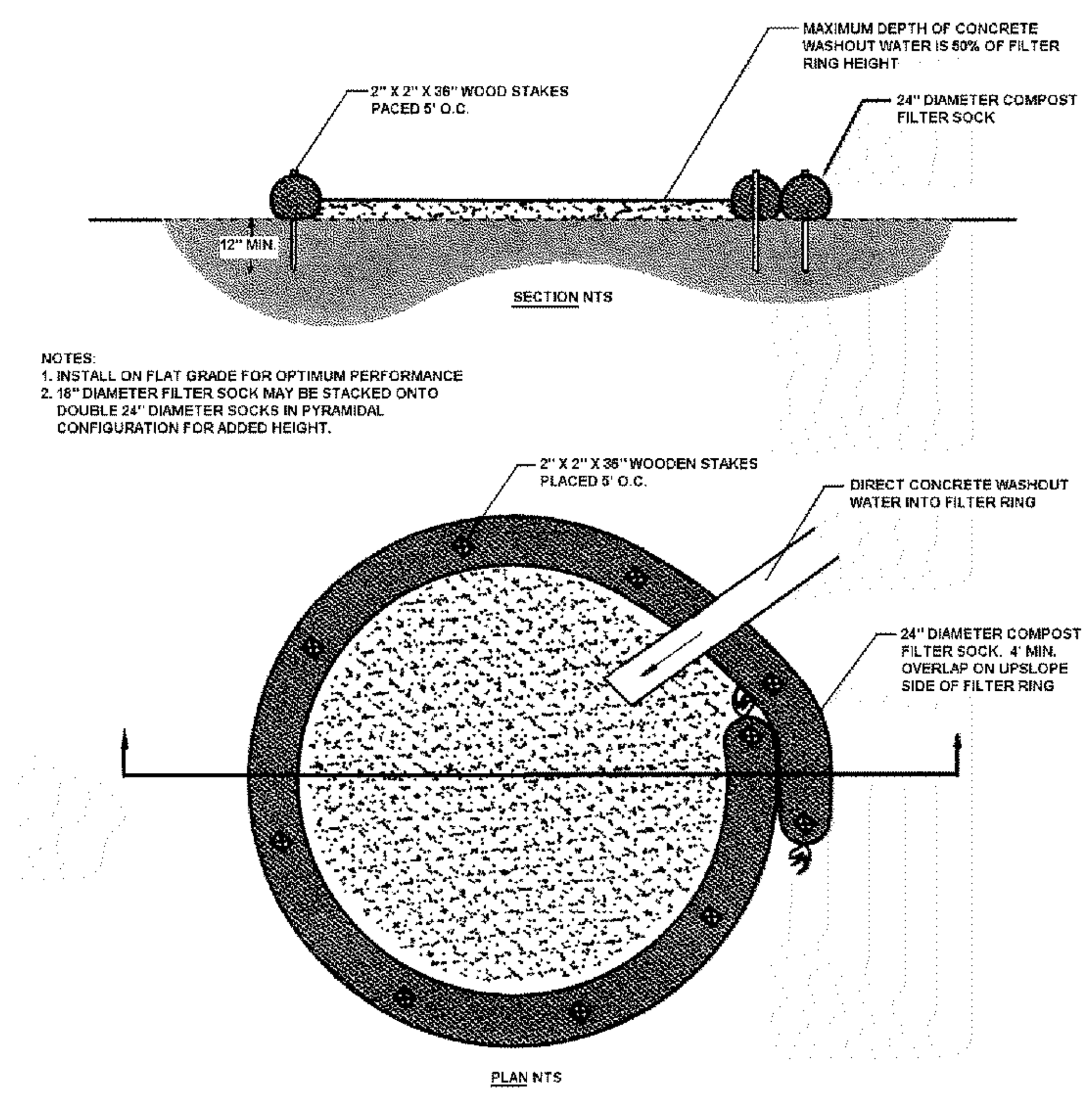
INSPECT STORAGE AND USE AREAS AND IDENTIFY CONTAINERS OR EQUIPMENT THAT COULD MALFUNCTION AND CAUSE LEAKS OR SPILLS. CHECK EQUIPMENT AND CONTAINERS FOR LEAKS, CORROSION, SUPPORT OR FOUNDATION FAILURE, OR OTHER SIGNS OF DETERIORATION, AND TEST THEM FOR SOUNDNESS. IMMEDIATELY REPAIR OR REPLACE ANY THAT ARE FOUND TO BE DEFECTIVE.

EFFECTIVENESS

WASTE MANAGEMENT PRACTICES ARE EFFECTIVE ONLY WHEN THEY ARE REGULARLY PRACTICED AT A CONSTRUCTION SITE. IN STORAGE AND USE AREAS, POST THE GUIDELINES FOR PROPER HANDLING, STORAGE, AND DISPOSAL OF CONSTRUCTION SITE WASTES; TRAIN WORKERS IN THESE PRACTICES TO ENSURE THAT EVERYONE IS KNOWLEDGEABLE ENOUGH TO PARTICIPATE.

COST CONSIDERATIONS

THE COSTS ASSOCIATED WITH CONSTRUCTION SITE WASTE MANAGEMENT ARE MAINLY ATTRIBUTED TO PURCHASING AND POSTING SIGNS, INCREASED MANAGEMENT TIME FOR OVERSIGHT, ADDITIONAL LABOR REQUIRED FOR SPECIAL HANDLING OF WASTES, TRANSPORTATION COSTS FOR WASTE HAULING, AND FEES CHARGED BY DISPOSAL FACILITIES TO TAKE THE WASTES.



NOTES:

WASHOUT SHALL NOT BE PLACED WITHIN 50 FEET OF STORM DRAINS, OPEN DITCHES, OR SURFACE WATERS. LOCATION SHALL BE CLOSE TO CONCRETE POUR, AND IF POSSIBLE, ON SLOPES NOT EXCEEDING 2% GRADE.

A SUITABLE IMPERVIOUS GEOMEMBRANE SHALL BE PLACED AT THE LOCATION OF THE WASHOUT PRIOR TO INSTALLING THE SOCKS. COMPOST SOCKS SHOULD BE STAKED IN THE MANNER RECOMMENDED BY THE MANUFACTURER AROUND PERIMETER OF THE GEOMEMBRANE SO AS TO FORM A RING WITH THE ENDS OF THE SOCK LOCATED AT THE UPSLOPE CORNER (FIGURE 3.18). CARE SHOULD BE TAKEN TO ENSURE CONTINUOUS CONTACT OF THE SOCK WITH THE GEOMEMBRANE AT ALL LOCATIONS. WHERE NECESSARY, SOCKS MAY BE STACKED AND STAKED SO AS TO FORM A TRIANGULAR CROSS–SECTION.

TYPICAL COMPOST SOCK WASHOUT INSTALLATION

NOT TO SCALE

STREET SWEEPING AND VACUUMING

PUBLIC STREET SWEEPING WITH A VACUUM SWEEPER AT THE END OF EACH WORKDAY AND DURING DRY CONDITIONS (OR MORE FREQUENTLY AS NEEDED); MANUAL CLEANING OF TIRES PRIOR TO SITE EGRESS.

SWEEPERS MUST MEET ALL FEDERAL, STATE, AND LOCAL AIR QUALITY REGULATIONS.

INSPECT INGRESS/EGRESS ACCESS POINTS DAILY AND SWEEP TRACKED SEDIMENT AS NEEDED.

BE CAREFUL NOT TO SWEEP UP ANY UNKNOWN SUBSTANCE OR ANY OBJECT THAT MAY BE POTENTIALLY HAZARDOUS.

ADJUST BROOMS FREQUENTLY TO MAINTAIN PROPER CONTACT WITH THE GROUND AND MAXIMIZE EFFICIENCY OF SWEEPING OPERATIONS.

AFTER SWEEPING IS FINISHED, DISPOSE OF WASTE MATERIALS IN ACCORDANCE WITH ALL LAWS, RULES, AND APPLICABLE REGULATIONS.

TYPE OF EQUIPMENT USED SHALL BE DEPENDENT UPON TYPE AND SEVERITY OF DIRT, SEDIMENT, AND DEBRIS TO BE REMOVED FROM SURFACES.

REMOVAL
PLAN FOR PROPER DISPOSAL OF WASTES AT AN APPROVED DUMPSITE OR CONSIDER INCORPORATING SEDIMENT BACK INTO PROJECT SITE IF FREE OF DEBRIS AND TRASH.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF THE RESPONSIBLE LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

[redacted]

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Plan Pre[]ared b[] Adam C. Kaminski

REV.	DATE	DESCRIPTION	CHK'D:	BY:

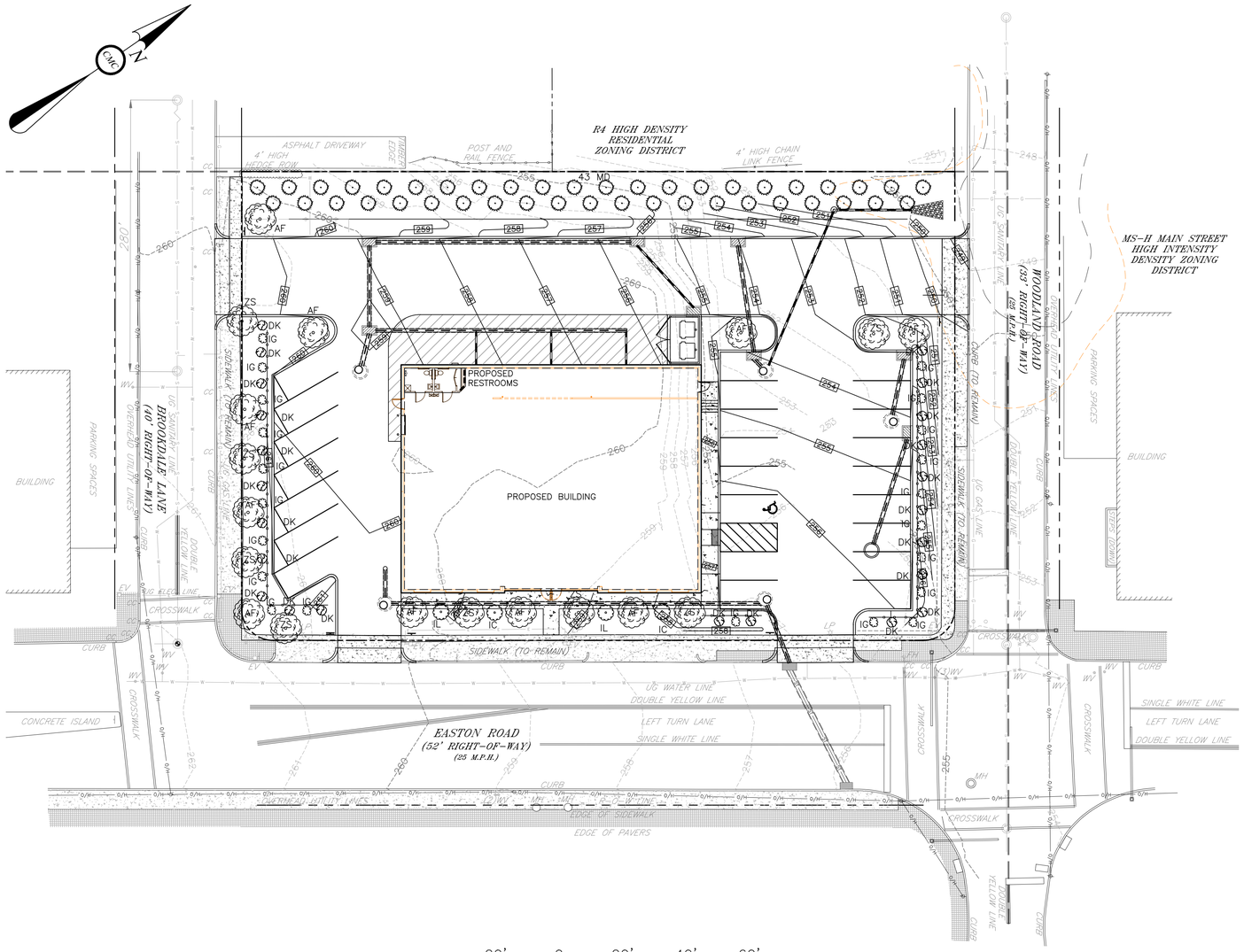
DRAWING NAME: EROSION CONTROL NOTES AND DETAILS

PROPOSED AUTOZONE LOCATION
1318 AND 1330 EASTON ROAD
ABINGTON, PA 19001

LOCATION: ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PA

DATE: 04/05/22	DRAWN BY: J.S.D.
SCALE: N/A	CHK'D BY: K.J.M.
PROJ. NUMBER: 1482–21–02–PA	
DRAWING NUMBER: EC–2	
SHEET NUMBER: 8 OF 10	

M:\Small Jobs\Wright Partners\AZ – Abington\CAD\Plan Set\8–Erosion and Sediment Control Notes ES–2.dwg



20' 0 20' 40' 60'

GRAPHIC SCALE: 1"=20'

LANDSCAPE NOTES:

1. ALL PLANT MATERIALS SHALL MEET THE STANDARDS OF THE AMERICAN STANDARD FOR NURSERY STOCK BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION (2004), OR MORE RECENT EDITION.
2. ALL PLANT MATERIALS SHALL BE GUARANTEED FOR A PERIOD OF 18 MONTHS FROM THE DAY OF FINAL APPROVAL OF THE LANDSCAPE INSTALLATION BY THE TOWNSHIP LANDSCAPE ARCHITECT. ANY PLANT MATERIAL 25% OR MORE OF WHICH IS DEAD SHALL BE CONSIDERED DEAD. A TREE SHALL BE CONSIDERED WHEN THE MAIN LEADER HAS DIED OR 25% OF THE CROWN IS DEAD. ANY DEAD PLANT MATERIAL SHALL BE REPLACED AND INSTALLED ACCORDING TO THE APPROVED PLANTING PRACTICES.
3. SHADE TREES WHEN ADJACENT TO PARKING STALLS AND PEDESTRIAN USE AREAS, SHALL BE LIMBED TO 6' ABOVE GRADE.
4. THIS PLAN IS FOR LANDSCAPING ONLY. ALL SITE IMPROVEMENTS INCLUDING, BUT NOT LIMITED TO, BUILDING LOCATIONS, CURBING, SIDEWALK, UTILITIES, AND THEIR ANCILLARY APPURTENANCES, ARE SHOWN FOR INFORMATION PURPOSES ONLY AND ARE SUBJECT TO MODIFICATION AND REVISION. CONTRACTOR SHALL REFER TO THE SITE PLAN, GRADING PLAN, AND UTILITY PLAN, AND THEIR RELATED DETAIL SHEETS, FOR ALL SITE IMPROVEMENTS OTHER THAN LANDSCAPING.
5. TREES SHALL NOT BE PLANTED WITHIN 3 FEET OF ANY PROPERTY LINE.
6. ALL SHRUBS SHALL BE PLACED IN CONTINUOUSLY MULCHED BEDS.
7. UNLESS OTHERWISE NOTED, ALL DISTURBED AREAS SHALL BE SEEDED.
8. PLANT SUBSTITUTIONS ARE REQUIRED TO BE SUBMITTED TO THE TOWNSHIP LANDSCAPE ARCHITECT IN WRITING FOR APPROVAL.
9. A MINIMUM OF 4" OF SCREENED TOP SOIL MUST BE PLACED IN ALL PLANTING AREAS.
10. ALL TREES TO BE REMOVED AND ARE VIABLE TO BE REPLANTED ARE TO BE MOVED TO OTHER AREAS OF THE PROPERTY TO BE COORDINATED WITH OWNER PRIOR TO CONSTRUCTION.
11. REFER TO THE POST CONSTRUCTION STORMWATER MANAGEMENT PLAN FOR LOCATION OF SOIL AMENDMENTS.

