UPPER UWCHLAN TOWNSHIP
PLANNING COMMISSION
AGENDA
July 14, 2022

6:00 p.m. – Work Session
7:00 p.m. -- Meeting

LOCATION
Upper Uwchlan Township Building
140 Pottstown Pike, Chester Springs PA 19425

6:00 p.m. Work Session
Village Concept Plan – review revised draft with Boards and Commissions Chairpersons

7:00 p.m. Meeting

I. Call To Order

II. 461 Font Road Minor Subdivision Plan
Introduction of a plan to separate lots for 2 existing homes on the tract.
Accept plan for consultant's review.

III. 161 East Township Line Road Sketch Plan
Introduction of a proposed zoning change from Residential to
Limited Industrial for a property abutting a Limited Industrial District.

IV. Byers Station Parcel 5C Lot 2B Commercial – Revised Amended Final PRD Plan
Discuss consultants' July 6, 2022 review letter of the Plan revised May 26, 2022.

V. Approval of Minutes: May 12, 2022 and June 9, 2022 Meetings

VI. Next Meeting Date: August 11, 2022 7:00 p.m.

VII. Open Session

VIII. Adjournment

RECEIVED

JUN 24 2022

UPPER UWCHLAN TWP
ADMINISTRATIVE OFFICES

SUBDIVISION / LAND DEVELOPMENT APPLICATION

[X] Preliminary Submittal [ ] Final Submittal

The undersigned hereby applies for review of the Plan submitted herewith and described below:

1. Name of Subdivision / Development: Minor Subdivision for 461 Font Road
2. Plan Dated: April 8, 2022 County Deed Book/Page No. 9618 / 1626
3. Name of property owner(s): William Mark Stephenson & Vicki Stephenson

   Address: 461 Font Road Downingtown

   State/Zip: Pa. 19335 Phone No.:

   Email:
4. Name of Applicant (If other than owner):

   same as owner

   Address:

   State/Zip: Phone No.:

   Email:
5. Applicant's interest (If other than owner): n/a
6. Engineer, Architect, Surveyor, or Landscape Architect responsible for Plan.

   Edward B. Walsh & Assoc. c/o Adam Brower

   Address: 855 Springdale Drive, Suite 202 Exton

   State/Zip: Pa. 19341 Phone No.: 610-903-0031

   Email: abrower@ebwalshinc.com
7. Total acreage: 4.194 Number of Lots: 2
8. Acreage of adjoining land in same ownership: (If any) 0
9. Describe Type of Development Planned: Create a two lot subdivision to provide separate lots for the two existing single family homes on the tract.

10. This Application shall be accompanied by: the Application Fee as listed below, an aerial image of the property, and the quantity of plans/supporting information as detailed in the Township Code §162-8.B.(1)(b) and/or §162-8.C.(1)(d).
[One-half of the required plan submissions may be of a reduced size, i.e. 11 x 17]

11. List all subdivision and zoning standards or requirements which have not been met and for which a waiver or change is requested.
Section 162-9.B(1)(h) & (2)(d)[1], [2] and [3] to not require a site analysis and impact plan, conservation plan or improvements and construction plan as no new structures or any improvements / disturbance is proposed.

12. The Applicant or his/her agent shall enter into a Subdivision / Land Development Review Escrow Agreement (attached) and place into escrow with the Township at the time of application an amount estimated by the Township to cover all costs of engineering and professional planning reviews (not including County application fee), legal services and other professional services used by the Township in connection with the application.

Signature of Property Owner or Applicant: W. Mark Stephenson

By: Vicki Stephenson

Date: 6-15-22

*Development subject to ACT 209 Impact Fee.

*Park & Recreation Fee per residence is levied. Contact Township Offices to determine amount.

SUBDIVISION / LAND DEVELOPMENT APPLICATION FEE

1-2 Lots $250

3-5 Lots $500
Plus $25 for each Lot over 3

Over 5 Lots $1000
Plus $50 for each Lot over 5

140 Pottstown Pike, Chester Springs, PA 19425
Phone: (610) 458-9400 • Fax: (610) 458-0307

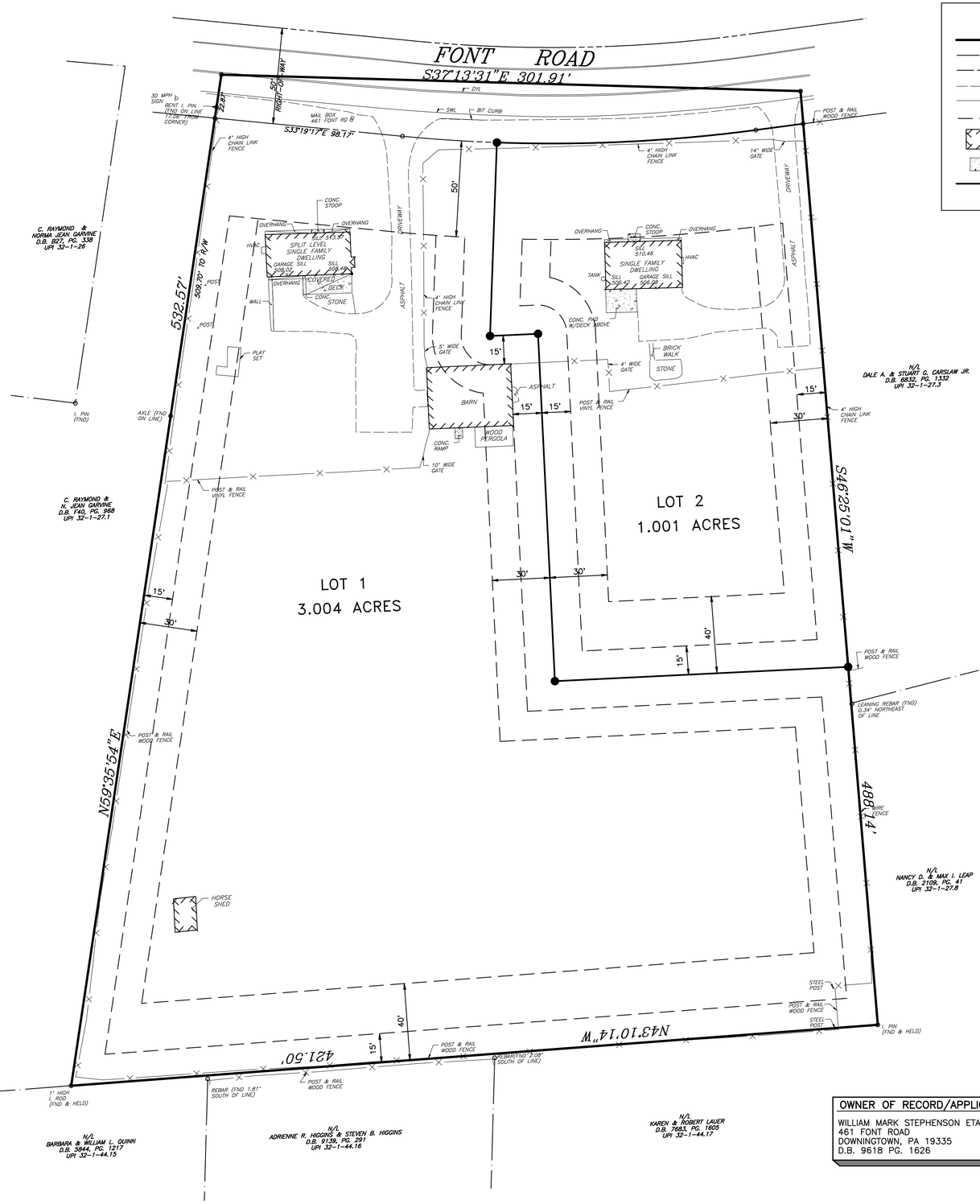
ZONING DATA

R–2 RESIDENTIAL ZONING DISTRICT

AREA AND BULK REQUIREMENTS		LOT 1	LOT 2
LOT AREA (MINIMUM)	1.0 ACRES	3.004 ACRES	1.001 ACRES
LOT WIDTH (MINIMUM)	150 FEET	153 FEET (AT BLDG SETBACK)	166 FEET (AT BLDG SETBACK)
YARD REGULATIONS			
FRONT YARD	50 FEET	50 FEET	50 FEET
SIDE YARD	30 FEET	30 FEET	30 FEET
REAR YARD	40 FEET	40 FEET	40 FEET
ACCESSORY BUILDING SETBACK			
SIDE/REAR	15 FEET	15 FEET	15 FEET
BUILDING COVERAGE (MAXIMUM)	15%	1.96%, 0.059 AC	2.30%, 0.023 AC
IMPERVIOUS COVERAGE (MAXIMUM)	20%	5.36%, 0.161 AC	9.29%, 0.093 AC
BUILDING HEIGHT (MAXIMUM)	35 FEET	EXISTING	EXISTING

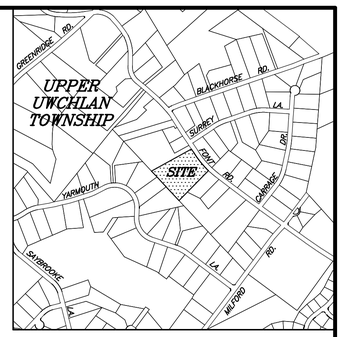
GENERAL NOTES:

1. BOUNDARY, EXISTING FEATURES AND TOPOGRAPHIC INFORMATION IS FROM A FIELD SURVEY PERFORMED BY EDWARD B. WALSH & ASSOCIATES, INC. ON MARCH 28, 2022.
2. BOUNDARY SURVEY WAS BASED UPON DEEDS OF RECORD. A TITLE REPORT WAS NOT PROVIDED, THEREFORE, THE SURVEY MAY NOT DEPICT ALL RIGHTS, EASEMENTS, ETC. ATTACHED TO THE PROPERTY THAT A CURRENT AND COMPLETE TITLE REPORT MAY DISCLOSE.
3. OWNER OF RECORD: WILLIAM MARK STEPHENSON ETAL & VICKI STEPHENSON
4. SITE ADDRESS: 461 FONT ROAD, DOWNINGTOWN, PA 19335
5. RECORDING INFORMATION: DEED BOOK 9618, PAGE 1626 RECORDED AT THE CHESTER COUNTY RECORDER OF DEEDS. BEING UPI 31–1–27.2 AT THE CHESTER COUNTY BOARD OF ASSESSMENTS.
6. LOCATIONS AND BEARING BASIS FOR THE SURVEY AS SHOWN ARE REFERENCED TO NAD 83, PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, AS DERIVED FROM GPS OBSERVATIONS.
7. VERTICAL DATUM – NAVD 1988
8. AREA: 4.194 ACRES (GROSS), 4.005 ACRES (NET OF EXISTING RIGHT–OF–WAY).
9. UTILITY LOCATIONS SHOWN HEREON ARE BASED UPON VISIBLE EVIDENCE, SUPPLEMENTED WITH INFORMATION SHOWN ON UTILITY COMPANY PLANS. EDWARD B. WALSH & ASSOCIATES, INC. (EBWA) DOES NOT GUARANTEE THE ACCURACY OF THE LOCATIONS OF EXISTING SUBSURFACE UTILITY LINES, STRUCTURES, ETC. SHOWN ON THESE PLANS, NOR DOES EBWA GUARANTEE THAT ALL SUBSURFACE UTILITY LINES, STRUCTURES, ETC. ARE SHOWN.
10. IRON PINS ARE TO BE SET BY LICENSED SURVEYOR AT THE PROPERTY CORNERS WHERE NOTED WITH THE "●" SYMBOL.



LEGEND

- TRACT BOUNDARY
- ADJACENT PROPERTY LINES
- EXISTING RIGHT–OF–WAY
- EXISTING EDGE OF PAVEMENT
- EXISTING FENCE
- BUILDING SETBACK LINE
- EXISTING BUILDING
- EXISTING CONCRETE
- PROPOSED PROPERTY LINE
- PROPOSED CORNER PIN



LOCATION MAP

SCALE: 1"=800'

COMMONWEALTH OF PENNSYLVANIA SS:
COUNTY OF CHESTER

On the _____day of _____A.D. 20 ____
before me, the subscriber, a Notary Public of the Commonwealth of Pennsylvania, residing in _____,
personally appeared _____who
acknowledges himself to be the _____
and that as such to do so, he executed the foregoing plan by signing his name by himself as _____
that he is the owner of the designated land, that necessary approval of the plan has been obtained and is endorsed thereon and that he desires that the foregoing plan may be duly recorded.

_____
Notary Public

_____
My Commission Expires

REVIEWED by the Planning Commission of Upper Uwchlan Township, Chester County, Pa., this _____day of _____,20___.

_____
_____
_____
_____

APPROVED by the Board of Supervisors of Upper Uwchlan Township, Chester County, Pa., this _____day of_____,20___.

_____
_____
_____
_____

REVIEWED by the Chester County Planning Commission this_____ day of _____, 20___.

_____
Secretary

APPROVED by the Upper Uwchlan Township Engineer;

_____ _____
Date

Recorded in the Office of the Recorder of Deeds of Chester County at West Chester, Pennsylvania in Plan book _____, Page _____, on the _____day of _____, 20___.

_____
(Deputy) Recorder of Deeds

SUBDIVISION AND LAND DEVELOPMENT ORDINANCE WAIVER REQUESTED

1. SECTION 162–9.B (1)(h) & (2)(d)[1], [2], [3] – RELIEF IS REQUESTED TO NOT REQUIRE A SITE ANALYSIS AND IMPACT PLAN, CONSERVATION PLAN OR IMPROVEMENTS AND CONSTRUCTION PLAN, NO NEW RESIDENTIAL STRUCTURES ARE PROPOSED.

SHEET INDEX	
TITLE PLAN	1 OF 2
EXISTING FEATURES PLAN	2 OF 2

ACT 287 as amended SERIAL NUMBER 20220900231
Edward B. Walsh & Associates, Inc. does not guarantee the accuracy of the locations for existing subsurface utility lines, structures, etc. shown on the plans, nor does E. B. Walsh & Assoc., Inc. guarantee that all subsurface utility lines, structures, etc. are shown.

