ABINGTON TOWNSHIP

JULY 13, 2023

Abington Township, PA Logo

BOARD OF COMMISSIONERS WORKING SESSION

TOWNSHIP OF ABINGTON

BOARD OF COMMISSIONERS WORKING SESSION

A G E N D A
July 13, 2023
7:30 PM

There are three ways for the public to participate in the meeting: in-person, online or by phone. Residents who wish to attend in person can do so in the Abington Township Board Room located at 1176 Old York Road, Abington, PA 19001, 2nd Floor. Alternative means of public participation are offered for those who do not wish to or are unable to attend the meetings in person. Residents who wish to participate in the meeting remotely can access the meeting online by a computer, iPad, iPhone, or Android at https://us06web.zoom.us/j/88216803878. This link will enable residents to hear the meeting, see presentations, and ask questions. There will be no video interaction capabilities. Residents, who are unable to join online, can listen to and participate in the meeting by calling 1-929-436-2866 and entering the meeting ID number 882-1680-3878 when prompted.

CALL TO ORDER

CONSIDER APPROVAL OF MINUTES

a. Motion to approve the Minutes from the Working Session of May 11, 2023.

PUBLIC COMMENT ON AGENDA ITEMS

UNFINISHED BUSINESS

NEW BUSINESS

a. Presentation of the Recreation, Parks and Open Space (RPOS) Plan- (William Collins)

b. Motion to approve the Preliminary/Final Land Development - LD-22-06 - 2620 West Moreland Road (Raising Cane's).

c. Conditional Use Hearing: Toll Mid-Atlantic LP Company, Inc. for the location at 711 Fox Chase Road, Jenkintown, PA 19046.

ADJOURNMENT

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 Board of Commissioners Working Session was held on Thursday, May 11, 2023 via webinar and in-person at the Township Administration Building, Abington, PA, with President Hecker presiding.

CALL TO ORDER: 8:08 p.m.

ROLL CALL: Present: Commissioners ROTHMAN, DiPLACIDO, VAUGHN, THOMPSON, WINEGRAD, HENRY, ZAPPONE, CARSWELL, SPIEGELMAN, BOLE, SCHREIBER, VAHEY, HECKER
Excused: Commissioners BRODSKY, BOWMAN

Also Present: Township Manager MANFREDI
Township Solicitor CLARKE

CONSIDER APPROVAL OF MINUTES:

Vice President Vahey made a MOTION, seconded by Commissioner Thompson to approve the minutes from the Working Session of April 13, 2023.

MOTION was ADOPTED 13-0.

PUBLIC COMMENT ON AGENDA ITEMS:

President Hecker announced that public comment will be taken following the agenda item.

UNFINISHED BUSINESS: None.

NEW BUSINESS:

Presentation on the Feasibility Study for potential Economic Development in Abington Township by Delta Development Group, Inc.

Mr. Darren Asper, Senior Vice President of Community Planning of Delta Development Group Inc., introduced Dane Higbee, Senior Consultant and Brandyn Smith, Consultant, and said the draft feasibility study includes an executive summary, demographic/market analysis, areas for economic development, economic development structures, funding opportunities, and an action/ implementation plan. Also, a public meeting was held last month regarding economic development corporations.

Between 2010 and 2020, Abington's population grew from 55,419 to 58,502; median household income has remained constant; and between 2010 and 2022, the Township experienced the most job growth in the healthcare & social assistance industries as well as the professional scientific & technical service sector, which are research-related industries.

Data shows that the Township is growing, so there is a need for enhanced community facilities including parks and recreation, abundant retailers/restaurants, and employment opportunities. The high median household income demonstrates high viability for consumer spending at retailers, restaurants, and entertainment venues. Growth in the number of low-income households indicates a need to equitability lift these households through community revitalization projects.

Sites toured: Ardsley Station, Crestmont Station, Glenside Station, Hollywood, Huntingdon Valley Shopping Center, Keswick, McKinley, Meadowbrook Station, North Hills Station, Noble Station, Old York Road, Roslyn Station, Rydal Station, and Willow Grove Park Mall. Criteria for site evaluation includes market viability; motorized transportation access; nonmotorized transportation access; commercial property availability; the number of available acreage/lots and connectivity to Township's assets in which the market data for each site was presented.

An Economic Development Corporation (EDC) is a quasi-governmental, nonprofit organization with a mission to advance economic development in a defined geographic area. Its sole focus is connecting with local businesses to address their needs; promote the interests of small businesses within the community; and take the lead in development projects. The EDC would be eligible for regional, state, and federal grants to assist with business-promotion, technical assistance, and capital improvement projects. An EDC promotes forward-thinking and long-term vision for the community through the completion of smaller impactful projects.

EDC case studies in Discover Haverford and Lansdowne were presented.

Funding strategies for operating an EDC can be sustained through business memberships; contributions from municipalities; private foundation grants; revenue from renting/leasing of EDC-owned properties; and fees for assistance with grant and loan funding.

Grants and loans from local, state, and federal sources can be used to assist the EDC with acquisition and improvement of buildings and other properties as well as provide sustained revenue sources, improve aesthetics of the community, and promote increased commerce within the Township.

An EDC is governed by the Board of Directors typically comprised of nominees from municipal elected officials. The Board of Directors is comprised of an odd number of members to prevent potential tied votes. The Board of Directors meets at regularly scheduled intervals to make personnel decisions, review finances, and vote on contracts. The EDC with either share staff members with its home municipality or hire EDC-dedicated staff members.

Benefits of the EDC are transparency; fostering community buy-in and consensus; ability to secure funding; strengthening the private sector; and focus solely on economic development.

Action and implementation plan would include considering the establishment of an Economic Development Corporation; develop operational and capital funding strategy; identify economic development priorities in a five-year EDC Strategic Plan; begin implementing economic development projects and initiatives; establish public-private partnerships for improvement of key community assets; and benchmark and measure impact.

President Hecker asked for any comments from Commissioners.

Commissioner Carswell questioned whether there is a specific stretch of roadway on Old York Road that may be a top priority.

Mr. Asper replied the three areas would be the Noble Train Station, Penn State Abington, and Abington Hospital.

Commissioner Rothman questioned whether there is encouraging data for office space as part of the Willow Grove Mall.

Mr. Asper replied data showed a strong market for office space in this region, and this area is known for regional corporate headquarters for businesses. Due to the mall's access, it would be a good location for that type of redevelopment and having amenities and recreation along with office space would be attractive.

President Hecker asked what sectors of the industry are growing?

Mr. Higbee replied we can further break down the data as to what type of industries have grown or declined.

Commissioner Bole asked how can we get this data to existing business owners about where trends are going in the medium and long-term?

Mr. Asper replied that the draft report will be sent to the Township and posted on its website.

Commissioner Vaughn said if the mall turns into a mixed-use redevelopment, should the building remain as is with offices occupying existing space or should it be completely redeveloped such as the Promenade in Upper Dublin Township.

Mr. Asper replied we will continue seeing a decline in retail space. We have not advocated taking down the mall, but looked at it for potential reuse, which would be a good economic project.

Commissioner Henry asked how would changing the footprint of the mall benefit our residents?

Mr. Asper replied we did not look at all the staging opportunities, only what the future could be. However, if an EDC was involved as a co-developer of the site, it could work on a market analysis for additional office/retail space versus what there is now.

Commissioner Schreiber said she would like data on the type restaurants for the Roslyn Business District.

Mr. Asper replied we can provide additional data, but most like a mix of restaurants.

Commissioner Winegrad asked about seed money for the startup of an EDC and are they mandated to focus on specific projects?

Mr. Asper replied some EDCs get seed money from their municipality in which they may stipulate a five-year sliding scale. The EDC could solicit funds from the business community, foundations, and other entities for operations. For capital projects, the EDC can utilize their own budget or work with the municipality to get a local match.

The EDC would be a new entity, so there will be a feasibility study that provides direction, and initially there should be oversight by the Township making sure it’s successful.

Commissioner Spiegelman asked for further explanation on the transparency of an EDC as well as the process of public-private partnerships.

Mr. Asper replied that the Board of Commissioners would establish the EDC appointing members with staggered terms. It is a public entity that will have a budget, and startup funds from the Township will be included in its budget process. Once the EDC is established, they will hold monthly meetings that are open to the public.

Regarding funding for capital improvement projects, a resolution would need to be approved for any grants or low-interest loan, and if the Township is backing it, the Board of Commissioners needs to approve a resolution.

Also, once a developer is selected not only do they need to work with the EDC, but they will also need to appear before the Township's Planning Commission, Zoning Hearing Board, and the Board of Commissioners to make their presentation.

President Hecker asked for the timeline of completion of the draft report.

Mr. Asper replied we will issue the revised draft report to the Township within the next few weeks.

President Hecker asked for any public comment.

Mike Tobin, resident, asked how the commingling of public-private funding works.

Mr. Asper replied that the EDC may retain the property and have a lease or rental agreement with a private entity.

Karen Milovcich, resident, expressed concern about "putting the land of our community in the hands of expending government and corporate landlords," so this is a huge mistake. She suggested asking the citizens for ideas.

Lora Lehmann, resident, expressed concern about mixed-use and apartments at the mall, and what would the benefits be for residents?

Lisa Mallon, resident, asked would the startup of an EDC be budget-neutral from a tax standpoint for residents.

Manager Manfredi replied until the report is finalized, public comment has been received, and the Board of Commissioners decides on how they want to proceed, the cost will be determined seeing how it fits into the budget.

ADJOURNMENT: 9:23 p.m.

Respectfully submitted,

Liz Vile, Minutes Secretary

BOARD OF COMMISSIONERS WORKING SESSION

AGENDA ITEM

July 13, 2023

DATE

AGENDA ITEM NUMBER

Administration

DEPARTMENT

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

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

AGENDA ITEM:

RPOS Plan

EXECUTIVE SUMMARY:

n/a

PREVIOUS BOARD ACTIONS:

n/a

RECOMMENDED BOARD ACTIONS:

Presentation of the Recreation, Parks and Open Space (RPOS) Plan- (William Collins)

BOARD OF COMMISSIONERS WORKING SESSION

AGENDA ITEM

July 13, 2023

DATE

AGENDA ITEM NUMBER

Administration

DEPARTMENT

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

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

AGENDA ITEM:

LD-22-06 - 2620 West Moreland Road (Raising Cane's)

EXECUTIVE SUMMARY:

Under this Application, the Applicant is proposing to construct a new one-story stand-alone 3,062 gross SF fast-food (Raising Cane's) restaurant with outdoor seating on an existing 44,910 SF lot in front of 2620 West Moreland Road. Other site improvements for this site include parking, curbing, sidewalk, benches, landscaping, and sanitary and stormwater management facilities. Access to/from the site will be by way of two (2) existing entrances that intersect West Moreland Road (S.R. 063, 70 FT R/W). The new building is proposed to be served by public water and sewer service.

PREVIOUS BOARD ACTIONS:

n/a

RECOMMENDED BOARD ACTIONS:

Motion to approve the Preliminary/Final Land Development - LD-22-06 - 2620 West Moreland Road (Raising Cane's).

APPLICATION FOR SUBDIVISION/LAND DEVELOPMENT

PROJECT NAME: Willow Grove Raising Cane's

APPLICANT NAME: Raising Cane's Restaurants, L.L.C.

TO BE COMPLETED BY THE TOWNSHIP
Submission Information:

Application Number:_____ Date Complete:_____

Project Title:_____ 90 Day Date:_____

File 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

Raising Cane's Restaurants, LLC c/o Michelle Robinson
Name

6800 Bishop Road, Plano, Texas 75024
Address

267.767.9644 _____
Phone Fax

mrobinson@michellerobinsondesign.com
Email Address

Property Owners Information (if different than applicant)

Willow Grove, PA PAD LLC c/o TLM Realty Holdings
Name

295 Madison Avenue, 37th Floor New York, NY 10017
Address

212-753-4576 _____
Phone Fax

_____
Email Address

Architect/ Planner

Dan Wise
Name

17710 Detroit Avenue Cleveland, Ohio 44107
Address

216-920-3128 _____
Phone Fax

dwise@adaarchitects.com
Email Address

Engineer/ Surveyor	Kevin Tatlow Name 1515 Market Street, Suite 920, Philadelphia, PA 19102 Address
Engineer/ Surveyor Cont'd	267-402-3400 Phone Fax ktatlow@bohlereng.com Email Address
Attorney	Marc Kaplin Name 910 Harvest Drive Blue Bell, PA 19422 Address 6106392637 Phone Fax mkaplin@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: 2620 West Moreland Road, Willow Grove, PA 19090

Tax Parcel No.: 30-00-45100-01-6 County Deed Book No.:_____ Page No.: _____

Description of Proposed Work: Proposed Fast Food Restaurant with Drive Thru and exterior outdoor seating and accessory parking.

Total Tract Acreage: 1.03 Project Acreage: 0.96

Zoning District: BC Existing Number of Lots: 1 Proposed Number of Lots: _____

Existing Sewer Flows: N/A Proposed Sewer Flows: 14 EDUS

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 _____ 10/24/22 _____ 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:
146-13 General Requirements	Request for preliminary/final Land Development to be submitted and reviewed concurrently.

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
- ___ 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
- X 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
- X 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.

Signature of Applicant — Date: 10/25/22

Michael Oestreich — Michael Oestreich, SVP & Authorized Signatory

Signature of Property Owner (if different than applicant) — Date: 10/24/2022

THE FOLLOWING IS FOR INTERNAL USE ONLY:

PAYMENT

____ Application Fee Amount: $_____ Check No.: #_____

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

DECISION INFORMATION

Approval _____ Denial_____ Decision Date: _____

Comments/Conditions:_____

_____

_____

_____

_____

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: _____ Date: 10/24/22

Applicant

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: 10/21/22
Municipality: Abington Township

Proposal Name: Willow Grove Raising Cane's

Applicant Name: Raising Cane's Restaurants, LLC c/o Michelle Robinson
Address: 6800 Bishop Road
City/State/Zip: Plano/Tx/75024
Phone: 207-632-4246
Email: mrobinson@michellerobinsondesign.com

Applicant's Representative: Bohler Engineering- Kevin Tatlow
Address: 1515 Market Street, Suite 920
City/State/Zip: Philadelphia, PA 19102
Business Phone (required): 267-304-4200
Business Email (required): ktatlow@bohlereng.com

Type of Review Requested:

(Check All Appropriate Boxes)

- ⊗ Land Development Plan
- O Subdivision Plan
- O Residential Lot Line Change
- O Nonresidential Lot Line Change
- O Zoning Ordinance Amendment
- O Zoning Map Amendment
- O Subdivision Ordinance Amendment
- O Curative Amendment
- O Comprehensive / Other Plan
- O 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:

- O Tentative (Sketch)
- ⊗ Preliminary / Final

Type of Submission:

- O New Proposal
- O 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: BC
Special Exception Granted ⊗ Yes O No
Varian Granted ⊗ Yes O No For Ordinance 2402.A.5, Ordinance 2403.B.4.a, Ordinance 1102, and Ordinance 1103

Plan Information:

Tax Parcel Number(s) 30-00-45100-01-6

Location *(address or frontage)* 2620 West Moreland Road
Nearest Cross Street West Moreland
Total Tract Area 1.03 AC
Total Tract Area Impacted By Development 0.96 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

May 12, 2023

ABINT130028

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

RE: LD-22-06-2620 West Moreland Road (Raising Cane's)
PARID: 30-00-45100-01-6 / TMID: 30117 020
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 twenty-six (26) sheets dated October 26, 2022, last revised April 10, 2023, and received on April 14, 2023; as prepared by Bohler Engineering, located at 1515 Market Street, Suite 920, in Philadelphia, PA for the above referenced project.

Under this Application, the Applicant is proposing to construct a new one-story stand-alone 3,062 gross SF fast-food (Raising Cane's) restaurant with outdoor seating on an existing 44,910 SF lot in front of 2620 West Moreland Road. Other site improvements for this site include parking, curbing, sidewalk, benches, landscaping, and sanitary and stormwater management facilities. Access to/from the site will be by way of two (2) existing entrances that intersect West Moreland Road (S.R. 063, 70 FT R/W). The new building is proposed to be served by public water and sewer service.

This project is located within the BC – Business Center Willow Grove Park Zoning District. The subject parcel is located on a separate parcel that is accessible to the Willow Grove Park Mall. The site is fronted by West Moreland Road (S.R. 063 70 FT R/W) to the northeast; commercial properties zoned in the BC - Business Center Willow Grove Park to the southeast and southwest; and residential properties zoned in the R-4 High Density Residential Zoning District to the northwest.

In accordance with the FEMA, Flood Insurance Rate Map (FIRM) Panel No. 42091C0313G, 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 RECEIVED

The Applicant has been granted the following Special Exception and variances under Application no. 22-24 at the Zoning Hearing Board meeting held on September 20, 2022:

1. A Special Exception pursuant to Abington Township Zoning Ordinance §1102, and the Comprehensive Use Matrix, to permit a drive-through restaurant.

2. A variance from §1103 (Figure 11.9) to allow a 5.7 feet parking to building setback along the southern property line of the subject property, where the Ordinance otherwise requires a minimum distance of 10 feet.

3. A variance from §2402.A.5 and §2403.B.4.a for the minimum buffer and planting requirements.

The relief was granted by the Board subject to the following conditions:

a) that the Applicant apply for and obtain land development approval (or waiver therefrom) from the Abington Township Board of Commissioners permitting the development and use proposed;
b) that, as part of the land development process, the Applicant shall provide and install any landscaping deemed appropriate by the Board of Commissioners, in their sole and absolute discretion, whether-or-not required specifically by the Township's Subdivision and Land Development Ordinance, to mitigate the effect of the variances granted hereby; and
c) that development and use of the subject property shall be in substantial conformance with the testimony and exhibits presented at the public hearing on this matter, including (without limitation) the plan attached hereto.

The Applicant shall include the above referenced variances and conditions on the record plan.

ADDITIONAL VARIANCES REQUESTED

The Applicant is scheduled for the May 17, 2023 Zoning Hearing Board meeting under Zoning Application no. 23-11; and is requesting the following additional variances:

1. A variance from §1103, Figure 11.9 to permit a patio canopy structure to be setback 12.6 feet from a main access drive where a 20-feet setback is required.

2. A variance from §1104.C.9.c to permit an approximately 14% window area for an exterior wall facing a street when a minimum 35% window area is required.

3. A variance from §1107.D to permit a service door to be located on the front façade of the fast-food restaurant facing West Moreland Road.

4. A variance from §2601.N.3.a to allow the outdoor trash containment facilities for the site to not utilize self-closing gates.

The Applicant shall include the above referenced additional variances being requested on the plan set.

WAIVERS REQUESTED

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

1. **§146-9.A.(1) – Application Stages –** A waiver to consider the current subdivision and land development submission to be a combined Preliminary/Final application.
   The Applicant is requesting a waiver to allow for a concurrent preliminary and final land development submission.

2. **§146-11.A.(4), §146-11.A.(8), and §146-11.A.(10) – Property Identification Plan –** A partial waiver to include the aerial plan as the Property Identification Plan.
   The Applicant is proposing to utilize the aerial plan provided in the plan set as the property

identification plan.

3. **§146-11.A.(7) – Property Identification Plan –** A partial waiver to utilize NAVD88 as opposed to the sanitary sewer datum of Abington Township.
   The Applicant has provided a conversion from the Abington Sanitary Sewer Datum to NAVD88 Datum.

4. **§146-11.B.(7) – Property Identification Plan –** A partial waiver to provide only the utility mains on the existing features plan since no other utilities outside the site would be affected.
   The Applicant has provided the existing mains on existing features plan.

5. **§146-33.D – Drainage Pipe Size –** A waiver to provide pipe size less than 15" and non RCCP material.
   The Applicant is proposing 6", 10", and 12" HDPE piping for the site.

6. **§146-43.C.(3).(a) – Erosion and Sediment Control –** A waiver to show slopes higher the 15% to tie back into existing curbing.
   The Applicant is proposing slopes of 15.5% to tie into the existing curb elevations.

The Applicant shall include the above referenced waivers being requested on the plan set.

The following documents have been reviewed:

Title	Sheet	Dated	Revised
Cover Sheet	1 of 26	10/26/22	4/10/23
Record Plan	2 of 26	10/26/22	4/10/23
General Notes	3 of 26	10/26/22	4/10/23
Soil Erosion and Sediment Pollution Control Plan	4 of 26	10/26/22	4/10/23
Soil Erosion and Sediment Pollution Control Notes	5 of 26	10/26/22	4/10/23
Soil Erosion and Sediment Pollution Control Notes	6 of 26	10/26/22	4/10/23
Soil Erosion and Sediment Pollution Control Details	7 of 26	10/26/22	4/10/23
Demolition Plan	8 of 26	10/26/22	4/10/23
Existing Resources and Site Analysis Map (ERSAM) Plan	9 of 26	10/26/22	4/10/23
Dimension Control Plan	10 of 26	10/26/22	4/10/23
Grading Plan	11 of 26	10/26/22	4/10/23
Pre-Development Plan	12 of 26	10/26/22	4/10/23
Post-Development Plan	13 of 26	10/26/22	4/10/23
PCSM Plan	14 of 26	10/26/22	4/10/23
PCSM Notes	15 of 26	10/26/22	4/10/23
Drainage Area Plan	16 of 26	10/26/22	4/10/23
Utility Plan	17-19 of 26	10/26/22	4/10/23
Construction Details	20 of 26	10/26/22	4/10/23
Basin Details	21 of 26	10/26/22	4/10/23
Basin Details	22 of 26	10/26/22	4/10/23
Vehicle Circulation Plan	23 of 26	10/26/22	4/10/23
Landscape Plan	24 of 26	10/26/22	4/10/23
Landscape Details	25 of 26	10/26/22	4/10/23
Aerial Plan	26 of 26	10/26/22	4/10/23

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) as well as our previous review letter dated December 5, 2022. We offer the following outstanding comments for your consideration:

ZONING COMMENTS

2. ***Per §1103 Figure 11.9 – Dimensional Regulations –*** *The minimum build-to line along public streets shall be 20 feet (50 feet on Moreland Road west of Park Avenue) and the maximum shall be 50 feet (100 feet on Moreland Road west of Park Avenue.) The minimum build-to-line along main access drives shall be 20 feet with a maximum of 25 feet, and along secondary access drives the minimum build-to-line shall be 16 feet with a maximum of 25 feet.*
   The site is accessed by two drives that intersect with West Moreland Road. Per Section 201 – Specific Definitions, the access drive to the south provides access from West Moreland Road to internal parking areas and is therefore classified as a main access drive. In addition, per the definition of building, the steel roof supported by columns on the patio is considered a building. The steel roof structure is only 12.6 feet from the main access drive which is less than the minimum required 20 feet. The plans shall be revised accordingly to show the building setback lines from West Moreland Road as well as the main access drive, and the steel roof structure moved to be located within the build-to-lines; otherwise, a variance from this section of the code will be required.
   In accordance with Zoning Hearing Board Application #23-11, the Applicant is requesting a variance from this Code Section to permit a canopy setback from the main access drive of 12.6 feet where a 20-foot setback is required.

4. ***Per §1104.C.9.c – Design Standards –*** *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.*
   A window area calculation shall be provided for the proposed façade that faces West Moreland Road to ensure that there is a window area between 35% and 75% for this façade.
   In accordance with Zoning Hearing Board Application #23-11, the Applicant is requesting a variance from this Code Section to permit approximately 14% window area for an exterior wall facing a street when a minimum of 35% is required.

6. ***Per §1105.C.4 – Public Open Space –*** *A minimum of 30% of the area shall be landscaped with a mixture of trees, shrubs, or ground cover. Such areas shall have benches, trash containers, and lighting fixtures.*
   There is no lighting proposed in the open space area. A lighting plan shall be provided to ensure there is adequate lighting for the site.
   The Applicant has indicated that a photometric site plan is included with the response; however, no photometric site plan has been provided. The photometric site plan shall be provided for review.

7. ***Per §1106 – Lighting –*** *Lighting shall be provided for the proposed development that meets the requirements of the above code section.*
   There is no lighting plan provided as part of this plan submission. A lighting plan shall be provided showing the number and type of lights provided with mounting heights. Depending on the type of lighting proposed, point-by-point calculations may have to be provided.
   The Applicant has indicated that a photometric site plan is included with the response; however, no photometric site plan has been provided. The photometric site plan shall be provided for review.

9. ***Per §1107.C – Trash Loading, and Utilities –*** *All wall-mounted or ground-mounted mechanical, HVAC, utility, or communication equipment, including satellite dishes and vent pipes, shall be screened from public view by parapets, walls, fences, landscaping, or other approved means.*

The Applicant shall confirm that the HVAC and mechanical equipment is screened from public view as indicated in this Code Section.
The Applicant has confirmed that the rooftop HVAC and mechanical equipment is screened from public view as provided on sheet A4.10. The Applicant shall submit revised architectural plans for review.

10. ***Per §1107.D – Trash, Loading, and Utilities –*** *Service and loading areas must be located to the side or rear of buildings and must be visually screened. Loading doors, service doors, and loading docks shall not be located on any façade facing a street, or on any portion of a façade within 35 feet of a street.*
On the architectural plans provided, it appears that there is a service door with a 4-digit wall mounted key lock located on the façade facing West Moreland Road. No service door shall be located on the front façade of a building. This door shall be relocated along the side or rear facades. In addition, the loading area for deliveries shall be shown on the plans.
In accordance with Zoning Hearing Board Application #23-11, the Applicant is requesting a variance from this Code Section to permit a service door to be located on the front façade of the restaurant facing West Moreland Road.

15. ***Per Article XXII – Signs –*** *The Applicant shall submit details and dimensions for the proposed signs to the Township Zoning Officer for review and approval.*

22. ***Per §2403.C.6.b.(1) – Site Element Screens –*** *Medium-Intensity Site Element Screen, Screen Type #4 – Opaque Fence or Masonry Wall with Shrubs.*
Per Figure 24.7 – Site Element Screen Requirements, for a dumpster or trash containment area, a medium intensity screen is required. The Applicant shall provide a dumpster detail to comply with the site element screen type #4 requirements of this Code Section.
Per the Code Section, screen type #4 shall have shrubs spaced no further than 3 feet on center. Based on our measurements, the shrubs surrounding the trash containment area are spaced 4'10" on center which is larger than the 3 feet maximum. The landscaping shall be revised to meet the type #4 screen requirements.

23. ***Per §2504.B.1 thru 4 – Sidewalks and Crosswalks –*** *Street front sidewalks in the BC Business Center Zoning District shall meet the requirements of these above Code Sections.*
The existing sidewalk along West Moreland Road is not proposed to be replaced and is only 4 feet in width. However, per these code sections, a minimum width of 10 feet for sidewalk and crosswalks along West Moreland Road, a public street, in the BC – Business Center zoning district shall be provided. In addition, the access roads abutting the site can be considered secondary access drives and shall have sidewalk and crosswalks along these drives with a minimum width of 6 feet. The plans shall be updated to show new sidewalk and crosswalks along West Moreland Road and the secondary access drives to provide an accessible route to/from the site. ADA compliant ramps shall also be provided at these locations to allow for maneuverability of persons with disabilities.
The Township has deemed the existing sidewalk along the West Moreland Road site frontage as a lawful nonconformity and is permitted to remain. The Applicant will also not be required to install new curb ramps along the West Moreland Road site frontage provided that the Applicant furnishes an escrow to fund the future curb ramps installation.

24. ***Per §2504.E – Sidewalk and Crosswalks –*** *Streets and access drives shall be separated from sidewalks by a decorative verge area, so as to allow for street trees and furnishings such as benches and light fixtures. Street furniture surrounded by hardscaping may be located in the decorative verge. At least 25% of the decorative verge area shall be landscaped with a mix of groundcover, shrubs, and trees. The width of the verge in the BC Business Center Zoning District shall be 6 feet along public streets and 4 feet along access drives.*

Since this site is within the BC Business Center Zoning District, a verge will be required along both West Moreland Road and the access drives. The plans shall be revised to include the required verge areas.
The Township has deemed the existing sidewalk along the West Moreland Road site frontage as a lawful nonconformity and is permitted to remain. The Applicant will also not be required to install new curb ramps along the West Moreland Road site frontage provided that the Applicant furnishes an escrow to fund the future curb ramps installation.

26. ***Per §2601.H.1 thru 11 – 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.*
The Applicant is proposing outdoor wall mounted lighting attached to the building. A site lighting plan has not been provided as part of this submission. A lighting plan, showing point-by-point calculations for the entire site shall be provided to ensure all parking areas are provided with a minimum of 0.5-foot candles at any point on the ground and that the lighting spillover meets the requirements of this Code Section.
The Applicant has indicated that a photometric site plan is included with the response; however, no photometric site plan has been provided. The photometric site plan shall be provided for review.

28. ***Per §2601.N.3. a thru d – Trash Containment Standards –*** *When trash containment is located outdoors in the BC - Business Center Zoning District, trash containers shall be located in a walled or fences enclosure, at least 6 feet in height.*
    a. *Enclosure shall utilize self-closing gates.*
    b. *Enclosures shall be constructed of masonry wall or wooden fence (or a vinyl-coated fence designed to look like wood).*
    c. *Enclosures and gates shall not consist of chain link fence; enclosures shall not consist of cinder block.*
    d. *It is recommended that trash enclosures be constructed of the same or similar materials and colors as the principal structure on-lot.*

    On the Record Plan (Sheet C1.1) it is noted to refer to the architectural plans for details of the screening, gates, bollards, and masonry for the trash enclosure however the details shall also be provided on the Land Development Plans. A trash enclosure detail shall be provided on the plans which shows the height and material of the proposed enclosure.
    In accordance with Zoning Hearing Board Application #23-11, the Applicant is requesting a variance from this Code Section to permit outdoor trash containment facilities to not utilize self-closing gates.

CHAPTER 146
SUBDIVISION & LAND DEVELOPMENT COMMENTS

31. ***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-22-06".*
    The Applicant shall provide the land development application number "LD-22-06" on all the plan sheets.

37. ***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 location of property lines and names of landowners within 400 feet of any part of the site shall be provided.
    The Applicant has provided an aerial plan showing the existing features within 400 feet of the site. The Applicant has indicated that the property lines and names of landowners has been provided for all parcels within 400 feet of the site; however, this information is not shown for the properties across

West Moreland Road. This information shall be shown on the plan.

41. ***Per §146-11.C.(3) – Proposed Layout Plans –*** *The proposed layout plans shall show the building setback lines incorporated with any other construction restriction line established by the Township Zoning Ordinance, indicated on each proposed lot.*
Building setback lines shall be shown on the proposed layout plans.
The Applicant has indicated that the building setback lines have been shown on the Record Plan (Sheet C1.1); however, the building setback lines have not been shown. The Applicant shall show the building setback lines on the Record Plan.

42. ***Per §146-11.D.(7) – Grading Plans –*** *The grading plans shall show the delineation of the limits of work areas and the portions to remain undisturbed.*
The Applicant shall label the size of the limit of disturbance area on the grading plan and show the complete limit of NPDES disturbance area. If the limit of disturbance area is greater than an acre, a NPDES permit will be required.
Based on our measurements, the limit of disturbance area is approximately 0.96 acres which is nearly 1 acre. The Applicant shall confirm with the Montgomery County Conservation District (MCCD) that a NPDES permit is not required for this grading permit application and forward a copy of the correspondence to the Township and our office.

43. ***Per §146-11.F.(4).(b).[1] thru [6] – Storm Sewer Facilities –*** *Profile plans for the proposed storm pipes and inlets shall be provided.*
The Applicant has indicated that once the Township Engineer is acceptable with the Utility Plan and Stormwater Report, they will submit Profile Plans showing the layout of the internal pipes. These plans shall be provided for review prior to recording.

46. ***Per §146-27.A – Sidewalks and Curbs -*** *Sidewalks shall be provided along all streets except where, in the opinion of the Board of Commissioners, they are unnecessary for the public safety and convenience.*
Based on an existing conditions site inspection, there is approximately 910 SF of existing sidewalk located along the West Moreland Road frontage that is in poor condition and shall be replaced. The entire length of the sidewalk shall be replaced and per §2504.B.1 thru 4 of the Township Zoning Code, the sidewalk is required to be 10 feet wide along the West Moreland Road frontage.
The Township has deemed the existing sidewalks along the West Moreland Road site frontage as lawful nonconformities. The Applicant will perform maintenance where required.

48. ***Per §146-27.F – Sidewalks and Curbs –*** *Curbs shall be the vertical type and constructed in accordance with Township specifications.*
Based on an existing conditions site inspection, there is existing curb along West Moreland Road that is in poor condition and shall be replaced. The entire length of the curbing along West Moreland Road shall be replaced.
The Township has deemed the existing sidewalk along the West Moreland Road site frontage as a lawful nonconformity and is permitted to remain. The Applicant will also not be required to install new curb ramps along the West Moreland Road site frontage provided that the Applicant furnishes an escrow to fund the future curb ramps installation.

50. ***Per §146.31.A.(6) – Reserve strips; rights-of-ways; easements –*** *Easements for present or ultimate construction of storm drains and sanitary sewers having a minimum width of twenty (20) feet shall be provided where necessitated by topographical conditions.*

The Applicant shall provide an easement around the proposed stormwater management facilities; or the Applicant may consider providing a blanket easement for the proposed stormwater management facilities as part of the stormwater bmp operations and maintenance agreement with the Township.
The Applicant has indicated that they will coordinate with the Township regarding necessary easements.

CHAPTER 142
STORMWATER MANAGEMENT COMMENTS

67. ***Per §142-409.A.(1).(b) – Stormwater Peak Rate Control and Management Districts*** *- Based on the Watershed Map, Figure 1.03, this site is located within the Pennypack Creek Watershed. Per Figure 409.1P Area P Stormwater Management District Watershed Map, this site is located within District B of this watershed. This district requires the 100-year post flow to be reduced to the 50-year pre, the 50-year post be reduced to the 25-year pre, the 25-year post be reduced to the 10-year pre, the 10-year post be reduced to the 5-year pre, the 5-year post be reduced to the 2-year pre, and the 2-year post be reduced to the 1-year pre.*
Since this project is located in Area B of the Pennypack Creek Watershed, the post-development rates shall be reduced as indicated above. The PCSM Report shall provide a chart comparing the pre-development stormwater runoff conditions and the post development runoff conditions to ensure the post-development rates are reduced as required per this Code Section.
After further review, this site is located within District A of the Pennypack Creek Watershed. A chart shall be provided in the report showing the pre-development and post-development rates to ensure the required reductions are being met for the site.

GENERAL STORMWATER MANAGEMENT COMMENTS

69. *Dewatering calculations shall be provided in the PCSM report.*
The Applicant has indicated that the basin dewaters in 35 hours and that dewatering calculations have been provided in the report; however, no dewatering calculations have been provided. Dewatering calculations shall be provided, and the location shall be called out in the table of contents to ensure the basin dewaters in the required time.

We have received the following documents/permits/reviews:

- AQUA Will Serve Letter (September 16, 2022)
- Zoning Hearing Board Decision (October 19, 2022)
- MCPC Request for Review (October 21, 2022)
- Application for SD/LD Review (October 24, 2022)
- Post Construction Stormwater Management Report (October 26, 2022)
- Sanitary Sewer Availability Letter (October 31, 2022)
- Application for Sewage Facilities Planning Module Exemption Mailer (October 25, 2022)
- Sanitary Sewer Review (November 23, 2022)
- Fire Marshal Review (November 23, 2022)
- MCPC Review (December 9, 2022)
- Joint EAC & STC Review (December 20, 2022)
- Waiver Request Letter (March 21, 2023)
- Traffic Generation + Drive-Thru Lane Vehicle Queue Evaluation Memo (4/14/23)
- TPD Traffic Review (February 6, 2023 & May 5, 2023)

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

- Financial Escrow
- LD Agreement
- Stormwater BMP O&M Agreement
- Legal Descriptions & Exhibits
- Planning Module Exemption

SUMMARY

Since the Applicant will be appearing before the Zoning Hearing Board to address the zoning comments, we recommend Preliminary/Final Major Subdivision and Land Development Plans approval contingent the Applicant adequately addresses the above comments, in particular the traffic comments.

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, Assistant Township Manager

U:\ACCOUNTS\ABINT\ABINT130028 - LD-22-06-2620 WEST MORELAND RD (RAISING\ADMIN\4 - PLAN REVIEWS\PF 2ND SUBMISSION 4-14-23\PF02051223 2620WMORELANDROAD.DOCX

OUTDOOR FURNITURE SHALL BE STORED INSIDE THE RESTAURANT AFTER NORMAL OPERATING HOURS. FURNITURE AFFIXED TO THE GROUND, ENCLOSED BY A WALL, SECURED, OR LOCATED IN A SECURED AREA ARE EXEMPT FROM THIS REQUIREMENT.

THE OUTSIDE DINING AREA MUST BE SECURED AND KEPT SANITARY, NEAT, AND CLEAN AT ALL TIMES. IT SHALL BE KEPT FREE FROM ACCUMULATION OF FOOD, LITTER, SNOW, ICE, AND OTHER POTENTIALLY DANGEROUS OR UNSANITARY MATTER. THE RESTURANT MUST PARTICIPATE IN AN APPROVED RODENT CONTROL PROGRAM.

LEGEND
PROPOSED PAVING

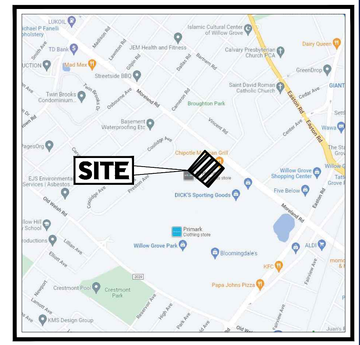
HEAVY DUTY CONCRETE PAVEMENT	
STANDARD DUTY PARKING ASPHALT PAVEMENT	
HEAVY DUTY ASPHALT PAVEMENT	
INTERGRAL COLORED 860 GRAPHITE 6" STANDARD DUTY CONCRETE PAVEMENT	
SIDEWALK PAVEMENT	

LEGEND
PROPOSED

BUILDING	
CANOPY	
CONCRETE	
LANDSCAPE	
PARKING COUNT	9
RAMP	
SIGN	
BOLLARD	
HANDRAIL	
CONCRETE CURB	
FLUSH CURB	
ACCESSIBLE SYMBOL	
TRAFFIC ARROWS	
CLEANOUT	C/O
HOUSE TRAP	HT
YARD DRAIN	
DRAINAGE INLET	
MANHOLE	

LEGEND
EXISTING

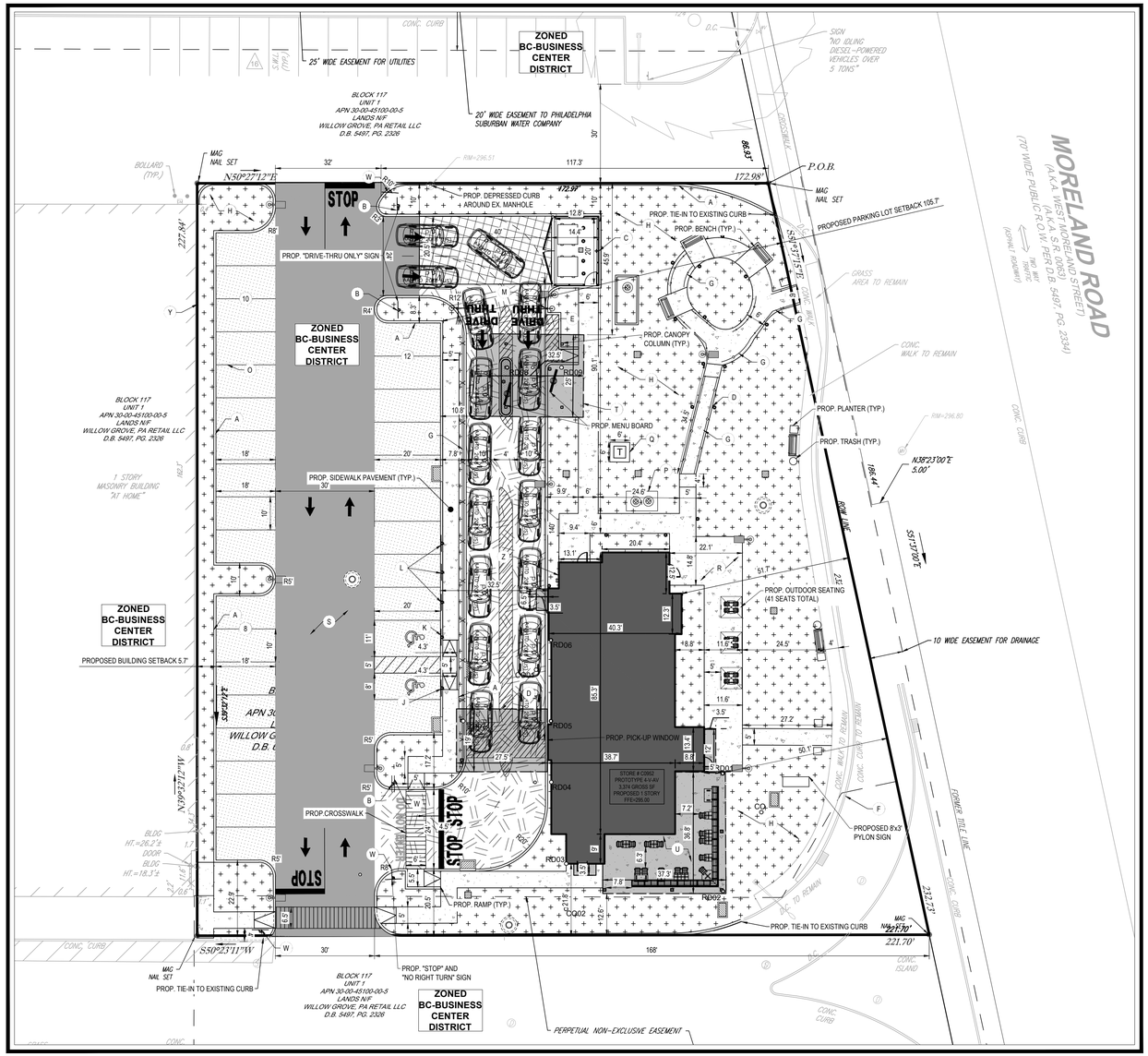
PROPERTY LINE	
ADJACENT PROPERTY LINE	
EASEMENT LINE	
SETBACK LINE	
BUILDING	
CONCRETE CURB	
FLUSH CURB	
ACCESSIBLE SYMBOL	
SIGN	
PARKING COUNT	10
AREA LIGHT	
TREE	
DRAINAGE INLET	
STORM/SANITARY MANHOLE	
WATER/GAS VALVES	
ROOF DRAIN/CLEANOUT	AD / CO
FIRE HYDRANT	
UTILITY POLE W/ LIGHT	
UTILITY POLE	
OVERHEAD UTILITY WIRES	



LOCATION MAP
SCALE: 1" = 500'

LEGEND
SITE KEYNOTES

A	PROPOSED CONCRETE CURB
B	PROPOSED CANE'S MOVEMENT SIGN LOCATION REFER TO ARCHITECTURAL PLAN
C	RECYCLING/ TRASH DUMPSTER LOCATION REFER TO ARCHITECTURAL PLANS FOR DETAILS OF SCREENING, GATES, BOLLARDS AND MASONRY
D	CONCRETE BOLLARD
E	DIRECTIONAL PAVEMENT MARKING
F	EXISTING CONCRETE CURB
G	PROPOSED ADA ACCESSIBLE RAMP WITH HANDRAILS
H	LANDSCAPE AREA, REFERENCE LANDSCAPE PLANS
J	ACCESSIBLE PARKING SIGN ON CONCRETE BOLLARD
K	VAN ACCESSIBLE PARKING SIGN ON CONCRETE BOLLARD
L	ORDER PICKUP PARKING SIGN ON CONCRETE BOLLARD
M	HEIGHT DETECTOR POLE
O	PAVEMENT STRIPING.
P	PROPOSED GREASE TRAP REFER TO ARCHTECTURAL PLANS FOR DETAILS
Q	PROPOSED TRANSFORMER, REFER TO MEP PLANS
R	PROPOSED CONCRETE SIDEWALK
S	PROPOSED ASPHALT AREA
T	PROPOSED CANOPY, DESIGNED BY OTHERS
U	PROPOSED CONCRETE PATIO WITH PATIO FURNITURE, DESIGNED BY OTHERS
W	PROPOSED STOP SIGN
Y	EXISTING PROPERTY LINE
Z	PROPOSED DARPRO CONNECTION, SEE ARCH PLAN FOR DETAILS



ZONING CHART
BC- BUSINESS CENTER

	REQUIRED	EXISTING	PROVIDED
LOT			
MIN. LOT AREA	1 AC. OR 43,560 SF	1.03 AC. OR 44,939 SF	1.03 AC. OR 44,939 SF
MIN. LOT WIDTH	100 FT	227.84	232.73
MIN. LOT DEPTH	150 FT	172.98	172.98
IMPERVIOUS COVERAGE	70%(75% MAXIMUM PAVING)	82.4% (37,038 SF/ 44,939 SF)	70.59% (31,724 SF)
GREEN AREA	MIN. 25% MIN. 15% IN TRIANGLE WITH BONUS (44,953 SF * .25 = 11,238 SF)	17.61% (7,915 SF/ 44,939 SF)	29.41% (13,215 SF)
PUBLIC OPEN SPACE (THESE AREAS SHALL BE OPEN TO THE GENERAL PUBLIC;NOT JUST THOSE USING THE SITE)	MIN.5% GROSS FLOOR A REA (3,374 SF *.05 = 169 SF)	0 SF	169 SF
BUILDING			
HEIGHT	MIN. 20 FT. FACADE HEIGHT (MAX. 55 FT)	N/A	20.0 FT
LENGTH	MAX. 300 FT	N/A	91.6 FT
SIZE	MAX. 150,000 SF	N/A	3,374 SF
COVERAGE	MAX. 40% (1,7424 SF)	N/A	(3,374 SF / 44,939 SF) = 7.5%
SETBACKS			
MIN. SIDE YARD AND REAR PROPERTY LINES ABUTTING OTHER DISTRICTS	30 FT	N/A	N/A
BUILDING SETBACK FROM PARKING	10 FT	5.9 FT	5.7 FT
PARKING LOT SETBACK FROM PUBLIC STREET	MIN. 100 FT	12.2 FT	105.7 FT
ACCESS POINT FROM EXTERNAL STREET	200 FT SEPERATION DISTANCE FROM STREET ACCESS POINTS (ON SUBJECT OR OTHER PROPERTY)	N/A	N/A
BUILT TO LINE (SHALL NOT OVERRIDE THE SIGHT TRIANGLE)			
TO PUBLIC STREET	MIN. 50 FT TO MAX. 100 FT	78.9 FT	51.7 FT
MAINACCESS DRIVE	MIN. 20 FT TO MAX 25 FT	N/A	24.0 SF
PARKING			
ADA	(26 TO 56 TOTAL PARKING SPACES) = 2	0	2
CARS	1 PARKING SPACE FOR EVERY 50 SF OF GROSS LEASABLE FLOOR AREA: 3,374 SF/ 50 = 68 SPACES; OR ONE PARKING SPACE FOR EVERY 3 SEATS, WHICHEVER REQUIRES THE LESSER NUMBER OF SPACES: 89 SEATS (48 INTERIOR, 41 EXTERIOR) * (1 SPACE/ 3 SEATS) = 30	85	30
BIKE PARKING	1 PER 250 PARKING SPACES	0	0
LOADING AREA	RETAIL USE, FIRST 5,000 SF - 1	0	0

Raising Cane's Chicken Fingers
Restaurant Support Office
6800 Bishop Road, Plano, TX 75024
Tele: 972-769-3100 Fax: 972-769-3101

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	2023-04-10	PER ABINGTON TOWNSHIP COMMENTS	CM / KT

811 Know what's below. Call before you dig.
PENNSYLVANIA
YOU MUST CALL 811 BEFORE ANY EXCAVATION WHETHER IT'S ON PRIVATE OR PUBLIC LAND.
1-800-242-1776
www.pa1call.org
20220541701

PROJECT No.: PP2270001
DRAWN BY: BMM
CHECKED BY: KRT
DATE: 10.26.22
CAD I.D.: PP2270001-X-TTLB-PHPD

PROJECT:
PRELIMINARY/ FINAL MAJOR LAND DEVELOPMENT PLANS
FOR
RAISING CANE'S RESTAURANTS, LLC.

PROPOSED RESTAURANT #C0952
LAND DEVELOPMENT #LD-22-06

2620 WEST MORELAND ROAD
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

BOHLER
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
www.BohlerEngineering.com

COMMONWEALTH OF PENNSYLVANIA
K.R. TATLOW
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE086172

SHEET TITLE:
RECORD PLAN

SHEET NUMBER:
C1.1
2 OF 26

REVISION 1 - 2023-04-10

R:\2022\PP2270001\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\PP2270001-LDVP-1A---LAYOUT C1-1 RECORD PLAN

PRELIMINARY / FINAL LAND DEVELOPMENT PLANS

FOR

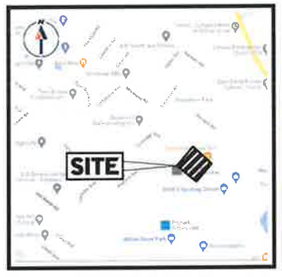
RAISING CANE'S RESTAURANTS, L.L.C.

PROPOSED

RESTAURANT #C952 W/ DRIVE-THRU

LOCATION OF SITE

2620 WEST MORELAND ROAD, WILLOW GROVE
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
COMMONWEALTH OF PENNSYLVANIA 19090
TAX PARCEL NO. 30-00-45100-01-6



LOCATION MAP
SCALE: 1" = 500'
SOURCE: GOOGLE MAPS



ZONING MAP
SCALE: 1" = 100'
SOURCE: ABINGTON TOWNSHIP ZONING MAP

ZONING LEGEND

SYMBOL	ZONING DISTRICT
BC	BC BUSINESS CENTER
HI	HIGH DENSITY RESIDENTIAL
MS-H	MAIN STREET HIGH INTENSITY DENSITY
MS-L	MAIN STREET LOW INTENSITY DENSITY
RC	RECREATION/CONSERVATION
CS	COMMUNITY SERVICE
AO	APARTMENT OFFICE
SI-W	SUBURBAN INDUSTRIAL WILLOW GROVE

PREPARED BY

BOHLER

DRAWING SHEET INDEX

SHEET TITLE	SHEET NUMBER
COVER SHEET*	C1.0
RECORD PLAN*	C1.1
GENERAL NOTES	C2.0
SOIL EROSION AND SEDIMENT POLLUTION CONTROL PLAN	C3.0
SOIL EROSION AND SEDIMENT POLLUTION CONTROL NOTES	C3.1
SOIL EROSION AND SEDIMENT POLLUTION CONTROL NOTES	C3.2
SOIL EROSION AND SEDIMENT POLLUTION CONTROL DETAILS	C3.3
DEMOLITION PLAN	C4.0
EXISTING RESOURCES AND SITE ANALYSIS MAP (ERSAM) PLAN	C4.1
DIMENSION CONTROL PLAN	C5.0
GRADING PLAN	C6.0
PRE DEVELOPMENT PLAN	C6.1
POST DEVELOPMENT PLAN	C6.2
POST CONSTRUCTION STORMWATER MANAGEMENT PLAN*	C6.3
POST CONSTRUCTION STORMWATER MANAGEMENT NOTES	C6.4
DRAINAGE AREA PLAN	C6.5
UTILITY PLAN	C7.0
CONSTRUCTION DETAILS	C8.0
CONSTRUCTION DETAILS	C8.1
CONSTRUCTION DETAILS	C8.2
BASIN DETAILS	C8.0
BASIN DETAILS	C8.1
VEHICLE CIRCULATION PLAN	C10.0
LANDSCAPE PLAN	C11.0
LANDSCAPE DETAILS	C11.1
AERIAL PLAN	C12.0

* DENOTES SHEETS TO BE RECORDED

UTILITIES:

THE FOLLOWING COMPANIES WERE NOTIFIED BY PENNSYLVANIA ONE CALL SYSTEM, INC. (1-800-242-1776) AND REQUESTED TO MARK OUT UNDERGROUND FACILITIES AFFECTING AND SERVICING THIS SITE. THE UNDERGROUND UTILITY INFORMATION SHOWN HEREON IS BASED UPON THE UTILITY COMPANIES RESPONSE TO THIS REQUEST.
SERIAL NUMBER: 20220541701

UTILITY COMPANY	PHONE NUMBER
ABINGTON TOWNSHIP	215-884-5000
AQUA PENNSYLVANIA, INC.	610-525-1400
PECO CENTRAL LOCATING	215-841-4000
COMCAST	800-266-2278
VERIZON	215-857-9260

APPLICANT CERTIFICATION

RAISING CANE'S RESTAURANTS, LLC., (THE APPLICANT), ACKNOWLEDGE(S) 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.

BY: RAISING CANE'S RESTAURANTS, LLC.

BY:_____ _____
NAME: DATE
ITS:

DESIGN ENGINEER STORMWATER CERTIFICATION

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

_____ LICENSE NO. PE086832
(SIGNATURE: PROFESSIONAL ENGINEER) (REGISTRATION NUMBER) DATE

EQUITABLE OWNER/APPLICANT

RAISING CANE'S RESTAURANTS, LLC.
6800 BISHOP ROAD
PLANO, TEXAS
75024-4274
PHONE NUMBER: 972-769-3348

VARIANCES GRANTED BY THE ABINGTON TOWNSHIP ZONING HEARING BOARD ON 10/19/2022

1. A SPECIAL EXCEPTION PURSUANT TO ABINGTON TOWNSHIP ZONING ORDINANCE §1102, AND THE COMPREHENSIVE USE MATRIX, TO PERMIT A DRIVE-THROUGH RESTAURANT WAS APPROVED BY ABINGTON TOWNSHIP ZONING HEARING BOARD
2. A VARIANCE FROM ORDINANCE §1103 TO ALLOW A 5.7' PARKING BUILDING SETBACK ALONG THE SOUTHERN PROPERTY LINE OF THE SUBJECT PROPERTY WAS APPROVED BY ABINGTON TOWNSHIP ZONING HEARING BOARD
3. VARIANCES FROM ORDINANCE 2402.A.5 AND 2403.B.4.a FOR THE MINIMUM BUFFER AND PLANTING REQUIREMENTS WERE APPROVED BY ABINGTON TOWNSHIP ZONING HEARING BOARD

LIST OF WAIVERS REQUESTED FROM ABINGTON TOWNSHIP

1. RELIEF FROM SECTION 146-13 GENERAL REQUIREMENTS REQUESTED FOR PRELIMINARY/ FINAL LAND DEVELOPMENT REVIEW CONCURRENTLY

MCPC No.: 22-0273-001

PROCESSED and REVIEWED. Report prepared by Montgomery County Planning Commission in accordance with the Municipalities Planning Code.

Certified this date _____

_____
Montgomery County Planning Commission

MUNICIPAL OFFICIAL OR DESIGNEE CERTIFICATION

_____ ON THIS DATE _____,
HAS REVIEWED AND HEREBY CERTIFIES THAT THE BMM SITE PLAN MEETS ALL DESIGN STANDARDS AND CRITERIA OF THE MUNICIPAL ORDINANCE NO. 2100 OF 2016.

BOARD OF COMMISSIONER'S APPROVAL

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

_____ PRESIDENT
_____ SECRETARY
_____ ENGINEER

CERTIFIED BY THE MONTGOMERY COUNTY PLANNING COMMISSION THIS _____DAY OF _____, 20__, FILE NO. _____

_____ SECRETARY

RECORDER OF DEEDS

RECORDED THIS _____ DAY OF _____, 20___, IN THE OFFICE FOR THE RECORDING OF DEEDS, ETC. IN AND FOR THE COUNTY OF MONTGOMERY IN NORRISTOWN, PENNSYLVANIA IN PLAN BOOK _____, PAGE No. _____, ON _____, BY

_____
RECORDER

PROFESSIONAL SURVEYOR CERTIFICATION

I, JAMES R. AIKEN II, LICENSE NO. SU075233, DO HEREBY CERTIFY THAT THE EXISTING FEATURES, TOPOGRAPHY AND METES AND BOUNDS DESCRIPTION SHOWN ON THIS PLAN REFERENCES A FIELD SURVEY PERFORMED BY:

_____ LICENSE NO. SU075233
(SIGNATURE PROFESSIONAL SURVEYOR) (REGISTRATION NUMBER) DATE

PROFESSIONAL ENGINEER CERTIFICATION

I, KEVIN TATLOW, LICENSE NO. PE086832 DO HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF, THAT THE INFORMATION CONTAINED IN THE ACCOMPANYING PLANS, SPECIFICATIONS, AND REPORTS HAS BEEN PREPARED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICE, IS TRUE AND CORRECT, AND IS IN CONFORMANCE WITH THE ZONING ORDINANCE AND THE SUBDIVISION AND LAND DEVELOPMENT ORDINANCE OF ABINGTON TOWNSHIP AS LAST AMENDED.

_____ LICENSE NO. PE086832
(SIGNATURE PROFESSIONAL ENGINEER) (REGISTRATION NUMBER) DATE

OWNER CERTIFICATION OF INTENT

I/WE, RAISING CANE'S RESTAURANTS, LLC., UNDERSIGNED, HAS LAID OUT UPON ITS LAND SITUATE IN THE TOWNSHIP OF ABINGTON TOWNSHIP, COUNTY OF MONTGOMERY, COMMONWEALTH OF PENNSYLVANIA, CERTAIN IMPROVEMENTS ACCORDING TO THE ACCOMPANYING PLAN WHICH IS INTENDED TO BE RECORDED.

WITNESS MY HAND AND SEAL THIS ____ DAY OF _____, 20__.

_____
BY:
TITLE:

OWNER CERTIFICATION OF ACKNOWLEDGEMENT

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 MICHAEL P. MARKMAN, WHO ACKNOWLEDGED HIMSELF TO BE THE MANAGER, BEING AUTHORIZED TO DO SO, HE 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

RECORDING NOTATIONS

(2)
"FIRE HYDRANTS AND STREETLIGHTS ARE TO BE INSTALLED AT THE EXPENSE OF THE SUBDIVIDER/LAND DEVELOPER IN ACCORDANCE WITH TOWNSHIP STANDARDS AND WITH THE RECOMMENDATIONS OF THE RESPECTIVE UTILITY COMPANIES, SUBJECT TO THE APPROVAL OF THE BOARD OF COMMISSIONERS."
(3)
"STREETLIGHTS AND STREET NAME SIGNS ARE TO BE INSTALLED AT THE EXPENSE OF THE SUBDIVIDER/LAND DEVELOPER IN ACCORDANCE WITH TOWNSHIP STANDARDS AND DEDICATED TO THE TOWNSHIP."
(4)
"THE PHILADELPHIA ELECTRIC COMPANY AND THE BELL TELEPHONE COMPANY OF PENNSYLVANIA ARE GRANTED THE RIGHT TO CONSTRUCT, MAINTAIN AND REPAIR POLE LINES AND UNDERGROUND EQUIPMENT ON, UNDER AND ACROSS LOTS, AND THIS SHALL BE SO RECITED IN ALL DEED DESCRIPTIONS, TOGETHER WITH THE RIGHT TO CONSTRUCT, MAINTAIN AND REPAIR POLE LINES AND UNDERGROUND EQUIPMENT ON, UNDER AND ACROSS ALL HIGHWAYS IN THIS TRACT."
(5)
WHERE A PLAN REQUIRES ACCESS TO A HIGHWAY WHICH IS UNDER THE JURISDICTION OF THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION, "A HIGHWAY OCCUPANCY PERMIT IS REQUIRED BY SECTION 420 P.L. 1242, NO. 428 KNOWN AS THE "STATE HIGHWAY LAW." BEFORE DRIVEWAY ACCESS TO A STATE HIGHWAY IS PERMITTED OR CONSTRUCTED."[1] WHERE A PLAN REQUIRES ACCESS TO A HIGHWAY WHICH IS UNDER THE JURISDICTION OF THE MONTGOMERY COUNTY, IT SHALL INCLUDE THE FOLLOWING NOTATION: "A HIGHWAY OCCUPANCY PERMIT IS REQUIRED BY THE ROADS AND BRIDGES DIVISION OF THE MONTGOMERY COUNTY PUBLIC WORKS BEFORE DRIVEWAY ACCESS TO A COUNTY HIGHWAY IS PERMITTED OR CONSTRUCTED."
EDITOR'S NOTE: SEE 36 P.S. § 670-420.
(6)
WHEN THE INSTALLATION OF CURBS OR SIDEWALKS IS WAIVED FOR A PARTICULAR DEVELOPMENT PLAN, "CURBS AND/OR SIDEWALKS MAY BE REQUIRED TO BE INSTALLED BY SUBSEQUENT LANDOWNERS AT THEIR EXPENSE, BY DIRECTION OF THE BOARD OF COMMISSIONERS."
(7)
OTHER NOTATIONS AS REQUIRED BY THIS CHAPTER AND THE BOARD OF COMMISSIONERS.

Restaurant Support Office
6800 Bishop Road, Plano, TX 75024
Tele: 972-769-3100 Fax 972-769-3101

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	2023-04-10	PER ABINGTON TOWNSHIP COMMENTS	CM / KT

811 Know what's below. Call before you dig.
PENNSYLVANIA
YOU MUST CALL 811 BEFORE ANY EXCAVATION WHETHER IT'S ON PRIVATE OR PUBLIC LAND.
1-800-242-1776
www.paupa.org
20220541701

PROJECT No.: PP2270001
DRAWN BY: BMM
CHECKED BY: KNT
DATE: 10.26.22
CAD I.D.: PP2270001-X-TTLB-PHFD

PROJECT:
PRELIMINARY/ FINAL MAJOR LAND DEVELOPMENT PLANS
FOR
RAISING CANE'S RESTAURANTS, LLC.

PROPOSED RESTAURANT #C0952
LAND DEVELOPMENT #LD-22-06
2620 WEST MORELAND ROAD
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

BOHLER
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PA 19102
Phone (267) 402-3400
Fax (267) 402-3401
www.BohlerEngineering.com

K.R. TATLOW — PROFESSIONAL ENGINEER — PENNSYLVANIA LICENSE NO. PE086832

SHEET TITLE:
COVER SHEET

SHEET NUMBER:
C1.0
1 OF 25

REVISION 1 - 2023-04-10

R:\2022\PP2270001\CAD\BMM\SDP\LAYOUTS\PP2270001-LDP-1A---LAYOUT C1.0 COVER PLAN.DWG

OUTDOOR FURNITURE SHALL BE STORED INSIDE THE RESTAURANT AFTER NORMAL OPERATING HOURS. FURNITURE AFFIXED TO THE GROUND, ENCLOSED BY A WALL, SECURED, OR LOCATED IN A SECURED AREA ARE EXEMPT FROM THIS REQUIREMENT.

THE OUTSIDE DINING AREA MUST BE SECURED AND KEPT SANITARY, NEAT, AND CLEAN AT ALL TIMES. IT SHALL BE KEPT FREE FROM ACCUMULATION OF FOOD, LITTER, SNOW, ICE, AND OTHER POTENTIALLY DANGEROUS OR UNSANITARY MATTER. THE RESTURANT MUST PARTICIPATE IN AN APPROVED RODENT CONTROL PROGRAM.

LEGEND
PROPOSED PAVING

HEAVY DUTY CONCRETE PAVEMENT	
STANDARD DUTY PARKING ASPHALT PAVEMENT	
HEAVY DUTY ASPHALT PAVEMENT	
INTERGRAL COLORED 860 GRAPHITE 6" STANDARD DUTY CONCRETE PAVEMENT	
SIDEWALK PAVEMENT	

LEGEND
PROPOSED

BUILDING	
CANOPY	
CONCRETE	
LANDSCAPE	
PARKING COUNT	8
RAMP	
SIGN	
BOLLARD	
HANDRAIL	
CONCRETE CURB	
FLUSH CURB	
ACCESSIBLE SYMBOL	
TRAFFIC ARROWS	
CLEANOUT	C/O
HOUSE TRAP	HT
YARD DRAIN	
DRAINAGE INLET	
MANHOLE	

LEGEND
EXISTING

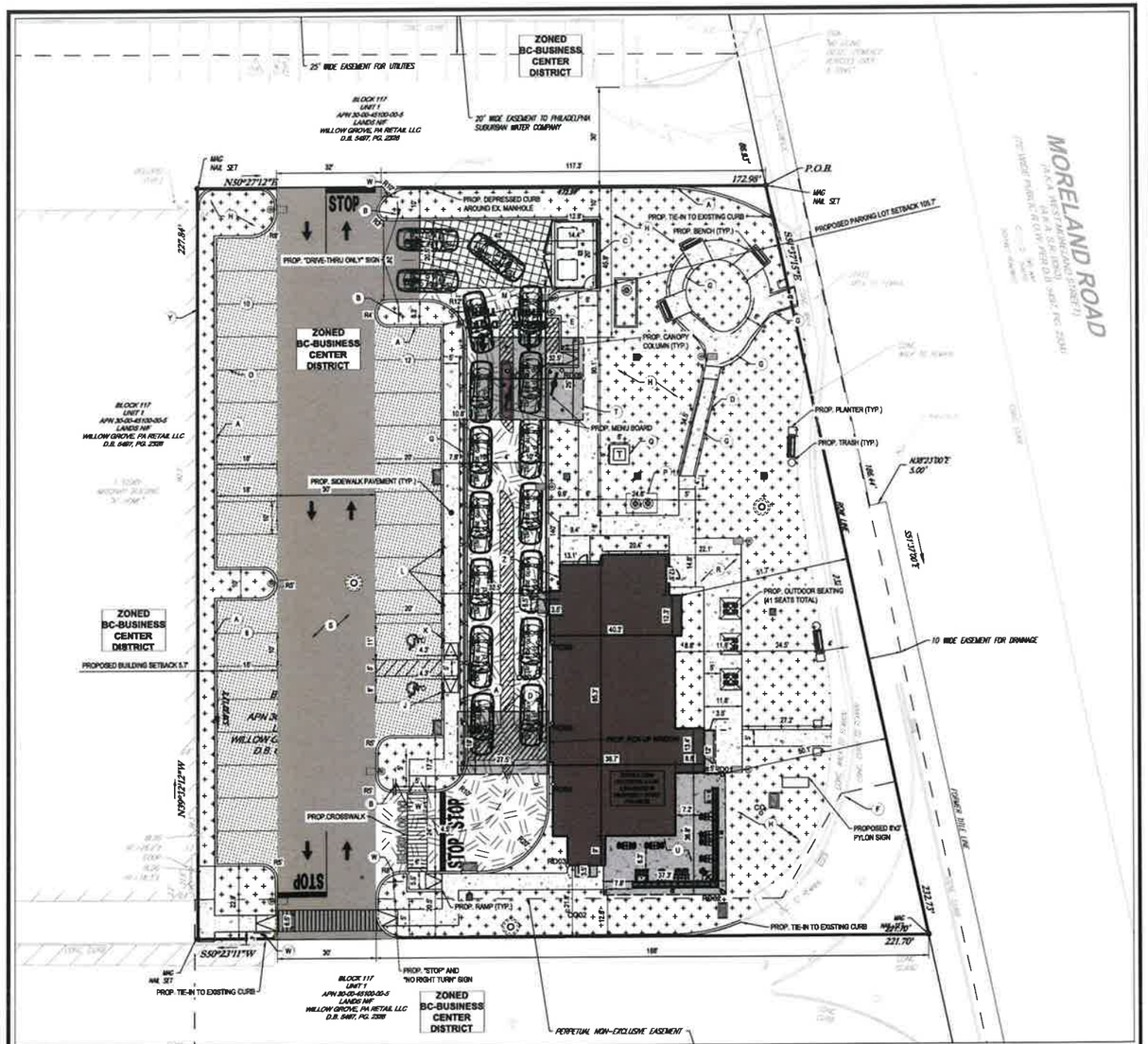
PROPERTY LINE	
ADJACENT PROPERTY LINE	
EASEMENT LINE	
SETBACK LINE	
BUILDING	
CONCRETE CURBS	
FLUSH CURB	
ACCESSIBLE SYMBOL	
SIGN	
PARKING COUNT	12
AREA LIGHT	
TREE	
DRAINAGE INLET	
STORM/SANITARY MANHOLE	
WATER/GAS VALVES	
ROOF DRAIN/CLEANOUT	
FIRE HYDRANT	
UTILITY POLE W/ LIGHT	
UTILITY POLE	
OVERHEAD UTILITY WIRES	



LOCATION MAP
SCALE: 1" = 500'

LEGEND
SITE KEYNOTES

A	PROPOSED CONCRETE CURB
B	PROPOSED CANE'S MOVEMENT SIGN LOCATION REFER TO ARCHITECTURAL PLAN
C	RECYCLING/ TRASH DUMPSTER LOCATION REFER TO ARCHITECTURAL PLANS FOR DETAILS OF SCREENING, GATES, BOLLARDS AND MASONRY
D	CONCRETE BOLLARD
E	DIRECTIONAL PAVEMENT MARKING
F	EXISTING CONCRETE CURB
G	PROPOSED ADA ACCESSIBLE RAMP WITH HANDRAILS
H	LANDSCAPE AREA, REFERENCE LANDSCAPE PLANS
J	ACCESSIBLE PARKING SIGN ON CONCRETE BOLLARD
K	VAN ACESSIBLE PARKING SIGN ON CONCRETE BOLLARD
L	ORDER PICKUP PARKING SIGN ON CONCRETE BOLLARD
M	HEIGHT DETECTOR POLE
O	PAVEMENT STRIPING.
P	PROPOSED GREASE TRAP REFER TO ARCHITECTURAL PLANS FOR DETAILS
Q	PROPOSED TRANFORMER, REFER TO MEP PLANS
R	PROPOSED CONCRETE SIDEWALK
S	PROPOSED ASPHALT AREA
T	PROPOSED CANOPY, DESIGNED BY OTHERS
U	PROPOSED CONCRETE PATIO WITH PATIO FURNITURE, DESIGNED BY OTHERS
W	PROPOSED STOP SIGN
Y	EXISTING PROPERTY LINE
Z	PROPOSED DARPRO CONNECTION, SEE ARCH PLAN FOR DETAILS



ZONING CHART
BC- BUSINESS CENTER

	REQUIRED	EXISTING	PROVIDED
LOT			
MIN. LOT AREA	1 AC. OR 43,560 SF	1.03 AC. OR 44,939 SF	1.03 AC. OR 44,939 SF
MIN. LOT WIDTH	100 FT	227.84	232.73
MIN. LOT DEPTH	150 FT	172.98	172.98
IMPERVIOUS COVERAGE	70%(75% MAXIMUM PAVING)	82.4% (37,038 SF/ 44,939 SF)	70.59% (31,724 SF)
GREEN AREA	MIN. 25% MIN. 15% IN TRIANGLE WITH BONUS (44,953 SF * .25 = 11,238 SF)	17.61% (7,915 SF/ 44,939 SF)	29.41% (13,215 SF)
PUBLIC OPEN SPACE (THESE AREAS SHALL BE OPEN TO THE GENERAL PUBLIC;NOT JUST THOSE USING THE SITE)	MIN.5% GROSS FLOOR A REA (3,374 SF *.05 = 169 SF)	0 SF	169 SF
BUILDING			
HEIGHT	MIN. 20 FT. FACADE HEIGHT (MAX. 55 FT)	N/A	20.0 FT
LENGTH	MAX. 300 FT	N/A	91.6 FT
SIZE	MAX. 150,000 SF	N/A	3,374 SF
COVERAGE	MAX. 40% (1,7424 SF)	N/A	(3,374 SF / 44,939 SF) = 7.5%
SETBACKS			
MIN. SIDE YARD AND REAR PROPERTY LINES ABUTTING OTHER DISTRICTS	30 FT	N/A	N/A
BUILDING SETBACK FROM PARKING	10 FT	5.9 FT	5.7 FT
PARKING LOT SETBACK FROM PUBLIC STREET	MIN. 100 FT	12.2 FT	105.7 FT
ACCESS POINT FROM EXTERNAL STREET	200 FT SEPERATION DISTANCE FROM STREET ACCESS POINTS (ON SUBJECT OR OTHER PROPERTY)	N/A	N/A
BUILT TO LINE (SHALL NOT OVERRIDE THE SIGHT TRIANGLE)			
TO PUBLIC STREET	MIN. 50 FT TO MAX. 100 FT	78.9 FT	51.7 FT
MAINACCESS DRIVE	MIN. 20 FT TO MAX 25 FT	N/A	24.0 SF
PARKING			
ADA	(26 TO 56 TOTAL PARKING SPACES) = 2	0	2
CARS	1 PARKING SPACE FOR EVERY 50 SF OF GROSS LEASABLE FLOOR AREA: 3,374 SF/ 50 = 68 SPACES; OR ONE PARKING SPACE FOR EVERY 3 SEATS, WHICHEVER REQUIRES THE LESSER NUMBER OF SPACES: 89 SEATS (48 INTERIOR, 41 EXTERIOR) * (1 SPACE/ 3 SEATS) = 30	85	30
BIKE PARKING	1 PER 250 PARKING SPACES	0	0
LOADING AREA	RETAIL USE, FIRST 5,000 SF - 1	0	0

Raising Cane's Chicken Fingers
Restaurant Support Office
6800 Bishop Road, Plano, TX 75024
Tele: 972-769-3100 Fax: 972-769-3101

REVISIONS

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PROJECT No.:	PP2270001
DRAWN BY:	BMM
CHECKED BY:	KRT
DATE:	10.26.22
CAD I.D.:	PP2270001-X-TITLB-PHPD

PROJECT:
PRELIMINARY/ FINAL MAJOR LAND DEVELOPMENT PLANS
FOR
RAISING CANE'S RESTAURANTS, LLC.

PROPOSED RESTAURANT #C0953
LAND DEVELOPMENT #LD-22-06

2620 WEST MORELAND ROAD
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

BOHLER
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PA 19102
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www.BohlerEngineering.com

COMMONWEALTH OF PENNSYLVANIA
K.R. TATLOW
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE NO. PE088221

SHEET TITLE:
RECORD PLAN

SHEET NUMBER:
C1.1
2 OF 28

REVISION 1 - 2023-04-10

GENERAL NOTES

(Rev. 2/2021)

1. THESE PLANS ARE SOLELY BASED ON INFORMATION THE OWNER AND OTHERS PROVIDED TO BOHLER ENGINEERING PENNSYLVANIA, LLC (HEREIN "BOHLER") PRIOR TO THE DATE ON WHICH THE ENGINEER OF RECORD AND BOHLER PREPARED THESE PLANS. THE CONTRACTOR MUST FIELD VERIFY ALL EXISTING CONDITIONS AND IMMEDIATELY NOTIFY BOHLER, IN WRITING, IF ANY ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THESE PLANS, OR IF THE PROPOSED WORK CONFLICTS WITH ANY OTHER SITE FEATURES.
2. THE CONTRACTOR MUST STRICTLY COMPLY WITH THESE NOTES AND ALL SPECIFICATIONS/REPORTS CONTAINED HEREIN. THE CONTRACTOR MUST ENSURE THAT ALL SUBCONTRACTORS FULLY AND COMPLETELY CONFORM TO AND COMPLY WITH THESE REQUIREMENTS, THESE NOTES, AND THE REQUIREMENTS ARTICULATED IN THE NOTES CONTAINED IN ALL THE OTHER DRAWINGS THAT COMPRISE THE PLAN SET OF DRAWINGS. ADDITIONAL NOTES AND SPECIFIC PLAN NOTES MAY BE FOUND ON THE INDIVIDUAL PLANS THESE GENERAL NOTES APPLY TO THIS ENTIRE DOCUMENT PACKAGE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL DOCUMENTS CONTRACT DOCUMENTS INCLUDING, BUT NOT LIMITED TO, ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE, PRIOR TO THE INITIATION AND COMMENCEMENT OF CONSTRUCTION.
3. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST CONFIRM WITH THE ENGINEER OF RECORD AND BOHLER THAT THE LATEST EDITION OF THE DOCUMENTS AND/OR REPORTS REFERENCED WITHIN THE PLAN REFERENCES ARE BEING USED FOR CONSTRUCTION. THIS IS THE CONTRACTOR'S SOLE AND COMPLETE RESPONSIBILITY.
4. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION IS TO BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED THE CONDITIONS OF APPROVAL TO ALL PERMITS AND OTHER DOCUMENTS APPROVED BY THE PERMITTING AUTHORITIES AND HAS ALSO CONFIRMED THAT ALL NECESSARY AND REQUIRED PERMITS HAVE BEEN OBTAINED. THE CONTRACTOR MUST HAVE COPIES OF ALL PERMITS AND APPROVALS ON SITE AT ALL TIMES.
5. THE CONTRACTOR MUST ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS/REPORTS AND CONDITIONS OF APPROVAL, AND ALL APPLICABLE REQUIREMENTS, RULES, REGULATIONS, STATUTORY REQUIREMENTS, CODES, LAWS AND STANDARDS OF ALL GOVERNMENTAL ENTITIES WITH JURISDICTION OVER THIS PROJECT, AND ALL PROVISIONS IN AND CONDITIONS OF THE CONSTRUCTION CONTRACT WITH THE OWNER/DEVELOPER INCLUDING ALL EXHIBITS, ATTACHMENTS AND AGENDA TO SAME.
6. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST COORDINATE THE BUILDING LAYOUT BY CAREFULLY REVIEWING THE MOST CURRENT ARCHITECTURAL AND STRUCTURAL CONSTRUCTION DOCUMENTS (INCLUDING, BUT NOT LIMITED TO, MECHANICAL, ELECTRICAL, PLUMBING AND FIRE SUPPRESSION PLANS WHERE APPLICABLE). THE CONTRACTOR MUST IMMEDIATELY NOTIFY OWNER, ARCHITECT AND ENGINEER OF RECORD AND BOHLER, IN WRITING, OF ANY DISCREPANCIES OR AMBIGUITIES WHICH EXIST BETWEEN THESE PLANS AND ANY OTHER PLANS THAT COMPRISE THE CONSTRUCTION DOCUMENTS.
7. CONTRACTOR MUST REFER TO AND ENSURE COMPLIANCE WITH THE APPROVED ARCHITECTURAL/BUILDING PLANS OF RECORD FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRY/EXIT POINTS, ELEVATIONS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY LOCATIONS.
8. THE CONTRACTOR MUST FIELD VERIFY ALL DIMENSIONS AND MEASUREMENTS SHOWN ON THESE PLANS, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR MUST IMMEDIATELY NOTIFY ENGINEER OF RECORD AND BOHLER, IN WRITING, IF ANY CONFLICTS, DISCREPANCIES, OR AMBIGUITIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. NO EXTRA COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR WORK WHICH HAS TO BE RE-DONE OR REPAIRED DUE TO DIMENSIONS, MEASUREMENTS OR GRADES SHOWN INCORRECTLY ON THESE PLANS PRIOR TO BOTH (A) THE CONTRACTOR GIVING ENGINEER OF RECORD AND BOHLER WRITTEN NOTIFICATION OF SAME AND (B) ENGINEER OF RECORD AND BOHLER, THEREAFTER, PROVIDING THE CONTRACTOR WITH WRITTEN AUTHORIZATION TO PROCEED WITH SUCH ADDITIONAL WORK.
9. THE CONTRACTOR MUST VERIFY ALL DIMENSIONS AND MEASUREMENTS INCLUDED ON DESIGN DOCUMENTS HEREIN AND MUST NOT SCALE OFF THE DRAWINGS DUE TO POTENTIAL PRINTING INACCURACIES. ALL DIMENSIONS AND MEASUREMENTS ARE TO BE CHECKED AND CONFIRMED BY THE GENERAL CONTRACTOR PRIOR TO PREPARATION OF SHOP DRAWINGS, FABRICATION/ORDERING OF PARTS AND MATERIALS AND COMMENCEMENT OF SITE WORK. BITE PLAN DRAWINGS ARE NOT INTENDED FOR CONSTRUCTION PURPOSES AND SUPERSEDE GRAPHICAL REPRESENTATIONS. THE CONTRACTOR MUST MAKE CONTRACTOR'S OWN MEASUREMENTS FOR LAYOUT OF IMPROVEMENTS.
10. THE OWNER AND CONTRACTOR MUST BE FAMILIAR WITH AND RESPONSIBLE FOR THE PROCUREMENT OF ANY AND ALL CERTIFICATIONS REQUIRED FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
11. WHEN INCLUDED AS ONE OF THE REFERENCED DOCUMENTS, THE GEOTECHNICAL REPORT, SPECIFICATIONS AND RECOMMENDATIONS SET FORTH THEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND, IN CASE OF CONFLICT, DISCREPANCY OR AMBIGUITY, THE MORE STRINGENT REQUIREMENTS AND/OR RECOMMENDATIONS CONTAINED IN: (A) THE PLANS, AND (B) THE GEOTECHNICAL REPORT AND RECOMMENDATIONS, MUST TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR MUST NOTIFY THE ENGINEER OF RECORD AND BOHLER, IN WRITING, OF ANY SUCH CONFLICT, DISCREPANCY OR AMBIGUITY BETWEEN THE GEOTECHNICAL REPORT AND PLANS AND SPECIFICATIONS, PRIOR TO PROCEEDING WITH ANY FURTHER WORK. IF A GEOTECHNICAL REPORT WAS NOT CREATED, THEN THE CONTRACTOR MUST FOLLOW AND COMPLY WITH ALL OF THE REQUIREMENTS OF ANY AND ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE SPECIFICATIONS WHICH HAVE JURISDICTION OVER THIS PROJECT.
12. ENGINEER OF RECORD AND BOHLER ARE NEITHER LIABLE NOR RESPONSIBLE FOR ANY SUBSURFACE CONDITIONS AND FURTHER, HAS NO LIABILITY FOR ANY HAZARDOUS MATERIALS, HAZARDOUS SUBSTANCES, OR POLLUTANTS ON, ABOUT OR UNDER THE PROPERTY.
13. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING WHEN AND WHERE SHORING IS REQUIRED AND FOR INSTALLING AND MAINTAINING ALL SHORING REQUIRED DURING EXCAVATION (TO BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS) AND ANY ADDITIONAL PRECAUTIONS TO BE TAKEN TO ENSURE THE STABILITY OF ADJACENT SLOPES AND ANY AND CONTIGUOUS STRUCTURES AND PROPERTIES. ALL OF THIS WORK IS TO BE PERFORMED AT CONTRACTOR'S SOLE COST AND EXPENSE.
14. THE CONTRACTOR MUST EXERCISE EXTREME CAUTION WHEN PERFORMING ANY WORK ACTIVITIES ADJACENT TO PAVEMENT, STRUCTURES, ETC. WHICH ARE TO REMAIN EITHER FOR AN INITIAL PHASE OF THE PROJECT OR AS PART OF THE FINAL CONDITION. THE CONTRACTOR IS RESPONSIBLE FOR TAKING ALL APPROPRIATE MEASURES REQUIRED TO ENSURE THE STRUCTURAL STABILITY OF SIDEWALKS AND PAVEMENT, UTILITIES, BUILDINGS, AND INFRASTRUCTURE WHICH ARE TO REMAIN, AND TO PROVIDE A SAFE WORK AREA FOR THIRD PARTIES, PEDESTRIANS AND ANYONE INVOLVED WITH THE PROJECT.
15. DEBRIS MUST NOT BE BURIED ON THE SUBJECT SITE. ALL DEMOLITION AND CONSTRUCTION WASTES, UNSUITABLE EXCAVATED MATERIAL, EXCESS SOIL AND DEBRIS (SOLID WASTE) MUST BE DISPOSED OF IN ACCORDANCE WITH THE REQUIREMENTS OF ANY AND ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE CODES WHICH HAVE JURISDICTION OVER THIS PROJECT OR OVER THE CONTRACTOR.
16. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO MAINTAIN RECORDS TO DEMONSTRATE PROPER AND FULLY COMPLIANT DISPOSAL ACTIVITIES, TO BE PROMPTLY PROVIDED TO THE OWNER UPON REQUEST.
17. THE CONTRACTOR MUST REPAIR, AT CONTRACTOR'S SOLE COST, ALL DAMAGE DONE TO ANY NEW OR EXISTING CONSTRUCTION OR PROPERTY DURING THE COURSE OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. AND MUST BEAR ALL COSTS ASSOCIATED WITH SAME TO INCLUDE, BUT NOT BE LIMITED TO, REGESION, RE-SURVEY, RE-PERMITTING AND CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR AND MUST REPLACE ALL SIGNAL INTERCONNECT CABLE, WIRING CONDUIT, AND ANY UNDERGROUND ACCESSORY EQUIPMENT DAMAGED DURING CONSTRUCTION AND MUST BEAR ALL COSTS ASSOCIATED WITH SAME. THE REPAIR OF ANY SUCH NEW OR EXISTING CONSTRUCTION AND PROPERTY SHALL RESTORE SUCH CONSTRUCTION AND PROPERTY TO A CONDITION EQUIVALENT TO OR BETTER THAN THE CONDITIONS PRIOR TO COMMENCEMENT OF THE CONSTRUCTION, AND IN CONFORMANCE WITH APPLICABLE CODES, LAWS, RULES, REGULATIONS, STATUTORY REQUIREMENTS AND STATUTES. THE CONTRACTOR MUST BEAR ALL COSTS ASSOCIATED WITH SAME. THE CONTRACTOR MUST, PROMPTLY, DOCUMENT ALL EXISTING DAMAGE AND NOTIFY, IN WRITING, THE OWNER AND THE CONSTRUCTION MANAGER PRIOR TO THE START OF CONSTRUCTION.
18. THE ENGINEER OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR AND HAVE NO CONTRACTUAL, LEGAL OR OTHER RESPONSIBILITIES FOR JOB SITE SAFETY, JOB SITE SUPERVISION, OR ANYTHING RELATED TO SAME. THE ENGINEER OF RECORD AND BOHLER HAVE NOT BEEN RETAINED TO PERFORM ON TO BE RESPONSIBLE FOR JOB SITE SAFETY, SAME BEING WHOLLY OUTSIDE OF ENGINEER OF RECORD AND BOHLER'S SCOPE OF WORK RELATED TO THE PROJECT. THE ENGINEER OF RECORD AND BOHLER ARE NOT RESPONSIBLE TO IDENTIFY OR REPORT ANY JOB SITE SAFETY ISSUES OR ANY JOB SITE CONDITIONS AT ANY TIME.
19. THE CONTRACTOR MUST IMMEDIATELY IDENTIFY IN WRITING TO THE ENGINEER OF RECORD AND BOHLER, ANY DISCREPANCIES THAT MAY OR COULD AFFECT THE PUBLIC SAFETY, HEALTH OR GENERAL WELFARE, OR PROJECT COST. IF THE CONTRACTOR PROCEEDS WITH CONSTRUCTION WITHOUT PROVIDING PROPER WRITTEN NOTIFICATION AS DESCRIBED ABOVE, IT WILL BE AT THE CONTRACTORS OWN RISK AND, FURTHER, THE CONTRACTOR MUST INDEMNIFY, DEFEND AND HOLD HARMLESS THE ENGINEER OF RECORD AND BOHLER FOR ANY AND ALL DAMAGES, COSTS, INJURIES, ATTORNEY'S FEES AND THE LIKE WHICH RESULT FROM OR ARE IN ANY WAY RELATED TO SAME INCLUDING, BUT NOT LIMITED TO, ANY THIRD PARTY AND FIRST PARTY CLAIMS.
20. THE ENGINEER OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR ANY INJURY OR DAMAGES RESULTING FROM THE CONTRACTOR'S FAILURE TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH THE APPROVED PLANS, AND CURRENT CODES, RULES, STATUTES AND THE LIKE. IF THE CONTRACTOR AND/OR OWNER FAIL TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH APPROVED PLANS, RULES, STATUTES, CODES AND THE LIKE, THE CONTRACTOR AND/OR OWNER SHALL INDEMNIFY, DEFEND, SEPARATELY, AND SEVERALLY INDEMNIFY AND HOLD THE ENGINEER OF RECORD AND BOHLER HARMLESS FOR AND FROM ALL INJURIES, CLAIMS AND DAMAGES THAT ENGINEER AND BOHLER SUFFER AND ANY AND ALL COSTS THAT ENGINEER AND BOHLER INCUR AS RELATED TO SAME.
21. ALL CONTRACTORS MUST CARRY AT LEAST THE MINIMUM AMOUNT OF THE SPECIFIED AND COMMERCIALLY REASONABLE STATUTORY WORKERS COMPENSATION INSURANCE, EMPLOYERS LIABILITY INSURANCE AND COMMERCIAL GENERAL LIABILITY INSURANCE (CGL) INCLUDING ALSO ALL UMBRELLA COVERAGES. ALL CONTRACTORS MUST HAVE THEIR CGL POLICIES ENDORSED TO NAME BOHLER , AND ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, AFFILIATE SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AS ADDITIONAL NAMED INSUREDS AND TO PROVIDE CONTRACTUAL LIABILITY COVERAGE SUFFICIENT TO INSURE (DEFEND, IF APPLICABLE) AND HOLD HARMLESS AND INDEMNITY OBLIGATIONS ASSUMED AND AGREED TO BY THE CONTRACTOR HEREUNDER. ALL CONTRACTORS MUST PROVIDE CERTIFICATES OF INSURANCE OR CERTIFICATES OF INSURANCE AS EVIDENCE OF THE REQUIRED INSURANCE COVERAGES PRIOR TO COMMENCING ANY WORK AND UPON RENEWAL OF EACH POLICY DURING THE ENTIRE PERIOD OF CONSTRUCTION AND FOR TWO YEARS AFTER THE COMPLETION OF CONSTRUCTION AND AFTER ALL PERMITS ARE ISSUED, WHICHEVER DATE IS LATER. IN ADDITION, ALL CONTRACTORS AGREE THAT THEY WILL, TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, INDEMNIFY, DEFEND AND HOLD HARMLESS BOHLER AND ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS FROM AND AGAINST ANY DAMAGES, INJURIES, CLAIMS, ACTIONS, PENALTIES, EXPENSES, PUNITIVE DAMAGES, TORT DAMAGES, STATUTORY CAUSES OF ACTION, LOSSES, DEBTS AND LIABILITIES OR COSTS, INCLUDING, BUT NOT LIMITED TO, REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS, ARISING OUT OF OR IN ANY WAY CONNECTED WITH OR TO THE PROJECT, INCLUDING ALL CLAIMS BY EMPLOYEES OF THE CONTRACTOR(S), ALL CLAIMS BY THIRD PARTIES AND ALL CLAIMS RELATED TO THE PROJECT'S CONSTRUCTION. THE CONTRACTOR MUST NOTIFY ENGINEER, IN WRITING, AT LEAST THIRTY (30) DAYS PRIOR TO ANY TERMINATION, SUSPENSION OR CHANGE OF ITS INSURANCE HEREUNDER.
22. THE ENGINEER OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR CONSTRUCTION METHODS, MEANS, TECHNIQUES OR PROCEDURES, GENERALLY OR FOR THE CONSTRUCTION MEANS METHODS, TECHNIQUES OR PROCEDURES FOR COMPLETION OF THE WORK DEPICTED BOTH ON THESE PLANS, AND THOSE CONTAINED IN SCOPE AND REVISIONS THAT RESULT FROM SAME. THE CONTRACTOR IS FULLY AND SOLELY RESPONSIBLE FOR DETERMINING THE MEANS AND METHODS FOR COMPLETION OF THE WORK PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
23. NEITHER THE PROFESSIONAL ACTIVITIES OF BOHLER, NOR THE PRESENCE OF BOHLER AND/OR ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AT A CONSTRUCTION/PROJECT SITE (HEREIN "BOHLER PARTIES"), RELIEVES OR WILL RELIEVE THE CONTRACTOR OF AND FROM CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, OVERSEEING, SUPERINTENDING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND COMPLIANCE WITH ALL HEALTH AND SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES WITH JURISDICTION OVER THE CONSTRUCTION PROJECTS. BOHLER PARTIES HAVE NO AUTHORITY TO EXERCISE CONTROL OVER (OR ANY RESPONSIBILITY FOR) ANY CONSTRUCTION, THE CONTRACTOR OR ITS EMPLOYEES RELATING TO THEIR WORK AND ANY AND ALL HEALTH AND SAFETY PROGRAMS OR PROCEDURES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY. THE CONTRACTOR MUST INDEMNIFY, DEFEND, PROTECT AND HOLD HARMLESS BOHLER PARTIES FOR AND FROM ANY LIABILITY TO BOHLER PARTIES RESULTING FROM THE CONTRACTOR'S WORK, SERVICES AND/OR VIOLATIONS OF THIS NOTE. THESE NOTES OR ANY NOTES IN THE PLAN SET AND, FURTHER, THE CONTRACTOR MUST NAME BOHLER AS AN ADDITIONAL INSURED UNDER THE GENERAL CONTRACTOR'S POLICIES OF GENERAL LIABILITY INSURANCE AS DESCRIBED ABOVE.
24. WHEN IT IS CLEARLY AND SPECIFICALLY WITHIN BOHLER'S SCOPE OF SERVICES/CONTRACT WITH THE OWNER/DEVELOPER, BOHLER WILL REVIEW OR TAKE OTHER APPROPRIATE ACTION ON THE CONTRACTOR SUBMITTALS, SUCH AS SHOP DRAWINGS, PRODUCT DATA, SAMPLES, AND OTHER DATA, WHICH THE CONTRACTOR IS REQUIRED TO SUBMIT, BUT ONLY FOR THE LIMITED PURPOSE OF EVALUATING CONFORMANCE WITH THE DESIGN INTENT AND THE INFORMATION SHOWN IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONSTRUCTION MEANS AND METHODS AND/OR TECHNIQUES OR PROCEDURES, COORDINATION OF THE WORK WITH OTHER TRADES, AND CONSTRUCTION SAFETY PRECAUTIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND BOHLER HAS NO RESPONSIBILITY OR LIABILITY FOR SAME. BOHLER WILL PERFORM ITS SHOP DRAWING REVIEW WITH REASONABLE PROMPTNESS, AS CONDITIONS PERMIT. ANY DOCUMENT, DOCUMENTING BOHLER'S REVIEW OF A SPECIFIC ITEM OR LIMITED SCOPE, MUST NOT INDICATE THAT BOHLER HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. BOHLER IS NOT RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR MUST, IN WRITING, PROMPTLY AND IMMEDIATELY BRING ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS TO BOHLER'S ATTENTION. BOHLER IS NOT REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN RECEIVED.
25. IF THE CONTRACTOR DEVIATES FROM THESE PLANS AND/OR SPECIFICATIONS, INCLUDING THE NOTES CONTAINED HEREIN, WITHOUT FIRST OBTAINING THE PRIOR WRITTEN AUTHORIZATION OF THE ENGINEER OF RECORD AND BOHLER FOR ALL DEVIATIONS WITHIN ENGINEER'S SCOPE, THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PAYMENT OF ALL COSTS INCURRED IN CORRECTING ANY WORK PERFORMED WHICH DEVIATES FROM THE PLANS, ALL FINES AND/OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM AND, FURTHER, MUST DEFEND, INDEMNIFY, PROTECT AND HOLD HARMLESS THE ENGINEER OF RECORD AND BOHLER WITH RESPECT TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, FOR AND FROM ALL FEES, ATTORNEYS' FEES, DAMAGES, COSTS, JUDGMENTS, CLAIMS, INJURIES, PENALTIES AND THE LIKE RELATED TO SAME.
26. THE CONTRACTOR IS RESPONSIBLE FOR A MAINTAINING AND PROTECTING THE TRAFFIC CONTROL PLAN AND ELEMENTS IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS. FOR ALL WORK THAT AFFECTS PUBLIC TRAVEL EITHER IN THE RIGHT OF WAY OR ON SITE. THE COST FOR THIS ITEM MUST BE INCLUDED IN THE CONTRACTOR'S PRICE AND IS THE CONTRACTOR'S SOLE RESPONSIBILITY.
27. OWNER MUST MAINTAIN AND PRESERVE ALL PHYSICAL SITE FEATURES AND DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS IN STRICT ACCORDANCE WITH THE APPROVED PLAN(S) AND DESIGN, AND, FURTHER, THE ENGINEER OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR ANY FAILURE TO SO MAINTAIN OR PRESERVE SITE AND/OR DESIGN FEATURES. IF OWNER FAILS TO MAINTAIN AND/OR PRESERVE ALL PHYSICAL SITE FEATURES AND/OR DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS, OWNER AGREES TO INDEMNIFY AND HOLD THE ENGINEER OF RECORD AND BOHLER PARTIES, HARMLESS FOR ALL INJURIES, DAMAGES AND COSTS THAT ENGINEER OF RECORD AND BOHLER INCUR AS A RESULT OF SAID FAILURE OR FAILURE TO PRESERVE.
28. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION ACTIVITIES AND MATERIALS COMPLY WITH AND CONFORM TO APPLICABLE FEDERAL, STATE AND LOCAL RULES AND REGULATIONS, LAWS, ORDINANCES, AND CODES, AND ALL APPLICABLE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, (29 U S C. 651 ET SEQ.) AS AMENDED. AND ANY MODIFICATIONS, AMENDMENTS OR REVISIONS TO SAME.
29. THE CONTRACTOR MUST STRICTLY COMPLY WITH THE LATEST AND CURRENT OSHA STANDARDS AND REGULATIONS, AND/OR ANY OTHER AGENCY WITH JURISDICTION OVER EXCAVATION AND TRENCHING PROCEDURES. ENGINEER OF RECORD AND BOHLER HAS NO RESPONSIBILITY FOR OR AS RELATED TO EXCAVATION AND TRENCHING PROCEDURES AND WORK.
30. THE CONTRACTOR AND THE OWNER MUST INSTALL ALL ELEMENTS AND COMPONENTS IN STRICT COMPLIANCE WITH AND IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDED INSTALLATION CRITERIA AND SPECIFICATIONS. IF THE CONTRACTOR AND/OR OWNER FAIL TO DO SO, THEY AGREE TO JOINTLY, INDEPENDENTLY, SEPARATELY, COLLECTIVELY, AND SEVERALLY INDEMNIFY, DEFEND, PROTECT AND HOLD ENGINEER OF RECORD AND BOHLER PARTIES HARMLESS FOR ALL INJURIES AND DAMAGES THAT ENGINEER SUFFERS AND COSTS THAT ENGINEER INCURS AS A RESULT OF SAID FAILURE.
31. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN AN ON-SITE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IN COMPLIANCE WITH THE ENVIRONMENTAL PROTECTION AGENCY (EPA) REQUIREMENTS OR LOCAL GOVERNING AGENCY FOR SITES WHERE ONE (1) ACRE OR MORE IS DISTURBED (OR ACCUMULATIVELY DISTURBED, WHERE THE PROJECT IS PART OF A LARGER COMMON PLAN WITH A DIFFERENT THRESHOLD). THE CONTRACTOR MUST ENSURE THAT ALL ACTIVITIES, INCLUDING THOSE OF ALL SUBCONTRACTORS, ARE IN COMPLIANCE WITH THE SWPPP, INCLUDING BUT NOT LIMITED TO LOGGING ACTIVITIES (MINIMUM ONCE PER WEEK AND AFTER RAINFALL EVENTS) AND CORRECTIVE MEASURES, AS APPROPRIATE AND FURTHER, THE CONTRACTOR IS SOLELY AND COMPLETELY RESPONSIBLE FOR FAILING TO DO SO.
32. AS CONTAINED IN THESE DRAWINGS AND ASSOCIATED DOCUMENTS PREPARED BY THE ENGINEER OF RECORD AND BOHLER, THE USE OF THE WORDS "CERTIFY" OR "CERTIFICATION CONSTITUTE(S) AN EXPRESSION ONLY OF PROFESSIONAL OPINION REGARDING THE INFORMATION WHICH IS THE SUBJECT OF SUCH CERTIFICATION BASED UPON KNOWLEDGE AND BELIEF AND IN ACCORDANCE WITH ACCEPTED STANDARD OF PROCEDURE CONSISTENT WITH THE APPLICABLE STANDARDS OF PRACTICE, AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE OF ANY NATURE OR TYPE, EITHER EXPRESSED OR IMPLIED, UNDER ANY CIRCUMSTANCES.
33. IT IS THE CONTRACTOR'S RESPONSIBILITY TO HAVE SUBMITTALS PREPARED FOR ANY CONSTRUCTION DETAILED ITEMS AND TO COORDINATE THE SUBMITTALS WITH THE RESPECTIVE GOVERNING AGENCIES OR SERVICE PROVIDERS, WHO SHALL HAVE THE FINAL AUTHORITY IN APPROVING THE SUBMITTALS.

DEMOLITION NOTES

(Rev. 2/2021)

1. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES, IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES.
2. THE CONTRACTOR MUST CONDUCT DEMOLITION/REMOVALS ACTIVITIES IN SUCH A MANNER AS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, SIDEWALKS, WALKWAYS, AND ALL OTHER ADJACENT FACILITIES. THE CONTRACTOR MUST OBTAIN ALL APPLICABLE PERMITS FROM THE APPROPRIATE GOVERNMENTAL AUTHORITY(IES) PRIOR TO THE COMMENCEMENT OF ANY ROAD OPENING OR DEMOLITION ACTIVITIES IN OR ADJACENT TO THE RIGHT-OF-WAY.
3. WHEN DEMOLITION-RELATED ACTIVITIES IMPACT ROADWAYS AND/OR ROADWAY RIGHT-OF-WAY, THE CONTRACTOR MUST PROVIDE TRAFFIC CONTROL AND GENERALLY ACCEPTED SAFE PRACTICES IN CONFORMANCE WITH THE CURRENT FEDERAL HIGHWAY ADMINISTRATION "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), AND THE FEDERAL, STATE, AND LOCAL REGULATIONS.
4. THE DEMOLITION (AND/OR REMOVALS) PLAN IS INTENDED TO PROVIDE GENERAL INFORMATION AND TO IDENTIFY ONLY CONDITIONS REGARDING ITEMS TO BE DEMOLISHED, REMOVED, AND/OR TO REMAIN.
   A. THE CONTRACTOR MUST ALSO REVIEW ALL CONSTRUCTION DOCUMENTS AND INCLUDE WITHIN THE DEMOLITION ACTIVITIES ALL INCIDENTAL WORK NECESSARY FOR THE CONSTRUCTION OF THE NEW SITE IMPROVEMENTS.
   B. THIS PLAN IS NOT INTENDED TO AND DOES NOT PROVIDE DIRECTION REGARDING THE MEANS, METHODS, SEQUENCING, TECHNIQUES AND PROCEDURES TO BE EMPLOYED TO ACCOMPLISH THE WORK. ALL MEANS, METHODS, SEQUENCING, TECHNIQUES AND PROCEDURES MUST BE USED MUST BE IN STRICT ACCORDANCE AND CONFORMANCE WITH ALL STATE, FEDERAL, LOCAL, AND JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR MUST COMPLY WITH ALL OSHA AND OTHER SAFETY PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK SITE FOR THE CONTRACTOR'S EMPLOYEES.
5. THE CONTRACTOR MUST PROVIDE ALL "METHODS AND MEANS" NECESSARY TO PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF EXISTING STRUCTURES, AND ANY OTHER IMPROVEMENTS THAT ARE REMAINING ON OR OFF SITE. THE CONTRACTOR, AT THE CONTRACTOR'S SOLE COST, MUST REPAIR, IN WRITING, OF ANY SUCH CONFLICT, DISCREPANCY OR AMBIGUITY BETWEEN THE GEOTECHNICAL REPORT AND PLANS AND SPECIFICATIONS, PRIOR TO PROCEEDING WITH ANY FURTHER WORK. IF A GEOTECHNICAL REPORT WAS NOT CREATED, THEN THE CONTRACTOR MUST FOLLOW AND COMPLY WITH ALL OF THE REQUIREMENTS OF ANY AND ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE SPECIFICATIONS WHICH HAVE JURISDICTION OVER THIS PROJECT.
6. ENGINEER OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION. THE CONTRACTOR MUST PROCEED WITH THE DEMOLITION IN A CAREFUL AND METHODICAL MANNER, CONSISTENT WITH GOOD HOUSEKEEPING REQUIREMENTS, TO ENSURE PUBLIC AND CONTRACTOR SAFETY AND SAFETY TO ALL PROPERTY ON THE SITE OR ADJACENT OR NEAR TO THE SAME.
7. THE CONTRACTOR IS RESPONSIBLE FOR JOB SITE SAFETY, WHICH MUST INCLUDE, BUT IS NOT LIMITED TO, THE INITIALATION AND MAINTENANCE OF BARRIERS, FENCING, OTHER APPROPRIATE AND/OR NECESSARY SAFETY FEATURES AND ITEMS NECESSARY TO PROTECT THE PUBLIC FROM AREAS OF CONSTRUCTION AND DEMOLITION ACTIVITIES. THE CONTRACTOR MUST SAFEGUARD THE SITE AND AREAS NOT INTENDED TO BE PERFORMED IN THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE ENTRY OF ALL UNAUTHORIZED PERSONS AT ANY TIME, TO OR NEAR THE DEMOLITION AREA.
8. PRIOR TO THE COMMENCEMENT OF ANY SITE ACTIVITY AND ANY DEMOLITION ACTIVITY, THE CONTRACTOR MUST, IN WRITING, RAISE ANY QUESTIONS CONCERNING THE ACCURACY OR INTENT OF TH

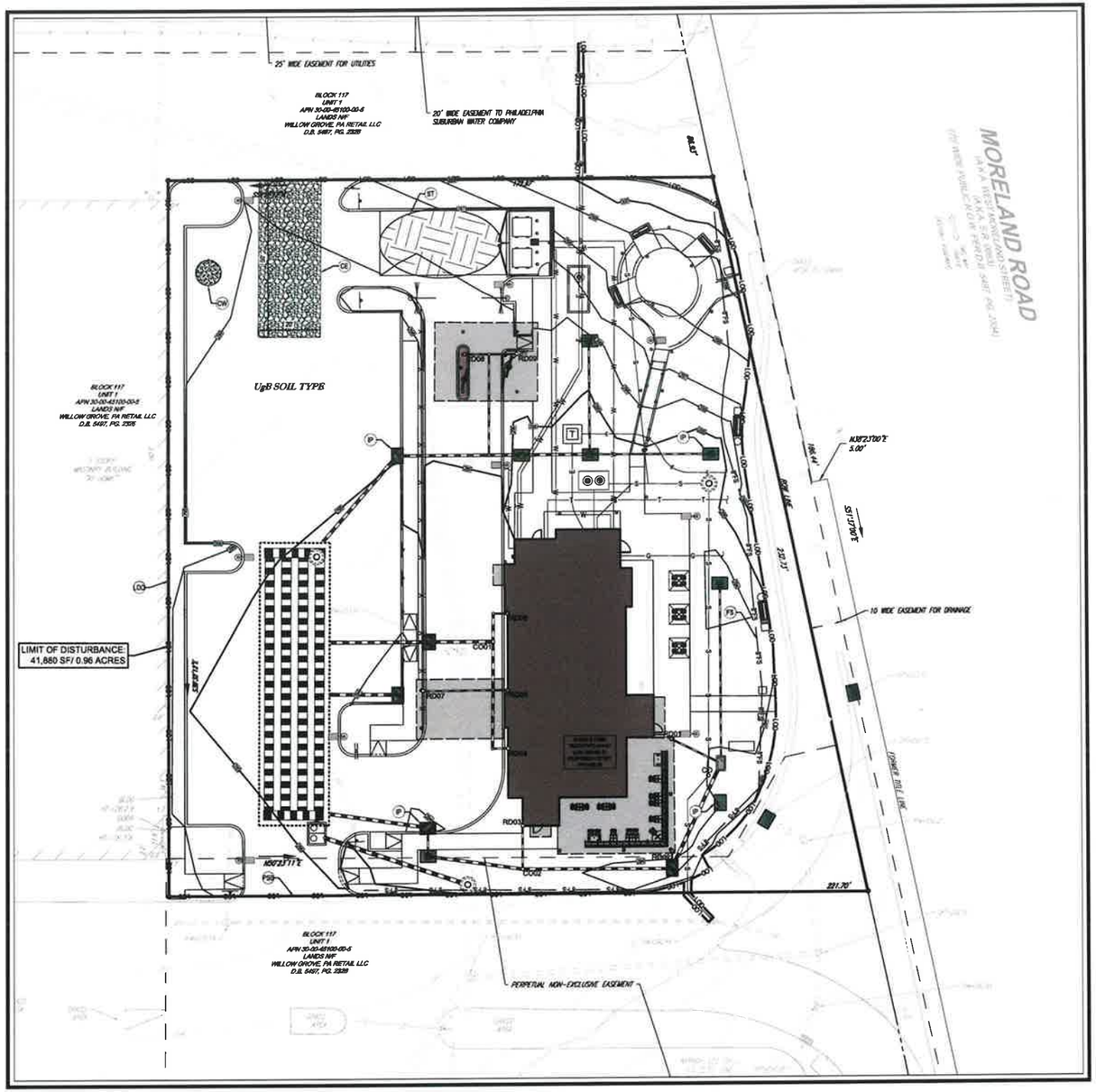
LEGEND	
E & S KEYNOTES	
CE	ROCK CONSTRUCTION ENTRANCE
FS	FILTER SOCK
IP	PROPOSED INLET PROTECTION
CW	CONCRETE WASHOUT
ST	PROP. TOPSOIL STOCKPILE
PSB	PROJECT SITE BOUNDARY
LOD	LIMIT OF DISTURBANCE

Compost Filter Sock Worksheet

Project: PP2270001

Description: Compost Filter Socks

Location	SiltSoxx Size (Inches)	Slope (%)	Max. Allowable Slope Length Above Barrier (ft)*	Provided Slope Length Above Barrier (ft)
NE	8	5.80	184	110
SE	8	3.60	293	55



SEQUENCE OF CONSTRUCTION

1. 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 THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
2. AT LEAST SEVEN (7) DAYS BEFORE COMMENCEMENT OF ANY EARTH DISTURBANCE ACTIVITIES, THE OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES, THE LAND OWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE EROSION AND SEDIMENTATION CONTROL PLAN PREPARER, AND THE INSPECTIONS COORDINATOR AT PWD (215-685-6387) TO AN ON-SITE PRE-CONSTRUCTION MEETING.
   - A. CONTRACTOR MUST PROVIDE AN AS-BUILT SURVEY PLAN FOR ON-SITE AND OFF-SITE IMPROVEMENTS. CONTRACTOR MUST CONFIRM PWD STORMWATER AS-BUILT REQUIREMENTS WITH PWD AT THIS TIME. AS-BUILT PLAN APPROVAL BY PWD IS REQUIRED TO OBTAIN A CERTIFICATE OF OCCUPANCY AND SHALL GENERALLY INCLUDE:
   - I. CONTRACTOR MUST PROVIDE CONSTRUCTION CERTIFICATION PACKAGE, INCLUDING SWP CONSTRUCTION CERTIFICATION FORMS FOR EACH SWP, TO PWD.
   - II. A LICENSED PROFESSIONAL/DESIGNEE MUST DOCUMENT THE INFORMATION AND MEASUREMENTS REQUIRED ON THE SWP CONSTRUCTION CERTIFICATION FORM(S) WITHIN THE CONSTRUCTION CERTIFICATION PACKAGE.
   - III. AS-BUILT PLAN TO INCLUDE GRADING AND DRAINAGE INCLUDING THE PROPOSED DETENTION BASIN AND ASSOCIATED STRUCTURES INCLUDING BUT NOT LIMITED TO MANHOLE/INLET RIM AND GRATE ELEVATIONS, INVERTS, AND SUMPS, PIPE LENGTH, SLOPE, PIPE SIZE AND MATERIAL ETC
   - IV. AS-BUILT PLAN MUST BE PREPARED AND SIGN/SEALED BY A PROFESSIONAL ENGINEER, REGISTERED ARCHITECT, LANDSCAPE ARCHITECT, PROFESSIONAL GEOLOGIST, LICENSED CONTRACTOR OR REGISTERED LAND SURVEYOR IN PA.
   - V. CONTRACTOR MUST RETAIN RECEIPTS OF MATERIALS PURCHASED ASSOCIATED WITH THE DETENTION BASIN, MEDIA FILTER, AND INLET/MANHOLES AND PROVIDE TO PWD.
   - B. CONTRACTOR MUST FIELD VERIFY EXISTING SPOT ELEVATIONS AND INVERTS AS DESIGNATED ON THE PLAN, PRIOR TO CONSTRUCTION. THE VERIFIED ELEVATIONS MUST BE PROVIDED TO THE SITE/CIVIL ENGINEER.
   - C. CONTRACTOR MUST MAINTAIN EXISTING UTILITY SERVICE TO ADJACENT EXISTING BUILDINGS TO REMAIN THROUGHOUT CONSTRUCTION.
   - D. PRIOR TO CONSTRUCTION, CONTRACTOR TO FIELD VERIFY ALL EXISTING UTILITIES WITHIN THE LIMIT OF DISTURBANCE INCLUDING SANITARY, STEMER, GAS LINE, ELECTRIC LINE, ETC. LOCATION, DEPTH AND SIZE AS NOTED ON THE PLAN AND NOTIFY ENGINEER OF ANY DISCREPANCIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LATERALS SERVING THE EXISTING BUILDINGS ON ADJACENT PROPERTIES.
3. ALL STRUCTURES ASSOCIATED WITH CONSTRUCTION OF SEDIMENT AND EROSION CONTROL MEASURES MUST BE AVAILABLE ON-SITE PRIOR TO ANY EARTH MOVING/DISTURBANCE.
4. CONTRACTOR MUST CONFIRM LOCATION OF EXISTING UTILITIES, ON-SITE AND WITHIN THE RIGHT-OF-WAYS PRIOR TO DEMOLITION. (INCLUDING BUT NOT LIMITED TO TELEPHONE, GAS, ELECTRIC, CABLE, WATER, AND COMBINED SEWER.)
5. INSTALL INLET PROTECTION AS DESIGNATED ON THE PLAN.
6. INSTALL Filter Sock AS SHOWN ON THE PLAN. OBJECTS OF CONSIDERABLE MASS (I.E. CONCRETE BLOCKS, SAND BAGS, ECT.) MUST BE USED IMMEDIATELY DOWNSLOPE OF COMPOST SOCKS PLACED ON PAVED SURFACES (AT THE SAME INTERVALS AS RECOMMENDED BY THE MANUFACTURER FOR STAKES) IN ORDER TO HOLD THEM IN PLACE.
7. DEMOLISH EXISTING SITE FEATURES INCLUDING BUT NOT LIMITED TO: EXISTING BUILDING AND EXISTING PARKING AREA, ETC.
8. CLEAR AND GRUB WITHIN THE LIMIT OF DISTURBANCE AS INDICATED ON THE PLANS. STRIP AND STOCKPILE SOIL WITHIN AREAS TO BE DISTURBED AS INDICATED ON THE PLANS. STOCKPILE SIDE SLOPES SHALL BE 2H:1V OR FLATTER - PLACE Filter Sock AROUND BASE OF TOPSOIL STOCKPILE.
9. CONTINUE SITE DEMOLITION AND COMMENCE SOIL EXCAVATIONS, AND ASSOCIATED STOCKPILING AS DESIGNATED ON THE PLANS. EXPORT EXCESS CUT MATERIAL AS REQUIRED (DETERMINED BY CONTRACTOR), IN A LAWFUL MANNER, AS INDICATED ON THE PLANS.
10. INITIATE BULK EARTHWORK ACTIVITIES (EXCAVATION, PLACEMENT, AND COMPACTION):
    - A. IN AREAS RECEIVING FILL, PLACE FILL IN APPROPRIATE LIFTS ACROSS THE ENTIRE FILL AREA SO AS NOT TO TRAP WATER UPSTREAM OF THE PROPOSED EROSION CONTROLS.
    - B. AS AREAS ARE BROUGHT TO PROPOSED SUBGRADE ELEVATION, INITIATE CONSTRUCTION OF UTILITIES INCLUDING BUT NOT LIMITED TO SANITARY, STORM, WATER, ELECTRIC, TELEPHONE, AND GAS. TRENCH EXCAVATION SHALL BE LIMITED TO THE LENGTH OF PIPE THAT CAN BE INSTALLED IN ONE (1) DAY. CONTINUE THESE INSTALLATIONS AS AREAS BECOME AVAILABLE. CONTRACTOR MUST PROVIDE ADEQUATE DEWATERING OF ANY TRENCHES THAT ENCOUNTER GROUNDWATER. (SEE PUMP FILTERING DETAIL.)
    - C. AS AREAS BECOME AVAILABLE, BEGIN CONSTRUCTION OF BUILDING INCLUDING BUT NOT LIMITED TO BUILDING FOUNDATION, FOUNDATION ELEMENTS, ETC.
    - D. AT LEAST THREE (3) DAYS BEFORE BEGINNING CONSTRUCTION OF THE BASIN, CONTRACTOR TO CALL PWD (215- 685-6387) FOR AN INSPECTION.
11. CONTINUE CONSTRUCTION OF UTILITIES, INSTALL SITE LIGHTING FOUNDATIONS, LIGHT STANDARDS, AND ASSOCIATED CONDUIT. REFER TO ARCHITECTURAL DRAWINGS FOR LIGHT CONDUIT LOCATIONS.
12. INSTALL PROPOSED CURB AS INDICATED ON THE PLANS.
13. INSTALL STONE BASE COURSE, BINDER COURSE, AND WEARING COURSE FOR THE ASPHALT AREAS. INSTALL PAVEMENT. THE PAVEMENT STONE BED SHALL BE PLACED ACCORDING TO THE DETAILS AND SPECIFICATIONS.
14. REMOVE ALL CONSTRUCTION DEBRIS AND EXCESS CUT MATERIAL FROM THE SITE IN A LAWFUL MANNER.
15. CRITICAL STAGE #4- A DESIGNEE/LICENSED PROFESSIONAL SHALL BE PRESENT ON THE SITE DURING CRITICAL STAGES OF IMPLEMENTATION. A LICENSED PROFESSIONAL/DESIGNEE MUST DOCUMENT THE INFORMATION AND MEASUREMENTS REQUIRED ON THE SWP CONSTRUCTION CERTIFICATION FORM(S) WITHIN THE CONSTRUCTION CERTIFICATION PACKAGE. IF INSPECTION INDICATES THAT SOIL SEDIMENT HAS ENTERED EITHER THE UNDERGROUND BASIN OR THE PAVEMENT AREAS THE CONTRACTOR MAY BE REQUIRED TO REMOVE THE SEDIMENT AND REPLACE WITH CLEAN, WASHED STONE. IF INSPECTION INDICATES SEDIMENT HAS ENTERED THE STORMSEWER, CLEANOUT/VACUUM THE INSTALLED STORM SEWER/INLET SYSTEM OF SEDIMENT WITH A VACUUM TRUCK.
16. FINAL GRADE LANDSCAPE AREAS, PLANT TREES AND SHRUBS, AND SPREAD TOP SOIL AS SHOWN ON THE LANDSCAPE PLAN.
17. UPON SITE STABILIZATION (UNIFORM COVERAGE OR DENSITY OF 70% ACROSS ALL DISTURBED AREAS) AND NOTIFICATION OF THE PHILADELPHIA WATER DEPARTMENT EROSION CONTROL STAFF, REMOVE EROSION AND SEDIMENT CONTROL MEASURES INCLUDING BUT NOT LIMITED TO Filter Sock AND INLET PROTECTION. ANY AREA DISTURBED DURING THE REMOVAL OF EROSION AND SEDIMENT CONTROL MEASURES SHALL BE STABILIZED IMMEDIATELY AS INDICATED ON THE PLANS.
18. DEMOBILIZE.

LEGEND	
PROPOSED	
LIMIT OF DISTURBANCE/ PROJECT SITE BOUNDARY	LOD
8" COMPOST FILTER SOCK	FTR
CONCRETE WASHOUT	
TEMPORARY STOCKPILE	
INLET PROTECTION	
ROCK CONSTRUCTION ENTRANCE	



LOCATION MAP
SCALE: 1" = 500'

Raising Cane's Chicken Fingers
Restaurant Support Office
6800 Bishop Road, Plano, TX 75024
Tele: 972-769-3100 Fax: 972-769-3101

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	2023-04-10	PER ABINGTON TOWNSHIP COMMENTS	CM / KT

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PROJECT No.:	PP2270001
DRAWN BY:	BMM
CHECKED BY:	KHT
DATE:	10.26.22
CAD I.D.:	PP2270001-X-TTLB-PHPD

PROJECT:
PRELIMINARY/ FINAL MAJOR LAND DEVELOPMENT PLANS
FOR
RAISING CANE'S RESTAURANTS, LLC.

PROPOSED RESTAURANT #C0952
LAND DEVELOPMENT #LD-22-05
2820 WEST MORELAND ROAD
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

BOHLER
1515 MARKET STREET, SUITE 820
PHILADELPHIA, PA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
www.BohlerEngineering.com

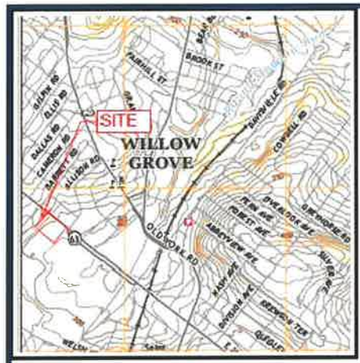
COMMONWEALTH OF PENNSYLVANIA — Kevin Tatlow — REGISTERED ENGINEER

SHEET TITLE:
SOIL EROSION & SEDIMENT POLLUTION CONTROL PLAN

SHEET NUMBER:
C3.0
4 OF 28

REVISION 1 - 2023-04-10

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USGS MAP

LOCATION OF ALL SURFACE WATERS AND THEIR CLASSIFICATION UNDER CHAPTER 93

§102.4(b)(5)(v)

THE SUBJECT SITE IS LOCATED WITHIN THE UPPER PENNYPACK CREEK WATERSHED, WHICH HAS A WWF (WARM WATER FISHES) & MF (MIGRATORY FISHES) CHAPTER 93 CLASSIFICATION.

RECYCLING OR DISPOSAL OF MATERIALS

§102.4(b)(5)(xi)

THE FOLLOWING IB A LIST THAT INCLUDES, BUT THAT IS NOT LIMITED TO, THE POTENTIAL CONSTRUCTION WASTES THAT MAY EXIST ON-SITE:

- CONCRETE CURB AND SIDEWALK
- ASPHALT
- E&S BMP - COMPOST FILTER SOCKS
- E&S BMP - TEMPORARY RISER
- E&S BMP - EROSION CONTROL MATTING
- E&S BMP - STONE INLET PROTECTION
- E&S BMP - STONE & CONCRETE BLOCK INLET PROTECTION
- E&S BMP - REGULATED FILL MATERIALS

ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENTS 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. BELOW IS A LIST OF METHODS FOR THE PROPER RECYCLING/DISPOSAL OF VARIOUS MATERIALS:

1.) DUST CONTROL - CONSTRUCTION TRAFFIC MUST ENTER AND EXIT THE SITE AT THE STABILIZED CONSTRUCTION ENTRANCE. THE PURPOSE IS TO TRAP DUST AND MUD THAT WOULD OTHERWISE BE CARRIED OFF-SITE BY CONSTRUCTION TRAFFIC. WATER TRUCKS WILL BE USED AS NEEDED DURING CONSTRUCTION TO REDUCE DUST GENERATED ON THE SITE. DUST CONTROL MUST BE PROVIDED BY THE CONTRACTOR TO A DEGREE THAT IS ACCEPTABLE TO THE LOCAL CONSERVATION DISTRICT AFTER CONSTRUCTION, THE SITE WILL BE STABILIZED, WHICH WILL REDUCE THE POTENTIAL FOR DUST GENERATION.

2.) SOLID WASTE DISPOSAL - NO SOLID MATERIALS, INCLUDING BUILDING MATERIALS, ARE ALLOWED TO BE DISCHARGED FROM THE SITE WITH STORMWATER. ALL SOLID WASTE, INCLUDING DISPOSABLE MATERIALS INCIDENTAL TO THE MAJOR CONSTRUCTION ACTIVITIES, MUST BE COLLECTED AND PLACED IN CONTAINERS. THE CONTAINERS WILL BE EMPTIED AS NECESSARY BY A CONTRACT TRASH DISPOSAL SERVICE AND HAULED AWAY FROM THE SITE.

3.) SANITARY FACILITIES - ALL PERSONNEL INVOLVED WITH CONSTRUCTION ACTIVITIES MUST COMPLY WITH STATE AND LOCAL SANITARY OR SEPTIC SYSTEM REGULATIONS. TEMPORARY SANITARY FACILITIES WILL BE PROVIDED AT THE SITE THROUGHOUT THE CONSTRUCTION PHASE. THEY MUST BE UTILIZED BY ALL CONSTRUCTION PERSONNEL AND WILL BE SERVICED BY A LICENSED COMMERCIAL OPERATOR.

4.) WATER SOURCE - NON-STORMWATER COMPONENTS OF SITE DISCHARGE MUST BE CLEAN WATER. WATER USED FOR CONSTRUCTION WHICH DISCHARGES FROM THE SITE MUST ORIGINATE FROM A PUBLIC WATER SUPPLY OR PRIVATE WELL APPROVED BY THE STATE HEALTH DEPARTMENT. WATER USED FOR CONSTRUCTION THAT DOES NOT ORIGINATE FROM AN APPROVED PUBLIC SUPPLY MUST NOT DISCHARGE FROM THE SITE.

5.) CONCRETE WASTE FROM CONCRETE READY-MIX TRUCKS - DISCHARGE OF EXCESS OR WASTE CONCRETE AND/OR WASH WATER FROM CONCRETE TRUCKS WILL BE ALLOWED ON THE CONSTRUCTION SITE, BUT ONLY IN SPECIFICALLY DESIGNATED DIKED AREAS PREPARED TO PREVENT CONTACT BETWEEN THE CONCRETE AND/OR WASH WATER AND STORMWATER THAT WILL BE DISCHARGED FROM THE SITE.

GEOLOGIC FORMATIONSIBOIL CONDITIONS THAT MAY HAVE THE POTENTIAL TO CAUSE POLLUTION

§102.4(b)(5)(xii)

THERE ARE NO GEOLOGIC FORMATIONS OR SOIL CONDITIONS THAT COULD CAUSE CONTAMINANT POLLUTION DURING EARTH DISTURBANCE ACTIVITIES.

POTENTIAL THERMAL IMPACTS TO SURFACE WATERS

A POTENTIAL FOR THERMAL IMPACTS EXISTS IN INSTANCES WHERE SURFACE RUNOFF IS DIRECTLY CONVEYED TO A RECEIVING STREAM WITHOUT ADEQUATE ATTENUATION OR COOLING. TO AVOID THERMAL IMPACTS, THE FOLLOWING ARE PROPOSED: UNDERGROUND DETENTION BASIN, DETENTION TRENCHES, VEGETATED SWALES, DISTERNS, RAINGARDENS, AND SUBSTANTIAL AMOUNTS OF VEGETATION AROUND EACH OF THE BMPs. ALL OF THOSE MEASURES WILL HELP TO CONTROL RUNOFF VOLUME AND RATE AND THEREBY PROVIDE ADDITIONAL COOLING TIME, THEREBY MINIMIZING THERMAL IMPACTS TO THE RECEIVING STREAM.



SOIL MAP

TYPES, DEPTH, SLOPE, LOCATIONS, AND LIMITATIONS OF THE SOILS

§102.4(b)(5)(ii)

SOIL DESCRIPTIONS

SOIL	DESCRIPTION	SOIL GROUP
UgB	- URBAN LAND, 0 TO 8 PERCENT SLOPES	C

SOIL USE LIMITATIONS AND THEIR RESOLUTIONS PROVIDED

CONTRACTOR SHALL CONSULT WITH GEOTECHNICAL ENGINEER TO DETERMINE SOIL LIMITATIONS AND RESOLUTIONS SPECIFIC TO THIS PROJECT.

1. SOIL TYPES POORLY SUITED AS SOURCES OF TOPSOIL RESTRICT OR PLACE CONDITIONS ON PLANNING VEGETATIVE STABILIZATION. ACIDIC, LOW FERTILITY, EXCESSIVE DRYNESS AND EXCESSIVE WETNESS LIMIT PLANT GROWTH.

RESOLUTIONS: IDENTIFYING AND RESOLVING CHARACTERISTICS, THAT RENDER THE SOIL TYPES POORLY, SUITED AS TOPSOIL.

2. ACIDIC SOIL TYPES EXHIBITING PH REACTION VALUES LOWER THAN ABOUT 5.5, LIMIT VEGETATIVE STABILIZATION. SOIL TESTS MIGHT BE NECESSARY TO DETERMINE SITE SPECIFIC PH REACTION.

RESOLUTIONS: APPLYING LIME CONSISTENT WITH RATES DETERMINED BY SOIL TESTING; SELECTING VEGETATIVE SPECIES TOLERANT TO ACIDIC SOIL CONDITIONS; AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLE 1 OF THE EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND PUBLISHED BY PENN STATE.

3. LOW FERTILITY SOIL TYPES LACKING IN SUFFICIENT AMOUNTS OF ESSENTIAL PLANT NUTRIENTS SUCH AS: NITROGEN, PHOSPHOROUS, POTASSIUM, SULFER, MAGNESIUM, CALCIUM, IRON, MANGANESE, BORON, CHLORINE, ZINC, COPPER AND MOLYBDENUM, LIMIT VEGETATION STABILIZATION. SOIL TESTS MIGHT BE NECESSARY TO DETERMINE SITE SPECIFIC SOIL FERTILITY.

RESOLUTIONS: INCORPORATING SOIL NUTRIENTS CONSISTENT WITH RATES DETERMINED BY SOIL TESTING; SELECTIVE VEGETATIVE SPECIES TOLERANT TO LOW FERTILITY SOIL CONDITIONS, AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLE 1 OF THE EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND PUBLISHED BY PENN STATE.

4. ERODIBLE SOIL TYPES EXHIBITING K VALUES GREATER THAN 0.36 OR PLASTICITY INDEX VALUES LOWER THAN 10, LIMIT VEGETATIVE STABILIZATION OF CHANNELS.

RESOLUTIONS: TEMPORARY CHANNEL LINING, PROVIDING PERMANENT CHANNEL LINING, DECREASING CHANNEL GRADE, INCREASING CHANNEL WIDTH, SELECTING VEGETATIVE WITH GREATER RETARDANCE, SELECTING PERMANENT LININGS OTHER THAN GRASSES, AND IMPLEMENTING COMBINATION OF THESE AND/OR METHODS. VEGETATIVE RETARDANCE INFORMATION IS PROVIDED IN TABLES 6 AND 7 OF THE EROSION AND SEDIMENT POLLUTION CONTROL MANUAL PUBLISHED BY PADEP.

5. WET SOIL TYPES HAVE EXCESSIVE ROOT ZONE AND SOIL MOISTURES. SOME SOIL SURVEYS INDICATE WETNESS, HIGH WATER TABLE AND FLOODING. THIS INDICATOR IS AFFECTED BY SOIL DISTURBANCE.

RESOLUTIONS: SELECTING VEGETATIVE SPECIES TOLERANT TO WET CONDITIONS, TILING VEGETATIVE AREAS, AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLE 1 OF THE EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND PUBLISHED BY THE PENN STATE.

6. DRY SOIL TYPES LACK SUFFICIENT ROOT ZONE SOIL MOISTURES. THIS INDICATOR IS AFFECTED BY SOIL DISTURBANCE.

RESOLUTIONS: SELECTING VEGETATIVE SPECIES TOLERANT TO DRY CONDITIONS, IRRIGATING VEGETATED AREAS AND IMPLEMENTING COMBINATION OF THESE AND/OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLE 1 OF THE EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND PUBLISHED BY PENN STATE.

7. SOIL TYPES SUSCEPTIBLE TO SINKHOLE AND SOLUTION CHANNELICHAMBER FORMATION POSE LIMITATIONS ON LOCATING RESERVOIR AREAS OF SEDIMENT BASINS, SEDIMENT TRAPS, STORMWATER RETENTION BASINS, AND STORMWATER DETENTION BASINS.

RESOLUTIONS: LOCATING THOSE FACILITIES ON OTHER SOIL TYPES, LINING RESERVOIR AREAS WITH IMPERMEABLE LINNINGS, LIMITING STANDING WATER DEPTHS, LIMITING RETENTION TIMES AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS.

8. SOIL TYPES THAT EXHIBIT INSTABILITY IN POND EMBANKMENTS OR SUSCEPTIBILITY TO PIPING AND SEEPING POSE LIMITATIONS ON PLANNING EMBANKMENTS OF SEDIMENT BASINS, SEDIMENT TRAPS, STORMWATER RETENTION BASINS AND STORMWATER DETENTION BASINS.

RESOLUTIONS: IMPORTING OTHER SOIL FOR EMBANKMENT OF THOSE FACILITIES, LOCATING THOSE FACILITIES ON OTHER SOIL TYPES, LIMITING EMBANKMENT SLOPE STEEPNESS AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS.

9. SOIL THAT ARE DIFFICULT TO COMPACT, UNSUITABLE FOR WINTER GRADING, OR SUSCEPTIBLE TO FROST ACTION POSE LIMITATIONS ON PLANNING EMBANKMENTS OF SEDIMENT BASINS, SEDIMENT TRAPS, STORMWATER RETENTION BASINS AND STORMWATER DETENTION BASINS.

RESOLUTIONS: IMPORTING OTHER SOIL FOR EMBANKMENT OF THOSE FACILITIES, LOCATING THOSE FACILITIES ON OTHER SOIL TYPES, NOT CONSTRUCTING EMBANKMENTS DURING PERIODS PRONE TO FROST AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS

10. SUSCEPTIBILITY FOR THE DEVELOPMENT OF SINKHOLE WITHIN IDENTIFIED SOILS.

RESOLUTIONS: IN THE EVENT THAT PRESENCE OF A SINKHOLE IS DETECTED DURING THE COURSE OF WORK, CORRECTIVE MEASURES SHALL BE PERFORMED UNDER THE OBSERVATION AND GUIDANCE OF THE OWNERS GEOTECHNICAL CONSULTANT.
EXCAVATE THE LOOSE, WET SOILS SURROUNDING THE SINKHOLE TO EXPOSE THE SINKHOLE "THROAT" (THE OPENING IN THE ROCK) AND THE ADJACENT STABLE SOILSIROCK WHERE POSSIBLE, THE EXCAVATION SHALL EXTEND A MINIMUM OF TWO FEET (2') BEYOND THE STABLE SOILS OR TO THE ROCK SURFACE, WHICHEVER IS ENCOUNTERED FIRST.
FILL THE EXPOSED SINKHOLE "THROAT" WITH LEAN CONCRETE TO BLOCK THE MIGRATION OF THE UPPER LAYERS OF SOIL THROUGH THE ROCK OPENING. AFTER CONCRETE HAS CURED OVERNIGHT BACKFILL THE REMAINDER OF THE EXCAVATION WITH CLAYEY SOILS TO PROVIDE A LOW PERMEABILITY BARRIER. THE CLAYEY SOILS SHALL BE PLACED IN 8" LIFTS AND EACH LIFT COMPACTED BY REPEATED PASSES OF THE COMPACTION EQUIPMENT UNTIL STABLE. CARE SHALL BE TAKEN TO ASSURE THAT THE SOIL AT THE EDGES OF THE EXCAVATION ARE WELL COMPACTED.

E&S PLAN DESIGNED AND IMPLEMENTED TO BE CONSISTENT WITH PCSM PLAN

§102.4(b)(5)(xiv)

REGARDING THE LOCATIONS OF EXISTING RIPARIAN BUFFERS RELATIVE TO THE LIMIT OF DISTURBANCE AND WHETHER PROPOSED DETENTION FACILITIES ARE OUTSIDE OF PROPOSED GRADING AREAS, NOTE THE FOLLOWING:

- THERE ARE NO EXISTING OR PROPOSED RIPARIAN BUFFERS.
- THERE ARE NO PROPOSED DETENTION BMPs OUTSIDE OF PROPOSED GRADING AREAS.

EXISTING/PROPOSED RIPARIAN FOREST BUFFERS

§102.4(b)(5)(xv)

REGARDING EXISTING OR PROPOSED RIPARIAN FOREST BUFFERS, NOTE THE FOLLOWING:

- THERE ARE NO EXISTING/PROPOSED RIPARIAN FOREST BUFFERS LOCATED WITHIN OR OUTSIDE THE LIMITS OF DISTURBANCE FOR THIS PROJECT.

OR

- THE EXISTING AND/OR PROPOSED RIPARIAN FOREST BUFFERS ARE SHOWN ON THE E&S PLAN.
- THE EXISTING AND/OR PROPOSED RIPARIAN FOREST BUFFERS LOCATED OUTSIDE THE LIMITS OF DISTURBANCE ARE SHOWN ON THE E&S PLAN.
- PROTECTION HAS BEEN PROVIDED FOR THE WETLANDS WITHIN THE RIPARIAN FOREST BUFFER.
- THE APPROPRIATE RIPARIAN BUFFER OFFSET IS SHOWN ON THE E&S PLAN.

SEQUENCE OF BMP INSTALLATION AND REMOVAL

§102.4(b)(5)(vii)

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED IN COMPLIANCE WITH CHAPTER 102 REGULATIONS BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE. UPON COMPLETION OR TEMPORARY CESSATION OF THE EARTH DISTURBANCE ACTIVITY THAT WILL EXCEED FOUR (4) DAYS [IMMEDIATELY FOR HQIEV WATERSHEDS], OR ANY STAGE THEREOF, THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZED WITH THE APPROPRIATE TEMPORARY OR PERMANENT STABILIZATION.

AT LEAST SEVEN (7) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES INCLUDING, BUT NOT LIMITED TO: THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS AND A REPRESENTATIVE OF THE MONTGOMERY COUNTY CONSERVATION DISTRICT FOR AN ON-SITE PRE-CONSTRUCTION MEETING. ALSO, AT LEAST THREE (3) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INC. AT 1-800-242-1776 FOR BURIED UTILITIES LOCATION.

BEFORE INITIATING ANY REVISION 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 MONTGOMERY COUNTY CONSERVATION DISTRICT. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED. 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.

1. INSTALL CONSTRUCTION ENTRANCE [AND STAGING AREAS] AS DESIGNATED ON THE PLANS.
2. INSTALL ALL PERIMETER [COMPOST FILTER SOCKS, SILT FENCE, TREE PROTECTION FENCING, CONSTRUCTION FENCING, INLET PROTECTION] WITHIN THE DESIGNATED LIMIT OF DISTURBANCE AS INDICATED ON THE PLANS. ONLY LIMITED CLEARING AND GRUBBING NECESSARY TO INSTALL THE PERIMETER EROSION AND SEDIMENT POLLUTION CONTROLS IS PERMITTED.
3. CONSTRUCT [SEDIMENT BASIN(S), SEDIMENT TRAP(S)]. ONLY LIMITED CLEARING AND GRUBBING IS PERMITTED FOR CONSTRUCTION OF ACCESS TO THE [SEDIMENT BASIN, SEDIMENT TRAP]. CONSTRUCTION OF THE [SEDIMENT BASIN, SEDIMENT TRAP] SHALL INCLUDE THE NECESSARY CLEARING AND GRUBBING, EARTHWORK, INSTALLATION OF THE PERMANENT BASIN OUTFALL SYTEM AND ALL OTHER [SEDIMENT BASIN, SEDIMENT TRAP] FEATURES AS SHOWN ON THE PLANS AND DETAILS,. AND ANY NECESSARY TEMPORARY STABILIZATION OF ALL DISTURBED AREAS. THE BASIN IS TO BE STABILIZED AND FUNCTIONING PROPERLY PRIOR TO ANY FURTHER EARTH DISTURBANCE ACTIVITIES. **UPON INSTALLATION OF THE SEDIMENT BASIN RISER(S), AN IMMEDIATE INSPECTION OF THE RISER(S) SHALL BE CONDUCTED BY A QUALIFIED SITE REPRESENTATIVE AND THE MONTGOMERY COUNTY CONSERVATION DISTRICT SHALL BE NOTIFIED IN WRITING THAT THE PROPER RISER IS INSTALLED AND SEALED, PER PLAN.** SEDIMENT BASINS MUST BE PROTECTED FROM UNAUTHORIZED ACTS OF THIRD PARTIES. REFER TO THE SEDIMENT BASIN SOIL CONSERVATION DISTRICT MONITORING, INSPECTION AND REPORTING REQUIREMENTS PROVIDED ON THE SOIL EROSION AND SEDIMENT POLLUTION CONTROL NOTES FOR ADDITIONAL SEDIMENT BASIN REQUIREMENTS DURING CONSTRUCTION.
4. ONCE [SEDIMENT BASIN, SEDIMENT TRAP] IS CONSTRUCTED, STABILIZED AND FUNCTIONING PROPERLY, INITIATE THE NECESSARY EARTHWORK TO REACH THE GRADES INDICATED ON THE PLANS. BUILDING CONSTRUCTION MAY COMMENCE UPON ACCEPTANCE OF BUILDING BY OWNER. THE CONCRETE WASHOUT MUST BE INSTALLED BEFORE ANY CONCRETE CAN BE POURED ON-SITE. CONTRACTOR MUST PERFORM BULK OF EARTHWORK TO BALANCE CUTS AND FILLS TO THE GREATEST EXTENT POSSIBLE. ALL AREAS DISTURBED DURING THE EARTHWORK PHASE OF CONSTRUCTION MUST BE TEMPORARILY SEEDED AND STABILIZED IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS AND SEEDING SPECIFICATIONS IF PERMANENT STABILIZATION CANNOT BE ACHIEVED WITHIN FOUR (4) DAYS [IMMEDIATELY FOR HQ/EV WATERSHEDS].
5. INITIATE STORM SEWER [AND SUBSURFACE BASIN] INSTALLATIONS FOR THE FEATURES SHOWN ON THE PLANS STARTING AT THE FURTHEST DOWNSTREAM STRUCTURE. [SEE ADDITIONAL DETENTION FACILITY SEQUENCING, INSTALLATION AND MAINTENANCE & INSPECTION NOTES PROVIDED ON THE POST CONSTRUCTION STORMWATER MANAGEMENT PLANS FOR CONSTRUCTION OF THE SUBSURFACE DETENTION BASINS. **THE PERMITTEE SHALL PROVIDE ENGINEERING OVERSIGHT FOR THE CONSTRUCTION OF SUBSURFACE DETENTION BASINS. A LICENSED PROFESSIONAL OR DESIGNEE KNOWLEDGEABLE IN THE DESIGN AND CONSTRUCTION OF SUBSURFACE DETENTION BASINS, PREFERABLY THE DESIGN ENGINEER, SHALL CONDUCT THE OVERSIGHT.** INLETS DISCHARGING TO SUBSURFACE DETENTION BASINS MUST BE BLOCKED IMMEDIATELY AFTER INSTALLATION AND REMAIN BLOCKED UNTIL SITE IS FULLY STABILIZED TO PREVENT SEDIMENT FROM ENTERING THE SUBSURFACE DETENTION BASIN. NO CONSTRUCTION EQUIPMENT, SUCH AS CONCRETE TRUCKS, BUILDING MATERIALS, SHALL BE PARKED ON TOP OF THE SUBSURFACE BASINS TO AVOID DAMAGING THE SUBSURFACE BASINS OR OVER-COMPACTING THE SUBSURFACE SOILS.]
6. CONTINUE WITH THE BALANCE OF EARTHWORK INCLUDING UTILITY INSTALLATION (SANITARY, ELECTRIC, TELEPHONE, CABLE AND GAS) WHERE APPLICABLE.
7. INSTALL ALL CURBING SHOWN IN THIS PHASE AND INSTALL STONE BASE COURSE IN THE DRIVEWAY AND PARKING AREAS
8. INITIATE FINAL GRADING AND PLACEMENT OF TOPSOIL IN ALL LANDSCAPE AREAS. AS SOON AS SLOPES, CHANNELS, DITCHES AND OTHER DISTURBED AREAS REACH FINAL GRADE, THEY MUST BE STABILIZED. ALL LANDSCAPE AREAS MUST BE STABILIZED AND PERMANENT SEEDING OR PLACEMENT OF SOD MUST BE APPLIED. WHEN FINAL GRADE IS ACHIEVED DURING NON-GERMINATING MONTHS, THE AREA SHOULD BE MULCHED UNTIL THE BEGINNING OF THE NEXT PLANTING SEASON. HOWEVER, THE AREA WILL NOT BE CONSIDERED STABILIZED UNTIL A MINIMUM UNIFORM 70% VEGETATIVE COVER OF EROSION RESISTANT PERENNIAL SPECIES HAS BEEN ACHIEVED. AS DISTURBED AREAS WITHIN A PROJECT APPROACH FINAL GRADE, PREPARATIONS SHOULD BE MADE FOR SEEDING AND MULCHING TO BEGIN (I.E. ANTICIPATE THE COMPLETION DATE AND SCHEDULE THE SEEDER). IN NO CASE SHOULD AN AREA EXCEEDING 15,000 SQUARE FEET, WHICH IS TO BE STABILIZED BY VEGETATION, REACH FINAL GRADE WITHOUT BEING SEEDED AND MULCHED. WAITING UNTIL EARTHMOVING IS COMPLETED BEFORE MAKING PREPARATIONS FOR SEEDING AND MULCHING IS NOT ACCEPTABLE. SEEDING AND MULCHING REQUIREMENTS ARE SPECIFIED IN THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS.
9. SITE INSPECTION AND APPROVAL BY THE CONSERVATION DISTRICT IS REQUIRED PRIOR TO REMOVAL OR CONVERSION OF SEDIMENT TRAPS AND BASINS. ONCE STONE BASE COURSE HAS BEEN SPREAD IN ALL PAVED AREAS AND ALL LANDSCAPE AREAS HAVE BEEN STABILIZED, BEGIN CONVERTING [SEDIMENT BASIN, SEDIMENT TRAP, BIO-RETENTION FACILITIES, RAINGARDENS, BIO-DETENTION FACILITIES] TO FINAL GRADES IN ACCORDANCE WITH BMP SEQUENCE OF CONSTRUCTION. **THE PERMITTEE SHALL PROVIDE ENGINEERING OVERSIGHT FOR THE CONVERSION OF DETENTION BASIN. A LICENSED PROFESSIONAL OR DESIGNEE KNOWLEDGEABLE IN THE DESIGN AND CONSTRUCTION OF DETENTION BASIN, PREFERABLY THE DESIGN ENGINEER, SHALL CONDUCT THE OVERSIGHT.**
10. INSTALL BITUMINOUS PAVEMENT AND CONCRETE INCLUDING SIDEWALKS.
11. INSTALL FINAL VEGETATION AND LANDSCAPING SPECIFIED ON THE LANDSCAPE PLAN.
12. UPON SITE STABILIZATION (UNIFORM COVERAGE OR DENSITY OF 70% ACROSS ALL DISTURBED AREAS) AND NOTIFICATION OF THE MONTGOMERY COUNTY CONSERVATION DISTRICT, REMOVE EROSION AND SEDIMENT CONTROL FACILITIES INCLUDING [LIST APPROPRIATE E&S CONTROLS]. ANY AREA DISTURBED DURING THE REMOVAL OF EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE STABILIZED IMMEDIATELY.
13. CLEAR SITE OF DEBRIS AND ALL UNWANTED MATERIALS. OPERATOR SHALL REMOVE FROM 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 WASTE AT THIS SITE.
14. DEMOBILIZE.
15. A NOTICE OF TERMINATION FORM SHOULD BE SUBMITTED TO THE MONTGOMERY COUNTY CONSERVATION DISTRICT UPON STABILIZATION AND FINAL COMPLETION OF THIS PROJECT.

MAINTENANCE PROGRAM

§102.4(b)(5)(x)

THE FOLLOWING MAINTENANCE PROGRAM HAS BEEN DEVELOPED TO PROVIDE FOR THE INSPECTION OF BMPs ON A WEEKLY BASIS AND AFTER EACH MEASURABLE RUNOFF EVENT, AND TO INCLUDE THE REPAIR OF THE BMPs TO ENSURE THEIR EFFECTIVE AND EFFICIENT OPERATION:

UNTIL THE SITE IS STABILIZED AND DURING CONSTRUCTION ACTIVITIES, ALL BMPs MUST BE MAINTAINED PROPERLY BY THE CONTRACTOR. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL 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 AND IN ACCORDANCE WITH THESE PROCEDURES, PLANS AND DETAILS. ANY AREAS DISTURBED DURING MAINTENANCE MUST BE STABILIZED IMMEDIATELY IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS. ALL SITE INSPECTIONS MUST BE DOCUMENTED IN AN INSPECTION LOG KEPT FOR THIS PURPOSE INDICATING THE COMPLIANCE ACTIONS AND THE DATE, TIME AND NAME OF THE PERSON CONDUCTING THE INSPECTION. THE INSPECTION LOG MUST BE KEPT ON SITE AT ALL TIMES AND MADE AVAILABLE TO THE DISTRICT UPON REQUEST.

- COMPOST FILTER SOCK - INSPECTIONS SHALL BE CONDUCTED ON A WEEKLY BASIS AND/OR AFTER EACH RUNOFF EVENT. NEEDED REPAIRS SHOULD BE INITIATED IMMEDIATELY AFTER THE INSPECTION. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES ½ THE ABOVE GROUND SOCK. THE SEDIMENT SHALL BE DISPOSED OF ON SITE AND/OR IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION. BIODEGRADABLE FILTER SOCKS SHALL BE REPLACED AFTER SIX (6) MONTHS; PHOTODEGRADABLE SOCKS AFTER ONE (1) YEAR. UPON STABILIZATION OF THE 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.
- INLET PROTECTION (FILTER BAGS) - INSPECTIONS SHALL BE CONDUCTED ON A WEEKLY BASIS AND/OR AFTER EACH RUNOFF EVENT. NEEDED REPAIRS SHOULD BE INITIATED IMMEDIATELY AFTER THE INSPECTION. FILTER BAGS SHOULD BE CLEANED AND/OR REPLACED AFTER EACH RUNOFF EVENT. THE SEDIMENT SHALL BE DISPOSED OF ON SITE AND/OR IN ACCORDANCE WITH APPLICABLE STATE REGULATIONS. DAMAGED FILTER BAGS SHOULD BE REPLACED.
- SWALES - SWALES SHALL BE INSPECTED FOR EROSION AND/OR SEDIMENT ACCUMULATION ON AN ANNUAL BASIS, AFTER A SIGNIFICANT RUNOFF EVENT OR AS DIRECTED BY THE CONSERVATION DISTRICT AND/OR BOROUGH ENGINEER. NEEDED MAINTENANCE SHOULD BE INITIATED IMMEDIATELY AFTER THE INSPECTION. AREAS OF EROSION SHALL BE REGRADED AND STABILIZED, AND SEDIMENT MUST BE REMOVED TO RESTORE DESIGN CAPACITIES. ANY REMOVED SEDIMENT SHALL BE DISPOSED OF IN AN APPROVED MANNER AND IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. ALL AREAS DISTURBED DURING MAINTENANCE MUST BE STABILIZED IMMEDIATELY IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS.
- SEDIMENT BASIN - INSPECTIONS SHALL BE CONDUCTED ON A WEEKLY BASIS AND/OR AFTER EACH RUNOFF EVENT. NEEDED REPAIRS SHOULD BE INITIATED IMMEDIATELY AFTER THE INSPECTION. WHEN SEDIMENT HAS ACCUMULATED TO THE CLEAN-OUT ELEVATION INDICATED ON THE STAKE, THE SEDIMENT MUST BE REMOVED TO RESTORE DESIGN CAPACITIES. THE SEDIMENT SHALL BE DISPOSED OF ON SITE AND/OR IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. THE CONTRACTOR MAY BE REQUIRED TO TREAT OR DRAIN THE SEDIMENT BASINS AND TRAPS SEVEN (7) DAYS AFTER A STORM EVENT IF DIRECTED BY THE LOCAL COUNTY HEALTH DEPARTMENT IN DEALING WITH WEST NILE VIRUS.
- CONSTRUCTION ENTRANCES - LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE MUST BE INSPECTED FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING. A STABILIZED CONSTRUCTION EXIT SHALL BE CONSTRUCTED WHERE VEHICLES ENTER AND EXIT. EXITS SHALL BE MAINTAINED OR SUPPLEMENTED AS NECESSARY TO PREVENT THE RELEASE OF SEDIMENT FROM VEHICLES LEAVING THE SITE. ANY SEDIMENT DEPOSITED ON THE ROADWAY SHALL BE SWEPT AS NECESSARY THROUGHOUT THE DAY OR AT THE END OF EVERY DAY AND DISPOSED OF IN AN APPROPRIATE MANNER. SEDIMENT SHALL NOT BE WASHED INTO STORM SEWER SYSTEMS. SEDIMENT TRACKED ONTO ANY ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORKDAY AND DISPOSED AS A MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED OR SWEPT INTO ANY ROAD SIDE DITCH, STORM SEWER OR SURFACE WATER.
- SEDIMENT BARRIERS AND BASINS/TRAPS MUST BE INSPECTED AND THEY MUST BE CLEANED OUT AT SUCH TIME AS THEIR ORIGINAL CAPACITY HAS BEEN REDUCED BY 50 PERCENT. ALL MATERIAL EXCAVATED FROM BEHIND SEDIMENT B

DEFINITION OF CLEAN FILL AND IMPORTIEXPORT MATERIAL NOTES

TO COMPLY WITH SECTION C.3 OF NOI

IF THE SITE WILL NEED TO IMPORT OR EXPORT MATERIAL FROM THE SITE, THE RESPONSIBILITY FOR PERFORMING ENVIRONMENTAL DUE DILIGENCE AND DETERMINATION OF CLEAN FILL WILL REST WITH THE APPLICANT.

1.) 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).

2.) 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".

3.) 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. A COPY OF FORM FP-001 CAN BE FOUND AT THE END OF THESE INSTRUCTIONS.

4.) ENVIRONMENTAL DUE DILIGENCE: THE APPLICANT MUST PERFORM ENVIRONMENTAL DUE DILIGENCE 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 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. THE REGULATIONS ARE AVAILABLE ON-LINE AT WWW.PACODE.COM.

E&S PLAN PLANNING & DESIGN

§102.4(b)(4)

THE FOLLOWING MEASURES ARE TAKEN TO MINIMIZE THE EXTENT AND DURATION OF EARTH DISTURBANCE:
- ACCESS THE SITE THRU DESIGNATED CONSTRUCTION ENTRANCE
- MAINTAIN 50' WETLAND MARGIN
- PROTECT WOODLANDS AND WETLAND MARGIN WITH TREE PROTECTION FENCING
- SEQUENCE CONSTRUCTION ACTIVITIES BY LIMITING DISTURBANCES TO A SPECIFIC TASK SUCH THAT EACH TASK IS COMPLETED BEFORE THE NEXT TASK IS INITIATED

THE FOLLOWING MEASURES ARE TAKEN TO MAXIMIZE PROTECTION OF EXISTING DRAINAGE FEATURES AND VEGETATION:
- ACCESS THE SITE THRU DESIGNATED CONSTRUCTION ENTRANCE
- MAINTAIN 50' WETLAND MARGIN
- PROTECT WOODLANDS AND WETLAND MARGIN WITH TREE PROTECTION FENCING

THE FOLLOWING MEASURES ARE TAKEN TO MINIMIZE SOIL COMPACTION:
- ACCESS THE SITE THRU DESIGNATED CONSTRUCTION ENTRANCE
- USE OF TREADED MACHINERY WHERE PRACTICAL DURING EARTHMOVING OPERATIONS
- GRADE SITE TO MINIMIZE EXTENT OF CUTS/FILLS

THE FOLLOWING MEABURES ARE TAKEN TO PREVENT OR MINIMIZE GENERATION OF INCREASED STORM WATER RUNOFF:
- DIRECT RUNOFF TO AN ABOVE GROUND STORM WATER BASIN TO CONTROL RUNOFF RATES
- PROVIDE PLANTED RAIN GARDENS TO HELP REDUCE RUNOFF RATES AND VOLUME
- PROVIDE LANDSCAPE RESTORATION TO HELP REDUCE RUNOFF VOLUME
- PROVIDE AMENDED SOILS THROUGHOUT THE SITE TO HELP REDUCE RUNOFF VOLUME

E&S - GENERAL NOTES:

1. THIS PLAN REPRESENTS THE MINIMUM LEVEL OF IMPLEMENTATION OF TEMPORARY EROSION AND SEDIMENTATION CONTROL STRUCTURES. ADDITIONAL FACILITIES OR MEASURES SHALL BE INSTALLED WHERE NECESSARY OR WHERE DIRECTED BY EITHER THE TOWNSHIP OR THE COUNTY CONSERVATION DISTRICT AS CONSTRUCTION PROGRESSES.

2. THE OWNER/CONSTRUCTION MANAGER IS RESPONSIBLE FOR ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROLS AND SITE STABILIZATION. THE OWNER SHALL ASSIGN ONE INDIVIDUAL TO BE RESPONSIBLE FOR PROPER INSTALLATION AND MAINTENANCE OF ALL FACILITIES AND MEASURES.

3. PROTECTION TO THE EXISTING TREES AND SHRUBS SHALL BE TAKEN BY THE CONTRACTOR TO ELIMINATE UNNECESSARY DAMAGE.

4. ANY DRY FILL HAULED OFFSITE MUST BE TAKEN TO A LOCATION WITH AN EROSION AND SEDIMENTATION CONTROL PLAN WHICH HAS BEEN REVIEWED BY THE COUNTY CONSERVATION DISTRICT FOR ADEQUACY.

5. EROSION AND SEDIMENTATION CONTROLS MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE WITHIN TRIBUTARY AREAS OF THOSE CONTROLS.