LOCATION MAP
SCALE: 1"=1000'

LANDSCAPING REQUIREMENTS

ZONING

	REQUIRED	PROPOSED
PARKING LOT LANDSCAPING		
PLANTING ISLAND LANDSCAPING	1 SHADE TREE LAWN GROUND COVER	1/ISLAND 1/LAWN
STREET TREES SPACING RATIO ALONG FRONTAGE (513 LF)	ONE (1)/40 LF	13 TREES
BUFFER REQUIREMENTS PROPERTY LINE BUFFER WIDTH	15 FT	15 FT

BUFFER SPECIFICATIONS (PER 100 LF OF PROPERTY LINE)

LOW INTENSITY	REQUIRED (PER 100 LF)	PROPOSED (PER 100 LF)
	1 CANOPY TREE	5 CANOPY TREE **
	2 UNDERSTORY TREES	2 UNDERSTORY TREES
	2 EVERGREEN TREES	2 EVERGREEN TREES

**(CANOPY TREE REQUIREMENT MET PER SPACING RATIO ALONG FRONTAGE AND INCLUDES GREEN AREA TREES)

HIGH INTENSITY (ALONG PROPERTY LINE ADJACENT TO R4 ZONING DISTRICT)	DOUBLE ROW EVERGREEN TREES 10 FT O.C. (STAGGERED)	DOUBLE ROW EVERGREEN TREES 10 FT O.C. (STAGGERED)

	REQUIRED	PROPOSED
SITE ELEMENT SCREENS DUMPSTER OR TRASH CONTAINMENT AREA	MED. INTENSITY (6 FT HIGH FENCE)	MED. INTENSITY (6 FT HIGH FENCE)
GROUND COVER (APPLIES TO "GREEN AREAS") ALL SEASON GROUND COVER	GRASS/ MANICURED LAWN AREA W/MULCH	GRASS/ MANICURED LAWN AREA W/MULCH

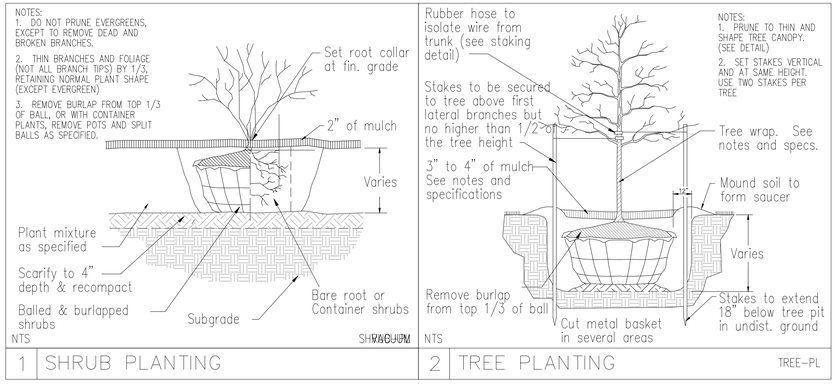
SUBDIVISION AND LAND DEVELOPMENT	REQUIRED	PROPOSED
GENERAL LANDSCAPING BUSINESS / COMMERCIAL USE: PER 1,000 SF OF GREEN AREA	TWO (2) DECIDUOUS OR EVERGREEN TREE	17 DECIDUOUS TREES (GREEN AREA 8,248 SF)

LEGEND:

- CANOPY/SHADE/STREET TREE
- UNDERSTORY TREE
- EVERGREEN TREE
- SHRUB (BUILDING FOUNDATION)
- SHRUB (ALL-WEATHER FENCE)

LANDSCAPE SCHEDULE

QTY.	SYM.	SCIENTIFIC NAME (COMMON NAME)	HEIGHT	SPREAD	CALLIPER	COMMENT
SHADE / STREET TREES						
10	AF	ACER FREEMAN "ARMSTRONG" (ARMSTRONG MAPLE)	12-14'	2 1/2" CAL AT 1' ABOVE BALL	3"	UNIFORM SHAPE/SIZE
8	ZS	ZELKOVA SERRAID (JAPENESE ZELKOVA)	12-14'	2 1/2" CAL AT 1' ABOVE BALL	3"	UNIFORM SHAPE/SIZE
SHRUBS						
43	MD	MICROBIOTA DIECUSSATA (RUSSIAN ARBOUITHE)	8' MIN			UNIFROM SHAPE/SIZE
22	IG	ILEX GCABRA "COMPACTA" (COMPACT INKBERRY)	18" MIN			UNIFORM SHAPE/SIZE
23	DK	DEUTZA X KALMIFLORA (KALMA FLOWERED DEUTZIA)	18" MIN			UNIFORM SHAPE/SIZE
2	IC	ILEX CRENATA "SKY PENCIL" (SKY PENCIL HOLLY)	30" MIN			UNIFROM SHAPE/SIZE
2	IL	ILEX CRENATA "SOFT TOUCH" (SOFT TOUCH COMPACT HOLLY)	30" MIN			UNIFROM SHAPE/SIZE



1 SHRUB PLANTING

2 TREE PLANTING

UTILITY NOTE:

PA ONE CALL SERIAL #20212700875
TICKET IS PRELIMINARY DESIGN TICKET

(A NOTIFICATION OF EXCAVATION OR DEMOLITION WORK GIVING NOT LESS THAN 10 NOR MORE THAN 90 BUSINESS DAYS NOTICE).

PA ONE CALL MUST BE NOTIFIED OF STATUS CHANGE FOR EXCAVATION AND/OR DEMOLITION.

THE FOLLOWING UTILITIES WERE CONTACTED PER PA ACT 287, AS AMENDED BY ACT 187 OF 1996:

ABINGTON TOWNSHIP
AQUA PA
COMCAST CABLE WILLOW GROVE
COMCAST CABLE
PECO ENERGY
VERIZON PA

ONE CALL SYSTEM 1-800-242-1776 PENNSYLVANIA

811 Know what's below. Call before you dig.

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REV.	DATE	DESCRIPTION	CHK'D:	BY:

DRAWING NAME: LANDSCAPING PLAN

LOCATION: PROPOSED AUTOZONE STORE
1318 AND 1330 EASTON ROAD
ABINGTON, PA 19001
ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PA

DATE: 04/05/22	DRAWN BY: J.S.D.
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SHEET NUMBER: 9 OF 10	

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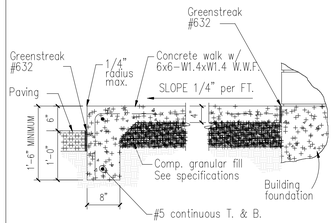
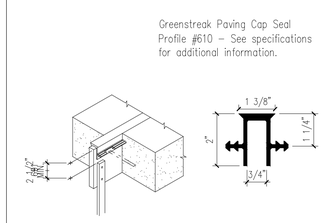


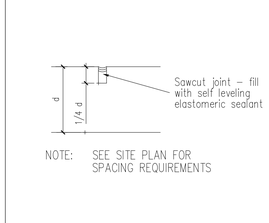
3/4" = 1'-0"

22 TYPICAL WALK SECTION



NO SCALE

23 TYPICAL EXPANSION JOINT



NOTE: SEE SITE PLAN FOR SPACING REQUIREMENTS

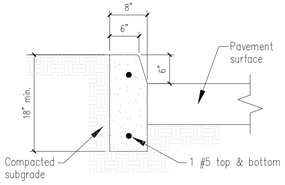
NO SCALE

24 TYPICAL CONTROL JOINT

Notes:

1. Install expansion joints in the curb at a maximum spacing of 20' o.c.
2. Landscaping materials, grass, sod, mulch, etc. shall be flush to 1" below top of curb/paving/drainage openings.

*** NOTE THIS DETAIL ONLY TO BE USED AS NOTED ON SITE PLAN ***

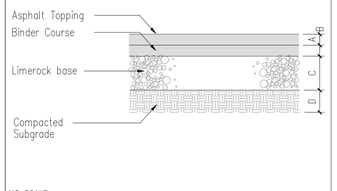


NO SCALE

CONCRETE VERTICAL CURB

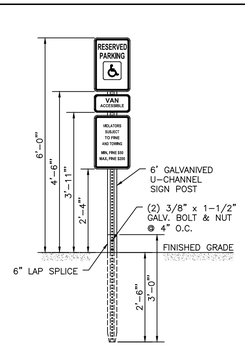
DIMENSION & TYPE

Paving Area	A	B	C	D
Drive Aisle	2"	2"	6"	6"
Parking	2"	2"	6"	6"



NO SCALE

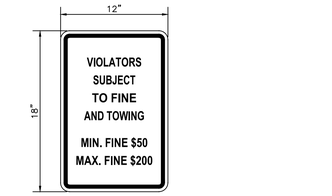
ASPHALT PAVING SECTION



H.C. SIGN PLACEMENT DETAIL
N.T.S.

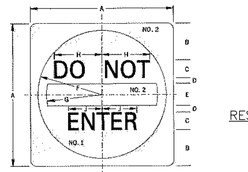
COLOR
LEGEND AND BORDER — GREEN (NON-REFLECTORIZED)
BACKGROUND — WHITE (NON-REFLECTORIZED)
SYMBOL — WHITE (NON-REFLECTORIZED)
BACKGROUND — BLUE (NON-REFLECTORIZED)

RESERVED PARKING SIGN R7-8
N.T.S.



COLOR
LEGEND AND BORDER — RED (NON-REFLECTORIZED)
BACKGROUND — WHITE (NON-REFLECTORIZED)

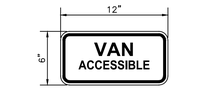
RESERVED PARKING PENALTIES SIGN R7-8B
N.T.S.



DIMENSIONS - IN								
SIGN SIZE A x A	B	C	D	E	F	G	H	J	BLANK STD.
30" x 30"	6.6	4D	1.9	6	14.6	12.4	9.9	7.9	93-30

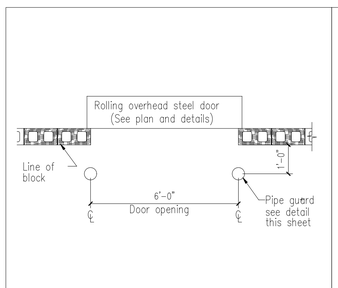
COLOR
NO. 1:
LEGEND — WHITE (REFLECTORIZED)
BACKGROUND — RED (REFLECTORIZED)
NO. 2:
BACKGROUND — WHITE (REFLECTORIZED)

DO NOT ENTER SIGN R5-1
N.T.S.



COLOR
LEGEND — GREEN (REFLECTORIZED)
BACKGROUND — WHITE (REFLECTORIZED)

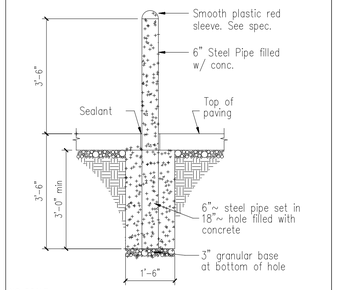
VAN ACCESSIBLE SIGN R7-8A
N.T.S.



CENTER PIPE GUARDS ON EDGE OF OPENING

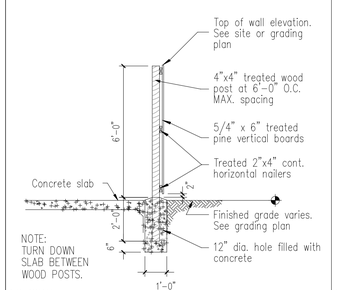
NO SCALE

15 PIPE GUARD @ SERVICE DOOR



NO SCALE

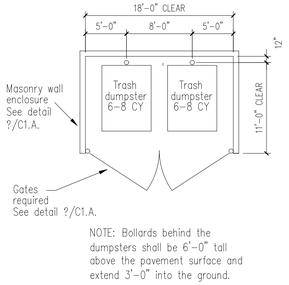
16 TYPICAL PIPE GUARD SECTION



NOTE: TURN DOWN SLAB BETWEEN WOOD POSTS.

NO SCALE

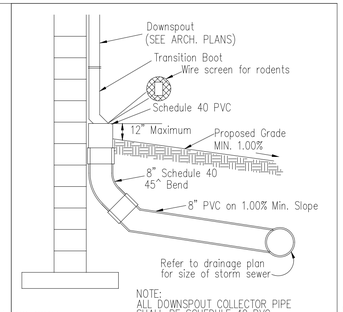
9 DUMPSTER SECTION WOOD



NOTE: Bollards behind the dumpsters shall be 6'-0" tall above the pavement surface and extend 3'-0" into the ground.

NO SCALE SEC-C17M

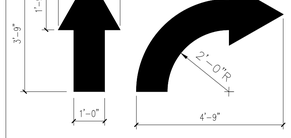
DUMPSTER LAYOUT



NOTE: ALL DOWNSPOUT COLLECTOR PIPE SHALL BE SCHEDULE 40 PVC.

NO SCALE

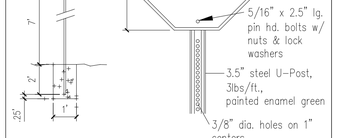
21 DOWNSPOUT DETAIL



Note: All traffic flow arrows to be solid white reflective traffic paint as per dimensions below.

NO SCALE

18 TYPICAL PAVEMENT MARKINGS



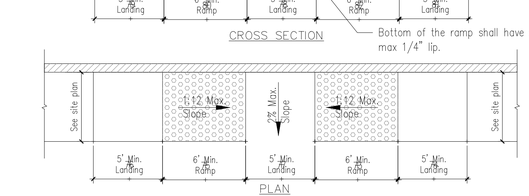
Note: All regulatory and warning signs shall be high intensity reflective sheeting.

NO SCALE

20 STOP SIGN DETAIL

NOTE:

Surface texture of ramp shall consist of raised truncated domes with a diameter of nominal 0.9 in (23mm), a height of nominal 0.2 in (5mm) and a center to center spacing of nominal 2.35 in (60 mm) and shall contrast visually with adjoining surface per Texas Accessibility Standards 4.29.2.

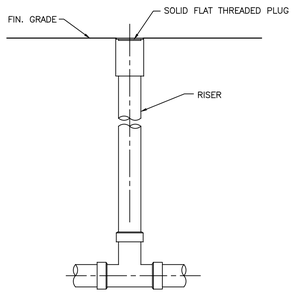


CROSS SECTION

Bottom of the ramp shall have a max 1/4" lip.

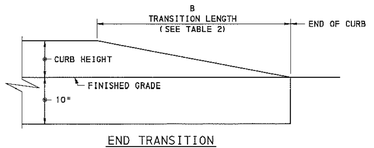
PLAN

2 HANDICAP PARKING RAMP



NOTES:
1. ALL RISER PIPES & FITTINGS TO BE SCH. 40 PVC (DIAMETER TO MATCH PIPE)
2. SEE PLANS FOR PIPE SIZES

CLEANOUT DETAIL
N.T.S.

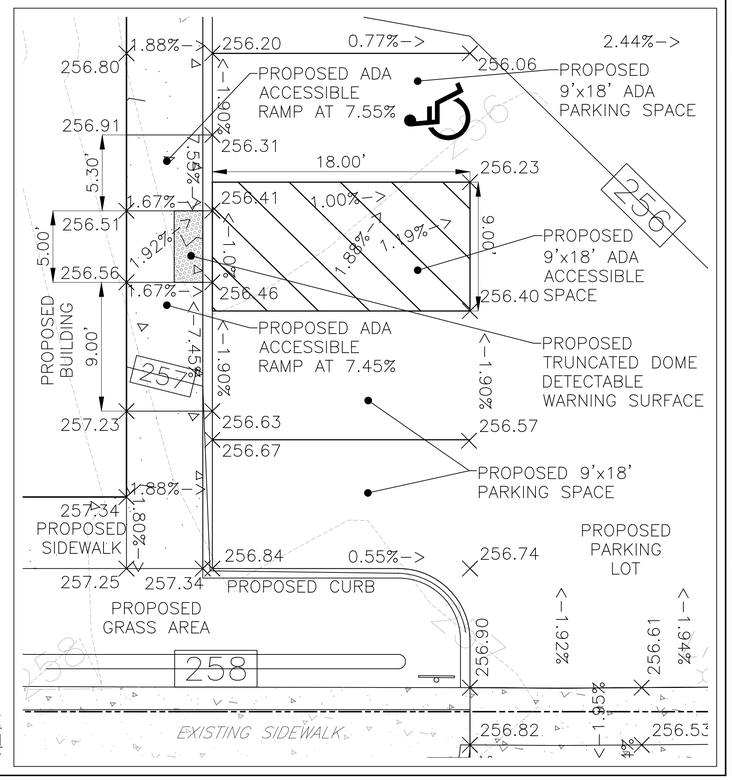


END TRANSITION

PLAIN CEMENT CONCRETE CURB - TRANSITIONS

TABLE 2	
CURB HEIGHT	B
8" CURB TO 0" CURB	7'-0"
6" CURB TO 0" CURB	5'-0"
4" CURB TO 0" CURB	3'-6"

NOTES:
1. CURB WIDTH SHALL BE 8 INCHES.
2. CURB HEIGHT ABOVE GRADE SHALL BE 6 INCHES.
3. TRANSITION CURBS SHALL BE INSTALLED AT ALL ACCESS DRIVES.