Contractor shall verify the location and elevations of all subsurface utility lines, structures, etc. before the start of work, by calling the Pennsylvania One Call System at 1–800–242–1776.

UTILITIES NOTIFIED

COLUMBIA GAS TRANSMISSION CORP.
AQUA PENNSYLVANIA
COMCAST CABLE
PECO
UPPER UWCHLAN TOWNSHIP MUNICIPAL AUTHORITY
VERIZON EASTERN

PENNSYLVANIA ONE CALL SYSTEM, INC. 1–800–242–1776 STOP–CALL BEFORE YOU DIG!

UPI NO. 32–1–27.2

OWNER OF RECORD/APPLICANT

WILLIAM MARK STEPHENSON ETAL &
461 FONT ROAD
DOWNINGTOWN, PA 19335
D.B. 9618 PG. 1626

GRAPHIC SCALE 1"=30'

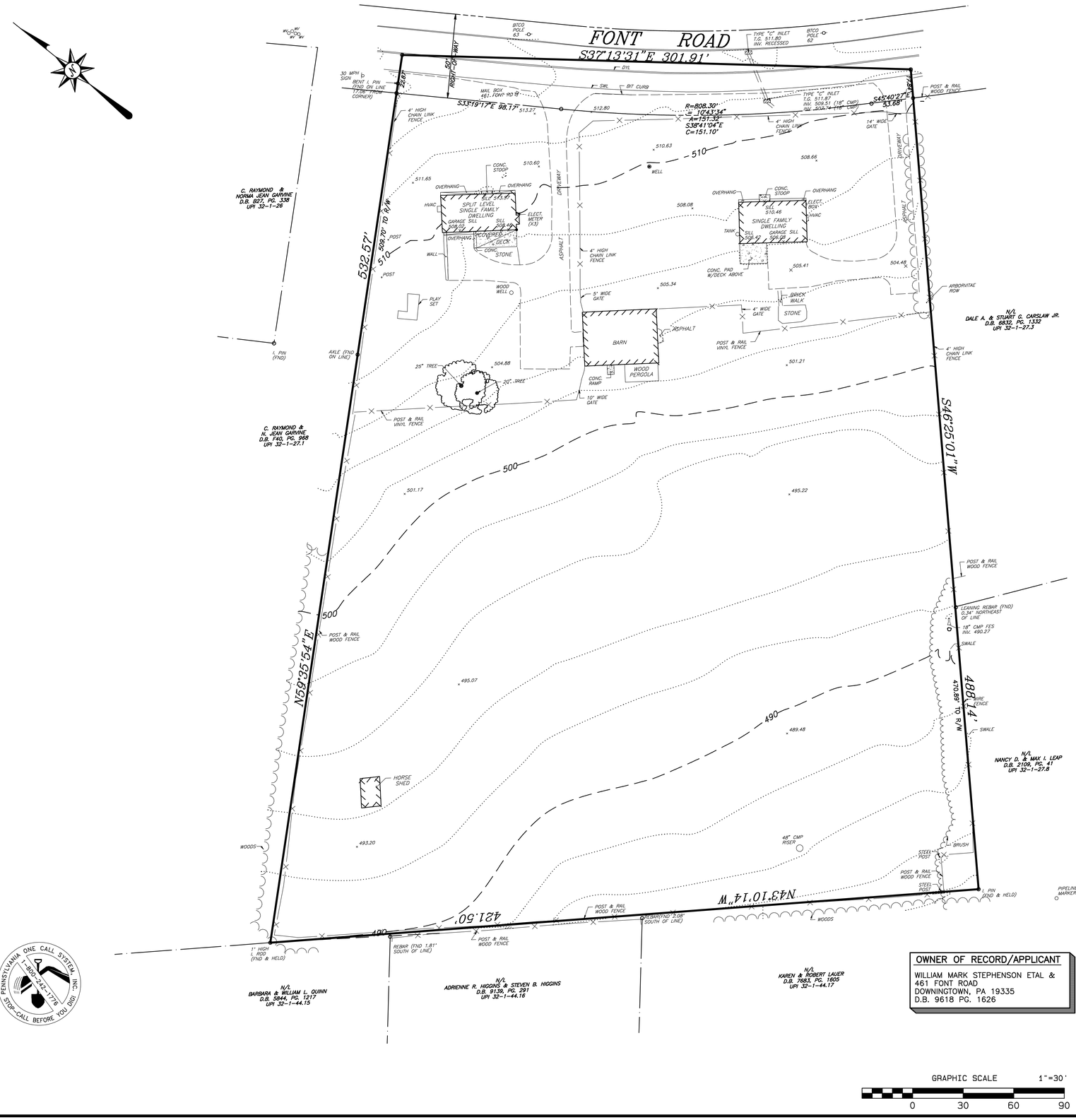
0 30 60 90

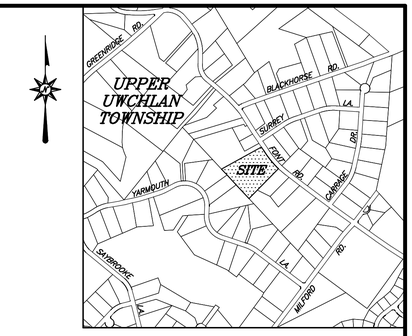
MINOR SUBDIVISION PLAN
FOR
461 FONT ROAD

UPPER UWCHLAN TOWNSHIP — CHESTER COUNTY, PA.

Edward B. Walsh & Associates, Inc.
CIVIL ENGINEERS & SURVEYORS
Whiteland Business Park
855 Springdale Drive, Suite 202
Exton, Pennsylvania 19341
Phone: 610–903–0060
Fax: 610–903–0080

Project– 4860	
Date– 4/8/22	
Scale– 1"= 30'	
Drawn– D.B.	
Checked– A.J.B.	
Sheet– 1 OF 2	
Plotted: 6/9/2022	File: F:\JB\4860\4860–B.pro





LOCATION MAP
SCALE: 1"=800'

LEGEND

- 430 — EXISTING INDEX CONTOUR
- EXISTING INTERIOR CONTOUR
- EXISTING INLET
- EXISTING STORM SEWER PIPE
- EXISTING WELL
- EXISTING UTILITY POLE
- EXISTING EDGE OF PAVEMENT
- EXISTING FENCE
- EXISTING BUILDING
- EXISTING CONCRETE

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D.B. 9618 PG. 1626

GRAPHIC SCALE 1"=30'
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UPI NO. 32-1-27.2

PENNSYLVANIA ONE CALL SYSTEM, INC. 1-800-242-1776 STOP-CALL BEFORE YOU DIG!

EXISTING FEATURES PLAN

MINOR SUBDIVISION PLAN
FOR
461 FONT ROAD

UPPER UWCHLAN TOWNSHIP — CHESTER COUNTY, PA.

Edward B. Walsh & Associates, Inc.
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Whiteland Business Park
855 Springdale Drive, Suite 202
Exton, Pennsylvania 19341
Phone: 610-903-0060
Fax: 610-903-0080

Project– 4860
Date– 4/8/22
Scale– 1"= 30'
Drawn– D.B.
Checked– A.J.B.
Sheet– 2 OF 2

Plotted: 5/25/2022 *File:* F:\JB\4860\4860-B.pro

GRAPHIC SCALE 1"=50'

50 0 50 100 150

AERIAL PLAN

FOR

461 FONT ROAD

UPPER UWCHLAN TWP. CHESTER COUNTY, PA

Edward B. Walsh & Associates, Inc.
CIVIL ENGINEERS & SURVEYORS
Whiteland Business Park
855 Springdale Drive, Suite 202
Exton, Pennsylvania 19341
Phone: (610) 903-0060
Fax: (610) 903-0080

PROJECT #4860
DATE: 2/15/2022
SCALE: 1" = 50'
DRAWN: MF
CHECKED: AB
SHEET: 1 OF 1

Plotted: 6/15/2022 File: F:\JB\4860\AERIAL\4860 AERIAL-1.DWG

902 Camaro Run Drive
West Chester, PA 19380
610-429-8089 (phone)
610-429-8098 (fax)
www.road-con.com

ROAD-CON, INC.
Heavy & Highway Contractors

June 15, 2022

Upper Uwchlan Township
140 Pottstown Pike
Chester Springs, PA 19425

Attn: Tony Scheivert
Township Manager

Re: 161 East Township Line Road

Letter No. 22001-0001

Dear Tony:

It was a pleasure meeting with you at the office the other day to review our potential use of the above referenced property. Following up on that meeting, I have consolidated our thoughts to writing. I ask that you review the following and attached document with your zoning team. As discussed, in order for us to pursue the purchase of the property from the current owner, we would need a commitment from the Township that it would be acceptable to change the current zoning from "Residential" to "Industrial". If this is not something the Township would consider, we would not be interested in the purchase of the property.

Background

Road-Con, Inc is a West Chester based heavy and highway construction firm. Currently, we reside at 902 Camaro Run Drive, West Chester, PA 19380. This address is a parcel in a small industrial park which borders both industrial buildings and some private residences in West Goshen Township. Our operations at this location include our administrative and engineering offices, shop facilities, and outside storage of heavy equipment and "reusable" materials. We employ approximately one hundred and twenty-five (125) people, administration staff, engineers, field managers, and various tradesmen. Most of our field staff report directly to the project sites while approximately twenty (20) personnel are staffed full time at the West Chester facility. Our current parcel is approximately four (4) acres which we have outgrown. With that in mind, we have been searching for an acceptable location in the Chester County or Montgomery County to handle our current needs and future expansion of the company.

Initial Interest in the Property

Our initial use for the property would be to create some usable space to provide for the storage of heavy equipment and materials (structural steel, steel sleeves, lumber, etc.). I have depicted this on the attached conceptual drawing. An important note would be our commitment to maintain a thirty (30) foot side yard setback which would either be a vegetative screen or an earthen berm with primary evergreen plantings. While it would need to be installed, we would suggest that the berm would provide a better separation from the adjoining properties both visually and from a noise standpoint. The existing creek that runs along the south eastern boarder of the property will provide a natural separation to our operations due to the required buffers on either side of the creek. Access to the parcel during this time would be through the existing industrial park.

Future use of the Property

Our long-range plan for the property (seven to ten years) would be to construct an office / shop building on the property and consolidate our company operations to this location.

In summary, our feeling is that the property fits both our initial and future uses quite well. Given its natural boundaries to the existing homes as well as the existing entrance from the existing industrial park, the parcel seems to be a natural fit as an extension of the existing industrial park in lieu of a residential development. The storage of our equipment and materials will be well shielded from view. In addition, as our current facility is located adjacent to existing residential parcels, in much closer proximity, we are well versed in conducting our operations without disturbance to the residential neighbors. We do not anticipate any issues with lighting, after hour noise, etc. with the neighboring properties.

If you have questions concerning the content of this letter or the attachment, please contact the undersigned. I will await your thoughts on the request.

Yours truly,

Albert D. Hoffman
President

Copy: File 22001

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

July 6, 2022

File No. 03-0434.07

Mr. Tony Scheivert
Upper Uwchlan Township Manager
140 Pottstown Pike
Chester Springs, PA 19425

Reference: Parcel 5C (Byers Station) – Lot 2B
Amended Final PRD Plans – Second Review
Upper Uwchlan Township, Chester County, PA

Dear Tony:

Gilmore & Associates, Inc. (G&A) is in receipt of the following documents from Bohler Engineering, unless otherwise noted:

- Plan set consisting of thirty-seven (37) sheets titled "Byers Station Amended Final PRD Plans – Final Plan for Lot 2B of Parcel 5C" dated March 15, 2022, last revised May 25, 2022.
- Report titled "General Project Description and Stormwater Management Calculations" dated March 25, 2019, last revised March 15, 2022, last revised May 25, 2022.
- ALTA/NSPS Land Title Survey prepared by Control Point Associates, Inc. dated December 22, 2021, last revised March 8, 2022.
- Preliminary Report of Geotechnical Investigation, Byers Station, 5C, Prepared by Earth Engineering Inc., dated October 30, 2015.
- AQUA Pennsylvania Test Flow Dated July 21, 2016.
- Proposed building elevations prepared by JAM Architects, dated May 12, 2022.
- Byers Station - Parking Analysis, prepared by TPD, dated March 30, 2022.
- Response letter from Bohler Engineering, dated May 25, 2022.
- Amendment to Easement and Covenant Agreement, recorded May 19, 2022.

G&A, as well as the other Township Consultants, have completed our first review of the above referenced Amended Final Plans for compliance with the Conditions of Tentative Approval Byers Station PRD, Township Zoning Ordinance, Subdivision and Land Development Ordinance, as well as the Stormwater Management Ordinance, and wish to submit the following comments for consideration.

I. OVERVIEW

The subject parcel is located at the northeastern corner of the intersection of Station Boulevard and Pottstown Pike. The tract is approximately 29.8 acres in size and is located in the R-4 Residential District and C-1 Village District, being developed under the Planned Residential Development Option as set forth in the Byers Station conditions of tentative approval. The parcel was subdivided into three lots; Lot 1, Lot 2A, and Lot 2B. Lots 1 and 2A consisting of 16.353 acres and 9.468 acres respectively, are currently under residential construction. This application is for Lot 2B which is 3.971 acres in size and is proposed to be developed as follows:

- 10,500 SF Day Care Facility
- 13,200 SF Retail Space
- 1,820 SF Drive-Thru Restaurant

The associated parking to support the uses will also be provided. Stormwater management will be handled via two (2) bioretention basins along the eastern ends of the property which have already been constructed during the previous phases of the project.