6. STOCKPILES MUST BE STABILIZED IMMEDIATELY.

7. NO CHANGES SHALL BE MADE IN THE CONTOUR OF THE LAND. NO GRADING, EXCAVATING, REMOVAL OR DESTRUCTION OF THE TOPSOIL, TREES OR OTHER VEGETATIVE COVER OF THE LAND SHALL BE COMMENCED WITHIN A PROPOSED SUBDIVISION OR LAND DEVELOPMENT UNTIL SUCH TIME THAT A PLAN FOR SEDIMENTATION CONTROL AND MINIMIZING EROSION HAS BEEN REVIEWED AND FOUND SATISFACTORY BY THE COUNTY CONSERVATION DISTRICT AND REVIEWED AND APPROVED BY THE TOWNSHIP, OR THERE HAS BEEN A DETERMINATION BY THE TOWNSHIP, UPON RECOMMENDATION BY THE COUNTY CONSERVATION DISTRICT, THAT SUCH PLANS ARE NOT NECESSARY.

8. 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 COUNTY CONSERVATION DISTRICT.

9. THE OPERATOR SHALL ASSURE THAT AN EROSION AND SEDIMENT CONTROL PLAN HAS BEEN PREPARED, APPROVED BY THE COUNTY CONSERVATION DISTRICT, AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL AND/OR ROCK SPOIL AND BORROW AREAS, REGARDLESS OF THEIR LOCATIONS.

10. CONTRACTOR SHALL USE TREADED MACHINERY AND MINIMIZE SOIL COMPACTION WHEREVER POSSIBLE.

MONTGOMERY COUNTY SOIL CONSERVATION DISTRICT STANDARD E&S 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. VEHICLES AND EQUIPMENT MAY NEITHER ENTER DIRECTLY NOR EXIT DIRECTLY FROM LOTS (SPECIFY LOT NUMBERS) ONTO (SPECIFY ROAD NAME®)
15. 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.
16. 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.
17. 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.
18. ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS.
19. 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.
20. 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.
21. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
22. 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.
23. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
24. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
25. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
26. 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.
27. 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.
28. 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.
29. 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.
30. 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.
31. 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.
32. 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.
33. 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.
34. CONCRETE WASH WATER SHALL BE HANDLED IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS. IN NO CASE SHALL IT BE ALLOWED TO ENTER ANY SURFACE WATERS OR GROUNDWATER SYSTEMS.
35. SEDIMENT TRAPS SHALL BE KEPT FREE OF ALL CONSTRUCTION WASTE, WASH WATER, AND OTHER DEBRIS HAVING POTENTIAL TO CLOG THE TRAP OUTLET STRUCTURES AND/OR POLLUTE THE SURFACE WATERS.
36. SEDIMENT TRAPS SHALL BE PROTECTED FROM UNAUTHORIZED ACTS BY THIRD PARTIES.
37. ANY DAMAGE THAT OCCURS IN WHOLE OR IN PART AS A RESULT OF TRAP DISCHARGE SHALL BE IMMEDIATELY REPAIRED BY THE PERMITTEE IN A PERMANENT MANNER SATISFACTORY TO THE MUNICIPALITY, LOCAL CONSERVATION DISTRICT, AND THE OWNER OF THE DAMAGED PROPERTY.
38. UPON REQUEST, THE APPLICANT OR HIS CONTRACTOR SHALL PROVIDE AN AS-BUILT (RECORD DRAWING) FOR ANY SEDIMENT TRAP TO THE MUNICIPAL INSPECTOR, LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.
39. EROSION CONTROL BLANKETING SHALL BE INSTALLED ON ALL SLOPES 3H:1V OR STEEPER WITHIN 50 FEET OF A SURFACE WATER AND ON ALL OTHER DISTURBED AREAS SPECIFIED ON THE PLAN MAPS AND/OR DETAIL SHEETS.

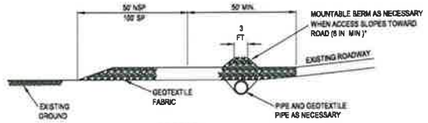
SEEDING SPECIFICATIONS

1. SEEDING DATES
   - A. SEEDING SHALL OCCUR BETWEEN MARCH 1ST AND MAY 15TH OR BETWEEN AUGUST 15TH AND NO LATER THAN OCTOBER 15TH.
   - B. IF SEEDING CANNOT BE CONDUCTED DURING THE TIMEFRAMES NOTED ABOVE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE LOCAL CONSERVATION DISTRICT AND ALL APPROPRIATE AGENCIES TO DETERMINE AN ACCEPTABLE MEANS IN WHICH TO STABILIZE THE SITE THROUGH THE NEXT GROWING SEASON.
2. SEED MIXTURES: SEED MIXTURE TO BE USED ON THIS SITE SHALL CONSIST OF THE FOLLOWING UNLESS OTHERWISE NOTED ON THE PLANS. RATES ARE IN THE FORM OF POUNDS PER ACRE (LBS) PER PURE LIVE SEED (POUNDS / ACRE PLS). CONTRACTOR WILL NEED TO ADJUST ACCORDINGLY BASED ON THE SEED GERMINATION AND PURITY RATING (SEE ITEM #3 BELOW).
   - A. TEMPORARY SEED MIXTURES: DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE DISTURBED AGAIN WITHIN TWELVE (12) MONTHS MUST BE SEEDED WITH A TEMPORARY SEED MIXTURE AS FOLLOWS:
     ANNUAL RYE (40 POUNDS / ACRE PLS)
     OR SPRING OATS (96 POUNDS / ACRE PLS)
     OR WINTER RYE (168 POUNDS / ACRE PLS)
     (REFERENCE: PENN STATE "EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND", TABLE 5)
   - B. PERMANENT SEEDING SHALL CONSIST OF A NURSE CROP PLUS A PERMANENT SEED MIXTURE, AS FOLLOWS:
     I. NURSE CROP (SELECT ONE):
     ANNUAL RYE (10 POUNDS / ACRE PLS)
     OR SPRING OATS (64 POUNDS / ACRE PLS)
     OR WINTER RYE (56 POUNDS / ACRE PLS)
     (REFERENCE: PA DEP EROSION AND SEDIMENT CONTROL PROGRAM MANUAL, LATEST EDITION, TABLE 11.4, SEED MIX #1)
     II. PERMANENT SEED MIX:
     TALL FESCUES (80 POUNDS / ACRE PLS)
     OR FINE FESCUE (56 POUNDS / ACRE PLS)
     OR KENTUCKY BLUEGRASS (25 POUNDS / ACRE PLS) PLUS REDTOP (3 POUNDS / ACRE PLS)
     OR PERENNIAL RYEGRASS (15 POUNDS / ACRE PLS)
     (REFERENCE: PA DEP EROSION AND SEDIMENT CONTROL PROGRAM MANUAL, LATEST EDITION, TABLE 11.4, SEED MIX #2)
3. PURE LIVE SEED: MINIMUM PLS RATING ACCEPTED SHALL BE 86% PLS. SEED RATE MAY NEED TO BE ADJUSTED BASED ON THE PLS RATING OF THE SEED.
   - A. SEED USED FOR THE PURPOSE OF PERMANENT STABILIZATION SHALL BE LABELED WITH GERMINATION AND PURITY PERCENTAGES. UNLABELED SEED WILL BE REJECTED. SEED SHALL NOT BE USED MORE THAN ONE (1) YEAR BEYOND THE LABEL DATE.
   - B. DETERMINING THE PERCENT PURE LIVE SEED (PERCENT PLS) OF A LABELED SEED. MULTIPLY BY THE PERCENTAGE OF PURE SEED BY THE PERCENTAGE OF GERMINATION AND DIVIDE THE RESULT BY 100 ((%PURE X %GERMINATION) / 100)
   - C. DETERMINING THE ACTUAL SEED RATE. SIMPLY DIVIDE THE PERCENT PLS RATING OF THE SEED INTO THE PLS REQUIRED, AS NOTED ABOVE. THE RESULT IS THE POUNDS OF SEED REQUIRED. FOR EXAMPLE. IF THE REQUIRED RATE IS 64 POUNDS PLS, AND THE SEED IS RATED AT 35% PLS, DIVIDE 64 BY 0.35 TO GET 182.9 POUNDS, WHICH IS THE AMOUNT OF THAT SEED REQUIRED PER ACRE.
4. APPLICATION OF SEED. SEEDING SHALL BE APPLIED AND ESTABLISHED IN ACCORDANCE WITH THE "EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL" AS PUBLISHED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WATER QUALITY PROTECTION (MOST RECENT EDITION).
   - A. SEEDING SHALL TAKE PLACE BETWEEN MARCH 15 - OCTOBER 15.
   - B. SEED SHALL BE APPLIED IN A NON-COMPACTED, ROUGHENED TOPSOIL.
   - C. SEED MAY BE APPLIED THROUGH ANY OF THE FOLLOWING MEANS AND METHODS, OR OTHER ACCEPTED INDUSTRY PRACTICES. UNLESS SPECIFICALLY NOTED OTHERWISE ON THESE PLANS:
     I. DRILL SEEDING
     II. BROADCAST SEEDING (TWO DIRECTIONS)
     III. HYDROSEEDING (TWO DIRECTIONS)
   - D. ALL SEED SHALL BE TEMPORARILY OR PERMANENTLY STABILIZED UNTIL A 70% PERENNIAL COVER IS ACHIEVED:
     I. TEMPORARY STABILIZATION WITH STRAW:
     1. STRAW MULCH SHALL BE APPLIED ON TOP OF THE FRESHLY SEEDDED AREAS AT A RATE OF 3 TONS PER ACRE (4 TONS PER ACRE BETWEEN NOVEMBER 1ST AND MARCH 1ST).
     2. STRAW SHALL BE STABILIZED WITH A WOOD OR PAPER FIBER MULCH AND TACKIFIER SOLUTION IN ACCORDANCE WITH THE PRODUCT MANUFACTURER'S SPECIFICATIONS.
     II. TEMPORARY/PERMANENT STABILIZATION WITH EROSION CONTROL MATTING/BLANKETS (WHERE SPECIFIED):
     1. MATTING/BLANKETS SHALL BE INSTALLED IN AREAS AS NOTED ON THE EROSION & SEDIMENT CONTROL PLAN OR WITHIN 50 FEET OF PONDS, STREAMS OR WETLANDS. THE PRODUCT SHALL BE INSTALLED AND STAPLED ON TOP OF THE SEEDING IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS.
     2. AREAS WITH MATTING/BLANKETS SHALL NOT BE TRACKED (CATWALKED) AFTER INSTALLATION.
     3. MATTING/BLANKETS SHALL BE VISUALLY INSPECTED DAILY TO ENSURE THAT THE PRODUCT IS FUNCTIONING PROPERLY, IS HELD FAST TO THE SOIL SURFACE AND IS IN GOOD CONDITION.
   - E. ONCE SEED HAS BEEN SET, VEHICULAR TRAFFIC OR OTHER SOURCES OF COMPACTION SHALL BE AVOIDED
5. IRRIGATION. NEW SEED APPLICATIONS SHOULD BE SUPPLIED WITH ADEQUATE WATER, A MINIMUM OF ¼" TWICE A DAY, UNTIL VEGETATION IS WELL ESTABLISHED (A MINIMUM OF 75% COVER).

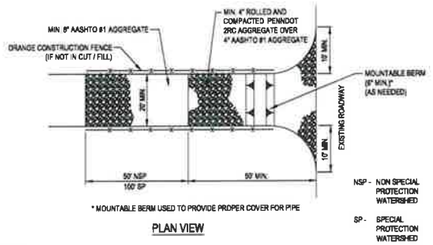
GENERAL CONSERVATION NOTES AND SPECIFICATIONS

I. GENERAL INFORMATION

A. THIS EROSION AND SEDIMENT CONTROL PLAN SHALL BE AVAILABLE AT THE SITE.
B. NO SEDIMENT OR SEDIMENT LADEN WATER MUST BE ALLOWED TO LEAVE THE SITE WITHOUT FIRST BEING PROPERLY FILTERED.
C. ANY SEDIMENT THAT IS TRACKED ONTO THE ROAD MUST BE CLEANED OFF BEFORE THE END OF THE DAY.
D. DISTURBED AREAS ON WHICH EARTHMOVING ACTIVITIES HAVE CEASED AND WHICH WILL REMAIN EXPOSED SHALL BE STABILIZED IMMEDIATELY, EITHER TEMPORARILY OR PERMANENTLY, INCLUDING THE RESTORATION OF DRIVEWAYS, STOCKPILES, OFF-SITE UNDERGROUND UTILITY LINES AND GRADED PERIMETER AREAS. DURING NON-GERMINATION PERIODS, MULCH MUST BE APPLIED AT RECOMMENDED RATES. CRUSHED STONE ON PAVEMENT SUBGRADES IS CONSIDERED ADEQUATE PROTECTION.
E. AREAS THAT FAIL TO GERMINATE MUST BE RE-SEEDED OR MULCHED.
F. WHERE DISTURBED AREAS ARE DIFFICULT TO STABILIZE, NETTING SHOULD BE USED TO HOLD SEED AND MULCH IN PLACE. THIS IS ESPECIALLY IMPORTANT AROUND WATERCOURSES, IN SWALES AND AREAS OF CONCENTRATED FLOWS, STEEP SLOPES.
G. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, RE-GRADING, RE-SEEDING, RE-MULCHING, AND RE-NETTING, MUST BE PERFORMED IMMEDIATELY. IF AT ANY TIME PRIOR TO SITE STABILIZATION ANY E&SP PROBLEMS OCCUR WHICH REQUIRE ADDITIONAL CONTROLS, IMMEDIATE ACTION MUST BE TAKEN TO CORRECT THE PROBLEMS.
H. THE CONTRACTOR MUST DEVELOP AND COORDINATE WITH OWNER AND HAVE APPROVED BY THE COUNTY CONSERVATION DISTRICT, A SEPARATE EROSION AND SEDIMENT POLLUTION CONTROL PLAN FOR EACH SPOIL, BORROW OR OTHER WORK AREA NOT DETAILED ON THE PERMITTED PLANS, WHETHER LOCATED WITHIN OR OUTSIDE OF THE LIMITS OF CONSTRUCTION.
I. CONTRACTOR SHALL NOTIFY THE COUNTY CONSERVATION DISTRICT OF DISPOSAL METHOD AND LOCATION OF ALL MATERIALS. NO WASTE IS TO BE REMOVED FROM SITE.
J. ALL MATERIALS TO BE RECYCLED OR DISPOSED OF MUST DO SO IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL REGULATIONS. STOCKPILES TO BE LOCATED OFF SITE MUST HAVE AN APPROVED EROSION AND SEDIMENT CONTROL PLAN AT THE DESTINATION LOCATION.
K. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN SOIL STABILIZATION THROUGHOUT CONSTRUCTION. ADDITIONAL MEASURES REQUIRED TO ENSURE



PROFILE



* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

PLAN VIEW

NOTES:

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

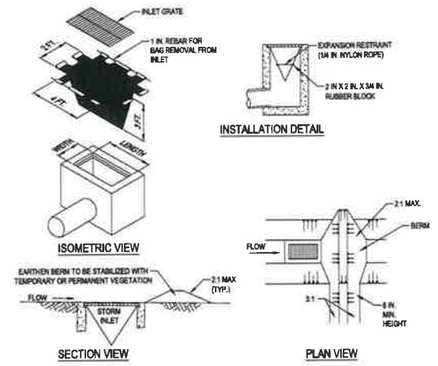
RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE

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 (ABACT)
ROCK CONSTRUCTION ENTRANCE

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 IN ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR REMAIN PERMANENTLY.

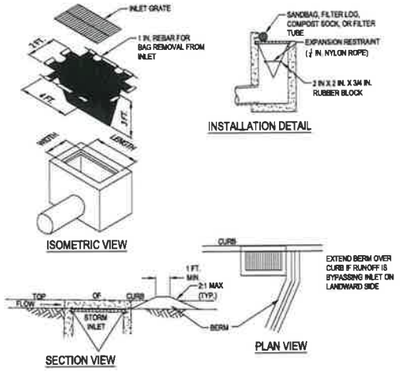
AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS., A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

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 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 #4-16
FILTER BAG INLET PROTECTION - TYPE M INLET

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.

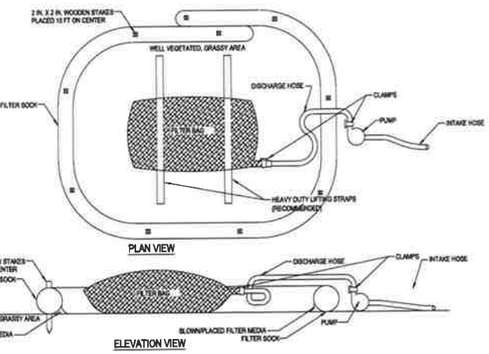
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INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED 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



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	90 LB/IN
GRAB TENSILE	ASTM D-4632	205 LB
PUNCTURE	ASTM D-4833	110 LB
MULLEN BURST	ASTM D-3786	390 PSI
UV RESISTANCE	ASTM D-4355	70%
AOS % RETAINED	ASTM D-4751	#2 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.

AS THE PROPOSED DEVELOPMENT IS WITHIN AN IMPAIRED WATERSHED, ALL FILTER BAGS MUST BE SURROUNDED BY A COMPOST FILTER SOCK RING OR OPERATED IN CONJUNCTION WITH A RUMP PIT.

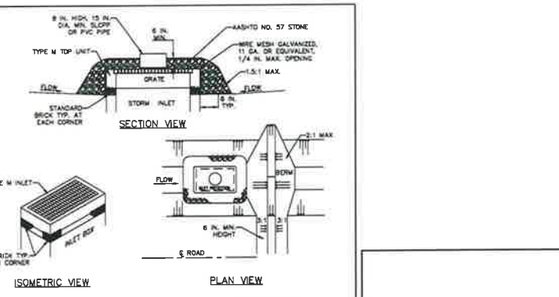
THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.

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 (ABACT)
PUMPED WATER FILTER BAG

NOT TO SCALE



NOTES:

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLETS TRIBUTARY TO SEDIMENT BASINS OR SEDIMENT TRAPS. ALTERNATE TYPE C INLET PROTECTION CAN BE USED ON ONE ACRE MAXIMUM DRAINAGE AREA WITH 15 IN. OVERFLOW PIPE AND 4 IN. HEAD.

BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS NOT LOCATED AT LOW POINTS. EARTHEN BERMS SHALL BE STABILIZED WITH VEGETATION AND MAINTAINED UNTIL ROADWAY IS STONED OR TRIBUTARY AREA IS PERMANENTLY VEGETATED. ROAD SUBBASE BERMS SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED

INLETS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE HEIGHT OF THE STONE. DAMAGED INSTALLATIONS SHALL BE REPAIRED OR REPLACED WITHIN 24 HOURS OF INSPECTION.

FOR SYSTEMS DISCHARGING TO HQ OR EV SURFACE WATER, A 6 INCH THICK COMPOST LAYER SHALL BE SECURELY ANCHORED ON OUTSIDE AND OVER TOP OF STONE. COMPOST SHALL MEET THE STANDARDS IN TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.

#4-22	STANDARD CONSTRUCTION DETAIL #4-22 ALTERNATE TYPE C INLET PROTECTION - NOT AT GRADE

NOT TO SCALE

NOTES:

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLETS TRIBUTARY TO SEDIMENT BASINS OR SEDIMENT TRAPS. ALTERNATE TYPE C INLET PROTECTION CAN BE USED ON ONE ACRE MAXIMUM DRAINAGE AREA WITH 15 IN. OVERFLOW PIPE AND 4 IN. HEAD.

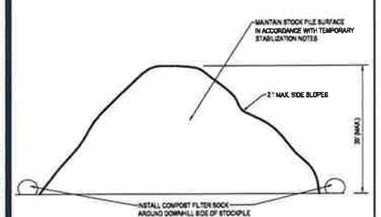
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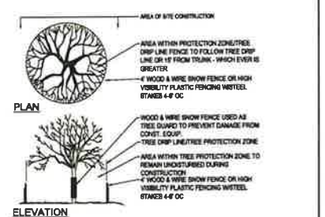
#4-23	STANDARD CONSTRUCTION DETAIL #4-23 ALTERNATE TYPE M INLET PROTECTION - NOT AT GRADE

NOT TO SCALE



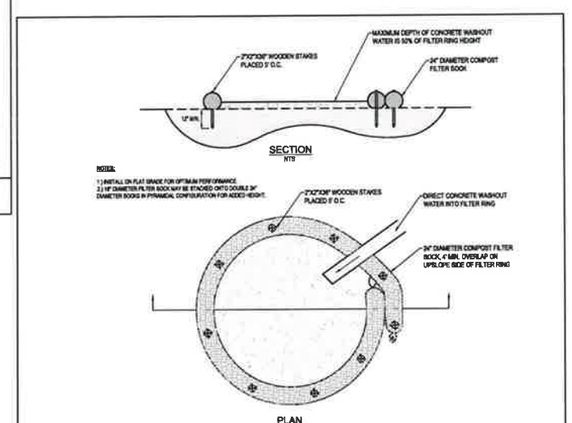
X-8	TEMPORARY SOIL STOCKPILE DETAIL

NOT TO SCALE



X-11	TREE PROTECTION DURING SITE CONSTRUCTION

NOT TO SCALE



A SUITABLE IMPERVIOUS GEOMEMBRANE SHALL BE PLACED AT THE LOCATION OF THE WASHOUT PRIOR TO INSTALLING THE SOCKS.

CONCRETE WASHOUT NOTES:

-UNDER NO CIRCUMSTANCES MAY WASH WATER FROM THESE VEHICLES BE ALLOWED TO ENTER ANY SURFACE WATERS.
-WASHOUT FACILITIES SHOULD NOT BE PLACED WITHIN 50 FEET OF STORM DRAINS, OPEN DITCHES OR SURFACE WATERS.
-SHOULD BE A MINIMUM OF 10 FEET WIDE AND PROVIDE AT LEAST 10 INCHES OF FREEBOARD ABOVE THE LIQUID AND SOLID WASTE ANTICIPATED BETWEEN CLEANOUT INTERVALS.
-THE PIT SHOULD BE LINED WITH PLASTIC SHEETING OF AT LEAST 10 MIL THICKNESS (WITH NO HOLES OR TEARS) TO PREVENT LEACHING OF LIQUIDS INTO THE GROUND.
-ALL CONCRETE WASHOUT FACILITIES SHOULD BE INSPECTED DAILY. DAMAGED OR LEAKING WASHOUTS SHOULD BE DEACTIVATED AND REPAIRED OR REPLACED IMMEDIATELY.
-ACCUMULATED MATERIALS SHOULD BE REMOVED WHEN THEY REACH 75% CAPACITY.
-PLASTIC LINERS SHOULD BE REPLACED WITH EACH CLEANING OF THE WASHOUT FACILITY.

X-13	TYPICAL COMPOST SOCK WASHOUT INSTALLATION

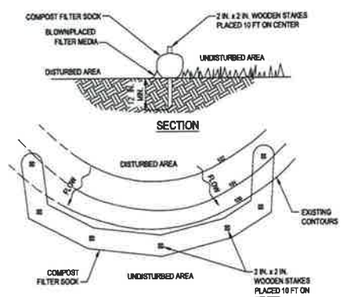
NOT TO SCALE

TABLE 4.1
Compost Sock Fabric Minimum Specifications

Material Type	3 mil MOVE Photo-degradable	5 mil MOVE Photo-degradable	3 mil ASPS Bio-degradable	Multi-filament Polypropylene (BPPP) Photo-degradable	Heavy Duty Multi-filament Polypropylene (BPPP) Photo-degradable
Material Characteristics	12" 18"	12" 18" 24" 30"	12" 18" 24" 30"	12" 18" 24" 30"	12" 18" 24" 30"
Sock Diameters					
Mesh Opening	3/8"	3/8"	3/8"	3/8"	1/8"
Tensile Strength		25 psi	36 psi	44 psi	202 psi
Ultraviolet Stability % Original Strength (ASTM D-4355)	23% at 1000 hr.	23% at 1000 hr.		100% at 1000 hr.	100% at 1000 hr.
Minimum Functional Longevity	6 months	6 months	6 months	1 year	2 years
Two-ply systems					
Inner Containment Netting	Two-ply systems Continously wound Fusion-welded junctions 3/4" x 3/4" Max. aperture size				
Outer Filtration Mesh	Composite Polypropylene Fabric (woven layer and non-woven fleece mechanically fussed via needle punch) 3/16" Max. aperture size				
Sock fabrics composed of burlap may be used on projects lasting 6 months or less					

TABLE 4.2
Compost Standards

Organic Matter Content	25% - 100% (dry weight basis)
Organic Portion	Fibrous and elongated
pH	5.5 - 8.5
Moisture Content	30% - 60%
Particle Size	30% - 60%% pass through 3/8" sieve
Soluble Salt Concentration	5.0 dS/m (mmhos/cm) Maximum



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

Raising Cane's Chicken Fingers

Restaurant Support Office
6800 Bishop Road, Plano, TX 75024
Tele: 972-769-3100 Fax: 972-769-3101

REVISIONS

REV	DATE	COMMENT	CHKD BY / DRAWN BY
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DATE: 10.26.22
CAD I.D.: PP2270001-X-TTLB-PHPD

PROJECT:
PRELIMINARY/ FINAL MAJOR LAND DEVELOPMENT PLANS
FOR
RAISING CANE'S RESTAURANTS, LLC.

PROPOSED RESTAURANT #C0952
LAND DEVELOPMENT #LD-22-08
2620 WEST MORELAND ROAD
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

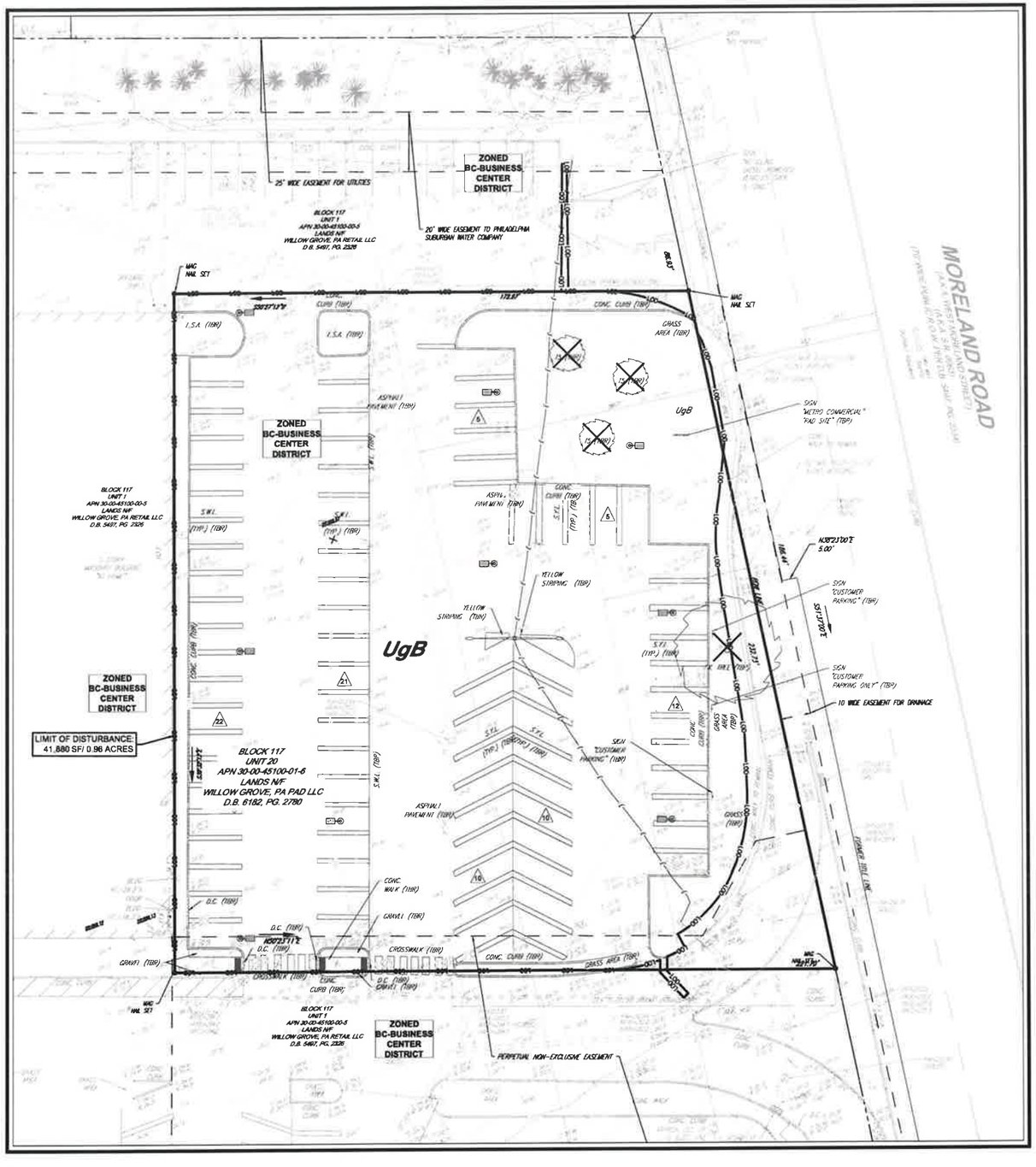
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COMMONWEALTH OF PENNSYLVANIA Ken Tatlor REGISTERED ENGINEER

SHEET TITLE:
SOIL EROSION & SEDIMENT POLLUTION CONTROL DETAILS

SHEET NUMBER:
C3.3
7 OF 28

REVISION 1 - 2023-04-10



20 10 5 0 20
1" = 20'



LOCATION MAP
SCALE: 1" = 500'

REFER TO SHEET C2.0 FOR DEMOLITION NOTES

THIS PLAN TO BE UTILIZED FOR DEMOLITION REMOVAL PURPOSES ONLY

EXISTING CONTOUR INFORMATION ARE BASED ON THE NAVD88 DATUM.

ABINGTON SANITARY SEWER DATUM = PLAN ELEVATIONS - 4.57

SOIL DESCRIPTION WITHIN PROJECT SITE

SOIL	DESCRIPTION	SOIL GROUP
UgB	- URBAN LAND, 0 TO 8 PERCENT SLOPES	C

REFER TO NOTES SHEET C3-1 FOR SOIL USE LIMITATIONS.

LEGEND
EXISTING

PROPERTY LINE	
ADJACENT PROPERTY LINE	
EASEMENT LINE	
SETBACK LINE	
BUILDING	
CONCRETE CURB	
FLUSH CURB	
ACCESSIBLE SYMBOL	
SIGN	
PARKING COUNT	
AREA LIGHT	
TREE	
DRAINAGE INLET	
STORM/SANITARY MANHOLE	
WATER/GAS VALVES	
ROOF DRAIN/CLEANOUT	
FIRE HYDRANT	
UTILITY POLE W/ LIGHT	
UTILITY POLE	
OVERHEAD UTILITY WIRES	
SOIL TYPE	UgB

LEGEND
TO BE REMOVED

EASEMENT LINE	
SETBACK LINE	
LEASE LINE	
BUILDING	
RETAINING WALL	
CONCRETE CURB	
FLUSH CURB	
FENCE	
GUIDE RAIL	
TREELINE	
ACCESSIBLE SYMBOL	
CONCRETE MONUMENT/ IRON PIN	
SIGN	
PARKING COUNT	
AREA LIGHT	
TREE	
DRAINAGE INLET	
STORM/SANITARY MANHOLE	
WATER/GAS VALVES	
ROOF DRAIN/CLEANOUT	
FIRE HYDRANT	
UTILITY POLE W/ LIGHT	
UTILITY POLE	
OVERHEAD UTILITY WIRES	
ELECTRIC LINE	
TELEPHONE LINE	
GAS LINE	
WATER LINE	
SANITARY SEWER	
STORM PIPE	

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PROJECT No.: PP2270001
DRAWN BY: BMM
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DATE: 10.26.22
CAD I.D.: PP2270001-X-TTLB-PHPO

PROJECT:
PRELIMINARY/ FINAL MAJOR LAND DEVELOPMENT PLANS
FOR
RAISING CANE'S RESTAURANTS, LLC.

PROPOSED RESTAURANT #C0952
LAND DEVELOPMENT #LD-22-06

2820 WEST MORELAND ROAD
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

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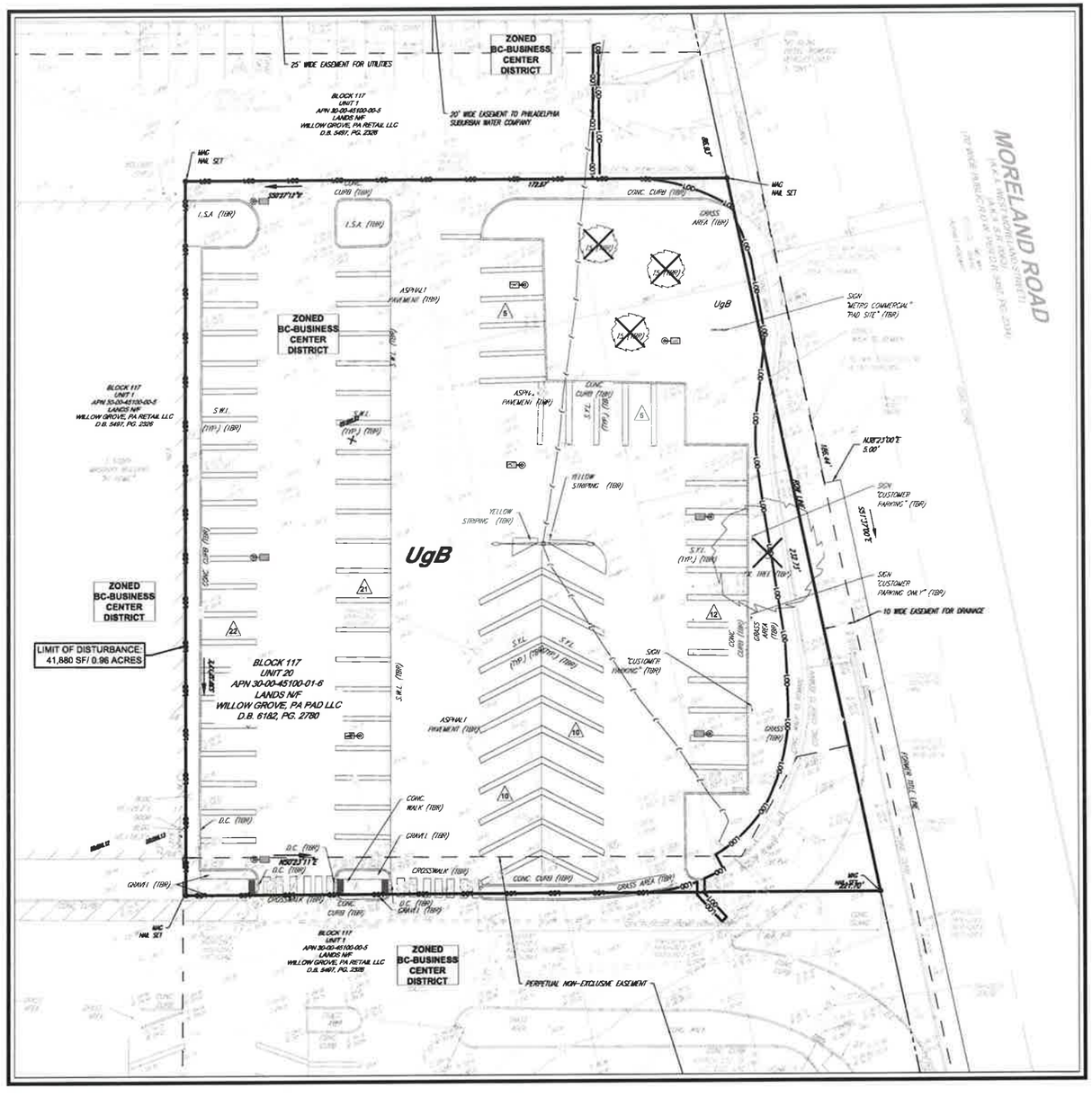
COMMONWEALTH OF PENNSYLVANIA Kevin Tuttle REGISTERED LANDSCAPE ARCHITECT

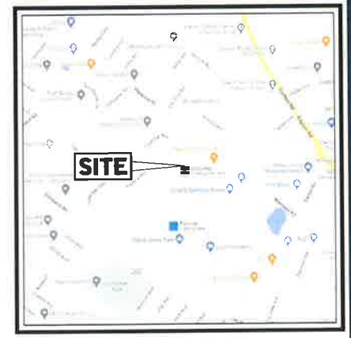
SHEET TITLE:
EXISTING CONDITIONS AND DEMOLITION PLAN

SHEET NUMBER:
C4.0
8 OF 26

REVISION 1 - 2023-04-10

M:\2022\PP2270001\CAD\DRAWINGS\PLAN SETS\CIVIL SUITE 1\PLANS\PP2270001-LDSP-1A.----A.DGIT 10-26-22 CM PLAN





LOCATION MAP
SCALE: 1" = 500'

THERE IS NO EVIDENCE OF PONDS, LAKES, STREAMS, WETLANDS, HYDRIC SOILS, VERNAL POOLS, STREAM BUFFERS, FLOODPLAINS, OR RECHARGE AREAS.

LEGEND
EXISTING

PROPERTY LINE	
ADJACENT PROPERTY LINE	
EASEMENT LINE	
SETBACK LINE	
BUILDING	
CONCRETE CURB	
FLUSH CURB	
ACCESSIBLE SYMBOL	
SIGN	
PARKING COUNT	10
AREA LIGHT	
TREE	
DRAINAGE INLET	
STORM/SANITARY MANHOLE	
WATER/GAS VALVES	
ROOF DRAIN/CLEANOUT	RD CO
FIRE HYDRANT	
UTILITY POLE W/ LIGHT	
UTILITY POLE	
OVERHEAD UTILITY WIRES	
SOIL TYPE	UgB

LEGEND
TO BE REMOVED

EASEMENT LINE	
SETBACK LINE	
LEASE LINE	
BUILDING	
RETAINING WALL	
CONCRETE CURB	
FLUSH CURB	
FENCE	
GUIDE RAIL	
TREELINE	
ACCESSIBLE SYMBOL	
CONCRETE MONUMENT/ IRON PIN	
SIGN	
PARKING COUNT	10
AREA LIGHT	
TREE	
DRAINAGE INLET	
STORM/SANITARY MANHOLE	
WATER/GAS VALVES	
ROOF DRAIN/CLEANOUT	RD CO
FIRE HYDRANT	
UTILITY POLE W/ LIGHT	
UTILITY POLE	
OVERHEAD UTILITY WIRES	OH
ELECTRIC LINE	E
TELEPHONE LINE	T
GAS LINE	G
WATER LINE	W
SANITARY SEWER	
STORM PIPE	

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PROJECT:
PRELIMINARY/ FINAL MAJOR LAND DEVELOPMENT PLANS
FOR
RAISING CANE'S RESTAURANTS, LLC.

PROPOSED RESTAURANT #C0952
LAND DEVELOPMENT #LD-22-06

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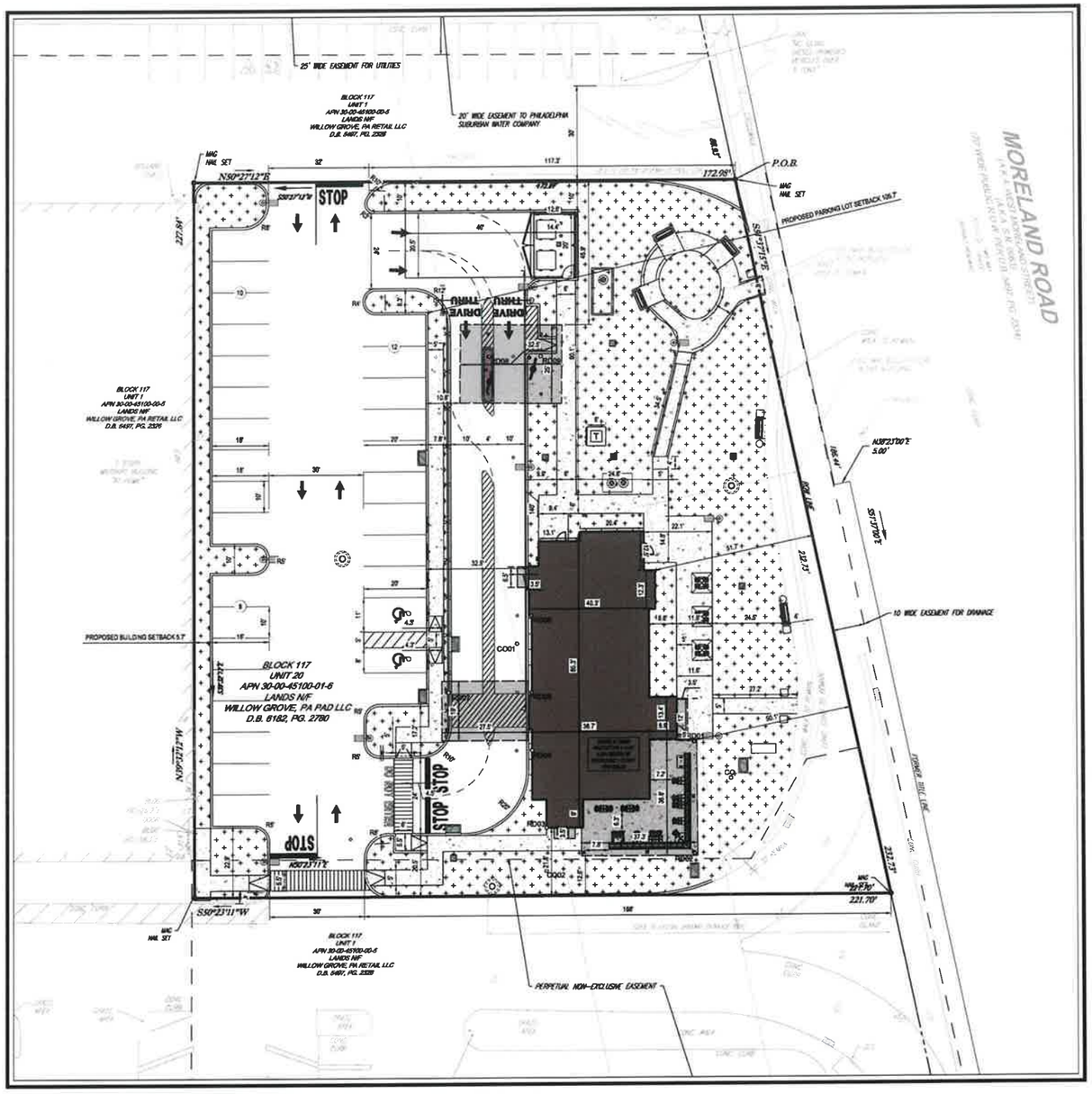
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COMMONWEALTH OF PENNSYLVANIA
Kevin Tatlow
REGISTERED LANDSCAPE ARCHITECT

SHEET TITLE:
EXISTING RESOURCES AND SITE ANALYSIS MAP PLAN

SHEET NUMBER:
C4.1
9 OF 28

REVISION 1 - 2023-04-10



20 10 5 0 20
1" = 20'



LOCATION MAP
SCALE: 1" = 500'

LEGEND
PROPOSED
BUILDING
CANOPY
CONCRETE
LANDSCAPE
PARKING COUNT
RAMP
SIGN
BOLLARD
HANDRAIL
CONCRETE CURB
FLUSH CURB
ACCESSIBLE SYMBOL
TRAFFIC ARROWS
CLEANOUT
HOUSE TRAP
YARD DRAIN
DRAINAGE INLET
MANHOLE

LEGEND
EXISTING
PROPERTY LINE
ADJACENT PROPERTY LINE
EASEMENT LINE
SETBACK LINE
BUILDING
CONCRETE CURB
FLUSH CURB
ACCESSIBLE SYMBOL
SIGN
PARKING COUNT
AREA LIGHT
TREE
DRAINAGE INLET
STORM/SANITARY MANHOLE
WATER/GAS VALVES
ROOF DRAIN/CLEANOUT
FIRE HYDRANT
UTILITY POLE W/ LIGHT
UTILITY POLE
OVERHEAD UTILITY WIRES

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FOR
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PROPOSED RESTAURANT #C0952
LAND DEVELOPMENT #LD-22-06

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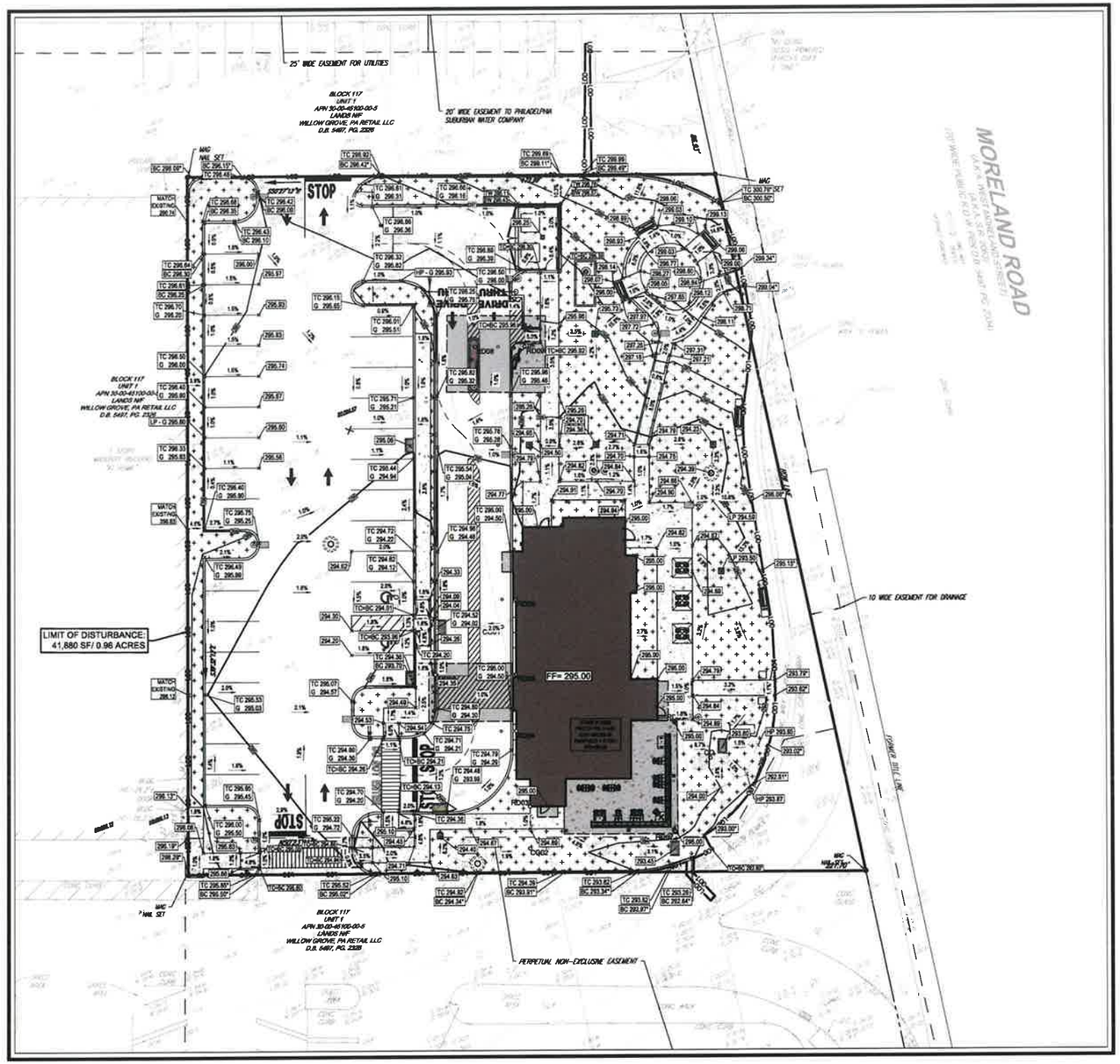
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Ken Tatlow
REGISTERED ENGINEER

SHEET TITLE:
DIMENSION PLAN

SHEET NUMBER:
C5.0
10 OF 28

REVISION 1 - 2023-04-10





LOCATION MAP
SCALE: 1" = 500'

EXISTING CONTOUR INFORMATION ARE BASED ON THE NAVD88 DATUM.

ABINGTON SANITARY SEWER DATUM = PLAN ELEVATIONS - 4.57

THIS PLAN TO BE UTILIZED FOR GRADING PURPOSES ONLY. REFER TO GENERAL NOTES SHEET FOR ADDITIONAL GRADING & UTILITY NOTES

LEGEND – PROPOSED	
LIMIT OF DISTURBANCE/ NPDES DISTURBANCE AREA	LOD
BUILDING	
CANOPY	
CONCRETE	
LANDSCAPE	
RAMP	
SIGN	
BOLLARD	
FENCE	
CONCRETE CURB	
FLUSH CURB	
ACCESSIBLE SYMBOL	
SLOPE	5.0%
CONTOUR	123.00
SPOT ELEVATION	TC 125.50 BC 123.00

LEGEND – EXISTING	
PROPERTY LINE	
ADJACENT PROPERTY LINE	
EASEMENT LINE	
SETBACK LINE	
BUILDING	
CONCRETE CURB	
FLUSH CURB	
ACCESSIBLE SYMBOL	
SIGN	
PARKING COUNT	10
AREA LIGHT	
TREE	
DRAINAGE INLET	
STORM/SANITARY MANHOLE	
WATER/GAS VALVES	
ROOF DRAIN/CLEANOUT	
FIRE HYDRANT	
UTILITY POLE W/ LIGHT	
UTILITY POLE	
CONTOUR	
SPOT ELEVATION	

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DATE:	10.26.22
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PROJECT:
PRELIMINARY/ FINAL MAJOR LAND DEVELOPMENT PLANS
FOR
RAISING CANE'S RESTAURANTS, LLC.

PROPOSED RESTAURANT #C0952
LAND DEVELOPMENT #LD-22-06

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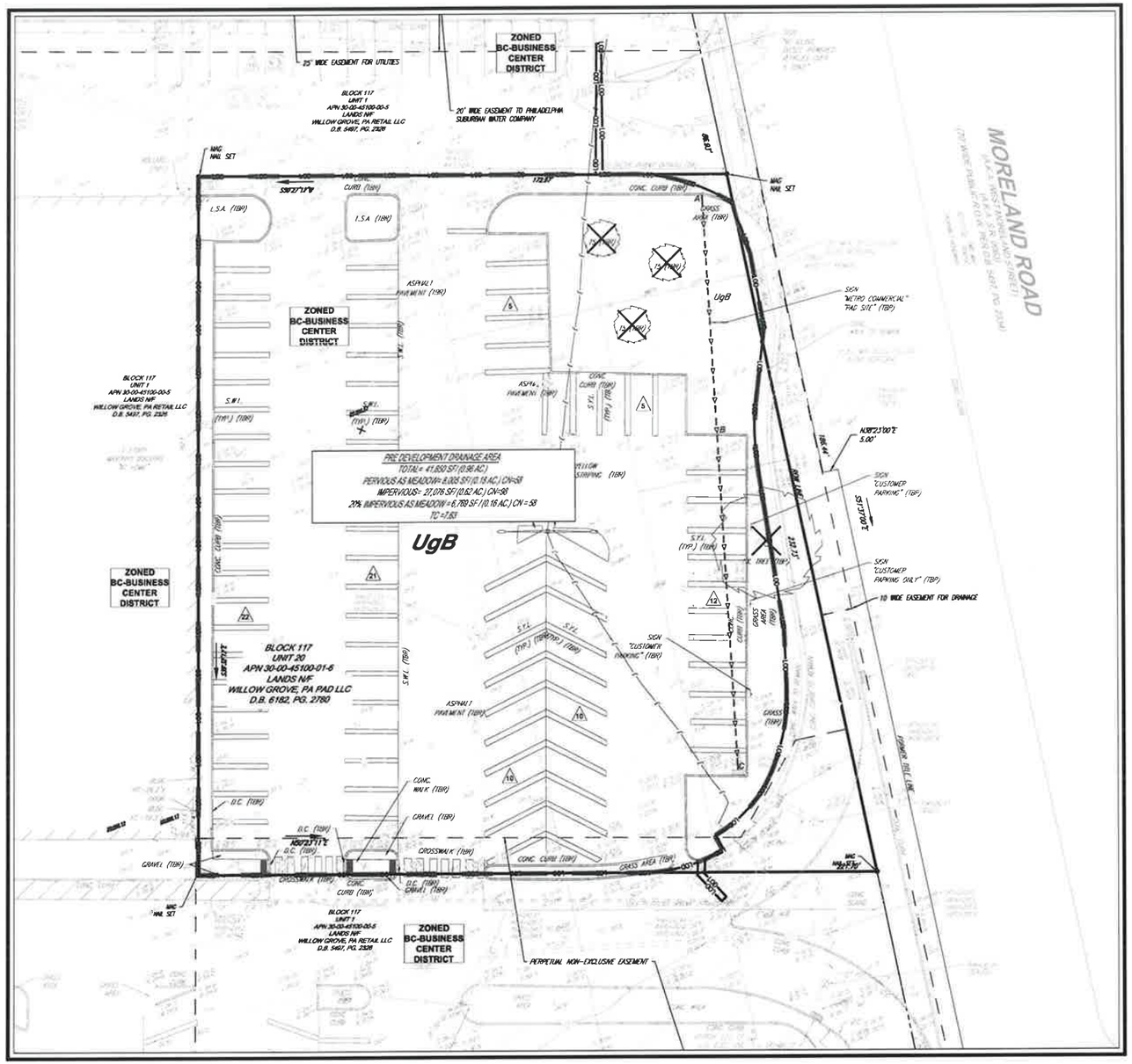
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COMMONWEALTH OF PENNSYLVANIA — Kevin Tuttle — REGISTERED LANDSCAPE ARCHITECT

SHEET TITLE:
GRADING PLAN

SHEET NUMBER:
C6.0
11 OF 26

REVISION 1 - 2023-04-10





LOCATION MAP
SCALE: 1" = 500'

Time of Concentration (Tc) or (Tt) Calculations

Project: Willow Grove

Description: Pre-development

Note: Space for as many as three segments per flow type can be used for each worksheet

Sheet Flow (Applicable to Tc only)	Segment ID	AB			
1 Surface Description (table 3-1)		Lawns			
2 Manning's roughness coeff., n (table 3-1)		0.250			
3 Flow length, L (total L ≤ 150 ft)	ft	78			
4 Two-yr 24-hr rainfall, P_2	in	3.30			
5 Land slope, s*	ft/ft	0.0760			
6 $Tt = 0.007(nL)^{0.8} / P_2^{0.5} s^{0.4}$	Compute Tt hr	0.1151	+	=	0.1151
*S is averaged					

Shallow Concentrated Flow	Segment ID	BC			
7 Surface Description (paved or unpaved)		Paved			
8 Flow length, L	ft	109			
9 Watercourse slope, s*	ft/ft	0.0150			
10 Average velocity, V	ft/sec	2.51			
11 Tt = L / 3600V		0.0121	+	=	0.0121
Shallow Concentrated Flow	Segment ID				

Channel Flow	Segment ID				
12 Cross sectional flow area, a	ft				
13 Wetted perimeter, p	ft				
14 Hydraulic radius, r = a/wp	ft				
15 Channel Slope, s	ft/ft				
16 Manning's roughness coeff., n					
17 $V = 1.49 r^{2/3} s^{1/2} / n$					
18 Flow length, L	ft				
19 Tt = L / 3600V			+	=	
20 Watershed or subarea T_c or T_t (add T_t in steps 6,11, and 19)					0.1272

Tc = 7.63 minutes

LEGEND

PRE-DEVELOPMENT DRAINAGE AREA

OVERALL DRAINAGE AREA - - - - - -

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PROJECT:
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FOR
RAISING CANE'S RESTAURANTS, LLC.

PROPOSED RESTAURANT #C0952
LAND DEVELOPMENT #LD-22-06

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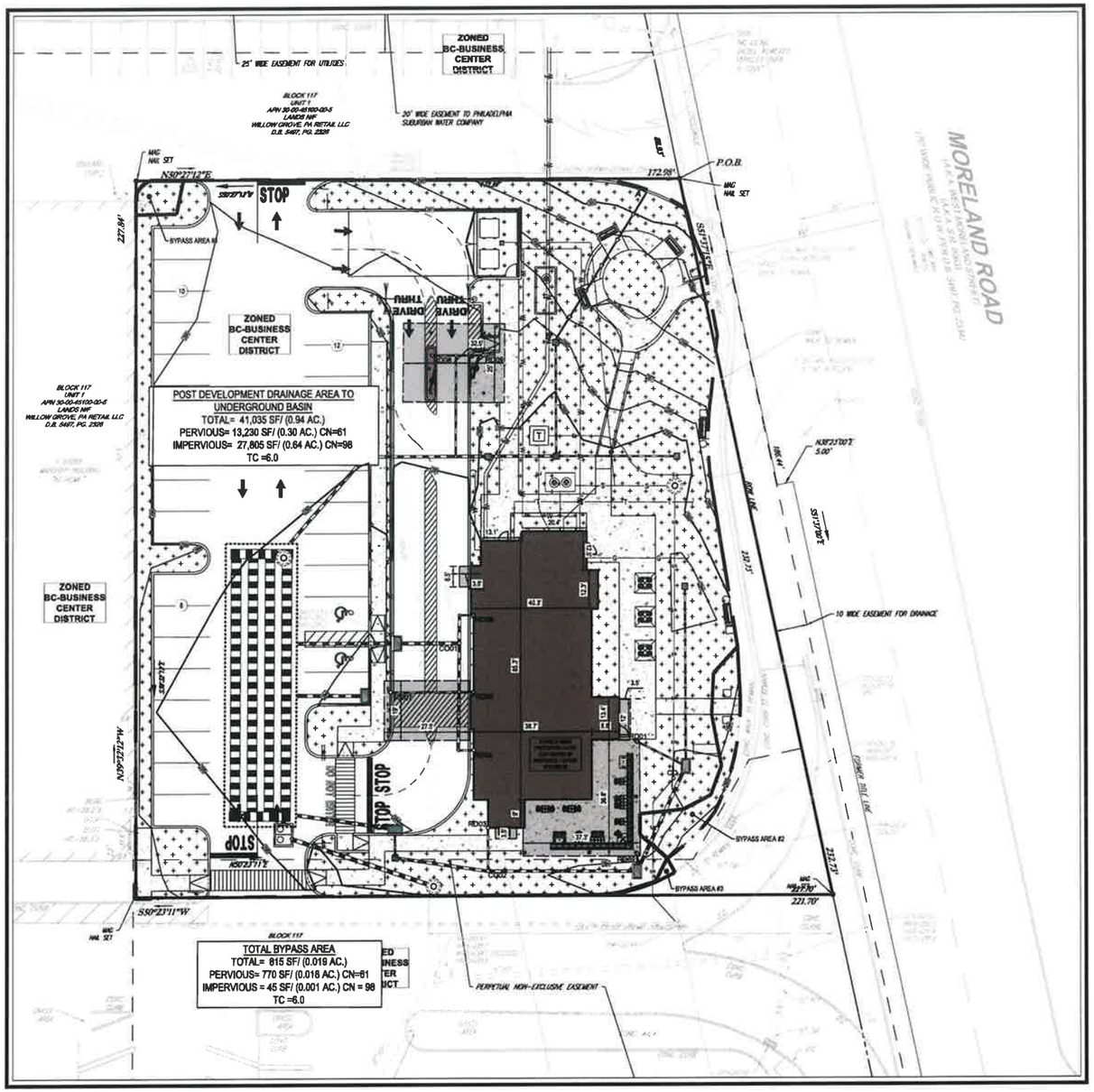
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SHEET TITLE:
PRE DEVELOPMENT PLAN

SHEET NUMBER:
C6.1
12 OF 26

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LOCATION MAP
SCALE: 1" = 500'

Time of Concentration (Tc) or (Tt) Calculations

Project: 1130 North Delaware

Description: Post-development

Note: Space for as many as three segments per flow type can be used for each worksheet

Sheet Flow (Applicable to Tc only)	Segment ID	AB			
1 Surface Description (table 3-1)		Lawns			
2 Manning's roughness coeff., n (table 3-1)		0.250			
3 Flow length, L (total L ≤ 150 ft)	ft	60			
4 Two-yr 24-hr rainfall, P_2	in	3.30			
5 Land slope, s*	ft/ft	0.0860			
6 $Tt = 0.007(nL)^{0.8} / P_2^{0.5} s^{0.4}$	Compute Tt hr	0.0897	+	+	= 0.0897

**S is averaged*

Shallow Concentrated Flow	Segment ID				
7 Surface Description (paved or unpaved)		Paved			
8 Flow length, L	ft				
9 Watercourse slope, s*	ft/ft				
10 Average velocity, V	ft/sec				
11 Tt = L / 3600V					=

Channel Flow	Segment ID				
12 Cross sectional flow area, a	ft²				
13 Wetted perimeter, p	ft				
14 Hydraulic radius, r = a/wp	ft				
15 Channel Slope, s	ft/ft				
16 Manning's roughness coeff., n		0.010			
17 $V = 1.49 r^{2/3} s^{1/2} / n$					
18 Flow length, L	ft				
19 Tt = L / 3600V					
20 Watershed or subarea T_c or T_t (add T_t in steps 6,11, and 19)					0.0897

Tc = 6.38 minutes

LEGEND

PROPOSED

- DRAINAGE AREA TO BMP
- BUILDING
- BUILDING ABOVE
- CONCRETE SIDEWALK
- LANDSCAPE AREA
- DRAINAGE INLET
- YARD DRAIN
- MANHOLE
- CLEANOUT

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DATE: 10.28.22
CAD I.D.: PP2270001-X-TTLS-PHPD

PROJECT:
PRELIMINARY/ FINAL MAJOR LAND DEVELOPMENT PLANS
FOR
RAISING CANE'S RESTAURANTS, LLC.

PROPOSED RESTAURANT #C0852
LAND DEVELOPMENT #LD-22-06

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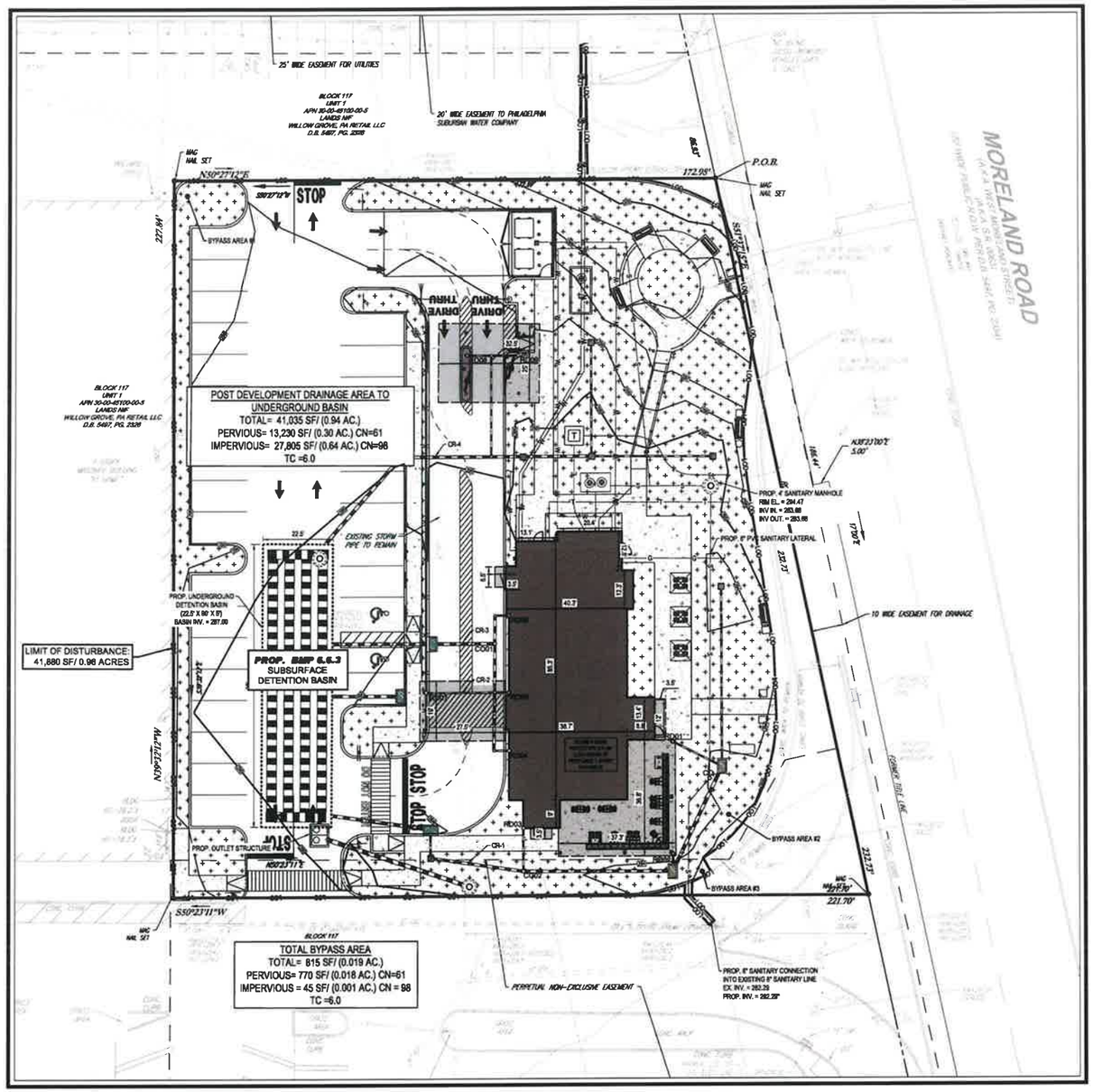
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Kevin Tatlow — Commonwealth of Pennsylvania — Notary Public

SHEET TITLE:
POST DEVELOPMENT PLAN

SHEET NUMBER:
C6.2
15 OF 28

REVISION 1 - 2023-04-10



20 10 5 0 20

1"=20'

LEGEND

PCSM PLAN

PROPERTY LINE

LIMIT OF DISTURBANCE/ PROJECT SITE BOUNDARY — LOD —

ANY REVISION TO THE APPROVED DRAINAGE PLAN MUST BE APPROVED BY THE TOWNSHIP. A REVISED EROSION AND SEDIMENT CONTROL PLAN MUST BE SUBMITTED TO THE TOWNSHIP OR CONSERVATION DISTRICT FOR APPROVAL.

APPLICANT: _____

I, (DESIGN ENGINEER), ON THIS DATE _____, HEREBY CERTIFIED THAT THE DRAINAGE PLAN MEETS ALL REQUIREMENTS OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION'S REGULATIONS AND THIS CHAPTER.

_____

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

_____

PCSM - GENERAL DESCRIPTION

RAISING CANE'S RESTAURANTS, LLC PROPOSES TO DEVELOP THE SITE WITH A 3,082 SF 1 STORY RESTAURANT, A DRIVE-THRU, AND AN ADJACENT PARKING LOT. THE PROPOSAL ALSO INCLUDES THE INSTALLATION OF UTILITIES AND STORMWATER MANAGEMENT CONTROLS NECESSARY TO SUPPORT THE DEVELOPMENT INCLUDING INLETS, YARD DRAINS, AND AN UNDERGROUND DETENTION BASIN. THE TOTAL LIMIT OF DISTURBANCE FOR THE SITE IS 0.98 ACRES PERTINENT DATA CHARACTERIZING THE EXISTING AND FUTURE SITE CONDITIONS ARE SHOWN ON THE ACCOMPANYING LAND DEVELOPMENT PLANS PREPARED BY BOHLER ENGINEERING.

PCSM - GENERAL BMP NOTES

1. A SITE INSPECTION AND APPROVAL BY THE COUNTY CONSERVATION DISTRICT IS REQUIRED PRIOR TO THE REMOVAL OR CONVERSION OF SEDIMENT BASINS AND TRAPS.

2. BOHLER ENGINEERING SHALL BE NOTIFIED OF PRE-CONSTRUCTION MEETING DATE AND BMP CONSTRUCTION SCHEDULE.

3. THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY TO LIMIT THE COMPACTION IN THE PROPOSED BMP BOTTOMS.

4. REFER TO THE BMP CONSTRUCTION DETAILS FOR THE CONSTRUCTION OF ALL PROPOSED STORMWATER MANAGEMENT BMPs.

5. REFER TO THE PCSWM PLAN AND DETAILS FOR SPECIFIC BMP CONSTRUCTION GUIDELINES.

6. AS-BUILT PLANS OF THE STORMWATER BMPs FOR EACH PROJECT PHASE SHALL BE PROVIDED WITHIN SIX MONTHS FOLLOWING THE COMPLETION OF EACH PHASE. THE AS-BUILT PLANS SHALL BE SIGNED AND SEALED BY A PA REGISTERED PROFESSIONAL SURVEYOR.

7. A NOTICE OF TERMINATION (NOT) WILL BE REQUIRED TO BE SUBMITTED FOLLOWING APPROVAL OF THE FINAL AS-BUILT PLANS. PRIOR TO ACCEPTING THE NOT, THE DEPARTMENT AND/OR CONSERVATION DISTRICT STAFF WILL PERFORM A FINAL INSPECTION TO ENSURE SITE STABILIZATION AND VERIFY ADEQUATE INSTALLATION AND FUNCTION OF STORMWATER BMPs.

LONG-TERM OPERATION AND MAINTENANCE SCHEDULE

§102.8(f)(10)

1. UNTIL THE SITE IS STABILIZED AND DURING THE CONSTRUCTION ACTIVITIES, ALL BMPs MUST BE MAINTAINED PROPERLY BY CONTRACTOR. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL BMPs AS SPECIFIED. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN-OUT, REPAIR, REPLACEMENT, RE-GRADING, RE-SEEDING, RE-MULCHING AND RE-NETTING MUST BE PERFORMED IMMEDIATELY AND IN ACCORDANCE WITH THESE PROCEDURES, PLANS, AND DETAILS. ANY AREAS DISTURBED DURING MAINTENANCE MUST BE STABILIZED IMMEDIATELY IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS.
2. ALL SITE INSPECTIONS MUST BE DOCUMENTED IN AN INSPECTION LOG KEPT FOR THIS PURPOSE INDICATING THE COMPLIANCE ACTIONS AND THE DATE, TIME AND NAME OF THE PERSON CONDUCTING THE INSPECTION. THE INSPECTION LOG MUST BE KEPT ON SITE AT ALL TIMES AND MADE AVAILABLE TO THE DISTRICT UPON REQUEST.
3. SHOULD ON-SITE EROSION OCCUR FROM THE LANDSCAPED AREAS, THE SOURCE OF EROSION SHALL BE IMMEDIATELY STABILIZED AND THE INLETS AND STORMWATER PIPING SHALL BE CHECKED FOR ACCUMULATION AND CLEARED IF ACCUMULATION OF SEDIMENT EXISTS.
4. HEAVY CONSTRUCTION VEHICLES SHALL NOT BE PARKED ON OR DRIVEN OVER BMP FACILITIES AND CARE SHOULD BE TAKEN TO AVOID EXCESSIVE COMPACTION BY EQUIPMENT, INCLUDING MOWERS.
5. INSPECT DETENTION FACILITIES AFTER RUNOFF EVENTS AND MAKE SURE THAT RUNOFF DRAINS DOWN WITHIN 72 HOURS. INSPECT FOR ACCUMULATION OF SEDIMENT; DAMAGE TO OUTLET CONTROL STRUCTURES, SIGNS OF WATER CONTAMINATION/SPILLS, AND SIGNS OF EROSION.
6. REMOVE ACCUMULATED SEDIMENT FROM THE FACILITIES AS REQUIRED. RESTORE ORIGINAL CROSS-SECTION IF NECESSARY. PROPERLY DISPOSE OF SEDIMENT AS SPECIFIED. FOR ABOVE-GROUND DETENTION FACILITIES, REMOVE AND REPLACE SANDSTONE LAYER AS NECESSARY IF FACILITY DEWATERING TIME EXCEEDS 72 HOURS.
7. RAISING CANE'S RESTAURANTS, LLC IS RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF THE STORMWATER MANAGEMENT BMPs AS DESCRIBED HEREIN.

LONG-TERM OPERATION AND MAINTENANCE TABLE

BMP NO.	DESCRIPTION	SCHEDULE	INSPECTION TASK	MAINTENANCE	FAILURE INDICATORS
STORM DRAINAGE SYSTEM	INLETS, MANHOLES, AND STORMWATER PIPING.	EVERY 3 MONTHS	• INSPECT INLETS, MANHOLES, AND STORMWATER PIPING	CLEAR SEDIMENT AND DEBRIS FROM ALL ON-SITE INLETS, MANHOLES, AND STORMWATER PIPING.	EXCESSIVE PONDING AROUND THE INLET GRATES COULD INDICATE THAT THERE MAY BE SEDIMENT/DEBRIS BUILDUP.
SWALES	DRAINAGE CHANNELS THAT CONVEY STORMWATER OVER LAND.	ANNUALLY OR AFTER EACH STORM >3"	• INSPECT FOR EROSION AND/OR SEDIMENT ACCUMULATION	AREAS OF EROSION SHALL BE REGRADED AND STABILIZED AND SEDIMENT MUST BE REMOVED TO RESTORE DESIGN CAPACITIES. ANY REMOVED SEDIMENT SHALL BE DISPOSED OF IN AN APPROVED MANNER AND IN ACCORDANCE WITH APPLICABLE STATE REGULATIONS. ALL AREAS DISTURBED DURING MAINTENANCE MUST BE STABILIZED IMMEDIATELY IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS.	CHANNEL EROSION OR VEGETATION FAILS TO ESTABLISH OR DIES OFF.
BMP 6.6.3 DETENTION BASIN	AN DETENTION BASIN IS A SHALLOW IMPOUNDMENT THAT STORES AND INFILTRATES RUNOFF OVER A LEVEL, UNCOMPACTED, (PREFERABLY UNDISTURBED AREA) WITH RELATIVELY PERMEABLE SOILS.	AFTER EACH STORM >3"	• INSPECT WATER DRAWDOWN TIME TO BE WITHIN 72 HOURS	ACCUMULATED DEBRIS AND SEDIMENT IN INLETS OR YARD DRAINS SHOULD BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.	IF ANY DETENTION BASIN IS OBSERVED TO FAIL TO DEWATER WITHIN THE ALLOWABLE 72 HOURS THE OWNER SHALL NOTIFY THE ENGINEER OF RECORD OR QUALIFIED GEOTECHNICAL ENGINEER TO DEVELOP A PLAN TO ADDRESS THE DEFICIENCY.
		4 TIMES PER YEAR	• INSPECT FOR ANY PONDING WATER		
		2 TIMES PER YEAR	• INSPECT STRUCTURES • INSPECT FOR SEDIMENT ACCUMULATION • INSPECT VEGETATIVE COVER CONDITION		
		ANNUALLY	• INSPECT FOR INVASIVE PLANT SPECIES		



LOCATION MAP
SCALE: 1" = 500'

Raising Cane's Chicken Fingers
Restaurant Support Office
6800 Bishop Road, Plano, TX 75024
Tele: 972-769-3100 Fax: 972-769-3101

REVISIONS

REV	DATE	COMMENT	ISSUED BY / PROCESSED BY
1	2023-04-10	PER ABINGTON TOWNSHIP COMMENTS	CM / KT

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PROJECT No.:	PP2270001
DRAWN BY:	BMM
CHECKED BY:	KRT
DATE:	10.26.22
CAD I.D.:	PP2270001-X-TTLB-PHPD

PROJECT:
PRELIMINARY/ FINAL MAJOR LAND DEVELOPMENT PLANS
FOR
RAISING CANE'S RESTAURANTS, LLC.

PROPOSED RESTAURANT #CH852
LAND DEVELOPMENT #LD-22-06

2620 WEST MORELAND ROAD
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

BOHLER
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
www.BohlerEngineering.com

COMMONWEALTH OF PENNSYLVANIA
Kevin Tatlow
REGISTERED ENGINEER

SHEET TITLE:
POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

SHEET NUMBER:
C6.3
14 OF 28

REVISION 1 - 2023-04-10

OVERALL SITE CONSTRUCTION SEQUENCE

§102.8(f)(7)

A. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED IN COMPLIANCE WITH CHAPTER 102 REGULATIONS BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE. UPON COMPLETION OR TEMPORARY CESSATION OF THE EARTH DISTURBANCE ACTIVITY THAT WILL EXCEED FOUR (4) DAYS, OR ANY STAGE THEREOF, THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZED WITH THE APPROPRIATE TEMPORARY OR PERMANENT STABILIZATION.

B. REFERENCES TO 'CONSERVATION DISTRICT' USED THROUGHOUT THIS SEQUENCE ARE MEANT TO REFER TO THE MONTGOMERY COUNTY CONSERVATION DISTRICT.

C. AT LEAST SEVEN (7) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES INCLUDING, BUT NOT LIMITED TO, THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS AND A REPRESENTATIVE OF THE CONSERVATION DISTRICT FOR AN ON-SITE PRE-CONSTRUCTION MEETING. ALSO, AT LEAST THREE (3) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INC. AT 1-800-242-1776 FOR BURIED UTILITIES LOCATION.

D. BEFORE INITIATING ANY REVISION 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 CONSERVATION DISTRICT. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED, 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.

E. THE TERM 'PERMANENT STABILIZATION' USED THROUGHOUT THIS SEQUENCE IS MEANT TO DESCRIBE THE PROPER PLACING, GRADING, CONSTRUCTING, REINFORCING, LINING, AND COVERING OF SOIL, ROCK OR EARTH TO ENSURE THEIR PERMANENT RESISTANCE TO EROSION, SLIDING OR OTHER MOVEMENT. FOR AN EARTH DISTURBANCE TO BE PERMANENTLY STABILIZED, THE DISTURBED AREA SHALL BE COVERED WITH ONE OF THE FOLLOWING: A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER, WITH A DENSITY CAPABLE OF RESISTING ACCELERATED EROSION AND SEDIMENTATION; OR AN ACCEPTABLE BMP THAT PERMANENTLY MINIMIZES ACCELERATED EROSION AND SEDIMENTATION.

F. FOR EACH OF THE 'CRITICAL STAGES' SPECIFIED BELOW, THE PERMITTEE SHALL PROVIDE ENGINEERING OVERSIGHT. A LICENSED PROFESSIONAL OR DESIGNEE KNOWLEDGEABLE IN THE DESIGN AND CONSTRUCTION OF SAID BMP, PREFERABLY THE DESIGN ENGINEER, SHALL CONDUCT THE OVERSIGHT.

G. SEDIMENT CONTROL FACILITIES, SUCH AS BASINS AND TRAPS, MUST BE PROTECTED FROM UNAUTHORIZED ACTS OF THIRD PARTIES. REFER ALSO TO THE MONITORING, INSPECTION AND REPORTING REQUIREMENTS PROVIDED HEREIN FOR ADDITIONAL REQUIREMENTS DURING CONSTRUCTION.

H. AS SOON AS SLOPES, CHANNELS, DITCHES AND OTHER DISTURBED AREAS REACH FINAL GRADE, THEY MUST BE STABILIZED. WHEN FINAL GRADE IS ACHIEVED DURING NON-GERMINATING MONTHS, THE AREA SHOULD BE MULCHED UNTIL THE BEGINNING OF THE NEXT PLANTING SEASON. AS DISTURBED AREAS WITHIN A PROJECT APPROACH FINAL GRADE, PREPARATIONS SHOULD BE MADE FOR SEEDING AND MULCHING TO BEGIN (I.E. ANTICIPATE THE COMPLETION DATE AND SCHEDULE THE SEEDER). IN NO CASE SHOULD AN AREA EXCEEDING 15,000 SQUARE FEET, WHICH IS TO BE STABILIZED BY VEGETATION, REACH FINAL GRADE WITHOUT BEING SEEDED AND MULCHED. WAITING UNTIL EARTHMOVING IS COMPLETED BEFORE MAKING PREPARATIONS FOR SEEDING AND MULCHING IS NOT ACCEPTABLE. SEEDING AND MULCHING REQUIREMENTS ARE SPECIFIED IN THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS.

1. INSTALL CONSTRUCTION ENTRANCE AND STAGING AREAS AS DESIGNATED ON THE PLANS.

2. INSTALL ALL TREE PROTECTION FENCING AND CONSTRUCTION FENCING WITHIN THE DESIGNATED LIMIT OF DISTURBANCE AS INDICATED ON THE PLANS. ONLY LIMITED CLEARING AND GRUBBING NECESSARY TO INSTALL THE PERIMETER EROSION AND SEDIMENT POLLUTION CONTROLS IS PERMITTED. PERIMETER E&S CONTROL DELIBERATELY LIGHT AS SITE CONSTRUCTION OUTSIDE OF PARK AVENUE ROW DRAINS TO PROTECTED INLETS WITHIN SITE. ALL WORK WITHIN ROW AND POTENTIAL TO DRAIN TO PARK AVE TO BE STABILIZED IMMEDIATELY.

3. INSTALL INLET PROTECTION TO ALL INLETS AS DESIGNATED ON SHEET C3.0 OF THIS PLAN SET. INSTALL INLET PROTECTION ON EXISTING INLETS ON-SITE PER DETAIL #4-15 AND #4-16. AS NEW INLETS ARE INSTALLED IN SUBSEQUENT PHASES, INSTALL INLET PROTECTION PER DETAILS #4-20 AND #4-21 WITH TEMPORARY BERMS AS SPECIFIED ON THE DETAILS UNTIL SURROUNDING PAVEMENT IS INSTALLED, THEN CONVERT TO #4-15 AND #4-16 AS NEEDED.

4. NOTIFICATION OF THE TOWNSHIP ENGINEER SHALL BE DONE FOLLOWING INSTALLATION OF PROTECTIVE BARRIERS AND PRIOR TO EARTH DISTURBANCE.

5. DEMOLISH EXISTING BUILDING.

6. INITIATE THE NECESSARY EARTHWORK TO REACH THE GRADES INDICATED ON THE PLANS. BUILDING CONSTRUCTION MAY COMMENCE UPON ACCEPTANCE OF BUILDING PAD BY OWNER. THE CONCRETE WASHOUT MUST BE INSTALLED BEFORE ANY CONCRETE CAN BE POURED ON-SITE. CONTRACTOR MUST PERFORM BULK OF EARTHWORK TO BALANCE CUTS AND FILLS TO THE GREATEST EXTENT POSSIBLE. ALL AREAS DISTURBED DURING THE EARTHWORK PHASE OF CONSTRUCTION MUST BE TEMPORARILY SEEDED AND STABILIZED IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS AND SEEDING SPECIFICATIONS IF PERMANENT STABILIZATION CANNOT BE ACHIEVED WITHIN FOUR (4) DAYS.

7. INSTALLATION OF A TEMPORARY BASIN, SEEPAGE BED, ROOF COLLECTION SYSTEM, AND CONNECTION TO AN EXISTING STORM SEWER MAY COMMENCE. NOTIFICATION OF THE TOWNSHIP ENGINEER FOR INSPECTION OF THE INSTALLATION OF THE SEEPAGE BED AND PIPING SHALL BE DONE PRIOR TO INSTALLATION.

8. **CRITICAL STAGE 1:** INITIATE STORM SEWER AND UNDERGROUND DETENTION BED WITH WQ JELLYFISH FILTER INSTALLATIONS FOR THE FEATURES SHOWN ON THE PLANS STARTING AT THE FURTHEST DOWNSTREAM STRUCTURE. [SEE ADDITIONAL FACILITY SEQUENCING, INSTALLATION AND MAINTENANCE & INSPECTION NOTES PROVIDED ON THE POST CONSTRUCTION STORMWATER MANAGEMENT PLANS FOR CONSTRUCTION OF THE UNDERGROUND DETENTION BED WITH WQ JELLYFISH FILTER.] THE PERMITTEE SHALL PROVIDE ENGINEERING OVERSIGHT FOR THE CONSTRUCTION OF UNDERGROUND DETENTION BASIN. INLETS DISCHARGING TO UNDERGROUND DETENTION BED MUST BE BLOCKED IMMEDIATELY AFTER INSTALLATION AND REMAIN BLOCKED UNTIL SITE IS FULLY STABILIZED TO PREVENT SEDIMENT FROM ENTERING THE UNDERGROUND DETENTION BED. NO CONSTRUCTION EQUIPMENT, SUCH AS CRANES DURING BUILDING CONSTRUCTION, SHALL BE PARKED ON TOP OF THE UNDERGROUND DETENTION BED TO AVOID DAMAGING THE UNDERGROUND DETENTION BED OR OVER-COMPACTING THE SUBSURFACE SOILS.]

9. CONTINUE WITH THE BALANCE OF EARTHWORK INCLUDING UTILITY INSTALLATION (SANITARY, ELECTRIC, TELEPHONE, CABLE AND GAS) WHERE APPLICABLE.

10. INSTALL ALL CURBING SHOWN IN THIS PHASE AND INSTALL STONE BASE COURSE IN THE DRIVEWAY AND PARKING AREAS.

11. INITIATE FINAL GRADING AND PLACEMENT OF TOPSOIL IN ALL LANDSCAPE AREAS. AS SOON AS SLOPES, CHANNELS, DITCHES AND OTHER DISTURBED AREAS REACH FINAL GRADE, THEY MUST BE STABILIZED. ALL LANDSCAPE AREAS MUST BE STABILIZED AND PERMANENT SEEDING OR PLACEMENT OF SOD MUST BE APPLIED. WHEN FINAL GRADE IS ACHIEVED DURING NON-GERMINATING MONTHS, THE AREA SHOULD BE MULCHED UNTIL THE BEGINNING OF THE NEXT PLANTING SEASON. HOWEVER, THE AREA WILL NOT BE CONSIDERED STABILIZED UNTIL A MINIMUM UNIFORM 70% VEGETATIVE COVER OF EROSION RESISTANT PERENNIAL SPECIES HAS BEEN ACHIEVED. AS DISTURBED AREAS WITHIN A PROJECT APPROACH FINAL GRADE, PREPARATIONS SHOULD BE MADE FOR SEEDING AND MULCHING TO BEGIN (I.E. ANTICIPATE THE COMPLETION DATE AND SCHEDULE THE SEEDER). IN NO CASE SHOULD AN AREA EXCEEDING 15,000 SQUARE FEET, WHICH IS TO BE STABILIZED BY VEGETATION, REACH FINAL GRADE WITHOUT BEING SEEDED AND MULCHED. WAITING UNTIL EARTHMOVING IS COMPLETED BEFORE MAKING PREPARATIONS FOR SEEDING AND MULCHING IS NOT ACCEPTABLE. SEEDING AND MULCHING REQUIREMENTS ARE SPECIFIED IN THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS.

12. INSTALL BITUMINOUS PAVEMENT AND CONCRETE INCLUDING SIDEWALKS. UPON INSTALLATION OF CONCRETE SIDEWALKS WITHIN PARK AVENUE ROW, EARTHWORK IS ONLY TO OCCUR WHERE IMMEDIATE STABILIZATION CAN OCCUR.

13. **CRITICAL STAGE 2:** INSTALL FINAL VEGETATION INCLUDING ALL LANDSCAPE RESTORATION, AND GRASSED AREAS.

14. **CRITICAL STAGE 3:** UPON SITE STABILIZATION (UNIFORM COVERAGE OR DENSITY OF 70% ACROSS ALL DISTURBED AREAS) AND NOTIFICATION OF THE MONTGOMERY COUNTY CONSERVATION DISTRICT, REMOVE EROSION AND SEDIMENT CONTROL FACILITIES INCLUDING INLET PROTECTION, ROCK CONSTRUCTION ENTRANCE WITH WASH RACK, TREE PROTECTION FENCE, CONCRETE WASHOUTS, AND SOIL STOCKPILES. ANY AREA DISTURBED DURING THE REMOVAL OF EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE STABILIZED IMMEDIATELY.

15. CLEAR SITE OF DEBRIS AND ALL UNWANTED MATERIALS. OPERATOR SHALL REMOVE FROM 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 WASTE AT THIS SITE.

16. DEMOBILIZE.

17. A NOTICE OF TERMINATION FORM SHOULD BE SUBMITTED TO THE MONTGOMERY COUNTY CONSERVATION DISTRICT UPON STABILIZATION AND FINAL COMPLETION OF THIS PROJECT.

RECEIVING SURFACE WATERS

§102.8(f)(5)

1. THE SUBJECT SITE DRAINS TO PENNYPACK WATERSHED DISTRICT A, WHICH HAS A WWF (WARM WATER FISHES) & MF (MIGRATORY FISHES) CHAPTER 93 CLASSIFICATION.

2. THE DEVELOPMENT IS IN NEITHER AN HQ NOR AN EV WATERSHED AND THEREFORE, NO BOUNDARIES ARE SHOWN.

3. THERE ARE NO WETLANDS LOCATED ON THE PROJECT SITE.

GENERAL PCSM PLANNING AND DESIGN

§102.8(b)

THE FOLLOWING MEASURES WERE TAKEN TO PRESERVE THE INTEGRITY OF STREAM CHANNELS AND MAINTAIN AND PROTECT THE PHYSICAL, BIOLOGICAL, AND CHEMICAL QUALITIES OF THE RECEIVING STREAM:

- DIRECT RUNOFF FROM IMPERVIOUS SURFACES TO BMPS
- THE USE OF NATIVE SPECIES REQUIRES LESS FERTILIZATION AND CHEMICAL APPLICATION THAN NONNATIVE SPECIES.

THE FOLLOWING MEASURES WERE TAKEN TO PREVENT AN INCREASE IN THE RATE OF STORMWATER RUNOFF:

- MINIMIZE IMPERVIOUS AREAS WHERE PRACTICAL

THE FOLLOWING MEASURES WERE TAKEN TO MINIMIZE ANY INCREASE IN STORMWATER RUNOFF VOLUME:

- PROVIDE AN SUBSURFACE INFILTRATION BED AND AN UNDERGROUND DETENTION BASIN TO HELP REDUCE RUNOFF VOLUME
- RE-VEGETATE DISTURBED AREAS TO HELP REDUCE RUNOFF VOLUME
- MINIMIZE IMPERVIOUS AREAS WHERE PRACTICAL.

MEASURES WERE TAKEN TO MINIMIZE IMPERVIOUS AREAS.

THE FOLLOWING MEASURES ARE TAKEN TO MAXIMIZE PROTECTION OF EXISTING DRAINAGE FEATURES AND VEGETATION:

- ACCESS THE SITE THRU DESIGNATED CONSTRUCTION ENTRANCES

THE FOLLOWING MEASURES WERE TAKEN TO MINIMIZE LAND CLEARING AND GRADING:

- GRADE SITE TO MINIMIZE EXTENT OF CUTS/FILLS

THE FOLLOWING MEASURES ARE TAKEN TO MINIMIZE SOIL COMPACTION:

- ACCESS THE SITE THRU DESIGNATED CONSTRUCTION ENTRANCES
- USE OF TREADED MACHINERY WHERE PRACTICAL DURING EARTHMOVING OPERATIONS
- GRADE SITE TO MINIMIZE EXTENT OF CUTS/FILLS

THE FOLLOWING MEASURES WERE TAKEN TO UTILIZE OTHER STRUCTURAL OR NONSTRUCTURAL BMPS THAT PREVENT OR MINIMIZE CHANGES IN STORMWATER RUNOFF:

- DIRECT RUNOFF TO AN SUBSURFACE INFILTRATION BED AND AN UNDERGROUND DETENTION BASIN TO HELP REDUCE RUNOFF VOLUME
- RE-VEGETATE DISTURBED AREAS TO HELP REDUCE RUNOFF VOLUME
- MINIMIZE IMPERVIOUS AREAS WHERE PRACTICAL

RECYCLING OR DISPOSAL OF MATERIALS

§102.8(f)(11)

THE FOLLOWING IS A LIST THAT INCLUDES, BUT THAT IS NOT LIMITED TO, THE POTENTIAL CONSTRUCTION WASTES THAT MAY EXIST ON-SITE:

- ORGANIC MATERIAL (CLIPPING FROM GRASS, MEADOW, AND SHRUBS)
- TRASH AND DEBRIS
- LEAVES
- ANY SEDIMENT ACCUMULATED IN PCSM BMPs

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. BELOW IS A LIST OF METHODS FOR THE PROPER RECYCLING/DISPOSAL OF VARIOUS MATERIALS:

1.) DUST CONTROL - CONSTRUCTION TRAFFIC MUST ENTER AND EXIT THE SITE AT THE STABILIZED CONSTRUCTION ENTRANCE. THE PURPOSE IS TO TRAP DUST AND MUD THAT WOULD OTHERWISE BE CARRIED OFF-SITE BY CONSTRUCTION TRAFFIC. WATER TRUCKS WILL BE USED AS NEEDED DURING CONSTRUCTION TO REDUCE DUST GENERATED ON THE SITE. DUST CONTROL MUST BE PROVIDED BY THE CONTRACTOR TO A DEGREE THAT IS ACCEPTABLE TO THE LOCAL CONSERVATION DISTRICT. AFTER CONSTRUCTION, THE SITE WILL BE STABILIZED, WHICH WILL REDUCE THE POTENTIAL FOR DUST GENERATION.

2.) SOLID WASTE DISPOSAL - NO SOLID MATERIALS, INCLUDING BUILDING MATERIALS, ARE ALLOWED TO BE DISCHARGED FROM THE SITE WITH STORMWATER. ALL SOLID WASTE, INCLUDING DISPOSABLE MATERIALS INCIDENTAL TO THE MAJOR CONSTRUCTION ACTIVITIES, MUST BE COLLECTED AND PLACED IN CONTAINERS. THE CONTAINERS WILL BE EMPTIED AS NECESSARY BY A CONTRACT TRASH DISPOSAL SERVICE AND HAULED AWAY FROM THE SITE.

3.) SANITARY FACILITIES - ALL PERSONNEL INVOLVED WITH CONSTRUCTION ACTIVITIES MUST COMPLY WITH STATE AND LOCAL SANITARY OR SEPTIC SYSTEM REGULATIONS. TEMPORARY SANITARY FACILITIES WILL BE PROVIDED AT THE SITE THROUGHOUT THE CONSTRUCTION PHASE. THEY MUST BE UTILIZED BY ALL CONSTRUCTION PERSONNEL AND WILL BE SERVICED BY A LICENSED COMMERCIAL OPERATOR.

4.) WATER SOURCE - NON-STORMWATER COMPONENTS OF SITE DISCHARGE MUST BE CLEAN WATER. WATER USED FOR CONSTRUCTION WHICH DISCHARGES FROM THE SITE MUST ORIGINATE FROM A PUBLIC WATER SUPPLY OR PRIVATE WELL APPROVED BY THE STATE HEALTH DEPARTMENT. WATER USED FOR CONSTRUCTION THAT DOES NOT ORIGINATE FROM AN APPROVED PUBLIC SUPPLY MUST NOT DISCHARGE FROM THE SITE.

5.) CONCRETE WASTE FROM CONCRETE READY-MIX TRUCKS - DISCHARGE OF EXCESS OR WASTE CONCRETE AND/OR WASH WATER FROM CONCRETE TRUCKS WILL BE ALLOWED ON THE CONSTRUCTION SITE, BUT ONLY IN SPECIFICALLY DESIGNATED DIKED AREAS PREPARED TO PREVENT CONTACT BETWEEN THE CONCRETE AND/OR WASH WATER AND STORMWATER THAT WILL BE DISCHARGED FROM THE SITE.

GEOLOGIC FORMATIONS OR SOIL CONDITIONS

§102.8(f)(12)

THERE ARE NO GEOLOGIC FORMATIONS OR SOIL CONDITIONS THAT COULD CAUSE CONTAMINANT POLLUTION DURING EARTH DISTURBANCE ACTIVITIES.

BELOW ARE INSTRUCTIONS FOR THE PROPER HANDLING AND/OR DISPOSAL OF ALL MATERIALS THAT COULD CAUSE POLLUTION:

1. ANY HAZARDOUS OR POTENTIALLY HAZARDOUS MATERIAL THAT IS BROUGHT ONTO THE CONSTRUCTION SITE SHALL BE HANDLED PROPERLY TO REDUCE THE POTENTIAL FOR STORMWATER POLLUTION. ALL MATERIALS USED ON THIS CONSTRUCTION SITE SHALL BE PROPERLY STORED, HANDLED, DISPENSED AND DISPOSED OF FOLLOWING ALL APPLICABLE LABEL DIRECTIONS. FLAMMABLE AND COMBUSTIBLE LIQUIDS SHALL BE STORED AND HANDLED ACCORDING TO APPLICABLE REGULATIONS, AND, AT A MINIMUM, ACCORDING TO 29 CFR 1926.152. ONLY APPROVED CONTAINERS AND PORTABLE TANKS SHALL BE USED FOR STORAGE AND HANDLING OF FLAMMABLE AND COMBUSTIBLE LIQUIDS.

2. MATERIAL SAFETY DATA SHEETS (MSDS) INFORMATION SHALL BE KEPT ON SITE FOR ANY AND ALL APPLICABLE MATERIALS. HOWEVER, MSDS MAY ALSO BE ACCESSED VIA TELEPHONE OR OTHER ELECTRONIC MEANS OR APPARATUS.

3. IN THE EVENT OF AN ACCIDENTAL SPILL, IMMEDIATE ACTION SHALL BE TAKEN BY THE GC TO CONTAIN AND REMOVE THE SPILLED MATERIAL. THE SPILL SHALL BE REPORTED TO THE APPROPRIATE AGENCIES IN THE REQUIRED TIME FRAMES. AS REQUIRED UNDER THE PROVISIONS OF THE CLEAN WATER ACT, ANY SPILL OR DISCHARGE ENTERING WATERS OF THE UNITED STATES SHALL BE PROPERLY REPORTED.

4. ALL HAZARDOUS MATERIALS, INCLUDING CONTAMINATED SOIL AND LIQUID CONCRETE WASTE, SHALL BE DISPOSED OF BY THE CONTRACTOR IN THE MANNER SPECIFIED BY FEDERAL, STATE AND LOCAL REGULATIONS AND BY THE MANUFACTURER OF SUCH PRODUCTS.

5. THE GC SHALL PREPARE A WRITTEN RECORD OF ANY SPILL AND ASSOCIATED CLEAN-UP ACTIVITIES OF PETROLEUM PRODUCTS OR HAZARDOUS MATERIALS IN EXCESS OF 1 GALLON OR REPORTABLE QUANTITIES, WHICHEVER IS LESS, ON THE DAY OF THE SPILL. THE GC SHALL PROVIDE NOTICE TO OWNER, VIA THE ONLINE CRITICAL INCIDENT REPORT, IMMEDIATELY UPON IDENTIFICATION OF ANY SPILL. SPILL REPORT FORMS ARE AVAILABLE IN THE ONLINE SWPPP REPORTING SYSTEM PROVIDED BY THE OWNER. COPIES OF SPILL CRITICAL INCIDENT REPORTS SHALL BE PRINTED AND MAINTAINED IN THE JOBSITE BINDER.

6. ANY SPILLS OF PETROLEUM PRODUCTS OR HAZARDOUS MATERIALS IN EXCESS OF REPORTABLE QUANTITIES AS DEFINED BY EPA OR THE STATE OR LOCAL AGENCY REGULATIONS, SHALL BE IMMEDIATELY REPORTED TO THE EPA NATIONAL RESPONSE CENTER (1-800-424-8802) AND THE MONTGOMERY COUNTY CONSERVATION DISTRICT (610-489-4506).

7. AS PER THE PA GENERAL PERMIT, ANY TIME THE PERMITTEE OR CO-PERMITTEE BECOMES AWARE OF ANY INCIDENT CAUSING OR THREATENING POLLUTION AS DESCRIBED IN 25. PA CODE SECTION 91.33, AS REQUIRED BY 25. PA CODE SECTION 92A.41(B), THE PERMITTEE AND CO-PERMITTEES(S) SHALL WITHIN 24 HOURS, CONTACT THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT, BY PHONE OR PERSONAL CONTACT, FOLLOWED BY SUBMISSION OF A WRITTEN REPORT WITHIN FIVE (5) DAYS OF THE INITIAL CONTACT.

8. TO MINIMIZE THE POTENTIAL FOR A SPILL OF PETROLEUM PRODUCT OR HAZARDOUS MATERIALS TO COME IN CONTACT WITH STORMWATER, THE FOLLOWING STEPS SHALL BE IMPLEMENTED:

(1) ALL MATERIALS WITH HAZARDOUS PROPERTIES, SUCH AS PESTICIDES, PETROLEUM PRODUCTS, FERTILIZERS, SOAPS, DETERGENTS, CONSTRUCTION CHEMICALS, ACIDS, BASES, PAINTS, PAINT SOLVENTS, ADDITIVES FOR SOIL STABILIZATION, CONCRETE CURING COMPOUNDS AND ADDITIVES, ETC., SHALL BE STORED IN A SECURE LOCATION, UNDER COVER AND IN APPROPRIATE, TIGHTLY SEALED CONTAINERS WHEN NOT IN USE.

(2) THE MINIMUM PRACTICAL QUANTITY OF ALL SUCH MATERIALS SHALL BE KEPT ON THE JOB SITE AND SCHEDULED FOR DELIVERY AS CLOSE TO TIME OF USE AS PRACTICAL.

(3) A SPILL CONTROL AND CONTAINMENT KIT (CONTAINING FOR EXAMPLE, ABSORBENT MATERIAL SUCH AS KITTY LITTER OR SAWDUST, ACID, BASE, NEUTRALIZING AGENT, BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, PLASTIC AND METAL TRASH CONTAINERS, ETC.) SHALL BE PROVIDED AT THE CONSTRUCTION SITE AND ITS LOCATION(S) SHALL BE IDENTIFIED WITH LEGIBLE SIGNAGE AND SHOWN ON SITE MAPS.

a. THE SPILL CONTROL AND CONTAINMENT KIT SUPPLIES SHALL BE OF SUFFICIENT QUANTITIES AND APPROPRIATE CONTENT TO CONTAIN A SPILL FROM THE LARGEST ANTICIPATED PIECE OF EQUIPMENT AND FROM THE LARGEST ANTICIPATED QUANTITIES OF PRODUCTS STORED ON THE SITE AT ANY GIVEN TIME.

b. CONTENTS SHALL BE INSPECTED DAILY DURING THE DAILY STORMWATER INSPECTION.

(4) ALL PRODUCTS SHALL BE STORED IN AND USED FROM THE ORIGINAL CONTAINER WITH THE ORIGINAL PRODUCT LABEL. CONTAINERS MUST BE STORED IN A MANNER TO PROTECT THEM FROM THE ELEMENTS AND INCIDENTAL DAMAGE.

(5) ALL PRODUCTS SHALL BE USED IN STRICT COMPLIANCE WITH INSTRUCTIONS ON THE PRODUCT LABEL.

(6) THE DISPOSAL OF EXCESS OR USED PRODUCTS SHALL BE IN STRICT COMPLIANCE WITH INSTRUCTIONS ON THE PRODUCT LABEL AND REGULATIONS.

RIPARIAN FOREST BUFFER MANAGEMENT PLAN

§102.8(f)(14)

REGARDING EXISTING OR PROPOSED RIPARIAN FOREST BUFFERS, NOTE THE FOLLOWING:

- THERE ARE NO EXISTING/PROPOSED RIPARIAN FOREST BUFFERS LOCATED WITHIN OR OUTSIDE THE LIMITS OF DISTURBANCE FOR THIS PROJECT.



USGS MAP



SOIL MAP

Raising Cane's Chicken Fingers

Restaurant Support Office
6800 Bishop Road, Plano, TX 75024
Tele: 972-769-3100 Fax 972-769-3101

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	2023-04-10	PER ABINGTON TOWNSHIP COMMENTS	CM / KT

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PROJECT No.:	PP2270001
DRAWN BY:	BMM
CHECKED BY:	KRT
DATE:	10.26.22
CAD I.D.:	PP2270001-X-TTLS-PHPD

PROJECT:

PRELIMINARY/ FINAL MAJOR LAND DEVELOPMENT PLANS

FOR

RAISING CANE'S RESTAURANTS, LLC.

PROPOSED RESTAURANT #C0952
LAND DEVELOPMENT #LD-22-06

2820 WEST MORELAND ROAD
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

BOHLER //
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
www.BohlerEngineering.com

SHEET TITLE:

POST CONSTRUCTION STORMWATER MANAGEMENT NOTES

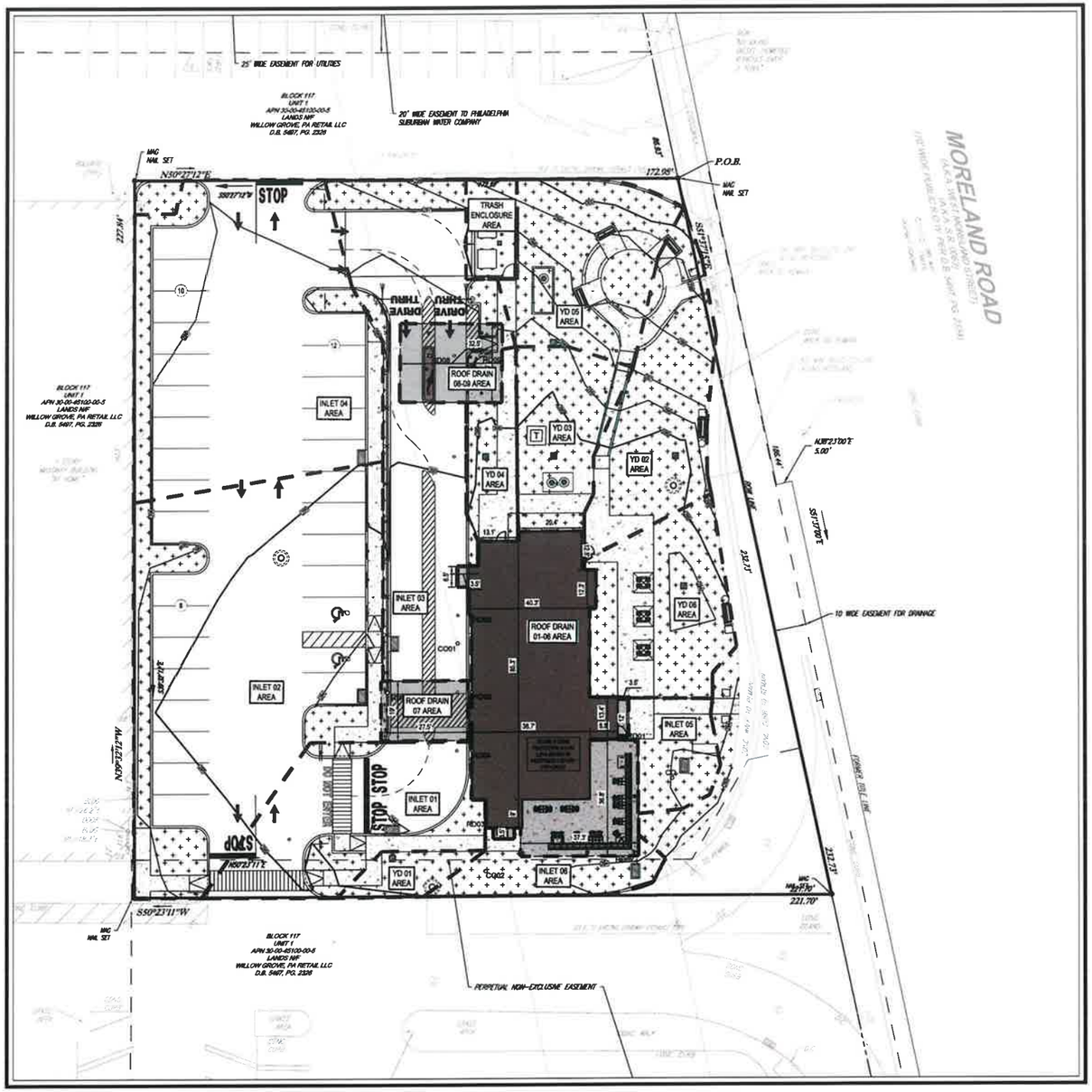
SHEET NUMBER:

C6-4

15 OF 28

REVISION 1 - 2023-04-10

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LOCATION MAP
SCALE: 1" = 500'

Catchment Areas

Description	HSG B / CN Open Space (Lawns), Good Condition 61	Impervious Impervious 98	Total Area (Ac)	Composite CN
Yard Drain 01	0.02		0.02	61
Yard Drain 02	0.04	0.02	0.06	73
Yard Drain 03	0.03	0.01	0.04	68
Yard Drain 04	0.01	0.01	0.02	80
Yard Drain 05	0.05	0.01	0.06	65
Yard Drain 06	0.03	0.01	0.04	70
Inlet 01	0.02	0.06	0.08	89
Inlet 02	0.02	0.15	0.17	94
Inlet 03	0.02	0.10	0.12	92
Inlet 04	0.02	0.14	0.16	93
Inlet 05	0.02		0.02	61
Inlet 06	0.02		0.02	61
RD01-06		0.10	0.10	98
RD07		0.01	0.01	98
RD08-09		0.02	0.02	98
Trash Enclosure		0.01	0.01	98
Totals:	0.30	0.64	0.94	

LEGEND

PROPOSED	
DRAINAGE AREA TO BMP	
BUILDING	
BUILDING ABOVE	
CONCRETE SIDEWALK	
LANDSCAPE AREA	
DRAINAGE INLET	
YARD DRAIN	
MANHOLE	
CLEANOUT	CO

Raising Cane's Chicken Fingers
Restaurant Support Office
6800 Bishop Road, Plano, TX 75024
Tele: 972-769-3100 Fax: 972-769-3101

REVISIONS

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PROJECT No.: PP2270001
DRAWN BY: BMM
CHECKED BY: KRT
DATE: 10.26.22
CAD I.D.: PP2270001-X-TTLB-PHPD

PROJECT:
PRELIMINARY/ FINAL MAJOR LAND DEVELOPMENT PLANS
FOR
RAISING CANE'S RESTAURANTS, LLC.

PROPOSED RESTAURANT #CH052
LAND DEVELOPMENT #LD-22-06

2620 WEST MORELAND ROAD
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

BOHLER
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
www.BohlerEngineering.com

COMMONWEALTH OF PENNSYLVANIA Kevin Tatter NOTARIAL SEAL

SHEET TITLE:
DRAINAGE AREA PLAN

SHEET NUMBER:
C6.5
18 OF 25

REVISION 1 - 2023-04-10

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LEGEND
UTILITY KEYNOTES

A	PROPOSED INLET
B	PROP. ROOF DRAIN PIPE 6" HDPE AT 1% MIN. SLOPE FROM BUILDING
C	PROP. MANHOLE
D	PROP. ELECTRIC SERVICE ENTRY WITH CT BOX AND METER.
E	PROP. GAS SERVICE LINE. REFER TO MEP FOR SIZE.
F	2" COPPER DOMESTIC LINE ENTRY, REFERENCE MEP PLANS
G	PROP. ELECTRICAL TRANSFORMER LOCATION
H	PROP. SANITARY LINE, REFER TO MEP PLANS FOR CONTINUATION
I	PROPOSED YARD DRAIN
J	PROP. 10" HDPE STORM LINE TO PROP. INLET
K	PROP. ROOF DRAIN
L	PROP. GREASE TRAP LOCATION, REF ARCHITECTURAL / MEP PLANS
M	PROP. 1" COPPER DOMESTIC WATER LINE CONNECTING TO TRASH ENCLOSURE
N	PROPOSED TRASH ENCLOSURE FLOOR DRAIN, TIE INTO SANITARY LINE
O	PROPOSED VERIZON AND COMCAST LINES IN COMBINED TRENCH
P	PROPOSED 1 1/4" COPPER IRRIGATION WATER LINE, SEE IRRIGATION PLAN FOR FULL CONTINUATION OF IRRIGATION LINE
R	PROPOSED 2" COPPER WATER LINE AND 6" DIP FIRE LINE 15' x 7'AQUA METER PIT WITH BACKFLOW PREVENTION INSIDE PIT, SEE AQUA DETAILS ON SHEET C9.0
S	PROPOSED 6" DIP FIRE LINE, REFERENCE MEP PLANS
T	PROPOSED FIRE DEPARTMENT CONNECTION, COORDINATED WITH FIRE MARSHAL

LEGEND
PROPOSED

LIMIT OF DISTURBANCE	LOD
BUILDING	
BUILDING ABOVE	
CONCRETE SIDEWALK	
LANDSCAPE AREA	
CONCRETE CURB	
FLUSH CURB	
FENCE	
SIGN	
YARD DRAIN	
DRAINAGE INLET	
MANHOLE	
OUTLET STRUCTURE	
UNDERGROUND BASIN	
CLEANOUT	C/O
HOUSE TRAP	HT
TEST PIT	TP
ELECTRIC LINE	E
TELECOM LINE	T
GAS LINE	G
FIRE SERVICE LINE	F
WATER LINE	W
SANITARY SEWER	S
STORM PIPE	

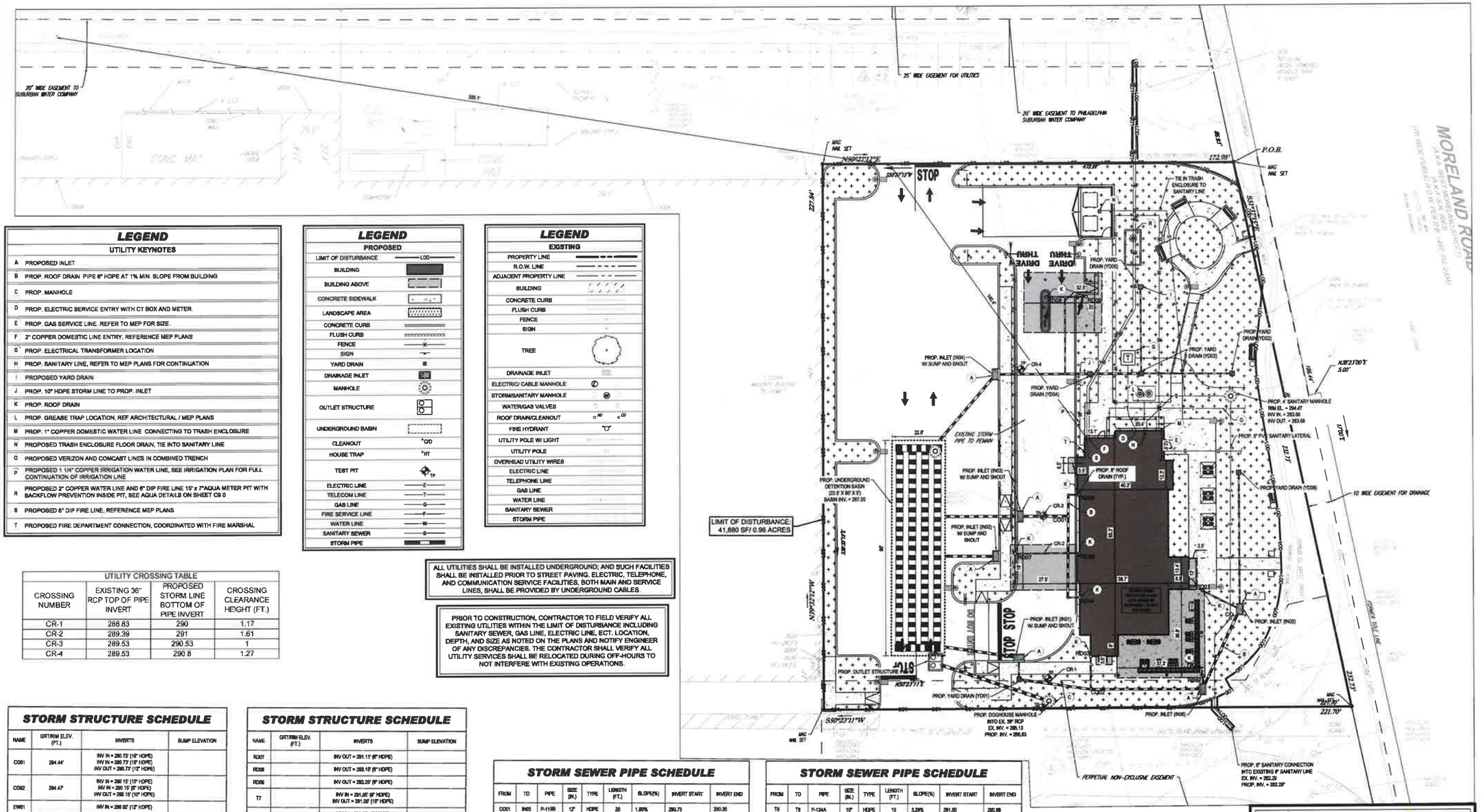
LEGEND
EXISTING

PROPERTY LINE	
R.O.W. LINE	
ADJACENT PROPERTY LINE	
BUILDING	
CONCRETE CURB	
FLUSH CURBS	
FENCE	
SIGN	
TREE	
DRAINAGE INLET	
ELECTRIC/ CABLE MANHOLE	
STORM/SANITARY MANHOLE	
WATER/GAS VALVES	
ROOF DRAIN/CLEANOUT	
FIRE HYDRANT	
UTILITY POLE W/ LIGHT	
UTILITY POLE	
OVERHEAD UTILITY WIRES	
ELECTRIC LINE	
TELEPHONE LINE	
GAS LINE	
WATER LINE	
SANITARY SEWER	
STORM PIPE	

UTILITY CROSSING TABLE			
CROSSING NUMBER	EXISTING 36" RCP TOP OF PIPE INVERT	PROPOSED STORM LINE BOTTOM OF PIPE INVERT	CROSSING CLEARANCE HEIGHT (FT.)
CR-1	288.83	290	1.17
CR-2	289.39	291	1.61
CR-3	289.53	290.53	1
CR-4	289.53	290.8	1.27

ALL UTILITIES SHALL BE INSTALLED UNDERGROUND; AND SUCH FACILITIES SHALL BE INSTALLED PRIOR TO STREET PAVING. ELECTRIC, TELEPHONE, AND COMMUNICATION SERVICE FACILITIES, BOTH MAIN AND SERVICE LINES, SHALL BE PROVIDED BY UNDERGROUND CABLES.

PRIOR TO CONSTRUCTION, CONTRACTOR TO FIELD VERIFY ALL EXISTING UTILITIES WITHIN THE LIMIT OF DISTURBANCE INCLUDING SANITARY SEWER, GAS LINE, ELECTRIC LINE, ECT. LOCATION, DEPTH, AND SIZE AS NOTED ON THE PLANS AND NOTIFY ENGINEER OF ANY DISCREPANCIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY SERVICES SHALL BE RELOCATED DURING OFF-HOURS TO NOT INTERFERE WITH EXISTING OPERATIONS.



STORM STRUCTURE SCHEDULE

NAME	GRT/RIM ELEV. (FT.)	INVERTS	SUMP ELEVATION
CO01	294.44'	INV IN = 290.72' (18" HDPE) INV IN = 290.73' (18" HDPE) INV OUT = 290.72' (12" HDPE)	
CO02	294.47'	INV IN = 290.15' (10" HDPE) INV IN = 290.16' (8" HDPE) INV OUT = 289.19' (10" HDPE)	
EW01		INV IN = 288.02' (12" HDPE)	
EW02		INV IN = 288.00' (12" HDPE)	
EW03		INV IN = 288.00' (12" HDPE)	
EW05		INV IN = 288.00' (12" HDPE)	
IN01	293.98'	INV IN = 289.40' (8" HDPE) INV OUT = 289.41' (12" HDPE)	286.30
IN02	293.76'	INV OUT = 290.76' (12" HDPE)	287.76
IN03	294.04'	INV IN = 290.35' (12" HDPE) INV OUT = 290.35' (12" HDPE)	287.35
IN04	295.08'	INV IN = 290.72' (10" HDPE) INV OUT = 290.72' (12" HDPE)	287.72
IN05	293.91'	INV IN = 290.77' (8" HDPE) INV IN = 290.77' (8" HDPE) INV OUT = 290.77' (12" HDPE)	
IN06	293.43'	INV IN = 289.41' (8" HDPE) INV IN = 289.41' (12" HDPE) INV OUT = 289.41' (10" HDPE)	
MH01	294.84'	INV IN = 288.53' (15" RCP)	283.63
OS01	294.69'	INV OUT = 287.00' (15" RCP)	284.00
RD01		INV OUT = 292.00' (6" HDPE)	
RD02		INV OUT = 290.86' (6" HDPE)	
RD03		INV OUT = 291.75' (6" HDPE)	
RD04		INV OUT = 291.85' (6" HDPE)	
RD05		INV OUT = 290.94' (6" HDPE)	
RD06		INV OUT = 291.19' (6" HDPE)	

STORM STRUCTURE SCHEDULE

NAME	GRT/RIM ELEV. (FT.)	INVERTS	SUMP ELEVATION
RD07		INV OUT = 291.11' (6" HDPE)	
RD08		INV OUT = 293.10' (6" HDPE)	
RD09		INV OUT = 293.25' (6" HDPE)	
T7		INV IN = 291.05' (6" HDPE) INV OUT = 291.05' (10" HDPE)	
T8		INV IN = 290.89' (6" HDPE) INV IN = 290.89' (6" HDPE) INV IN = 290.89' (10" HDPE) INV OUT = 290.89' (10" HDPE)	
T9		INV IN = 291.50' (6" HDPE) INV OUT = 291.56' (10" HDPE)	
T10		INV IN = 293.02' (6" HDPE) INV IN = 293.02' (6" HDPE) INV OUT = 293.02' (8" HDPE)	
T11		INV IN = 291.02' (10" HDPE) INV IN = 291.02' (8" HDPE) INV OUT = 291.02' (10" HDPE)	
YD01	294.55'	INV IN = 289.85' (10" HDPE) INV OUT = 289.85' (6" HDPE)	
YD02	294.23'	INV OUT = 291.73' (6" HDPE)	
YD03	294.36'	INV IN = 291.34' (6" HDPE) INV IN = 291.34' (6" HDPE) INV OUT = 291.34' (10" HDPE)	
YD04	294.92'	INV IN = 291.12' (10" HDPE) INV OUT = 291.12' (10" HDPE)	
YD05	295.74'	INV OUT = 292.75' (6" HDPE)	
YD06	293.92'	INV OUT = 291.37' (6" HDPE)	

STORM SEWER PIPE SCHEDULE

FROM	TO	PIPE	SIZE (IN.)	TYPE	LENGTH (FT.)	SLOPE(%)	INVERT START	INVERT END
CO01	IN03	P-119B	12"	HDPE	20	1.80%	290.73	290.35
CO02	YD01	P-115B	10"	HDPE	30	1.00%	290.15	289.85
IN01	EW01	P-126	12"	HDPE	32	4.47%	289.41	288.00
IN02	EW02	P-102	12"	HDPE	22	12.81%	290.76	288.00
IN03	EW03	P-103	12"	HDPE	32	7.46%	290.35	288.00
IN04	EW05	P-107	12"	HDPE	36	7.46%	290.72	288.00
IN05	IN06	P-112A	12"	HDPE	37	0.98%	290.77	290.41
IN06	CO02	P-115A	10"	HDPE	47	0.55%	290.41	290.15
OS01	MH01	P-121	15"	RCP	48	0.78%	287.00	286.63
RD01	IN05	P-112C	6"	HDPE	18	7.01%	292.00	290.77
RD02	IN06	P-115	8"	HDPE	6	7.90%	290.86	290.41
RD03	CO02	P-116	6"	HDPE	14	11.53%	291.75	290.15
RD04	T9	P-124	6"	HDPE	6	7.23%	291.85	291.50
RD05	T8	P-117	6"	HDPE	5	1.10%	290.94	290.89
RD06	T7	P-118	6"	HDPE	4	1.13%	291.10	291.05
RD07	T8	P-120	6"	HDPE	22	1.00%	291.11	290.89
RD08	T10	P-122	6"	HDPE	8	0.97%	293.10	293.02
RD09	T10	P-123	6"	HDPE	9	2.63%	293.25	293.02
T7	CO01	P-118A	10"	HDPE	9	3.57%	291.05	290.73
T8	CO01	P-115D	10"	HDPE	15	1.04%	290.89	290.73

STORM SEWER PIPE SCHEDULE

FROM	TO	PIPE	SIZE (IN.)	TYPE	LENGTH (FT.)	SLOPE(%)	INVERT START	INVERT END
T9	T8	P-124A	10"	HDPE	18	3.28%	291.50	290.89
T10	T11	P-126	8"	HDPE	32	5.23%	293.02	291.02
T11	IN04	P-113B (1)	10"	HDPE	29	1.04%	291.02	290.72
YD01	IN01	P-127	8"	HDPE	8	4.62%	289.85	289.40
YD02	YD03	P-113	8"	HDPE	39	1.00%	291.73	291.34
YD03	YD04	P-113A	10"	HDPE	22	1.00%	291.34	291.12
YD04	T11	P-113B	10"	HDPE	10	1.01%	291.12	291.02
YD05	YD03	P-111	6"	HDPE	36	3.89%	292.75	291.34
YD06	IN05	P-112	6"	HDPE	57	1.05%	291.37	290.77

INLETS (IN01, IN02. IN03, IN04) SHALL HAVE SUMPS AND SNOUTS INSTALLED

THIS PLAN TO BE UTILIZED FOR UTILITIES PURPOSES ONLY. REFER TO GENERAL NOTES SHEET FOR ADDITIONAL GRADING & UTILITY NOTES

A MINIMUM OF TWO FEET OF COVER SHALL BE MAINTAINED OVER ALL STORM DRAIN PIPES.



LOCATION MAP
SCALE: 1" = 500'

Raising Cane's Chicken Fingers
Restaurant Support Office
6800 Bishop Road, Plano, TX 75024
Tele: 972-769-3100 Fax: 972-769-3101

REVISIONS

REV	DATE	COMMENT	ISSUED BY / CHECKED BY
1	2023-04-10	PER ABINGTON TOWNSHIP COMMENTS	CM / KT

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PROJECT No.: PP2270001
DRAWN BY: SMH
CHECKED BY: KRT
DATE: 10.26.22
CAD I.D.: PP2270001-X-TTLB-PHPD

PROJECT:
PRELIMINARY/ FINAL MAJOR LAND DEVELOPMENT PLANS
FOR
RAISING CANE'S RESTAURANTS, LLC.

PROPOSED RESTAURANT #C0952
LAND DEVELOPMENT #LD-22-06
2820 WEST MORELAND ROAD
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

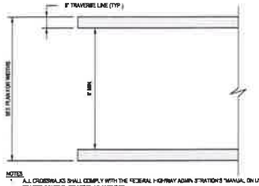
BOHLER
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
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SHEET TITLE:
UTILITY PLAN

SHEET NUMBER:
C7.0
17 OF 26

REVISION 1 - 2023-04-10

R:\2022\PP2270001\CAD\DRAWING\SITE PLAN SET\CIVIL SITE PLANS\PP2270001-DVP-1A---LAYOUT C1.0 UTILITY PLAN



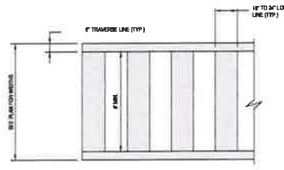
T-24 **STANDARD CROSSWALK DETAIL**

NOT TO SCALE

CROSSWALK DESIGN NOTES

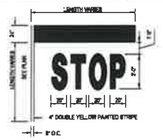
§2504.F(1 & 2)

CROSSWALKS SHALL BE AT LEAST 6 FEET WIDE BUT SHALL NOT EXCEED 10 FEET WIDE. IN THE BC BUSINESS CENTER ZONING DISTRICT, 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 6 INCHES IN WIDTH. INSTALLATION AND SELECTED MATERIALS SHALL BE DURABLE AND ABLE TO WITHSTAND VEHICULAR TRAFFIC.



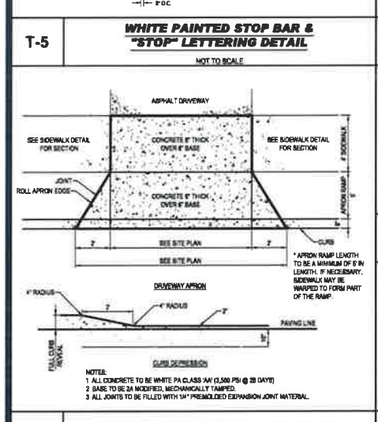
T-6 **WHITE PAINTED STOP BAR DETAIL**

NOT TO SCALE



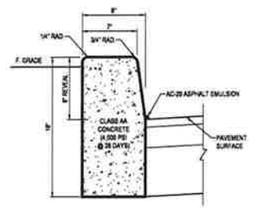
T-5 **WHITE PAINTED STOP BAR & "STOP" LETTERING DETAIL**

NOT TO SCALE



P-8 **CONCRETE DRIVEWAY APRON DETAIL**

NOT TO SCALE

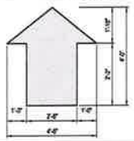


P-1 **TYPICAL CONCRETE CURB DETAIL**

NOT TO SCALE

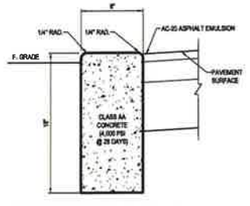
T-21 **HIGH VISIBILITY CROSSWALK DETAIL (PERPENDICULAR TO INTERSECTION)**

NOT TO SCALE



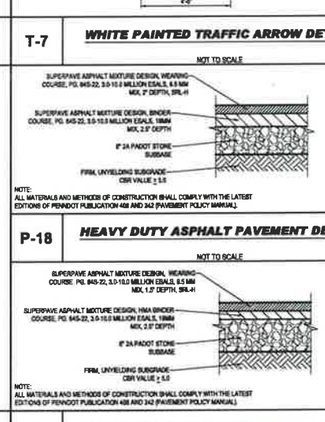
T-7 **WHITE PAINTED TRAFFIC ARROW DETAIL**

NOT TO SCALE



P-2 **TYPICAL FLUSH CONCRETE CURB DETAIL**

NOT TO SCALE

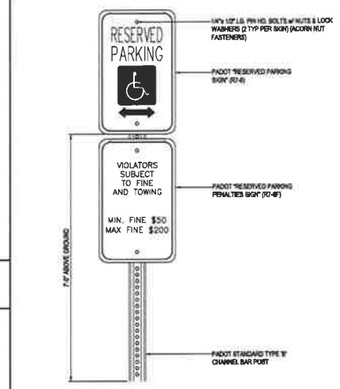


P-18 **HEAVY DUTY ASPHALT PAVEMENT DETAIL**

NOT TO SCALE

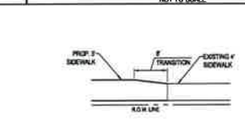
P-17 **STANDARD ASPHALT PAVEMENT DETAIL**

NOT TO SCALE



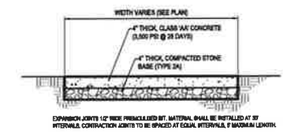
T-15 **RESERVED PARKING SPACE & PENALTIES SIGNS**

NOT TO SCALE



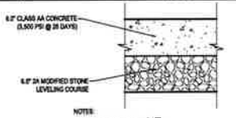
P-22 **SIDEWALK TIE-IN DETAIL**

NOT TO SCALE



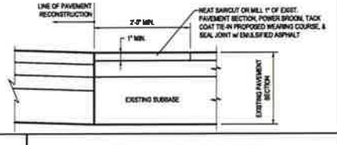
P-21 **CONCRETE SIDEWALK DETAIL**

NOT TO SCALE



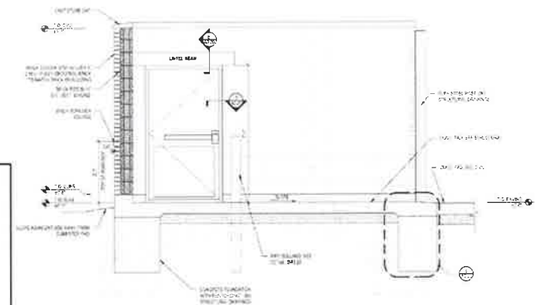
P-15 **CONCRETE PAVEMENT DETAIL**

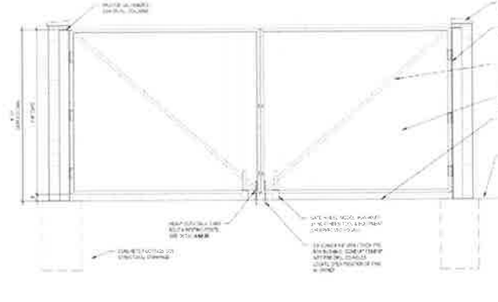
NOT TO SCALE

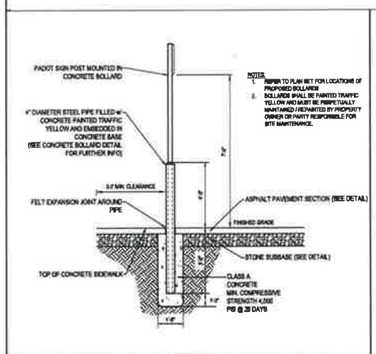


P-13 **PAVEMENT TIE-IN DETAIL**

NOT TO SCALE

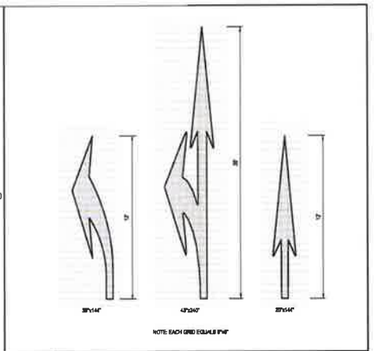






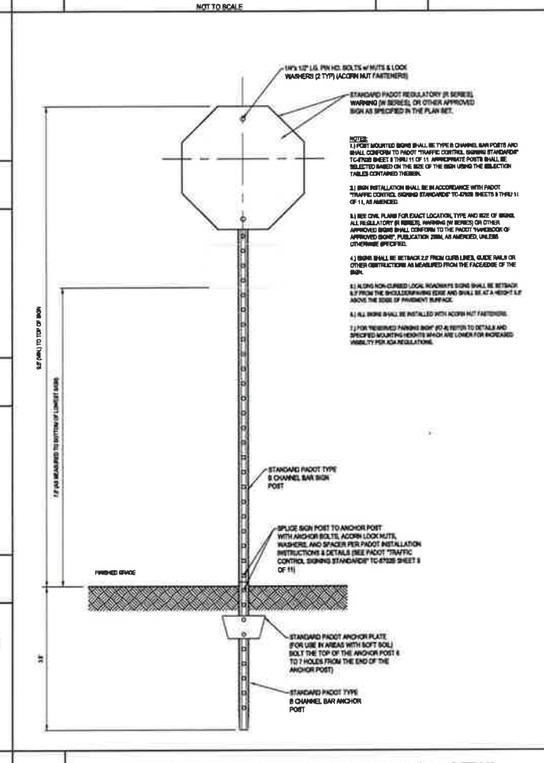
T-19 **SIGN WITHIN BOLLARD IN ASPHALT DETAIL**

NOT TO SCALE



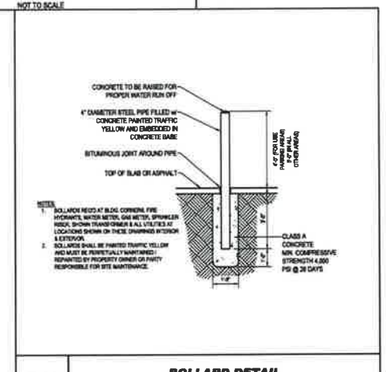
T-10 **WHITE PADOT PAVEMENT MARKING ARROW DETAIL**

NOT TO SCALE



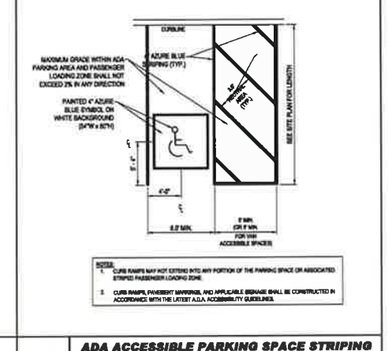
T-11 **STANDARD POLE MOUNTED SIGN INSTALLATION DETAIL**

NOT TO SCALE



T-20 **BOLLARD DETAIL**

NOT TO SCALE



T-13 **ADA ACCESSIBLE PARKING SPACE STRIPING (1 SPACE)**

NOT TO SCALE

LIST OF APPLICABLE PADOT DETAILS & STANDARDS

SIGNAGE: P.A.D.O.T. PUBLICATION 236
PEDESTRIAN SIGN - W11-2 (30" x 30" W/ FLUORESCENT YELLOW-GREEN BACKGROUND)
DOWNWARD POINTING ARROW SIGN - W16-7P (24" x 12" W/ FLUORESCENT YELLOW-GREEN BACKGROUND)

ADDITIONAL DETAILS ASSOCIATED WITH ON-SITE STORMWATER STRUCTURES AND PADOT ROAD IMPROVEMENTS ARE ON THE FOLLOWING STANDARD DETAILS FROM THE LATEST EDITION OF PennDOT PUBLICATION 72M:
(THE PERMITTEE IS REQUIRED TO PROVIDE THE CONTRACTOR WITH COPIES OF THE MOST CURRENT APPLICABLE RC DRAWINGS)

STANDARD DRAWING NUMBER	DRAWING NAME
RC - 26M	CONCRETE PAVEMENT REHABILITATION
RC - 28M	OVERLAY TRANSITIONS AND PAVING NOTCHES
RC - 30M	SUBSURFACE DRAINS
RC - 35M	STORMWATER MANHOLES
RC - 64M	CURBS AND GUTTERS
RC - 65M	CONCRETE MOUNTABLE CURBS
RC - 67M	CURB RAMPS AND SIDEWALKS

Raising Cane's Chicken Fingers
Restaurant Support Office
6800 Bishop Road, Plano, TX 75024
Tele: 972-769-3100 Fax: 972-769-3101

REVISIONS

REV	DATE	COMMENT	ISSUED BY (INITIALS)
1	2023-04-10	PER ABINGTON TOWNSHIP COMMENTS	CM KT

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PROJECT No.: PP2270001
DRAWN BY: BMM
CHECKED BY: KRT
DATE: 10.26.22
CAD I.D.: PP2270001-X-TTLB-PHPD

PROJECT:
PRELIMINARY/ FINAL MAJOR LAND DEVELOPMENT PLANS
FOR
RAISING CANE'S RESTAURANTS, LLC.

PROPOSED RESTAURANT #C0952
LAND DEVELOPMENT #LD-22-06

2820 WEST MORELAND ROAD
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

BOHLER //
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
www.BohlerEngineering.com

COMMONWEALTH OF PENNSYLVANIA — Kevin Tuttle — REGISTERED LANDSCAPE ARCHITECT

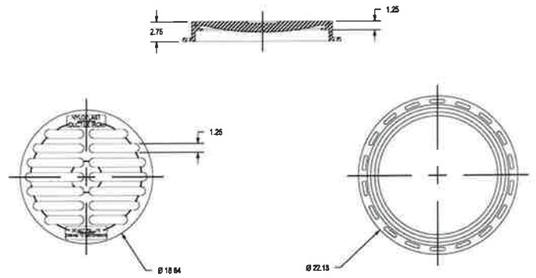
SHEET TITLE:
DETAILS

SHEET NUMBER:
C8.0
18 OF 28

REVISION 1 - 2023-04-10

1899CGS

APPROX. DRAIN AREA = 115.72 SQ IN
APPROX. WEIGHT WITH FRAME = 68.50 LBS



DIMENSIONS ARE FOR REFERENCE ONLY
ACTUAL DIMENSIONS MAY VARY
DIMENSIONS ARE IN INCHES
GRATE MEETS H-20 LOAD RATING
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT
LOCKING DEVICE AVAILABLE UPON REQUEST SEE DRAWING NO. 7001-110-029

THIS PRINT DISCLOSES SUBJECT MATTER IN WHICH NYLOPLAST HAS PROPRIETARY RIGHTS. THE RECEIPT OR POSSESSION OF THIS PRINT DOES NOT CONFER, TRANSFER, OR LICENSE THE USE OF THE DESIGN OR TECHNICAL INFORMATION SHOWN HEREIN. REPRODUCTION OF THIS PRINT OR ANY INFORMATION CONTAINED HEREIN, OR MANUFACTURE OF ANY ARTICLE HEREFROM, FOR THE DISCLOSURE TO OTHERS IS FORBIDDEN, EXCEPT BY SPECIFIC WRITTEN PERMISSION FROM NYLOPLAST.

DRAWN BY	ESC	MATERIAL	DUCTILE IRON
DATE	03-06-08		
REVISED BY	CCA	PROJECT RELEASE	
DATE	05-30-13		
DWG SIZE	A	SCALE 1:10	SHEET 1 OF 1

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BUFORD, GA 30518
PHN (770) 932-2440
FAX (770) 932-2486
www.nyloplast-us.com

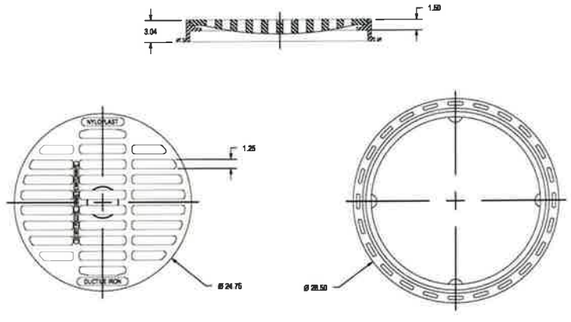
TITLE: 18 IN STANDARD GRATE ASSEMBLY - TYPE C

DWG NO. 7001-110-213 REV D

2499CGS

APPROX. DRAIN AREA = 194.80 SQ IN
APPROX. WEIGHT WITH FRAME = 124.90 LBS

EFFECTIVE WEIR LENGTH CALCULATIONS:
Area=
194.80=πR²
R= 7.57 IN.
D= 15.74 IN.



DIMENSIONS ARE FOR REFERENCE ONLY
ACTUAL DIMENSIONS MAY VARY
DIMENSIONS ARE IN INCHES
GRATE MEETS H-20 LOAD RATING
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT
LOCKING DEVICE AVAILABLE UPON REQUEST SEE DRAWING NO. 7001-110-024

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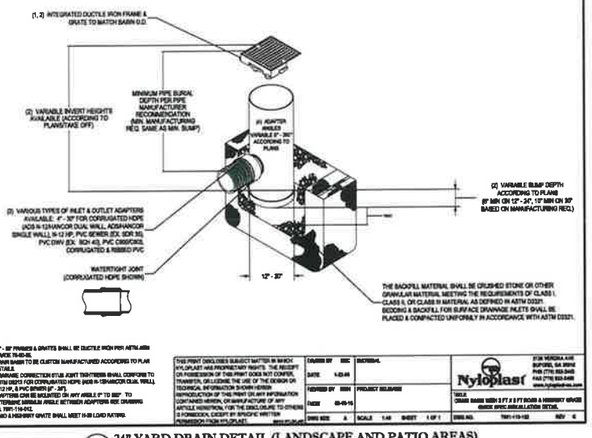
DRAWN BY	RSC	MATERIAL	DUCTILE IRON
DATE	03-06-08		
REVISED BY	CCA	PROJECT RELEASE	
DATE	05-30-13		
DWG SIZE	A	SCALE 1:10	SHEET 1 OF 1

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TITLE: 24 IN STANDARD GRATE ASSEMBLY - TYPE B

DWG NO. 7001-110-217 REV D

NYLOPLAST 2 FT X 2FT ROAD & HIGHWAY STRUCTURE: 32 _ _ AGS _ _ X



1 - 12" - 30" FRAMES & GRATES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS.
3 - DRAINAGE CORRECTION STUB JOINT TIGHTENER SHALL CONFORM TO ASTM D8210 FOR CORRUGATED HDPE (ADS N-12/ADVANCOR DUAL WALL N-12 HP, & PVC SEWER (8" - 24").
4 - ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 90°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-116-012.
5 - ROAD & HIGHWAY GRATE SHALL MEET H-20 LOAD RATING.

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DRAWN BY	ESC	MATERIAL	
DATE	1-23-08		
REVISED BY	DSH	PROJECT RELEASE	
DATE	03-05-15		
DWG SIZE	A	SCALE 1:40	SHEET 1 OF 1

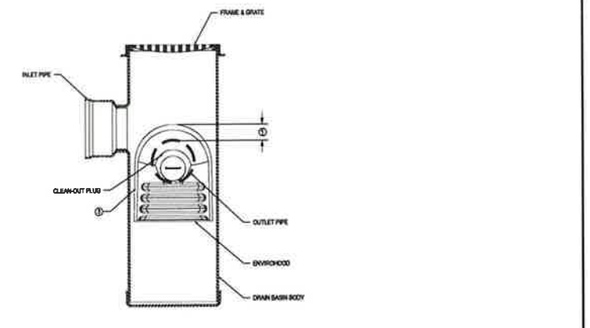
Nyloplast

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BUFORD, GA 30518
PHN (770) 932-2440
FAX (770) 932-2486
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TITLE: GRADE BASIN WITH 2 FT X 2 FT GRATE & HIGHWAY GRADE 4 BASIC SPEC INSTALLATION DETAIL

DWG NO. 7001-110-102 REV C

24" YARD DRAIN DETAIL (LANDSCAPE AND PATIO AREAS)
SCALE: N.T.S.



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DRAWN BY	JJC	MATERIAL	
DATE	8-29-13		
APVD BY	JJC	PROJECT RELEASE	
DATE	8-29-13		
DWG SIZE	A	SCALE 1:10	SHEET 1 OF 1

Nyloplast

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TITLE: ENVIROHOOD FIELD INSTALLATION

DWG NO. 7004-110-113 REV A

YARD DRAIN ENVIROHOOD DETAIL
SCALE: N.T.S.

Raising Cane's Chicken Fingers
Restaurant Support Office
6800 Bishop Road, Plano, TX 75024
Tele: 972-769-3100 Fax: 972-769-3101

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REV	DATE	COMMENT	DRAWN BY / CHECKED BY
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PROJECT No.: PP2270001
DRAWN BY: BMM
CHECKED BY: KRT
DATE: 10.26.22
CAD I.D.: PP2270001-X-TTLB-PHPD

PROJECT:
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FOR
RAISING CANE'S RESTAURANTS, LLC.

PROPOSED RESTAURANT #C0952
LAND DEVELOPMENT #LD-22-06
2520 WEST MORELAND ROAD
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

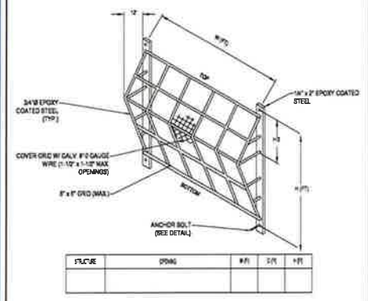
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SHEET TITLE:
DETAILS

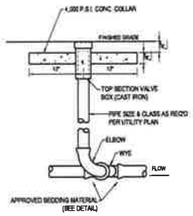
SHEET NUMBER:
C8.1
18 OF 26

REVISION 1 - 2023-04-10



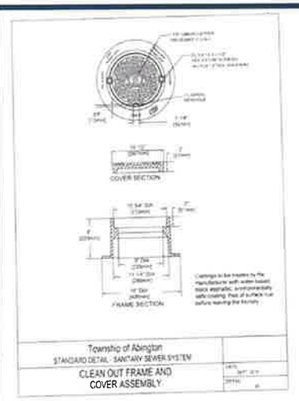
R-8 ***TRASH RACK-SAFETY GRATE FOR OUTLET STRUCTURE WEIR***

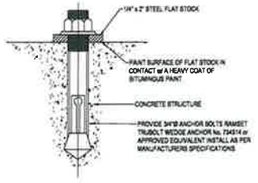
NOT TO SCALE



S-13 ***TYPICAL CLEANOUT DETAIL (LANDSCAPE AREAS)***

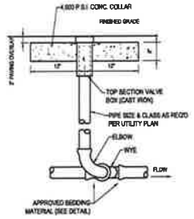
NOT TO SCALE





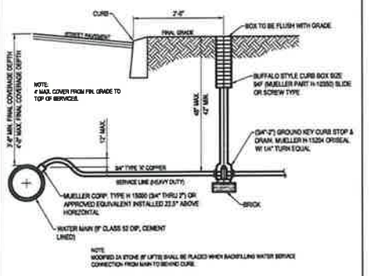
R-10 ***ANCHOR BOLT FOR TRASH RACKS***

NOT TO SCALE



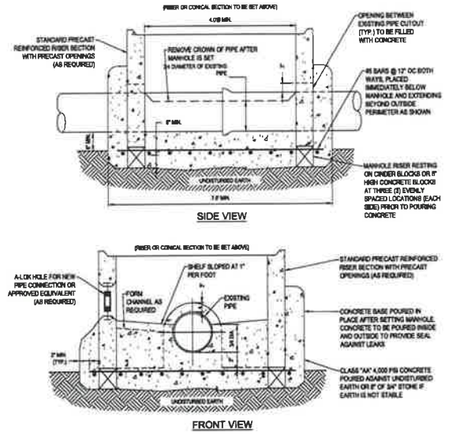
S-12 ***TYPICAL CLEANOUT DETAIL (PAVED AREAS)***

NOT TO SCALE



W-2 ***WATER SERVICES CONNECTION DETAIL***

NOT TO SCALE



R-5 ***DOGHOUSE MANHOLE DETAIL***

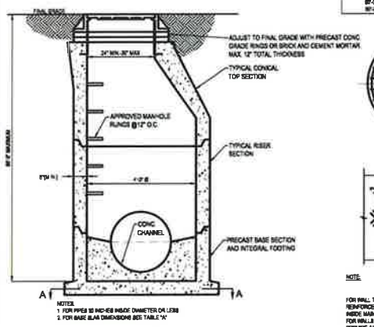
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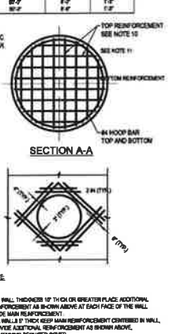


TABLE A
BASE SLAB DIMENSIONS

MAX. DEPTH FROM TOP OF MANHOLE TO TOP OF FOOTING	AS DESIGNED (SEE NOTE 12)	
	FOOTING DIAMETER	FOOTING THICKNESS
10'-0"	6'-0"	1'-0"
20'-0"	6'-0"	1'-0"
30'-0"	6'-0"	1'-0"
40'-0"	6'-0"	1'-0"
50'-0"	6'-0"	1'-0"
60'-0"	6'-0"	1'-0"



SECTION



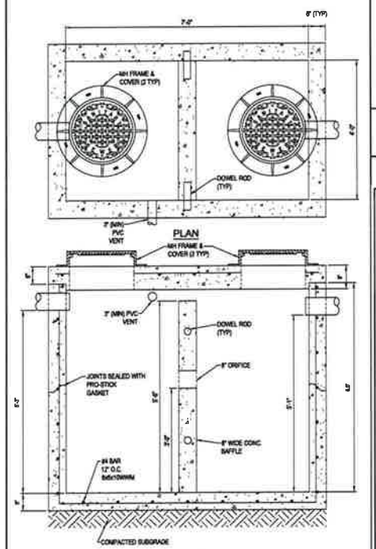
NOTE:
FOR WALL THICKNESS 10" THICK OR GREATER PLACE ADDITIONAL REINFORCEMENT AS SHOWN ABOVE AT EACH FACE OF THE WALL INSIDE MAIN REINFORCEMENT.
FOR WALLS 9" THICK KEEP MAIN REINFORCEMENT CENTERED IN WALL. PROVIDE ADDITIONAL REINFORCEMENT AS SHOWN ABOVE, MAINTAINING REQUIRED COVER.

REINFORCEMENT DETAIL AT OPENINGS

NOTES:
1. PRECAST MANHOLES, MEETING THE REQUIREMENTS OF PUBLICATION 408 SPECIFICATIONS, SECTION 714, MAY BE SUBSTITUTED FOR THE STANDARD CAST-IN-PLACE MANHOLE.
2. CONSTRUCTION NOTES:
A. CONSTRUCT IN ACCORDANCE WITH PENNDOT PUBLICATION 408 SPECIFICATIONS, SECTIONS 639, 706, 714 AND ASTM C-478-95, STANDARD SPECIFICATIONS FOR PRECAST REINFORCED CONCRETE MANHOLE SECTIONS, AS MODIFIED HERE IN.
B. MINIMUM CONCRETE CLASS AA.
C. PROVIDE EPOXY COATED STEEL REINFORCEMENT (IN ACCORDANCE WITH ASTM A-185), STEEL WELDED WIRE FABRIC (IN ACCORDANCE WITH ASTM A-885 & A615), PLAIN BILLET STEEL BARS (IN ACCORDANCE WITH ASTM A615) OR DEFORMED BILLET STEEL BARS. PROVIDE MINIMUM YIELD STRENGTH OF 60,000 PSI.
D. CLEAR COVER FOR STEEL: WALLS 3" FOOTINGS 3" (TOP BARS), 1 1/2" (BOTTOM BARS) 1 1/2" SIDE COVER.
3. PROVIDE 12" MINIMUM HORIZONTAL CLEARANCE BETWEEN OPENINGS LOCATED AT THE BASE DEPTH. PIPES NOT LOCATED AT THE BASE DEPTH MUST BE LOCATED VERTICALLY AT LEAST ONE TIMES MAXIMUM OPENING DIAMETER APART.
4. FOR RISERS OR BASE SECTIONS WITH OPENINGS, PROVIDE A MINIMUM HEIGHT OF SECTION EQUAL TO TWO TIMES THE LARGEST OPENING. CENTER OF OPENING TO BE LOCATED AT LEAST ONE TIMES THE OPENING FROM THE CLOSEST JOINT BETWEEN RISERS.
5. FOR PRECAST RISER OR BASE SECTIONS WITH ONE OPENING LOCATED AT DEPTHS TO 20' OR FOR SECTIONS WITH TWO OR MORE OPENINGS, LOCATED AT A DEPTH OF 14 FEET AND LESS, PROVIDE CIRCUMFERENTIAL REINFORCEMENT IN ACCORDANCE WITH REINFORCEMENT DETAIL AT OPENINGS.
FOR RISERS OR BASE SECTIONS WITH 1 OR MORE OPENINGS, LOCATED AT DEPTHS GREATER THAN 20 FEET, BUT LESS THAN OR EQUAL TO 28 FEET, PROVIDE CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.44 INCH VERTICAL FOOT FOR THE DEPTH OF THE RISER OR BASE SECTION
FOR RISERS OR BASE SECTIONS WITH 2 OR MORE OPENINGS, LOCATED AT DEPTHS GREATER THAN 28 FEET, USE A 10 INCH THICK WALL RISER OR BASE SECTION WITH CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.18 INCH VERTICAL FOOT EACH FACE
RISERS OR BASE SECTIONS WITH HOLES TO BE CLEARLY MARKED WITH MINIMUM ALLOWABLE DEPTH.
6. PROVIDE ADDITIONAL REINFORCEMENT BARS AROUND OPENINGS AS SHOWN ON REINFORCEMENT DETAILS AT OPENINGS
7. PROVIDE MANHOLE STEPS MEETING THE REQUIREMENTS OF PUBLICATION 408 SPECIFICATIONS, SECTION 850.3(C). ALTERNATE CONFIGURATIONS AND DIMENSIONS, AS APPROVED BY THE ENGINEER, MAY BE USED.
8. PROVIDE MINIMUM 7" SECTION DIMENSION FOR METAL STEPS. PROVIDE MINIMUM 9" SECTION DIMENSION FOR NON-DETERIORATING MATERIAL STEPS.
9. MECHANICAL ANCHOR REQUIRED FOR INSTALLATION OF STEPS WITHOUT HOOKS.
10. FOR FOOTING TOP REINFORCEMENT, BOTH DIRECTIONS, USE NO. 10 @ BARS AT 12" FOR DEPTHS TO 20' OR LESS (#5FT BARS FOR DEPTHS TO 30' AND #6 #5FT BARS FOR DEPTHS GREATER THAN 30' 4" MAXIMUM SPACING FOR #5FT.
11. FOR FOOTING BOTTOM REINFORCEMENT, BOTH DIRECTIONS, USE NO. 10 (#) BARS AT 12" FOR DEPTHS TO 40' OR LESS (#5FT BARS FOR DEPTHS TO 20' AND #6 #5FT BARS FOR DEPTHS GREATER THAN 30'. 4" MAXIMUM SPACING FOR #5FT.
12. A SAFE BEARING CAPACITY OF 2.5 TONS PER SF UNDER THE ENTIRE SLAB IS ASSUMED TO DETERMINE THE BASE SIZE. WHEN THE SUBSOIL IS EXTREMELY POOR, PROCEED WITH CONSTRUCTION ONLY AFTER THE ENGINEER SPECIFIES ADEQUATE BASE DESIGN

R-4 ***PRECAST STORM MANHOLE DETAILS***

NOT TO SCALE

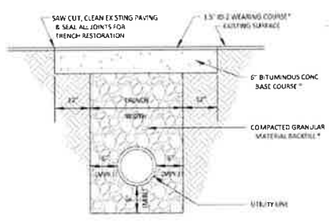


SECTION

S-10 ***GREASE TRAP DETAIL***

NOT TO SCALE

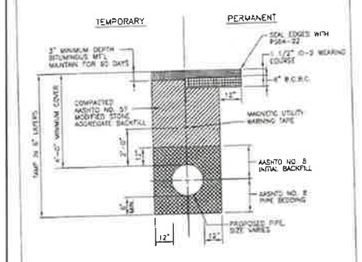
ABINGTON TOWNSHIP STANDARD



* NOTE: PAVEMENT AND TRENCH RESTORATION SHALL BE IN ACCORDANCE WITH PENNSYLVANIA CODE 67, CHAPTER 459 (3/27/99) AND PUBLICATION 408-1997.