ADA RAMP AND PARKING SPACE ENLARGED GRADING PLAN
SCALE: 1"=5'

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REV.	DATE	DESCRIPTION	CHK'D: BY:

DRAWING NAME: DETAIL PLAN

PROPOSED AUTOZONE LOCATION
1318 AND 1330 EASTON ROAD
ABINGTON, PA 19001

LOCATION: ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PA

DATE: 04/05/22	DRAWN BY: A.C.K.
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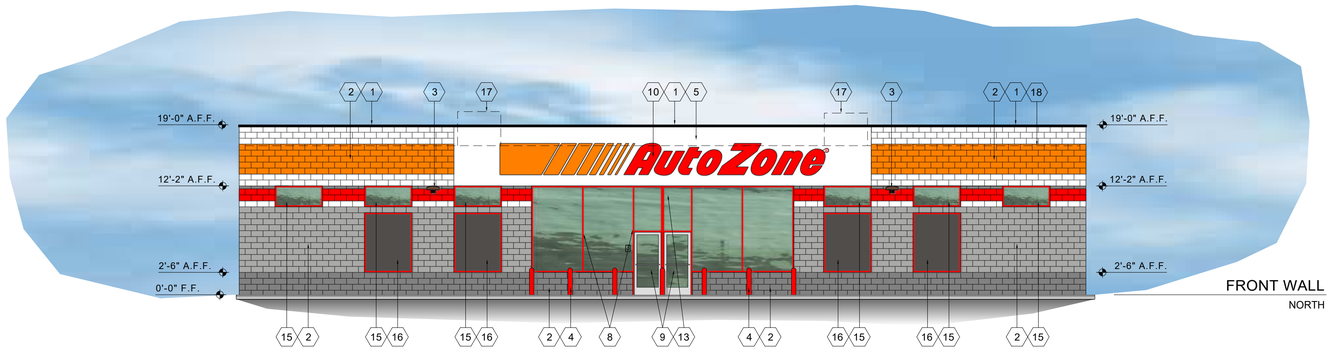
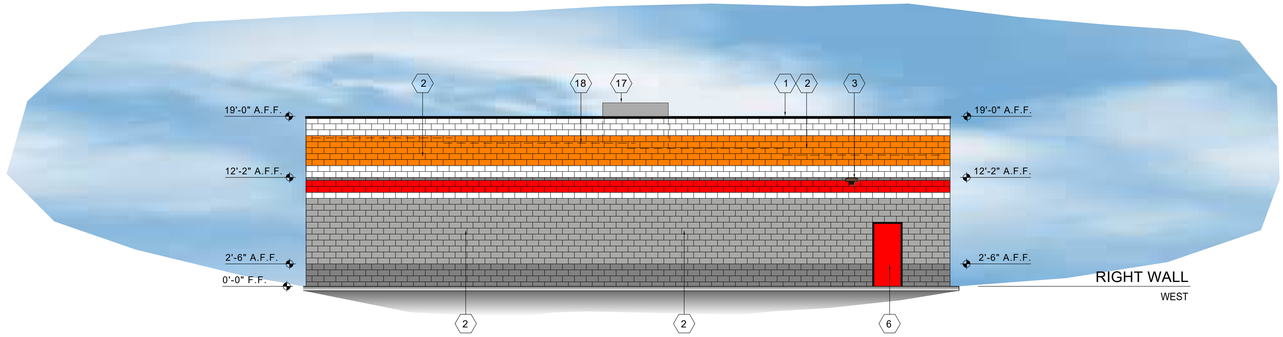
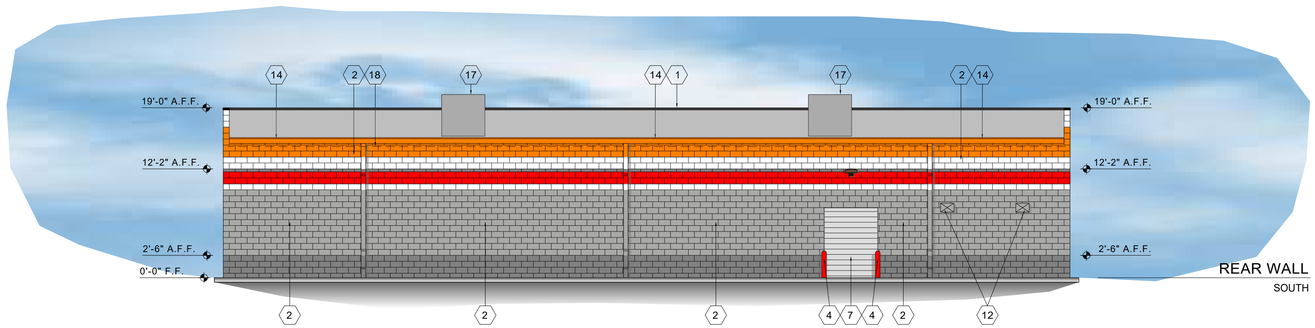
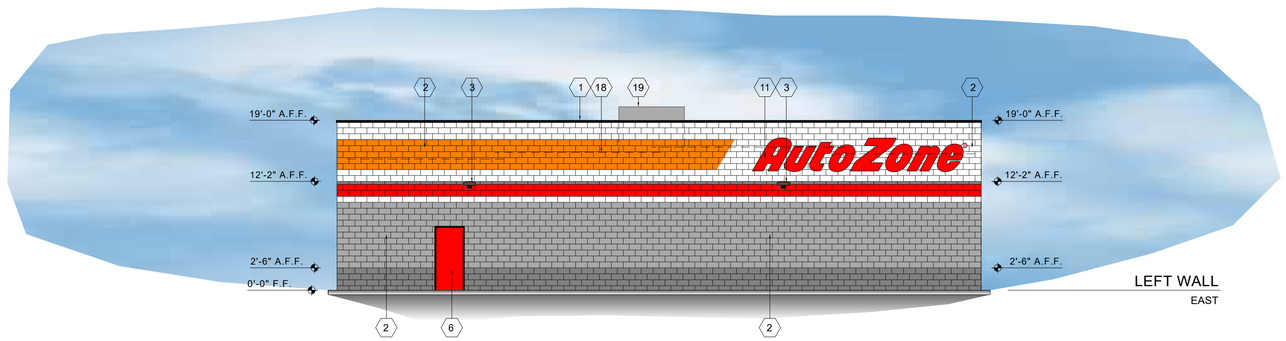








1. TWO PIECE COMPRESSION TRIM
2. SMOOTH FACE CONCRETE MASONRY UNITS
3. WALL MOUNTED LIGHT FIXTURE=COLOR: BRONZE
4. PIPE GUARD WITH RED SLEEVE
5. MFG. EXTERIOR INSULATED FINISH=PAINT WHITE
6. PAINT MAN DOOR RED & METAL FRAMES BLACK
7. DO NOT PAINT OVEHEAD DOOR-PAINT ANGLES BLACK
8. ALUMINUM STOREFRONT-RED KYNAR FINISH
9. GLASS AND ALUMINUM DOORS-CLEAR ANODIZED FINISH
10. FRONT WALL SIGN: 42" CHANNEL LTRS-LSTRP
11. LEFT WALL SIGN: 44" CHANNEL LTRS-NSTRP
12. TOILET WALL VENTS-PAINT TO MATCH WALL BEHIND
13. STORE ADDRESS-6" WHITE REFLECTIVE NUMBERS
14. PAINT GUTTER AND DOWNSPOUTS TO MATCH WALL BEHIND
15. CLERESTORY WINDOWS-EVERGREEN GLASS
16. FAUX WINDOWS-OPAQUE BLACK FLASS
17. HVAC ROOF TOP UNITS
18. BOND BEAM AT ROOF LINE

REVISIONS

1	REV1	4	REV4		
2	REV2	5	REV5		
3	REV3	6	REV6		

AUTOZONE PROROTYPE -
NOT PROPOSED

COLOR EXTERIOR ELEVATIONS & NOTES

Architect: Lew Ellis
123 South Front Street
Memphis, Tennessee 38103
TEL: 901-495-8600 FAX: (901) 495-8969

For Bidding & Contractor Information Contact:
McGraw - Hill Construction Tel. 615-884-1017
www.construction.com

01/07/22

65W2-L

CE1

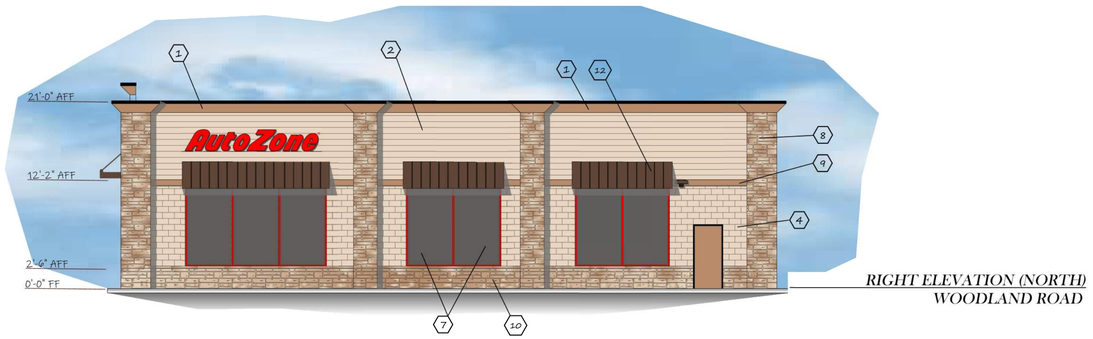
PRECEDENT IMAGES IN ABINGTON TOWNSHIP

WAWA
ABINGTON, PA

DUNKIN'
ABINGTON, PA

MEDIPLEX
ABINGTON, PA

FRONT ELEVATION (EAST)
EASTON ROAD



RIGHT ELEVATION (NORTH)
WOODLAND ROAD

REAR ELEVATION (WEST)

LEFT ELEVATION (SOUTH)
BROOKDALE AVENUE

1. DECORATIVE CORNICE W/ STUCCO FINISH COLOR: SW6088-NUTHATCH
2. HARDIE PLANK SIDING COLOR: SW6086 SAND DUNE
3. 11 STUCCO FINISH OVER STOREFRONT - COLOR: SW6086-SAND DUNE
4. SPLIT FACE CMU - INTEGRAL COLOR-MEDIUM BEIGE
5. CLERESTORY WINDOW - EVERGREEN GLASS
6. ALUMINUM STOREFRONT - RED KYNAR FINISH
7. FAUX WINDOW - OPAQUE BLACK GLASS
8. 8" DP. PILASTER - THIN STONE VENEER FULL HEIGHT
9. 8" STUCCO ACCENT BAND COLOR: SW6088 NUTHATCH
10. STONE VENEER W/ CAP-ENVIRONMENTAL STONEWORK COLOR: TAUPE MOUNTAIN LEDGESTONE
11. METAL TRELLIS CANOPY-COLOR: BRONZE
12. STANDING SEAM METAL AWNING-COLOR: DARK BRONZE

AutoZone

PROPOSED ELEVATIONS V1.2
AUTOZONE STORE #5707
ABINGTON TWP, PA
03/22/22

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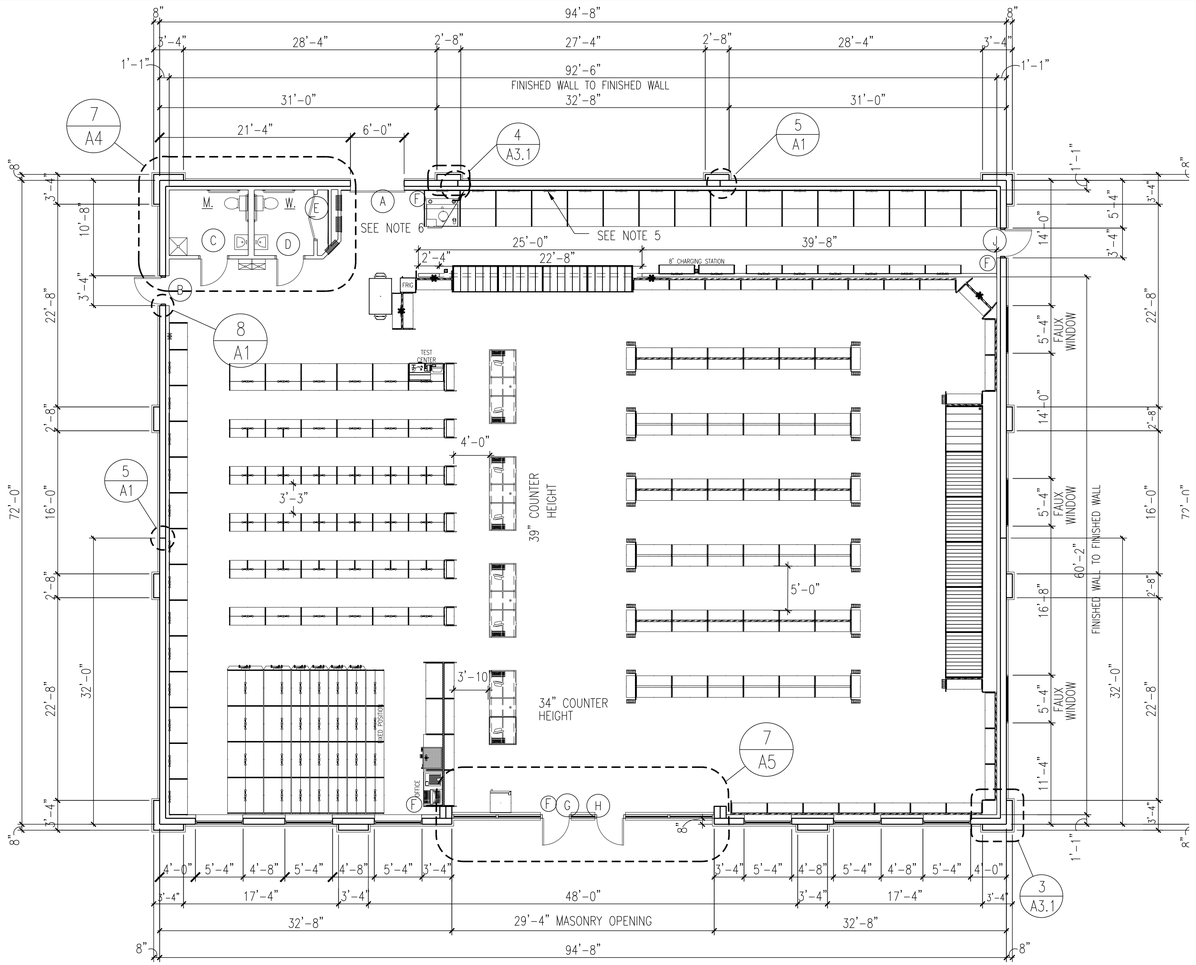


NOTE: (F) = NEW DRY CHEMICAL FIRE EXTINGUISHER. GENERAL CONTRACTOR TO INSTALL ONE KIDDE 10 lb #46620420 AT BATTERY CHARGING AND KIDDE 5 lb #FC-340M-VB AT ALL OTHER LOCATIONS. INSTALL EITHER ON WALL SURFACE, FIXTURE UPRIGHT OR ALUMINUM MULLION. MOUNTING HEIGHT = 3'-6" ABOVE FINISHED FLOOR TO TOP OF EXTINGUISHER.