II. CONDITIONS OF TENTATIVE APPROVAL BYERS STATION PRD

1. *Paragraph B.3.(f). requires a break in the façade after a maximum length of 150'; the proposed day care center does not appear to comply with this requirement.*

   The specific condition states *"Building mass shall be broken through façade offsets of at least 10 feet or roofline changes, with maximum single façade length of 150;"* The applicant is attempting to address this condition through the use of awnings rather than true offsets in the foundation. **The Planning Commission should review and determine if this meets the spirit of this condition.**

2. *The plans should be revised to give an indication of the proposed signage to confirm compliance with paragraph B.3.(l).*

   The applicant indicates in their response letter they intend to combined the permitted square footage of signage for their 3 roadway frontages to erect a single 48 square foot

ground sign. **The Applicant should review this matter with the Township Zoning Office to confirm this is permissible.**

III. ZONING ORDINANCE REVIEW

1. *§200-74.B., §200-73.B(2)(b) and §200-76.A(1). – Clarify where off-street loading and unloading is proposed.*

   The applicant indicates in their response letter areas were delineated on Sheet C-301 indicating where loading / unloading would occur. However, these areas do not appear to have been shown. Please revise the plans to indicate these areas.

IV. SUBDIVISION AND LAND DEVELOPMENT REVIEW

1. *§162-9.2(a)[7]. – Provide bearings and distances for the proposed variable width driveway cross access easement and a legal description.*

   The applicant indicates in their response letter the bearings and distances have been provided, however, we were unable to locate. Nor was a legal description provided. Future submissions should include this information.

2. *§162-40.D – Street name signs shall be installed at all street intersections. If the proposed access to Pottstown Pike is to be considered an extension of Iris Lane, street signs should be provided indicating same.*

   Street name signs shall be provided at the access roads intersection with both Pottstown Pike as well as Begonia Lane.

V. STORMWATER MANAGEMENT ORDINANCE REVIEW

The applicant has submitted an addendum to the initial stormwater management report which documents that the development of Lot 2B does not alter the stormwater management design for the original drainage area. Additionally, the previously approved stormwater design included 103,038 square feet of impervious cover for Lot 2B, whereas the amended plans propose 97,075 square feet of imperious cover. This reduction in impervious cover will result in a less runoff and therefore, no basin modifications are necessary.

There is an active NPDES permit for the site. The plans indicate an "Area of 2022 Minor Amendment Disturbance = 3.96 Ac." Please confirm whether or not the referenced amendment to the NPDES permit has been submitted to the Conservation District.

The applicant indicates in their response letter a preapplication meeting has been scheduled with the Chester County Conservation District and it is anticipated a "Minor Amendment" will be all that is required. The Applicant should keep the Township apprised of the approval status of this matter.

VI. GENERAL COMMENTS

1. *Inlet 217 (Installed previously; not labeled on the plan) should be indicated to be removed as it will be in conflict with the proposed grading.*

   This comment has been adequately addressed. **However, there is also an existing inlet in the vicinity of proposed inlet 515 which should also be indicated to be removed on the demolition plan.**

2. **The proposed retaining wall along Pottstown Pike is in close proximity to the existing sanitary main. At a minimum, if the proposed wall is intended to be a unit masonry wall, there will certainly be conflicts between the tiebacks and the sanitary. A detail should be provided indicating the proposed wall and associated fencing construction as well as any required tiebacks.**

VII. TOWNSHIP TRAFFIC CONSULTANT COMMENTS McMAHON ASSOCIATES, INC.

1. As indicated in General Note 41 on Sheet C-102, the applicant is responsible to complete a traffic count at the intersection of Graphite Mine Road and Station Boulevard after construction and full-occupancy of Lot 2B to determine the need for left-turn phasing, and if needed, the applicant will modify the traffic signal to add the left-turn phase. The applicant should contact the Township and our office prior to completing the traffic count to determine the scope of the left-turn phasing evaluation.

2. ZO Section 200-73.F – The plan does not meet the parking supply requirements for the specific land uses contained in Section II.J Parking of the Conditions of Tentative Approval; however, Subsection II.J.8 reads: "At the discretion of the Board of Supervisors, a reduction in the sum total of the required parking is permitted if there are efficiencies derived by shared parking for uses which have complementary peak demands. The Applicant will submit parking generation data based on current and accepted methodology, such as that published by the Urban Land Institute, or from actual parking studies for the review and approval by the Board of Supervisors." Therefore, there is an option in the conditions of approval that allow for the parking to be calculated alternatively using other data sources, which is the approach the applicant is

using with this proposal. The plan proposes 131 parking spaces, including 15 parking spaces in the immediate vicinity of the fast-food restaurant. Based on the results of the submitted shared parking analysis, the total combined peak parking demand for the mix of uses on the site is 93 parking spaces, which is less than the 130 proposed parking spaces, and therefore, the proposed parking supply is sufficient overall. Since there are only 15 parking spaces in the immediate vicinity of the fast-foot restaurant, we recommend a pedestrian connection between the main parking area to the south of the east/west access drive and the fast-foot building. In addition, the parking study recommends the fast-food restaurant employees should park in the larger parking lot south of the east/west access drive to allow the 15 parking spaces in the vicinity of restaurant to be available for customers.

3. The sidewalk proposed on the southwest corner of the Begonia Drive / East/West Drive Aisle intersection provides an indirect connection to the existing sidewalk on the west side of Begonia Drive. This may result in pedestrians cutting the corner to avoid the longer walking route proposed by the current proposed sidewalk alignment. This newly proposed section of sidewalk should be realigned to follow a more direct route along the curbline. This would require reconstruction of the curb ramp on the southwest corner of the intersection. It is noted that based on the information provided on the plans, this ramp may not have been constructed based on the approved design, since the DWS for this ramp does not appear to be curved as proposed in the original design. This should be corrected as part of the redesign.

4. Since only 15 parking spaces are provided in the vicinity of the proposed fast-food restaurant, it is likely that employees and patrons of the restaurant will park in the larger parking lot on the south side of the east/west access drive and walk to the restaurant. The applicant's engineer indicates concern for the safety of pedestrians crossing the east/west access aisle. As an alternative, the applicant proposes that pedestrians should cross the east/west access aisle at its intersection with Begonia Drive. However, since vehicle traffic approaching this midblock driveway location will either be turning from Route 100 or Begonia Drive at lower speeds, and since any pedestrian crossing of the east/west access aisle would provide adequate signing and striping to enhance pedestrian safety, we continue to support a pedestrian crossing of the east/west access drive at the internal driveway intersection, including ADA compliant pedestrian curb ramps, a crosswalk, advance pedestrian warning signing, and verification of sight distances.

5. The plans designate two off-peak loading areas within the southern parking lot, which each take up eight parking spaces (for a total of 16 parking spaces designated for off-peak loading). The plans propose signing in front of these spaces which state "Designated Off-Peak Loading Area". These signs should be revised to provide a time period when these spaces will be used as a loading area as opposed to general parking

spaces. Alternatively, please provide some method of enforcement to ensure use of these parking spaces for loading will not negatively impact customer parking.

6. Per the 2019 Lot 2 Decision and Order, the applicant's engineer indicates the applicant will provide additional information regarding the specific restaurant user once the tenant is known. If feasible, we recommend this information should be provided prior to final plan approval in order to confirm the number of needed drive-through stacking spaces.

Upon resubmission, the applicant's engineer should compose a response letter that describes how each comment has been addressed and where any plan revisions are located. Additional comments regarding the traffic improvements and/or land development plans may follow upon receipt of future submissions.

VIII. TOWNSHIP PLANNING CONSULTANT COMMENTS BRANDYWINE CONSERVANCY

We have competed the review of items described above and offer the following comments to the applicant's responses submitted via letter to the Township dated May 25, 2022, as they relate to the items noted below.

Comprehensive Plan (2014) and Community Trails Master Plan (2005)

We appreciate applicant's efforts to provide pedestrian connectivity to the greatest extent feasible which would made it more consistent with the vision for the Village Concept Plan. However, we believe that there are additional connection improvements that could be made to meet that vision, including:

- Connecting the proposed sidewalk that runs along south side of Iris Lane with the ADA curb ramp at the southwestern corner of Iris Lane and Begonia Drive;
- Providing a crosswalk at Iris Lane from the southwestern corner of Iris Lane and Begonia Drive to connect with the existing sidewalk that runs along western side of Begonia Drive at the drive-thru restaurant site;
- Providing a crosswalk from west to east side of Begonia Drive at the northern side of the development to connect to the existing sidewalk running along Iris Lane within residential development;
- Providing sidewalk across the proposed parking island that is in the middle of the development and designating one parking spot on each side of said island to

pedestrian use to provide walkable connection from the eastern to western side of the development across the proposed parking areas.

Considering the extent of pedestrian network proposed by the applicant, we are supportive of 5-foot-wide concrete sidewalks as a minimum requirement.

Zoning Ordinance

1. The applicant revised the Plan to add a crosswalk at the southern end of the site by the trash enclosure to connect this sidewalk to Begonia Drive. We are fully supportive of that revision and recommend adding an additional crosswalk at proposed drive access off Begonia Drive to connect to the existing sidewalk at the southeastern corner of the site.

2. The applicant provided architectural drawings to indicate compliance with the Resolution #07-06-99-09 for a tentative approval for Byers Village subdivision. While we recognize that the applicant meets the height requirements, the pad sites shall be designed with no flat or faux-mansard roofs (Section II.B.3.e). Presented architectural drawings include flat roofs for retail stores. We recommend the applicant revisits those drawings.

3. We are in support of applicant using roofline changes to break the proposed building mass as per Resolution #07-06-99-09 for a tentative approval for Byers Village subdivision (Section II.B.3.f); however, the applicant shall address the comment above as it relates to the usage of flat roofs.

4. We appreciate the applicant including delivery truck circulation plan with the resubmission. We encourage the applicant to indicate on the plan (as appropriate) the discharge and pick-up areas for day-care center. Our recommendation is to designate several parking spots to day-care use during a specific timeframe (i.e., peak morning and evening hours) and mark those with appropriate signage. Outside of those specified hours, the parking spots will be utilized for other purposes to support the proposed development.

IX. TOWNSHIP SEWER CONSULTANT COMMENTS ARRO CONSULTING, INC.

1. The sanitary sewer capacity needs need to be determined for this project. Pennsylvania Department of Environmental Protection (PADEP) issued sewage facilities planning module (SFPM) approval on January 7th, 2020 in the amount of 12,872 gallons per day (GPD) for Lots 2A and 2B of which 2,697 GPD was allocated for

Lot 2B. The proposed building uses have changed since that SFPM approval, as such, estimated usage calculations need to be provided based on similar facilities for review in order to determine the sanitary sewer capacity needs. Additional SFPM approval from PADEP may be required. Once determined, the required sanitary sewer capacity should be shown on the plan. All of the required capacity will need to be purchased.

2. Based on our record drawings, the gravity sewer main shown crossing Pottstown Pike (SR 0100) from the Reserve at Waynebrook to existing sanitary sewer manhole MH-1A does not exist. Please remove this the gravity sewer main from the plans. The drawings should show both the existing Reserve at Waynebrook sanitary sewer main crossing under Route 100 and flowing through manhole MH-1 on the east side of Route 100 and also the manhole MH-1A1 between manhole MH-1 and manhole MH-1A. (ARRO will provide available record drawing information.)

3. A minimum 10-foot separation distance from the centerline of the Waynebrook 8-inch gravity sewer and the edge of the retaining wall, needs to be provided.

X. TOWNSHIP LIGHTING CONSULTANT COMMENTS GILMORE & ASSOCIATES, INC.

1. §162-58.C(1) - Lighting Compliance note on sheet C-701 indicates compliance with the required light levels, however calculations and compliance information is only provided for parking areas. We note that there is a minimum requirement for sidewalk areas, that does not appear to be addressed, and the sidewalk area between the proposed Daycare Building and adjacent Retail Building does not appear to provide adequate illumination of the sidewalk in that area. Applicant shall provide illumination levels and compliance information for the sidewalk areas.

2. §162-58.C(4)(b) - Lighting Compliance note on sheet C-701 indicates compliance with the minimum five foot setback for light poles, however detail 1/S5 (Flush Foundation Detail) indicates a three foot minimum setback. Detail shall be revised to indicate the required five foot minimum setback.

3. Location of 'PT' type fixtures shall be coordinated and verified. It appears that the northern-most fixture is proposed within existing sidewalk/within the road right-of-way, while the others are behind the sidewalk and right-of-way line. Light fixture location shall be consistent, to the extent feasible. Northern-most fixture also appears to be in very close proximity to a proposed water meter pit. Two other fixtures are in very close proximity to sanitary sewer laterals. Locations shall be coordinated to avoid conflicts.

This concludes our second review of the above referenced Amended Final Plans. If you have any questions, please do not hesitate to contact me.

Sincerely,

David N. Leh

David N. Leh, P.E.
Vice President
Gilmore & Associates, Inc.

cc: Upper Uwchlan Township Planning Commission Members
Upper Uwchlan Township Board of Supervisors
Kristin S. Camp, Esq., BBM&M (via email only)
Sheila A. Fleming, ASLA, Brandywine Conservancy (via email only)
Christopher J. Williams, P.E., McMahon Associates, Inc. (via email only)
David Schlott, P.E., ARRO Consulting, Inc. (via email only)
Matt Brown, P.E., DEE – UUTMA Authority Administrator (via email only)
Alyson Zarro, Esq. – RRHC (via email only)
Jason Korczak, P.E., Bohler Engineering (via email only)
Michael Baginski, P.E., Bohler Engineering (via email only)
Guy DiMartino, P.E., TPD (via email only)
Richard Huffman, Applicant (via email only)
Allan Greenberg Applicant (via email only)
Kevin Michals Applicant (via email only)
Gary Large Applicant (via email only)
Gwen Jonik, Township Secretary (via email only)

Lionville Fire Company

15 South Village Avenue P.O. Box 478 Lionville, Pennsylvania 19353
Emergency: 911 Business: (610) 363-7663

TO: Upper Uwchlan Township

FROM: Richard Ruth

DATE: June 3, 2022

RE: Byers Station Parcel 5C Lot 2B Commercial Lot ~ Amended PRD Plan review

MEMORANDUM

I have reviewed Bohler Engineering's May 25, 2022 response letter and my May 12, 2022 comments have been satisfactorily addressed.