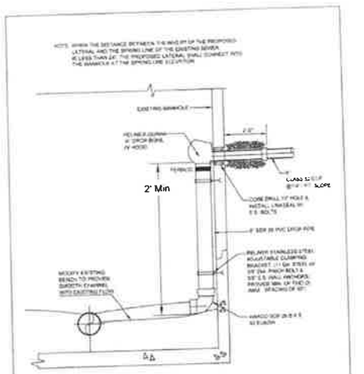
PAVEMENT REPLACEMENT DETAIL

NOT TO SCALE



Township of Abington
STANDARD DETAIL - SANITARY SEWER

BACKFILL AND PAVEMENT RESTORATION DETAIL FOR STATE / TWP. ROADS



Township of Abington
STANDARD DETAIL - SANITARY SEWER SYSTEM

6" LATERAL CONNECTION TO AN EXISTING SANITARY MANHOLE

Restaurant Support Office
6800 Bishop Road, Plano, TX 75024
Tele: 972-769-3100 Fax: 972-769-3101

REVISIONS

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PROJECT No.: PP2270001
DRAWN BY: BMM
CHECKED BY: KRT
DATE: 10.26.22
CAD I.D.: PP2270001-X-TTLB-PHPD

PROJECT:
PRELIMINARY/ FINAL MAJOR LAND DEVELOPMENT PLANS
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Phone: (267) 402-3400
Fax: (267) 402-3401
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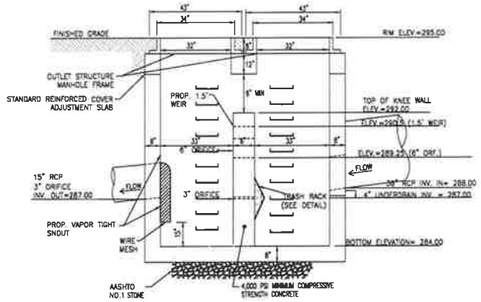
Kevin Tatter — COMMONWEALTH OF PENNSYLVANIA

SHEET TITLE:
DETAILS

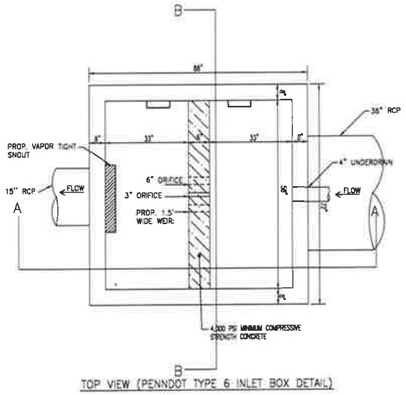
SHEET NUMBER:
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REVISION 1 - 2023-04-10

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SECTION A–A
SIDE VIEW (PENNDOT TYPE 6 INLET BOX DETAIL)

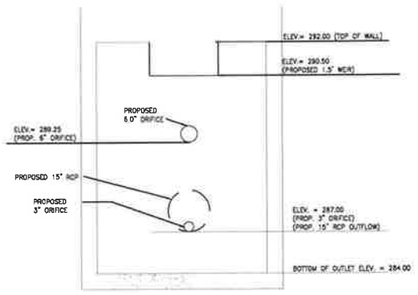


TOP VIEW (PENNDOT TYPE 6 INLET BOX DETAIL)

NOTES:

1.) FURNISH OUTLET BOX WITH COPOLYMER PROPYLENE STEPS.
2.) ALL JOINTS WITHIN OUTLET STRUCTURE TO BE WATERTIGHT.
3.) IF THE STRUCTURE IS NOT MONOLITHIC, PROVIDE CONSTRUCTION JOINTS OR KEYS FOR RISER SECTIONS AND PRECAST COVER ADJUSTMENT SLABS.
4.) CONCRETE SHALL BE 4,000 PSI MINIMUM COMPRESSIVE STRENGTH.
5.) A 30" MINIMUM INTERIOR CLEAR OPENING SHALL BE REQUIRED IN THE COVER ADJUSTMENT SLAB.
6.) WEIR WALL TO BE ATTACHED TO INLET BOX WITH 4" REBAR.
7.) WEIR WALL WITHIN OUTLET CONTROL STRUCTURE MUST BE POURED MONOLITHICALLY.

DB 6 **PROB. BASIN OUTLET STRUCTURE OS01**
SCALE: N.T.S. REV.: 2017.06.06



SECTION B–B
FRONT VIEW (NTS)

PCSM - GENERAL BMP NOTES

1. BOHLER ENGINEERING SHALL BE NOTIFIED OF PRE-CONSTRUCTION MEETING DATE AND BMP CONSTRUCTION SCHEDULE.
2. THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY TO LIMIT THE COMPACTION IN THE PROPOSED BMP BOTTOMS.
3. REFER TO THE BMP CONSTRUCTION DETAILS FOR THE CONSTRUCTION OF ALL PROPOSED STORMWATER MANAGEMENT BMPs.
4. REFER TO THE PCSWM PLAN AND DETAILS FOR SPECIFIC BMP CONSTRUCTION GUIDELINES.
5. AS-BUILT PLANS OF THE STORMWATER BMPs FOR EACH PROJECT PHASE SHALL BE PROVIDED WITHIN SIX MONTHS FOLLOWING THE COMPLETION OF EACH PHASE. THE AS-BUILT PLANS SHALL BE SIGNED AND SEALED BY A PA REGISTERED PROFESSIONAL SURVEYOR.

LONG-TERM OPERATION AND MAINTENANCE SCHEDULE

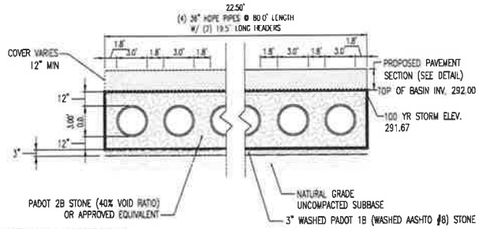
§102.8(f)(10)

1. UNTIL THE SITE IS STABILIZED AND DURING THE CONSTRUCTION ACTIVITIES, ALL BMPs MUST BE MAINTAINED PROPERLY BY CONTRACTOR. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL BMPs AS SPECIFIED. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN-OUT, REPAIR, REPLACEMENT, RE-GRADING, RE-SEEDING, RE-MULCHING AND RE-NETTING MUST BE PERFORMED IMMEDIATELY AND IN ACCORDANCE WITH THESE PROCEDURES, PLANS, AND DETAILS. ANY AREAS DISTURBED DURING MAINTENANCE MUST BE STABILIZED IMMEDIATELY IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS.
2. ALL SITE INSPECTIONS MUST BE DOCUMENTED IN AN INSPECTION LOG KEPT FOR THIS PURPOSE INDICATING THE COMPLIANCE ACTIONS AND THE DATE, TIME AND NAME OF THE PERSON CONDUCTING THE INSPECTION. THE INSPECTION LOG MUST BE KEPT ON SITE AT ALL TIMES AND MADE AVAILABLE TO THE DISTRICT UPON REQUEST.
3. SHOULD ON-SITE EROSION OCCUR FROM THE LANDSCAPED AREAS, THE SOURCE OF EROSION SHALL BE IMMEDIATELY STABILIZED AND THE INLETS AND STORMWATER PIPING SHALL BE CHECKED FOR ACCUMULATION AND CLEARED IF ACCUMULATION OF SEDIMENT EXISTS.
4. HEAVY CONSTRUCTION VEHICLES SHALL NOT BE PARKED ON OR DRIVEN OVER BMP FACILITIES AND CARE SHOULD BE TAKEN TO AVOID EXCESSIVE COMPACTION BY EQUIPMENT, INCLUDING MOWERS.
5. REMOVE ACCUMULATED SEDIMENT FROM THE FACILITIES AS REQUIRED. RESTORE ORIGINAL CROSS-SECTION IF NECESSARY. PROPERLY DISPOSE OF SEDIMENT AS SPECIFIED.

PRESSER REALTY LP IS RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF THE STORMWATER MANAGEMENT BMPs AS DESCRIBED HEREIN.

UNDERGROUND DETENTION BASIN GEOTEXTILE NOTES:

1.) GEOTEXTILE MUST CONSIST OF POLYPROPYLENE FIBERS AND MEET THE FOLLOWING SPECIFICATIONS (AASHTO CLASS 1 OR CLASS 2 GEOTEXTILE IS RECOMMENDED):
GRAB TENSILE STRENGTH (ASTM-D4632): ≥ 120 LBS
MULLEN BURST STRENGTH (ASTM-D3786): ≥ 225 PSI
FLOW RATE (ASTM-D4491): ≥ 95 GAL/MIN/FT2
UV RESISTANCE AFTER 500 HRS (ASTM-D4355): ≥ 70%
HEAT-SET OR HEAT-CALENDARED FABRICS ARE NOT PERMITTED.



STORMWATER DETENTION BASIN SPECIFICATIONS:

1.) UTILIZE A UNIFORMLY GRADED CRUSHED STONE (2B), PROVIDED THAT THE STONE IS PROPERLY CLEANED AND THAT A MINIMUM VOID RATIO OF 40% IS PROVIDED. HIGHER VOID THE RATIOS MAY BE SELECTED BY THE DESIGN ENGINEER, AND IF SO, THE DESIGN VOID RATIO SHALL GOVERN. IN ORDER TO INSURE THAT THE STONE USED IS PROPERLY CLEANED, IN ADDITION TO AASHTO DESIGNATION: M43-88 GRADATION, THE PERCENT PASSING THE NO. 200 SIEVE SHALL NOT EXCEED 0.2%

2.) A CERTIFICATION FROM THE MANUFACTURER DOCUMENTING THE FULL GRADATION AND VOID RATIO SHALL BE OBTAINED.

3.) WHEN IN THE OPINION OF THE TOWNSHIP INSPECTOR OR THE GEOTECHNICAL ENGINEER THE STONE IS NOT CONSISTENT WITH THE APPROVED SAMPLE, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE THE STONE RETESTED AND CERTIFIED BEFORE ANY ADDITIONAL STONE IS INSTALLED OR DELIVERED.

4.) ALL STONE SAMPLES AND CERTIFICATIONS SHALL BE SUBMITTED TO THE TOWNSHIP 14 DAYS PRIOR TO THE START OF STORMWATER DETENTION BASIN CONSTRUCTION.

5.) THE BOTTOM OF THE EXCAVATION SHALL BE SCARIFIED PRIOR TO THE PLACEMENT OF AGGREGATE.

6.) ONLY CLEAN AGGREGATE, FREE OF DEBRIS, SHALL BE ALLOWED.

7.) THE TOP, BOTTOM AND ALL SIDES OF THE BEDS SHALL BE COVERED WITH CONTINUOUS NON-WOVEN GEOTEXTILE, MIRAFI 140N, AMOCO 4547, GEOTEX 451, OR APPROVED EQUIVALENT.

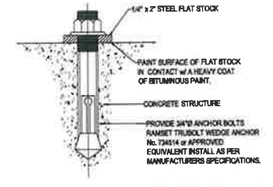
8.) CONSTRUCTION OF THE FACILITY SHALL PREVENT SILT FROM CLOGGING THE AGGREGATE BACKFILL.

9.) CONTRACTOR TO REVIEW AND IMPLEMENT PIPE BEDDING AND BACKFILL REQUIREMENTS RECOMMENDED BY THE SPECIFIC PIPE MANUFACTURER.

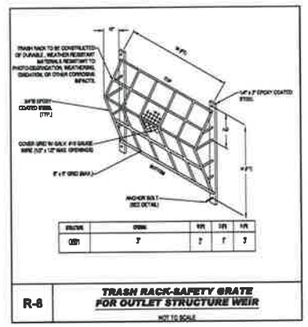
10.) THE BEDS SHALL BE BACKFILLED WITH CLEAN WASHED AGGREGATE AND SHALL BE KEPT CLEAN OF SOIL/SEDIMENT DURING THE INSTALLATION PROCESS. IF INSPECTION INDICATES THAT SOIL/SEDIMENT HAS CONTAMINATED THESE ITEMS, THE MATERIALS SHALL BE REPLACED AND/OR CLEANED AS NECESSARY.

11.) THE USE OF WATERTIGHT CONNECTIONS IS REQUIRED IN SINKHOLE AREAS.

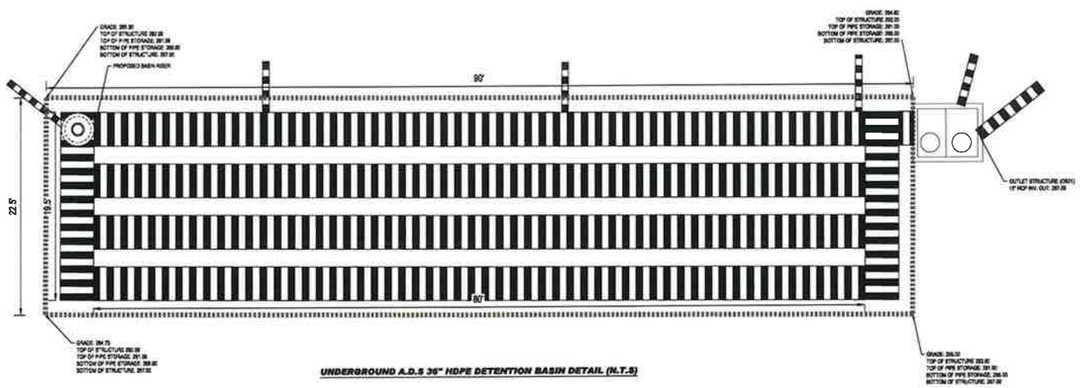
B S3 CROSS SECTION OF SUBSURFACE DETENTION BASIN (UB#1)
SCALE: N.T.S.



R S7 ANCHOR BOLT DETAIL FOR TRASH RACKS
SCALE: N.T.S. REV.: 2019.07.17



R-6 **TRASH RACK-SAFETY GRATE FOR OUTLET STRUCTURE WEIR**
NOT TO SCALE



UNDERGROUND A.D.S 36" HDPE DETENTION BASIN DETAIL (N.T.S)

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Raising Cane's Chicken Fingers
Restaurant Support Office
6800 Bishop Road, Plano, TX 75024
Tele: 972-769-3100 Fax: 972-769-3101

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1	2023-04-10	PER ABINGTON TOWNSHIP COMMENTS	CM / KT

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PROJECT No.: PP2270001
DRAWN BY: BMM
CHECKED BY: KRT
DATE: 10.28.22
CAD I.D.: PP2270001-X-TTLB-PHPD

PROJECT:
PRELIMINARY/ FINAL MAJOR LAND DEVELOPMENT PLANS
FOR
RAISING CANE'S RESTAURANTS, LLC.

PROPOSED RESTAURANT #C0952
LAND DEVELOPMENT #LD-22-06
2620 WEST MORELAND ROAD
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

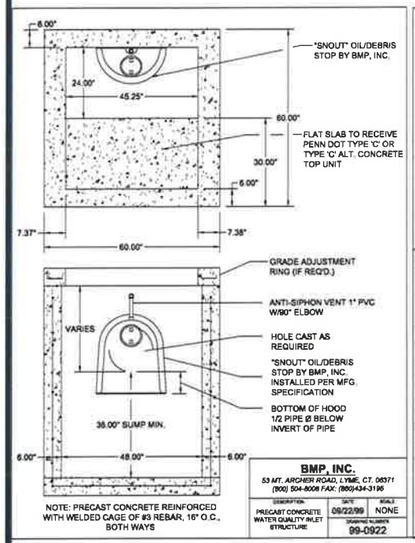
BOHLER
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
www.BohlerEngineering.com

COMMONWEALTH OF PENNSYLVANIA — KEVIN T. TUTTLE — PROFESSIONAL ENGINEER

SHEET TITLE:
DETAILS

SHEET NUMBER:
C9.0
21 OF 26

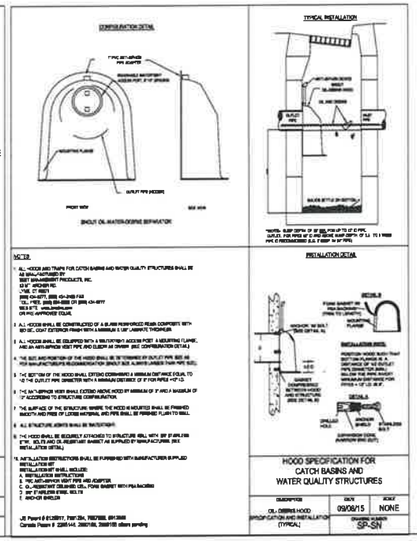
REVISION 1 - 2023-04-10



NOTE: PRECAST CONCRETE REINFORCED WITH WELDED CAGE OF #3 REBAR, 16" O.C., BOTH WAYS

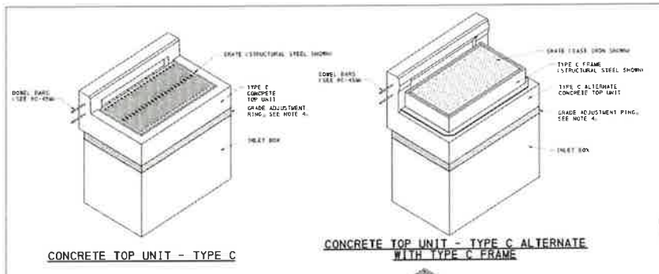
BMP, INC.
53 MT. ARCHER ROAD, LYME, CT. 06371
(800) 504-8008 FAX: (860)434-3196

DESCRIPTION	DATE	SCALE
PRECAST CONCRETE WATER QUALITY INLET STRUCTURE	09/22/99	NONE
	DRAWING NUMBER	99-0922



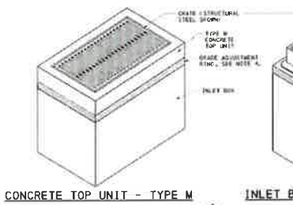
HOOD SPECIFICATION FOR CATCH BASINS AND WATER QUALITY STRUCTURES

DESCRIPTION	DATE	SCALE
OIL/DEBRIS HOOD SPECIFICATION AND INSTALLATION (TYPICAL)	09/06/15	NONE
	DRAWING NUMBER	SP-SN

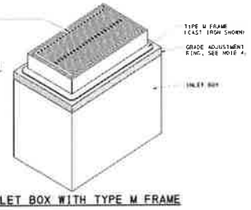


CONCRETE TOP UNIT - TYPE C

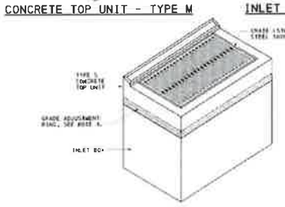
CONCRETE TOP UNIT - TYPE C ALTERNATE WITH TYPE C FRAME



CONCRETE TOP UNIT - TYPE M

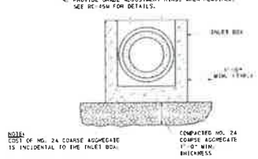


INLET BOX WITH TYPE M FRAME



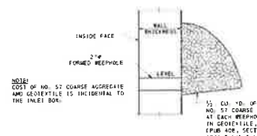
CONCRETE TOP UNIT - TYPE S

NOTES:
1. FOR ADDITIONAL NOTES, SEE SHEETS 1 - 3.
2. STANDARD INLET BOXES SHOWN, PROVIDE TOP SLANT FOR OTHER INLET BOX TYPES.
3. SEE RC-45M FOR DETAILS FOR THE CONCRETE TOP UNITS, FRAMES, AND GRATES.
4. PROVIDE GRADE ADJUSTMENT RINGS WHEN REQUIRED. SEE RC-45M FOR DETAILS.



NOTE: COST OF NO. 2A COARSE AGGREGATE IS INCIDENTAL TO THE INLET BOX.

INLET BOX SUBBASE PREPARATION DETAIL
(SEE FIELD CONSTRUCTION NOTES ON SHEET 1)



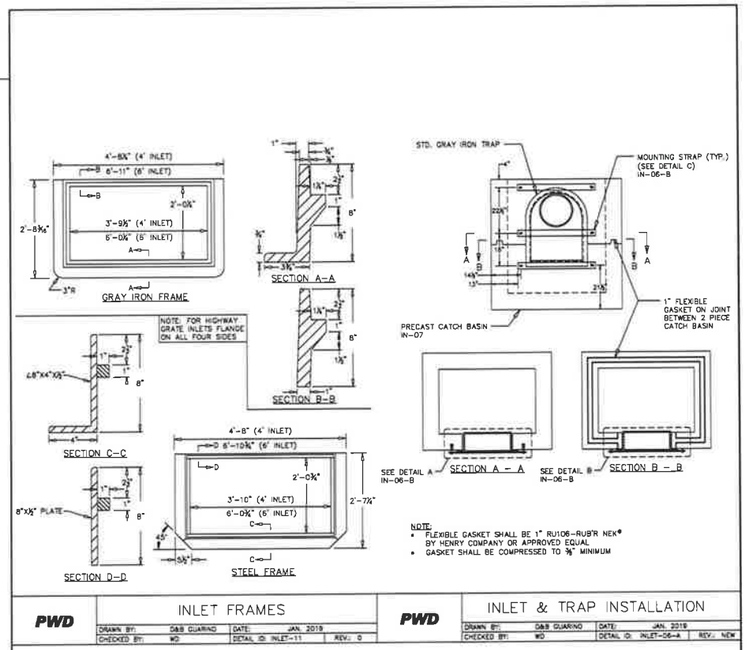
NOTE: COST OF NO. 57 COARSE AGGREGATE AND GEOTEXTILE IS INCIDENTAL TO THE INLET BOX.

WEEPHOLE DETAIL
(SEE GENERAL NOTE 15 ON SHEET 1)

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF PROJECT DELIVERY

INLET BOXES
INLET ASSEMBLIES - 1

RECOMMENDED SEPT. 15, 2010	RECOMMENDED SEPT. 15, 2010	SHT. 4 OF 34
CHIEF, ENGINEERING DISTRICT	DIRECTOR, BUREAU OF PROJECT DELIVERY	RC-46M



NOTE:
- FLEXIBLE GASKET SHALL BE 1" RU106-RUB'R NEK® BY HENRY COMPANY OR APPROVED EQUAL
- GASKET SHALL BE COMPRESSED TO ⅜" MINIMUM

PWD	INLET FRAMES			PWD	INLET & TRAP INSTALLATION		
DRAWN BY:	D&B GUARINO	DATE: JAN. 2019		DRAWN BY:	D&B GUARINO	DATE: JAN. 2019	
CHECKED BY:	WD	DETAIL ID: INLET-11	REV: 0	CHECKED BY:	WD	DETAIL ID: INLET-06-A	REV: NEW

I-8

INLET FRAMES
INLET & TRAP INSTALLATION
NOT TO SCALE

Restaurant Support Office
6800 Bishop Road, Plano, TX 75024
Tele: 972-769-3100 Fax: 972-769-3101

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PROJECT No.:	PP2270001
DRAWN BY:	BMM
CHECKED BY:	KRT
DATE:	10.26.22
CAD I.D.:	PP2270001-X-TTLB-PHPO

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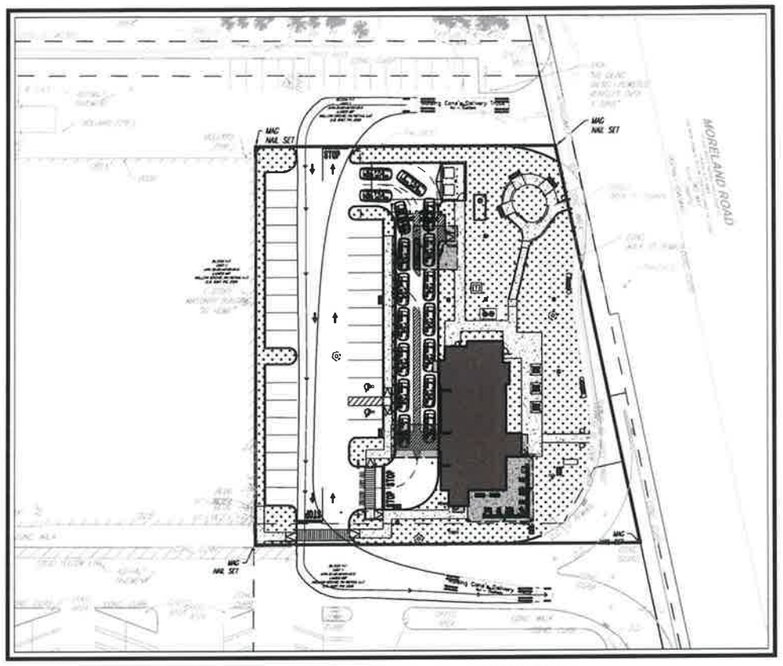
COMMONWEALTH OF PENNSYLVANIA Kevin Tatlo REGISTERED ENGINEER

SHEET TITLE:
DETAILS

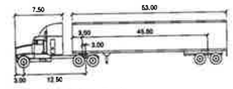
SHEET NUMBER:
C9.1
22 OF 26

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RAISING CANE'S DELIVERY TURNING PLAN



Raising Cane's Delivery Truck

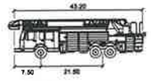
	feet		
Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.00	Steering Angle	: 28.4
Tractor Track	: 8.00	Articulating Angle	: 75.0
Trailer Track	: 8.50		

Raising Cane's Delivery Truck
NJ - Custom

ON-SITE DELIVERIES TO TAKE PLACE DURING OFF HOURS WHEN STORE IS CLOSED.



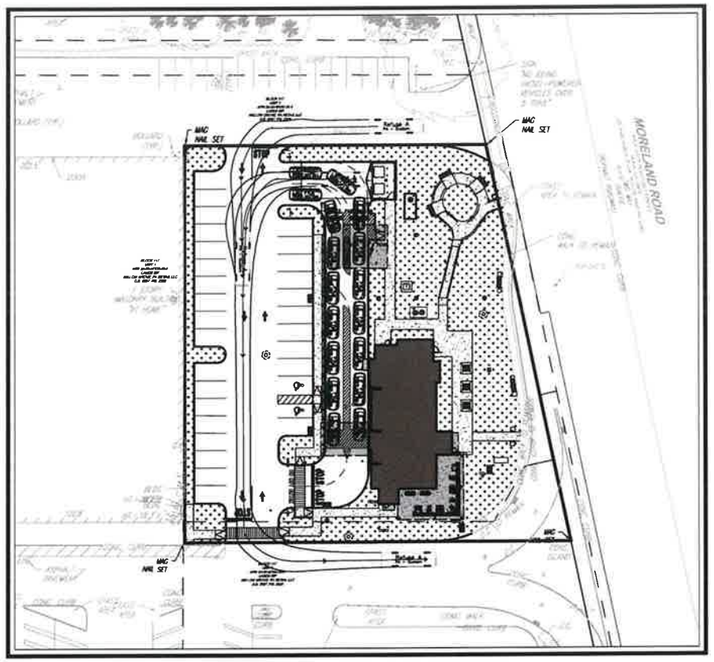
LOCATION MAP
SCALE: 1" = 500'



Fire-Truck

	feet
Width	: 7.83
Track	: 7.83
Lock to Lock Time	: 6.0
Steering Angle	: 40.0

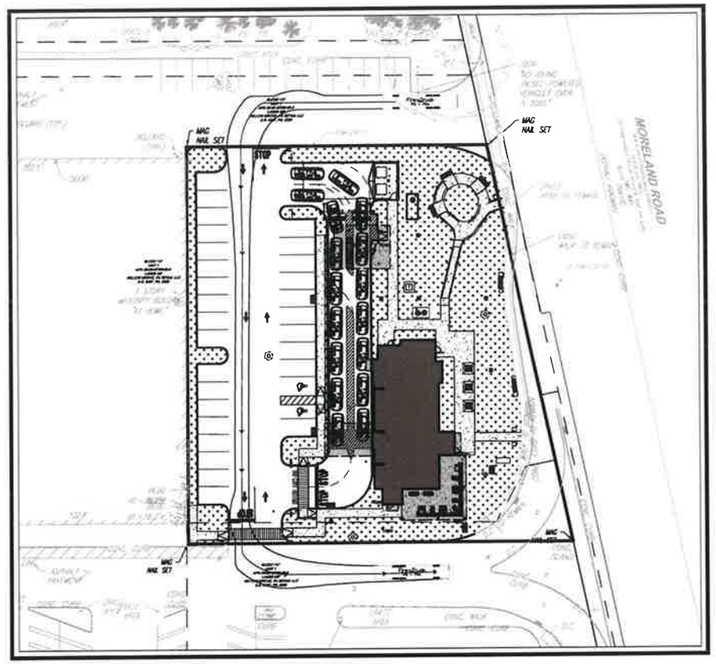
Fire-Truck
PA - Fire



GARBAGE TRUCK TURNING PLAN



Refuse A
PA - Custom



FIRE TRUCK TURNING PLAN

40 20 10 0 40
1"=40'

Restaurant Support Office
6800 Bishop Road, Plano, TX 75024
Tele: 972-769-3100 Fax: 972-769-3101

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	2023-04-18	PER ABINGTON TOWNSHIP COMMENTS	CM / KT

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PROJECT No.: PP2270001
DRAWN BY: BMM
CHECKED BY: KRT
DATE: 10.26.22
CAD I.D.: PP2270001-X-TTLB-PHPD

PROJECT:
PRELIMINARY/ FINAL MAJOR LAND DEVELOPMENT PLANS
FOR
RAISING CANE'S RESTAURANTS, LLC.

PROPOSED RESTAURANT #C0952
LAND DEVELOPMENT #LD-22-06

2820 WEST MORELAND ROAD
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

BOHLER //
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
www.BohlerEngineering.com

KENNETH R. TATTA — COMMONWEALTH OF PENNSYLVANIA

SHEET TITLE:
VEHICLE TURNING PLAN

SHEET NUMBER:
C10.0
23 OF 26

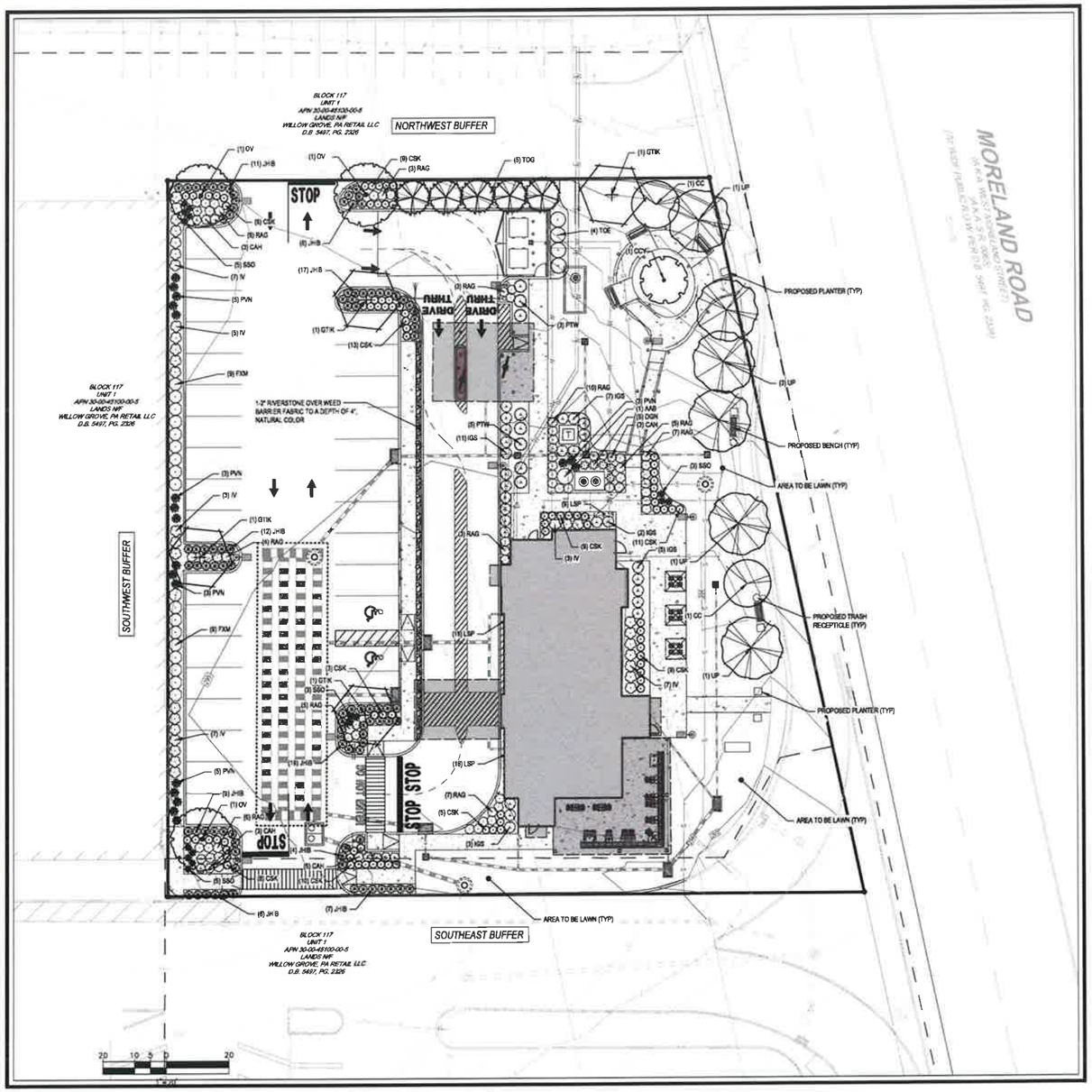
REVISION 1 - 2023-04-18

D:\BOHLER\PROJECTS\RAISING CANES\PP2270001\CAD\SHEETS\PHASE 1 SITE PLAN\PP2270001-X-TTLB-PHPD.DWG - Layout: C10.0 - Plotted: 4/18/2023 - 2:48 PM - By: KRISTEN TATTA

GENERAL NOTES:

1. THIS PLAN IS TO BE UTILIZED FOR LANDSCAPE PURPOSES ONLY.
2. ALL DISTURBED UNPAVED AREAS, EXCLUDING PLANTING BEDS, ARE TO BE INSTALLED AS LAWN IN ACCORDANCE WITH LANDSCAPE SPECIFICATION #2.C , UNLESS OTHERWISE STATED ON THIS PLAN.
3. SHRUBS PLANTED ALONG HEAD-IN PARKING STALLS SHALL BE INSTALLED TO ALLOW A CLEARANCE OF TWO FEET FROM FACE OF CURB TO ALLOW FOR BUMPER OVERHANG.
4. IRRIGATION IS REQUIRED BY THE APPROVING MUNICIPALITY. THE CONTRACTOR SHALL PROVIDE AN IRRIGATION SYSTEM MEETING THE SPECIFICATIONS OF THE CHOSEN PRODUCT'S MANUFACTURER. THE IRRIGATION DESIGN SHALL ACCOMMODATE LAWN AND BED AREAS EACH UNDER SEPARATE ZONES TO MAXIMIZE WATER EFFICIENCY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ANY PERMITS REQUIRED FOR THE INSTALLATION OF A PERMANENT IRRIGATION SYSTEM.
5. PLANT MATERIAL SUBSTITUTIONS MUST BE FORMALLY SUBMITTED TO BOHLER ENGINEERING AND THE MUNICIPAL ENGINEER AND LANDSCAPE CONSULTANTS FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION. ANY PLANT MATERIAL THAT ARE TO BE INSTALLED WITHIN STORMWATER BMP FEATURES MUST BE NATIVE SPECIES.
6. WITHOUT EXCEPTION, WEED BARRIER FABRIC SHALL NOT BE INSTALLED WITHIN ANY BMP FACILITY. BMP FACILITIES INCLUDE RAINGARDENS, INFILTRATION TRENCHES, VEGETATIVE SWALES AND STORMWATER BASINS.

20 10 5 0 20
1"=20'



PLANT SCHEDULE

CANOPY TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	
GTK	4	GLEDITSIA TRIACANTHOS INERMIS 'SKYCOLE'	SKYLINE THORNLESS HONEY LOCUST	3" CAL.	B&B	
OV	3	OSTRYA VIRGINIANA	AMERICAN HOP HORNBEAM	3" CAL.	B&B	
UP	6	ULMUS AMERICANA 'PRINCETON'	AMERICAN ELM	3" CAL.	B&B	
EVERGREEN TREES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**CONTAINER**	
TOG	5	THUJA OCCIDENTALIS 'GREEN GIANT'	GREEN GIANT ARBORVITAE	6' HT.	B&B	
ORNAMENTAL TREES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**CONTAINER**	
CC	2	CERCIS CANADENSIS	EASTERN REDBUD	2-2 1/2" CAL	B&B	
CCY	1	COTINUS OBOVATUS	AMERICAN SMOKETREE	5-6'	B&B	
SHRUBS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**CONTAINER**	
AAB	1	ARONIA ARBUTIFOLIA 'BRILLIANTISSIMA'	BRILLIANT RED CHOKEBERRY	3-4'	B&B	
CAH	14	CLETHRA ALNIFOLIA 'HUMMINGBIRD'	HUMMINGBIRD SUMMERSWEET (DWARF)	24-30"	CONTAINER	
CSK	83	CORNUS SERICEA 'KELSEYI'	KELSEYI DOGWOOD	15-18"	CONTAINER	
DGN	5	DEUTZIA GRACILIS 'NIKKO'	SLENDER DEUTZIA	18-24"	CONTAINER	
FXM	18	FOTHERGILLA X 'MOUNT AIRY'	MOUNT AIRY FOTHERGILLA	24-30"	B&B	
IGS	26	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY	36" MIN.	CONTAINER	
IV	32	ITEA VIRGINICA 'HENRY'S GARNET'	HENRY'S GARNET SWEETSPIRE	24-30"	CONTAINER	
JHB	91	JUNIPERUS HORIZONTALIS 'MONBER'	ICEE BLUE JUNIPER	15-18" SPRC	CONTAINER	
PTW	8	PHYSOCARPUS OPULIFOLIUS 'TINY WINE'	TINY WINE NINEBARK (DWARF)	24-30"	CONTAINER	
RAG	59	RHUS AROMATICA 'GRO-LOW'	GRO-LOW FRAGRANT SUMAC	15-18"	CONTAINER	
TOE	4	THUJA OCCIDENTALIS 'EMERALD'	EMERALD ARBORVITAE	6' MIN.	B&B	
GRASSES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**CONTAINER**	
PVN	19	PANICUM VIRGATUM 'NORTH WIND'	NORTH WIND SWITCH GRASS	1 GAL.	CONTAINER	
SSO	18	SCHIZACHYRIUM SCOPARIUM 'STANDING OVATION'	STANDING OVATION LITTLE BLUESTEM GRASS	1 GAL.	CONTAINER	
PERENNIALS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**CONTAINER**	**SPACING**
LSP	43	LIRIOPE SPICATA	CREEPING LILY TURF	1 GAL	CONTAINER	15" o.c.



LOCATION MAP
SCALE: 1" = 500'

LANDSCAPE SPECIFICATIONS:

1. SCOPE OF WORK:
THE CONTRACTOR SHALL BE REQUIRED TO PERFORM ALL CLEARING, FINISHED GRADING, SOIL PREPARATION, PERMANENT SEEDING OR SODDING, PLANTING AND MULCHING INCLUDING ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY FOR THE COMPLETION OF THIS PROJECT, UNLESS OTHERWISE CONTRACTED BY THE GENERAL CONTRACTOR.

2. MATERIALS
A. GENERAL - ALL HARDSCAPE MATERIALS SHALL MEET OR EXCEED SPECIFICATIONS AS OUTLINED IN THE STATE DEPARTMENT OF TRANSPORTATION'S SPECIFICATIONS.

B. TOPSOIL - NATURAL, FRIABLE, LOAMY SILT SOIL HAVING AN ORGANIC CONTENT NOT LESS THAN 3%, A PH RANGE BETWEEN 5.5 & 7.5 THAT SHALL BE FREE OF DEBRIS, ROOTS LARGER THAN ONE INCH (1"), WOOD, ROOTS, VEGETABLE MATTER AND CLAY CLODS.

C. LAWN - LAWN AREAS SHALL BE SEEDED OR SODDED IN ACCORDANCE WITH THE PERMANENT STABILIZATION METHODS INDICATED WITHIN THE SOIL EROSION AND SEDIMENT CONTROL NOTES. FOR SOIL BED PREPARATIONS, REFER TO ITEM 4 BELOW.
1. LAWN SEED MIXTURE SHALL BE FRESH, CLEAN NEW CROP SEED.
2. SOD SHALL BE STRONGLY ROOTED, MEET MACHINE-SLICED PIECE WITH A UNIFORM THICKNESS. SOD INSTALLED ON SLOPES GREATER THAN 4:1 SHALL BE PEGGED TO HOLD SOD IN PLACE.

D. MULCH - ALL PLANTING BEDS SHALL BE MULCHED WITH A 3" THICK LAYER OF DOUBLE SHREDDED HARDWOOD BARK MULCH, UNLESS OTHERWISE STATED ON THE LANDSCAPE PLAN.

E. FERTILIZER
1. FERTILIZER SHALL BE DELIVERED TO THE SITE MIXED AS SPECIFIED IN THE ORIGINAL UNOPENED STANDARD BAGS SHOWING WEIGHT, ANALYSIS AND NAME OF MANUFACTURER. FERTILIZER SHALL BE STORED IN A WEATHERPROOF PLACE SO THAT IT CAN BE KEPT DRY PRIOR TO USE.
2. FOR THE PURPOSE OF SEEDING, ASSUME THAT FERTILIZER SHALL BE 10% NITROGEN, 6% PHOSPHORUS AND 4% POTASSIUM BY WEIGHT. A FERTILIZER SHOULD NOT BE SELECTED WITHOUT A SOIL TEST PERFORMED BY A CERTIFIED SOIL LABORATORY.

F. PLANT MATERIAL
1. ALL PLANTS SHALL BE ALL CASES CONFORM TO THE REQUIREMENTS OF THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1), LATEST EDITION, AS PUBLISHED BY AMERICAN HORT (FORMERLY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION).
II. IN ALL CASES, BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES
III. PLANTS SHALL BE LEGIBLY TAGGED WITH THE PROPER NAME AND SIZE. TAGS ARE TO REMAIN ON AT LEAST ONE PLANT OF EACH SPECIES FOR VERIFICATION PURPOSES DURING THE FINAL INSPECTION.
IV. TREES WITH ABRASIONS OF THE BARK, SUN SCALDS, DISFIGURATION OR FRESH CUTS OF LIMBS OVER 1½", WHICH HAVE NOT BEEN COMPLETELY CALLUSED, SHALL BE REJECTED. PLANTS SHALL NOT BE SOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO CHANGE THE BARK OR BREAK BRANCHES.
V. ALL PLANTS SHALL BE TYPICAL OF THOSE SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH, WELL DEVELOPED BRANCHES, DENSELY FOLIATED, VIGOROUS ROOT SYSTEMS AND BE FREE OF DISEASE, INSECTS, PESTS, SUNS OR LAYING.
VI. CALIPER MEASUREMENTS OF NURSERY GROWN TREES SHALL BE TAKEN AT A POINT ON THE TRUNK SIX INCHES (6") ABOVE THE NATURAL GRADE FOR TREES UP TO AND INCLUDING A FOUR INCH (4") CALIPER SIZE. IF THE CALIPER AT SIX INCHES (6") ABOVE THE GROUND EXCEEDS FOUR INCHES (4") IN CALIPER, THE CALIPER SHOULD BE MEASURED AT A POINT 12" ABOVE THE NATURAL GRADE.
VII. SHRUBS SHALL BE MEASURED TO THE AVERAGE HEIGHT OR SPREAD OF THE SHRUB, AND NOT TO THE LONGEST BRANCH.
VIII. TREES AND SHRUBS SHALL BE HANDLED WITH CARE BY THE ROOT BALL.

3. GENERAL WORK PROCEDURES
A. CONTRACTOR TO UTILIZE WORKMEN WHO ARE INDUSTRY STANDARDS IN PERFORMING ALL LANDSCAPE CONSTRUCTION. THE SITE IS TO BE LEFT IN A CLEAN STATE AT THE END OF EACH WORKDAY. ALL DEBRIS, MATERIALS AND TOOLS SHALL BE PROPERLY STORED, STOCKPILED OR DISPOSED OF.

B. WASTE MATERIALS AND DEBRIS SHALL BE COMPLETELY DISPOSED OF AT THE CONTRACTOR'S EXPENSE. DEBRIS SHALL NOT BE BURIED, INCLUDING ORGANIC MATERIALS, BUT SHALL BE REMOVED COMPLETELY FROM THE SITE.

4. SITE PREPARATIONS
A. BEFORE AND DURING PRELIMINARY GRADING AND FINISHED GRADING, ALL WEEDS AND GRASSES SHALL BE DUG OUT BY THE ROOTS AND DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES OUTLINED HEREIN.

B. ALL EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE ANY DAMAGED BRANCHES. THE ENTIRE LIMB OF ANY DAMAGED BRANCH SHALL BE CUT OFF AT THE BRANCH COLLAR. CONTRACTOR SHALL ENSURE THAT CUTS ARE SMOOTH AND STRAIGHT. ANY EXPOSED ROOTS SHALL BE CUT BACK WITH CLEAN, SHARP TOOLS AND TOPSOIL SHALL BE PLACED AROUND THE REMAINDER OF THE ROOTS. EXISTING TREES SHALL BE MONITORED ON A REGULAR BASIS FOR ANIMAL ROOT OR BRANCH DAMAGE AS A RESULT OF CONSTRUCTION. ROOTS SHALL NOT BE LEFT EXPOSED FOR MORE THAN ONE (1) DAY. CONTRACTOR SHALL WATER EXISTING TREES AS NEEDED TO PREVENT SHOCK OR DECLINE.

C. CONTRACTOR SHALL ARRANGE TO HAVE A UTILITY STAKE-OUT TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY LANDSCAPE MATERIAL. UTILITY COMPANIES SHALL BE CONTACTED THREE (3) DAYS PRIOR TO THE BEGINNING OF WORK.

5. TREE PROTECTION
A. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TREES TO REMAIN. A TREE PROTECTION ZONE SHALL BE ESTABLISHED AT THE DRIP LINE OR 15 FEET FROM THE TRUNK OR AT THE LIMIT OF CONSTRUCTION DISTURBANCE, WHICHEVER IS GREATER. LOCAL ETIMEATION THAT MAY REQUIRE A MORE STRICT TREE PROTECTION ZONE SHALL BE HONORED.

B. A FORTY EIGHT INCH (48") HIGH WOODEN SNOW FENCE OR ORANGE COLORED HIGH-DENSITY "SNOW FENCE", OR APPROVED EQUAL, MOUNTED ON STEEL POSTS SHALL BE PLACED ALONG THE BOUNDARY OF THE TREE PROTECTION ZONE. POSTS SHALL BE LOCATED AT A MAXIMUM OF EIGHT FEET (8') ON CENTER OR AS INDICATED WITHIN THE TREE PROTECTION DETAIL.

C. WHEN THE TREE PROTECTION FENCING HAS BEEN INSTALLED, IT SHALL BE INSPECTED BY THE APPROVING AGENCY PRIOR TO DEMOLITION, GRADING, TREE CLEARING OR ANY OTHER CONSTRUCTION. THE FENCING ALONG THE TREE PROTECTION ZONE SHALL BE REGULARLY INSPECTED BY THE CONTRACTOR AND MAINTAINED UNTIL ALL CONSTRUCTION ACTIVITY HAS BEEN COMPLETED.

D. AT NO TIME SHALL MACHINERY, DEBRIS, FALLEN TREES OR OTHER MATERIALS BE PLACED, STOCKPILED OR LEFT STANDING IN THE TREE PROTECTION ZONE.

6. SOIL MODIFICATIONS
A. CONTRACTOR SHALL ATTAIN A SOIL TEST FOR ALL AREAS OF THE SITE PRIOR TO CONDUCTING ANY PLANTING. SOIL TESTS SHALL BE PERFORMED BY A CERTIFIED SOIL LABORATORY.

B. CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIALS. MODIFICATIONS, AS SPECIFIED HEREIN, MAY NEED TO BE CONDUCTED BY THE CONTRACTOR DEPENDING ON SITE CONDITIONS.

C. THE FOLLOWING AMENDMENTS AND QUANTITIES ARE APPROXIMATE AND ARE FOR SEEDING PURPOSES ONLY. COMPOSITION OF AMENDMENTS SHOULD BE REVISED DEPENDING ON THE OUTCOME OF A TOPSOIL ANALYSIS PERFORMED BY A CERTIFIED SOIL LABORATORY.
I. TO INCREASE A SANDY SOIL'S ABILITY TO RETAIN WATER AND NUTRIENTS, THOROUGHLY TILL ORGANIC MATTER INTO THE TOP 6-12". USE COMPOSTED BARK, COMPOSTED LEAF MULCH OR PEAT MOSS. ALL PRODUCTS SHOULD BE COMPOSTED TO A DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF OR WOOD STRUCTURE. AVOID MATERIAL WITH A PH HIGHER THAN 7.5.
II. TO INCREASE DRAINAGE, MODIFY HEAVY CLAY OR SILT SOILS THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK UP TO 30% BY VOLUME, AND/OR AGRICULTURAL GYPSUM. COARSE SAND MAY BE USED IF ENOUGH IS ADDED TO BRING THE SAND CONTENT TO MORE THAN 80% OF THE TOTAL MIX. SUBSURFACE DRAINAGE LINES MAY NEED TO BE ADDED TO INCREASE DRAINAGE.
III. MODIFY EXTREMELY SANDY SOILS (MORE THAN 85%) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.

7. FINISHED GRADING
A. UNLESS OTHERWISE CONTRACTED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF FINE-GRADING WITHIN THE DISTURBANCE AREA OF THE SITE.

B. CONTRACTOR SHALL VERIFY THAT SUBGRADE FOR INSTALLATION OF TOPSOIL HAS BEEN ESTABLISHED. THE SUBGRADE OF THE SITE MUST MEET THE THREE-SIX GRADE LESS THE REQUIRED TOPSOIL THICKNESS (T/K).

C. ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE AS DEPICTED WITHIN THIS SET OF CONSTRUCTION PLANS, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER OR LANDSCAPE ARCHITECT.

D. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER IN AND AROUND THE PLANTING BEDS. STANDING WATER SHALL NOT BE PERMITTED IN PLANTING BEDS

8. TOPSOILING
A. CONTRACTOR SHALL PROVIDE A SIX INCH (6") THICK MINIMUM LAYER OF TOPSOIL OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, IN ALL PLANTING AND LAWN AREAS. TOPSOIL SHOULD BE SPREAD OVER A PREPARED SUBFACE IN A UNIFORM LAYER TO ACHIEVE THE DESIRED COMPACTED THICKNESS.

B. ON SITE TOPSOIL MAY BE USED TO SUPPLEMENT THE TOTAL AMOUNT REQUIRED. TOPSOIL FROM THE SITE MAY BE REJECTED IF IT HAS NOT BEEN PROPERLY REMOVED, STORED AND PROTECTED PRIOR TO CONSTRUCTION.

C. CONTRACTOR SHALL FURNISH TO THE APPROVING AGENCY AN ANALYSIS OF BOTH IMPORTED AND ON-SITE TOPSOIL TO BE UTILIZED IN ALL PLANTING AREAS. THE PH AND NUTRIENT LEVELS MAY NEED TO BE ADJUSTED THROUGH SOIL MODIFICATIONS AS NEEDED TO ACHIEVE THE REQUIRED LEVELS AS SPECIFIED IN THE MATERIALS SECTION ABOVE.

D. ALL LAWN AREAS ARE TO BE CULTIVATED TO A DEPTH OF SIX INCHES (6"). ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES SECTION ABOVE. THE FOLLOWING SHALL BE TILLED INTO THE TOP FOUR INCHES (4") IN TWO DIRECTIONS (QUANTITIES BASED ON A 1,000 SQUARE FOOT AREA - FOR BID PURPOSES ONLY (SEE SPECIFICATION 6.A.)):
I. 20 POUNDS SINGLE-NITROGEN OR APPROVED EQUAL SOIL CONDITIONER/FERTILIZER.
II. 25 POUNDS NITROGEN (COURSE) 50-0-0 SLOW CHIP OR APPROVED NITROGEN FERTILIZER.

E. THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN CONDITIONS.

9. PLANTING
A. ENSURE THAT IT IS FEASIBLE, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THAT THIS IS NOT POSSIBLE, CONTRACTOR SHALL PROTECT UNINSTALLED PLANT MATERIAL. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE DAY PERIOD AFTER DELIVERY. PLANTS THAT WILL NOT BE PLANTED FOR A PERIOD OF TIME GREATER THAN THREE DAYS SHALL BE HEALED IN WITH TOPSOIL OR MULCH TO HELP PRESERVE ROOT MOISTURE.

B. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOPSOIL THAT IS IN A MUDDY OR FROZEN CONDITION.

C. ANY INJURED ROOTS OR BRANCHES SHALL BE PRUNED TO MAKE CLEAN-CUT ENDS PRIOR TO PLANTING UTILIZING CLEAN, SHARP TOOLS. ONLY INJURED OR DISEASED BRANCHING SHALL BE REMOVED.

D. ALL PLANTING CONTAINERS, BARRETS AND NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED FROM ROOT BALLS DURING PLANTING. NATURAL FIBER BURLAP MUST BE CUT FROM AROUND THE TRUNK OF THE TREE AND FOLDED DOWN AGAINST THE ROOT BALL PRIOR TO BACKFILLING.

E. POSITION TREES AND SHRUBS AT THEIR INTENDED LOCATIONS AS PER THE PLANS AND SECURE THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO EXCAVATING PITS, MAKING NECESSARY ADJUSTMENTS AS DIRECTED.

F. PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY, THE PROPOSED LANDSCAPE, AS SHOWN ON THE APPROVED LANDSCAPE PLAN, MUST BE INSTALLED, INSPECTED AND APPROVED BY THE APPROVING AGENCY. THE APPROVING AGENCY SHALL TAKE INTO ACCOUNT SEASONAL CONSIDERATIONS IN THIS REGARD AS FOLLOWS. THE PLANTING OF TREES, SHRUBS, VINES OR GROUND COVER SHALL OCCUR ONLY DURING THE FOLLOWING PLANTING SEASONS:
I. PLANTS: MARCH 15TH TO DECEMBER 15TH
II. LAWN AND SEED MIXES: MARCH 1ST TO MAY 15TH OR BETWEEN AUGUST 15TH AND OCTOBER 15TH

PLANTINGS REQUIRED FOR A CERTIFICATE OF OCCUPANCY SHALL BE PROVIDED DURING THE NEXT APPROPRIATE SEASON AT THE MUNICIPALITY'S DISCRETION. CONTRACTOR SHOULD CONTACT APPROVING AGENCY FOR POTENTIAL SUBSTITUTIONS.

G. FURTHERMORE, THE FOLLOWING TREE VARIETIES ARE UNUSUALLY SUSCEPTIBLE TO WINTER DAMAGE. WITH TRANSPLANT SHOCK AND THE SEASONAL LACK OF NITROGEN AVAILABILITY, THE RISK OF PLANT DEATH IS GREATLY INCREASED. IT IS NOT RECOMMENDED THAT THESE SPECIES BE DUG AT THE NURSERY DURING THE FALL PLANTING SEASON:

ACER RUBRUM	PLATANUS X ACERIFOLIA
BETULA VARIETIES	POPULUS VARIETIES
CARPINUS VARIETIES	PRUNUS VARIETIES
CRATAEGUS VARIETIES	PYRUS VARIETIES
KOELREUTERIA PANICULATA	QUERCUS VARIETIES
LIQUIDAMBAR STYRACIFLUA	TILIA TOMENTOSA
LIRIODENDRON TULIPIFERA	ZELKOVA VARIETIES

H. PLANTING PITS SHALL BE DUG WITH LEVEL OR CONVEX BOTTOMS, WITH THE WIDTH THREE TIMES THE DIAMETER OF ROOT BALL. THE ROOT BALL SHALL REST ON UNDISTURBED GRADE. EACH PLANT PIT SHALL BE BACKFILLED IN LAYERS WITH THE FOLLOWING PREPARED SOIL MIXED THOROUGHLY:
I. 1 PART COMPOST OR PEAT MOSS
II. 3 PARTS TOPSOIL BY VOLUME
III. 21 GRAMS AGRIFORM PLANTING TABLETS (OR APPROVED EQUAL) AS FOLLOWS:
A) 2 TABLETS PER 1 GALLON PLANT
B) 5 TABLETS PER 5 GALLON PLANT
C) 7 TABLETS PER 15 GALLON PLANT
D) LARGER PLANTS: 2 TABLETS PER 1" CALIPER OF TRUNK

I. FILL PREPARED SOIL AROUND BALL OF PLANT HALF-WAY AND INSERT PLANT TABLETS. COMPLETE BACKFILL AND WATER THOROUGHLY.

J. ALL PLANTS SHALL BE PLANTED SO THAT THE TOP OF THE ROOT BALL, THE POINT AT WHICH THE ROOT FLARE BEGINS, IS SET AT FINISHED GROUND LEVEL AND IN THE CENTER OF THE PIT. NO SOIL IS TO BE PLACED DIRECTLY ON TOP OF THE ROOT BALL.

K. ALL PROPOSED TREES DIRECTLY ADJACENT TO WALKWAYS OR DRIVEWAYS SHALL BE PRUNED AND MAINTAINED TO A MINIMUM BRANCHING HEIGHT OF 7' FROM GRADE. NO PRUNING SHALL BE CONDUCTED WITHIN THE FIRST YEAR OF PLANTING.

L. GROUND COVER AREAS SHALL RECEIVE A ¼" LAYER OF HUMUS RAKED INTO THE TOP 1" OF PREPARED SOIL PRIOR TO PLANTING. ALL GROUND COVER AREAS SHALL BE WEEDED AND TREATED WITH A PRE-EMERGENT CHEMICAL AS PER MANUFACTURER'S RECOMMENDATION.

M. NO PLANT, EXCEPT GROUND COVERS, GRASSES OR VINES, SHALL BE PLANTED LESS THAN TWO FEET (2') FROM EXISTING STRUCTURES AND SIDEWALKS.

N. ALL PLANTING AREAS AND PLANTING PITS SHALL BE MULCHED AS SPECIFIED HEREIN TO FILL THE ENTIRE BED AREA OR BASCER. NO MULCH IS TO TOUCH THE TRUNK OF THE TREE OR SHRUB.

O. ALL PLANTING AREAS SHALL BE WATERED IMMEDIATELY UPON INSTALLATION IN ACCORDANCE WITH THE WATERING SPECIFICATIONS AS LISTED HEREIN.

10. TRANSPLANTING (WHEN REQUIRED)
A. ALL TRANSPLANTED TREES SHALL BE DUG WITH INTACT ROOT BALLS CAPABLE OF SUSTAINING THE PLANT. (SEE SPECIFICATION 3.F., ABOVE)

B. IF PLANTS ARE TO BE STOCKPILED BEFORE REPLANTING, THEY SHALL BE HEALED IN WITH MULCH OR SOIL, ADEQUATELY WATERED AND PROTECTED FROM EXTREME HEAT, SUN AND WIND.

C. PLANTS SHALL NOT BE DUG FOR TRANSPLANTING BETWEEN APRIL 15TH AND JUNE 30TH.

D. UPON REPLANTING, BACKFILL SOIL SHALL BE AMENDED WITH FERTILIZER AND ROOT GROWTH HORMONE.

E. TRANSPLANTS SHALL BE GUARANTEED FOR THE LENGTH OF THE GUARANTEE PERIOD SPECIFIED HEREIN.

F. IF TRANSPLANTS DIE, SHRUBS AND TREES LESS THAN SIX INCHES (6") DBH SHALL BE REPLACED IN KIND. TREES OVER LESS THAN SIX INCHES (6") DBH MAY BE REQUIRED TO BE REPLACED IN ACCORDANCE WITH THE MUNICIPALITY'S TREE REPLACEMENT GUIDELINES.

11. MATERIALS
A. NEW PLANTINGS ON LAWN AREAS SHALL BE ADEQUATELY IRRIGATED BEGINNING IMMEDIATELY AFTER PLANTING. WATER SHALL BE APPLIED TO EACH TREE AND SHRUB IN SUCH MANNER AS NOT TO DISTURB BACKFILL AND TO THE EXTENT THAT ALL MATERIALS IN THE PLANTING HOLE ARE THOROUGHLY SATURATED. WATERING SHALL CONTINUE AT LEAST UNTIL PLANTS ARE ESTABLISHED.

B. SITE OWNER SHALL PROVIDE WATER IF AVAILABLE ON SITE AT TIME OF PLANTING. IF WATER IS NOT AVAILABLE ON SITE, CONTRACTOR SHALL SUPPLY ALL NECESSARY WATER. THE USE OF WATERING BAGS IS RECOMMENDED FOR ALL NEWLY PLANTED TREES.

C. IF AN IRRIGATION SYSTEM HAS BEEN INSTALLED ON THE SITE, IT SHALL BE USED TO WATER PROPOSED PLANT MATERIAL, BUT ANY FAILURE OF THE SYSTEM DOES NOT ELIMINATE THE CONTRACTOR'S RESPONSIBILITY OF MAINTAINING THE DESIRED MOISTURE LEVEL FOR WOODY/SOIL HEALTHY GROWTH.

12. GUARANTEE
A. THE CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF ONE (1) YEAR FROM APPROVAL OF LANDSCAPE INSTALLATION BY THE APPROVING AGENCY. CONTRACTOR SHALL SUPPLY THE OWNER WITH A MAINTENANCE BOND FOR TEN PERCENT (10%) OF THE VALUE OF THE LANDSCAPE INSTALLATION WHICH WILL BE RELEASED AT THE CONCLUSION OF THE GUARANTEE PERIOD AND WHEN A FINAL INSPECTION HAS BEEN COMPLETED AND APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.

B. ANY DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED FOR THE LENGTH OF THE GUARANTEE PERIOD. REPLACEMENT OF PLANT MATERIAL SHALL BE CONDUCTED AT THE FIRST SUCCESSIVE PLANTING SEASON. ANY DEBRIS SHALL BE DISPOSED OF OFF-SITE, WITHOUT EXCEPTION. A PLANT SHALL BE CONSIDERED "DEAD OR DYING" IF MORE THAN 50% OF ITS BRANCHES ARE DEAD.

C. TREES AND SHRUBS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND UNTIL TURNOVER TO THE OWNER/OPERATOR. CULTIVATION, WEEDING, MULCHING AND THE PREVENTATIVE TREATMENTS SHALL BE PERFORMED AS NECESSARY TO KEEP PLANT MATERIAL IN GOOD CONDITION AND FREE OF INSECTS AND DISEASE.

D. LAWNS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND UNTIL TURNOVER TO THE OWNER/OPERATOR THROUGH MOWING, FERTILIZING, WEEDING, MOWING, TRIMMING AND OTHER OPERATIONS SUCH AS ROLLING, RESEEDING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF ERODED OR BARE AREAS.

13. CLEANUP
A. UPON THE COMPLETION OF ALL LANDSCAPE INSTALLATION AND BEFORE THE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL UNUSED MATERIALS, EQUIPMENT AND DEBRIS FROM THE SITE. ALL PAVED AREAS ARE TO BE CLEANED.

B. THE SITE SHALL BE CLEANED AND LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.

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Restaurant Support Office
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CHECKED BY:	KRT
DATE:	10.26.22
CAD I.D.:	PP2270001-X-TTLB-PHPD

PROJECT:
PRELIMINARY/ FINAL MAJOR LAND DEVELOPMENT PLANS
FOR
RAISING CANE'S RESTAURANTS, LLC.

PROPOSED RESTAURANT #C0952
LAND DEVELOPMENT #LD-22-06
2620 WEST MORELAND ROAD
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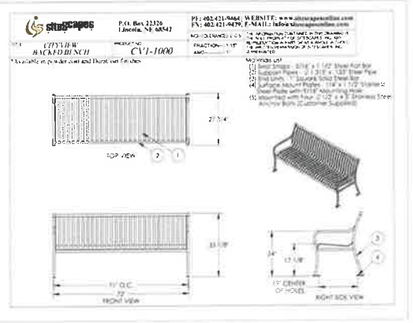
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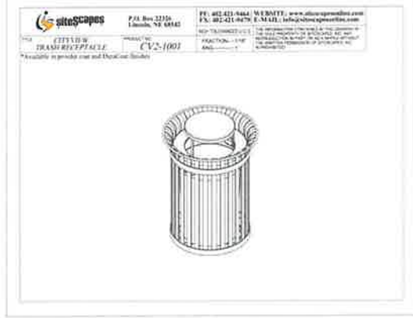
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LANDSCAPE PLAN

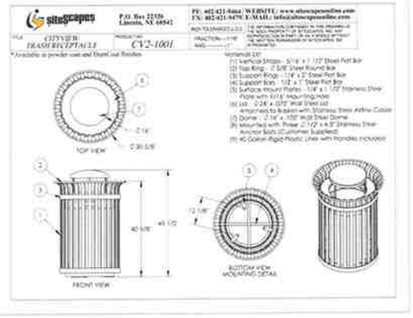
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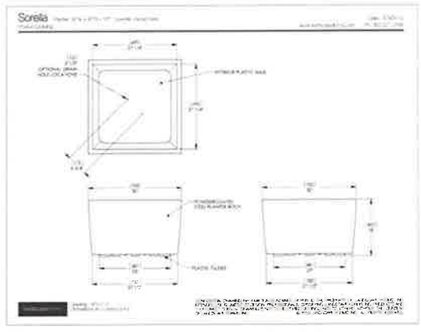
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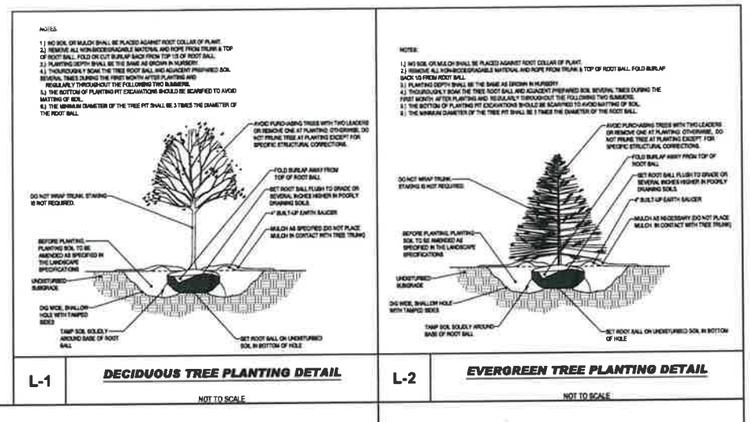










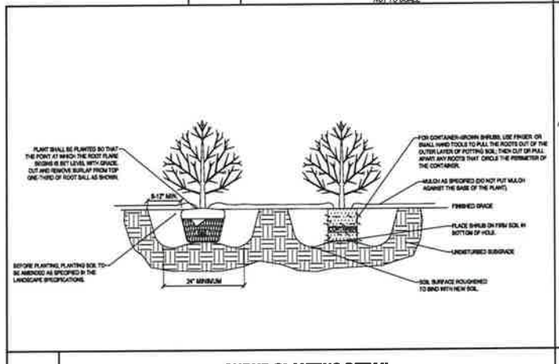


L-1 **DECIDUOUS TREE PLANTING DETAIL**

NOT TO SCALE

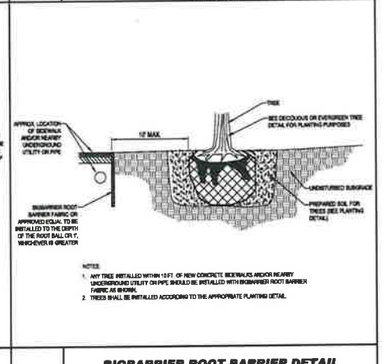
L-2 **EVERGREEN TREE PLANTING DETAIL**

NOT TO SCALE



L-5 **SHRUB PLANTING DETAIL**

NOT TO SCALE



L-12 **BIOBARRIER ROOT BARRIER DETAIL**

NOT TO SCALE

COMPLIANCE CHART

SECTION	REQUIREMENT	CALCULATIONS (REQUIRED / PROVIDED)	COMPLIANCE
540.00 146-39 LANDSCAPING	A.(1) PLACEMENT. SHADE TREES SHALL BE PROVIDED BY THE SUBDIVIDER/LAND DEVELOPER AND PLANTED APPROXIMATELY FIVE FEET INSIDE THE LOT LINES PARALLELING THE RIGHT-OF-WAY LINE. THE TREES SHALL BE PLACED TO PROVIDE AN APPROXIMATE AVERAGE SPACING OF ONE TREE PER 50 FEET OR PLANTED IN AN ALTERNATE ARRANGEMENT CONSISTENT WITH TOWNSHIP POLICY ENCOURAGING THE USE OF SHADE TREES IN SUBDIVISION AND DEVELOPMENT. THE TREES SHALL BE LOCATED SO AS NOT TO INTERFERE WITH THE INSTALLATION AND MAINTENANCE OF SIDEWALKS AND UTILITIES OR THE OPERATION OF STREETLIGHTS, NOR SHALL THEY BE PLACED WITHIN THE CLEAR SIGHT TRIANGLE AT STREET INTERSECTIONS.	SEE ZONING SECTION 24128.2.c. BELOW FOR MORE STRICT REQUIREMENT.	SEE BELOW
	B.(2)(a) MINIMUM TREE/SHRUB PLANTINGS FOR THE GREEN AREA SHALL INCLUDE A MINIMUM OF ONE DECIDUOUS OR EVERGREEN TREE OF TWO-AND-ONE-HALF-INCH CALIPER, MEASURED AT A HEIGHT OF THREE FEET ABOVE GRADE, FOR EACH 1,000 SQUARE FEET OF GREEN AREA. THREE EVERGREEN SHRUBS OF 2 1/2 FEET IN HEIGHT MAY BE SUBSTITUTED FOR ONE TREE FOR A MAXIMUM OF 50% OF THE TREE REQUIREMENT. THE TREE/SHRUB REQUIREMENT MAY BE MET BY PRESERVING EXISTING TREES AS PROVIDED IN SUBSECTION B(4).	TOTAL GREEN AREA PROVIDED ON SITE = 13,374± SF REQUIRED: 13,374 / 1,000 = 13.374 13.374 x 1 = 13,374 OR 13 TREES PROVIDED: 4 OV, 2 OC, 1 CCY 3 GTW, 5 TOG, 8 UP (21 TREES ALSO COUNTING TOWARDS OTHER REQUIREMENTS. SEE ZONING SECTIONS BELOW)	COMPLIES
	B.(3)(a)(1) AT LEAST 5% OF THE TOTAL AREA DEVOTED TO PARKING AREA, NOT INCLUDING BUFFERS OR YARDS ON THE PERIMETER, SHALL NOT BE PAVED BUT SHALL BE USED FOR INTERIOR LANDSCAPING WITHIN A PARKING AREA.	SEE ZONING SECTION 2402.A.6. BELOW FOR MORE STRICT REQUIREMENT.	SEE BELOW
	B.(3)(a)(2) FOR ANY LAND USE WHERE THE TOTAL NUMBER OF PARKING SPACES EXCEEDS 10 STALLS, AT LEAST ONE TWO-AND-ONE-HALF-INCH CALIPER DECIDUOUS OR EVERGREEN TREE SHALL BE PLANTED WITHIN THE PARKING AREA. AN ADDITIONAL TREE OF THE SAME SIZE SHALL BE PLANTED FOR EACH ADDITIONAL 15 SPACES OR PORTION THEREOF.	SEE ZONING 2402.A.2. A.(1)(2) BELOW FOR MORE STRICT REQUIREMENT.	SEE BELOW
ZONING 1135 THE PUBLIC REALM STREETSCAPE, OPEN SPACE THE PEDESTRIAN SYSTEM AND TRANSIT	B. STREET FURNITURE. 3. BENCHES AND TRASH AND RECYCLING RECEPTACLES SHALL BE PROVIDED AT LEAST EVERY 100'. 4. PLANTERS SHALL BE PROVIDED AT LEAST ONCE EVERY 50'. 5. BIKE RACKS SHALL BE PROVIDED AT A RATE OF AT LEAST ONE PER EVERY 250 PARKING SPACES. EACH BIKE RACK SHALL ACCOMMODATE AT LEAST TEN BIKES. EACH BUILDING AND MAIN BUILDING ENTRANCE SHALL BE LOCATED WITHIN 200 FEET OF A BIKE RACK. AT LEAST HALF OF ALL REQUIRED BIKE RACKS STORAGE SPACES SHALL CONSIST OF BIKE LOCKER SPACES OR COVERED BIKE RACK SPACES.	TOTAL LENGTH ALONG MORELAND ROAD = 233±LF (EXCLUDING LENGTH OF CROSSING DRIVEWAY) REQUIRED: 233 / 100 = 2.33 OR 2 BENCHES / TRASH RECEPTACLES 233 / 50 = 4.66 OR 5 PLANTERS PROPOSED PARKING SPACES = 33 33 / 250 = 0.13 OR 0 BIKE RACKS PROVIDED: 2 BENCHES/TRASH RECEPTACLES, 5 PLANTERS	COMPLIES
2401 PRESERVATION AND PROTECTION OF EXISTING VEGETATION	A.2.b. REPLACEMENT AFTER IMPERVIOUS COVERAGE INCREASE. IF IMPERVIOUS COVERAGE IS INCREASED BY AT LEAST 500 SQUARE FEET, AND SUCH AN INCREASE REQUIRES TREE REMOVAL, EACH REMOVED TREE WITH A CALIPER ≥ 8 INCHES MUST BE REPLACED WITH TWO TREES—EACH WITH A CALIPER ≥ 2.5".	IMPERVIOUS COVERAGE IS DECREASED. NOTHING REQUIRED.	N/A

2402 PARKING LOT LANDSCAPING AND STREET TREES	A.2.a.(2) THERE SHALL BE NO MORE THAN 15 CONTIGUOUS PARKING STALLS IN A ROW WITHOUT A PLANTING ISLAND. AS AN ALTERNATIVE, AN APPLICANT MAY PROVIDE ONE CANOPY TREE FOR EVERY TEN PARKING STALLS IN PLANTING ISLAND AREAS AND/OR PERIMETER PARKING PLANTING AREAS, AT THE DISCRETION OF THE BOARD OF COMMISSIONERS. HOWEVER, REGARDLESS OF WHICH OPTION IS USED, THE ENDS OF ALL PARKING ROWS SHALL BE DIVIDED FROM DRIVES BY PLANTING ISLANDS.	TOTAL OPEN AIR PARKING SPACES PROPOSED =36 REQUIRED: 36 / 10 = 3 CANOPY TREES PROVIDED: 2 OV, 3 GTW (5 TREES ALSO COUNTING TOWARD 2402.a.2.A.(4))	COMPLIES
	A.2.a.(4) 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 INCHES IN CALIPER, BRANCHING AT 6 FEET TO 8 FEET IN HEIGHT AND OF THE RECOMMENDED SPECIES AS LISTED IN THE RECOMMENDED PLANT MATERIALS LIST IN THE SALDO. PARKING LOT ISLANDS SHALL BE PLANTED IN LAWN OR GROUND COVER ONLY.	TOTAL PROPOSED PLANTING ISLANDS = 5 REQUIRED: 5 SHADE TREES PROVIDED: 2 OV, 3 GTW. (5 TREES ALSO COUNTING TOWARD 2402.A.2.A.(2))	COMPLIES
	A.5. PARKING LOT PERIMETER BUFFER. ALL PARKING LOTS OR AREAS WITH MORE THAN 15 PARKING SPACES SHALL BE BUFFERED ACCORDING TO THE FOLLOWING WHEN ANY PART OF THE PARKING LIES WITHIN 100' OF A PROPERTY LINE, PUBLIC STREET, OR RESIDENTIAL DISTRICT (EXCEPTION: THOSE PARKING LOTS TO WHICH THE STREET WALL REQUIREMENT IN ARTICLE XXV: STREETSCAPE APPLIES). a. PARKING LOTS SHALL BE PLANTED WITH A MEDIUM-INTENSITY BUFFER (SEE §2403.B. BUFFER REQUIREMENTS), A MINIMUM OF 10 FEET IN WIDTH, EXCEPT WHERE BUILDINGS, ACCESS DRIVES, AND/OR WALKWAYS ARE LOCATED OPTION A: 2 CANOPY TREES (2-2½' MINIMUM CALIPER), 2 UNDERSTORY TREES (1½" MINIMUM CALIPER), 5 EVERGREEN TREES (6' MINIMUM HEIGHT), AND 5 SHRUBS (24" MINIMUM HEIGHT) PER EACH 100 LINEAR FEET. OPTION B: A DECORATIVE, OPAQUE WALL OR FENCE. A FENCE OR WALL, 8 FEET IN HEIGHT, WHERE THE FENCE OR WALL FACES A PUBLIC STREET OR DISTRICT PERMITTING RESIDENTIAL USES. SHRUBS SHALL LINE THE OUTSIDE OF THE FENCE OR WALL AT A RATIO OF 10 SHRUBS PER 100 LINEAR FEET. NO MORE THAN 50% OF THE SHRUBS SHALL CONSIST OF ANY ONE SPECIES; THEY MAY BE GROUPED INFORMALLY OR SPACED EVENLY.	TOTAL PERIMETER LENGTH ALONG PARKING LOT = 321.25±LF REQUIRED: MEDIUM-INTENSITY BUFFER OPTION A 321.25 / 100 = 3.21 3.21 X 2 = 6.42 OR 6 CANOPY TREES 3.21 X 2 = 6.42 OR 6 UNDERSTORY TREES 3.21 X 5 = 16.05 OR 18 EVERGREEN TREES 3.21 X 5 = 16.05 OR 16 SHRUBS PROVIDED: NONE	VARIANCE
	A.6. 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 IN WHICH THE PARKING IS LOCATED.	TOTAL OPEN AIR PARKING AREA = 15,744.94± REQUIRED: 1,574.50 SF LANDSCAPE AREA (10%) PROVIDED: 1,705.62 ± SF LANDSCAPE AREA (10.8%)	COMPLIES
	B.2.c. TREES SHALL BE PLANTED AT A RATIO OF AT LEAST ONE TREE PER 40 L.F. OF FRONTAGE OR FRACTION THEREOF. TREES SHALL BE DISTRIBUTED ALONG THE ENTIRE FRONTAGE OF THE PROPERTY, ALTHOUGH THEY NEED NOT BE EVENLY SPACED. WHEN FEASIBLE, TREES PLANTED ON DIFFERENT SIDES OF THE SAME STREET SHOULD HAVE ALTERNATING ARRANGEMENT TO MINIMIZE GAPS IN TREE CANOPY COVER.	TOTAL LENGTH ALONG MORELAND ROAD = 233±LF (EXCLUDING LENGTH OF CROSSING DRIVEWAY) REQUIRED: 233 / 40 = 5.83 OR 6 STREET TREES PROVIDED: 6 UP (6 STREET TREES)	COMPLIES
2403 BUFFERS AND SCREENS	FIGURE 24.5 BUFFER REQUIRED BY LAND USE TYPE BUFFER TYPE REQUIRED PROPOSED LAND USE / ADJOINING LAND USE CLASSIFICATION IN (RETAIL) II(RETAIL) / L (LOW INTENSITY BUFFER) B.4.a.IV ACCORDANCE WITH THE DIAGRAM REFERENCED ABOVE, EVERY 100 LINEAR FEET OF PROPERTY LINE TO BE BUFFERED SHALL CONTAIN THE PLANT MATERIALS AND QUANTITIES INDICATED BELOW. THE APPLICABLE PROPERTY LINE BUFFER REQUIREMENTS ARE DETERMINED FROM THE ADJOINING LAND USE CLASSIFICATION ACCORDING TO THE TABLE BELOW. IF AN ADJOINING PARCEL IN A RESIDENTIAL DISTRICT IS VACANT, IT SHALL BE CONSIDERED A "RESIDENTIAL USE" FOR THE PURPOSE OF CALCULATING THE BUFFER REQUIREMENTS. (1) LOW INTENSITY BUFFER. A LOW-INTENSITY BUFFER IS INTENDED TO SOFTEN THE IMPACT OF A LAND DEVELOPMENT WITHOUT SIGNIFICANTLY BLOCKING THE VIEW. IT INCLUDES THE FOLLOWING ELEMENTS PER 100 L.F.: 1 CANOPY TREE (2-2½" MINIMUM CALIPER), 2 UNDERSTORY TREES (1½" MINIMUM CALIPER), AND 2 EVERGREEN TREES (6' MINIMUM HEIGHT)	LENGTH ALONG SOUTHEAST PROPERTY LINE ADJACENT TO RETAIL = 194.18± LF (EXCLUDING RIGHT TURN LANE) REQUIRED: 194.18 / 100 = 1.94 1.94 x 1 = 1.94 OR 2 CANOPY TREES 1.94 x 2 = 3.88 OR 4 UNDERSTORY TREES 1.94 x 2 = 3.88 OR 4 EVERGREEN TREES PROVIDED: NONE	VARIANCE
		LENGTH ALONG SOUTHWEST PROPERTY LINE ADJACENT TO RETAIL = 227.84± LF REQUIRED: 227.84 / 100 = 2.28 2.28 x 1 = 2.28 OR 2 CANOPY TREES 2.28 x 2 = 4.56 OR 5 UNDERSTORY TREES 2.28 x 2 = 4.56 OR 5 EVERGREEN TREES PROVIDED: NONE	VARIANCE
		LENGTH ALONG NORTHWEST PROPERTY LINE ADJACENT TO RETAIL = 172.87± LF REQUIRED: 172.87 / 100 = 1.73 1.73 x 1 = 1.73 OR 2 CANOPY TREES 1.73 x 2 = 3.46 OR 3 UNDERSTORY TREES 1.73 x 2 = 3.46 OR 3 EVERGREEN TREES PROVIDED: 1 OV, 1 GTW (2 SHADE TREES), 3 CC (3 UNDERSTORY TREES), 3 TOG (3 EVERGREEN TREES)	COMPLIES
	FIGURE 24.7 SITE ELEMENT SCREEN REQUIREMENTS SITE ELEMENT / TYPE OF SCREEN REQUIRED ELECTRICAL, HVAC, OR UTILITY EQUIPMENT BOX / LOW INTENSITY BC BUSINESS CENTER: GROUND OR WALL-MOUNTED MECHANICAL, ELECTRICAL, COMMUNICATION, HVAC, AND SERVICE EQUIPMENT, INCLUDIGN SATELLITE DISHES AND VENT PIPES / LOW INTENSITY DUMPSTER OR TRASH CONTAINMENT AREA / MEDIUM INTENSITY DRIVE-THROUGH / MEDIUM INTENSITY, BUT HIGH INTENSITY WHEN ABUTTING OR FACING A RESIDENTIAL DISTRICT	DRIVE THROUGH SCREENING REQUIRED: MEDIUM-INTENSITY SCREEN TYPE #5 PROVIDED: LAND USE BUFFER MEETS INTENT OF REQUIREMENT, SEE SECTION 2403.B.4.a ABOVE:	COMPLIES
	C.1. SITE ELEMENT SCREENS SHALL BE REQUIRED IN ALL PROPOSED SUBDIVISION AND LAND DEVELOPMENTS FOR SITE ELEMENTS THAT ARE LOCATED PARTIALLY OR FULLY WITHIN 100 FEET OF THE PROPERTY LINE OR EXISTING ROAD RIGHT-OF-WAY. C.6.a.(1) LOW-INTENSITY SITE ELEMENT SCREEN: SCREEN TYPE #1: EVERGREEN OR DECIDUOUS SHRUBS. THIS SHALL CONSIST OF EVERGREEN OR DECIDUOUS SHRUBS SPACED NO FURTHER THAN THREE FEET ON CENTER, IN A MINIMUM FIVE-FOOT-WIDE BED SURROUNDING THE SITE ELEMENT, AND ARRANGED TO PROVIDE A CONTINUOUS HEDGE-LIKE SCREEN WITH A MINIMUM HEIGHT OF 4 FEET AT MATURITY. SHRUBS MAY BE CLIPPED TO FORM A HEDGE OR LEFT IN THEIR NATURAL HABIT. C.6.b.(1) MEDIUM-INTENSITY SITE ELEMENT SCREEN TYPE #4: OPAQUE FEN CE OR MASONRY WALL WITH SHRUBS. THIS SHALL CONSIST OF AN OPAQUE FENCE OR MASONRY WALL WITH A MINIMUM HEIGHT OF AT LEAST 6 FEET. A FENCE MAY NOT CONSIST OF CHAIN LINK OR WIRE. A WALL SHALL BE CONSTRUCTED OF MASONRY (BUT NOT UNFINISHED CONCRETE MASONRY UNITS). THE FINISHED SIDE OF THE FENCE OR WALL SHALL FACE OUT. THE OUTSIDE OF THE FENCE OR WALL SHALL BE SURROUNDED BY A PLANTING AREA EXTENDING AT LEAST 3 FEET OUTWARDS, PLANTED WITH DECIDUOUS OR EVERGREEN SHRUBS (5' MINIMUM HEIGHT AT TIME OF PLANTING, WITH A HEIGHT OF AT LEAST 6' AT MATURITY) SPACED NO FURTHER THAN 3 FEET ON CENTER. SCREENS FOR DUMPSTERS OR TRASH CONTAINMENT AREAS SHALL COMPLETELY ENCLOSE THE SITE ELEMENT, AND SHALL INCLUDE A SELF-CLOSING GATE. C.6.a.(2) MEDIUM-INTENSITY SITE ELEMENT SCREEN TYPE #5: EVERGREEN HEDGE. THIS SHALL CONSIST OF AN EVERGREEN HEDGE WITH A MINIMUM HEIGHT OF 6 FEET AT TIME OF PLANTING, SPACED NO FURTHER APART THAN 3 FEET ON CENTER.	TRASH CONTAINMENT AREA REQUIRED: MEDIUM INTENSITY SCREEN TYPE #4 PROVIDED: MASONRY WALL ON THREE SIDES WITH A FIVE-FOOT PLANTING AREA WITH EVERGREEN SHRUBS SPACED 3 FEET ON CENTER WHERE FEASIBLE.	COMPLIES
	D.2. A MINIMUM OF 25% OF THE LINEAR AREA (PARALLEL TO THE BUILDING WALL) BETWEEN THE BUILDING FOUNDATION AND SIDEWALKS, ACCESS DRIVES, OR PARKING AREAS SHALL BE LANDSCAPED WITH ORNAMENTAL OR EVERGREEN TREES AND SHRUBS (PLEASE REFER TO THE "RECOMMENDED PLANT MATERIALS" LIST IN THE SALDO)	TREES AND SHRUBS HAVE BEEN PROVIDED BETWEEN THE BUILDING FOUNDATION AND THE SIDEWALKS.	COMPLIES
	E.3. ALL AREAS NOT DEVOTED TO BUILDINGS, DRIVEWAYS, WALKS, 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.	TREES AND SHRUBS HAVE BEEN PROVIDED BETWEEN THE BUILDING FOUNDATION AND THE SIDEWALKS.	COMPLIES
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	TOTAL LENGTH ALONG MORELAND ROAD = 233±LF (EXCLUDING LENGTH OF CROSSING DRIVEWAY) REQUIRED: 233 / 100= 2.33 OR 2 BENCHES / TRASH RECEPTACLES 233 / 50 = 4.66 OR 5 PLANTERS PROPOSED PARKING SPACES = 33 33 / 250 = 0.13 OR 0 BIKE RACKS PROVIDED: 2 BENCHES/TRASH RECEPTACLES, 5 PLANTERS	COMPLIES

Raising Cane's Chicken Fingers
Restaurant Support Office
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Tele: 972-769-3100 Fax: 972-769-3101

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PROJECT No.: PP2270001
DRAWN BY: BMM
CHECKED BY: KRT
DATE: 10.26.22
CAD I.D.: PP2270001-X-TTLB-PHPD

PROJECT:
PRELIMINARY/ FINAL MAJOR LAND DEVELOPMENT PLANS
FOR
RAISING CANE'S RESTAURANTS, LLC.

PROPOSED RESTAURANT #C0952
LAND DEVELOPMENT #LD-22-06

2620 WEST MORELAND ROAD
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
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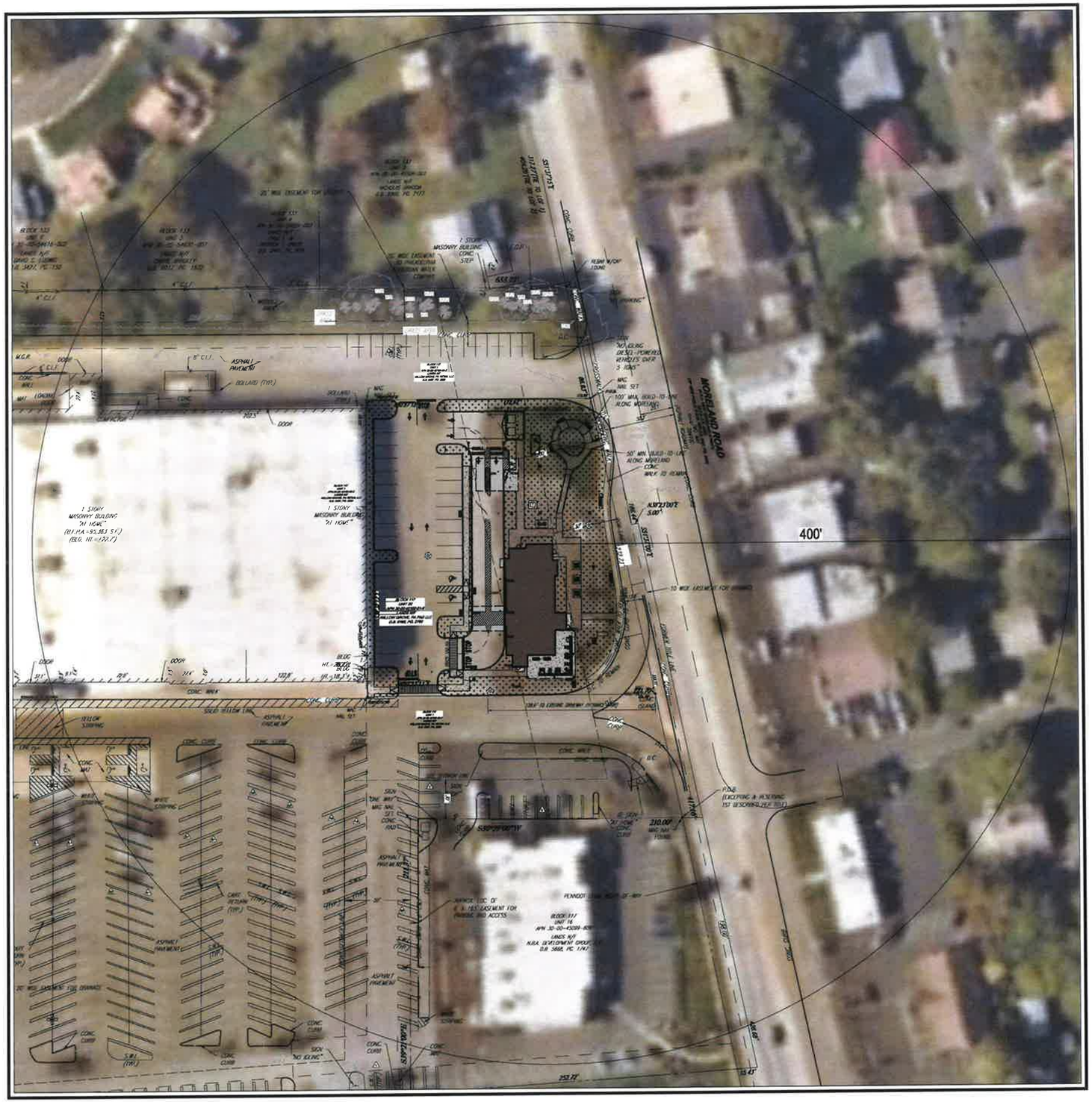
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SHEET TITLE:
LANDSCAPE DETAILS

SHEET NUMBER:
C11.1
25 OF 28

REVISION 1 - 2023-04-10

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MORELAND ROAD
400'
1 STORY MASONRY BUILDING "N/ HOME"
1 STORY MASONRY BUILDING "N/ HOME"
ASPHALT PAVEMENT
BOLLARD (TYP.)
CONC. WALK
CONC. CURB
SIDEWALK
DOOR
W.C.P.
8" C.I.P.
4" C.I.P.
SIGN "NO LEFT TURN"
SIGN "NO U-TURN"
SIGN "NO RIGHT TURN"
SIGN "DO NOT ENTER"
SIGN "ONE WAY"
SIGN "STOP"
SIGN "RIGHT TURN ONLY"
SIGN "KEEP RIGHT"
SIGN "DO NOT BLOCK INTERSECTION"
SIGN "NO PARKING ANYTIME"
SIGN "NO PARKING"
SIGN "NO STOPPING"
SIGN "NO STOPPING ANYTIME"
SIGN "NO STOPPING ANYTIME"
SIGN "NO STOPPING"
SIGN "NO PARKING"
SIGN "NO PARKING ANYTIME"
SIGN "NO PARKING"
SIGN "NO PARKING"
SIGN "NO PARKING

1515 Market Street, Suite 920
Philadelphia, PA 19102
267.402.3400

April 5, 2023
Via: GWRIGLEY@ABINGTON.ORG

Abington Township Wastewater Treatment
1000 Fitzwatertown Road
Roslyn, PA 19001

ATTENTION: George Wrigley,
Director of Wastewater Utilities

Re: Proposed Restaurant
2620 West Moreland Road
Willow Grove
Abington Township, Montgomery County
Bohler Project No. PP2270001

Dear George:

Regarding the above reference project, please find the following items:

- One (1) copy of the Project Narrative
- One (1) copy of the Application for Sewage Facilities Planning Module Exemption Mailer:
- One (1) copy of the PNDI Project Environmental Review Receipt, dated 09-28-22
- One (1) copy of the USGS Site Location Map
- One (1) copy of Raising Cane's existing Water Bills
- One (1) copy of the Utility Plan prepared by Bohler Engineering

Please accept this letter as a request for an exemption from the planning requirements under the PA Sewage Facilities Act 537 for the above referenced project. If you have any questions or require any additional information, please do not hesitate to contact our office.

Sincerely,

BOHLER ENGINEERING PA, LLC

Shannon Heybach-Park, Sr. Design Engineer

1. **Development Information**

Name of Development Rasing Canes

Developer Name Raising Cane's Restaurants, LLC.

Address 6800 Bishop Road, Plano

Texas 75024

Telephone # 770-549-1850

Email acaracci@raisingcanes.com

2. **Location of Development**

a. County Montgomery County

b. Municipality Abington Township

c. Address or Coordinates 2620 West Moreland Rd. Willow Grove, PA 19090

d. Tax Parcel # 30-00-45100-01-6

e. USGS Quad Name Hatboro Quadrangle

inches up 2 over 10

from bottom right corner of map.

f. Located in a High Quality/Exceptional Value watershed?

☐ Yes ☐ No

3. **Type of Development Proposed** (check appropriate box)

☐ Residential ☐ Multi-Residential

Describe

☒ Commercial ☐ Institutional

Describe Restaurant

☐ Brownfield Site Redevelopment

☐ Other (specify)

4. **Size**

a. # of lots 1 # of EDUs 5

b. # of lots since 5/15/72

c. Development Acreage 0.96

d. Remaining Acreage 0

5. **Sewage Flows** 2,000 gpd

6. **Proposed Sewage Disposal Method** (check applicable boxes)

a. ☒ Sewerage System

☒ Existing (connection only) ☐ New (extension)

☒ Public ☐ Private

☐ Pump Station(s)/Force Main ☒ Gravity

Name of existing system being extended

AQUA Pennsylvania

Interceptor Name

Treatment Facility Name

NPDES Permit #

b. ☐ Construction of Treatment Facility

☐ With Stream Discharge

☐ With Land Application (not including IRSIS)

☐ Other

☐ Repair?

Name of waterbody where point of discharge is proposed (if stream discharge)

c. ☐ Onlot Sewage Disposal Systems (check appropriate box)

☐ Individual onlot system(s) (including IRSIS)

☐ Community onlot system

☐ Large-Volume onlot system

d. ☐ Retaining tanks

Number of Holding Tanks

Number of Privies

7. ☐ **Request Sewage Facilities Planning Module forms in electronic format**

8. **Request for Planning Exemption**

a. Protection of rare, endangered or threatened species

Check one:

☒ The "PNDI Project Environmental Review Receipt" is attached.

or

☐ A completed "PNDI Project Planning & Environmental Review Form," (PNDI Form) is attached. I request DEP staff to complete the required PNDI search for my project. I realize that my planning exemption will be considered incomplete and that the DEP processing of my planning exemption request will be delayed, until a "PNDI Project Environmental Review Receipt" and all supporting documentation from jurisdictional agencies (when necessary) is/are received by DEP.

Applicant or Consultant Initials

b. ☒ Plot Plan Attached ☐ Site Reports Attached

c. Onlot Disposal Systems

(1) I certify that the Official Plan shows this area as an onlot service area.

(Signature of Municipal Official) Date

Name (Print) Title

Municipality (must be same as in 2.b.)

Telephone #

(2) I certify that each lot in this subdivision has been tested and is suitable for both a primary and replacement sewage disposal system.

Signature of SEO) Date

Name (Print) Certification #

Telephone #

(3) I certify that each lot in this subdivision is at least 1 acre in size

(Signature of Project Applicant/Agent) Date

d. Public Sewerage Service (i.e., ownership by municipality or authority)

Based upon written documentation, I certify that the facilities proposed for use have capacity and that no overload exists or is projected within 5 years. (Attach documents.)

(Signature of Municipal Official) Date

Name (Print) Title

Municipality (must be same as in 2.b.)

Telephone #

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

The National Map US Topo

HATBORO QUADRANGLE
PENNSYLVANIA
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid:Universal Transverse Mercator, Zone 18T

This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Imagery.....NAIP, June 2017 - December 2017
Roads.....U.S. Census Bureau, 2016
Names.....GNIS, 1979 - 2019
Hydrography.....National Hydrography Dataset, 2001 - 2018
Contours.....National Elevation Dataset, 2011 - 2017
Boundaries.....Multiple sources; see metadata file 2017 - 2018

Wetlands.....FWS National Wetlands Inventory 1981 - 2013

MN GN
12°12'
217 MILS
0°2'
1 MILS
UTM GRID AND 2019 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

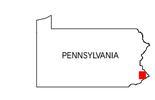
U.S. National Grid
100,000 - m Square ID
VK
Grid Zone Designation
18T

SCALE 1:24 000

1 0.5 0 KILOMETERS 1 2
1000 500 0 METERS 1000 2000
1 0.5 0 1
MILES
1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
FEET

CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the
National Geospatial Program US Topo Product Standard, 2011.
A metadata file associated with this product is draft version 0.6.18



QUADRANGLE LOCATION

1	2	3
4		5
6	7	8

ADJOINING QUADRANGLES
1 Doylestown
2 Buckingham
3 Lambertville
4 Ambler
5 Langhorne
6 Germantown
7 Frankford
8 Beverly

ROAD CLASSIFICATION
Expressway
Secondary Hwy
Ramp
Local Connector
Local Road
4WD
Interstate Route
US Route
State Route

HATBORO, PA
2019

NSN, NGA REF NO. USGSX24K7032702 7643016391472

1. PROJECT INFORMATION

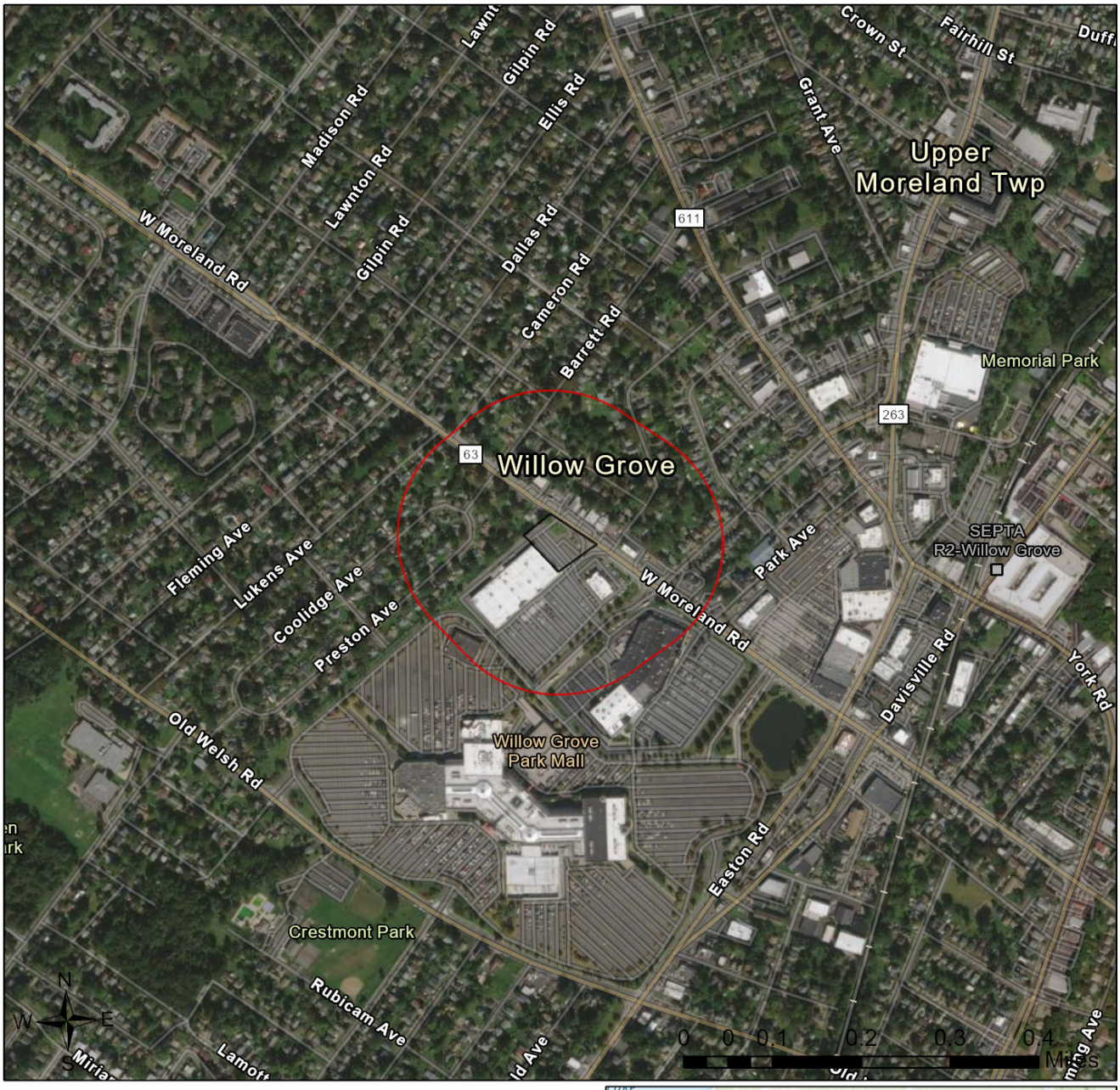
Project Name: **PP227001-2620 West Moreland Road**
Date of Review: **9/28/2022 03:25:50 PM**
Project Category: **Development, Additions/maintenance to existing development facilities**
Project Area: **1.41 acres**
County(s): **Montgomery**
Township/Municipality(s): **ABINGTON TOWNSHIP**
ZIP Code:
Quadrangle Name(s): **HATBORO**
Watersheds HUC 8: **Lower Delaware**
Watersheds HUC 12: **Upper Pennypack Creek**
Decimal Degrees: **40.144174, -75.122418**
Degrees Minutes Seconds: **40° 8' 39.254" N, 75° 7' 20.7045" W**

2. SEARCH RESULTS

Agency	Results	Response
PA Game Commission	No Known Impact	No Further Review Required
PA Department of Conservation and Natural Resources	No Known Impact	No Further Review Required
PA Fish and Boat Commission	No Known Impact	No Further Review Required
U.S. Fish and Wildlife Service	No Known Impact	No Further Review Required

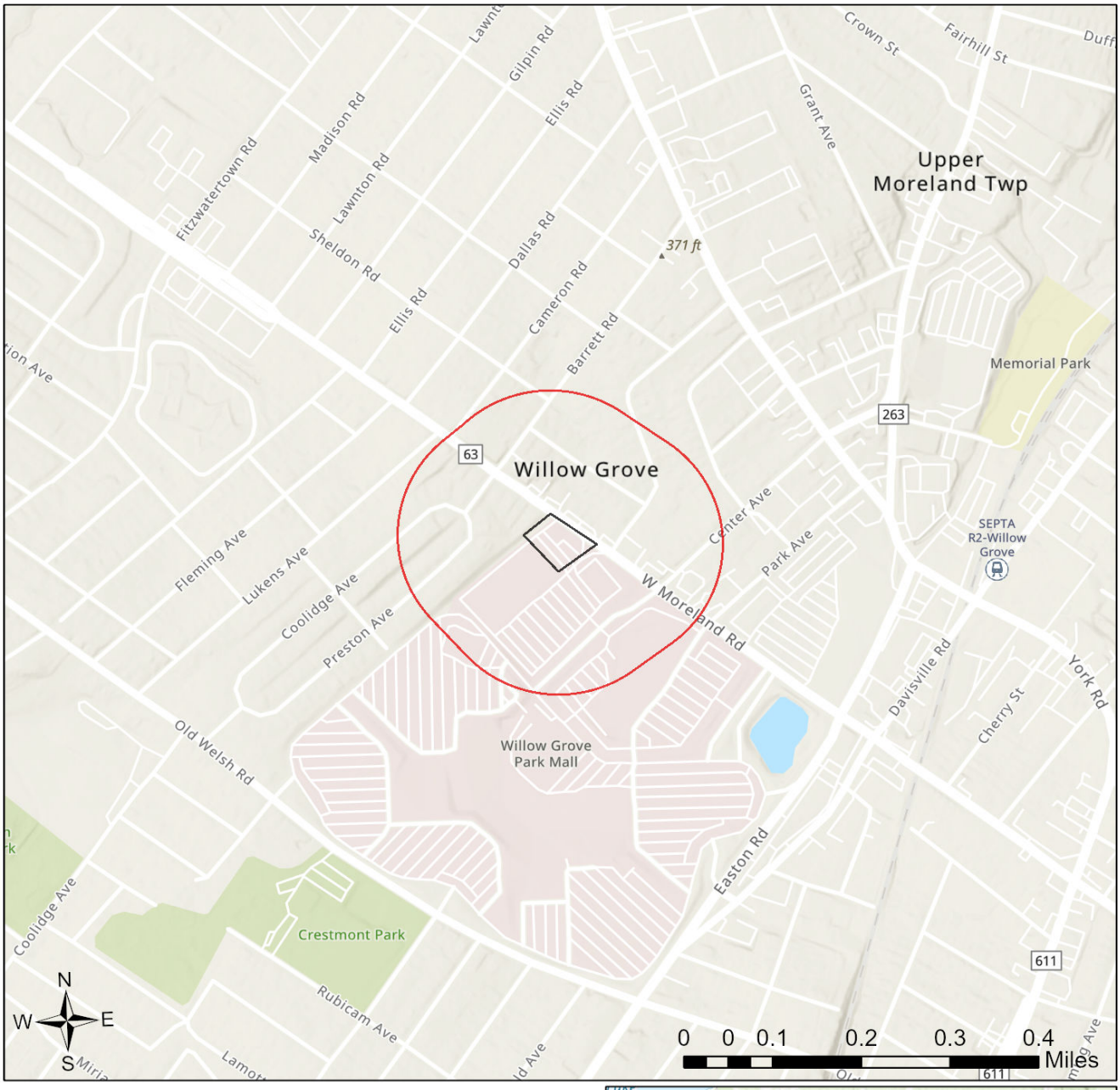
As summarized above, Pennsylvania Natural Diversity Inventory (PNDI) records indicate no known impacts to threatened and endangered species and/or special concern species and resources within the project area. Therefore, based on the information you provided, no further coordination is required with the jurisdictional agencies. This response does not reflect potential agency concerns regarding impacts to other ecological resources, such as wetlands.

PP227001-2620 West Moreland Road



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

PP227001-2620 West Moreland Road



Buffered Project Boundary

Project Boundary



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

3. AGENCY COMMENTS

Regardless of whether a DEP permit is necessary for this proposed project, any potential impacts to threatened and endangered species and/or special concern species and resources must be resolved with the appropriate jurisdictional agency. In some cases, a permit or authorization from the jurisdictional agency may be needed if adverse impacts to these species and habitats cannot be avoided.

These agency determinations and responses are **valid for two years** (from the date of the review), and are based on the project information that was provided, including the exact project location; the project type, description, and features; and any responses to questions that were generated during this search. If any of the following change: 1) project location, 2) project size or configuration, 3) project type, or 4) responses to the questions that were asked during the online review, the results of this review are not valid, and the review must be searched again via the PNDI Environmental Review Tool and resubmitted to the jurisdictional agencies. The PNDI tool is a primary screening tool, and a desktop review may reveal more or fewer impacts than what is listed on this PNDI receipt. The jursidictional agencies **strongly advise against** conducting surveys for the species listed on the receipt prior to consultation with the agencies.

PA Game Commission

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Department of Conservation and Natural Resources

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Fish and Boat Commission

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

U.S. Fish and Wildlife Service

RESPONSE:

No impacts to **federally** listed or proposed species are anticipated. Therefore, no further consultation/coordination under the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq. is required. Because no take of federally listed species is anticipated, none is authorized. This response does not reflect potential Fish and Wildlife Service concerns under the Fish and Wildlife Coordination Act or other authorities.

4. DEP INFORMATION

The Pa Department of Environmental Protection (DEP) requires that a signed copy of this receipt, along with any required documentation from jurisdictional agencies concerning resolution of potential impacts, be submitted with applications for permits requiring PNDI review. Two review options are available to permit applicants for handling PNDI coordination in conjunction with DEP's permit review process involving either T&E Species or species of special concern. Under sequential review, the permit applicant performs a PNDI screening and completes all coordination with the appropriate jurisdictional agencies prior to submitting the permit application. The applicant will include with its application, both a PNDI receipt and/or a clearance letter from the jurisdictional agency if the PNDI Receipt shows a Potential Impact to a species or the applicant chooses to obtain letters directly from the jurisdictional agencies. Under concurrent review, DEP, where feasible, will allow technical review of the permit to occur concurrently with the T&E species consultation with the jurisdictional agency. The applicant must still supply a copy of the PNDI Receipt with its permit application. The PNDI Receipt should also be submitted to the appropriate agency according to directions on the PNDI Receipt. The applicant and the jurisdictional agency will work together to resolve the potential impact(s). See the DEP PNDI policy at https://conservationexplorer.dcnr.pa.gov/content/resources.

5. ADDITIONAL INFORMATION

The PNDI environmental review website is a preliminary screening tool. There are often delays in updating species status classifications. Because the proposed status represents the best available information regarding the conservation status of the species, state jurisdictional agency staff give the proposed statuses at least the same consideration as the current legal status. If surveys or further information reveal that a threatened and endangered and/or special concern species and resources exist in your project area, contact the appropriate jurisdictional agency/agencies immediately to identify and resolve any impacts.

For a list of species known to occur in the county where your project is located, please see the species lists by county found on the PA Natural Heritage Program (PNHP) home page (www.naturalheritage.state.pa.us). Also note that the PNDI Environmental Review Tool only contains information about species occurrences that have actually been reported to the PNHP.

6. AGENCY CONTACT INFORMATION

PA Department of Conservation and Natural Resources
Bureau of Forestry, Ecological Services Section
400 Market Street, PO Box 8552
Harrisburg, PA 17105-8552
Email: RA-HeritageReview@pa.gov

U.S. Fish and Wildlife Service
Pennsylvania Field Office
Endangered Species Section
110 Radnor Rd; Suite 101
State College, PA 16801
Email: IR1_ESPenn@fws.gov
NO Faxes Please

PA Fish and Boat Commission
Division of Environmental Services
595 E. Rolling Ridge Dr., Bellefonte, PA 16823
Email: RA-FBPACENOTIFY@pa.gov

PA Game Commission
Bureau of Wildlife Management
Division of Environmental Review
2001 Elmerton Avenue, Harrisburg, PA 17110-9797
Email: RA-PGC_PNDI@pa.gov
NO Faxes Please

7. PROJECT CONTACT INFORMATION

Name: Kevin Tatlow
Company/Business Name: Bohler Engineering
Address: 1515 Market Street Suite 920
City, State, Zip: Philadelphia, PA 19102
Phone:(267)402-3400 Fax:( )
Email: ktatlow@bohlereng.com

8. CERTIFICATION

I certify that ALL of the project information contained in this receipt (including project location, project size/configuration, project type, answers to questions) is true, accurate and complete. In addition, if the project type, location, size or configuration changes, or if the answers to any questions that were asked during this online review change, I agree to re-do the online environmental review.

Kevin Tatlow
applicant/project proponent signature

09-28-22
date

Project Narrative

2620 West Moreland Road

Willow Grove

Abington Township

Montgomery County, PA

PP2270001

Project Description

The Raising Cane's Restaurants, LLC. proposes to develop the site by constructing a proposed 3,062 SF GFA restaurant. The proposal also includes the installation of landscaping, parking, utilities and stormwater management controls necessary to support the development. The total limit of disturbance for the development is approximately 0.96 acres, including both on-site and off-site disturbance. Pertinent data characterizing the existing and future site conditions are shown on the accompanying Land Development Plans, prepared by Bohler Engineering PA, LLC. This development is submitting for Montgomery County Conservation District approval.

Proposed Sewage Disposal Method, Waste Water Flows and SRUs/EDUs

The development will be serviced by public water and sewer. The public water will be provided via a connection to the water main within an existing 20' wide easement to Philadelphia Suburban Water Company adjacent to Moreland Road. The proposed building will have a connection to the 36" RCP located within the site. The site is expected to produce 2,000 GPD or 5 EDUs based on previous water bills of equally sized Raising Cane's restaurants. The previous Water Bills have been provided. The existing use at 2620 West Moreland Road is a parking lot. The proposed use will be a fast-food restaurant.

Alternative Sewage Disposal Investigation

Construction of the proposed restaurant will require 2,000 gallons per day and is proposed to connect to the existing sewer located within the existing Parking Lot, which ultimately leads to Moreland Road. There is no alternative disposal method that is applicable for this site.

McMAHON
a Bowman company

March 29, 2023

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

Re: Response to Traffic Review Comments #1
2620 West Moreland Road – Raising Cane's
Abington Township, Montgomery County, PA

Dear Mr. Manfredi:

On behalf of our client, Raising Cane's, our office provides the following responses to the comments raised by Traffic Planning & Design in their memo dated February 6, 2023 specifically related to their review of the Transportation Impact Assessment report submitted.

Traffic Impact Assessment

Comment #1: *The traffic report assumes 10% of the site trips will utilize intersections not included in the study area. Presumably, these trips will utilize the traffic signal at Moreland Road (S.R. 0063) & Center Road/Willow Grove Park Mall Access. It is recommended that the traffic report be revised to include this intersection and assess the impact that the site may have on it.*

Response: **The traffic assessment does assume that 10% of the traffic generated by the proposed Raising Canes will utilize the mall access road to either come from or go to the existing retail businesses within the area. It should not be assumed that all or any of that traffic will utilize the signalized intersection since the pad site already has viable access to/from Moreland Road via the two unsignalized accesses next to the outparcel. This percent distribution was intended to be trips to/from the existing retail businesses in and around the mall property.**

Comment #2: *The traffic counts included in the traffic report were conducted on Saturday, December 17th and Tuesday, December 20th. Verify that local schools were in session at this time, or a seasonal adjustment factor may be needed.*

Response: **It was verified prior to the completion of the data collection, and also re-verified after receipt of the comments, all schools in the area did have a full-day of classes on December 20th. Schools in the area did not break for the holidays until Friday, December 23rd.**

1515 Market Street, Suite 1360, Philadelphia, PA 19102
P: 215.433.1660
mcmahonassociates.com | bowman.com

Comment #3: *The traffic report utilizes previous studies from three comparable sites in Illinois to determine a site- specific trip generation rate. We note that the comparable trip generation rate is more conservative than published ITE data. However, it appears that these comparable sites all have a single drive- thru lane, rather than the dual drive-thru configuration proposed at this location. Provide additional information related to the trip generation impacts of a dual drive-thru configuration. Our office may have additional comments upon review of revisions to the trip generation calculations that may be needed due to the dual drive-thru configuration.*

Response: **Updated trip generation and drive-thru vehicle queue evaluations of existing sites with the dual drive-thru design are being performed and will be utilized for comparison when available.**

Comment #4: *The weekday morning peak hour was not evaluated as the traffic report indicates these stores typically do not begin operating until 10:00 a.m. It is recommended that an operating time limit be made a condition of any approval.*

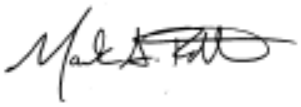
Response: **Although the proposed restaurant does not currently have operating hours during the morning commuter peak hours, it is our understanding that the applicant is not in agreement with the restriction being suggested.**

Comment #5: *The Synchro analysis at the Full Movement Access Driveway to Moreland Road (S.R. 0063) assumed a two-stage left turn maneuver exiting the proposed site with the median storage inputted as two (2) vehicles. The maximum vehicle storage input should be 1 vehicle based on the width of the two-way left-turn lane (TWLTL). We note that this input value has a significant impact on the approach LOS and queue results. Provide further justification that two-stage left turn maneuvers occur at this location. Otherwise, the analysis should assume a one-stage left turn maneuver.*

Response: **Our analysis of the unsignalized full movement driveway access to Moreland Road included a two-stage left-turn for the vehicles exiting the driveway making a left-turn onto Moreland Road. Based on our observations of traffic operations in the area, the center lane area along Moreland Road in this area is currently being utilized to perform this movement, and will continue to be utilized in this manner. Since the 2-stage left-turn movement is currently performed along Moreland Road at other unsignalized driveways, it is our opinion that it is appropriate in this scenario.**

If you have any questions related to our responses, please contact our office. Thank you.

Sincerely,



Mark A. Roth, P.E.
Senior Project Manager

1515 Market Street, Suite 1360, Philadelphia, PA 19102
P: 215.433.1660
mcmahonassociates.com | bowman.com

1515 Market Street, Suite 920
Philadelphia, PA 19102
267.402.3400

April 10, 2023
Via: Fedex

Montgomery County Planning Commission
Montgomery County Courthouse • Po Box 311
Norristown, PA 19404-0311

Attention: Mike Narcowich
Phone: 610-278-3722
Email: mnarcowi@montcopa.org

Re: Professional Due Diligence Services
Proposed Raising Cane's Restaurant
2620 Moreland Road
Willow Grove, PA 19090 ("site")
Bohler No. PP2270001
Raising Cane's No. C0952

Dear Mike:

With regard to the above referenced project, enclosed please find the following for your review and approval:

- Preliminary/ Final Major Land Development Plans dated 10.26.22, revised 04.10.23.
- Architectural Elevation Plans
- Greg H email Coordination
- $190 Fee to be Paid online once MCPC receives the proposal.

Below please find an itemized response to the Review letter received from your office, dated December 9, 2022. Our responses are noted in **bold.**

Transportation

1. A. Sidewalks.

   Street front sidewalks are required to be at least ten feet wide along the street, eight feet wide along main access drives, and six feet wide along secondary access drives [Zoning §2504.B]. The sidewalk along Moreland Road is generally four feet wide, with the exception of an area in the easternmost part of the property where it is five feet wide. No sidewalk is proposed along the access drive (the drive located between the proposed restaurant and Chipotle).

   Response: Per coordination between Craig R. Lewis and Gregory Heleniak and Abington Township, Abington Township has deemed the requested sidewalks as a lawful nonconformities. Abington will not require the existing West Moreland Sidewalk Frontage to be replaced. Abington Township will not require the installation of the requested curb ramp on the Raising Cane's property as part of land development provided that an escrow is furnished by the developer to fund future installation of the required curb ramp. Please see the attached email correspondence dated 02/23/23.

2. Decorative Verge. The required sidewalk along the access drive shall be separated from the curb by a minimum four-foot verge. At least 25 percent of the verge area (including those along both Moreland Road and the access drive) shall be planted with a mix of ground cover, shrubs, and trees [Zoning §2504.E] (consistent with the provisions of the variance for planting requirements, the Board of Commissioners may determine that such landscaping is necessary)

   Response: Noted. Verge has been added for access drive sidewalk being proposed. Moreland Road sidewalk remaining as existing due to existing nonconformity.

3. Sidewalks are also required by the SALDO, as are curb ramps [§146-27].

   Response: Per coordination between Craig R. Lewis and Gregory Heleniak and Abington Township, Abington Township has deemed the requested sidewalks as a lawful nonconformities. Abington will not require the existing West Moreland Sidewalk Frontage to be replaced. Abington Township will not require the installation of the requested curb ramp on the Raising Cane's property as part of land development provided that an escrow is furnished by the developer to fund future installation of the required curb ramp. Please see the attached email correspondence dated 02/23/23.

1. B. Crosswalks.

   A crosswalk is required where a street meets an access drive [Zoning §2504.F]. No crosswalk is proposed in this location. The applicant's property includes the right-in turn lane from Moreland Road onto the shopping center's access drive.

   Response: A crosswalk, designed to Abington Standards, has been implemented at the drive access. Please see Sheet C1.1.

2. We recommend that a crosswalk be added where the proposed parking aisle for the restaurant would meet the access drive (at proposed stop bars located closest to Chipotle).

   Response: A crosswalk, designed to Abington Standards, has been implemented at the drive access. Please see Sheet C1.1.

C. Parking. A waiver is required from §146-28 to allow for nine by eighteen foot parking spaces.

   Response: Parking has been revised to match Abington Township dimension standards. Please see Sheet C1.1.

D. Vehicular Circulation. A trash truck servicing the dumpster would block the drive-through lanes. We suggest the applicant explain how timing of trash pickups or other measures will prevent conflicts.

   Response: Raising Canes deliveries will occur during off hours when the store is closed, therefore a dedicated loading space is not needed. Refer to the Vehicle circulation plan , sheet C-10 showing the delivery truck movement as well as a note indicating "deliveries to occur during off hours when store is closed"

<u>Building</u>

A. Corner Buildings. Buildings located on a corner (of streets and/or access drives) in the BC Business Center District shall have a main entrance on (and facing) the corner [Zoning §1104.C.]. This would apply to the intersection of Moreland Road and the access drive (near Chipotle).

Response: There is an access that faces both Moreland Road and the access drive.

B. Building Height. The table should specify that 20 feet is the “minimum” façade height.

Response: Table has been revised to show the corrected height of 20’. Please see Sheet C1.1.

C. Renderings. Renderings are required [§146-11.L]. These are necessary for determining if the proposed building complies with the design requirements of the zoning ordinance [Zoning Article XI], including, but not limited to the following requirements [Zoning §1104.C].

1. Facades facing the street and access drive.
2. Matching of colors of rear, side, and front façades.
3. Use of parapets, pitched roofs, or mansard roofs to conceal flat roofs and rooftop equipment.
4. Window area of 35 to 75 percent on walls facing the street.
5. Minimum 50 percent clear window area on ground floors.

Response: Architectural Elevations have been provided. Please see attached.

LANDSCAPING

As noted above, the applicant received a variance from the minimum planting and buffer requirements (provided that the applicant install landscaping deemed necessary by the Board of Commissioners). We offer the following comments for the Board of Commissioners’ consideration:

A. Street/Shade Trees [Zoning §2402, SALDO §146-39]. The six proposed street trees along Moreland Road are Eastern Redbuds, which are typically considered “ornamental trees.” These trees should be a more appropriate species to meet the intent of street trees (providing shade for the sidewalk and pedestrians using it). The Willow Grove Park Mall vicinity is the largest heat island in the township, so street trees providing shade are all the more important.

Response: The six proposed ornamental street trees have been replaced with shade trees as required (Sheet C11.0).

B. Verge. See comment under TRANSPORTATION: Sidewalks: Decorative Verge, above.

Response: Noted. Verge has been added for access drive sidewalk being proposed. Moreland Road sidewalk remaining as existing due to existing nonconformity.

C. Screening. We recommend that shrubs, perennials, or ornamental grasses be planted in the 5.9-foot wide strip on the plans near the label “Southwest Buffer” to provide visual interest and improve stormwater management.

Response: Shrub and ornamental grasses have been provided, as requested (sheet C11.0).

Upon review, should you have any questions or require additional information, please do not hesitate to contact our office.

Sincerely,

BOHLER ENGINEERING PA, LLC

Kevin Tatlow

Kevin Tatlow, P.E., Senior Project Manager

KT/as
R:\2022\PP2270001\Administrative\Correspondence\County PC\PP2270001_2023-04-10_CRL.docx

1515 Market Street, Suite 920
Philadelphia, PA 19102
267.402.3400

April 10, 2023
Via: FedEx – Priority

Abington Township Environmental Advisory Council
1176 Old York Road
Abington, PA 19001

Attention: Susan Myerov, & Patricia Gallagher

Re: Proposed Raising Cane's Pad Site
2620 Moreland Road
Abington Township
Montgomery County, PA
PP2270002

Dear Susan & Patricia:

With regard to the above referenced project, enclosed please find the following for your review and approval:

- Preliminary/ Final Major Land Development Plans dated 10.26.22, revised 04.10.23.

Below please find an itemized response to the Memo letter received from Abington Township Environmental Advisory Council and Shade Tree Commission, dated 12/20/2022. Our responses are noted in **bold.**

General Comments:

1. Both the STC and EAC members feel the site could easily accommodate more trees, especially true canopy trees, in line with Township's desire to reduce heat island effects in highly impervious cover places. More specific landscape comments are noted below.

   Related to our comments above, please address why all of the existing trees along Moreland Road need to be removed. A portion of this area is proposed to be used for green space after construction. Why not keep trees within the proposed green area and incorporate them into the new landscape plan?

   Response: The proposed grading, utilities, and public amenity space will disturb the smaller sized trees along Moreland road. As for the other one that is in the middle of the site's frontage, this tree will also be impacted by grading and utilities. It also appears to be in decline and could be considered a hazard to pedestrians walking by. By removing the existing trees along the frontage, we are able to propose new healthy trees that compliment the proposed design.

2. Based on the layout of the parking lot relative to the restaurant's main entrance, it was noted that patrons need to cross the active drive-thru lanes to access the building. We feel this creates a potential safety concern (pedestrian/car conflict) which should be addressed.

   Response: Additional crosswalk and ADA ramps have been provided.

3. In addition to the new building, plans indicate the addition of landscaped areas on the northeast and southeast sides of the building. The reconstruction of this landscaped area 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 the roof area (specifically at the southeast corner, where site is at its lowest elevation). Would the applicant consider redesigning these grassed areas as a bioretention area?

Response: The site constraints result in not enough space for a bio retention. The project is sheet flowing impervious areas to green areas as shown on the grading plan, sheet C6-0.

4. We also noted that the building's roof top offers excellent opportunity for a green roof application. This should be considered as it would help mitigate the volume and velocity of rooftop runoff, which could impact the size of the underground storage basin. The vegetated element can help moderate the building's energy use and set an example for other similar building types in our commercial and business zones. Green roof systems have also been noted to extend the useful life of the roof as well.

   Response: The installation of a green roof would significantly increase the weight on the roof framing members. Since Raising Cane's employs a very specifically designed wooden roof truss system for their prototypical design, a green roof presents an unacceptable increase in design, cost and construction, in addition to maintenance and upkeep. The proposed plans provide for acceptable underground basin storage capacity for rooftop runoff.

5. Would the applicant clarify drainage for the trash enclosure area for the restaurant? On sheet C7, Utility Plan, the legend indicates that the trash enclosure floor drain ties into the storm sewer system, but the plan indicates tie-in to Sanitary Sewer. We recommend that this be tied to Sanitary Sewer line to capture any pollutants that might run off from trash enclosure areas, especially since this area is not covered.

   Response: This was a typo, the Trash enclosure floor drain is to tie into the sanitary sewer. Please see Sheet C7-0.

Landscape/Habitat Recommendations:

6. The STC found the proposed tree planting plan to be disappointing at best. The developer applied for and received landscaping variances for the parking lot perimeter buffer, the southwest property line, and the southeast property line. Additionally, while the developer proposes to reduce the impervious area of the site from 82.4% (above the 75% maximum paving permitted) to 68.95%, they use the proposed reduction to claim exemption from the requirement to replace the four trees that will be removed. Finally, the developer proposes to plant the absolute minimum number of canopy and understory trees in the remainder of the site where variances were not requested.

   For a corporation with a strong community-oriented marketing strategy ("Let's Work in Together for Our Community"), the STC believes there are significant missed opportunities to align with the mission of the Raising Cane Corporation and make **meaningful improvements** to our community. These opportunities include increasing the tree canopy, replacing removed trees, improving the local habitat, and reducing urban heat island effects by planting shade trees and using innovative stormwater best management practices, all of which would "work together for our community."

   The EAC and STC appreciate that many native species were included in the proposed planting plan. We recommend adding **more urban-tolerant native trees to the plan**, such as American Smoketree (Cotinus obovatus), Apple Serviceberry (Amelanchier x grandiflora 'Autumn Brilliance'), or Black Tupelo (Nyssa sylvatica). American smoketree would grow well in the center circle of the bench seating area.

   Response: Acknowledged.

Specific Comments on Proposed Tree Selection (STC):

7. CCA CARPINUS CAROLINIANA AMERICAN HORNBEAM, which is specified as a canopy tree, is actually an understory tree and should be replaced with a canopy tree. We recommend using Ostrya virginiana (American Hop Hornbeam) which is both a canopy tree and better suited for dry, urban growing conditions.

   We recommend replacing six of the proposed CC CERCIS CANADENSIS EASTERN REDBUD with shade trees. While undeniably beautiful in spring, Eastern redbud is not well suited to the dry conditions and the urban heat island effect in this highly developed area. A predominance of shade trees will shelter the redbuds and increase their likelihood of survival. Suggested shade tree species include Acer rubrum (Red maple), Ulmus americana (American elm), and Nyssa sylvatica (Black tupelo). There are no overhead utility lines at the site that would interfere with planting shade trees. If the developer does not include shade trees in this area, we recommend adding more variety of species to lengthen the bloom time and reduce risk of diseases. Appropriate species include with American Smoketree (Cotinus obovatus), or Apple Serviceberry (Amelanchier x grandiflora 'Autumn Brilliance').

Response: The CCA have been replaced with Ostrya virginiana as requested. A portion of the CC have been replaced with Ulmus americana 'Princeton' as requested (sheet C11.0)

8. The STC also recommends that a tree be planted inside the circular walkway in the seating area to provide visual interest and shading in this proposed public green space. Suitable species are listed in the previous paragraph.

   Response: A tree has been planted within the circular walkway in the seating area as requested (sheet C11.0).

9. With respect to the landscaping specifications (Sheet 20), Notes G and H appear out of date and do not reflect current practice. Specifically, with respect to Note G: Trees can be planted year-round; in the fall, they need to be planted after dormancy, so they should be dug late in the fall. With respect to Note H: Trees should be backfilled with native material. If the native material is unsuitable, the backfill should consist of a mixture of 80% topsoil and 20% compost.

   Response: Notes G and H have been revised slightly (sheet C11.0).

Specific Comments on Proposed Planting Species (EAC and STC):

10. DGN 48 DEUTZIA GRACILIS `NIKKO` SLENDER DEUTZIA 18-24" CONTAINER. - Not native, not considered invasive. Consider substituting some of these with native species such as Rhus aromatica 'Gro Low,' Aronia melanocarpa 'Low Scape Mound,' Erigeron pulchellis 'Lynnhaven Carpet,' Sweetfern (Comptonia peregrine), or, if conditions permit, Ceanothus americanus (New Jersey Tea).

    Response: Acknowledged. All Slender deutzia have been replaced with Rhus aromatica 'Gro Low', as suggested (sheet C11.0).

11. IMBB 24 ILEX X MESERVEAE `BLUE BOY` BLUE BOY HOLLY 36" MIN. CONTAINER. - Not native, not considered invasive. Consider substituting these with male and female cultivars of Ilex opaca (American

holly), such as ‘Jersey Knight’ and ‘Jersey Princess.’ Plant one male for every 3 to 7 females. Female plants grow red berries that provide winter interest and food for wildlife.

Response: Acknowledged. All Blue Boy hollies have been replaced with Ilex glabra ‘Shamrock’ (sheet C11.0).

12. JHIB 112 JUNIPERUS HORIZONTALIS `MONBER` ICEE BLUE JUNIPER 15-18" SPRD CONTAINER. - Not native, not considered invasive. Consider substituting some of these with native Arctostaphylos uva-ursi (Bearberry), Thuja occidentalis ‘Concesarini’ (Pancake arborvitae) or other Thuja occidentalis cultivar, Erigeron pulchellis ‘Lynnhaven Carpet,’ Baptisia australis (False Blue Indigo), or a blue-green native sedge species.

    Response: Acknowledged.

13. VR 8 VIBURNUM RHYTIDOPHYLLUM LEATHERLEAF VIBURNUM 3-4` B&B. - Not native, considered invasive in a few southern states. Viburnum leaf beetle exists in this area and may kill viburnums, although this species is one of the most resistant ones. Consider substituting some of these with native Physocarpus opulifolius cultivar (Common ninebark), Myrica cerifera (Southern bayberry), Myrica pennsylvanica (Northern bayberry), Leucothoe axillaris (Coastal doghobble), Leucothue fontanesiana ‘Rainbow’ (Drooping leucothoe), or, if conditions permit, Ceanothus americanus (New Jersey Tea).

    Response: Acknowledged. All Leatherlead Viburnums have been replaced with “Tiny Wine” Ninebark, as suggested. Please see Sheet C11-0.

14. LSP 43 LIRIOPE SPICATA CREEPING LILY TURF 1 GAL. CONTAINER 15" o.c. - Not native, not considered invasive. This tough plant is good for the tough location along the drive thru. Consider substituting Phlox subulata (Moss phlox), Penstemon digitalis ‘Husker Red,’ Carex plantaginea (Plaintain leaf sedge), or other native species.

    Response: Acknowledged.

Sustainability Comments:

15. We encourage that a specific area be designed to accommodate bicycle parking.

    Response: Noted.

16. 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.

    Response: Due to the inherent nature of the proposed Raising Cane’s restaurant, natural gas plays a crucial part in everyday operations. With numerous fryer batteries and griddles (and hot water heater system), natural gas is already an unavoidable, integral part of the buildings functionality. The HVAC units were selected by Raising Cane’s mechanical engineers to provide high efficiency units that meet or exceed minimum energy standards and provide separate, thermostat controlled zone coverage for more efficient utilization. The use of all-electric units would require an increase in the electric service size, and would require a complete redesign of what is an already code compliant building and systems.

Upon review, should you have any questions or require additional information, please do not hesitate to contact our office.

Sincerely,

BOHLER ENGINEERING PA, LLC

Kevin Tatlow

Kevin Tatlow, P.E., Senior Project Manager

KT/jcs
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1515 Market Street, Suite 920
Philadelphia, PA 19102
267.402.3400

April 14th, 2023
Via: Fed-Ex Priority

Abington Township
1176 Old York Road
Abington, PA 19001

Attention: Mr. Richard Manfredi, Township Manager

Re: **LD-22-06-2620**
Proposed Raising Cane's Restaurant
2620 West Moreland Road
Abington Township
Montgomery County, PA
Bohler Project No. PP2270001

Dear Richard:

With regard to the above referenced project, enclosed please find the following for your review and approval:

- Three (3) copies of the Stormwater Management Narrative and Calculations dated April 10th, 2023
- One (1) reduced copy of Proposed Land Development Plans, Size 11" x 17", dated April 10th, 2023
- Ten (10) copies of Proposed Land Development Plans, Size 24" x 36", dated April 10th, 2023
- Two (2) copies of Architectural Plans including Photometric Plan, prepared by ADA Architects, dated 02/02/23
- One (1) copy of the Sign Package prepared by AGI
- Coordination Emails with Allison Lee
- Coordination Emails With Gregory Heleniak
- Waiver Request Letter
- Shade Tree Review/Response Letter
- MCPC Review/Response Letter
- Traffic Review/Response Letter
- MCCD Applications
- Sewer Mailer Exemption Package, revised and resubmitted to George Wrigley 04/05/23

Below please find an itemized response to the letter received from Khaled R. Hassan P.E., with Pennoni Associates, Inc., dated December 5, 2022. Our responses are noted in **bold.**

ZONING COMMENTS

1. Per §1102 – Permitted Uses – In accordance with the Abington Comprehensive Use Matrix, Use C-25 Fast-food Restaurant is a permitted use in the BC Business Center Willow Grove Park Zoning District. Use A-17 Outdoor Dining is also a permitted accessory use to the principal C-25 – Fast Food Restaurant within the BC Business Center Willow Grove Park Zoning District.

   Response: Noted.

2. Per §1103 Figure 11.9 – Dimensional Regulations – The minimum build-to line along public streets shall be 20 feet (50 feet on Moreland Road west of Park Avenue) and the maximum shall be 50 feet (100 feet on Moreland Road west of Park Avenue.) The minimum build-to-line along main access drives shall be 20 feet with a maximum of 25 feet, and along secondary access drives the minimum build-to-line shall be 16 feet with a maximum of 25 feet.
   The site is accessed by two drives that intersect with West Moreland Road. Per Section 201 – Specific Definitions, the access drive to the south provides access from West Moreland Road to internal parking

areas and is therefore classified as a main access drive. In addition, per the definition of building, the steel roof supported by columns on the patio is considered a building. The steel roof structure is only 12.6 feet from the main access drive which is less than the minimum required 20 feet. The plans shall be revised accordingly to show the building setback lines from West Moreland Road as well as the main access drive, and the steel roof structure moved to be located within the build-to-lines; otherwise, a variance from this section of the code will be required.

Response: The proposed canopy will remain and the applicant will request a variance for the minimum build-to-line.

3. Per §1103 Figure 11.9 – Dimensional Regulations – The minimum façade height shall be 20 feet, or 25 feet if a pitched roof. Per the architectural plans, a façade height of 19.8 feet is proposed for the Raising Cane's restaurant which is less than the 20 feet minimum requirement. The façade height shall be revised to conform with the 20 feet minimum requirement; otherwise, a variance from this Code Section will be required.

   Response: The façade heights of proposed Exterior Elevations have been revised to 20'-0".

4. Per §1104.C.9.c – Design Standards – 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. A window area calculation shall be provided for the proposed façade that faces West Moreland Road to ensure that there is a window area between 35% and 75% for this façade.

   Response: The façade facing West Moreland Road has a window area (including glass storefront entrance door) of 235 square feet on the façade whose overall square footage is 1,636 square feet. This yields a window area of 14.36%. A window area of 35% to 75% is not achievable without the building failing the required Building Envelope COMcheck for compliance with the locally adopted energy code. In general, the COMcheck software is used by architects, builders, designers, and contractors to determine whether a new commercial building meets the requirements of the IECC and ASHRAE Standard 90.1, as well as several state-specific codes, in this case, the 2018 International Energy Code.

5. Per §1105.B.1, 3, & 4 – Street Furniture – The following shall be provided; benches, trash and recycling receptacles, planters, and bike racks. Benches and trash and recycling receptacles shall be provided at least every 100 feet and planters shall be provided at least once every 50 feet. An open space area with benches has been provided on the plans. Trash and recycling receptacles as well as planters shall be provided along with the benches and be spaced as required by this Code Section. A detail of each street furniture element shall be provided on the plans.

   Response: Trash and recycling receptacles and planters have been added to the landscape plan as required (sheet C11.0). Details for each have been added to the landscape detail sheet (sheet C11.1).

6. Per §1105.C.4 – Public Open Space – A minimum of 30% of the area shall be landscaped with a mixture of trees, shrubs, or ground cover. Such areas shall have benches, trash containers, and lighting fixtures. There is no lighting proposed in the open space area. A lighting plan shall be provided to ensure there is adequate lighting for the site.

   Response: A Photometric Site Plan is included with this response letter which shows a pole mounted light fixture in the open space area, and adequate lighting for the overall site.

7. Per §1106 – Lighting – Lighting shall be provided for the proposed development that meets the requirements of the above code section. There is no lighting plan provided as part of this plan submission. A lighting plan shall be provided showing the number and type of lights provided with mounting heights. Depending on the type of lighting proposed, point-by-point calculations may have to be provided.

Response: A detailed Photometric Site Plan is included with this response letter which shows the number and type of light fixtures, including the height of the light poles and mounted height of the light fixtures.

8. Per §1107 – Trash, Loading, and Utilities – Trash, loading, and utilities shall be regulated by §2601.0 and §2312. A detail of the trash enclosure shall be provided on the plans for review and approval to ensure compliance with this Code Section.

   Response: A trash enclosure plan and details are included as shown on sheet C8.0.

9. Per §1107.C – Trash Loading, and Utilities – All wall-mounted or ground-mounted mechanical, HVAC, utility, or communication equipment, including satellite dishes and vent pipes, shall be screened from public view by parapets, walls, fences, landscaping, or other approved means. The Applicant shall confirm that the HVAC and mechanical equipment is screened from public view as indicated in this Code Section.

   Response: Confirmed. The rooftop HVAC and mechanical equipment is screened from public view as shown on sheet A4.10

10. Per §1107.D – Trash, Loading, and Utilities – Service and loading areas must be located to the side or rear of buildings and must be visually screened. Loading doors, service doors, and loading docks shall not be located on any façade facing a street, or on any portion of a façade within 35 feet of a street. On the architectural plans provided, it appears that there is a service door with a 4-digit wall mounted key lock located on the façade facing West Moreland Road. No service door shall be located on the front façade of a building. This door shall be relocated along the side or rear facades. In addition, the loading area for deliveries shall be shown on the plans.

    Response: The door in question is the building's rear exit, which is required to meet the building code's egress requirements. The door cannot be located to the rear façade due to the location of the electric service meter, disconnect, and main switchgear cabinets. Additionally, the door cannot be relocated to the opposite side of the building due to the kitchen and drive-thru layout. The proposed loading area is located within the parking lot.

11. Per §2103.A Use A-17.1 – Outdoor Dining – Outdoor dining shall be enclosed by a removeable partition, such as planters, or posts with ropes, that clearly demarcate the boundary of the outdoor dining area. Construction barricades shall not be used for such a purpose. Opening in the partition for ingress/egress shall not be wider than five (5) feet. Based on the land development and the architectural plans provided, it appears that the Applicant is proposing two locations where outdoor seating is provided. Under the proposed canopy there are (16 seats) and between the front of the building and West Moreland Road there are (12 seats). The seating between the building and West Moreland Road is shown on the land development plans but is not shown in the architectural plans; and the seating beneath the canopy is shown in gray tone on the architectural plans and is not shown on the land development plans. The Applicant shall clarify and confirm the intent of the outdoor seating areas as well as clarify the total proposed outdoor seating. There also does not appear to be a connected accessible path to the outdoor seating area beneath the canopy. The outdoor seating area shown on the LD plans between the building and West Moreland Road shall be partitioned as required per this Code Section.

    Response: The outdoor seating area of (12) seats under umbrellas is separated from the sidewalk along West Moreland Road by an area of landscaping which clearly defines the boundary of that seating area, while the patio seating beneath the canopy is separated by perimeter bench seating which creates an architectural barrier clearly defining the patio seating area. The openings to the patio are greater than 5'-0", and dimensions have been added to demonstrate this. To clarify, seating counts have been added to the architectural plan: there are (12) seats between the front of the building and West Moreland Road, and there are (29) seats under the proposed canopy – the

comment above does note account for the bench seating across from the chairs at the tables along the perimeter of the patio area, yielding a total outdoor seating count of (41) seats.

12. Per §2103.A Use A-17.2 – Outdoor Dining – Outdoor dining must not obstruct with pedestrian circulation on or off-site and must have unobstructed aisles and entrances. A minimum sidewalk or pathway of five feet free of obstacles shall be maintained. Based on our measurements, the proposed outdoor seating provides a pathway clearance of approximately 4'-8" which is less than the required 5' minimum. The pathway shall be revised to provide a minimum of 5' of clearance.

    Response: The pathway in question is greater than 5'-0" clear and dimensions have been added to the architectural plan to clearly demonstrate this.

13. Per §2103.A Use A-17.7 – Outdoor Dining – The outdoor furniture shall be stored inside the restaurant after normal operating hours. Furniture affixed to the ground, enclosed by a wall, secured, or located in a secured area are exempt from this requirement. A note shall be provided on the plans stating compliance with this Code Section.

    Response: The outdoor tables are fixed to the ground, and the chairs will be secured after normal operating hours. A note has been added to sheet C1.1.

14. Per §2103.A Use A-17.8 – Outdoor Dining – The outside dining area must be secured and kept sanitary, neat, and clean at all times. It shall be kept free from accumulation of food, litter, snow, ice, and other potentially dangerous or unsanitary matter. The restaurant must participate in an approved rodent control program. A note shall be provided on the plans stating compliance with this Code Section.

    Response: A note has been added to sheet C1.1.

15. Per Article XXII – Signs – The Applicant shall submit details and dimensions for the proposed signs to the Township Zoning Officer for review and approval.

    Response: Refer to the attached sign package.

16. Per §2304.A.13 – Parking Use Requirements, Use A-17 Outdoor Dining – 1 space for every 3 outdoor seats shall be provided. It appears that the Applicant is proposing a total of 28 seats total for the outdoor dining areas between the building and West Moreland Road and beneath the canopy. Based on our calculations with the 28 total outdoor seats, a total of ten (10) parking spaces will be required for the outdoor seating; however, the Applicant shall confirm the total number of outdoor seats. A parking calculation shall be provided on the plans distinguishing the required parking for the outdoor seating and the indoor sit-down restaurant seating.

    Response: The zoning chart on the Record Plan C1.1 is revised to list the Parking Use requirements A-17.

17. Per §2304.C.24 – Parking Use Requirements, Use C-25 Fast-food Restaurant – 1 parking space for every 50 SF of gross leasable floor area devoted to customer or patron use for sit-down restaurants, or one parking space for every 3 seats, whichever requires the lesser number of spaces. The Applicant has provided a seating capacity of 97 total seats based on one (1) parking space for every three (3) seats for the proposed land development. However, the Applicant shall provide the gross leasable floor area for the indoor sit-down restaurant and a calculation based on the gross leasable floor area on the plans to confirm that the parking spaces provided are the lesser number of spaces being provided per this Code Section. These calculations should be separated to distinguish the parking requirement for the outdoor dining areas.

    Response: The zoning chart on the Record Plan C1.1 is revised to list the Parking Use requirements C-25.

18. Per §2312.A thru K – Off-Street Loading Requirements – There is no loading berth/area shown on the plans. Since the proposed fast-food restaurant will be receiving deliveries of food and supplies to the site, a loading berth/area shall be provided. The plans shall indicate where the loading berth/area will be provided on the site. The loading berth/area shall adhere to the requirements of this Code Section. Per Figure 23.2, the fast-food restaurant is classified as an other use and is required to have 1 loading berth/area for the first 20,000 SF of gross floor area.

    Response: Raising Cane's deliveries will occur during off hours when the store is closed, therefore a dedicated loading space is not needed. Refer to Vehicle circulation plan, Sheet C-10 showing the delivery truck movement as well as a note indicating "deliveries to occur during off hours when store is closed".

19. Per §2402.A.2.a.(4) – Planting Islands – 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 inches in caliper, branching at 6 feet to 8 feet in height and of the recommended species as listed in the 'Recommended Plant Materials' List in the SALDO. Parking lot islands shall be planted in lawn or ground cover only. The proposed planting island adjacent to the drive-through exit and the underground BMP is planted with shrubs and groundcover but no shade tree. This island shall be planted with a shade tree.

    Response: A shade tree has been provided within the island as required (sheet C11.0).

20. Per §2402.A.2.a.(5) – Planting Islands – Shade trees located within any parking island which is less than 300 SF measured from outside curb to outside curb will require permanently installed irrigation. There are multiple parking islands on site that are less than 300 SF and have a shade tree planted in the island and will require permanently installed irrigation. These irrigation lines shall be shown in the plans and a note shall also be added to the plans.

    Response: General Note #4 has been modified to specify a permanent irrigation system to be installed as required (sheet C11.0). Irrigation will be handled as design build.

21. Per §2402.B.2.c – Street Trees – Trees shall be planted at a ratio of at least one tree per 40 LF of frontage or fraction thereof. Trees shall be distributed along the entire frontage of the property, although they need not be evenly spaced. The Applicant is providing six (6) shade trees along West Moreland Road, which is the required number of street trees along the site frontage based on our calculations. The Applicant shall provide a street tree calculation on the landscape plans to document compliance with this Code Section.

    Response: Project complies. Street tree calculations have been provided in the Compliance Chart on the Landscape Detail sheet (sheet C11.1).

22. Per §2403.C.6.b.(1) – Site Element Screens – Medium-Intensity Site Element Screen, Screen Type #4 – Opaque Fence or Masonry Wall with Shrubs. Per Figure 24.7 – Site Element Screen Requirements, for a dumpster or trash containment area, a medium intensity screen is required. The Applicant shall provide a dumpster detail to comply with the site element screen type #4 requirements of this Code Section.

    Response: The trash enclosure details are provided on Sheet C8.0.

23. Per §2504.B.1 thru 4 – Sidewalks and Crosswalks – Street front sidewalks in the BC Business Center Zoning District shall meet the requirements of these above Code Sections. The existing sidewalk along West Moreland Road is not proposed to be replaced and is only 4 feet in width. However, per these code sections, a minimum width of 10 feet for sidewalk and crosswalks along West Moreland Road, a public

street, in the BC – Business Center zoning district shall be provided. In addition, the access roads abutting the site can be considered secondary access drives and shall have sidewalk and crosswalks along these drives with a minimum width of 6 feet. The plans shall be updated to show new sidewalk and crosswalks along West Moreland Road and the secondary access drives to provide an accessible route to/from the site. ADA compliant ramps shall also be provided at these locations to allow for maneuverability of persons with disabilities.

Response: As confirmed by the Township's solicitor, the sidewalks on the property are lawful nonconformities that will remain. Further, it was determined that the Applicant will not be required to install the requested curb ramp as part of the land development but, in lieu thereof, shall furnish an escrow to fund future installation. Please see attached email confirmation dated 02/23/23.

Sidewalk and crosswalk along Southern secondary access drive has been added to Plans. Please see Sheet C1.1.

24. Per §2504.E – Sidewalk and Crosswalks – Streets and access drives shall be separated from sidewalks by a decorative verge area, so as to allow for street trees and furnishings such as benches and light fixtures. Street furniture surrounded by hardscaping may be located in the decorative verge. At least 25% of the decorative verge area shall be landscaped with a mix of groundcover, shrubs, and trees. The width of the verge in the BC Business Center Zoning District shall be 6 feet along public streets and 4 feet along access drives. Since this site is within the BC Business Center Zoning District, a verge will be required along both West Moreland Road and the access drives. The plans shall be revised to include the required verge areas.

    Response: As confirmed by the Township's solicitor, the sidewalks on the property are lawful nonconformities that will remain. Further, it was determined that the Applicant will not be required to install the requested curb ramp as part of the land development but, in lieu thereof, shall furnish an escrow to fund future installation. Please see attached email confirmation dated 02/23/23.

    Sidewalk and crosswalk along Southern secondary access drive has been added to Plans. Please see Sheet C1.1.

25. Per §2504.F.1 & 2 – Sidewalk and Crosswalks – Crosswalks shall be provided at all intersections of streets with access drives of other curb cuts in public streets (including those for private streets and parking areas). Crosswalks shall be at least 6 feet wide but shall not exceed 10 feet wide. In the BC Business Center Zoning District, 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 6 inches in width. Installation and selected materials shall be durable and able to withstand vehicular traffic. Crosswalks shall be provided across the drive aisle within the parking lot and along both access drives intersecting West Moreland Road. The crosswalks shall be decorative per this Code Section.

    Response: Crosswalk has been added to the Southern Access Drive. Note for Crosswalk construction has been added to C8.0 matching the code section.

26. Per §2601.H.1 thru 11 – 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. The Applicant is proposing outdoor wall mounted lighting attached to the building. A site lighting plan has not been provided as part of this submission. A lighting plan, showing point-by-point calculations for the entire site shall be provided to ensure all parking areas are provided with a minimum of 0.5-foot candles at any point on the ground and that the lighting spillover meets the requirements of this Code Section.

Response: Acknowledged. A detailed Photometric Site Plan showing point-by-point calculations is included with the response letter.

27. 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 feet beyond the property line, as measured at a height of six (6) feet above street grade. The Applicant shall clarify if roof-mounted equipment is being proposed as part of this project. If so, the equipment shall be screened as required in compliance with this Code Section.

    Response: Acknowledged. Rooftop HVAC and mechanical equipment is screened from public view in compliance with this Code Section.

28. Per §2601.N.3. a thru d – Trash Containment Standards – When trash containment is located outdoors in the BC - Business Center Zoning District, trash containers shall be located in a walled or fences enclosure, at least 6 feet in height.

    a) Enclosure shall utilize self-closing gates.

    b) Enclosures shall be constructed of masonry wall or wooden fence (or a vinyl-coated fence designed to look like wood).

    c) Enclosures and gates shall not consist of chain link fence; enclosures shall not consist of cinder block.

    d) It is recommended that trash enclosures be constructed of the same or similar materials and colors as the principal structure on-lot.

    On the Record Plan (Sheet C1.1) it is noted to refer to the architectural plans for details of the screening, gates, bollards, and masonry for the trash enclosure however the details shall also be provided on the Land Development Plans. A trash enclosure detail shall be provided on the plans which shows the height and material of the proposed enclosure.

    Response:

    Dumpster walls above 6' in height. Please see detail on sheet C8.0 for items B) through d).

    Regarding comment 28(a), Due to the size and weight of the Raising Cane's gates, installing self-closing devices is extremely impractical. Raising Cane's already provides heavy-duty hinges for durability/smooth operation, as well as ½" diameter stainless steel cane bolts to ensure the gates cannot be blown open in extreme weather conditions.

    By installing self-closing devices, several undesirable and potentially hazardous situations arise: First, we would need to install additional "pin holes" for the gates when in a fully-open position for use by the waste collection company in order to keep the gates open (otherwise, they start closing by the time the driver gets back inside the trash truck cab). This is problematic for several reasons in itself. 1. We would be relying on the third-party waste collection company's driver to go back and close and secure the gates, rather than just driving off to the next collection location (something Raising Cane's has *no way of guaranteeing*). 2. The additional pin holes for the open gate positions will become filled with debris over time, and/or ice in winter weather conditions, both of which prevent their intended use/functionality.

    Second, self-closing gates present a hazard to Raising Cane's employees taking out the trash, since there is no control over having the gates closing and striking the employees should they not be paying attention behind them, or, as they turn to leave the enclosure with little to no reaction time.

Third, self-closing devices are susceptible to breaking/requiring maintenance which would interrupt regular trash collection activities. If a self-closing device fails and is stuck in a closed position, trash collection simply cannot take place. This would be unacceptable to Raising Cane's operations (and the Township's) trash collection requirement for regular uninterrupted collections.

CHAPTER 146 - SUBDIVISION & LAND DEVELOPMENT COMMENTS

29. Per §146-9.A.(1) – Type of Application, Stages – A preliminary plan is a first-stage plan in a two-stage approval process. The preliminary plan is required for all subdivision, land development or combination subdivision and land development plans within the township, wherein public improvements are proposed. The Applicant is requesting a waiver from this Code Section to allow for a Preliminary and Final land development application submission.

    Response: Waiver is being requested to allow for a Preliminary and Final Land Development application submission.

30. Per §146-10.A.(3) – General Requirements – If two or more sheets comprise a submission, all sheets shall be of the same size, and each shall be consecutively numbered and titled to show and describe its relation to the total number of sheets comprising the plan (i.e. Grading Plan Sheet 3 of 6). The plans shall be numbered as required per this Code Section.

    Response: Noted, plan sheets have been revised to show Sheet # __ of 24.

31. 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-22-06".

    Response: Noted, Sheets have been revised.

32. 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. A plan shall be provided showing the required information per this Code Section.

    Response: Partial Waiver/Modification request to include an aerial depiction to be shown as the Property Identification Plan, Per Allison Lee of Pennoni. Please see 03/16/23 coordination email.

33. Per §146-11.A.(7) – Property Identification Plans – The property identification plans shall provide an indication that the elevations are based upon sanitary sewer datum of the Township of Abington.

    Response: Datum to remain as the standard PA NAV88. A datum conversion calculation will be provided to show conversion to Sewer Datum of Township of Abington. This was deemed acceptable by Allison Lee, please see attached coordination.

34. 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 cartway width for West Moreland Road shall be provided on the plans.

    Response: Cartway width for West Moreland Road has been added to Sheet C1.1 and C4.0.

35. 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 tract boundaries within 400 feet of the entire site.

    Response: Partial Waiver/Modification request to include an aerial depiction to be shown as the Property Identification Plan, Per Allison Lee of Pennoni. Please see 03/16/23 coordination email.

36. Per §146-11.B.(2) – Existing Features Plan – The existing features plan shall contain the location, names, and widths of all streets, whether including right-of-way, cartway, or center lines. The Applicant shall label the cartway width for West Moreland Road.

    Response: Requested labels have been added to Sheet C1.1 and C4.0.

37. 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 location of property lines and names of landowners within 400 feet of any part of the site shall be provided.

    Response: Aerial Plan has been added to the Land Development Plans showing the property lines and names of landowners within 400' of the Site. Please see Sheet C12.0.

38. 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 ad 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 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 shall be provided.

    Response: Partial Waiver requested to provide only the utility mains on the Existing Features Plan, since no other utilities outside the site would be affected by this Land Development Project, per Allison Lee of Pennoni. Please see attached email correspondence.

    Utility connection locations are still being coordinated with utility companies, so it is not yet confirmed where the connections will be located.

39. Per §146-11.B.(8).(b) & §146-11.D.(4) – Existing Features Plan & Grading Plan – The existing features plan shall contain the datum to which contour lines refer. This note shall be provided on the Existing Conditions plan (Sheet C4.0) and grading plan (Sheet C6.0) per Section 146-11.D.(4).

    Response: Note stating "Existing Contour Information are based on the NAVD88 Datum" has been added to Sheets C4.0 and C6.0.

40. Per §146-11.B.(9).(a) – Existing Features Plan – The existing features plan shall contain the soil types within the site, based on maps contains 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 limitations, i.e., bearing value, depth to bedrock, seasonal water table, etc. The plan shall provide a mapped soil boundary, as well as, a table indicating the limitations of the soils as indicated per this Code Section.