0/0" = 1'-0"

1 FLOOR PLAN

1. REFER TO STRUCTURAL DRAWINGS FOR ALL DETAILS AND REQUIREMENTS REGARDING FOUNDATIONS, WALL REINFORCING, BOND BEAMS, LINTELS, AND ROOF FRAMING.
2. REFER TO CIVIL DRAWINGS FOR LOCATIONS AND DETAILS OF SIDEWALKS, PIPE GUARDS, ETC., AS WELL AS FINISH FLOOR ELEVATION AND EXTERIOR FINISHED GRADES AROUND THE BUILDING.
3. INSTALL 6" WIDE, 20 GAUGE GALVANIZED SHEET METAL STRIP BETWEEN THE BACK OF THE GYPSUM BOARD AND THE FACE OF THE METAL STUD AROUND THE ENTIRE PERIMETER OF THE BUILDING, AS WELL AS BOTH SIDES OF THE CURTAIN WALL. TOP OF STRIP TO BE 93" ABOVE FINISHED FLOOR. REFER TO SHEET A-4 FOR DETAILS OF CURTAIN WALL.
4. SEE SHEET M-2 FOR LOCATION OF NON FREEZE YARD HYDRANT AND INSTALLATION REQUIREMENTS.
5. INSTALL 1/2" X 4'-0" X 8'-0" AC PLYWOOD HORIZONTALLY WITH THE LONG EDGE ON THE FLOOR AND THE END JOINT CENTERING ON A STUD. APPLY PLYWOOD TO THE FACE OF GYPSUM BOARD WITH SCREWS TO FACILITATE FUTURE REPLACEMENT. SEE INTERIOR ELEVATIONS SEE 3/A4 DETAIL.
6. SEE SPECIFICATIONS FOR INFORMATION ON ITEMS NOT COMPLETELY DELINEATED ON THE DRAWINGS.

1/8" = 1'-0" AFN01

2 FLOOR PLAN NOTES

LOCATION	FLOOR		BASE		WALLS		CLG.		REM.
	SEALED CONCRETE	VINYL TILE	VINYL	QUARRY TILE	GYPSUM BOARD	FIBER REINFORCED PANELS	METAL DECK	GYPSUM BOARD	
SALES AREA		●	●		●		●		
REST ROOMS	●		●			●		●	

3/16" = 1'-0" AFC01

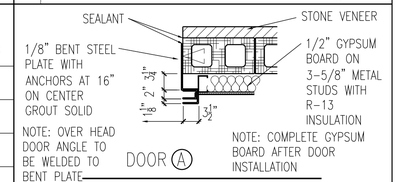
3 ROOM FINISH SCHEDULE

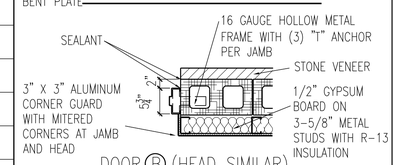
MK	SIZE	TYPE	FRAME	JAMB DETAIL	HEAD DETAIL	ADA / EXIT HARDWARE (SEE SECTION 08700 OF THE SPECIFICATIONS)
A	6'-0" x 8'-0"	STEEL OVERHEAD ROLL-UP	STEEL ANGLE	6;7&8/A1	6&7/A1	
B	3'-0" x 7'-0" x 1-3/4"	HOLLOW METAL	HOLLOW METAL	8/A1	8/A1	PUSH BAR EXIT DEVICE WILL HAVE AN INTEGRAL SOUNDER
C	3'-0" x 6'-8" x 1-3/4"	SOLID CORE WOOD UNDERCUT DOOR 1"	HOLLOW METAL	8/A1	8/A1	LEVER HANDLE PRIVACY SETS
D	3'-0" x 6'-8" x 1-3/4"	SOLID CORE WOOD UNDERCUT DOOR 1"	HOLLOW METAL	8/A1	8/A1	LEVER HANDLE PRIVACY SETS
E	2'-6" x 6'-8" x 1-3/4"	SOLID CORE WOOD PAIR REQUIRED	HOLLOW METAL	8/A1	8/A1	UNDERCUT DOOR 1" (PAIR REQUIRED)
G	3'-0" x 7'-0" x 1-3/4"	GLASS & ALUMINUM SEE SHEET A-5	ALUMINUM	SEE MANUFACTURER'S SHOP DRAWINGS		
H	3'-0" x 7'-0" x 1-3/4"	GLASS & ALUMINUM SEE SHEET A-5	ALUMINUM	SEE MANUFACTURER'S SHOP DRAWINGS		
J	3'-0" x 7'-0" x 1-3/4"	HOLLOW METAL	HOLLOW METAL	8/A1	8/A1	PUSH BAR EXIT DEVICE

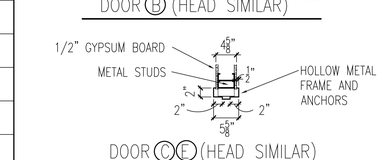
3/32" = 1'-0" ADC01

4 DOOR SCHEDULE – HOLLOW METAL DOORS & FRAMES

7 OVERHEAD DELIVERY DOOR (A)







3/4" = 1'-0" ADS02

8 JAMB DETAILS

REVISIONS			
1		4	
2		5	
3		6	

AutoZone Store No. 5707
1330 EASTON ROAD
ABINGTON TOWNSIP, PA

FLOOR PLAN / DOOR SCHEDULE / WALL DETAILS

DRAFT

03/28/22

65W2-L

A-1

3100 Horizon Drive
Suite 200
King of Prussia, PA 19406
T: 610-277-2402
F: 610-277-7449

www.pennoni.com

January 20, 2022

ABINT17000.11

Mr. Richard Manfredi, Township Manager
Abington Township
1176 Old York Road
Abington, PA 19001

RE: 1318 Easton Road - PARID 30-00-14016-00-3/TMID 30389 023
1330 Easton Road - PARID 30-00-14020-00-8/TMID 30389 022
Zoning Code Review (2nd Submission)

Dear Mr. Manfredi

We have received a copy of the Existing Features Plan dated November 17, 2021 and Zoning Plan dated December 1, 2021, both received on December 1, 2021; as prepared by CMC Engineering, located at 2215 Kimberton Road in Kimberton, PA for the above referenced project.

Under this Application, the Applicant is proposing to demolish the existing 3,973 SF multi-use building located on the 1318 Easton Road parcel, and the existing 1,454 SF multi-use building located on the 1330 Easton Road parcel; and consolidate these parcels into one parcel to construct a proposed 7,381 SF building for a proposed AutoZone retail shop.

This site is located within the MS-VC Main Street Village Center Zoning District. The site is fronted by Brookdale Lane to the southwest, Easton Road to the Southeast, Woodland Road and the MS-H - Main Street High Density/Intensity zoning district to the northeast; and residential properties zoned in the R4 – Medium-High Density Residential zoning district to the northwest.

We have been requested by the Township to perform a review of the above referenced plan for compliance with the Abington Township Zoning Ordinance. Based on our review of the Abington Township Zoning Ordinance for this application, we offer the following comments for your consideration:

ZONING ORDINANCE COMMENTS

1. Per the Abington Comprehensive Use Matrix, this would be considered Use C-28, Retail Shop which is a permitted use in the MS-VC Zoning District.

   Per §1003.B – Main Street Village Center District Intent – In addition to the intent for all Main Street District areas, the MS-VC district shall encourage appropriate façade and signage design.
   The Applicant shall clarify the façade and signage design.

2. Per §1006 Figure 10.20 MS-H Main Street Village Center District Dimensional Requirements, the minimum façade height is twenty (20) feet. The Applicant has indicated that the façade height is to be determined.

The Applicant shall confirm the façade height and ensure that it meets the specifications of this section of the code.

3. Per §1006 Figure 10.20 MS-H Main Street Village Center District Dimensional Requirements, the minimum window area for the street-facing façade(s) shall be forth-five (45) percent for the ground floor.
   The Applicant shall provide window area calculations to ensure that they meet the specifications of this section of the code.

4. Per §1006 Figure 10.20 MS-H Main Street Village Center District Dimensional Requirements, the minimum parking setback from abutting R1/R2/R3/R4 Properties is twenty (20) feet.
   The Applicant is proposing four (4) parallel parking spaces located to the rear of the site which abuts the existing residential properties zoned in the R4 – Medium-High Density residential zoning district. The setback is not dimensioned on the sketch plan, however, based on our measurements, these parallel parking spaces are located twenty (20) feet from the property line. The Applicant shall provide a dimension on the sketch plan to confirm compliance with this code requirement.

5. Per §1007.H.1 – Design – in the MS-VC Village Center Zoning District, each building shall utilize at least four (4) of the design features on its front façade.
   The Applicant shall indicate if at least four (4) of the design features of this section are present on the proposed building.

6. Per §1007.J – Repairs or Fabrication – No repair or fabrication shall occur outside.
   The Applicant shall confirm that no repairs will be taking place outside the building.

7. Per §2305.B – Parking Space Computation and Reduction – Gross Leasable Floor Area – Unless otherwise stated, parking space requirements are calculated using the Gross Leasable Floor Area of a building. The gross leasable floor area is calculated by determining the sum of all floor areas of a building capable of being devoted to a principal or accessory use of an occupant or tenant, as measured by the exterior building walls, minus floor areas of the building devoted to:
   1. Basement and crawl space utilized strictly as storage use.
   2. Mechanical and building utility spaces such as elevator shafts, water closets, and building equipment rooms.
   3. Common hallways and stairways.
   4. Aesthetic lobbies used for architectural enhancement or display, and not used or intended for business use.
   5. Mezzanines devoted exclusively to storage use.
   6. Bathroom facilities for use by common tenants or the general public utilizing the building.
   7. Garage area utilized in the required parking space count for the principal building use, and not devoted to storage use.
   8. Design elements for handicapped accessibility

   The Applicant is excluding the restroom and storage areas from the proposed gross leasable floor area. Therefore, based on our calculation, a total of 19 parking spaces, or 18 total parking spaces required with the total 5% parking reduction factors claimed. The Applicant is proposing 21 parking spaces as part of this project which meets the requirements of this section of the code.

The Applicant has labeled the restroom area as 3,555 SF and the storage area as 147 SF on the parking calculation. The Applicant shall revise the labels to reflect the correct areas.

8. Per §2402.B.A.a – Street Trees – Street trees shall be required along each frontage on all existing streets when they abut or lie within a proposed subdivision or land development. The Applicant will be required to provide street trees along the frontages or Brookdale Lane, Easton Road, and Woodland Road. They shall be planted at a ratio of one per 40 LF of frontage.
The site has approximately 535 LF of frontage which will require 13.375 or fourteen (14) street trees; and the Applicant is only proposing ten (10) street trees. The Applicant shall include a street tree calculation on the plan showing the total number of street trees required.

9. §2500.A – Street Wall – Since this project is located within the MS-VC Zoning district, a fence or wall shall be provided to screen parking from the street. The fence or wall shall meet the requirements of the above section of the code.
The Applicant has provided a fence along Woodland Road and a portion of Easton Road, but no fence or wall is provided to screen the parallel parking and loading areas along Brookdale Lane. The Applicant shall provide screening for these parking areas to comply with this code requirement.

10. Per §2601.H.2 – Lighting Standards – All on-lot public parking areas, aisles, and access ways for any nonresidential use shall be provided with a minimum of one half (0.5) foot candles of light at any point on the ground.
It appears that some of the existing on-site lighting along Easton Road will remain, however, no other site lighting is shown on the Sketch Plan. The Applicant shall clarify if there will be other site lighting proposed. Lighting shall meet the requirements of §2601.H of the Abington Zoning Code.

11. Per §2601.N.3 – Trash Containment Standards – Trach enclosures shall be located in walled or fenced facilities at least six (6) feet in height and shall meet the specifications of this section of the code.
The Applicant has indicated that the trash enclosure fence will be six (6) feet tall. A detail shall be provided to ensure the enclosure meets the specifications of this section of the code.

GENERAL COMMENTS

12. Applicant shall provide a curb ramp from the accessible parking space to the concrete sidewalk adjacent the proposed building.

13. The Applicant has provided an access door located adjacent to Easton Road. It does not appear that this access door would be needed; however, we suggest that a sidewalk or walkway leading to/from this access door should be provided to comply with ADA guidelines.

14. The Applicant may wish to consider relocating the loading access door located on the Brookdale Lane side of the building closer to the loading berth located to the rear of the building for ease of access into the building in lieu of the other access doors being proposed. Similarly, the Applicant may wish to provide an access door to the rear of the building for ease of access to the proposed trash enclosure area.

If you have any questions or comments with this submittal, please do not hesitate to contact me.

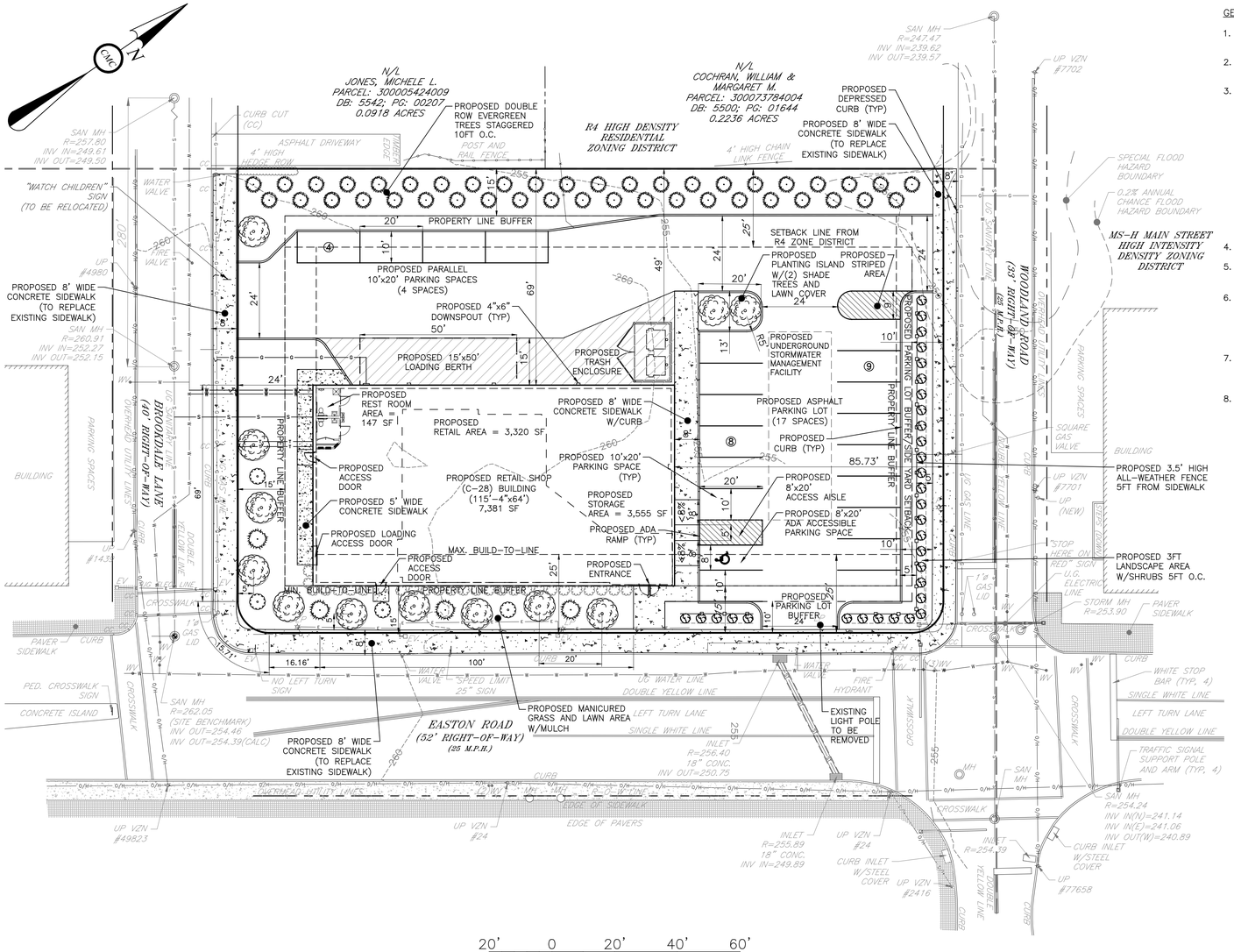
Sincerely,

PENNONI

Khaled R. Hassan, PE
Municipal Engineer

cc: Terry Castorina, Executive Assistant to the Township Manager
Ashley McIlvaine, Special Assistant to the Township Manager