Sincerely,

Richard Ruth
Upper Uwchlan Township Fire Marshal

'BYERS STATION'

AMENDED FINAL PRD PLANS

(FINAL PLAN FOR LOT 2B OF PARCEL 5C)

FOR

PROSPERITY PROPERTY INVESTMENTS, LLC

1306 BELLONA AVENUE, LUTHERVILLE-TIMONIUM, MD 21093

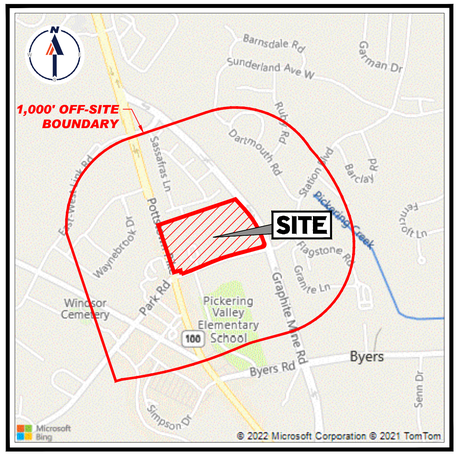
PROPOSED

COMMERCIAL DEVELOPMENT

LOCATION OF SITE

GRAPHITE MINE ROAD & STATION BOULEVARD

UPPER UWCHLAN TOWNSHIP, CHESTER COUNTY, PENNSYLVANIA, 19425

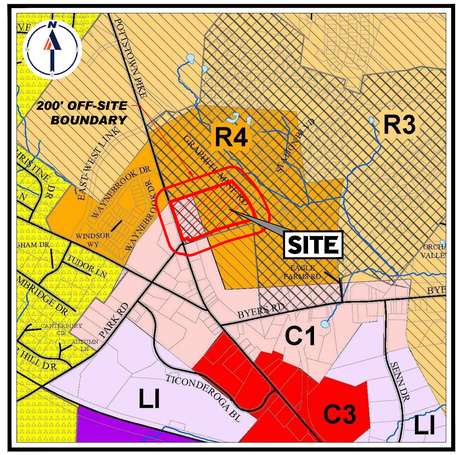


SITE LOCATION MAP

SCALE: 1"=800'

SITE AERIAL MAP

SCALE: 1"=800'



UPPER UWCHLAN ZONING MAP (REV. 10/20/05)

SCALE: 1"=1,000'

LEGEND

C1 - VILLAGE COMMERCIAL DISTRICT
C2 - LIMITED COMMERCIAL DISTRICT
C3 - HIGHWAY COMMERCIAL DISTRICT
LI - LIMITED INDUSTRIAL DISTRICT
PI - PLANNED INDUSTRIAL DISTRICT
R3 - RESIDENTIAL DISTRICT (1.5 DWELLING UNITS/ACRE)
R4 - RESIDENTIAL DISTRICT (2-4 DWELLING UNITS/ACRE)

F2 - FLEXIBLE DEVELOPMENT OVERLAY

PRD - PLANNED RESIDENTIAL DEVELOPMENT (ALSO PART OF F2 OVERLAY)

DRAWING SHEET INDEX

	SHEET TITLE	SHEET NUMBER
*	COVER SHEET	C-101
*	PROJECT NOTES	C-102
	EXISTING CONDITIONS / DEMOLITION PLAN	C-201
*	SITE PLAN	C-301
	FIRE TRUCK CIRCULATION PLAN	C-302
	DELIVERY TRUCK CIRCULATION PLAN	C-303
	TRASH TRUCK CIRCULATION PLAN	C-304
	GRADING PLAN	C-401
	ADA GRADING DETAILS	C-402
	UTILITY PLAN	C-501
	OVERALL SOIL EROSION & SEDIMENT POLLUTION CONTROL PLAN	C-601
	SOIL EROSION & SEDIMENT POLLUTION CONTROL PLAN	C-602
	SOIL EROSION & SEDIMENT POLLUTION CONTROL NOTES	C-603, C-604
	SOIL EROSION & SEDIMENT POLLUTION CONTROL DETAILS	C-605, C-606, C-607
*	OVERALL POST CONSTRUCTION STORMWATER MANAGEMENT PLAN	C-608
*	POST CONSTRUCTION STORMWATER MANAGEMENT PLAN	C-609
*	POST CONSTRUCTION STORMWATER MANAGEMENT NOTES	C-610
*	POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS	C-611, C-612
	LIGHTING PLAN	C-701
	LIGHTING DETAILS	C-702, C-703
	LANDSCAPE PLAN	C-704
	LANDSCAPE DETAILS	C-705
	PROPOSED STORM SEWER PROFILES	C-801, C-802
	PROPOSED ACCESS DRIVEWAY PROFILE	C-803
	DETAILS	C-901, C-902, C-903, C-904
	PRE-DEVELOPMENT DRAINAGE AREA PLAN	C-910
	POST DEVELOPMENT DRAINAGE AREA PLAN	C-911
	INLET DRAINAGE AREA PLAN	C-912

* SHEETS C-101, C-102, C-301, AND C-608 THROUGH C-612 IN THIS PLAN SET ARE TO BE CONSIDERED A COMPLETE RECORD SET FOR FILING PURPOSES IN THE CHESTER COUNTY RECORDER OF DEEDS.

SHEETS C-201, C-302 THROUGH C-607, AND C-701 THROUGH C-912 INCLUSIVE ON RECORD AT UPPER UWCHLAN TOWNSHIP, SHALL BE CONSIDERED A PART OF THE APPROVED AMENDED FINAL PRD PLANS AS IF RECORDED WITH THE SAME.

OWNER / DEVELOPER'S ACKNOWLEDGEMENT:

STATE OF _____ SS:

COUNTY OF _____

ON THE _____ DAY OF _____, A.D. 2022, BEFORE ME, THE SUBSCRIBER, A NOTARY PUBLIC OF THE COMMONWEALTH OF PENNSYLVANIA, RESIDING IN _____, PERSONALLY APPEARED _____ WHO ACKNOWLEDGED HIMSELF TO BE THE _____ OF PROSPERITY PROPERTY INVESTMENTS, LLC, AND THAT AS MUCH TO DO SO, HE EXECUTED THE FOREGOING PLAN BY SIGNING THE NAME OF SAID CORPORATION BY HIMSELF AS _____ THAT THE SAID LIMITED PARTNERSHIP IS THE OWNER OF THE DESIGNATED LAND, THAT ALL NECESSARY APPROVAL OF THE PLAN HAS BEEN OBTAINED AND IS ENDORSED THEREON AND THAT THE SAID LIMITED PARTNERSHIP DESIRES THAT THE FOREGOING PLAN MAY BE DULY RECORDED.

_____
OWNER:

_____
PRINT NAME:

_____
TITLE:
PROSPERITY PROPERTY INVESTMENTS, LLC

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

_____
NOTARY PUBLIC OR OTHER OFFICER

MY COMMISSION EXPIRES:_____

OWNER / DEVELOPER'S ACKNOWLEDGEMENT:

ANY REVISIONS TO THE APPROVED STORMWATER MANAGEMENT PLAN SHALL BE SUBMITTED TO, AND APPROVED, BY THE UPPER UWCHLAN TOWNSHIP, AND A REVISED EROSION AND SEDIMENT POLLUTION CONTROL PLAN SHALL BE SUBMITTED TO, AND APPROVED, BY THE CHESTER COUNTY CONSERVATION DISTRICT OR UPPER UWCHLAN TOWNSHIP (AS APPLICABLE) FOR DETERMINATION OF ADEQUACY PRIOR TO CONSTRUCTION OF THE REVISED FEATURES.

_____
OWNER:

_____
PRINT NAME:

_____
TITLE:
PROSPERITY PROPERTY INVESTMENTS, LLC

REVIEWED BY THE PLANNING COMMISSION OF UPPER UWCHLAN TOWNSHIP, CHESTER COUNTY, PENNSYLVANIA, THIS _____ DAY OF _____, A.D. 2022,

_____
CHAIRMAN

_____
VICE CHAIRMAN

_____
SECRETARY

APPROVED BY THE BOARD OF SUPERVISORS OF UPPER UWCHLAN TOWNSHIP, CHESTER COUNTY, PENNSYLVANIA, THIS _____ DAY OF _____, A.D. 2022

_____
CHAIRMAN

_____
VICE CHAIRMAN

_____
MEMBER

REVIEWED BY THE PLANNING COMMISSION OF CHESTER COUNTY, PENNSYLVANIA, THIS _____ DAY OF _____, A.D. 2022,

_____
CHAIRMAN

_____
SECRETARY

REVIEWED BY UPPER UWCHLAN TOWNSHIP ENGINEER:

_____
SIGNED

_____
DATE

PREPARED BY

BOHLER

UNIFORM PARCEL IDENTIFIER: 32-4-1090.1

I:\2PC\211160\CAD\DRAWINGS\PLAN SETS\DWG, SITE PLANS\PC211160-CNDS-1A-----LAYOUT C-101 COVER

BOHLER

SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

THE INFORMATION, DESIGN AND CONTENT OF THIS PLAN ARE COPYRIGHTED AND SHALL NOT BE COPIED OR USED FOR ANY PURPOSE WITHOUT THE EXPRESS AUTHORIZATION FROM BOHLER. ONLY APPROVED PLANS SHALL BE UTILIZED FOR CONSTRUCTION PURPOSES. © 2022 BOHLER

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	05/25/2022	REV. PER TOWNSHIP COMMENTS	LGU / MJB

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NOT APPROVED FOR CONSTRUCTION

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	PC211160
DRAWN BY:	LGU
CHECKED BY:	J.R.K.
DATE:	03/15/2022
CAD I.D.:	PC211160-CNDS-1A

PROJECT:

AMENDED FINAL PRD PLANS

FOR

PROSPERITY PROPERTY INVESTMENTS, LLC

"FINAL PLAN FOR LOT 2B OF PARCEL 5C"
PROPOSED COMMERCIAL DEVELOPMENT

GRAPHITE MINE ROAD & STATION BOULEVARD
UPPER UWCHLAN TOWNSHIP
CHESTER COUNTY
COMMONWEALTH OF PENNSYLVANIA

BOHLER
1600 MANOR DRIVE, SUITE 200
CHALFONT, PA 18914
Phone: (215) 996-9100
Fax: (215) 996-9102
www.BohlerEngineering.com

J.R. KORCZAK
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE074279
NEW JERSEY LICENSE No. 24GE04715400

SHEET TITLE:

COVER SHEET

SHEET NUMBER:

C-101

1 OF 37

REVISION 1 - 05/25/2022

GENERAL NOTES:

SCONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH THE NOTES AND SPECIFICATIONS CONTAINED HEREIN. CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL SUBCONTRACTORS FULLY AND COMPLETELY CONFORM TO AND COMPLY WITH THESE REQUIREMENTS.

1. THE FOLLOWING DOCUMENTS ARE INCORPORATED BY REFERENCE AS PART OF THIS SITE PLAN:
   a. "ALTA/ACSM LAND TITLE SURVEY," PREPARED BY CONTROL POINTS ASSOCIATES, INC., FOR BYERS RESIDENTIAL ACQUISITION, L.P. & BYERS RETAIL ACQUISITION, L.P., DATED 10/27/2015, LAST REVISED 11/16/2015.
   b. "BYERS STATION SUBDIVISION & AMENDED FINAL PRD PLANS," PREPARED BY BOHLER ENGINEERING, PA, LLC, FOR TOLL PA II, L.P., DATED 05/20/2016, LAST REVISED 12/06/17.
   c. "GENERAL PROJECT DESCRIPTION AND STORMWATER MANAGEMENT CALCULATIONS," PREPARED BY BOHLER ENGINEERING PA, LLC, DATED 3/22/19 LATEST REVISION.
   d. "PARK ROAD EXTENSION SANITARY SEWER AS-BUILT PLAN," PREPARED BY YERKES ASSOCIATES, INC., DATED 10/12/16.
   e. "PRELIMINARY REPORT OF GEOTECHNICAL INVESTIGATION, BYERS STATION 5C, POTTSTOWN PIKE AND STATION BOULEVARD, UPPER UWCHLAN TOWNSHIP, CHESTER COUNTY, PENNSYLVANIA," PREPARED BY EARTH ENGINEERING, INC., DATED 10/30/15.
   f. "STORM AND SANITARY AS-BUILTS COMMERCIAL PARCEL - LOT 2," PREPARED BY ESE CONSULTANTS, INC., DATED 8/06/19.
   g. "AMENDED FINAL PRD PLANS - FINAL PLAN FOR LOT 2A OF PARCEL 5C" PREPARED BY BOHLER ENGINEERING, PA, LLC, FOR TOLL PA II, L.P., DATED 03/25/2019, LAST REVISED 11/15/2021.

   PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR MUST VERIFY THAT HE/SHE HAS THE LATEST EDITION OF THE DOCUMENTS REFERENCED ABOVE. THIS IS THE CONTRACTOR'S RESPONSIBILITY.
2. ALL ACCESSIBLE ADA PARKING SPACES MUST BE CONSTRUCTED TO MEET, AT A MINIMUM, THE MORE STRINGENT OF THE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT" (ADA) CODE (42 U.S.C. § 12101 et seq. AND 42 U.S.C. § 4151 et seq.) OR THE REQUIREMENTS OF THE JURISDICTION WHERE THE PROJECT IS TO BE CONSTRUCTED, AND ANY AND ALL AMENDMENTS TO BOTH WHICH ARE IN EFFECT WHEN THESE PLANS ARE COMPLETED.
3. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED THE COMMENTS TO ALL PLANS AND OTHER DOCUMENTS REVIEWED AND APPROVED BY THE PERMITTING AUTHORITIES AND CONFIRMED THAT ALL NECESSARY OR REQUIRED PERMITS HAVE BEEN OBTAINED. CONTRACTOR MUST HAVE COPIES OF ALL PERMITS AND APPROVALS ON SITE AT ALL TIMES.
4. THE OWNER/CONTRACTOR MUST BE FAMILIAR WITH AND RESPONSIBLE FOR THE PROCUREMENT OF ANY AND ALL CERTIFICATIONS REQUIRED FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
5. ALL WORK MUST BE PERFORMED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS 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.
6. THE GEOTECHNICAL REPORT AND RECOMMENDATIONS SET FORTH HEREIN 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 THE PLANS AND THE GEOTECHNICAL REPORT AND RECOMMENDATIONS SHALL TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR MUST NOTIFY THE ENGINEER, IN WRITING, OF ANY SUCH CONFLICT, DISCREPANCY OR AMBIGUITY BETWEEN THE GEOTECHNICAL REPORT AND PLANS AND SPECIFICATIONS PRIOR TO PROCEEDING WITH ANY FURTHER WORK.
7. THESE PLANS ARE BASED ON INFORMATION PROVIDED TO BOHLER ENGINEERING BY THE OWNER AND OTHERS PRIOR TO THE TIME OF PLAN PREPARATION. CONTRACTOR MUST FIELD VERIFY EXISTING CONDITIONS AND NOTIFY BOHLER ENGINEERING, IN WRITING, IMMEDIATELY IF ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLAN, OR IF THE PROPOSED WORK CONFLICTS WITH ANY OTHER SITE FEATURES.
8. ALL DIMENSIONS SHOWN ON THE PLANS MUST BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR MUST NOTIFY ENGINEER, 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 REDONE OR REPAIRED DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS PRIOR TO CONTRACTOR GIVING ENGINEER WRITTEN NOTIFICATION OF SAME AND ENGINEER, THEREAFTER, PROVIDING CONTRACTOR WITH WRITTEN AUTHORIZATION TO PROCEED WITH SUCH ADDITIONAL WORK.
9. CONTRACTOR MUST REFER TO THE ARCHITECTURAL/BUILDING PLANS "OF RECORD" FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRY/EXIT POINTS, ELEVATIONS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY LOCATIONS.
10. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR MUST COORDINATE THE BUILDING LAYOUT BY CAREFUL REVIEW OF THE LATEST CIVIL PLANS AND THE LATEST ARCHITECTURAL PLANS (INCLUDING, BUT NOT LIMITED TO, STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND FIRE SUPPRESSION PLAN, WHERE APPLICABLE). CONTRACTOR MUST IMMEDIATELY NOTIFY OWNER, ARCHITECT AND BOHLER ENGINEERING, IN WRITING, OF ANY CONFLICTS, DISCREPANCIES OR AMBIGUITIES WHICH EXIST.
11. DEBRIS MUST NOT BE BURIED ON THE SUBJECT SITE AND ALL UNSUITABLE EXCAVATED MATERIAL AND DEBRIS (SOLID WASTE) MUST BE DISPOSED OF IN ACCORDANCE WITH THE REQUIREMENTS OF ANY AND ALL GOVERNMENTAL AUTHORITIES WHICH HAVE JURISDICTION OVER THIS PROJECT OR OVER CONTRACTOR.
12. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING WHEN SHORING IS REQUIRED AND FOR INSTALLING ALL SHORING REQUIRED DURING EXCAVATION (TO BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS) AND ANY ADDITIONAL PRECAUTIONS TO BE TAKEN TO ASSURE THE STABILITY OF ADJACENT, NEARBY AND CONTIGUOUS STRUCTURES AND PROPERTIES.
13. THE CONTRACTOR IS TO EXERCISE EXTREME CARE 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. 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.
14. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY 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 SHALL 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 SIGNAL INTERCONNECTION 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. CONTRACTOR MUST BEAR ALL COSTS ASSOCIATED WITH SAME. CONTRACTOR IS RESPONSIBLE TO DOCUMENT ALL EXISTING DAMAGE AND TO NOTIFY THE OWNER AND THE CONSTRUCTION MANAGER PRIOR TO THE START OF CONSTRUCTION.
15. ALL CONCRETE MUST BE AIR ENTRAINED AND HAVE THE MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS UNLESS OTHERWISE NOTED ON THE PLANS, DETAILS AND/OR GEOTECHNICAL REPORT.
16. THE ENGINEER IS 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 FOR ANY CONFLICTS/SCOPE REVISIONS WHICH RESULT FROM SAME. CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE METHODS/MEANS FOR COMPLETION OF THE WORK PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
17. THE ENGINEER OF RECORD IS NOT RESPONSIBLE FOR JOB SITE SAFETY. THE ENGINEER OF RECORD HAS NOT BEEN RETAINED TO PERFORM OR BE RESPONSIBLE FOR JOB SITE SAFETY, SAME BEING WHOLLY OUTSIDE OF ENGINEER'S SERVICES AS RELATED TO THE PROJECT. THE ENGINEER OF RECORD IS NOT RESPONSIBLE TO IDENTIFY OR REPORT ANY JOB SITE SAFETY ISSUES, AT ANY TIME.
18. ALL CONTRACTORS MUST CARRY THE SPECIFIED STATUTORY WORKER'S COMPENSATION INSURANCE, EMPLOYER'S LIABILITY INSURANCE AND LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE (CGL). ALL OWNERS AND CONTRACTORS MUST NAME THEIR RESPECTIVE OWNERS, 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 THIS HOLD HARMLESS AND INDEMNITY OBLIGATIONS ASSUMED BY THE CONTRACTOR. EACH PARTY MUST FURNISH BOHLER ENGINEERING WITH CERTIFICATIONS OF INSURANCE AS EVIDENCE OF THE REQUIRED INSURANCE PRIOR TO COMMENCING WORK AND UPON RENEWAL OF EACH POLICY DURING THE ENTIRE PERIOD OF CONSTRUCTION AND FOR ONE YEAR AFTER THE COMPLETION OF CONSTRUCTION. IN ADDITION, ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, INDEMNIFY, DEFEND AND HOLD HARMLESS BOHLER ENGINEERING 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 CLAIMS, STATUTORY CAUSES OF ACTION, LOSSES, 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 CONTRACTORS, ALL CLAIMS BY THIRD PARTIES AND ALL CLAIMS RELATED TO THE PROJECT. CONTRACTOR MUST NOTIFY THE DESIGN ENGINEER, BOHLER ENGINEERING PA, LLC, IN WRITING, AT LEAST THIRTY (30) DAYS PRIOR TO ANY TERMINATION, SUSPENSION OR CHANGE OF ITS INSURANCE HEREUNDER.
19. BOHLER ENGINEERING 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 CHECKING FOR CONFORMANCE WITH THE DESIGN INTENT AND THE INFORMATION SHOWN IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONSTRUCTION MEANS AND/OR 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 HEREUNDER. BOHLER ENGINEERING'S SHOP DRAWING REVIEW WILL BE CONDUCTED WITH REASONABLE PROMPTNESS WHILE ALLOWING SUFFICIENT TIME TO PERMIT ADEQUATE REVIEW. REVIEW OF A SPECIFIC ITEM MUST NOT INDICATE THAT BOHLER ENGINEERING HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. BOHLER ENGINEERING WILL NOT BE RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS NOT PROMPTLY AND IMMEDIATELY BROUGHT TO ITS ATTENTION, IN WRITING, BY THE CONTRACTOR. BOHLER ENGINEERING WILL NOT BE REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN RECEIVED.
20. NEITHER THE PROFESSIONAL ACTIVITIES OF BOHLER ENGINEERING, NOR THE PRESENCE OF BOHLER ENGINEERING 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, SHALL RELIEVE THE GENERAL CONTRACTOR OF ITS OBLIGATIONS, DUTIES AND RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, OVERSEEING, SUPERINTENDING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND COMPLIANCE ANY HEALTH OR SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES WITH JURISDICTION OVER THE PROJECT AND/OR PROPERTY. BOHLER ENGINEERING AND ITS PERSONNEL HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER ANY CONSTRUCTION CONTRACTOR OR ITS EMPLOYEES IN CONNECTION WITH THEIR WORK OR ANY HEALTH OR SAFETY PROGRAMS OR PROCEDURES. THE GENERAL CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY. BOHLER ENGINEERING SHALL BE INDEMNIFIED BY THE GENERAL CONTRACTOR AND MUST BE NAMED AN ADDITIONAL INSURED UNDER THE GENERAL CONTRACTORS POLICIES OF GENERAL LIABILITY INSURANCE AS DESCRIBED ABOVE FOR JOB SITE SAFETY.
21. IF THE CONTRACTOR DEVIATES FROM THE PLANS AND SPECIFICATIONS, INCLUDING THE NOTES CONTAINED HEREIN, WITHOUT FIRST OBTAINING THE PRIOR WRITTEN AUTHORIZATION OF THE ENGINEER FOR SUCH DEVIATIONS, THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PAYMENT OF ALL COSTS INCURRED IN CORRECTING ANY WORK DONE WHICH DEVIATES FROM THE PLANS, ALL FINES AND/OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM AND, FURTHER, SHALL DEFEND, INDEMNIFY AND HOLD HARMLESS THE ENGINEER, TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, IN ACCORDANCE WITH THESE NOTES HEREIN, FOR AND FROM ALL FEES, ATTORNEYS' FEES, DAMAGES, COSTS, JUDGMENTS, PENALTIES AND THE LIKE RELATED TO SAME.
22. CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE AND PROTECTION OF TRAFFIC PLAN FOR ALL WORK THAT AFFECTS PUBLIC TRAVEL EITHER IN THE R.O.W. OR ON SITE. THE COST FOR THIS ITEM MUST BE INCLUDED IN THE CONTRACTOR'S PRICE.
23. ALL SIGNING AND PAVEMENT STRIPING MUST CONFORM TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES OR LOCALLY APPROVED SUPPLEMENT.
24. ENGINEER IS NOT RESPONSIBLE FOR ANY INJURY OR DAMAGES RESULTING FROM CONTRACTOR'S FAILURE TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH THE APPROVED PLANS. IF CONTRACTOR AND/OR OWNER FAIL TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH APPROVED PLANS, THEY AGREE TO JOINTLY AND SEVERALLY INDEMNIFY AND HOLD ENGINEER HARMLESS FOR ALL INJURIES AND DAMAGES THAT ENGINEER SUFFERS AND COSTS THAT ENGINEER INCURS.
25. 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 ENGINEER IS 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 ENGINEER HARMLESS FOR ALL INJURIES AND DAMAGES THAT ENGINEER SUFFERS AND COSTS THAT ENGINEER INCURS AS A RESULT OF SAID FAILURE.
26. ALL DIMENSIONS MUST BE TO FACE OF CURB, EDGE OF PAVEMENT, OR EDGE OF BUILDING, UNLESS NOTED OTHERWISE.
27. ALL CONSTRUCTION AND MATERIALS MUST COMPLY WITH AND CONFORM TO APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, LAWS, ORDINANCES, RULES AND CODES, AND ALL APPLICABLE OSHA REQUIREMENTS.
28. CONTRACTOR AND OWNER MUST INSTALL ALL ELEMENTS AND COMPONENTS IN STRICT COMPLIANCE WITH AND ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDED INSTALLATION CRITERIA AND SPECIFICATIONS. IF CONTRACTOR AND/OR OWNER FAIL TO DO SO, THEY AGREE TO JOINTLY AND SEVERALLY INDEMNIFY AND HOLD ENGINEER HARMLESS FOR ALL INJURIES AND DAMAGES THAT ENGINEER SUFFERS AND COSTS THAT ENGINEER INCURS AS A RESULT OF SAID FAILURE.
29. AS CONTAINED IN THESE DRAWINGS AND ASSOCIATED APPLICATION DOCUMENTS PREPARED BY THE SIGNATORY PROFESSIONAL ENGINEER, THE USE OF THE WORDS CERTIFY OR CERTIFICATION CONSTITUTES AN EXPRESSION OF "PROFESSIONAL OPINION" REGARDING THE INFORMATION WHICH IS THE SUBJECT OF THE UNDERSIGNED PROFESSIONAL KNOWLEDGE OR BELIEF AND IN ACCORDANCE WITH COMMON ACCEPTED PROCEDURE CONSISTENT WITH THE APPLICABLE STANDARDS OF PRACTICE, AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE, EITHER EXPRESSED OR IMPLIED.
30. ROAD NAMES ARE SUBJECT TO CHANGE BASED ON APPROVAL BY THE TOWNSHIP PLANNING COMMISSION AND THE LOCAL POST MASTER.
31. ROADS ARE NOT OFFERED FOR DEDICATION TO UPPER UWCHLAN TOWNSHIP.
32. THE HOMEOWNER'S ASSOCIATION AND OWNER IS RESPONSIBLE FOR PERPETUAL MAINTENANCE OF THE STORMWATER FACILITIES ON THIS SITE. HOWEVER, SHOULD THE HOMEOWNER'S ASSOCIATION FAIL TO MAINTAIN THE STORMWATER FACILITIES A BLANKET EASEMENT IN FAVOR OF UPPER UWCHLAN TOWNSHIP IS HEREBY PROVIDED FOR INSPECTION AND MAINTENANCE OF ALL STORMWATER AND BMP FACILITIES WITHIN PRIVATELY OWNED LANDS.
33. ELEVATIONS BASED ON NAVD 1988 VERTICAL DATUM BY GPS OBSERVATIONS UTILIZING TREMBLE VRS NETWORK. TEMPORARY BENCHMARKS SET:
   -TBM -A: MAG NAIL SET IN ASPHALT WALK, ELEV.=462.48
   -TBM-B: MAG NAIL SET IN GRAPHITE MINE ROADWAY SHOULDER, ELEV.=427.08
34. PROPERTY LIES WITHIN FLOOD HAZARD ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AS SHOWN ON THE FLOOD INSURANCE RATE MAPS (FIRM) 42029C0090G AND 42029C0950G, MAPS LAST REVISED ON SEPTEMBER 29, 2017.
35. THIS PLAN IS BEING SUBMITTED AS AN AMENDED FINAL PLANNED RESIDENTIAL DEVELOPMENT PLAN IN ACCORDANCE WITH UPPER UWCHLAN TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCES OF 1989.
36. AS-BUILT PLANS SHALL BE SUBMITTED TO UPPER UWCHLAN TOWNSHIP IN ACCORDANCE WITH SECTION 152-502 OF THE STORMWATER MANAGEMENT ORDINANCE. AND SECTION 162-62 OF THE SUBDIVISION AND LAND DEVELOPMENT ORDINANCE.
37. ANY AND ALL TRAILS PROPOSED TO CONNECT PARCEL 5C TO OTHER PARCELS IN THE TOWNSHIP WILL BE DEDICATED TO UPPER UWCHLAN TOWNSHIP. A BLANKET EASEMENT, IN FAVOR OF UPPER UWCHLAN TOWNSHIP, SHALL BE PROVIDED FOR THE TRAIL THAT IS OUTSIDE OF THE RIGHT-OF-WAY.
38. AREA WITHIN THE ULTIMATE RIGHT-OF-WAY WILL BE DEDICATED TO UPPER UWCHLAN TOWNSHIP. ANY ADDITIONAL RIGHT-OF-WAY REQUESTED BY UPPER UWCHLAN TOWNSHIP FOR FUTURE ROAD IMPROVEMENTS ABOVE AND BEYOND THAT REQUIRED BY THE ORIGINAL PRD APPROVAL WILL BE OFFERED TO UPPER UWCHLAN TOWNSHIP AND/OR THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION FOR DEDICATION, PROVIDED SUCH OFFER OF DEDICATION DOES NOT ADVERSELY AFFECT THE ALLOWABLE DENSITY APPROVED IN SAID PRD APPROVAL.
39. CROSSWALK ACROSS STATION BOULEVARD TO BE CONSTRUCTED AT THE SAME TIME AS THE SITE ACCESS. THE CROSS WALK SHALL BE IN INSTALLED IN ACCORDANCE WITH EXHIBIT 'A' PREPARED BY TRAFFIC PLANNING AND DESIGN, INC., DATED 10/17/17.
40. RETAINING WALLS SHALL BE DESIGNED BY A LICENSED PENNSYLVANIA ENGINEER WHO SPECIALIZES IN RETAINING WALL DESIGN. THE DESIGN OF THE RETAINING WALLS SHALL TAKE INTO ACCOUNT THE SATURATED SOIL CONDITIONS ADJOINING THE WALLS.
41. THE APPLICANT WILL COMPLETE A TRAFFIC COUNT AT THE INTERSECTION OF GRAPHITE MINE ROAD AND STATION BOULEVARD TO DETERMINE IF LEFT-TURN PHASING IS NEEDED BASED ON TRAFFIC GENERATED BY THIS DEVELOPMENT. THIS SHALL BE COMPLETED AFTER FULL BUILD-OUT OF LOT 2A AND 2B, OR WHEN REQUESTED BY THE TOWNSHIP. IF WARRANTED, THE APPLICANT SHALL MODIFY THE TRAFFIC SIGNALTO ADD THE LEFT-TURN SIGNAL PHASING.