Response: Soil Map and Soil Limitations and Their Resolutions have been provided on Sheet C3.1 due to spacing on Sheet C4.0 (Existing Features Plan). Note added to the C4.0 stating the Soil Type and referring to C3.1 for Limitation Notes.

41. Per §146-11.C.(3) – Proposed Layout Plans – The proposed layout plans shall show the building setback lines incorporated with any other construction restriction line established by the Township Zoning Ordinance, indicated on each proposed lot. Building setback lines shall be shown on the proposed layout plans.

    Response: Noted. The building setback lines and build-to lines are shown on sheet C1.1

42. Per §146-11.D.(7) – Grading Plans – The grading plans shall show the delineation of the limits of work areas and the portions to remain undisturbed. The Applicant shall label the size of the limit of disturbance area on the grading plan and show the complete limit of NPDES disturbance area. If the limit of disturbance area is greater than an acre, a NPDES permit will be required.

    Response: Sheet C6.0 shows the Limit of Disturbance Line/ NPDES Disturbance Area. Please see the Legend. The Area is less than one acre, therefore an NPDES permit will not be required.

43. Per §146-11.F.(4).(b).[1] thru [6] – Storm Sewer Facilities – Profile plans for the proposed storm pipes and inlets shall be provided.

    Response: Once Township Engineer is acceptable with Utility plan and Stormwater Report, Bohler will submit Profile Plan showing proposed stormwater layout of inlet and pipes.

44. Per §146-11.G.(1).(d) – Utility Plan – The utility plan shall show fire hydrants, fire lanes, and fire department connections. The utility plans shall clearly show the locations of existing fire hydrants. The Applicant shall ensure there is a working hydrant located within 500 feet of the building under construction per §146- 41.B.(4)(d).

    Response: Please see Sheet C7.0, which has been revised to show an existing Fire Hydrant located within 500' of the building. Proposed Fire Department Connection shown on plan with label "T".

45. Per §146-12 – Record Plan, Seals – The Record Plan shall include the required seals, acknowledgements, and notations as indicated in §146-12.A thru E.

    Response: Noted, please see Sheet C1.0 which includes the required seals, acknowledgements, and notations. Record Plans C1.1 and C6.3. are denoted on Sheet C1.0 as Sheets to be Recorded. Due to lack of space on the Sheets C1.0 and C6.3, all Seals will be shown on C1.0.

46. Per §146-27.A – Sidewalks and Curbs - Sidewalks shall be provided along all streets except where, in the opinion of the Board of Commissioners, they are unnecessary for the public safety and convenience. Based on an existing conditions site inspection, there is approximately 910 SF of existing sidewalk located along the West Moreland Road frontage that is in poor condition and shall be replaced. The entire length of the sidewalk shall be replaced and per §2504.B.1 thru 4 of the Township Zoning Code, the sidewalk is required to be 10 feet wide along the West Moreland Road frontage.

    Response: Per coordination between Craig R. Lewis and Gregory Heleniak and Abington Township, Abington Township has deemed the requested sidewalks as a lawful nonconformities. Applicant will perform maintenance where required. Please see the attached email correspondence dated 02/23/23.

47. 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. Where the sidewalk crosses the access drives and parking aisles, curb ramps shall be provided that meet ADA specifications. Details of these curb ramps shall be shown on the plans and spot elevations shall also be provided to ensure compliance with the ADA requirements.

Response: Curb ramps have been proposed where the sidewalk crosses the southern access drive aisle. Please see Sheet C6.0.

48. Per §146-27.F – Sidewalks and Curbs – Curbs shall be the vertical type and constructed in accordance with Township specifications. Based on an existing conditions site inspection, there is existing curb along West Moreland Road that is in poor condition and shall be replaced. The entire length of the curbing along West Moreland Road shall be replaced.

    Response: Per coordination between Craig R. Lewis and Gregory Heleniak and Abington Township, Abington Township has deemed the requested sidewalks as a lawful nonconformities. Abington will not require the existing West Moreland Sidewalk Frontage to be replaced. Abington Township will not require the installation of the requested curb ramp on the Raising Cane's property as part of land development provided that an escrow is furnished by the developer to fund future installation of the required curb ramp. Please see the attached email correspondence dated 02/23/23.

49. 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 parking spaces as shown on the plans are only 9 feet wide by 18 feet long. The parking spaces shall be revised to be 10 feet wide by 18 feet long.

    Response: Parking Spaces have been revised to meet 146-28.A parking requirements. See Sheet C1.1. Parking spaces adjacent to building shown as 10' by 20'. Parking spaces to the west of the drive aisle shown as 10' by 18' due to the 2' overhang in the landscape area.

50. Per §146.31.A.(6) – Reserve strips; rights-of-ways; easements – Easements for present or ultimate construction of storm drains and sanitary sewers having a minimum width of twenty (20) feet shall be provided where necessitated by topographical conditions. The Applicant shall provide an easement around the proposed stormwater management facilities; or the Applicant may consider providing a blanket easement for the proposed stormwater management facilities as part of the stormwater bmp operations and maintenance agreement with the Township.

    Response: Applicant will coordinate with the township regarding necessary easements.

51. 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. Based on the storm sewer pipe schedule provided on the Utility Plan (Sheet C7.0), the Applicant is proposing to use 10" and 6" HDPE pipe for the storm drains flowing from inlets to the underground detention basin on site. These are both smaller than the required 15 inches and shall be revised to be a minimum of 15 inches; otherwise, a waiver from this Code Section will be required.

    Response: Pipes have been adequately sized, please refer to the attached Stormwater Report. Waiver is being requested for pipe size and material.

52. Per §146.37 – Utilities – All water mains, gas mains, electric, telephone, and other communication services shall be located underground; and such facilities shall be installed prior to street paving. Electric, telephone, and communication service facilities, both main and service lines, shall be provided by underground cables. A note shall be provided on the plans stating that all utilities will be installed underground.

Response: Note has been added to Sheet C7.0.

53. 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.

    Response: Noted.

54. Per §146-43.C.(3)(a) – Erosion and Sediment Control – Cut and fill slopes shall not be 15% or steeper, except as approved by the Township Zoning Hearing Board. There are slopes on site that have grades of approximately 18.3% which is greater than 15%. The grades shall be revised to be less than 15% in all locations.

    Response: Patrial Waiver to be requested to show Slopes higher than 15% to tie back into existing curb lines. Please note, Steep Slopes Exhibit has been sent to Abington showing the existing Steep Slopes. Per the attached coordination with Allison lee on March 9th, a Waiver from the SLADO will be required.

CHAPTER 142 - STORMWATER MANAGEMENT COMMENTS

55. Per §142-302.B.(1).(a) – SWM Site Plan Contents – The stormwater management plan shall provide a general description of the project. A general description of the project shall be shown on the PCSM Plan.

    Response: General Description has been added to Sheet C6.3.

56. Per §142-302.B.(1).(m) – SWM Site Plan Contents – The following signature block for the Municipality: "(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)." The above signature block shall be added to the PCSM plan as required per this Code Section.

    Response: Signature Block has been added to Sheet C6.3. Owner to sign once Record Plans are finalized.

57. Per §142.302.B.(2).(a) – SWM Site Plan Requirements – The Applicant shall prepare 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, stream 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. An ERSAM Plan shall be provided as part of this submission and shall show the information as indicated per this Code Section.

    Response: An ERSAM Plan has been provided in the Land Development Plan set, see Sheet C4.1.

58. Per §142-302.B.(2).(b).[5] – SWM Site Plan Requirements – The PCSM Plan shall show the locations of all existing and proposed utilities, sanitary sewers, and water lines within fifty (50) feet of the property lines. The PCSM Plan shall show the existing and proposed features within fifty (50) feet of the property lines as indicated in this Code Section.

Response: Noted.

59. Per §142-302.B.(2).(b).[9] – SWM Site Plan Requirements – The PCSM Plan shall include O&M plan in accordance with §142-702 of this chapter, for all existing and proposed physical stormwater management facilities. This plan shall address long-term ownership and responsibilities for O&M as well as schedules and costs for O&M activities. An Operation & Maintenance (O&M) plan shall be provided on the PCSM Plan showing how the proposed BMPS will be operated and maintained.

    Response: Long Term O & M Schedule and Table has been added to PCSM Plan. Please see Sheet C6.3.

60. Per §142-302.B.(2).(b).[10] – SWM Site Plan Requirements – The PCSM Plan shall show the limits of earth disturbance, including the type and amount of impervious area that is proposed. The total limit of disturbance shall be labeled and called out on the PCSM Plan.

    Response: Limit of Disturbance line and callout have been added to the PCSM Plan. Note showing a breakdown of Impervious Area proposed has been included.

61. Per §142-302.B.(2).(b).[22] – SWM Site Plan Requirements – The PCSM Plan shall show a fifteen-foot-wide access easement around all stormwater management facilities to provide ingress to and egress from a public right-of-way. There are no stormwater easements shown on the plans. These easements shall be shown, or a note shall be provided if a blanket easement is proposed for the entire site.

    Response: Applicant will coordinate with the township regarding necessary easements.

62. Per §142-302.B.(2).(b).[25] – SWM Site Plan Requirements – The PCSM Plan shall provide a statement, signed by the Applicant, acknowledging that any revision to the approved drainage plan must be approved by the Township, and that a revised erosion and sediment control plan must be submitted to the Township or Conservation District for approval. The required acknowledgement statement shall be provided on the PCSM Plan per this Code Section.

    Response: Required Acknowledgement has been provided on Sheet C6.3.

63. Per §142-302.B.(2).(b).[26] – SWM Site Plan Requirements – The PCSM Plan shall provide the following signature block for the design engineer: “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 regulations and this chapter.” The design engineer signature block shall be provided on the PCSM Plan.

    Response: Design Engineer Signature Block provided on Sheet C6.3.

64. Per §142-401.A – General Requirements – For any of the activities regulated by this chapter, unless preparation of a stormwater management (SWM) site plan is specifically exempted, the preliminary or final approval of subdivision and/or land development plans, the issuance of any building or occupancy permit, the commencement of any earth disturbance activity may not proceed until the property owner or applicant or his/her agent has received written approval from the Municipality of a SWM site plan that demonstrates compliance with the requirements of this chapter, and a written approval of an adequate erosion and sediment (E&S) control plan from the Municipality or County Conservation District when required. In the current plan submission, there is no plan that is labeled a Post Construction Stormwater Management Plan. A PCSM Plan shall be provided as part of this submission before preliminary/final approval is granted.

    Response: Noted. PCSM Plan provided.

65. Per §142-401.H – General Requirements – No regulated activities shall commence until the Township issues written approval of an SWM site plan, which demonstrates compliance with the requirements of this chapter.

    Response: Noted.

66. Per §142-408.B.(2) – Stream Bank Erosion Requirements – The minimum orifice size in the outlet structure to the BMP shall be three inches in diameter where possible, and a trash rack shall be installed to prevent clogging. On sites with small drainage areas contributing to this BMP that do not provide enough runoff volume to allow a twenty-four-hour attenuation with the three-inch orifice, the calculations shall be submitted showing this condition. Orifice sizes less than three inches can be utilized, provided that the design will prevent clogging of the intake. It is recommended that the design, to accommodate maintenance, include a sand or porous media filter. For the proposed outlet structure (OS01) the Applicant is proposing an orifice of 0.5 inches which is less than the required 3 inches minimum. The Applicant shall revise the orifice opening to 3 inches minimum, or provide documentation that the 0.5-inch orifice will be designed to prevent clogging.

    Response: Orifice opening has been revised to 3 Inches to meeting Abington Township Minimum orifice size. Refer to Sheet C9.0 for outlet details and Stormwater report showing Abington Township Stormwater compliance.

67. Per §142-409.A.(1).(b) – Stormwater Peak Rate Control and Management Districts - Based on the Watershed Map, Figure 1.03, this site is located within the Pennypack Creek Watershed. Per Figure 409.1P Area P Stormwater Management District Watershed Map, this site is located within District B of this watershed. This district requires the 100-year post flow to be reduced to the 50-year pre, the 50- year post be reduced to the 25-year pre, the 25-year post be reduced to the 10-year pre, the 10-year post be reduced to the 5-year pre, the 5-year post be reduced to the 2-year pre, and the 2-year post be reduced to the 1-year pre. Since this project is located in Area B of the Pennypack Creek Watershed, the post-development rates shall be reduced as indicated above. The PCSM Report shall provide a chart comparing the pre-development stormwater runoff conditions and the post development runoff conditions to ensure the post-development rates are reduced as required per this Code Section.

    Response: Per Allison Lee Coordination (see attached 1/10/23 email) Watershed district is Pennypack District A. See Stormwater report showing compliance with Pennypack District A stormwater requirements.

68. Per §142-704.A – Operation and Maintenance Agreement for Privately Owned Stormwater Controls and BMPs – Prior to final approval of the SWM site plan, the owner shall sign and record an operation and maintenance (O&M) agreement covering all stormwater control facilities which are to be privately owned.

    Response: Noted.

GENERAL STORMWATER MANAGEMENT COMMENTS

69. Dewatering calculations shall be provided in the PCSM report.

    Response: Per Hydro Report, the proposed underground Basin dewaters in 35 hours time. Please see Stormwater Report for the calculations.

70. A cross-section profile shall be provided for the BMP and the 100-year stormwater elevation shall be shown on this cross-section to ensure the BMP can adequately capture the 100-year storm.

    Response: Cross Section Profile of the Detention Basin has been included. See Sheet C9.1.

71. The Applicant shall provide a PCSM Plan as part of this submission. The PCSM plan shall show all existing and proposed storm pipes, inlets, manholes, etc.

    Response: See Sheet C6.3. All requested has been provided.

72. The Post Development Plan shall show the existing stormwater facilities on the plan.

    Response: Noted, See Sheet C6.2.

GENERAL COMMENTS

73. On the drawing sheet index on the cover sheet, the index lists the Proposed Onsite Drainage Area Map as being included in the plan set but the plan is not included. The Applicant shall confirm if this plan is to be part of the plan set and revise accordingly.

    Response: Cover Sheet revised accordingly.

74. On the drawing sheet index on the cover sheet, the index lists the Post Development Plan as sheet number C6.2 but on the plans, the Post Development Plan is labeled as sheet 6.1. This shall be revised to be consistent.

    Response: Revised accordingly.

75. The PCSM plan shall be recorded along with the cover sheet and record plan.

    Response: Noted. Cover Sheet revised to include PCSM Plan Sheet C6.3 as Recorded Plan in Index.

76. The Applicant shall provide our office with legal descriptions and exhibits for any proposed easements as well as for the entire lot for review and approval.

    Response: Noted.

77. It is our understanding that the Applicant will provide a traffic assessment as a result of the proposed land development. We defer to the Township Traffic Engineer for any traffic related comments.

    Response: Noted. Traffic comments being coordinated and revised accordingly.

Upon review, should you have any questions or require additional information, please do not hesitate to contact our office.

Sincerely,

BOHLER ENGINEERING PA, LLC

Shannon Heybach- Park P.E.;
Assistant Project Manager

IV. WAIVERS

List of Requested Waivers: Attach separate sheet if required.

Section/Requirement:	Relief Requested:
146-9.A(1)-Application Stages	Waiver Request to allow for a Preliminary and Final Land Dev application submission
146-11.A(4)/146-11.A(8)/146-11.A(10) -Property Identification Plan	Partial Waiver request to include an Aerial Plan as the Property Identification Plan. Per coordination with Allison lee of Pennoni, Aerial plan will suffice.
146-11.A(7)-Property Identification Plan Datum	Partial Waiver Request. Datum to remain NAVD88, Datum Conversion calculation to be included on Grading Plan. Per coordination with Allison Lee, NAVD88 is acceptable if conversion calc is included.
146-11.B(7)-Property Identification Plan	Partial Waiver request to provide only the Utility Mains on the Ex. Features Plan since no other utilities outside the site would be affected. Coordinated with Allison Lee.
146-33.D- Drainage Pipe Size	Pipes have been adequately sized and checked for capacity. Waiver is being requested to use pipe size less than 15" and non RCCP material.
146-43.C.(3)(a) - Erosion and Sediment Control	Waiver requested to show slopes higher than 15% to tie back into existing curb. Existing slopes are above 15% on site.

MEMORANDUM

TO: Raising Cane's Restaurants, LLC

FROM: Mark A. Roth, P.E.

DATE: April 14, 2023

SUBJECT: Trip Generation and Drive-Thru Lane Vehicle Queue Evaluation Memo
Proposed Raising Cane's Restaurant – 2620 Moreland Road
Abington Township, Montgomery County, PA

As requested, McMahon, a Bowman Company, has completed its Trip Generation and Drive-Thru Lane Vehicle Queue Evaluation Memo for submission to the Project Team and Abington Township for the proposed Raising Cane's fast-food restaurant with drive-thru to be located at 2620 Moreland Road in Abington Township, Montgomery County, Pennsylvania. The proposed development consists of a 3,062 s.f. fast-food restaurant with dual drive-thru lanes.

The purpose of this Trip Generation and Drive-Thru Lane Vehicle Queue Evaluation Memo is to evaluate the trip generation and drive-thru queue demand for similar type restaurants in the area. This memo includes an evaluation of the peak hour trip generation, average vehicle queue length, and maximum vehicle queue length during the weekday and Saturday operations at two existing Raising Cane's restaurants with dual drive-thru lanes.

Trip Generation and Drive-Thru Queue Data

In order to determine the peak hour trip generation rates as well as the average and maximum drive-thru queue demand characteristics for a Raising Cane's restaurant with dual drive-thru lanes, McMahon evaluated two (2) existing sites in Bucks County during the weekday midday/afternoon/evening period (11:00 AM to 7:00 PM) and Saturday midday/afternoon/evening period (11:00 AM to 7:00 PM) operations at the following Raising Cane's restaurants with dual drive-thru lanes:

- Trevose – 3617 Horizon Boulevard
- Langhorne – 640 Commerce Boulevard

The results of the trip generation traffic counts are tabulated by 15-minute intervals in **Attachment 1**. The results of the queue observations are tabulated by 5-minute intervals in **Attachment 3**.

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mcmahonassociates.com | bowman.com

Trip Generation Evaluation

As stated above, the peak hour trip generation for the existing Raising Cane's restaurants was based on actual counts conducted in March/April 2023. Trip generation traffic counts were conducted at site driveways providing access to each restaurant in order to establish total site-generated traffic volumes. A detailed summary of the trip generation traffic counts at the existing Raising Cane's restaurants is provided in **Attachment 2**.

Table 1 provides a summary of the peak hour entering and exiting trips at each existing restaurant during the weekday afternoon (4:00 PM to 6:00 PM) and Saturday midday (11:00 AM to 2:00 PM) peak periods.

Table 1. Existing Raising Cane's Trip Generation [(1)]

Location	Size	Weekday Afternoon Peak Hour			Saturday Midday Peak Hour		
		In	Out	Total	In	Out	Total
Trevose	3,331 s.f.	64	57	121	88	63	151
Langhorne	3,329 s.f.	68	62	130	108	102	210

(1) Based on driveway counts performed at existing Raising Cane's restaurants.

In order to determine the trip generation rate for a Raising Cane's restaurant with dual drive-thru lanes, McMahon utilized the trip generation data from the two Raising Cane's sites. Trip generation rates were developed for the existing sites based on the size of each site. A summary of the trip generation rates for each site and a combined average is provided in **Table 2**.

Table 2. Raising Cane's Trip Generation Rates

Location	Weekday Afternoon Peak Hour	Saturday Midday Peak Hour
Trevose	36.33 53% in / 47% out	45.33 58% in / 42% out
Langhorne	39.05 52% in / 48% out	63.08 51% in / 49% out
Overall Average	**37.69 53% in/ 47% out**	**54.21 55% in / 45% out**

Drive-Thru Queue Evaluation

According to the queue observations and measurements, the average vehicle queues at the drive-thru lanes of the two existing restaurant sites, observed an overall average queue of 3 vehicles during the weekday and 6 vehicles during Saturday, as well as an overall average maximum queue of 9 vehicles during the weekday and 13 vehicles during Saturday.

Table 3 summarizes the field measured queues.

Table 3. Drive-Thru Queue Observations

Location	Time Period	Average Vehicle Queue	Maximum Vehicle Queue
Trevose	Weekday	3	8
	Saturday	5	13
Langhorne	Weekday	3	10
	Saturday	6	13
Overall Average	**Weekday**	**3**	**9**
	Saturday	**6**	**13**

We trust that this Trip Generation and Drive-Thru Lane Vehicle Queue Evaluation Memo responds to your requests and satisfactorily addresses the traffic-related questions at this time that are related to the trip generation and drive-thru queue of the proposed development. If you have any questions, or require further clarification, please feel free to contact me.

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Attachment 1

Trip Generation Traffic Counts

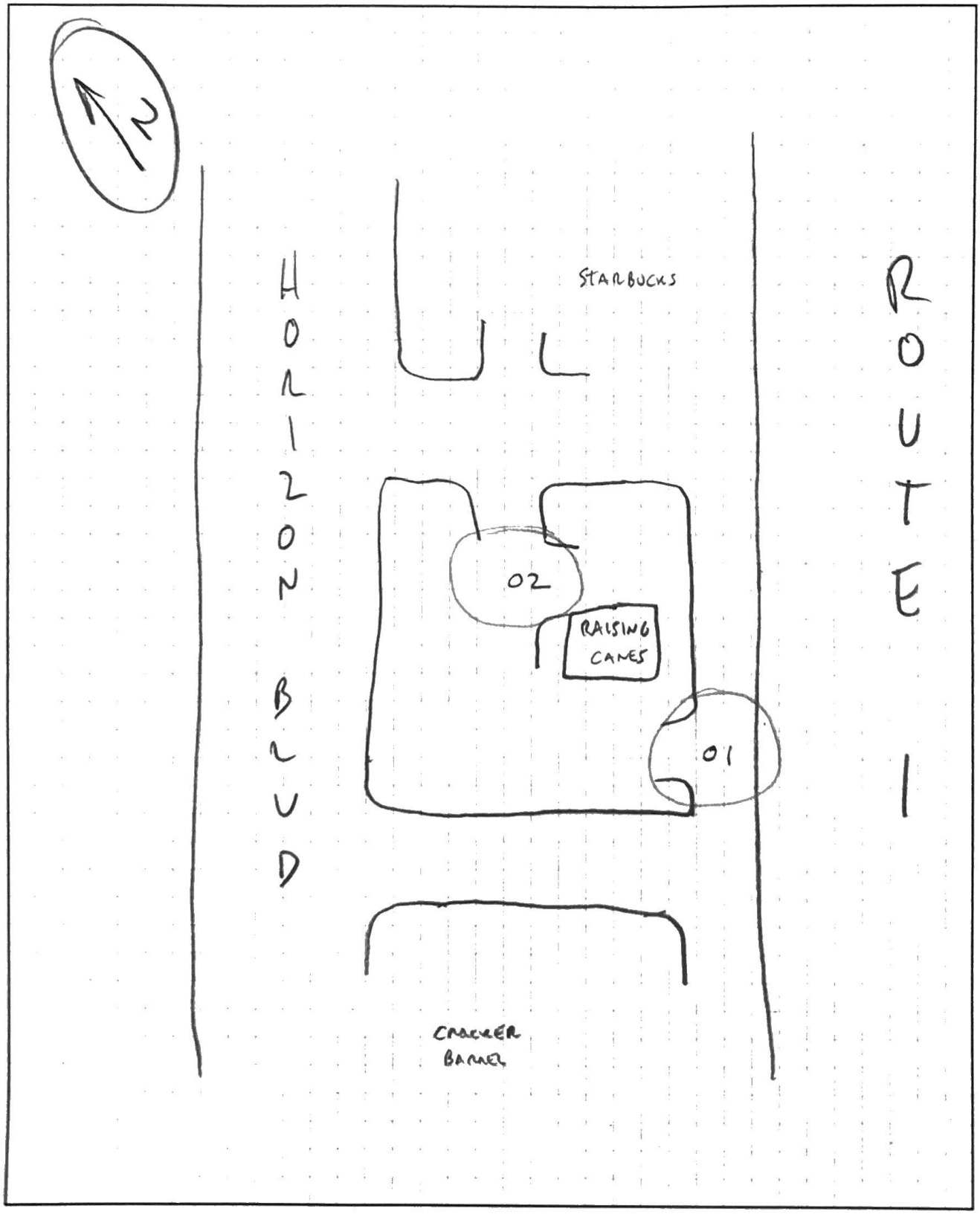
McMAHON
TRANSPORTATION ENGINEERS & PLANNERS

Trevose Location - 3617 Horizon Boulevard

Job TREVOSE | McMahon Project No. | Sheet | of

Description HORIZON BLVD SITE | Designed By | Date

Checked By | Date



McMahon a Bowman Company
425 Commerce Drive, Suite 200

Fort Washington, Pennsylvania, United States 19034
215-283-9444

Count Name: 822C56.11 Raising Canes - Exit
Site Code:
Start Date: 03/28/2023

Turning Movement Data

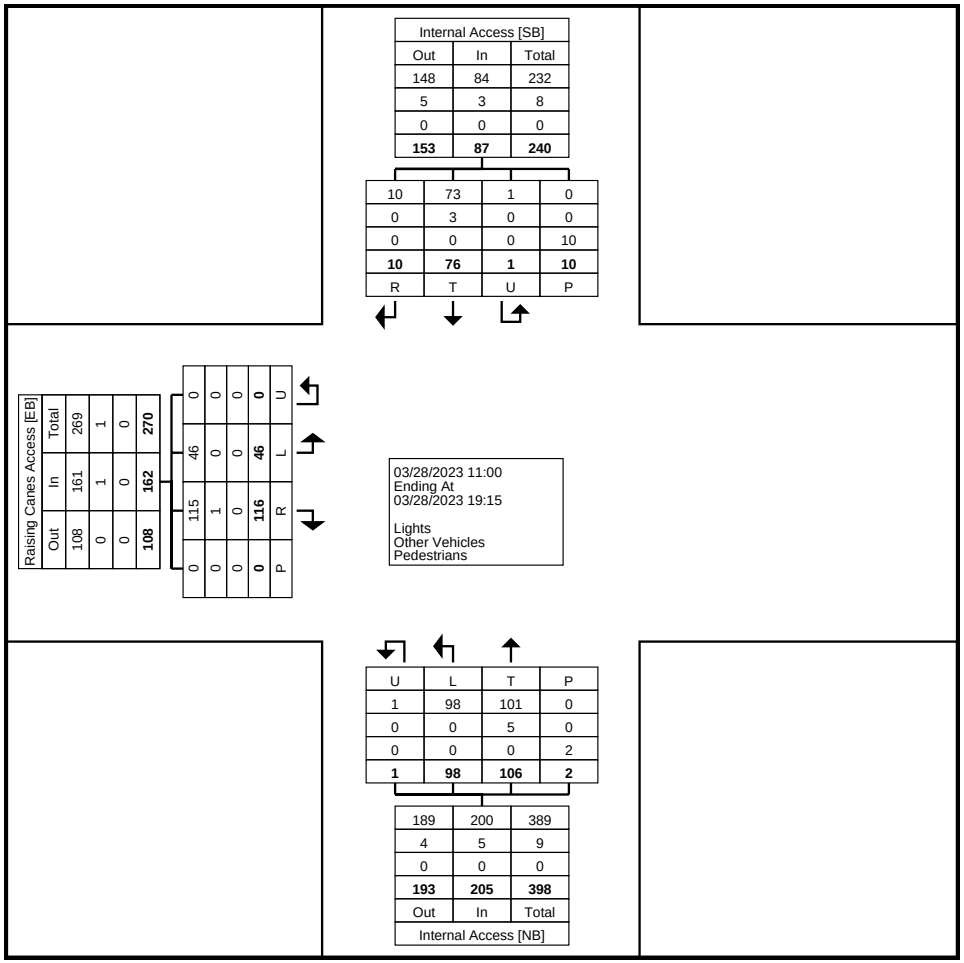
Start Time	Internal Access Southbound					Internal Access Northbound					Raising Canes Access Eastbound					
	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Int. Total
11:00	5	0	0	1	5	8	8	0	0	16	1	2	0	0	3	24
11:15	3	1	0	4	4	4	10	0	1	14	2	6	0	0	8	26
11:30	3	1	0	0	4	4	4	0	1	8	0	5	0	0	5	17
11:45	5	0	0	0	5	3	2	0	0	5	1	10	0	0	11	21
Hourly Total	16	2	0	5	18	19	24	0	2	43	4	23	0	0	27	88
12:00	3	0	0	0	3	2	3	0	0	5	2	2	0	0	4	12
12:15	2	0	0	0	2	2	3	0	0	5	3	7	0	0	10	17
12:30	4	0	0	0	4	0	3	0	0	3	0	2	0	0	2	9
12:45	4	0	0	0	4	1	3	0	0	4	1	2	0	0	3	11
Hourly Total	13	0	0	0	13	5	12	0	0	17	6	13	0	0	19	49
13:00	2	0	0	0	2	4	2	0	0	6	2	4	0	0	6	14
13:15	5	0	0	0	5	2	3	0	0	5	3	5	0	0	8	18
13:30	1	0	0	0	1	3	2	0	0	5	1	2	0	0	3	9
13:45	0	1	0	0	1	4	5	0	0	9	1	5	0	0	6	16
Hourly Total	8	1	0	0	9	13	12	0	0	25	7	16	0	0	23	57
14:00	3	1	0	0	4	4	3	0	0	7	1	2	0	0	3	14
14:15	1	0	0	0	1	3	2	0	0	5	1	1	0	0	2	8
14:30	2	0	0	0	2	5	1	0	0	6	1	3	0	0	4	12
14:45	2	0	0	0	2	2	1	0	0	3	1	4	0	0	5	10
Hourly Total	8	1	0	0	9	14	7	0	0	21	4	10	0	0	14	44
15:00	1	0	0	0	1	7	1	0	0	8	1	3	0	0	4	13
15:15	1	0	0	0	1	1	2	0	0	3	2	4	0	0	6	10
15:30	1	2	0	0	3	7	6	0	0	13	2	1	0	0	3	19
15:45	5	0	0	1	5	4	3	0	0	7	1	5	0	0	6	18
Hourly Total	8	2	0	1	10	19	12	0	0	31	6	13	0	0	19	60
16:00	2	0	0	0	2	1	3	0	0	4	4	0	0	0	4	10
16:15	6	0	0	1	6	2	2	0	0	4	0	3	0	0	3	13
16:30	4	1	1	0	6	6	5	0	0	11	2	4	0	0	6	23
16:45	0	0	0	0	0	2	2	0	0	4	2	3	0	0	5	9
Hourly Total	12	1	1	1	14	11	12	0	0	23	8	10	0	0	18	55
17:00	1	1	0	0	2	3	3	0	0	6	0	4	0	0	4	12
17:15	2	0	0	0	2	6	5	0	0	11	2	7	0	0	9	22
17:30	2	1	0	0	3	0	2	0	0	2	0	4	0	0	4	9
17:45	2	0	0	0	2	1	2	0	0	3	3	4	0	0	7	12
Hourly Total	7	2	0	0	9	10	12	0	0	22	5	19	0	0	24	55
18:00	1	0	0	3	1	2	5	0	0	7	2	2	0	0	4	12

18:15	0	0	0	0	0	3	0	0	0	3	1	3	0	0	4	7
18:30	3	1	0	0	4	0	5	1	0	6	1	2	0	0	3	13
18:45	0	0	0	0	0	2	5	0	0	7	2	5	0	0	7	14
Hourly Total	4	1	0	3	5	7	15	1	0	23	6	12	0	0	18	46
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	76	10	1	10	87	98	106	1	2	205	46	116	0	0	162	454
Approach %	87.4	11.5	1.1	-	-	47.8	51.7	0.5	-	-	28.4	71.6	0.0	-	-	-
Total %	16.7	2.2	0.2	-	19.2	21.6	23.3	0.2	-	45.2	10.1	25.6	0.0	-	35.7	-
Lights	73	10	1	-	84	98	101	1	-	200	46	115	0	-	161	445
% Lights	96.1	100.0	100.0	-	96.6	100.0	95.3	100.0	-	97.6	100.0	99.1	-	-	99.4	98.0
Other Vehicles	3	0	0	-	3	0	5	0	-	5	0	1	0	-	1	9
% Other Vehicles	3.9	0.0	0.0	-	3.4	0.0	4.7	0.0	-	2.4	0.0	0.9	-	-	0.6	2.0
Pedestrians	-	-	-	10	-	-	-	-	2	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	-	-	-

McMahon a Bowman Company
425 Commerce Drive, Suite 200

Fort Washington, Pennsylvania, United States 19034
215-283-9444

Count Name: 822C56.11 Raising Canes - Exit
Site Code:
Start Date: 03/28/2023



Turning Movement Data Plot

McMahon a Bowman Company
425 Commerce Drive, Suite 200

Fort Washington, Pennsylvania, United States 19034
215-283-9444

Count Name: 822C56.11 Raising Canes - Exit
Site Code:
Start Date: 03/25/2023

Turning Movement Data

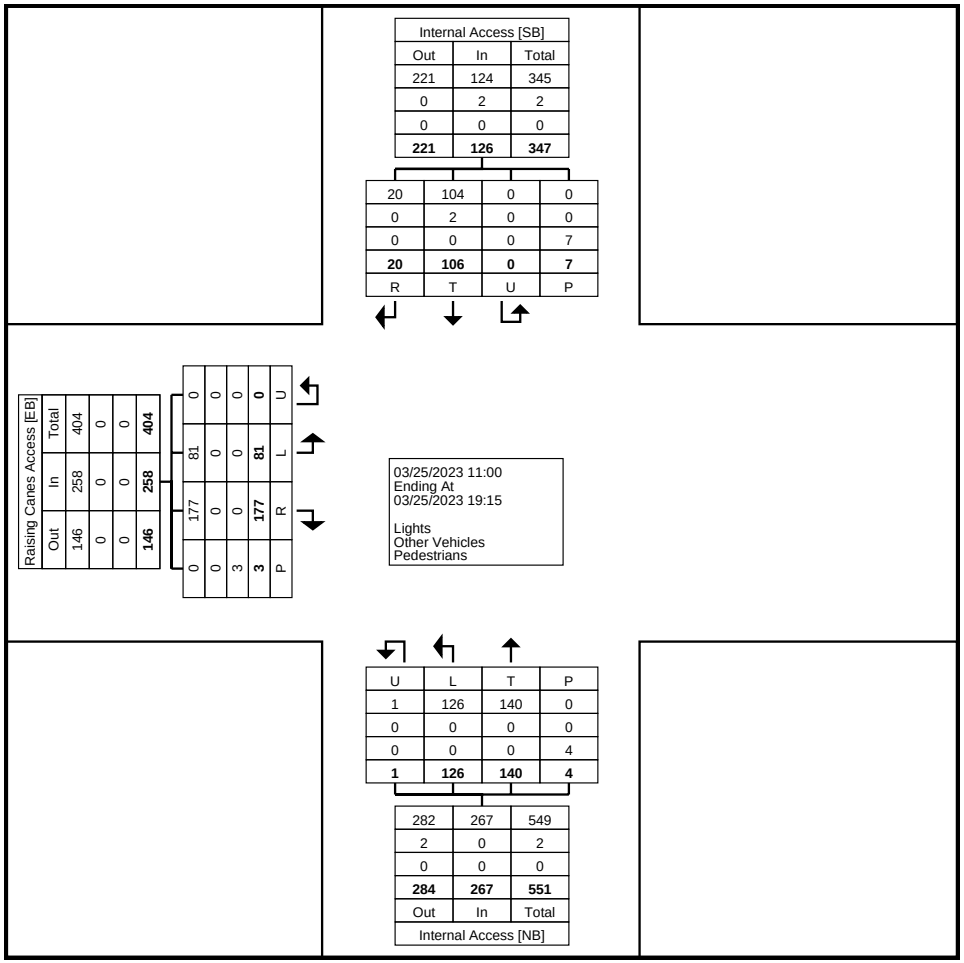
Start Time	Internal Access Southbound					Internal Access Northbound					Raising Canes Access Eastbound					
	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Int. Total
11:00	7	2	0	0	9	1	3	0	2	4	2	5	0	0	7	20
11:15	4	0	0	0	4	3	2	0	0	5	3	1	0	0	4	13
11:30	5	2	0	0	7	4	3	0	2	7	5	5	0	0	10	24
11:45	3	0	0	0	3	4	6	0	0	10	2	5	0	0	7	20
Hourly Total	19	4	0	0	23	12	14	0	4	26	12	16	0	0	28	77
12:00	4	1	0	0	5	10	7	0	0	17	2	6	0	0	8	30
12:15	7	1	0	0	8	6	4	0	0	10	3	8	0	0	11	29
12:30	3	2	0	0	5	6	7	1	0	14	4	6	0	0	10	29
12:45	4	0	0	0	4	3	7	0	0	10	2	8	0	0	10	24
Hourly Total	18	4	0	0	22	25	25	1	0	51	11	28	0	0	39	112
13:00	3	1	0	0	4	1	5	0	0	6	3	2	0	0	5	15
13:15	4	1	0	0	5	3	2	0	0	5	7	7	0	0	14	24
13:30	6	1	0	0	7	3	5	0	0	8	5	7	0	0	12	27
13:45	5	0	0	0	5	3	6	0	0	9	3	4	0	0	7	21
Hourly Total	18	3	0	0	21	10	18	0	0	28	18	20	0	0	38	87
14:00	4	0	0	0	4	3	1	0	0	4	2	3	0	0	5	13
14:15	3	1	0	0	4	7	5	0	0	12	3	4	0	0	7	23
14:30	1	0	0	0	1	3	2	0	0	5	2	4	0	0	6	12
14:45	4	1	0	1	5	8	11	0	0	19	2	8	0	1	10	34
Hourly Total	12	2	0	1	14	21	19	0	0	40	9	19	0	1	28	82
15:00	3	0	0	0	3	2	2	0	0	4	2	6	0	0	8	15
15:15	5	1	0	1	6	2	4	0	0	6	1	8	0	0	9	21
15:30	4	0	0	0	4	2	2	0	0	4	3	4	0	0	7	15
15:45	3	0	0	0	3	2	5	0	0	7	1	9	0	0	10	20
Hourly Total	15	1	0	1	16	8	13	0	0	21	7	27	0	0	34	71
16:00	3	1	0	1	4	7	4	0	0	11	2	9	0	0	11	26
16:15	3	0	0	0	3	6	4	0	0	10	2	7	0	0	9	22
16:30	2	1	0	0	3	5	4	0	0	9	2	4	0	0	6	18
16:45	1	2	0	0	3	2	7	0	0	9	1	7	0	0	8	20
Hourly Total	9	4	0	1	13	20	19	0	0	39	7	27	0	0	34	86
17:00	2	0	0	0	2	4	4	0	0	8	4	6	0	0	10	20
17:15	2	0	0	0	2	8	1	0	0	9	1	5	0	0	6	17
17:30	3	1	0	1	4	2	6	0	0	8	3	7	0	0	10	22
17:45	1	0	0	1	1	5	5	0	0	10	0	5	0	0	5	16
Hourly Total	8	1	0	2	9	19	16	0	0	35	8	23	0	0	31	75
18:00	2	0	0	0	2	3	6	0	0	9	2	6	0	2	8	19

18:15	3	0	0	0	3	3	1	0	0	4	2	5	0	0	7	14
18:30	1	1	0	2	2	3	3	0	0	6	5	2	0	0	7	15
18:45	1	0	0	0	1	2	6	0	0	8	0	4	0	0	4	13
Hourly Total	7	1	0	2	8	11	16	0	0	27	9	17	0	2	26	61
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	106	20	0	7	126	126	140	1	4	267	81	177	0	3	258	651
Approach %	84.1	15.9	0.0	-	-	47.2	52.4	0.4	-	-	31.4	68.6	0.0	-	-	-
Total %	16.3	3.1	0.0	-	19.4	19.4	21.5	0.2	-	41.0	12.4	27.2	0.0	-	39.6	-
Lights	104	20	0	-	124	126	140	1	-	267	81	177	0	-	258	649
% Lights	98.1	100.0	-	-	98.4	100.0	100.0	100.0	-	100.0	100.0	100.0	-	-	100.0	99.7
Other Vehicles	2	0	0	-	2	0	0	0	-	0	0	0	0	-	0	2
% Other Vehicles	1.9	0.0	-	-	1.6	0.0	0.0	0.0	-	0.0	0.0	0.0	-	-	0.0	0.3
Pedestrians	-	-	-	7	-	-	-	-	4	-	-	-	-	3	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-

McMahon a Bowman Company
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Fort Washington, Pennsylvania, United States 19034
215-283-9444

Count Name: 822C56.11 Raising Canes - Exit
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Turning Movement Data Plot

McMahon a Bowman Company
425 Commerce Drive, Suite 200

Fort Washington, Pennsylvania, United States 19034
215-283-9444

Count Name: 822C56.11 Raising Canes - Main Access
Site Code:
Start Date: 03/28/2023

Turning Movement Data

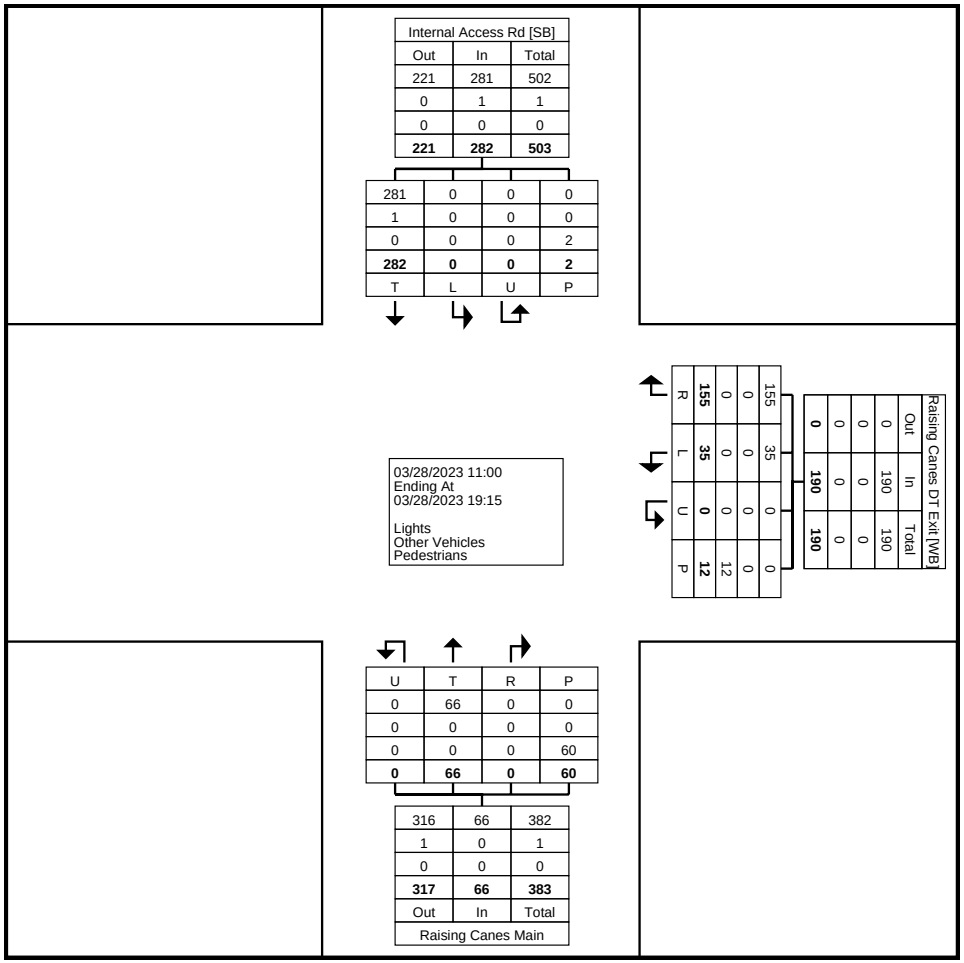
Start Time	Internal Access Rd Southbound					Raising Canes DT Exit Westbound					Raising Canes Main Access Northbound					
	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Int. Total
11:00	0	11	0	0	11	0	7	0	4	7	3	0	0	3	3	21
11:15	0	17	0	0	17	2	7	0	0	9	2	0	0	4	2	28
11:30	0	11	0	0	11	0	9	0	1	9	1	0	0	1	1	21
11:45	0	8	0	0	8	2	7	0	0	9	2	0	0	0	2	19
Hourly Total	0	47	0	0	47	4	30	0	5	34	8	0	0	8	8	89
12:00	0	13	0	0	13	2	2	0	0	4	3	0	0	0	3	20
12:15	0	10	0	0	10	3	5	0	1	8	0	0	0	0	0	18
12:30	0	8	0	0	8	1	6	0	0	7	1	0	0	0	1	16
12:45	0	7	0	0	7	1	4	0	1	5	2	0	0	0	2	14
Hourly Total	0	38	0	0	38	7	17	0	2	24	6	0	0	0	6	68
13:00	0	8	0	0	8	1	2	0	0	3	2	0	0	1	2	13
13:15	0	12	0	0	12	3	6	0	0	9	0	0	0	1	0	21
13:30	0	7	0	0	7	3	6	0	0	9	1	0	0	6	1	17
13:45	0	6	0	0	6	0	5	0	0	5	4	0	0	2	4	15
Hourly Total	0	33	0	0	33	7	19	0	0	26	7	0	0	10	7	66
14:00	0	5	0	0	5	1	1	0	0	2	2	0	0	0	2	9
14:15	0	4	0	0	4	0	7	0	0	7	0	0	0	0	0	11
14:30	0	6	0	0	6	2	4	0	0	6	0	0	0	0	0	12
14:45	0	6	0	0	6	1	2	0	0	3	7	0	0	0	7	16
Hourly Total	0	21	0	0	21	4	14	0	0	18	9	0	0	0	9	48
15:00	0	9	0	0	9	1	4	0	0	5	2	0	0	1	2	16
15:15	0	7	0	0	7	0	5	0	0	5	2	0	0	5	2	14
15:30	0	10	0	0	10	0	3	0	0	3	1	0	0	1	1	14
15:45	0	7	0	0	7	0	8	0	0	8	2	0	0	0	2	17
Hourly Total	0	33	0	0	33	1	20	0	0	21	7	0	0	7	7	61
16:00	0	8	0	0	8	2	6	0	0	8	4	0	0	1	4	20
16:15	0	6	0	0	6	0	1	0	0	1	1	0	0	4	1	8
16:30	0	9	0	0	9	1	4	0	0	5	2	0	0	4	2	16
16:45	0	12	0	1	12	2	6	0	0	8	4	0	0	5	4	24
Hourly Total	0	35	0	1	35	5	17	0	0	22	11	0	0	14	11	68
17:00	0	12	0	0	12	1	7	0	0	8	1	0	0	0	1	21
17:15	0	12	0	0	12	2	5	0	0	7	4	0	0	0	4	23
17:30	0	9	0	0	9	1	6	0	0	7	2	0	0	3	2	18
17:45	0	6	0	0	6	1	4	0	0	5	0	0	0	0	0	11
Hourly Total	0	39	0	0	39	5	22	0	0	27	7	0	0	3	7	73
18:00	0	11	0	0	11	0	3	0	0	3	3	0	0	5	3	17

18:15	0	6	0	1	6	1	3	0	3	4	3	0	0	1	3	13
18:30	0	9	0	0	9	0	5	0	0	5	1	0	0	2	1	15
18:45	0	10	0	0	10	1	5	0	2	6	4	0	0	10	4	20
Hourly Total	0	36	0	1	36	2	16	0	5	18	11	0	0	18	11	65
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	282	0	2	282	35	155	0	12	190	66	0	0	60	66	538
Approach %	0.0	100.0	0.0	-	-	18.4	81.6	0.0	-	-	100.0	0.0	0.0	-	-	-
Total %	0.0	52.4	0.0	-	52.4	6.5	28.8	0.0	-	35.3	12.3	0.0	0.0	-	12.3	-
Lights	0	281	0	-	281	35	155	0	-	190	66	0	0	-	66	537
% Lights	-	99.6	-	-	99.6	100.0	100.0	-	-	100.0	100.0	-	-	-	100.0	99.8
Other Vehicles	0	1	0	-	1	0	0	0	-	0	0	0	0	-	0	1
% Other Vehicles	-	0.4	-	-	0.4	0.0	0.0	-	-	0.0	0.0	-	-	-	0.0	0.2
Pedestrians	-	-	-	2	-	-	-	-	12	-	-	-	-	60	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-

McMahon a Bowman Company
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Count Name: 822C56.11 Raising Canes - Main Access
Site Code:
Start Date: 03/28/2023



Turning Movement Data Plot

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425 Commerce Drive, Suite 200

Fort Washington, Pennsylvania, United States 19034
215-283-9444

Count Name: 822C56.11 Raising Canes - Main
Site Code:
Start Date: 03/25/2023

Turning Movement Data

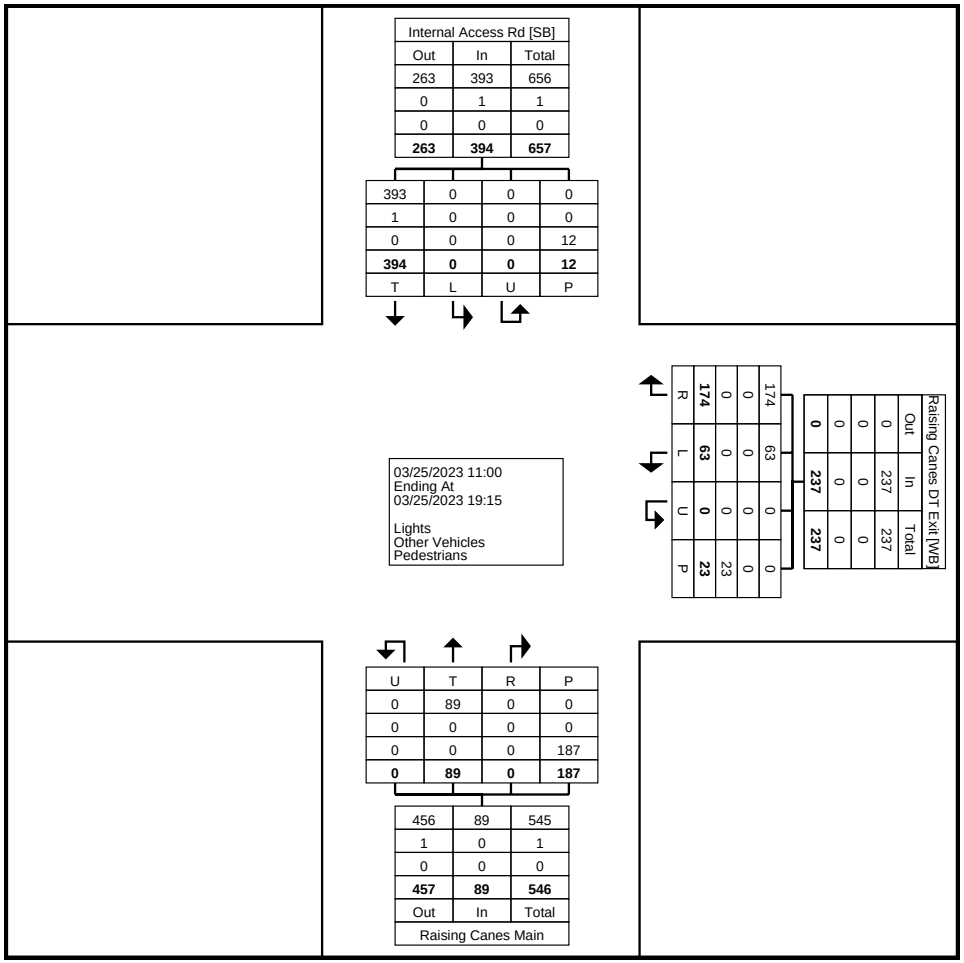
Start Time	Internal Access Rd Southbound					Raising Canes DT Exit Westbound					Raising Canes Main Access Northbound					
	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Int. Total
11:00	0	16	0	0	16	0	3	0	0	3	4	0	0	4	4	23
11:15	0	11	0	0	11	0	6	0	0	6	1	0	0	0	1	18
11:30	0	9	0	0	9	1	7	0	0	8	4	0	0	4	4	21
11:45	0	12	0	0	12	3	5	0	0	8	2	0	0	3	2	22
Hourly Total	0	48	0	0	48	4	21	0	0	25	11	0	0	11	11	84
12:00	0	14	0	0	14	4	1	0	0	5	4	0	0	3	4	23
12:15	0	14	0	0	14	2	0	0	0	2	3	0	0	6	3	19
12:30	0	17	0	0	17	3	6	0	0	9	1	0	0	6	1	27
12:45	0	14	0	0	14	3	9	0	0	12	0	0	0	4	0	26
Hourly Total	0	59	0	0	59	12	16	0	0	28	8	0	0	19	8	95
13:00	0	14	0	0	14	1	6	0	1	7	3	0	0	9	3	24
13:15	0	13	0	0	13	1	6	0	0	7	3	0	0	5	3	23
13:30	0	14	0	0	14	3	4	0	1	7	2	0	0	0	2	23
13:45	0	6	0	0	6	1	11	0	0	12	2	0	0	2	2	20
Hourly Total	0	47	0	0	47	6	27	0	2	33	10	0	0	16	10	90
14:00	0	7	0	0	7	3	2	0	1	5	1	0	0	3	1	13
14:15	0	9	0	0	9	0	2	0	0	2	4	0	0	6	4	15
14:30	0	7	0	3	7	3	6	0	2	9	4	0	0	5	4	20
14:45	0	22	0	3	22	3	6	0	6	9	2	0	0	2	2	33
Hourly Total	0	45	0	6	45	9	16	0	9	25	11	0	0	16	11	81
15:00	0	16	0	0	16	1	0	0	2	1	1	0	0	9	1	18
15:15	0	13	0	0	13	3	6	0	0	9	1	0	0	16	1	23
15:30	0	12	0	0	12	5	8	0	0	13	5	0	0	8	5	30
15:45	0	14	0	0	14	1	5	0	0	6	3	0	0	17	3	23
Hourly Total	0	55	0	0	55	10	19	0	2	29	10	0	0	50	10	94
16:00	0	12	0	2	12	2	6	0	2	8	2	0	0	3	2	22
16:15	0	14	0	2	14	0	8	0	2	8	6	0	0	4	6	28
16:30	0	13	0	2	13	3	8	0	2	11	4	0	0	6	4	28
16:45	0	14	0	0	14	1	10	0	0	11	2	0	0	4	2	27
Hourly Total	0	53	0	6	53	6	32	0	6	38	14	0	0	17	14	105
17:00	0	11	0	0	11	1	2	0	2	3	3	0	0	11	3	17
17:15	0	10	0	0	10	4	7	0	0	11	2	0	0	8	2	23
17:30	0	16	0	0	16	3	8	0	0	11	4	0	0	0	4	31
17:45	0	7	0	0	7	0	5	0	0	5	2	0	0	5	2	14
Hourly Total	0	44	0	0	44	8	22	0	2	30	11	0	0	24	11	85
18:00	0	13	0	0	13	4	7	0	0	11	7	0	0	14	7	31

18:15	0	13	0	0	13	2	8	0	0	10	5	0	0	3	5	28
18:30	0	7	0	0	7	2	4	0	2	6	0	0	0	8	0	13
18:45	0	10	0	0	10	0	2	0	0	2	2	0	0	9	2	14
Hourly Total	0	43	0	0	43	8	21	0	2	29	14	0	0	34	14	86
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	394	0	12	394	63	174	0	23	237	89	0	0	187	89	720
Approach %	0.0	100.0	0.0	-	-	26.6	73.4	0.0	-	-	100.0	0.0	0.0	-	-	-
Total %	0.0	54.7	0.0	-	54.7	8.8	24.2	0.0	-	32.9	12.4	0.0	0.0	-	12.4	-
Lights	0	393	0	-	393	63	174	0	-	237	89	0	0	-	89	719
% Lights	-	99.7	-	-	99.7	100.0	100.0	-	-	100.0	100.0	-	-	-	100.0	99.9
Other Vehicles	0	1	0	-	1	0	0	0	-	0	0	0	0	-	0	1
% Other Vehicles	-	0.3	-	-	0.3	0.0	0.0	-	-	0.0	0.0	-	-	-	0.0	0.1
Pedestrians	-	-	-	12	-	-	-	-	23	-	-	-	-	187	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-

McMahon a Bowman Company
425 Commerce Drive, Suite 200

Fort Washington, Pennsylvania, United States 19034
215-283-9444

Count Name: 822C56.11 Raising Canes - Main
Site Code:
Start Date: 03/25/2023



Turning Movement Data Plot

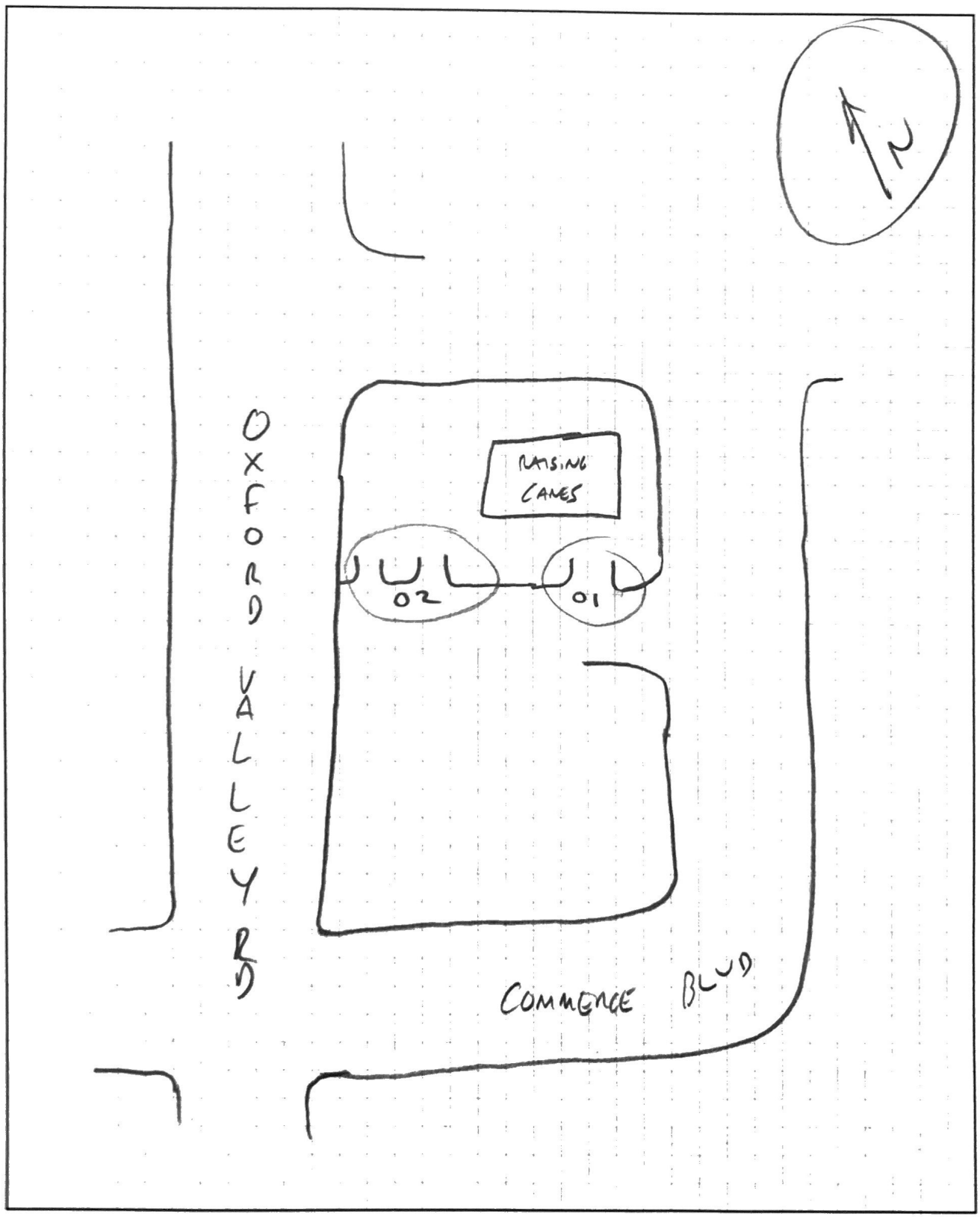
McMAHON
TRANSPORTATION ENGINEERS & PLANNERS

Langhorne Location - 640 Commerce Boulevard

Job LANGHORNE | McMahon Project No. | Sheet ____ of ____

Description COMMERCE BLVD SITE | Designed By | Date

Checked By | Date



McMahon a Bowman Company
425 Commerce Drive, Suite 200

Fort Washington, Pennsylvania, United States 19034
215-283-9444

Count Name: 822C56.11 Raising Canes - Eastern
Site Code:
Start Date: 03/30/2023

Turning Movement Data

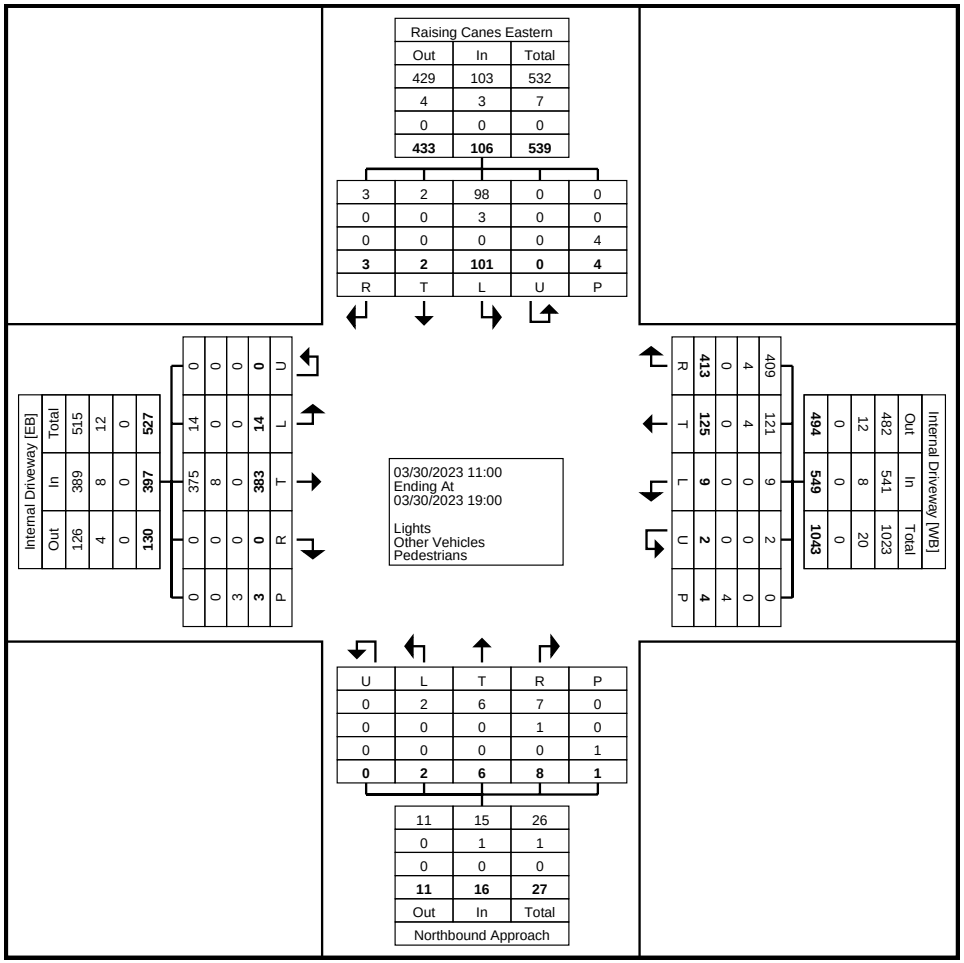
Start Time	Raising Canes Eastern Access Southbound						Internal Driveway Westbound						Northbound Approach Northbound						Internal Driveway Eastbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
11:00	1	0	0	0	0	1	1	4	5	1	1	11	0	1	1	0	1	2	0	2	0	0	2	2	16
11:15	0	0	0	0	0	0	0	5	5	0	0	10	0	0	0	0	0	0	0	7	0	0	0	7	17
11:30	0	0	0	0	0	0	0	5	14	0	0	19	0	0	0	0	0	0	1	7	0	0	0	8	27
11:45	1	0	0	0	0	1	0	5	16	0	0	21	1	0	0	0	0	1	1	11	0	0	0	12	35
Hourly Total	2	0	0	0	0	2	1	19	40	1	1	61	1	1	1	0	1	3	2	27	0	0	2	29	95
12:00	8	0	0	0	0	8	0	4	15	0	0	19	0	0	0	0	0	0	0	12	0	0	0	12	39
12:15	3	1	0	0	0	4	0	3	23	0	0	26	1	1	0	0	0	2	1	18	0	0	0	19	51
12:30	6	0	1	0	0	7	0	6	10	0	0	16	0	1	0	0	0	1	2	14	0	0	0	16	40
12:45	4	0	0	0	0	4	0	4	16	0	0	20	0	0	0	0	0	0	0	14	0	0	0	14	38
Hourly Total	21	1	1	0	0	23	0	17	64	0	0	81	1	2	0	0	0	3	3	58	0	0	0	61	168
13:00	5	1	0	0	0	6	1	4	17	0	0	22	0	0	0	0	0	0	1	14	0	0	0	15	43
13:15	3	0	0	0	0	3	1	4	14	0	0	19	0	0	0	0	0	0	0	23	0	0	0	23	45
13:30	3	0	0	0	0	3	1	1	16	0	0	18	0	0	0	0	0	0	1	13	0	0	0	14	35
13:45	4	0	0	0	0	4	0	2	11	0	0	13	0	0	0	0	0	0	0	17	0	0	0	17	34
Hourly Total	15	1	0	0	0	16	3	11	58	0	0	72	0	0	0	0	0	0	2	67	0	0	0	69	157
14:00	2	0	0	0	0	2	0	5	12	0	0	17	0	0	0	0	0	0	2	7	0	0	0	9	28
14:15	4	0	2	0	0	6	1	1	16	1	0	19	0	0	0	0	0	0	2	7	0	0	0	9	34
14:30	3	0	0	0	0	3	0	5	12	0	0	17	0	0	0	0	0	0	1	16	0	0	0	17	37
14:45	4	0	0	0	0	4	0	1	6	0	0	7	0	1	1	0	0	2	2	8	0	0	0	10	23
Hourly Total	13	0	2	0	0	15	1	12	46	1	0	60	0	1	1	0	0	2	7	38	0	0	0	45	122
15:00	2	0	0	0	0	2	0	3	10	0	0	13	0	1	2	0	0	3	0	12	0	0	0	12	30
15:15	7	0	0	0	0	7	0	2	9	0	0	11	0	0	0	0	0	0	0	7	0	0	0	7	25
15:30	2	0	0	0	0	2	0	1	8	0	0	9	0	0	0	0	0	0	0	7	0	0	0	7	18
15:45	2	0	0	0	0	2	0	6	7	0	0	13	0	1	0	0	0	1	0	7	0	0	0	7	23
Hourly Total	13	0	0	0	0	13	0	12	34	0	0	46	0	2	2	0	0	4	0	33	0	0	0	33	96
16:00	3	0	0	0	0	3	0	3	12	0	0	15	0	0	0	0	0	0	0	11	0	0	0	11	29
16:15	4	0	0	0	0	4	0	3	11	0	1	14	0	0	0	0	0	0	0	11	0	0	0	11	29
16:30	4	0	0	0	0	4	0	3	19	0	0	22	0	0	0	0	0	0	0	10	0	0	0	10	36
16:45	2	0	0	0	0	2	2	3	13	0	0	18	0	0	0	0	0	0	0	15	0	0	0	15	35
Hourly Total	13	0	0	0	0	13	2	12	55	0	1	69	0	0	0	0	0	0	0	47	0	0	0	47	129
17:00	3	0	0	0	1	3	0	4	10	0	1	14	0	0	1	0	0	1	0	12	0	0	0	12	30
17:15	4	0	0	0	1	4	0	6	12	0	0	18	0	0	0	0	0	0	0	10	0	0	0	10	32
17:30	5	0	0	0	1	5	0	11	10	0	1	21	0	0	1	0	0	1	0	8	0	0	0	8	35
17:45	3	0	0	0	1	3	1	4	15	0	0	20	0	0	2	0	0	2	0	18	0	0	0	18	43
Hourly Total	15	0	0	0	4	15	1	25	47	0	2	73	0	0	4	0	0	4	0	48	0	0	0	48	140

18:00	2	0	0	0	0	2	0	4	18	0	0	22	0	0	0	0	0	0	0	17	0	0	0	17	41
18:15	4	0	0	0	0	4	1	6	17	0	0	24	0	0	0	0	0	0	0	12	0	0	0	12	40
18:30	1	0	0	0	0	1	0	6	13	0	0	19	0	0	0	0	0	0	0	22	0	0	0	22	42
18:45	2	0	0	0	0	2	0	1	21	0	0	22	0	0	0	0	0	0	0	14	0	0	1	14	38
Hourly Total	9	0	0	0	0	9	1	17	69	0	0	87	0	0	0	0	0	0	0	65	0	0	1	65	161
Grand Total	101	2	3	0	4	106	9	125	413	2	4	549	2	6	8	0	1	16	14	383	0	0	3	397	1068
Approach %	95.3	1.9	2.8	0.0	-	-	1.6	22.8	75.2	0.4	-	-	12.5	37.5	50.0	0.0	-	-	3.5	96.5	0.0	0.0	-	-	-
Total %	9.5	0.2	0.3	0.0	-	9.9	0.8	11.7	38.7	0.2	-	51.4	0.2	0.6	0.7	0.0	-	1.5	1.3	35.9	0.0	0.0	-	37.2	-
Lights	98	2	3	0	-	103	9	121	409	2	-	541	2	6	7	0	-	15	14	375	0	0	-	389	1048
% Lights	97.0	100.0	100.0	-	-	97.2	100.0	96.8	99.0	100.0	-	98.5	100.0	100.0	87.5	-	-	93.8	100.0	97.9	-	-	-	98.0	98.1
Other Vehicles	3	0	0	0	-	3	0	4	4	0	-	8	0	0	1	0	-	1	0	8	0	0	-	8	20
% Other Vehicles	3.0	0.0	0.0	-	-	2.8	0.0	3.2	1.0	0.0	-	1.5	0.0	0.0	12.5	-	-	6.3	0.0	2.1	-	-	-	2.0	1.9
Pedestrians	-	-	-	-	4	-	-	-	-	-	4	-	-	-	-	-	1	-	-	-	-	-	3	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

McMahon a Bowman Company
425 Commerce Drive, Suite 200

Fort Washington, Pennsylvania, United States 19034
215-283-9444

Count Name: 822C56.11 Raising Canes - Eastern
Site Code:
Start Date: 03/30/2023



Turning Movement Data Plot

McMahon a Bowman Company
425 Commerce Drive, Suite 200

Fort Washington, Pennsylvania, United States 19034
215-283-9444

Count Name: 822C56.11 Raising Canes - Eastern
Site Code:
Start Date: 04/01/2023

Turning Movement Data

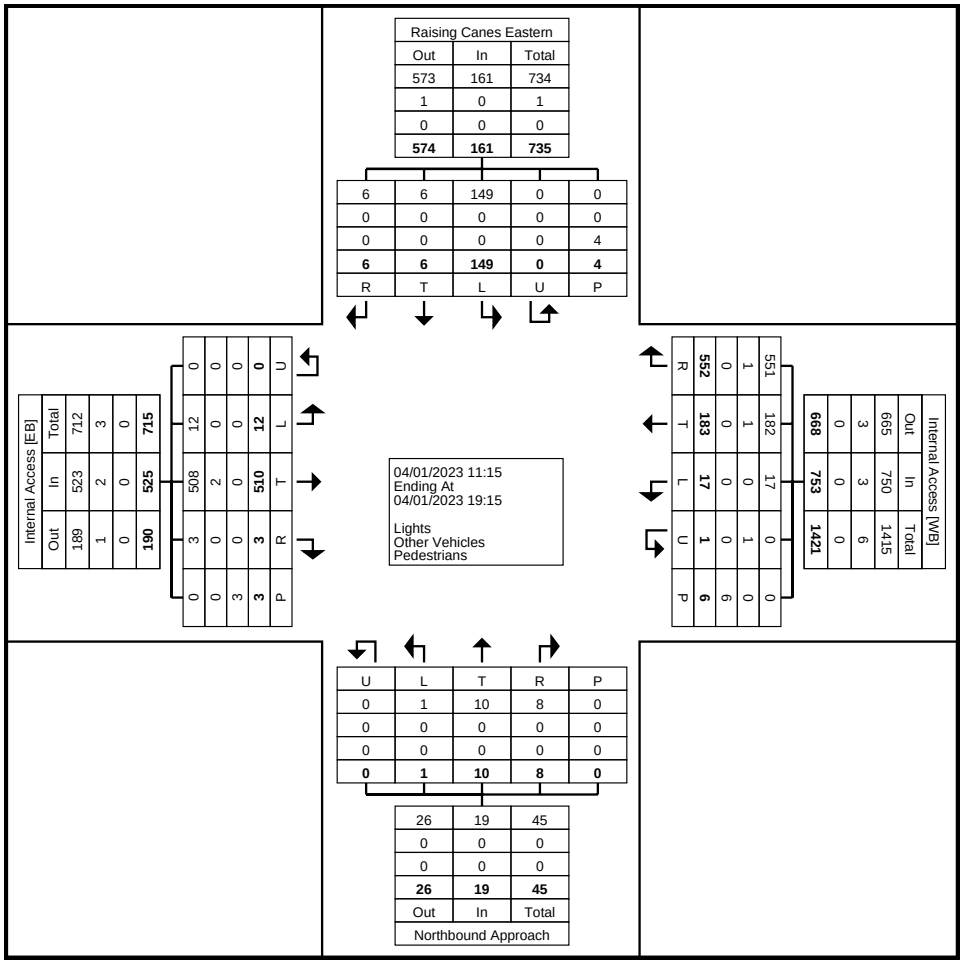
Start Time	Raising Canes Eastern Access Southbound						Internal Access Westbound						Northbound Approach Northbound						Internal Access Eastbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
11:15	1	0	0	0	0	1	1	1	16	0	0	18	0	0	0	0	0	0	0	10	0	0	0	10	29
11:30	2	0	0	0	1	2	1	5	5	0	1	11	0	1	0	0	0	1	1	10	0	0	0	11	25
11:45	3	0	0	0	0	3	0	7	13	0	0	20	0	0	1	0	0	1	1	11	0	0	0	12	36
Hourly Total	6	0	0	0	1	6	2	13	34	0	1	49	0	1	1	0	0	2	2	31	0	0	0	33	90
12:00	4	0	0	0	0	4	1	5	15	0	0	21	0	1	0	0	0	1	0	15	0	0	0	15	41
12:15	5	0	0	0	0	5	0	8	17	0	0	25	0	0	0	0	0	0	1	14	0	0	0	15	45
12:30	1	0	0	0	0	1	0	5	20	0	0	25	0	0	0	0	0	0	1	16	0	0	0	17	43
12:45	6	0	0	0	2	6	0	9	16	1	2	26	0	1	0	0	0	1	0	16	0	0	0	16	49
Hourly Total	16	0	0	0	2	16	1	27	68	1	2	97	0	2	0	0	0	2	2	61	0	0	0	63	178
13:00	4	0	0	0	0	4	1	8	18	0	0	27	0	1	0	0	0	1	1	18	0	0	0	19	51
13:15	2	0	0	0	0	2	0	5	25	0	0	30	1	1	0	0	0	2	0	13	0	0	0	13	47
13:30	7	0	1	0	0	8	1	6	21	0	0	28	0	0	0	0	0	0	1	15	0	0	0	16	52
13:45	7	0	0	0	0	7	1	11	21	0	0	33	0	0	0	0	0	0	0	29	0	0	1	29	69
Hourly Total	20	0	1	0	0	21	3	30	85	0	0	118	1	2	0	0	0	3	2	75	0	0	1	77	219
14:00	8	0	0	0	0	8	0	13	27	0	0	40	0	0	0	0	0	0	0	19	0	0	1	19	67
14:15	4	0	0	0	1	4	1	7	21	0	1	29	0	0	1	0	0	1	0	23	0	0	0	23	57
14:30	6	2	0	0	0	8	1	8	22	0	1	31	0	1	1	0	0	2	0	20	0	0	1	20	61
14:45	9	0	0	0	0	9	1	6	22	0	0	29	0	0	0	0	0	0	0	23	0	0	0	23	61
Hourly Total	27	2	0	0	1	29	3	34	92	0	2	129	0	1	2	0	0	3	0	85	0	0	2	85	246
15:00	4	0	1	0	0	5	1	5	16	0	1	22	0	0	1	0	0	1	0	18	0	0	0	18	46
15:15	5	0	0	0	0	5	0	4	15	0	0	19	0	0	0	0	0	0	0	23	0	0	0	23	47
15:30	3	0	0	0	0	3	2	4	24	0	0	30	0	0	0	0	0	0	1	9	0	0	0	10	43
15:45	7	1	2	0	0	10	1	4	13	0	0	18	0	0	1	0	0	1	0	12	1	0	0	13	42
Hourly Total	19	1	3	0	0	23	4	17	68	0	1	89	0	0	2	0	0	2	1	62	1	0	0	64	178
16:00	5	0	1	0	0	6	0	7	18	0	0	25	0	0	0	0	0	0	1	17	0	0	0	18	49
16:15	2	0	0	0	0	2	2	5	17	0	0	24	0	0	0	0	0	0	1	14	0	0	0	15	41
16:30	4	0	0	0	0	4	0	0	17	0	0	17	0	0	1	0	0	1	0	15	0	0	0	15	37
16:45	4	0	0	0	0	4	0	6	16	0	0	22	0	1	0	0	0	1	0	12	1	0	0	13	40
Hourly Total	15	0	1	0	0	16	2	18	68	0	0	88	0	1	1	0	0	2	2	58	1	0	0	61	167
17:00	5	1	0	0	0	6	0	6	14	0	0	20	0	1	0	0	0	1	1	10	0	0	0	11	38
17:15	5	0	0	0	0	5	0	5	16	0	0	21	0	0	0	0	0	0	0	17	0	0	0	17	43
17:30	4	0	0	0	0	4	1	8	23	0	0	32	0	1	0	0	0	1	0	20	0	0	0	20	57
17:45	7	0	0	0	0	7	1	10	15	0	0	26	0	0	1	0	0	1	0	19	0	0	0	19	53
Hourly Total	21	1	0	0	0	22	2	29	68	0	0	99	0	2	1	0	0	3	1	66	0	0	0	67	191
18:00	7	1	0	0	0	8	0	3	23	0	0	26	0	0	0	0	0	0	1	17	0	0	0	18	52

18:15	7	0	1	0	0	8	0	5	15	0	0	20	0	0	0	0	0	0	1	15	1	0	0	17	45
18:30	3	1	0	0	0	4	0	5	17	0	0	22	0	0	1	0	0	1	0	23	0	0	0	23	50
18:45	5	0	0	0	0	5	0	2	9	0	0	11	0	0	0	0	0	0	0	11	0	0	0	11	27
Hourly Total	22	2	1	0	0	25	0	15	64	0	0	79	0	0	1	0	0	1	2	66	1	0	0	69	174
19:00	3	0	0	0	0	3	0	0	5	0	0	5	0	1	0	0	0	1	0	6	0	0	0	6	15
Grand Total	149	6	6	0	4	161	17	183	552	1	6	753	1	10	8	0	0	19	12	510	3	0	3	525	1458
Approach %	92.5	3.7	3.7	0.0	-	-	2.3	24.3	73.3	0.1	-	-	5.3	52.6	42.1	0.0	-	-	2.3	97.1	0.6	0.0	-	-	-
Total %	10.2	0.4	0.4	0.0	-	11.0	1.2	12.6	37.9	0.1	-	51.6	0.1	0.7	0.5	0.0	-	1.3	0.8	35.0	0.2	0.0	-	36.0	-
Lights	149	6	6	0	-	161	17	182	551	0	-	750	1	10	8	0	-	19	12	508	3	0	-	523	1453
% Lights	100.0	100.0	100.0	-	-	100.0	100.0	99.5	99.8	0.0	-	99.6	100.0	100.0	100.0	-	-	100.0	100.0	99.6	100.0	-	-	99.6	99.7
Other Vehicles	0	0	0	0	-	0	0	1	1	1	-	3	0	0	0	0	-	0	0	2	0	0	-	2	5
% Other Vehicles	0.0	0.0	0.0	-	-	0.0	0.0	0.5	0.2	100.0	-	0.4	0.0	0.0	0.0	-	-	0.0	0.0	0.4	0.0	-	-	0.4	0.3
Pedestrians	-	-	-	-	4	-	-	-	-	-	6	-	-	-	-	-	0	-	-	-	-	-	3	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

McMahon a Bowman Company
425 Commerce Drive, Suite 200

Fort Washington, Pennsylvania, United States 19034
215-283-9444

Count Name: 822C56.11 Raising Canes - Eastern
Site Code:
Start Date: 04/01/2023



Turning Movement Data Plot

McMahon a Bowman Company

425 Commerce Drive, Suite 200
Fort Washington, PA 19034

Municipality: Langhorne
Location: Internal Access Road & Raising Canes Accesses
Counter:M

File Name : langhorne01w
Site Code :
Start Date : 3/30/2023
Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles

	Raising Canes East Southbound						Internal Access Westbound						S.C. Access East Northbound						S.C. Access West Northeastbound						Internal Access Eastbound						Raising Canes West Southeastbound						
Start Time	Left	Thru	Bear Right	Right	Hard Right	Peds	Left	Bear Left	Thru	Bear Right	Right	Peds	Hard Left	Left	Bear Left	Thru	Right	Peds	Hard Left	Left	Bear Left	Bear Right	Hard Right	Peds	Hard Left	Left	Thru	Right	Hard Right	Peds	Hard Left	Bear Left	Bear Right	Right	Hard Right	Peds	Int. Total
11:00	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	5
11:15	5	0	0	0	0	0	0	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	11
11:30	6	0	0	0	0	0	0	2	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	0	15
11:45	8	0	1	0	0	0	0	3	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0	1	0	0	19
Total	19	0	1	0	0	0	0	8	0	2	6	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	10	0	2	0	0	50
12:00	9	0	0	0	0	0	0	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	15
12:15	9	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	4	0	0	0	0	17
12:30	7	0	0	0	0	0	0	2	0	1	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	6	0	2	0	0	22
12:45	10	0	0	0	1	0	0	1	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	20
Total	35	0	0	0	1	0	0	4	0	2	12	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	16	0	2	0	0	74
13:00	7	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	18
13:15	17	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	6	0	0	0	0	29
13:30	9	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	5	0	1	0	0	18
13:45	11	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	5	0	0	0	0	19
Total	44	0	0	0	0	0	0	2	0	3	6	0	0	0	0	0	0	0	0	1	0	3	0	0	0	0	1	0	0	0	0	23	0	1	0	0	84
14:00	5	0	1	0	0	0	0	1	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	14
14:15	5	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	1	0	14
14:30	9	0	0	0	0	0	0	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	5	0	2	0	0	21
14:45	6	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	0	0	0	0	13
Total	25	0	1	0	0	0	0	4	0	3	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	17	0	2	1	0	62
15:00	9	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	14
15:15	5	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1	1	0	10
15:30	5	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	9
15:45	6	0	0	0	0	0	0	0	1	1	4	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Total	25	0	0	0	0	0	0	1	1	1	7	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0	0	5	0	2	1	0	46
16:00	8	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	13
16:15	10	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	15
16:30	8	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	15
16:45	13	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	18
Total	39	0	0	0	0	0	0	5	0	2	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	9	0	0	0	0	61

McMahon a Bowman Company

425 Commerce Drive, Suite 200
Fort Washington, PA 19034

Municipality: Langhorne
Location: Internal Access Road & Raising Canes Accesses
Counter:M

File Name : langhorne01w
Site Code :
Start Date : 3/30/2023
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Groups Printed- Passenger Vehicles - Heavy Vehicles

	Raising Canes East Southbound						Internal Access Westbound						S.C. Access East Northbound						S.C. Access West Northeastbound						Internal Access Eastbound						Raising Canes West Southeastbound						
Start Time	Left	Thru	Bear Right	Right	Hard Right	Peds	Left	Bear Left	Thru	Bear Right	Right	Peds	Hard Left	Left	Bear Left	Thru	Right	Peds	Hard Left	Left	Bear Left	Bear Right	Hard Right	Peds	Hard Left	Left	Thru	Right	Hard Right	Peds	Hard Left	Bear Left	Bear Right	Right	Hard Right	Peds	Int. Total
17:00	5	0	0	0	0	0	0	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	1	0	0	15
17:15	8	0	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	14
17:30	6	0	0	0	0	0	0	1	0	4	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	20
17:45	14	0	0	0	0	0	0	2	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	23
Total	33	0	0	0	0	0	0	4	0	7	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	1	0	0	72
18:00	13	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	21
18:15	9	0	0	0	0	0	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	16
18:30	15	0	0	0	0	0	0	1	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	0	25
18:45	12	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	2	0	0	20
Total	49	0	0	0	0	0	0	5	0	2	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	3	0	0	82
Grand Total	269	0	2	0	1	0	0	33	1	22	63	0	0	0	0	0	0	0	0	2	3	5	0	0	0	0	3	0	0	0	3	109	0	13	2	0	531
Apprch %	98.9	0	0.7	0	0.4	0	0	27.7	0.8	18.5	52.9	0	0	0	0	0	0	0	0	20	30	50	0	0	0	0	100	0	0	0	2.4	85.8	0	10.2	1.6	0	
Total %	50.7	0	0.4	0	0.2	0	0	6.2	0.2	4.1	11.9	0	0	0	0	0	0	0	0	0.4	0.6	0.9	0	0	0	0	0.6	0	0	0	0.6	20.5	0	2.4	0.4	0	
Passenger Vehicles	267	0	2	0	1	0	0	33	1	19	61	0	0	0	0	0	0	0	0	2	3	5	0	0	0	0	3	0	0	0	3	107	0	13	2	0	522
% Passenger Vehicles	99.3	0	100	0	100	0	0	100	100	86.4	96.8	0	0	0	0	0	0	0	0	100	100	100	0	0	0	0	100	0	0	0	100	98.2	0	100	100	0	98.3
Heavy Vehicles	2	0	0	0	0	0	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	9
% Heavy Vehicles	0.7	0	0	0	0	0	0	0	0	13.6	3.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.8	0	0	0	0	1.7

McMahon a Bowman Company

425 Commerce Drive, Suite 200
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Municipality: Langhorne
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Counter: M

File Name : langhorne02s
Site Code :
Start Date : 4/1/2023
Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles

	Raising Canes East Southbound						Internal Access Rd Westbound						S.C. Access East Northbound						S.C. Access West Northeastbound						Internal Access Rd Eastbound						Raising Canes West Southeastbound						
Start Time	Left	Thru	Bear Right	Right	Hard Right	Peds	Left	Bear Left	Thru	Bear Right	Right	Peds	Hard Left	Left	Bear Left	Thru	Right	Peds	Hard Left	Left	Bear Left	Bear Right	Hard Right	Peds	Hard Left	Left	Thru	Right	Hard Right	Peds	Hard Left	Bear Left	Bear Right	Right	Hard Right	Peds	Int. Total
11:00	1	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	12
11:15	7	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	13
11:30	8	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0	1	0	0	16
11:45	11	0	0	0	0	0	0	2	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	18
Total	27	0	0	0	0	0	0	8	0	2	9	0	0	0	0	0	0	0	0	0	1	4	0	0	0	0	0	0	0	0	0	6	0	2	0	0	59
12:00	8	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	1	0	0	20
12:15	11	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	4	0	0	0	0	24
12:30	14	0	0	0	3	0	0	1	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	3	0	3	0	0	30
12:45	12	0	2	0	0	0	0	2	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	24
Total	45	0	2	0	3	0	0	7	0	1	18	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	16	0	4	0	0	98
13:00	10	0	0	0	1	0	0	4	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	1	1	0	29
13:15	6	0	2	0	0	0	0	2	0	0	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	9	0	1	0	0	24
13:30	10	0	0	0	2	0	0	3	0	0	5	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	5	0	0	0	0	27
13:45	17	0	0	0	0	0	0	6	0	3	1	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	10	0	2	0	0	41
Total	43	0	2	0	3	0	0	15	0	4	13	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	1	31	0	4	1	0	121
14:00	13	0	1	0	1	0	0	5	0	1	6	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	5	0	2	0	0	35
14:15	15	0	0	0	2	0	0	4	0	1	3	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	6	0	2	0	0	35
14:30	12	0	0	0	0	0	0	4	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	5	0	1	0	0	24
14:45	11	0	0	0	0	0	0	5	0	1	1	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	11	0	2	0	0	33
Total	51	0	1	0	3	0	0	18	0	3	11	0	0	0	0	0	0	0	0	1	1	4	0	0	0	0	0	0	0	0	0	27	0	7	0	0	127
15:00	13	0	1	0	0	0	0	3	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	4	0	0	0	0	23
15:15	16	0	0	0	0	0	0	4	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	28
15:30	5	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	4	0	0	0	0	12
15:45	10	0	0	0	0	0	0	3	0	1	4	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	22
Total	44	0	1	0	0	0	0	12	0	1	7	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	15	0	1	0	0	85
16:00	11	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	7	0	1	0	0	29
16:15	5	0	1	0	0	0	0	3	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	8	0	1	0	0	21
16:30	11	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	2	0	0	18
16:45	8	0	0	0	0	0	0	3	0	1	2	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	23
Total	35	0	2	0	0	0	0	10	0	1	8	0	0	0	0	0	0	0	0	3	1	2	0	0	0	1	0	0	0	0	0	24	0	4	0	0	91

McMahon a Bowman Company

425 Commerce Drive, Suite 200
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Municipality: Langhorne
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Groups Printed- Passenger Vehicles - Heavy Vehicles

	Raising Canes East Southbound						Internal Access Rd Westbound						S.C. Access East Northbound						S.C. Access West Northeastbound						Internal Access Rd Eastbound						Raising Canes West Southeastbound						
Start Time	Left	Thru	Bear Right	Right	Hard Right	Peds	Left	Bear Left	Thru	Bear Right	Right	Peds	Hard Left	Left	Bear Left	Thru	Right	Peds	Hard Left	Left	Bear Left	Bear Right	Hard Right	Peds	Hard Left	Left	Thru	Right	Hard Right	Peds	Hard Left	Bear Left	Bear Right	Right	Hard Right	Peds	Int. Total
17:00	10	0	0	0	0	0	0	2	0	1	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	19
17:15	9	0	0	0	0	0	0	2	0	1	2	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	6	0	1	0	0	23
17:30	16	0	1	0	0	0	0	2	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	27
17:45	9	0	0	0	0	0	1	2	0	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	27
Total	44	0	1	0	0	0	1	8	0	5	13	0	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	19	0	2	0	0	96
18:00	13	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	21
18:15	15	0	0	0	1	0	0	4	0	1	1	0	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	3	0	1	0	0	29
18:30	15	0	0	0	0	0	1	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	28
18:45	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	0	0	0	0	12
Total	49	0	0	0	1	0	1	4	0	3	7	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	0	0	0	0	1	17	0	1	0	0	90
Grand Total	338	0	9	0	10	0	2	82	0	20	86	0	0	0	0	0	0	0	0	11	5	19	0	0	0	1	0	0	1	0	2	155	0	25	1	0	767
Apprch %	94.7	0	2.5	0	2.8	0	1.1	43.2	0	10.5	45.3	0	0	0	0	0	0	0	0	31.4	14.3	54.3	0	0	0	50	0	0	50	0	1.1	84.7	0	13.7	0.5	0	
Total %	44.1	0	1.2	0	1.3	0	0.3	10.7	0	2.6	11.2	0	0	0	0	0	0	0	0	1.4	0.7	2.5	0	0	0	0.1	0	0	0.1	0	0.3	20.2	0	3.3	0.1	0	
Passenger Vehicles	338	0	9	0	10	0	2	82	0	20	86	0	0	0	0	0	0	0	0	11	5	19	0	0	0	1	0	0	1	0	2	154	0	25	1	0	766
% Passenger Vehicles	100	0	100	0	100	0	100	100	0	100	100	0	0	0	0	0	0	0	0	100	100	100	0	0	0	100	0	0	100	0	100	99.4	0	100	100	0	99.9
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
% Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	0	0	0	0	0.1

Attachment 2

Raising Cane's
Trip Generation Summary

Raising Cane's Trip Generation Traffic Counts

Tues - 3/28/2023	Weekday - Entering and Exiting Traffic - Trevose Location - 3617 Horizon Boulevard											
Time	Camera Location 1				Camera Location 2			Total Entering	Total Exiting	Total	Peak Hour Total	
	Entering		Exiting		Entering	Exiting						
	Internal Access		Raising Cane's Access		Internal Access	Raising Cane's Drive-Thru	Raising Cane's Main Access					
	NBL	SBR	EBL	EBR	SBT	WBR	NBT					
11:00 AM	8	0	1	2	11	7	3	**19**	**13**	**32**		
11:15 AM	4	1	2	6	17	7	2	**22**	**17**	**39**		
11:30 AM	4	1	0	5	11	9	1	**16**	**15**	**31**		
11:45 AM	3	0	1	10	8	7	2	**11**	**20**	**31**	**133**	11:00 AM
12:00 PM	2	0	2	2	13	2	3	15	9	24	125	
12:15 PM	2	0	3	7	10	5	0	12	15	27	113	
12:30 PM	0	0	0	2	8	6	1	8	9	17	99	
12:45 PM	1	0	1	2	7	4	2	8	9	17	85	
1:00 PM	4	0	2	4	8	2	2	12	10	22	83	
1:15 PM	2	0	3	5	12	6	0	14	14	28	84	
1:30 PM	3	0	1	2	7	6	1	10	10	20	87	
1:45 PM	4	1	1	5	6	5	4	11	15	26	96	
2:00 PM	4	1	1	2	5	1	2	10	6	16	90	
2:15 PM	3	0	1	1	4	7	0	7	9	16	78	
2:30 PM	5	0	1	3	6	4	0	11	8	19	77	
2:45 PM	2	0	1	4	6	2	7	8	14	22	73	
3:00 PM	7	0	1	3	9	4	2	16	10	26	83	
3:15 PM	1	0	2	4	7	5	2	8	13	21	88	
3:30 PM	7	2	2	1	10	3	1	19	7	26	95	
3:45 PM	4	0	1	5	7	8	2	11	16	27	100	
4:00 PM	1	0	4	0	8	6	4	9	14	23	97	
4:15 PM	2	0	0	3	6	1	1	8	5	13	89	
4:30 PM	6	1	2	4	9	4	2	**16**	**12**	**28**	91	
4:45 PM	2	0	2	3	12	6	4	**14**	**15**	**29**	93	
5:00 PM	3	1	0	4	12	7	1	**16**	**12**	**28**	98	
5:15 PM	6	0	2	7	12	5	4	**18**	**18**	**36**	**121**	4:30 PM
5:30 PM	0	1	0	4	9	6	2	10	12	22	115	
5:45 PM	1	0	3	4	6	4	0	7	11	18	104	
6:00 PM	2	0	2	2	11	3	3	13	10	23	99	
6:15 PM	3	0	1	3	6	3	3	9	10	19	82	
6:30 PM	0	1	1	2	9	5	1	10	9	19	79	
6:45 PM	2	0	2	5	10	5	4	12	16	28	89	

Weekday PM Peak Hour

Overall Peak Hour if Different

Raising Cane's Trip Generation Traffic Counts

Sat - 3/25/2023	Saturday - Entering and Exiting Traffic - Trevose Location - 3617 Horizon Boulevard											
Time	Camera Location 1				Camera Location 2			Total Entering	Total Exiting	Total	Peak Hour Total	
	Entering		Exiting		Entering	Exiting						
	Internal Access		Raising Cane's Access		Internal Access	Raising Cane's Drive-Thru	Raising Cane's Main Access					
	NBL	SBR	EBL	EBR	SBT	WBR	NBT					
11:00 AM	1	2	2	5	16	3	4	19	14	33		
11:15 AM	3	0	3	1	11	6	1	14	11	25		
11:30 AM	4	2	5	5	9	7	4	15	21	36		
11:45 AM	4	0	2	5	12	5	2	16	14	30	124	
12:00 PM	10	1	2	6	14	1	4	**25**	**13**	**38**	129	
12:15 PM	6	1	3	8	14	0	3	**21**	**14**	**35**	139	
12:30 PM	6	2	4	6	17	6	1	**25**	**17**	**42**	145	
12:45 PM	3	0	2	8	14	9	0	**17**	**19**	**36**	**151**	12:00 PM
1:00 PM	1	1	3	2	14	6	3	16	14	30	143	
1:15 PM	3	1	7	7	13	6	3	17	23	40	148	
1:30 PM	3	1	5	7	14	4	2	18	18	36	142	
1:45 PM	3	0	3	4	6	11	2	9	20	29	135	
2:00 PM	3	0	2	3	7	2	1	10	8	18	123	
2:15 PM	7	1	3	4	9	2	4	17	13	30	113	
2:30 PM	3	0	2	4	7	6	4	10	16	26	103	
2:45 PM	8	1	2	8	22	6	2	31	18	49	123	
3:00 PM	2	0	2	6	16	0	1	18	9	27	132	
3:15 PM	2	1	1	8	13	6	1	16	16	32	134	
3:30 PM	2	0	3	4	12	8	5	14	20	34	142	
3:45 PM	2	0	1	9	14	5	3	16	18	34	127	
4:00 PM	7	1	2	9	12	6	2	**20**	**19**	**39**	139	
4:15 PM	6	0	2	7	14	8	6	**20**	**23**	**43**	150	
4:30 PM	5	1	2	4	13	8	4	**19**	**18**	**37**	153	
4:45 PM	2	2	1	7	14	10	2	**18**	**20**	**38**	**157**	4:00 PM
5:00 PM	4	0	4	6	11	2	3	15	15	30	148	
5:15 PM	8	0	1	5	10	7	2	18	15	33	138	
5:30 PM	2	1	3	7	16	8	4	19	22	41	142	
5:45 PM	5	0	0	5	7	5	2	12	12	24	128	
6:00 PM	3	0	2	6	13	7	7	16	22	38	136	
6:15 PM	3	0	2	5	13	8	5	16	20	36	139	
6:30 PM	3	1	5	2	7	4	0	11	11	22	120	
6:45 PM	2	0	0	4	10	2	2	12	8	20	116	

Sat Midday Peak Hour

Overall Peak Hour if Different

Raising Cane's Trip Generation Traffic Counts

Thurs - 3/30/2023	Weekday - Entering and Exiting Traffic - Langhorne Location - 640 Commerce Boulevard																			
Time	Camera Location 1						Camera Location 2										Total Entering	Total Exiting	Total	Peak Hour Total
	Entering			Exiting			Entering					Exiting								
	Internal Access		Shopping Center	Raising Cane's Eastern Access			Internal Access			Shopping Center		Raising Cane's East		Raising Cane's West						
	EBL	WBR	NBT	SBL	SBT	SBR	EBL	WB Bear Right	WBR	NE Left	NE Bear Left	SBL	SB Bear Right	SE Bear Left	SE Right	SE Hard Right				
11:00 AM	0	5	1	1	0	0	0	0	1	0	0	0	0	3	0	0	7	4	11	
11:15 AM	0	5	0	0	0	0	0	1	1	0	0	5	0	1	0	0	7	6	13	
11:30 AM	1	14	0	0	0	0	0	1	2	0	0	6	0	3	1	0	18	10	28	
11:45 AM	1	16	0	1	0	0	0	0	2	0	0	8	1	3	1	0	19	14	33	85
12:00 PM	0	15	0	8	0	0	0	0	3	0	0	9	0	2	0	0	18	19	37	111
12:15 PM	1	23	1	3	1	0	0	1	2	0	0	9	0	4	0	0	**28**	**17**	**45**	143
12:30 PM	2	10	1	6	0	1	0	1	3	0	1	7	0	6	2	0	**18**	**22**	**40**	155
12:45 PM	0	16	0	4	0	0	0	0	4	0	0	10	0	4	0	0	**20**	**18**	**38**	160
1:00 PM	1	17	0	5	1	0	0	1	3	0	0	7	0	7	0	0	**22**	**20**	**42**	**165**
1:15 PM	0	14	0	3	0	0	0	2	2	1	0	17	0	6	0	0	19	26	45	165
1:30 PM	1	16	0	3	0	0	0	0	1	0	0	9	0	5	1	0	18	18	36	161
1:45 PM	0	11	0	4	0	0	0	0	0	0	0	11	0	5	0	0	11	20	31	154
2:00 PM	2	12	0	2	0	0	0	2	1	0	0	5	1	4	0	0	17	12	29	141
2:15 PM	2	16	0	4	0	2	0	0	2	0	0	5	0	4	0	1	20	16	36	132
2:30 PM	1	12	0	3	0	0	0	0	3	0	0	9	0	5	2	0	16	19	35	131
2:45 PM	2	6	1	4	0	0	0	1	1	0	0	6	0	4	0	0	11	14	25	125
3:00 PM	0	10	1	2	0	0	0	0	1	0	1	9	0	2	0	0	13	13	26	122
3:15 PM	0	9	0	7	0	0	0	0	1	0	0	5	0	1	1	1	10	15	25	111
3:30 PM	0	8	0	2	0	0	0	0	1	0	0	5	0	2	1	0	9	10	19	95
3:45 PM	0	7	1	2	0	0	0	1	4	1	0	6	0	0	0	0	14	8	22	92
4:00 PM	0	12	0	3	0	0	0	0	1	0	0	8	0	2	0	0	13	13	26	92
4:15 PM	0	11	0	4	0	0	0	1	1	0	0	10	0	2	0	0	13	16	29	96
4:30 PM	0	19	0	4	0	0	0	1	0	0	1	8	0	2	0	0	21	14	35	112
4:45 PM	0	13	0	2	0	0	0	0	2	0	0	13	0	3	0	0	15	18	33	123
5:00 PM	0	10	0	3	0	0	0	0	3	0	0	5	0	5	1	0	**13**	**14**	**27**	124
5:15 PM	0	12	0	4	0	0	0	2	3	0	0	8	0	1	0	0	**17**	**13**	**30**	125
5:30 PM	0	10	0	5	0	0	0	4	6	0	0	6	0	3	0	0	**20**	**14**	**34**	124
5:45 PM	0	15	0	3	0	0	0	1	2	0	0	14	0	4	0	0	**18**	**21**	**39**	**130**
6:00 PM	0	18	0	2	0	0	0	0	2	0	0	13	0	5	0	0	20	20	40	143
6:15 PM	0	17	0	4	0	0	0	1	0	0	0	9	0	3	0	0	18	16	34	147
6:30 PM	0	13	0	1	0	0	0	1	4	0	0	15	0	3	1	0	18	20	38	151
6:45 PM	0	21	0	2	0	0	0	0	1	0	0	12	0	5	2	0	22	21	43	155

12:15 PM

5:00 PM

Weekday PM Peak Hour

Overall Peak Hour if Different

Raising Cane's Trip Generation Traffic Counts

Sat - 4/1/2023	Saturday - Entering and Exiting Traffic - Langhorne Location - 640 Commerce Boulevard																				
Time	Camera Location 1						Camera Location 2										Total Entering	Total Exiting	Total	Peak Hour Total	
	Entering			Exiting			Entering					Exiting									
	Internal Access		Shopping Center	Raising Cane's Eastern Access			Internal Access			Shopping Center		Raising Cane's East		Raising Cane's West							
	EBL	WBR	NBT	SBL	SBT	SBR	EBL	WB Bear Right	WBR	NE Left	NE Bear Left	SBL	SB Bear Right	SE Bear Left	SE Right	SE Hard Right					
11:00 AM	0	0	0	0	0	0	0	0	4	0	0	1	0	0	1	0	4	2	6		
11:15 AM	0	16	0	1	0	0	0	0	1	0	1	7	0	2	0	0	18	10	28		
11:30 AM	1	5	1	2	0	0	0	0	2	0	0	8	0	3	1	0	9	14	23		
11:45 AM	1	13	0	3	0	0	0	2	2	0	0	11	0	1	0	0	18	15	33	90	
12:00 PM	0	15	1	4	0	0	0	0	5	0	0	8	0	6	1	0	21	19	40	124	
12:15 PM	1	17	0	5	0	0	0	0	4	0	0	11	0	4	0	0	22	20	42	138	
12:30 PM	1	20	0	1	0	0	0	0	5	0	0	14	0	3	3	0	26	21	47	162	
12:45 PM	0	16	1	6	0	0	0	1	4	0	0	12	2	3	0	0	22	23	45	174	
1:00 PM	1	18	1	4	0	0	0	1	4	0	0	10	0	7	1	1	**25**	**23**	**48**	182	
1:15 PM	0	25	1	2	0	0	0	0	3	0	0	6	2	9	1	0	**29**	**20**	**49**	189	
1:30 PM	1	21	0	7	0	1	0	0	5	0	1	10	0	5	0	0	**28**	**23**	**51**	193	
1:45 PM	0	21	0	7	0	0	0	3	1	1	0	17	0	10	2	0	**26**	**36**	**62**	**210**	1:00 PM
2:00 PM	0	27	0	8	0	0	0	1	6	0	0	13	1	5	2	0	**34**	**29**	**63**	225	
2:15 PM	0	21	0	4	0	0	0	1	3	0	1	15	0	6	2	0	**26**	**27**	**53**	**229**	1:30 PM
2:30 PM	0	22	1	6	2	0	0	0	1	0	0	12	0	5	1	0	24	26	50	228	
2:45 PM	0	22	0	9	0	0	0	1	1	1	0	11	0	11	2	0	25	33	58	224	
3:00 PM	0	16	0	4	0	1	0	0	1	0	0	13	1	4	0	0	17	23	40	201	
3:15 PM	0	15	0	5	0	0	0	0	2	1	0	16	0	5	0	0	18	26	44	192	
3:30 PM	1	24	0	3	0	0	0	0	0	0	0	5	0	4	0	0	25	12	37	179	
3:45 PM	0	13	0	7	1	2	0	1	4	1	0	10	0	2	1	0	19	23	42	163	
4:00 PM	1	18	0	5	0	1	0	0	4	0	1	11	0	7	1	0	24	25	49	172	
4:15 PM	1	17	0	2	0	0	1	0	1	0	0	5	1	8	1	0	20	17	37	165	
4:30 PM	0	17	0	4	0	0	0	0	1	0	0	11	1	3	2	0	18	21	39	167	
4:45 PM	0	16	1	4	0	0	0	1	2	3	0	8	0	6	0	0	23	18	41	166	
5:00 PM	1	14	1	5	1	0	0	1	2	1	0	10	0	2	1	0	20	19	39	156	
5:15 PM	0	16	0	5	0	0	0	1	2	1	0	9	0	6	1	0	20	21	41	160	
5:30 PM	0	23	1	4	0	0	0	1	4	0	0	16	1	3	0	0	29	24	53	174	
5:45 PM	0	15	0	7	0	0	0	2	5	0	0	9	0	8	0	0	22	24	46	179	
6:00 PM	1	23	0	7	1	0	0	1	2	0	1	13	0	2	0	0	28	23	51	191	
6:15 PM	1	15	0	7	0	1	0	1	1	2	0	15	0	3	1	0	20	27	47	197	
6:30 PM	0	17	0	3	1	0	0	1	4	0	0	15	0	7	0	0	22	26	48	192	
6:45 PM	0	9	0	5	0	0	0	0	0	0	0	6	0	5	0	0	9	16	25	171	

Sat Midday Peak Hour
Overall Peak Hour if Different

Attachment 3

Drive-Thru Queue Counts

Raising Cane's Drive-Thru Queue Observations

Trevose Location - 3617 Horizon Boulevard

Tuesday, 3/28

									Max Queue				
11:00	2	12:00	2	1:00	1	2:00	1	3:00	5	4:00	1	5:00	5	6:00	2
11:05	2	12:05	3	1:05	3	2:05	1	3:05	5	4:05	2	5:05	0	6:05	3
11:10	0	12:10	5	1:10	3	2:10	4	3:10	5	4:10	2	5:10	0	6:10	6
11:15	1	12:15	2	1:15	4	2:15	6	3:15	4	4:15	1	5:15	1	6:15	4
11:20	0	12:20	4	1:20	6	2:20	3	3:20	4	4:20	1	5:20	0	6:20	3
11:25	1	12:25	3	1:25	6	2:25	4	3:25	2	4:25	0	5:25	0	6:25	2
11:30	0	12:30	1	1:30	3	2:30	4	3:30	2	4:30	0	5:30	0	6:30	5
11:35	1	12:35	5	1:35	0	2:35	5	3:35	1	4:35	5	5:35	3	6:35	6
11:40	1	12:40	6	1:40	0	2:40	3	3:40	0	4:40	7	5:40	6	6:40	6
11:45	0	12:45	1	1:45	0	2:45	1	3:45	0	**4:45**	**8**	5:45	6	6:45	2
11:50	1	12:50	1	1:50	2	2:50	3	3:50	1	4:50	6	5:50	5	6:50	1
11:55	1	12:55	3	1:55	2	2:55	1	3:55	1	4:55	5	5:55	4	6:55	1

Average Queue = 2.61

Saturday, 3/25

									Max Queue				
11:00	0	12:00	4	1:00	3	2:00	7	3:00	2	4:00	11	5:00	1	6:00	1
11:05	1	12:05	2	1:05	3	2:05	5	3:05	5	**4:05**	**13**	5:05	4	6:05	2
11:10	0	12:10	3	1:10	4	2:10	3	3:10	4	**4:10**	**13**	5:10	2	6:10	2
11:15	3	12:15	7	1:15	6	2:15	7	3:15	1	4:15	11	5:15	3	6:15	6
11:20	6	12:20	7	1:20	5	2:20	5	3:20	4	**4:20**	**13**	5:20	4	6:20	7
11:25	2	12:25	6	1:25	4	2:25	7	3:25	6	4:25	12	5:25	6	6:25	6
11:30	1	12:30	4	1:30	6	2:30	6	3:30	9	4:30	9	5:30	7	6:30	7
11:35	2	12:35	5	1:35	6	2:35	7	3:35	10	4:35	3	5:35	5	6:35	4
11:40	3	12:40	2	1:40	9	2:40	6	3:40	7	4:40	1	5:40	4	6:40	2
11:45	4	12:45	2	1:45	9	2:45	4	3:45	9	4:45	2	5:45	5	6:45	4
11:50	4	12:50	2	1:50	6	2:50	2	3:50	11	4:50	3	5:50	4	6:50	3
11:55	1	12:55	2	1:55	5	2:55	2	3:55	10	4:55	1	5:55	3	6:55	4

Average Queue = 4.85

Raising Cane's Drive-Thru Queue Observations

Langhorne Location - 640 Commerce Boulevard

Thursday 3/30

												Max Queue	
11:00	0	12:00	2	1:00	4	2:00	1	3:00	4	4:00	3	5:00	3	6:00	6
11:05	0	12:05	3	1:05	3	2:05	2	3:05	4	4:05	2	5:05	0	6:05	7
11:10	0	12:10	6	1:10	4	2:10	1	3:10	6	4:10	2	5:10	3	6:10	3
11:15	2	12:15	3	1:15	3	2:15	2	3:15	1	4:15	2	5:15	1	**6:15**	**10**
11:20	3	12:20	6	1:20	1	2:20	3	3:20	2	4:20	4	5:20	2	6:20	8
11:25	2	12:25	6	1:25	5	2:25	2	3:25	3	4:25	2	5:25	3	6:25	7
11:30	0	12:30	8	1:30	3	2:30	4	3:30	1	4:30	0	5:30	4	6:30	6
11:35	1	12:35	3	1:35	2	2:35	3	3:35	0	4:35	5	5:35	5	6:35	6
11:40	3	12:40	3	1:40	2	2:40	4	3:40	3	4:40	4	5:40	5	6:40	8
11:45	6	12:45	1	1:45	6	2:45	1	3:45	3	4:45	6	5:45	5	6:45	5
11:50	6	12:50	3	1:50	3	2:50	2	3:50	1	4:50	4	5:50	5	6:50	9
11:55	4	12:55	4	1:55	4	2:55	1	3:55	3	4:55	3	5:55	5	6:55	8

Average Queue = 3.47

Saturday, 4/1

												Max Queue	
11:00	1	12:00	6	1:00	0	2:00	12	3:00	4	4:00	2	5:00	2	6:00	0
11:05	4	12:05	5	1:05	6	2:05	9	3:05	4	4:05	3	5:05	5	6:05	10
11:10	7	12:10	5	1:10	3	2:10	11	3:10	7	4:10	4	5:10	4	6:10	8
11:15	5	12:15	9	1:15	0	2:15	9	3:15	6	4:15	2	5:15	5	**6:15**	**13**
11:20	6	12:20	7	1:20	3	2:20	8	3:20	4	4:20	0	5:20	5	6:20	8
11:25	5	12:25	10	1:25	9	2:25	10	3:25	3	4:25	3	5:25	2	6:25	10
11:30	8	12:30	10	1:30	7	2:30	8	3:30	2	4:30	7	5:30	4	6:30	6
11:35	9	12:35	10	1:35	7	2:35	9	3:35	7	4:35	5	5:35	6	6:35	6
11:40	6	12:40	7	1:40	12	2:40	7	3:40	5	4:40	5	5:40	4	6:40	4
11:45	4	12:45	6	1:45	10	2:45	11	3:45	9	4:45	1	5:45	4	6:45	2
11:50	3	12:50	1	1:50	9	2:50	8	3:50	7	4:50	1	5:50	3	6:50	1
11:55	3	12:55	3	1:55	8	2:55	9	3:55	7	4:55	2	5:55	4	6:55	4

Average Queue = 5.68

TRAFFIC PLANNING AND DESIGN, INC.

WWW.TRAFFICPD.COM

Memorandum

To: Richard Manfredi, Manager - Abington Township

From: Greg Richardson, P.E.

Date: May 5, 2023

Re: **2620 West Moreland Road – Raising Cane's**
Traffic Review #2
Abington Township, Montgomery County, PA
TPD No. ABTO.00036

cc: Board of Commissioners
Planning Commission
Tim Clark
Ashley McIlvaine
Terry Castorina
Khalid 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:

- *Traffic Impact Assessment (TIA)* prepared by McMahon Associates, Inc. – Dated January 19, 2023;
- *Site Plans* prepared by Bohler Engineering – Dated October 26, 2022;
- *Trip Generation and Drive-Thru Lane Vehicle Queue Evaluation Memo* by McMahon Associates – Dated April 14, 2023.

Note: The applicant provided information to address the TIA Comment #3. However, since TPD did not receive an updated TIA or site plans, the remaining comments from our February 6, 2023 traffic review remain open. If the Applicant intends to re-submit the updated documents, the trip generation and queue information should be incorporated into the TIA.

The following are our comments (open):

Traffic Impact Assessment (TIA)

1. The traffic report assumes 10% of the site trips will utilize intersections not included in the study area. Presumably, these trips will utilize the traffic signal at Moreland Road (S.R. 0063) & Center Road/Willow Grove Park Mall Access. It is recommended that the traffic report be revised to include this intersection and assess the impact that the site may have on it.

2. The traffic counts included in the traffic report were conducted on Saturday, December 17th and Tuesday, December 20th. Verify that local schools were in session at this time, or a seasonal adjustment factor may be needed.

3. The traffic report utilizes previous studies from three comparable sites in Illinois to determine a site-specific trip generation rate. We note that the comparable trip generation rate is more conservative than published ITE data. However, it appears that these comparable sites all have a single drive-thru lane, rather than the dual drive-thru configuration proposed at this location. Provide additional information related to the trip generation impacts of a dual drive-thru configuration. Our office may have additional comments upon review of revisions to the trip generation calculations that may be needed due to the dual drive-thru configuration.

   Comment Satisfied

4. The weekday morning peak hour was not evaluated as the traffic report indicates these stores typically do not begin operating until 10:00 a.m. It is recommended that an operating time limit be made a condition of any approval.

5. The Synchro analysis at the Full Movement Access Driveway to Moreland Road (S.R. 0063) assumed a two-stage left turn maneuver exiting the proposed site with the median storage inputted as two (2) vehicles. The maximum vehicle storage input should be 1 vehicle based on the width of the two-way left-turn lane (TWLTL). We note that this input value has a significant impact on the approach LOS and queue results. Provide further justification that two-stage left turn maneuvers occur at this location. Otherwise, the analysis should assume a one-stage left turn maneuver.

Site Plans

1. Based on the site plans, seventeen (17) total vehicles can stack in the drive-thru area. This appears to be from the pick-up area to the end of the drive-thru lane. No information is provided regarding the total number of vehicles that can stack behind the ordering window, which is where the longest dwell time may be for customers placing orders. Thus, it appears based on the plans that two (2) vehicles can stack behind a vehicle at the ordering window in the outer lane and three (3) vehicles can stack behind a vehicle at the ordering window in the inner lane.

2. Additional information should be provided regarding the number of vehicles that can stack behind those at the ordering window. In addition, more information should be provided regarding the sufficiency of the proposed stacking area from the ordering window, given the driveway aisle and parking areas located adjacent to the drive-thru area.

3. Regarding Table 7 in the TIA, information was provided from sites with one (1) drive-thru lane, not two (2), as proposed. Thus, the queueing averages could be different, because more lanes to order might accommodate more vehicles queueing.

4. As indicated on the plans, drive-thru stacking may extend into the driveway and parking areas because only five (5) total vehicles can queue before the order window. Consideration should be given re-examining the parking layout, specifically the parking area adjacent to the full-access driveway intersection (i.e., vehicles may have a difficult time entering/exiting these parking stalls).

General

1. Since any modification to the signalized intersection of Moreland Road (S.R. 0063) & Center Road/Willow Grove Park Mall Access is subject to PennDOT review and approval, any correspondence to and from the Department must also be coordinated with our office and the Township, and evaluated and addressed accordingly in subsequent submissions.

2. 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

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December 5, 2022

ABINT130028

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

RE: LD-22-06-2620 West Moreland Road (Raising Cane's)
PARID: 30-00-45100-01-6 / TMID: 30117 020
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 twenty (20) sheets dated October 26, 2022 and received on November 1, 2022; as prepared by Bohler Engineering, located at 1515 Market Street, Suite 920, in Philadelphia, PA for the above referenced project.

Under this Application, the Applicant is proposing to construct a new one-story stand-alone 3,062 gross SF fast-food (Raising Cane's) restaurant with outdoor seating on an existing 44,910 SF lot in front of 2620 West Moreland Road. Other site improvements for this site include parking, curbing, sidewalk, benches, landscaping, and sanitary and stormwater management facilities. Access to/from the site will be by way of two (2) existing entrances that intersect West Moreland Road (S.R. 063, 70 FT R/W). The new building is proposed to be served by public water and sewer service.

This project is located within the BC – Business Center Willow Grove Park Zoning District. The subject parcel is located on a separate parcel that is accessible to the Willow Grove Park Mall. The site is fronted by West Moreland Road (S.R. 063 70 FT R/W) to the northeast; commercial properties zoned in the BC - Business Center Willow Grove Park to the southeast and southwest; and residential properties zoned in the R-4 High Density Residential Zoning District to the northwest.

In accordance with the FEMA, Flood Insurance Rate Map (FIRM) Panel No. 42091C0313G, 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 RECEIVED

The Applicant has been granted the following Special Exception and variances under Application no. 22-24 at the Zoning Hearing Board meeting held on September 20, 2022:

1. A Special Exception pursuant to Abington Township Zoning Ordinance §1102, and the Comprehensive Use Matrix, to permit a drive-through restaurant.

2. A variance from §1103 (Figure 11.9) to allow a 5.7 feet parking to building setback along the southern property line of the subject property, where the Ordinance otherwise requires a minimum distance of 10 feet.

3. A variance from §2402.A.5 and §2403.B.4.a for the minimum buffer and planting requirements.

The relief was granted by the Board subject to the following conditions:

a) that the Applicant apply for and obtain land development approval (or waiver therefrom) from the Abington Township Board of Commissioners permitting the development and use proposed;
b) that, as part of the land development process, the Applicant shall provide and install any landscaping deemed appropriate by the Board of Commissioners, in their sole and absolute discretion, whether-or-not required specifically by the Township's Subdivision and Land Development Ordinance, to mitigate the effect of the variances granted hereby; and
c) that development and use of the subject property shall be in substantial conformance with the testimony and exhibits presented at the public hearing on this matter, including (without limitation) the plan attached hereto.

The Applicant shall include the above referenced variances and conditions on the record plan.

WAIVERS REQUESTED

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

1. **§146-13 – General Requirements –** A waiver to consider the current subdivision and land development submission to be a combined Preliminary/Final application.
   The Applicant is intending this submission to be a preliminary/final submission and is requesting a waiver to allow for a combined preliminary/final stage submission. For a combined preliminary/final stage submission, the Applicant shall request a waiver from §146-9.A, Application Stages, instead of from section 146-13 which relates to general requirements.

The following documents have been reviewed:

Title	Sheet	Dated	Revised
Cover Sheet	1 of 37	06/06/22	-----
Record Plan	2 of 17	06/06/22	-----
General Notes	3 of 37	06/06/22	-----
Soil Erosion and Sediment Pollution Control Plan	4 of 37	06/06/22	-----
Soil Erosion and Sediment Pollution Control Notes	5 of 37	06/06/22	-----
Soil Erosion and Sediment Pollution Control Details	6 of 37	06/06/22	-----
Soil Erosion and Sediment Pollution Control Details	7 of 37	06/06/22	-----
Existing Conditions/Demolition Plan	8 of 37	06/06/22	-----
Dimension Control Plan	9-10 of 37	06/06/22	-----
Grading Plan	11 of 37	06/06/22	-----
Pre-Development Plan	12-13 of 37	06/06/22	-----
Post-Development Plan	14 of 37	06/06/22	-----
Utility Plan	16 of 37	06/06/22	-----
Construction Details	17 of 37	06/06/22	-----
Construction Details	18 of 37	06/06/22	-----

Construction Details	19-24 of 37	06/06/22	-----
Basin Details	25 of 37	06/06/22	-----
Vehicle Circulation Plan	26 of 37	06/06/22	-----
Landscape Plan	27 of 37	06/06/22	-----
Landscape Details	28 of 37	06/06/22	-----

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 §1102 – Permitted Uses –** In accordance with the Abington Comprehensive Use Matrix, Use C-25 Fast-food Restaurant is a permitted use in the BC Business Center Willow Grove Park Zoning District. Use A-17 Outdoor Dining is also a permitted accessory use to the principal C-25 – Fast Food Restaurant within the BC Business Center Willow Grove Park Zoning District.

2. **Per §1103 Figure 11.9 – Dimensional Regulations –** The minimum build-to line along public streets shall be 20 feet (50 feet on Moreland Road west of Park Avenue) and the maximum shall be 50 feet (100 feet on Moreland Road west of Park Avenue.) The minimum build-to-line along main access drives shall be 20 feet with a maximum of 25 feet, and along secondary access drives the minimum build-to-line shall be 16 feet with a maximum of 25 feet.
   The site is accessed by two drives that intersect with West Moreland Road. Per Section 201 – Specific Definitions, the access drive to the south provides access from West Moreland Road to internal parking areas and is therefore classified as a main access drive. In addition, per the definition of building, the steel roof supported by columns on the patio is considered a building. The steel roof structure is only 12.6 feet from the main access drive which is less than the minimum required 20 feet. The plans shall be revised accordingly to show the building setback lines from West Moreland Road as well as the main access drive, and the steel roof structure moved to be located within the build-to-lines; otherwise, a variance from this section of the code will be required.

3. **Per §1103 Figure 11.9 – Dimensional Regulations –** The minimum façade height shall be 20 feet, or 25 feet if a pitched roof.
   Per the architectural plans, a façade height of 19.8 feet is proposed for the Raising Cane's restaurant which is less than the 20 feet minimum requirement. The façade height shall be revised to conform with the 20 feet minimum requirement; otherwise, a variance from this Code Section will be required.

4. **Per §1104.C.9.c – Design Standards –** 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.
   A window area calculation shall be provided for the proposed façade that faces West Moreland Road to ensure that there is a window area between 35% and 75% for this façade.

5. **Per §1105.B.1, 3, & 4 – Street Furniture –** The following shall be provided; benches, trash and recycling receptacles, planters, and bike racks. Benches and trash and recycling receptacles shall be provided at least every 100 feet and planters shall be provided at least once every 50 feet.
   An open space area with benches has been provided on the plans. Trash and recycling receptacles as well as planters shall be provided along with the benches and be spaced as required by this Code Section. A detail of each street furniture element shall be provided on the plans.

6. **Per §1105.C.4 – Public Open Space –** A minimum of 30% of the area shall be landscaped with a mixture of trees, shrubs, or ground cover. Such areas shall have benches, trash containers, and lighting fixtures.
   There is no lighting proposed in the open space area. A lighting plan shall be provided to ensure there is adequate lighting for the site.

7. **Per §1106 – Lighting –** Lighting shall be provided for the proposed development that meets the requirements of the above code section.
   There is no lighting plan provided as part of this plan submission. A lighting plan shall be provided showing the number and type of lights provided with mounting heights. Depending on the type of lighting proposed, point-by-point calculations may have to be provided.

8. **Per §1107 – Trash, Loading, and Utilities –** Trash, loading, and utilities shall be regulated by §2601.0 and §2312.
   A detail of the trash enclosure shall be provided on the plans for review and approval to ensure compliance with this Code Section.

9. **Per §1107.C – Trash Loading, and Utilities –** All wall-mounted or ground-mounted mechanical, HVAC, utility, or communication equipment, including satellite dishes and vent pipes, shall be screened from public view by parapets, walls, fences, landscaping, or other approved means.
   The Applicant shall confirm that the HVAC and mechanical equipment is screened from public view as indicated in this Code Section.

10. **Per §1107.D – Trash, Loading, and Utilities –** Service and loading areas must be located to the side or rear of buildings and must be visually screened. Loading doors, service doors, and loading docks shall not be located on any façade facing a street, or on any portion of a façade within 35 feet of a street.
    On the architectural plans provided, it appears that there is a service door with a 4-digit wall mounted key lock located on the façade facing West Moreland Road. No service door shall be located on the front façade of a building. This door shall be relocated along the side or rear facades. In addition, the loading area for deliveries shall be shown on the plans.

11. **Per §2103.A Use A-17.1 – Outdoor Dining –** Outdoor dining shall be enclosed by a removeable partition, such as planters, or posts with ropes, that clearly demarcate the boundary of the outdoor dining area. Construction barricades shall not be used for such a purpose. Opening in the partition for ingress/egress shall not be wider than five (5) feet.
    Based on the land development and the architectural plans provided, it appears that the Applicant is proposing two locations where outdoor seating is provided. Under the proposed canopy there are (16 seats) and between the front of the building and West Moreland Road there are (12 seats). The seating between the building and West Moreland Road is shown on the land development plans but is not shown in the architectural plans; and the seating beneath the canopy is shown in gray tone on the architectural plans and is not shown on the land development plans. The Applicant shall clarify and confirm the intent of the outdoor seating areas as well as clarify the total proposed outdoor seating. There also does not appear to be a connected accessible path to the outdoor seating area beneath the canopy. The outdoor seating area shown on the LD plans between the building and West Moreland Road shall be partitioned as required per this Code Section.

12. **Per §2103.A Use A-17.2 – Outdoor Dining –** Outdoor dining must not obstruct with pedestrian circulation on or off-site and must have unobstructed aisles and entrances. A minimum sidewalk or pathway of five feet free of obstacles shall be maintained.
    Based on our measurements, the proposed outdoor seating provides a pathway clearance of approximately 4'-8" which is less than the required 5' minimum. The pathway shall be revised to

provide a minimum of 5' of clearance.

13. **Per §2103.A Use A-17.7 – Outdoor Dining –** The outdoor furniture shall be stored inside the restaurant after normal operating hours. Furniture affixed to the ground, enclosed by a wall, secured, or located in a secured area are exempt from this requirement.
A note shall be provided on the plans stating compliance with this Code Section.

14. **Per §2103.A Use A-17.8 – Outdoor Dining –** The outside dining area must be secured and kept sanitary, neat, and clean at all times. It shall be kept free from accumulation of food, litter, snow, ice, and other potentially dangerous or unsanitary matter. The restaurant must participate in an approved rodent control program.
A note shall be provided on the plans stating compliance with this Code Section.

15. **Per Article XXII – Signs –** The Applicant shall submit details and dimensions for the proposed signs to the Township Zoning Officer for review and approval.

16. **Per §2304.A.13 – Parking Use Requirements, Use A-17 Outdoor Dining –** 1 space for every 3 outdoor seats shall be provided.
It appears that the Applicant is proposing a total of 28 seats total for the outdoor dining areas between the building and West Moreland Road and beneath the canopy. Based on our calculations with the 28 total outdoor seats, a total of ten (10) parking spaces will be required for the outdoor seating; however, the Applicant shall confirm the total number of outdoor seats. A parking calculation shall be provided on the plans distinguishing the required parking for the outdoor seating and the indoor sit-down restaurant seating.

17. **Per §2304.C.24 – Parking Use Requirements, Use C-25 Fast-food Restaurant –** 1 parking space for every 50 SF of gross leasable floor area devoted to customer or patron use for sit-down restaurants, or one parking space for every 3 seats, whichever requires the lesser number of spaces.
The Applicant has provided a seating capacity of 97 total seats based on one (1) parking space for every three (3) seats for the proposed land development. However, the Applicant shall provide the gross leasable floor area for the indoor sit-down restaurant and a calculation based on the gross leasable floor area on the plans to confirm that the parking spaces provided are the lesser number of spaces being provided per this Code Section. These calculations should be separated to distinguish the parking requirement for the outdoor dining areas.

18. **Per §2312.A thru K – Off-Street Loading Requirements –** There is no loading berth/area shown on the plans. Since the proposed fast-food restaurant will be receiving deliveries of food and supplies to the site, a loading berth/area shall be provided. The plans shall indicate where the loading berth/area will be provided on the site. The loading berth/area shall adhere to the requirements of this Code Section. Per Figure 23.2, the fast-food restaurant is classified as an other use and is required to have 1 loading berth/area for the first 20,000 SF of gross floor area.

19. **Per §2402.A.2.a.(4) – Planting Islands –** 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 inches in caliper, branching at 6 feet to 8 feet in height and of the recommended species as listed in the 'Recommended Plant Materials' List in the SALDO. Parking lot islands shall be planted in lawn or ground cover only.
The proposed planting island adjacent to the drive-through exit and the underground BMP is planted with shrubs and groundcover but no shade tree. This island shall be planted with a shade tree.

20. **Per §2402.A.2.a.(5) – Planting Islands –** Shade trees located within any parking island which is less than 300 SF measured from outside curb to outside curb will require permanently installed irrigation.
There are multiple parking islands on site that are less than 300 SF and have a shade tree planted in the island and will require permanently installed irrigation. These irrigation lines shall be shown in the plans and a note shall also be added to the plans.

21. **Per §2402.B.2.c – Street Trees –** Trees shall be planted at a ratio of at least one tree per 40 LF of frontage or fraction thereof. Trees shall be distributed along the entire frontage of the property, although they need not be evenly spaced.
The Applicant is providing six (6) shade trees along West Moreland Road, which is the required number of street trees along the site frontage based on our calculations. The Applicant shall provide a street tree calculation on the landscape plans to document compliance with this Code Section.

22. **Per §2403.C.6.b.(1) – Site Element Screens –** Medium-Intensity Site Element Screen, Screen Type #4 – Opaque Fence or Masonry Wall with Shrubs.
Per Figure 24.7 – Site Element Screen Requirements, for a dumpster or trash containment area, a medium intensity screen is required. The Applicant shall provide a dumpster detail to comply with the site element screen type #4 requirements of this Code Section.

23. **Per §2504.B.1 thru 4 – Sidewalks and Crosswalks –** Street front sidewalks in the BC Business Center Zoning District shall meet the requirements of these above Code Sections.
The existing sidewalk along West Moreland Road is not proposed to be replaced and is only 4 feet in width. However, per these code sections, a minimum width of 10 feet for sidewalk and crosswalks along West Moreland Road, a public street, in the BC – Business Center zoning district shall be provided. In addition, the access roads abutting the site can be considered secondary access drives and shall have sidewalk and crosswalks along these drives with a minimum width of 6 feet. The plans shall be updated to show new sidewalk and crosswalks along West Moreland Road and the secondary access drives to provide an accessible route to/from the site. ADA compliant ramps shall also be provided at these locations to allow for maneuverability of persons with disabilities.

24. **Per §2504.E – Sidewalk and Crosswalks –** Streets and access drives shall be separated from sidewalks by a decorative verge area, so as to allow for street trees and furnishings such as benches and light fixtures. Street furniture surrounded by hardscaping may be located in the decorative verge. At least 25% of the decorative verge area shall be landscaped with a mix of groundcover, shrubs, and trees. The width of the verge in the BC Business Center Zoning District shall be 6 feet along public streets and 4 feet along access drives.
Since this site is within the BC Business Center Zoning District, a verge will be required along both West Moreland Road and the access drives. The plans shall be revised to include the required verge areas.

25. **Per §2504.F.1 & 2 – Sidewalk and Crosswalks –** Crosswalks shall be provided at all intersections of streets with access drives of other curb cuts in public streets (including those for private streets and parking areas). Crosswalks shall be at least 6 feet wide but shall not exceed 10 feet wide. In the BC Business Center Zoning District, 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 6 inches in width. Installation and selected materials shall be durable and able to withstand vehicular traffic.
Crosswalks shall be provided across the drive aisle within the parking lot and along both access drives intersecting West Moreland Road. The crosswalks shall be decorative per this Code Section.

26. **Per §2601.H.1 thru 11 – 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.
The Applicant is proposing outdoor wall mounted lighting attached to the building. A site lighting plan has not been provided as part of this submission. A lighting plan, showing point-by-point calculations for the entire site shall be provided to ensure all parking areas are provided with a minimum of 0.5-foot candles at any point on the ground and that the lighting spillover meets the requirements of this Code Section.

27. **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 feet beyond the property line, as measured at a height of six (6) feet above street grade.
The Applicant shall clarify if roof-mounted equipment is being proposed as part of this project. If so, the equipment shall be screened as required in compliance with this Code Section.
28. **Per §2601.N.3. a thru d – Trash Containment Standards –** When trash containment is located outdoors in the BC - Business Center Zoning District, trash containers shall be located in a walled or fences enclosure, at least 6 feet in height.
    a) Enclosure shall utilize self-closing gates.
    b) Enclosures shall be constructed of masonry wall or wooden fence (or a vinyl-coated fence designed to look like wood).
    c) Enclosures and gates shall not consist of chain link fence; enclosures shall not consist of cinder block.
    d) It is recommended that trash enclosures be constructed of the same or similar materials and colors as the principal structure on-lot.

On the Record Plan (Sheet C1.1) it is noted to refer to the architectural plans for details of the screening, gates, bollards, and masonry for the trash enclosure however the details shall also be provided on the Land Development Plans. A trash enclosure detail shall be provided on the plans which shows the height and material of the proposed enclosure.

CHAPTER 146
SUBDIVISION & LAND DEVELOPMENT COMMENTS

29. **Per §146-9.A.(1) – Type of Application, Stages –** A preliminary plan is a first-stage plan in a two-stage approval process. The preliminary plan is required for all subdivision, land development or combination subdivision and land development plans within the township, wherein public improvements are proposed.
The Applicant is requesting a waiver from this Code Section to allow for a Preliminary and Final land development application submission.

30. **Per §146-10.A.(3) – General Requirements –** If two or more sheets comprise a submission, all sheets shall be of the same size, and each shall be consecutively numbered and titled to show and describe its relation to the total number of sheets comprising the plan (i.e. Grading Plan Sheet 3 of 6).
The plans shall be numbered as required per this Code Section.

31. **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-22-06".

32. **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.
A plan shall be provided showing the required information per this Code Section.

33. **Per §146-11.A.(7) – Property Identification Plans –** The property identification plans shall provide an indication that the elevations are based upon sanitary sewer datum of the Township of Abington.

34. **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 cartway width for West Moreland Road shall be provided on the plans.

35. **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 tract boundaries within 400 feet of the entire site.

36. **Per §146-11.B.(2) – Existing Features Plan –** The existing features plan shall contain the location, names, and widths of all streets, whether including right-of-way, cartway, or center lines.
The Applicant shall label the cartway width for West Moreland Road.

37. **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 location of property lines and names of landowners within 400 feet of any part of the site shall be provided.
38. **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 ad 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 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 shall be provided.

39. **Per §146-11.B.(8).(b) & §146-11.D.(4) – Existing Features Plan & Grading Plan –** The existing features plan shall contain the datum to which contour lines refer.
This note shall be provided on the Existing Conditions plan (Sheet C4.0) and grading plan (Sheet C6.0) per Section 146-11.D.(4).

40. **Per §146-11.B.(9).(a) – Existing Features Plan –** The existing features plan shall contain the soil types within the site, based on maps contains 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 limitations, i.e., bearing value, depth to bedrock, seasonal water table, etc.
The plan shall provide a mapped soil boundary, as well as, a table indicating the limitations of the soils as indicated per this Code Section.

41. **Per §146-11.C.(3) – Proposed Layout Plans –** The proposed layout plans shall show the building setback lines incorporated with any other construction restriction line established by the Township Zoning Ordinance, indicated on each proposed lot.
Building setback lines shall be shown on the proposed layout plans.

42. **Per §146-11.D.(7) – Grading Plans –** The grading plans shall show the delineation of the limits of work areas and the portions to remain undisturbed.
The Applicant shall label the size of the limit of disturbance area on the grading plan and show the complete limit of NPDES disturbance area. If the limit of disturbance area is greater than an acre, a NPDES permit will be required.

43. **Per §146-11.F.(4).(b).[1] thru [6] – Storm Sewer Facilities –** Profile plans for the proposed storm pipes and inlets shall be provided.

44. **Per §146-11.G.(1).(d) – Utility Plan –** The utility plan shall show fire hydrants, fire lanes, and fire department connections.
The utility plans shall clearly show the locations of existing fire hydrants. The Applicant shall ensure there is a working hydrant located within 500 feet of the building under construction per §146-41.B.(4)(d).

45. **Per §146-12 – Record Plan, Seals –** The Record Plan shall include the required seals, acknowledgements, and notations as indicated in §146-12.A thru E.

46. **Per §146-27.A – Sidewalks and Curbs -** Sidewalks shall be provided along all streets except where, in the opinion of the Board of Commissioners, they are unnecessary for the public safety and convenience.
Based on an existing conditions site inspection, there is approximately 910 SF of existing sidewalk located along the West Moreland Road frontage that is in poor condition and shall be replaced. The entire length of the sidewalk shall be replaced and per §2504.B.1 thru 4 of the Township Zoning Code, the sidewalk is required to be 10 feet wide along the West Moreland Road frontage.

47. **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.
Where the sidewalk crosses the access drives and parking aisles, curb ramps shall be provided that meet ADA specifications. Details of these curb ramps shall be shown on the plans and spot elevations shall also be provided to ensure compliance with the ADA requirements.

48. **Per §146-27.F – Sidewalks and Curbs –** Curbs shall be the vertical type and constructed in accordance with Township specifications.
Based on an existing conditions site inspection, there is existing curb along West Moreland Road that is in poor condition and shall be replaced. The entire length of the curbing along West Moreland Road shall be replaced.

49. **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 parking spaces as shown on the plans are only 9 feet wide by 18 feet long. The parking spaces shall be revised to be 10 feet wide by 18 feet long.

50. **Per §146.31.A.(6) – Reserve strips; rights-of-ways; easements –** Easements for present or ultimate construction of storm drains and sanitary sewers having a minimum width of twenty (20) feet shall be provided where necessitated by topographical conditions.
The Applicant shall provide an easement around the proposed stormwater management facilities; or the Applicant may consider providing a blanket easement for the proposed stormwater management facilities as part of the stormwater bmp operations and maintenance agreement with the Township.

51. **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.
Based on the storm sewer pipe schedule provided on the Utility Plan (Sheet C7.0), the Applicant is proposing to use 10" and 6" HDPE pipe for the storm drains flowing from inlets to the underground detention basin on site. These are both smaller than the required 15 inches and shall be revised to be a minimum of 15 inches; otherwise, a waiver from this Code Section will be required.

52. **Per §146.37 – Utilities –** All water mains, gas mains, electric, telephone, and other communication services shall be located underground; and such facilities shall be installed prior to street paving. Electric, telephone, and communication service facilities, both main and service lines, shall be provided by underground cables.
A note shall be provided on the plans stating that all utilities will be installed underground.

53. **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.

54. **Per §146-43.C.(3)(a) – Erosion and Sediment Control –** Cut and fill slopes shall not be 15% or steeper, except as approved by the Township Zoning Hearing Board.
There are slopes on site that have grades of approximately 18.3% which is greater than 15%. The grades shall be revised to be less than 15% in all locations.

CHAPTER 142
STORMWATER MANAGEMENT COMMENTS

55. **Per §142-302.B.(1).(a) – SWM Site Plan Contents –** The stormwater management plan shall provide a general description of the project.
A general description of the project shall be shown on the PCSM Plan.

56. **Per §142-302.B.(1).(m) – SWM Site Plan Contents –** The following signature block for the Municipality:
"(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)."
The above signature block shall be added to the PCSM plan as required per this Code Section.

57. **Per §142.302.B.(2).(a) – SWM Site Plan Requirements –** The Applicant shall prepare 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, stream 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.
An ERSAM Plan shall be provided as part of this submission and shall show the information as indicated per this Code Section.

58. **Per §142-302.B.(2).(b).[5] – SWM Site Plan Requirements –** The PCSM Plan shall show the locations of all existing and proposed utilities, sanitary sewers, and water lines within fifty (50) feet of the property lines.

The PCSM Plan shall show the existing and proposed features within fifty (50) feet of the property lines as indicated in this Code Section.

59. **Per §142-302.B.(2).(b).[9] – SWM Site Plan Requirements –** The PCSM Plan shall include O&M plan in accordance with §142-702 of this chapter, for all existing and proposed physical stormwater management facilities. This plan shall address long-term ownership and responsibilities for O&M as well as schedules and costs for O&M activities.
An Operation & Maintenance (O&M) plan shall be provided on the PCSM Plan showing how the proposed BMPS will be operated and maintained.

60. **Per §142-302.B.(2).(b).[10] – SWM Site Plan Requirements –** The PCSM Plan shall show the limits of earth disturbance, including the type and amount of impervious area that is proposed.
The total limit of disturbance shall be labeled and called out on the PCSM Plan.

61. **Per §142-302.B.(2).(b).[22] – SWM Site Plan Requirements –** The PCSM Plan shall show a fifteen-foot-wide access easement around all stormwater management facilities to provide ingress to and egress from a public right-of-way.
There are no stormwater easements shown on the plans. These easements shall be shown, or a note shall be provided if a blanket easement is proposed for the entire site.

62. **Per §142-302.B.(2).(b).[25] – SWM Site Plan Requirements –** The PCSM Plan shall provide a statement, signed by the Applicant, acknowledging that any revision to the approved drainage plan must be approved by the Township, and that a revised erosion and sediment control plan must be submitted to the Township or Conservation District for approval.
The required acknowledgement statement shall be provided on the PCSM Plan per this Code Section.

63. **Per §142-302.B.(2).(b).[26] – SWM Site Plan Requirements –** The PCSM Plan shall provide the following signature block for the design engineer:
"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 regulations and this chapter."
The design engineer signature block shall be provided on the PCSM Plan.

64. **Per §142-401.A – General Requirements –** For any of the activities regulated by this chapter, unless preparation of a stormwater management (SWM) site plan is specifically exempted, the preliminary or final approval of subdivision and/or land development plans, the issuance of any building or occupancy permit, the commencement of any earth disturbance activity may not proceed until the property owner or applicant or his/her agent has received written approval from the Municipality of a SWM site plan that demonstrates compliance with the requirements of this chapter, and a written approval of an adequate erosion and sediment (E&S) control plan from the Municipality or County Conservation District when required.
In the current plan submission, there is no plan that is labeled a Post Construction Stormwater Management Plan. A PCSM Plan shall be provided as part of this submission before preliminary/final approval is granted.

65. **Per §142-401.H – General Requirements –** No regulated activities shall commence until the Township issues written approval of an SWM site plan, which demonstrates compliance with the requirements of this chapter**.**

66. **Per §142-408.B.(2) – Stream Bank Erosion Requirements –** The minimum orifice size in the outlet structure to the BMP shall be three inches in diameter where possible, and a trash rack shall be installed

to prevent clogging. On sites with small drainage areas contributing to this BMP that do not provide enough runoff volume to allow a twenty-four-hour attenuation with the three-inch orifice, the calculations shall be submitted showing this condition. Orifice sizes less than three inches can be utilized, provided that the design will prevent clogging of the intake. It is recommended that the design, to accommodate maintenance, include a sand or porous media filter.
For the proposed outlet structure (OS01) the Applicant is proposing an orifice of 0.5 inches which is less than the required 3 inches minimum. The Applicant shall revise the orifice opening to 3 inches minimum, or provide documentation that the 0.5-inch orifice will be designed to prevent clogging.

67. **Per §142-409.A.(1).(b) – Stormwater Peak Rate Control and Management Districts -** Based on the Watershed Map, Figure 1.03, this site is located within the Pennypack Creek Watershed. Per Figure 409.1P Area P Stormwater Management District Watershed Map, this site is located within District B of this watershed. This district requires the 100-year post flow to be reduced to the 50-year pre, the 50-year post be reduced to the 25-year pre, the 25-year post be reduced to the 10-year pre, the 10-year post be reduced to the 5-year pre, the 5-year post be reduced to the 2-year pre, and the 2-year post be reduced to the 1-year pre.
Since this project is located in Area B of the Pennypack Creek Watershed, the post-development rates shall be reduced as indicated above. The PCSM Report shall provide a chart comparing the pre-development stormwater runoff conditions and the post development runoff conditions to ensure the post-development rates are reduced as required per this Code Section.

68. **Per §142-704.A – Operation and Maintenance Agreement for Privately Owned Stormwater Controls and BMPs –** Prior to final approval of the SWM site plan, the owner shall sign and record an operation and maintenance (O&M) agreement covering all stormwater control facilities which are to be privately owned.

GENERAL STORMWATER MANAGEMENT COMMENTS

69. Dewatering calculations shall be provided in the PCSM report.

70. A cross-section profile shall be provided for the BMP and the 100-year stormwater elevation shall be shown on this cross-section to ensure the BMP can adequately capture the 100-year storm.

71. The Applicant shall provide a PCSM Plan as part of this submission. The PCSM plan shall show all existing and proposed storm pipes, inlets, manholes, etc.

72. The Post Development Plan shall show the existing stormwater facilities on the plan.

GENERAL COMMENTS

73. On the drawing sheet index on the cover sheet, the index lists the Proposed Onsite Drainage Area Map as being included in the plan set but the plan is not included. The Applicant shall confirm if this plan is to be part of the plan set and revise accordingly.

74. On the drawing sheet index on the cover sheet, the index lists the Post Development Plan as sheet number C6.2 but on the plans, the Post Development Plan is labeled as sheet 6.1. This shall be revised to be consistent.

75. The PCSM plan shall be recorded along with the cover sheet and record plan.

76. The Applicant shall provide our office with legal descriptions and exhibits for any proposed easements as well as for the entire lot for review and approval.

77. It is our understanding that the Applicant will provide a traffic assessment as a result of the proposed land development. We defer to the Township Traffic Engineer for any traffic related comments.

We have received the following documents/permits/reviews:

- AQUA Will Serve Letter (September 16, 2022)
- Zoning Hearing Board Decision (October 19, 2022)
- MCPC Request for Review (October 21, 2022)
- Application for SD/LD Review (October 24, 2022)
- Post Construction Stormwater Management Report (October 26, 2022)
- Sanitary Sewer Availability Letter (October 31, 2022)
- Application for Sewage Facilities Planning Module Exemption Mailer (October 25, 2022)
- Sanitary Sewer Review (November 23, 2022)
- Fire Marshal Review (November 23, 2022)

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

- Waiver Request Letter
- EAC Review
- STC Review
- MCPC Review
- Traffic Review
- Financial Escrow
- LD Agreement
- Stormwater BMP O&M Agreement
- Legal Descriptions & Exhibits
- Planning Module Exemption

SUMMARY

We do not recommend Preliminary/Final Major Land Development Plans approval until the Applicant addresses the above referenced comments, in particular the zoning comments. We suggest that a technical discussion meeting be scheduled to discuss the above referenced comments.

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, Assistant Township Manager

PRELIMINARY / FINAL LAND DEVELOPMENT PLANS

FOR

RAISING CANE'S RESTAURANTS, L.L.C.

PROPOSED

RESTAURANT #C952 W/ DRIVE-THRU

LOCATION OF SITE

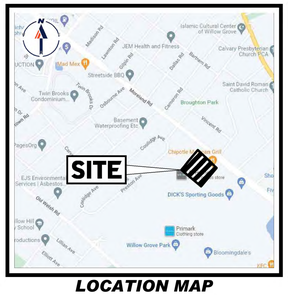
2620 WEST MORELAND ROAD, WILLOW GROVE
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
COMMONWEALTH OF PENNSYLVANIA 19090
TAX PARCEL NO. 30-00-45100-01-6

VARIANCES GRANTED BY THE ABINGTON TOWNSHIP ZONING HEARING BOARD ON 10/19/2022

1. A SPECIAL EXCEPTION PURSUANT TO ABINGTON TOWNSHIP ZONING ORDINANCE §1102, AND THE COMPREHENSIVE USE MATRIX, TO PERMIT A DRIVE-THROUGH RESTAURANT WAS APPROVED BY ABINGTON TOWNSHIP ZONING HEARING BOARD
2. A VARIANCE FROM ORDINANCE §1103 TO ALLOW A 5.7' PARKING BUILDING SETBACK ALONG THE SOUTHERN PROPERTY LINE OF THE SUBJECT PROPERTY WAS APPROVED BY ABINGTON TOWNSHIP ZONING HEARING BOARD
3. VARIANCES FROM ORDINANCE 2402.A.5 AND 2403.B.4.a FOR THE MINIMUM BUFFER AND PLANTING REQUIREMENTS WERE APPROVED BY ABINGTON TOWNSHIP ZONING HEARING BOARD

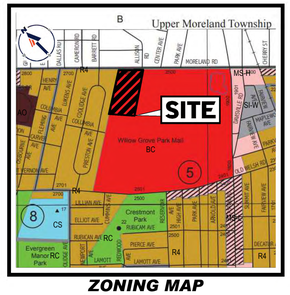
LIST OF WAIVERS REQUESTED FROM ABINGTON TOWNSHIP

1. RELIEF FROM SECTION 146-13 GENERAL REQUIREMENTS REQUESTED FOR PRELIMINARY/ FINAL LAND DEVELOPMENT REVIEW CONCURRENTLY



LOCATION MAP

SCALE: 1" = 500'
SOURCE: GOOGLE MAPS



ZONING MAP

SCALE: 1" = 100'
SOURCE: ABINGTON TOWNSHIP ZONING MAP

ZONING LEGEND

SYMBOL	ZONING DISTRICT
BC	BC BUSINESS CENTER
R4	HIGH DENSITY RESIDENTIAL
MS-H	MAIN STREET HIGH INTENSITY DENSITY
MS-L	MAIN STREET LOW INTENSITY DENSITY
RC	RECREATION/CONSERVATION
CS	COMMUNITY SERVICE
AO	APARTMENT OFFICE
SI-W	SUBURBAN INDUSTRIAL WILLOW GROVE

PREPARED BY

BOHLER

DRAWING SHEET INDEX

SHEET TITLE	SHEET NUMBER
COVER SHEET*	C1.0
RECORD PLAN*	C1.1
GENERAL NOTES	C2.0
SOIL EROSION AND SEDIMENT POLLUTION CONTROL PLAN	C3.0
SOIL EROSION AND SEDIMENT POLLUTION CONTROL NOTES	C3.1
SOIL EROSION AND SEDIMENT POLLUTION CONTROL DETAILS	C3.2
SOIL EROSION AND SEDIMENT POLLUTION CONTROL DETAILS	C3.3
DEMOLITION PLAN	C4.0
DIMENSION CONTROL PLAN	C5.0
GRADING PLAN	C6.0
PRE DEVELOPMENT PLAN	C6.1
POST DEVELOPMENT PLAN	C6.2
PROPOSED ONSITE DRAINAGE AREA MAP	C6.3
UTILITY PLAN	C7.0
CONSTRUCTION DETAIL	C8.0
CONSTURCTION DETAILS	C8.1
CONSTRUCTION DETAILS	C8.2
BASIN DETAILS	C9.0
VEHICLE CIRCULATION PLAN	C10.0
LANDSCAPE PLAN	C11.0
LANDSCAPE DETAILS	C11.1

* DENOTES SHEETS TO BE RECORDED

UTILITIES:

THE FOLLOWING COMPANIES WERE NOTIFIED BY PENNSYLVANIA ONE CALL SYSTEM, INC. (1-800-242-1776) AND REQUESTED TO MARK OUT UNDERGROUND FACILITIES AFFECTING AND SERVICING THIS SITE. THE UNDERGROUND UTILITY INFORMATION SHOWN HEREON IS BASED UPON THE UTILITY COMPANIES RESPONSE TO THIS REQUEST.
SERIAL NUMBER: 20220541701

UTILITY COMPANY	PHONE NUMBER
ABINGTON TOWNSHIP	215-884-5000
AQUA PENNSYLVANIA, INC.	610-525-1400
PECO CENTRAL LOCATING	215-841-4000
COMCAST	800-266-2278
VERIZON	215-657-9260

Restaurant Support Office
6800 Bishop Road, Plano, TX 75024
Tele: 972-769-3100 Fax: 972-769-3101

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

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www.pa1call.org
20220541701

PROJECT No.:	PP2270001
DRAWN BY:	BMM
CHECKED BY:	KRT
DATE:	10.26.22
CAD I.D.:	PP2270001-X-TTLB-PHPD

PROJECT:
PRELIMINARY/ FINAL LAND DEVELOPMENT PLANS
FOR
RAISING CANE'S RESTAURANTS, LLC.
PROPOSED RESTAURANT #C0952
2620 WEST MORELAND ROAD
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

BOHLER
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
www.BohlerEngineering.com

K.R. TATLOW
COMMONWEALTH OF PENNSYLVANIA
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE086852

SHEET TITLE:
COVER SHEET

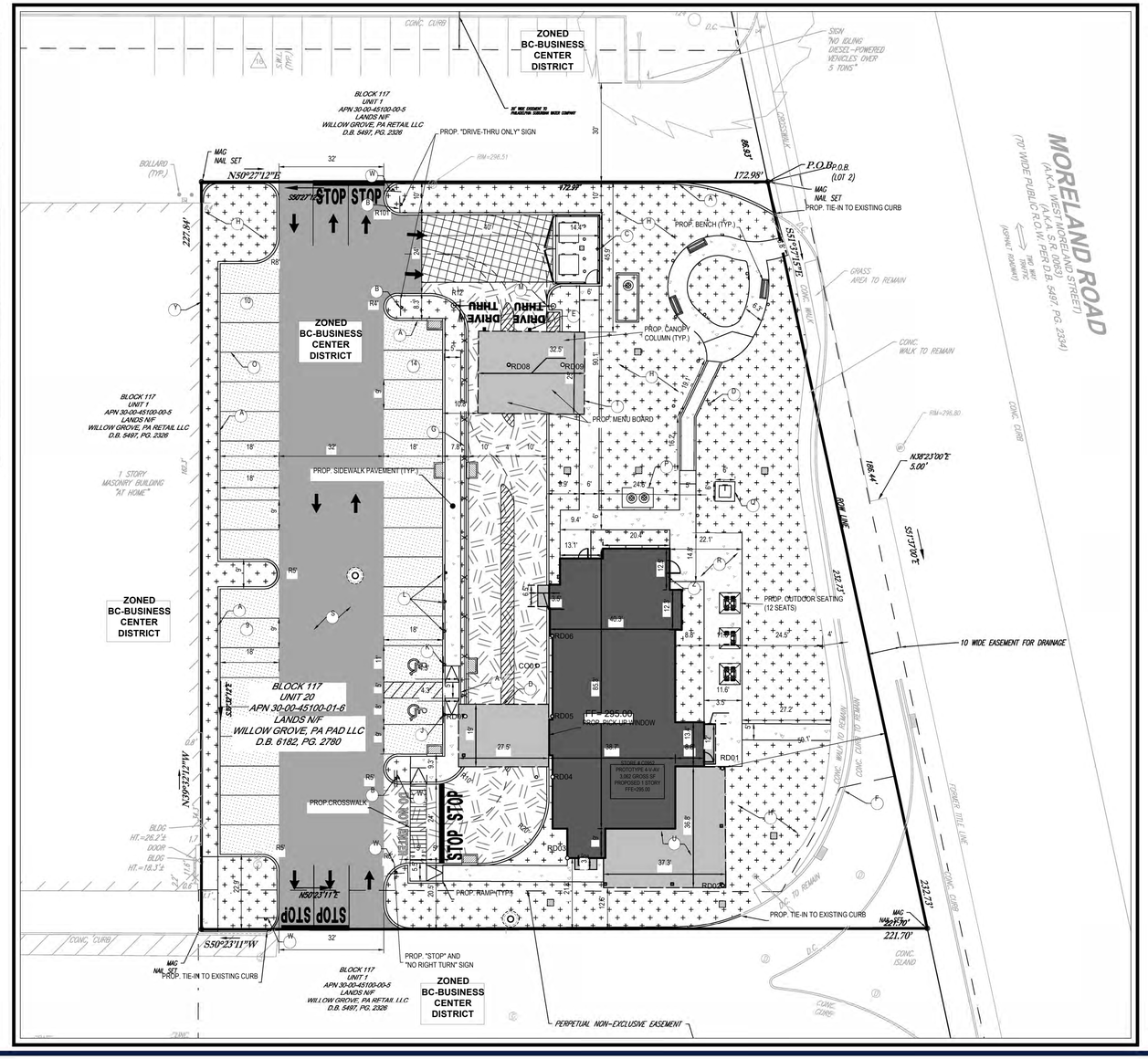
SHEET NUMBER:
C1.0

ORG. DATE - 10.26.22

R:\2022\PP2270001\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\PP2270001-LDVP-03A----LAYOUT C1-0 COVER PLAN

LEGEND
SITE KEYNOTES

A	PROPOSED CONCRETE CURB
B	PROPOSED CANE'S MOVEMENT SIGN LOCATION REFER TO ARCHITECTURAL PLAN
C	RECYCLING/ TRASH DUMPSTER LOCATION REFER TO ARCHITECTURAL PLANS FOR DETAILS OF SCREENING, GATES, BOLLARDS AND MASONRY
D	CONCRETE BOLLARD
E	DIRECTIONAL PAVEMENT MARKING
F	EXISTING CONCRETE CURB
G	PROPOSED FENCE
H	LANDSCAPE AREA, REFERENCE LANDSCAPE PLANS
J	ACCESSIBLE PARKING SIGN ON CONCRETE BOLLARD
K	VAN ACCESSIBLE PARKING SIGN ON CONCRETE BOLLARD
L	ORDER PICKUP PARKING SIGN ON CONCRETE BOLLARD
M	HEIGHT DETECTOR POLE
O	PAVEMENT STRIPING.
P	PROPOSED GREASE TRAP REFER TO ARCHTECTURAL PLANS FOR DETAILS
Q	PROPOSED TRANSFORMER, REFER TO MEP PLANS
R	PROPOSED CONCRETE AREA
S	PROPOSED ASPHALT AREA
T	PROPOSED CANOPY, DESIGNED BY OTHERS
U	PROPOSED CONCRETE PATIO WITH PATIO FURNITURE, DESIGNED BY OTHERS
W	PROPOSED STOP SIGN
Y	EXISTING PROPERTY LINE
Z	PROPOSED DARPRO CONNECTION, SEE ARCH PLAN FOR DETAILS



LEGEND
PROPOSED PAVING

HEAVY DUTY CONCRETE PAVEMENT	
STANDARD DUTY PARKING ASPHALT PAVEMENT	
HEAVY DUTY ASPHALT PAVEMENT	
INTERGRAL COLORED 860 GRAPHITE 6" STANDARD DUTY CONCRETE PAVEMENT	
SIDEWALK PAVEMENT	

LEGEND
PROPOSED

PROPERTY LINE	
BUILDING	
CANOPY	
CONCRETE/ ASPHALT	
LANDSCAPE	
PARKING COUNT	9
RAMP	
SIGN	
BOLLARD	
FENCE	
CONCRETE CURB	
FLUSH CURB	
ACCESSIBLE SYMBOL	
TRAFFIC ARROWS	
CLEANOUT	C/O
HOUSE TRAP	HT
YARD DRAIN	
DRAINAGE INLET	
MANHOLE	

LEGEND
EXISTING

PROPERTY LINE	
ADJACENT PROPERTY LINE	
EASEMENT LINE	
SETBACK LINE	
BUILDING	
CONCRETE CURB	
FLUSH CURB	
ACCESSIBLE SYMBOL	
SIGN	
PARKING COUNT	10
AREA LIGHT	
TREE	
DRAINAGE INLET	
STORM/SANITARY MANHOLE	
WATER/GAS VALVES	
ROOF DRAIN/CLEANOUT	RD / CO
FIRE HYDRANT	
UTILITY POLE W/ LIGHT	
UTILITY POLE	
OVERHEAD UTILITY WIRES	



LOCATION MAP
SCALE: 1" = 500'

ZONING CHART
BC- BUSINESS CENTER

	REQUIRED	EXISTING	PROVIDED
LOT			
MIN. LOT AREA	1 AC. OR 43,560 SF	1.03 AC. OR 44,939 SF	1.03 AC. OR 44,939 SF
MIN. LOT WIDTH	100 FT	227.84	232.73
MIN. LOT DEPTH	150 FT	172.98	172.98
IMPERVIOUS COVERAGE	70%(75% MAXIMUM PAVING)	82.4% (37,038 SF/ 44,939 SF)	68.95% (30,987 SF)
GREEN AREA	MIN. 25% MIN. 15% IN TRIANGLE WITH BONUS (44,953 SF * .25 = 11,238 SF)	17.61% (7,915 SF/ 44,939 SF)	31.05% (13,952 SF)
PUBLIC OPEN SPACE (THESE AREAS SHALL BE OPEN TO THE GENERAL PUBLIC;NOT JUST THOSE USING THE SITE)	MIN.5% GROSS FLOOR A REA (3,062 SF *.05 = 153 SF)	0 SF	153 SF
BUILDING			
HEIGHT	20 FT. (MAX. 55 FT) FACADE HEIGHT	N/A	19.8 FT
LENGTH	MAX. 300 FT	N/A	91.6 FT
SIZE	MAX. 150,000 SF	N/A	3,062 SF
COVERAGE	MAX. 40% (1,7424 SF)	N/A	(3,062 SF / 44,939 SF) = 6.8%
SETBACKS			
MIN. SIDE YARD AND REAR PROPERTY LINES ABUTTING OTHER DISTRICTS	30 FT	N/A	N/A
BUILDING SETBACK FROM PARKING	10 FT	5.9 FT	5.7 FT
PARKING LOT SETBACK FROM PUBLIC STREET	MIN. 100 FT	12.2 FT	105.7 FT
ACCESS POINT FROM EXTERNAL STREET	200 FT SEPERATION DISTANCE FROM STREET ACCESS POINTS (ON SUBJECT OR OTHER PROPERTY)	N/A	N/A
BUILT TO LINE (SHALL NOT OVERRIDE THE SIGHT TRIANGLE)			
TO PUBLIC STREET	MIN. 50 FT TO MAX. 100 FT	78.9 FT	52.4 FT
MAINACCESS DRIVE	MIN. 20 FT TO MAX 25 FT	N/A	23.7 SF
PARKING			
ADA	(26 TO 56 TOTAL PARKING SPACES) = 2	0	2
CARS	1 PARKING SPACE FOR EVERY 50 SF OF GROSS LEASABLE FLOOR AREA..., OR ONE PARKING SPACE FOR EVERY 3 SEATS, WHICHEVER REQUIRES THE LESSER NUMBER OF SPACES. (97 SEATS * (1 SPACE/ 3 SEATS) = 33	85	33
BIKE PARKING	1 PER 250 PARKING SPACES	0	0
LOADING AREA	REATAIL USE, FIRST 5,000 SF - 0 BERTHS REQUIRED	0	0

Raising Cane's CHICKEN FINGERS

Restaurant Support Office
6800 Bishop Road, Plano, TX 75024
Tele: 972-769-3100 Fax: 972-769-3101

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

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www.pa1call.org
20220541701

PROJECT No.:	PP2270001
DRAWN BY:	BMM
CHECKED BY:	KRT
DATE:	10.26.22
CAD I.D.:	PP2270001-X-TTLB-PHPD

PROJECT:
PRELIMINARY/ FINAL LAND DEVELOPMENT PLANS
FOR
RAISING CANE'S RESTAURANTS, LLC.