U:\ACCOUNTS\ABINT\ABINT17000 - ZONING REVIEWS\ADMIN\PHASE 11 - 1318 & 1330 EASTON RD (AUTOZONE)\3 - REVIEW\2ND SUBMISSION\ZR02012022 1318&1330EASTONROAD.DOCX



20' 0 20' 40' 60'

GRAPHIC SCALE: 1"=20'

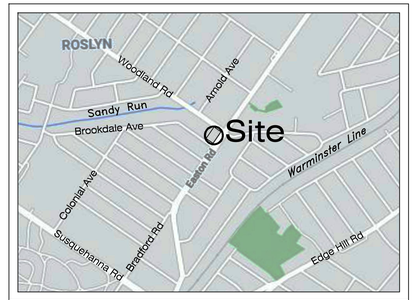
GENERAL NOTES:

1. BOUNDARY AND TOPOGRAPHIC FEATURES TAKEN FROM A FIELD SURVEY PERFORMED BY CMC ENGINEERING ON SEPTEMBER 20, 2021.
2. THE SUBJECT PROPERTYS ARE WITHIN THE MS-VC MAIN STREET-VILLAGE CENTER DISTRICT.
3. THE SUBJECT PROPERTYS CAN BE FOUND AT THE MONTGOMERY COUNTY COURTHOUSE UNDER OWNER OF RECORD:

   GRAHAM, CYNTHIA — PROPERTY ADDRESS: 1318 EASTON RD
   961 RED COAT FARM DR — ABINGTON, PA 19001
   CHALFONT, PA 18914
   TAXMAPID: 30389 023
   PARID #: 30-00-14016-00-3

   JAKUBOWSKI, JOHN R. — PROPERTY ADDRESS: 1330 EASTON RD
   1330 EASTON RD — ABINGTON, PA 19001
   ABINGTON, PA 19001
   TAXMAPID: 30389 022
   PARID #: 30-00-14020-00-8

4. SITE CONTOURS ARE ON U.S.G.S. DATUM NAVD 88.
5. 1318 EASTON RD PROPERTY IS LOCATED IN FLOOD ZONE "X", AREAS OF MINIMAL FLOOD HAZARD. REFERENCE PER FEMA MAP #42091C0294G, DATED MARCH 2, 2016.
6. 1330 EASTON RD PROPERTY IS LOCATED IN FLOOD ZONE "X", AREAS OF MINIMAL FLOOD HAZARD, IN ZONE "X" WITH AREAS OF 0.2% ANNUAL CHANCE FLOOD HAZARD, AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTH LESS THAN ONE FOOT OR WITH DRAINAGE AREAS LESS THAN ONE SQUARE MILE: REFERENCE PER FEMA MAP #42091C0294G, DATED MARCH 2, 2016.
7. SITE BENCHMARK IS A FOUND SANITARY MANHOLE ON BROOKDALE AVENUE AT EASTON ROAD.
   RIM ELEVATION = 262.05'
8. PROPOSED USE: RETAIL SHOP (C-28)



LOCATION MAP
SCALE: 1"=1000'

LANDSCAPING REQUIREMENTS

ZONING

	REQUIRED	PROPOSED
PARKING LOT LANDSCAPING		
PARKING AREAS WITH LESS THAN 50 STALLS, PLANTING ISLANDS ARE REQUIRED		
PLANTING ISLAND SIZE	10 FT x 18 FT	13 FT x 20 FT
PLANTING ISLAND LANDSCAPING	1 SHADE TREE LAWN OR GROUND COVER	2 SHADE TREES* LAWN
*(SUBDIVISION AND LAND DEVELOPMENT REQUIREMENT)		
PARKING AREAS WITH MORE THAN 15 SPACES, PERIMETER BUFFER IS REQUIRED		
MINIMUM BUFFER WIDTH	10 FT	10 FT
STREET TREES		
SETBACK FROM ULTIMATE-RIGHT-OF-WAY OR SIDEWALK	5 FT	5 FT
SETBACK FROM OVERHEAD/UNDERGROUND UTILITIES	15 FT/6 FT	NA / 6 FT
SPACING RATIO ALONG FRONTAGE	ONE (1)/40 LF	ONE (1)/20 LF
BUFFER REQUIREMENTS		
PROPERTY LINE BUFFER WIDTH	15 FT	15 FT

BUFFER SPECIFICATIONS (PER 100 LF OF PROPERTY LINE)	REQUIRED (PER 100 LF)	PROPOSED (PER 100 LF)
LOW INTENSITY (ALONG EASTON ROAD AND BROOKDALE LANE)	1 CANOPY TREE 2 UNDERSTORY TREES 2 EVERGREEN TREES	5 CANOPY TREE ** 2 UNDERSTORY TREES 2 EVERGREEN TREES

**(CANOPY TREE REQUIREMENT MET PER SPACING RATIO ALONG FRONTAGE AND INCLUDES GREEN AREA TREES)

HIGH INTENSITY (ALONG PROPERTY LINE ADJACENT TO R4 ZONING DISTRICT)	DOUBLE ROW EVERGREEN TREES 10 FT O.C. (STAGGERED)	DOUBLE ROW EVERGREEN TREES 10 FT O.C. (STAGGERED)
	REQUIRED	PROPOSED
SITE ELEMENT SCREENS		
DUMPSTER OR TRASH CONTAINMENT AREA	MED. INTENSITY (6 FT HIGH FENCE)	MED. INTENSITY (6 FT HIGH FENCE)
BUILDING FOUNDATION LANDSCAPING		
MINIMUM PERCENTAGE OF LINEAR AREA BETWEEN BUILDING AND SIDEWALK	25 % (SHRUBS)	25 % (SHRUBS)
GROUND COVER (APPLIES TO "GREEN AREAS")		
ALL SEASON GROUND COVER	GRASS/ MANICURED LAWN AREA W/MULCH	GRASS/ MANICURED LAWN AREA W/MULCH
	REQUIRED	PROPOSED
SUBDIVISION AND LAND DEVELOPMENT		
GENERAL LANDSCAPING		
BUSINESS / COMMERCIAL USE: PER 1,000 SF OF GREEN AREA	TWO (2) DECIDUOUS OR EVERGREEN TREE	NINE (9) DECIDUOUS TREES (GREEN AREA 9,119 SF)
	REQUIRED	PROPOSED
OFF-STREET PARKING AREAS		
MINIMUM PERCENTAGE OF TOTAL AREA NOT PAVED	5 %	3.46 %
PROPOSED PARKING AREA = 6,688 SF		
REQUIRED NUMBER OF TREES (10 STALLS OR MORE; ADDITIONAL 15 SPACES)	ONE (1) DECIDUOUS OR EVERGREEN TREE	TWO (2) DECIDUOUS TREES

SIDEWALK AND STREETSCAPE DESIGN

	REQUIRED	PROPOSED
STREET WALL (REQUIRED WHERE PARKING IS PROPOSED IN MS MAIN STREET DISTRICTS)		
FENCE OR WALL		ALL-WEATHER FENCE
MAXIMUM SETBACK FROM THE SIDEWALK	5 FT	5 FT
LANDSCAPING	3 FT FROM FENCE	3 FT FROM FENCE
PERENNIALS, ORNAMENTAL GRASSES, SHRUBS	5 FT O.C.	SHRUBS 5 FT O.C.
STREET FRONT SIDEWALKS		
MINIMUM WIDTH (PUBLIC STREETS)	8 FT	8 FT

LEGEND:

- CANOPY/SHADE/STREET TREE
- UNDERSTORY TREE
- EVERGREEN TREE
- SHRUB (BUILDING FOUNDATION)
- SHRUB (ALL-WEATHER FENCE)

PARKING USE REQUIREMENT

PER USE C-28 RETAIL SHOP (LESS THAN 10,000 SF), 1 PARKING SPACE PER 200 SF GROSS LEASABLE FLOOR AREA

PROPOSED BUILDING AREA	7,381 SF			
RESTROOM AREA	-3555 SF			
STORAGE AREA	-147 SF			
PROPOSED GROSS LEASABLE FLOOR AREA	3,679 SF			
	3,679 SF			
	200 SF	=	18.40	SPACES
		~	19	SPACES

PARKING SPACE REDUTION FACTORS:

USE IS WITHIN 200 FT OF A BUS SHELTER STATION; THEREFORE, A 2% REDUCTION IS PERMITTED.

USE WITH DEFINED PEDESTRIAN WALKWAY (AND BICYCLE TRAIL SYSTEMS) LEADING TO SURROUNDING RESIDENTIAL NEIGHBORHOODS; THEREFORE, A 3% REDUCTION IS PERMITTED.

TOTAL PUBLIC TRANSPORTATION REDUCTION FACTORS 5 %

18.4 SPACES * 0.05 = 0.92 -> 17.48 ~ 18 SPACES

PARKING SPACES PROVIDED = 21 SPACES

PARKING FOR INDIVIDUALS WITH DISIBILITIES

ACCESSIBLE PARKING SPACE REQUIREMENT — TOTAL PARKING SPACES IN LOT 1 TO 25 = REQUIRED MIN. OF ACCESSIBLE SPACES = 1

ACCESSIBLE PARKING SPACES PROVIDED = 1 SPACE

ZONING DISTRICT DIMENSIONAL REQUIREMENTS

MS-VC MAIN STREET VILLAGE CENTER DISTRICT

	REQUIRED	1318 EASTON RD. EXISTING	1330 EASTON RD. EXISTING	PROPOSED
MINIMUM LOT AREA	10,000 SF	22,178.5 SF	11,078.5 SF	33,257.1 SF
MINIMUM LOT WIDTH	50 FT	150.0 FT	75.0 FT	225.0 FT
MINIMUM GREEN AREA	20 %	28.0 %	49.0 %	27.4 %
MINIMUM BUILDING SEPARATION	20 FT	2.3 FT	N/A	N/A
MINIMUM BUILD-TO-LINE	15 FT	N/A	N/A	15.0 FT
MAXIMUM BUILD-TO-LINE	25 FT	75.4 FT*	37.9 FT*	23.9 FT
MINIMUM SIDE YARD SETBACK	10 FT	29.8 FT	24.5 FT	85.7 FT
MINIMUM BUILDING SETBACK FROM ABUTTING R4	25 FT	20.1 FT	71.2 FT	69.0 FT
MINIMUM TRASH STORAGE SETBACK ABUTTING R4	20 FT	N/A	N/A	49.0 FT
MAXIMUM BUILDING FOOTPRINT	10,000 SF	4,070.0 SF	1,454.0 SF	7,381.0 SF
MINIMUM FAÇADE HEIGHT	20 FT	N/A	N/A	TBD
MAXIMUM BUILDING HEIGHT	35 FT	<35 FT	<35 FT	<35 FT
MINIMUM WINDOW AREA	45 %	N/A	N/A	TBD
PARKING SETBACK FROM STREET WALL AND LANDSCAPING	5 FT	3 FT*	N/A	5.0 FT
MAXIMUM WIDTH, PARKING BETWEEN PRINCIPAL BUILDING AND SIDE LOT LINE (FOR BUILDING IN BUILD-TO-ZONE)	70 FT	N/A	N/A	64.0 FT
MINIMUM PARKING SETBACK FROM ABUTTING R4 PROPERTIES	20 FT	42.7 FT	20.5 FT	48.0 FT
MAXIMUM WIDTH, STREET ACCESS POINT (TWO-WAY)	35 FT	33.8 FT	20.1 FT	24.0 FT

* EXISTING, NON-CONFORMING

ONE CALL SYSTEM 1-800-242-1776 PENNSYLVANIA

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PA ONE CALL SERIAL #20212700875
TICKET IS PRELIMINARY DESIGN TICKET
(A NOTIFICATION OF EXCAVATION OR DEMOLITION WORK GIVING NOT LESS THAN 10 NOR MORE THAN 90 BUSINESS DAYS NOTICE).
PA ONE CALL MUST BE NOTIFIED OF STATUS CHANGE FOR EXCAVATION AND/OR DEMOLITION.
THE FOLLOWING UTILITIES WERE CONTACTED PER PA ACT 287, AS AMENDED BY ACT 187 OF 1996:

ABINGTON TOWNSHIP
AQUA PA
COMCAST CABLE WILLOW GROVE
COMCAST CABLE
PECO ENERGY
VERIZON PA

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF THE RESPONSIBLE LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

SEAL: COMMONWEALTH OF PENNSYLVANIA — KEITH J. MARSHALL — ENGINEER

KEITH J. MARSHALL
PROFESSIONAL ENGINEER
PENNSYLVANIA
No. PE073228

CMC ENGINEERING
2215 Kimberton Road
P.O. Box 958 Kimberton, PA 19442
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EMail: Contact@CMCEng.com

REV.	DATE	DESCRIPTION	CHK'D:	BY:
1	1/4/22	REVISED FOR PARKING CALCULATIONS	KJM	JSD

DRAWING NAME: ZONING PLAN

PROPOSED AUTOZONE LOCATION
1318 AND 1330 EASTON ROAD
ABINGTON, PA 19001

LOCATION: ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PA

DATE:	DRAWN BY:
12/1/21	A.C.K.
SCALE: 1"=20'	CHK'D BY: K.J.M.
PROJ. NUMBER: 1482-21-02-PA	
SHEET NUMBER: Z-1	

M:\Small Jobs\Wright Partners\XZ - Abington\CAD\Zoning\Zoning Plan 2-1.dwg

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May 6, 2022

ABINT130022

Mr. Richard Manfredi, Township Manager
Abington Township
1176 Old York Road
Abington, PA 19001

RE: LD-22-03 – 1318 & 1330 Easton Road (AutoZone)
1318 Easton Road PARID: 30-00-14016-00-3 / TMID: 30389 023
1330 Easton Road PARID: 30-00-14020-00-8 / TMID: 30389 022
Preliminary Major Subdivision and Land Development Plans Review (1st Submission)

Dear Mr. Manfredi:

We have received a copy of the Preliminary/Final Major Subdivision and Land Development Plans consisting of ten (10) sheets dated April 5, 2022, as well as a Stormwater Analysis report dated the same, and received on April 6, 2022; as prepared by CMC Engineering, located at 2215 Kimberton Road in Kimberton, PA for the above referenced project.

This land development application involves the following:

- 1318 Easton Road - consisting of an approx. 22,178.5 SF (or approx. 0.51 acre) corner parcel located adjacent Easton Road and Brookdale Lane. The parcel currently consists of a 3,973 SF commercial multi-use retail, office and apartments building with drive through; shed; landscaping and planters; fencing; curbing; and associated off-street parking. There are two (2) entrances to this site, and both are located off of Easton Road.
- 1330 Easton Road - consisting of an approx. 11,078.9 SF (or approx. 0.25 acre) corner parcel located adjacent Easton Road and Woodland Road. The parcel currently consists of a 1,454 SF commercial multi-use retail, office and apartments building with porches and steps; landscaping; fencing; curbing; and associated off-street parking located to the rear of the building. Vehicular access to this parcel is off of Woodland Road.