GENERAL GRADING & UTILITY NOTES:

1. LOCATIONS OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE AND MUST BE INDEPENDENTLY CONFIRMED WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION. SANITARY SEWER AND ALL OTHER UTILITY SERVICE CONNECTION POINTS MUST BE INDEPENDENTLY CONFIRMED BY THE CONTRACTOR IN THE FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ALL DISCREPANCIES MUST IMMEDIATELY BE REPORTED, IN WRITING, TO THE ENGINEER. CONSTRUCTION MUST COMMENCE BEGINNING AT THE LOWEST INVERT (POINT OF CONNECTION) AND PROGRESS UP GRADIENT. PROPOSED INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY TEST PITS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
2. CONTRACTOR MUST VERTICALLY AND HORIZONTALLY LOCATE ALL EXISTING UTILITIES AND SERVICES INCLUDING, BUT NOT LIMITED TO, GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN THE LIMITS OF DISTURBANCE OR WORK SPACE, WHICHEVER IS GREATER. THE CONTRACTOR MUST USE, REFER TO, AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL THE UNDERGROUND UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL DAMAGE TO ANY EXISTING UTILITIES DURING CONSTRUCTION, AT NO COST TO THE OWNER. CONTRACTOR SHALL BEAR ALL COSTS ASSOCIATED WITH DAMAGE TO ANY EXISTING UTILITIES DURING CONSTRUCTION.
3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL CONSTRUCTION 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. SHOULD THE CONTRACTOR FIND A CONFLICT AND/OR DISCREPANCY BETWEEN THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR THE RELATIVE OR APPLICABLE CODES, REGULATIONS, LAWS, RULES, STATUTES AND/OR ORDINANCES, IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD, IN WRITING, OF SAID CONFLICT AND/OR DISCREPANCY PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR'S FAILURE TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE CONTRACTOR'S FULL AND COMPLETE ACCEPTANCE OF ALL RESPONSIBILITY TO COMPLETE THE SCOPE OF WORK AS DEFINED BY THE DRAWINGS AND IN FULL COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS, LAWS, STATUTES, ORDINANCES AND CODES AND, FURTHER, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH SAME.
4. THE CONTRACTOR MUST LOCATE AND CLEARLY AND UNAMBIGUOUSLY DEFINE VERTICALLY AND HORIZONTALLY ALL ACTIVE AND INACTIVE UTILITY AND/OR SERVICE SYSTEMS THAT ARE TO BE REMOVED. THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN ALL ACTIVE AND INACTIVE SYSTEMS THAT ARE NOT BEING REMOVED/RELOCATED DURING SITE ACTIVITY.
5. THE CONTRACTOR MUST FAMILIARIZE ITSELF WITH THE APPLICABLE UTILITY SERVICE PROVIDER REQUIREMENTS AND IS RESPONSIBLE FOR ALL COORDINATION REGARDING UTILITY DEMOLITION AS IDENTIFIED OR REQUIRED FOR THE PROJECT. THE CONTRACTOR MUST PROVIDE THE OWNER WITH WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH THE JURISDICTION AND UTILITY COMPANY REQUIREMENTS AND ALL OTHER APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES.
6. THE CONTRACTOR MUST INSTALL ALL STORM SEWER AND SANITARY SEWER COMPONENTS WHICH FUNCTION BY GRAVITY PRIOR TO THE INSTALLATION OF ALL OTHER UTILITIES.
7. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF SITE PLAN DOCUMENTS AND ARCHITECTURAL DESIGN FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS, GREASE TRAP REQUIREMENTS, DETAILS, DOOR CONTACTS, ROOF CONTACTS, ETC. PRIOR TO CONSTRUCTION. THE ARCHITECT WILL DETERMINE THE UTILITY SERVICE SIZES. THE CONTRACTOR MUST COORDINATE INSTALLATION OF UTILITIES/SERVICES WITH THE INDIVIDUAL COMPANIES, TO AVOID CONFLICTS AND TO ENSURE THAT PROPER DEPTHS ARE ACHIEVED. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT INSTALLATION OF ALL IMPROVEMENTS COMPLIES WITH ALL UTILITY REQUIREMENTS WITH JURISDICTION AND/OR CONTROL OF THE SITE, AND ALL OTHER APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES AND, FURTHER, IS RESPONSIBLE FOR COORDINATING THE UTILITY TIE-IN/CONNECTIONS PRIOR TO CONNECTING TO THE EXISTING UTILITY/SERVICE. WHERE A CONFLICT(S) EXISTS BETWEEN THESE PLANS AND THE ARCHITECTURAL PLANS, OR WHERE ARCHITECTURAL PLAN UTILITY CONNECTION POINTS DIFFER, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER, IN WRITING, AND PRIOR TO CONSTRUCTION, RESOLVE SAME.
8. WATER SERVICE MATERIALS, BURIAL DEPTH, AND COVER REQUIREMENTS MUST BE SPECIFIED BY THE LOCAL UTILITY COMPANY. CONTRACTOR'S PRICE FOR WATER SERVICE MUST INCLUDE ALL FEES, COSTS, TESTING AND APPURTENANCES REQUIRED BY THE UTILITY COMPANY TO PROVIDE FULL AND COMPLETE WORKING SERVICE. CONTRACTOR MUST CONTACT THE APPLICABLE UTILITY COMPANY TO CONFIRM THE SIZE AND TYPE OF WATER METER AND/OR VAULT, PRIOR TO COMMENCING CONSTRUC

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(S): 201825331377

UTILITY COMPANY	PHONE NUMBER
AQUA PENNSYLVANIA, INC.	610-525-1400
COLUMBIA GAS TRANS.	610-380-7700
COMCAST CABLE COMMUNICATION, INC.	215-918-3137
NEON TRANSCOM	202-842-4680
PECO	610-292-8057
UPPER UWCHLAN TOWNSHIP	610-458-9400
VERIZON	215-657-9260

DRAWING LEGEND

EXISTING FEATURES

- PROPERTY BOUNDARY
- LEGAL RIGHT-OF-WAY LINE
- ADJACENT PROPERTY LINE
- EASEMENT LINE
- EXISTING STREAM LINE
- RIPARIAN BUFFER LINE
- SOIL BOUNDARY LINE
- SOIL TYPE (DsA)
- BUILDING
- RETAINING WALL
- CONCRETE CURB
- FLUSH CURB
- FENCE
- GUIDE RAIL
- TREELINE
- CONCRETE MONUMENT AND IRON PIN
- SIGN
- AREA LIGHT
- UTILITY POLE W/ LIGHT
- FIRE HYDRANT
- UTILITY POLE
- TREE
- DRAINAGE INLET
- STORM/SANITARY MANHOLE
- WATER/GAS VALVES
- ROOF DRAIN/CLEANOUT
- MAJOR & MINOR CONTOURS / ELEVATIONS
- OVERHEAD UTILITY WIRES
- ELECTRIC LINE
- TELEPHONE LINE
- GAS LINE
- WATER LINE
- SANITARY SEWER
- STORM PIPE

DRAWING LEGEND

TO BE REMOVED FEATURES

- RETAINING WALL
- CONCRETE CURB
- FENCE
- GUIDE RAIL
- SIGN
- AREA LIGHT
- 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

UNIFORM PARCEL IDENTIFIER: 32-4-1090.1

30 15 7.5 0 30
1"= 30'

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
LAND PLANNING
SUSTAINABILITY SERVICES
PERMITTING SERVICES
TRANSPORTATION SERVICES

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	05/25/2022	REV. PER TOWNSHIP COMMENTS	LGU / MJB

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www.pa1call.org
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PROJECT No.:	PC211160
DRAWN BY:	LGU
CHECKED BY:	J.R.K.
DATE:	03/15/2022
CAD I.D.:	PC211160-LDVP-1A

PROJECT:

AMENDED FINAL PRD PLANS

FOR

PROSPERITY PROPERTY INVESTMENTS, LLC

"FINAL PLAN FOR LOT 2B OF PARCEL 5C"
PROPOSED COMMERCIAL DEVELOPMENT

GRAPHITE MINE ROAD &
STATION BOULEVARD
UPPER UWCHLAN TOWNSHIP
CHESTER COUNTY
COMMONWEALTH OF PENNSYLVANIA

BOHLER
1600 MANOR DRIVE, SUITE 200
CHALFONT, PA 18914
Phone: (215) 996-9100
Fax: (215) 996-9102
www.BohlerEngineering.com

J.R. KORCZAK
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE084279
NEW JERSEY LICENSE No. 24GE04715400

SHEET TITLE:

EXISTING CONDITIONS/ DEMOLITION PLAN

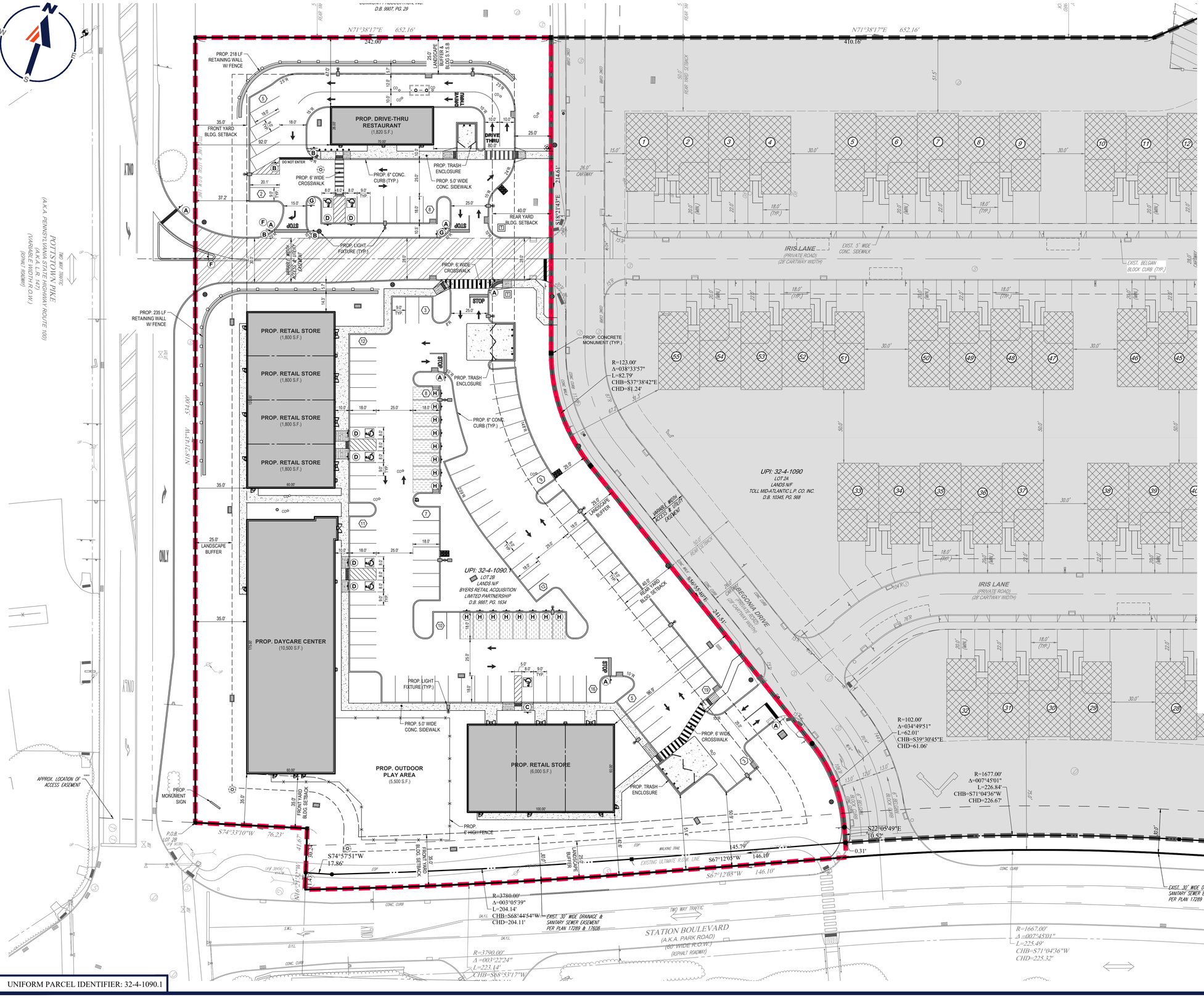
SHEET NUMBER:

C-201

3 OF 37

REVISION 1 - 05/25/2022

I:\21PC\211160\CAD\DRAWINGS\PLAN SETS\OVAL SITE PLANS\PC211160-LDVP-1A.----=LAYOUT: C-201 DEMO



DRAWING LEGEND

EXISTING FEATURES

PROPERTY BOUNDARY
PROPERTY LINE
BUILDING SETBACK LINE
LANDSCAPE BUFFER LINE
LEGAL RIGHT-OF-WAY LINE
ADJACENT PROPERTY LINE
EASEMENT LINE
ACCESS / UTILITY EASEMENT
EXISTING STREAM LINE
RIPARIAN BUFFER LINE
BUILDING
RETAINING WALL
CONCRETE CURB
FLUSH CURB
FENCE
GUIDE RAIL
TREELINE
CONCRETE MONUMENT AND IRON PIN
SIGN
AREA LIGHT
UTILITY POLE W/ LIGHT
FIRE HYDRANT
UTILITY POLE
TREE

DRAWING LEGEND

PROPOSED FEATURES

BUILDING
RETAINING WALL
CONCRETE CURB
FLUSH CURB
PRIVACY FENCE
POST & RAIL FENCE
GUIDE RAIL
ACCESSIBLE SYMBOL
CROSSWALK
CONCRETE SIDEWALK
ADA CURB RAMP
BOLLARD
PARKING COUNT
TREELINE
TRAFFIC SIGN
AREA LIGHT
DRAINAGE INLET
MANHOLE
ENDWALL
RIPRAP
CLEANOUT
FIRE HYDRANT
UTILITY POLE
CONCRETE MONUMENT & IRON PIN
DESIGNATED OFF PEAK LOADING AREA (HATCHING SHOWN FOR REFERENCE ONLY, NOT TO BE STRIPED)

SIGNAGE SYMBOL LEGEND

- (A) 'STOP' SIGN (R1-1)
- (B) 'DO NOT ENTER' SIGN (R5-1)
- (C) 'RESERVED PARKING' SIGN (R7-8) & RESERVED PARKING PENALTIES SIGN (R7-8F)
- (D) 'RESERVED PARKING' SIGN (R7-8) & RESERVED PARKING PENALTIES SIGN (R7-8F) & 'VAN ACCESSIBLE' SIGN (R7-8B)
- (E) PEDESTRIAN CROSSING SIGN (W11-2) & DOWNWARD POINTING ARROW (W16-7P)
- (F) RIGHT TURN ONLY SIGN (R3-5R)
- (G) 'TO ROUTE 100 NORTHBOUND ONLY' SIGN (M1-5, M3-1, M4-5)
- (H) 'DESIGNATED OFF PEAK LOADING AREA' SIGN

BOHLER

SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
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INDUSTRIAL DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

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PROJECT No.:	PC211160
DRAWN BY:	LGU
CHECKED BY:	J.R.K.
DATE:	03/15/2022
CAD I.D.:	PC211160-LDVP-1A

PROJECT:

AMENDED FINAL PRD PLANS

FOR

PROSPERITY PROPERTY INVESTMENTS, LLC

"FINAL PLAN FOR LOT 2B OF PARCEL 5C"
PROPOSED COMMERCIAL DEVELOPMENT

GRAPHITE MINE ROAD & STATION BOULEVARD
UPPER UWCHLAN TOWNSHIP
CHESTER COUNTY
COMMONWEALTH OF PENNSYLVANIA

BOHLER

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Fax: (215) 996-9102
www.BohlerEngineering.com

J.R. KORCZAK
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE074279
NEW JERSEY LICENSE No. 24GE04715400

SHEET TITLE:

SITE PLAN

SHEET NUMBER:

C-301

4 OF 37

REVISION 1 - 05/25/2022

I:\21\PC211160\CAD\DRAWINGS\PLAN SETS\OVAL SITE PLANS\PC211160-LDVP-1A.----LAYOUT C-301 SITE

DRAWING LEGEND

PROPOSED FEATURES

BUILDING
RETAINING WALL
CONCRETE CURB
FLUSH CURB
PRIVACY FENCE
POST & RAIL FENCE
GUIDE RAIL
ACCESSIBLE SYMBOL
CROSSWALK
CONCRETE SIDEWALK
ADA CURB RAMP
BOLLARD
PARKING COUNT
TREELINE
TRAFFIC SIGN
AREA LIGHT
DRAINAGE INLET
MANHOLE
ENDWALL
RIPRAP
CLEANOUT
FIRE HYDRANT
UTILITY POLE
CONCRETE MONUMENT & IRON PIN
DESIGNATED OFF PEAK

UNIFORM PARCEL IDENTIFIER: 32-4-1090.1

R:\21\PC211160\CAD\DRAWINGS\PLAN SET\CIVIL SITE PLANS\PC211160-LDVP-1A---LAYOUT, C-302 FIRE TRUCK

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DRAWN BY:	LGU
CHECKED BY:	J.R.K.
DATE:	03/15/2022
CAD I.D.:	PC211160-LDVP-1A

PROJECT:

AMENDED FINAL PRD PLANS

FOR

PROSPERITY PROPERTY INVESTMENTS, LLC

"FINAL PLAN FOR LOT 2B OF PARCEL 5C" PROPOSED COMMERCIAL DEVELOPMENT

GRAPHITE MINE ROAD & STATION BOULEVARD UPPER UWCHLAN TOWNSHIP CHESTER COUNTY COMMONWEALTH OF PENNSYLVANIA

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Fax: (215) 996-9102
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J.R. KORCZAK
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE084279
NEW JERSEY LICENSE No. 24GE04715400

SHEET TITLE:

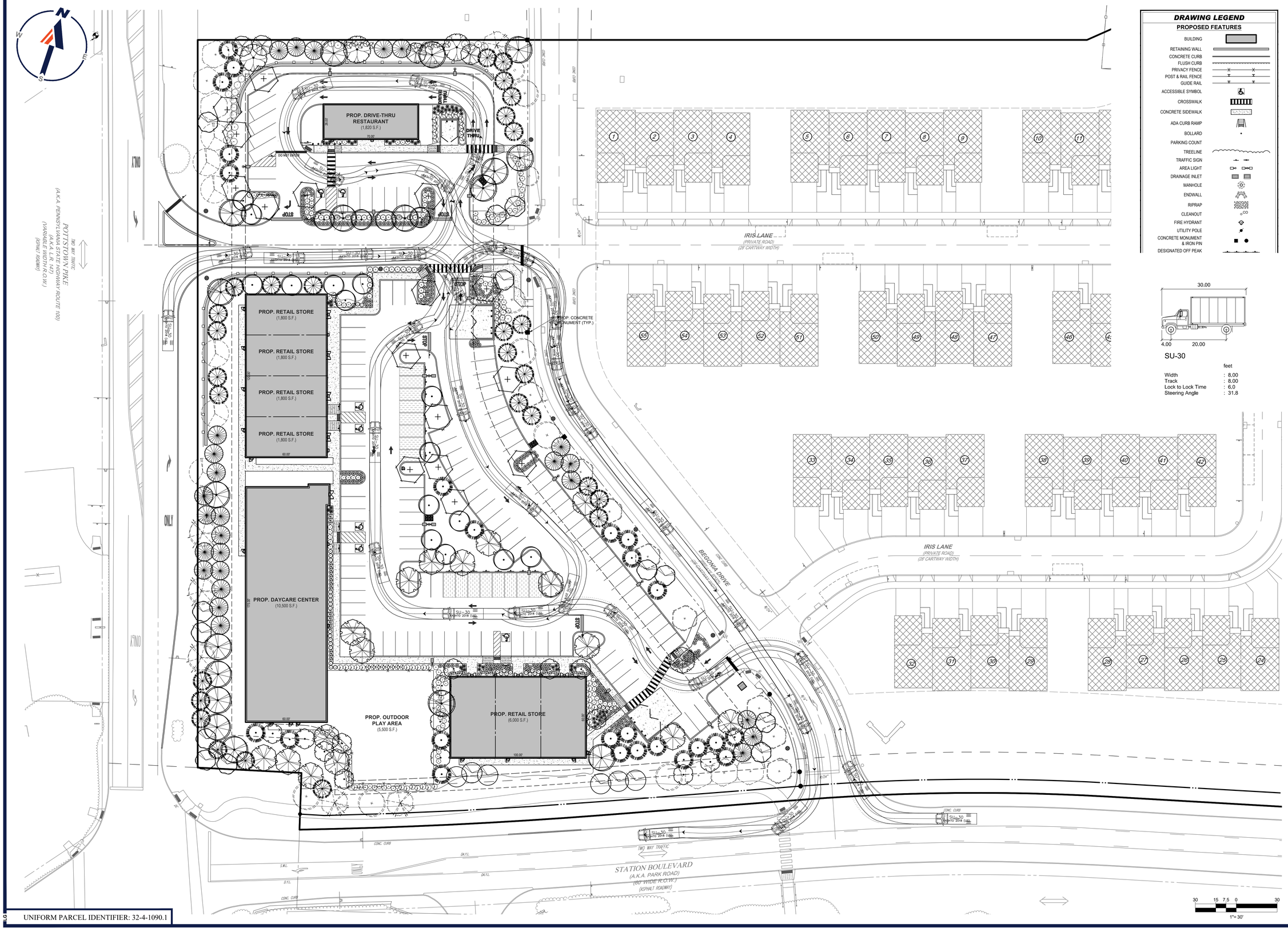
FIRE TRUCK CIRCULATION PLAN

SHEET NUMBER:

C-302

5 OF 37

REVISION 1 - 05/25/2022



DRAWING LEGEND

PROPOSED FEATURES

BUILDING
RETAINING WALL
CONCRETE CURB
FLUSH CURB
PRIVACY FENCE
POST & RAIL FENCE
GUIDE RAIL
ACCESSIBLE SYMBOL
CROSSWALK
CONCRETE SIDEWALK
ADA CURB RAMP
BOLLARD
PARKING COUNT
TREELINE
TRAFFIC SIGN
AREA LIGHT
DRAINAGE INLET
MANHOLE
ENDWALL
RIPRAP
CLEANOUT
FIRE HYDRANT
UTILITY POLE
CONCRETE MONUMENT & IRON PIN
DESIGNATED OFF PEAK

SU-30

	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.8

UNIFORM PARCEL IDENTIFIER: 32-4-1090.1

R:\2\PC211160\CADD\DRAWINGS\PLAN SET\CIVIL SITE PLANS\PC211160-LDVP-1A-----LAYOUT C-303 DELIVERY TRUCK

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DATE:	03/15/2022
CAD I.D.:	PC211160-LDVP-1A

PROJECT:

AMENDED FINAL PRD PLANS

FOR

PROSPERITY PROPERTY INVESTMENTS, LLC

"FINAL PLAN FOR LOT 2B OF PARCEL 5C"
PROPOSED COMMERCIAL DEVELOPMENT

GRAPHITE MINE ROAD &
STATION BOULEVARD
UPPER UWCHLAN TOWNSHIP
CHESTER COUNTY
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J.R. KORCZAK
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE074279
NEW JERSEY LICENSE No. 24GE04715400

SHEET TITLE:

DELIVERY TRUCK CIRCULATION PLAN

SHEET NUMBER:

C-303

6 OF 37

REVISION 1 - 05/25/2022

DRAWING LEGEND

PROPOSED FEATURES

BUILDING
RETAINING WALL
CONCRETE CURB
FLUSH CURB
PRIVACY FENCE
POST & RAIL FENCE
GUIDE RAIL
ACCESSIBLE SYMBOL
CROSSWALK
CONCRETE SIDEWALK
ADA CURB RAMP
BOLLARD
PARKING COUNT
TREELINE
TRAFFIC SIGN
AREA LIGHT
DRAINAGE INLET
MANHOLE
ENDWALL
RIPRAP
CLEANOUT
FIRE HYDRANT
UTILITY POLE
CONCRETE MONUMENT & IRON PIN
DESIGNATED OFF PEAK

Refuse A

	feet
Width	: 8.00
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 32.0

UNIFORM PARCEL IDENTIFIER: 32-4-1090.1

R:\21\PC211160\CAD\DRAWINGS\PLAN SET\CIVIL SITE PLANS\PC211160-LDVP-1A-----LAYOUT C-304 TRASH TRUCK

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CHECKED BY:	J.R.K.
DATE:	03/15/2022
CAD I.D.:	PC211160-LDVP-1A