PROPOSED RESTAURANT #C0952

2620 WEST MORELAND ROAD
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

BOHLER
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SHEET TITLE:
RECORD PLAN

SHEET NUMBER:
C1.1

ORG. DATE - 10.26.22

R:\2022\PP2270001\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\PP2270001-LDVP-3A-----LAYOUT C1-1 RECORD PLAN

GENERAL NOTES

(Rev. 2/2021)

1. THESE PLANS ARE SOLELY BASED ON INFORMATION THE OWNER AND OTHERS PROVIDED TO BOHLER ENGINEERING, PENNSYLVANIA, LLC (HEREIN "BOHLER") PRIOR TO THE DATE ON WHICH THE ENGINEER OF RECORD AND BOHLER PREPARED THESE PLANS. THE CONTRACTOR MUST FIELD VERIFY ALL EXISTING CONDITIONS AND IMMEDIATELY NOTIFY BOHLER, IN WRITING, IF ANY ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THESE PLANS, OR IF THE PROPOSED WORK CONFLICTS WITH ANY OTHER SITE FEATURES.

2. THE CONTRACTOR MUST STRICTLY COMPLY WITH THESE NOTES AND ALL SPECIFICATIONS/REPORTS CONTAINED HEREIN. THE CONTRACTOR MUST ENSURE THAT ALL SUBCONTRACTORS FULLY AND COMPLETELY CONFORM TO AND COMPLY WITH THESE REQUIREMENTS, THESE NOTES, AND THE REQUIREMENTS ARTICULATED IN THE NOTES CONTAINED IN ALL OTHER DRAWINGS THAT COMPRISE THE PLAN SET OF DRAWINGS. ADDITIONAL NOTES AND SPECIFIC PLAN NOTES MAY BE FOUND ON THE INDIVIDUAL PLANS. THESE GENERAL NOTES APPLY TO THIS ENTIRE DOCUMENT PACKAGE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL CONSTRUCTION CONTRACT DOCUMENTS INCLUDING, BUT LIMITED TO, ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE, PRIOR TO THE INITIATION AND COMMENCEMENT OF CONSTRUCTION.

3. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST CONFIRM WITH THE ENGINEER OF RECORD AND BOHLER THAT THE LATEST EDITION OF THE DOCUMENTS AND/OR REPORTS REFERENCED WITHIN THE PLAN REFERENCES ARE BEING USED FOR CONSTRUCTION. THIS IS THE CONTRACTOR'S SOLE AND COMPLETE RESPONSIBILITY.

4. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION IS TO BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED THE CONDITIONS OF APPROVAL TO ALL PLANS AND OTHER DOCUMENTS REVIEWED AND APPROVED BY THE PERMITTING AUTHORITIES AND HAS ALSO CONFIRMED THAT ALL NECESSARY AND REQUIRED PERMITS HAVE BEEN OBTAINED. THE CONTRACTOR MUST HAVE COPIES OF ALL PERMITS AND APPROVALS ON SITE AT ALL TIMES.

5. THE CONTRACTOR MUST ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS/REPORTS AND CONDITIONS OF APPROVAL, AND ALL APPLICABLE REQUIREMENTS, RULES, REGULATIONS, STATUTORY REQUIREMENTS, CODES, LAWS AND STANDARDS OF ALL GOVERNMENTAL ENTITIES WITH JURISDICTION OVER THIS PROJECT, AND ALL PROVISIONS IN AND CONDITIONS OF THE CONSTRUCTION CONTRACT WITH THE OWNER/DEVELOPER INCLUDING ALL EXHIBITS, ATTACHMENTS AND ADDENDA TO SAME.

6. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST COORDINATE THE BUILDING LAYOUT BY CAREFULLY REVIEWING THE MOST CURRENT ARCHITECTURAL, CIVIL AND STRUCTURAL CONSTRUCTION DOCUMENTS INCLUDING, BUT NOT LIMITED TO, MECHANICAL, ELECTRICAL, PLUMBING AND FIRE SUPPRESSION PLANS, WHERE APPLICABLE). THE CONTRACTOR MUST IMMEDIATELY NOTIFY OWNER, ARCHITECT AND ENGINEER OF RECORD AND BOHLER, IN WRITING, OF ANY CONFLICTS, DISCREPANCIES OR AMBIGUITIES WHICH EXIST BETWEEN THESE PLANS AND ANY OTHER PLANS THAT COMPRISE THE CONSTRUCTION DOCUMENTS.

7. CONTRACTOR MUST REFER TO AND ENSURE COMPLIANCE WITH THE APPROVED ARCHITECTURAL/BUILDING PLANS OF RECORD FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRY/EXIT POINTS, ELEVATIONS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY LOCATIONS.

8. THE CONTRACTOR MUST FIELD VERIFY ALL DIMENSIONS AND MEASUREMENTS SHOWN ON THESE PLANS, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR MUST IMMEDIATELY NOTIFY ENGINEER OF RECORD AND BOHLER, IN WRITING, IF ANY CONFLICTS, DISCREPANCIES, OR AMBIGUITIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION, NO EXTRA COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR WORK WHICH HAS TO BE RE-DONE OR REPAIRED DUE TO DIMENSIONS, MEASUREMENTS OR GRADES SHOWN INCORRECTLY ON THESE PLANS PRIOR TO BOTH (A) THE CONTRACTOR GIVING ENGINEER OF RECORD AND BOHLER WRITTEN NOTIFICATION OF SAME AND (B) ENGINEER OF RECORD AND BOHLER, THEREAFTER, PROVIDING THE CONTRACTOR WITH WRITTEN AUTHORIZATION TO PROCEED WITH SUCH ADDITIONAL WORK.

9. THE CONTRACTOR MUST VERIFY ALL DIMENSIONS AND MEASUREMENTS INCLUDED ON DESIGN DOCUMENTS HEREIN AND MUST NOT SCALE OFF THE DRAWINGS DUE TO POTENTIAL PRINTING INACCURACIES. ALL DIMENSIONS AND MEASUREMENTS ARE TO BE CHECKED AND CONFIRMED BY THE GENERAL CONTRACTOR PRIOR TO FABRICATION OR CONSTRUCTION OF APPLICABLE PLANS. THE CONTRACTOR MUST NOTIFY THE ENGINEER OF RECORD OF SITE WORK. SITE PLAN DRAWINGS ARE NOT INTENDED AS SURVEY DOCUMENTS. DIMENSIONS SUPERSEDE GRAPHICAL REPRESENTATIONS. THE CONTRACTOR MUST MAKE CONTRACTORS OWN MEASUREMENTS FOR LAYOUT OF IMPROVEMENTS.

10. THE OWNER AND CONTRACTOR MUST BE FAMILIAR WITH AND RESPONSIBLE FOR THE PROCUREMENT OF ANY AND ALL CERTIFICATIONS REQUIRED FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

11. WHEN INCLUDED AS ONE OF THE REFERENCED DOCUMENTS, THE GEOTECHNICAL REPORT, SPECIFICATIONS AND RECOMMENDATIONS SET FORTH THEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND, IN CASE OF CONFLICT, DISCREPANCY OR AMBIGUITY, THE MORE STRINGENT REQUIREMENTS AND/OR RECOMMENDATIONS CONTAINED IN: (A) THE PLANS; AND (B) THE GEOTECHNICAL REPORT AND RECOMMENDATIONS, MUST TAKE PRECEDENCE AND BE FOLLOWED. THE CONTRACTOR MUST NOTIFY THE OWNER, ARCHITECT AND ENGINEER OF RECORD AND BOHLER, IN WRITING, OF ANY SUCH CONFLICT, DISCREPANCY OR AMBIGUITY BETWEEN THE GEOTECHNICAL REPORT AND PLANS AND SPECIFICATIONS, PRIOR TO PROCEEDING WITH ANY FURTHER WORK. IF A GEOTECHNICAL REPORT WAS NOT CREATED, THEN THE CONTRACTOR MUST FOLLOW AND COMPLY WITH ALL OF THE REQUIREMENTS OF ANY AND ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE SPECIFICATIONS WHICH HAVE JURISDICTION OVER THIS PROJECT.

12. ENGINEER OF RECORD AND BOHLER ARE NEITHER LIABLE NOR RESPONSIBLE FOR ANY SUBSURFACE CONDITIONS AND FURTHER, HAS NO LIABILITY FOR ANY HAZARDOUS MATERIALS, HAZARDOUS SUBSTANCES, OR POLLUTANTS ON, ABOUT OR UNDER THE PROPERTY.

13. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING WHEN AND WHERE SHORING IS REQUIRED AND FOR INSTALLING ALL SHORING REQUIRED DURING EXCAVATION (TO BE PERFORMED IN ACCORDANCE WITH OSHA STANDARDS) AND FOR IMPLEMENTING ALL PRECAUTIONS TO BE TAKEN TO ASSURE THE STABILITY OF ADJACENT, NEARBY AND CONTIGUOUS STRUCTURES AND PROPERTIES. ALL OF THIS WORK IS TO BE PERFORMED AT CONTRACTOR'S SOLE COST AND EXPENSE.

14. THE CONTRACTOR MUST EXERCISE EXTREME CAUTION WHEN PERFORMING ANY WORK ACTIVITIES ADJACENT TO PAVEMENT, STRUCTURES, ETC. WHICH ARE TO REMAIN IN USE FOR AN EXTENDED PERIOD OF TIME OR AS PART OF THE FINAL CONDITION. THE CONTRACTOR IS RESPONSIBLE FOR TAKING ALL APPROPRIATE MEASURES REQUIRED TO ENSURE THE STRUCTURAL STABILITY OF SIDEWALKS AND PAVEMENT, UTILITIES, BUILDINGS, AND INFRASTRUCTURE WHICH ARE TO REMAIN, AND TO PROVIDE A SAFE WORK AREA FOR THIRD PARTIES, PEDESTRIANS AND ANYONE INVOLVED WITH THE PROJECT.

15. DEBRIS MUST NOT BE BURIED ON THE SUBJECT SITE. ALL DEMOLITION AND CONSTRUCTION WASTES, UNSUITABLE EXCAVATED MATERIAL, EXCESS SOIL AND DEBRIS (SOLID WASTE) MUST BE DISPOSED OF IN ACCORDANCE WITH THE REQUIREMENTS OF ANY AND ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE CODES WHICH HAVE JURISDICTION OVER THIS PROJECT OR OVER THE CONTRACTOR.

16. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO MAINTAIN RECORDS TO DEMONSTRATE PROPER AND FULLY COMPLIANT DISPOSAL ACTIVITIES, TO BE PROMPTLY PROVIDED TO THE OWNER UPON REQUEST.

17. THE CONTRACTOR IS RESPONSIBLE FOR THE CONTRACTOR'S MEANS AND METHODS OF CONSTRUCTION COST. ALL DAMAGE DONE TO ANY NEW OR EXISTING CONSTRUCTION OR PROPERTY DURING THE COURSE OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. AND MUST BEAR ALL COSTS ASSOCIATED WITH SAME TO INCLUDE, BUT NOT BE LIMITED TO, REDESIGN, RE-SURVEY, RE-PERMITTING AND CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR AND MUST REPLACE ALL DISCONNECTION CABLE, WIRING CONDUITS, AND ANY UNDERGROUND ACCESSORY EQUIPMENT DAMAGED DURING CONSTRUCTION AND MUST BEAR ALL COSTS ASSOCIATED WITH SAME. THE REPAIR OF ANY SUCH NEW OR EXISTING CONSTRUCTION OR PROPERTY MUST RESTORE SUCH CONSTRUCTION OR PROPERTY TO A CONDITION EQUIVALENT TO OR BETTER THAN THE CONDITIONS PRIOR TO COMMENCEMENT OF THE CONSTRUCTION, AND IN CONFORMANCE WITH APPLICABLE CODES, LAWS, RULES, REGULATIONS, STATUTORY REQUIREMENTS AND STATUTES. THE CONTRACTOR MUST BEAR ALL COSTS ASSOCIATED WITH SAME. THE CONTRACTOR MUST, PROMPTLY, DOCUMENT ALL EXISTING DAMAGE AND NOTIFY, IN WRITING, THE OWNER AND THE CONSTRUCTION MANAGER PRIOR TO THE START OF CONSTRUCTION.

18. THE ENGINEER OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR AND HAVE NO CONTRACTUAL, LEGAL OR OTHER RESPONSIBILITIES FOR JOB SITE SAFETY, JOB SITE SUPERVISION, OR ANYTHING RELATED TO SAME. THE ENGINEER OF RECORD AND BOHLER HAVE NOT BEEN RETAINED TO PERFORM OR TO BE RESPONSIBLE FOR ANY DUTIES IN CONNECTION WITH JOB SITE SAFETY OR SUPERVISION OF CONTRACTOR'S AND BOHLER SERVICES AS RELATED TO THE PROJECT. THE ENGINEER OF RECORD AND BOHLER ARE NOT RESPONSIBLE TO IDENTIFY OR REPORT ANY JOB SITE SAFETY ISSUES OR ANY JOB SITE CONDITIONS, AT ANY TIME.

19. THE CONTRACTOR MUST IMMEDIATELY IDENTIFY IN WRITING, TO THE ENGINEER OF RECORD AND BOHLER , ANY DISCREPANCIES THAT MAY OR COULD AFFECT THE PLANS IN ANY WAY, IN GENERAL, OR THAT MAY INCREASE COST, IF THE CONTRACTOR PROCEEDS WITH CONSTRUCTION WORK WITHOUT PROVIDING PROPER WRITTEN NOTIFICATION AS DESCRIBED ABOVE, IT WILL BE AT THE CONTRACTOR'S OWN RISK AND, FURTHER, THE CONTRACTOR MUST INDEMNIFY, DEFEND AND HOLD HARMLESS THE ENGINEER OF RECORD AND BOHLER FOR ANY AND ALL DAMAGES, COSTS, INJURIES, ATTORNEY'S FEES AND THE LIKE WHICH RESULT FROM OR ARE IN ANY WAY RELATED TO SAME INCLUDING, BUT NOT LIMITED TO, ANY THIRD PARTY AND FIRST PARTY CLAIMS.

20. THE ENGINEER OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR ANY INJURY OR DAMAGES RESULTING FROM THE CONTRACTOR'S FAILURE TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH THE APPROVED PLANS, AND CURRENT CODES, RULES, STATUTES AND THE LIKE. IF THE CONTRACTOR AND/OR OWNER FAILS TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH ALL SUCH CODES AND RULES, STATUTES AND THE LIKE, THE CONTRACTOR AND/OR OWNER AGREE TO AND MUST JOINTLY, INDEPENDENTLY, SEPARATELY, AND SEVERALLY INDEMNIFY AND HOLD THE ENGINEER OF RECORD AND BOHLER HARMLESS FOR AND FROM ALL INJURIES, CLAIMS AND DAMAGES THAT ENGINEER AND BOHLER SUFFER AND ANY AND ALL COSTS THAT ENGINEER AND BOHLER INCUR AS RELATED TO SAME.

21. ALL CONTRACTORS MUST CARRY AT LEAST THE MINIMUM AMOUNT OF THE SPECIFIED AND COMMERCIALLY REASONABLE STATUTORY WORKER'S COMPENSATION INSURANCE, EMPLOYER'S LIABILITY INSURANCE AND COMMERCIAL GENERAL LIABILITY INSURANCE (CGL) INCLUDING ALSO ALL UMBRELLA COVERAGES. ALL CONTRACTORS MUST HAVE THEIR CGL POLICIES ENDORSED TO NAME BOHLER , AND ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AS ADDITIONAL NAMED INSUREDS AND TO PROVIDE CONTRACTUAL LIABILITY COVERAGE SUFFICIENT TO INSURE (DEFEND, IF APPLICABLE) AND HOLD HARMLESS AND INDEMNIFY OBLIGATIONS ASSUMED AND AGREED TO BY THE CONTRACTOR HEREIN. ALL CONTRACTORS MUST FURNISH BOHLER WITH CERTIFICATIONS OF INSURANCE OR CERTIFICATES OF INSURANCE AS EVIDENCE OF THE REQUIRED INSURANCE COVERAGES PRIOR TO COMMENCING ANY WORK AND UPON RENEWAL OF EACH POLICY DURING THE ENTIRE PERIOD OF CONSTRUCTION AND FOR TWO YEARS AFTER THE COMPLETION OF CONSTRUCTION AND AFTER ALL PERMITS ARE ISSUED, WHICHEVER DATE IS LATER. IN ADDITION, ALL CONTRACTORS AGREE THAT THEY WILL, TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, INDEMNIFY, DEFEND AND HOLD HARMLESS BOHLER AND ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS FROM AND AGAINST ANY DAMAGES, INJURIES, CLAIMS, ACTIONS, PENALTIES, EXPENSES, PUNITIVE DAMAGES, TORT DAMAGES, STATUTORY CAUSES OF ACTION, LOSSES, JUDGMENTS, CAUSES OF ACTION, LIABILITIES OR COSTS, INCLUDING, BUT NOT LIMITED TO, REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS, ARISING OUT OF OR IN ANY WAY CONNECTED WITH OR TO THE PROJECT, INCLUDING ALL CLAIMS BY EMPLOYEES OF THE CONTRACTOR(S), ALL CLAIMS BY THIRD PARTIES AND ALL CLAIMS RELATED TO THE PROJECT. THE CONTRACTOR MUST NOTIFY ENGINEER, IN WRITING, AT LEAST THIRTY (30) DAYS PRIOR TO ANY TERMINATION, SUSPENSION OR CHANGE OF ITS INSURANCE HEREUNDER.

22. THE ENGINEER OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR CONSTRUCTION METHODS, MEANS, TECHNIQUES OR PROCEDURES, GENERALLY OR FOR ANY OF THE CONSTRUCTION MEANS, METHODS, TECHNIQUES OR PROCEDURES FOR COMPLETION OF THE WORK DEPICTED BOTH ON THESE PLANS, AND FOR ANY CONFLICTS IN SCOPE AND REVISIONS THAT RESULT FROM SAME. THE CONTRACTOR IS FULLY AND SOLELY RESPONSIBLE FOR DETERMINING THE MEANS AND METHODS FOR COMPLETION OF THE WORK, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

23. NEITHER THE PROFESSIONAL ACTIVITIES OF BOHLER, NOR THE PRESENCE OF BOHLER AND/OR ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AT A CONSTRUCTION/PROJECT SITE (HEREIN "BOHLER PARTIES"), RELIEVES OR WILL RELIEVE THE CONTRACTOR OF AND FROM CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, OVERSEEING, SUPERINTENDING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND COMPLIANCE WITH ALL HEALTH AND SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES WITH JURISDICTION OVER THE PROJECT AND/OR PROPERTY. BOHLER PARTIES HAVE NO AUTHORITY TO EXERCISE ANY CONTROL (OR ANY RESPONSIBILITY FOR) ANY CONSTRUCTION, THE CONTRACTOR OR ITS EMPLOYEES RELATING TO THEIR WORK AND ANY AND ALL HEALTH AND SAFETY PROGRAMS OR PROCEDURES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY. THE CONTRACTOR MUST INDEMNIFY, DEFEND, PROTECT AND HOLD HARMLESS BOHLER PARTIES FOR AND FROM ANY LIABILITY TO BOHLER PARTIES RESULTING FROM THE CONTRACTOR'S WORK, SERVICES AND/OR VIOLATIONS OF THIS NOTE, THESE NOTES OR ANY NOTES IN THE PLAN SET AND, FURTHER, THE CONTRACTOR MUST NAME BOHLER AS AN ADDITIONAL INSURED UNDER THE GENERAL CONTRACTOR'S POLICIES OF GENERAL LIABILITY INSURANCE AS DESCRIBED ABOVE.

24. WHEN IT IS CLEARLY AND SPECIFICALLY WITHIN BOHLER'S SCOPE OF SERVICES CONTRACT WITH THE OWNER/DEVELOPER, BOHLER WILL REVIEW OR TAKE OTHER APPROPRIATE ACTION ON THE CONTRACTOR SUBMITTALS, SUCH AS SHOP DRAWINGS, PRODUCT DATA, SAMPLES, AND OTHER DATA, WHICH THE CONTRACTOR IS REQUIRED TO SUBMIT, BUT ONLY FOR THE LIMITED PURPOSE OF EVALUATING CONFORMANCE WITH THE DESIGN INTENT AND THE INFORMATION SHOWN IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONSTRUCTION MEANS AND METHODS AND/OR TECHNIQUES OR PROCEDURES, COORDINATION OF THE WORK WITH OTHER TRADES, AND CONSTRUCTION SAFETY PRECAUTIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND BOHLER HAS NO RESPONSIBILITY OR LIABILITY FOR SAME. BOHLER WILL PERFORM ITS SHOP DRAWING REVIEW WITH REASONABLE PROMPTNESS, AS CONDITIONS PERMIT. ANY DOCUMENT, DOCUMENTING BOHLER'S REVIEW OF A SPECIFIC ITEM OR LIMITED SCOPE, MUST NOT INDICATE THAT BOHLER HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. BOHLER IS NOT RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR MUST, IN WRITING, PROMPTLY AND IMMEDIATELY BRING ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS TO BOHLER'S ATTENTION. BOHLER IS NOT REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN RECEIVED.

25. IF THE CONTRACTOR DEVIATES FROM THESE PLANS AND/OR SPECIFICATIONS, INCLUDING THE NOTES CONTAINED HEREIN, WITHOUT FIRST OBTAINING THE PRIOR WRITTEN AUTHORIZATION OF THE ENGINEER OF RECORD AND BOHLER FOR ALL DEVIATIONS WITHIN ENGINEER'S SCOPE, THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PAYMENT OF ALL COSTS INCURRED IN CORRECTING ANY WORK PERFORMED WHICH DEVIATES FROM THE PLANS, ALL FINES AND/OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM AND, FURTHER, MUST DEFEND, INDEMNIFY, PROTECT, AND HOLD HARMLESS THE ENGINEER OF RECORD AND BOHLER PARTIES TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, FOR AND FROM ALL FEES, ATTORNEYS' FEES, DAMAGES, COSTS, JUDGMENTS, CLAIMS, INJURIES, PENALTIES AND THE LIKE RELATED TO SAME.

26. THE CONTRACTOR IS RESPONSIBLE FOR A MAINTAINING AND PROTECTING THE TRAFFIC CONTROL PLAN AND ELEMENTS IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS, FOR ALL WORK THAT AFFECTS PUBLIC TRAVEL EITHER IN THE RIGHT OF WAY OR ON SITE. THE COST FOR THIS ITEM MUST BE INCLUDED IN THE CONTRACTOR'S PRICE AND IS THE CONTRACTOR'S SOLE RESPONSIBILITY.

27. OWNER MUST MAINTAIN AND PRESERVE ALL PHYSICAL SITE FEATURES AND DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS IN STRICT ACCORDANCE WITH THE APPROVED PLAN(S) AND DESIGN; AND, FURTHER, THE ENGINEER OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR ANY FAILURE TO SO MAINTAIN OR PRESERVE SITE AND/OR DESIGN FEATURES. IF OWNER FAILS TO MAINTAIN AND/OR PRESERVE ALL PHYSICAL SITE FEATURES AND/OR DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS, OWNER AGREES TO INDEMNIFY AND HOLD THE ENGINEER OF RECORD AND BOHLER PARTIES, HARMLESS FOR ALL INJURIES, DAMAGES AND COSTS THAT ENGINEER OF RECORD AND BOHLER INCUR AS A RESULT OF SAID FAILURE OR FAILURE TO PRESERVE.

28. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION ACTIVITIES AND MATERIALS COMPLY WITH AND CONFORM TO APPLICABLE FEDERAL, STATE AND LOCAL RULES AND REGULATIONS, LAWS, ORDINANCES, AND CODES, AND ALL APPLICABLE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, (29 U.S.C. 651 ET SEQ.) AS AMENDED, AND ANY MODIFICATIONS, AMENDMENTS OR REVISIONS TO SAME.

29. THE CONTRACTOR MUST STRICTLY COMPLY WITH THE LATEST AND CURRENT OSHA STANDARDS AND REGULATIONS, AND/OR ANY OTHER AGENCY WITH JURISDICTION OVER EXCAVATION AND TRENCHING PROCEDURES. ENGINEER OF RECORD AND BOHLER HAS NO RESPONSIBILITY FOR OR AS RELATED TO EXCAVATION AND TRENCHING PROCEDURES AND WORK.

30. THE CONTRACTOR AND THE OWNER MUST INSTALL ALL ELEMENTS AND COMPONENTS IN STRICT COMPLIANCE WITH AND IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDED INSTALLATION CRITERIA AND SPECIFICATIONS. IF THE CONTRACTOR AND/OR OWNER FAIL TO DO SO, THEY AGREE TO JOINTLY, INDEPENDENTLY, SEPARATELY, COLLECTIVELY, AND SEVERALLY INDEMNIFY, DEFEND, PROTECT AND HOLD ENGINEER OF RECORD AND BOHLER PARTIES HARMLESS FOR ALL INJURIES AND DAMAGES THAT ENGINEER SUFFERS AND COSTS THAT ENGINEER INCURS AS A RESULT OF SAID FAILURE.

31. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN AN ON-SITE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IN COMPLIANCE WITH THE ENVIRONMENTAL PROTECTION AGENCY (EPA) REQUIREMENTS OR LOCAL GOVERNING AGENCY FOR SITES WHERE ONE (1) ACRE OR MORE IS DISTURBED BY CONSTRUCTION ACTIVITIES (UNLESS THE LOCAL JURISDICTION REQUIRES A DIFFERENT THRESHOLD). THE CONTRACTOR MUST ENSURE THAT ALL ACTIVITIES, INCLUDING THOSE OF ALL SUBCONTRACTORS, ARE IN COMPLIANCE WITH THE SWPPP, INCLUDING BUT NOT LIMITED TO LOGGING ACTIVITIES (MINIMUM ONCE PER WEEK AND AFTER RAINFALL EVENTS) AND CORRECTIVE MEASURES, AS APPROPRIATE AND FURTHER, THE CONTRACTOR IS SOLELY AND COMPLETELY RESPONSIBLE FOR FAILING TO DO SO.

32. AS CONTAINED IN THESE DRAWINGS AND ASSOCIATED DOCUMENTS PREPARED BY THE ENGINEER OF RECORD AND BOHLER, THE USE OF THE WORDS 'CERTIFY' OR 'CERTIFICATION' CONSTITUTE(S) AN EXPRESSION ONLY OF PROFESSIONAL OPINION REGARDING THE INFORMATION WHICH IS THE SUBJECT OF THE ENGINEER OF RECORD'S AND BOHLER KNOWLEDGE OR BELIEF AND IN ACCORDANCE WITH COMMON AND ACCEPTED PROCEDURE CONSISTENT WITH THE APPLICABLE STANDARDS OF PRACTICE, AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE OF ANY NATURE OR TYPE, EITHER EXPRESSED OR IMPLIED, UNDER ANY CIRCUMSTANCES.

33. IT IS THE CONTRACTOR'S RESPONSIBILITY TO HAVE SUBMITTALS PREPARED FOR ANY CONSTRUCTION DETAILED ITEMS AND TO COORDINATE THE SUBMITTALS WITH THE RESPECTIVE GOVERNING AGENCIES OR SERVICE PROVIDERS, WHO SHALL HAVE THE FINAL AUTHORITY IN APPROVING THE SUBMITTALS.

DEMOLITION NOTES

(Rev. 2/2021)

1. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES, IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES.

2. THE CONTRACTOR MUST CONDUCT DEMOLITION/REMOVALS ACTIVITIES IN SUCH A MANNER AS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, SIDEWALKS, WALKWAYS, AND ALL OTHER ADJACENT FACILITIES. THE CONTRACTOR MUST OBTAIN ALL APPLICABLE PERMITS FROM THE APPROPRIATE GOVERNMENTAL AUTHORITY(IES) PRIOR TO THE COMMENCEMENT OF ANY ROAD OPENING OR DEMOLITION ACTIVITIES IN OR ADJACENT TO THE RIGHT-OF-WAY.

3. WHEN DEMOLITION-RELATED ACTIVITIES IMPACT ROADWAYS AND/OR ROADWAY RIGHT-OF-WAY, THE CONTRACTOR MUST PROVIDE TRAFFIC CONTROL AND GENERALLY ACCEPTED SAFE PRACTICES IN CONFORMANCE WITH THE CURRENT FEDERAL HIGHWAY ADMINISTRATION "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), FEDERAL, STATE AND LOCAL REGULATIONS.

4. THE DEMOLITION (AND/OR REMOVALS) PLAN IS INTENDED TO PROVIDE GENERAL INFORMATION AND TO IDENTIFY ONLY CONDITIONS REGARDING ITEMS TO BE DEMOLISHED, REMOVED, AND/OR TO REMAIN.

   A. THE CONTRACTOR MUST ALSO REVIEW ALL CONSTRUCTION DOCUMENTS AND INCLUDE WITHIN THE DEMOLITION ACTIVITIES ALL INCIDENTAL WORK NECESSARY FOR THE CONSTRUCTION OF THE NEW SITE IMPROVEMENTS.
   B. THIS PLAN IS NOT INTENDED TO AND DOES NOT CONTAIN INFORMATION REGARDING THE MEANS, METHODS, SEQUENCING, TECHNIQUES AND PROCEDURES TO BE EMPLOYED TO ACCOMPLISH THE WORK. ALL MEANS, METHODS, SEQUENCING, TECHNIQUES AND PROCEDURES TO BE USED MUST BE IN STRICT ACCORDANCE AND CONFORMANCE WITH ALL STATE, FEDERAL, LOCAL, AND JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR MUST COMPLY WITH ALL OSHA AND OTHER SAFETY PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK SITE FOR THE CONTRACTOR AND THE PUBLIC.

5. THE CONTRACTOR MUST PROVIDE ALL "METHODS AND MEANS" NECESSARY TO PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF EXISTING STRUCTURES, AND ANY OTHER IMPROVEMENTS THAT ARE REMAINING ON OR OFF SITE. THE CONTRACTOR, AT THE CONTRACTOR'S SOLE COST, MUST REPAIR ALL DAMAGE TO ALL ITEMS AND FEATURES THAT ARE TO REMAIN. CONTRACTOR MUST USE NEW MATERIAL FOR ALL REPAIRS. CONTRACTOR'S REPAIRS MUST INCLUDE THE RESTORATION OF ALL ITEMS AND FEATURES REPAIRED TO THEIR PRE-DEMOLITION CONDITION, OR BETTER. CONTRACTOR MUST PERFORM ALL REPAIRS AT THE CONTRACTOR'S SOLE EXPENSE.

6. ENGINEER OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION. THE CONTRACTOR MUST PROCEED WITH THE DEMOLITION IN A SYSTEMATIC AND SAFE MANNER AND IN ACCORDANCE WITH ALL APPLICABLE REQUIREMENTS, TO ENSURE PUBLIC AND CONTRACTOR SAFETY AND SAFETY TO ALL PROPERTY ON THE SITE OR ADJACENT OR NEAR TO THE SAME.

7. THE CONTRACTOR IS RESPONSIBLE FOR JOB SITE SAFETY, WHICH MUST INCLUDE, BUT IS NOT LIMITED TO, THE INSTALLATION AND MAINTENANCE OF BARRIERS, FENCING, OTHER APPROPRIATE AND/OR NECESSARY SAFETY FEATURES AND ITEMS NECESSARY TO PROTECT THE PUBLIC FROM AREAS OF CONSTRUCTION ACTIVITY AND/OR DEMOLITION ACTIVITIES. THE CONTRACTOR MUST ENSURE THAT THE AREA AROUND THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE ENTRY OF ALL UNAUTHORIZED PERSONS AT ANY TIME, TO OR NEAR THE DEMOLITION AREA.

8. PRIOR TO THE COMMENCEMENT OF ANY SITE ACTIVITY AND ANY DEMOLITION ACTIVITY, THE CONTRACTOR MUST, IN WRITING, RAISE ANY QUESTIONS CONCERNING THE ACCURACY OR INTENT OF THESE PLANS AND/OR SPECIFICATIONS, ALL CONCER

LEGEND

E & S KEYNOTES

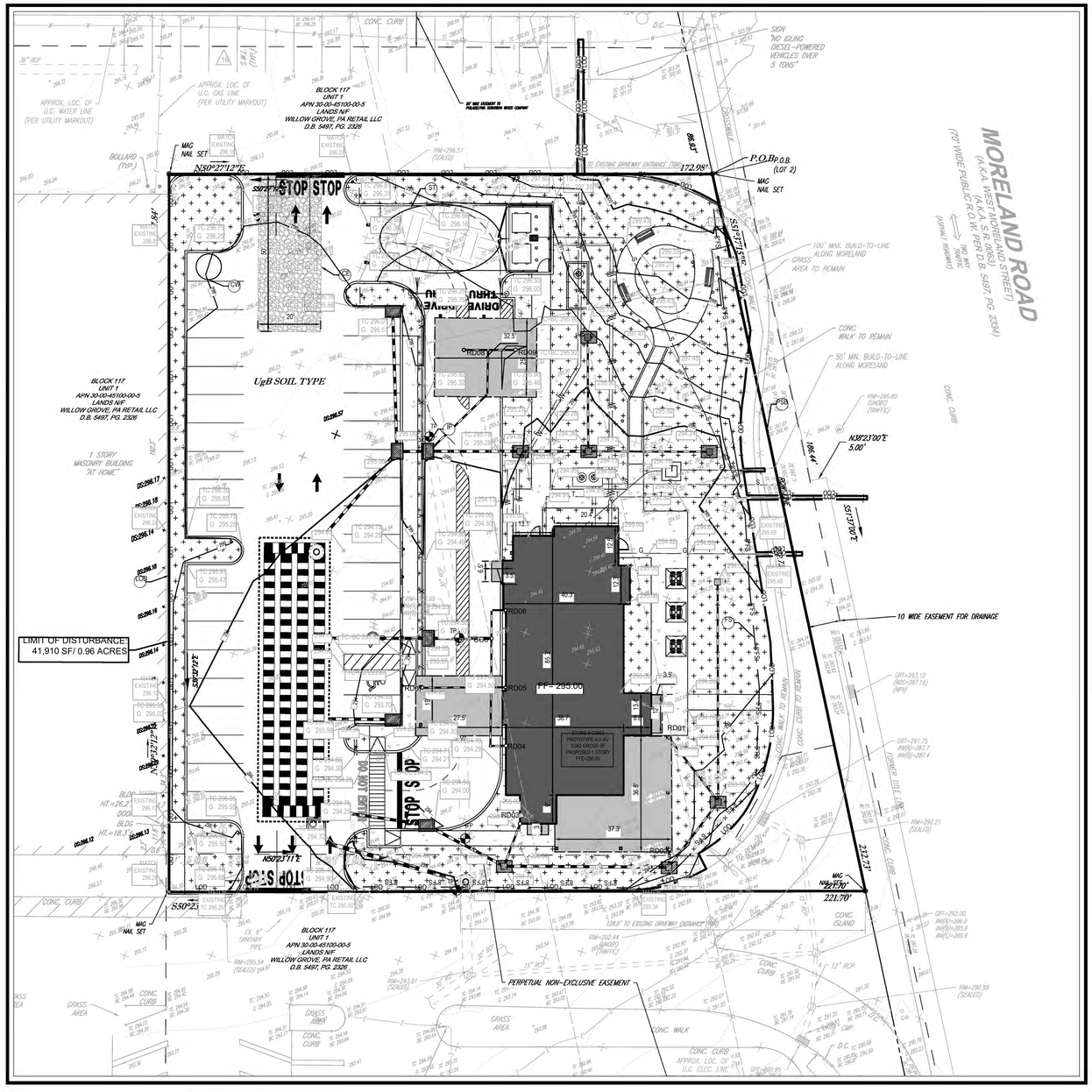
CE	ROCK CONSTRUCTION ENTRANCE
FS	FILTER SOCK
IP	PROPOSED CURB INLET PROTECTION
CW	CONCRETE WASHOUT
ST	PROP. TOPSOIL STOCKPILE
PSB	PROJECT SITE BOUNDARY
LOD	LIMIT OF DISTURBANCE

Compost Filter Sock Worksheet

Project: PP2270001

Description: Compost Filter Socks

Location	SiltSoxx Size (inches)	Slope (%)	Max. Allowable Slope Length Above Barrier (ft)*	Provided Slope Length Above Barrier (ft)
NE	8	5.80	184	110
SE	8	3.60	293	55



SEQUENCE OF CONSTRUCTION

1. 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 THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
2. AT LEAST SEVEN (7) DAYS BEFORE COMMENCEMENT OF ANY EARTH DISTURBANCE ACTIVITIES, THE OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES, THE LAND OWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE EROSION AND SEDIMENTATION CONTROL PLAN PREPARER, AND THE INSPECTIONS COORDINATOR AT PWD (215-685-6387) TO AN ON-SITE PRE-CONSTRUCTION MEETING.
   - A. CONTRACTOR MUST PROVIDE AN AS-BUILT SURVEY PLAN FOR ON-SITE AND OFF-SITE IMPROVEMENTS. CONTRACTOR MUST CONFIRM PWD STORMWATER AS-BUILT REQUIREMENTS WITH PWD AT THIS TIME. AS-BUILT PLAN APPROVAL BY PWD IS REQUIRED TO OBTAIN A CERTIFICATE OF OCCUPANCY AND SHALL GENERALLY INCLUDE:
   - I. CONTRACTOR MUST PROVIDE CONSTRUCTION CERTIFICATION PACKAGE, INCLUDING SMP CONSTRUCTION CERTIFICATION FORMS FOR EACH SMP, TO PWD.
   - II. A LICENSED PROFESSIONAL/DESIGNEE MUST DOCUMENT THE INFORMATION AND MEASUREMENTS REQUIRED ON THE SMP CONSTRUCTION CERTIFICATION FORM(S) WITHIN THE CONSTRUCTION CERTIFICATION PACKAGE.
   - III. AS-BUILT PLAN TO INCLUDE GRADING AND DRAINAGE INCLUDING THE PROPOSED DETENTION BASIN AND ASSOCIATED STRUCTURES INCLUDING BUT NOT LIMITED TO MANHOLE/INLET RIM AND GRATE ELEVATIONS, INVERTS, AND SUMPS; PIPE LENGTH, SLOPE, PIPE SIZE AND MATERIAL, ETC.
   - IV. AS-BUILT PLAN MUST BE PREPARED AND SIGN/SEALED BY A PROFESSIONAL ENGINEER, REGISTERED ARCHITECT, LANDSCAPE ARCHITECT, PROFESSIONAL GEOLOGIST, LICENSED CONTRACTOR OR REGISTERED LAND SURVEYOR IN PA.
   - V. CONTRACTOR MUST RETAIN RECEIPTS OF MATERIALS PURCHASED ASSOCIATED WITH THE DETENTION BASIN, MEDIA FILTER, AND INLET/MANHOLES AND PROVIDE TO PWD.
   - B. CONTRACTOR MUST FIELD VERIFY EXISTING SPOT ELEVATIONS AND INVERTS AS DESIGNATED ON THE PLAN, PRIOR TO CONSTRUCTION. THE VERIFIED ELEVATIONS MUST BE PROVIDED TO THE SITE/CIVIL ENGINEER.
   - C. CONTRACTOR MUST MAINTAIN EXISTING UTILITY SERVICE TO ADJACENT EXISTING BUILDINGS TO REMAIN THROUGHOUT CONSTRUCTION.
   - D. PRIOR TO CONSTRUCTION, CONTRACTOR TO FIELD VERIFY ALL EXISTING UTILITIES WITHIN THE LIMIT OF DISTURBANCE INCLUDING SANITARY, SEWER, GAS LINE, ELECTRIC LINE, ETC. LOCATION, DEPTH AND SIZE AS NOTED ON THE PLAN AND NOTIFY ENGINEER OF ANY DISCREPANCIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LATERALS SERVING THE EXISTING BUILDINGS ON ADJACENT PROPERTIES.
3. ALL STRUCTURES ASSOCIATED WITH CONSTRUCTION OF SEDIMENT AND EROSION CONTROL MEASURES MUST BE AVAILABLE ON-SITE PRIOR TO ANY EARTH MOVING/DISTURBANCE.
4. CONTRACTOR MUST CONFIRM LOCATION OF EXISTING UTILITIES, ON-SITE AND WITHIN THE RIGHT-OF-WAYS PRIOR TO DEMOLITION. (INCLUDING BUT NOT LIMITED TO TELEPHONE, GAS, ELECTRIC, CABLE, WATER, AND COMBINED SEWER.)
5. INSTALL INLET PROTECTION AS DESIGNATED ON THE PLAN.
6. INSTALL Filter Sock AS SHOWN ON THE PLAN. OBJECTS OF CONSIDERABLE MASS (I.E. CONCRETE BLOCKS, SAND BAGS, ECT.) MUST BE USED IMMEDIATELY DOWNSLOPE OF COMPOST SOCKS PLACED ON PAVED SURFACES (AT THE SAME INTERVALS AS RECOMMENDED BY THE MANUFACTURER FOR STAKES) IN ORDER TO HELP HOLD THEM IN PLACE.
7. DEMOLISH EXISTING SITE FEATURES INCLUDING BUT NOT LIMITED TO: EXISTING BUILDING AND EXISTING PARKING AREA, ETC.
8. CLEAR AND GRUB WITHIN THE LIMIT OF DISTURBANCE AS INDICATED ON THE PLANS. STRIP AND STOCKPILE SOIL WITHIN AREAS TO BE DISTURBED AS INDICATED ON THE PLANS. STOCKPILE SIDE SLOPES SHALL BE 2H:1V OR FLATTER – PLACE Filter Sock AROUND BASE OF TOPSOIL STOCKPILE.
9. CONTINUE SITE DEMOLITION AND COMMENCE SOIL EXCAVATIONS, AND ASSOCIATED STOCKPILING AS DESIGNATED ON THE PLANS. EXPORT EXCESS CUT MATERIAL AS REQUIRED (DETERMINED BY CONTRACTOR), IN A LAWFUL MANNER, AS INDICATED ON THE PLANS.
10. INITIATE BULK EARTHWORK ACTIVITIES (EXCAVATION, PLACEMENT, AND COMPACTION):
    - A. IN AREAS RECEIVING FILL, PLACE FILL IN APPROPRIATE LIFTS ACROSS THE ENTIRE FILL AREA SO AS NOT TO TRAP WATER UPSTREAM OF THE PROPOSED EROSION CONTROLS.
    - B. AS AREAS ARE BROUGHT TO PROPOSED SUBGRADE ELEVATION, INITIATE CONSTRUCTION OF UTILITIES INCLUDING BUT NOT LIMITED TO SANITARY, STORM, WATER, ELECTRIC, TELEPHONE, AND GAS. TRENCH EXCAVATION SHALL BE LIMITED TO THE LENGTH OF PIPE THAT CAN BE INSTALLED IN ONE (1) DAY. CONTINUE THESE INSTALLATIONS AS AREAS BECOME AVAILABLE. CONTRACTOR MUST PROVIDE ADEQUATE DEWATERING OF ANY TRENCHES THAT ENCOUNTER GROUNDWATER. (SEE PUMP FILTERING DETAIL.)
    - C. AS AREAS BECOME AVAILABLE, BEGIN CONSTRUCTION OF BUILDING INCLUDING BUT NOT LIMITED TO BUILDING FOUNDATION, FOUNDATION ELEMENTS, ETC.
    - D. AT LEAST THREE (3) DAYS BEFORE BEGINNING CONSTRUCTION OF THE BASIN, CONTRACTOR TO CALL PWD (215- 685-6387) FOR AN INSPECTION.
11. CONTINUE CONSTRUCTION OF UTILITIES, INSTALL SITE LIGHTING FOUNDATIONS, LIGHT STANDARDS, AND ASSOCIATED CONDUIT. REFER TO ARCHITECTURAL DRAWINGS FOR LIGHT CONDUIT LOCATIONS.
12. INSTALL PROPOSED CURB AS INDICATED ON THE PLANS.
13. INSTALL STONE BASE COURSE, BINDER COURSE, AND WEARING COURSE FOR THE ASPHALT AREAS. INSTALL PAVEMENT. THE PAVEMENT STONE BED SHALL BE PLACED ACCORDING TO THE DETAILS AND SPECIFICATIONS.
14. REMOVE ALL CONSTRUCTION DEBRIS AND EXCESS CUT MATERIAL FROM THE SITE IN A LAWFUL MANNER.
15. CRITICAL STAGE #4– A DESIGNEE/LICENCED PROFESSIONAL SHALL BE PRESENT ON THE SITE DURING CRITICAL STAGES OF IMPLEMENTATION. A LICENSED PROFESSIONAL/DESIGNEE MUST DOCUMENT THE INFORMATION AND MEASUREMENTS REQUIRED ON THE SMP CONSTRUCTION CERTIFICATION FORM(S) WITHIN THE CONSTRUCTION CERTIFICATION PACKAGE. IF INSPECTION INDICATES THAT SOIL SEDIMENT HAS ENTERED EITHER THE UNDERGROUND BASIN OR THE PAVEMENT AREAS THE CONTRACTOR MAY BE REQUIRED TO REMOVE THE SEDIMENT AND REPLACE WITH CLEAN, WASHED STONE. IF INSPECTION INDICATES SEDIMENT HAS ENTERED THE STORMSEWER, CLEANOUT/VACUUM THE INSTALLED STORM SEWER/INLET SYSTEM OF SEDIMENT WITH A VACUUM TRUCK.
16. FINAL GRADE LANDSCAPE AREAS, PLANT TREES AND SHRUBS, AND SPREAD TOP SOIL AS SHOWN ON THE LANDSCAPE PLAN.
17. UPON SITE STABILIZATION (UNIFORM COVERAGE OR DENSITY OF 70% ACROSS ALL DISTURBED AREAS) AND NOTIFICATION OF THE PHILADELPHIA WATER DEPARTMENT EROSION CONTROL STAFF, REMOVE EROSION AND SEDIMENT CONTROL MEASURES INCLUDING BUT NOT LIMITED TO Filter Sock AND INLET PROTECTION. ANY AREA DISTURBED DURING THE REMOVAL OF EROSION AND SEDIMENT CONTROL MEASURES SHALL BE STABILIZED IMMEDIATELY AS INDICATED ON THE PLANS.
18. DEMOBILIZE.



LOCATION MAP
SCALE: 1" = 500'

LEGEND — PROPOSED

LIMIT OF DISTURBANCE/ PROJECT SITE BOUNDARY	LOD
8" COMPOST FILTER SOCK	8"FS
CONCRETE WASHOUT	CW
TEMPORARY STOCKPILE	SF
ROCK CONSTRUCTION ENTRANCE	CE

LEGEND — PROPOSED

PROPERTY LINE
BUILDING
CANOPY
CONCRETE/ ASPHALT
LANDSCAPE
PARKING COUNT
RAMP
SIGN
BOLLARD
FENCE
CONCRETE CURB
FLUSH CURB
ACCESSIBLE SYMBOL
TRAFFIC ARROWS
CLEANOUT
HOUSE TRAP
YARD DRAIN
DRAINAGE INLET
MANHOLE

LEGEND — EXISTING

PROPERTY LINE
ADJACENT PROPERTY LINE
EASEMENT LINE
SETBACK LINE
BUILDING
CONCRETE CURB
FLUSH CURB
ACCESSIBLE SYMBOL
SIGN
PARKING COUNT
AREA LIGHT
TREE
DRAINAGE INLET
STORM/SANITARY MANHOLE
WATER/GAS VALVES
ROOF DRAIN/CLEANOUT
FIRE HYDRANT
UTILITY POLE W/ LIGHT
UTILITY POLE
OVERHEAD UTILITY WIRES

Raising Cane's Chicken Fingers
Restaurant Support Office
6800 Bishop Road, Plano, TX 75024
Tele: 972-769-3100 Fax: 972-769-3101

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

Know what's below. Call before you dig.
PENNSYLVANIA
YOU MUST CALL 811 BEFORE ANY EXCAVATION WHETHER IT'S ON PRIVATE OR PUBLIC LAND.
1-800-242-1776
www.pa1call.org
20220541701

PROJECT No.:	PP2270001
DRAWN BY:	BMM
CHECKED BY:	KRT
DATE:	10.26.22
CAD I.D.:	PP2270001-X-TTLB-PHPD

PROJECT:
PRELIMINARY/ FINAL LAND DEVELOPMENT PLANS
FOR
RAISING CANE'S RESTAURANTS, LLC.

PROPOSED RESTAURANT #C0952

2620 WEST MORELAND ROAD
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

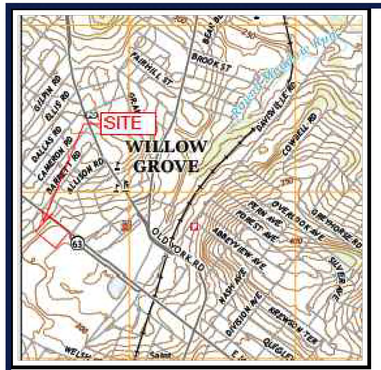
BOHLER
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PA 19102
Phone: (267) 402-3400
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K.R. TATLOW
COMMONWEALTH OF PENNSYLVANIA
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE088832

SHEET TITLE:
SOIL EROSION & SEDIMENT POLLUTION CONTROL PLAN
SHEET NUMBER:
C3.0

ORG. DATE - 10.26.22

R:\2022\PP2270001\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\PP2270001-LDVP-GA-----LAYOUT C3-0 E & S PLAN



USGS MAP

LOCATION OF ALL SURFACE WATERS AND THEIR CLASSIFICATION UNDER CHAPTER 93

§102.4(b)(5)(v)

THE SUBJECT SITE IS LOCATED WITHIN THE UPPER PENNYPACK CREEK WATERSHED, WHICH HAS A WWF (WARM WATER FISHES) & MF (MIGRATORY FISHES) CHAPTER 93 CLASSIFICATION.

RECYCLING OR DISPOSAL OF MATERIALS

§102.4(b)(5)(xi)

THE FOLLOWING IS A LIST THAT INCLUDES, BUT THAT IS NOT LIMITED TO, THE POTENTIAL CONSTRUCTION WASTES THAT MAY EXIST ON-SITE:
- CONCRETE CURB AND SIDEWALK
- ASPHALT
- E&S BMP - COMPOST FILTER SOCKS
- E&S BMP - TEMPORARY RISER
- E&S BMP - EROSION CONTROL MATTING
- E&S BMP - STONE INLET PROTECTION
- E&S BMP - STONE & CONCRETE BLOCK INLET PROTECTION
- E&S BMP - REGULATED FILL MATERIALS

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. BELOW IS A LIST OF METHODS FOR THE PROPER RECYCLING/DISPOSAL OF VARIOUS MATERIALS:

1.) DUST CONTROL - CONSTRUCTION TRAFFIC MUST ENTER AND EXIT THE SITE AT THE STABILIZED CONSTRUCTION ENTRANCE. THE PURPOSE IS TO TRAP DUST AND MUD THAT WOULD OTHERWISE BE CARRIED OFF-SITE BY CONSTRUCTION TRAFFIC. WATER TRUCKS WILL BE USED AS NEEDED DURING CONSTRUCTION TO REDUCE DUST GENERATED ON THE SITE. DUST CONTROL MUST BE PROVIDED BY THE CONTRACTOR TO A DEGREE THAT IS ACCEPTABLE TO THE LOCAL CONSERVATION DISTRICT. AFTER CONSTRUCTION, THE SITE WILL BE STABILIZED, WHICH WILL REDUCE THE POTENTIAL FOR DUST GENERATION.

2.) SOLID WASTE DISPOSAL - NO SOLID MATERIALS, INCLUDING BUILDING MATERIALS, ARE ALLOWED TO BE DISCHARGED FROM THE SITE WITH STORMWATER. ALL SOLID WASTE, INCLUDING DISPOSABLE MATERIALS INCIDENTAL TO THE MAJOR CONSTRUCTION ACTIVITIES, MUST BE COLLECTED AND PLACED IN CONTAINERS. THE CONTAINERS WILL BE EMPTIED AS NECESSARY BY A CONTRACT TRASH DISPOSAL SERVICE AND HAULED AWAY FROM THE SITE.

3.) SANITARY FACILITIES - ALL PERSONNEL INVOLVED WITH CONSTRUCTION ACTIVITIES MUST COMPLY WITH STATE AND LOCAL SANITARY OR SEPTIC SYSTEM REGULATIONS. TEMPORARY SANITARY FACILITIES WILL BE PROVIDED AT THE SITE THROUGHOUT THE CONSTRUCTION PHASE. THEY MUST BE UTILIZED BY ALL CONSTRUCTION PERSONNEL AND WILL BE SERVICED BY A LICENSED COMMERCIAL OPERATOR.

4.) WATER SOURCE - NON-STORMWATER COMPONENTS OF SITE DISCHARGE MUST BE CLEAN WATER. WATER USED FOR CONSTRUCTION WHICH DISCHARGES FROM THE SITE MUST ORIGINATE FROM A PUBLIC WATER SUPPLY OR PRIVATE WELL APPROVED BY THE STATE HEALTH DEPARTMENT. WATER USED FOR CONSTRUCTION THAT DOES NOT ORIGINATE FROM AN APPROVED PUBLIC SUPPLY MUST NOT DISCHARGE FROM THE SITE.

5.) CONCRETE WASTE FROM CONCRETE READY-MIX TRUCKS - DISCHARGE OF EXCESS OR WASTE CONCRETE AND/OR WASH WATER FROM CONCRETE TRUCKS WILL BE ALLOWED ON THE CONSTRUCTION SITE, BUT ONLY IN SPECIFICALLY DESIGNATED DIKED AREAS PREPARED TO PREVENT CONTACT BETWEEN THE CONCRETE AND/OR WASH WATER AND STORMWATER THAT WILL BE DISCHARGED FROM THE SITE.

GEOLOGIC FORMATIONS/SOIL CONDITIONS THAT MAY HAVE THE POTENTIAL TO CAUSE POLLUTION

§102.4(b)(5)(xii)

THERE ARE NO GEOLOGIC FORMATIONS OR SOIL CONDITIONS THAT COULD CAUSE CONTAMINANT POLLUTION DURING EARTH DISTURBANCE ACTIVITIES.

POTENTIAL THERMAL IMPACTS TO SURFACE WATERS

A POTENTIAL FOR THERMAL IMPACTS EXISTS IN INSTANCES WHERE SURFACE RUNOFF IS DIRECTLY CONVEYED TO A RECEIVING STREAM WITHOUT ADEQUATE ATTENUATION OR COOLING. TO AVOID THERMAL IMPACTS, THE FOLLOWING ARE PROPOSED: UNDERGROUND DETENTION BASIN, DETENTION TRENCHES, VEGETATED SWALES, CISTERNS, RAINGARDENS, AND SUBSTANTIAL AMOUNTS OF VEGETATION AROUND EACH OF THE BMPs. ALL OF THOSE MEASURES WILL HELP TO CONTROL RUNOFF VOLUME AND RATE AND THEREBY PROVIDE ADDITIONAL COOLING TIME, THEREBY MINIMIZING THERMAL IMPACTS TO THE RECEIVING STREAM.



SOIL MAP

TYPES, DEPTH, SLOPE, LOCATIONS, AND LIMITATIONS OF THE SOILS

§102.4(b)(5)(ii)

SOIL DESCRIPTIONS

SOIL	DESCRIPTION	SOIL GROUP
UgB	- URBAN LAND, 0 TO 8 PERCENT SLOPES	C

SOIL USE LIMITATIONS AND THEIR RESOLUTIONS PROVIDED

CONTRACTOR SHALL CONSULT WITH GEOTECHNICAL ENGINEER TO DETERMINE SOIL LIMITATIONS AND RESOLUTIONS SPECIFIC TO THIS PROJECT.

1. SOIL TYPES POORLY SUITED AS SOURCES OF TOPSOIL RESTRICT OR PLACE CONDITIONS ON PLANNING VEGETATIVE STABILIZATION. ACIDIC, LOW FERTILITY, EXCESSIVE DRYNESS AND EXCESSIVE WETNESS LIMIT PLANT GROWTH.

RESOLUTIONS: IDENTIFYING AND RESOLVING CHARACTERISTICS, THAT RENDER THE SOIL TYPES POORLY, SUITED AS TOPSOIL.

2. ACIDIC SOIL TYPES EXHIBITING PH REACTION VALUES LOWER THAN ABOUT 5.5, LIMIT VEGETATIVE STABILIZATION. SOIL TESTS MIGHT BE NECESSARY TO DETERMINE SITE SPECIFIC PH REACTION.

RESOLUTIONS: APPLYING LIME CONSISTENT WITH RATES DETERMINED BY SOIL TESTING; SELECTING VEGETATIVE SPECIES TOLERANT TO ACIDIC SOIL CONDITIONS; AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLE 1 OF THE EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND PUBLISHED BY PENN STATE.

3. LOW FERTILITY SOIL TYPES LACKING IN SUFFICIENT AMOUNTS OF ESSENTIAL PLANT NUTRIENTS SUCH AS: NITRPGEN, PHOSPHOROUS, POTASSIUM, SULFER, MAGNESIUM, CALCIUM, IRON, MANGANESE, BORON, CHLORINE, ZINC, COPPER AND MOLYBDENUM, LIMIT VEGETATION STABILIZATION. SOIL TESTS MIGHT BE NECESSARY TO DETERMINE SITE SPECIFIC SOIL FERTILITY.

RESOLUTIONS: INCORPORATING SOIL NUTRIENTS CONSISTENT WITH RATES DETERMINED BY SOIL TESTING; SELECTIVE VEGETATIVE SPECIES TOLERANT TO LOW FERTILITY SOIL CONDITIONS; AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLE 1 OF THE EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND PUBLISHED BY PENN STATE.

4. ERODIBLE SOIL TYPES EXHIBITING K VALUES GREATER THAN 0.36 OR PLASTICITY INDEX VALUES LOWER THAN 10, LIMIT VEGETATIVE STABILIZATION OF CHANNELS.

RESOLUTIONS: TEMPORARY CHANNEL LINING, PROVIDING PERMANENT CHANNEL LINING, DECREASING CHANNEL GRADE, INCREASING CHANNEL WIDTH. SELECTING VEGETATIVE WITH GREATER RETARDANCE, SELECTING PERMANENT LININGS OTHER THAN GRASSES, AND IMPLEMENTING COMBINATION OF THESE AND/OR METHODS. VEGETATIVE RETARDANCE INFORMATION IS PROVIDED IN TABLES 6 AND 7 OF THE EROSION AND SEDIMENT POLLUTION CONTROL MANUAL PUBLISHED BY PADEP.

5. WET SOIL TYPES HAVE EXCESSIVE ROOT ZONE AND SOIL MOISTURES. SOME SOIL SURVEYS INDICATE WETNESS, HIGH WATER TABLE AND FLOODING. THIS INDICATOR IS AFFECTED BY SOIL DISTURBANCE.

RESOLUTIONS: SELECTING VEGETATIVE SPECIES TOLERANT TO WET CONDITIONS, TILING VEGETATIVE AREAS, AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLE 1 OF THE EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND PUBLISHED BY PENN STATE.

6. DRY SOIL TYPES LACK SUFFICIENT ROOT ZONE SOIL MOISTURES. THIS INDICATOR IS AFFECTED BY SOIL DISTURBANCE.

RESOLUTIONS: SELECTING VEGETATIVE SPECIES TOLERANT TO DRY CONDITIONS, IRRIGATING VEGETATED AREAS AND IMPLEMENTING COMBINATION OF THESE AND/OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLE 1 OF THE EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND PUBLISHED BY PENN STATE.

7. SOIL TYPES SUSCEPTIBLE TO SINKHOLE AND SOLUTION CHANNEL/CHAMBER FORMATION POSE LIMITATIONS ON LOCATING RESERVOIR AREAS OF SEDIMENT BASINS, SEDIMENT TRAPS, STORMWATER RETENTION BASINS, AND STORMWATER DETENTION BASINS.

RESOLUTIONS: LOCATING THOSE FACILITIES ON OTHER SOIL TYPES, LINING RESERVOIR AREAS WITH IMPERMEABLE LINNINGS, LIMITING STANDING WATER DEPTHS, LIMITING RETENTION TIMES AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS.

8. SOIL TYPES THAT EXHIBIT INSTABILITY IN POND EMBANKMENTS OR SUSCEPTIBILITY TO PIPING AND SEEPING POSE LIMITATIONS ON PLANNING EMBANKMENTS OF SEDIMENT BASINS, SEDIMENT TRAPS, STORMWATER RETENTION BASINS AND STORMWATER DETENTION BASINS.

RESOLUTIONS: IMPORTING OTHER SOIL FOR EMBANKMENT OF THOSE FACILITIES, LOCATING THOSE FACILITIES ON OTHER SOIL TYPES, LIMITING EMBANKMENT SLOPE STEEPNESS AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS.

9. SOIL THAT ARE DIFFICULT TO COMPACT, UNSUITABLE FOR WINTER GRADING, OR SUSCEPTIBLE TO FROST ACTION POSE LIMITATIONS ON PLANNING EMBANKMENTS OF SEDIMENT BASINS, SEDIMENT TRAPS, STORMWATER RETENTION BASINS AND STORMWATER DETENTION BASINS.

RESOLUTIONS: IMPORTING OTHER SOIL FOR EMBANKMENT OF THOSE FACILITIES, LOCATING THOSE FACILITIES ON OTHER SOIL TYPES, NOT CONSTRUCTING EMBANKMENTS DURING PERIODS PRONE TO FROST AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS

10. SUSCEPTIBILITY FOR THE DEVELOPMENT OF SINKHOLE WITHIN IDENTIFIED SOILS.

RESOLUTIONS: IN THE EVENT THAT PRESENCE OF A SINKHOLE IS DETECTED DURING THE COURSE OF WORK, CORRECTIVE MEASURES SHALL BE PERFORMED UNDER THE OBSERVATION AND GUIDANCE OF THE OWNER'S GEOTECHNICAL CONSULTANT.
EXCAVATE THE LOOSE, WET SOILS SURROUNDING THE SINKHOLE TO EXPOSE THE SINKHOLE "THROAT" (THE OPENING IN THE ROCK) AND THE ADJACENT STABLE SOILS/ROCK WHERE POSSIBLE, THE EXCAVATION SHALL EXTEND A MINIMUM OF TWO FEET (2') BEYOND THE STABLE SOILS OR TO THE ROCK SURFACE, WHICHEVER IS ENCOUNTERED FIRST.
FILL THE EXPOSED SINKHOLE "THROAT" WITH LEAN CONCRETE TO BLOCK THE MIGRATION OF THE UPPER LAYERS OF SOIL THROUGH THE ROCK OPENING.
AFTER CONCRETE HAS CURED OVERNIGHT BACKFILL THE REMAINDER OF THE EXCAVATION WITH CLAYEY SOILS TO PROVIDE A LOW PERMEABILITY BARRIER. THE CLAYEY SOILS SHALL BE PLACED IN 8" LIFTS AND EACH LIFT COMPACTED BY REPEATED PASSES OF THE COMPACTION EQUIPMENT UNTIL STABLE. CARE SHALL BE TAKEN TO ASSURE THAT THE SOIL AT THE EDGES OF THE EXCAVATION ARE WELL COMPACTED.

E&S PLAN DESIGNED AND IMPLEMENTED TO BE CONSISTENT WITH PCSM PLAN

§102.4(b)(5)(xiv)

REGARDING THE LOCATIONS OF EXISTING RIPARIAN BUFFERS RELATIVE TO THE LIMIT OF DISTURBANCE AND WHETHER PROPOSED DETENTION FACILITIES ARE OUTSIDE OF PROPOSED GRADING AREAS, NOTE THE FOLLOWING:
- THERE ARE NO EXISTING OR PROPOSED RIPARIAN BUFFERS.
- THERE ARE NO PROPOSED DETENTION BMPs OUTSIDE OF PROPOSED GRADING AREAS.

EXISTING/PROPOSED RIPARIAN FOREST BUFFERS

§102.4(b)(5)(xv)

REGARDING EXISTING OR PROPOSED RIPARIAN FOREST BUFFERS, NOTE THE FOLLOWING:
- THERE ARE NO EXISTING/PROPOSED RIPARIAN FOREST BUFFERS LOCATED WITHIN OR OUTSIDE THE LIMITS OF DISTURBANCE FOR THIS PROJECT.

OR

- THE EXISTING AND/OR PROPOSED RIPARIAN FOREST BUFFERS ARE SHOWN ON THE E&S PLAN.
- THE EXISTING AND/OR PROPOSED RIPARIAN FOREST BUFFERS LOCATED OUTSIDE THE LIMITS OF DISTURBANCE ARE SHOWN ON THE E&S PLAN.
- PROTECTION HAS BEEN PROVIDED FOR THE WETLANDS WITHIN THE RIPARIAN FOREST BUFFER.
- THE APPROPRIATE RIPARIAN BUFFER OFFSET IS SHOWN ON THE E&S PLAN.

SEQUENCE OF BMP INSTALLATION AND REMOVAL

§102.4(b)(5)(vii)

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED IN COMPLIANCE WITH CHAPTER 102 REGULATIONS BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE. UPON COMPLETION OR TEMPORARY CESSATION OF THE EARTH DISTURBANCE ACTIVITY THAT WILL EXCEED FOUR (4) DAYS [IMMEDIATELY FOR HQ/EV WATERSHEDS], OR ANY STAGE THEREOF, THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZED WITH THE APPROPRIATE TEMPORARY OR PERMANENT STABILIZATION.

AT LEAST SEVEN (7) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES INCLUDING, BUT NOT LIMITED TO: THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS AND A REPRESENTATIVE OF THE MONTGOMERY COUNTY CONSERVATION DISTRICT FOR AN ON-SITE PRE-CONSTRUCTION MEETING. ALSO, AT LEAST THREE (3) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INC. AT 1-800-242-1776 FOR BURIED UTILITIES LOCATIONS.

BEFORE INITIATING ANY REVISION 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 MONTGOMERY COUNTY CONSERVATION DISTRICT. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED. 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.

1. INSTALL CONSTRUCTION ENTRANCE [AND STAGING AREAS] AS DESIGNATED ON THE PLANS.
2. INSTALL ALL PERIMETER [COMPOST FILTER SOCKS, SILT FENCE, TREE PROTECTION FENCING, CONSTRUCTION FENCING, INLET PROTECTION] WITHIN THE DESIGNATED LIMIT OF DISTURBANCE AS INDICATED ON THE PLANS. ONLY LIMITED CLEARING AND GRUBBING NECESSARY TO INSTALL THE PERIMETER EROSION AND SEDIMENT POLLUTION CONTROLS IS PERMITTED.
3. CONSTRUCT [SEDIMENT BASIN(S), SEDIMENT TRAP(S)]. ONLY LIMITED CLEARING AND GRUBBING IS PERMITTED FOR CONSTRUCTION OF ACCESS TO THE [SEDIMENT BASIN, SEDIMENT TRAP]. CONSTRUCTION OF THE [SEDIMENT BASIN, SEDIMENT TRAP] SHALL INCLUDE THE NECESSARY CLEARING AND GRUBBING, EARTHWORK, INSTALLATION OF THE PERMANENT BASIN OUTFALL SYSTEM AND ALL OTHER [SEDIMENT BASIN, SEDIMENT TRAP] FEATURES AS SHOWN ON THE PLANS AND DETAILS., AND ANY NECESSARY TEMPORARY STABILIZATION OF ALL DISTURBED AREAS. THE BASIN IS TO BE STABILIZED AND FUNCTIONING PROPERLY PRIOR TO ANY FURTHER EARTH DISTURBANCE ACTIVITIES. **UPON INSTALLATION OF THE SEDIMENT BASIN RISER(S), AN IMMEDIATE INSPECTION OF THE RISER(S) SHOULL BE CONDUCTED BY A QUALIFIED SITE REPRESENTATIVE AND THE MONTGOMERY COUNTY CONSERVATION DISTRICT SHALL BE NOTIFIED IN WRITING THAT THE PROPER RISER IS INSTALLED AND SEALED, PER PLAN.** SEDIMENT BASINS MUST BE PROTECTED FROM UNAUTHORIZED ACTS OF THIRD PARTIES. REFER TO THE SEDIMENT BASIN SOIL CONSERVATION DISTRICT MONITORING, INSPECTION AND REPORTING REQUIREMENTS PROVIDED ON THE SOIL EROSION AND SEDIMENT POLLUTION CONTROL NOTES FOR ADDITIONAL SEDIMENT BASIN REQUIREMENTS DURING CONSTRUCTION.
4. ONCE [SEDIMENT BASIN, SEDIMENT TRAP] IS CONSTRUCTED, STABILIZED AND FUNCTIONING PROPERLY, INITIATE THE NECESSARY EARTHWORK TO REACH THE GRADES INDICATED ON THE PLANS. BUILDING CONSTRUCTION MAY COMMENCE UPON ACCEPTANCE OF BUILDING PAD BY OWNER. THE CONCRETE WASHOUT MUST BE INSTALLED BEFORE ANY CONCRETE CAN BE POURED ON-SITE. CONTRACTOR MUST PERFORM BULK OF EARTHWORK TO BALANCE CUTS AND FILLS TO THE GREATEST EXTENT POSSIBLE. ALL AREAS DISTURBED DURING THE EARTHWORK PHASE OF CONSTRUCTION MUST BE TEMPORARILY SEEDED AND STABILIZED IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS AND SEEDING SPECIFICATIONS IF PERMANENT STABILIZATION CANNOT BE ACHIEVED WITHIN FOUR (4) DAYS [IMMEDIATELY FOR HQ/EV WATERSHEDS].
5. INITIATE STORM SEWER [AND SUBSURFACE BASIN] INSTALLATIONS FOR THE FEATURES SHOWN ON THE PLANS STARTING AT THE FURTHEST DOWNSTREAM STRUCTURE. [SEE ADDITIONAL DETENTION FACILITY SEQUENCING, INSTALLATION AND MAINTENANCE & INSPECTION NOTES PROVIDED ON THE POST CONSTRUCTION STORMWATER MANAGEMENT PLANS FOR CONSTRUCTION OF THE SUBSURFACE DETENTION BASINS. **THE PERMITTEE SHALL PROVIDE ENGINEERING OVERSIGHT FOR THE CONSTRUCTION OF SUBSURFACE DETENTION BASINS. A LICENSED PROFESSIONAL OR DESIGNEE KNOWLEDGEABLE IN THE DESIGN AND CONSTRUCTION OF SUBSURFACE DETENTION BASINS, PREFERABLY THE DESIGN ENGINEER, SHALL CONDUCT THE OVERSIGHT.** INLETS DISCHARGING DIRECTLY TO SUBSURFACE DETENTION BASINS MUST BE BLOCKED IMMEDIATELY AFTER INSTALLATION AND REMAIN BLOCKED UNTIL SITE IS FULLY STABILIZED TO PREVENT SEDIMENT FROM ENTERING THE SUBSURFACE DETENTION BASIN. NO CONSTRUCTION EQUIPMENT, SUCH AS CRANES DURING BUILDING CONSTRUCTION, SHALL BE PARKED ON TOP OF THE SUBSURFACE BASINS TO AVOID DAMAGING THE SUBSURFACE BASINS OR DATE AND COMPACTING THE SUBSURFACE SOILS.]
6. CONTINUE WITH THE BALANCE OF EARTHWORK INCLUDING UTILITY INSTALLATION (SANITARY, ELECTRIC, TELEPHONE, CABLE AND GAS) WHERE APPLICABLE.
7. INSTALL ALL CURBING SHOWN IN THIS PHASE AND INSTALL STONE BASE COURSE IN THE DRIVEWAY AND PARKING AREAS.
8. INITIATE FINAL GRADING AND PLACEMENT OF TOPSOIL IN ALL LANDSCAPE AREAS. AS SOON AS SLOPES, CHANNELS, DITCHES AND OTHER DISTURBED AREAS REACH FINAL GRADE, THEY MUST BE STABILIZED. ALL LANDSCAPE AREAS MUST BE STABILIZED AND PERMANENT SEEDING OR PLACEMENT OF SOD MUST BE APPLIED. WHEN FINAL GRADE IS ACHIEVED DURING NON-GERMINATING MONTHS, THE AREA SHOULD BE MULCHED UNTIL THE BEGINNING OF THE NEXT PLANTING SEASON. HOWEVER, THE AREA WILL NOT BE CONSIDERED STABILIZED UNTIL A MINIMUM UNIFORM 70% VEGETATIVE COVER OF EROSION RESISTANT PERENNIAL SPECIES HAS BEEN ACHIEVED. AS DISTURBED AREAS WITHIN A PROJECT APPROACH FINAL GRADE, PREPARATIONS SHOULD BE MADE FOR SEEDING AND MULCHING TO BEGIN (I.E. ANTICIPATE THE COMPLETION DATE AND SCHEDULE THE SEEDER). IN NO CASE SHOULD AN AREA EXCEEDING 15,000 SQUARE FEET, WHICH IS TO BE STABILIZED BY VEGETATION, REACH FINAL GRADE WITHOUT BEING SEEDED AND MULCHED. WAITING UNTIL EARTHMOVING IS COMPLETED BEFORE MAKING PREPARATIONS FOR SEEDING AND MULCHING IS NOT ACCEPTABLE. SEEDING AND MULCHING REQUIREMENTS ARE SPECIFIED IN THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS.
9. A SITE INSPECTION AND APPROVAL BY THE CONSERVATION DISTRICT IS REQUIRED PRIOR TO REMOVAL OR CONVERSION OF SEDIMENT TRAPS AND BASINS. ONCE STONE BASE COURSE HAS BEEN SPREAD IN ALL PAVED AREAS AND ALL LANDSCAPE AREAS HAVE BEEN STABILIZED, BEGIN CONVERTING SEDIMENT TRAP, SEDIMENT BASIN, DETENTION FACILITIES, RAINGARDENS, BIO-DETENTION FACILITIES] TO FINAL GRADES IN ACCORDANCE WITH BMP SEQUENCE OF CONSTRUCTION. **THE PERMITTEE SHALL PROVIDE ENGINEERING OVERSIGHT FOR THE CONVERSION OF DETENTION BASIN. A LICENSED PROFESSIONAL OR DESIGNEE KNOWLEDGEABLE IN THE DESIGN AND CONSTRUCTION OF DETENTION BASIN, PREFERABLY THE DESIGN ENGINEER, SHALL CONDUCT THE OVERSIGHT.**
10. INSTALL BITUMINOUS PAVEMENT AND CONCRETE INCLUDING SIDEWALKS.
11. INSTALL FINAL VEGETATION AND LANDSCAPING SPECIFIED ON THE LANDSCAPE PLAN.
12. UPON SITE STABILIZATION (UNIFORM COVERAGE OR DENSITY OF 70% ACROSS ALL DISTURBED AREAS) AND NOTIFICATION OF THE MONTGOMERY COUNTY CONSERVATION DISTRICT, REMOVE EROSION AND SEDIMENT CONTROL FACILITIES INCLUDING [LIST APPROPRIATE E&S CONTROLS]. ANY AREA DISTURBED DURING THE REMOVAL OF EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE STABILIZED IMMEDIATELY.
13. CLEAR SITE OF DEBRIS AND ALL UNWANTED MATERIALS. OPERATOR SHALL REMOVE FROM 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 WASTE AT THIS SITE.
14. DEMOBILIZE.
15. A NOTICE OF TERMINATION FORM SHOULD BE SUBMITTED TO THE MONTGOMERY COUNTY CONSERVATION DISTRICT UPON STABILIZATION AND FINAL COMPLETION OF THIS PROJECT.

MAINTENANCE PROGRAM

§102.4(b)(5)(x)

THE FOLLOWING MAINTENANCE PROGRAM HAS BEEN DEVELOPED TO PROVIDE FOR THE INSPECTION OF BMPs ON A WEEKLY BASIS AND AFTER EACH MEASURABLE RUNOFF EVENT, AND TO INCLUDE THE REPAIR OF THE BMPs TO ENSURE THEIR EFFECTIVE AND EFFICIENT OPERATION:

UNTIL THE SITE IS STABILIZED AND DURING CONSTRUCTION ACTIVITIES, ALL BMPs MUST BE MAINTAINED PROPERLY BY THE CONTRACTOR. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL 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 AND IN ACCORDANCE WITH THESE PROCEDURES, PLANS AND DETAILS. ANY AREAS DISTURBED DURING MAINTENANCE MUST BE STABILIZED IMMEDIATELY IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS. ALL SITE INSPECTIONS MUST BE DOCUMENTED IN AN INSPECTION LOG KEPT FOR THIS PURPOSE INDICATING THE COMPLIANCE ACTIONS AND THE DATE, TIME AND NAME OF THE PERSON CONDUCTING THE INSPECTION. THE INSPECTION LOG MUST BE KEPT ON SITE AT ALL TIMES AND MADE AVAILABLE TO THE DISTRICT UPON REQUEST.

- COMPOST FILTER SOCK - INSPECTIONS SHALL BE CONDUCTED ON A WEEKLY BASIS AND/OR AFTER EACH RUNOFF EVENT. NEEDED REPAIRS SHOULD BE INITIATED IMMEDIATELY AFTER THE INSPECTION. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES ½ THE ABOVE GROUND SOCK. THE SEDIMENT SHALL BE DISPOSED OF ON SITE AND/OR IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION. BIODEGRADABLE FILTER SOCKS SHALL BE REPLACED AFTER SIX (6) MONTHS; PHOTODEGRADABLE SOCKS AFTER ONE (1) YEAR. UPON STABILIZATION OF THE 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.
- INLET PROTECTION (FILTER BAGS) - INSPECTIONS SHALL BE CONDUCTED ON A WEEKLY BASIS AND/OR AFTER EACH RUNOFF EVENT. NEEDED REPAIRS SHOULD BE INITIATED IMMEDIATELY AFTER THE INSPECTION. FILTER BAGS SHOULD BE CLEANED AND/OR REPLACED AFTER EACH RUNOFF EVENT. THE SEDIMENT SHALL BE DISPOSED OF ON SITE AND/OR IN ACCORDANCE WITH APPLICABLE STATE REGULATIONS. DAMAGED FILTER BAGS SHOULD BE REPLACED.
- SWALES - SWALES SHALL BE INSPECTED FOR EROSION AND/OR SEDIMENT ACCUMULATION ON AN ANNUAL BASIS, AFTER A SIGNIFICANT RUNOFF EVENT OR AS DIRECTED BY THE CONSERVATION DISTRICT AND/OR BOROUGH ENGINEER. NEEDED MAINTENANCE SHOULD BE INITIATED IMMEDIATELY AFTER THE INSPECTION. AREAS OF EROSION SHALL BE REGRADED AND STABILIZED, AND SEDIMENT MUST BE REMOVED TO RESTORE DESIGN CAPACITIES. ANY REMOVED SEDIMENT SHALL BE DISPOSED OF IN AN APPROVED MANNER AND IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. ALL AREAS DISTURBED DURING MAINTENANCE MUST BE STABILIZED IMMEDIATELY IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS.
- SEDIMENT BASIN - INSPECTIONS SHALL BE CONDUCTED ON A WEEKLY BASIS AND/OR AFTER EACH RUNOFF EVENT. NEEDED REPAIRS SHOULD BE INITIATED IMMEDIATELY AFTER THE INSPECTION. WHEN SEDIMENT HAS ACCUMULATED TO THE CLEAN-OUT ELEVATION INDICATED ON THE STONE, THE SEDIMENT MUST BE REMOVED TO RESTORE DESIGN CAPACITIES. THE SEDIMENT SHALL BE DISPOSED OF ON SITE AND/OR IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. THE CONTRACTOR MAY BE REQUIRED TO TREAT OR DRAIN THE SEDIMENT BASINS AND TRAPS SEVEN (7) DAYS AFTER A STORM EVENT IF DIRECTED BY THE LOCAL COUNTY HEALTH DEPARTMENT IN DEALING WITH WEST NILE VIRUS.
- CONSTRUCTION ENTRANCES - LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE MUST BE INSPECTED FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING. A STABILIZED CONSTRUCTION EXIT SHALL BE CONSTRUCTED WHERE VEHICLES ENTER AND EXIT. EXITS SHALL BE MAINTAINED OR SUPPLEMENTED AS NECESSARY TO PREVENT THE RELEASE OF SEDIMENT FROM VEHICLES LEAVING THE SITE. ANY SEDIMENT DEPOSITED ON THE ROADWAY SHALL BE SWEPT AS NECESSARY THROUGHOUT THE DAY OR AT THE END OF EVERY DAY AND DISPOSED OF IN AN APPROPRIATE MANNER. SEDIMENT SHALL NOT BE WASHED INTO STORM SEWER SYSTEMS. SEDIMENT TRACKED OFF THE CONSTRUCTION SITE SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORKDAY AND DISPOSED AS A MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED OR SWEPT INTO ANY ROAD SIDE DITCH, STORM SEWER OR SURFACE WATER.
- SEDIMENT BARRIERS AND BASINS/TRAPS MUST BE INSPECTED AND THEY MUST BE CLEANED OUT AT SUCH TIME AS THEIR ORIGINAL CAPACITY HAS BEEN REDUCED BY 50 PERCENT. ALL MATERIAL EXCAVATED FROM BEHIND SEDIMENT BARRIERS OR IN BASINS A

DEFINITION OF CLEAN FILL AND IMPORT/EXPORT MATERIAL NOTES

TO COMPLY WITH SECTION C.3 OF NOI

IF THE SITE WILL NEED TO IMPORT OR EXPORT MATERIAL FROM THE SITE, THE RESPONSIBILITY FOR PERFORMING ENVIRONMENTAL DUE DILIGENCE AND DETERMINATION OF CLEAN FILL WILL REST WITH THE APPLICANT.

1.) 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).

2.) 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".

3.) 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. A COPY OF FORM FP-001 CAN BE FOUND AT THE END OF THESE INSTRUCTIONS.

4.) ENVIRONMENTAL DUE DILIGENCE: THE APPLICANT MUST PERFORM ENVIRONMENTAL DUE DILIGENCE 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 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. THE REGULATIONS ARE AVAILABLE ON-LINE AT WWW.PACODE.COM.

E&S PLAN PLANNING & DESIGN

§102.4(b)(4)

THE FOLLOWING MEASURES ARE TAKEN TO MINIMIZE THE EXTENT AND DURATION OF EARTH DISTURBANCE:

- ACCESS THE SITE THRU DESIGNATED CONSTRUCTION ENTRANCE
- MAINTAIN 50' WETLAND MARGIN
- PROTECT WOODLANDS AND WETLAND MARGIN WITH TREE PROTECTION FENCING
- SEQUENCE CONSTRUCTION ACTIVITIES BY LIMITING DISTURBANCES TO A SPECIFIC TASK SUCH THAT EACH TASK IS COMPLETED BEFORE THE NEXT TASK IS INITIATED

THE FOLLOWING MEASURES ARE TAKEN TO MAXIMIZE PROTECTION OF EXISTING DRAINAGE FEATURES AND VEGETATION:

- ACCESS THE SITE THRU DESIGNATED CONSTRUCTION ENTRANCE
- MAINTAIN 50' WETLAND MARGIN
- PROTECT WOODLANDS AND WETLAND MARGIN WITH TREE PROTECTION FENCING

THE FOLLOWING MEASURES ARE TAKEN TO MINIMIZE SOIL COMPACTION:

- ACCESS THE SITE THRU DESIGNATED CONSTRUCTION ENTRANCE
- USE OF TREADED MACHINERY WHERE PRACTICAL DURING EARTHMOVING OPERATIONS
- GRADE SITE TO MINIMIZE EXTENT OF CUTS/FILLS

THE FOLLOWING MEASURES ARE TAKEN TO PREVENT OR MINIMIZE GENERATION OF INCREASED STORM WATER RUNOFF:

- DIRECT RUNOFF TO AN ABOVE GROUND STORM WATER BASIN TO CONTROL RUNOFF RATES
- PROVIDE PLANTED RAIN GARDENS TO HELP REDUCE RUNOFF RATES AND VOLUME
- PROVIDE LANDSCAPE RESTORATION TO HELP REDUCE RUNOFF VOLUME
- PROVIDE AMENDED SOILS THROUGHOUT THE SITE TO HELP REDUCE RUNOFF VOLUME

E&S - GENERAL NOTES:

1. THIS PLAN REPRESENTS THE MINIMUM LEVEL OF IMPLEMENTATION OF TEMPORARY EROSION AND SEDIMENTATION CONTROL STRUCTURES. ADDITIONAL FACILITIES OR MEASURES SHALL BE INSTALLED WHERE NECESSARY OR WHERE DIRECTED BY EITHER THE TOWNSHIP OR THE COUNTY CONSERVATION DISTRICT AS CONSTRUCTION PROGRESSES.

2. THE OWNER/CONSTRUCTION MANAGER IS RESPONSIBLE FOR ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROLS AND SITE STABILIZATION. THE OWNER SHALL ASSIGN ONE INDIVIDUAL TO BE RESPONSIBLE FOR PROPER INSTALLATION AND MAINTENANCE OF ALL FACILITIES AND MEASURES.

3. PROTECTION TO THE EXISTING TREES AND SHRUBS SHALL BE TAKEN BY THE CONTRACTOR TO ELIMINATE UNNECESSARY DAMAGE.

4. ANY DRY FILL HAULED OFFSITE MUST BE TAKEN TO A LOCATION WITH AN EROSION AND SEDIMENTATION CONTROL PLAN WHICH HAS BEEN REVIEWED BY THE COUNTY CONSERVATION DISTRICT FOR ADEQUACY.

5. EROSION AND SEDIMENTATION CONTROLS MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE WITHIN TRIBUTARY AREAS OF THOSE CONTROLS.

6. STOCKPILES MUST BE STABILIZED IMMEDIATELY.

7. NO CHANGES SHALL BE MADE IN THE CONTOUR OF THE LAND. NO GRADING, EXCAVATING, REMOVAL OR DESTRUCTION OF THE TOPSOIL, TREES OR OTHER VEGETATIVE COVER OF THE LAND SHALL BE COMMENCED WITHIN A PROPOSED SUBDIVISION OR LAND DEVELOPMENT TRACT UNTIL SUCH TIME THAT A PLAN FOR SEDIMENTATION CONTROL AND MINIMIZING EROSION HAS BEEN REVIEWED AND FOUND SATISFACTORY BY THE COUNTY CONSERVATION DISTRICT AND REVIEWED AND APPROVED BY THE TOWNSHIP, OR THERE HAS BEEN A DETERMINATION BY THE TOWNSHIP, UPON RECOMMENDATION BY THE COUNTY CONSERVATION DISTRICT, THAT SUCH PLANS ARE NOT NECESSARY.

8. 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 COUNTY CONSERVATION DISTRICT.

9. THE OPERATOR SHALL ASSURE THAT AN EROSION AND SEDIMENT CONTROL PLAN HAS BEEN PREPARED, APPROVED BY THE COUNTY CONSERVATION DISTRICT, AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL AND/OR ROCK SPOIL AND BORROW AREAS, REGARDLESS OF THEIR LOCATIONS.

10. CONTRACTOR SHALL USE TREADED MACHINERY AND MINIMIZE SOIL COMPACTION WHEREVER POSSIBLE.

MONTGOMERY COUNTY SOIL CONSERVATION DISTRICT STANDARD E&S 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. VEHICLES AND EQUIPMENT MAY NEITHER ENTER DIRECTLY NOR EXIT DIRECTLY FROM LOTS (SPECIFY LOT NUMBERS) ONTO (SPECIFY ROAD NAMES)

15. 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.

16. 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.

17. 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.

18. ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS.

19. 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.

20. 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.

21. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.

22. 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.

23. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.

24. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.

25. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.

26. 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.

27. 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.

28. 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.

29. 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.

30. 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.

31. 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.

32. 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.

33. 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.

34. CONCRETE WASH WATER SHALL BE HANDLED IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS. IN NO CASE SHALL IT BE ALLOWED TO ENTER ANY SURFACE WATERS OR GROUNDWATER SYSTEMS.

35. SEDIMENT TRAPS SHALL BE KEPT FREE OF ALL CONSTRUCTION WASTE, WASH WATER, AND OTHER DEBRIS HAVING POTENTIAL TO CLOG THE TRAP OUTLET STRUCTURES AND/OR POLLUTE THE SURFACE WATERS.

36. SEDIMENT TRAPS SHALL BE PROTECTED FROM UNAUTHORIZED ACTS BY THIRD PARTIES.

37. ANY DAMAGE THAT OCCURS IN WHOLE OR IN PART AS A RESULT OF TRAP DISCHARGE SHALL BE IMMEDIATELY REPAIRED BY THE PERMITTEE IN A PERMANENT MANNER SATISFACTORY TO THE MUNICIPALITY, LOCAL CONSERVATION DISTRICT, AND THE OWNER OF THE DAMAGED PROPERTY.

38. UPON REQUEST, THE APPLICANT OR HIS CONTRACTOR SHALL PROVIDE AN AS-BUILT (RECORD DRAWING) FOR ANY SEDIMENT TRAP TO THE MUNICIPAL INSPECTOR, LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.

39. EROSION CONTROL BLANKETING SHALL BE INSTALLED ON ALL SLOPES 3H:1V OR STEEPER WITHIN 50 FEET OF A SURFACE WATER AND ON ALL OTHER DISTURBED AREAS SPECIFIED ON THE PLAN MAPS AND/OR DETAIL SHEETS.

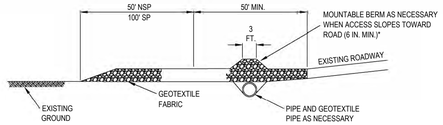
SEEDING SPECIFICATIONS

1. SEEDING DATES
   - A. SEEDING SHALL OCCUR BETWEEN MARCH 1ST AND MAY 15TH OR BETWEEN AUGUST 15TH AND NO LATER THAN OCTOBER 15TH.
   - B. IF SEEDING CANNOT BE CONDUCTED DURING THE TIMEFRAMES NOTED ABOVE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE LOCAL CONSERVATION DISTRICT AND ALL APPROPRIATE AGENCIES TO DETERMINE AN ACCEPTABLE MEANS IN WHICH TO STABILIZE THE SITE THROUGH THE NEXT GROWING SEASON.
2. SEED MIXTURES: SEED MIXTURE TO BE USED ON THIS SITE SHALL CONSIST OF THE FOLLOWING UNLESS OTHERWISE NOTED ON THE PLANS. RATES ARE IN THE FORM OF POUNDS PER ACRE (LB/A) PER PURE LIVE SEED (POUNDS / ACRE PLS). CONTRACTOR WILL NEED TO ADJUST ACCORDINGLY BASED ON THE SEED GERMINATION AND PURITY RATING (SEE ITEM #3 BELOW).
   - A. TEMPORARY SEED MIXTURES: DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE DISTURBED AGAIN WITHIN TWELVE (12) MONTHS MUST BE SEEDED WITH A TEMPORARY SEED MIXTURE AS FOLLOWS:
     ANNUAL RYE (40 POUNDS / ACRE PLS)
     OR SPRING OATS (96 POUNDS / ACRE PLS)
     OR WINTER RYE (168 POUNDS / ACRE PLS)
     (REFERENCE: PENN STATE "EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND", TABLE 5)
   - B. PERMANENT SEEDING SHALL CONSIST OF A NURSE CROP PLUS A PERMANENT SEED MIXTURE, AS FOLLOWS:
     I. NURSE CROP (SELECT ONE):
     ANNUAL RYE (10 POUNDS / ACRE PLS)
     OR SPRING OATS (64 POUNDS / ACRE PLS)
     OR WINTER RYE (56 POUNDS / ACRE PLS)
     (REFERENCE: PA DEP EROSION AND SEDIMENT CONTROL PROGRAM MANUAL, LATEST EDITION, TABLE 11-4, SEED MIX #1)
     II. PERMANENT SEED MIX:
     TALL FESCUES (60 POUNDS / ACRE PLS)
     OR FINE FESCUE (35 POUNDS / ACRE PLS)
     OR KENTUCKY BLUEGRASS (25 POUNDS / ACRE PLS) PLUS REDTOP (3 POUNDS / ACRE PLS)
     OR PERENNIAL RYEGRASS (15 POUNDS / ACRE PLS)
     (REFERENCE: PA DEP EROSION AND SEDIMENT CONTROL PROGRAM MANUAL, LATEST EDITION, TABLE 11-4, SEED MIX #2)
3. PURE LIVE SEED: MINIMUM PLS RATING ACCEPTED SHALL BE 85% PLS. SEED RATE MAY NEED TO BE ADJUSTED BASED ON THE PLS RATING OF THE SEED.
   - A. SEED USED FOR THE PURPOSE OF PERMANENT STABILIZATION SHALL BE LABELED WITH GERMINATION AND PURITY PERCENTAGES. UNLABELED SEED WILL BE REJECTED. SEED SHALL NOT BE USED MORE THAN ONE (1) YEAR BEYOND THE LABEL DATE.
   - B. DETERMINING THE PERCENT PURE LIVE SEED (PERCENT PLS) OF A LABELED SEED: MULTIPLY BY THE PERCENTAGE OF PURE SEED BY THE PERCENTAGE OF GERMINATION AND DIVIDE THE RESULT BY 100 (i %PURE X %GERMINATION / 100)
   - C. DETERMINING THE ACTUAL SEED RATE: SIMPLY DIVIDE THE PERCENT PLS RATING OF THE SEED INTO THE PLS REQUIRED, AS NOTED ABOVE. THE RESULT IS THE POUNDS OF SEED REQUIRED. FOR EXAMPLE: IF THE REQUIRED RATE IS 64 POUNDS PLS, AND THE SEED IS RATED AT 35% PLS, DIVIDE 64 BY 0.35 TO GET 182.9 POUNDS, WHICH IS THE AMOUNT OF THAT SEED REQUIRED PER ACRE.
4. APPLICATION OF SEED: SEEDING SHALL BE APPLIED AND ESTABLISHED IN ACCORDANCE WITH THE "EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL" AS PUBLISHED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WATER QUALITY PROTECTION (MOST RECENT EDITION).
   - A. SEEDING SHALL TAKE PLACE BETWEEN MARCH 15 - OCTOBER 15.
   - B. SEED SHALL BE APPLIED IN A NON-COMPACTED, ROUGHENED TOPSOIL.
   - C. SEED MAY BE APPLIED THROUGH ANY OF THE FOLLOWING MEANS AND METHODS, OR OTHER ACCEPTED INDUSTRY PRACTICES, UNLESS SPECIFICALLY NOTED OTHERWISE ON THESE PLANS:
     I. DRILL SEEDING
     II. BROADCAST SEEDING (TWO DIRECTIONS)
     III. HYDROSEEDING (TWO DIRECTIONS).
   - D. ALL SEED SHALL BE TEMPORARILY OR PERMANENTLY STABILIZED UNTIL A 70% PERENNIAL COVER IS ACHIEVED:
     I. TEMPORARY STABILIZATION WITH STRAW:
     1. STRAW MULCH SHALL BE APPLIED ON TOP OF THE FRESHLY SEEDED AREAS AT A RATE OF 3 TONS PER ACRE (4 TONS PER ACRE BETWEEN NOVEMBER 1ST AND MARCH 1ST).
     2. STRAW SHALL BE STABILIZED WITH A WOOD OR PAPER FIBER MULCH AND TACKIFIER SOLUTION IN ACCORDANCE WITH THE PRODUCT MANUFACTURER'S SPECIFICATIONS.
     II. TEMPORARY/PERMANENT STABILIZATION WITH EROSION CONTROL MATTING/BLANKETS (WHERE SPECIFIED):
     1. MATTING/BLANKETS SHALL BE INSTALLED IN AREAS AS NOTED ON THE EROSION & SEDIMENT CONTROL PLAN OR WITHIN 50 FEET OF PONDS, STREAMS OR WETLANDS. THE PRODUCT SHALL BE INSTALLED AND STAPLED ON TOP OF THE SEEDING IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS.
     2. AREAS WITH MATTING/BLANKETS SHALL NOT BE TRACKED (CATWALKED) AFTER INSTALLATION.
     3. MATTING/BLANKETS SHALL BE VISUALLY INSPECTED DAILY TO ENSURE THAT THE PRODUCT IS FUNCTIONING PROPERLY, IS HELD FAST TO THE SOIL SURFACE AND IS IN GOOD CONDITION.
   - E. ONCE SEED HAS BEEN SET, VEHICULAR TRAFFIC OR OTHER SOURCES OF COMPACTION SHALL BE AVOIDED
5. IRRIGATION: NEW SEED APPLICATIONS SHOULD BE SUPPLIED WITH ADEQUATE WATER, A MINIMUM OF ½" TWICE A DAY, UNTIL VEGETATION IS WELL ESTABLISHED (A MINIMUM OF 75% COVER).

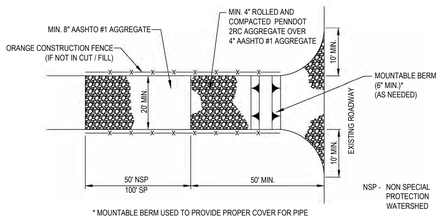
GENERAL CONSERVATION NOTES AND SPECIFICATIONS

I. GENERAL INFORMATION

- A. THIS EROSION AND SEDIMENT CONTROL PLAN SHALL BE AVAILABLE AT THE SITE.
- B. NO SEDIMENT OR SEDIMENT LADEN WATER MUST BE ALLOWED TO LEAVE THE SITE WITHOUT FIRST BEING PROPERLY FILTERED.
- C. ANY SEDIMENT THAT IS TRACKED ONTO THE ROAD MUST BE CLEANED OFF BEFORE THE END OF THE DAY.
- D. DISTURBED AREAS ON WHICH EARTHMOVING ACTIVITIES HAVE CEASED AND WHICH WILL REMAIN EXPOSED SHALL BE STABILIZED IMMEDIATELY, EITHER TEMPORARILY OR PERMANENTLY, INCLUDING THE RESTORATION OF DRIVEWAYS, STOCKPILES, OFF-SITE UNDERGROUND UTILITY LINES AND GRADED PERIMETER AREAS. DURING NON-GERMINATION PERIODS, MULCH MUST BE APPLIED AT RECOMMENDED RATES. CRUSHED STONE ON PAVEMENT SUBGRADES IS CONSIDERED ADEQUATE PROTECTION.
- E. AREAS THAT FAIL TO GERMINATE MUST BE RE-SEEDED OR MULCHED.
- F. WHERE DISTURBED AREAS ARE DIFFICULT TO STABILIZE, NETTING SHOULD BE USED TO HOLD SEED AND MULCH IN PLACE. THIS IS ESPECIALLY IMPORTANT AROUND WATERCOURSES, IN SWALES AND AREAS OF CONCENTRATED FLOWS, STEEP SLOPES.
- G. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, RE-GRADING, RE-SEEDING, RE-MULCHING, AND RE-NETTING, MUST BE PERFORMED IMMEDIATELY. IF AT ANY TIME PRIOR TO SITE STABILIZATION ANY E&SP PROBLEMS OCCUR WHICH REQUIRE ADDITIONAL CONTROLS, IMMEDIATE ACTION MUST BE TAKEN TO CORRECT THE PROBLEMS.
- H. THE CONTRACTOR MUST DEVELOP AND COORDINATE WITH OWNER AND HAVE APPROVED BY THE COUNTY CONSERVATION DISTRICT A SEPARATE EROSION AND SEDIMENT POLLUTION CONTROL PLAN FOR EACH SPOIL, BORROW OR OTHER WORK AREA NOT DETAILED ON THE PERMITTED PLANS, WHETHER LOCATED WITHIN OR OUTSIDE OF THE LIMITS OF CONSTRUCTION.
- I. CONTRACTOR SHALL NOTIFY THE COUNTY CONSERVATION DISTRICT OF DISPOSAL METHOD AND LOCATION OF MATERIALS (IF ANY) TO BE REMOVED FROM SITE.
- J. ALL MATERIALS TO BE RECYCLED OR DISPOSED OF MUST DO SO IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL REGULATIONS. STOCKPILES TO BE HAULED OFF SITE MUST HAVE AN APPROVED EROSION AND SEDIMENT CONTROL PLAN AT THE DESTINATION LOCATION.
- K. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN SOIL STABILIZATION THROUGHOUT CONSTRUCTION. ADDITIONAL M



PROFILE



* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

PLAN VIEW

NOTES:

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

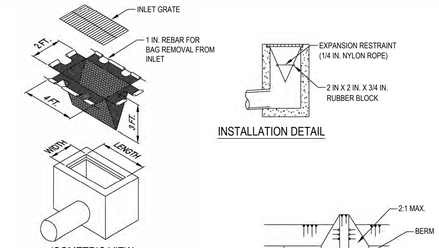
RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

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 (ABACT)
ROCK CONSTRUCTION ENTRANCE

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 IN ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR REMAIN PERMANENTLY.

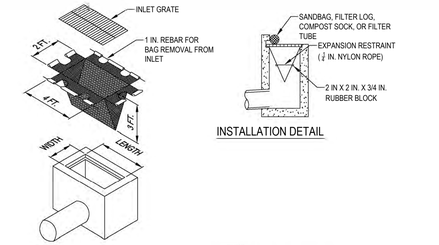
AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS., A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

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 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 #4-16
FILTER BAG INLET PROTECTION - TYPE M INLET

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.

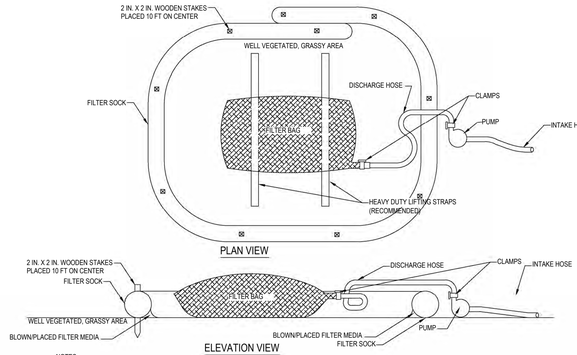
ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT.
AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 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



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.

AS THE PROPOSED DEVELOPMENT IS WITHIN AN IMPAIRED WATERSHED, ALL FILTER BAGS MUST BE SURROUNDED BY A COMPOST FILTER SOCK RING OR OPERATED IN CONJUNCTION WITH A SUMP PIT.

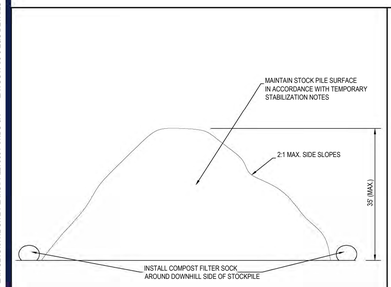
THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.

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.

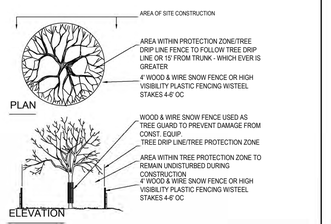
STANDARD CONSTRUCTION DETAIL #3-16 (ABACT)
PUMPED WATER FILTER BAG

NOT TO SCALE



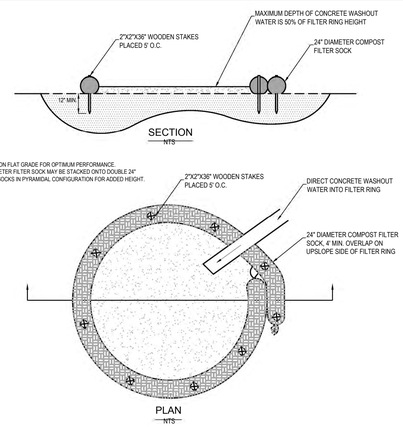
X-8 **TEMPORARY SOIL STOCKPILE DETAIL**

NOT TO SCALE



X-11 **TREE PROTECTION DURING SITE CONSTRUCTION**

NOT TO SCALE



CONCRETE WASHOUT NOTES:

-UNDER NO CIRCUMSTANCES MAY WASH WATER FROM THESE VEHICLES BE ALLOWED TO ENTER ANY SURFACE WATERS.
-WASHOUT FACILITIES SHOULD NOT BE PLACED WITHIN 50 FEET OF STORM DRAINS, OPEN DITCHES OR SURFACE WATERS.
-SHOULD BE A MINIMUM OF 10 FEET WIDE AND PROVIDE AT LEAST 12 INCHES OF FREEBOARD ABOVE THE LIQUID AND SOLID WASTE ANTICIPATED BETWEEN CLEANOUT INTERVALS.
-THE PIT SHOULD BE LINED WITH PLASTIC SHEETING OF AT LEAST 10 MIL THICKNESS (WITH NO HOLES OR TEARS) TO PREVENT LEACHING OF LIQUIDS INTO THE GROUND.
-ALL CONCRETE WASHOUT FACILITIES SHOULD BE INSPECTED DAILY. DAMAGED OR LEAKING WASHOUTS SHOULD BE DEACTIVATED AND REPAIRED OR REPLACED IMMEDIATELY.
-ACCUMULATED MATERIALS SHOULD BE REMOVED WHEN THEY REACH 75% CAPACITY.
-PLASTIC LINERS SHOULD BE REPLACED WITH EACH CLEANING OF THE WASHOUT FACILITY.

X-13 **TYPICAL COMPOST SOCK WASHOUT INSTALLATION**

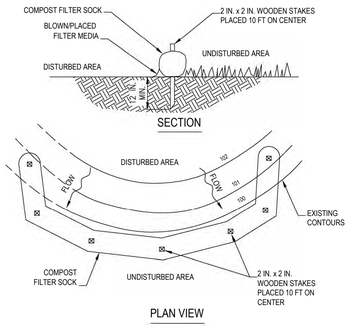
NOT TO SCALE

TABLE 4.1
Compost Sock Fabric Minimum Specifications

Material Type	3 mil HDPE	5 mil HDPE	3 mil HDPE	Multi-filament Polypropylene (MFPP)	Heavy Duty Multi-filament Polypropylene (MFPP)
Material Characteristics	Photo-degradable	Photo-degradable	Photo-degradable	Photo-degradable	Photo-degradable
Sock Diameters	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
Mesh Opening	3/8"	3/8"	3/8"	3/8"	1/8"
Tensile Strength		26 psi	26 psi	44 psi	202 psi
Ultraviolet Stability % Original Strength (ASTM G-155)	23% at 1000 hr.	23% at 1000 hr.		100% at 1000 hr.	100% at 1000 hr.
Minimum Functional Longevity	6 months	9 months	6 months	1 year	2 years
Two-ply systems					
Inner Containment Netting				Two-ply systems Continuously wound Fusion-welded junctures 3/4" x 3/4" Max: aperture size	
Outer Filtration Mesh				Composite Polypropylene Fabric (woven layer and non-woven fleece mechanically fused via needle punch) 3/16" Max: aperture size	
Sock fabrics composed of burlap may be used on projects lasting 6 months or less					

TABLE 4.2
Compost Standards

Organic Matter Content	25% - 100% (dry weight basis)
Organic Portion	Fibrous and elongated
pH	5.5 - 8.5
Moisture Content	30% - 60%
Particle Size	30% - 50% pass through 3/8" sieve
Soluble Salt Concentration	5.0 dS/m (mmhos/cm) Maximum



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

Raising Cane's CHICKEN FINGERS

Restaurant Support Office
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CAD I.D.:	PP2270001-X-TTLB-PHPD

PROJECT:

PRELIMINARY/ FINAL LAND DEVELOPMENT PLANS

FOR

RAISING CANE'S RESTAURANTS, LLC.

PROPOSED RESTAURANT #C0952

2620 WEST MORELAND ROAD
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

BOHLER

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PHILADELPHIA, PA 19102
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Fax: (267) 402-3401
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COMMONWEALTH OF PENNSYLVANIA
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE086832

SHEET TITLE:

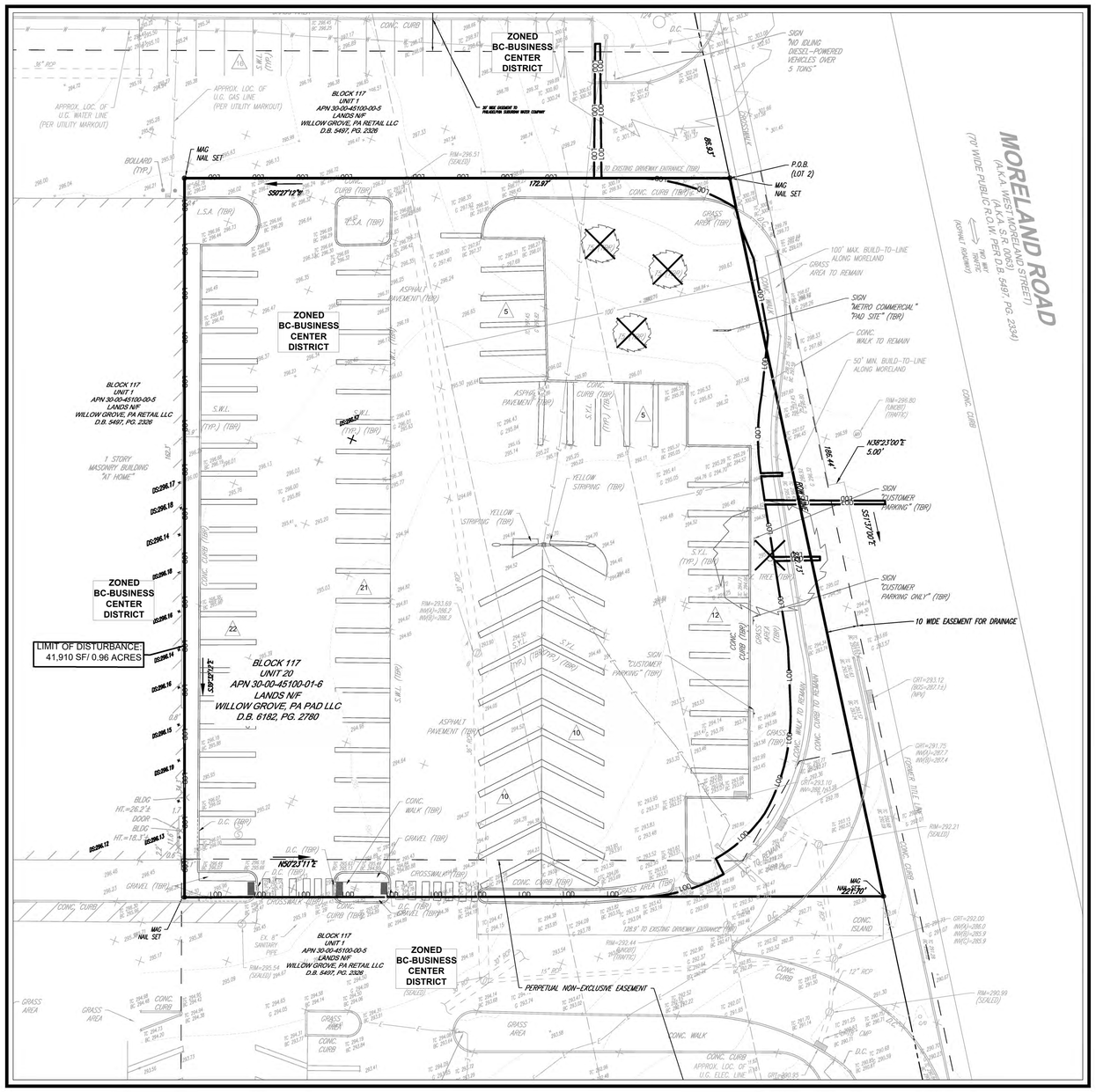
SOIL EROSION & SEDIMENT POLLUTION CONTROL DETAILS

SHEET NUMBER:

C3.3

ORG. DATE - 10.26.22

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LOCATION MAP
SCALE: 1" = 500'

REFER TO SHEET 1.2 FOR DEMOLITION NOTES

THIS PLAN TO BE UTILIZED FOR DEMOLITION REMOVAL PURPOSES ONLY

LEGEND
EXISTING

PROPERTY LINE	
ADJACENT PROPERTY LINE	
EASEMENT LINE	
SETBACK LINE	
BUILDING	
CONCRETE CURB	
FLUSH CURB	
ACCESSIBLE SYMBOL	
SIGN	
PARKING COUNT	10
AREA LIGHT	
TREE	
DRAINAGE INLET	
STORM/SANITARY MANHOLE	
WATER/GAS VALVES	
ROOF DRAIN/CLEANOUT	RD, CO
FIRE HYDRANT	
UTILITY POLE W/ LIGHT	
UTILITY POLE	
OVERHEAD UTILITY WIRES	OH

LEGEND
TO BE REMOVED

EASEMENT LINE	
SETBACK LINE	
LEASE LINE	
BUILDING	
RETAINING WALL	
CONCRETE CURB	
FLUSH CURB	
FENCE	
GUIDE RAIL	
TREELINE	
ACCESSIBLE SYMBOL	
CONCRETE MONUMENT/ IRON PIN	
SIGN	
PARKING COUNT	10
AREA LIGHT	
TREE	
DRAINAGE INLET	
STORM/SANITARY MANHOLE	
WATER/GAS VALVES	
ROOF DRAIN/CLEANOUT	RD, CO
FIRE HYDRANT	
UTILITY POLE W/ LIGHT	
UTILITY POLE	
OVERHEAD UTILITY WIRES	OH
ELECTRIC LINE	E
TELEPHONE LINE	T
GAS LINE	G
WATER LINE	W
SANITARY SEWER	S
STORM PIPE	

Raising Cane's Chicken Fingers

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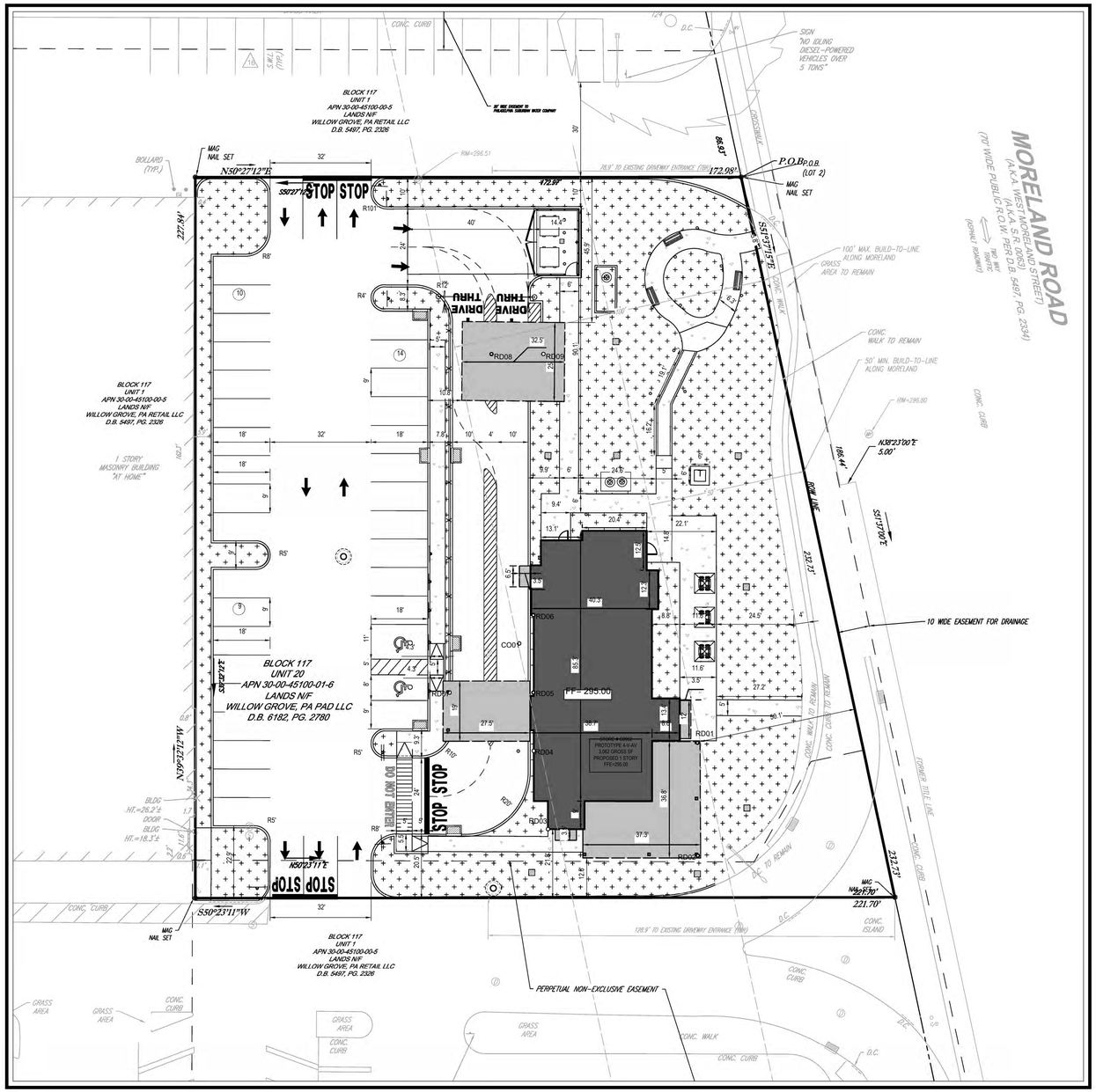
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PROFESSIONAL ENGINEER
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SHEET TITLE:
EXISTING CONDITIONS AND DEMOLITION PLAN

SHEET NUMBER:
C4.0

ORG. DATE - 10.26.22

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LOCATION MAP
SCALE: 1" = 500'

LEGEND
PROPOSED

- PROPERTY LINE
- BUILDING
- CANOPY
- CONCRETE/ ASPHALT
- LANDSCAPE
- PARKING COUNT
- RAMP
- SIGN
- BOLLARD
- FENCE
- CONCRETE CURB
- FLUSH CURB
- ACCESSIBLE SYMBOL
- TRAFFIC ARROWS
- CLEANOUT
- HOUSE TRAP
- YARD DRAIN
- DRAINAGE INLET
- MANHOLE

LEGEND
EXISTING

- PROPERTY LINE
- ADJACENT PROPERTY LINE
- EASEMENT LINE
- SETBACK LINE
- BUILDING
- CONCRETE CURB
- FLUSH CURB
- ACCESSIBLE SYMBOL
- SIGN
- PARKING COUNT
- AREA LIGHT
- TREE
- DRAINAGE INLET
- STORM/SANITARY MANHOLE
- WATER/GAS VALVES
- ROOF DRAIN/CLEANOUT
- FIRE HYDRANT
- UTILITY POLE W/ LIGHT
- UTILITY POLE
- OVERHEAD UTILITY WIRES

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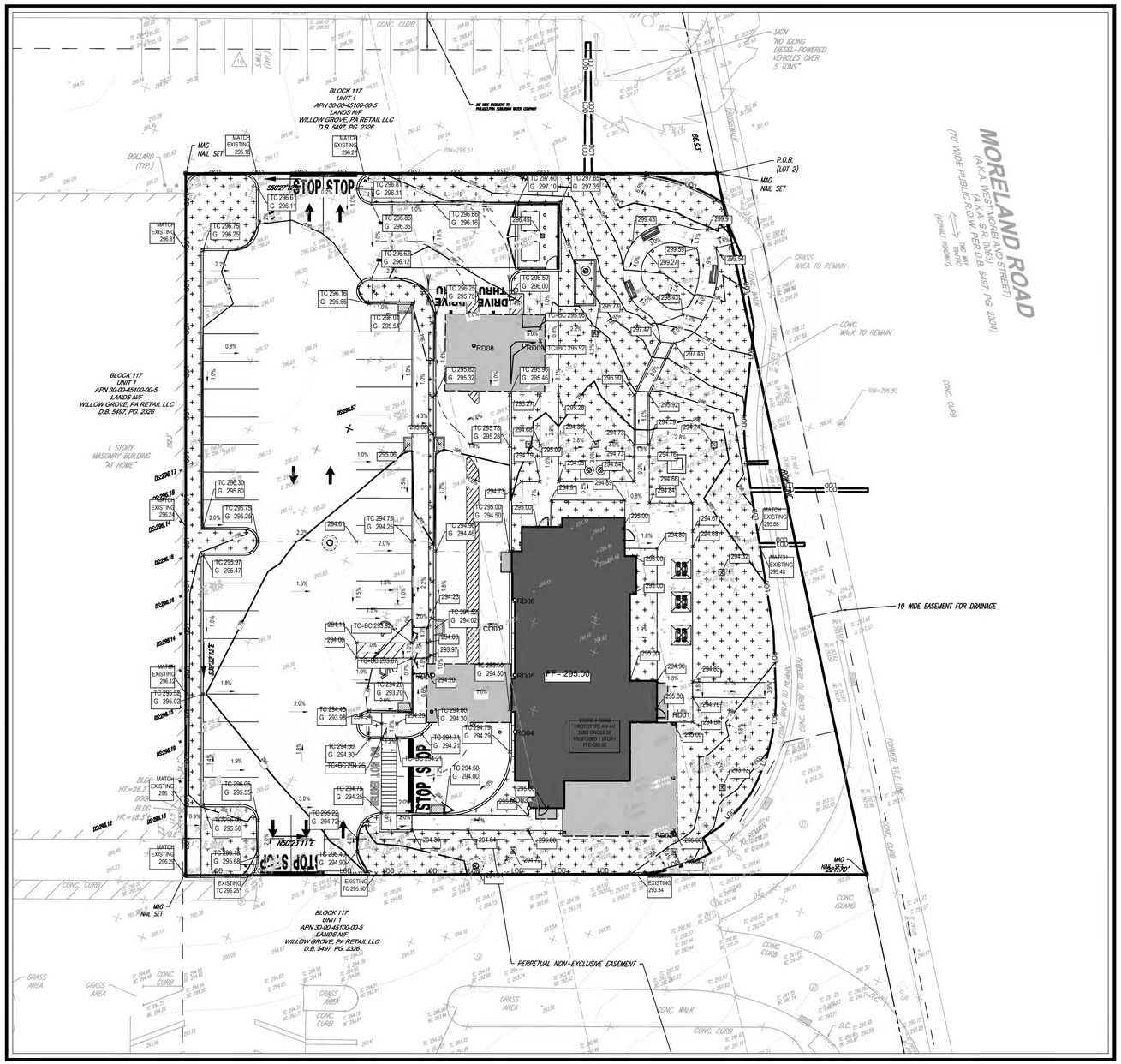
K.R. TATLOW
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE086832

SHEET TITLE:
DIMENSION PLAN

SHEET NUMBER:
C5.0

ORG. DATE - 10.26.22

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LOCATION MAP
SCALE: 1" = 500'

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LEGEND
PROPOSED

- PROPERTY LINE
- BUILDING
- CANOPY
- CONCRETE/ ASPHALT
- LANDSCAPE
- PARKING COUNT
- RAMP
- SIGN
- BOLLARD
- FENCE
- CONCRETE CURB
- FLUSH CURB
- ACCESSIBLE SYMBOL
- SLOPE
- CONTOUR
- SPOT ELEVATION (123.00 / TC 123.00 / BC 123.00)

LEGEND
EXISTING

- PROPERTY LINE
- ADJACENT PROPERTY LINE
- EASEMENT LINE
- SETBACK LINE
- BUILDING
- CONCRETE CURB
- FLUSH CURB
- ACCESSIBLE SYMBOL
- SIGN
- PARKING COUNT
- AREA LIGHT
- TREE
- DRAINAGE INLET
- STORM/SANITARY MANHOLE
- WATER/GAS VALVES
- ROOF DRAIN/CLEANOUT
- FIRE HYDRANT
- UTILITY POLE W/ LIGHT
- UTILITY POLE
- CONTOUR
- SPOT ELEVATION

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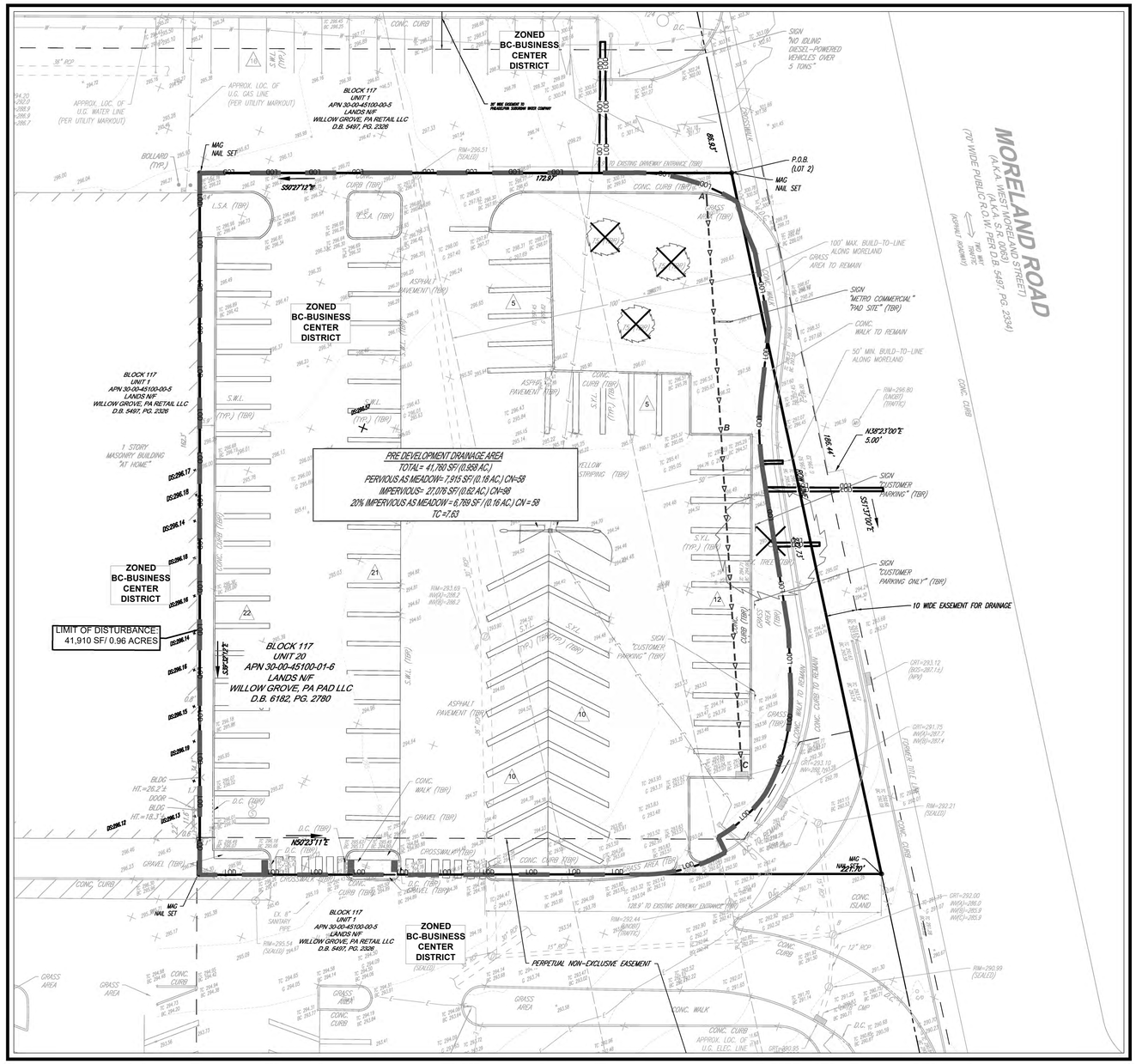
K.R. TATLOW
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE086832

SHEET TITLE:
GRADING PLAN

SHEET NUMBER:
C6.0

ORG. DATE - 10.26.22

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LOCATION MAP
SCALE: 1" = 500'

Time of Concentration (Tc) or (Tt) Calculations

Project: Willow Grove

Description: Pre-development

Note: Space for as many as three segments per flow type can be used for each worksheet.

Sheet Flow (Applicable to Tc only)	Segment ID	AB				
1. Surface Description (table 3-1)		Lawns				
2. Manning's roughness coeff., n (table 3-1)		0.250				
3. Flow length, L (total L ≤ 150 ft)	ft	78				
4. Two-yr 24-hr rainfall, P_2	in	3.30				
5. Land slope, s*	ft/ft	0.0780				
6. $Tt = 0.007(nL)^{0.8} / P_2^{0.5} s^{0.4}$	Compute Tt hr	0.1151	+		+	= 0.1151
*S is averaged						

Shallow Concentrated Flow	Segment ID	BC				
7. Surface Description (paved or unpaved)		Paved				
8. Flow length, L	ft	109				
9. Watercourse slope, s*	ft/ft	0.0150				
10. Average velocity, V	ft/sec	2.51				
11. Tt = L / 3600V		0.0121	+		+	= 0.0121
Shallow Concentrated Flow	Segment ID					

Channel Flow	Segment ID					
12. Cross sectional flow area, a	ft^2					
13. Wetted perimeter, p	ft					
14. Hydraulic radius, r = a/wp	ft					
15. Channel Slope, s	ft/ft					
16. Manning's roughness coeff., n						
17. $V = 1.49 r^{2/3} s^{1/2} / n$						
18. Flow length, L	ft					
19. Tt = L / 3600V			+		+	=
20. Watershed or subarea T_c or T_t (add T_t in steps 6,11, and 19)						0.1272

Tc = 7.63 minutes

LEGEND

PRE-DEVELOPMENT DRAINAGE AREA

OVERALL DRAINAGE AREA

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K.R. TATLOW
COMMONWEALTH OF PENNSYLVANIA
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE086832

SHEET TITLE:

PRE DEVELOPMENT PLAN

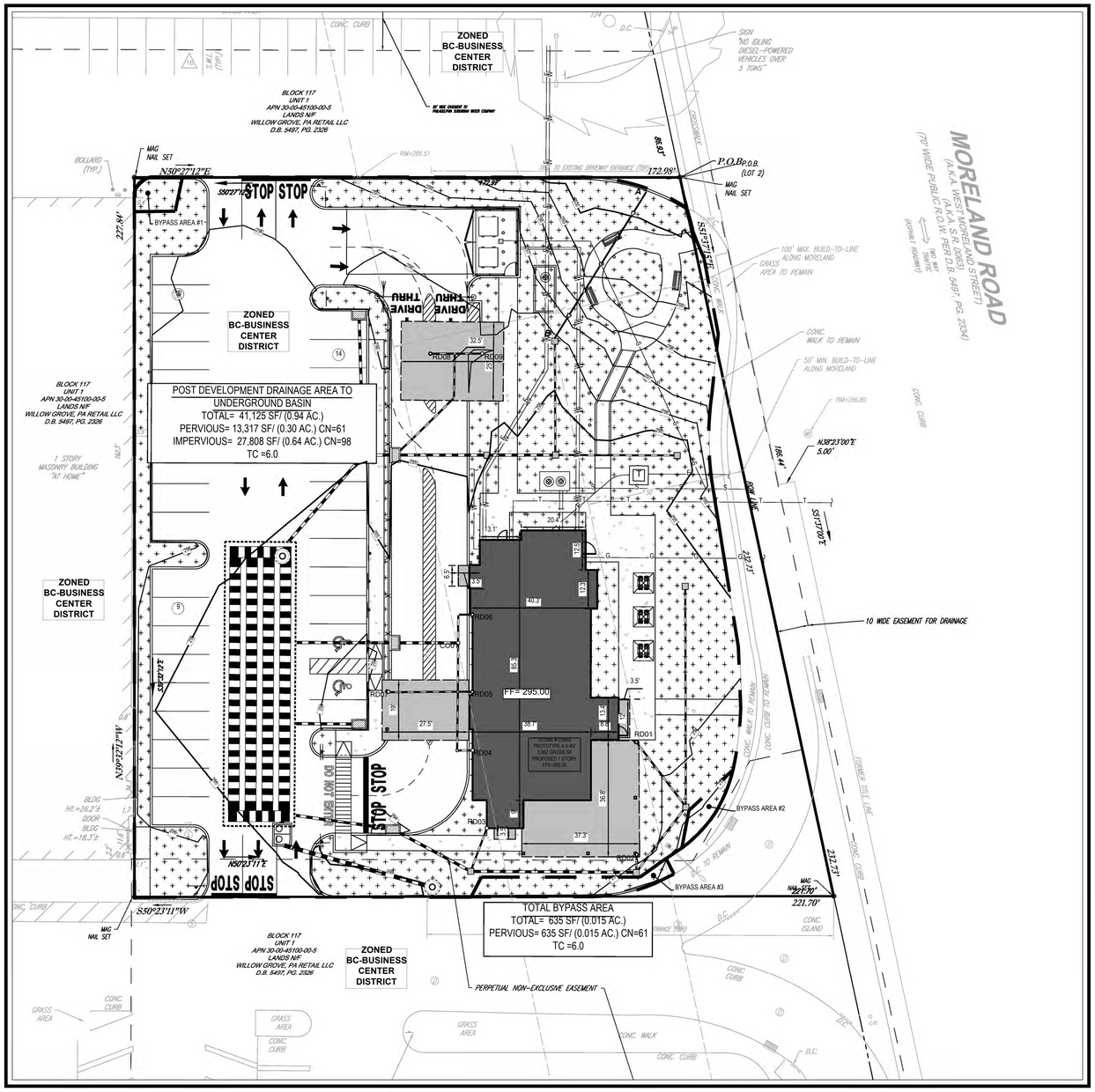
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CHP





LOCATION MAP
SCALE: 1" = 500'

Time of Concentration (Tc) or (Tt) Calculations

Project: 1130 North Delaware

Description: Post-development

Note: Space for as many as three segments per flow type can be used for each worksheet.

Sheet Flow (*Applicable to Tc only*)	Segment ID	AB			
1. Surface Description (*table 3-1*)		Lawns			
2. Manning's roughness coeff., n (*table 3-1*)		0.250			
3. Flow length, L (*total L ≤ 150 ft*)	ft	60			
4. Two-yr 24-hr rainfall, P_2	in	3.30			
5. Land slope, s*	ft/ft	0.0860			
6. $Tt=0.007(nL)^{0.8} / P_2^{0.5} s^{0.4}$	Compute Tt hr	0.0897	+	+	= 0.0897
**S is averaged*					

Shallow Concentrated Flow	Segment ID				
7. Surface Description (paved or unpaved)		Paved			
8. Flow length, L	ft				
9. Watercourse slope, s*	ft/ft				
10. Average velocity, V	ft/sec				
11. Tt = L / 3600V			+	+	=

Channel Flow	Segment ID				
12. Cross sectional flow area, a	ft^2				
13. Wetted perimeter, p	ft				
14. Hydraulic radius, r = a/wp	ft				
15. Channel Slope, s	ft/ft				
16. Manning's roughness coeff., n		0.010			
17. $V=1.49r^{2/3}s^{1/2} / n$					
18. Flow length, L	ft				
19. Tt = L / 3600V			+	+	=
20. Watershed or subarea T_c or T_t (add T_t in steps 6,11, and 19)					0.0897

Tc = 5.38 minutes

LEGEND

PROPOSED

DRAINAGE AREA TO BMP	
BUILDING	
BUILDING ABOVE	
CONCRETE SIDEWALK	
LANDSCAPE AREA	
DRAINAGE INLET	
YARD DRAIN	
MANHOLE	
CLEANOUT	CO

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PENNSYLVANIA LICENSE No. PE086832

SHEET TITLE:

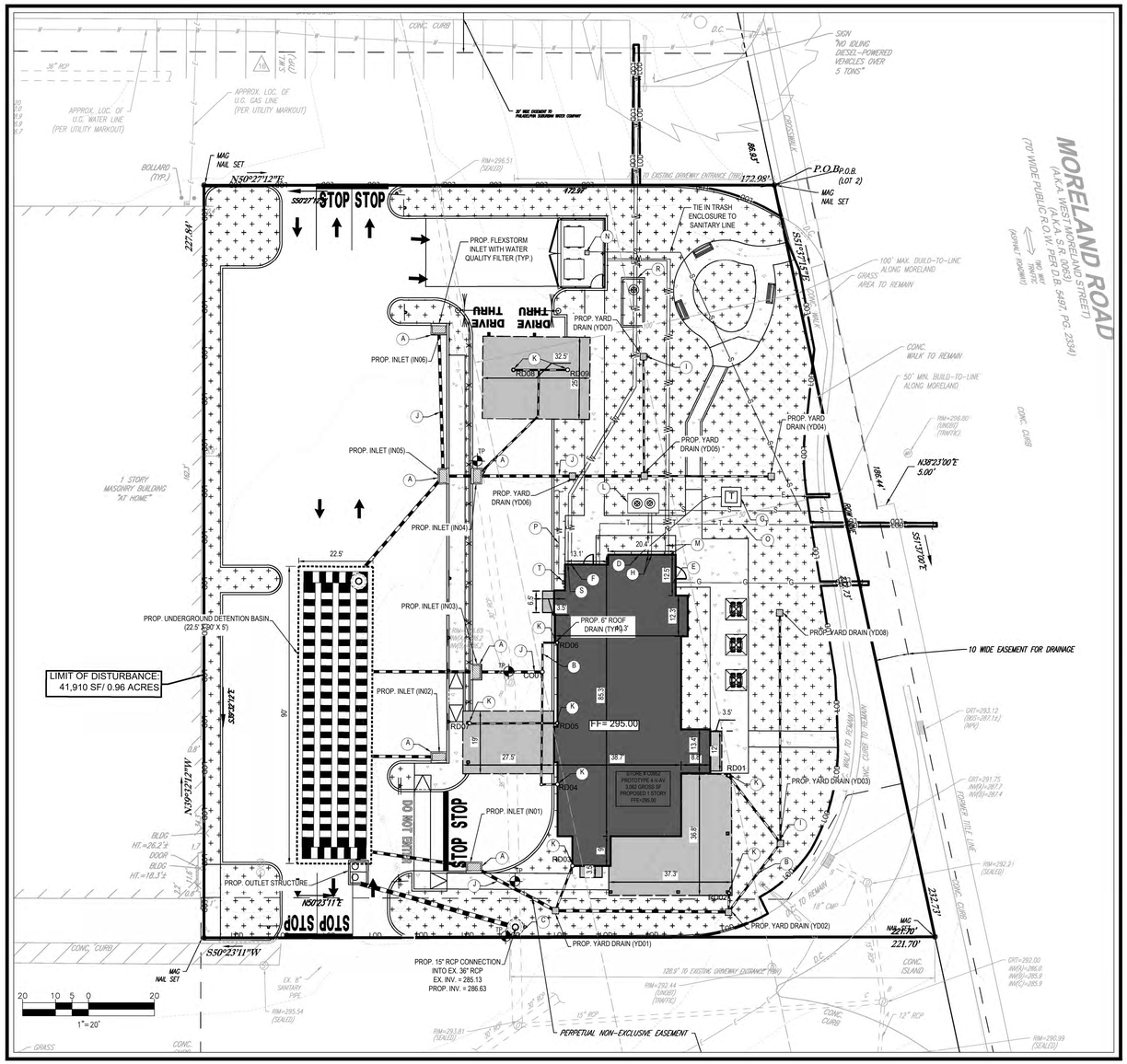
POST DEVELOPMENT PLAN

SHEET NUMBER:

C6.1

ORG. DATE - 10.26.22

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PRIOR TO CONSTRUCTION, CONTRACTOR TO FIELD VERIFY ALL EXISTING UTILITIES WITHIN THE LIMIT OF DISTURBANCE INCLUDING SANITARY SEWER, GAS LINE, ELECTRIC LINE, ECT. LOCATION, DEPTH, AND SIZE AS NOTED ON THE PLANS AND NOTIFY ENGINEER OF ANY DISCREPANCIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY SERVICES SHALL BE RELOCATED DURING OFF-HOURS TO NOT INTERFERE WITH EXISTING OPERATIONS.

A MINIMUM OF TWO FEET OF COVER SHALL BE MAINTAINED OVER ALL STORM DRAIN PIPES.

UTILITIES:

THE FOLLOWING COMPANIES WERE NOTIFIED BY PENNSYLVANIA ONE CALL SYSTEM, INC. (1-800-242-1776) AND REQUESTED TO MARK OUT UNDERGROUND FACILITIES AFFECTING AND SERVICING THIS SITE. THE UNDERGROUND UTILITY INFORMATION SHOWN HEREON IS BASED UPON THE UTILITY COMPANIES RESPONSE TO THIS REQUEST.
SERIAL NUMBER: 20220541701

UTILITY COMPANY	PHONE NUMBER
ABINGTON TOWNSHIP	215-884-5000
AQUA PENNSYLVANIA, INC.	610-525-1400
PECO CENTRAL LOCATING	215-841-4000
COMCAST	800-266-2278
VERIZON	215-657-9260



LOCATION MAP
SCALE: 1" = 500'

STORM STRUCTURE SCHEDULE

NAME	GRT/RIM ELEV. (FT.)	INVERTS	SUMP ELEVATION
CO01	294.44'	INV IN = 290.55' (6" HDPE) INV IN = 290.55' (6" HDPE) INV OUT = 290.55' (10" HDPE)	290.55
EW01	289.93'	INV IN = 289.00' (10" HDPE)	???
EW02	291.21'	INV IN = 290.00' (10" HDPE)	???
EW03	290.96'	INV IN = 290.00' (10" HDPE)	???
EW05	290.73'	INV IN = 289.80' (10" HDPE)	???
IN01	293.96'	INV IN = 289.30' (10" HDPE) INV OUT = 289.30' (10" HDPE)	286.30
IN02	293.76'	INV OUT = 290.26' (10" HDPE)	287.26
IN03	294.04'	INV IN = 290.35' (10" HDPE) INV OUT = 290.35' (10" HDPE)	287.35
IN04	295.06'	INV IN = 290.34' (10" HDPE) INV IN = 293.02' (6" HDPE) INV OUT = 290.34' (10" HDPE)	287.34
IN05	295.06'	INV IN = 290.24' (10" HDPE) INV IN = 290.24' (10" HDPE) INV OUT = 290.24' (10" HDPE)	287.24
IN06	295.53'	INV OUT = 291.72' (10" HDPE)	288.72
MH01	294.94'	INV IN = 286.63' (15" RCP)	283.50
OS01	293.38'	INV OUT = 287.00' (15" RCP)	???
RD01	295.00'	INV OUT = 292.00' (6" HDPE)	292.00
RD02	294.70'	INV OUT = 292.00' (6" HDPE)	292.00
RD03	295.00'	INV OUT = 291.75' (6" HDPE)	291.75
RD04	295.00'	INV OUT = 291.00' (6" HDPE)	291.00
RD05	295.00'	INV OUT = 291.00' (6" HDPE)	291.00
RD06	295.00'	INV OUT = 291.00' (6" HDPE)	291.00
RD07	294.56'	INV OUT = 291.33' (6" HDPE)	291.33

STORM STRUCTURE SCHEDULE

NAME	GRT/RIM ELEV. (FT.)	INVERTS	SUMP ELEVATION
RD08	295.60'	INV OUT = 292.60' (6" HDPE)	292.60
RD09	296.02'	INV IN = 292.50' (6" HDPE)	292.50
T7	291.42'	INV IN = 290.85' (6" HDPE) INV OUT = 290.85' (6" HDPE)	???
T8	291.86'	INV IN = 290.75' (6" HDPE) INV IN = 290.75' (6" HDPE) INV IN = 290.75' (6" HDPE) INV OUT = 290.75' (6" HDPE)	???
T9	294.36'	INV IN = 290.95' (6" HDPE) INV OUT = 290.95' (6" HDPE)	290.95
T10	293.97'	INV IN = 293.40' (6" HDPE) INV OUT = 293.40' (6" HDPE)	???
T11	294.09'	INV IN = 292.50' (6" HDPE) INV OUT = 292.60' (6" HDPE) INV OUT = 293.53' (6" HDPE)	???
YD01	294.72'	INV IN = 289.60' (10" HDPE) INV IN = 289.60' (6" HDPE) INV OUT = 289.60' (10" HDPE)	286.60
YD02	293.59'	INV IN = 290.12' (6" HDPE) INV IN = 290.12' (6" HDPE) INV OUT = 290.12' (10" HDPE)	287.12
YD03	293.13'	INV IN = 290.38' (6" HDPE) INV IN = 290.12' (6" HDPE) INV OUT = 290.38' (6" HDPE)	287.12
YD04	294.23'	INV OUT = 291.23' (6" HDPE)	288.23
YD05	294.36'	INV IN = 290.84' (6" HDPE) INV IN = 290.84' (6" HDPE) INV OUT = 290.84' (10" HDPE)	287.84
YD06	295.10'	INV IN = 290.63' (10" HDPE) INV OUT = 290.63' (10" HDPE)	287.63
YD07	295.74'	INV OUT = 292.24' (6" HDPE)	289.24
YD08	294.32'	INV OUT = 291.10' (6" HDPE)	288.10

STORM SEWER PIPE SCHEDULE

FROM	TO	PIPE	SIZE (IN.)	TYPE	LENGTH (FT.)	SLOPE(%)	INVERT START	INVERT END
CO01	IN03	P-118B	10"	HDPE	20	1.00%	290.55	290.35
IN01	EW01	P-101	10"	HDPE	32	0.95%	289.30	289.00
IN02	EW02	P-102	10"	HDPE	20	1.27%	290.26	290.00
IN03	EW03	P-103	10"	HDPE	32	1.11%	290.35	290.00
IN04	IN05	P-106	10"	HDPE	10	0.97%	290.34	290.24
IN05	EW05	P-107	10"	HDPE	36	1.21%	290.24	289.80
IN06	IN05	P-108	10"	HDPE	44	3.33%	291.72	290.24
OS01	MH01	P-121	15"	RCP	49	0.75%	287.00	286.63
RD01	YD03	P-112C	6"	HDPE	26	7.30%	292.00	290.12
RD02	YD02	P-115	6"	HDPE	6	33.75%	292.00	290.12
RD03	YD01	P-116	6"	HDPE	15	14.80%	291.75	289.60
RD04	T9	P-124	6"	HDPE	5	1.03%	291.00	290.95
RD05	T8	P-117	6"	HDPE	5	5.50%	291.00	290.75
RD06	T7	P-118	6"	HDPE	4	3.39%	291.00	290.85
RD07	T8	P-120	6"	HDPE	22	2.63%	291.33	290.75
RD08	T11	P-122	6"	HDPE	8	1.29%	292.60	292.50
T7	CO01	P-118A	6"	HDPE	9	3.35%	290.85	290.55
T8	CO01	P-115D	6"	HDPE	15	1.30%	290.75	290.55
T9	T8	P-124A	6"	HDPE	19	1.07%	290.95	290.75
T10	IN04	P-122C	6"	HDPE	26	1.46%	293.40	293.02

STORM SEWER PIPE SCHEDULE

FROM	TO	PIPE	SIZE (IN.)	TYPE	LENGTH (FT.)	SLOPE(%)	INVERT START	INVERT END
T11	T10	P-122A	6"	HDPE	14	0.89%	293.53	293.40
T11	RD09	P-123	6"	HDPE	9	1.17%	292.60	292.50
YD01	IN01	P-115B	10"	HDPE	28	1.07%	289.60	289.30
YD02	YD01	P-115A	10"	HDPE	52	0.99%	290.12	289.60
YD03	YD02	P-112A	6"	HDPE	26	1.00%	290.38	290.12
YD04	YD05	P-113	6"	HDPE	39	1.01%	291.23	290.84
YD05	YD06	P-113A	10"	HDPE	22	0.97%	290.84	290.63
YD06	IN04	P-113B	10"	HDPE	29	1.00%	290.63	290.34
YD07	YD05	P-111	6"	HDPE	36	3.88%	292.24	290.84
YD08	YD03	P-112	6"	HDPE	70	1.03%	291.10	290.38

LEGEND
UTILITY KEYNOTES

- (A) PROPOSED INLET
- (B) PROP. ROOF DRAIN PIPE 6" HDPE AT 1% MIN. SLOPE FROM BUILDING
- (C) PROP. MANHOLE
- (D) PROP. ELECTRIC SERVICE ENTRY WITH CT BOX AND METER.
- (E) PROP. GAS SERVICE LINE. REFER TO MEP FOR SIZE.
- (F) 2" COPPER DOMESTIC LINE ENTRY, REFERENCE MEP PLANS
- (G) PROP. ELECTRICAL TRANSFORMER LOCATION
- (H) PROP. SANITARY LINE, REFER TO MEP PLANS FOR CONTINUATION
- (I) PROPOSED YARD DRAIN
- (J) PROP. 10" HDPE STORM LINE TO PROP. INLET
- (K) PROP. ROOF DRAIN
- (L) PROP. GREASE TRAP LOCATION, REF ARCHITECTURAL / MEP PLANS
- (M) PROP. 1" COPPER DOMESTIC WATER LINE CONNECTING TO TRASH ENCLOSURE
- (N) PROPOSED TRASH ENCLOSURE FLOOR DRAIN, TIE INTO STORM SEWER
- (O) PROPOSED VERIZON AND COMCAST LINES IN COMBINED TRENCH
- (P) PROPOSED 1 1/4" COPPER IRRIGATION WATER LINE; SEE IRRIGATION PLAN FOR FULL CONTINUATION OF IRRIGATION LINE
- (R) PROPOSED 2" COPPER WATER LINE AND 6" DIP FIRE LINE 15' x 7"AQUA METER PIT WITH BACKFLOW PREVENTION INSIDE PIT, SEE AQUA DETAILS ON SHEET C9.0
- (S) PROPOSED 6" DIP FIRE LINE, REFERENCE MEP PLANS
- (T) PROPOSED FIRE DEPARTMENT CONNECTION, COORDINATED WITH FIRE MARSHAL

LEGEND
PROPOSED

- LIMIT OF DISTURBANCE — LOD
- BUILDING
- BUILDING ABOVE
- CONCRETE SIDEWALK
- LANDSCAPE AREA
- CONCRETE CURB
- FLUSH CURB
- FENCE
- SIGN
- YARD DRAIN
- DRAINAGE INLET
- MANHOLE
- OUTLET STRUCTURE
- UNDERGROUND BASIN
- CLEANOUT — CO
- HOUSE TRAP — HT
- TEST PIT — TP
- ELECTRIC LINE — E
- TELECOM LINE — T
- GAS LINE — G
- FIRE SERVICE LINE — F
- WATER LINE — W
- SANITARY SEWER — S
- STORM PIPE

LEGEND
EXISTING

- PROPERTY LINE
- R.O.W. LINE
- ADJACENT PROPERTY LINE
- BUILDING
- CONCRETE CURB
- FLUSH CURB
- FENCE — X
- SIGN
- TREE
- DRAINAGE INLET
- ELECTRIC/ CABLE MANHOLE — E
- STORM/SANITARY MANHOLE — D / S
- WATER/GAS VALVES — W / G
- ROOF DRAIN/CLEANOUT — RD / CO
- FIRE HYDRANT
- UTILITY POLE W/ LIGHT
- UTILITY POLE
- OVERHEAD UTILITY WIRES — OHU
- ELECTRIC LINE — E
- TELEPHONE LINE — T
- GAS LINE — G
- WATER LINE — W
- SANITARY SEWER — S
- STORM PIPE

Raising Cane's Chicken Fingers
Restaurant Support Office
6800 Bishop Road, Plano, TX 75024
Tele: 972-769-3100 Fax: 972-769-3101

REVISIONS

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PROJECT No.: PP2270001
DRAWN BY: BMM
CHECKED BY: KRT
DATE: 10.26.22
CAD I.D.: PP2270001-X-TTLB-PHPD

PROJECT:
PRELIMINARY/ FINAL LAND DEVELOPMENT PLANS
FOR
RAISING CANE'S RESTAURANTS, LLC.