The Applicant is proposing to consolidate the existing two (2) parcels to provide for an approximately single 33,257.1 SF (or approx. 0.76 acre) triple frontage parcel; and as follows;

- Demolish the existing buildings and associated site features on each site to construct the following:
- Construct an approximately 6,816 SF AutoZone retail store; as well as associated internal sidewalk curbing adjacent the building; internal curbing along the parking areas; driveway aprons; off-street parking; and stormwater management facilities.
- Provide new internal traffic circulation and access to the site by way of four (4) new or relocated driveway entrances. There will be one site entrance intersecting Brookdale Lane (40 FT R/W); one entrance intersecting Woodland Road (33 FT R/W); and two entrances intersecting Easton Road (52 FT R/W), of which one of the site entrance will be for egress only.

The new AutoZone building is proposed to be serviced by public water and sewer.

This project is located within the MS-VC Main Street Village Center Zoning District and is fronted by Easton Road (52 FT R/W) to the southeast; Woodland Road (33 FT R/W) to the northeast; Brookdale Lane (40 FT R/W) to the southwest; and residential properties zoned in the R-4 - Medium-High Density Residential Zoning District to the northwest.

In accordance with the FEMA, Flood Insurance Rate Map (FIRM) Panel No. 42091C0294G, effective March 2, 2016, a tiny piece of the site located at the curb and portion of sidewalk adjacent and within the Woodland Road right-of-way, is identified by the FEMA FIRM to be located within Zone AE, which is determined to be special flood hazard areas of Sandy Run subject to inundation by the 1% annual chance flood (100-year flood) with base flood elevations or depths defined. Abutting flood Zone AE is a corner piece of the tract that has been identified by the FEMA FIRM to be located within Zone X, which are areas located within the 0.2% annual chance flood (or 500-year floodplain). The remaining portions of the site are located in Zone X, which are areas determined by the FEMA FIRM as areas outside of the flood hazard areas or areas of minimal flood hazard. Therefore, based on the FEMA determination, the areas located within the tract are not located within the Floodplain Conservation District and is therefore not subject to the floodplain regulations of the Floodplain Conservation District.

Based on the existing contours shown on the plan, there are areas of precautionary steep slopes (greater than 15% to 25%) and prohibitive steep slopes (greater than 25%), located primarily in the center and rear of the site. Although there are existing steep slopes identified on the site, these areas do not span five contiguous 10-foot contour intervals; and therefore, the site is determined to be located outside the steep slope conservation overlay district.

The Applicant is not requesting any variances as part of this lot consolidation and land development project.

The Applicant is requesting the following waivers as part of this lot consolidation and land development project:

WAIVERS REQUESTED

1. **§146-28.A – Off-Street Parking Areas** – A waiver from the requirements for parking spaces to be ten (10) feet wide by twenty (20) feet long.
   The Applicant has requested a waiver to allow the parking spaces to be nine (9) feet wide by eighteen (18) feet long. We would support this dimensional waiver request for the parking areas fronting the planter strips which would permit the front of the vehicles to overhang onto the planter strips with relocation of the proposed fencing to permit the overhang. However, the parking spaces adjacent the eastern side of the proposed building will be in front of a 5.3' wide sidewalk and if the fronts of the vehicles overhang would encroach onto the proposed sidewalk. Therefore, we do not support this waiver request for the site plan as currently shown unless the Applicant revises the site plan to accommodate for the overhang.

2. **§146-28.B – Off-Street Parking Areas –** A waiver from the requirements to provide entrances, exits and driveways in a parking lot to have a minimum width of twenty-four (24) feet.
   The Applicant is proposing a sixteen (16) feet wide drive aisle for the angle parking spaces located along the western side of the proposed building. We support this waiver request contingent the Applicant provides turning temple showing adequate maneuverability into and out of the angle parking spaces.

The following documents have been reviewed:

Title	Sheet	Dated	Revised
Title Sheet	1 of 10	04/05/22	-----
Existing Features Plan	2 of 10	04/05/22	-----
Site Plan	3 of 10	04/05/22	-----
Grading Plan	4 of 10	04/05/22	-----
Stormwater Management Plan	5 of 10	04/05/22	-----
Stormwater Management Details	6 of 10	04/05/22	-----
Erosion Control Plan	7 of 10	04/05/22	-----
Erosion Control Details	8 of 10	04/05/22	-----
Landscaping Plan	9 of 10	04/05/22	-----
Details Sheet	10 of 10	04/05/22	-----
Stormwater Analysis Report	143 pages	04/05/22	-----

We have performed a review of the above referenced plans for compliance with the Zoning Ordinance (Chapter 162); Subdivision and Land Development Ordinance (Chapter 146); Stormwater Management Ordinance (Chapter 142). We offer the following comments for your consideration:

ZONING COMMENTS

1. Per the Abington Comprehensive Use Matrix, the proposed land use would be considered Use C-28, Retail Shop which is a permitted use in the MS-VC Main Street Village Center Zoning District.

2. Per §1006 Figure 10.20 MS-VC Main Street Village Center District Dimensional Requirements, the minimum green area shall be twenty (20) percent. The Applicant has indicated a green area of 24.8%.
   The Applicant shall provide a calculation on the plans showing the green area percentage in order to confirm compliance with this code section.

3. Per §1006 Figure 10.20 MS-VC Main Street Village Center District Dimensional Requirements, the minimum window area for the street-facing façade(s) shall be forth-five (45) percent for the ground floor.
   The Applicant shall provide window area calculations to ensure that they meet the specifications of this code section.

4. **Per §1007.C.2. – Design** – Roofs Near Residential Districts - Buildings with less than 15,000 square feet of building area on the ground floor that are located within 100 feet of a single-family residential zoning district are required to have pitched roofs covering at least 80% of their surface, with a pitch of five-to-one (5:1) or 20%, to help the building fit better with the nearby residential district (buildings with roof-mounted solar arrays may have a higher pitch).
   The site is located within 100 feet of the R-4 – Medium-High Density Residential Zoning District and there are single family residential dwellings abutting the site. Based on the architectural renderings provided, the Applicant is proposing a flat roof with a parapet wall. The Applicant will be required to provide a pitch roof per this code section.

5. **Per §1007.J – Repairs or Fabrication –** No repair or fabrication shall occur outside.
   The Applicant shall confirm that no vehicle repairs will be taking place outside the building.

6. **Per §2101.A.2.d.(1).(a) – Tree Replacement –** On existing lots, tree replacement shall occur when new impervious coverage exceeds 500 SF and a tree with a minimum caliper of six inches (6") is removed. In such cases, two new trees, each a minimum of 3-to-3.5" caliper, measured 6" above grade, shall be planted for each tree with a minimum caliper of 6" or greater that is removed.
The Applicant shall provide an impervious coverage calculation on the plans showing the pre and post impervious coverages. The Applicant shall also indicate if any trees with a minimum caliper of 6" to be removed. If new impervious coverage exceeds 500 SF and trees of a minimum caliper of 6" are to be removed, the Applicant shall replace the trees as specified in this code section.

7. **Per §2101.A.2.d.(1).(c) – Tree Replacement –** Each mature tree with a 10-inch caliper or greater on the site shall be designated either "TO REMAIN" or "TO BE REMOVED".
There are multiple existing trees on site that are greater than 10" in caliper. The Applicant shall label these trees as either "TO REMAIN" or "TO BE REMOVED."

8. **Per §2402.A.2.a.(5) – Planting Islands –** Shade trees located within any parking island which is less than 300 square feet measured from outside curb to outside curb will require permanently installed irrigation.
The Applicant is proposing shade trees to be located in islands that are less than 300 SF. The Applicant shall provide permanent irrigation for these planting islands per this code section.

9. **Per §2402.B.1.a – Street Trees –** Street trees shall be required along each frontage on all existing streets when they abut or lie within a proposed subdivision or land development. The Applicant will be required to provide street trees along the frontages or Brookdale Lane, Easton Road, and Woodland Road. They shall be planted at a ratio of one per 40 LF of frontage.
The site has approximately 513 LF of frontage which will require 12.825 or 13 street trees. The Applicant shall clarify and distinguish the street trees and the canopy trees in the landscape schedule on Sheet 9 to ensure that the required number of trees are being proposed.

10. **Per §2402.B.2.b – Street Trees –** Large canopy trees shall be planted at least feet 15 feet from overhead utilities, including streetlights, and 6 feet from underground utilities. However, ornamental trees may be planted under overhead utility wires. Street trees shall not be placed within the clear site triangle of street intersections.
The Applicant is proposing a canopy tree within the planting island adjacent to pipe run L10 to be approximately three (3) feet from the pipe. The Applicant shall provide at least 6 feet of clearance as indicated in this code section.

11. **Per §2403 Figure 24.6 – Buffers and Screens –** When 16-30 trees are being proposed, a minimum of three (3) tree species shall be provided with the maximum percent of any one species being 40%.
The Applicant is providing 18 trees and 2 species as part of this land development. Based on the above code, the Applicant will be required to provide a minimum of 3 species of trees.

12. **Per §2403 Figure 24.7 & §2403.C.6.b.(1)&(2) – Site Element Screens –** Dumpster or trash enclosure facilities require a medium intensity buffer which consists of an opaque or masonry wall with shrubs or an evergreen hedge.
The Applicant is providing a masonry wall around the trash enclosure; however, no shrubs are proposed around the facility. The Applicant shall provide shrubs around the trash enclosure facility as indicated in these code sections; or be required to obtain a waiver from these code sections to not provide landscaping at the trash enclosure area.

13. **Per §2502 – Street Furniture –** Street furniture shall include (though not be limited to) benches, trash and recycling receptacles, planters, and bike racks. It is recommended that street furniture shall be decorative, functional, durable, and properly scaled to the space, and follow recommendations of an adopted or approved revitalization plan or other plan addressing the streetscape. Where land is under common ownership, benches, and trash and recycling receptacles shall be provided at least every 100 feet, bicycle racks shall be provided at least every 300 feet (but every 200 feet in the MS Main Street and BC Business Center Districts), and planters shall be provided at least every 50 feet. At least half of all bike racks shall be covered or shall consist of bike lockers.
The Applicant is not providing any street furniture as part of this land development. The Applicant shall provide street furniture as indicated in this code section.

14. **Per §2504.E.2 – Sidewalks and Crosswalks** – Streets and main access drives shall be separated from sidewalks by a decorative verge (landscaped strip) area, so as to allow for street trees and furnishings such as benches and light fixtures. Street furniture surrounded by hardscaping (brick surface, paving stones, or other decorative paving) may be located in the decorative verge. At least 25% of the decorative verge area shall be landscaped with a mix of ground cover, shrubs, and trees. The width of the verge in all MS Main Street Districts shall be Three feet (3'). Tree pits may extend one foot (1') into the sidewalk so they may attain a width of four feet (4').
The Applicant is not providing a decorative verge as part of this land development and is proposing the existing sidewalk to remain. However, the condition of the sidewalk and curb are in poor condition, and we recommend that new cement concrete sidewalk be provided with a decorative verge as required by this code section.

15. **Per §2601.H.2 – Lighting Standards –** All on-lot public parking areas, aisles, and access ways for any nonresidential use shall be provided with a minimum of one half (0.5) foot candles of light at any point on the ground.
It appears that some of the existing on-site lighting along Easton Road will remain, however, no other site lighting is shown on the Sketch Plan. The Applicant shall clarify if there will be other site lighting proposed. A lighting plan should be provided to ensure that the site lighting meets the requirements of §2601.H of the Abington Zoning Code.

In addition, there is an existing light fixture located in the site entrance off of Easton Road behind the existing storm inlet that should be relocated outside from the entrance area. The Applicant shall revise this location of the light fixture accordingly.

16. **Per §2601.J.1 – Mechanical Equipment Standards** – All roof-mounted equipment shall be architecturally screened from public view on adjoining streets, public thoroughfares, and adjacent residential uses for a minimum distance of 1,000' beyond the property line, as measured at a height of six feet (6') above street grade.
The Applicant shall clarify and confirm that the HVAC roof top units will be screened per this code section.

17. **Per §2601.J.2 – Mechanical Equipment Standards –** When nonresidential land uses abut a residential land use or residential zoning district, all air conditioners, compressors, fans, motors, refrigerators, and other mechanical equipment shall be either roof-mounted in muffled compartment enclosures, or ground-mounted as remotely as possible from the residential use and mounted in muffled compartment enclosures or sound screening devices. Equipment specifications shall comply with the noise provisions of this Ordinance.

This project abuts the R-4 Medium-High Density Zoning District and shall therefore meet the requirements of this section. The Applicant shall confirm that the equipment specifications comply with the noise provisions of this Ordinance.

18. **Per §2601.N.3 – Trash Containment Standards –** Trach enclosures shall be located in walled or fenced facilities at least six (6) feet in height and shall meet the specifications of this section of the code.
The Applicant has indicated that the trash enclosure fence will be six (6) feet tall. On the dumpster layout detail provided on Detail Plan (Sheet 10), the Applicant is indicating a masonry wall enclosure. However, on the dumpster section wood detail on the same sheet, the Applicant is indicating treated wood posts and pine vertical boards for the walls. The Applicant shall clarify and confirm the dumpster enclosure material, and revise accordingly.

CHAPTER 146
SUBDIVISION & LAND DEVELOPMENT COMMENTS

19. **Per §146.B.(2) – Type of Application –** A major plan is a plan for subdivision or land development, which will require two stage approval process because public improvements are proposed or because subdivision is occurring simultaneously with land development.
Based on the definition of major plans above, the project shall be considered a major plan submission. The Applicant shall add "Major" to the plans set title to specify the submission type on the plans. Although we recognize the plans set indicated "Preliminary/Final", the land development application is for "Preliminary" major land development.

20. **Per §146-11.A.(6) – Property Identification Plans** – the property identification plans shall contain the location of all existing monuments and iron pins on or defining the site.
Applicant shall show and label all existing and proposed monuments and pins to define the site.

21. **Per §146-11.A.(7) – Property Identification Plans –** the property identification plans shall contain an indication that the elevations are based upon sanitary sewer datum of the Township of Abington.
The Applicant has indicated on General Note No. 4 (Sheet 2) that the site contours are based on Datum NAVD 88; however, the Applicant shall provide a note indicating the reference datum based upon the Abington Township sanitary sewer datum used to obtain the elevations for this project. The sanitary sewer datum can be requested from the Abington Township Wastewater Utilities department.

22. **Per §146-11.B.(3) – Existing Features Plan –** The existing features plan shall contain the location of property lines and names of landowners within 400 feet of any part of the site to be subdivided or developed.
The existing features plan does not show the location of all landowners within 400 feet of the site. The Applicant shall show this information on the existing conditions plan; otherwise, a waiver from this section of the code will be required.

23. **Per §146-11.B.(4) – Existing Features Plan –** The existing features plan shall contain the location and type of all existing survey monuments.
The Applicant is not showing any existing concrete monuments or iron pins on the existing features plan. The Applicant shall confirm if there are monuments and iron pins existing and show their respective locations on the plans.

24. **Per §146-11.B.(5) – Existing Features Plan –** The existing features plan shall contain the location and dimension of all existing buildings and man-made structures, or surfaces located on site, with notation

as to which ones will remain and which will be removed.
The Applicant has included all existing buildings and man-made structures on the plan; however, not all existing buildings and structures are labeled to remain or to be removed. The Applicant shall label the existing buildings and structures to remain or to be removed accordingly per this code section.

25. **Per §146-11.B.(7) – Existing Features Plan** – The existing features plan shall contain the location, size, and ownership of all underground and above ground public or private utilities, on the site and within 400 feet of any portion of the site, including waterlines, sanitary sewer lines, storm sewer lines, electric lines, telephone lines, gas mains, fire hydrants, and streetlights.
The existing features plan does not show the information required above both on-site and within 400 feet of the site. The Applicant shall provide this information on the existing features plan; otherwise, a waiver from this section of the code will be required.

26. **Per §146-11.B.(8).(d).[1]&[2] – Existing Features Plan –** The existing features plan shall contain steep slope delineation by shading and notation of all areas of slope with 15% to 25% and areas greater than 25% slope.
There appears to be existing slopes that are greater than 15% located to the rear and side of the existing 3,973 SF building. These slopes shall be delineated on the existing features plan per this code section.

27. **Per §146-11.B.(9).(a)&(b) – Existing Features Plan –** The existing features plan shall contain the soil types within the site, based on maps contained in the Soil Survey of Montgomery County, United States Department of Agriculture, Soil Conservation Service, 1967, as amended. An attached table shall indicate each soil's development limitation, i.e., bearing value, depth to bedrock, seasonal water table, etc. The delineation of the soil layers shall also be shown.
The Applicant shall show a delineation of the soil types on the plan and include a table containing the information in this code section.

28. **Per §146-11.B.(11).(b) – Existing Features Plan –** the existing features plan shall contain vegetation resource identification of stand-alone trees with calipers of 10 inches or greater, measured at a point four feet above grade, with indication of which trees are to be removed and which are to remain.
The Applicant shall label the trees "TO REMAIN" or "TO BE REMOVED."

29. **Per §146-11.C.(2) – Proposed Layout Plan –** The proposed layout plans shall contain the layout, dimensions, bearings, and net area of all proposed lots.
The Applicant shall provide the bearings and distances for the consolidated lot on all plans showing the proposed consolidated lot.

30. **Per §146-11.C.(6) – Proposed Layout Plan –** The proposed layout plans shall contain the location, dimension, height, type, and first-floor elevation of all proposed buildings and structures.
The Applicant shall provide the first-floor elevation of the proposed building on the Lot Consolidation/Site Plan (Sheet 3).

31. **Per §146-11.D.(4) – Grading Plans –** The grading plan shall contain a notation stating the datum to which the contour lines refer is based off of the Abington Township sanitary sewer datum.
The Applicant shall include this notation on the grading plan.

32. **Per §146-11.D.(5) – Grading Plans –** The grading plan shall contain the base flood elevation data as defined by the Township Zoning Ordinance.

The Applicant shall include the base flood elevation on the plan to ensure that the lowest floor elevation of the proposed dwelling will be above the required minimum regulatory flood elevations.

33. **Per §146-11.D.(7) – Grading Plan –** The grading plan shall show the delineation of the proposed limits of work area and the portion to remain undisturbed.
The Applicant has delineated the limit of disturbance area on the plan; however, the Applicant did not call out the size of the limit of disturbance area on the plan. Based on our measurements, the area within the limit of disturbance is approximately 0.76 acres, however the Applicant shall clarify and confirm.

34. **Per §146-11.H.(1) – Landscape Plan –** The landscape plan shall be prepared by a registered landscape architect.
The Applicant did not indicate if the landscape plan was prepared by a registered landscape architect. The Applicant shall have the plan prepared by a registered landscape architect and include the signature and seal of said landscape architect on the plan.

35. **Per §146-12 – Record Plan** – a record plan is required to be included in the plan set including all applicable seals per §146-12.B, all applicable acknowledgements per §146-12.C, all applicable approval notations, and signatures per §146-12.D, and all applicable recording notations per §146-12.E.
The Applicant shall indicate and denote the plan sheets that are to be recorded on Sheet 1. In addition, sufficient room for the signature and seal of the Township Engineer shall be provided to ensure no text overwrites occur with the years referencing "19___" updated to "20____."

36. **Per §146-24.E.(1) – Alignment –** A minimum sight distance of 300 feet for secondary streets and 200 feet for residential streets, measured at the center line and at driver's eye height of four feet, shall be provided.
The Applicant shall provide the required and proposed sight distances at each site entrance on the plans.

37. **Per §146-25.F – Intersections –** Proper sight lines shall be maintained at all intersections of streets. They shall be measured along the center line a minimum clear sight triangle of sixty-five (65) feet from the point of intersection. No buildings, trees, hedges, shrubbery, or other obstruction within the subdivision/land development will be permitted in this area.
The Applicant shall add the clear sight lines for each of the proposed driveway and roadway intersections to the plans.

38. **Per §146-27.B.(2) – Sidewalks and Curbs –** Sidewalks shall be constructed of concrete, four inches in thickness, except at driveways, where the thickness shall be increased to six inches for the full width of the driveway.
The Applicant is proposing to maintain the existing curb and sidewalk; however, the existing curb and sidewalk are in poor condition and should be replaced to the required dimensions and specifications of this code section, along with a decorative verge as required by zoning.

39. **Per §146-27.E – Sidewalks and Curbs –** At corners and other pedestrian street crossing points, sidewalks shall be extended to the curbline with ramps for adequate and reasonable access across curbs by physically handicapped persons, including those in wheelchairs.
The Applicant shall install curb ramps along the sidewalk at all driveway entrances to the site as well as at the corners of Brookdale Lane and Easton Road and Woodland Road and Easton Road to comply with current ADA requirements.

40. **Per §146-27.F – Sidewalks and Curbs –** Curbs shall be the vertical type and constructed in accordance with Township Specifications.
The Applicant is proposing to maintain the existing curb and sidewalk; however, the existing curb and sidewalk are in poor condition and should be replaced to the required dimensions and specifications of this code section, along with a decorative verge as required by zoning. All curbing within the public right-of-way shall have an eight (8) inch reveal per this code section.

41. **Per §146-32.A – Survey Monuments; Benchmarks; Deed Correction –** Monuments shall be of stone or concrete and be located on the right-of-way lines at corners, angle points, beginning and end of curves, and as otherwise required. Monuments shall be indicated on all plans. They shall be placed after a new street has been completed. A certified copy of this referenced information shall be given to the Township Engineer. Permanent reference monuments of concrete or durable stone 20 inches by four inches by four inches with forty-five-degree beveled edges shall be set by the subdivider/land developer or builder.
The Applicant is not indicating if there are any existing or proposed monuments on any of the plans. The Applicant shall include monuments at all locations per this code section. These monuments shall be shown on all plans.

42. **Per §146-33.D – Drainage –** Storm drains shall be adequate for the anticipated runoff when the area is fully developed as permitted by zoning. They shall have a minimum internal diameter of 15 inches and a minimum grade of 0.5% unless otherwise approved by the Township Engineer. Reinforced cement concrete pipe (RCCP) shall be used where the system is to be accepted by the township.
The Applicant is proposing to use 12" and 6" high density polyethylene (HDPE) pipe as part of this development. The Applicant shall be required to obtain a waiver from this section of the code to allow for the use of pipes less than 15" diameter for the HDPE pipe.

43. **Per §146.38.A. – Streetlighting –** The subdivider/land developer shall submit a plan showing the type and location of each streetlight to be installed, and the plan shall also specify the supplier and installer of such lights. The plan will be submitted for review and approval by the township, and no streetlights shall be installed prior to such review and approval.
The Applicant is not proposing any streetlighting as part of this land development. There are currently streetlights along Easton Road that the Applicant is showing on the plans. The Applicant shall confirm if they will be keeping these streetlights as part of this project. If so, one of the streetlights is located in the middle of a driveway entrance off of Easton Road and will need to be relocated accordingly.

44. **Per §146-43.A.(1) – Erosion and Sediment Control –** No change shall be made in the contour of the land nor shall grading, excavating, removal, or destruction of the topsoil, trees, or other vegetative cover of the land can be commenced until such time that a grading permit is applied for and approved.

45. **Per §146-43.C.(3).(a) – Grading for Drainage** – Cut and fill slopes shall not be fifteen (15) percent or steeper, except as approved by the Township Zoning Hearing Board. The Township Engineer may require the use of retaining walls, cribbing, or other measures necessary to stabilize the slopes which are either cut into or filled.
The Applicant is proposing slopes of 33% to the rear of the site which is greater than the 15% maximum slope. The Applicant will be required to obtain a waiver from this section of the code to allow for slopes greater than 15%.

46. **Per §146-44 – Steep Slopes –** Areas where the pre and post development slope is fifteen (15) percent or more shall be shown on the preliminary and final plans as required by Article V of this chapter, and

any development shall be in accordance with the steep-slope district of the Zoning Code of the Township of Abington.
The Applicant shall delineate and label all steep slope areas shown on the plans.

CHAPTER 142
STORMWATER MANAGEMENT COMMENTS

47. **Per §142-302.B.(1).(a) – SWM Site Plan Contents –** The Applicant shall include a general description of the project.
The Applicant shall include a general description of the project on the SWM Plan.

48. **Per §142-302.B.(2).(a) – SWM Site Plan Requirements –** The Applicant shall prepare an existing resources and site analysis map (ERSAM) showing environmentally sensitive areas including, but not limited to, steep slopes, ponds, lakes, streams, wetlands, hydric soils, vernal pools, stream buffers, floodplains, hydrologic soil groups, topographic depressions, and recharge areas.
The Applicant shall prepare an ERSAM plan or may consider requesting a partial waiver from this code section due to the size and scope of the project and contingent no wetlands currently exist within the site.

49. **Per §142-302.B.(2).(b).[9] – SWM Site Plan Requirements** – The SWM site plan shall include an O&M schedule in accordance with §142-702 of this chapter for all existing and proposed physical stormwater management facilities.
The Applicant shall include O&M notes on the stormwater management plan in accordance with §142-702 of this chapter.

50. **Per §142-302.B.(2).(b).[17] – SWM Site Plan Requirements –** The total tract boundary and size with distances marked to the nearest hundredth of a foot and bearings to the actual degree, minute, and second.
The Applicant shall include the bearings and distances for the entire tract boundary on the stormwater management plan.

51. **Per §142-302.B.(2).(b).[23] – SWM Site Plan Requirements –** The location of all erosion and sediment control facilities shall be shown on the stormwater management plan.
The Applicant shall show all erosion and sediment control facilities on the stormwater management plan per this code section.

52. **Per §142-401.L – General Requirements** – Storage facilities should completely drain both the volume control and rate control capacities over a period of time not less than twenty-four (24) and not more than seventy-two (72) hours from the end of the design storm.
The Applicant shall provide dewatering calculations to ensure that the proposed underground stormwater facilities meet the dewatering specifications as indicated above.

53. **Per §142-405.A.(1).(a) – Groundwater Recharge Requirements** – Infiltration BMPs shall have a minimum soil depth of twenty-four (24) inches between the bottom of the infiltration BMPs and the bedrock or other limiting zones such as clay layers.
The Applicant shall provide the depth of any limiting zones on the Stormtech Cross Section Detail on Sheet 6 to ensure that at least 24 inches between the bottom of the BMP and the top of the limiting zone is being provided. The Applicant shall also provide the elevations for each storm year event.

GENERAL STORMWATER MANAGEMENT COMMENTS

54. Based on our measurements, this project will be disturbing approximately 0.76 acres, which is less than an acre of land; and therefore, a NPDES permit will not be required for this project.

55. The Applicant is proposing the basins to be infiltration basins. The Applicant shall perform infiltration testing at these locations to ensure infiltration is feasible in those areas. Our office shall be sent a copy of these results for review to ensure the appropriate infiltration rates are being used in the stormwater calculations.

56. On pages 131-142 of the Stormwater Analysis Report, the Applicant shall confirm the invert and grate elevations for the pipes and inlets based on what is proposed on the plans. There are multiple occasions where the report inverts do not match what is proposed on the plans. For example, on page 131 of the report, the Applicant is proposing manhole 1 rim elevation to be at 256.72 feet but on the plans, the grate elevation for manhole 1 is labeled as 259.18. The Applicant shall confirm and revise all elevations accordingly.

57. The Applicant shall provide profiles on the plans of all proposed storm, sanitary, and water pipes for review and approval.

58. Along the building frontage, the Applicant is proposing a new storm sewer pipe located beneath the proposed concrete sidewalk at approximately 2'-9" to 3'-6" of separation between the proposed building and the new storm sewer pipe. The Applicant should consider shifting the proposed storm sewer to provide at least 5' of separation from the building to be located beneath the proposed grass area for ease of future maintenance.

59. The Applicant should consider combining proposed infiltration basins IB2 and IB3 to provide a more efficient storm sewer system within the site.

60. The Applicant is proposing to discharge the overflows from infiltration basin IB3 in the lawn area at the northern corner of the site adjacent to a single-family residential dwelling and also the special flood hazard floodplain boundary, for runoff onto Woodland Avenue. The Applicant should consider tying the overflow discharge to infiltration basin IB2 to be routed through the existing storm sewer system so as not to direct flows onto an identified flood hazard area.

61. The Applicant should consider relocating proposed inlet I-F and pipe L10 closer to the edge of the driveway entrance off of Woodland Road to capture additional runoff from the site and pipe the captured flows to proposed inlet I-H.

62. The Applicant shall clarify the discharge flows exiting the existing inlet on Easton Road at the southwest corner of the Easton Rd and Woodland Road intersection.

63. The Applicant shall update the pipe conveyance calculations accordingly and to ensure that the existing storm sewer system on Easton Road has adequate capacity to receive the additional flows.

GENERAL COMMENTS

64. The Applicant shall add a label on all plan sheets to indicate the land development application number and type as "LD-22-03-Preliminary Major Subdivision and Land Development Plans".

65. On the Existing Features Plan (Sheet 2), the Applicant shall provide a label or symbol to clarify and distinguish each parcel as indicated in General Note no. 3. The Applicant may wish to consider labeling the two lots as Lot 1 and Lot 2 and distinguishing each lot on General Note no. 3 for better clarification.

66. The Applicant shall provide our office with legal descriptions and exhibits for all proposed easements for review and approval prior to the recording of the plans.

67. The Applicant shall provide turning templates showing emergency vehicles, sanitation vehicles, and passenger vehicles to ensure that proper maneuverability is accounted for on the site.

68. A traffic impact analysis shall be provided for the proposed AutoZone site for review and comment to ensure that the trips generated by the proposed site will not adversely impact the existing traffic conditions on Easton Road and the adjacent side streets.

We have received the following documents/permits/reviews:

- AQUA Water Will Serve Letter (October 11, 2021)
- Abington Township Wastewater Department Will Serve Letter (January 31, 2022)
- MCPC Request for Review Letter (April 3, 2022)
- Application for Subdivision/Land Development (April 5, 2022)
- Planning Module Exemption Letter (April 5, 2022)
- Abington Township Wastewater Department Review Letter (May 4, 2022)
- Fire Marshal Review (May 5, 2022 via email)

We have not received the following documents/permits/reviews:

- MCPC Review
- MCCD Review
- EAC Review
- STC Review
- Traffic Review
- Financial Escrow
- BMP O&M Agreement
- Legal Descriptions & Exhibits

SUMMARY

We do not recommend Preliminary Major Subdivision and Land Development Plans approval until the Applicant addresses the above referenced comments, in particular the Zoning comments. Once the zoning comments have been addressed, we will be in a better position to recommend Preliminary Major Subdivision and Land Development Plans approval.

If you have any questions or comments with this submittal, please do not hesitate to contact me.

Sincerely,

PENNONI

Khaled Hassan

Khaled R. Hassan, PE
Township Engineer

cc: Terry Castorina, Executive Assistant to the Township Manager
Ashley McIlvaine, Special Assistant to the Township Manager

U:\ACCOUNTS\ABINT\ABINT130025 - LD-22-03 Ũ 1318 & 1330 EASTON RD (AZ ABI\ADMIN\4 - PLAN REVIEWS\P010050622 1318&1330EASTONROAD.DOCX

WASTEWATER DEPARTMENT

George Wrigley, Director

May 4, 2022

Khaled R. Hassan, PE.
Pennoni
3100 Horizon Drive, Suite 200
King of Prussia, PA 19406

RE: AutoZone Abington Re-development: Sanitary Sewer Review (1318 & 1330 Easton Rd)

Khaled:

The Abington Wastewater Utilities Department has reviewed the Planning Module Exemption for AZ Abington, LLC and the site plans submitted by CMC Engineering dated April 5, 2022. CMC Engineering utilized an average daily sanitary rate of 225 gallons per day (gpd) to estimate the existing total daily flow from the two existing properties at 777 gpd.