PROPOSED RESTAURANT #C0952

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ABINGTON TOWNSHIP
MONTGOMERY COUNTY
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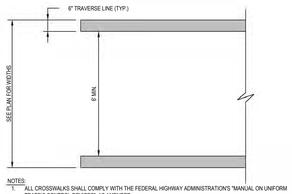
K.R. TATLOW
COMMONWEALTH OF PENNSYLVANIA
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE085032

SHEET TITLE:
UTILITY PLAN

SHEET NUMBER:
C7.0

ORG. DATE - 10.26.22

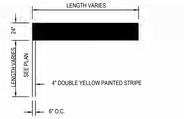
I:\2022\PP2270001\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\PP2270001-LDVP-PHL-----LAYOUT C7-0 UTILITY PLAN



NOTES:
1. ALL CROSSWALKS SHALL COMPLY WITH THE FEDERAL HIGHWAY ADMINISTRATION'S "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AS AMENDED.
2. TRAVERSE LINES SHALL EXTEND ACROSS THE FULL WIDTH OF PAVEMENT OR TO THE EDGE OF THE INTERSECTING CROSSWALK TO DISCOURAGE DIAGONAL WALKING BETWEEN CROSSWALKS.
3. ALL CROSSWALK TRAVERSE LINES SHALL BE BE WHITE THERMOPLAST AND SHALL BE OF EQUAL WIDTHS.

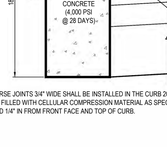
T-24 ***STANDARD CROSSWALK DETAIL***

NOT TO SCALE



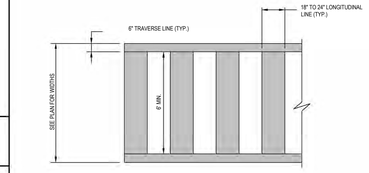
T-6 ***WHITE PAINTED STOP BAR DETAIL***

NOT TO SCALE



T-5 ***WHITE PAINTED STOP BAR & "STOP" LETTERING DETAIL***

NOT TO SCALE



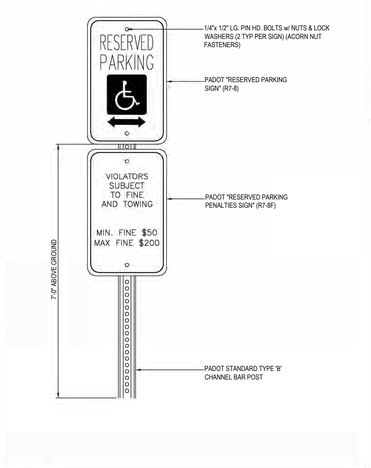
NOTES:
1. THIS TYPE OF MARKING SHOULD BE USED AT LOCATIONS WHERE SUBSTANTIAL NUMBERS OF PEDESTRIANS CROSS WITHOUT ANY OTHER TRAFFIC CONTROL DEVICE, AT LOCATIONS WHERE PHYSICAL CONDITIONS ARE SUCH THAT ADDED VISIBILITY OF THE CROSSWALK IS NECESSARY, OR AT PLACES WHERE PEDESTRIANS MIGHT NOT BE EXPECTED.
2. ALL CROSSWALKS SHALL COMPLY WITH THE FEDERAL HIGHWAY ADMINISTRATION'S "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), AS AMENDED.
3. TRAVERSE AND LONGITUDINAL LINES SHALL EXTEND ACROSS THE FULL WIDTH OF PAVEMENT OR TO THE EDGE OF THE INTERSECTING CROSSWALK TO DISCOURAGE DIAGONAL WALKING BETWEEN CROSSWALKS.
4. ALL CROSSWALK TRAVERSE LINES SHALL BE WHITE THERMOPLAST, LONGITUDINAL LINES SHALL BE PAINTED WHITE. ALL LINES AND NEUTRAL AREAS SHALL BE OF EQUAL WIDTHS.
5. WARNING SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH MUTCD, AS AMENDED.

T-21 ***HIGH VISIBILITY CROSSWALK DETAIL (PERPENDICULAR TO INTERSECTION)***

NOT TO SCALE

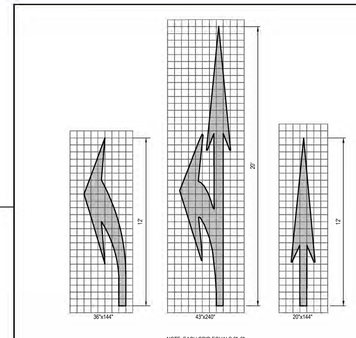
T-7 ***WHITE PAINTED TRAFFIC ARROW DETAIL***

NOT TO SCALE



T-15 ***RESERVED PARKING SPACE & PENALTIES SIGNS***

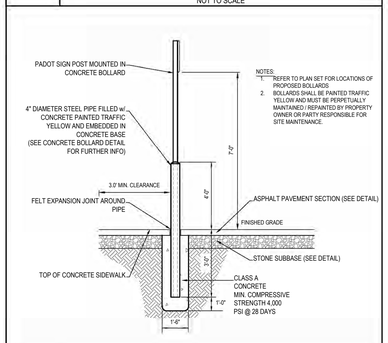
NOT TO SCALE



NOTE: EACH GRID EQUALS 6'x6"

T-10 ***WHITE PADOT PAVEMENT MARKING ARROW DETAIL***

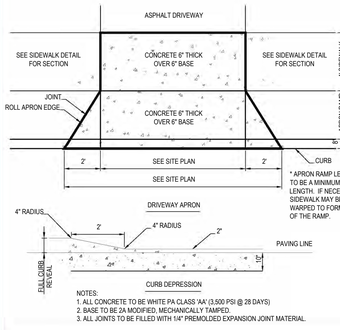
NOT TO SCALE



NOTES:
1. REFER TO PLAN SET FOR LOCATIONS OF PROPOSED BOLLARDS
2. BOLLARDS SHALL BE PAINTED TRAFFIC YELLOW AND MUST BE PERPETUALLY MAINTAINED / REPAINTED BY PROPERTY OWNER OR PARTY RESPONSIBLE FOR SITE MAINTENANCE.

T-19 ***SIGN WITHIN BOLLARD IN ASPHALT DETAIL***

NOT TO SCALE

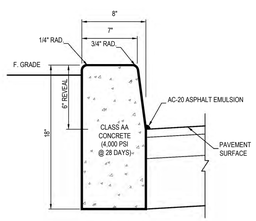


* APRON RAMP LENGTH TO BE A MINIMUM OF 5' IN LENGTH. IF NECESSARY, SIDEWALK MAY BE WARPED TO FORM PART OF THE RAMP.

NOTES:
1. ALL CONCRETE TO BE WHITE PA CLASS 'AA' (3,500 PSI @ 28 DAYS)
2. BASE TO BE 2A MODIFIED, MECHANICALLY TAMPED.
3. ALL JOINTS TO BE FILLED WITH 1/4" PREMOLDED EXPANSION JOINT MATERIAL.

P-8 ***CONCRETE DRIVEWAY APRON DETAIL***

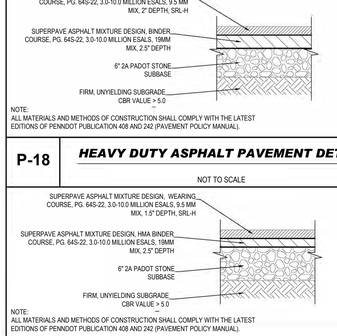
NOT TO SCALE



TRANSVERSE JOINTS 3/4" WIDE SHALL BE INSTALLED IN THE CURB 20' APART AND SHALL BE FILLED WITH CELLULAR COMPRESSION MATERIAL AS SPECIFIED RECESSED 1/4" IN FROM FRONT FACE AND TOP OF CURB.

P-1 ***TYPICAL CONCRETE CURB DETAIL***

NOT TO SCALE



NOTE:
ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL COMPLY WITH THE LATEST EDITIONS OF PENNDOT PUBLICATION 408 AND 242 (PAVEMENT POLICY MANUAL).

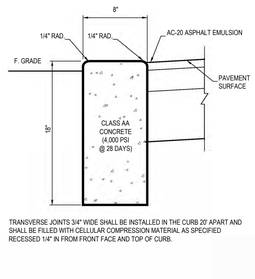
P-18 ***HEAVY DUTY ASPHALT PAVEMENT DETAIL***

NOT TO SCALE

NOTE:
ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL COMPLY WITH THE LATEST EDITIONS OF PENNDOT PUBLICATION 408 AND 242 (PAVEMENT POLICY MANUAL).

P-17 ***STANDARD ASPHALT PAVEMENT DETAIL***

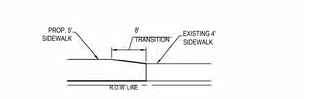
NOT TO SCALE



TRANSVERSE JOINTS 3/4" WIDE SHALL BE INSTALLED IN THE CURB 20' APART AND SHALL BE FILLED WITH CELLULAR COMPRESSION MATERIAL AS SPECIFIED RECESSED 1/4" IN FROM FRONT FACE AND TOP OF CURB.

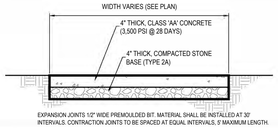
P-2 ***TYPICAL FLUSH CONCRETE CURB DETAIL***

NOT TO SCALE



P-22 ***SIDEWALK TIE-IN DETAIL***

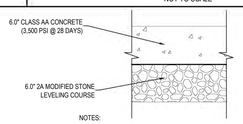
NOT TO SCALE



EXPANSION JOINTS 1/2" WIDE PREMOLDED BIT. MATERIAL SHALL BE INSTALLED AT 30' INTERVALS. CONTRACTION JOINTS TO BE SPACED AT EQUAL INTERVALS, 5' MAXIMUM LENGTH.

P-21 ***CONCRETE SIDEWALK DETAIL***

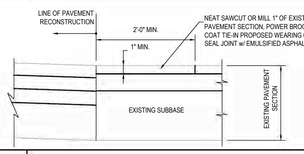
NOT TO SCALE



NOTES:
JOINT SPACING SHALL BE 12 FT.

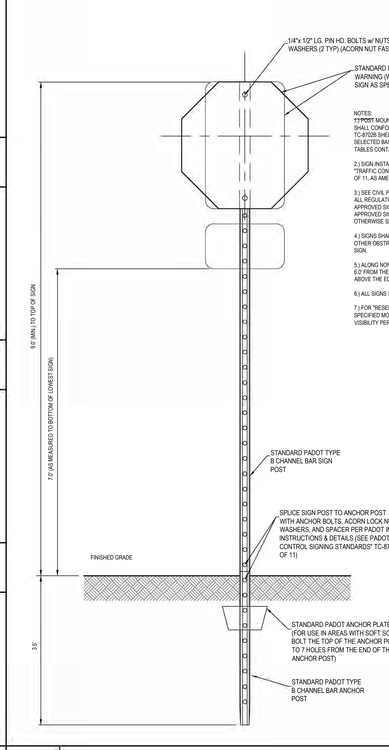
P-15 ***CONCRETE PAVEMENT DETAIL***

NOT TO SCALE



P-13 ***PAVEMENT TIE-IN DETAIL***

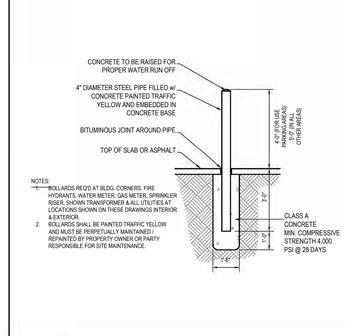
NOT TO SCALE



NOTES:
1. POST MOUNTED SIGNS SHALL BE TYPE B CHANNEL BAR POSTS AND SHALL CONFORM TO PADOT "TRAFFIC CONTROL SIGNING STANDARDS" TC-8702B SHEET 8 THRU 11 OF 11. APPROPRIATE POSTS SHALL BE SELECTED BASED ON THE SIZE OF THE SIGN USING THE SELECTION TABLES CONTAINED THEREIN.
2.) SIGN INSTALLATION SHALL BE IN ACCORDANCE WITH PADOT "TRAFFIC CONTROL SIGNING STANDARDS" TC-8702B SHEETS 8 THRU 11 OF 11, AS AMENDED.
3.) SEE CIVIL PLANS FOR EXACT LOCATION, TYPE AND SIZE OF SIGNS. ALL REGULATORY (R SERIES), WARNING (W SERIES) OR OTHER APPROVED SIGNS SHALL CONFORM TO THE PADOT "HANDBOOK OF APPROVED SIGNS", PUBLICATION 236M, AS AMENDED. UNLESS OTHERWISE SPECIFIED
4.) SIGNS SHALL BE SETBACK 2.0' FROM CURB LINES, GUIDE RAILS OR OTHER OBSTRUCTIONS AS MEASURED FROM THE FACE/EDGE OF THE SIGN.
5.) ALONG NON-CURBED LOCAL ROADWAYS SIGNS SHALL BE SETBACK 6.0' FROM THE SHOULDER/PAVING EDGE AND SHALL BE AT A HEIGHT 5.0' ABOVE THE EDGE OF PAVEMENT SURFACE.
6.) ALL SIGNS SHALL BE INSTALLED WITH ACORN NUT FASTENERS.
7.) FOR "RESERVED PARKING SIGN" (R7-8) REFER TO DETAILS AND SPECIFIED MOUNTING HEIGHTS WHICH ARE LOWER FOR INCREASED VISIBILITY PER ADA REGULATIONS.

T-11 ***STANDARD POLE MOUNTED SIGN INSTALLATION DETAIL***

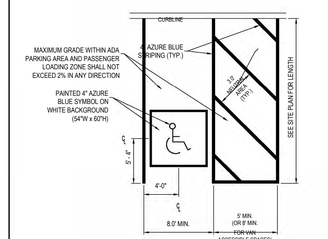
NOT TO SCALE



NOTES:
1. BOLLARDS REQ'D AT BLDG. CORNERS. FIRE HYDRANTS, WATER METER, GAS METER, SPRINKLER RISER, SHOWN TRANSFORMER & ALL UTILITIES AT LOCATIONS SHOWN ON THESE DRAWINGS INTERIOR & EXTERIOR.
2. BOLLARDS SHALL BE PAINTED TRAFFIC YELLOW AND MUST BE PERPETUALLY MAINTAINED / REPAINTED BY PROPERTY OWNER OR PARTY RESPONSIBLE FOR SITE MAINTENANCE.

T-20 ***BOLLARD DETAIL***

NOT TO SCALE



NOTES:
1. CURB RAMPS MAY NOT EXTEND INTO ANY PORTION OF THE PARKING SPACE OR ASSOCIATED STRIPED PASSENGER LOADING ZONE.
2. CURB RAMPS, PAVEMENT MARKINGS, AND APPLICABLE SIGNAGE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST A.D.A. ACCESSIBILITY GUIDELINES.

T-13 ***ADA ACCESSIBLE PARKING SPACE STRIPING (1 SPACE)***

NOT TO SCALE

LIST OF APPLICABLE PADOT DETAILS & STANDARDS

SIGNAGE: PA.D.O.T. PUBLICATION 236
PEDESTRIAN SIGN - W11-2 (30" x 30" W/ FLUORESCENT YELLOW-GREEN BACKGROUND)
DOWNWARD POINTING ARROW SIGN - W16-7P (24" x 12" W/ FLUORESCENT YELLOW-GREEN BACKGROUND)

ADDITIONAL DETAILS ASSOCIATED WITH ON-SITE STORMWATER STRUCTURES AND PADOT ROAD IMPROVEMENTS ARE ON THE FOLLOWING STANDARD DETAILS FROM THE LATEST EDITION OF PennDOT PUBLICATION 72M:
(THE PERMITTEE IS REQUIRED TO PROVIDE THE CONTRACTOR WITH COPIES OF THE MOST CURRENT APPLICABLE RC DRAWINGS)

STANDARD DRAWING NUMBER	DRAWING NAME
RC - 26M	CONCRETE PAVEMENT REHABILITATION
RC - 28M	OVERLAY TRANSITIONS AND PAVING NOTCHES
RC - 30M	SUBSURFACE DRAINS
RC - 39M	STORMWATER MANHOLES
RC - 64M	CURBS AND GUTTERS
RC - 65M	CONCRETE MOUNTABLE CURBS
RC - 67M	CURB RAMPS AND SIDEWALKS

Raising Cane's Chicken Fingers

Restaurant Support Office
6800 Bishop Road, Plano, TX 75024
Tele: 972-769-3100 Fax: 972-769-3101

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

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PROJECT No.:	PP2270001
DRAWN BY:	BMM
CHECKED BY:	KRT
DATE:	10.26.22
CAD I.D.:	PP2270001-X-TTLB-PHPD

PROJECT:
PRELIMINARY/ FINAL LAND DEVELOPMENT PLANS
FOR
RAISING CANE'S RESTAURANTS, LLC.

PROPOSED RESTAURANT #C0952

2620 WEST MORELAND ROAD
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

BOHLER
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PA 19102
Phone: (267) 402-3400
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COMMONWEALTH OF PENNSYLVANIA
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE086832

SHEET TITLE:
DETAILS

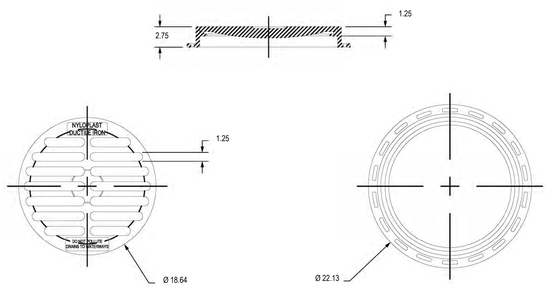
SHEET NUMBER:
C8.0

ORG. DATE - 10.26.22

R:\2022\PP2270001\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\PP2270001-CNDS-GN-----LAYOUT: C8-0 DETAILS

1899CGS

APPROX. DRAIN AREA = 116.72 SQ IN
APPROX. WEIGHT WITH FRAME = 68.50 LBS



DIMENSIONS ARE FOR REFERENCE ONLY
ACTUAL DIMENSIONS MAY VARY
DIMENSIONS ARE IN INCHES
GRATE MEETS H-20 LOAD RATING
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT
LOCKING DEVICE AVAILABLE UPON REQUEST SEE DRAWING NO. 7001-110-029

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DRAWN BY	EBC	MATERIAL	DUCTILE IRON
DATE	03-08-06		
REVISED BY	CCA	PROJECT NO./NAME	
DATE	08-30-13		
DWG SIZE	A	SCALE 1:10	SHEET 1 OF 1

ADS Nyloplast
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BUFORD, GA 30518
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FAX (770) 932-2490
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TITLE: 18 IN STANDARD GRATE ASSEMBLY - TYPE C

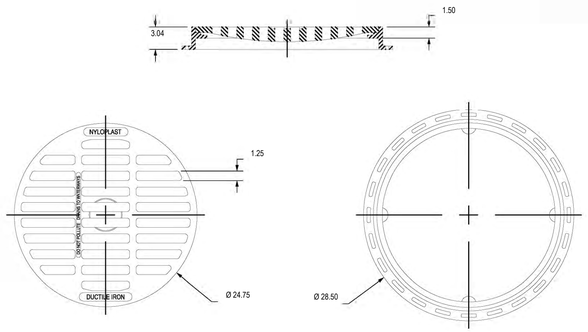
DWG NO. 7001-110-213 REV D

2499CGS

APPROX. DRAIN AREA = 194.60 SQ IN
APPROX. WEIGHT WITH FRAME = 124.00 LBS

EFFECTIVE WEIR LENGTH CALCULATIONS:

~~$A = \pi R^2$~~
$194.60 = \pi R^2$
R= 7.87 IN.
D= 15.74 IN.



DIMENSIONS ARE FOR REFERENCE ONLY
ACTUAL DIMENSIONS MAY VARY
DIMENSIONS ARE IN INCHES
GRATE MEETS H-20 LOAD RATING
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT
LOCKING DEVICE AVAILABLE UPON REQUEST SEE DRAWING NO. 7001-110-024

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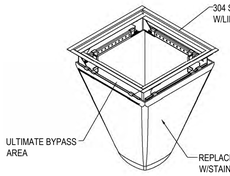
DRAWN BY	EBC	MATERIAL	DUCTILE IRON
DATE	03-08-06		
REVISED BY	CCA	PROJECT NO./NAME	
DATE	08-30-13		
DWG SIZE	A	SCALE 1:10	SHEET 1 OF 1

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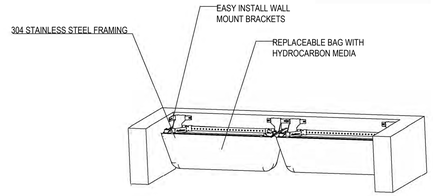
TITLE: 24 IN STANDARD GRATE ASSEMBLY - TYPE B

DWG NO. 7001-110-217 REV D

FLEXSTORM PURE FILTERS FOR PERMANENT INLET PROTECTION
PRODUCT SELECTION AND SPECIFICATION DRAWING



FLEXSTORM PURE INLET FILTERS FOR RECTANGULAR OPENINGS WITH GRATES



FLEXSTORM HDWM WALL MOUNT INLET FILTERS FOR OPEN THROAT GUTTERS

Product selection for FLEXSTORM PURE Filters (Permanent Inlet Protection)

Descrip	Inlet Type	Grate Size	Opening Size	Bag Cap (ft^3)	Flow Ratings (CFS) FX/FX+	PC/PC+	Bypass	FX	FX+	PC	PC+
2' x 2' Frame and Grate	Square/Rect (SQ)	24 x 24	22 x 22	3.3	1.8	1.6	4.8	62MHD22FX	62MHD22FXP	62MHD22PC	62MHD22PCP
2' x 4' Penndot Type M & C	Square/Rect (SQ)	26.5 x 48	24 x 44.5	6.3	3.1	2.2	9.5	62PENNMHDFX	62PENNMHDFXP	62PENNMHDPC	62PENNMHDPCP
2' x 6' Frame and Grate	Concrete Box (HD4)	26.5 x 75	24 x 72	10.0	4.8	4.1	13.0	62PENNHD2x6FX	62PENNHD2x6FXP	62PENNHD2x6PC	62PENNHF2x6PCP
3 x 3 Frame and Grate	Square/Rect (SQ)	37.5 x 37.5	36 x 36	7.2	4.4	3.2	9.6	62HDXLFX	62HDXLFXP	62HDXLPC	62HDXLPCP
48" Open Throat Curb Inlet	Wall Mount (WM)	N/A	48	3.3	2.5	4.2	N/A*	62HDWM48FX	62HDWM48FXP	62HDWM48PC	62HDWM48PCP

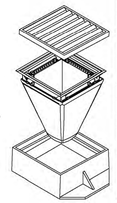
*FLOW RATINGS SHOWN ARE 50% MAXIMUM

NOTES:

1. ALL FRAMING IS CONSTRUCTED OF 304 STAINLESS STEEL FOR 25 YEAR SERVICE LIFE RATING
2. TOTAL BYPASS CAPACITY WILL VARY WITH EACH SIZED DRAINAGE STRUCTURE. FLEXSTORM DESIGNS FRAMING BYPASS TO MEET OR EXCEED THE DESIGN FLOW OF THE PARTICULAR DRAINAGE STRUCTURE.
3. UPON ORDERING ADS P/N CONFIRMATION OF THE DOT CALLOUT, FLEXSTORM ITEM CODE, CASTING MAKE AND MODEL, OR DETAILED DIMENSIONAL FORMS MUST BE PROVIDED.
4. FOR WRITTEN SPECIFICATIONS AND MAINTENANCE GUIDELINES VISIT WWW.INLETFILTERS.COM

INSTALLATION:

1. REMOVE GRATE
2. DROP FLEXSTORM INLET FILTER ONTO LOAD BEARING LIP OF CASTING OR CONCRETE STRUCTURE
3. REPLACE GRATE

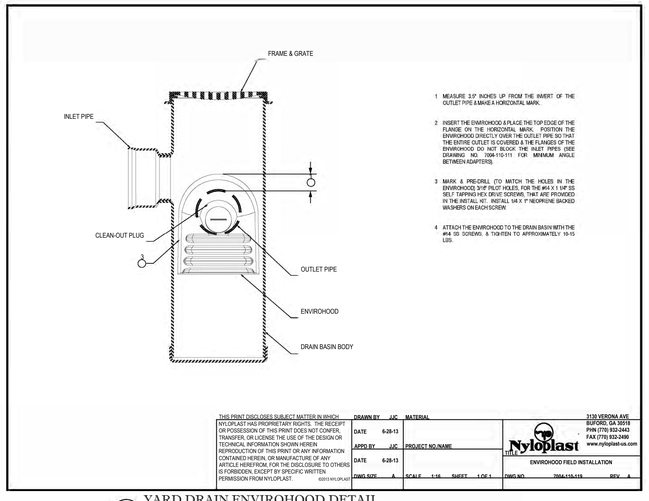


INLETS WITH WATER QUALITY FILTERS

STRUCTURE ID
IN01
IN02
IN03
IN04
IN05
IN06
YD01
YD02
YD03
YD04
YD05
YD06
YD07

NOTE: CONTRACTOR TO USE MODEL# 62PENNMHDPC AND 62MHD22PC

WATER QUALITY FILTER TYPICAL DETAIL



1 MEASURE 3.5" INCHES UP FROM THE INVERT OF THE OUTLET PIPE & MAKE A HORIZONTAL MARK.

2 INSERT THE ENVIROHOOD & PLACE THE TOP EDGE OF THE FLANGE ON THE HORIZONTAL MARK. POSITION THE ENVIROHOOD DIRECTLY OVER THE OUTLET PIPE SO THAT THE ENTIRE OUTLET IS COVERED & THE FLANGES OF THE ENVIROHOOD DO NOT BLOCK THE INLET PIPES (SEE DRAWING NO. 7006-110-111 FOR MINIMUM ANGLE BETWEEN ADAPTERS).

3 MARK & PRE-DRILL (TO MATCH THE HOLES IN THE ENVIROHOOD) 3/16" PILOT HOLES. FOR THE #14 X 1 1/4" SS SELF TAPPING HEX DRIVE SCREWS, THAT ARE PROVIDED IN THE INSTALL KIT. INSTALL 1/4 X 1" NEOPRENE BACKED WASHERS ON EACH SCREW.

4 ATTACH THE ENVIROHOOD TO THE DRAIN BASIN WITH THE #14 SS SCREWS. & TIGHTEN TO APPROXIMATELY 10-15 LBS.

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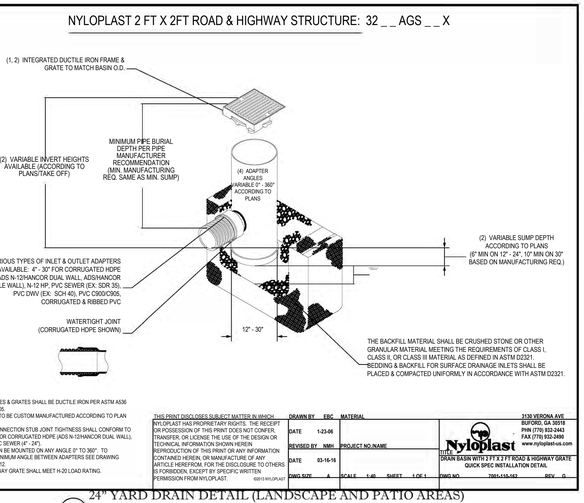
DRAWN BY	JJC	MATERIAL	
DATE	6-28-13		
APPD BY	JJC	PROJECT NO./NAME	
DATE	6-28-13		
DWG SIZE	A	SCALE 1:15	SHEET 1 OF 1

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BUFORD, GA 30518
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TITLE: ENVIROHOOD FIELD INSTALLATION

DWG NO. 7004-110-115 REV A

YARD DRAIN ENVIROHOOD DETAIL
SCALE: N.T.S.



1 - 12" - 30" FRAMES & GRATES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS.
3 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL) N-12 HP, & PVC SEWER (4" - 24").
4 - ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012.
5 - ROAD & HIGHWAY GRATE SHALL MEET H-20 LOAD RATING.

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DRAWN BY	EBC	MATERIAL	
DATE	1-23-06		
REVISED BY	NMH	PROJECT NO./NAME	
DATE	03-16-16		
DWG SIZE	A	SCALE 1:45	SHEET 1 OF 1

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FAX (770) 932-2490
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TITLE: DRAIN BASIN WITH 2'FT X 2'FT ROAD & HIGHWAY GRATE QUICK SPEC INSTALLATION DETAIL

DWG NO. 7001-110-163 REV G

24" YARD DRAIN DETAIL (LANDSCAPE AND PATIO AREAS)
SCALE: N.T.S.

Raising Cane's Chicken Fingers
Restaurant Support Office
6800 Bishop Road, Plano, TX 75024
Tele: 972-769-3100 Fax: 972-769-3101

REVISIONS

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PROJECT No.:	PP2270001
DRAWN BY:	BMM
CHECKED BY:	KRT
DATE:	10.26.22
CAD I.D.:	PP2270001-X-TTLB-PHPD

PROJECT:

PRELIMINARY/ FINAL LAND DEVELOPMENT PLANS

FOR

RAISING CANE'S RESTAURANTS, LLC.

PROPOSED RESTAURANT #C0952

2620 WEST MORELAND ROAD
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

BOHLER
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
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COMMONWEALTH OF PENNSYLVANIA
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE086832

SHEET TITLE:

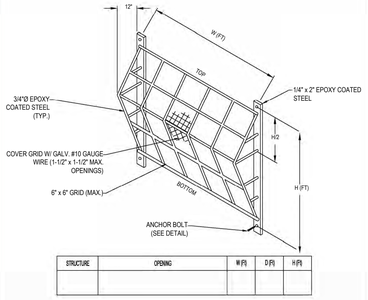
DETAILS

SHEET NUMBER:

C8.1

ORG. DATE - 10.26.22

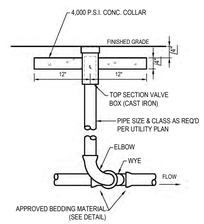
R:\2022\PP2270001\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\PP2270001-CNDS-09-----LAYOUT C8-1 DETAILS



STRUCTURE	OPENING	W (ft)	D (ft)	H (ft)

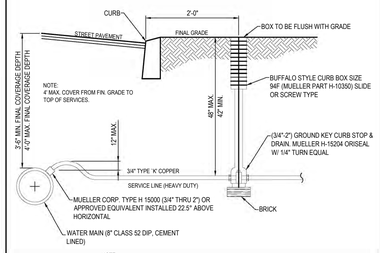
R-8 ***TRASH RACK-SAFETY GRATE FOR OUTLET STRUCTURE WEIR***

NOT TO SCALE



S-13 ***TYPICAL CLEANOUT DETAIL (LANDSCAPE AREAS)***

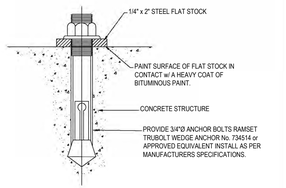
NOT TO SCALE



NOTE:
MODIFIED 2A STONE (8" LIFTS) SHALL BE PLACED WHEN BACKFILLING WATER SERVICE CONNECTION FROM MAIN TO BEHIND CURB.

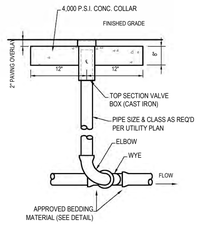
W-2 ***WATER SERVICES CONNECTION DETAIL***

NOT TO SCALE



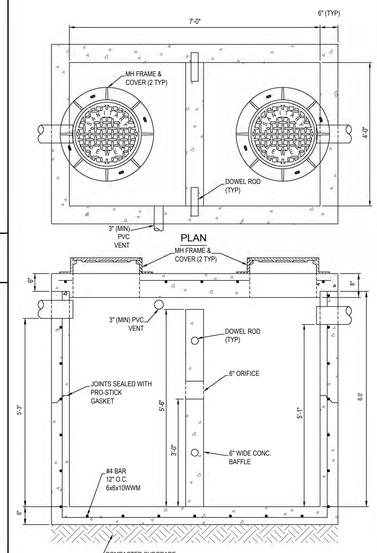
R-10 ***ANCHOR BOLT FOR TRASH RACKS***

NOT TO SCALE



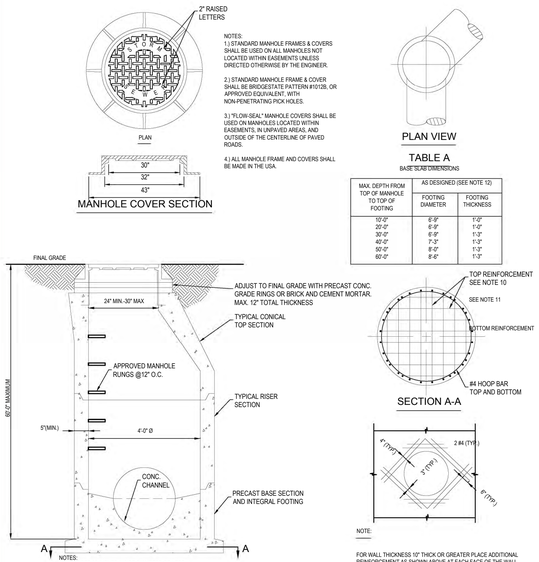
S-12 ***TYPICAL CLEANOUT DETAIL (PAVED AREAS)***

NOT TO SCALE



S-10 ***GREASE TRAP DETAIL***

NOT TO SCALE

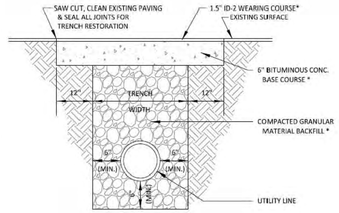


NOTES:
1. PRECAST MANHOLES, MEETING THE REQUIREMENTS OF PUBLICATION 408 SPECIFICATIONS, SECTION 714, MAY BE SUBSTITUTED FOR THE STANDARD CAST-IN-PLACE MANHOLE.
2. CONSTRUCTION NOTES:
A. CONSTRUCT IN ACCORDANCE WITH: PENNDOT PUBLICATION 408 SPECIFICATIONS, SECTIONS 605, 608, 714 AND ASTM C-478-94, STANDARD SPECIFICATIONS FOR PRECAST REINFORCED CONCRETE MANHOLE SECTIONS, AS MODIFIED HERE IN.
B. MINIMUM CONCRETE CLASS AA
C. PROVIDE EPOXY COATED STEEL REINFORCEMENT (IN ACCORDANCE WITH ASTM A185), STEEL WELDED WIRE FABRIC (IN ACCORDANCE WITH ASTM A563 & A675), PLAIN BILLET STEEL BARS (IN ACCORDANCE WITH ASTM A615) OR DEFORMED BILLET STEEL BARS. PROVIDE MINIMUM YIELD STRENGTH OF 60,000 PSI.
D. CLEAR COVER FOR STEEL: WALLS: 2" FOOTINGS: 2" (TOP BARS), 1 1/2" (BOTTOM BARS) 1 1/2" (SIDE COVER)
3. PROVIDE 12" MINIMUM HORIZONTAL CLEARANCE BETWEEN OPENINGS LOCATED AT THE SAME DEPTH. PIPES NOT LOCATED AT THE SAME DEPTH MUST BE LOCATED VERTICALLY AT LEAST ONE TIMES MAXIMUM OPENING DIAMETER APART.
4. FOR RISERS OR BASE SECTIONS WITH OPENINGS, PROVIDE A MINIMUM HEIGHT OF SECTION EQUAL TO TWO TIMES THE LARGEST OPENING, CENTER OF OPENING TO BE LOCATED AT LEAST ONE TIMES THE OPENING FROM THE CLOSEST JOINT BETWEEN RISERS.
5. FOR PRECAST RISER OR BASE SECTIONS WITH ONE OPENING LOCATED AT DEPTHS TO 60' OR FOR SECTIONS WITH TWO OR MORE OPENINGS, LOCATED AT A DEPTH OF 15 FEET AND LESS, PROVIDE CIRCUMFERENTIAL REINFORCEMENT IN ACCORDANCE WITH REINFORCEMENT DETAIL AT OPENINGS.
FOR RISERS OR BASE SECTIONS WITH 2 OR MORE OPENINGS, LOCATED AT A DEPTH GREATER THAN 15 FEET, BUT LESS THAN OR EQUAL TO 30 FEET, PROVIDE CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.4 SQ/IN VERTICAL FOOT FOR THE DEPTH OF THE RISER OR BASE SECTION
FOR RISERS OR BASE SECTIONS WITH 2 OR MORE OPENINGS, LOCATED AT DEPTHS GREATER THAN 30 FEET, USE A 10 INCH THICK WALL RISER OR BASE SECTION WITH CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ/IN VERTICAL FOOT EACH FACE
RISERS OR BASE SECTIONS WITH HOLES TO BE CLEARLY MARKED WITH MAXIMUM ALLOWABLE DEPTH.
6. PROVIDE ADDITIONAL REINFORCEMENT BARS AROUND OPENINGS AS SHOWN ON REINFORCEMENT DETAILS AT OPENINGS
7. PROVIDE MANHOLE STEPS MEETING THE REQUIREMENTS OF PUBLICATION 408 SPECIFICATIONS, SECTION 605.2(C). ALTERNATE CONFIGURATIONS AND DIMENSIONS, AS APPROVED BY THE ENGINEER, MAY BE USED.
8. PROVIDE MINIMUM 1" SECTION DIMENSION FOR METAL STEPS. PROVIDE MAXIMUM 3/4" SECTION DIMENSION FOR NONDETERIORATING MATERIAL STEPS.
9. MECHANICAL ANCHOR REQUIRED FOR INSTALLATION OF STEPS WITHOUT HOOKS.
10. FOR FOOTING TOP REINFORCEMENT, BOTH DIRECTIONS, USE NO. 19 (6) BARS AT 12" FOR DEPTHS TO 40' OR 0.30 IN/FT WWF FOR DEPTHS TO 30' AND 0.32 IN/FT WWF FOR DEPTHS GREATER THAN 30'. 6" MAXIMUM SPACING FOR WWF.
11. FOR FOOTING BOTTOM REINFORCEMENT, BOTH DIRECTIONS, USE NO. 13 (4) BARS AT 18" FOR DEPTHS TO 60' OR 0.15 IN/FT WWF FOR DEPTHS TO 30' AND 0.16 IN/FT WWF FOR DEPTHS GREATER THAN 30'. 6" MAXIMUM SPACING FOR WWF.
12. A SAFE BEARING CAPACITY OF (1.5 TONS PER SF) UNDER THE ENTIRE SLAB IS ASSUMED TO DETERMINE THE BASE SIZE. WHEN THE SUBSOIL IS EXTREMELY POOR, PROCEED WITH CONSTRUCTION ONLY AFTER THE ENGINEER SPECIFIES ADEQUATE BASE DESIGN.

R-4 ***PRECAST STORM MANHOLE DETAILS***

NOT TO SCALE

ABINGTON TOWNSHIP STANDARD

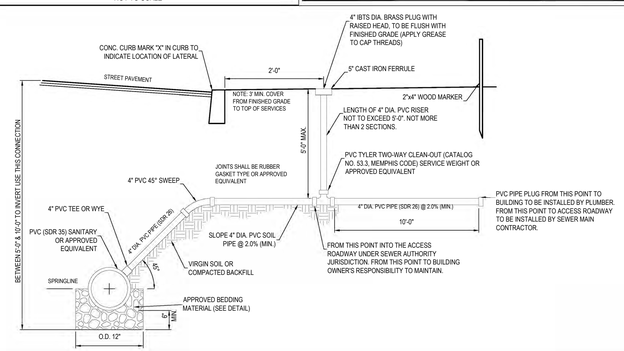


* NOTE: PAVEMENT AND TRENCH RESTORATION SHALL BE IN ACCORDANCE WITH PENNSYLVANIA CODE 67, CHAPTER 459 (3/22/89), AND PUBLICATION 408-1987.

PAVEMENT REPLACEMENT DETAIL

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REV: 5/19



S-1 ***TYPICAL SANITARY SEWER LATERAL DETAIL***

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PROJECT No.:	PP2270001
DRAWN BY:	BMM
CHECKED BY:	KRT
DATE:	10.26.22
CAD I.D.:	PP2270001-X-TTLB-PHPD

PROJECT:

PRELIMINARY/ FINAL LAND DEVELOPMENT PLANS

FOR

RAISING CANE'S RESTAURANTS, LLC.

PROPOSED RESTAURANT #C0952

2620 WEST MORELAND ROAD
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

BOHLER
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PA 19102
Phone: (267) 402-3400
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K.R. TATLOW
COMMONWEALTH OF PENNSYLVANIA
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE NO. PE086832

SHEET TITLE:

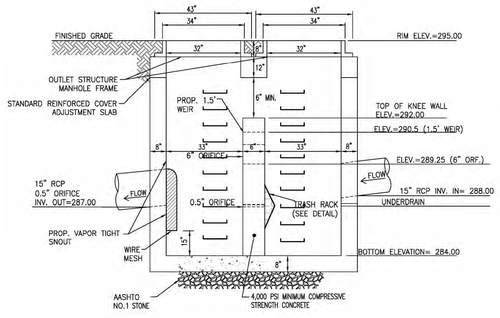
DETAILS

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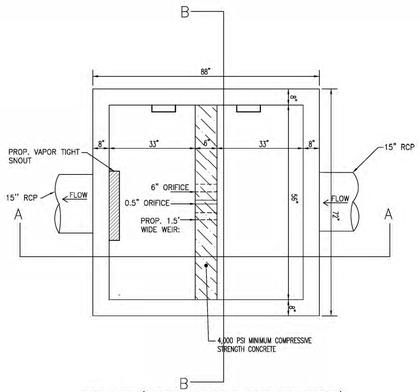
C8.2

ORG. DATE - 10.26.22

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SECTION A–A
SIDE VIEW (PENNDOT TYPE 6 INLET BOX DETAIL)

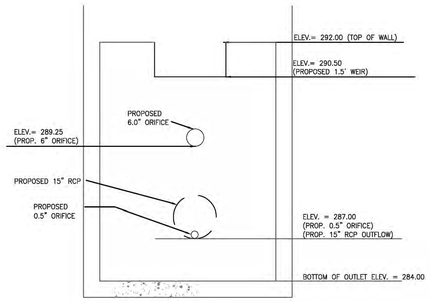


SECTION B–B
TOP VIEW (PENNDOT TYPE 6 INLET BOX DETAIL)

NOTES:

1.) FURNISH OUTLET BOX WITH COPOLYMER PROPYLENE STEPS.
2.) ALL JOINTS WITHIN OUTLET STRUCTURE TO BE WATERTIGHT.
3.) IF THE STRUCTURE IS NOT MONOLITHIC, PROVIDE CONSTRUCTION JOINTS OR KEYS FOR RISER SECTIONS AND PRECAST COVER ADJUSTMENT SLABS.
4.) CONCRETE SHALL BE 4,000 PSI MINIMUM COMPRESSIVE STRENGTH.
5.) A 30" MINIMUM INTERIOR CLEAR OPENING SHALL BE REQUIRED IN THE COVER ADJUSTMENT SLAB.
6.) WEIR WALL TO BE ATTACHED TO INLET BOX WITH 4" REBAR.
7.) WEIR WALL WITHIN OUTLET CONTROL STRUCTURE MUST BE POURED MONOLITHICALLY.

DB 6 PROB. BASIN OUTLET STRUCTURE OS01
SCALE: N.T.S. REV.: 2017.06.06



SECTION B–B
FRONT VIEW (NTS)

UNDERGROUND DETENTION BASIN GEOTEXTILE NOTES:

1.) GEOTEXTILE MUST CONSIST OF POLYPROPYLENE FIBERS AND MEET THE FOLLOWING SPECIFICATIONS (AASHTO CLASS 1 OR CLASS 2 GEOTEXTILE IS RECOMMENDED):
GRAB TENSILE STRENGTH (ASTM–D4632): ≥ 120 LBS
MULLEN BURST STRENGTH (ASTM–D3786): ≥ 225 PSI
FLOW RATE (ASTM–D4491): ≥ 95 GAL/MIN/FT2
UV RESISTANCE AFTER 500 HRS (ASTM–D4355): ≥ 70%
HEAT–SET OR HEAT–CALENDARED FABRICS ARE NOT PERMITTED.

PCSM - GENERAL BMP NOTES

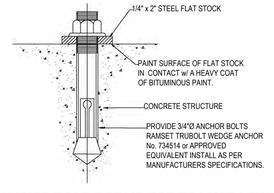
1. BOHLER ENGINEERING SHALL BE NOTIFIED OF PRE–CONSTRUCTION MEETING DATE AND BMP CONSTRUCTION SCHEDULE.
2. THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY TO LIMIT THE COMPACTION IN THE PROPOSED BMP BOTTOMS.
3. REFER TO THE BMP CONSTRUCTION DETAILS FOR THE CONSTRUCTION OF ALL PROPOSED STORMWATER MANAGEMENT BMPs.
4. REFER TO THE PCSWM PLAN AND DETAILS FOR SPECIFIC BMP CONSTRUCTION GUIDELINES.
5. AS–BUILT PLANS OF THE STORMWATER BMPs FOR EACH PROJECT PHASE SHALL BE PROVIDED WITHIN SIX MONTHS FOLLOWING THE COMPLETION OF EACH PHASE. THE AS–BUILT PLANS SHALL BE SIGNED AND SEALED BY A PA REGISTERED PROFESSIONAL SURVEYOR.

LONG-TERM OPERATION AND MAINTENANCE SCHEDULE

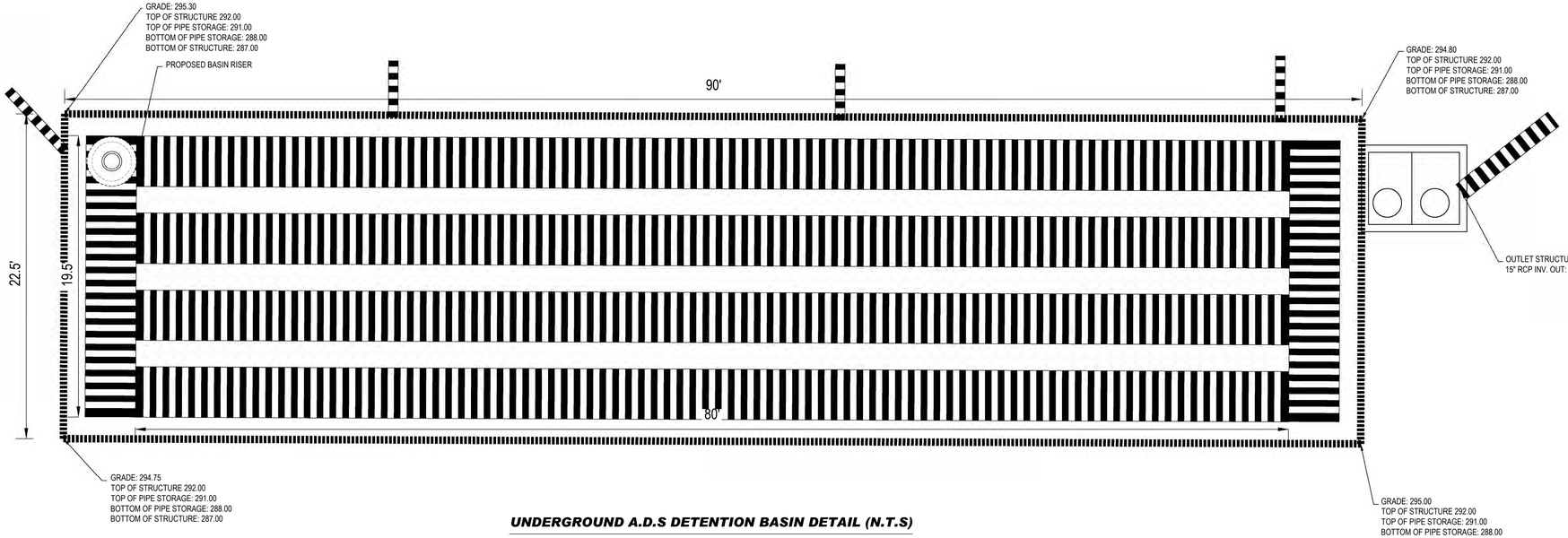
§102.8(f)(10)

1. UNTIL THE SITE IS STABILIZED AND DURING THE CONSTRUCTION ACTIVITIES, ALL BMPs MUST BE MAINTAINED PROPERLY BY CONTRACTOR. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL BMPs AS SPECIFIED. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN-OUT, REPAIR, REPLACEMENT, RE-GRADING, RE-SEEDING, RE-MULCHING AND RE-NETTING MUST BE PERFORMED IMMEDIATELY AND IN ACCORDANCE WITH THESE PROCEDURES, PLANS, AND DETAILS. ANY AREAS DISTURBED DURING MAINTENANCE MUST BE STABILIZED IMMEDIATELY IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS.
2. ALL SITE INSPECTIONS MUST BE DOCUMENTED IN AN INSPECTION LOG KEPT FOR THIS PURPOSE INDICATING THE COMPLIANCE ACTIONS AND THE DATE, TIME AND NAME OF THE PERSON CONDUCTING THE INSPECTION. THE INSPECTION LOG MUST BE KEPT ON SITE AT ALL TIMES AND MADE AVAILABLE TO THE DISTRICT UPON REQUEST.
3. SHOULD ON-SITE EROSION OCCUR FROM THE LANDSCAPED AREAS, THE SOURCE OF EROSION SHALL BE IMMEDIATELY STABILIZED AND THE INLETS AND STORMWATER PIPING SHALL BE CHECKED FOR ACCUMULATION AND CLEARED IF ACCUMULATION OF SEDIMENT EXISTS.
4. HEAVY CONSTRUCTION VEHICLES SHALL NOT BE PARKED ON OR DRIVEN OVER BMP FACILITIES AND CARE SHOULD BE TAKEN TO AVOID EXCESSIVE COMPACTION BY EQUIPMENT, INCLUDING MOWERS.
5. REMOVE ACCUMULATED SEDIMENT FROM THE FACILITIES AS REQUIRED. RESTORE ORIGINAL CROSS-SECTION IF NECESSARY. PROPERLY DISPOSE OF SEDIMENT AS SPECIFIED.

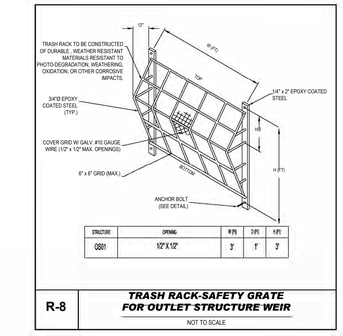
PRESSER REALTY LP IS RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF THE STORMWATER MANAGEMENT BMPs AS DESCRIBED HEREIN.



R S7 ANCHOR BOLT DETAIL FOR TRASH RACKS
SCALE: N.T.S. REV.: 2019.07.17



UNDERGROUND A.D.S DETENTION BASIN DETAIL (N.T.S)



R-8 ***TRASH RACK-SAFETY GRATE FOR OUTLET STRUCTURE WEIR***
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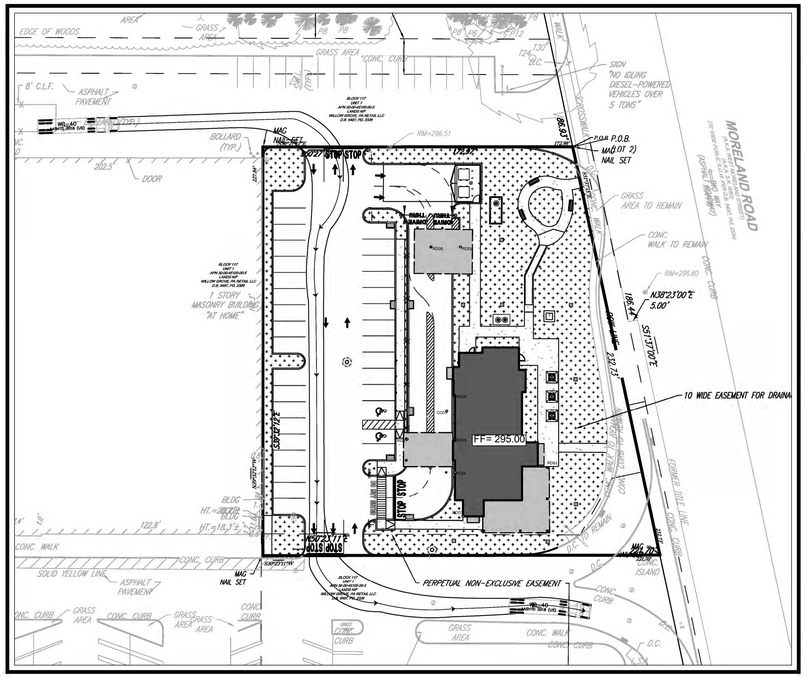
DETAILS

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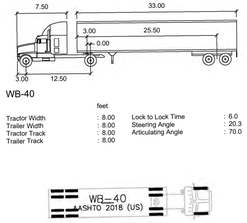
C9.0

ORG. DATE - 10.26.22

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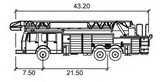


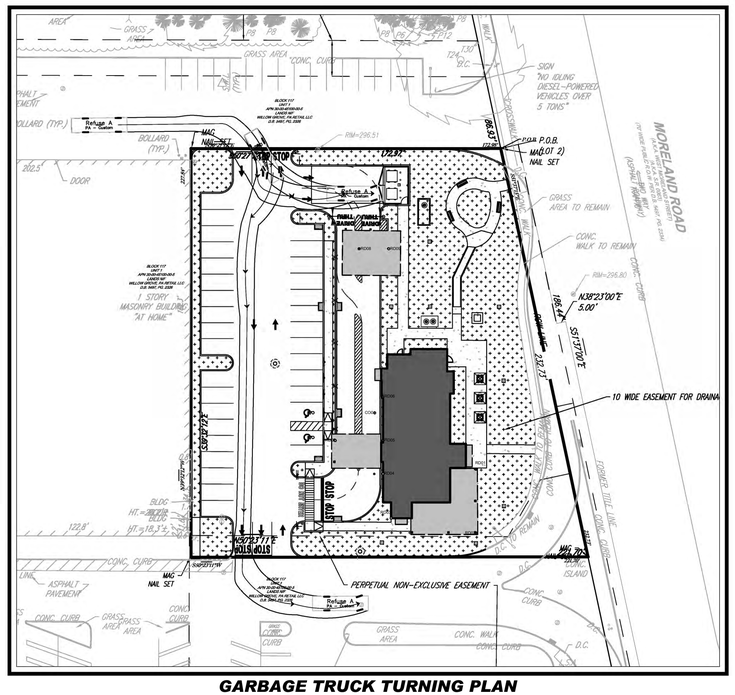
WB-40 TURNING PLAN





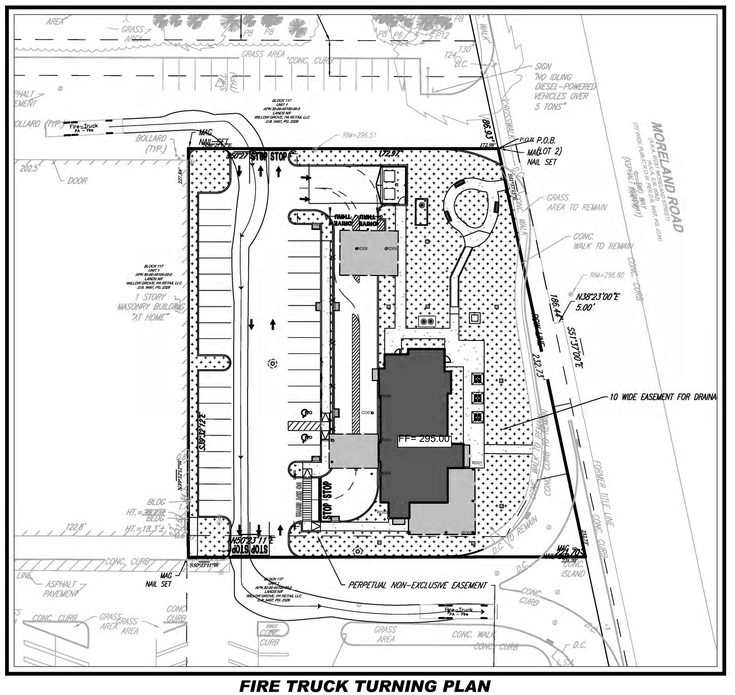
LOCATION MAP
SCALE: 1" = 500'





GARBAGE TRUCK TURNING PLAN





FIRE TRUCK TURNING PLAN

40 20 10 0 40
1"=40'

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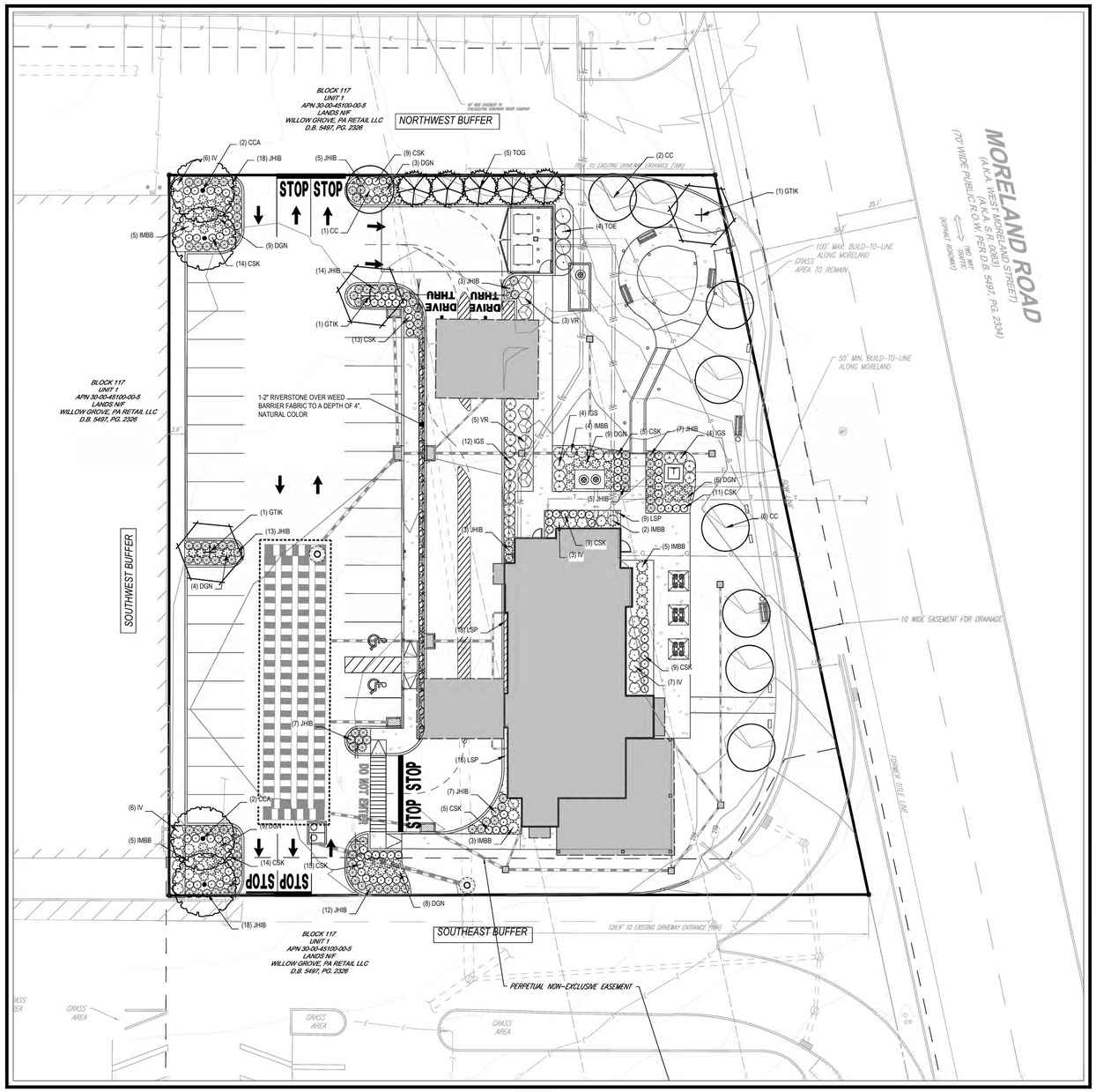
VEHICLE TURNING PLAN

SHEET NUMBER:

C10.0

ORG. DATE - 10.26.22

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LOCATION MAP
SCALE: 1" = 500'

GENERAL NOTES:

1. THIS PLAN IS TO BE UTILIZED FOR LANDSCAPE PURPOSES ONLY.
2. ALL DISTURBED UNPAVED AREAS, EXCLUDING PLANTING BEDS, ARE TO BE INSTALLED AS LAWN IN ACCORDANCE WITH LANDSCAPE SPECIFICATION #2.C., UNLESS OTHERWISE STATED ON THIS PLAN.
3. SHRUBS PLANTED ALONG HEAD-IN PARKING STALLS SHALL BE INSTALLED TO ALLOW A CLEARANCE OF TWO FEET FROM FACE OF CURB TO ALLOW FOR BUMPER OVERHANG.
4. IF IRRIGATION IS REQUIRED BY THE OWNER OR APPROVING MUNICIPALITY, THE CONTRACTOR SHALL PROVIDE AN IRRIGATION SYSTEM MEETING THE SPECIFICATIONS OF THE CHOSEN PRODUCT'S MANUFACTURER. THE IRRIGATION DESIGN SHALL ACCOMMODATE LAWN AND BED AREAS EACH UNDER SEPARATE ZONES TO MAXIMIZE WATER EFFICIENCY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ANY PERMITS REQUIRED FOR THE INSTALLATION OF AN IRRIGATION SYSTEM.
5. PLANT MATERIAL SUBSTITUTIONS MUST BE FORMALLY SUBMITTED TO BOHLER ENGINEERING AND THE MUNICIPAL ENGINEER AND LANDSCAPE CONSULTANTS FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION. ANY PLANT MATERIAL THAT ARE TO BE INSTALLED WITHIN STORMWATER BMP FEATURES MUST BE NATIVE SPECIES.
6. WITHOUT EXCEPTION, WEED BARRIER FABRIC SHALL NOT BE INSTALLED WITHIN ANY BMP FACILITY. BMP FACILITIES INCLUDE RAINGARDENS, INFILTRATION TRENCHES, VEGETATIVE SWALES AND STORMWATER BASINS.

PLANT SCHEDULE

CANOPY TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	
CCA	4	CARPINUS CAROLINIANA	AMERICAN HORNBEAM	2.5" CAL.	B&B	
GTIK	3	GLEDITSIA TRIACANTHOS INERMIS `SKYCOLE`	SKYLINE THORNLESS HONEY LOCUST	2.5" CAL.	B&B	
EVERGREEN TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	
TOG	5	THUJA OCCIDENTALIS `GREEN GIANT`	GREEN GIANT ARBORVITAE	8` HT.	B&B	
ORNAMENTAL TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	
CC	9	CERCIS CANADENSIS	EASTERN REDBUD	2-2 1/2" CAL.	B&B	
SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	
CSK	104	CORNUS SERICEA `KELSEYI`	KELSEYI DOGWOOD	15-18"	CONTAINER	
DGN	48	DEUTZIA GRACILIS `NIKKO`	SLENDER DEUTZIA	18-24"	CONTAINER	
IGS	20	ILEX GLABRA `SHAMROCK`	SHAMROCK INKBERRY	36" MIN.	CONTAINER	
IMBB	24	ILEX X MESERVEAE `BLUE BOY`	BLUE BOY HOLLY	36" MIN.	CONTAINER	
IV	22	ITEA VIRGINICA `HENRY`S GARNET`	HENRY`S GARNET SWEETSPIRE	24-30"	CONTAINER	
JHIB	112	JUNIPERUS HORIZONTALIS `MONBER`	ICEE BLUE JUNIPER	15-18" SPRD	CONTAINER	
TOE	4	THUJA OCCIDENTALIS `EMERALD`	EMERALD ARBORVITAE	6` MIN.	B&B	
VR	8	VIBURNUM RHYTIDOPHYLLUM	LEATHERLEAF VIBURNUM	3-4	B&B	
PERENNIALS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING
LSP	43	LIRIOPE SPICATA	CREEPING LILY TURF	1 GAL.	CONTAINER	15" o.c.

Raising Cane's Chicken Fingers
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K.R. THORLOW
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REGISTERED LANDSCAPE ARCHITECT
PENNSYLVANIA LICENSE No. LA002729

SHEET TITLE:
LANDSCAPE PLAN

SHEET NUMBER:
C11.0

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LANDSCAPE SPECIFICATIONS:

1. SCOPE OF WORK:
THE CONTRACTOR SHALL BE REQUIRED TO PERFORM ALL CLEARING, FINISHED GRADING, SOIL PREPARATION, PERMANENT SEEDING OR SODDING, PLANTING AND MULCHING INCLUDING ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY FOR THE COMPLETION OF THIS PROJECT, UNLESS OTHERWISE CONTRACTED BY THE GENERAL CONTRACTOR.

2. MATERIALS
A. GENERAL: ALL HARDSCAPE MATERIALS SHALL MEET OR EXCEED SPECIFICATIONS AS OUTLINED IN THE STATE DEPARTMENT OF TRANSPORTATION'S SPECIFICATIONS.

B. TOPSOIL - NATURAL, FRIABLE, LOAMY SILT SOIL HAVING AN ORGANIC CONTENT NOT LESS THAN 6%, A PH RANGE BETWEEN 5.5-7.0, IT SHALL BE FREE OF DEBRIS, ROCKS LARGER THAN ONE INCH (1"), WOOD, ROOTS, VEGETABLE MATTER AND CLAY CLODS.

C. LAWN - LAWN AREAS SHALL BE SEEDED OR SODDED IN ACCORDANCE WITH THE PERMANENT STABILIZATION METHODS INDICATED WITHIN THE SOIL EROSION AND SEDIMENT CONTROL NOTES. FOR SOIL BED PREPARATIONS, REFER TO ITEM B BELOW.
I. LAWN SEED MIXTURE SHALL BE FRESH, CLEAN NEW CROP SEED.
II. SOD SHALL BE STRONGLY ROOTED, WEED AND DISEASE/PEST FREE WITH A UNIFORM THICKNESS. SOD INSTALLED ON SLOPES GREATER THAN 4:1 SHALL BE PEGGED TO HOLD SOD IN PLACE.

D. MULCH - ALL PLANTING BEDS SHALL BE MULCHED WITH A 3" THICK LAYER OF DOUBLE SHREDDED HARDWOOD BARK MULCH, UNLESS OTHERWISE STATED ON THE LANDSCAPE PLAN

E. FERTILIZER
I. FERTILIZER SHALL BE DELIVERED TO THE SITE MIXED AS SPECIFIED IN THE ORIGINAL UNOPENED STANDARD BAGS SHOWING WEIGHT, ANALYSIS AND NAME OF MANUFACTURER. FERTILIZER SHALL BE STORED IN A WEATHERPROOF PLACE SO THAT IT CAN BE KEPT DRY PRIOR TO USE.
II. FOR THE PURPOSE OF BIDDING, ASSUME THAT FERTILIZER SHALL BE 10% NITROGEN, 6% PHOSPHORUS AND 4% POTASSIUM BY WEIGHT. A FERTILIZER SHOULD NOT BE SELECTED WITHOUT A SOIL TEST PERFORMED BY A CERTIFIED SOIL LABORATORY.

F. PLANT MATERIAL
I. ALL PLANTS SHALL IN ALL CASES CONFORM TO THE REQUIREMENTS OF THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1), LATEST EDITION, AS PUBLISHED BY AMERICAN HORT (FORMERLY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION).
II. IN ALL CASES, BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES FOR ANY AND ALL PLANT MATERIAL.
III. PLANTS SHALL BE LEGIBLY TAGGED WITH THE PROPER NAME AND SIZE. TAGS ARE TO REMAIN ON AT LEAST ONE PLANT OF EACH SPECIES FOR VERIFICATION PURPOSES DURING THE FINAL INSPECTION.
IV. TREES WITH ABRASION OF THE BARK, SUN SCALDS, DISFIGURATION OR FRESH CUTS OF LIMBS OVER 1½", WHICH HAVE NOT BEEN COMPLETELY CALLUSED, SHALL BE REJECTED. PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES.
V. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH. WELL DEVELOPED BRANCHES, DENSELY FOLIATED, VIGOROUS ROOT SYSTEMS AND BE FREE OF DISEASE, INSECTS, PESTS, EGGS OR LARVAE.
VI. CALIPER MEASUREMENTS OF NURSERY GROWN TREES SHALL BE TAKEN AT A POINT ON THE TRUNK SIX INCHES (6") ABOVE THE NATURAL GRADE FOR TREES UP TO AND INCLUDING A FOUR INCH (4") CALIPER SIZE. IF THE CALIPER AT SIX INCHES (6") ABOVE THE GROUND EXCEEDS FOUR INCHES (4") IN CALIPER, THE CALIPER SHOULD BE MEASURED AT A POINT 12" ABOVE THE NATURAL GRADE.
VII. SHRUBS SHALL BE MEASURED TO THE AVERAGE HEIGHT OR SPREAD OF THE SHRUB, AND NOT TO THE LONGEST BRANCH.
VIII. TREES AND SHRUBS SHALL BE HANDLED WITH CARE BY THE ROOT BALL.

3. GENERAL WORK PROCEDURES
A. CONTRACTOR SHALL PERFORM IN WORKMANLIKE INDUSTRY STANDARDS IN PERFORMING ALL LANDSCAPE CONSTRUCTION. THE SITE IS TO BE LEFT IN A CLEAN STATE AT THE END OF EACH WORKDAY. ALL DEBRIS, MATERIALS AND TOOLS SHALL BE PROPERLY STORED, STOCKPILED OR DISPOSED OF.

B. WASTE MATERIALS AND DEBRIS SHALL BE COMPLETELY DISPOSED OF AT THE CONTRACTOR'S EXPENSE. DEBRIS SHALL NOT BE BURIED, INCLUDING ORGANIC MATERIALS, BUT SHALL BE REMOVED COMPLETELY FROM THE SITE.

4. SITE PREPARATIONS
A. BEFORE BEGINNING PRELIMINARY GRADING AND FINISHED GRADING, ALL WEEDS AND GRASSES SHALL BE DUG OUT BY THE ROOTS AND DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES OUTLINED HEREIN.

B. ALL EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE ANY DAMAGED BRANCHES. THE ENTIRE LIMB OF ANY DAMAGED BRANCH SHALL BE CUT OFF AT THE BRANCH COLLAR. CONTRACTOR SHALL ENSURE THAT CUTS ARE SMOOTH AND STRAIGHT. ANY EXPOSED ROOTS SHALL BE CUT BACK WITH CLEAN, SHARP TOOLS AND TOPSOIL SHALL BE PLACED AROUND THE REMAINDER OF THE ROOTS. EXISTING TREES SHALL BE MONITORED ON A REGULAR BASIS FOR ADDITIONAL ROOT OR BRANCH DAMAGE AS A RESULT OF CONSTRUCTION. ROOTS SHALL NOT BE LEFT EXPOSED FOR MORE THAN ONE (1) DAY. CONTRACTOR SHALL WATER EXISTING TREES AS NEEDED TO PREVENT SHOCK OR DECLINE.

C. CONTRACTOR SHALL ARRANGE TO HAVE A UTILITY STAKE-OUT TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY LANDSCAPE MATERIAL. UTILITY COMPANIES SHALL BE CONTACTED THREE (3) DAYS PRIOR TO THE BEGINNING OF WORK.

5. TREE PROTECTION
A. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TREES TO REMAIN. A TREE PROTECTION ZONE SHALL BE ESTABLISHED AT THE DRIP LINE OR 15 FEET FROM THE TRUNK OR AT THE LIMIT OF CONSTRUCTION DISTURBANCE, WHICHEVER IS GREATER. LOCAL STANDARDS THAT MAY REQUIRE A MORE STRICT TREE PROTECTION ZONE SHALL BE HONORED.

B. A FORTY-EIGHT INCH (48") HIGH WOODEN SNOW FENCE OR ORANGE COLORED HIGH-DENSITY VISI-FENCE®, OR APPROVED EQUAL, MOUNTED ON STEEL POSTS SHALL BE PLACED ALONG THE BOUNDARY OF THE TREE PROTECTION ZONE. POSTS SHALL BE LOCATED AT A MAXIMUM OF EIGHT FEET (8') ON CENTER OR AS INDICATED WITHIN THE TREE PROTECTION DETAIL.

C. WHEN THE TREE PROTECTION FENCING HAS BEEN INSTALLED, IT SHALL BE INSPECTED BY THE APPROVING AGENCY PRIOR TO DEMOLITION, GRADING, TREE CLEARING OR ANY OTHER CONSTRUCTION. THE FENCING ALONG THE TREE PROTECTION ZONE SHALL BE REGULARLY INSPECTED BY THE CONTRACTOR AND MAINTAINED UNTIL ALL CONSTRUCTION ACTIVITY HAS BEEN COMPLETED.

D. AT NO TIME SHALL MACHINERY, DEBRIS, FALLEN TREES OR OTHER MATERIALS BE PLACED, STOCKPILED OR LEFT STANDING IN THE TREE PROTECTION ZONE.

6. SOIL MODIFICATIONS
A. CONTRACTOR SHALL ATTAIN A SOIL TEST FOR ALL AREAS OF THE SITE PRIOR TO CONDUCTING ANY PLANTING. SOIL TESTS SHALL BE PERFORMED BY A CERTIFIED SOIL LABORATORY.

B. CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL. SOIL MODIFICATIONS, AS SPECIFIED HEREIN, MAY NEED TO BE CONDUCTED BY THE CONTRACTOR DEPENDING ON SITE CONDITIONS.

C. THE FOLLOWING AMENDMENTS AND QUANTITIES ARE APPROXIMATE AND ARE FOR BIDDING PURPOSES ONLY. COMPOSITION OF AMENDMENTS SHOULD BE REVISED DEPENDING ON THE OUTCOME OF A TOPSOIL ANALYSIS PERFORMED BY A CERTIFIED SOIL LABORATORY.
I. TO INCREASE A SANDY SOIL'S ABILITY TO RETAIN WATER AND NUTRIENTS, THOROUGHLY TILL ORGANIC MATTER INTO THE TOP 6-12". USE COMPOSTED BARK, COMPOSTED LEAF MULCH OR PEAT MOSS. ALL PRODUCTS SHOULD BE COMPOSTED TO A DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF OR WOOD STRUCTURE. AVOID MATERIAL WITH A PH HIGHER THAN 7.5.
II. TO INCREASE DRAINAGE, MODIFY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) AND/OR AGRICULTURAL GYPSUM. COARSE SAND MAY BE USED IF ENOUGH IS ADDED TO BRING THE SAND CONTENT TO MORE THAN 60% OF THE TOTAL MIX. SUBSURFACE DRAINAGE LINES MAY NEED TO BE ADDED TO INCREASE DRAINAGE.
III. MODIFY EXTREMELY SANDY SOILS (MORE THAN 85%) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.

7. FINISHED GRADING
A. UNLESS OTHERWISE CONTRACTED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF FINE-GRADING WITHIN THE DISTURBANCE AREA OF THE SITE.

B. CONTRACTOR SHALL VERIFY THAT SUBGRADE FOR INSTALLATION OF TOPSOIL HAS BEEN ESTABLISHED. THE SUBGRADE OF THE SITE MUST MEET THE FINISHED GRADE LESS THE REQUIRED TOPSOIL THICKNESS (1"±).

C. ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE AS DEPICTED WITHIN THIS SET OF CONSTRUCTION PLANS, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER OR LANDSCAPE ARCHITECT.

D. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER IN AND AROUND THE PLANTING BEDS. STANDING WATER SHALL NOT BE PERMITTED IN PLANTING BEDS.

8. TOPSOILING
A. CONTRACTOR SHALL PROVIDE A SIX INCH (6") THICK MINIMUM LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, IN ALL PLANTING AND LAWN AREAS. TOPSOIL SHOULD BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO ACHIEVE THE DESIRED COMPACTED THICKNESS.

B. ON-SITE TOPSOIL MAY BE USED TO SUPPLEMENT THE TOTAL AMOUNT REQUIRED. TOPSOIL FROM THE SITE MAY BE REJECTED IF IT HAS NOT BEEN PROPERLY REMOVED, STORED AND PROTECTED PRIOR TO CONSTRUCTION.

C. CONTRACTOR SHALL FURNISH TO THE APPROVING AGENCY AN ANALYSIS OF BOTH IMPORTED AND ON-SITE TOPSOIL TO BE UTILIZED IN ALL PLANTING AREAS. THE PH AND NUTRIENT LEVELS MAY NEED TO BE ADJUSTED THROUGH SOIL MODIFICATIONS AS NEEDED TO ACHIEVE THE REQUIRED LEVELS AS SPECIFIED IN THE MATERIALS SECTION ABOVE.

D. ALL LAWN AREAS ARE TO BE CULTIVATED TO A DEPTH OF SIX INCHES (6"). ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES SECTION ABOVE. THE FOLLOWING SHALL BE TILLED INTO THE TOP FOUR INCHES (4") IN TWO DIRECTIONS (QUANTITIES BASED ON A 1,000 SQUARE FOOT AREA - FOR BID PURPOSES ONLY (SEE SPECIFICATION 6.A.):
I. 20 POUNDS GRO-POWER OR APPROVED EQUAL SOIL CONDITIONER/FERTILIZER
II. 20 POUNDS NITRO-FORM (COURSE) 38-0-0 BLUE CHIP OR APPROVED NITROGEN FERTILIZER

E. THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN CONDITIONS.

9. PLANTING
A. ENSURE THAT IT IS FEASIBLE PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THAT THIS IS NOT POSSIBLE, CONTRACTOR SHALL PROTECT UNINSTALLED PLANT MATERIAL. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE DAY PERIOD AFTER DELIVERY. PLANTS THAT WILL NOT BE PLANTED FOR A PERIOD OF TIME GREATER THAN THREE DAYS SHALL BE HEALED IN WITH TOPSOIL OR MULCH TO HELP PRESERVE ROOT MOISTURE.

B. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOPSOIL THAT IS IN A MUDDY OR FROZEN CONDITION.

C. ANY INJURED ROOTS OR BRANCHES SHALL BE PRUNED TO MAKE CLEAN CUT ENDS PRIOR TO PLANTING UTILIZING CLEAN, SHARP TOOLS. ONLY INJURED OR DISEASED BRANCHING SHALL BE REMOVED.

D. ALL PLANTING CONTAINERS, BASKETS AND NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED FROM ROOT BALLS DURING PLANTING. NATURAL FIBER BURLAP MUST BE CUT FROM AROUND THE TRUNK OF THE TREE AND FOLDED DOWN AGAINST THE ROOT BALL PRIOR TO BACKFILLING.

E. POSITION TREES AND SHRUBS AT THEIR INTENDED LOCATIONS AS PER THE PLANS AND SECURE THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO EXCAVATING PITS, MAKING NECESSARY ADJUSTMENTS AS DIRECTED.

F. PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY, THE PROPOSED LANDSCAPE, AS SHOWN ON THE APPROVED LANDSCAPE PLAN, MUST BE INSTALLED, INSPECTED AND APPROVED BY THE APPROVING AGENCY. THE APPROVING AGENCY SHALL TAKE INTO ACCOUNT SEASONAL CONSIDERATIONS IN THIS REGARD AS FOLLOWS. THE PLANTING OF TREES, SHRUBS, VINES OR GROUND COVER SHALL OCCUR ONLY DURING THE FOLLOWING PLANTING SEASONS:
I. PLANTS: MARCH 15TH TO DECEMBER 15TH
II. LAWN AND SEED MIXES: MARCH 1ST TO MAY 15TH OR BETWEEN AUGUST 15TH AND OCTOBER 15TH

PLANTINGS REQUIRED FOR A CERTIFICATE OF OCCUPANCY SHALL BE PROVIDED DURING THE NEXT APPROPRIATE SEASON AT THE MUNICIPALITY'S DISCRETION. CONTRACTOR SHOULD CONTACT APPROVING AGENCY FOR POTENTIAL SUBSTITUTIONS.

G. FURTHERMORE, THE FOLLOWING TREE VARIETIES ARE UNUSUALLY SUSCEPTIBLE TO WINTER DAMAGE. WITH TRANSPLANT SHOCK AND THE SEASONAL LACK OF NITROGEN AVAILABILITY, THE RISK OF PLANT DEATH IS GREATLY INCREASED. IT IS NOT RECOMMENDED THAT THESE SPECIES BE PLANTED DURING THE FALL PLANTING SEASON.

ACER RUBRUM	PLATANUS X ACERIFOLIA	
BETULA VARIETIES	POPULUS VARIETIES	
CARPINUS VARIETIES	PRUNUS VARIETIES	
CRATAEGUS VARIETIES	PYRUS VARIETIES	
KOELREUTERIA	QUERCUS VARIETIES	
LIQUIDAMBAR STYRACIFLUA	TILIA TOMENTOSA	
LIRIODENDRON TULIPIFERA	ZELKOVA VARIETIES	

H. PLANTING PITS SHALL BE DUG WITH LEVEL OR CONVEX BOTTOMS, WITH THE WIDTH THREE TIMES THE DIAMETER OF ROOT BALL. THE ROOT BALL SHALL REST ON UNDISTURBED GRADE. EACH PLANT PIT SHALL BE BACKFILLED IN LAYERS WITH THE FOLLOWING PREPARED SOIL MIXED THOROUGHLY:
I. 1 PART PEAT MOSS
II. 1 PART COMPOSTED COW MANURE BY VOLUME
III. 3 PARTS TOPSOIL BY VOLUME
IV. 21 GRAMS 'AGRIFORM' PLANTING TABLETS (OR APPROVED EQUAL) AS FOLLOWS:
A) 2 TABLETS PER 1 GALLON PLANT
B) 3 TABLETS PER 5 GALLON PLANT
C) 4 TABLETS PER 15 GALLON PLANT
D) LARGER PLANTS: 2 TABLETS PER ½" CALIPER OF TRUNK

I. FILL PREPARED SOIL AROUND BALL OF PLANT HALF-WAY AND INSERT PLANT TABLETS. COMPLETE BACKFILL AND WATER THOROUGHLY.

J. ALL PLANTS SHALL BE PLANTED SO THAT THE TOP OF THE ROOT BALL, THE POINT AT WHICH THE ROOT FLARE BEGINS, IS SET AT GROUND LEVEL AND IN THE CENTER OF THE PIT. NO SOIL IS TO BE PLACED DIRECTLY ON TOP OF THE ROOT BALL.

K. ALL PROPOSED TREES DIRECTLY ADJACENT TO WALKWAYS OR DRIVEWAYS SHALL BE PRUNED AND MAINTAINED TO A MINIMUM BRANCHING HEIGHT OF 7' FROM GRADE. NO PRUNING SHALL BE CONDUCTED WITHIN THE FIRST YEAR OF PLANTING.

L. GROUND COVER AREAS SHALL RECEIVE A ½" LAYER OF HUMUS RAKED INTO THE TOP ½" OF PREPARED SOIL PRIOR TO PLANTING. ALL GROUND COVER AREAS SHALL BE WEEDED AND TREATED WITH A PRE-EMERGENT CHEMICAL AS PER MANUFACTURER'S RECOMMENDATION.

M. NO PLANT, EXCEPT GROUND COVERS, GRASSES OR VINES, SHALL BE PLANTED LESS THAN TWO FEET (2') FROM EXISTING STRUCTURES AND SIDEWALKS.

N. ALL PLANTING AREAS AND PLANTING PITS SHALL BE MULCHED AS SPECIFIED HEREIN TO FILL THE ENTIRE BED AREA OR SAUCER. NO MULCH IS TO TOUCH THE TRUNK OF THE TREE OR SHRUB.

O. ALL PLANTING AREAS SHALL BE WATERED IMMEDIATELY UPON INSTALLATION IN ACCORDANCE WITH THE WATERING SPECIFICATIONS AS LISTED HEREIN.

10. TRANSPLANTING (WHEN REQUIRED)
A. ALL TRANSPLANTS SHALL BE DUG WITH INTACT ROOT BALLS CAPABLE OF SUSTAINING THE PLANT. (SEE SPECIFICATION 2.F. ABOVE)

B. IF PLANTS ARE TO BE STOCKPILED BEFORE REPLANTING, THEY SHALL BE HEALED IN WITH MULCH OR SOIL, ADEQUATELY WATERED AND PROTECTED FROM EXTREME HEAT, SUN AND WIND.

C. PLANTS SHALL NOT BE DUG FOR TRANSPLANTING BETWEEN APRIL 10TH AND JUNE 30TH.

D. UPON REPLANTING, BACKFILL SOIL SHALL BE AMENDED WITH FERTILIZER AND ROOT GROWTH HORMONE.

E. TRANSPLANTS SHALL BE GUARANTEED FOR THE LENGTH OF THE GUARANTEE PERIOD SPECIFIED HEREIN.

F. IF TRANSPLANTS DIE, SHRUBS AND TREES LESS THAN SIX INCHES (6") DBH SHALL BE REPLACED IN KIND. TREES GREATER THAN SIX INCHES (6") DBH MAY BE REQUIRED TO BE REPLACED IN ACCORDANCE WITH THE MUNICIPALITY'S TREE REPLACEMENT GUIDELINES.

11. WATERING
A. NEW PLANTINGS OR LAWN AREAS SHALL BE ADEQUATELY IRRIGATED BEGINNING IMMEDIATELY AFTER PLANTING. WATER SHALL BE APPLIED TO EACH TREE AND SHRUB IN SUCH MANNER AS NOT TO DISTURB BACKFILL AND TO THE EXTENT THAT ALL MATERIALS IN THE PLANTING HOLE ARE THOROUGHLY SATURATED. WATERING SHALL CONTINUE AT LEAST UNTIL PLANTS ARE ESTABLISHED.

B. SITE OWNER SHALL PROVIDE WATER IF AVAILABLE ON SITE AT TIME OF PLANTING. IF WATER IS NOT AVAILABLE ON SITE, CONTRACTOR SHALL SUPPLY ALL NECESSARY WATER. THE USE OF WATERING BAGS IS RECOMMENDED FOR ALL NEWLY PLANTED TREES.

C. IF AN IRRIGATION SYSTEM HAS BEEN INSTALLED ON THE SITE, IT SHALL BE USED TO WATER PROPOSED PLANT MATERIAL, BUT ANY FAILURE OF THE SYSTEM DOES NOT ELIMINATE THE CONTRACTOR'S RESPONSIBILITY OF MAINTAINING THE DESIRED MOISTURE LEVEL FOR VIGOROUS, HEALTHY GROWTH.

12. GUARANTEE
A. THE CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF ONE (1) YEAR FROM APPROVAL OF LANDSCAPE INSTALLATION BY THE APPROVING AGENCY. CONTRACTOR SHALL SUPPLY THE OWNER WITH A MAINTENANCE BOND FOR TEN PERCENT (10%) OF THE VALUE OF THE LANDSCAPE INSTALLATION WHICH WILL BE RELEASED AT THE CONCLUSION OF THE GUARANTEE PERIOD AND WHEN A FINAL INSPECTION HAS BEEN COMPLETED AND APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.

B. ANY DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED FOR THE LENGTH OF THE GUARANTEE PERIOD. REPLACEMENT OF PLANT MATERIAL SHALL BE CONDUCTED AT THE FIRST SUCCEEDING PLANTING SEASON. ANY DEBRIS SHALL BE DISPOSED OF OFF-SITE, WITHOUT EXCEPTION. A PLANT SHALL BE CONSIDERED "DEAD OR DYING" IF MORE THAN 30% OF ITS BRANCHES ARE DEAD.

C. TREES AND SHRUBS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND UNTIL TURNOVER TO THE OWNER/OPERATOR. CULTIVATION, WEEDING, WATERING AND THE PREVENTATIVE TREATMENTS SHALL BE PERFORMED AS NECESSARY TO KEEP PLANT MATERIAL IN GOOD CONDITION AND FREE OF INSECTS AND DISEASE.

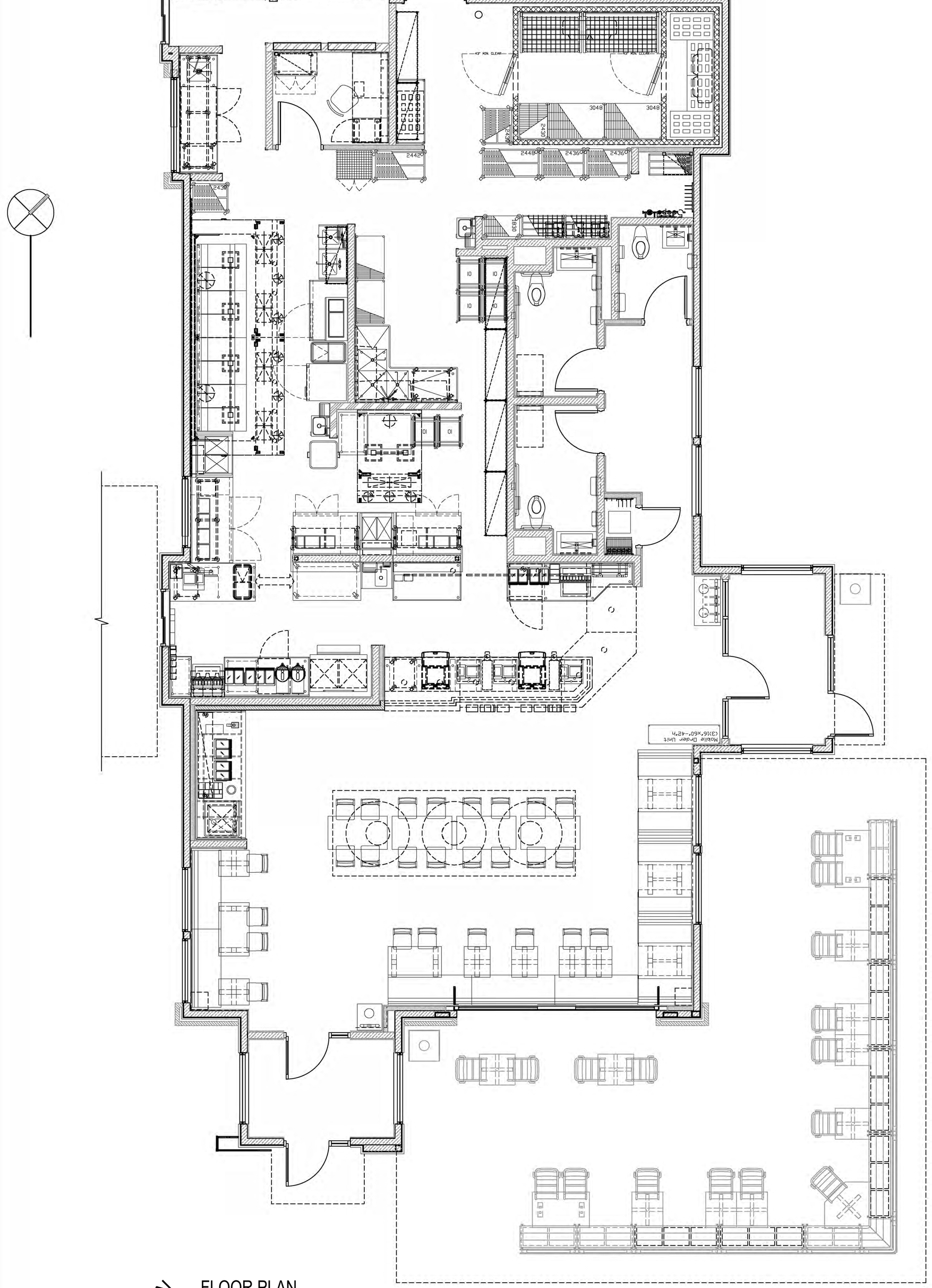
D. LAWNS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND UNTIL TURNOVER TO THE OWNER/OPERATOR THROUGH WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING AND OTHER OPERATIONS SUCH AS ROLLING, REGARDING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF ERODED OR BARE AREAS.

13. CLEANUP
A. UPON THE COMPLETION OF ALL LANDSCAPE INSTALLATION AND BEFORE THE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL UNUSED MATERIALS, EQUIPMENT AND DEBRIS FROM THE SITE. ALL PAVED AREAS ARE TO BE CLEANED.

B. THE SITE SHALL BE CLEANED AND LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.

COMPLIANCE CHART

SECTION	REQUIREMENT	CALCULATIONS (REQUIRED / PROVIDED)	COMPLIANCE
SALDO: 146-39 LANDSCAPING	A.(1) PLACEMENT. SHADE TREES SHALL BE PROVIDED BY THE SUBDIVIDER/LAND DEVELOPER AND PLANTED APPROXIMATELY FIVE FEET INSIDE THE LOT LINES PARALLELING THE RIGHT-OF-WAY LINE. THE TREES SHALL BE PLACED TO PROVIDE AN APPROXIMATE AVERAGE SPACING OF ONE TREE PER 50 FEET OR PLANTED IN AN ALTERNATE ARRANGEMENT CONSISTENT WITH TOWNSHIP POLICY ENCOURAGING THE USE OF SHADE TREES IN SUBDIVISION/LAND DEVELOPMENT. THE TREES SHALL BE LOCATED SO AS NOT TO INTERFERE WITH THE INSTALLATION AND MAINTENANCE OF SIDEWALKS AND UTILITIES OR THE OPERATION OF STREETLIGHTS, NOR SHALL THEY BE PLACED WITHIN THE CLEAR SIGHT TRIANGLE AT STREET INTERSECTIONS.	SEE ZONING SECTION 2402B.2.c. BELOW FOR MORE STRICT REQUIREMENT.	SEE BELOW
	B.(2)(c) MINIMUM TREE/SHRUB PLANTINGS FOR THE GREEN AREA SHALL INCLUDE A MINIMUM OF ONE DECIDUOUS OR EVERGREEN TREE OF TWO-AND-ONE-HALF-INCH CALIPER, MEASURED AT A HEIGHT OF THREE FEET ABOVE GRADE, FOR EACH 1,000 SQUARE FEET OF GREEN AREA. THREE EVERGREEN SHRUBS OF 2 1/2 FEET IN HEIGHT MAY BE SUBSTITUTED FOR ONE TREE FOR A MAXIMUM OF 50% OF THE TREE REQUIREMENT. THE TREE/SHRUB REQUIREMENT MAY BE MET BY PRESERVING EXISTING TREES AS PROVIDED IN SUBSECTION B(4).	TOTAL GREEN AREA PROVIDED ON SITE = 13,374± SF REQUIRED: 13,374 / 1,000 = 13.374 13.374 x 1 = 13.374 OR 13 TREES PROVIDED: 4 CCA, 9 CC, 3 GTIK, 5 TOG (21 TREES ALSO COUNTING TOWARDS OTHER REQUIREMENTS. SEE ZONING SECTIONS BELOW).	COMPLIES
	B.(3)a(1) AT LEAST 5% OF THE TOTAL AREA DEVOTED TO PARKING AREA, NOT INCLUDING BUFFERS OR YARDS ON THE PERIMETER, SHALL NOT BE PAVED BUT SHALL BE USED FOR INTERIOR LANDSCAPING WITHIN A PARKING AREA.	SEE ZONING SECTION 2402.A.6. BELOW FOR MORE STRICT REQUIREMENT.	SEE BELOW
	B.(3)a(2) FOR ANY LAND USE WHERE THE TOTAL NUMBER OF PARKING SPACES EXCEEDS 10 STALLS, AT LEAST ONE TWO-AND-ONE-HALF-INCH CALIPER DECIDUOUS OR EVERGREEN TREE SHALL BE PLANTED WITHIN THE PARKING AREA. AN ADDITIONAL TREE OF THE SAME SIZE SHALL BE PLANTED FOR EACH ADDITIONAL 15 SPACES OR PORTION THEREOF.	SEE ZONING 2402.A.2. A.(1)(2) BELOW FOR MORE STRICT REQUIREMENT.	SEE BELOW
ZONING: 1105. THE PUBLIC REALM: STREETSCAPE, OPEN SPACE, THE PEDESTRIAN SYSTEM AND TRANSIT	B. STREET FURNITURE. 3. BENCHES AND TRASH AND RECYCLING RECEPTACLES SHALL BE PROVIDED AT LEAST EVERY 100'. 4. PLANTERS SHALL BE PROVIDED AT LEAST ONCE EVERY 50'. 5. BIKE RACKS SHALL BE PROVIDED AT A RATE OF AT LEAST ONE PER EVERY 250 PARKING SPACES. EACH BIKE RACK SHALL ACCOMMODATE AT LEAST TEN BIKES. EACH BUILDING AND MAIN BUILDING ENTRANCE SHALL BE LOCATED WITHIN 200 FEET OF A BIKE RACK. AT LEAST HALF OF ALL REQUIRED BIKE RACKS STORAGE SPACES SHALL CONSIST OF BIKE LOCKER SPACES OR COVERED BIKE RACK SPACES.	TOTAL LENGTH ALONG MORELAND ROAD = 233±LF (EXCLUDING LENGTH OF CROSSING DRIVEWAY) REQUIRED: 233 / 100= 2.33 OR 2 BENCHES / TRASH RECEPTACLES 233 / 50 = 4.66 OR 5 PLANTERS PROPOSED PARKING SPACES = 33 33 / 250 = 0.13 OR 0 BIKE RACKS PROVIDED: 2 BENCHES/TRASH RECEPTACLES, 5 PLANTERS	COMPLIES
2401 PRESERVATION AND PROTECTION OF EXISTING VEGETATION	A.2.b. REPLACEMENT AFTER IMPERVIOUS COVERAGE INCREASE. IF IMPERVIOUS COVERAGE IS INCREASED BY AT LEAST 500 SQUARE FEET, AND SUCH AN INCREASE REQUIRES TREE REMOVAL, EACH REMOVED TREE WITH A CALIPER ≥ 6 INCHES MUST BE REPLACED WITH TWO TREES—EACH WITH A CALIPER ≥ 2.5".	IMPERVIOUS COVERAGE IS DECREASED. NOTHING REQUIRED.	N/A
2402 PARKING LOT LANDSCAPING AND STREET TREES	A.2.a.(2) THERE SHALL BE NO MORE THAN 15 CONTIGUOUS PARKING STALLS IN A ROW WITHOUT A PLANTING ISLAND. AS AN ALTERNATIVE, AN APPLICANT MAY PROVIDE ONE CANOPY TREE FOR EVERY TEN PARKING STALLS IN PLANTING ISLAND AREAS AND/OR PERIMETER PARKING PLANTING AREAS, AT THE DISCRETION OF THE BOARD OF COMMISSIONERS. HOWEVER, REGARDLESS OF WHICH OPTION IS USED, THE ENDS OF ALL PARKING ROWS SHALL BE DIVIDED FROM DRIVES BY PLANTING ISLANDS.	TOTAL OPEN AIR PARKING SPACES PROPOSED =33 REQUIRED: 33 / 10 = 3.3 OR 3 CANOPY TREES PROVIDED: 3 ARA, 2 GTIK (5 TREES ALSO COUNTING TOWARD 2402.a.2.A.(4))	COMPLIES
	A.2.a.(4) 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 INCHES IN CALIPER, BRANCHING AT 6 FEET TO 8 FEET IN HEIGHT AND OF THE RECOMMENDED SPECIES AS LISTED IN THE 'RECOMMENDED PLANT MATERIALS' LIST IN THE SALDO. PARKING LOT ISLANDS SHALL BE PLANTED IN LAWN OR GROUND COVER ONLY.	TOTAL PROPOSED PLANTING ISLANDS = 5 REQUIRED: 5 SHADE TREES PROVIDED: 3 CCA, 2 GTIK (5 TREES ALSO COUNTING TOWARD 2402 A.2.A.(2))	COMPLIES
	A.5. PARKING LOT PERIMETER BUFFER. ALL PARKING LOTS OR AREAS WITH MORE THAN 15 PARKING SPACES SHALL BE BUFFERED ACCORDING TO THE FOLLOWING WHEN ANY PART OF THE PARKING LIES WITHIN 150' OF A PROPERTY LINE, PUBLIC STREET, OR RESIDENTIAL DISTRICT (EXCEPTION: THOSE PARKING LOTS TO WHICH THE STREET WALL REQUIREMENT IN ARTICLE XXV: STREETSCAPE APPLIES). a. PARKING LOTS SHALL BE PLANTED WITH A MEDIUM-INTENSITY BUFFER (SEE §2403.B. BUFFER REQUIREMENTS), A MINIMUM OF 10 FEET IN WIDTH, EXCEPT WHERE BUILDINGS, ACCESS DRIVES, AND/OR WALKWAYS ARE LOCATED OPTION A: 2 CANOPY TREES (2-2½" MINIMUM CALIPER), 2 UNDERSTORY TREES (1½" MINIMUM CALIPER), 5 EVERGREEN TREES (8' MINIMUM HEIGHT), AND 5 SHRUBS (24" MINIMUM HEIGHT) PER EACH 100 LINEAR FEET. OPTION B: A DECORATIVE, OPAQUE WALL OR FENCE. A FENCE OR WALL, 6 FEET IN HEIGHT. WHERE THE FENCE OR WALL FACES A PUBLIC STREET OR DISTRICT PERMITTING RESIDENTIAL USES, SHRUBS SHALL LINE THE OUTSIDE OF THE FENCE OR WALL AT A RATIO OF 10 SHRUBS PER 100 LINEAR FEET. NO MORE THAN 50% OF THE SHRUBS SHALL CONSIST OF ANY ONE SPECIES; THEY MAY BE GROUPED INFORMALLY OR SPACED EVENLY	TOTAL PERIMETER LENGTH ALONG PARKING LOT = 321.23±LF REQUIRED: MEDIUM-INTENSITY BUFFER OPTION A 321.23 / 100 = 3.21 3.21 X 2 = 6.42 OR 6 CANOPY TREES 3.21 X 2 = 6.42 OR 6 UNDERSTORY TREES 3.21 X 5 = 16.05 OR 16 EVERGREEN TREES 3.21 X 5 = 16.05 OR 16 SHRUBS PROVIDED: NONE	VARIANCE
	A.6. MINIMUM GREEN AREA. IN ADDITION TO THE VEGETATION REQUIRED FOR



FLOOR PLAN
SCALE: 1/4 = 1'-0"

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RESTAURANT
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SCHEME: A
RESTAURANT #RC952
VERSION: 2021-3.0 RELEASE 1.05.2022

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ENGINEER INFORMATION:

SHEET REVISIONS

#	DATE	TYPE
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

FLOOR PLAN

DATE: 10/21/22

JOB NO. 22132

SK1.10
SHEET NO.

KEY NOTES

MARK	DESCRIPTION
1	SIGN, BY OWNER. PROVIDE BLOCKING AS REQ'D (4'-0" x 8'-0" OVAL)
2	NOT USED
3	WALL ART ON SUBSTRATE BY OWNER
4	NOT USED
5	PRE-FABRICATED METAL CANOPY, G.C. TO PERMIT SEPARATELY
6	8" BRICK SOLDIER COURSE
7	BULK CO2 FILL
8	8" DRYVIT BAND
9	METAL, GUTTER & DOWNSPOUT EM-2
10	ROOF SCUPPER & DOWNSPOUT. OMIT DRYVIT BAND @ DOWNSPOUT EM-2
11	CAST STONE SILL
12	UTILITY METERS & CONDUIT, PAINT TO MATCH ADJACENT CLADDING MATERIAL
13	BREAK METAL BETWEEN WINDOWS PRE-FINISHED TO MATCH STOREFRONT
14	EXTERIOR SPEAKERS - MOUNTED AT ±9'-0" A.F.F.
15	SECONDARY SCUPPER
16	4" BOLLARD WITH BLACK PLASTIC SLEEVE
17	ADDRESS NUMBERS IN 6" CHARACTERS , SIZE AND LOCATION AS REQUIRED BY AHJ
18	GUARDRAIL. SEE DETAIL 6/A8.41
19	DARPRO OUTLET. SEE MECHANICAL DRAWINGS FOR MORE INFORMATION
20	ORIA 4-DIGIT WALL-MOUNTED KEY STORAGE LOCK BOX.
21	VENDOR TO FIELD VERIFY STEEL PANELS

NOTES

	GENERAL NOTES
1	SIGNAGE TO BE APPROVED UNDER SEPARATE FILING (DEFERRED SUBMITTAL).
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4	VERIFY ROOF FLAGS, LOGO SIGNS, PAINTED MURAL W/ SIGNAGE VENDOR.
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2	TWO-PART NONSAG POLYURETHANE SEALANT BY SONNEBORN BUILDING PRODUCTS. CUSTOM COLOR TO MATCH ADJACENT WALL MATERIAL AT ALL DOOR FRAMES, STOREFRONT & WINDOWS, ALL PENETRATIONS AND DRYVIT TO MASONRY CONNECTIONS.

SCHEDULE OF EXTERIOR MATERIALS

KEY	MATERIALS	MANUFACTURER	PRODUCT	COLOR / FINISH	DESCRIPTION
EM-1	STANDING SEAM ROOF	BERRIDGE	REFER TO SPEC	KYNAR 500 MATTE BLACK	GALVANIZED STEEL SHEET W/ KYNAR FINISH STANDARD COLOR
EM-2	METAL CAP FLASHING	REFER TO SPEC	REFER TO SPEC	KYNAR 500 MATTE BLACK	GALVANIZED STEEL SHEET W/ KYNAR FINISH STANDARD COLOR
EM-3	POWER COATED ALUM.	SIGNAGE SUPPLIER		CHARCOAL	POWDER COATED ALUM. MATTE BLACK FINISH 0.063 GA.
EM-4	METAL ACCENT PANELS	SIGNAGE SUPPLIER		DISTRESSED/SALVAGED RED	METAL PANELS TO BE APPLIED OVER STUCCO WALL EWF-5
EWF-1	BRICK VENEER	BELDEN	NORMAN STANDARD	MEDIUM RANGE IRON SPOT	1/2 RUNNING BOND, REFER TO DETAIL. MORTAR: SOLOMAN COLORS, INC. 10H LIGHT BUFF JOINT PROFILE: WEATHER-STRUCK
EWF-2	ELASTOMERIC COATING	DRYVIT	SANDPEBBLE E	SW7669 SUMMIT GREY	APPLIED OVER PORTLAND CEMENT STUCCO AT EXTERIOR WALLS. APPLIED OVER MASONRY AT CORRAL
EWF-3	CAST STONE LEDGE	MARCSTONE		6658 ARCHITECT'S GREY	MORTAR: ARGOS MAGNOLIA MASON'S MIX
EWF-4	BRICK VENEER	BORAL	QUEEN BRICK	ALAMO	MORTAR: LAFARGE IVORY BUFF, SACK RUB FINISH
EWF-5	ELASTOMERIC COATING	DRYVIT	SANDPEBBLE E	132 MOUNTAIN FOG	APPLIED OVER PORTLAND CEMENT STUCCO AT EXTERIOR WALLS. APPLIED OVER EIFS AT ROOF SCREEN
EWF-6	ELASTOMERIC COATING	DRYVIT	SANDPEBBLE E	456 OYSTER SHELL	APPLIED OVER PORTLAND CEMENT STUCCO AT EXTERIOR WALLS
EWF-7	MASONRY VENEER CMU	PREMIER		ULTRA BURNISHED, DUSK / SMOOTH	MORTAR: TO MATCH
EWS-1	DRIVE-THRU WINDOW	REFER TO WINDOW SCHED.	REFER TO WINDOW SCHED.	REFER TO WINDOW SCHED.	
EWS-2	ALUMINUM STOREFRONT	REFER TO WINDOW SCHED.	REFER TO WINDOW SCHED.	REFER TO WINDOW SCHED.	
P-10	PAINT - EXPOSED STRUCTURAL STEEL	BENJAMIN MOORE	SUPER SPEC 23	BLACK / LOW LUSTER	TWO COATS REQUIRED

LIGHT FIXTURE TYPE

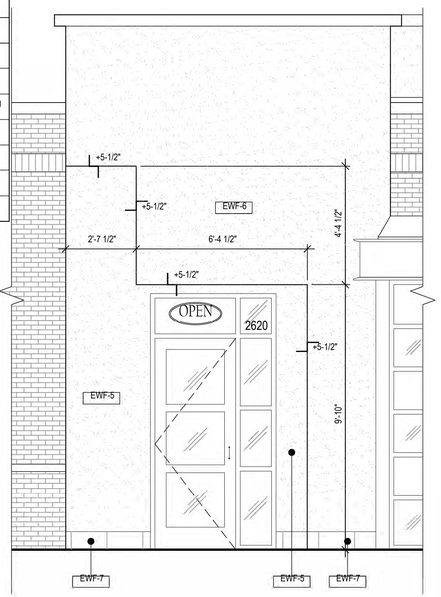
JJ — B2 (FAN)

GG — II

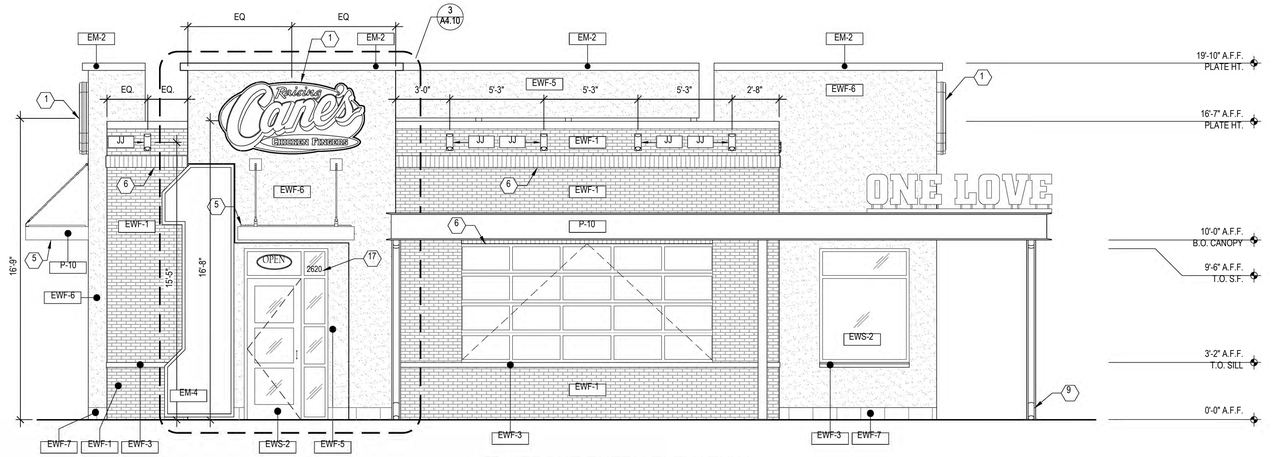
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SYMBOL LEGEND

- SECTION CUT MARKER (# / A#)
- ELEVATION MARKER (# / A#)
- DETAIL CALLOUT (# / A#)
- KEY NOTE (#)
- FINISH TAG (###)

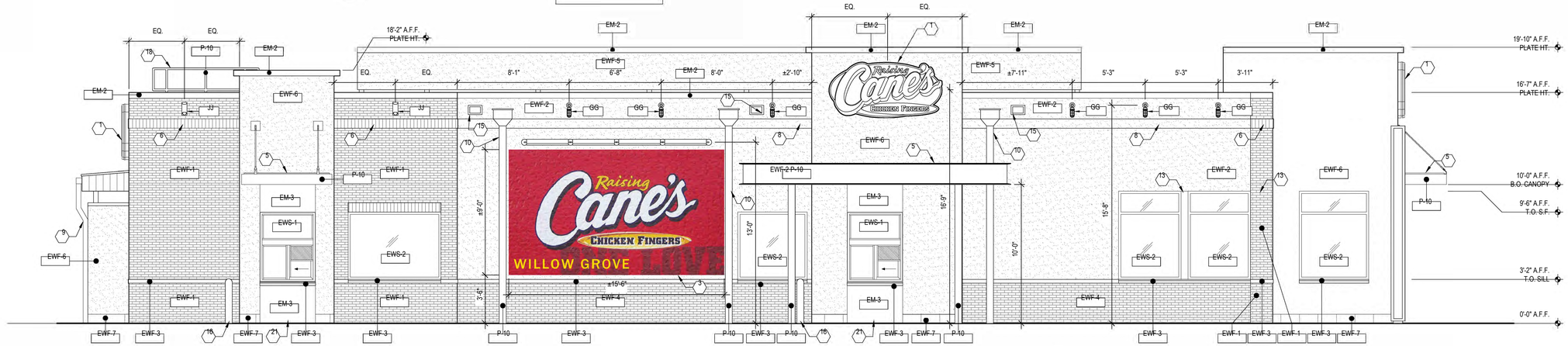


3 A4.10 FRONT TOWER PROFILE
SCALE: 3/8" = 1'-0"



2 A4.10 FRONT ENTRY ELEVATION
SCALE: 1/4" = 1'-0"

NOTE:
SIGN, AWNING, SIGNAGE AND "ONE" NOT SHOWN FOR CLARITY.



1 A4.10 DRIVE THRU ELEVATION
SCALE: 1/4" = 1'-0"

Raising Cane's Chicken Fingers
Restaurant Support Office
6800 Bishop Road, Plano, TX 75024
Tele: 972-769-3100 Fax: 972-769-3101

STORE:
RAISING CANE'S RESTAURANT
2620 W. MORELAND ROAD
WILLOW GROVE, PA, 19090
PROTOTYPE: P4-V-Av
SCHEME: A
RESTAURANT #RC952
VERSION: 2021-3.0 RELEASE 1.05.2022

ADA ARCHITECTS
17710 Detroit Avenue Lakewood, Ohio 44107
Phone (216) 521-5134 Fax (216) 521-4824
www.adaarchitects.com

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ENGINEER INFORMATION:

SHEET REVISIONS

#	DATE	TYPE
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

EXTERIOR KEYNOTE ELEVATIONS

DATE: 10/21/22

JOB NO. 22132

A4.10
SHEET NO.

KEY NOTES

MARK	DESCRIPTION
1	SIGN, BY OWNER. PROVIDE BLOCKING AS REQ'D (4'-0" x 8'-0" OVAL)
2	NOT USED
3	WALL ART ON SUBSTRATE BY OWNER
4	NOT USED
5	PRE-FABRICATED METAL CANOPY, G.C. TO PERMIT SEPARATELY
6	8" BRICK SOLDIER COURSE
7	BULK CO2 FILL
8	8" DRYVIT BAND
9	METAL, GUTTER & DOWNSPOUT EM-2
10	ROOF SCUPPER & DOWNSPOUT. OMIT DRYVIT BAND @ DOWNSPOUT EM-2
11	CAST STONE SILL
12	UTILITY METERS & CONDUIT, PAINT TO MATCH ADJACENT CLADDING MATERIAL
13	BREAK METAL BETWEEN WINDOWS PRE-FINISHED TO MATCH STOREFRONT
14	EXTERIOR SPEAKERS - MOUNTED AT ±9'-0" A.F.F.
15	SECONDARY SCUPPER
16	4" BOLLARD WITH BLACK PLASTIC SLEEVE
17	ADDRESS NUMBERS IN 6" CHARACTERS , SIZE AND LOCATION AS REQUIRED BY AHJ
18	GUARDRAIL. SEE DETAIL 6/A8.41
19	DARPRO OUTLET. SEE MECHANICAL DRAWINGS FOR MORE INFORMATION
20	ORIA 4-DIGIT WALL-MOUNTED KEY STORAGE LOCK BOX.
21	VENDOR TO FIELD VERIFY STEEL PANELS

LIGHT FIXTURE TYPE

JJ		B2 (FAN)
GG		II
X		

SYMBOL LEGEND

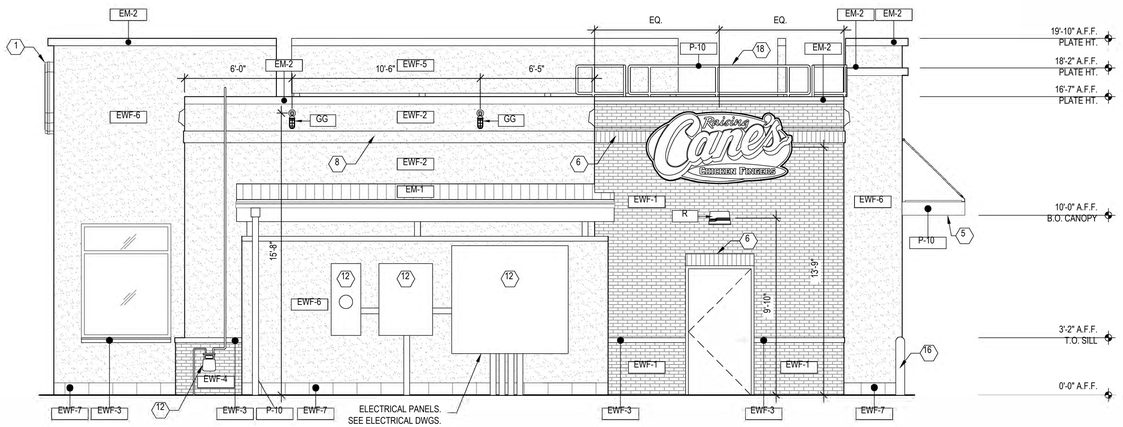
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NOTES

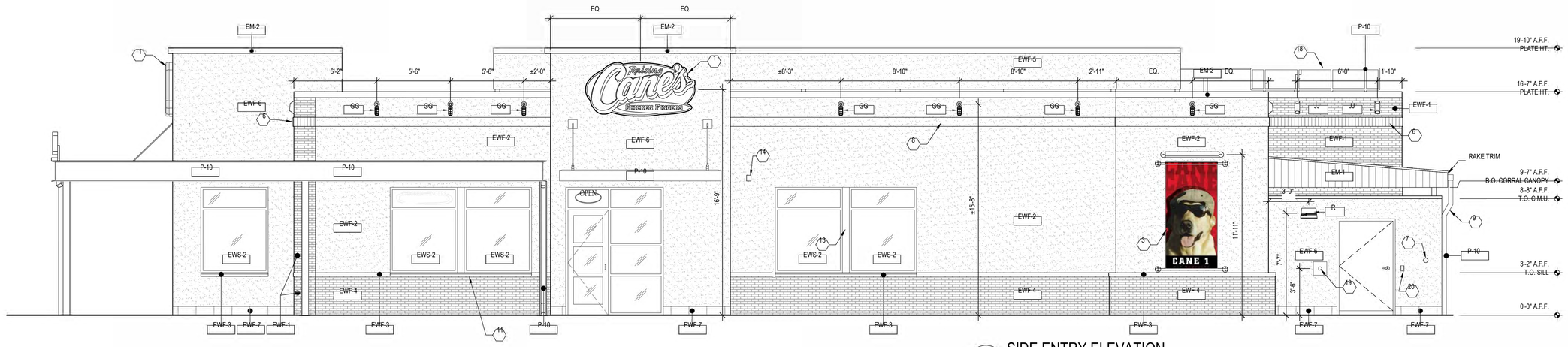
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2 A4.20 REAR ELEVATION
SCALE: 1/4" = 1'-0"



1 A4.20 SIDE ENTRY ELEVATION
SCALE: 1/4" = 1'-0"

Raising Cane's Chicken Fingers
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STORE:
RAISING CANE'S RESTAURANT
2620 W. MORELAND ROAD
WILLOW GROVE, PA, 19090
PROTOTYPE: P4-V-Av
SCHEME: A
RESTAURANT #RC952
VERSION: 2021-3.0 RELEASE 1.05.2022

ENGINEER INFORMATION:

SHEET REVISIONS

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10		

EXTERIOR KEYNOTE ELEVATIONS

DATE: 10/21/22
JOB NO. 22132

A4.20
SHEET NO.

KUHLS LAW LLC

Joseph C. Kuhls
Attorney at Law

October 19, 2022

Marc B. Kaplin, Esquire
Kaplin, Stewart, Meloff, Reiter & Stein, P.C.
910 Harvest Drive, P.O. Box 3037
Blue Bell, PA 19422
mkaplin@kaplaw.com

Raising Cane's Restaurant's, LLC
c/o Adam Caracci
6800 Bishop Road
Plano, TX 75024

Re: Abington Township Zoning Hearing Board Application 22-24

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 Application of Raising Cane's Restaurants, LLC, relative to a 44,910 square-foot (1.03 acre) lease area of real property at 2620 West Moreland Road (the "Subject Property").

The Board granted the following relief:

1) a Special Exception pursuant to Abington Township Zoning Ordinance (the "Ordinance") §1102, and the Comprehensive Use Matrix, to permit a drive-through restaurant;
2) a Variance from Ordinance §1103 (Figure 11.9) to allow a 5.7 parking to building setback along the southern property line of the Subject Property, where the Ordinance otherwise requires a minimum distance of 10 feet; and
3) Variances from the minimum buffer and planting requirements of Ordinance 2402.A.5 and 2403.B.4.a.

All relief granted by the Board is collectively and respectively granted subject to the conditions:

a) that the Applicant apply for and obtain land development approval (or a waiver therefrom) from the Abington Township Board of Commissioners permitting the development and use proposed;
b) that, as part of that land development process, the Applicant shall provide and install any landscaping deemed appropriate by the Board of Commissioners, in their sole and absolute discretion, whether-or-not required specifically by the Township's Subdivision and Land Development Ordinance, to mitigate the effect of the variances granted hereby; and

confirm that the Board, at its Public Meeting last evening, voted unanimously to approve your Application for a variance from Hatfield Township Zoning Ordinance (the "Ordinance") §282-201.A (Fences and Walls to permit a six-foot high fence upon real property commonly referred to as 1495 Leas Way.

This approval is granted subject to the condition that development and use of the subject property be in substantial conformance with the testimony and exhibits presented on behalf of the Applicant at the Public Hearing on this matter, including (without limitation) the Plan attached hereto.

Any aggrieved party may file an appeal to the Court contesting this decision within thirty (30) days. Anyone taking action 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 therefore will be issued.

Thank you.

Joseph C. Kuhls

Joseph C. Kuhls

cc: Peter A. Schorsch, Trustee, of the Arlington Cemetery Stock Trust
Owner of 1644 Warner Road

500 Office Center Drive, Suite 400 Fort Washington, PA 19034 I 484-684-4203 I jckuhls@kuhlslaw.com

500 Office Center Drive, Suite 400 Fort Washington, PA 19034 I 484-684-4203 I jckuhls@kuhlslaw.com

Description	Quantity	Rate	Total
ence [1304] with Reibstein and Dainoff detailing y on the upcoming project	0.70	$475.00	$332.50
Concept Plans circulated by JB under cover of 0920]	0.30	$475.00	$142.50
ation of email [1455] to Client providing update tact with Township Planning Director, together view of response	0.10	$475.00	$47.50
[1504] with Township Planning Director olan re his official determination on parcel dation, sketch plan submission determinations, her outstanding issues	0.60	$475.00	$285.00
ation of email [1152] reporting to Client on Officer determination regarding lot dation, procedure on submission of Application tch Plan Review, and other outstanding items	0.30	$475.00	$142.50
ge of emails [1239] with Attorney Dainoff and ein regarding delay of consolidating parcels until rmal Zoning Officer's Opinion is received from olan	0.20	$475.00	$95.00
ence [1309] with team regarding form of hip upon lot consolidation, and process for sion of a preliminary opinion on a Sketch Plan tion	0.30	$475.00	$142.50
message and ultimate telcon [1523] with er Tweedie re plan versions, lot areas, and other ns which need to be resolved prior to sion of formal Zoning Opinion Request to harsh Township	0.30	$475.00	$142.50
email [1138] from JB and respond with telcon outlining strategy and delivery of request for Zoning Officer's Opinion	0.20	$475.00	$95.00

352 N Easton Road Glenside, PA 19038 I 215.277.7122 I jckuhls@kuhlslaw.com

ZONING NOTES

1. THIS DRAWING REFERENCES DOCUMENTS AND INFORMATION BY:
   CONTROL POINT ASSOCIATES INC
   1900 MANOR DRIVE, 210
   CHALFONT, PA 18914
   ENTITLED: BOUNDARY AND TOPOGRAPHIC SURVEY
   RAISING CANE'S RESTAURANTS, LLC
   DATED: 03-30-2022
   REVISED: N/A
2. APPLICANT:
   RAISING CANE'S RESTAURANT LLC
   6800 BISHOP ROAD
   PLANO, TEXAS 75024-4274
3. OWNER:
   WILLOW GROVE, PA PAD LLC
4. ZONING ORDINANCE
   REQUIREMENTS TAKEN FROM
   ABINGTON TOWNSHIP ZONING ORDINANCE

   ZONED: BC-BUSINESS CENTER DISTRICTS
   EXISTING USE: PARKING LOT
   PROPOSED USE: C-25 RESTAURANT, FAST-FOOD W/ DRIVE-THRU AND OUTDOOR

PASSENGER CAR



LEGEND

EXISTING

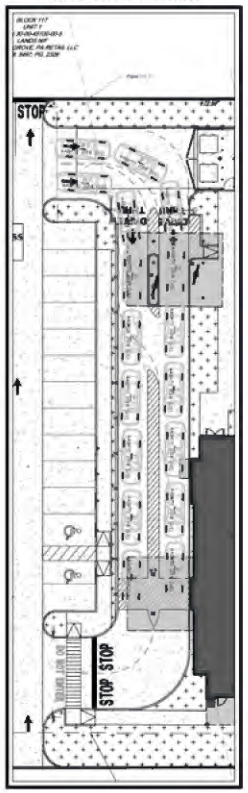
- PROPERTY LINE
- ADJACENT PROPERTY LINE
- EASEMENT LINE
- SETBACK LINE
- BUILDING
- CONCRETE CURB
- FLUSH CURB
- ACCESSIBLE SYMBOL
- SIGN
- PARKING COUNT
- AREA LIGHT
- TREE
- DRAINAGE INLET
- STORM/SANITARY MANHOLE
- WATER/GAS VALVES
- ROOF DRAIN/CLEANOUT
- FIRE HYDRANT
- UTILITY POLE W/ LIGHT
- UTILITY POLE
- OVERHEAD UTILITY WIRES

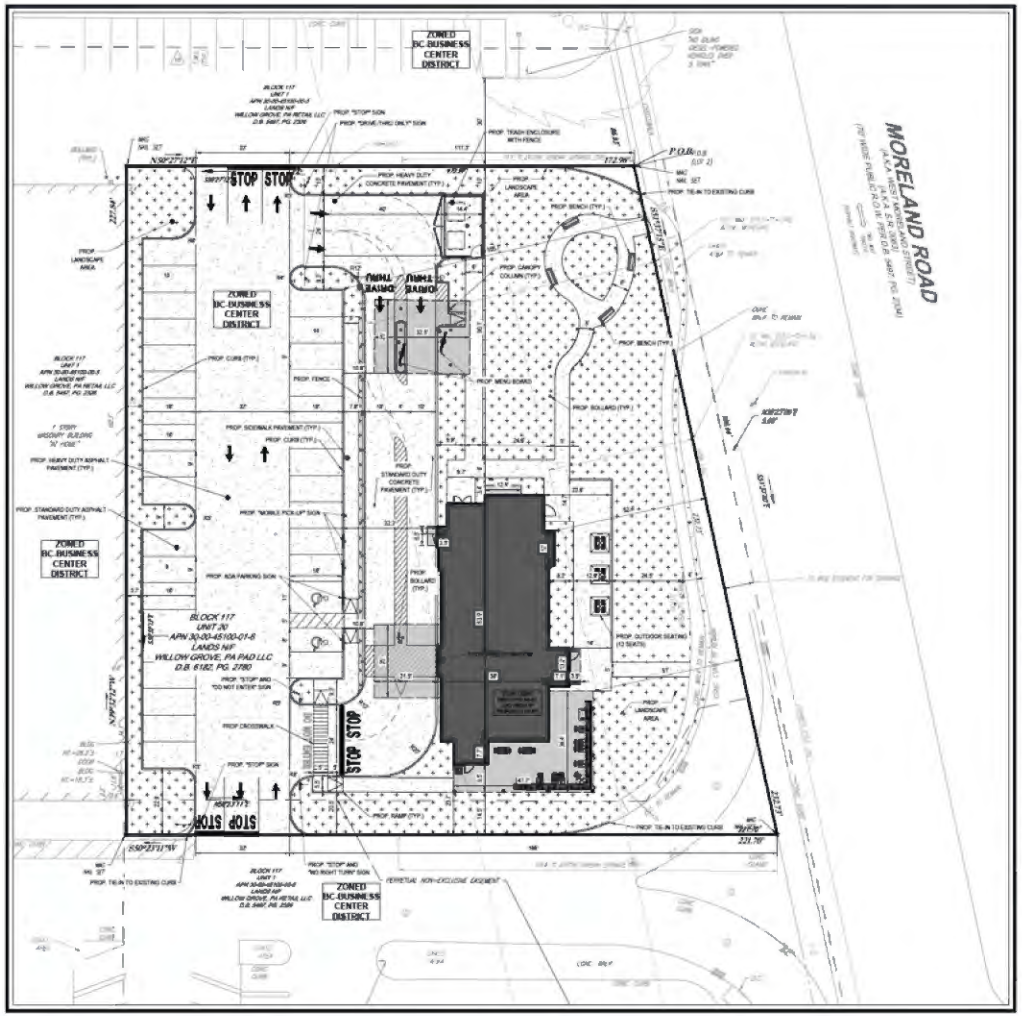
LEGEND

PROPOSED

- PROPERTY LINE
- BUILDING
- CANOPY
- PAVERS
- CONCRETE/ ASPHALT
- LANDSCAPE
- PARKING COUNT
- RAMP
- SIGN
- BOLLARD
- FENCE
- CONCRETE CURB
- FLUSH CURB
- ACCESSIBLE SYMBOL
- TRAFFIC ARROWS

DRIVE-THRU STAKING





ZONING CHART

BC- BUSINESS CENTER

	REQUIRED	EXISTING	PROVIDED
LOT			
MIN. LOT AREA	1 AC. OR 43,560 SF	1.03 AC. OR 44,939 SF	1.03 AC. OR 44,939 SF
MIN. LOT WIDTH	100 FT	227.84	232.73
MIN. LOT DEPTH	150 FT	172.98	172.98
IMPERVIOUS COVERAGE	70%(75% MAXIMUM PAVING)	82.4% (37,038 SF/ 44,939 SF)	68.95% (30,987 SF)
GREEN AREA	MIN. 25% MIN. 15% IN TRIANGLE WITH BONUS (44,953 SF * 25 = 11,238 SF)	17.61% (7,915 SF/ 44,939 SF)	31.05% (13,952 SF)
PUBLIC OPEN SPACE (THESE AREAS SHALL BE OPEN TO THE GENERAL PUBLIC,NOT JUST THOSE USING THE SITE)	MIN 5% GROSS FLOOR A REA (3,062 SF * 05 = 153 SF)	0 SF	153 SF
BUILDING			
HEIGHT	20 FT. (MAX. 55 FT) FACADE HEIGHT	N/A	19.8 FT
LENGTH	MAX. 300 FT	N/A	91.6 FT
SIZE	MAX. 150,000 SF	N/A	3,062 SF
COVERAGE	MAX. 40% (1,7424 SF)	N/A	(3,062 SF / 44,939 SF) = 6.8%
SETBACKS			
MIN. SIDE YARD AND REAR PROPERTY LINES ABUTTING OTHER DISTRICTS	30 FT	N/A	N/A
BUILDING SETBACK FROM PARKING	10 FT	5.9 FT	5.7 FT
PARKING LOT SETBACK FROM PUBLIC STREET	MIN. 100 FT	12.2 FT	105.7 FT
ACCESS POINT FROM EXTERNAL STREET	200 FT SEPERATION DISTANCE FROM STREET ACCESS POINTS (ON SUBJECT OR OTHER PROPERTY)	N/A	N/A
BUILT TO LINE (SHALL NOT OVERRIDE THE SIGHT TRIANGLE)			
TO PUBLIC STREET	MIN. 50 FT TO MAX. 100 FT	78.9 FT	52.4 FT
MAINACCESS DRIVE	MIN. 20 FT TO MAX 25 FT	N/A	23.7 SF
PARKING			
ADA	(26 TO 56 TOTAL PARKING SPACES) = 2	0	2
CARS	1 PARKING SPACE FOR EVERY 50 SF OF GROSS LEASABLE FLOOR AREA. .., OR ONE PARKING SPACE FOR EVERY 3 SEATS, WHICHEVER REQUIRES THE LESSER NUMBER OF SPACES. (97 SEATS * (1 SPACE/ 3 SEATS) = 33	85	33
BIKE PARKING	1 PER 250 PARKING SPACES	0	0
LOADING AREA	REATAIL USE, FIRST 5,000 SF - 0 BERTHS REQUIRED	0	0

Raising Cane's Chicken Fingers
Restaurant Support Office
6800 Bishop Road, Plano, TX 75024
Tele: 972-769-3100 Fax: 972-769-3101

REVISIONS

REV	DATE	COMMENT	BY

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20220541701

PROJECT No.: PP2270001
DRAWN BY: DMH
CHECKED BY: KRT
DATE: 07/12/2022
CAD I.D.: PP2270001-X-TTLB-ZONE

PROJECT:

ZONING PLAN

FOR

RAISING CANE'S RESTAURANTS, LLC.

PROPOSED RESTAURANT #C0952

2620 WEST MORELAND ROAD
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

BOHLER
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
www.BohlerEngineering.com

COMMONWEALTH OF PENNSYLVANIA
K.R. TATLOW
PROFESSIONAL ENGINEER
COMMONWEALTH LICENSE No. PE090523

SHEET TITLE:

ZONING PLAN

SHEET NUMBER:

Z-101

ORG. DATE - 07/12/2022

WASTEWATER DEPARTMENT

George Wrigley, Director

October 31, 2022

Ms. Shannon Heybach-Park
Bohler Engineering
1515 Market Street, Suite 920
Philadelphia, PA 19102

RE: Proposed restaurant at 2620 Moreland Rd: Sanitary Sewer Availability

Dear Ms. Heybach-Park:

The Township of Abington Wastewater Utilities Department has reviewed the documents you submitted including the Utility Plan Sheet No. C7.0 dated October 26, 2022 and the Sewerage Facilities Planning Exemption Mailer, in regards to your request for verification of sanitary sewer service availability at the development site.

The site is immediately adjacent to existing sanitary sewers along West Moreland Road which are available and are required to be utilized for sanitary sewer disposal for the proposed building site. In order to evaluate the sanitary sewer pipes and pump station capacities, the anticipated sanitary flow rates for the proposed building are required to be determined. Comparable water useage reports from two (2) similar type and size restaurants for a period of 24 months shall be submitted for this determination.

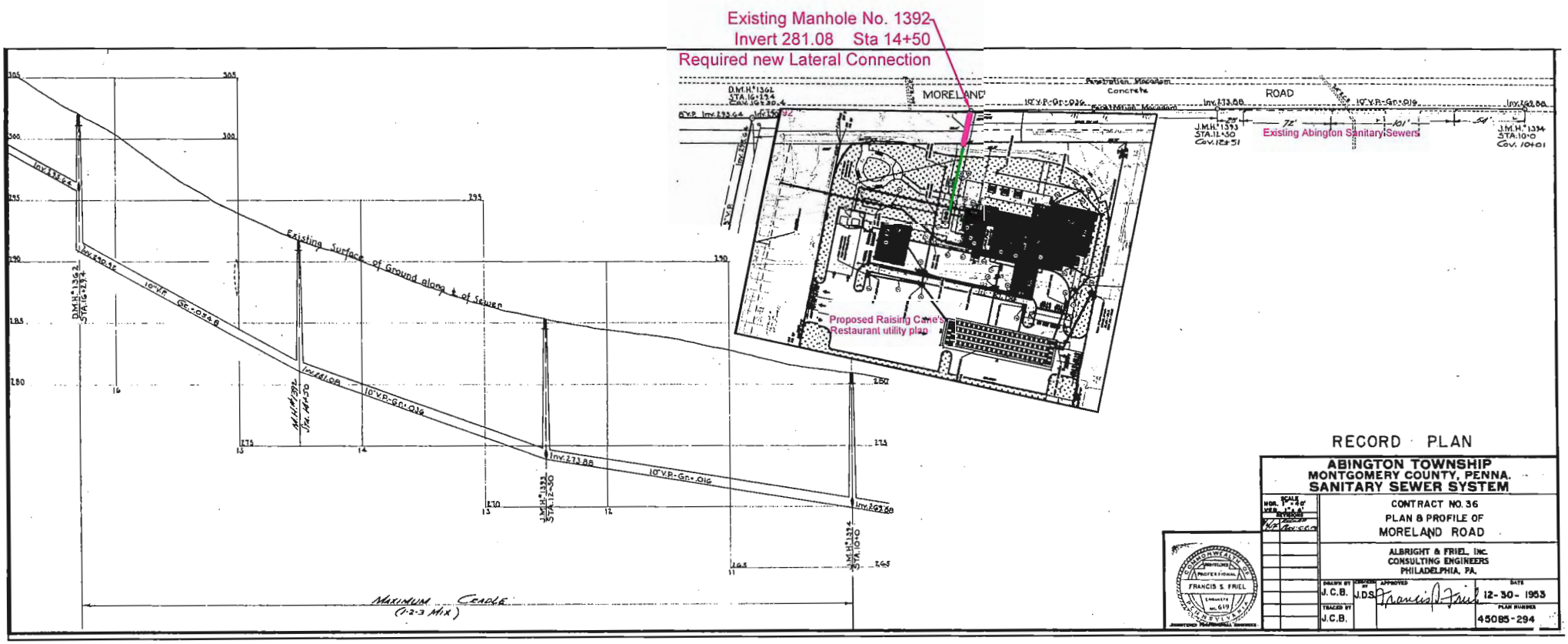
Should you have any questions or require any additional information, please contact me at 215-884-8329 or email at gwrigley@abingtonpa.gov.

Sincerely,

George Wrigley, Director
Abington Wastewater Utilities Department

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

Enclosure: Sanitary sewer system plan with site utilities


Existing Manhole No. 1392
Invert 281.08 Sta 14+50
Required new Lateral Connection
MORELAND
ROAD
Existing Abington Sanitary Sewers
Proposed Raising Cane's Restaurant utility plan
Existing Surface of Ground along ℄ of Sewer
10"V.P.-Gr.-0.24 B
10"V.P.-Gr.-0.16
Inv.273.88
MAXIMUM CRADLE
(1-2-3 MIX)
RECORD PLAN
ABINGTON TOWNSHIP
MONTGOMERY COUNTY, PENNA.
SANITARY SEWER SYSTEM
CONTRACT NO. 36
PLAN & PROFILE OF
MORELAND ROAD
ALBRIGHT & FRIEL, INC.
CONSULTING ENGINEERS
PHILADELPHIA, PA.
FRANCIS S. FRIEL
J.C.B.
J.D.S.
12-30-1953
45085-294

WASTEWATER DEPARTMENT

George Wrigley, Director

November 23, 2022

Ms. Shannon Heybach-Park
Bohler Engineering
1515 Market Street, Suite 920
Philadelphia, PA 19102

RE: Proposed restaurant at 2620 Moreland Rd: Sanitary Sewer Review

Dear Ms. Heybach-Park:

The Township of Abington Wastewater Utilities Department has reviewed the documents you submitted including the Utility Plan Sheet No. C7.0 dated October 26, 2022, in regards to a sanitary sewer system for the proposed restaurant at the development site. We offer the following initial comments:

- In accordance with our letter dated October 31, 2022, the sanitary sewer from the proposed restaurant shall connect into the existing sanitary sewer Manhole No. 1392 located in West Moreland Road utilizing 6" diameter ductile iron pipe. (see Detail 27)
- Development plans shall be submitted detailing all sanitary sewer piping materials, interior and exterior routing, proposed grease handling equipment and facilities, construction methods, etc. (see enclosed details for some basic requirements)
- The previously submitted estimated daily sanitary generation rate of 3,388 gallons per day (gpd) should be explained in more detail. Our review of the submitted comparable water useage reports from two (2) similar type and size restaurants indicated that the maximum daily sanitary generation rate was about 1,600 gpd (Plano Texas location).

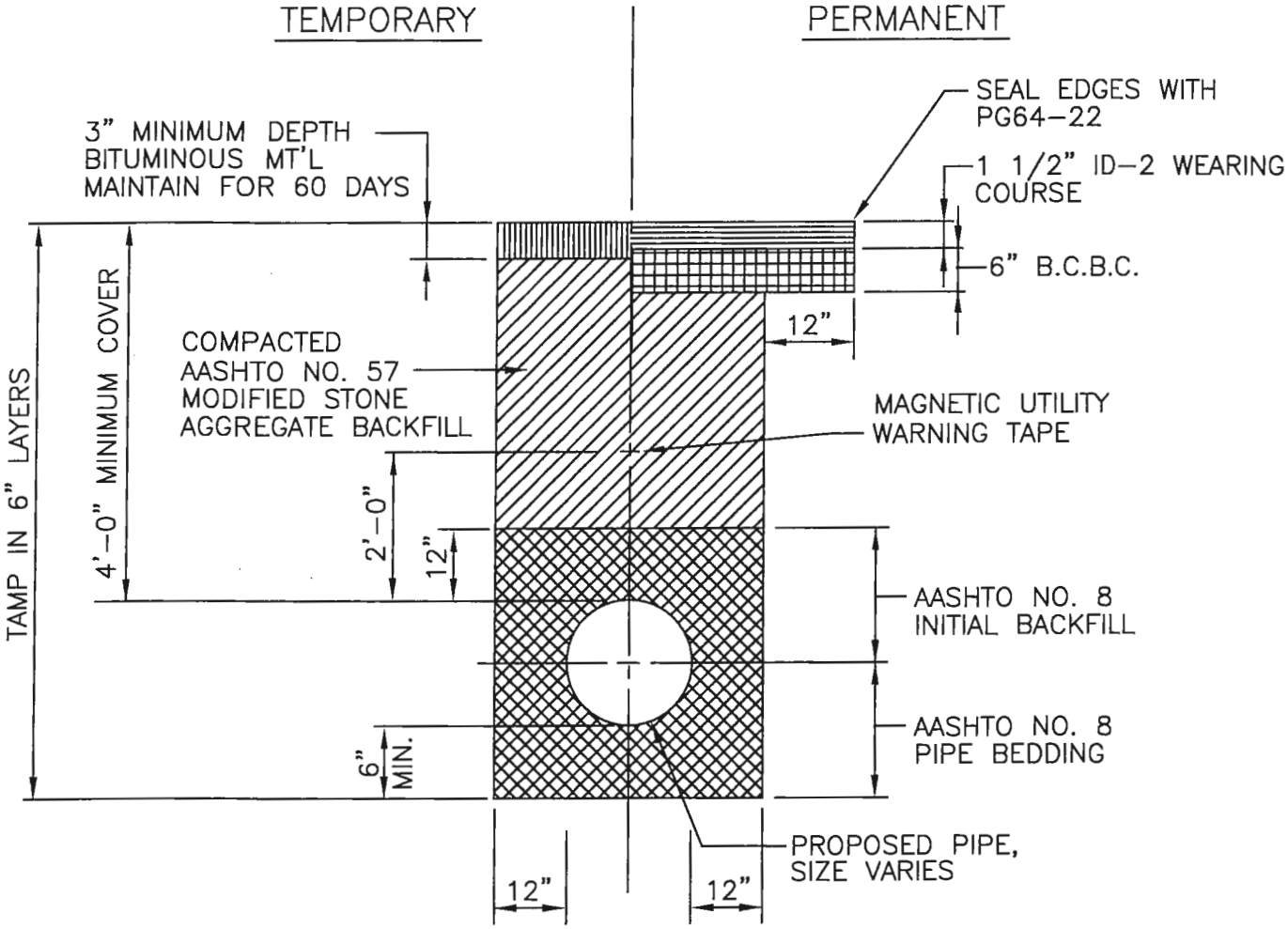
Should you have any questions or require any additional information, please contact me at 215-884-8329 or email at gwrigley@abingtonpa.gov.

Sincerely,

George Wrigley, Director
Abington Wastewater Utilities Department

pc: Terry Castorina, Executive Assistant
Kimberly Hamm, Director of Community Development
Khaled Hassan, P.E. Pennoni Associates
Allison Lee, P.E., Pennoni Associates

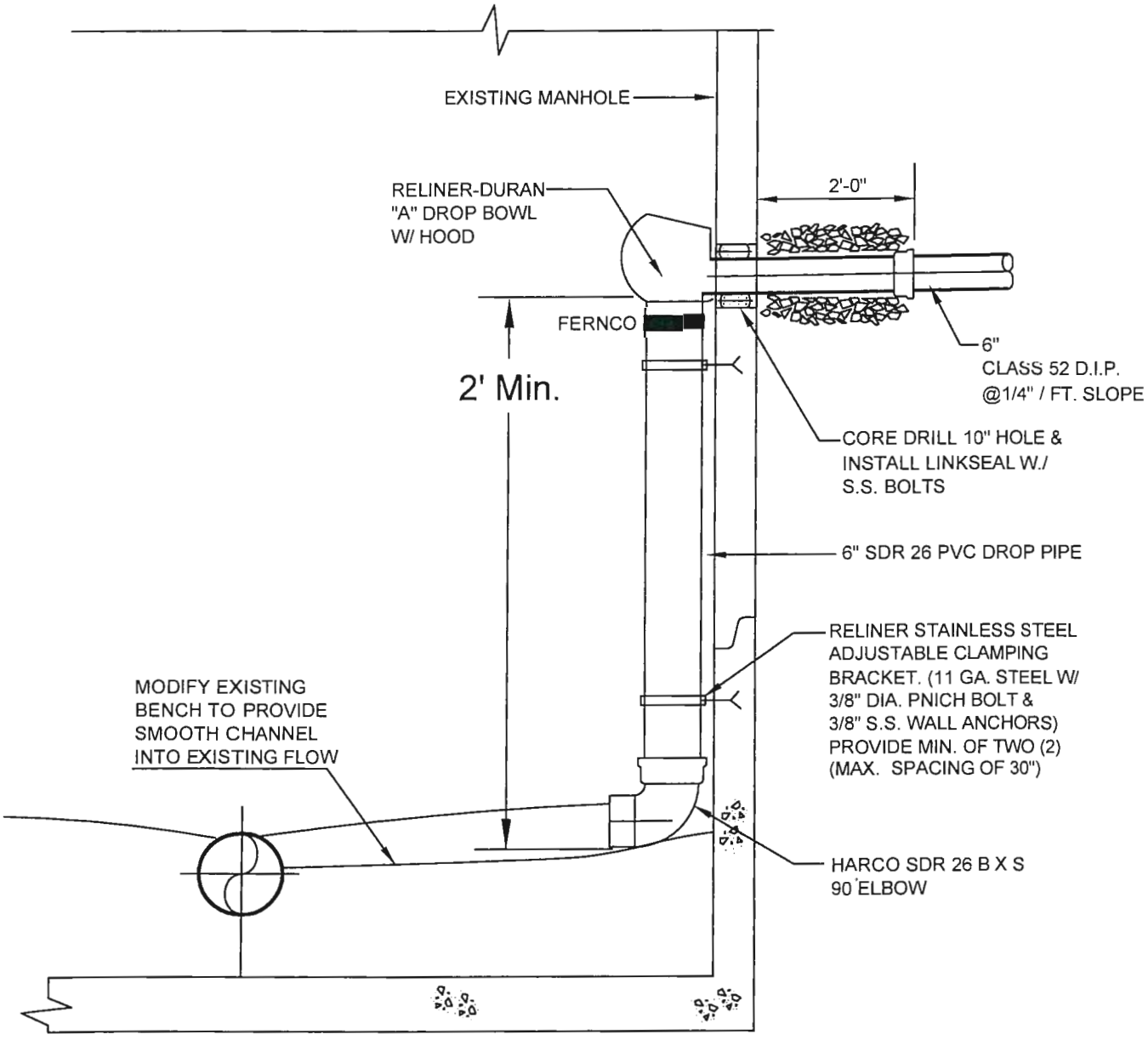
Enclosure: Sanitary sewer details



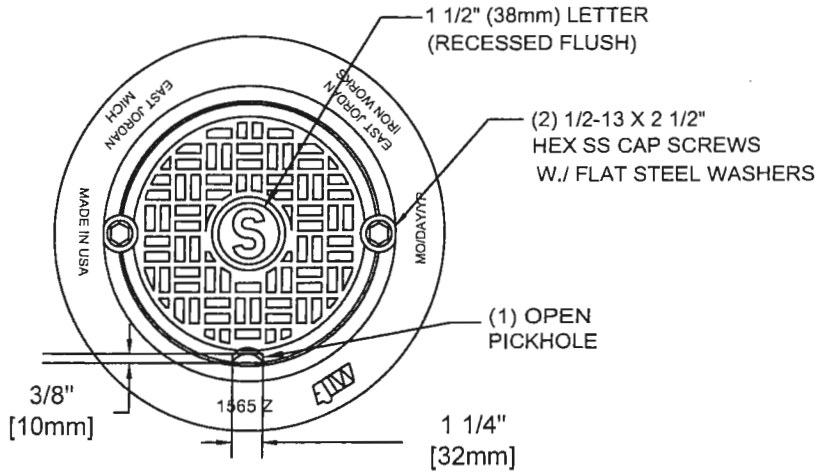
ALL WORK TO BE DONE IN ACCORDANCE WITH PADOT PUBLICATION 408

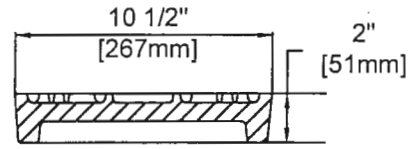
Township of Abington STANDARD DETAIL - SANITARY SEWER	
BACKFILL AND PAVEMENT RESTORATION DETAIL FOR STATE / TWP. ROADS	DATE: OCTOBER 2015 DETAIL: 1

NOTE: WHEN THE DISTANCE BETWEEN THE INVERT OF THE PROPOSED LATERAL AND THE SPRING LINE OF THE EXISTING SEWER IS LESS THAN 24", THE PROPOSED LATERAL SHALL CONNECT INTO THE MANHOLE AT THE SPRING LINE ELEVATION.

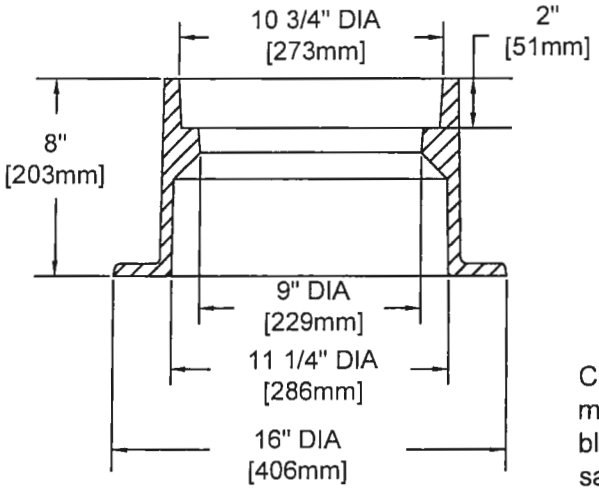


Township of Abington STANDARD DETAIL - SANITARY SEWER SYSTEM	
6" LATERAL CONNECTION TO AN EXISTING SANITARY MANHOLE	DATE: SEPT. 2015 DETAIL: 27





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
WWW.MONTCOPA.ORG

SCOTT FRANCE, AICP
EXECUTIVE DIRECTOR

December 9, 2022

Mr. Richard J. Manfredi, Manager
Abington Township
1176 Old York Road
Abington, Pennsylvania 19001-3713

Re: MCPC #22-0273-001
Plan Name: Raising Cane's
(3,062 square feet on 1 lot on 1.03 acres)
Situate: 2620 West Moreland Road
Cross Street: Allison Road
Abington Township

Dear Mr. Manfredi:

We have reviewed the above-referenced subdivision and land development in accordance with Section 502 of Act 247, "The Pennsylvania Municipalities Planning Code," as you requested on November 4, 2022. We forward this letter as a report of our review.

BACKGROUND

Raising Cane's Restaurants, LLC, the applicant, has submitted a preliminary land development plan. The proposal would construct a 3,062 square foot restaurant on a 1.03 acre outparcel on West Moreland Road. Although not identified as such, it appears that the restaurant would fit the Use C-25 Fast-Food Restaurant description. The proposal would reduce the amount of impervious area from 82.4 percent to 69.0 percent, thus increasing the amount of green area from 17.6 percent to 31.1 percent.

The applicant received a special exception for an A-11 Drive-Through Facility use, received a variance for a 5.7 foot parking setback from the building rather than 10 feet, and a variance from the minimum planting and buffer requirements (provided the applicant install landscaping deemed necessary by the Board of Commissioners). The site is located in the BC Business Center zoning district. Public sewer and water will serve the site. The plan is dated October 26, 2022.

COMPREHENSIVE AND OTHER PLAN COMPLIANCE

MONTCO 2040: A New Vision: the Comprehensive Plan for Montgomery County (2015). The proposal is located in the plan's Regional Mixed Use Center future land use area. The plan recommends that, "over time, these centers should establish more of a sense of place, ideally with a clearly defined public gathering place." It also

says that, “developments and public improvements should make it easy to walk to public transportation and other parts of the center,” and that, “over time, the character of development might evolve, with higher buildings, diverse uses, and structured parking.” The proposal is consistent with the plan.

Comprehensive Plan Update for Abington Township (2007): The proposal is located in the “Retail, Commercial, Office Use” category on the land use map of that plan and is consistent with that plan. The plan talks about the importance of using the land development process to reduce impervious surface area at the mall (this proposal would affect an area in the vicinity).

RECOMMENDATION

The Montgomery County Planning Commission (MCPC) generally supports the applicant‘s proposal, however, in the course of our review we have identified a number of key issues that we believe should be resolved prior to zoning amendment adoption. Our comments are as follows:

REVIEW COMMENTS

TRANSPORTATION

A. Sidewalks.

1. Street front sidewalks are required to be at least ten feet wide along the street, eight feet wide along main access drives, and six feet wide along secondary access drives [Zoning §2504.B]. The sidewalk along Moreland Road is generally four feet wide, with the exception of an area in the easternmost part of the property where it is five feet wide. No sidewalk is proposed along the access drive (the drive located between the proposed restaurant and Chipotle).
2. Decorative Verge. The required sidewalk along the access drive shall be separated from the curb by a minimum four-foot verge. At least 25 percent of the verge area (including those along both Moreland Road and the access drive) shall be planted with a mix of ground cover, shrubs, and trees [Zoning §2504.E] (consistent with the provisions of the variance for planting requirements, the Board of Commissioners may determine that such landscaping is necessary).
3. Sidewalks are also required by the SALDO, as are curb ramps [§146-27].

B. Crosswalks.

1. A crosswalk is required where a street meets an access drive [Zoning §2504.F]. No crosswalk is proposed in this location. The applicant’s property includes the right-in turn lane from Moreland Road onto the shopping center’s access drive.
2. We recommend that a crosswalk be added where the proposed parking aisle for the restaurant would meet the access drive (at proposed stop bars located closest to Chipotle).

C. Parking. A waiver is required from §146-28 to allow for nine by eighteen foot parking spaces.

D. Vehicular Circulation. A trash truck servicing the dumpster would block the drive-through lanes. We suggest the applicant explain how timing of trash pickups or other measures will prevent conflicts.

BUILDING

A. Corner Buildings. Buildings located on a corner (of streets and/or access drives) in the BC Business Center District shall have a main entrance on (and facing) the corner [Zoning §1104.C.]. This would apply to the intersection of Moreland Road and the access drive (near Chipotle).

B. Building Height. The table should specify that 20 feet is the "minimum" façade height.

C. Renderings. Renderings are required [§146-11.L]. These are necessary for determining if the proposed building complies with the design requirements of the zoning ordinance [Zoning Article XI], including, but not limited to the following requirements [Zoning §1104.C].

1. Facades facing the street and access drive.
2. Matching of colors of rear, side, and front façades.
3. Use of parapets, pitched roofs, or mansard roofs to conceal flat roofs and rooftop equipment.
4. Window area of 35 to 75 percent on walls facing the street.
5. Minimum 50 percent clear window area on ground floors.

LANDSCAPING

As noted above, the applicant received a variance from the minimum planting and buffer requirements (provided that the applicant install landscaping deemed necessary by the Board of Commissioners). We offer the following comments for the Board of Commissioners' consideration:

A. Street/Shade Trees [Zoning §2402, SALDO §146-39]. The six proposed street trees along Moreland Road are Eastern Redbuds, which are typically considered "ornamental trees." These trees should be a more appropriate species to meet the intent of street trees (providing shade for the sidewalk and pedestrians using it). The Willow Grove Park Mall vicinity is the largest heat island in the township, so street trees providing shade are all the more important.

B. Verge. See comment under TRANSPORTATION: Sidewalks: Decorative Verge, above.

C. Screening. We recommend that shrubs, perennials, or ornamental grasses be planted in the 5.9-foot wide strip on the plans near the label "Southwest Buffer" to provide visual interest and improve stormwater management.

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 (#22-0273-001) on any plans submitted for final recording.