The proposed redevelopment of the two properties, 1318 Easton Road (hair stylist and dry cleaner) and 1330 Easton Road (professional law office) will be combined into a single automotive parts retail store. The actual historical maximum monthly water use provided by Aqua to Abington in the past for these properties is as follows:

1318 Easton hair stylist (Aqua # 119044) = 6,000 gallons or 194 gallons per day (gpd)
1318 Easton dry cleaner (Aqua # 124964) = 3,500 gallons or 103 gallons per day (gpd)
1330 Easton law offices (Aqua # 119046) = 400 gallons or 134 gallons per day (gpd)

Total available capacity 310 gpd

The criteria for estimating sanitary sewer generation rates are based on the historic recorded water consumption rates for similar retail buildings in Abington Township. Abington Township utilizes the actual water usage for each property for sanitary sewer billing purposes, and also to project sanitary sewer flow rates for proposed developments. The water useage from the retail store located at 462 Easton Road was 101,100 gallons in 2019 or 280 gpd, which for a 6,781 square foot (SF) building equates to 0.0413 gpd /SF. The water useage from the retail store located at 2801 Limekiln Pike was 78,100 gallons in 2021 or 217 gpd, which for a 5,000 square foot (SF) building equates to 0.0434 gpd /SF. An average of these two stores is 0.0424 gpd/SF.

Applying the average of 0.0424 gpd/SF to the proposed AutoZone retail store of 6,796 SF equates to an estimated 288 gpd. Therefore, the anticipated sanitary discharge rate is lower than the historical rate for these properties. A sewage facility planning mailer submission to PaDEP will not be required, nor is there additional sewer connections fees required at this time. If measured water useage in the future indicates that the maximum daily flow is greater than the 310 gpd, the property would be required to purchase additional capacity in the Abington sanitary system.

WASTEWATER DEPARTMENT

George Wrigley, Director

Based on the preliminary site plans and the building fixture layout, the proposed sanitary sewer pipeline leaving the retail store should be connected into the existing 6" vitrified clay lateral pipe that already serves the dry cleaners and hair stylist building off of Brookdale Avenue. The existing building sanitary sewer service pipeline should be removed in its entirety and replaced with a new PVC or Cast Iron pipe.

Should you have any questions or require any additional information, please contact me at 215-884-8329 or email at gwrigley@abingtonpa.gov.

Sincerely,

George R. Wrigley, Director
Abington Township Wastewater Utilities Department

pc: Kimberly Hamm, Director, Abington Community Development
Keith J. Marshall, PE. CMC Engineering

MONTGOMERY COUNTY
BOARD OF COMMISSIONERS

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MONTGOMERY COUNTY
PLANNING COMMISSION

MONTGOMERY COUNTY COURTHOUSE • PO BOX 311
NORRISTOWN, PA 19404-0311
610-278-3722 • FAX: 610-278-3941
WWW.MONTCOPA.ORG

SCOTT FRANCE, AICP
EXECUTIVE DIRECTOR

May 4, 2022

Mr. Richard J. Manfredi, Manager
Abington Township
1176 Old York Road
Abington, Pennsylvania 19001-3713

Re: MCPC #22-0107-001
Plan Name: Auto Zone Abington
(7,381 square feet on 1 lot of 0.76 acres)
Situate: 1318 & 1330 Easton Road
Cross Street: Woodland Road/Brookdale Lane
Abington Township

Dear Mr. Manfredi:

We have reviewed the above-referenced preliminary land development plan, in accordance with Section 502 of Act 247, "The Pennsylvania Municipalities Planning Code," as you requested on April 14, 2022. We forward this letter as a report of our review.

BACKGROUND

AZ Abington, LLC, the applicant, has submitted a proposed land development plan for a 7,381 square foot commercial building at 1318 and 1330 Easton Road. The applicant proposes to demolish two existing buildings: a 3,973 square foot mixed-use building and a 1,454 mixed-use building. The site is located in the MS-VC Main Street Village Center District. Public sewer and water serve the site; the plan is dated February 4, 2022.

COMPREHENSIVE PLAN COMPLIANCE

MONTCO 2040: A New Vision: the Comprehensive Plan for Montgomery County (2015). The proposed building expansion is located in the Town Center future land use category of the county comprehensive plan. This category calls for development built to the sidewalk. Uses should include traditional downtown retail uses. Therefore, the proposal is consistent with the plan.

Roslyn Revitalization Plan: The proposal is consistent in some ways with the Roslyn Revitalization Plan but could be more consistent in others. For example, the proposed building location near the street is more pedestrian-oriented than the current site. However, the Revitalization Plan specifically calls for reducing the number of curb cuts on the block of Easton Road affected by the applicant's proposal. The applicant proposes to move curb cuts, resulting in the same number of curb cuts that exist today.

Abington Master Bicycle Plan: To be consistent with the plan, the applicant should consult with the township about the need for bicycle signage to mark Route 7: Easton Road Cross Township Bike Route (Cheltenham Township to Upper Moreland).

Comprehensive Plan Update for Abington Township (2007): The proposal is located in the "Retail, Commercial, Office" future land use category of the Comprehensive Plan Update for Abington Township, and is consistent with that plan.

RECOMMENDATION

The Montgomery County Planning Commission (MCPC) generally supports the applicant's proposal, however, in the course of our review we have identified the following issues that the applicant and township may wish to consider prior to final plan approval. Our comments are as follows:

REVIEW COMMENTS

BUILDING

A. Location – The building must be located in the build-to-zone of two of the three abutting streets (it must be located on one of the street corners), consistent with the requirement for triple-frontage lots in the Main Street Districts [§2601.O]. We recommend that the building be located at the corner of Easton and Woodland Roads, which is a more prominent intersection that has been considered a gateway to Roslyn. Additionally, this would allow for the establishment of the one Easton Road vehicular access point to be located in the center of the Easton Road frontage, providing a greater setback for the vehicular access point from both Woodland Road and Brookdale Lane than either of the two vehicular access points currently proposed for Easton Road.

B. Design Requirements – We will need renderings to evaluate compliance with the design requirements of the Main Street-Village Center District [Zoning §1007].

C. Access Drive Setback - In no case shall a building be located closer than 5 feet to a parking area or access drive [Zoning §2310]. The part of the proposed building closest to Brookdale Lane has no access drive setback from the building.

PARKING AND TRANSPORTATION

A. Access Management – Only one vehicular access point is allowed on Easton Road [§2312]. As noted in the Draft Montco Pikes study [1], the intersection of Easton Road and Woodland Road has had more crashes in the 2015-2019 period than any other intersection on Easton Road except York Road (for the section including Upper Moreland, Abington, and Cheltenham). Access management and limitation of curb cuts in this area (as well as adequate distance of curb cuts from intersections) is critical.

B. Number of Spaces – The proposed number of spaces is 25, while the amount required is only 16. The applicant could combine the two parking lots while reducing spaces and moving the building to anchor the intersection of Easton Road and Woodland Road.

C. Coordination –

1. Easton Road is a county road. The applicant should coordinate with the county Department of Roads and Bridges for a highway occupancy permit.
2. There is currently a bus stop on the opposite side of Woodland Road from the proposed land development. The application should coordinate with Mark Cassel, SEPTA's Director of Service Planning to determine if any changes to the existing stop and its location would be advisable.

D. Loading - All loading areas shall be adequately screened from adjacent streets and properties, and landscaped in accordance with an overall plan, designed according to the provisions herein [Zoning §2312].

E. Splitter Island – An island is required to separate inbound and outbound traffic at parking lot entrances [Zoning Figure 10.20].

LANDSCAPING

A. Tree Replacement – Tree removal and replacement shall only occur consistent with Zoning §2402. The plans shall show whether each tree is to remain or be removed. We recommend a tree replacement table be provided.

B. Species Selection – The dwarf shrubs proposed for the required high-intensity buffer along the property line with the residential district should not be used for the following reasons:

1. They are a groundcover that grows only to a height of 8-18 inches
2. They tend to struggle in hot, humid summers
3. They are non-native

[1] https://www.montcopa.org/DocumentCenter/View/34934/3---Easton-Road-DRAFT

Additionally, the applicant's proposal would create a monoculture of 43 plantings of the same species.

C. Street Trees – [§2402]

1. Woodland Road – Street trees are required along Woodland Road. Although there is a slope in this location, street trees should still be planted.
2. Arrangement – We feel that the proposed regular alternation of two species of street tree would produce an artificial, undesirable effect.

SIDEWALK AND STREETSCAPE

A. Sidewalks – [Zoning §2504]

a. Sidewalks shall be eight feet wide.

b. A three-foot decorative verge is required between the curb and sidewalk.

c. The sidewalk along Woodland Road is proposed to be widened. However, there is a sign in the middle and the existing concrete is in poor condition. We recommend replacing the existing sidewalk with a new one that meets the required zoning width.

B. Street Furniture –Benches, and trash and recycling receptacles shall be provided at least every 100 feet, bicycle racks shall be provided at least every 200 feet, and planters shall be provided at least every 50 feet. At least half of all bike racks shall be covered or shall consist of bike lockers [Zoning §2502].

OTHER PLAN INFORMATION

The following information shall be shown [§146-11].:

A. Cartway – Cartway dimensions
B. Trees – Stand-alone trees with calipers greater than ten inches
C. Landscaping – Including material to be removed
D. Architectural Plans.

CONCLUSION

We wish to reiterate that MCPC generally supports the applicant's proposal but we believe that our suggested revisions will better achieve the township's planning objectives for commercial development.

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.

Please print the assigned MCPC number (#22-0107-001) on any plans submitted for final recording.

Sincerely,

Mike Narcowich, AICP, Community Planning Assistant Manager
mnarcowi@montcopa.org – 610-278-5238

c: AZ Abington, LLC, Applicant
Alyson J. Fritzges, Esq., Applicant's Representative
Lucy Strackhouse, Chair, Township Planning Commission
Mark Cassel, AICP, Director, Service Planning, SEPTA
Manasa L. Kondreddi, EIT, McCormick Taylor, for Montgomery County Department of Roads and Bridges

Attachment A: Aerial Image of Site
Attachment B: Reduced Copy of Applicant's Proposed Site Plan

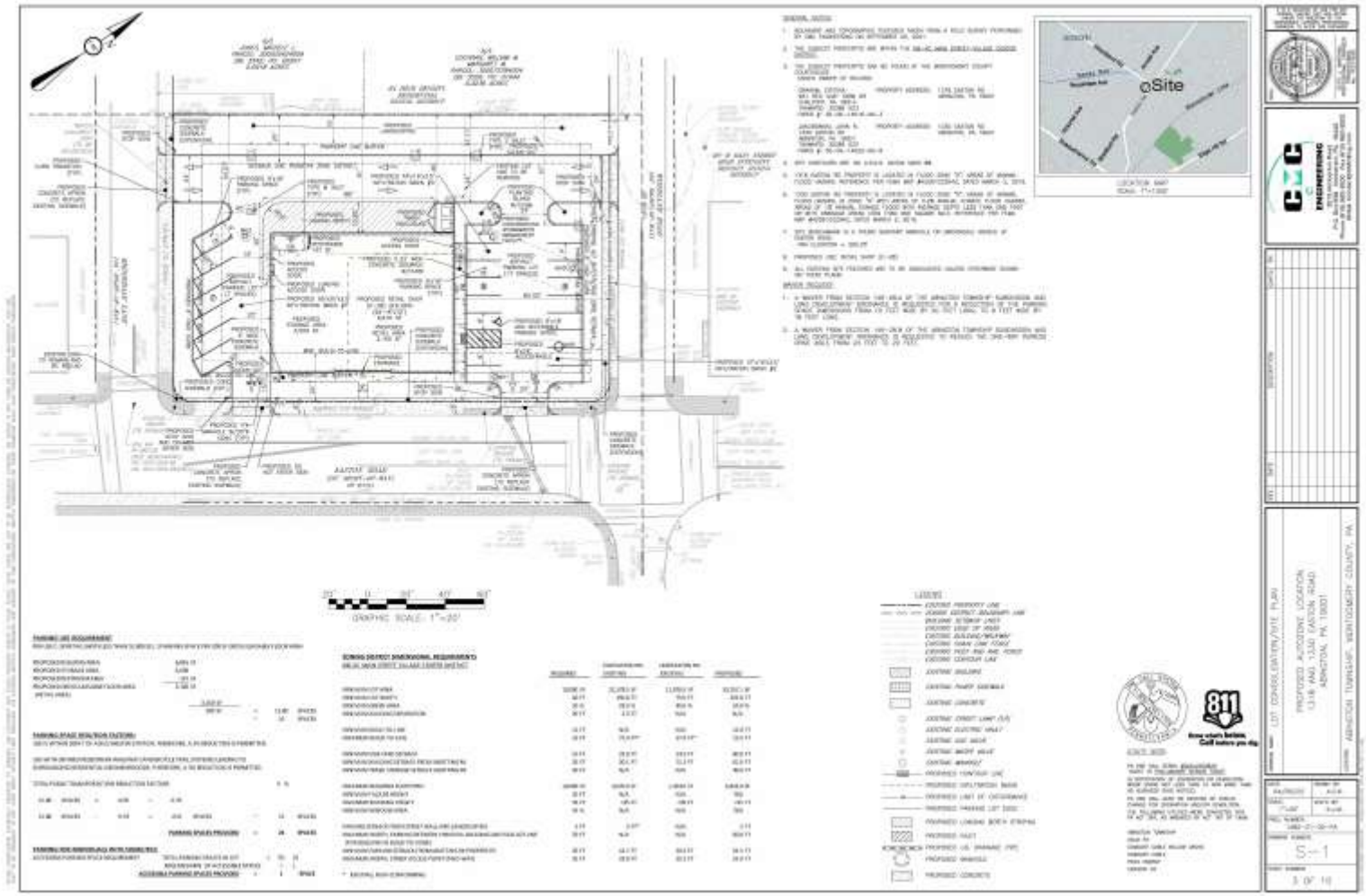
ATTACHMENT A

Autozone Abington
MCPC#220107001

Montgomery County Planning Commission

0 50 100 200 Feet

ATTACHMENT B



May 11, 2022

MEMO

To: Lucy Strackhouse, Chair – Abington Township Planning Commission
From: Abington Township Environmental Advisory Council
RE: LD-22-03 – Auto Zone Land Development Plan – 1318-1330 Easton Road
Plan Set Date: April 5, 2022

EAC Review Date: May 11, 2022

Site Summary
Owner: Abington Auto Zone
Zone – MS-VC – Main Street Village Retail - **Use – C-8 - Retail**
Watershed – Sandy Run – Wissahickon Creek
Summary – Consolidation of two lots, demolition of existing structures and new construction of Auto Zone Retail Store

Dear Chairperson Strackhouse,

The members of the Abington Township Environmental Advisory Council (EAC) have reviewed the above referenced Land Development Plan and offer the following comments and questions:

Although the plan is in conformance with zoning dimensional and minimum green area requirements, there seems to be more parking spaces than required (24 provided, 16 required). To help in reducing pavement area, we recommend considering modifying the parking area layout to expand landscaped island areas to allow for additional green space and shading. If not possible, consider using deep rooted native grasses/vegetation as alternative ground cover in the two "grass areas" shown adjacent to each parking area on the Site Plan (Sheet3). It appears that all stormwater control measures (SCM) are underground. There is a reference to a "**rain garden**" on the notes section of the Stormwater Management Site Plan (Sheet 5), however it is unclear where the rain garden feature is proposed as part of the proposed SCM's. The EAC prefers the use of vegetated SCM's such as rain gardens, as they provide added water quality benefits, which is particularly important in the Sandy Run Tributary to Wissahickon Creek. Can the developer please clarify?

The landscape schedule included on the Landscaping Plan (Sheet 9) references several non-native plant species/varieties. We request that all trees, shrubs, and grasses proposed be Pennsylvania native varieties. We defer comment on shade and street tree species to the Shade Tree Commission.

Respectfully submitted,

Susan S. Myerov

Susan Myerov,
Member, Abington Township EAC

cc: Richard Manfredi
Michael Narcowich
Shaun Littlefield
Planning Commission Members
EAC and Shade Tree Commission Members