Sincerely,



Mike Narcowich, AICP, Community Planning Assistant Manager
mnarcowi@montcopa.org – 610-278-5238

c:

Lucy Strackhouse, Chair, Township Planning Commission
Raising Cane's Restaurants, LLC, Applicant
Kevin R. Tatlow, R.P.E., Bohler Engineering, Applicant's Representative
Khaled R. Hassan, P.E., Pennoni, Township Engineer
Michael P. Clarke, Esq., Rudolph Clarke, LLC, Township Solicitor
Mark Cassel, AICP, Director, Service Planning, SEPTA

Attachment A: Aerial Image of Site
Attachment B: Reduced Copy of Applicant's Proposed Site Plan

ATTACHMENT A

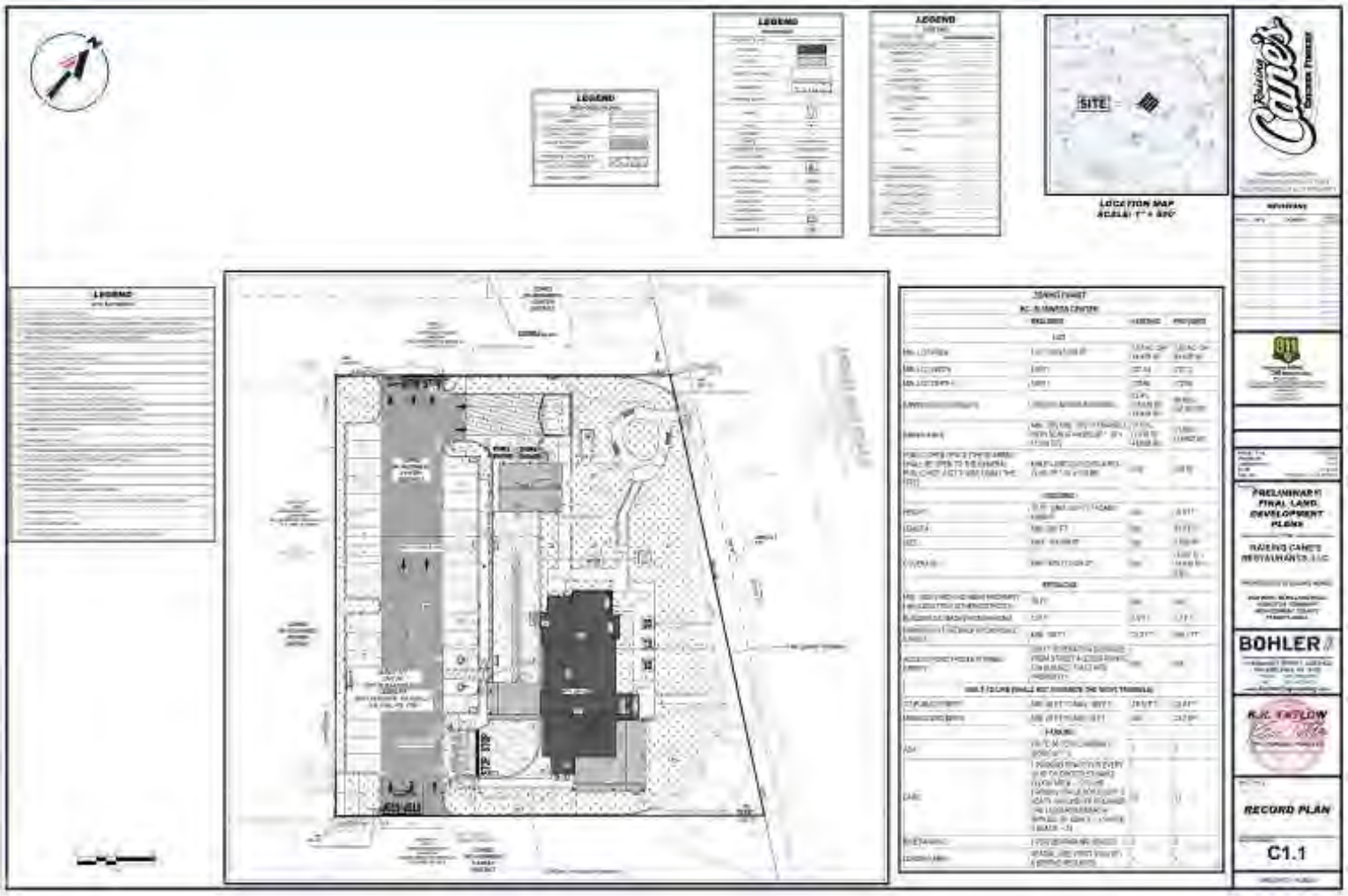


Raising Cane's
MCPC#220273001

Montgomery County Planning Commission

0 50 100 200 Feet

ATTACHMENT B



December 20, 2022

MEMO

To: Lucy Strackhouse, Chair – Abington Township Planning Commission
From: Abington Township Environmental Advisory Council and Shade Tree Commission
RE: LD-22-06 - – Proposed Raising Cane's PAD Site
Plan Set Date: 10-26-2022

STC Review Date: December 13, 2022
EAC Review Date: December 14, 2022

Site Summary:
Owner: Willow Grove, PA PAD L.L.C
Applicant: Raising Cane's Restaurants, L.L.C.
Zone – BC – Business Center
Watershed – Pennypack Creek Watershed
Land Development: Addition of free-standing Raising Cane's Restaurant in parking lot area of Willow Grove Mall adjacent to the At Home, Home Goods Store, and existing Chipotle Restaurant.

Dear Chairperson Strackhouse,

The members of the Abington Township Environmental Advisory Council (EAC) and Abington Township Shade Tree Commission (STC) have reviewed the above referenced land development plan and offer the following comments/questions and recommendations:

General Comments:
Both the STC and EAC members feel the site could easily accommodate more trees, especially true canopy trees, in line with Township's desire to reduce heat island effects in highly impervious cover places. More specific landscape comments are noted below.

Related to our comments above, please address why all of the existing trees along Moreland Road need to be removed. A portion of this area is proposed to be used for green space after construction. Why not keep trees within the proposed green area and incorporate them into the new landscape plan?

Based on the layout of the parking lot relative to the restaurant's main entrance, it was noted that patrons need to cross the active drive-thru lanes to access the building. We feel this creates a potential safety concern (pedestrian/car conflict) which should be addressed.

Stormwater Management Questions/Recommendations:

- In addition to the new building, plans indicate the addition of landscaped areas on the northeast and southeast sides of the building. The reconstruction of this landscaped area 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 the roof area (specifically at the southeast corner, where site is at its lowest elevation). Would the applicant consider redesigning these grassed areas as a bioretention area?

- We also noted that the building's roof top offers excellent opportunity for a green roof application. This should be considered as it would help mitigate the volume and velocity of rooftop runoff, which could impact the size of the underground storage basin. The vegetated element can help moderate the building's energy use and set an example for other similar building types in our commercial and business zones. Green roof systems have also been noted to extend the useful life of the roof as well. [1]

- Would the applicant clarify drainage for the trash enclosure area for the restaurant? On sheet C7, Utility Plan, the legend indicates that the trash enclosure floor drain ties into the storm sewer system, but the plan indicates tie-in to Sanitary Sewer. We recommend that this be tied to Sanitary Sewer line to capture any pollutants that might run off from trash enclosure areas, especially since this area is not covered.

Landscape/Habitat Recommendations

The STC found the proposed tree planting plan to be disappointing at best. The developer applied for and received landscaping variances for the parking lot perimeter buffer, the southwest property line, and the southeast property line. Additionally, while the developer proposes to reduce the impervious area of the site from 82.4% (above the 75% maximum paving permitted) to 68.95%, they use the proposed reduction to claim exemption from the requirement to replace the four trees that will be removed. Finally, the developer proposes to plant the absolute minimum number of canopy and understory trees in the remainder of the site where variances were not requested.

For a corporation with a strong community-oriented marketing strategy ("Let's Work in Together for Our Community"), the STC believes there are significant missed opportunities to align with the mission of the Raising Cane Corporation and make **meaningful improvements** to our community. These opportunities include increasing the tree canopy, replacing removed trees, improving the local habitat, and reducing urban heat island effects by planting shade trees and using innovative stormwater best management practices, all of which would "work together for our community."

The EAC and STC appreciate that many native species were included in the proposed planting plan. We recommend adding **more urban-tolerant native trees to the plan**, such as American Smoketree (Cotinus obovatus), Apple Serviceberry (Amelanchier x grandiflora 'Autumn Brilliance'), or Black Tupelo (Nyssa sylvatica). American smoketree would grow well in the center circle of the bench seating area.

Specific comments on proposed tree selection (STC):

CCA CARPINUS CAROLINIANA AMERICAN HORNBEAM, which is specified as a canopy tree, is actually an understory tree and should be replaced with a canopy tree. We recommend using Ostrya virginiana (American Hop Hornbeam) which is both a canopy tree and better suited for dry, urban growing conditions.

[1] https://home1.nps.gov/tps/sustainability/new-technology/green-roofs/benefits.htm

We recommend replacing six of the proposed CC CERCIS CANADENSIS EASTERN REDBUD with shade trees. While undeniably beautiful in spring, Eastern redbud is not well suited to the dry conditions and the urban heat island effect in this highly developed area. A predominance of shade trees will shelter the redbuds and increase their likelihood of survival. Suggested shade tree species include Acer rubrum (Red maple), Ulmus americana (American elm), and Nyssa sylvatica (Black tupelo). There are no overhead utility lines at the site that would interfere with planting shade trees. If the developer does not include shade trees in this area, we recommend adding more variety of species to lengthen the bloom time and reduce risk of diseases. Appropriate species include with American Smoketree (Cotinus obovatus), or Apple Serviceberry (Amelanchier x grandiflora 'Autumn Brilliance').

The STC also recommends that a tree be planted inside the circular walkway in the seating area to provide visual interest and shading in this proposed public green space. Suitable species are listed in the previous paragraph.

With respect to the landscaping specifications (Sheet 20), Notes G and H appear out of date and do not reflect current practice. Specifically, with respect to Note G: Trees can be planted year-round; in the fall, they need to be planted after dormancy, so they should be dug late in the fall. With respect to Note H: Trees should be backfilled with native material. If the native material is unsuitable, the backfill should consist of a mixture of 80% topsoil and 20% compost.

Specific Comments on proposed planting species (EAC and STC):

DGN 48 DEUTZIA GRACILIS `NIKKO` SLENDER DEUTZIA 18-24" CONTAINER. - Not native, not considered invasive. Consider substituting some of these with native species such as Rhus aromatica 'Gro Low,' Aronia melanocarpa 'Low Scape Mound,' Erigeron pulchellis 'Lynnhaven Carpet,' Sweetfern (Comptonia peregrine), or, if conditions permit, Ceanothus americanus (New Jersey Tea).

IMBB 24 ILEX X MESERVEAE `BLUE BOY` BLUE BOY HOLLY 36" MIN. CONTAINER. - Not native, not considered invasive. Consider substituting these with male and female cultivars of Ilex opaca (American holly), such as 'Jersey Knight' and 'Jersey Princess.' Plant one male for every 3 to 7 females. Female plants grow red berries that provide winter interest and food for wildlife.

JHIB 112 JUNIPERUS HORIZONTALIS `MONBER` ICEE BLUE JUNIPER 15-18" SPRD CONTAINER. - Not native, not considered invasive. Consider substituting some of these with native Arctostaphylos uva-ursi (Bearberry), Thuja occidentalis 'Concesarini' (Pancake arborvitae) or other Thuja occidentalis cultivar, Erigeron pulchellis 'Lynnhaven Carpet,' Baptisia australis (False Blue Indigo), or a blue-green native sedge species.

VR 8 VIBURNUM RHYTIDOPHYLLUM LEATHERLEAF VIBURNUM 3-4` B&B. - Not native, considered invasive in a few southern states. Viburnum leaf beetle exists in this area and may kill viburnums, although this species is one of the most resistant ones. Consider substituting some of these with native Physocarpus opulifolius cultivar (Common ninebark), Myrica cerifera (Southern bayberry), Myrica pennsylvanica (Northern bayberry), Leucothoe axillaris (Coastal doghobble), Leucothue fontanesiana 'Rainbow' (Drooping leucothoe), or, if conditions permit, Ceanothus americanus (New Jersey Tea).

LSP 43 LIRIOPE SPICATA CREEPING LILY TURF 1 GAL. CONTAINER 15" o.c. - Not native, not considered invasive. This tough plant is good for the tough location along the drive thru. Consider substituting Phlox subulata (Moss phlox), Penstemon digitalis 'Husker Red,' Carex plantaginea (Plaintain leaf sedge), or other native species.

Sustainability Comments

- We encourage that a specific area be designed to accommodate bicycle parking.

- 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.

We appreciate the opportunity to comment on this land development plan.

Respectfully submitted,

Susan S. Myerov

Susan Myerov, Member
Abington Township EAC

Patricia Gallagher

Patricia Gallagher, Chair
Abington Township STC

cc: Richard Manfredi
Michael Narcowich
Shaun Littlefield
Planning Commission Members
EAC Members
Abington Shade Tree Commission Members

TRAFFIC PLANNING AND DESIGN, INC.

WWW.TRAFFICPD.COM

Memorandum

To: Richard Manfredi, Manager - Abington Township

From: Greg Richardson, P.E.

Date: February 6, 2023

Re: **2620 West Moreland Road – Raising Cane's**
Traffic Review #1
Abington Township, Montgomery County, PA
TPD No. ABTO.00036

cc: Board of Commissioners
Planning Commission
Tim Clark
Ashley McIlvaine
Terry Castorina
Khalid 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:

- Traffic Impact Assessment (TIA) prepared by McMahon Associates, Inc. – Dated January 19, 2023;
- Site Plans prepared by Bohler Engineering – Dated October 26, 2022.

The following are our comments:

Traffic Impact Assessment

1. The traffic report assumes 10% of the site trips will utilize intersections not included in the study area. Presumably, these trips will utilize the traffic signal at Moreland Road (S.R. 0063) & Center Road/Willow Grove Park Mall Access. It is recommended that the traffic report be revised to include this intersection and assess the impact that the site may have on it.
2. The traffic counts included in the traffic report were conducted on Saturday, December 17th and Tuesday, December 20th. Verify that local schools were in session at this time, or a seasonal adjustment factor may be needed.

2500 East High Street, Suite 650
Pottstown, PA 19464
610.326.3100
TrafficPD@TrafficPD.com

3. The traffic report utilizes previous studies from three comparable sites in Illinois to determine a site-specific trip generation rate. We note that the comparable trip generation rate is more conservative than published ITE data. However, it appears that these comparable sites all have a single drive-thru lane, rather than the dual drive-thru configuration proposed at this location. Provide additional information related to the trip generation impacts of a dual drive-thru configuration. Our office may have additional comments upon review of revisions to the trip generation calculations that may be needed due to the dual drive-thru configuration.

4. The weekday morning peak hour was not evaluated as the traffic report indicates these stores typically do not begin operating until 10:00 a.m. It is recommended that an operating time limit be made a condition of any approval.

5. The Synchro analysis at the Full Movement Access Driveway to Moreland Road (S.R. 0063) assumed a two-stage left turn maneuver exiting the proposed site with the median storage inputted as two (2) vehicles. The maximum vehicle storage input should be 1 vehicle based on the width of the two-way left-turn lane (TWLTL). We note that this input value has a significant impact on the approach LOS and queue results. Provide further justification that two-stage left turn maneuvers occur at this location. Otherwise, the analysis should assume a one-stage left turn maneuver.

Site Plans

1. Based on the site plans, seventeen (17) total vehicles can stack in the drive-thru area. This appears to be from the pick-up area to the end of the drive-thru lane. No information is provided regarding the total number of vehicles that can stack behind the ordering window, which is where the longest dwell time may be for customers placing orders. Thus, it appears based on the plans that two (2) vehicles can stack behind a vehicle at the ordering window in the outer lane and three (3) vehicles can stack behind a vehicle at the ordering window in the inner lane.

2. Additional information should be provided regarding the number of vehicles that can stack behind those at the ordering window. In addition, more information should be provided regarding the sufficiency of the proposed stacking area from the ordering window, given the driveway aisle and parking areas located adjacent to the drive-thru area.

3. Regarding Table 7 in the TIA, information was provided from sites with one (1) drive-thru lane, not two (2), as proposed. Thus, the queueing averages could be different, because more lanes to order might accommodate more vehicles queueing.

4. As indicated on the plans, drive-thru stacking may extend into the driveway and parking areas because only five (5) total vehicles can queue before the order window. Consideration should be given re-examining the parking layout, specifically the parking area adjacent to the full-access driveway intersection (i.e., vehicles may have a difficult time entering/exiting these parking stalls).

General

1. Since any modification to the signalized intersection of Moreland Road (S.R. 0063) & Center Road/Willow Grove Park Mall Access is subject to PennDOT review and approval, any correspondence to and from the Department must also be coordinated with our office and the Township, and evaluated and addressed accordingly in subsequent submissions.

2. 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

September 16, 2022

Chris Madonna
Bohler Engineering
Philadelphia, PA 19102

Re: Water Availability
2620 W Moreland Ave
Abington Twp, Mongtomery 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

Zoning Hearing Board Application

Abington Township, PA

1176 Old York Road, Abington PA 19001, Fax: 215-884-8271, Telephone: 267-536-1000 x4

Checklist

1. A completed application, to include the signature of the owner and signature of the applicant.
2. Only the below items will be accepted with a completed application:
    a. Agreement of sale or the lease agreement.
    b. Copy of the most recent deed.
    c. The plot plan of the property prepared by a Professional Engineer or a Registered Land Surveyor. The date of the plan may not be more than (1) year old. Ten (10) physical copies to scale must be provided with the application.
3. Any additional exhibits may only be presented at the hearing in the form of twelve (12) hard copies (photographs, letters of support, etc.). A flash drive with the exhibits may be brought to the hearing.
4. The plot plan must include the zoning district, zoning district requirements and what is proposed. The requested relief is required to be highlighted.
5. The plot plan is required to plot the location of existing coverage, structures and the like. All proposed improvements are required to be plotted and highlighted on the plan. The plan is required to list all proposed coverage numbers for both the building coverage and the impervious coverage as well as plot all building setback lines and required landscaped buffers.
6. Any and all proposed changes to the existing grades on the site will be required to be clearly shown. If the property has existing steep slopes, that area and the percentage of disturbance must be shown.
7. The site plan should include a site area map @ a 500/1 scale.
8. Applications must be submitted by the second Friday of the month by 4:00 PM in order to appear on the following month's agenda. Applications are subject to review and the submission of an application does not automatically guarantee its placement on an agenda.
9. Completed application, deed(s) and plot plan must be e-mailed to zoning.officer@abingtonpa.gov upon submission.

The Zoning Hearing Board of the Township of Abington holds a regularly scheduled meeting on the third Tuesday of each month. If you have any questions, please feel free to contact the Township Zoning Officer at zoning.officer@abingtonpa.gov or 267-536-1013.

All applications are reviewed by the Zoning Officer of the Township of Abington and may be returned to the applicant if the application is found to be incomplete.

Zoning Hearing Board Application

Abington Township, PA

1176 Old York Road, Abington PA 19001, Fax: 215-884-8271, Telephone: 267-536-1000 x4

This application must be accompanied by a minimum of ten (10) copies of the plot plan of the property, prepared and signed by a registered land surveyor or professional engineer. The plan must include lot area, lot dimensions, coverge percentages, existing structures, other improvements, proposed improvements, off-street parking, buffers and all characteristics on the site. The plan may not be more than one (1) year old.

The Undersigned herein makes application for:

[X] Request for Variance from the Zoning Ordinance.

[ ] Request for a Special Exception as provided by the Zoning Ordinance.

[ ] Appeal from the actions of the Zoning Officer.

1. Name and address of the owner of the land:
   Willow Grove, PA PAD LLC
   c/o TLM Realty Holdings
   295 Madison Avenue, 37th Floor
   New York, NY 10017
   Phone number:
   (212) 752-4576

2. Name and address of the applicant:
   Raising Cane's Restaurants, LLC
   c/o Bryan Brown, Chief Development Officer
   6800 Bishop Road
   Plano, TX 75024
   Phone number:
   (972) 769-3206

3. Name and address of the attorney:
   Kaplin, Stewart, Meloff, Reiter & Stein, P.C.
   910 Harvest Drive, P.O. Box 3037
   Blue Bell, PA 19422
   Phone number:
   (610) 260-6000

4. If the applicant is not the owner of the property, list the applicant's interest in filing this application. Example: equitable owner, agent, lessee, etc.

   Proposed Tenant

5. Description of the property:

   Address/location 2620 W. Moreland Road, Abington Township, Montgomery County, PA

   Present use Parking lot

   Proposed improvement Fast-food Restaurant with accessory drive-through and outdoor dining facilities

6. State briefly the reasons for which the proposed improvements or use does not meet the requirements of the Zoning Ordinance, and the nature of relief you are seeking:

Applicant is seeking various dimensional variances related to setback requirements, facade composition requirements and service door requirements. Please see the attached Addendum for complete details

7. List the specific section of the Zoning Ordinance upon which the application for a variance or special exception is based:

Applicant requests: (i) a variance from Section 1103 of the Zoning Ordinance referencing Figure 11 9 BC Business Center Districts: Dimensional Requirements to permit the outdoor dini patio canopy to be setback 12.6 feet from the main access drive where a 20 foot setback is required;
(ii) a variance from Section 1104.C 9.c. of the Zoning Ordinance to permit a window area of 14% (+/-) on an exterior, street facing wall where such walls require a minimum window area 35%;
(iii) a variance from Section 1107.D. of the Zoning Ordinance to permit a service door to be located on the front façade of the fast-food restaurant where such service doors are required to visually screened and located to the side or rear of the building; and (iv) any other relief deemed necessary

8. Describe in detail the grounds for the appeal, or the reasons both in law and in fact for the granting of the variance or special exception, describing in detail the nature of the unique circumstances, and the specific hardship justifying your request for approval of the application.

Applicant is seeking dimensional variances from the setback requirements, facade composition requirements and service door requirements, which should be granted under the Pennsylvania Supreme Court's Decision in Hertzberg. Please see the attached Addendum for complete details.

9. List any and all prior Zoning Hearing Board action regarding the property. List the date, case number and the nature of the zoning relief granted.

Decision of the Zoning Hearing Board dated October 19, 2022 at Abington Township Zoning Hearing Board Application No. 22-24. Please see Exhibit "F" to the attached Addendum.

10. List any and all additional information, records, transcripts which may be helpful to the Zoning Hearing Board in rendering a decision: A minimum of eight (8) copies are required to be submitted.

The Property was part of a two-lot subdivision approved by the Township Board of Commissioners in December of 2019.

Please also see Exhibit "F" to the attached Addendum.

Signature of Applicant

Michael Oestreich Authorized Signatory

Signature of Owner

Internal Validation:

Date Received: 03/17/2023

Fee Paid: $1,500.00, Ck # 24198

Case: 23-11

Signature of the Zoning Officer

Ordinance No. 1951

AN ORDINANCE OF THE TOWNSHIP OF ABINGTON RE-ESTABLISHING FEES TO BE CHARGED FOR CERTAIN ZONING HEARING BOARD APPLICATIONS OR APPEALS, AND SUBSTANTIVE CHALLENGES BROUGHT BEFORE THE ZONING HEARING BOARD; A FEE TO BE CHARGED FOR POSTPONEMENTS REQUESTED BY APPLICATNS; A FEE TO BE CHARGED FOR APPLICATIONS FOR A CHANGE OR AMENDMENT TO THE ZONING MAP; A FEE TO BE CHARGED FOR APPLICATIONS FOR CONDITIONAL USE; A FEE TO BE CHARGED FOR APPLICATIONS FOR CURATIVE AMENDMENT; A FEE TO BE CHARGED FOR APPLICATIONS FOR ZONING COMPLIANCE CERTIFICATES; AND REPEALING ALL PRIOR ORDINANCES OR PARTS THEREOF THAT ARE INCONSISTENT WITH THIS ORDINANCE.

The Board of Commissioners of the Township of Abington, pursuant to the authority set forth in section 908(1.1) of the Pennsylvania Municipality Planning Code (53 P.S. - 10908(1.1), does hereby enact and ordain as follows:

Section 1. **Fees for Applications and Appeals to the Zoning Hearing Board.** Fees to be charged for appliations or appeals to the Zoning Hearing Board, and substantive challenges to the validity of the zoning ordinance, shall be determined as follows, and shall be in the folliwng amounts:

A. For applications or appeals relating to accessory structures up to and including 500 square feet, fences and retaining walls: Two hundred dollars ($200.00).

B. For applications or appeals relating to single-family dwellings or one residentially zoned parcel: Four hundred dollars ($400.00).

C. For applications or appeals relating to from two to four residentially zoned properties: Five hundred dollars ($500.00).

D. For applications or appeals relating to five to nine residentially zoned properties: One thousand dollars ($1,000.00).

E. For applications or appeals relating to ten or more residentially zoned properties: One thousand five hundred dollars ($1,500.00).

F. For applications or appeals relating to a duplex: Five hundred dollars ($500.00).

G. For applications or appeals relating to three to five apartment units: Six Hundred dollars ($600.00).

H. For appliactions or appeals relating to six to ten apartment units: One thousand dollars ($1,000.00)

I. For applications or appeals relating to more than ten apartments: One thousand five hundred dollars ($1,500.00)

J. For an application or appeal involving any change in use, alteration or addition to any non-residential building under one thousand (1,000) square feet: One thousand dollars ($1,000.00).

K. For an application or appeal involving any change in use, alteration or addition to any non-residential building over one thousand (1,000) square feet: One thousand five hundred dollars ($1,500.00).

L. For a procedural or substantive challenge to the validity of the zoning ordinance: One thousand five hundred dollars ($1,500.00).

Section 2. **Fee for Postponement Requested by Applicant.** A fee of three hundred ($300.00) will be charged for each postponement of any matter identified in Section 1 or 2 requested by an applicant, said fee to be paid prior to the scheduling of the postponed hearing. The purpose of this fee is to cover the cost of legally required advertising and mailings giving notice of the re-scheduled hearing.

Section 3. **Fees for Matters to be Heard by the Board of Commissioners.** For applications for a change or amendment to the zoning map, for a conditional use, petitions for land use ordinance amendments, including curative amendments: Two thousand dollars ($2,000.00).

Section 4. **Fee for Zoning Compliance Certificate.** A fee of one hundred and fifty dollars ($150.00) shall be charged for an application for the issuance of a zoning certificate.

Section 5. **Repealer.** All prior ordinances or parts of prior ordinances that are inconsistent with this Ordinance are hereby repealed to the extent of such inconsistency.

Section 6. **Severability.** In the event that any section, sentence, clause or word of this Ordinance shall be declared illegal, invalid or unconstitutional by any Court of competent jurisdiction, such declaration shall not prevent, preclude or otherwise foreclose the validity of the remaining portions of this Ordinance.

Section 7. **Effective Date.** This Ordinance shall be effective immediately.

ENACTED and **ORDAINED** this 13th day of December, 2007.

Attest:

Burton T. Conway, Secretary

By:

James Ring, President
Board of Commissioners

Kaplin Stewart Meloff Reiter & Stein, P.C.
Union Meeting Corporate Center
910 Harvest Drive
P.O. Box 3037
Blue Bell, PA 19422
(610) 260-6000

Marc B. Kaplin, Esquire
Craig R. Lewis, Esquire
mkaplin@kaplaw.com
rlewis@kaplaw.com

Attorneys for Applicant

BEFORE THE ZONING HEARING BOARD OF ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

IN THE MATTER OF:	:	PREMISES:
	:	
RAISING CANE'S	:	PARCEL ID NO. 30-00-45100-01-6
RESTAURANTS, LLC,	:	
APPLICANT	:	2620 WEST MORELAND ROAD
	:	ABINGTON TOWNSHIP, PA

ADDENDUM TO APPEAL TO ZONING HEARING BOARD

Raising Cane's Restaurants, LLC, by and through its attorneys, Marc B. Kaplin, Esquire and Craig R. Lewis, Esquire, hereby files this addendum to its Application to the Abington Township Zoning Hearing Board seeking certain relief from the Abington Township Zoning Ordinance (**"Zoning Ordinance"**) to permit the improvements described herein for the property identified above, and in support thereof states as follows:

I. Name and Address of Owner/Applicant.

1. The Applicant is Raising Cane's Restaurants, LLC (**"Raising Cane's"**), c/o Bryan Brown, Chief Development Officer, having a business address of 6800 Bishop Road, Plano, TX 75024. Raising Cane's is the proposed tenant of the property located at 2620 West Moreland Road (Montgomery County Parcel ID No. 30-00-45100-01-6) (**"Property"**) in Abington

Township (**"Township"**), by virtue of an executed Ground Lease between Applicant and Willow Grove, PA PAD LLC, the legal owner of the Property. A redacted copy of the Ground Lease between Raising Cane's and Willow Grove, PA PAD LLC is attached hereto and made a part hereof as Exhibit "A" and incorporated herein by reference.

II. Description and Background of Real Estate Affected.

2. The Property is an approximately 1.03 acre (+/-) tract and is located within the property developed and known as the Willow Grove Park Mall (**"Willow Grove Park"**). The Property has frontage along West Moreland Road and primary access to the Property is provided via two (2) existing driveways onto West Moreland Road.

3. The Property was created as part of the subdivision associated with the redevelopment of the former K-Mart property, now being used as an At Home store (**"At Home Building"**), that was approved by the Board of Commissioners of Abington Township in December of 2019 (**"Subdivision Plan"**).

4. The Subdivision Plan created the Property as a separate building lot from the lot that houses the At Home Building located to the rear of the Property and identified on the Subdivision Plan as Lot #1. Lot #1 is an approximately 8.34-acre parcel (+/-) and is presently improved with a 94,968 sq. ft. retail/commercial building. The At Home Building directly abuts the Property along its southwestern property line.

5. According to the Abington Township Zoning Map, the Property is located in the Business Center Zoning District (**"BC District"**). Additionally, as the Property is located within the Willow Grove Park Mall, the Property is subject to the provisions of the Zoning Ordinance regulating development in Willow Grove Park.

6. The Property is currently being used as a parking lot and is improved with eighty-five (85) surface parking spaces and associated internal access driveways[1]. The existing conditions on the Property are depicted on the Existing Conditions and Demolition Plan, Sheet C4.0. of a Plan Set entitled "Preliminary / Final Land Development Plans for Raising Cane's Restaurants, LLC" prepared by Bohler Engineering and dated October 28, 2022 (**"LD Plans"**). Sheet C1.0 (Cover Sheet), Sheet C1.1 (Record Plan) and Sheet C4.0 (Existing Conditions and Demolition Plan) of the LD Plans are attached hereto and made a part hereof as Exhibit "B."

III. Proposed Redevelopment

7. Raising Cane's is proposing to redevelop the Property with a single-story, approximately 3,374 sq. ft. (+/-) fast food restaurant[2] with an accessory dual-lane drive-through facility, outdoor dining area, access drives and circulation areas, and other related improvements (**"Proposed Redevelopment"**)[3]. Thirty (30) off-street parking spaces will be provided, including two (2) ADA spaces. The Proposed Redevelopment is depicted on the Record Plan, Sheet C1.1 of the LD Plans attached and previously identified as Exhibit "B."

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[1] The Property is presently nonconforming with respect to numerous dimensional requirements applicable to the BC District including, but not limited to, maximum impervious coverage (82.4% where 70% maximum (75% maximum paving) is permitted), minimum green area (17.61% provided where 25% minimum is required) and the required parking lot setback from public streets (12.2 ft. provided where 100 ft. minimum are required). Additionally, there are currently no ADA parking spaces provided on the Property.

[2] Use C-25: Restaurant, Fast-Food: An establishment specializing in food and beverages that can be prepared and served quickly, where food is typically ordered and delivered at a counter, typically served in disposable containers which must be cleared from tables by the customers. This use category shall also include Drive-Through Restaurants (any place or premises used for the sale, dispensing or serving of food, refreshments or beverages whose design, method of operation or any portion of whose business includes the delivery of the food or beverage directly to the customer to consume the food or beverage within a motor vehicle parked on the subject property). A Fast-Food Restaurant may include carryout services.

[3] The Proposed Redevelopment will eliminate the existing impervious coverage nonconformity on the Property (from 82.4% to 68.95% (+/-), where 70% maximum (75% maximum paving) is permitted; the green area nonconformity on the Property (from 17.61% to 31.05%, where 25% minimum is required) and compliance with the required parking lot setback from public streets (from 12.2 ft. to 105.7 ft., where 100 ft. are required). As noted above, the Proposed Redevelopment will add two (2) ADA parking spaces to the Property, where there are currently no such spaces provided.

IV. Procedural Background

8. On June 21, 2022, Marc Kaplin, Esquire, on behalf of Raising Cane's, contacted the Township to discuss Raising Cane's plans to redevelop the Property for the proposed fast-food use. Mr. Kaplin informed the Township Manager that in order to proceed with the Proposed Redevelopment, Raising Cane's team had determined that Raising Cane's would require at least two (2) variances from the Township's Zoning Ordinance relating to the required parking and building setbacks from the At Home Building, in addition to special exception approval for the drive-through facility.

9. Mr. Kaplin requested that the Abington Township Zoning Officer (**"Zoning Officer"**) and Pennoni Associates, Inc. (**"Pennoni"**), the Township's Engineer, conduct a preliminary review of the plans for the Proposed Redevelopment in order to confirm that the development plans for the Property otherwise complied with the applicable Township ordinances and/or that all required relief was identified.

10. On June 22, 2022, the Township informed Mr. Kaplin that Pennoni had been designated as the Assistant Township Zoning Officer ("**Assistant Zoning Officer**") charged with reviewing all commercial applications. Raising Cane's was directed to file an application to the Zoning Hearing Board requesting the relief it believed necessary, and the variance and special exception relief identified and thereafter, the application would be forwarded to the Assistant Zoning Officer who would review the application and provide any additional comments.

11. On July 15, 2022, Raising Cane's filed with the Township an application to the Zoning Hearing Board seeking the following relief:

a. A special exception under Section 1102 of the Zoning Ordinance referencing the *Comprehensive Use Matrix* to permit a drive-through facility in connection with the Proposed Redevelopment;

b. A variance from Section 1103 of the Zoning Ordinance referencing *Figure 11.9 BC Business Center Districts: Dimensional Requirements* to permit a building setback from a parking area of 5.7 ft. where 10 ft. are required;

c. A variance from the required buffer and planting requirements of Section 2402.A.5.;

d. A variance from the required buffer and planting requirements of Section 2403.B.4.a.; and

e. Such other relief as the Zoning Hearing Board deems necessary and sufficient to authorize the Proposed Redevelopment as described herein.

(**"First ZHB Application"**).

12. In the Submission Letter filing the First ZHB Application, Mr. Kaplin confirmed that he had discussed with the Township Manager Raising Cane's desire to have the application reviewed the Assistant Zoning Officer to confirm that all necessary relief required to implement the Proposed Development had been sought. Mr. Kaplin further requested that the First ZHB Application and supporting materials be forwarded to the Assistant Zoning Officer for their review and comment, and that Pennoni be authorized to discuss the First ZHB Application with Raising Cane's and its representatives. A copy of the July 15, 2022 Submission Letter for the First ZHB Application is attached hereto and made a part hereof as Exhibit "C", and is incorporated by reference herein.

13. On July 18, 2022, the Zoning Officer informed Mr. Kaplin that it was understood that Raising Cane's desired to, "have the application and submission reviewed by

Pennoni Associates; however, the review of the application requires a Professional Services Agreement submitted through the Township Manager's office.

14. Counsel for Raising Cane's requested the Professional Services Agreement in order to have the First ZHB Application reviewed via email correspondence on July 18, 2022, July 26, 2022 and August 9, 2022; and via telephone messages on July 26, 2022 and August 9, 2022.

15. The Township never responded to counsel's inquiries and the Professional Services Agreement was never provided to Raising Cane's or its counsel.

16. Accordingly, on August 9, 2022, Mr. Kaplin again contacted the Assistant Zoning Officer and Township reiterating his prior request that the First ZHB Application and plans be reviewed for compliance with the applicable ordinances so as to avoid appearing before the Zoning Hearing Board without having sought all of the necessary relief, and further requesting confirmation that the plans were being reviewed by the Township's staff and consultants.

17. No response was received.

18. Instead, on August 17, 2022, the Zoning Officer emailed to Mr. Kaplin and Mr. Lewis general comments issued in connection with the Zoning Officer's review of the First ZHB Application. In the August 17, 2022 correspondence, the Zoning Officer requested clarification on specific aspects of the First ZHB Application and identified certain areas where additional variance relief was needed. A copy of the Zoning Officer's August 17, 2022 email correspondence is attached hereto and made a part hereof as Exhibit "D", and is incorporated by reference herein.

19. On September 9, 2022, Raising Cane's, via counsel, provided the Zoning Officer with detailed responses to all of the comments contained within the August 17, 2022 email. Where applicable, Raising Cane's also amended the relief requested in the First ZHB Application, including requests for the following additional relief:

a. A variance from Section 2402.A.5.a. of the Zoning Ordinance referencing Section 2403.B.3.a. of the Zoning Ordinance to permit a 10 ft. wide medium-intensity buffer along the northwest property line, where a 15 ft. wide medium-intensity buffer is required;

b. Variances from Section 2402.A.5 and Section 2403.B.4.a. of the Zoning Ordinance to not provide the required buffers, trees and plantings materials along the Property's southwestern and southeastern property lines, where there is inadequate space on the Property to provide them; and

c. An extension of the previously requested variance relief from the required buffer, trees, planting and width requirements of Section 2403.B.4.a. of the Zoning Ordinance to apply to the Property's northwestern property line.

A copy of Raising Cane's September 9, 2022 correspondence is attached hereto and made a part hereof as Exhibit "E", and is incorporated by reference herein.

20. A hearing on the First ZHB Application was held before the Zoning Hearing Board on September 20, 2022. At the hearing, Raising Cane's presented the testimony of two (2) witnesses, Kevin Tatlow, P.E. of Bohler Engineering, the civil engineer for the Proposed Redevelopment, and Michelle Robinson, AIA NCARB, the project manager for the Proposed Redevelopment. At the conclusion of the September 20, 2022 hearing, the Zoning Hearing Board voted orally to approve the First ZHB Application.

21. On October 19, 2022, the Zoning Hearing Board issued its written decision approving the First ZHB Application and granting all of the requested relief as set forth above (**"ZHB Decision"**). A copy of the ZHB Decision is attached hereto and made a part hereof as Exhibit "F," and is incorporated by reference herein.

22. Shortly thereafter, on October 26, 2022, Bohler Engineering on behalf of Raising Cane's submitted to the Township an Application for Preliminary / Final Land Development approval of the Proposed Development, together with proposed land development plans, architectural plans, a Sewage Facilities Planning Module, a Stormwater Management Narrative and Calculations and all required forms, applications and fees (collectively, the **"LD Application"**). A true and correct copy of Bohler's transmittal letter to the Township is attached hereto and made a part hereof as Exhibit "G."

23. The LD Application and supporting materials were reviewed by Pennoni Associates, Inc., which issued its technical review by letter dated December 5, 2022 (**"Review Letter"**).

24. Despite repeated requests (spanning from June 2022 through August 2022 as detailed above) that the First ZHB Application and plans be reviewed by the Township's Zoning Officer, the Township's Engineer and the Township's Assistant Zoning Officer to ensure that all required relief was identified and sought from the Zoning Hearing Board, the Review Letter identified numerous areas within the land development plans where it was alleged additional zoning relief may be required.

25. The Decision approving the First ZHB Application specifically provides that, "All relief granted by the Board is collectively and respectively granted subject to the conditions: a) that the Applicant apply for and obtain land development approval (or a waiver therefrom) from the Abington Township Board of Commissioners permitting the development and use proposed."

26. As described in the Review Letter, the Township through its Engineer, has determined that the Applicant requires additional relief to permit the redevelopment of the Property

as proposed in the LD Application. As a result, Raising Cane's cannot proceed with the Proposed Development of the Property unless the zoning issues identified in the Review Letter are resolved.

27. On February 2, 2023, Raising Cane's and its representatives met with the Township's staff and consultants in order to address numerous comments contained within the Review Letter. Based on that meeting the Township's solicitor confirmed that several of the alleged issues of zoning non-compliance had been in error and were withdrawn. However, although Raising Cane's determined that the plans and other materials submitted with the LD Application can be revised and amended to address certain other comments contained in the Review Letter, there are still several issues for which zoning relief is required.

V. Requested Relief

28. Therefore, Raising Cane's hereby requests that the Zoning Hearing Board grant the following dimensional variances as identified in Pennoni's 12/05/2022 Review Letter:

a. A variance from Section 1103 of the Zoning Ordinance referencing *Figure 11.9 BC Business Center Districts: Dimensional Requirements* to permit the outdoor dining patio canopy to be setback 12.6 feet from the main access drive where a 20 foot setback is required (*See, Review Letter – Zoning Comments Item #2);*

b. A variance from Section 1104.C.9.c. to permit a window area of 14% (+/-) on an exterior, street facing wall where such walls require a minimum window area of 35% (*See, Review Letter – Zoning Comments Item #4);*

c. A variance from Section 1107.D. of the Zoning Ordinance to permit a service door to be located on the front façade of the fast-food restaurant where such service doors are required to be visually screened and located to the side or rear of the building (*See, Review Letter – Zoning Comments - Item #10*); and

d. Any other relief deemed necessary to proceed with the Proposed Redevelopment.

A. Request for Variance from Access Drive Setback Requirement

29. Section 1103 of the Zoning Ordinance referencing *Figure 11.9 BC Business Center Districts: Dimensional Requirements* requires that the minimum build-to line along public

streets shall be 20 feet (50 feet on Moreland Road west of Park Avenue) and the maximum shall be 50 feet (100 feet on Moreland Road west of Park Avenue.). Section 1103 of the Zoning Ordinance referencing *Figure 11.9 BC Business Center Districts: Dimensional Requirements* further requires that the minimum build-to-line along main access drives shall be 20 feet with a maximum of 25 feet, and along secondary access drives the minimum build-to-line shall be 16 feet with a maximum of 25 feet.

30. Zoning Comments - Item #2 of the Review Letter states as follows:

> **The site is accessed by two drives that intersect with West Moreland Road. Per Section 201 – Specific Definitions, the access drive to the south provides access from West Moreland Road to internal parking areas and is therefore classified as a main access drive. In addition, per the definition of building, the steel roof supported by columns on the patio is considered a building. The steel roof structure is only 12.6 feet from the main access drive which is less than the minimum required 20 feet. The plans shall be revised accordingly to show the building setback lines from West Moreland Road as well as the main access drive, and the steel roof structure moved to be located within the build-to-lines; otherwise, a variance from this section of the code will be required.**

31. The Review Letter makes two (2) determinations: (1) the driveway on the adjacent property is a "main access drive", and (2) the unenclosed canopy over the patio dining constitutes a "building". As such, the canopy is required to be setback 20 – 25 ft. from the adjacent driveway. As depicted on the LD plans however, the proposed canopy can only be setback approximately 12.6 feet from the driveway.

32. Because the Property fronts on Moreland Road, the Proposed Development is subject to the ordinance provisions related to build-to-lines from Moreland Road as set forth in Figure 11.9 of Section 1103. Section 1103 requires that the minimum build-to-line on Moreland must be a minimum of 50 feet and a maximum of 100 feet. This encumbers the Property with two

large front yard setback requirements[4]. Due to the particularly diminutive size of the Property, it is uniquely affected by the imposition of two front yard setbacks.

33. Moreover, the Zoning Ordinance prohibits parking and vehicular circulation areas in front of buildings, which requires that these improvements must be located to the rear. However, as described in the First ZHB Application, the location of the At Home Building immediately adjacent to the southwestern property line constrains the available space on the Property to provide the required parking, landscaping, etc., and further limits the available areas in which to implement the outdoor patio area.

34. Accordingly, Raising Cane's requests a variance from Section 1103 of the Zoning Ordinance referencing *Figure 11.9 BC Business Center Districts: Dimensional Requirements* to permit the outdoor dining patio canopy to be setback 12.6 feet from the main access drive where a minimum 20 foot setback is required.

B. Request for Variance from Façade Composition Requirement

35. Section 1104 of the Zoning Ordinance regulates certain design standards applicable to development in the BC District.

36. In particular, Section 1104.C.9.c. of the Zoning Ordinance requires that, "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."

37. Zoning Comments - Item #4 of the Review Letter states as follows:

> Per §1104.C.9.c – Design Standards – Blank walls shall not be permitted along any exterior wall facing a street or passenger train station. Walls in these locations shall

[4] See Section 201. Specific Definitions of the Zoning Ordinance: Build-to-Line - "Where required, a build-to-line replaces the front yard setback."

> comprise a minimum of 35% window area and a maximum of 75% window area, with windows interspersed across the façade.
>
> **A window area calculation shall be provided for the proposed façade that faces West Moreland Road to ensure that there is a window area between 35% and 75% for this façade.**

38. As depicted on the Exterior Keynote Elevations submitted with the LD Application, the façade of the proposed fast-food restaurant that faces West Moreland Road will not be blank walls, as certain window areas are envisioned. A copy of the Exterior Elevations for the Proposed Development prepared by ADA Architects, dated October 21, 2022, is attached hereto and made a part hereof as Exhibit "H", and is incorporated by reference herein.

39. This façade facing West Moreland Road has a window area (including glass storefront entrance door) of 235 square feet on the façade, whose overall square footage is 1,636 square feet. This yields a window area of 14.36%, which fails to comply with the 35% minimum required by Section 1104.C.9.c. of the Zoning Ordinance.

40. Raising Cane's is committed to a more energy efficient way of doing business. Because of this, the proposed fast-food restaurant has been designed in compliance with the energy efficiency standards applicable to commercial buildings as set forth by the locally adopted Building Energy Code.

41. If the proposed fast-food restaurant were required to provide the required 35% - 75% window area for this façade, the building would certainly fail the required Building Envelope COMcheck for compliance with the locally adopted Building Energy Code[5].

[5] In general, the COMcheck software is used by architects, builders, designers, and contractors to determine whether a new commercial building meets the requirements of the IECC and ASHRAE Standard 90.1, as well as several state-specific codes, in this case, the 2018 International Energy Code.

42. Accordingly, Raising Cane's requests a variance from Section 1104.C.9.c. to permit a window area of 14% (+/-) on an exterior, street facing wall where such walls require a minimum window area of 35%.

C. Request for Variance from Service Door Requirement

43. Section 1107 of the Zoning Ordinance contains regulations relating to the location of trash, loading facilities and utilities.

44. Specifically, Section 1107.D. of the Zoning Ordinance requires that, "Service and loading areas must be located to the side or rear of buildings and must be visually screened. Loading doors, service doors, and loading docks shall not be located on any façade facing a street, or on any portion of a façade within 35 feet of a street."

45. As depicted on the Exterior Keynote Elevations submitted with the LD Application, there is a proposed service door to be located on the façade of the fast-food restaurant that faces West Moreland Road.

46. Zoning Comments – Item #10 of the Review Letter states as follows:

> Per §1107.D – Trash, Loading, and Utilities – Service and loading areas must be located to the side or rear of buildings and must be visually screened. Loading doors, service doors, and loading docks shall not be located on any façade facing a street, or on any portion of a façade within 35 feet of a street.
>
> **On the architectural plans provided, it appears that there is a service door with a 4-digit wall mounted key lock located on the façade facing West Moreland Road. No service door shall be located on the front façade of a building. This door shall be relocated along the side or rear facades. In addition, the loading area for deliveries shall be shown on the plans.**

47. As such, Raising Cane's requests a variance from Section 1107.D. of the Zoning Ordinance to permit the service door to be located on the front façade of the fast-food

restaurant where such service doors are required to be visually screened and located to the side or rear of the building. This service door will serve as the building's rear exit.

48. Simply stated, there is no other location on the fast-food restaurant building where this door can be located in order to safely accommodate both utility connections and emergency egress for employees and restaurant staff.

49. The service door cannot be located to the rear façade due to the location of the electric service meter, disconnect, and main switchgear cabinets for the proposed fast-food building. If the service door were in this location, the utilities would have to be relocated to the Moreland Road façade; a far worse aesthetic result.

50. Furthermore, this service door for the proposed fast-food restaurant has also been located so as to not interfere with any of the operations of the drive-through facility. As indicated above, and as described in great detail at the hearing on the First ZHB Application, the drive-through facility has been designed to comply with the requirements of the Zoning Ordinance applicable to drive-through uses and to provide safe and efficient access on and through the Property.

51. Just as importantly, this service door also serves the purpose of providing a secondary exit / emergency egress point for the staff and employees of the proposed fast-food restaurant. Occupational Safety and Health Administration standards require that a workplace must provide at least two (2) exist routes to permit prompt evacuation of employees from a building in the event of an emergency and that such exit routes must be located as far away as practical from each other in case one is blocked by fire or smoke. This service door has been properly located to comply with these OSHA requirements.

52. Finally, Section 1100 of the Zoning Ordinance sets forth the legislative intent of the BC District and includes the enabling of attractive building design and the encouraging of attractive buildings, circulation systems and green systems. *See, Zoning Ordinance Section 1100.E. & 1100.H.*

53. Raising Cane's will ensure that the design of the proposed fast-food restaurant, including the design of the proposed service door, incorporates attractive aesthetic and architectural features, and thus meets the intent of the Zoning Ordinance applicable to development in the BC District.

54. Accordingly, Raising Cane's requests a variance from Section 1107.D. of the Zoning Ordinance to permit a service door to be located on the front façade of the fast-food restaurant where such service doors are required to be visually screened and located to the side or rear of the building.

VI. Reasons for Granting Relief

55. As Mr. Tatlow confirmed at the hearing on the First ZHB Application, the existing conditions on the Property, including its multiple existing nonconformities, and the configuration of the Property, including the limited space between the Property and the At Home Building, substantially constrain the Property and limit its ability to be developed.

56. These unique physical circumstances of the Property, which the Zoning Hearing Board previously determined constituted an unnecessary hardship, have not changed since the granting of the First ZHB Application. These unique physical circumstances necessitate relief from the Zoning Ordinance in order to enable a reasonable, commercially viable use of the Property. Additionally, the proposed uses for the Property – the fast-food restaurant with drive-

through facility and outdoor seating area - are either permitted by right or by special exception in the BC District in which the Property is zoned.

57. The Pennsylvania Supreme Court stated in *Hertzberg v. Zoning Bd. of Adjustment of City of Pittsburgh,* 721 A.2d 43, (Pa. 1998), "[w]hen seeking a dimensional variance within a permitted use, the owner is asking only for a reasonable adjustment of the zoning regulations in order to utilize the property in a manner consistent with the applicable regulations".

58. As the relief requested herein is dimensional in nature, it is subject to a less stringent standard than that applicable to a use variance request. In *Hertzberg*, the Pennsylvania Supreme made clear that "the quantum of proof required to establish unnecessary hardship is indeed lesser when a dimensional variance, as opposed to a use variance, is sought."

59. In discussing the relaxed standard regarding dimensional variances, the Court held that factors such as financial and other hardships created by the condition or configuration of a building or lot and the characteristics of the surrounding area should be taken into account and would be deemed sufficient to justify the grant of a dimensional variance. *Id.*

60. Where, as is the case here, an applicant proposes to develop a property in a fashion consistent with the surrounding uses – and does so within the confines of existing site amenities – the grant of the requisite dimensional variances is supported by *Hertzberg*.

VII. Conclusion.

61. Raising Cane's is requesting the dimensional zoning relief outlined herein to allow Applicant to make reasonable use of the Property, consistent with the nature and character of the surrounding uses. Applicant contends that the variance relief requested will in no way alter the character of the District in which the Property is located or have an adverse effect on the health, safety and public welfare of the Township.

62. For all of the foregoing reasons, as well as those to be presented at the hearing, Applicant, Raising Cane's Restaurants, LLC respectfully requests that the Zoning Hearing Board grant the requested relief.

KAPLIN STEWART MELOFF REITER & STEIN, P.C.

By: 

Marc B. Kaplin, Esquire
Craig R. Lewis, Esquire
Attorneys for Applicant

Dated: March 17, 2023

Exhibit "A"

Ground Lease

DocuSign Envelope ID: 3651B983-D390-46BC-A327-147675528A3C

RC# C952
York Road & Westmoreland Road
Willow Grove, PA

GROUND LEASE

BETWEEN

WILLOW GROVE, PA PAD LLC

(LANDLORD)

AND

RAISING CANE'S RESTAURANTS, L.L.C.

(TENANT)

EFFECTIVE DATE
JUNE 29, 2022

DocuSign Envelope ID: 3651B983-D390-46BC-A327-147675528A3C

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EXHIBIT LIST:

Exhibit A:	Legal Description of the Property
Exhibit A-1:	Site Plan of the Shopping Center
Exhibit B:	Development and Construction
Exhibit B-1:	Site Plan of the Property
Exhibit B-2:	Elevations for Improvements
Exhibit B-3:	Sign Elevations
Exhibit B-4:	Landlord's Work
Exhibit B-5:	Intentionally Omitted
Exhibit C:	Form of Memorandum of Lease

DocuSign Envelope ID: 3651B983-D390-46BC-A327-147675528A3C

Exhibit D: Lease Term and Rent Schedule Agreement
Exhibit E: Form of Subordination, Non-Disturbance and Attornment Agreement
Exhibit F: Form of Access Easement Agreement
Exhibit G: Form of Estoppel Certificate

DocuSign Envelope ID: 3651B983-D390-46BC-A327-147675528A3C

GROUND LEASE

THIS GROUND LEASE ("Lease") is made as of the Effective Date (as hereinafter defined) by and between **WILLOW GROVE, PA PAD LLC**, a Delaware limited liability company ("Landlord"), and **RAISING CANE'S RESTAURANTS, L.L.C.**, a Louisiana limited liability company ("Tenant").

1. FUNDAMENTAL TERMS

(a) Fundamental Terms. The following is a summary schedule of certain fundamental terms of this Lease.

(i) Landlord **Willow Grove, PA Pad LLC**
c/o TLM Realty Corp.
Address: **295 Madison Avenue, 37th Floor**
New York, New York 10017
Attn: Ronald J. Oehl
Email: roehl@tlmltd.com

with a copy to:

Offit Kurman, P.A.
123 Main Street, 9th Floor
White Plains, New York 10601
Attn: M. Marc Dahan, Esq.
Email: marc.dahan@offitkurman.com

(ii) Tenant **Raising Cane's Restaurants, L.L.C.**
Address: **6800 Bishop Road**
Plano, TX 75024
Attn: Real Estate Department
Email: realestate@raisingcanes.com
Re: RC #C952

with a copy to:

Arnall Golden Gregory LLP
171 17th Street, NW, Suite 2100
Atlanta, Georgia 30363
Attn: Jonathan L. Neville, Esquire
Email: Jonathan.Neville@AGG.com
Re: RC #C952

EXECUTED by Landlord on this 29 day of JUNE, 2022.

LANDLORD:

WILLOW GROVE, PA PAD LLC,
a Delaware limited liability company

By: St. Petersburg, FL Retail LLC,
a Delaware limited liability company,
Sole Member

By: R.O. & S.W. Manager Corp.,
a Delaware corporation, Manager

By: _____
Andrew J. Greene
Vice President

DocuSign Envelope ID: 3651B983-D390-46BC-A327-147675528A3C

6/24/2022

EXECUTED by Tenant on this ____ day of _____, 2022.

TENANT:

RAISING CANE'S RESTAURANTS, L.L.C.,
a Louisiana limited liability company

DS
DG

By: DocuSigned by: Bryan Brown
D7897252FC9543A...

Bryan L. Brown
Chief Development Officer

Exhibit "B"

Selected Preliminary Land Development Plan Sheets

PRELIMINARY / FINAL LAND DEVELOPMENT PLANS

FOR

RAISING CANE'S RESTAURANTS, L.L.C.

PROPOSED

RESTAURANT #C952 W/ DRIVE-THRU

LOCATION OF SITE

2620 WEST MORELAND ROAD, WILLOW GROVE

ABINGTON TOWNSHIP

MONTGOMERY COUNTY

COMMONWEALTH OF PENNSYLVANIA 19090

TAX PARCEL NO. 30-00-45100-01-6

DRAWING SHEET INDEX

SHEET TITLE	SHEET NUMBER
COVER SHEET*	C1.0
RECORD PLAN*	C1.1
GENERAL NOTES	C2.0
SOIL EROSION AND SEDIMENT POLLUTION CONTROL PLAN	C3.0
SOIL EROSION AND SEDIMENT POLLUTION CONTROL NOTES	C3.1
SOIL EROSION AND SEDIMENT POLLUTION CONTROL DETAILS	C3.2
SOIL EROSION AND SEDIMENT POLLUTION CONTROL DETAILS	C3.3
DEMOLITION PLAN	C4.0
DIMENSION CONTROL PLAN	C5.0
GRADING PLAN	C6.0
PRE DEVELOPMENT PLAN	C6.1
POST DEVELOPMENT PLAN	C6.2
PROPOSED ONSITE DRAINAGE AREA MAP	C6.3
UTILITY PLAN	C7.0
CONSTRUCTION DETAIL	C8.0
CONSTURCTION DETAILS	C8.1
CONSTRUCTION DETAILS	C8.2
BASIN DETAILS	C9.0
VEHICLE CIRCULATION PLAN	C10.0
LANDSCAPE PLAN	C11.0
LANDSCAPE DETAILS	C11.1

* DENOTES SHEETS TO BE RECORDED

VARIANCES GRANTED BY THE ABINGTON TOWNSHIP ZONING HEARING BOARD ON 10/19/2022

1. A SPECIAL EXCEPTION PURSUANT TO ABINGTON TOWNSHIP ZONING ORDINANCE §1102, AND THE COMPREHENSIVE USE MATRIX, TO PERMIT A DRIVE-THROUGH RESTAURANT WAS APPROVED BY ABINGTON TOWNSHIP ZONING HEARING BOARD
2. A VARIANCE FROM ORDINANCE §1103 TO ALLOW A 5.7' PARKING BUILDING SETBACK ALONG THE SOUTHERN PROPERTY LINE OF THE SUBJECT PROPERTY WAS APPROVED BY ABINGTON TOWNSHIP ZONING HEARING BOARD
3. VARIANCES FROM ORDINANCE 2402.A.5 AND 2403.B.4.a FOR THE MINIMUM BUFFER AND PLANTING REQUIREMENTS WERE APPROVED BY ABINGTON TOWNSHIP ZONING HEARING BOARD

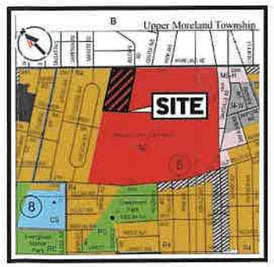
LIST OF WAIVERS REQUESTED FROM ABINGTON TOWNSHIP

1. RELIEF FROM SECTION 146-13 GENERAL REQUIREMENTS REQUESTED FOR PRELIMINARY/ FINAL LAND DEVELOPMENT REVIEW CONCURRENTLY



LOCATION MAP

SCALE: 1" = 500'
SOURCE: GOOGLE MAPS



ZONING MAP

SCALE: 1" = 100'
SOURCE: ABINGTON TOWNSHIP ZONING MAP

ZONING LEGEND

SYMBOL	ZONING DISTRICT
BC	BC BUSINESS CENTER
R4	HIGH DENSITY RESIDENTIAL
MS-H	MAIN STREET HIGH INTENSITY DENSITY
MS-L	MAIN STREET LOW INTENSITY DENSITY
RC	RECREATION/CONSERVATION
CS	COMMUNITY SERVICE
AO	APARTMENT OFFICE
SI-W	SUBURBAN INDUSTRIAL WILLOW GROVE

UTILITIES:

THE FOLLOWING COMPANIES WERE NOTIFIED BY PENNSYLVANIA ONE CALL SYSTEM, INC. (1-800-242-1776) AND REQUESTED TO MARK OUT UNDERGROUND FACILITIES AFFECTING AND SERVICING THIS SITE. THE UNDERGROUND UTILITY INFORMATION SHOWN HEREON IS BASED UPON THE UTILITY COMPANIES RESPONSE TO THIS REQUEST.
SERIAL NUMBER: 20220541701

UTILITY COMPANY	PHONE NUMBER
ABINGTON TOWNSHIP	215-884-5000
AQUA PENNSYLVANIA, INC.	610-525-1400
PECO CENTRAL LOCATING	215-841-4000
COMCAST	800-266-2278
VERIZON	215-657-9260

PREPARED BY

BOHLER

Restaurant Support Office
6800 Bishop Road, Plano, TX 75024
Tele: 972-769-3100 Fax: 972-769-3101

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

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www.pa1call.org
20220541701

PROJECT No.:	PP2270001
DRAWN BY:	BMM
CHECKED BY:	KRT
DATE:	10.26.22
CAD I.D.:	PP2270001-X-TTLB-PHPD

PROJECT:
PRELIMINARY/ FINAL LAND DEVELOPMENT PLANS

FOR

RAISING CANE'S RESTAURANTS, LLC.

PROPOSED RESTAURANT #C0952

2620 WEST MORELAND ROAD
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

BOHLER
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
www.BohlerEngineering.com

COMMONWEALTH OF PENNSYLVANIA
K.R. TAYLOR
PROFESSIONAL ENGINEER
LICENSE No. PE088418

SHEET TITLE:
COVER SHEET

SHEET NUMBER:
C1.0

ORG. DATE - 10.26.22

© 2022 BOHLER ENGINEERING, SITE PLANS/PP2270001/ADP/A1—LAYOUT: C1.0 COVER PLAN



LEGEND
PROPOSED PAVING

HEAVY DUTY CONCRETE PAVEMENT	
STANDARD DUTY PARKING ASPHALT PAVEMENT	
HEAVY DUTY ASPHALT PAVEMENT	
INTERGRAL COLORED 950 GRAPHITE 5" STANDARD DUTY CONCRETE PAVEMENT	
SIDEWALK PAVEMENT	

LEGEND
PROPOSED

PROPERTY LINE	
BUILDING	
CANOPY	
CONCRETE/ ASPHALT	
LANDSCAPE	
PARKING COUNT	9
RAMP	
SIGN	
BOLLARD	
FENCE	
CONCRETE CURB	
FLUSH CURB	
ACCESSIBLE SYMBOL	
TRAFFIC ARROWS	
CLEANOUT	C/O
HOUSE TRAP	HT
YARD DRAIN	
DRAINAGE INLET	
MANHOLE	

LEGEND
EXISTING

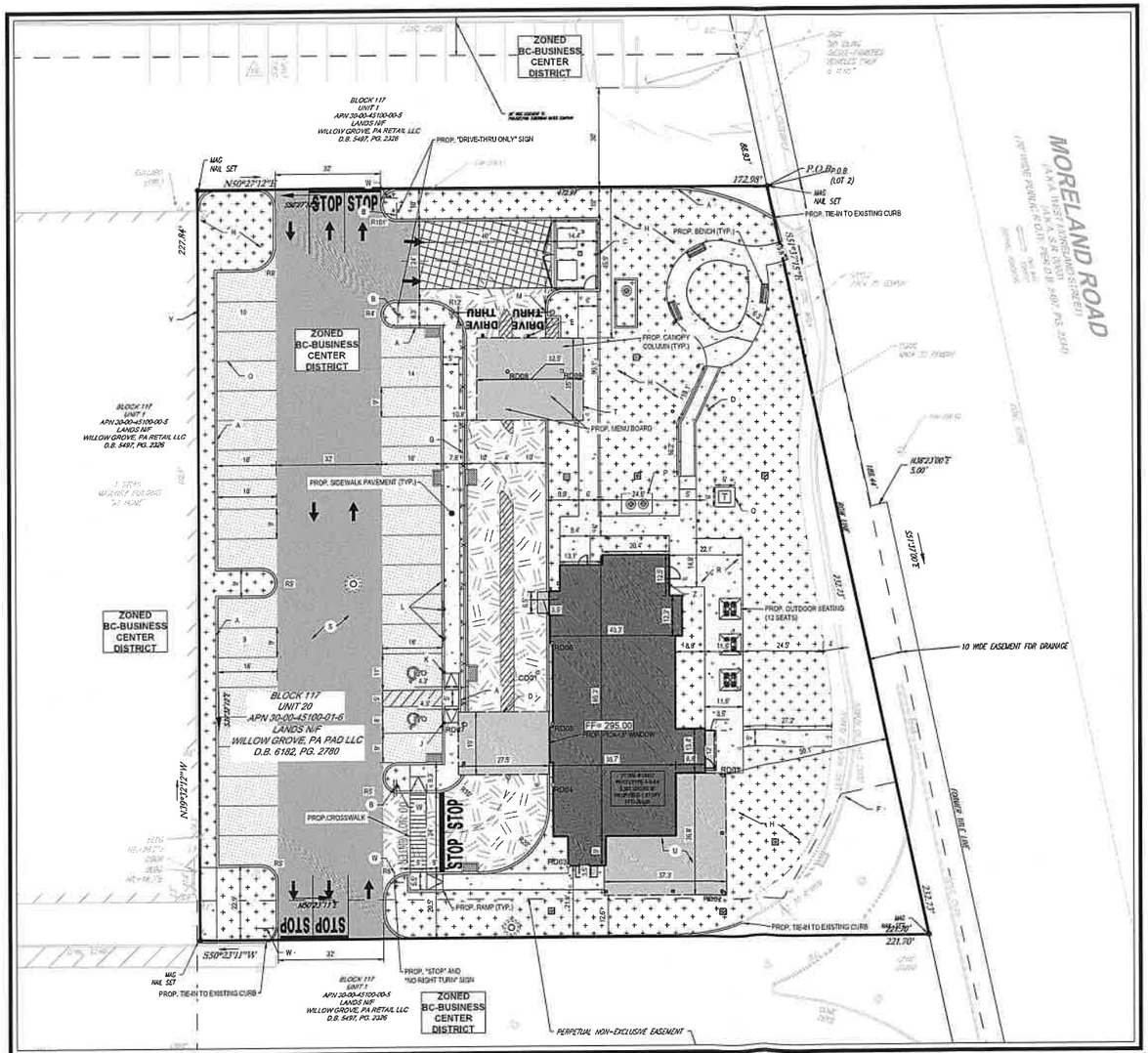
PROPERTY LINE	
ADJACENT PROPERTY LINE	
EASEMENT LINE	
SETBACK LINE	
BUILDING	
CONCRETE CURB	
FLUSH CURB	
ACCESSIBLE SYMBOL	
SIGN	
PARKING COUNT	9
AREA LIGHT	
TREE	
DRAINAGE INLET	
STORM/SANITARY MANHOLE	
WATER/GAS VALVES	
ROOF DRAIN/CLEANOUT	
FIRE HYDRANT	
UTILITY POLE W/ LIGHT	
UTILITY POLE	
OVERHEAD UTILITY WIRES	



LOCATION MAP
SCALE: 1" = 500'

LEGEND
SITE KEYNOTES

A	PROPOSED CONCRETE CURB
B	PROPOSED CANE'S MOVEMENT SIGN LOCATION REFER TO ARCHITECTURAL PLAN
C	RECYCLING/ TRASH DUMPSTER LOCATION REFER TO ARCHITECTURAL PLANS FOR DETAILS OF SCREENING, GATES, BOLLARD S AND MASONRY
D	CONCRETE BOLLARD
E	DIRECTIONAL PAVEMENT MARKING
F	EXISTING CONCRETE CURB
G	PROPOSED FENCE
H	LANDSCAPE AREA, REFERENCE LANDSCAPE PLANS
J	ACCESSIBLE PARKING SIGN ON CONCRETE BOLLARD
K	VAN ACESSIBLE PARKING SIGN ON CONCRETE BOLLARD
L	ORDER PICKUP PARKING SIGN ON CONCRETE BOLLARD
M	HEIGHT DETECTOR POLE
O	PAVEMENT STRIPING
P	PROPOSED GREASE TRAP REFER TO ARCHTECTURAL PLANS FOR DETAILS
Q	PROPOSED TRANSFORMER, REFER TO MEP PLANS
R	PROPOSED CONCRETE AREA
S	PROPOSED ASPHALT AREA
T	PROPOSED CANOPY, DESIGNED BY OTHERS
U	PROPOSED CONCRETE PATIO WITH PATIO FURNITURE, DESIGNED BY OTHERS
W	PROPOSED STOP SIGN
Y	EXISTING PROPERTY LINE
Z	PROPOSED DARPRO CONNECTION, SEE ARCH PLAN FOR DETAILS



20 10 5 0 20
1"=20'

ZONING CHART
BC- BUSINESS CENTER

	REQUIRED	EXISTING	PROVIDED
LOT			
MIN. LOT AREA	1 AC. OR 43,560 SF	1.03 AC. OR 44,939 SF	1.03 AC. OR 44,939 SF
MIN. LOT WIDTH	100 FT	227.84	232.73
MIN. LOT DEPTH	150 FT	172.98	172.98
IMPERVIOUS COVERAGE	70%(75% MAXIMUM PAVING)	82.4% (37,038 SF/ 44,939 SF)	68.95% (30,987 SF)
GREEN AREA	MIN. 25% MIN. 15% IN TRIANGLE WITH BONUS (44,953 SF * .25 = 11,238 SF)	17.61% (7,915 SF/ 44,939 SF)	31.05% (13,952 SF)
PUBLIC OPEN SPACE (THESE AREAS SHALL BE OPEN TO THE GENERAL PUBLIC;NOT JUST THOSE USING THE SITE)	MIN.5% GROSS FLOOR A REA (3,062 SF *.05 = 153 SF)	0 SF	153 SF
BUILDING			
HEIGHT	20 FT. (MAX. 55 FT) FACADE HEIGHT	N/A	19.8 FT
LENGTH	MAX. 300 FT	N/A	91.6 FT
SIZE	MAX. 150,000 SF	N/A	3,062 SF
COVERAGE	MAX. 40% (1,7424 SF)	N/A	(3,062 SF / 44,939 SF) = 6.8%
SETBACKS			
MIN. SIDE YARD AND REAR PROPERTY LINES ABUTTING OTHER DISTRICTS	30 FT	N/A	N/A
BUILDING SETBACK FROM PARKING	10 FT	5.9 FT	5.7 FT
PARKING LOT SETBACK FROM PUBLIC STREET	MIN. 100 FT	12.2 FT	105.7 FT
ACCESS POINT FROM EXTERNAL STREET	200 FT SEPERATION DISTANCE FROM STREET ACCESS POINTS (ON SUBJECT OR OTHER PROPERTY)	N/A	N/A
BUILT TO LINE (SHALL NOT OVERRIDE THE SIGHT TRIANGLE)			
TO PUBLIC STREET	MIN. 50 FT TO MAX. 100 FT	78.9 FT	52.4 FT
MAINACCESS DRIVE	MIN. 20 FT TO MAX 25 FT	N/A	23.7 SF
PARKING			
ADA	(26 TO 56 TOTAL PARKING SPACES) = 2	0	2
CARS	1 PARKING SPACE FOR EVERY 50 SF OF GROSS LEASABLE FLOOR AREA..., OR ONE PARKING SPACE FOR EVERY 3 SEATS, WHICHEVER REQUIRES THE LESSER NUMBER OF SPACES. (97 SEATS * (1 SPACE/ 3 SEATS) = 33	85	33
BIKE PARKING	1 PER 250 PARKING SPACES	0	0
LOADING AREA	REATAIL USE, FIRST 5,000 SF - 0 BERTHS REQUIRED	0	0

Raising Cane's Chicken Fingers
Reslaurant Support Office
8800 Bishop Road, Plano, TX 75024
Tele: 972-769-3100 Fax: 972-769-3101

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

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PROJECT No.: PP2270001
DRAWN BY: BMM
CHECKED BY: KRT
DATE: 10.26.22
CAD I.D.: PP2270001-X-TTLB-PHPD

PROJECT:
PRELIMINARY/ FINAL LAND DEVELOPMENT PLANS
FOR
RAISING CANE'S RESTAURANTS, LLC.

PROPOSED RESTAURANT #C0952

2620 WEST MORELAND ROAD
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

BOHLER //
1515 MARKET STREET, SUITE 920
PHILADELPHIA, PA 19102
Phone: (267) 402-3400
Fax: (267) 402-3401
www.BohlerEngineering.com

COMMONWEALTH OF PENNSYLVANIA
KR TATLOW
PROFESSIONAL ENGINEER
REGISTRATION LICENSE No. 078617

SHEET TITLE:
RECORD PLAN

SHEET NUMBER:
C1.1

ORG. DATE - 10.26.22





LOCATION MAP
SCALE: 1" = 500'

REFER TO SHEET 1.2 FOR DEMOLITION NOTES

THIS PLAN TO BE UTILIZED FOR DEMOLITION REMOVAL PURPOSES ONLY

LEGEND

EXISTING	
PROPERTY LINE	
ADJACENT PROPERTY LINE	
EASEMENT LINE	
SETBACK LINE	
BUILDING	
CONCRETE CURB	
FLUSH CURB	
ACCESSIBLE SYMBOL	
SIGN	
PARKING COUNT	
AREA LIGHT	
TREE	
DRAINAGE INLET	
STORM/SANITARY MANHOLE	
WATER/GAS VALVES	
ROOF DRAIN/CLEANOUT	
FIRE HYDRANT	
UTILITY POLE W/ LIGHT	
UTILITY POLE	
OVERHEAD UTILITY WIRES	

LEGEND

TO BE REMOVED	
EASEMENT LINE	
SETBACK LINE	
LEASE LINE	
BUILDING	
RETAINING WALL	
CONCRETE CURB	
FLUSH CURB	
FENCE	
GUIDE RAIL	
TREELINE	
ACCESSIBLE SYMBOL	
CONCRETE MONUMENT/ IRON PIN	
SIGN	
PARKING COUNT	
AREA LIGHT	
TREE	
DRAINAGE INLET	
STORM/SANITARY MANHOLE	
WATER/GAS VALVES	
ROOF DRAIN/CLEANOUT	
FIRE HYDRANT	
UTILITY POLE W/ LIGHT	
UTILITY POLE	
OVERHEAD UTILITY WIRES	
ELECTRIC LINE	
TELEPHONE LINE	
GAS LINE	
WATER LINE	
SANITARY SEWER	
STORM PIPE	

Raising Cane's Chicken Fingers
Restaurant Support Office
6800 Bishop Road, Plano, TX 75024
Tele: 972-769-3100 Fax: 972-769-3101

REVISIONS

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CAD I.D.:	PP2270001-X-TTLB-PHPD

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COMMONWEALTH OF PENNSYLVANIA
K.R. TAYLOW
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE081512

SHEET TITLE:
EXISTING CONDITIONS AND DEMOLITION PLAN

SHEET NUMBER:
C4.0

ORG. DATE - 10.26.22

Exhibit "C"

July 15, 2022 Submission Letter for First ZHB Application

Kaplin Stewart
Attorneys at Law

Marc B. Kaplin
Direct Dial: (610) 941-2666
Direct Fax: (610) 684-2000
Email: mkaplin@kaplaw.com
www.kaplaw.com

July 15, 2022

VIA EMAIL: SLITTLEFIELD@ABINGTONPA.GOV

Shaun Littlefield, Zoning Officer
Township of Abington
1176 Old York Road
Abington, PA 19001

RE: Application of Raising Cane's Restaurants, LLC
2620 W. Moreland Road, Willow Grove, PA 19090
Our Reference No. 17234-1

Dear Mr. Littlefield:

Kaplin Stewart represents Raising Cane's Restaurants, LLC (**"Applicant"**), the proposed tenant of the property located at 2620 W. Moreland Road, further identified as Montgomery County Parcel ID No. 30-00-45100-01-6 (**"Property"**), in Abington Township (**"Township"**). In accordance with the Township Zoning Map, the Property is located in the Business Center District within the Willow Grove Park Mall. The Property is currently developed and being used as a parking lot. Applicant is proposing to redevelop the Property with an approximately 3,062 sq. ft. Fast-food Restaurant, with an accessory drive-through facility, outdoor dining area and related improvements (**"Proposed Development"**). The Proposed Development will require certain relief from the Township's Zoning Ordinance.

As such, on behalf of Applicant, enclosed please find each of the following:

1. Eleven (11) completed copies of the Zoning Hearing Board Application, which includes an Addendum and related exhibits (**"Application"**);

2. A copy of the Deed to the Property, included with the Application as Exhibit "A";

3. A copy of the Ground Lease Agreement, included with the Application as Exhibit "B";

4. A Boundary and Topographic Survey of the Property prepared for Applicant by Control Point Associates, Inc., dated February 27, 2022, included with the Application as Exhibit "C"; and

5. One (1) check in the amount of One Thousand Five Hundred Dollars ($1,500.00), the required application fee involving the change of use or addition of any nonresidential building over one thousand square feet.

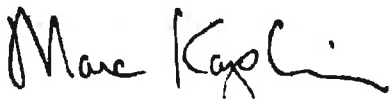
Please retain ten (10) copies of the Application and distribute the within materials accordingly. Additionally, please time-stamp and return to my courier the remaining copy.

We have discussed with Mr. Manfredi our desire to have the Application reviewed by Mr. Hassan, in his capacity as the Township Engineer, and by Ms. Lee, in her capacity as the Assistant Zoning Officer for commercial development, to confirm that we have sought all necessary relief from the Zoning Ordinance in order to implement the Proposed Development. Therefore, we respectfully request that you forward the Application and related materials to Mr. Hassan and Ms. Lee for their review and authorize them to discuss the Application with our office. Additionally, please allow this letter to serve as our request to be provided with copies of any and all communications, correspondence or review letters related to the Property and/or the Proposed Development as soon as they are generated or received.

Should you have any questions or require any further information to process this application, please feel free to contact this office.

Thank you for your attention to this matter.

Very truly yours,



Marc B. Kaplin

MBK:jrw
Enclosures

cc (via email): Raising Cane's Restaurants, LLC
TLM Realty
Bohler Engineering
Michelle Robinson Design
Richard J. Manfredi, Township Manager
Khaled R. Hassan, P.E., Township Engineer
Allison A. Lee, P.E., Assistant Zoning Officer

Exhibit "D"

Zoning Officer Email dated August 17, 2022

From: Shaun Littlefield <slittlefield@AbingtonPA.gov>
Sent: Wednesday, August 17, 2022 11:31 AM
To: Marc B. Kaplin
Cc: Craig R. Lewis
Subject: RE: 2620 W. Moreland Road - Zoning Hearing Board Application [KS-IMAN_BB.FID989753]

Hi Marc,

We had spoke I believe last week and you asked me to look over this application in anticipating of having it scheduled for the September 20 ZHB meeting. I did have some general comments, but as we both noted this may not be a complete list and other comments from Pennoni would be forthcoming if this proposal goes through the Land Development process.

1. Signage was not included as part of the Zoning Application submission. Signage would be reviewed separately in part under Figure 22.22 of the ZO and may require separate future variance(s).

2. It's not entirely clear from reading the plan if enough space is provided for the stacking of six vehicles as required in the ZO.

Other comments related to the variances requested:

3. I believe a side yard variance is required from Section 1103, Figure 11.19 relating to parking setbacks:

    a. My interpretation of the side yard setback on the "north" side of the plan is required to be 75 feet, not 30 feet as noted, as the site abuts a residential district beyond Parcel # 300045100005 owned by "Willow Grove PA Retail LLC". My belief is that the application could be amended by way of an e-mail or letter indicating that this relief is requested.
    a. On that note, is there a shared access agreement with Willow Grove PA Retail owned parcel?

4. Figure 11.19 - Is there a 200-foot setback from a street access point? A variance may be required.

5. Would the façade height of the roof comply with Figure 11.19?

6. Section 2402.A-5 relating to buffer and planting requirements
    b. Buffer area must be 15' in width per 2403.B-3.a. Buffer area on northwest property line is 10' in width.

7. Section 2403.B-4.a relating to buffer and planting requirements
    c. I believe this should apply to the north west property line as well.

8. How many outdoor seats are proposed? Have these seats been taken into account for the parking requirements?

Also, letting you know that I am going to be out on vacation after today and returning on the 25th.

Thank you,

Shaun Littlefield (he/they)
Zoning Officer
Department of Community Development
Township of Abington
267-536-1013 / slittlefield@abingtonpa.gov

Exhibit "E"

Raising Cane's Correspondence dated September 9, 2022

Kaplin | Stewart
Attorneys at Law

Marc B. Kaplin
Direct Dial: (610) 941-2666
Direct Fax: (610) 684-2000
Email: mkaplin@kaplaw.com
www.kaplaw.com

September 9, 2022

VIA EMAIL: SLITTLEFIELD@ABINGTONPA.GOV

Shaun Littlefield, Zoning Officer
Township of Abington
1176 Old York Road
Abington, PA 19001

RE: Application of Raising Cane's Restaurants, LLC
2620 W. Moreland Road, Willow Grove, PA 19090
Our Reference No. 17234-1

Dear Shaun:

As you know, I represent Raising Cane's Restaurants, LLC (**"Raising Cane's"**), the proposed tenant of the property located at 2620 W. Moreland Road (**"Property"**) in Abington Township (**"Township"**). On July 15, 2022, Raising Cane's filed an Application to the Zoning Hearing Board (**"ZHB Application"**) seeking the special exception and variance relief required in order to permit the development of the Property with a 3,062 sq. ft. (+/-) Fast-food Restaurant, with an accessory drive-through facility, outdoor dining area and related improvements (**"Proposed Development"**).

Please allow this letter to provide the following information in response to the various comments contained in your August 17, 2022 email correspondence,:

1. Signage was not included as part of the Zoning Application submission. Signage would be reviewed separately in part under Figure 22.22 of the ZO and may require separate future variance(s).

   Response: The signage for the Proposed Development has not been finalized and will be submitted under a separate application.

2. It's not entirely clear from reading the plan if enough space is provided for the stacking of six vehicles as required in the ZO.

   Response: The Zoning Plan shows that the vehicle stacking lanes can accommodate between 8 and 9 vehicles in each stacking lane. The vehicle stacking

lanes comply with the applicable criteria contained within the Zoning Ordinance that there must be sufficient stacking space for six (6) vehicles per drive-through-facility and that the stacking area may not interfere with required parking spaces or vehicular aisles.

3. I believe a side yard variance is required from Section 1103, Figure 11.19 relating to parking setbacks:

    a. My interpretation of the side yard setback on the "north" side of the plan is required to be 75 feet, not 30 feet as noted, as the site abuts a residential district beyond Parcel # 300045100005 owned by "Willow Grove PA Retail LLC". My belief is that the application could be amended by way of an e-mail or letter indicating that this relief is requested.

    Response: As shown on the enclosed Boundary & Topographic Survey of the Property prepared for Raising Cane's by Control Point Associates, Inc., the At Home Property (Identified as Parcel ID No. 30-00-45100-00-5) abuts the Property along its northern property line, directly between the Property and the neighboring R-4 Medium-High Density Residential District. In accordance with Section 201 of the Zoning Ordinance, "Abut", "As it pertains to lots, those that share common lot line. As it pertains to zoning districts, those that share a common zoning line." As the At Home Property is located directly between the Property and the neighboring R-4 District, the Property does not "abut" the neighboring residential district, as they do not share a common zoning line, and we believe that a 30 ft. setback is required.

    b. On that note, is there a shared access agreement with Willow Grove PA Retail owned parcel?

    Response: Please see enclosed Perpetual Non-Exclusive Easement as set forth in Montgomery County Deed Book 4787, Page 1600.

4. Figure 11.19 - Is there a 200-foot setback from a street access point? A variance may be required.

    Response: The provision of Figure 11.9 requiring a "200 ft. separation distance from street access points (on subject or other property)" is really ambiguous. The only logical interpretation that we can see is that there must be separation of at least 200 ft. between all access points to the Property. There are two (2) access points to the Property and they are 232 ft. apart. If

that is not the correct interpretation, then we do not understand how this requirement is applicable.

5. Would the façade height of the roof comply with Figure 11.19?

Response: The proposed Fast-Food Restaurant will have a non-pitched roof, with a height of 20.0 ft in compliance with the requirements of Figure 11.9. Elevations to demonstrate compliance will be submitted at the time of the hearing on the ZHB Application.

6. Section 2402.A-5 relating to buffer and planting requirements

b. Buffer area must be 15' in width per 2403.B-3.a. Buffer area on northwest property line is 10' in width.

Response: Please allow this letter to amend, to the extent deemed required, the variance relief sought in the ZHB Application. Raising Cane's hereby requests a variance from Section 2402.A.5.a. of the Zoning Ordinance referencing Section 2403.B.3.a. to permit a 10 ft. wide medium-intensity buffer along the northwest property line, where a 15 ft. wide medium-intensity buffer is required.

7. Section 2403.B-4.a relating to buffer and planting requirements

c. I believe this should apply to the northwest property line as well.

Response: Please allow this letter to amend, to the extent deemed required, the variance relief sought in the ZHB Application. Raising Cane's has sought variance relief from Section 2402.A.5 and Section 2403.B.4.a. of the Zoning Ordinance to not provide the required buffers, trees and plantings materials along the southwestern and southeastern property lines, where there is inadequate space on the Property to provide them. Please allow this letter to extend the requested relief from the required buffers, trees, planting and width requirements of Section 2403.B.4.a. of the Zoning Ordinance to the northwestern property line.

8. How many outdoor seats are proposed? Have these seats been taken into account for the parking requirements?

   Response: The Fast-Food Restaurant proposes 50 indoor seats and 47 outdoor seats, for a total 97 seats. The Zoning Ordinance requires one (1) parking space for every three (3) seats for a total parking requirement of 33 spaces. There are 33 spaces proposed on the Property as required by the Zoning Ordinance.

Please feel free to contact this office with any questions in this regard.

Very truly yours,

Marc B. Kaplin

MBK:jrw
Enclosures

cc (via email): Raising Cane's Restaurants, LLC
TLM Realty
Bohler Engineering
Michelle Robinson Design
Richard J. Manfredi, Township Manager
Khaled R. Hassan, P.E., Township Engineer
Allison A. Lee, P.E., Assistant Zoning Officer

Exhibit "F"

Zoning Hearing Board's Decision dated October 19, 2022

KUHLS LAW LLC

Joseph C. Kuhls
Attorney at Law

October 19, 2022

Marc B. Kaplin, Esquire
Kaplin, Stewart, Meloff, Reiter & Stein, P.C.
910 Harvest Drive, P.O. Box 3037
Blue Bell, PA 19422
mkaplin@kaplaw.com

Raising Cane's Restaurant's, LLC
c/o Adam Caracci
6800 Bishop Road
Plano, TX 75024

Re: Abington Township Zoning Hearing Board Application 22-24

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 Application of Raising Cane's Restaurants, LLC, relative to a 44,910 square-foot (1.03 acre) lease area of real property at 2620 West Moreland Road (the "Subject Property").

The Board granted the following relief:

1) a Special Exception pursuant to Abington Township Zoning Ordinance (the "Ordinance") §1102, and the Comprehensive Use Matrix, to permit a drive-through restaurant;
2) a Variance from Ordinance §1103 (Figure 11.9) to allow a 5.7 parking to building setback along the southern property line of the Subject Property, where the Ordinance otherwise requires a minimum distance of 10 feet; and
3) Variances from the minimum buffer and planting requirements of Ordinance 2402.A.5 and 2403.B.4.a.

All relief granted by the Board is collectively and respectively granted subject to the conditions:

a) that the Applicant apply for and obtain land development approval (or a waiver therefrom) from the Abington Township Board of Commissioners permitting the development and use proposed;
b) that, as part of that land development process, the Applicant shall provide and install any landscaping deemed appropriate by the Board of Commissioners, in their sole and absolute discretion, whether-or-not required specifically by the Township's Subdivision and Land Development Ordinance, to mitigate the effect of the variances granted hereby; and

c) that development and use of the Subject Property shall be in substantial conformance with the testimony and exhibits presented at the Public Hearing on this matter, including (without limitation) the Plan attached hereto.

Any aggrieved party may file an appeal to the Court contesting this decision within thirty (30) days. Anyone taking action 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

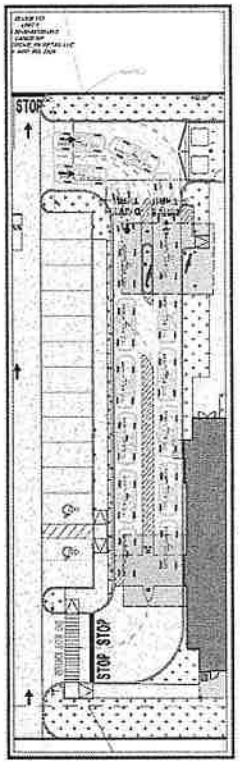
ZONING NOTES

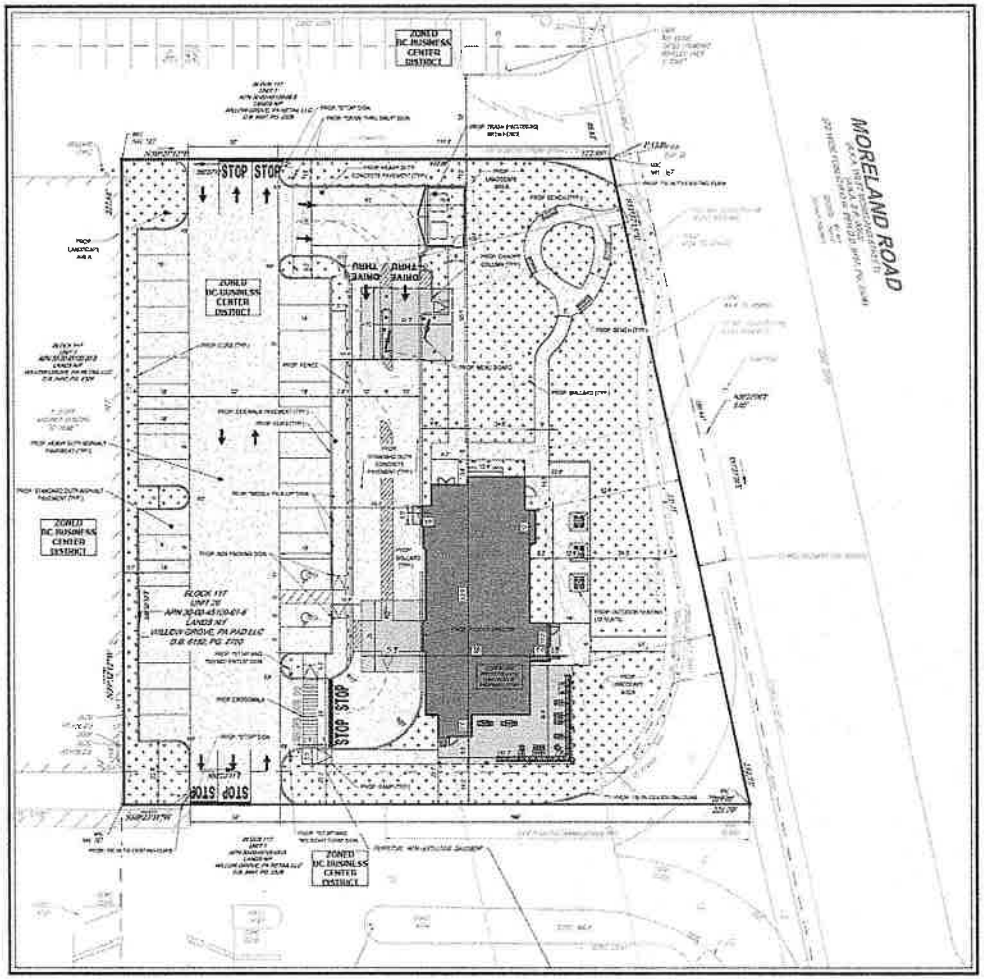
PASSENGER CAR

LEGEND (EXISTING)

LEGEND (PROPOSED)

DRIVE-THRU STAKING





ZONING CHART

BC- BUSINESS CENTER

	REQUIRED	EXISTING	PROVIDED
LOT			
MIN. LOT AREA	1 AC OR 43,560 SF	1.03 AC OR 44,939 SF	1.03 AC OR 44,939 SF
MIN. LOT WIDTH	100 FT	227.84	232.70
MIN. LOT DEPTH	150 FT	172.58	172.58
IMPERVIOUS COVERAGE	70%(75% MAXIMUM PAVING)	82.1% (37,039 SF/ 44,939 SF)	68.35% (30,587 SF)
GREEN AREA	MIN. 25% MIN. 15% IN TRIANGLE WITH BONUS (44,950 SF * 25% = 11,238 SF)	17.51% (7,915 SF/ 44,939 SF)	31.05% (13,952 SF)
PUBLIC OPEN SPACE (THESE AREAS SHALL BE OPEN TO THE GENERAL PUBLIC NOT JUST THOSE USING THE SITE)	MIN 5% GROSS FLOOR AREA (3,062 SF * 05 = 153 SF)	0 SF	153 SF
BUILDING			
HEIGHT	20 FT (MAX. 55 FT) FACADE HEIGHT	N/A	19.8 FT
LENGTH	MAX. 300 FT	N/A	51.6 FT
SIZE	MAX. 150,000 SF	N/A	3,062 SF
COVERAGE	MAX. 40% (17,424 SF)	N/A	(3,062 SF / 44,939 SF) = 6.8%
SETBACKS			
MIN. SIDE YARD AND REAR PROPERTY LINES ABUTTING OTHER DISTRICTS	30 FT	N/A	N/A
BUILDING SETBACK FROM PARKING	10 FT	5.9 FT	5.7 FT
PARKING LOT SETBACK FROM PUBLIC STREET	MIN. 100 FT	12.2 FT	105.7 FT
ACCESS POINT FROM EXTERNAL STREET	300FT SEPERATION DISTANCE FROM STREET ACCESS POINTS (ON SUBJECT OR OTHER PROPERTY)	N/A	N/A
BUILT TO LINE (SHALL NOT OVERRIDE THE SIGHT TRIANGLE)			
TO PUBLIC STREET	MIN. 50 FT TO MAX. 100 FT	78.9 FT	52.4 FT
MIN/ACCESS DRIVE	MIN. 20 FT TO MAX 25 FT	N/A	23.7 SF
PARKING			
ADA	(26 TO 56 TOTAL PARKING SPACES) = 2	0	2
CARS	1 PARKING SPACE FOR EVERY 50 SF OF GROSS LEASABLE FLOOR AREA , OR ONE PARKING SPACE FOR EVERY 3 SEATS, WHICHEVER REQUIRES THE LESSER NUMBER OF SPACES (97 SEATS * (1 SPACE/ 3 SEATS) = 33	65	33
BIKE PARKING	1 PER 250 PARKING SPACES	0	0
LOADING AREA	RETAIL USE, FIRST 5,000 SF - 0 BERTHS REQUIRED	0	0

Raising Cane's Chicken Fingers
Restaurant Support Office
6800 Bishop Road Plano, TX 75024
Tele: 972-702-3100 Fax: 972-702-3101

REVISIONS

REV	DATE	COMMENT

811 Know what's below. Call before you dig.

PROJECT:

ZONING PLAN

FOR

RAISING CANE'S RESTAURANTS, LLC.

PROPOSED RESTAURANT #0952

2620 WEST MORELAND ROAD
ABINGTON TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

BOHLER
1515 MARKET STREET, SUITE 509
PHILADELPHIA, PA 19102
Phone (267) 402-3400
Fax (267) 402-3401
www.BohlerEngineering.com

K.R. TATLOW
PROFESSIONAL ENGINEER

ZONING PLAN

SHEET NUMBER

Z-101

ORIG. DATE: 07/12/2022

Exhibit "G"

Bohler Engineering Land Development Transmittal

dated October 26, 2022

BOHLER

1515 Market Street, Suite 920
Philadelphia, PA 19102
267.402.3400

October 26, 2022
Via: FedEx – Priority

Abington Township
1176 Old York Road
Abington, PA 19001

Attention: Terry Castorina

Re: Proposed Restaurant
2620 West Moreland Road
Abington Township
Montgomery County, PA
Bohler Project No. PP2270001

Dear Terry:

Regarding the above reference project, please find enclosed the following items:

- One (1) copy of the Abington Preliminary/Final Land Development Application.
- One (1) check in the amount of $10,000 made payable to Abington Township for Escrow Fee.
- One (1) check in the amount of $1,000 made payable to Abington Township for Application Fee.
- One (1) copy of the Montgomery County Planning Commission Applicant Request for County Review.
- Two (2) copies of Sewage Facilities Planning Module Application, which has been submitted to George Wrigley, Director of Abington Wastewater Utilities on October 25, 2022.
- One (1) copy of the Letter of Water Availability, prepared by Aqua PA, dated September 16, 2022.
- Three (3) copies of the Stormwater Management Narrative and Calculations dated October 26, 2022.
- One (1) reduced copy of Proposed Land Development Plans, Size 11" x 17", dated October 26, 2022.
- Ten (10) copies of Proposed Land Development Plans, Size 24" x 36", dated October 26, 2022.
- Two (2) copies of Architectural Plans, prepared by ADA Architects, dated October 21, 2022.

The enclosed items have been submitted for Preliminary/Final Land Development approval. Should you have any questions or require any additional information, please contact our office.

Sincerely,

BOHLER ENGINEERING PA, LLC

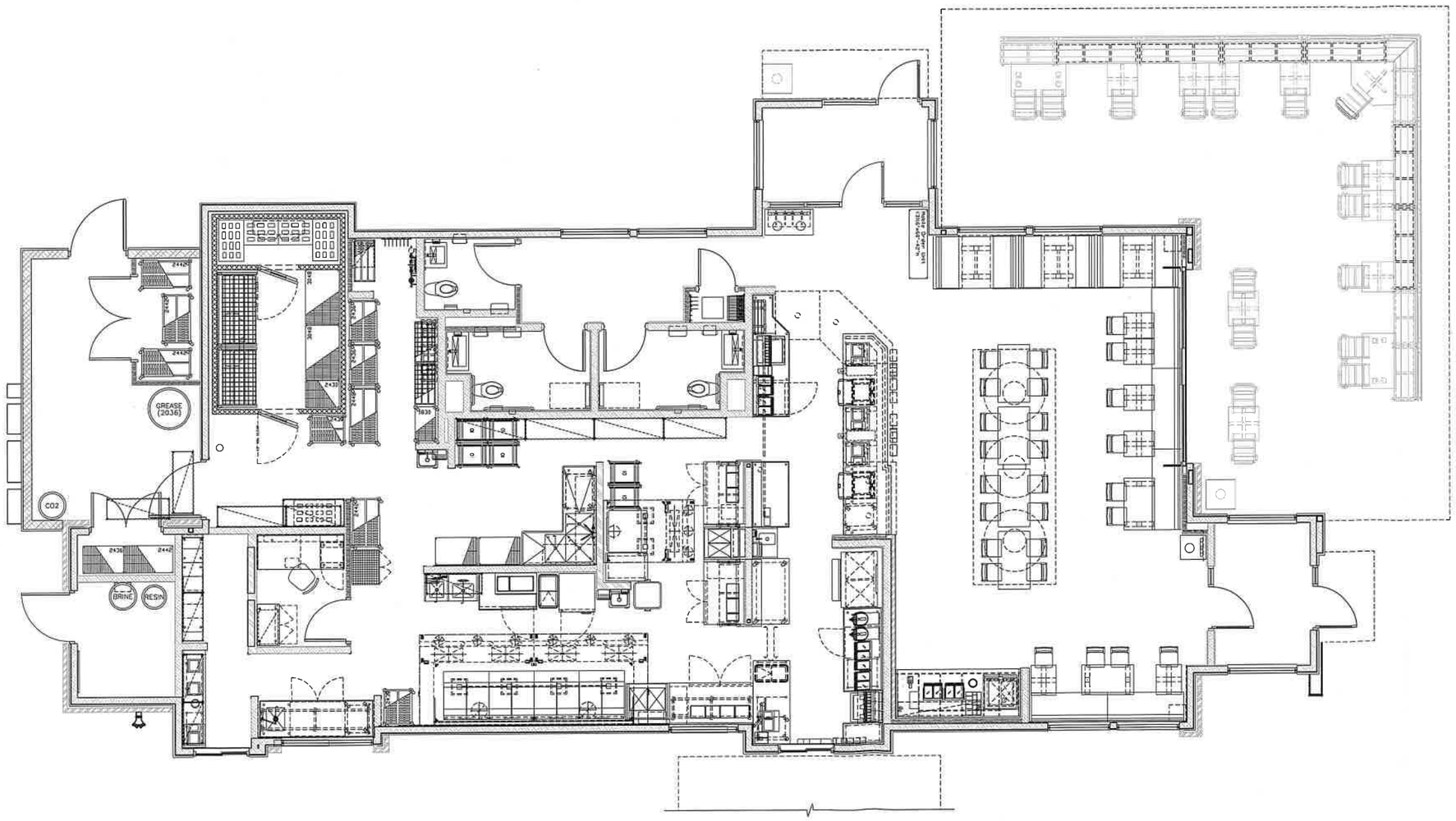
Shannon Heybach-Park, P.E.
Assistant Project Manager

SH/CM/jcs
R:\2022\PP2270001\Administrative\Correspondence\Township\PP2270001_2022-10-26_L (Township Submission).docx

Exhibit "H"

Exterior Elevations prepared by ADA Architects

dated October 21, 2022



FLOOR PLAN
SCALE: 1/4 = 1'-0"

Raising Cane's Chicken Fingers

Restaurant Support Office
6800 Bishop Road, Plano, TX 75024
Tele: 972-769-3100 Fax: 972-769-3101

STORE:
RAISING CANE'S RESTAURANT
2620 W. MORELAND ROAD
WILLOW GROVE, PA, 19090
PROTOTYPE: P4-V-Av
SCHEME: A
RESTAURANT #RC952
VERSION: 2021-3.0 RELEASE 1.05.2022

ADA ARCHITECTS
17710 Detroit Avenue Lakewood, Ohio 44107
Phone (216) 521-5134 Fax (216) 521-4824
www.adaarchitects.com

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO ADA ARCHITECTS, INC. UNAUTHORIZED USE OF THESE DOCUMENTS IS EXPRESSLY PROHIBITED UNLESS AGREED UPON IN WRITING.

ENGINEER INFORMATION:

SHEET REVISIONS

#	DATE	TYPE
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

FLOOR PLAN

DATE: 10/21/22

JOB NO. 22132

SK1.10
SHEET NO.

KEY NOTES

MARK	DESCRIPTION
1	SIGN, BY OWNER. PROVIDE BLOCKING AS REQ'D (4'-0" x 8'-0" OVAL)
2	NOT USED
3	WALL ART ON SUBSTRATE BY OWNER
4	NOT USED
5	PRE-FABRICATED METAL CANOPY, G.C. TO PERMIT SEPARATELY
6	8" BRICK SOLDIER COURSE
7	BULK CO2 FILL
8	8" DRYVIT BAND
9	METAL, GUTTER & DOWNSPOUT EM-2
10	ROOF SCUPPER & DOWNSPOUT. OMIT DRYVIT BAND @ DOWNSPOUT EM-2
11	CAST STONE SILL
12	UTILITY METERS & CONDUIT, PAINT TO MATCH ADJACENT CLADDING MATERIAL
13	BREAK METAL BETWEEN WINDOWS PRE-FINISHED TO MATCH STOREFRONT
14	EXTERIOR SPEAKERS - MOUNTED AT ±9'-0" A.F.F.
15	SECONDARY SCUPPER
16	4" BOLLARD WITH BLACK PLASTIC SLEEVE
17	ADDRESS NUMBERS IN 6" CHARACTERS , SIZE AND LOCATION AS REQUIRED BY AHJ
18	GUARDRAIL. SEE DETAIL 6/A8.41
19	DARPRO OUTLET. SEE MECHANICAL DRAWINGS FOR MORE INFORMATION
20	ORIA 4-DIGIT WALL-MOUNTED KEY STORAGE LOCK BOX.
21	VENDOR TO FIELD VERIFY STEEL PANELS

LIGHT FIXTURE TYPE

JJ — B2 (FAN)

GG — II

X

SYMBOL LEGEND

SECTION CUT MARKER

ELEVATION MARKER

DETAIL CALLOUT

KEY NOTE

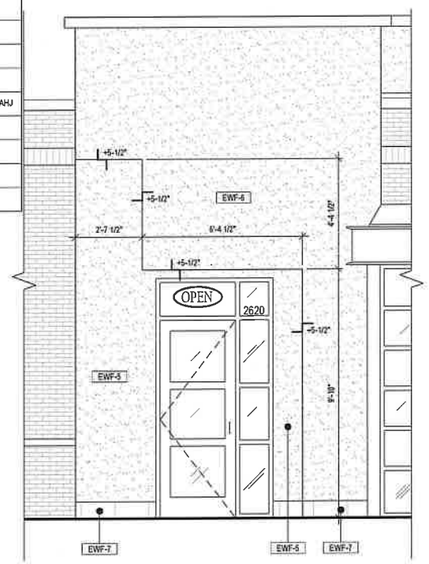
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NOTES

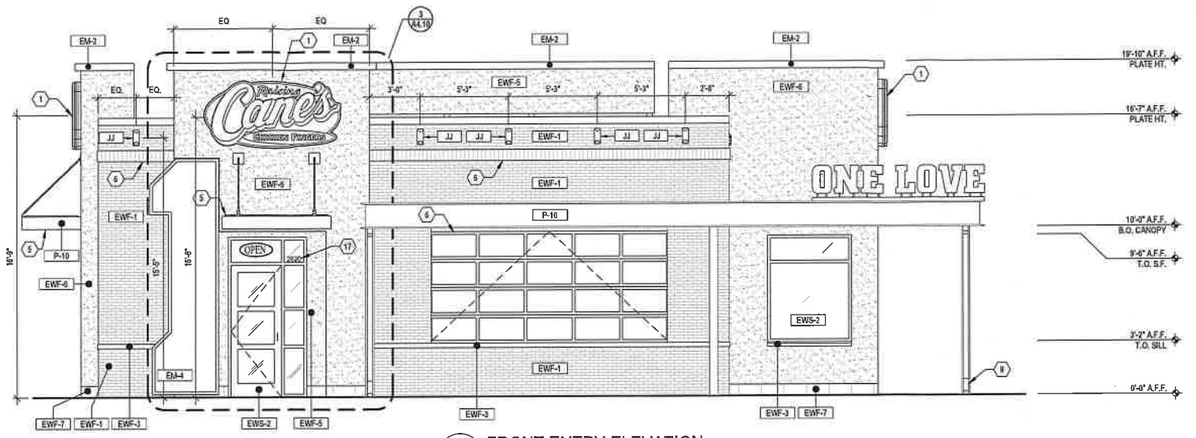
GENERAL NOTES	
1	SIGNAGE TO BE APPROVED UNDER SEPARATE FILING (DEFERRED SUBMITTAL).
2	CANOPIES AND AWNINGS ARE REQUESTED AS DEFERRED SUBMITTALS AS INDICATED ON SHEET PCS. G.C. TO PERMIT CANOPIES AND AWNINGS USING MANUFACTURER SPECIFICATIONS AND SHOP DRAWINGS.
3	CONFIRM OUTDOOR SPEAKER LOCATIONS WITH LT.
4	VERIFY ROOF FLAGS, LOGO SIGNS, PAINTED MURAL W/ SIGNAGE VENDOR.
SEALANT NOTES	
1	PROVIDE SEALANT & BACKER RODS AT ALL DISSIMILAR MATERIALS.
2	TWO-PART NONSAG POLYURETHANE SEALANT BY SONNEBORN BUILDING PRODUCTS. CUSTOM COLOR TO MATCH ADJACENT WALL MATERIAL AT ALL DOOR FRAMES, STOREFRONT & WINDOWS, ALL PENETRATIONS AND DRYVIT TO MASONRY CONNECTIONS.

SCHEDULE OF EXTERIOR MATERIALS

KEY	MATERIALS	MANUFACTURER	PRODUCT	COLOR / FINISH	DESCRIPTION
EM-1	STANDING SEAM ROOF	BERRIDGE	REFER TO SPEC	KYNAR 500 MATTE BLACK	GALVANIZED STEEL SHEET W/ KYNAR FINISH STANDARD COLOR
EM-2	METAL CAP FLASHING	REFER TO SPEC	REFER TO SPEC	KYNAR 500 MATTE BLACK	GALVANIZED STEEL SHEET W/ KYNAR FINISH STANDARD COLOR
EM-3	POWER COATED ALUM.	SIGNAGE SUPPLIER		CHARCOAL	POWDER COATED ALUM. MATTE BLACK FINISH 0.063 GA.
EM-4	METAL ACCENT PANELS	SIGNAGE SUPPLIER		DISTRESSED/SALVAGED RED	METAL PANELS TO BE APPLIED OVER STUCCO WALL EWF-5
EWF-1	BRICK VENEER	BELDEN	NORMAN STANDARD	MEDIUM RANGE IRON SPOT	1/2 RUNNING BOND, REFER TO DETAIL. MORTAR: SOLOMAN COLORS, INC. 10H LIGHT BUFF JOINT PROFILE: WEATHER-STRUCK
EWF-2	ELASTOMERIC COATING	DRYVIT	SANDPEBBLE E	SW7669 SUMMIT GREY	APPLIED OVER PORTLAND CEMENT STUCCO AT EXTERIOR WALLS. APPLIED OVER MASONRY AT CORRAL
EWF-3	CAST STONE LEDGE	MARCSTONE		6656 ARCHITECT'S GREY	MORTAR: ARGOS MAGNOLIA MASON'S MIX
EWF-4	BRICK VENEER	BORAL	QUEEN BRICK	ALAMO	MORTAR: LAFARGE IVORY BUFF, SACK RUB FINISH
EWF-5	ELASTOMERIC COATING	DRYVIT	SANDPEBBLE E	132 MOUNTAIN FOG	APPLIED OVER PORTLAND CEMENT STUCCO AT EXTERIOR WALLS. APPLIED OVER EIFS AT ROOF SCREEN
EWF-6	ELASTOMERIC COATING	DRYVIT	SANDPEBBLE E	456 OYSTER SHELL	APPLIED OVER PORTLAND CEMENT STUCCO AT EXTERIOR WALLS
EWF-7	MASONRY VENEER CMU	PREMIER		ULTRA BURNISHED, DUSK / SMOOTH	MORTAR: TO MATCH
EWS-1	DRIVE-THRU WINDOW	REFER TO WINDOW SCHED.	REFER TO WINDOW SCHED.	REFER TO WINDOW SCHED.	
EWS-2	ALUMINUM STOREFRONT	REFER TO WINDOW SCHED.	REFER TO WINDOW SCHED.	REFER TO WINDOW SCHED.	
P-10	PAINT - EXPOSED STRUCTURAL STEEL	BENJAMIN MOORE	SUPER SPEC 23	BLACK / LOW LUSTER	TWO COATS REQUIRED

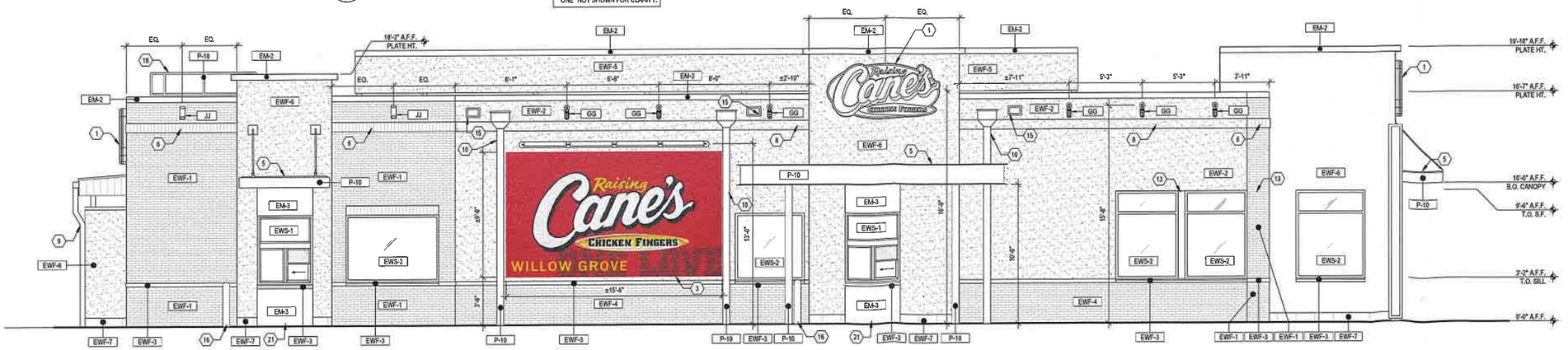


3 A4.10 FRONT TOWER PROFILE
SCALE: 3/8" = 1'-0"



2 A4.10 FRONT ENTRY ELEVATION
SCALE: 1/4" = 1'-0"

NOTE:
SIGN, AWNING, SIGNAGE AND "ONE" NOT SHOWN FOR CLARITY.



1 A4.10 DRIVE THRU ELEVATION
SCALE: 1/4" = 1'-0"

Raising Cane's Chicken Fingers
Restaurant Support Office
6800 Bishop Road, Plano, TX 75024
Tele: 972-769-3100 Fax: 972-769-3101

STORE:
RAISING CANE'S RESTAURANT
2620 W. MORELAND ROAD
WILLOW GROVE, PA, 19090
PROTOTYPE: P4-V-Av
SCHEME: A
RESTAURANT #RC952
VERSION: 2021-3.0 RELEASE 1.05.2022

ADA ARCHITECTS
17710 Detroit Avenue Lakewood, Ohio 44107
Phone (216) 521-5134 Fax (216) 521-4824
www.adaarchitects.com

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ENGINEER INFORMATION:

SHEET REVISIONS

#	DATE	TYPE
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

EXTERIOR KEYNOTE ELEVATIONS

DATE: 10/21/22

JOB NO. 22132

A4.10
SHEET NO.

KEY NOTES

MARK	DESCRIPTION
1	SIGN, BY OWNER. PROVIDE BLOCKING AS REQ'D (4'-0" x 5'-0" OVAL)
2	NOT USED
3	WALL ART ON SUBSTRATE BY OWNER
4	NOT USED
5	PRE-FABRICATED METAL CANOPY, G.C. TO PERMIT SEPARATELY
6	8" BRICK SOLDIER COURSE
7	BULK CO2 FILL
8	8" DRYVIT BAND
9	METAL, GUTTER & DOWNSPOUT EM-2
10	ROOF SCUPPER & DOWNSPOUT. OMIT DRYVIT BAND @ DOWNSPOUT EM-2
11	CAST STONE SILL
12	UTILITY METERS & CONDUIT, PAINT TO MATCH ADJACENT CLADDING MATERIAL
13	BREAK METAL BETWEEN WINDOWS PRE-FINISHED TO MATCH STOREFRONT
14	EXTERIOR SPEAKERS - MOUNTED AT ±5'-0" A.F.F.
15	SECONDARY SCUPPER
16	4" BOLLARD WITH BLACK PLASTIC SLEEVE
17	ADDRESS NUMBERS IN 6" CHARACTERS , SIZE AND LOCATION AS REQUIRED BY AHJ
18	GUARDRAIL. SEE DETAIL 6/A8.41
19	DARPRO OUTLET. SEE MECHANICAL DRAWINGS FOR MORE INFORMATION
20	ORIA 4-DIGIT WALL-MOUNTED KEY STORAGE LOCK BOX.
21	VENDOR TO FIELD VERIFY STEEL PANELS

LIGHT FIXTURE TYPE

JJ — B2 (FAN)

GG — II

X

SYMBOL LEGEND

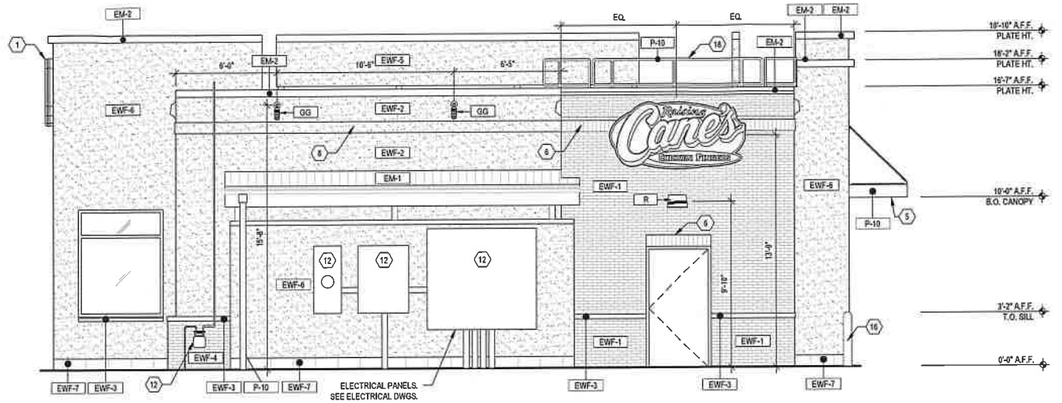
- SECTION CUT MARKER (# / A#)
- ELEVATION MARKER (# / A#)
- DETAIL CALLOUT (# / A#)
- KEY NOTE (#)
- FINISH TAG (###)

NOTES

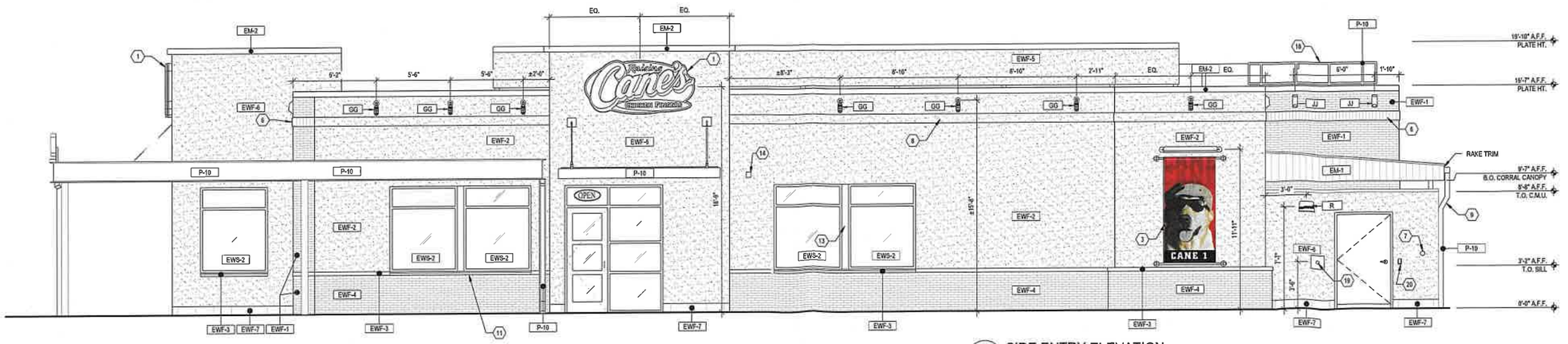
	GENERAL NOTES
1	SIGNAGE TO BE APPROVED UNDER SEPARATE FILING (DEFERRED SUBMITTAL).
2	CANOPIES AND AWNINGS ARE REQUESTED AS DEFERRED SUBMITTALS AS INDICATED ON SHEET PCS. G.C. TO PERMIT CANOPIES AND AWNINGS USING MANUFACTURER SPECIFICATIONS AND SHOP DRAWINGS.
3	CONFIRM OUTDOOR SPEAKER LOCATIONS WITH I.T.
4	VERIFY ROOF FLAGS, LOGO SIGNS, PAINTED MURAL W/ SIGNAGE VENDOR.
SEALANT NOTES	
1	PROVIDE SEALANT & BACKER RODS AT ALL DISSIMILAR MATERIALS.
2	TWO-PART NONSAG POLYURETHANE SEALANT BY SONNEBORN BUILDING PRODUCTS. CUSTOM COLOR TO MATCH ADJACENT WALL MATERIAL AT ALL DOOR FRAMES, STOREFRONT & WINDOWS, ALL PENETRATIONS AND DRYVIT TO MASONRY CONNECTIONS.

SCHEDULE OF EXTERIOR MATERIALS

KEY	MATERIALS	MANUFACTURER	PRODUCT	COLOR / FINISH	DESCRIPTION
EM-1	STANDING SEAM ROOF	BERRIDGE	REFER TO SPEC	KYNAR 500 MATTE BLACK	GALVANIZED STEEL SHEET W/ KYNAR FINISH STANDARD COLOR
EM-2	METAL CAP FLASHING	REFER TO SPEC	REFER TO SPEC	KYNAR 500 MATTE BLACK	GALVANIZED STEEL SHEET W/ KYNAR FINISH STANDARD COLOR
EM-3	POWER COATED ALUM.	SIGNAGE SUPPLIER		CHARCOAL	POWDER COATED ALUM. MATTE BLACK FINISH 0.053 GA.
EM-4	METAL ACCENT PANELS	SIGNAGE SUPPLIER		DISTRESSED/SALVAGED RED	METAL PANELS TO BE APPLIED OVER STUCCO WALL EWF-5
EWF-1	BRICK VENEER	BELDEN	NORMAN STANDARD	MEDIUM RANGE IRON SPOT	1/2 RUNNING BOND, REFER TO DETAIL. MORTAR: SOLOMAN COLORS, INC. 10H LIGHT BUFF JOINT PROFILE: WEATHER-STRUCK
EWF-2	ELASTOMERIC COATING	DRYVIT	SANDPEBBLE E	SW7669 SUMMIT GREY	APPLIED OVER PORTLAND CEMENT STUCCO AT EXTERIOR WALLS. APPLIED OVER MASONRY AT CORRAL
EWF-3	CAST STONE LEDGE	MARCSTONE		6658 ARCHITECT'S GREY	MORTAR: ARGOS MAGNOLIA MASONS MIX
EWF-4	BRICK VENEER	BORAL	QUEEN BRICK	ALAMO	MORTAR: LAFARGE IVORY BUFF, SACK RUB FINISH
EWF-5	ELASTOMERIC COATING	DRYVIT	SANDPEBBLE E	132 MOUNTAIN FOG	APPLIED OVER PORTLAND CEMENT STUCCO AT EXTERIOR WALLS. APPLIED OVER EIFS AT ROOF SCREEN
EWF-6	ELASTOMERIC COATING	DRYVIT	SANDPEBBLE E	456 OYSTER SHELL	APPLIED OVER PORTLAND CEMENT STUCCO AT EXTERIOR WALLS
EWF-7	MASONRY VENEER CMU	PREMIER		ULTRA BURNISHED, DUSK / SMOOTH	MORTAR: TO MATCH
EWS-1	DRIVE-THRU WINDOW	REFER TO WINDOW SCHED.	REFER TO WINDOW SCHED.	REFER TO WINDOW SCHED.	
EWS-2	ALUMINUM STOREFRONT	REFER TO WINDOW SCHED.	REFER TO WINDOW SCHED.	REFER TO WINDOW SCHED.	
P-10	PAINT - EXPOSED STRUCTURAL STEEL	BENJAMIN MOORE	SUPER SPEC 23	BLACK / LOW LUSTER	TWO COATS REQUIRED



2 A4.20 REAR ELEVATION
SCALE: 1/4" = 1'-0"



1 A4.20 SIDE ENTRY ELEVATION
SCALE: 1/4" = 1'-0"

Raising Cane's Chicken Fingers
Restaurant Support Office
6800 Bishop Road, Plano, TX 75024
Tele: 972-769-3100 Fax: 972-769-3101

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17710 Detroit Avenue Lakewood, Ohio 44107
Phone (216) 521-1434 Fax (216) 521-4824
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ENGINEER INFORMATION:

STORE:
RAISING CANE'S RESTAURANT
2620 W. MORELAND ROAD
WILLOW GROVE, PA, 19090
PROTOTYPE: P4-V-Av
SCHEME: A
RESTAURANT #RC952
VERSION: 2021-3.0 RELEASE 1.05.2022

SHEET REVISIONS

#	DATE	TYPE
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EXTERIOR KEYNOTE ELEVATIONS

DATE: 10/21/22
JOB NO. 22132

A4.20
SHEET NO.

BOARD OF COMMISSIONERS WORKING SESSION

AGENDA ITEM

July 13, 2023

DATE

AGENDA ITEM NUMBER

Administration

DEPARTMENT

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

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

AGENDA ITEM:

Toll Mid-Atlantic LP Company, Inc. Conditional Use Application

EXECUTIVE SUMMARY:

Toll Mid-Atlantic LP Company, Inc. ("Applicant") is the equitable owner of a property located at 711 Fox Chase Road, Jenkintown, Pennsylvania 19046, consisting of approximately 46.37 acres, and more specifically identified as Tax Parcel Numbers 30-00-22424-001 and 30-00- 22420-005 ("Property"). The Property was formerly used for Saint Basil Academy. Applicant proposes to redevelop the Property pursuant to the AR Age-Restricted Carriage Home Overlay District with 150 Age-Restricted Single-Family Attached Carriage Home Dwelling Units and accessory uses. In connection with the proposed redevelopment of the Property, Applicant requests

conditional use approval, pursuant to Section 1503.B.2.b of the Abington Township Zoning Ordinance, to allow the installation of a central sewer line in Zone Two of the Riparian Corridor Conservation District.

PREVIOUS BOARD ACTIONS:

08.12.22 - A revised Ordinance was sent to address the Planning Commissions comments from the August 4, 2022 meeting. This Ordinance is attached and marked Revised 08.12.22.
08.23.22 - The Planning Commission recommended moving forward to the Comprehensive Plan Consistency Committee on August 31, 2022 with the recommendations stated in the Executive Summary.
09.08.22 - Working Session - recommended to move to the next Board of Commissioners meeting on October 13, 2022
10.13.22 - The Board of Commissioners approved advertisement of amendment

11.10.22 - Ordinance # 2199 was adopted.
05.23.23 - The Planning Commission reviewed the Conditional Use Application.

RECOMMENDED BOARD ACTIONS:

Conditional Use Hearing: Toll Mid-Atlantic LP Company, Inc. for the location at 711 Fox Chase Road, Jenkintown, PA 19046.

TOWNSHIP OF ABINGTON

CONDITIONAL USE APPLICATION

Section 1806 of The Zoning Ordinance of the Township of Abington contains the requirements for the submission, review procedures and the criteria for approval of a Conditional Use application within the Township of Abington. This form has been provided for your use. Please complete the entire form and submit the completed application with the required plan(s), reports(s) and application fee.

Name of Applicant: Toll Mid-Atlantic LP Company, Inc.

Address of Applicant: 1140 Virginia Drive, Fort Washington, PA 19034

Attn.: Brian Thierrin

Telephone Number: 215-938-8000

E-Mail Address: BThierrin@tollbrothers.com

Name of Land Owner: Sisters of St. Basil the Great

Address of Land Owner: 710 Fox Chase Road, Jenkintown, PA 19046

Telephone Number:

Submit proof of standing for the property involved in this application. A copy of the deed, agreement of sale or lease can be submitted. Please feel free to delete the financial terms of the sales agreement or lease.

Name of Attorney: Alyson M. Zarro, Esquire

Address of Attorney: Riley Riper Hollin & Colagreco, 717 Consitution Drive, Suite 201

Exton, PA 19341

Attorney's Phone Number: 610-458-4400

Attorney's E-Mail Address: Alyson@rrhc.com

A written narrative may be submitted with this application that addresses the need for this application, an assessment of the property involved, the community character, safety related issues, traffic impact, storm water management and the effect on public utilities.

The undersigned herewith declares this submission to be true and correct as to the facts known as of the date of this application.

Signature of Applicant: _____

Signature of Land Owner: _____

Section #3 of Ordinance #1951 of the Township of Abington contains the fee schedule for matters heard by the Board of Commissioners and include zoning change applications, map amendments, conditional use application, petitions and curative amendments.

A fee of $2,000.00 is required to be submitted as the time the application is received. Checks are to be made payable to the Township of Abington and submitted to the Zoning Officer.

Date Received: _____ Receipt Number: _____

Signature of Zoning Officer: _____

If there are any questions that you may have, please feel free to contact Allison Lee @ 610-422-2360 or by e-mail at aalee@Pennoni.com.

ABINGTON TOWNSHIP
CONDITIONAL USE APPLICATION NARRATIVE

Toll Mid-Atlantic LP Company, Inc.
1140 Virginia Drive, Fort Washington, Pennsylvania 19034

Toll Mid-Atlantic LP Company, Inc. ("Applicant") is the equitable owner of a property located at 711 Fox Chase Road, Jenkintown, Pennsylvania 19046, consisting of approximately 46.37 acres, and more specifically identified as Tax Parcel Numbers 30-00-22424-001 and 30-00-22420-005 ("Property"). The Property was formerly used for Saint Basil Academy. Applicant proposes to redevelop the Property pursuant to the AR Age-Restricted Carriage Home Overlay District with 150 Age-Restricted Single-Family Attached Carriage Home Dwelling Units and accessory uses. In connection with the proposed redevelopment of the Property, Applicant requests conditional use approval, pursuant to Section 1503.B.2.b of the Abington Township Zoning Ordinance, to allow the installation of a central sewer line in Zone Two of the Riparian Corridor Conservation District.

The proposed development would be served by public sewer. Public sewer for the majority of the Property will be provided via connection to an existing sanitary sewer manhole located within a 20-foot wide sanitary sewer easement generally on the east side of the Property. The location of the existing sanitary sewer easement and manhole are shown on the enclosed Conditional Use Plan prepared by ESE Consultants, Inc. dated March 2023.

Portions of the eastern end of the Property are within the Riparian Corridor Conservation District. Zone One and Zone Two of the Riparian Corridor Conservation District are shown on the Subdivision and Land Development Plan being filed contemporaneously with this conditional use application. An enlarged area of the two Zones are shown on the Conditional Use Plan. The existing sanitary sewer improvements in Zone One are not specifically permitted uses in Zone One but are proposed to be continued as an existing nonconforming use pursuant to Section 1505 of the Zoning Ordinance.

Applicant is proposing to connect the new central sanitary sewer line at the existing manhole. In order to connect the portion of the Property being developed with homes and accessory facilities such as a clubhouse, the new central sewer line is required to cross Zone Two of the Riparian Corridor Conservation District. Accordingly, Applicant is seeking conditional use approval for the new central sanitary sewer line within Zone Two pursuant to Section 1503.B.2.b of the Abington Township Zoning Ordinance. The installation of the sanitary sewer line in this location will allow for the most efficient and direct connection to the existing public sewer system. Mitigation measures and riparian corridor planting will be in compliance with Section 1508 of the Zoning Ordinance and applicable regulations of the Subdivision and Land Development Ordinance. Landscaping throughout the proposed development will utilize native species. The proposed installation of the sanitary sewer line in Zone Two will have no adverse effect on the character of the community, safety, traffic, or public utilities.

AGREEMENT OF SALE

THIS AGREEMENT OF SALE (the "Agreement") is made as of this 4th day of May, 2020, between **SISTERS OF ST. BASIL THE GREAT**, a Pennsylvania non-profit corporation, having an address at 711 Fox Chase Road, Abington, PA 19046-4198 (collectively, "Seller") and **TOLL MID-ATLANTIC LP COMPANY, INC.,** a Delaware corporation, 250 Gibraltar Road, Horsham, PA 19044 ("Buyer").

WITNESSETH:

In consideration of the covenants and provisions contained herein, and subject to the terms and conditions hereinafter set forth, the parties hereto, intending to be legally bound, agree as follows:

1. Sale. Seller hereby agrees to sell and convey to Buyer, who hereby agrees to purchase from Seller, that certain tract of land, located in Abington Township, Montgomery County, State of Pennsylvania, designated on the Tax Map of Abington Township as Tax Parcel Numbers 30-00-22424-001 and 30-00-22420-005 with approximately 46.5 total acres as more particularly described on Exhibit "A" attached hereto and incorporated herein (the "Property"). The Property includes (i) all tenements, hereditaments, appurtenances, easements, covenants, permits, approvals, escrows and other rights arising from or appertaining to the land; (ii) all structures (including the existing school), fixtures, systems, improvements, topsoil, trees, shrubbery and landscaping situated on, in or under or used in connection with the land; (iii) all agreements that are in force and effect and benefit the Property; (iv) all intangible property now or hereafter owned by Seller and used by Seller in the ownership or operation of the Property, excluding all trademarks, logos, tradenames and other intellectual property; (v) all existing sewer and/or water capacity reserved for the benefit of the Property; and (vi) all surveys, plans, specifications, reports, engineering work-product and other information that Seller has in its possession or control relating to the Property (all items set forth in this subparagraph (vi) collectively, the "Seller's Plans"). Seller agrees to provide to Buyer copies of Seller's Plans on or before the date of this Agreement.

2. [redacted]

(a) [redacted]

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[redacted]

[redacted]

(d) [redacted]

[redacted]

(f) [redacted]

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3. [redacted]

[redacted]

(b) [redacted]

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(c) [redacted]

(d) [redacted]

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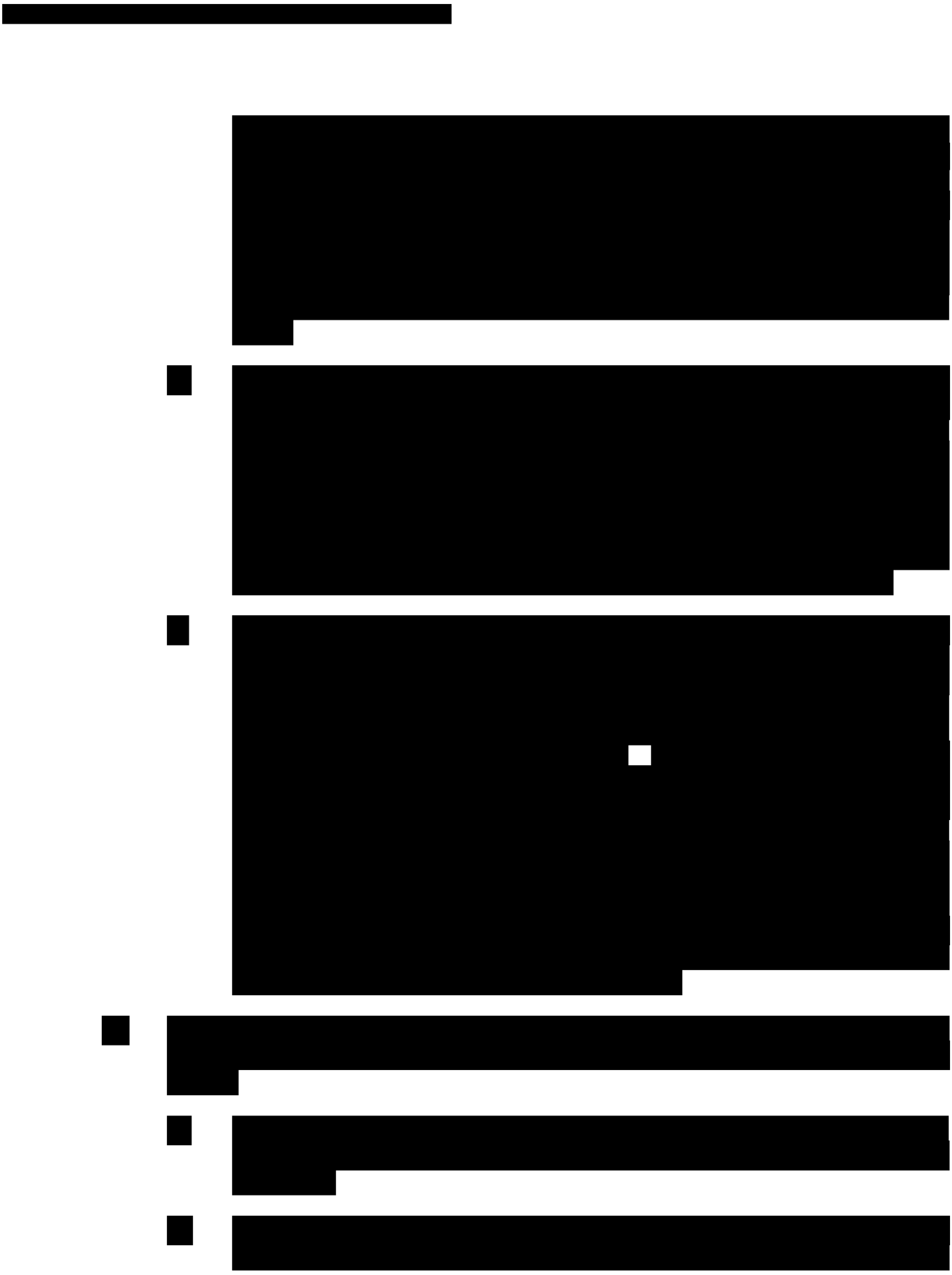


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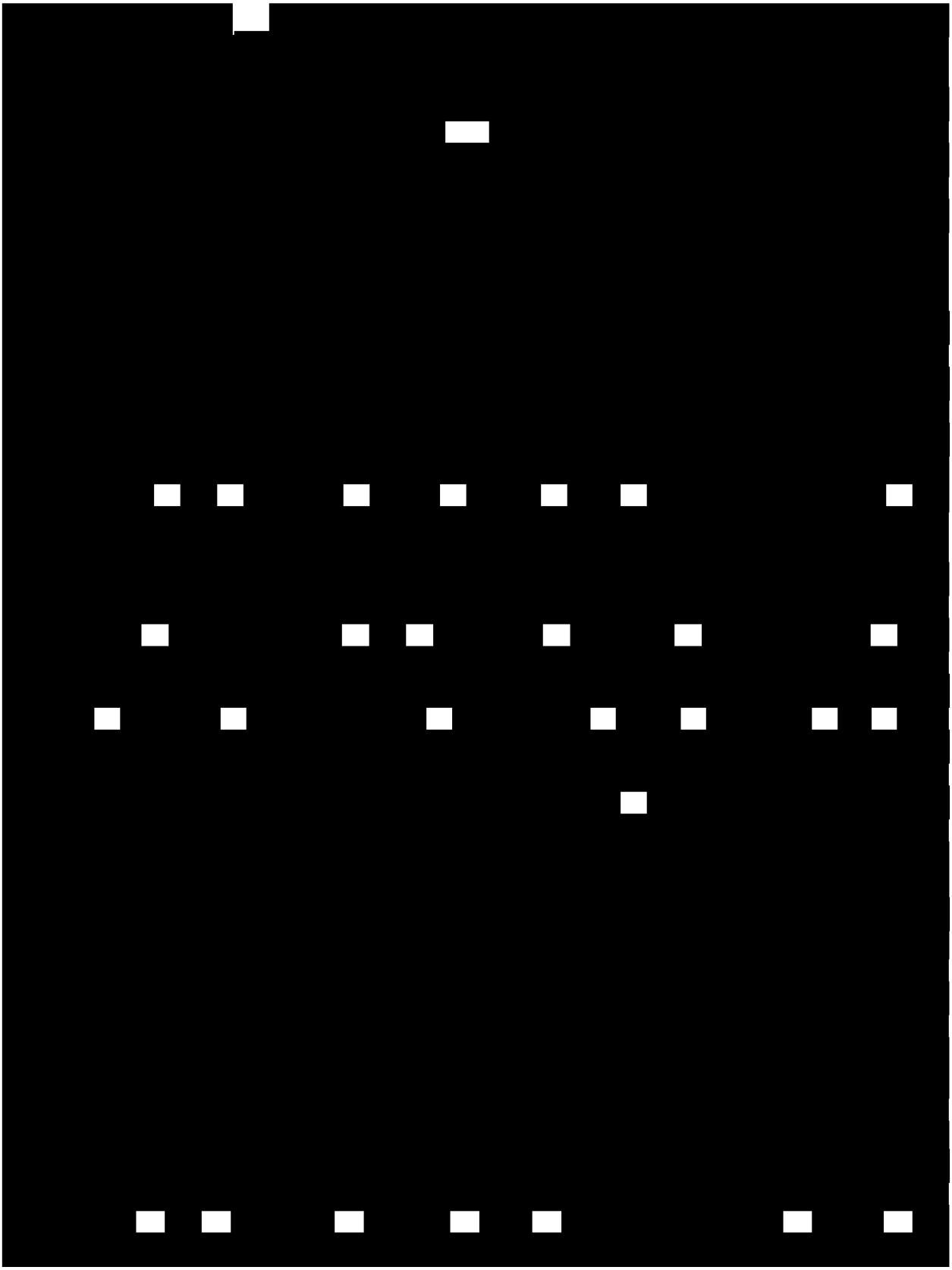




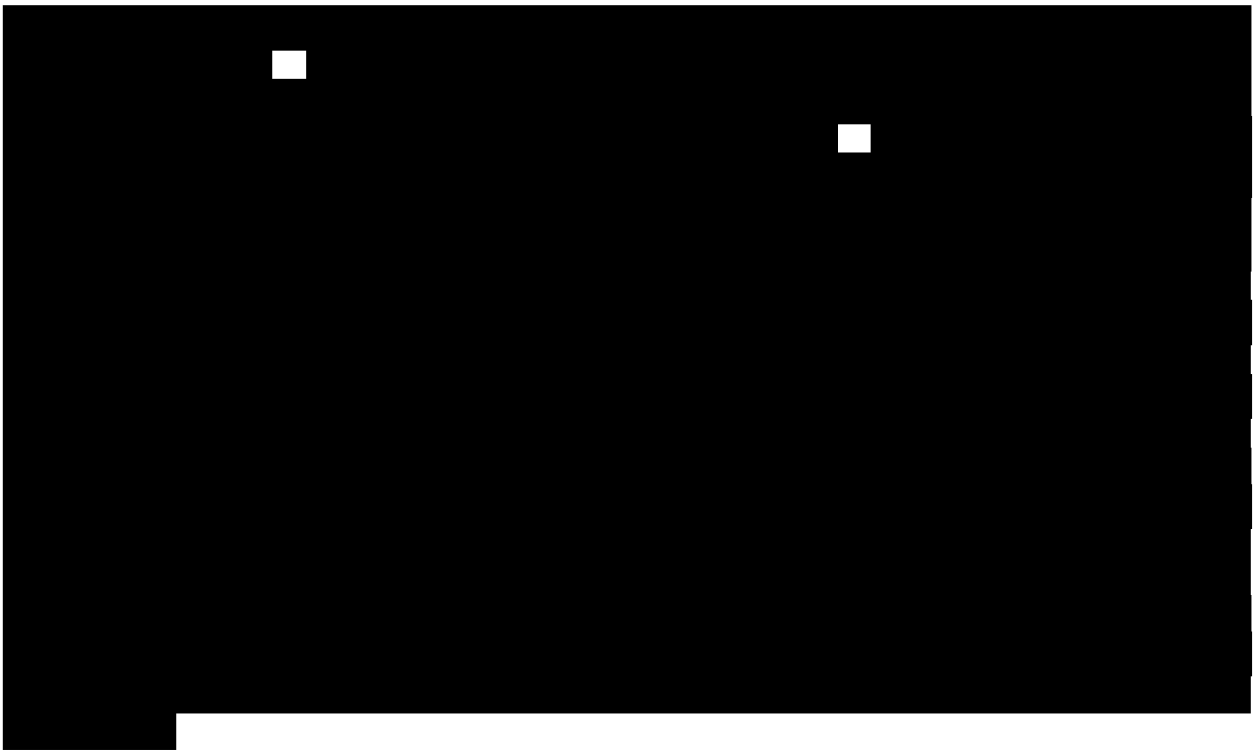




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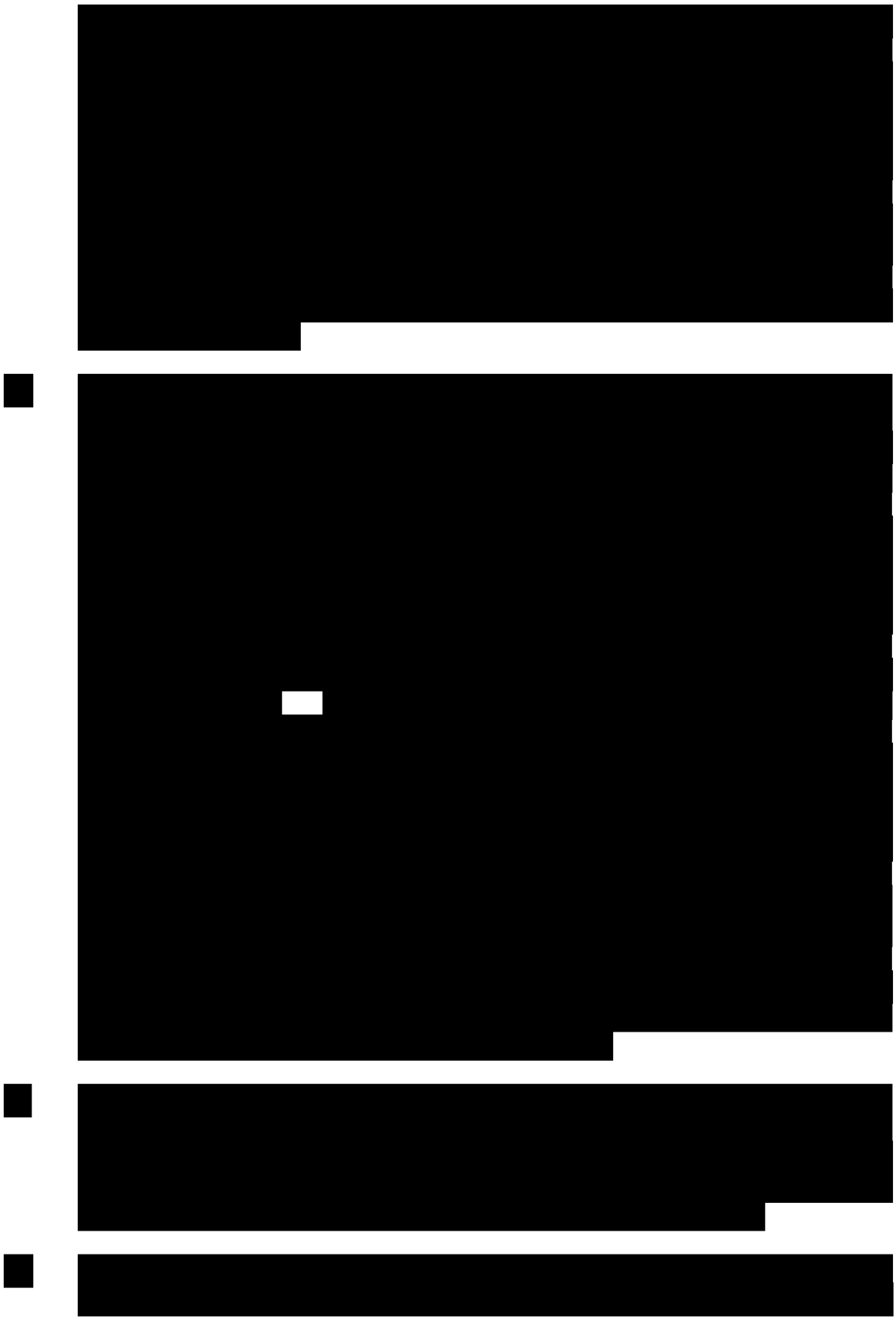
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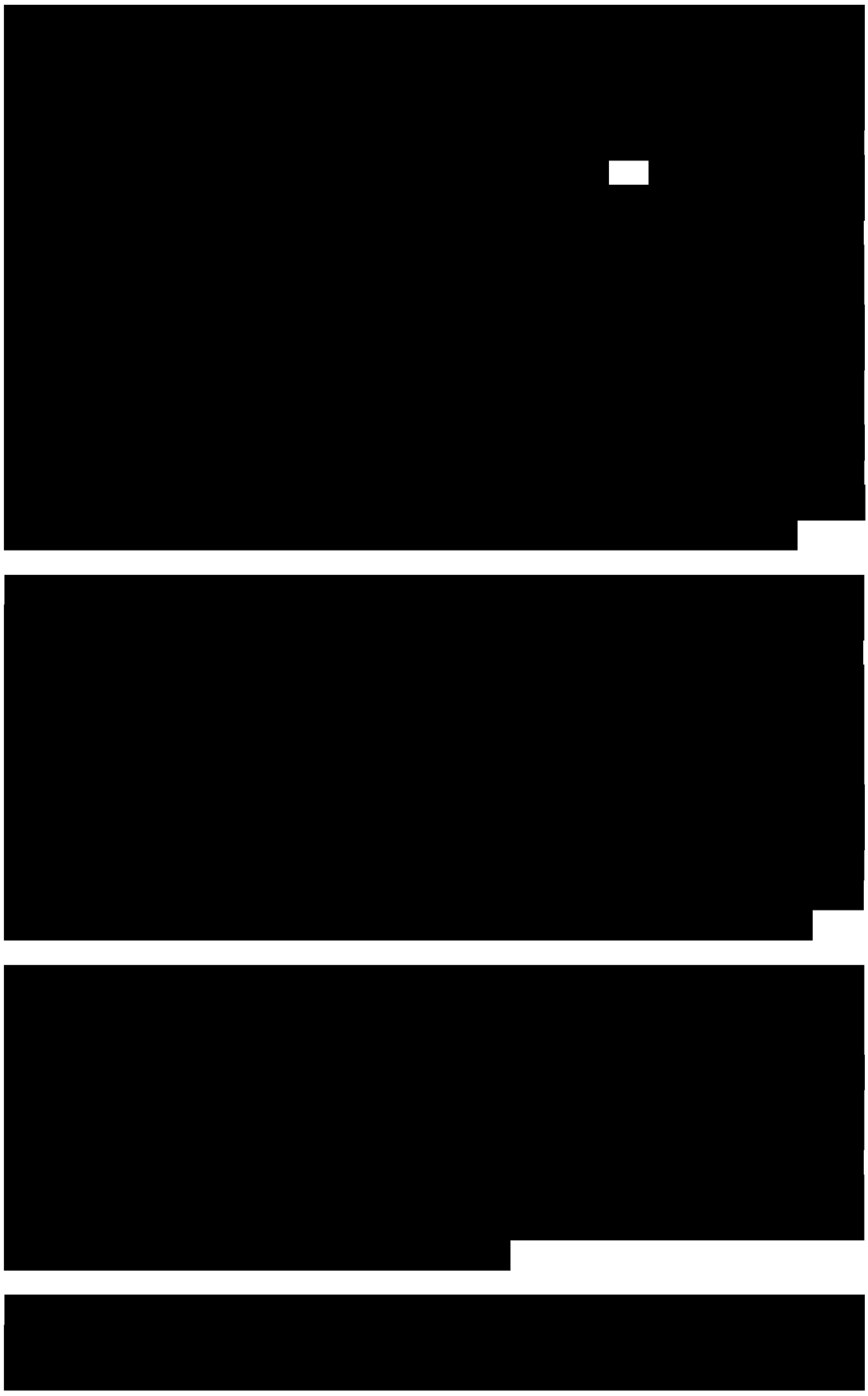


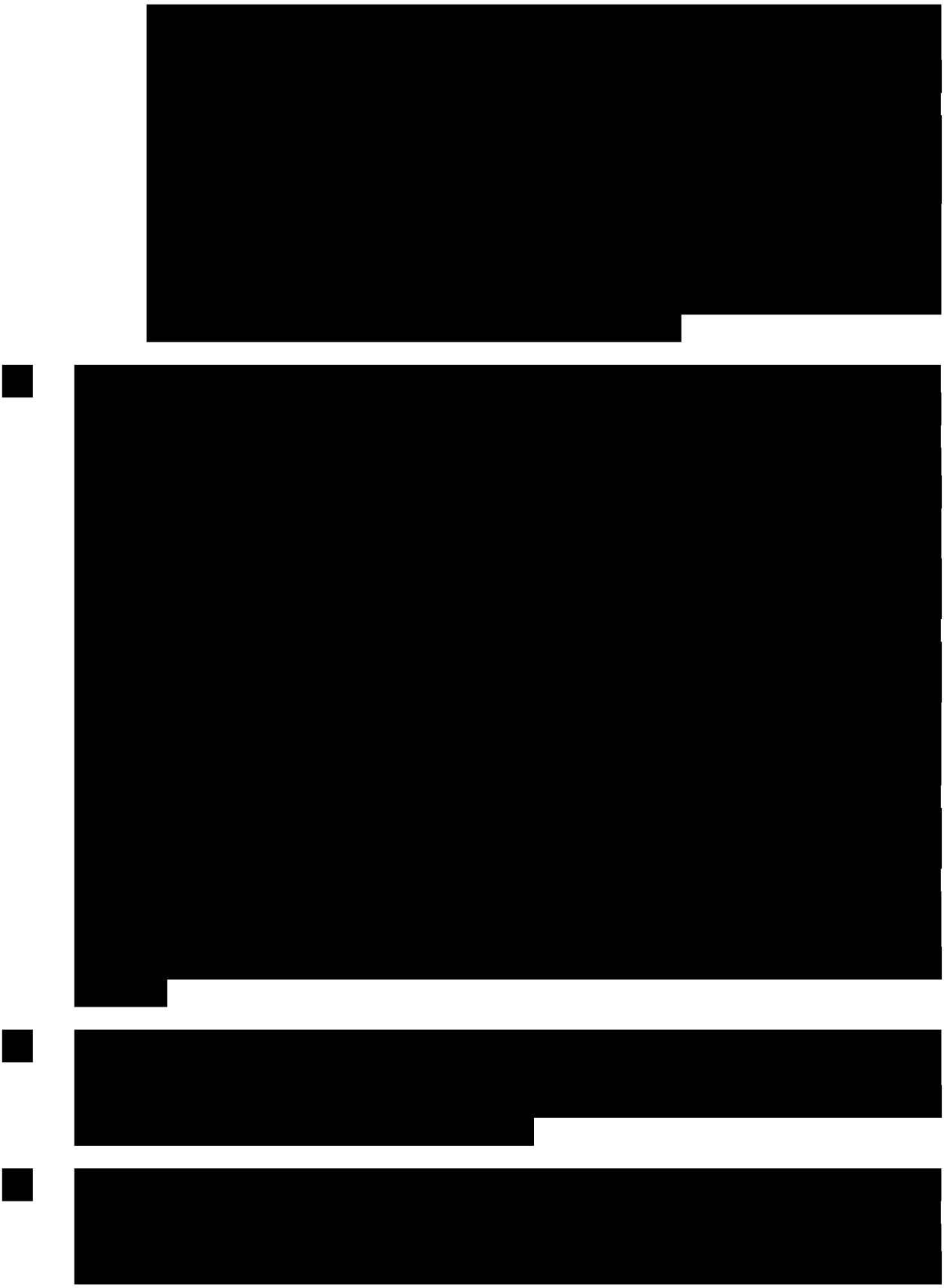






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To Seller: Sister Dorothy Ann Busowski, OSBM
Provincial Superior
Sisters of St. Basil the Great
710 Fox Chase Road
Jenkintown PA 19046
Email: dabusowski@stbasils.com

With a copy to: John Morozin, Jr.
116 Thomas Gates
Williamsburg, VA 23185
Email: jjmyellow@cox.net

and a copy to: Stradley Ronon Stevens & Young, LLP
30 Valley Stream Parkway
Malvern PA 19355
Attn: Christopher E, Cummings, Esq.
Email: ccummings@stradley.com

To Buyer: Toll Mid-Atlantic LP Company, Inc.
c/o Toll Bros., Inc.
250 Gibraltar Road
Horsham, PA 19044
Attn: Kevin Golden, Esquire,
Assistant Vice President and Counsel
Fax: (215) 938-8255
Email: kgolden@tollbrothers.com

With a copy to: Toll Mid-Atlantic LP Company, Inc.
c/o Toll Bros., Inc.
250 Gibraltar Road
Horsham, PA 19044
Attn: Christopher Gaffney, Regional President
Email: CGAFFNEY@tollbrothers.com

And a copy to: Toll Mid-Atlantic LP Company, Inc.
c/o Toll Bros., Inc.
250 Gibraltar Road
Horsham, PA 19044
Attn: John Dean, Division President
Email: jdean@tollbrothers.com

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DocuSign Envelope ID: 113D2528-C0B7-47E1-B5C3-D29871883BD5

IN WITNESS WHEREOF, the parties hereto have hereunto set their hands and seals the day and year first above written.

BUYER:
TOLL MID-ATLANTIC LP COMPANY, INC.,
a Delaware corporation

DocuSigned by:
By: John Dean
C461DB74585E4D8...
Name: John Dean
Title: Division President

Date of Execution: 05-04-2020

SELLER:
SISTERS OF ST. BASIL THE GREAT,
a Pennsylvania non-profit corporation

By: Sister Dorothy Ann Burdowski, OSBM
Name: SISTER DOROTHY ANN BURDOWSKI, OSBM
Title: PROVINCIAL

Date of Execution: 5/4/2020

TITLE COMPANY:
Westminster Abstract Company

By:
Name: STEVEN R RICHARDSON
Title: COMMERCIAL TITLE MANAGER

Date of Execution: 5/5/2020



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EXHIBIT "A"

DESCRIPTION OF PROPERTY

ALL THAT CERTAIN tract or piece of land SITUATE in the Township of Abington, County of Montgomery, Commonwealth of Pennsylvania, described according to a survey and plan thereof made by Barton and Martin Civil Engineers, of Philadelphia, Pennsylvania, on October 20, 1943, as

BEGINNING at a nail set in the middle line of Fox Chase Road (60 feet wide), which nail is situate at the distance of three hundred twenty-three and seventy-seven one-hundredths feet measured in a Southeasterly direction along the middle line of Fox Chase Road from its point of intersection with the middle line of Forest Avenue (33 feet wide) and extending thence from the above mentioned nail and place of beginning, through land of the Sellers, of which this is a part, and passing over a concrete monument set in the Northeasterly side of Fox Chase Road, North forty-four degrees fifty-seven minutes ten seconds East the distance of twenty one hundred eighty-one and thirteen one-hundredths feet to a concrete monument, and extending thence still through land of the Sellers, South forty-five degrees two minutes fifty seconds East the distance of five hundred seventy-five and twenty-two one-hundredths feet to a concrete monument marking a corner of other land of the Buyer, and extending thence by the said Buyer's land South forty-four degrees fifty-seven minutes ten seconds West the distance of twenty-three hundred fifty-nine and two one hundredths feet, passing over a marble stone set in the Northeasterly side of Fox Chase Road to a nail in the middle line of Fox Chase Road, and extending thence by the same the three following courses and distances: (1) On a line curving to the right in a Northwesterly direction with a radius of fourteen hundred thirty-two and sixty-nine one-hundredths feet the arc distance of one hundred sixty-two and forty-six one-hundredths feet to a point of tangency, (2) North twenty-six degrees thirty-four minutes fifty seconds West three hundred twelve and fifteen one-hundredths feet a point of curve, (3) On a line curving to the left in a Northwesterly direction with a radius of nineteen hundred ten and eight one-hundredth feet the arc distance of one hundred twenty-nine and twelve one-hundred feet to the first above mentioned nail and place of beginning. CONTAINING thirty acres of land.

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ALL THAT CERTAIN lot or piece of ground SITUATE in Abington Township, Montgomery County, Pennsylvania.

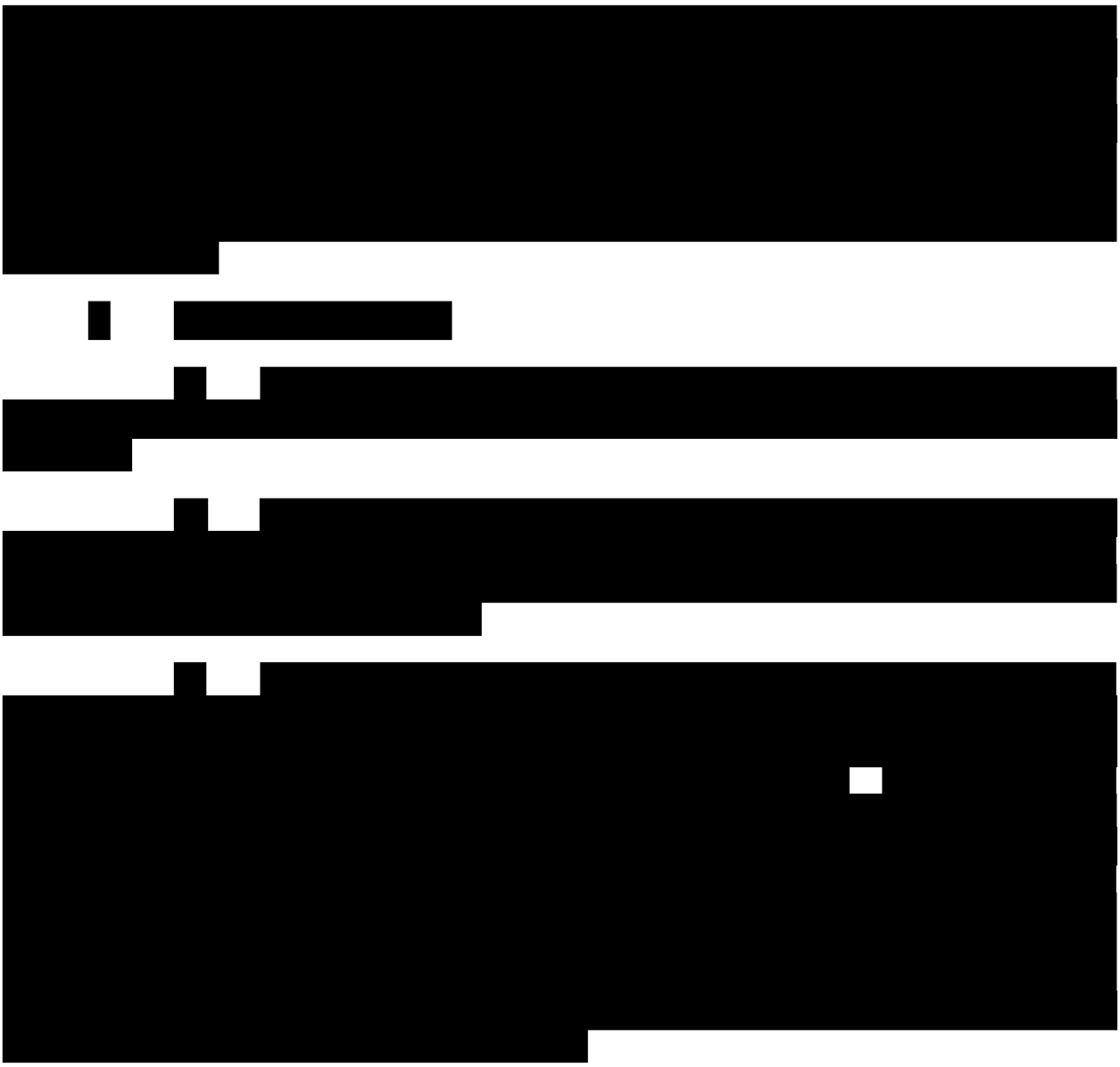
BEGINNING at the point of intersection which the original centerline of Fox Chase Road (33 feet wide) makes with the southwesterly side of the new location of Fox Chase Road(60 feet wide) at the arc distan of 267.56 feet, measured along the said southwesterly side of Fox Chase Road by a line curving to the right in a northwesterly direction with a radius of 1462.69 feet from a point of tangent; said point of tangent being at the distance of 13.5 feet measured South 22 deg. 19 min. West from a point in the said southwesterly side of Fox Chase Road (33 feet wide, but since widened 8.5 feet on the northeasterly side the present width of 41.5 feet); said last mentioned point being at the distance of 810.80 feet measured North 67 deg. 41 min. West from the point of intersection which the said southwesterly side of Fox Chase Road extended, makes with the original centerline of Cedar Road (35 feet wide, but since widened 10 feet on the northwesterly side to the present width of 43 feet); thence from the first mentioned point and along the original centerline of Fox Chase Road, being line of land of Sisters of St. Basil the Great, North 67 deg. 58 min. 30 sec. West 193.78 feet to an angle point, the intersection which the said original centerline of Fox Chase Road makes with the centerline of Shelmire Street(recently vacated); thence from said angle point along the said original centerline of Fox Chase Road, being line of land of Sisters of St. Basil, the Great, North 28 deg. 58 min. West 154.75 feet to the point of intersection which the said original centerline of Fox Chase Road makes with the said southwesterly side of the new location of Fox Chase Road; thence along the same concentric with the centerline of concrete paving and 30.00 feet southwest therefrom, by a line curving to the left in a southeasterly direction with a radius of 1462.69 feet, the arc distance of 529.50 feet to the place of beginning.

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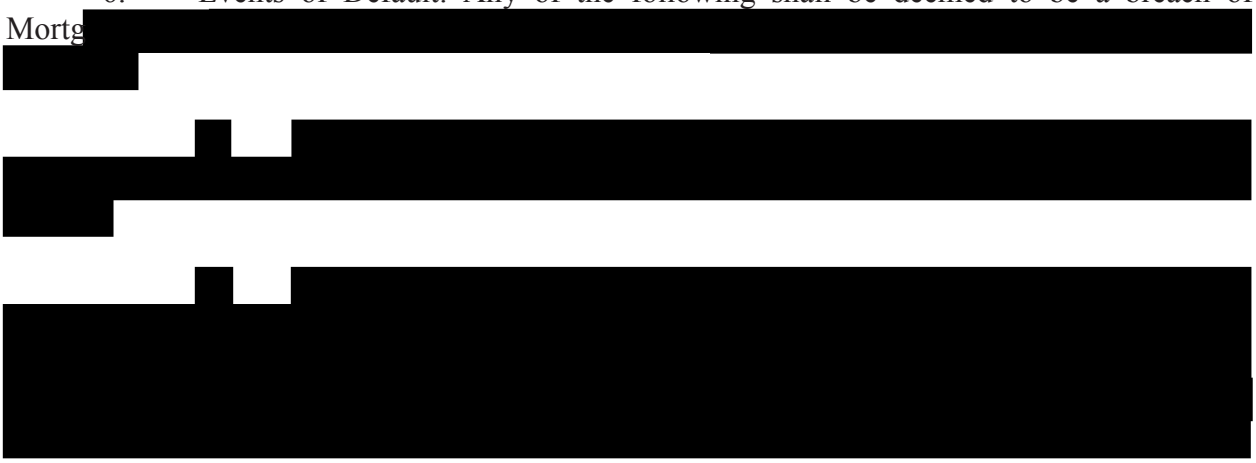
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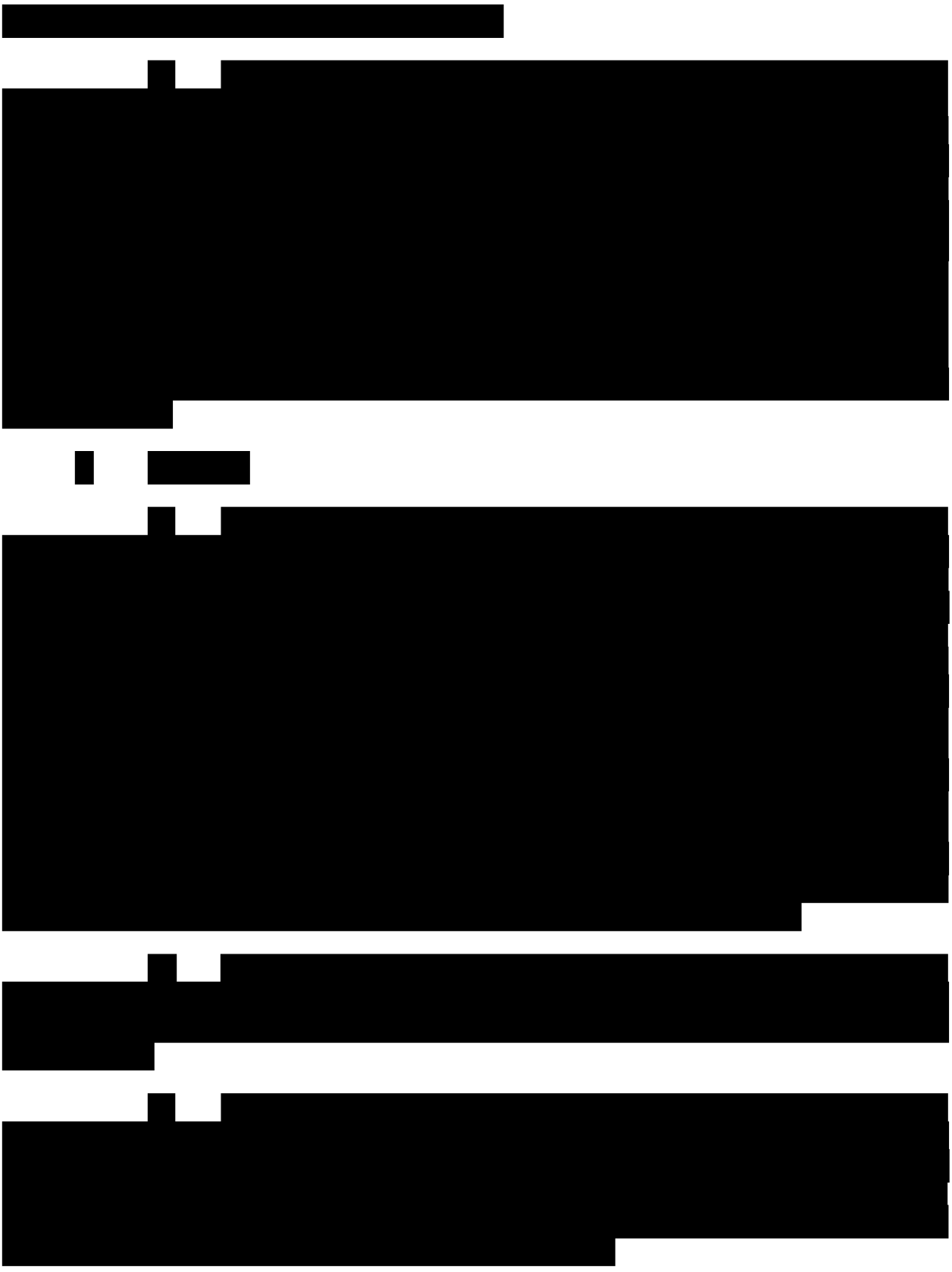


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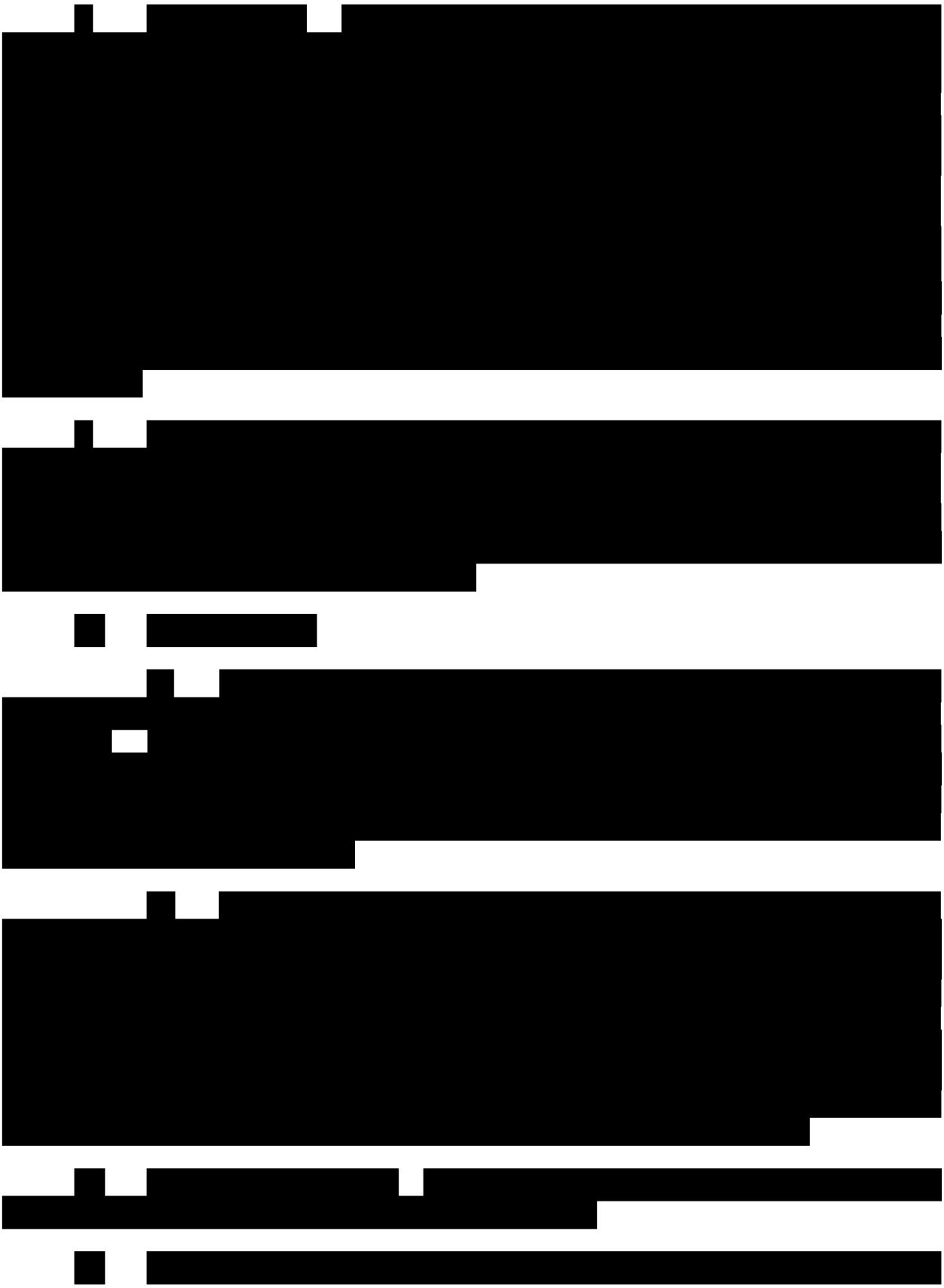


6. Events of Default. Any of the following shall be deemed to be a breach of Mortg





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,608/325Ā-5914671Ā.,)Ā!#,"%"'Ä+ *&Ä$&-!Ä*%+#Ä,"('&!"#*,%

[redacted]

AGOR

[redacted]

Name:

[redacted]

,608/325Ã-5914671Ã.,)Ã!#,"%"'Ä+ *&Ä$&-!Ä*%+#Ä,"('&!"#*,%



[redacted]

,608/325Ā-5914671Ā.,)Ā!#,"%"'Ä+ *&Ä$&-!Ä*%+#Ä,"('&!"#*,%

[redacted]

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[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

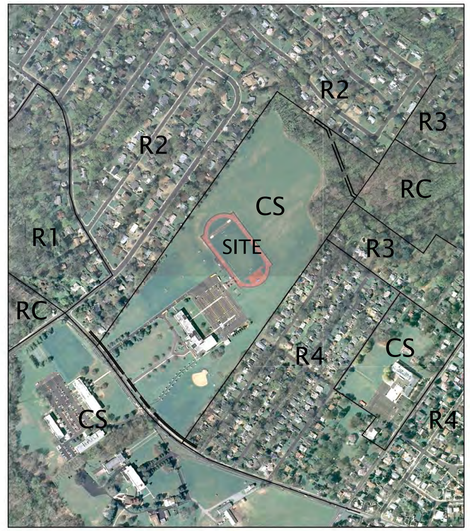
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[redacted]

EROSION AND SEDIMENT CONTROL PLANS FOR

SISTERS OF ST. BASIL

ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA
TAX MAP PARCELS: 30-00-22424-00-1, 30-00-22420-00-5



ZONING MAP
SCALE: 1"=500'

GRAPHIC SCALE
500 0 250 500 1000 2000
(IN FEET)
1 inch = 500 ft.



LOCATION MAP
SCALE: 1"=500'

GRAPHIC SCALE
500 0 250 500 1000 2000
(IN FEET)
1 inch = 500 ft.

SHEET INDEX

EROSION & SEDIMENT PLANS

SHEET NO.	REFERENCE NO.	DESCRIPTION
1	ES01.01	COVER SHEET
2 – 9	ES20.02 – ES20.09	EROSION AND SEDIMENT CONTROL PLAN
10 – 13	ES20.10 – ES20.13	EROSION AND SEDIMENT CONTROL DETAILS
14 – 15	ES20.14 – ES20.15	EROSION AND SEDIMENT CONTROL NOTES

OWNER AND APPLICANT:

SISTERS OF ST. BASIL THE GREAT
711 FOX CHASE ROAD
JENKINTOWN, PA. 19046-4198

EQUITABLE OWNER AND APPLICANT:

TOLL MID-ATLANTIC, L.P. COMPANY, INC.
1140 VIRGINIA DRIVE
FORT WASHINGTON, PA 19034
(215) 938-8000

ENGINEER, SURVEYOR, PLANNER, LANDSCAPE ARCHITECT

ESE CONSULTANTS, INC.
1140 VIRGINIA DRIVE
FORT WASHINGTON, PA 19034
(215) 914-2050

ARCHITECT:

TOLL ARCHITECTURE
1140 VIRGINIA DRIVE
FORT WASHINGTON, PA 19034
(215) 938-8000

ATTORNEY:

ALYSON M. ZARRO, ESQ
RILEY RIPER HOLLIN & COLAGRECO
717 CONSTITUTION DRIVE, SUITE 201
EXTON, PA 19341
(610) 458-4400 EXT. 202

PENNSYLVANIA ONE CALL SYSTEM, INC. 1-800-242-1776 STOP - CALL BEFORE YOU DIG

THIS MAP DEPICTS PHYSICAL FEATURES VISIBLE ON THE SURFACE. BELOW GROUND STRUCTURES ARE SHOWN FOR GRAPHIC REPRESENTATION PURPOSES ONLY. ALTHOUGH EFFORTS HAVE BEEN MADE TO ACCURATELY DEPICT THE BELOW GROUND STRUCTURES, EXACT LOCATIONS ARE TO BE VERIFIED BY AND ARE THE RESPONSIBILITY OF PERSON(S) USING THIS MAP.

ALL CONTRACTORS WORKING ON THIS PROJECT SHALL VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK AND SHALL COMPLY WITH THE REQUIREMENTS OF P.L. 852, NO. 287 DECEMBER 10, 1974 AS AMENDED ON DECEMBER 12, 1986, P.L. 1574, NO. 172. PA-ONE CALL SERIAL NUMBER FOR DESIGN PURPOSES ONLY.

PA ONE CALL WAS INITIATED 01-18-2023
SERIAL NO. 20230532913, 20230532932, 20230532933 AND 20230532937.

STREET INDEX

PLAN IDENTIFICATION	STREET NAME
ROAD "A"	XXXXX
ROAD "B"	XXXXX
ROAD "C"	XXXXX
ROAD "D"	XXXXX
ROAD "E"	XXXXX
ROAD "F"	XXXXX
ROAD "G"	XXXXX

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ESE Consultants, Inc.
1140 Virginia Drive • Fort Washington, PA 19034
T: 215-914-2050

REV.	DATE	DESCRIPTION	DRAWN

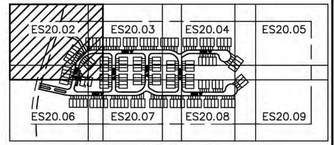
COVER SHEET
EROSION AND SEDIMENT CONTROL

SISTERS OF ST. BASIL
ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

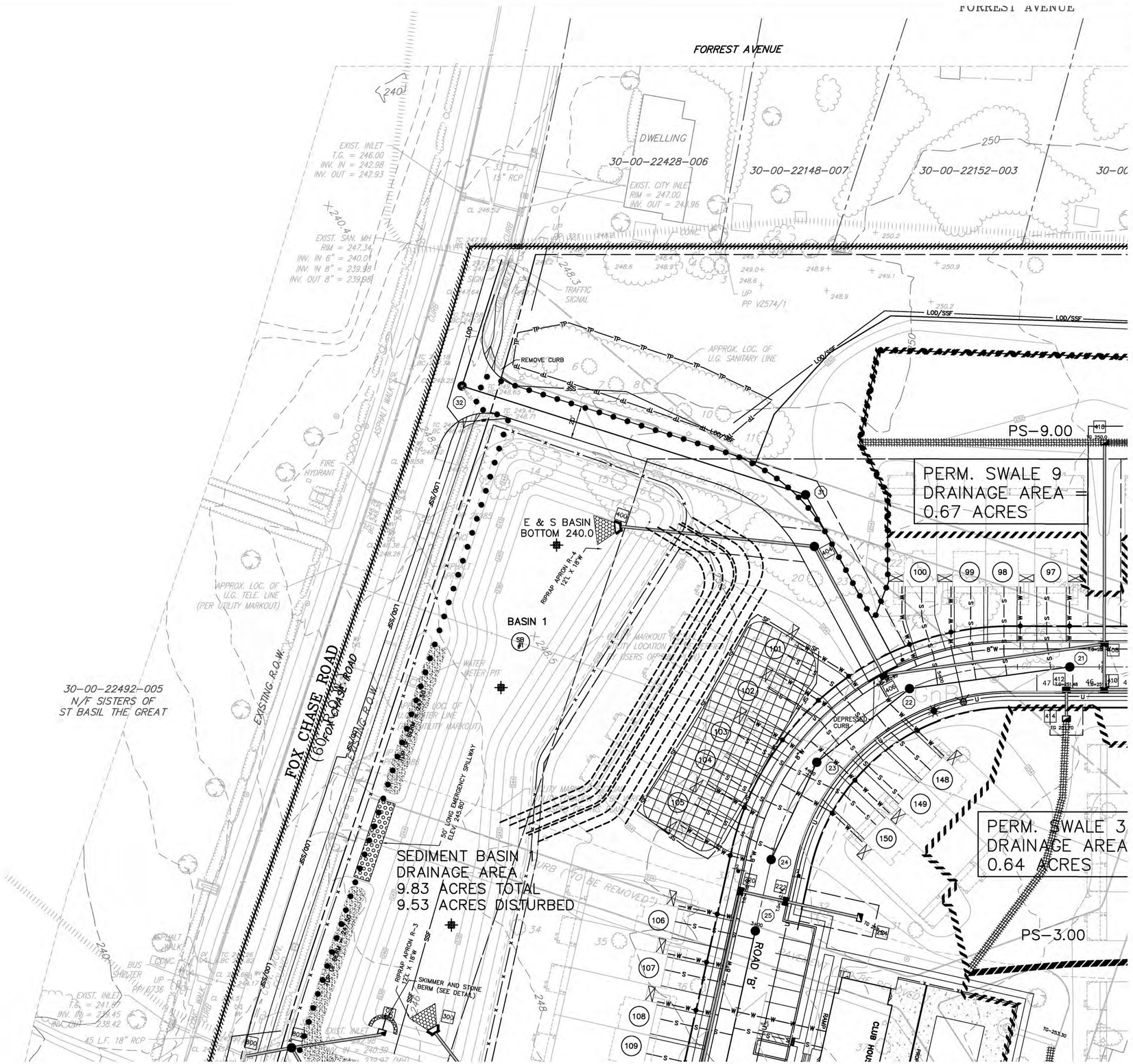
DATE: 3-24-23	SCALE: AS NOTED
DESIGN:	DRAWN: EJS
JOB NO.: 7662	FILE NAME: 7662-S-ENS-COVER
REF. NO.:	ES01.01
SHEET NO.: 1	OF 15

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FORREST AVENUE



KEYMAP



LEGEND

- TEMPORARY CONTOURS
- PROPOSED SWALE LINING (S75)
- SOIL STOCKPILE
- CLEAN OUT STAKE
- RIP-RAP APRON (CONDUIT OUTLET PROTECTION)
- SCE — PROPOSED STABILIZED CONSTRUCTION ENTRANCE
- SB — SEDIMENT BASIN
- SOILS LINE
- NPDES BOUNDARY
- EXISTING 15-25% SLOPES
- EXISTING >25% SLOPES
- INLET PROTECTION
- ROCK FILTER
- SF — SILT FENCE - STANDARD
- LOD — LIMIT OF DISTURBANCE
- SSF — SILT FENCE - SUPER
- TP — TREE PROTECTION FENCE
- ENS PHASE LINE
- SWALE DRAINAGE AREA
- SEDIMENT BASIN DRAINAGE AREA
- TOWNSHIP RIPARIAN BUFFER - ZONE 1
- TOWNSHIP RIPARIAN BUFFER - ZONE 2

THIS PLAN SHALL BE USED FOR SOIL EROSION AND SEDIMENTATION PURPOSES ONLY.

GRAPHIC SCALE
30 0 30 60
(IN FEET)
1" = 30 FEET

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL ENGINEER
JEFFREY M. MAUDER
ENGINEER
No. PE076010
COUNTY OF MONTGOMERY

ESE CONSULTANTS
ENGINEERING • PLANNING • SURVEYING • ENVIRONMENTAL
ESE Consultants, Inc.
1140 Virginia Drive • Fort Washington, PA 19034
T: 215-914-2050

REV.	DATE	DESCRIPTION	DRAWN

EROSION AND SEDIMENT CONTROL PLAN

SISTERS OF ST. BASIL

ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

DATE: 3-24-23	SCALE: 1"=30'
DESIGN:	DRAWN: EJS
JOB NO.: 7662	FILE NAME: 7662-S-ENS
REF. NO.:	ES20.02
SHEET NO.:	2 OF 15

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FORREST AVENUE

INV. OUT = 238.88

LINE FOR GRAPHICAL REPRESENTATION (TYP)

FORREST AVENUE

DWELLING

DWELLING

DWELLING

DWELLING

DWELLING

DWELLING

DWELLING

30-00-22152-003

30-00-22156-008

30-00-22160-004

30-00-22164-009

30-00-22168-005

30-00-22172-001

30-00-22176-006

30-00-22180-002

SHED

IRON PIPE FOUND

SPLIT RAIL FENCE

VINYL FENCE

LOD/SSF

PERM. SWALE 10
DRAINAGE AREA =
0.87 ACRES

PERM. SWALE 11
DRAINAGE AREA =
0.84 ACRES

PERM. SWALE 12
DRAINAGE AREA =
0.34 ACRES

PERM. SWALE 9
DRAINAGE AREA =
0.67 ACRES

PERM. SWALE 3
DRAINAGE AREA =
0.64 ACRES

PERM. SWALE 5
DRAINAGE AREA =
0.54 ACRES

PERM. SWALE 6
DRAINAGE AREA =
0.65 ACRES

PS-3.00

PS-5.00

PS-6.00

PS-9.00

PS-10.00

PS-11.00

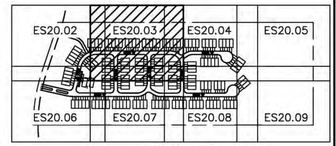
PS-12.00

ROAD 'B'

ROAD 'C'

ROAD 'F'

ROAD 'G'



KEYMAP

LEGEND

- TEMPORARY CONTOURS
- PROPOSED SWALE LINING (S75)
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- TOWNSHIP RIPARIAN BUFFER - ZONE 2

THIS PLAN SHALL BE USED FOR SOIL EROSION AND SEDIMENTATION PURPOSES ONLY.

GRAPHIC SCALE
30 0 30 60
(IN FEET)
1" = 30 FEET

COMMONWEALTH OF PENNSYLVANIA — REGISTERED — JEFFREY M. MAUDEN — ENGINEER — No. PE078010

ESE CONSULTANTS
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ESE Consultants, Inc.
1140 Virginia Drive • Fort Washington, PA 19034
T: 215-914-2050

REV.	DATE	DESCRIPTION	DRAWN

EROSION AND SEDIMENT CONTROL PLAN

SISTERS OF ST. BASIL
ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

DATE: 3-24-23	SCALE: 1"=30'
DESIGN:	DRAWN: EJS
JOB NO.: 7662	FILE NAME: 7662-S-ENS
REF. NO.:	ES20.03
SHEET NO.:	3 OF 15

N:\PROJECTS\PENNSYLVANIA\7662-ROYAL ST. BASILS\ENGDEPT\DRAWINGS\CMS\7662-S-ENS.DWG Fri, Sharpe - 3/24/2023 10:53 AM

FORREST AVENUE

ASCOT ROAD (BITUMINOUS PAVING)

DWELLING

30-00-22176-006

30-00-22180-002

30-00-22184-007

30-00-22188-003

30-00-22192-008

30-00-22196-004

30-00-22200-009

SHED

VINYL FENCE

BENT IRON PIPE

STONE BMP 1

PERM. SWALE 12
DRAINAGE AREA =
0.34 ACRES

PERM. SWALE 8
DRAINAGE AREA =
0.35 ACRES

PERM. SWALE 7

SWALE 6
AGE AREA =
ACRES

ROAD 'D'

ROAD 'G'

STONE BMP 2A

STONE BMP 2B

TEMP PIPE

RIPRAP APRON R-3
8'L X 5'W

RIPRAP APRON R-4
14'L X 20'W

45' LONG EMERGENCY SPILLWAY
ELEV. 245.80

RIPRAP APRON R-3
8'L X 12.5'W

BASIN ACCESS DRIVE

DEPRESSED CURB

BASIN 3A

SEDIMEN
DRAINAG
6.78 AC
6.78 AC

SKIMME
BERM (S

LOD/SSF

PS=12.00

PS=8.00

GnB

KEYMAP

ES20.02 | ES20.03 | ES20.04 | ES20.05
ES20.06 | ES20.07 | ES20.08 | ES20.09

LEGEND

- TEMPORARY CONTOURS
- PROPOSED SWALE LINING (S75)
- SOIL STOCKPILE
- CLEAN OUT STAKE
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- TOWNSHIP RIPARIAN BUFFER - ZONE 2

THIS PLAN SHALL BE USED FOR SOIL EROSION AND SEDIMENTATION PURPOSES ONLY.

GRAPHIC SCALE
30 0 30 60
(IN FEET)
1" = 30 FEET

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL ENGINEER — JEFFREY M. MAUDER — ENGINEER No. PE079001 — CHESTER COUNTY

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ESE Consultants, Inc.
1140 Virginia Drive • Fort Washington, PA 19034
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REV.	DATE	DESCRIPTION	DRAWN

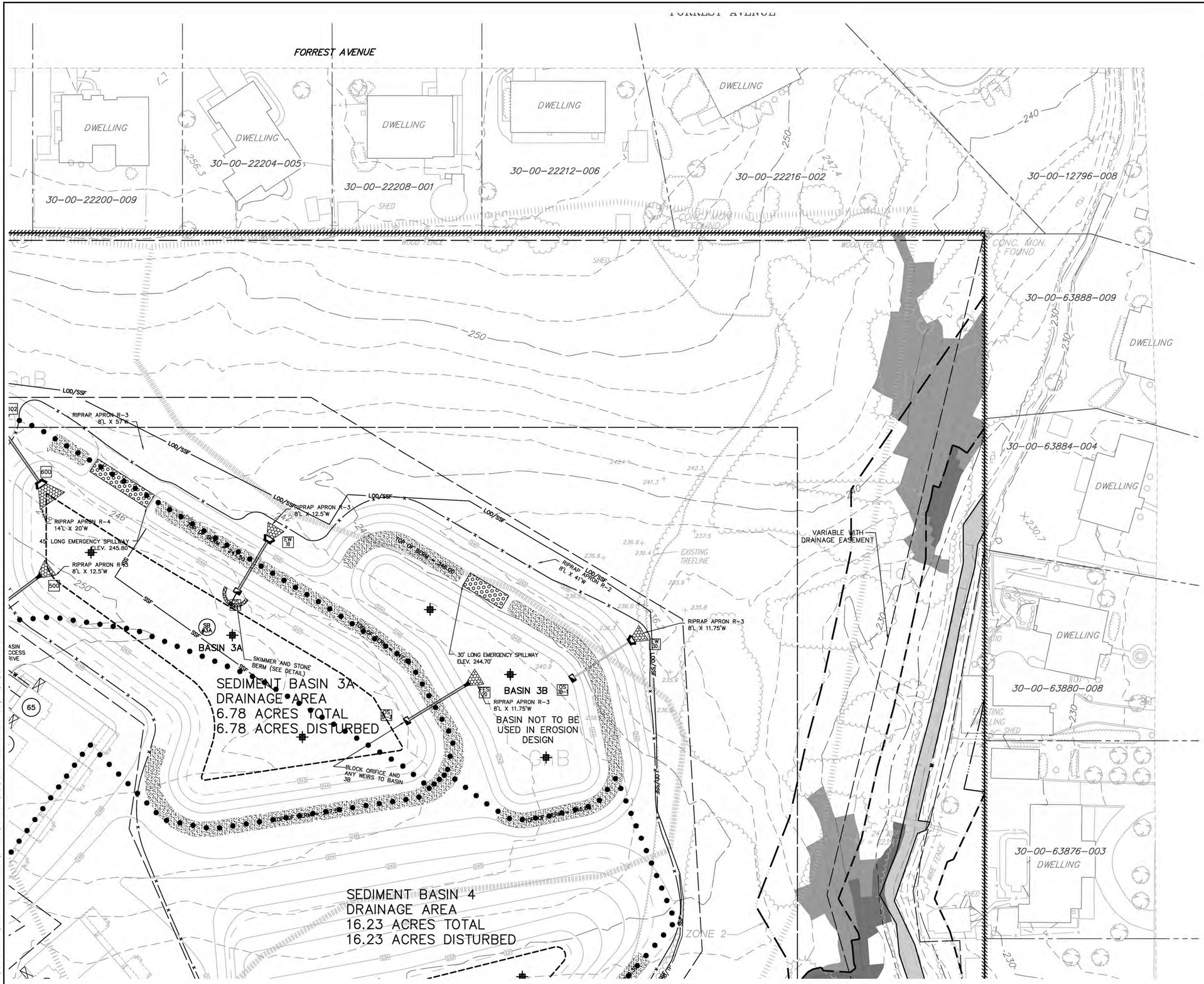
EROSION AND SEDIMENT CONTROL PLAN

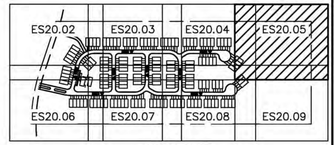
SISTERS OF ST. BASIL
ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

DATE: 3-24-23	SCALE: 1"=30'
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JOB NO.: 7662	FILE NAME: 7662-S-ENS
REF. NO.:	ES20.04
SHEET NO.:	4 OF 15

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FORREST AVENUE





KEYMAP

LEGEND

- TEMPORARY CONTOURS
- PROPOSED SWALE LINING (S75)
- SOIL STOCKPILE
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- RIP-RAP APRON (CONDUIT OUTLET PROTECTION)
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THIS PLAN SHALL BE USED FOR SOIL EROSION AND SEDIMENTATION PURPOSES ONLY.

GRAPHIC SCALE
30 0 30 60
(IN FEET)
1" = 30 FEET

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER JEFFREY M. MAUDER ENGINEER No. PE078525 CHESTER COUNTY, PA

ESE CONSULTANTS
ENGINEERING • PLANNING • SURVEYING • ENVIRONMENTAL
ESE Consultants, Inc.
1140 Virginia Drive • Fort Washington, PA 19034
T: 215-914-2050

REV.	DATE	DESCRIPTION	DRAWN

EROSION AND SEDIMENT CONTROL PLAN

SISTERS OF ST. BASIL
ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

DATE: 3-24-23	SCALE: 1"=30'
DESIGN:	DRAWN: EJS
JOB NO.: 7662	FILE NAME: 7662-S-ENS
REF. NO.:	ES20.05
SHEET NO.:	5 OF 15

N:\PROJECTS\PENNSYLVANIA\7662-ABINGTON, ST. BASILS\ENGDEPT\DRAWINGS\ENS\7662-S-ENS.DWG, Eric Stengel 3/24/2023 10:53 AM

SEDIMENT BASIN #1
DRAINAGE AREA =
9.83 ACRES TOTAL
9.53 ACRES DISTURBED

0.64 ACRES

PS-3.00

PERM. SWALE
DRAINAGE ARE
0.38 ACRES

PS-2.00

ROAD 'B'

ROAD 'A'

CLUB HOUSE

POOL

MAILBOX AREA

FOX CHASE ROAD

EXISTING R.O.W.

BASIN NOT TO BE USED IN EROSION DESIGN

BASIN 2

RIPRAP APRON R-3 12'L X 18'W

TEMP. PIPE

RIPRAP APRON R-3 8'L X 11.75'W

40' LONG EMERGENCY SPILLWAY ELEV. 247.40'

CLEAN OUT STAKE (SEE DETAIL)

SKIMMER AND STONE BERM (SEE DETAIL)

BELGIAN BLOCK CURB

CONCRETE CURB

EXIST. STORM MH
RIM = 248.07
INV. OUT = 242.32

EXIST. INLET
T.G. = 241.91
INV. IN = 238.45
INV. OUT = 238.42

45 L.F. 18" RCP

352 L.F. 18" RCP

6" PECO GAS MAIN

TRAFFIC SIGNAL (TYP.)

BUS SHELTER

CONC. WALK

ASPHALT WALK

UP PP 3236

UP PP 4185

30-00-36620-007

30-00-36624-003

30-00-36626-008

30-00-36632-004

30-00-36636-009

30-00-36640-005

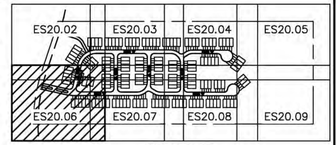
30-00-36644-001

30-00-36648

DWELLING

KIRKWOOD AVENUE

KEYMAP



LEGEND

- TEMPORARY CONTOURS
- PROPOSED SWALE LINING (S75)
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- TOWNSHIP RIPARIAN BUFFER - ZONE 2

THIS PLAN SHALL BE USED FOR SOIL EROSION AND SEDIMENTATION PURPOSES ONLY.

GRAPHIC SCALE
30 0 30 60
(IN FEET)
1" = 30 FEET

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER
JEFFREY M. MAUDEN
ENGINEER
No. PE076010
PROFESSIONAL ENGINEER

ESE CONSULTANTS
ENGINEERING • PLANNING • SURVEYING • ENVIRONMENTAL
ESE Consultants, Inc.
1140 Virginia Drive • Fort Washington, PA 19034
T: 215-914-2050

REV.	DATE	DESCRIPTION	DRAWN

EROSION AND SEDIMENT CONTROL PLAN

SISTERS OF ST. BASIL
ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

DATE: 3-24-23	SCALE: 1"=30'
DESIGN:	DRAWN: EJS
JOB NO.: 7662	FILE NAME: 7662-S-ENS
REF. NO.:	ES20.06
SHEET NO.:	6 OF 15

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PERM. SWALE 2
DRAINAGE AREA =
0.38 ACRES

PERM. SWALE 4
DRAINAGE AREA =
0.32 ACRES

PERM. SWALE 6
DRAINAGE AREA =
0.65 ACRES

TEMP. SWALE 1
DRAINAGE AREA =
2.38 ACRES

PS-2.00

PS-4.00

PS-6.00

3 STORY BRICK BUILDING
("TO BE REMOVED")

POOL

ROAD 'A'

"TO BE REMOVED"

GARAGE

SHED

LOD/SSF

SILT FENCE

WOOD FENCE

SPLIT RAIL FENCE

IRON PIPE FOUND

REBAR FOUND

30-00-36644-001

30-00-36648-006

30-00-36652-002

30-00-36656-007

30-00-36660-003

30-00-36664-008

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30-00-36680-001

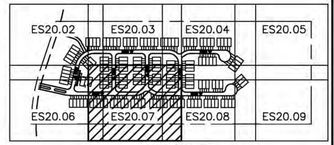
30-00-36684-006

30-00-36688-002

DWELLING

GIBSON AVENUE
(BITUMINOUS PAVING)

KIRKWOOD AVENUE



KEYMAP

LEGEND

- TEMPORARY CONTOURS
- PROPOSED SWALE LINING (S75)
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THIS PLAN SHALL BE USED FOR SOIL EROSION AND SEDIMENTATION PURPOSES ONLY.

GRAPHIC SCALE
30 0 30 60
(IN FEET)
1" = 30 FEET

COMMONWEALTH OF PENNSYLVANIA
REGISTERED
PROFESSIONAL
ENGINEER
JEFFREY M. MADDEN
No. PE078102
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Jeff Madden

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ESE Consultants, Inc.
1140 Virginia Drive • Fort Washington, PA 19034
T: 215-914-2050

REV.	DATE	DESCRIPTION	DRAWN

EROSION AND SEDIMENT CONTROL PLAN

SISTERS OF ST. BASIL
ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

DATE: 3-24-23	SCALE: 1"=30'
DESIGN:	DRAWN: EJS
JOB NO.: 7662	FILE NAME: 7662-S-ENS
REF. NO.:	ES20.07
SHEET NO.:	7 OF 15

N:\PROJECTS\PENNSYLVANIA\7662-RYDAL ST. BASIL ST\ENGDEPT\DRAWINGS\ENS\7662-S-ENSDWG-Eric Stengel- 3/24/2023 10:54 AM

0.35 ACRES

PS-8.00

PERM. SWALE 7
DRAINAGE AREA =
0.52 ACRES

PS-7.00

SWALE 6
AGE AREA =
ACRES

STONE BMP 2A

STONE BMP 2B

TEMP PIPE

ROAD 'G'

ROAD 'E'

PERM. SWALE 1
DRAINAGE AREA =
0.15 ACRES

PS-1.00

DEPRESSED CURB

BASIN ACCESS DRIVE

RIP-RAP APRON R-3
8'L X 96'W

LOD/SSF

SPLIT RAIL FENCE

WIRE FENCE

MARBLE MON. FOUND

IRON PIPE FOUND

CLEANING CON. MON. FOUND

30-00-36684-006

30-00-36688-002

30-00-36696-003

30-00-36700-00

30-00-36708-009

30-00-36712-005

30-00-36716-001

30-00-36720-006

30-00-36724-0

DWELLING

MONTGOMERY AVENUE (50' R.O.W.)
(BITUMINOUS PAVING)

2" PECO GAS MAIN

4" PECO

KIRKWOOD AVENUE

KIRKWOOD

KEYMAP

ES20.02 | ES20.03 | ES20.04 | ES20.05
ES20.06 | ES20.07 | ES20.08 | ES20.09

LEGEND

- TEMPORARY CONTOURS
- PROPOSED SWALE LINING (S75)
- SOIL STOCKPILE
- CLEAN OUT STAKE
- RIP-RAP APRON (CONDUIT OUTLET PROTECTION)
- SCE — PROPOSED STABILIZED CONSTRUCTION ENTRANCE
- SB — SEDIMENT BASIN
- SOILS LINE
- NPDES BOUNDARY
- EXISTING 15-25% SLOPES
- EXISTING >25% SLOPES
- INLET PROTECTION
- ROCK FILTER
- SF — SILT FENCE - STANDARD
- LOD — LIMIT OF DISTURBANCE
- SSF — SILT FENCE - SUPER
- TP — TREE PROTECTION FENCE
- ENS PHASE LINE
- SWALE DRAINAGE AREA
- SEDIMENT BASIN DRAINAGE AREA
- TOWNSHIP RIPARIAN BUFFER - ZONE 1
- TOWNSHIP RIPARIAN BUFFER - ZONE 2

THIS PLAN SHALL BE USED FOR SOIL EROSION AND SEDIMENTATION PURPOSES ONLY.

GRAPHIC SCALE
30 0 30 60
(IN FEET)
1" = 30 FEET

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL ENGINEER — JEFFREY M. MAUDER — ENGINEER No. PE078004 — PROPERTY OF ESE CONSULTANTS

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SISTERS OF ST. BASIL

ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

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SEDIMENT BASIN 4
DRAINAGE AREA
16.23 ACRES TOTAL
16.23 ACRES DISTURBED

BASIN 4

SKIMMER AND STONE BERM (SEE DETAIL)

RIPRAP APRON R-4 20'W

SB #4

80' LONG EMERGENCY SPILLWAY ELEV. 237.0

DEPRESSED CURB

BASIN ACCESS DRIVE

RIPRAP APRON R-3 8'L x 96'W

RIPRAP APRON R-3 12'L x 18'W

VARIABLE WIDTH DRAINAGE EASEMENT

EXISTING TREELINE

EXISTING 8" VITRIFIED CLAY PUBLIC SANITARY SEWER

DRAINAGE EASEMENT PLAN BOOK 189

ZONE 1

ZONE 2

30-00-63876-003
DWELLING

30-00-63872-007
DWELLING

REBAR FOUND

DWELLING

30-00-63868-002

30-00-10052-007

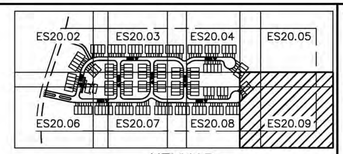
MARBLE MON. FOUND

30-00-36724-002
DWELLING

30-00-36860-001

(BITUMINOUS PAVING)

KEYMAP



LEGEND

- TEMPORARY CONTOURS
- PROPOSED SWALE LINING (S75)
- SOIL STOCKPILE
- CLEAN OUT STAKE
- RIP-RAP APRON (CONDUIT OUTLET PROTECTION)
- PROPOSED STABILIZED CONSTRUCTION ENTRANCE
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COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER JEFFREY M. MAUDEN ENGINEER No. PE076010 FRANKLIN, VIRGINIA

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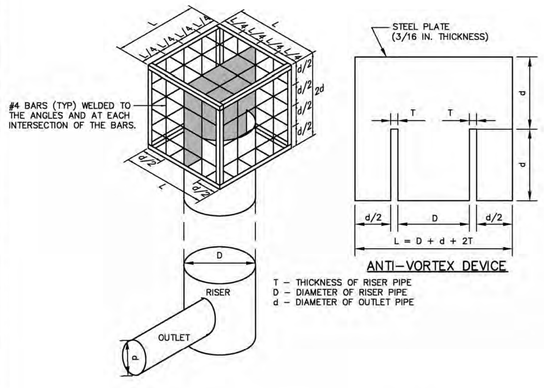
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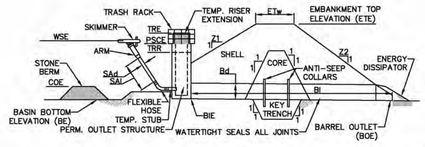
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ANTI–VORTEX DEVICE

STANDARD CONSTRUCTION DETAIL #7–5
TRASH RACK AND ANTI–VORTEX DEVICE

NOT TO SCALE



BASIN NO.	Z1 (FT)	Z2 (FT)	TEMP RISER EXT. ELEV TRE (FT)	TEMP RISER REDUCE ELEV TRR (FT)	EMBANKMENT				CLEAN OUT ELEV COE (FT)	BOTTOM ELEV BIE (FT)
					TOP ELEV ETE (FT)	TOP WIDTH ETw (FT)	KEY TRENCH DEPTH (FT)	KEY TRENCH WIDTH (FT)		
1	3	3	NA	245.00	247.50	10	2.0	6.0	241.00	240.00
3A	3	3	NA	245.20	247.50	10	3.0	9.0	243.00	242.00
4	3	3	NA	236.70	239.30	10	3.0	9.0	232.10	230.00

OUTLET BARREL					
BASIN NO.	DIA Bd (IN)	INLET ELEV BIE (FT)	MAT'L	LENGTH Bl (FT)	OUTLET ELEV BOE (FT)
1	15	240.59	RCP	56	240.31
3A	18	242.50	RCP	18	242.00
4	24	230.50	RCP	63	230.00

NOTES:

SEDIMENT BASINS, INCLUDING ALL APPURTENANT WORKS, SHALL BE CONSTRUCTED TO THE DETAIL AND DIMENSIONS SHOWN ON THE E&S PLAN DRAWINGS.

AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO A DEPTH OF TWO FEET PRIOR TO ANY PLACEMENT AND COMPACTION OF EARTHEN FILL. IN ORDER TO FACILITATE MAINTENANCE AND RESTORATION, THE POOL AREA SHALL BE CLEARED OF ALL BRUSH, TREES, AND OBJECTIONABLE MATERIAL. FILL MATERIAL FOR THE EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE COMPACTED IN LAYERED LIFTS OF NOT MORE THAN 6 TO 9 IN. THE MAXIMUM ROCK SIZE SHALL BE NO GREATER THAN 2/3 THE LIFT THICKNESS.

UPON COMPLETION, THE EMBANKMENT SHALL BE SEEDED, MULCHED, BLANKETED OR OTHERWISE STABILIZED ACCORDING TO THE SPECIFICATIONS OF THE E&S PLAN DRAWINGS. TREES SHALL NOT BE PLANTED ON THE EMBANKMENT.

INSPECT ALL SEDIMENT BASINS ON AT LEAST A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. PROVIDE ACCESS FOR SEDIMENT REMOVAL AND OTHER REQUIRED MAINTENANCE ACTIVITIES. A CLEAN OUT STAKE SHALL BE PLACED NEAR THE CENTER OF EACH BASIN. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED THE CLEAN OUT ELEVATION ON THE STAKE AND THE BASIN RESTORED TO ITS ORIGINAL DIMENSIONS. DISPOSE OF MATERIALS REMOVED FROM THE BASIN IN THE MANNER DESCRIBED IN THE E&S PLAN.

BASIN EMBANKMENTS, SPILLWAYS, AND OUTLETS SHALL BE INSPECTED FOR EROSION, PIPING AND SETTLEMENT. NECESSARY REPAIRS SHALL BE IMMEDIATELY. DISPLACED RIPRAP WITHIN THE OUTLET ENERGY DISSIPATER SHALL BE REPLACED IMMEDIATELY.

ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISTURBED AREAS SHALL BE STABILIZED INSIDE THE BASIN BEFORE CONVERSION TO A STORMWATER MANAGEMENT FACILITY. THE DEVICE SHOWN IN STANDARD CONSTRUCTION DETAIL #7–16 MAY BE USED TO DEWATER SATURATED SEDIMENT PRIOR TO ITS REMOVAL. ROCK FILTERS SHALL BE ADDED AS NECESSARY.

STANDARD CONSTRUCTION DETAIL #7–4
SEDIMENT BASIN EMBANKMENT AND SPILLWAY DETAILS – SKIMMER

NOT TO SCALE

SECTION VIEW

BASIN NO.	WATER SURFACE ELEV. WSE (FT)	SKIMMER						
		ORIFICE		ARM			FLEXIBLE HOSE	
		DIA. (IN)	HEAD (FT)	DIA. SAd (IN)	LENGTH SAL (FT)	MAT'L	DIA. (IN)	LENGTH (IN)	MAT'L
1	242.00	3.0	VARIES	4.0	8.0	PVC	4.0	30	PVC
3A	243.60	3.0	VARIES	4.0	8.0	PVC	4.0	30	PVC
4	235.70	3.0	VARIES	4.0	8.0	PVC	4.0	30	PVC

BASIN NO.	TEMPORARY STUB			PERMANENT RISER				RISER EXTENSION			BARREL
	INSIDE DIA (IN)	INVERT ELEV TSIE (FT)	MAT'L	CREST ELEV PSCE (FT)	HORIZ OPENING		TEMPORARY INTERNAL WEIR CREST ELEVATION	CREST ELEV TRE (FT)	HORIZ OPENING		INLET ELEV BIE (FT)
					LENGTH El (IN)	WIDTH Ew (IN)			LENGTH (IN)	WIDTH (IN)	
1	4	240.75	PVC	245.00	245.50	45.5	24	N/A	N/A	N/A	N/A	240.59
3A	4	242.50	PVC	245.20	245.80	45.5	24	N/A	N/A	N/A	N/A	242.50
4	4	231.00	PVC	236.70	237.70	45.5	24	N/A	N/A	N/A	N/A	230.50

NOTES:

ALL ORIFICES ON PERMANENT RISER BELOW TEMPORARY RISER EXTENSION SHALL HAVE WATER–TIGHT TEMPORARY SEALS PROVIDED. TEMPORARY STUB INVERT ELEVATION SHALL BE SET AT OR BELOW SEDIMENT CLEAN–OUT ELEVATION.

A ROPE SHALL BE ATTACHED TO THE SKIMMER ARM TO FACILITATE ACCESS TO THE SKIMMER ONCE INSTALLED.

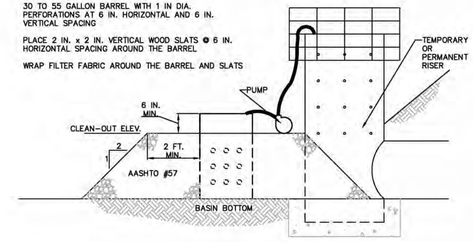
SKIMMER SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT.
ANY MALFUNCTIONING SKIMMER SHALL BE REPAIRED OR REPLACED WITHIN 24 HOURS OF INSPECTION.

ICE OR SEDIMENT BUILDUP AROUND THE PRINCIPAL SPILLWAY SHALL BE REMOVED SO AS TO ALLOW THE SKIMMER TO RESPOND TO FLUCTUATING WATER ELEVATIONS.

SEDIMENT SHALL BE REMOVED FROM THE BASIN WHEN IT REACHES THE LEVEL MARKED ON THE SEDIMENT CLEAN–OUT STAKE OR THE TOP OF THE STONE BERM. SEE STANDARD CONSTRUCTION DETAIL #7–3 FOR CONFIGURATION OF STONE BERM.

STANDARD CONSTRUCTION DETAIL #7–2
SKIMMER ATTACHED TO PERMANENT RISER

NOT TO SCALE



NOTES:

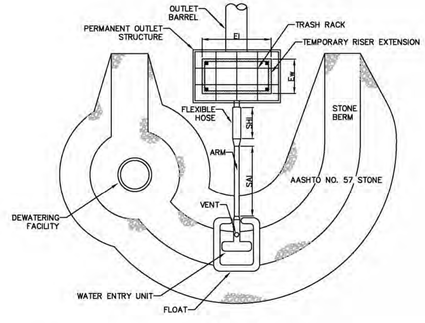
DEWATERING FACILITY SHALL BE INSTALLED IMMEDIATELY UPON COMPLETION OF BASIN/TRAP.

PRIOR TO INITIATING OPERATION OF DEWATERING FACILITY, ALL ACCUMULATED SEDIMENT SHALL BE CLEANED FROM THE INSIDE OF THE BARREL.

DEWATERING FACILITY SHALL BE CONTINUOUSLY MONITORED DURING OPERATION. IF FOR ANY REASON THE DEWATERING FACILITY CEASES TO FUNCTION PROPERLY, IT SHALL BE IMMEDIATELY SHUT DOWN AND NOT RESTARTED UNTIL THE PROBLEM HAS BEEN CORRECTED.

STANDARD CONSTRUCTION DETAIL #7–18
SEDIMENT BASIN OR SEDIMENT TRAP
SEDIMENT STORAGE DEWATERING FACILITY

NOT TO SCALE



PLAN VIEW

NOTES:

NO GUIDE RAILS SHALL BE REQUIRED FOR THIS INSTALLATION.

THIS DETAIL SHALL BE USED IN CONJUNCTION WITH STANDARD CONSTRUCTION DETAILS #7–2 AND #7–4.

STANDARD CONSTRUCTION DETAIL #7–3
SKIMMER WITH STONE LANDING BERM

NOT TO SCALE

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COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER JEFFREY M. MAUDER No. PE039001 STATE COLLEGE, PA

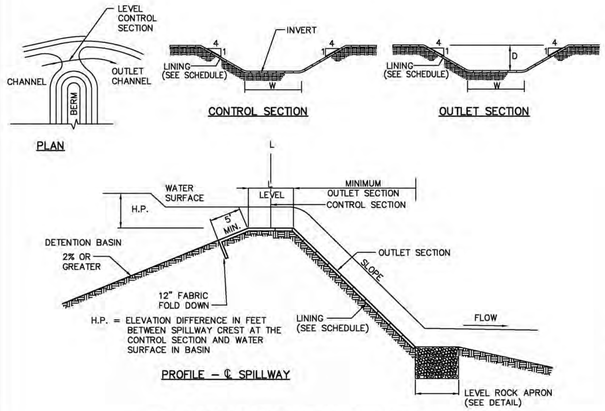
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EROSION AND SEDIMENT CONTROL DETAILS

SISTERS OF ST. BASIL
ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

DATE: 3–24–23	SCALE: AS NOTED
DESIGN:	DRAWN: EJS
JOB NO.: 7662	FILE NAME: 7662-S-ENS-DET
REF. NO.: ES20.10	
SHEET NO.: 10 OF 15	

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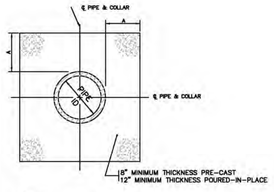


EMERGENCY SPILLWAY SCHEDULE

BASIN #	TOP OF BERM ft.	PERMANENT CONTROL SECTION			TEMPORARY CONTROL SECTION			OUTLET SECTION			
		WIDTH ft.	INVERT ft.	LINING	WIDTH ft.	INVERT ft.	LINING	MAX SLOPE ft.	W ft.	D ft.	LINING
1	247.50	50	245.80	C-125	NA	NA	NA	3:1	50	1.70	C-125
2	249.00	40	247.40	C-125	NA	NA	NA	3:1	40	1.60	C-125
3A	247.50	45	245.80	C-125	NA	NA	NA	3:1	45	1.70	C-125
3B	246.00	30	244.70	C-125	NA	NA	NA	3:1	30	1.30	C-125
4	239.30	85	237.70	C-125	NA	NA	NA	3:1	85	1.60	C-125

EMERGENCY SPILLWAY CALCULATION

FORMULA: Q =2.7 L (H 3/2)

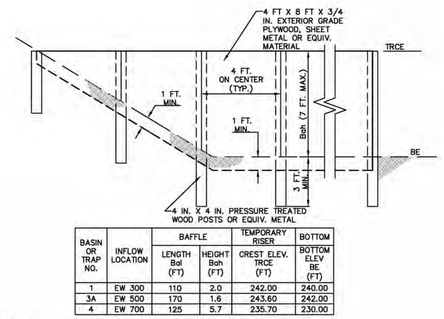


NOTE:
1. LOCATION AS SHOWN IN PROFILE VIEW AND PLAN VIEW.
2. COLLARS SHALL BE PLACED NO CLOSER THAN 2 FEET TO ANY PIPE JOINTS.

CONCRETE ANTI-SEEP COLLAR

N.T.S.

BASIN #	# OF COLLARS	VERTICAL PROJECTION A (IN.)	SPACING (FT.)	DISTANCE TO FIRST COLLAR (FT)	BARREL DIA. (IN)
O.S. 3A-1	2	12	8.59	8.59	18
O.S. 3A-2	2	13.5	8.46	8.46	15
O.S. 3B-1	3	18	14.31	14.31	15
O.S. 4.0	3	18	13.37	13.37	24



BASIN OR TRAP NO.	INFLOW LOCATION	BAFFLE		TEMPORARY RISER	BOTTOM
		LENGTH Bal (FT)	HEIGHT Bah (FT)	CREST ELEV. TRCE (FT)	BOTTOM ELEV BE (FT)
1	EW 300	110	2.0	242.00	240.00
3A	EW 500	170	1.6	243.60	242.00
4	EW 700	125	5.7	235.70	230.00

NOTES:

SEE APPROPRIATE BASIN DETAIL FOR PROPER LOCATION AND ORIENTATION.

AN ACCEPTABLE ALTERNATIVE IS TO INSTALL AN EQUIVALENT MATERIAL SUCH AS CHAINLINK FENCE WITH FABRIC. IF CHAINLINK FENCE AND FABRIC ARE USED, THE MATERIALS SHALL MEET THE MINIMUM STANDARDS SHOWN ON THE SUPER SILT FENCE DETAIL.

IN POOLS WITH DEPTHS EXCEEDING 7', THE TOP OF THE PLYWOOD BAFFLE DOES NOT NEED TO EXTEND TO THE TEMPORARY RISER CREST. SUPER SILT FENCE BAFFLES NEED NOT EXTEND TO TRCE ELEVATION.

BAFFLES SHALL BE TIED INTO ONE SIDE OF THE BASIN UNLESS OTHERWISE SHOWN ON THE PLAN DRAWINGS.

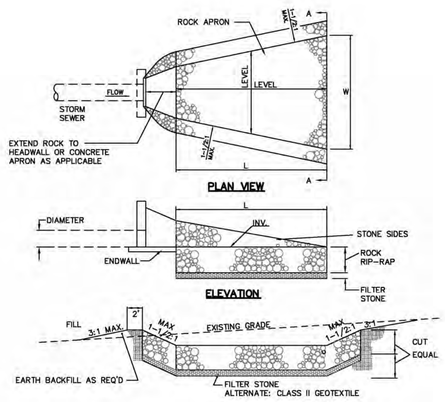
SUBSTITUTION OF MATERIALS NOT SPECIFIED IN THIS DETAIL SHALL BE APPROVED BY THE DEPARTMENT OR THE LOCAL CONSERVATION DISTRICT BEFORE INSTALLATION.

DAMAGED OR WARPED BAFFLES SHALL BE REPLACED WITHIN 7 DAYS OF INSPECTION.

BAFFLES REQUIRING SUPPORT POSTS SHALL NOT BE INSTALLED IN BASINS REQUIRING IMPERVIOUS LINERS.

STANDARD CONSTRUCTION DETAIL #7-14
BAFFLE

NOT TO SCALE



SECTION A-A

STORM SEWER OUTLET ROCK APRON SCHEDULE

OUTLET #	PIPE DIA (in)	RIP-RAP CALCULATED SIZE	RIP-RAP PROVIDED SIZE	RIP-RAP THICK (in)	MIN. APRON DIM. L (ft)	INITIAL WIDTH (ft)	TERMINAL W (ft)
FES 100	15	R-3	R-3	9	8	3.75	11.75
EW 200	24	R-3	R-3	9	12	6	18.0
EW 300	24	R-3	R-3	9	12	6	18.0
EW 400	24	R-4	R-4	18	12	6	18.0
FES 500	18	R-3	R-3	9	8	4.5	12.5
EW 600	24	R-4	R-4	18	14	6	20.0
EW 700	36	R-4	R-4	18	20	9	29.0
O.S. 3A-2	18	R-3	R-3	9	8	4.5	12.5
O.S. 3A-4	15	R-3	R-3	9	8	3.75	11.75
O.S. 3B-2	15	R-3	R-3	9	8	3.75	11.75
O.S. 4.1	24	R-5	R-5	27	12	6	18.0

RIPRAP APRONS AT PIPE OUTLETS WITH D-W ENDWALS

RIPRAP

PADOT No.	Size Inches (sq. openings) Max.	Avg. (1)	Min. (2)	Filter Stone NCSA Size No.
R-3	6	3	2	FS-2
R-4	12	6	3	FS-2
R-5	18	9	5	FS-2
R-6	24	12	7	FS-3
R-7	30	15	12	FS-3
R-8	48	24	19	FS-3

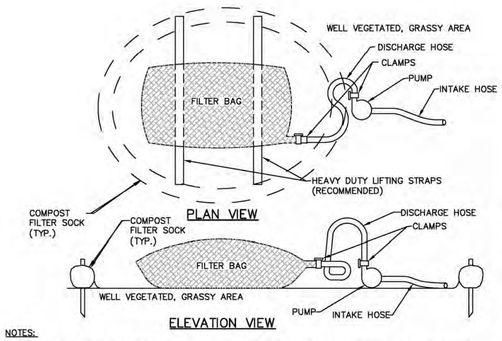
FILTER STONE

NCSA No.	Size Inches (sq. openings) Max	Avg.	Min	Thickness
FS-2	2	No. 4	No. 100	4 in (minimum)
FS-3	6-1/2	2.5	No. 16	8 in (minimum)

NOTES:
1. "AVERAGE SIZE" IS THAT SIZE EXCEEDED BY AT LEAST 50% OF THE TOTAL WEIGHT OF THE TONNAGE SHIPPED; 50% OF THE TONNAGE SHALL CONSIST OF PIECES LARGER THAN THE "AVERAGE" SIZE.
2. PIECES SMALLER THAN THE MINIMUM SIZE SHOWN SHALL NOT EXCEED 15% OF THE TONNAGE SHIPPED.
3. THE TABLE ASSUMES A STONE DRY DENSITY OF 165 POUNDS PER CUBIC FOOT.
4. PLACE FILTER STONE TO SPECIFIED THICKNESS UNDER RIP RAP.
5. FILTER STONE ALTERNATIVE: PADOT CLASS 2 GEOTEXTILE MAY BE SUBSTITUTED FOR FILTER STONE AS FOLLOWS:
   TYPE A – UNDER R-3, R-4, R-5, AND R-6 RIP RAP.
   TYPE B – UNDER R-7 AND R-8 RIP RAP.
6. ALL APRONS ARE TO BE LEVEL AT ELEVATIONS MATCHING THE PIPE OUTLET INVERT.
7. ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

STORM SEWER ROCK APRONS

(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.

MAINTENANCE AND INSPECTION
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

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER JEFFREY M. MAUDEN No. PE078025
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1140 Virginia Drive • Fort Washington, PA 19034
T: 215-914-2050

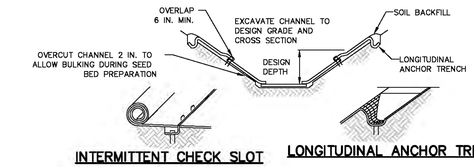
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EROSION AND SEDIMENT CONTROL DETAILS

SISTERS OF ST. BASIL
ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

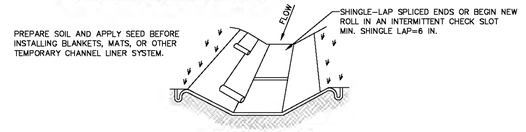
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JOB NO.: 7662	FILE NAME: 7662-S-ENS-DET
REF. NO.: ES20.11	
SHEET NO.: 11 OF 15	

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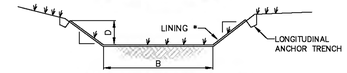


INTERMITTENT CHECK SLOT

LONGITUDINAL ANCHOR TRENCH



ISOMETRIC VIEW



CHANNEL CROSS-SECTION

* SEE MANUFACTURER'S LINING INSTALLATION DETAIL FOR STAPLE PATTERNS, VEGETATIVE STABILIZATION FOR SOIL AMENDMENTS, SEED MIXTURES AND MULCHING INFORMATION

NOTES:

ANCHOR TRENCHES SHALL BE INSTALLED AT BEGINNING AND END OF CHANNEL IN THE SAME MANNER AS LONGITUDINAL ANCHOR TRENCHES.

CHANNEL DIMENSIONS SHALL BE CONSTANTLY MAINTAINED. 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 LINING SHALL BE REPAIRED OR REPLACED WITHIN 48 HOURS OF DISCOVERY.

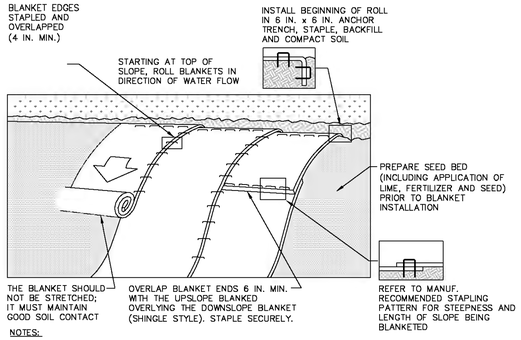
NO MORE THAN ONE THIRD OF THE SHOOT (GRASS LEAF) SHALL BE REMOVED IN ANY MOWING. GRASS HEIGHT SHALL BE MAINTAINED BETWEEN 2 AND 3 INCHES UNLESS OTHERWISE SPECIFIED. EXCESS VEGETATION SHALL BE REMOVED FROM PERMANENT CHANNELS TO ENSURE SUFFICIENT CHANNEL CAPACITY.

LINING TO BE NORTH AMERICAN GREEN, OR APPROVED EQUAL.

TRAPEZOIDAL SWALES

CHANNEL NO.	MIN. BOTTOM WIDTH (B) (FT)	DEPTH (D) (FT)	TOP WIDTH (B) (FT)	Z1	Z2	LINING
TS – 1	3	0.92	15.88	7	7	S75
PS – 1	3	0.64	11.96	7	7	S75
PS – 2	2	0.74	16.80	10	10	S75
PS – 3	2	0.75	17.00	10	10	S75
PS – 4	2	0.74	16.80	10	10	S75
PS – 5	2	0.83	10.30	5	5	S75
PS – 6	2	0.86	8.88	4	4	S75
PS – 7	2	0.79	17.80	10	10	S75
PS – 8	2	0.74	16.80	10	10	S75
PS – 9	2	0.82	16.76	9	9	S75
PS – 10	2	0.84	10.40	5	5	S75
PS – 11	2	0.86	10.60	5	5	S75
PS – 12	2	0.76	9.60	5	5	S75

SWALE DETAIL
NOT TO SCALE



NOTES:

MAPPING TO BE APPLIED ON ANY SLOPE STEEPER THAN 3:1 (<3:1)

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.

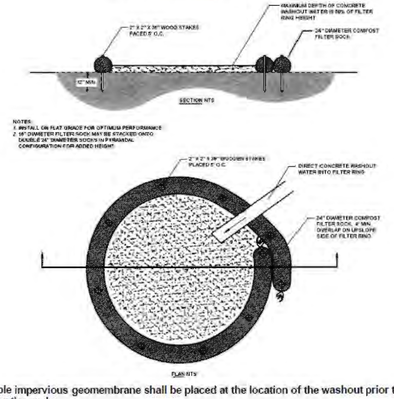
BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.

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.

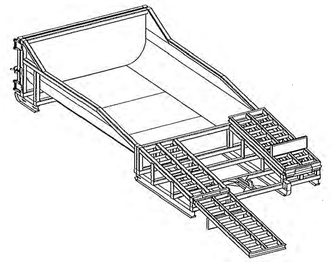
STANDARD CONSTRUCTION DETAIL #11-1
EROSION CONTROL BLANKET INSTALLATION
NOT TO SCALE

FIGURE 3.18
Typical Compost Sock Washout Installation



A suitable impervious geomembrane shall be placed at the location of the washout prior to installing the socks.
Adapted from Filtrexx

CONCRETE WASHOUT – COMPOST SOCK
N.T.S.



A PREFABRICATED WASHOUT CONTAINER MAY ALSO BE USED. IF IT IS, CARE SHOULD BE TAKEN TO ENSURE THAT THE CONTAINERS ARE INTENDED BY THE MANUFACTURER FOR USE AS CONCRETE WASHOUT BMPs, THAT THEY ARE WATERTIGHT, AND APPROPRIATELY SIZED. ACCUMULATED MATERIALS MUST BE PROPERLY DISPOSED OF WHEN THEY REACH THE CLEANOUT LEVEL.

THESE CONTAINERS CAN BE RELOCATED TO OTHER LOTS IF NEEDED.

CONSTRUCTION PROJECTS WHERE CONCRETE, STUCCO, MORTAR, GROUT, AND CEMENT ARE USED AS A CONSTRUCTION MATERIAL OR WHERE CEMENTITOUS WASTEWATER IS CREATED.

MAINTENANCE:
INSPECT AND CLEAN OUT WHEN ⅓ FULL OR AT THE LEVEL SPECIFIED BY THE MANUFACTURER, NOT ALLOWING THE CONTAINER TO OVERFLOW. INSPECT WASTEWATER LEVEL AND REQUEST A VACUUM IF NEEDED. THE WASTEWATER MUST BE DISPOSED OF OR TREATED AND RECYCLED IN AN ENVIRONMENTALLY SAFE MANNER AND IN ACCORDANCE WITH FEDERAL, STATE OR LOCAL REGULATORY GUIDELINES.

PORTABLE CONCRETE WASHOUT – CONTAINER
N.T.S.

ESE CONSULTANTS
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1140 Virginia Drive • Fort Washington, PA 19034
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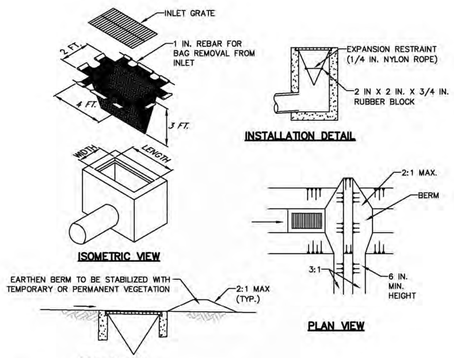
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EROSION AND SEDIMENT CONTROL DETAILS

SISTERS OF ST. BASIL
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NOTES:
THIS DEVICE IS AN ABACT FOR HQ WATERSHEDS
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.

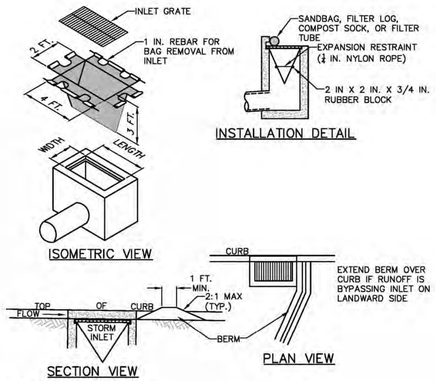
ROLLED EARTHEN BERM IN ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR REMAIN PERMANENTLY.

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 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 #4–16
FILTER BAG INLET PROTECTION – TYPE M INLET
(NOT TO SCALE)



NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

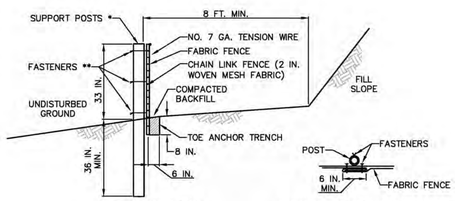
INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

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



* POSTS SPACED AT 10 FT. MAX. USE 2–1/2 IN. DIA HEAVY DUTY GALVANIZED OR ALUMINUM POSTS.

** CHAIN LINK TO POST FASTENERS SPACED AT 14 IN. MAX. USE NO. 9 GA. ALUMINUM WIRE OR NO. 9 GALVANIZED STEEL WIRE. FABRIC TO SHAIN FASTENERS SPACED AT 24 IN. MAX. ON CENTER.

NOTES:

FABRIC SHALL HAVE THE MINIMUM PROPERTIES AS SHOWN IN TABLE 4.3 OF THE PA DEP EROSION CONTROL MANUAL.

FABRIC WIDTH SHALL BE 42 IN. MINIMUM.

POSTS SHALL BE INSTALLED USING A POSTHOLE DRILL.

CHAIN LINK SHALL BE GALVANIZED NO. 11.5 GA. STEEL WIRE WITH 2–1/4 IN. OPENING, NO. 11 GA. ALUMINUM COATED STEEL WIRE IN ACCORDANCE WITH ASTM–A–491, OR GALVANIZED NO. 9 GA. STEEL WIRE TOP AND BOTTOM WITH GALVANIZED NO. 11 GA. STEEL INTERMEDIATE WIRES. NO. 7 GAGE TENSION WIRE TO BE INSTALLED HORIZONTALLY THROUGH HOLES AT TOP AND BOTTOM OF CHAIN–LINK FENCE OR ATTACHED WITH HOG RINGS AT 5 FT MAX. CENTERS.

SILT FENCE SHALL BE PLACED AT LEVEL EXISTING GRADE, BOTH ENDS OF THE FENCE SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT.

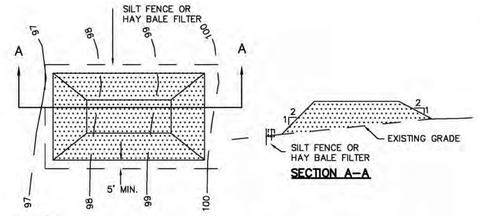
FENCE SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN TRIBUTARY AREA IS PERMANENTLY STABILIZED.

MAINTENANCE AND INSPECTION

SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH HALF THE ABOVE GROUND HEIGHT OF THE FENCE.

SILT FENCE SHALL BE INSPECTED ROUTINELY AND AFTER RUNOFF EVENTS TO DETERMINE IF MAINTENANCE IS REQUIRED.

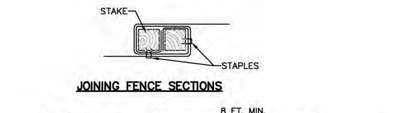
STANDARD CONSTRUCTION DETAIL #4–10
SUPER SILT FENCE
NOT TO SCALE

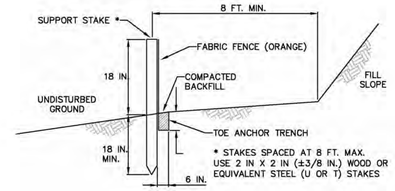


NOTES:

1. PLACE STOCKPILES AT LOCATIONS AS SHOWN ON THE SOIL EROSION AND SEDIMENT CONTROL PLAN.
2. ALL SIDE SLOPES SHALL BE 2 TO 1 OR FLATTER.
3. STOCKPILE SHALL RECEIVE A VEGETATIVE COVER IN ACCORDANCE WITH MINIMUM STABILIZATION REQUIREMENTS.
4. SILT FENCE OR HAY BALE FILTER SHALL BE INSTALLED AS DETAILED HEREON, BUT COMPOST FILTER SOCK OR ANOTHER ABACT BMP MUST BE DOWNSTREAM OF THE STOCKPILE.
5. LOCATION OF PROPOSED STOCKPILE WHICH AFFECT EROSION CONTROLS ARE SHOWN SCHEMATICALLY ONLY. ACTUAL STOCKPILE LOCATION MAY CHANGE DURING CONSTRUCTION.
6. SEE SEQUENCE OF CONSTRUCTION NOTES.
7. THE STOCKPILES MAY NOT EXCEED 35 FEET IN HEIGHT.

STOCKPILE DETAIL
(NOT TO SCALE)





NOTES:

FABRIC SHALL HAVE THE MINIMUM PROPERTIES AS SHOWN IN TABLE 4.3 OF THE PA DEP EROSION CONTROL MANUAL.

FABRIC WIDTH SHALL BE 30 IN. MINIMUM. STAKES SHALL BE HARDWOOD OR EQUIVALENT STEEL (U OR T) STAKES.

SILT FENCE SHALL BE PLACED AT LEVEL EXISTING GRADE, BOTH ENDS OF THE FENCE SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT.

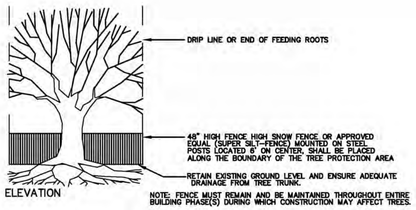
SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH HALF THE ABOVE GROUND HEIGHT OF THE FENCE.

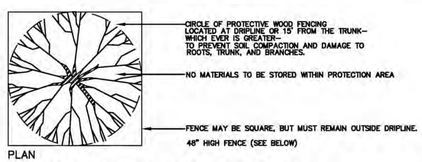
ANY SECTION OF SILT FENCE WHICH HAS BEEN UNDERMINED OR TOPPED SHALL BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET (STANDARD CONSTRUCTION DETAIL # 4–6).

FENCE SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN TRIBUTARY AREA IS PERMANENTLY STABILIZED.

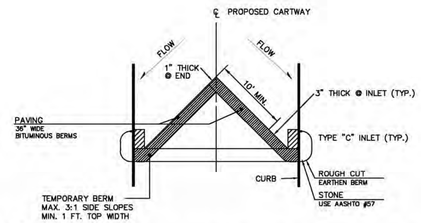
STANDARD SILT FENCE (18" HIGH)
(NOT TO SCALE)

TREE PROTECTION DETAIL: TREE CLUSTER
NOT TO SCALE





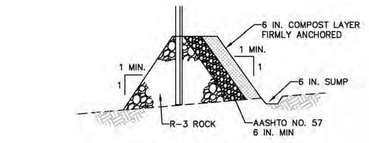
TREE PROTECTION DETAIL: SINGLE TREE
NOT TO SCALE

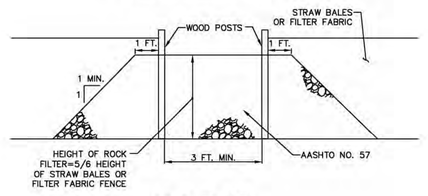


NOTES:

1. INSTALL ROUGH–CUT BERMS IMMEDIATELY AFTER ROUGH GRADING OF THE ROAD AREAS. THE TOP OF THE BERM ELEVATION SHALL BE A MINIMUM OF 6"ABOVE THE TOP OF GRATE ELEVATION FOR THE FULL LENGTH OF THE BERM.
2. INSTALL STONE BERMS IMMEDIATELY AFTER PLACEMENT OF THE STONE BASE COURSE. THE TOP OF STONE BERM ELEVATION SHALL BE A MINIMUM OF 6" ABOVE THE TOP OF GRATE ELEVATION FOR THE FULL LENGTH OF THE BERM.
3. INSTALL PAVING BERMS AFTER PLACEMENT OF THE BINDER COURSE. CONSTRUCT OF BINDER MATERIAL. THE TOP OF PAVING BERM ELEVATION SHALL BE A MINIMUM OF 3" ABOVE THE TOP OF GRATE ELEVATION FOR THE FULL LENGTH OF THE BERM.
4. ALL BERMS SHALL BE CONSTRUCTED SUCH THAT ALL ROAD RUNOFF IS DIRECTED TO THE INLETS.

CARTWAY DIVERSION BERMS
(NOT TO SCALE)



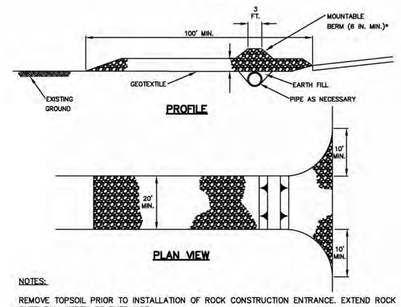


NOTES:

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.

ROCK FILTER OUTLET
(NOT TO SCALE)



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 DEPOSTED 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.

ROCK CONSTRUCTION ENTRANCE
(NOT TO SCALE)

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REV.	DATE	DESCRIPTION	DRAWN

EROSION AND SEDIMENT CONTROL DETAILS

SISTERS OF ST. BASIL
ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

DATE: 3–24–23	SCALE: AS NOTED
DESIGN:	DRAWN: EJS
JOB NO.: 7662	FILE NAME: 7662–S–ENS–DET
REF. NO.:	ES20.13
SHEET NO.:	13 OF 15

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GENERAL E&S NOTES

THE E&S PLAN HAS BEEN PREPARED TO FOLLOW THE GENERAL E&S PLANNING AND DESIGN REQUIREMENTS AS FOLLOWS:
- THE E&S PLAN MINIMIZES THE EXTENT & DURATION OF EARTH DISTURBANCE BY PROVIDING A LIMIT OF DISTURBANCE BOUNDARY AND A CONSTRUCTION SEQUENCE. DISTURBED AREAS WILL BE STABILIZED IN ACCORDANCE WITH THE SEQUENCE AND THE REQUIREMENTS OF THE MONTGOMERY COUNTY CONSERVATION DISTRICT.
- THE E&S PLAN MAXIMIZES PROTECTION OF EXISTING DRAINAGE FEATURES AND VEGETATED THROUGH THE ESTABLISHMENT OF A CONSERVATION AREA THAT PROTECTS EXISTING TREES AND WETLAND AREAS.
- THE E&S PLAN MINIMIZES SOIL COMPACTION BY PROVIDING A LIMIT OF DISTURBANCE BOUNDARY AND A CONSTRUCTION SEQUENCE.
- THE E&S PLAN UTILIZES OTHER MEASURES OR CONTROLS THAT PREVENT OR MINIMIZE GENERATION OF INCREASED STORMWATER RUNOFF. THREE STORMWATER BASINS WILL CONTROL THE PEAK FLOW RATE LEAVING THE SITE DURING CONSTRUCTION SO THAT THEY DO NOT EXCEED EXISTING CONDITIONS.

STANDARD EROSION AND SEDIMENT CONTROL 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. THE SITE ONE CALL SERIAL NUMBERS ARE 20160290792, 20160290793, 20160290819, AND 20160290837.
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 MATERIALS.
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 MAP(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 DOWN ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS.
14. VEHICLES AND EQUIPMENT MAY NEITHER ENTER DIRECTLY NOR EXIT DIRECTLY FROM ANY AREAS THAT ARE NOT SHOWN ON THE E&S PLAN WITH A CONSTRUCTION ENTRANCE.
15. 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 MEASURABLE RUNOFF EVENT (0.25" OR MORE OF RAINFALL) 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.
16. 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.
17. 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.
18. ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS.
19. 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.
20. 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.
21. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
22. 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.
23. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
24. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
25. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
26. 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.
27. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATION 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.
28. 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.
29. 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.
30. 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.
31. 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.
32. UPON COMPLETING 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.
33. 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.
34. CONCRETE WASH WATER SHALL BE HANDLED IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS. IN NO CASE SHALL IT BE ALLOWED TO ENTER ANY SURFACE WATERS OR GROUNDWATER SYSTEMS.
35. ALL CHANNELS SHALL BE KEPT FREE OF OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO FILL, ROCKS, LEAVES, WOODY DEBRIS, ACCUMULATED SEDIMENT, EXCESS VEGETATION, AND CONSTRUCTION MATERIAL/WASTES.
36. UNDERGROUND UTILITIES CUTTING THROUGH ANY ACTIVE CHANNEL SHALL BE IMMEDIATELY BACKFILLED AND THE CHANNEL RESTORED TO ITS ORIGINAL CROSS-SECTION AND PROTECTIVE LINING. ANY BASE FLOW WITHIN THE CHANNEL SHALL BE CONVEYED PAST THE WORK AREA IN THE MANNER DESCRIBED IN THIS PLAN UNTIL SUCH RESTORATION IS COMPLETE.
37. CHANNELS HAVING RIPRAP, RENO MATTRESS, OR GABION LININGS MUST BE SUFFICIENTLY OVER EXCAVATED SO THAT THE DESIGN DIMENSIONS WILL BE PROVIDED AFTER PLACEMENT OF THE PROTECTIVE LINING.
38. SEDIMENT BASINS AND/OR TRAPS SHALL BE KEPT FREE OF ALL CONSTRUCTION WASTE, WASH WATER, AND OTHER DEBRIS HAVING POTENTIAL TO CLOG THE BASIN/TRAP OUTLET STRUCTURES AND/OR POLLUTE THE SURFACE WATERS.
39. SEDIMENT BASINS SHALL BE PROTECTED FROM UNAUTHORIZED ACTS BY THIRD PARTIES.
40. ANY DAMAGES THAT OCCUR IN WHOLE OR IN PART AS A RESULT OF BASIN OR TRAP DISCHARGE SHALL BE IMMEDIATELY REPAIRED BY THE PERMITTEE IN A PERMANENT MANNER SATISFACTORY TO THE MUNICIPALITY, LOCAL CONSERVATION DISTRICT, AND THE OWNER OF THE DAMAGED PROPERTY.
41. UPON REQUEST, THE APPLICANT OR HIS CONTRACTOR SHALL PROVIDE AN AS-BUILT (RECORD DRAWING) FOR ANY SEDIMENT BASIN OR TRAP TO THE MUNICIPAL INSPECTOR, LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.
42. EROSION CONTROL BLANKETING SHALL BE INSTALLED ON ALL SLOPES 3H:1V OR STEEPER WITHIN 50 FEET OF A SURFACE WATER AND ON ALL OTHER DISTURBED AREAS SPECIFIED ON THE PLAN MAPS AND/OR DETAIL SHEETS.
43. FILL MATERIAL FOR EMBANKMENTS SHALL BE FREE OR ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE COMPACTED IN MAXIMUM 8 INCH LAYERED LIFTS AT 95% DENSITY.

TEMPORARY STABILIZATION AND PERMANENT STABILIZATION

1. HAY OR STRAW MULCH MUST BE APPLIED AT 3.0 TONS PER ACRE.
2. STRAW AND HAY MULCH SHOULD BE ANCHORED OR TACKIFIED IMMEDIATELY AFTER APPLICATION TO PREVENT BEING WINDBLOWN. A TRACTOR-DRAWN IMPLEMENT MAY BE USED TO "CRIMP" THE STRAW OR HAY INTO THE SOIL - ABOUT 3 INCHES. THIS METHOD SHOULD BE LIMITED TO SLOPES NO STEEPER THAN 3H:1V. THE MACHINERY SHOULD BE OPERATED ON THE CONTOUR. NOTE: CRIMPING OF HAY OR STRAW BY RUNNING OVER IT WITH TRACKED MACHINERY IS NOT RECOMMENDED.
3. POLYMERIC AND GUM TACKIFIERS MIXED AND APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS MAY BE USED TO TACK MULCH. AVOID APPLICATION DURING RAIN AND ON WINDY DAYS. A 24-HOUR CURING PERIOD AND A SOIL TEMPERATURE HIGHER THAN 45°F ARE TYPICALLY REQUIRED. APPLICATION SHOULD GENERALLY BE HEAVIEST AT EDGES OF SEEDED AREAS AND AT CRESTS OF RIDGES AND BANKS TO PREVENT LOSS BY WIND. THE REMAINDER OF THE AREA SHOULD HAVE BINDER APPLIED UNIFORMLY. BINDERS MAY BE APPLIED AFTER MULCH IS SPREAD OR SPRAYED INTO THE MULCH AS IT IS BEING BLOWN ONTO THE SOIL. APPLYING STRAW AND BINDER TOGETHER IS GENERALLY MORE EFFECTIVE.
4. MULCH WITH MULCH CONTROL NETTING OR EROSION CONTROL BLANKETS MUST BE INSTALLED ON ALL SLOPES 3:1 OR STEEPER.
5. STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN.
6. 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]
7. 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.
8. GRADED AREAS SHOULD BE SCARIFIED OR OTHERWISE LOOSENED AS DESCRIBED ON PAGE 263 OF THE PADEP E&S MANUAL, MARCH 2012 OR LATEST EDITION.
9. THE NPDES BOUNDARY IS EQUAL TO 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, SUCH AS UTILITIES AND ROADWAYS.
10. THE PROJECT IS IN THE MINGO CREEK WATERSHED.

SURFACE STABILIZATION CRITERIA

A. TEMPORARY COVER: FOR EXPOSURE PERIODS OF 20 DAYS TO 12 MONTHS.

1. SEED - MINIMUM 90% PURITY AND 85% GERMINATION.
   FROM APRIL 15 TO OCTOBER 15:
   50% WINTER RYE
   50% ANNUAL RYE GRASS
   AT 40 LBS/ACRE

   FROM OCTOBER 15 TO APRIL 15:
   ANNUAL RYE GRASS AT 40 LBS/ACRE
2. FERTILIZER - STARTER QUALITY
   12-20-20 AT 1 TON/ACRE
3. LIME - AGRICULTURAL LIMESTONE
   85% MINIMUM OF CARBONATES AT 3 TONS/ACRE
4. MULCH - ALL YEAR.
   STRAW OR HAY AT 3.0 TONS/ACRE

   ALTERNATE - HYDRAULICALLY APPLIED
   WOOD CELLULOSE FIBER AT 47 #/1000-SF (WOOD CELLULOSE ON SLOPES STEEPER THAN 5% WILL REQUIRE TACKIFIER)

B. PERMANENT COVER: (FOR EXPOSURE PERIODS OVER 12 MONTHS)

1. SEED- MINIMUM 90% PURITY AND 85% GERMINATION.
   FROM APRIL 15 TO OCTOBER 15:
   60% KENTUCKY BLUEGRASS
   10% PENNFINE PERENNIAL RYEGRASS
   30% PENNLAWN FESCUE
   AT 4 lbs/1000 SQ. FT.

   OPTIMUM SEEDING MARCH 15 TO JUNE 1 OR AUGUST 15 TO OCTOBER 15, ACCEPTABLE PLANTING JUNE 1 TO AUGUST 14
   PERMANENT COVER: DETENTION BASINS DEERTONGUE GRASS ESTABLISHMENT

   A) DEERTONGUE GRASS, PLUS COMPANION (USE ONE) 10 LBS/ACRE
   B) TALL FESCUE, OR 25 LBS/ACRE
   C) BIRDSFOOT TREFOIL, PLUS NURSE GRASS (USE ONE) 5 LBS/ACRE
   D) ANNUAL RYEGRASS, OR 30 LBS/ACRE
   E) PERENNIAL RYEGRASS 30 LBS/ACRE

   FROM OCTOBER 15 TO APRIL 15:
   SEE TEMPORARY COVER. RESEED WITH PERMANENT COVER FROM APRIL 15 TO OCTOBER 15.
2. FERTILIZER - STANDARD QUALITY
   10-10-10 STARTER FERTILIZER AT 1.0 TON/ACRE
3. LIME - AGRICULTURAL LIMESTONE
   85% MINIMUM OF CARBONATES AT 3.0 TONS/ACRE
4. MULCH - ALL YEAR
   STRAW OR HAY AT 3.0 TONS/ACRE
   ALTERNATE - HYDRAULICALLY APPLIED WOOD CELLULOSE FIBER:
   320 #/1000-SF
5. SOD - BLUE TAG CERTIFIED SEED, STANDARD QUALITY WEED FREE MIXED KENTUCKY BLUEGRASS 1" THICK, 12-16" WIDE, 4-5' LONG.

C. NOTES:
1. ANY DISTURBED AREA ON WHICH ACTIVITY HAS CEASED AND WHICH WILL REMAIN EXPOSED FOR MORE THAN 20 DAYS MUST BE SEEDED AND MULCHED OR HYDROSEEDED IMMEDIATELY. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN 1 YEAR MAY BE SEEDED AND MULCH WITH A QUICK GROWING TEMPORARY SEEDING MIXTURE AND MULCH.
2. DISTURBED AREAS WHICH ARE EITHER AT FINISHED GRADE OR WILL NOT BE REDISTURBED WITHIN 1 YEAR MUST BE SEEDED AND MULCHED WITH A PERMANENT SEED MIXTURE AND MULCH.
3. MULCH OR HYDROSEED BASINS, TRAPS, SWALES AND STOCKPILES IMMEDIATELY AFTER SEEDING. ANCHORED NETTING IS TO BE INSTALLED OVER MULCH ON SLOPES 3:1 MULCH AND NETTING NEED NOT BE INSTALLED WITHIN SEDIMENT BASINS AND TRAPS BELOW CLEANOUT ELEVATIONS.

COMMONWEALTH OF PENNSYLVANIA REGISTERED JEFFREY M. MAUDEN ENGINEER No. PE078105 PROFESSIONAL

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REV.	DATE	DESCRIPTION	DRAWN

EROSION AND SEDIMENT CONTROL NOTES

SISTERS OF ST. BASIL
ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

DATE: 3-24-23	SCALE: AS NOTED
DESIGN:	DRAWN: EJS
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SHEET NO.: 14 OF 15	

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TYPICAL SEDIMENT BASIN CONSTRUCTION SEQUENCE

1. THE SEDIMENT BASIN SHOWN ON THESE PLANS DEPICT REQUIRED GRADING TO OBTAIN THE REQUIRED STORAGE VOLUME.
2. BAFFLES MUST BE INSTALLED TO ALLOW BASIN MAINTENANCE AND CLEAN OUT.
3. SEDIMENT BASINS MUST BE STRUCTURALLY SOUND AND PROTECTED FROM UNAUTHORIZED ACTS OF THIRD PARTIES.
4. APPROVAL OF THE USE OF SKIMMERS DOES NOT APPROVE USE OF ANY SKIMMERS IN VIOLATION OF ANY PATENT, PATENT RIGHTS, AND/OR PATENT LAWS.
5. SITE PREPARATION: ONLY LIMITED UPSLOPE DISTURBANCE WILL BE PERMITTED TO PROVIDE ACCESS TO THE SEDIMENT BASIN FOR GRADING, ACQUIRING BORROW OR PLACING FILL DURING CONSTRUCTION OF BASINS. PERIMETER SEDIMENT CONTROL DEVICES MUST BE INSTALLED PRIOR TO CLEARING AND GRUBBING. AREAS WHERE THE EMBANKMENT IS TO BE PLACED SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS OR OTHER OBJECTIONABLE MATERIAL. THE POOL AREA SHALL NOT BE CLEARED UNTIL COMPLETION OF THE DAM EMBANKMENT UNLESS THE POOL AREA IS TO BE USED FOR BORROW. IN ORDER TO FACILITATE CLEAN-OUT AND RESTORATION, THE POOL AREA (MEASURED AT THE TOP OF THE PIPE SPILLWAY) SHALL BE CLEARED OF ALL BRUSH, TREES, AND OTHER OBJECTIONABLE MATERIALS.
6. CUT-OFF TRENCH: A CUT-OFF TRENCH SHALL BE EXCAVATED ALONG THE CENTERLINE OF EARTH FILL EMBANKMENTS. THE MINIMUM DEPTH SHALL BE FOUR FEET. THE CUT-OFF TRENCH SHALL EXTEND UP BOTH ABUTMENTS TO THE RISER CREST ELEVATION. THE MINIMUM BOTTOM WIDTH SHALL BE TWO FEET, BUT WIDE ENOUGH TO PERMIT OPERATION OF EXCAVATION AND COMPACTION EQUIPMENT. THE SIDE SLOPES SHALL BE NO STEEPER THAN 1:1. COMPACTION REQUIREMENTS SHALL BE THE SAME AS THOSE FOR THE EMBANKMENT. THE TRENCH SHALL BE DEWATERED (USING APPROVED METHODS) DURING THE BACKFILLING-COMPACTION OPERATIONS.
7. EMBANKMENT & OUTLET STRUCTURE/PIPE: THE FILL MATERIAL SHALL BE TAKEN FROM APPROVED AREAS SHOWN ON THE PLANS. IT SHALL BE CLEAN MINERAL SOIL FREE OF ROOTS, WOODY VEGETATION, OVERSIZED STONES, ROCKS, OR OTHER OR OTHER OBJECTIONABLE MATERIAL. RELATIVELY PREVIOUS MATERIALS SUCH AS SAND OR GRAVEL (UNIFIED SOIL CLASSES GW, GP, SW & SP) OR ORGANIC MATERIALS (UNIFIED SOIL CLASSES OL AND OH) SHALL NOT BE PLACED IN THE EMBANKMENT. AREAS ON WHICH FILL IS TO BE PLACED SHALL BE SCARIFIED PRIOR TO PLACEMENT OF FILL. THE FILL MATERIAL SHALL CONTAIN SUFFICIENT MOISTURE SO THAT IT CAN BE FORMED BY HAND INTO A BALL WITHOUT CRUMBLING. IF WATER CAN BE SQUEEZED OUT OF THE BALL, IT IS TOO WET FOR PROPER COMPACTION. FILL MATERIAL SHALL BE PLACED IN SIX-INCH TO EIGHT-INCH THICK CONTINUOUS LIFTS OVER THE ENTIRE LENGTH OF THE FILL. COMPACTION SHALL BE OBTAINED BY ROUTING AND HAULING THE CONSTRUCTION EQUIPMENT OVER THE FILL SO THAT THE ENTIRE SURFACE OF EACH LAYER OF THE FILL IS TRAVERSED BY AT LEAST ONE WHEEL OR TREAD TRACK OF THE EQUIPMENT OR BY THE USE OF A COMPACTOR. FILL COMPACTION SHALL BE AT LEAST 95 PERCENT OF THE MAXIMUM DRY WEIGHT DENSITY. THE EMBANKMENT SHALL BE CONSTRUCTED TO AN ELEVATION 10 PERCENT HIGHER THAN THE DESIGN HEIGHT TO ALLOW FOR SETTLEMENT. IF THE BASIN INCLUDES AN OUTLET STRUCTURE AND OUTLET PIPE, THEY SHALL BE CONSTRUCTED DURING THIS STEP.
8. PRINCIPAL SPILLWAY: CONCRETE RISERS SHALL BE POURED WITH THE PRINCIPAL SPILLWAY IN PLACE OR PRECASTS WITH VOIDS AROUND THE PRINCIPAL SPILLWAY FILLED WITH CONCRETE OR SHRINK PROOF GROUT FOR WATERTIGHT CONNECTION. THE CONNECTION BETWEEN THE RISER AND THE RISER BASE SHALL BE WATERTIGHT. ALL CONNECTIONS BETWEEN BARREL SECTIONS MUST BE ACHIEVED BY APPROVED WATERTIGHT BAND ASSEMBLIES. THE BARREL AND RISER SHALL BE PLACED ON A FIRM, SMOOTH FOUNDATION OF IMPERVIOUS SOIL AS THE EMBANKMENT IS CONSTRUCTED. BREACHING THE EMBANKMENT TO INSTALL THE BARREL IS UNACCEPTABLE. PERVIOUS MATERIALS SUCH AS SAND, GRAVEL, OR CRUSHED STONE SHALL NOT BE USED AS BACKFILL AROUND THE PIPE OR ANTI-SEEP COLLARS. THE FILL MATERIAL AROUND THE PIPE SPILLWAY SHALL BE PLACED IN FOUR INCH LIFTS AND HAND COMPACTED UNDER AND AROUND THE PIPE TO AT LEAST THE SAME DENSITY AS THE ADJACENT EMBANKMENT. A DEPTH OF 1.5 TIMES THE PIPE DIAMETER (MIN.) SHALL BE BACKFILLED OVER THE PRINCIPAL SPILLWAY AND HAND COMPACTED BEFORE CROSSING IT WITH CONSTRUCTION EQUIPMENT. TEMPORARY RISERS, IF USED, SHALL BE ALUMINUM OR GALVANIZED STEEL CORRUGATED PIPE WITH 2 2/3" X 1/2" HELICAL. UPON INSTALLATION OF THE TEMPORARY SEDIMENT BASIN RISER(S) OR OTHER OUTLET CONTROL, AN IMMEDIATE INSPECTION SHALL BE DONE BY A QUALIFIED SITE REPRESENTATIVE AND THE MONTGOMERY COUNTY CONSERVATION DISTRICT SHALL BE NOTIFIED IN WRITING THAT THE RISER IS SEALED.
9. EMERGENCY SPILLWAY: THE EMERGENCY SPILLWAY SHALL BE INSTALLED IN UNDISTURBED GROUND OR AS SHOWN ON PLAN. THE ACHIEVEMENT OF PLANNED ELEVATIONS, GRADES, DESIGN WIDTH, ENTRANCE AND EXIT CHANNEL SLOPES ARE CRITICAL TO THE SUCCESSFUL OPERATION OF EMERGENCY SPILLWAY AND MUST BE CONSTRUCTED WITHIN A TOLERANCE OF PLUS OR MINUS 0.2 FEET.
10. VEGETATIVE TREATMENT: STABILIZE THE EMBANKMENT IN ACCORDANCE WITH THE APPROPRIATE VEGETATIVE STANDARD AND SPECIFICATIONS IMMEDIATELY FOLLOWING CONSTRUCTION. IN NO CASE SHALL THE EMBANKMENT REMAIN UNSTABILIZED FOR MORE THAN SEVEN (7) DAYS. ONCE CONSTRUCTED, THE TOP AND OUTSIDE FACE OF THE EMBANKMENT SHALL BE STABILIZED WITH SEED AND MULCH. THE REMAINDER OF THE INTERIOR SLOPES SHOULD BE STABILIZED (ONE TIME) WITH SEED AND MULCH UPON BASIN COMPLETION AND MONITORED AND MAINTAINED EROSION FREE DURING THE LIFE OF THE BASIN.
11. SAFETY: LOCAL REQUIREMENTS CONCERNING FENCING AND SIGNS SHALL BE MET, WARNING THE PUBLIC OF HAZARDS OF SOFT SEDIMENT AND FLOODWATER.
12. MAINTENANCE: REPAIR OF ALL DAMAGE CAUSED BY SOIL EROSION AND CONSTRUCTION EQUIPMENT AT OR BEFORE THE END OF EACH WORKING DAY. A CLEANOUT STAKE SHALL BE PLACED NEAR THE CENTER OF EACH BASIN. SEDIMENT SHALL BE REMOVED FROM THE BASIN WHEN IT REACHES THE SPECIFIED ELEVATION SHOWN ON THE CLEAN-OUT STAKES. THIS SEDIMENT SHALL BE PLACED IN SUCH A MANNER THAT IT WILL NOT ERODE FROM THE SITE. THE SEDIMENT SHALL NOT BE DEPOSITED DOWNSTREAM FROM THE EMBANKMENT, ADJACENT TO A STREAM OR FLOODPLAIN. DISPOSAL AREAS MUST BE STABILIZED.
13. FINAL DISPOSAL: WHEN TEMPORARY STRUCTURES HAVE SERVED THEIR INTENDED PURPOSE AND THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED, THE EMBANKMENT AND RESULTING SEDIMENT DEPOSITS ARE TO BE LEVELED OR OTHERWISE DISPOSED OF IN ACCORDANCE WITH THE APPROVED SEDIMENT CONTROL PLAN. THE PROPOSED USE OF A SEDIMENT BASIN SITE WILL OFTEN DICTATE FINAL DISPOSITION OF THE BASIN AND ANY SEDIMENT CONTAINED THERein. IF THE SITE IS SCHEDULED FOR FUTURE CONSTRUCTION, THEN THE BASIN MATERIAL AND TRAPPED SEDIMENTS MUST BE REMOVED AND SAFELY DISPOSED OF AND THE BASIN SHALL BE BACKFILLED WITH A STRUCTURAL FILL. WHEN THE BASIN AREA IS TO REMAIN OPEN SPACE, THE POND MAY BE PUMPED DRY (USING APPROVED METHODS), GRADED, AND BACKFILLED.
14. CONVERSION TO STORMWATER MANAGEMENT STRUCTURE: AFTER PERMANENT STABILIZATION OF ALL DISTURBED CONTRIBUTORY DRAINAGE AREAS, TEMPORARY SEDIMENT BASINS, IF INITIALLY BUILT AND CERTIFIED TO MEET PERMANENT STANDARDS, MAY BE CONVERTED TO PERMANENT USE, THE OUTLET STRUCTURE MUST BE MODIFIED IN ACCORDANCE WITH APPROVED STORMWATER MANAGEMENT DESIGN PLANS. THE BASIN SHALL BE EXCAVATED TO REMOVE ACCUMULATED SEDIMENT AND TO ACHIEVE THE FINAL GRADING VOLUME. CARE SHALL BE TAKEN NOT TO PUNCTURE THE LINER DURING CONVERSION. CONVERSION CAN ONLY TAKE PLACE AFTER ALL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED TO THE SATISFACTION OF THE INSPECTION AUTHORITY AND THE STORM DRAINS HAVE BEEN FLUSHED.

TYPICAL SEDIMENT BASIN REMOVAL SEQUENCE

NOTE: SEDIMENT BASIN TEMPORARY CONTROLS, INCLUDING THE TEMPORARY WEIR, CAN BE REMOVED WHEN THE VEGETATED AREAS SHALL BE CONSIDERED PERMANENTLY STABILIZED WHEN A UNIFORM 70% VEGETATIVE COVER OF EROSION RESISTANT PERENNIAL SPECIES HAS BEEN ACHIEVED ACROSS THE ENTIRE BMP DRAINAGE AREA, OR THE DISTURBED AREA IS COVERED WITH AN ACCEPTABLE BMP WHICH PERMANENTLY MINIMIZES ACCELERATED EROSION AND SEDIMENTATION. UNTIL SUCH TIME AS THIS STANDARD IS ACHIEVED, INTERIM STABILIZATION MEASURES AND TEMPORARY EROSION AND SEDIMENT CONTROL BMPs THAT ARE USED TO TREAT PROJECT RUNOFF MAY NOT BE REMOVED.

1. DEWATER THE BASIN PER THE PUMPED WATER SILTATION SUMP DETAIL OR PUMPED WATER SILTATION BASIN DETAILS.
2. PERFORM ADDITIONAL SAMPLING OF THE SEDIMENT IN THE BASE OF THE TEMPORARY BASIN PRIOR TO CONVERSION TO VERIFY CONTAMINANT CONCENTRATIONS DO NOT EXCEED ALLOWABLE LIMITS. REMOVE ACCUMULATED SEDIMENT. MIX WITH UNIT TOPSOIL AND STABILIZE.
3. REGRADE THE AREA TO PROPOSED FINAL GRADES.

OTHER BMP'S

1. AT STREAM CROSSINGS, 50' BUFFER AREAS SHOULD BE MAINTAINED. WITHIN BUFFERS, CLEARING, SOD DISTURBANCES, EXCAVATION, AND EQUIPMENT TRAFFIC SHOULD BE MINIMIZED. ACTIVITIES SUCH AS STACKING LOGS, BURNING CLEARED BRUSH, DISCHARGING RAINWATER FROM TRENCHES, WELDING PIPE SECTIONS, REFUELING AND MAINTAINING EQUIPMENT SHOULD BE ACCOMPLISHED OUTSIDE OF BUFFERS.

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.

TYPICAL UTILITY CONSTRUCTION SEQUENCE

NOTE: UTILITY TRENCHING OPERATIONS SHALL BE LIMITED TO THE LENGTH OF PIPE THAT CAN BE INSTALLED, BACKFILLED AND STABILIZED IN ONE (1) WORKING DAY.

1. PLACE EXCAVATED MATERIAL ON THE UPHILL SIDE OF TRENCHES.
2. INSTALL UTILITIES AND STABILIZE BACKFILLED TRENCHES IMMEDIATELY.
3. BACKFILL TRENCHES WITH COMPACTED EARTH IN TOWNSHIP ROADS.
4. ADDITIONAL REQUIREMENTS FOR STORM SEWERS:
   a. IMMEDIATELY AFTER INLETS ARE PLACED AND STORM SEWERS ARE FUNCTIONAL, INSTALL CARTWAY DIVERSION BERMS-ROUGH CUT, AS SHOWN ON THE PLANS.
   b. IMMEDIATELY AFTER ROADWAY STONE BALLAST IS PLACED, INSTALL CARTWAY DIVERSION BERMS-STONE.
   c. IMMEDIATELY AFTER THE BINDER COURSE IS PLACED, INSTALL CARTWAY DIVERSION BERMS-PAVING.

CRITICAL STAGES

THE CRITICAL STAGES OF THIS PROJECT INCLUDE THE CONSTRUCTION OF THE INFILTRATION BASINS (BASIN 1, 2, AND 3A), THE CONSTRUCTION OF DETENTION BASINS (BASINS 3A AND 4), THE CONSTRUCTION OF THEIR OUTLET BARRELS, AND THEIR CONVERSION TO THE FINAL CONDITION. THE CONSTRUCTION OF THE UNDERGROUND INFILTRATION BASINS (1, 2, AND 2B) IS ALSO A CRITICAL STAGE. THESE BMPs ARE REQUIRED TO BE INSPECTED DURING INSTALLATION AND MUST BE SIGNED OFF ON PRIOR TO NOTICE OF TERMINATION. THE RESPONSIBLE PARTY, THE DESIGN PROFESSIONAL, AND/OR AN AGENT OF SUCH WILL BE PRESENT ON-SITE DURING PREPARATION AND INSTALLATION OF THE PROPOSED BMPs.

THERMAL IMPACT MEASURES

RUNOFF FROM THE PROPOSED IMPERVIOUS SURFACES WILL BE WARMEST FROM THE STORM'S FIRST FLUSH. THE RUNOFF WILL BE CONVEYED THROUGH AN UNDERGROUND PIPE NETWORK TO AN INFILTRATION SYSTEM AND/OR A WET POND DESIGNED WITH A CAPTURE & RE-USE IRRIGATION SYSTEM. TRAVELING THROUGH THE UNDERGROUND PIPES WILL GIVE THE RUNOFF AN OPPORTUNITY TO COOL BECAUSE THE GROUND IS COOLER THAN THE AIRE. ONCE THE FIRST FLUSH REACHES THE BMPs, IT WILL BE INFILTRATION INTO THE GROUND OR STORED WITHIN THE WET POND; SO, THE WARMEST RUNOFF WILL NOT DRAIN DIRECTLY TO THE WATERCOURSE.

TYPICAL LOT CONSTRUCTION SEQUENCE - AS NEEDED

1. INSTALL PERIMETER CONTROL ON THE LOT DOWNHILL SIDE OF PROPOSED CONSTRUCTION AREAS.
2. CLEAR, GRUB AND ROUGH GRADE FOR THE LOT ENTRANCE AT THE DRIVEWAY. STABILIZE DRIVE AREAS IMMEDIATELY WITH THE DRIVEWAY STONE.
3. CLEAR, GRUB AND ROUGH GRADE LOT AREAS AND CONSTRUCT THE INDIVIDUAL UNIT & MODEL HOME AND ASSOCIATED UTILITIES TO THE UNITS.
4. FINE GRADE AND STABILIZE THE UNITS IN ACCORDANCE WITH THE SURFACE STABILIZATION CRITERIA FOR PERMANENT COVER.
5. AFTER THE LOT IS COMPLETELY STABILIZED REMOVE PERIMETER CONTROL. RE-STABILIZE AREAS DISTURBED DURING REMOVAL OF FENCING.

SOURCE: USDA NATURAL RESOURCES CONSERVATION SERVICE SCALE: 1"=200'

SOILS MAP

SEQUENCE OF CONSTRUCTION

FOLLOWING THIS SEQUENCE WILL BENEFIT THE SOIL EROSION AND SEDIMENT CONTROL DESIGN GOALS FOR THIS SITE. THE SEQUENCE MINIMIZES THE EXTENT & DURATION OF EARTH DISTURBANCE AND MINIMIZES SOIL COMPACTION WHILE MAXIMIZING PROTECTION OF EXISTING DRAINAGE FEATURES AND VEGETATION. WHERE NEEDED, THIS PLAN & SEQUENCE UTILIZE OTHER MEASURES OR CONTROLS THAT PREVENT OR MINIMIZE THE GENERATION OF INCREASED STORMWATER RUNOFF.

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. DEVIATION FROM THE SEQUENCE MUST BE APPROVED BY THE MONTGOMERY COUNTY CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO IMPLEMENTATION. EACH STEP OF THE SEQUENCE SHALL BE COMPLETED BEFORE PROCEEDING TO THE NEXT STEP. CLEARING AND GRUBBING SHALL BE LIMITED TO ONLY THOSE AREAS DESCRIBED IN EACH STAGE.

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, AND A REPRESENTATIVE FROM THE MONTGOMERY COUNTY CONSERVATION DISTRICT TO AN ON-SITE PRECONSTRUCTION MEETING.

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.

UPON INSTALLATION OR STABILIZATION OF ALL PERIMETER SEDIMENT CONTROL BMPS AND AT LEAST 3 DAYS PRIOR TO PROCEEDING WITH THE BULK EARTH DISTURBANCE ACTIVITIES, THE PERMITTEE OR CO-PERMITTEE SHALL PROVIDE NOTIFICATION TO THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT.

ONLY LIMITED CLEARING AND GRUBBING IS PERMITTED FOR THE SOIL REMEDIATION, WHICH INCLUDES BASIN INSTALLATIONS. UPON THE COMPLETION OF THE SEDIMENT BASINS AND/OR TRAPS, OTHER CLEARING AND GRUBBING FOR THE REMAINDER OF THE E&S CONTROL INSTALLATION SHALL OCCUR. SITE WIDE CLEARING AND GRUBBING SHALL NOT OCCUR UNTIL ALL REQUIRED E&S CONTROLS HAVE BEEN INSTALLED. ADDITIONALLY, IF CUT/FILL DOESN'T BALANCE FOR THESE INSTALLATIONS, CLEAR SPOIL OR BORROW AREAS NEED TO BE IDENTIFIED. CONSIDER SOIL TYPES FOR BERM COMPACTION WHEN LOCATING A BORROW AREA.

AS DISTURBED AREAS APPROACH FINAL GRADE, PREPARATIONS SHALL BE MADE FOR SEEDING AND MULCHING TO BEGIN. ANTICIPATE THE COMPLETION DATE AND SCHEDULE THE SEEDER IN NO CASE SHOULD AN AREA EXCEEDING 15,000 SF (0.344 AC.), WHICH IS TO BE STABILIZED BY VEGETATION, REACH FINAL GRADE WITHOUT BEING SEEDED AND MULCHED.

IN ALL WATERSHEDS, CESSATION OF ACTIVITY FOR AT LEAST 4 DAYS REQUIRES TEMPORARY STABILIZATION.

LIMIT OF DISTURBANCE/CLEARING MUST BE DELINEATED WITH ORANGE CONSTRUCTION FENCE PRIOR TO EARTH MOVING ACTIVITIES. TREE PROTECTION ZONES WILL BE DELINEATED PRIOR TO BEGINNING CONSTRUCTION.

IT IS RECOMMENDED THAT INLETS LOCATED WITHIN GRASSED AREA AND PCSM BMP AREAS SHALL HAVE THE JOINTS OF THE INLET BOX AND TOP SEALED WITH MASTIC OR EQUIVALENT TO PREVENT SOIL FROM WASHING INTO THE STORM SEWER IF REQUIRED BY THE MONTGOMERY COUNTY CONSERVATION DISTRICT OR DEPARTMENT.

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE, EACH STEP OF THE SEQUENCE SHALL BE COMPLETED BEFORE PROCEEDING TO THE NEXT STEP, EXCEPT WHERE NOTED. DEVIATION FROM THE SEQUENCE MUST BE APPROVED BY THE MONTGOMERY COUNTY CONSERVATION DISTRICT OR THE DEPARTMENT PRIOR TO IMPLEMENTATION:

PHASE #1

1. INSTALL THE TEMPORARY STONE CONSTRUCTION ENTRANCES AT ROAD A.
2. STAKE OUT THE LIMITS OF DISTURBANCE, INCLUDING THE INSTALLATION OF PERIMETER CONTROLS, TREE PROTECTION FENCE, SILTFENCE, AND SUPER SILTFENCE IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL PLAN.
3. INSTALL CONSTRUCTION SAFETY FENCE AROUND THE INFILTRATION BASIN AREA AS INDICATED ON THE EROSION AND SEDIMENT CONTROL PLAN. (NOTE: THIS FENCE CAN BE TEMPORARILY REMOVED DURING CONSTRUCTION TO ALLOW ACCESS FOR THE REMOVAL OF FILL MATERIAL. CARE SHOULD BE TAKEN TO USE LIGHTWEIGHT CONSTRUCTION EQUIPMENT TO AVOID COMPACTING THE EXISTING SOIL.).
4. PERFORM BUILDING/STRUCTURE DEMOLITION WORK FOR THE EXISTING SCHOOL, INCLUDING REMOVAL AND PROPER DISPOSAL OF ALL MATERIALS.
5. CLEAR AND GRUB THE AREAS FOR SEDIMENT BASIN 1.
6. CLEAR AND GRUB THE AREA FOR THE SEDIMENT BASINS 3A AND 4.
7. ***CRITICAL STAGE*** CONSTRUCT THE SEDIMENT BASINS, INCLUDING OUTLET STRUCTURES, SPILLWAYS, RIPRAP APRONS, ETC...
8. STRIP THE TOPSOIL AND STOCKPILE TOPSOIL AS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLANS. STABILIZE THE STOCKPILES AND PROTECT THE AREA WITH THE APPROPRIATE PERIMETER CONTROL.
9. INSTALL SWALES AND CONSTRUCT THE PIPE RUNS TO EACH BASIN. BLANKET SHALL BE INSTALLED ALONG THE SWALES.
10. CLEAR AND ROUGH GRADE ROADS, CONTINUE STORM SEWER INSTALLATION), AND START MODEL HOMES CONSTRUCTION (LOTS 1 TO 5). PROVIDE ADDITIONAL STONE FOR THE MODEL HOME, IF NEEDED.
11. INSTALL THE SANITARY SEWER STARTING AT THE LOW POINTS AND CONTINUING THROUGH THE SITE.
12. START ROUGH GRADING THE RESIDENTIAL UNITS. STOCKPILE TOPSOIL IN DESIGNATED AREAS. REFER TO THE "TYPICAL LOT CONSTRUCTION SEQUENCE". HOME CONSTRUCTION CAN BEGIN ONCE EACH E&S FACILITY HAS BEEN COMPLETED. MODEL HOMES CAN BE CONSTRUCTED PRIOR TO INSTALLATION OF CURB AND BINDER COURSE; FOR THE REMAINDER OF THE UNITS, UNIT CONSTRUCTION CAN BEGIN ONCE CURB AND BINDER COURSE IS INSTALLED ACROSS THE FRONTAGE OR IF A STONE ACCESS ROAD IS INSTALLED FOR EMERGENCY ACCESS. USE THE TYPICAL UNIT CONSTRUCTION SEQUENCE. UTILITY AND ROADWAY CONSTRUCTION CAN PROCEED IN THE AREAS OF COMPLETED EROSION CONTROL FACILITIES WITH STORM SEWER COMPLETION A PRIORITY.
13. STORM SEWER AND SWALES LOCATED WITHIN THE OPEN SPACE SHALL BE INSTALLED PRIOR TO, OR AT THE TIME OF, THE ASSOCIATED AREAS/UNITS BEING DISTURBED AND CONSTRUCTED.
14. STABILIZE TOPSOIL STOCKPILES NOT SUBJECT TO IMMEDIATE CONSTRUCTION WITH A TEMPORARY SEEDING MIXTURE.
15. INSTALL THE WATER MAIN, IRRIGATION LINES, AND ANY OTHER UTILITIES.
16. INSTALL THE ROAD; SUBBASE, CURBING AND BASE COURSE. STABILIZE THE ROAD AND LOT AREAS.
17. EROSION CONTROLS AROUND THE SITE PERIMETER REQUIRE REGULAR INSPECTION AND MAINTENANCE:
    a. OUTLET STRUCTURES AND STORM SEWER INLETS - CLEAR GRATES OF DEBRIS. ENSURE THAT THE OUTLET STRUCTURE OPENING ARE NOT CLOGGED.
    b. STORM SEWER PIPES - REMOVE DEBRIS AND SILT ACCUMULATIONS WHEN MORE THAN 1 FOOT DEEP OR ¼ OF THE PIPE DIAMETER IS MEASURED, WHICHEVER IS LESS. PIPE LINES SUBMERGED IN THE BASIN NEED PARTICULAR ATTENTION.
18. THE FOLLOWING CONTROLS CAN BE REMOVED AFTER THE TRIBUTARY AREAS ARE STABILIZED:
    c. COMPOST FILTER SOCK EXCEPT WHEN USED FOR INDIVIDUAL UNIT CONTROLS.
    d. ***CRITICAL STAGE*** INSTALL UNDERGROUND INFILTRATION BASINS 1, 2A, AND 2B. CONVERT THE BASINS TO THEIR PERMANENT CONDITION. CONVERSION AT EACH BASIN CAN BE STARTED ONCE A UNIFORM 70% VEGETATIVE COVER ACROSS THE ENTIRE BMP DRAINAGE AREA HAS BEEN ACHIEVED OR THE DISTURBED AREA IS COVERED WITH AN ACCEPTABLE BMP WHICH PERMANENTLY MINIMIZES ACCELERATED EROSION AND SEDIMENTATION. ALL STORM STRUCTURES AND PIPING THAT DRAIN TO THE BMP SHALL BE FLUSHED PRIOR TO CONSTRUCTION OF THE SYSTEM, CONTACT THE CONSERVATION DISTRICT BEFORE CONVERTING THE BASINS TO THEIR PERMANENT CONDITION.
19. INSTALL TOPSOIL AND FINE GRADE, SEED AND STABILIZE ALL DISTURBED AREAS. TOPSOIL TO BE INSTALLED IN ACCORDANCE WITH REQUIREMENTS LISTED ON PAGE 263 OF THE PADEP E&S MANUAL, MARCH 2012 OR LATEST EDITION AND NOTE 19 OF THE APPENDIX C - STANDARD E&S PLAN NOTES ON THIS SHEET.
20. INSTALL TOP COURSE OF PAVING TO REMAINING ROADWAYS.
21. REMOVE ALL REMAINING TEMPORARY CONTROLS.

UNTIL THE PERMITTEE OR CO-PERMITTEE HAS RECEIVED WRITTEN APPROVAL OF THE NOTICE OF TERMINATION, THE PERMITTEE OR CO-PERMITTEE WILL REMAIN RESPONSIBLE FOR COMPLIANCE WITH THE PERMIT TERMS AND CONDITIONS, INCLUDING LONGTERM OPERATION AND MAINTENANCE OF ALL PCSM BMPS ON THE PROJECT SITE IN ACCORDANCE WITH 25 PA. CODE § 102.8(M) THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT WILL CONDUCT A FOLLOW UP INSPECTION AND APPROVE OR DENY THE NOT WITHIN 30 DAYS OF RECEIPT IN ACCORDANCE WITH 25 PA. CODE 102.7(C) (RELATING TO PERMIT TERMINATION).

CONSTRUCTION/DEMOLITION WASTES MANAGEMENT PLAN

PROCEDURES MUST BE IMPLEMENTED WHICH ENSURE THAT THE PROPER MEASURES FOR THE RECYCLING OR DISPOSAL OF WASTE MATERIALS ASSOCIATED WITH OR FROM THE PROJECT SITE WILL BE UNDERTAKEN IN ACCORDANCE WITH DEPARTMENT REGULATIONS. WASTE IS DEFINED AS A MATERIAL WHOSE ORIGINAL PURPOSE HAS BEEN COMPLETED AND WHICH IS DIRECTED TO A DISPOSAL, PROCESSING OR BENEFICIAL USE FACILITY OR IS OTHERWISE DISPOSED OF, PROCESSED OR BENEFICIALLY USED.

THE FOLLOWING ITEMS OF CONSTRUCTION/DEMOLITION WASTES ARE ANTICIPATED AS A RESULT OF THE PROPOSED RESIDENTIAL DEVELOPMENT:

* SOLID WASTES RESULTING FROM THE CONSTRUCTION OF THE RESIDENTIAL BUILDINGS, SEWERS, ROADWAYS, LANDSCAPE IMPROVEMENTS ETC. INCLUDING, BUT NOT LIMITED TO, WOOD, PLASTER, METALS, PLASTIC, ASPHALTIC SUBSTANCES, BRICKS, BLOCK AND UNSEGREGATED CONCRETE.
* SOLID WASTES RESULTING FROM THE DEMOLITION OF THE EXISTING RESIDENTIAL OUTBUILDINGS, STORM SEWERS, ROADWAYS, ETC. INCLUDING, BUT NOT LIMITED TO, WOOD, PLASTER; METALS, ASPHALTIC SUBSTANCES, BRICKS, BLOCK AND UNSEGREGATED CONCRETE.
* SOLID WASTES RESULTING FROM LAND CLEARING OPERATIONS INCLUDING, BUT NOT LIMITED TO, WOOD, TREES, BRUSH, STUMPS AND VEGETATIVE MATERIAL.

CONSTRUCTION/DEMOLITION WASTE DOES NOT INCLUDE MUNICIPAL WASTE, HAZARDOUS WASTE, RESIDENTIAL SEPTAGE, WASTE OIL, RESIDUAL WASTE, FUEL-CONTAMINATED SOIL, OR WASTE TIRES. IF ANY OF THESE WASTE MATERIALS ARE GENERATED OR OTHERWISE RESULTANT OF THE CONSTRUCTION/DEMOLITION ACTIVITIES, A SEPARATE INDIVIDUAL MANAGEMENT PLAN MUST BE DEVELOPED AND IMPLEMENTED IN ACCORDANCE WITH THE PENNSYLVANIA SOLID WASTE MANAGEMENT ACT.

DIRECTIONS FOR RECYCLING/DISPOSING OF CONSTRUCTION WASTES:

* WOODY MATERIALS DERIVED FROM LAND CLEARING ARE CONSIDERED WASTE UNDER THE DEPARTMENT OF ENVIRONMENTAL PROTECTION'S WASTE REGULATIONS, THEREFORE NO TREES, BRUSH, STUMPS AND VEGETATIVE MATERIAL RESULTING FROM LAND CLEARING OPERATIONS SHALL BE DISPOSED OF ON SITE OR OTHERWISE DISPOSED OF EXCEPT IN STRICT ACCORDANCE WITH CONSTRUCTION WASTE DISPOSAL REGULATIONS.
* ALL MATERIAL SUITABLE FOR RECYCLING SHOULD BE COLLECTED, SEPARATED AND TRANSPORTED TO A PERMITTED RECYCLING CENTER FOR PROCESSING.
* ALL OTHER CONSTRUCTION WASTE MATERIALS MUST BE COLLECTED ON-SITE IN CONTAINERS SUITABLE FOR THE PURPOSE (I.E. DUMPSTERS) AND TRANSPORTED TO A PERMITTED SOLID WASTE DISPOSAL FACILITY FOR PROPER DISPOSAL.

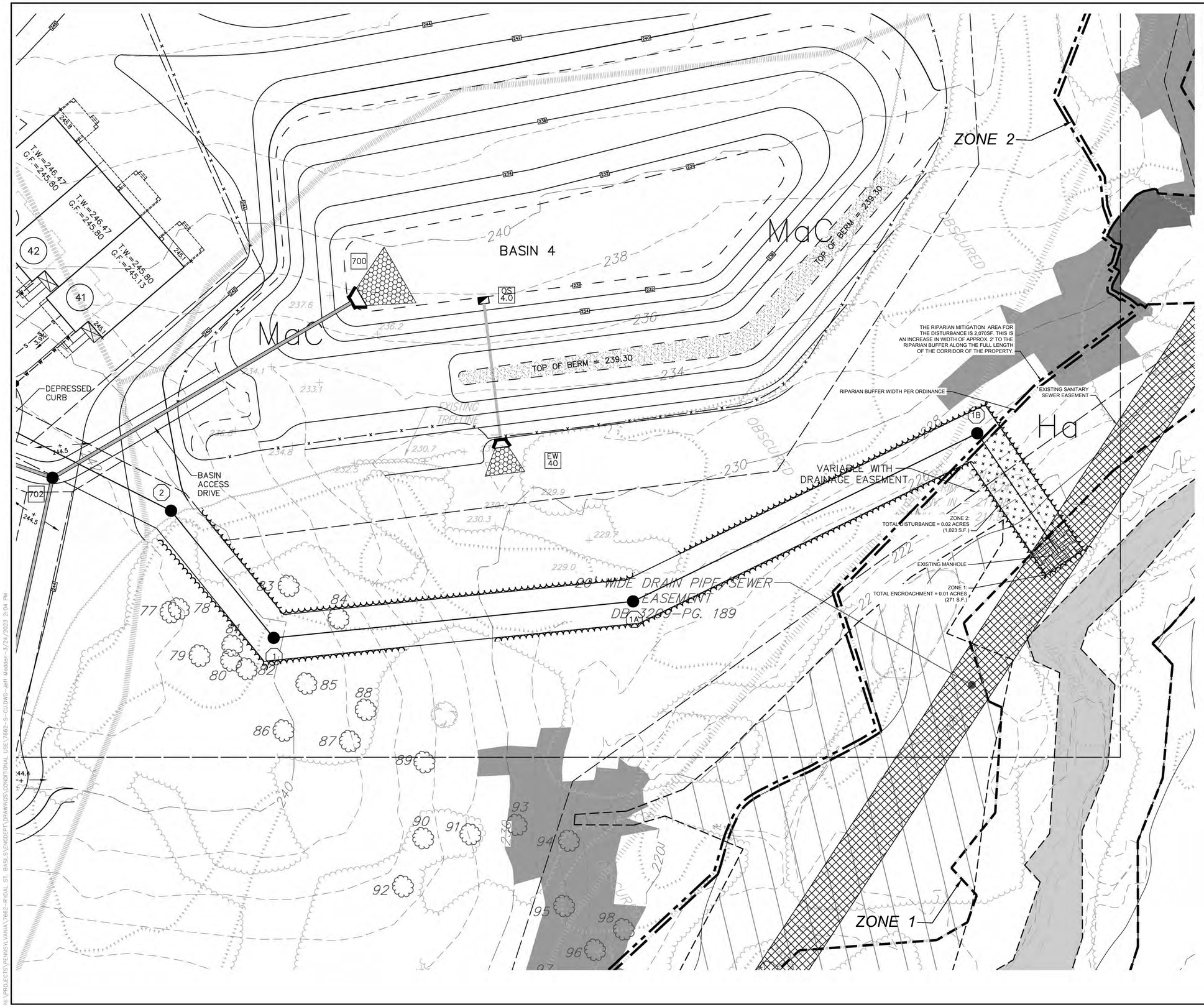
SOIL/ROCK DISPOSAL AREAS

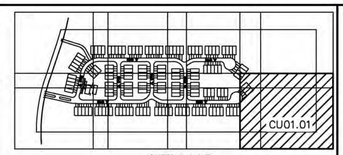
UNCONTAMINATED, NONWATER-SOLUBLE, NONDECOMPOSABLE INERT SOLID MATERIAL SUCH AS SOIL, ROCK, STONE, GRAVEL, BRICK AND BLOCK, CONCRETE AND USED ASPHALT MAY BE USED TO LEVEL AN AREA OR BRING THE AREA TO GRADE OR OTHERWISE USED IN NON-STRUCTURAL FILL AREAS. LARGE BOULDERS ARE NOT EXPECTED DUE TO THE EXISTING SUBSURFACE GEOLOGICAL CONDITIONS, HOWEVER LARGE BOULDERS SHOULD ONLY BE USED IN A FILL CONDITION OUTSIDE THE LIMITS OF ANY ROAD RIGHTS-OF-WAY OR UTILITY EASEMENTS AS MAY BE PERMITTED BY THE MUNICIPAL AUTHORITIES. THE ENTIRE SITE SOILS HAVE NATURALLY OCCURRING ARSENIC AND SHOULD REMAIN ON SITE. IF SOIL IS TO BE HAULED OFFSITE, THIS MATERIAL SHOULD BE TREATED AS HAZARDOUS.

NOTE

UPON COMPLETION OF CONSTRUCTION AN AS-BUILT SURVEY PLAN OF ALL STORMWATER BMP's, SHALL BE SUBMITTED TO TOWNSHIP FOR REVIEW.

COMMONWEALTH OF





KEYMAP

LEGEND

- EXISTING STRUCTURE
- EXISTING DIRT/GRAVEL ROAD
- EXISTING STREET SIGN
- EXISTING UTILITY POLE
- EXISTING R.O.W.
- EXISTING CARTWAY
- STREAM LINE
- EXISTING CENTER LINE
- EXISTING BOUNDARY LINE
- SOILS LINE
- EXISTING OVERHEAD UTILITY (ELECTRIC, PHONE, CABLE, ETC.)
- EXISTING CONCRETE MONUMENT
- EXISTING IRON PIN
- EXISTING SIGN
- EXISTING UTILITY POLE
- EXISTING INLET
- EXISTING SPOT ELEVATION
- EXISTING TREE
- STEEP SLOPES 15% TO 25%
- STEEP SLOPES > 25%
- EXISTING CONTOURS
- PROPOSED CONTOURS
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- EXISTING TREE LINE
- EXISTING VEGETATION
- PROPOSED BUFFER
- PROPOSED STORM SEWER W/ STRUCTURE NUMBER
- PROPOSED STORM MANHOLE W/ STRUCTURE NUMBER
- PROPOSED FLARED END SECTION W/STRUCTURE NUMBER
- WETLANDS WATERS
- WETLANDS
- WATERS OF THE U.S.
- SANITARY MAIN AND MANHOLE W/ STRUCTURE NUMBER
- ZONE 1
- ZONE 2
- FLOODPLAIN SOILS
- ZONE 1 ENCROACHMENT
- ZONE 2 DISTURBANCE
- EXISTING SANITARY SEWER EASEMENT

GRAPHIC SCALE
20 0 20 40
(IN FEET)
1" = 20 FEET

ESE CONSULTANTS
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ESE Consultants, Inc.
1140 Virginia Drive • Fort Washington, PA 19034
T: 215-914-2050

REV.	DATE	DESCRIPTION	DRAWN

PRELIMINARY MAJOR SUBDIVISION AND LAND DEVELOPMENT–NOT TO BE RECORDED

CONDITIONAL USE PLAN

SISTERS OF ST. BASIL
ABINGTON TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

DATE: 03/2023	SCALE: 1"= 20'
DESIGN: JMM	DRAWN: LJP
JOB NO.: 7662	FILE NAME: 7662-S-CU
REF. NO.:	CU01.01
SHEET NO.:	1 OF 1

N:\PROJECTS\PENNSYLVANIA\7662-PROAL ST BASIL'S\DWGS\PLANS\CONDITIONAL USE\7662-S-CU.DWG, Jeff Madden, 3/24/2023 2:04 PM

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

www.pennoni.com

June 1, 2023

ABINT130030

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

RE: LD-23-01-711 Fox Chase Road (St. Basil)
PARID: 30-00-22424-00-1/ TMID: 30059 025
PARID: 30-00-22424-00-5/ TMID: 30059 026
Conditional Use Application Zoning Review

Dear Mr. Manfredi:

We have received a copy of the Conditional Use Application, application narrative, and redacted agreement of sale received on March 30, 2023, in conjunction with the subdivision and land development application submission of the Preliminary/Final Major Land Development Plans dated March 24, 2023, as submitted by the Applicant, Toll Mid-Atlantic, L.P Company, Inc. for the above referenced property on behalf of the property owner, Sisters of St. Basil the Great.

The Applicant is proposing to demolish the existing structures of the former St. Basil Academy School site; and construct a total of 150 age-restricted carriage homes as well as a clubhouse and pool on an existing parcel of land located within the newly created AR – Age Restricted Carriage Home Overlay District. The entire site consists of approx. 46.37 acres and is located within the CS – Community Service Zoning District. Other site improvements for this site include parking, curbing, sidewalk, landscaping, lighting, and sanitary and stormwater management facilities. Access to/from the site will be by way of one (1) proposed entrance off Fox Chase Road. In addition, an emergency access road is proposed off of Fox Chase Road on the northwestern corner of the site. The proposed development will be serviced by public water and sewer.

This project is located within the CS – Community Service Zoning District and the newly created AR – Age Restricted Carriage Home Overlay District as adopted by Ordinance no. 2199 on November 10, 2022. The site is fronted by Fox Chase Road to the southwest; residential properties zoned in the R1 – Low Medium Density Residential Zoning District to the north or northeast; residential properties zoned in the R3 – Medium Density Residential Zoning District, as well as the RC – Recreation/Conservation Zoning District, to the southeast; and residential properties zoned in the R4 – High Density Residential Zoning District to the south. In addition, a tributary of the Pennypack Creek traverses from north to south within the eastern corner of the track.

In accordance with the FEMA, Flood Insurance Rate Map (FIRM) Panel No. 42091C0403G, effective March 2, 2016, the tract is identified to be primarily located within Zone X, an area outside the 0.2% chance flood and minimal flood hazard. However, the area where the Pennypack Creek tributary traverses the site is located within Flood Zone X, an area of 0.2% annual chance flood hazard, areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile. Therefore, based on the FEMA FIRM determination, this site is not located within the Floodplain Conservation District, and is therefore not subject to the floodplain regulations of the Floodplain Conservation District. However, per the Abington

Township Riparian Corridor Analysis Map, Figure 15.2, and Section 1502.A.1, this parcel is identified as a parcel which is located within and intersecting the Riparian Corridor; and is therefore, subject to the regulations of the Riparian Corridor Conservation District.

Under this Conditional Use Application, the Applicant is proposing to provide a new sewer main connection for the majority of the Property to the existing sanitary sewer manhole located within a 20-foot wide sanitary sewer easement located on the east side of the property and within Zone 2 of the Riparian Corridor Conservation District.

CONDITIONAL USE REQUESTED

The Applicant is requesting the following conditional use approval from the Abington Township Zoning Code:

1. **§1503.B.2.b - Used Permitted by Conditional Use, Zone 2 –** A conditional use approval to allow for the installation of a central sewer line in Zone 2 of the Riparian Corridor Conservation District. **The Applicant is proposing a new central sewer main to cross Zone 2 of the Riparian Corridor Conservation District which requires conditional use approval from the Abington Township Board of Commissioners.**

The following documents have been reviewed:

Title	Sheet	Dated	Revised
Conditional Use Application Submittal			
Conditional Use Application & Application Fee	3 pages	-----	-----
Application Narrative	1 page	-----	-----
Redacted Agreement of Sale	40 pages	05/04/20	-----
Land Development Plans			
Cover Sheet	1 of 64	03/24/23	-----
Record Plans	2-5 of 64	03/24/23	-----
General Notes	6 of 64	03/24/23	-----
Existing Features Plans	7-10 of 64	03/24/23	-----
Overall Site Plan	11 of 64	03/24/23	-----
Grading Plans	12-19 of 64	03/24/23	-----
Utility Plans	20-27 of 64	03/24/23	-----
Road Plan & Profile	28-34 of 64	03/24/23	-----
Easement Profiles	35-39 of 64	03/24/23	-----
Construction Details	40-41 of 64	03/24/23	-----
Storm Sewer Details	42-43 of 64	03/24/23	-----
Sanitary Sewer Details	44-45 of 64	03/24/23	-----
Water Details	46 of 64	03/24/23	-----
Basin Details	47-55 of 64	03/24/23	-----
Landscape & Lighting Plans	56-63 of 64	03/24/23	-----
Landscape & Lighting Details & Notes	64 of 64	03/24/23	-----
Erosion and Sediment Control Plans			
Cover Sheet	1 of 15	03/24/23	-----
Erosion and Sediment Control Plan	2-9 of 15	03/24/23	-----
Erosion and Sediment Control Details	10-13 of 15	03/24/23	-----
Erosion and Sediment Control Notes	14-15 of 15	03/24/23	-----

Stormwater Management Narrative	660 pages	03/2023	-----

We have performed a review of the above referenced plans for compliance with the Zoning Ordinance (Chapter 162). We offer the following comments for your consideration:

ZONING COMMENTS

1. **Per §301 – Permitted Uses –** Based on the Abington Township Comprehensive Use Matrix, the existing and proposed uses on the above referenced property are:

   - **Existing/Former Use E-14 – School/College –** The former St. Basil Academy, which is classified as a Use E-14 – School/College use is a permitted use within the CS – Community Service Zoning District.

   - **Proposed Use H-13 - Age-Restricted Carriage Home Dwelling Unit (Single-Family Attached) –** The Applicant is utilizing the AR - Age-Restricted Carriage Home Overlay District for the proposed carriage homes on the site. A Use H-13 is a permitted use within the AR - Age-Restricted Carriage Home Overlay District for the site.

2. **Per §1503.B.2.b – Used Permitted by Conditional Use, Zone 2 –** Corridor crossings by centralized sewer and water lines and/or public utility transmission lines, provided that any disturbance is offset by corridor mitigation measures as outlined in §1508, Riparian Management of this chapter, and provided underground utility and pipe crossings are located at least 3 feet below stream invert.
   The eastern portion of this site is located within the Riparian Corridor Conservation District Zone 2. Based on the utility plans, the Applicant is proposing new sanitary lines to be located within Zone 2 of the Riparian Corridor which is only permitted by conditional use. As part of this Land Development application, the Applicant has included a completed conditional use application seeking approval from this Code Section to allow for the sanitary sewer crossing within Zone 2 of the Riparian Corridor Conservation District.

3. **Per §1710.A – Use Regulations –** Based on the Abington Township comprehensive Use Matrix, Use H-13 – Age-Restricted Carriage Home Dwelling Unit (Single-Family attached) was created as part of Ordinance No. 2199 which permits Use H-13 within the AR – Age Restricted Carriage Home Overlay Zoning District.
   Based on Ordinance No. 2199 as adopted on November 10, 2022, the subject property is located within the AR – Age Restricted Carriage Home Overlay Zoning District; therefore, a Use H-13 is permitted within this overlay zoning district.

4. **Per §1710.B – Use Regulations –** Based on the Abington Township comprehensive Use Matrix, Use A-6 Clubhouse, Use A-18 – Outdoor Recreation, Uses Accessory to, Use A-24 Swimming Pool, and Use A-25 Tennis/Sports Court are all permitted within the AR Overlay Zoning District.
   The Applicant is proposing a clubhouse, pool, and outdoor recreation areas as part of this land development which are permitted within the AR – Age Restricted Carriage Home Overlay Zoning District.

5. **Per §1711, Figure 17.2 – Dimensional Regulations –** The minimum lot area shall be 40 acres gross.
   Based on the plans, the total tract area is 46.37 acres which is in compliance with this Code Section.

6. **Per §1711, Figure 17.2 – Dimensional Regulations –** The minimum front yard setback shall be 30 feet dwelling setback from the face of the curb and/or edge of cartway.

Based on our measurements, it appears that the Applicant will comply with the required dwelling setback dimensions; however, dimensions for the building setbacks shall be provided on the plans to ensure compliance with this Code Section.

7. **Per §1711, Figure 17.2 – Dimensional Regulations –** The maximum building coverage shall be 25%.
The Applicant has provided a building coverage percentage of 19.8% which is in compliance with this Code Section. The Applicant shall provide a building coverage calculation on the plans showing the total building areas and the resulting percentages to ensure compliance with this Code Section.

8. **Per §1711, Figure 17.2 – Dimensional Regulations –** The maximum impervious coverage shall be 50% and the minimum green area shall be 50%.
The Applicant has provided a building coverage percentage of 34.3% which is in compliance with this Code Section. The Applicant shall provide an impervious coverage calculation on the plans showing the total impervious areas and the resulting percentages to ensure compliance with this Code Section.

9. **Per §1711, Figure 17.2 – Dimensional Regulations –** The minimum open space shall be the gross site area (in acres) x 0.40.
The Applicant has provided a building coverage percentage of 34.3% which is in compliance with this Code Section. The Applicant shall provide an open space calculation on the plans showing the total open space and the resulting percentages to ensure compliance with this Code Section.

10. **Per §1711, Figure 17.2 – Dimensional Regulations –** The maximum density shall be the gross site area (in acres) x 3.4.
The Applicant is proposing 150 dwellings on 46.37 acres of land which results in a density of 3.23 DU/Ac. which is less than the maximum allowable of 3.4 DU/Ac.; however, per §201 – Definitions – density is defined as the dwelling units per developable acre. The definition of developable acre is land remaining at a development site after excluding existing easements; rights-of-ways; areas consisting of floodplain and wetlands which are protected from development by federal, state, or local land regulations; and steep slope areas (including those steep slope areas for which a grant of special exception has been denied by the Township Zoning Hearing Board). The Applicant shall provide a developable acreage calculation on the plan and also provide a density calculation based on the developable acreage to ensure compliance with this Code Section.

11. **Per §1711, Figure 17.2 – Dimensional Regulations –** The maximum building height shall be 35 feet.
The Applicant is indicating that the building heights will be less than 30 feet. The Applicant has provided architectural renderings; however, no dimensions were shown on the renderings. The Applicant shall provide architectural drawings or update the renderings to include the building height dimensions for the proposed dwellings and clubhouse to ensure the buildings are no more than 35 feet in height.

12. **Per §1712.B – Special Development Regulations –** Along any boundary line of the tract adjoining an existing residential use, a 125-foot-wide green area shall be provided. In addition, a screening buffer conforming to §2403.B.4 Buffer specifications, Medium Intensity Buffer Option A, with a depth of not less than 40 feet, shall be situated within the green area, the final location if which shall be determined during land development.
The Applicant is proposing a 125-foot-wide green area which includes a 40-foot-wide medium intensity buffer area, and is therefore in compliance with the above Code Section.

13. **Per §1806.B – Conditional Uses –** The Board of Commissioners shall grant a conditional use only if it finds adequate evidence that any proposed development submitted will meet all of the following general requirements as well as any specific requirements and standards listed herein for the proposed use. The Board shall require that any proposed use, and its location among other things, shall be:
    1. In accordance with the Abington Township Comprehensive Plan.
    2. Consistent with the spirit, purposes, and intent of the applicable zoning district.
    3. An improvement which is not a detriment to the properties in the immediate vicinity, and which shall be in the best interests of the Township.
    4. In conformance with all applicable requirements of this Ordinance and all municipal, state and federal codes applicable to the use or process in question.

    The Applicant will be required to meet the requirements and standards of this Code provision.

14. **Per §1806.G – Criteria for Conditional Use Approval –** Applications for conditional use approval shall contain all data, information, and reports necessary for the Board of Commissioners to evaluate the proposal. In addition to the requirements of the Pennsylvania Municipalities Planning Code (MPC), the following criteria shall be considered by the Board of Commissioners:

    1. Consistency with the goals, objectives, and recommendations of the Township and County Comprehensive Plans; Old York Road Corridor Improvement Plan; Township Open Space, Recreation, and Environmental Resource Protection Plan; Township Revitalization Plans, and other plans adopted by the Township.

    2. Suitability of the proposed use for the property in question. This criterion shall consider issues such as traffic, vehicular and pedestrian circulation, adjacent land use(s), buffering, and other impacts on the surrounding area.

    3. Community Character. The impact of the proposed use on the surrounding community shall be considered. If the proposal is adjacent to a residential district, the scale of the use shall relate to and complement the surrounding area. The location and design of parking areas shall be in harmony with preserving the general appearance and character of the area. All new buildings shall be architecturally compatible with existing buildings on the site.

    4. Nuisance/Safety Analysis. The use shall not generate excessive noise, noxious odors, air pollution or lighting, or result in pedestrian conflict or other safety hazards to people or property. Artificial light shall be directed away from adjacent property and buildings. Artificial lighting shall be located to avoid shining into habitable room windows offsite. Outdoor uses and accessory facilities shall only be permitted where the noise generated by the use will have a minimal impact on nearby residential uses and where hazards are contained on the site to the maximum extent possible.

    5. Traffic Impact. The existing road system must be able to accommodate the peak traffic generated by the proposed use in a safe and efficient manner. Existing residential areas shall not be impacted by significant volumes of traffic from the proposed facility. The Board of Commissioners may request a traffic impact study, as described in Traffic Impact Study section of the SALDO.

    6. Public Utilities. All uses shall be capable of being served by public sewer. A use may be permitted to be served by an on lot sanitary system, only if deemed acceptable by the Board of Commissioners and the adopted 537 Plan of the Township, upon recommendation of the Township Engineer, and upon approval of the Pennsylvania Department of Environmental Protection. Sufficient water supply must be available to accommodate all the needs of the proposed use.

    The Applicant will be required to meet the criteria of these Code provisions.

15. **Per §2103.H Use H-13.1 – Age-Restricted Carriage Home Dwelling Unit (Single-Family Attached) –** Age Restricted carriage homes may be one or two-level dwelling units above grade, provided that they do not exceed the district height limitation and may have a third level serving as a basement.
The Applicant shall provide architectural drawings or updated renderings of the dwellings to show total number of stories for the buildings, as well as the building heights to ensure compliance with this Code Section.

16. **Per §2103.H Use H-13.2 – Age-Restricted Carriage Home Dwelling Unit (Single-Family Attached) –** All age-restricted carriage home dwelling units must connect to public water and sewer.
On the Utility Plans, there are some locations where the water lines are not shown connecting to the dwellings within the development. The Applicant shall confirm the connections and revise accordingly.

17. **Per Article XXII – Signs –** Any monument/landmark signage proposed as part of the land development shall be shown on the plan. The Applicant shall be responsible for obtaining the required sign permits.

18. **Per §2304.H Use H-13 – Age-Restricted Carriage Home Dwelling Unit (Single-Family Attached) –** 2 parking spaces exclusive of garage space, plus one-quarter (1/4) parking space per dwelling unit for visitor and overflow parking shall be provided. The visitor and overflow parking may be provided in designated on-street parking spaces; parking spaces may be reduced to 9' x 18'; and single car garages may not be utilized as required parking spaces, unless a basement is provided.
The Applicant is proposing 150 dwelling units which requires the following parking spaces.
    - **150 Units x 2 spaces per unit = 300 parking spaces**
    - **150 Units x (1/4) spaces per unit = 37.5 = 38 parking spaces**

    In total, the Applicant is required to provide 338 parking spaces for the dwelling units. Based on the plan provided, the Applicant is proposing 359 parking spaces on site consisting of 300 parking spaces in the driveways of the dwelling units and 59 parking spaces on Roads A, B, D, and E as well as in front of the clubhouse area. The Applicant shall clarify if any basements will be provided for the proposed dwelling units to confirm the total number of parking spaces being provided on the site. The Applicant shall update the parking calculation on the Record Plan (Sheet 3) to reflect the correct number of parking spaces required and proposed.

19. **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.
The Applicant is not required to provide ADA accessible parking for the private on-lot parking spaces within the driveway areas of the individual dwellings; however, the Applicant shall provide ADA accessible parking located in front of the proposed clubhouse area for the additional overflow parking requirements. Based on the overflow parking requirements, the Applicant is proposing 59 parking spaces which requires a minimum of three (3) accessible parking spaces to be provided, of which one of the accessible parking spaces shall be van accessible in accordance with ADA guidelines.

20. **Per §2310.A – Parking Lot and Frontage Development Standards –** The minimum width of drives and parking aisles shall be 24 feet for two-way travel and 12 feet for one-way travel.
Based on the plans, in the areas where the Applicant is proposing on-street parking, the drive aisle width for the two-way road around the on-street parking is only 20 feet wide which is less than the required 24 feet wide. The Applicant shall revise the parking and drive layout to ensure a minimum of 24 feet for two-way travel is provided.

21. **Per §2401.A.2.d.(1).(a) – Preservation and Protection of Existing Vegetation –** Tree replacement shall occur when new impervious coverage exceeds 500 SF and a tree with a minimum caliper of six (6) inches 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.
Based on the Existing Features Plan (Sheet 7), the Applicant is indicating that they are removing 67 trees as part of this Land Development project. The trees shall be labeled with a diameter of the tree to be removed to confirm the required tree replacement. A tree replacement calculation shall be provided on the landscaping plan showing the total number of trees removed and the total number of trees proposed based on this code requirement. In addition, the Applicant shall label the trees that are proposed to remain. For example, on the Existing Features Plan (Sheet 7), the existing trees that are not labeled which are located between the trees labeled 44 and 45 and 48 and 49 as not proposed to be removed; however, on the Utility Plan (Sheet 24) there is storm piping proposed directly underneath those trees which will require those trees to be removed. The Applicant shall clarify and confirm all trees to remain or to be removed and update the label on the Existing Features plan accordingly.

22. **Per §2401.A.2.d.(1).(c) – Preservation and Protection of Existing Vegetation –** Each mature tree with a 10-inch caliper or greater on the site shall be designated either "TO REMAIN" or "TO BE REMOVED".
The Applicant shall label all trees with a ten (10) in caliper or greater as "TO REMAIN" or "TO BE REMOVED".

23. **Per §2401.A.2.d.(2) – Preservation and Protection of Existing Vegetation –** Existing vegetation designated "TO REMAIN," in accordance with the landscaping plan of a subdivision or land development shall be identified in the field prior to any clearing and shall be physically protected throughout the construction process. A temporary tree protection zone, constructed according to the standards expressed below, shall be erected a minimum of one foot outside the drip line on all sides of individual trees or tree masses prior to major clearing or construction. The barrier shall be placed to prevent disturbance to or compaction of soil inside the barrier and shall remain until construction is complete. The barrier shall be shown on the landscape plan.
On the E&S plans, there is a callout for tree protection fencing in the legend; however, it is unclear where the tree protection fencing is provided on the plans to protect the existing vegetation shown to remain on the site. The Applicant shall clarify and update the plans accordingly to distinguish the tree protection fencing.

24. **Per §2402.A.2.a.(4) – Planting Islands –** 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 inches in caliper, branching at 6 feet to 8 feet in height and of the recommended species as listed in the 'Recommended Plant Materials' List in the SALDO. Parking lot islands shall be planted in lawn or ground cover only.
The Applicant is proposing a planting island in front of the proposed clubhouse building with no shade tree proposed in this planting island. A shade tree shall be required based on the requirement of the above Code Section.

25. **Per §2402.A.2.a.(5) – Planting Islands –** Shade trees located within any parking island which is less than 300 SF measured from outside curb to outside curb will require permanently installed irrigation.
The planting island in front of the proposed clubhouse building at 200 SF is less than 300 SF. The Applicant will need to revise the size of the planting island or be required to provide the required irrigation system per this Code Section.

26. **Per §2402.B.2.c – Street Trees –** Trees shall be planted at a ratio of at least one tree per 40 LF of frontage

or fraction thereof. Trees shall be distributed along the entire frontage of the property, although they need not be evenly spaced.
Based on our measurements, there is approximately 9,195 LF of frontage which will require 9,195/40 = 230 street trees. The Applicant is indicating that there is 8,845 LF of frontage and which will require 222 street trees. The Applicant shall update the street tree calculation and provide the additional required street trees.

27. **Per §2601.H.4 – Lighting Standards -** Lighting standards in parking areas shall not be located farther than 200' apart and may not be taller than 18' in height. No pedestrian lighting standard may exceed 14' in height.
The Applicant has provided street lighting with the Landscape and Lighting Details Plan, however, the mounting heights for the proposed street lighting along the proposed internal roadways and the iso-foot-candles for these lights have not been provided on the plans. The Applicant shall confirm the mounting heights of the lights and revise the plans to show the mounting heights and the iso-foot-candles for the proposed lights.

GENERAL COMMENTS

28. Per the Existing Features Plans (Sheets 7 to 10), there are multiple locations where private fencing and structures are shown to be encroaching within the site boundaries from the abutting properties that front Forrest Avenue, Kirkwood Street, and Suffolk Road. The Applicant shall clarify if the private fences and structures are permitted to remain or be required to be removed outside the site boundaries. It is recommended that a written agreement to permit these encroachments for each of the properties should be provided to the Township.

29. The Applicant shall address the review comments as issued under the SALDO application submission.

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

Sincerely,

PENNONI

Allison A. Lee, PE
Assistant Zoning Officer

cc: Terry Castorina, Assistant to the Township Manager
Ashley McIlvaine, Assistant Township Manager & Assistant CAO

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