PROJECT:

AMENDED FINAL PRD PLANS

FOR

PROSPERITY PROPERTY INVESTMENTS, LLC

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GRAPHITE MINE ROAD & STATION BOULEVARD
UPPER UWCHLAN TOWNSHIP
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J.R. KORCZAK
PROFESSIONAL ENGINEER
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NEW JERSEY LICENSE No. 24GE04715400

SHEET TITLE:

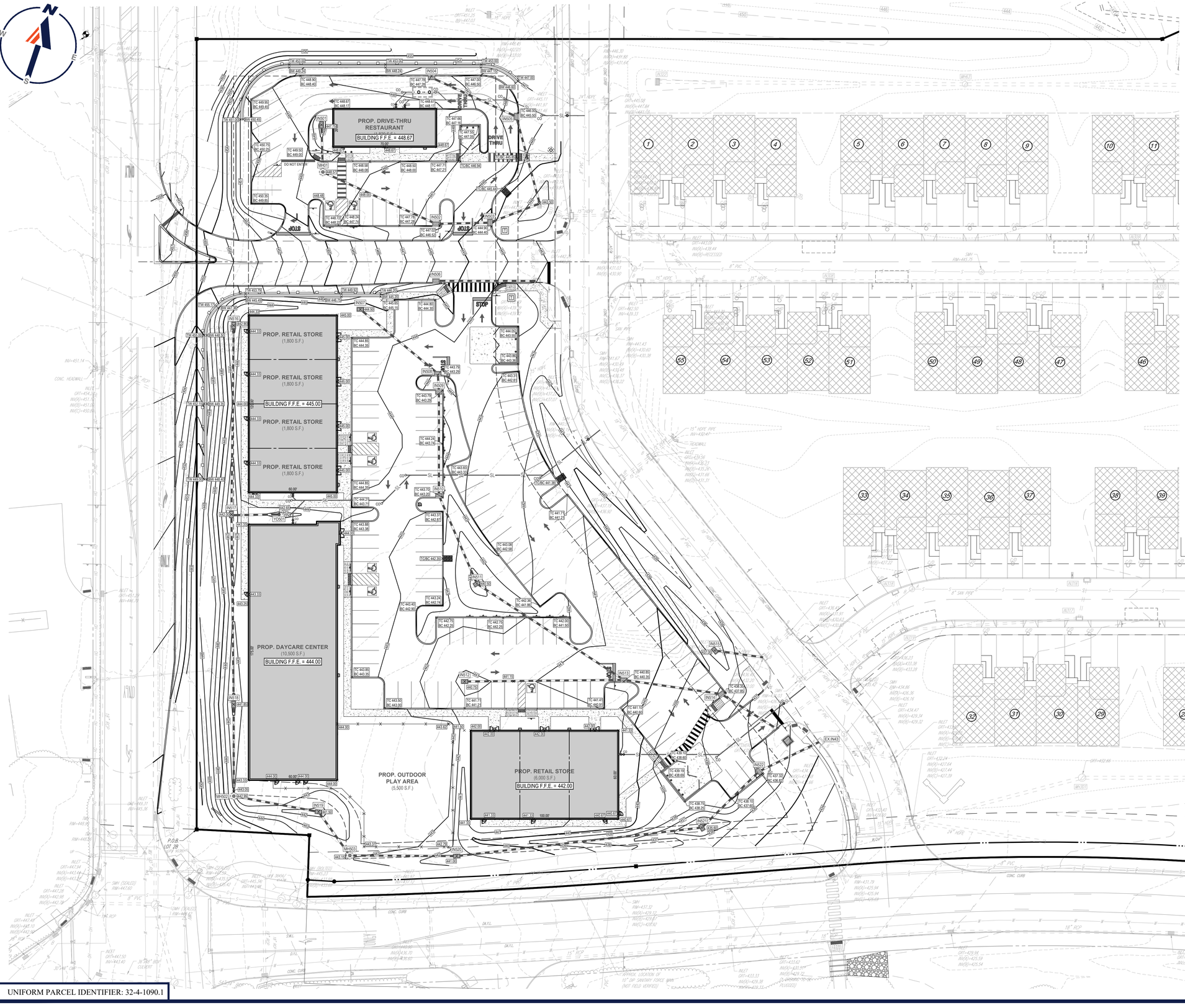
TRASH TRUCK CIRCULATION PLAN

SHEET NUMBER:

C-304

7 OF 37

REVISION 1 - 05/25/2022



DRAWING LEGEND

EXISTING FEATURES

- PROPERTY BOUNDARY
- LEGAL RIGHT-OF-WAY LINE
- ADJACENT PROPERTY LINE
- EASEMENT LINE
- EXISTING STREAM LINE
- RIPARIAN BUFFER LINE
- BUILDING
- RETAINING WALL
- CONCRETE CURB
- FLUSH CURB
- FENCE
- GUIDE RAIL
- TREELINE
- UTILITY POLE W/ LIGHT
- FIRE HYDRANT
- UTILITY POLE
- TREE
- DRAINAGE INLET
- STORM/SANITARY MANHOLE
- MAJOR & MINOR CONTOURS / ELEVATIONS
- SPOT ELEVATION
- SANITARY SEWER
- STORM PIPE

DRAWING LEGEND

PROPOSED FEATURES

- BUILDING
- RETAINING WALL
- CONCRETE CURB
- FLUSH CURB
- FENCE
- GUIDE RAIL
- ACCESSIBLE SYMBOL
- CROSSWALK
- RAMP
- BOLLARD
- TRAFFIC SIGN
- TREELINE
- AREA LIGHT
- DRAINAGE INLET
- MANHOLE
- ENDWALL
- RIPRAP
- CLEANOUT
- FIRE HYDRANT
- UTILITY POLE
- MAJOR & MINOR CONTOURS & ELEVATION
- SPOT ELEVATION
- WATER LINE
- SANITARY SEWER
- STORM PIPE

UNIFORM PARCEL IDENTIFIER: 32-4-1090.1

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PROJECT No.:	PC211160
DRAWN BY:	LGU
CHECKED BY:	J.R.K.
DATE:	03/15/2022
CAD I.D.:	PC211160-LDVP-1A

PROJECT:

AMENDED FINAL PRD PLANS

FOR

PROSPERITY PROPERTY INVESTMENTS, LLC

"FINAL PLAN FOR LOT 2B OF PARCEL 5C" PROPOSED COMMERCIAL DEVELOPMENT

GRAPHITE MINE ROAD & STATION BOULEVARD
UPPER UWCHLAN TOWNSHIP
CHESTER COUNTY
COMMONWEALTH OF PENNSYLVANIA

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1600 MANOR DRIVE, SUITE 200
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J.R. KORCZAK
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE074279
NEW JERSEY LICENSE No. 24GE04715400

SHEET TITLE:

GRADING PLAN

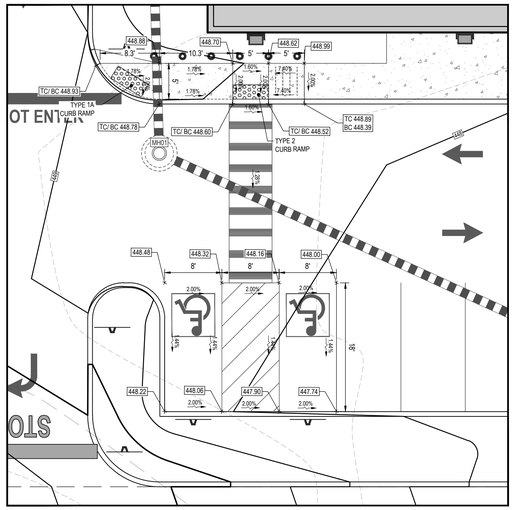
SHEET NUMBER:

C-401

8 OF 37

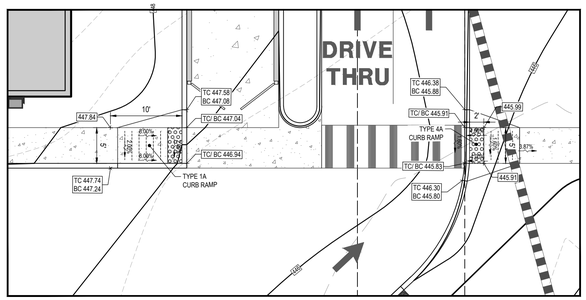
REVISION 1 - 05/25/2022

I:\PC\PC211160\CAD\DRAWINGS\PLAN SETS\OVAL SITE PLANS\PC211160-LDVP-1A-----LAYOUT C-401 GRADE



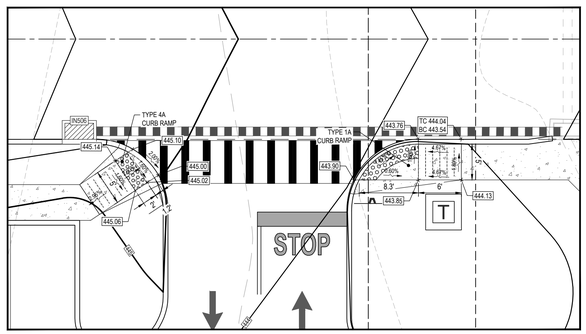
ADA GRADING DETAIL 'A'

SCALE: 1" = 10'



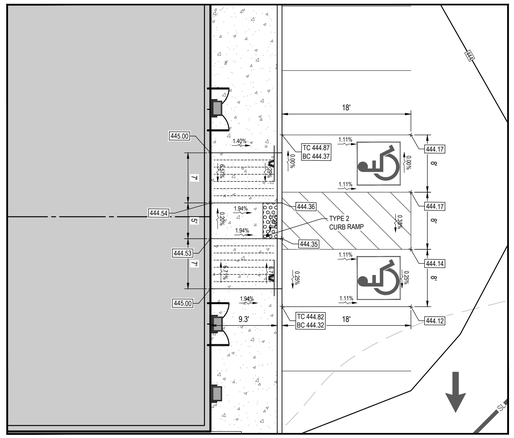
ADA GRADING DETAIL 'B'

SCALE: 1" = 10'



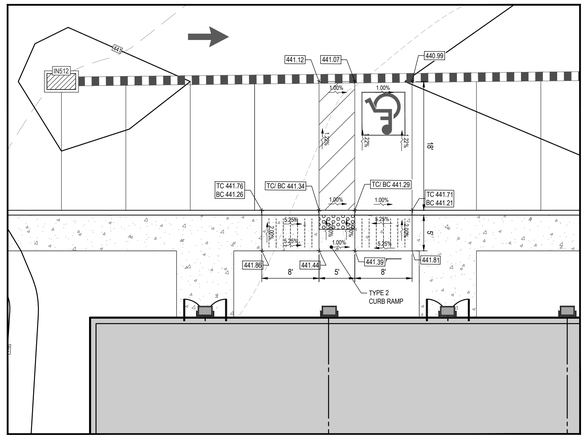
ADA GRADING DETAIL 'C'

SCALE: 1" = 10'



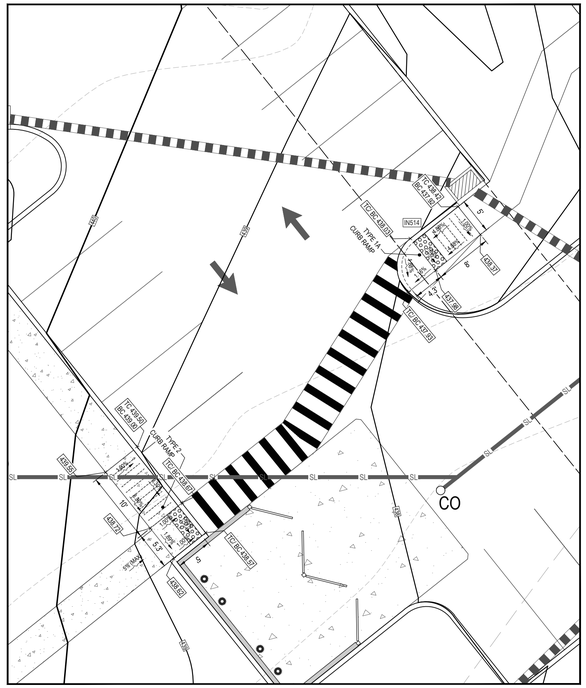
ADA GRADING DETAIL 'D'

SCALE: 1" = 10'



ADA GRADING DETAIL 'F'

SCALE: 1" = 10'

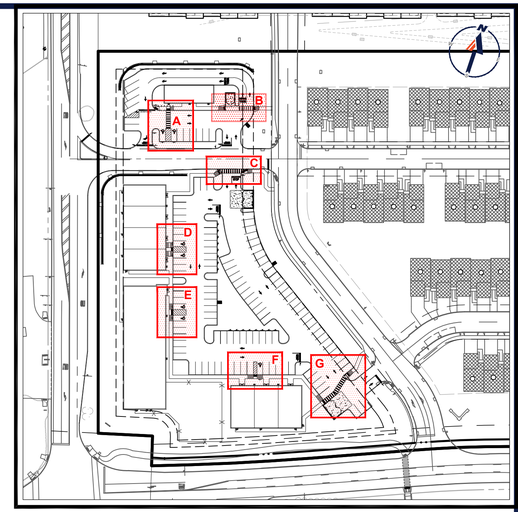


ADA GRADING DETAIL 'G'

SCALE: 1" = 10'

ADA GRADING DETAIL 'E'

SCALE: 1" = 10'



SITE KEY MAP

SCALE: 1"=100'

DRAWING LEGEND

EXISTING FEATURES

- PROPERTY BOUNDARY
- LEGAL RIGHT-OF-WAY LINE
- ADJACENT PROPERTY LINE
- EASEMENT LINE
- EXISTING STREAM LINE
- RIPARIAN BUFFER LINE
- BUILDING
- RETAINING WALL
- CONCRETE CURB
- FLUSH CURB
- FENCE
- GUIDE RAIL
- TREELINE
- UTILITY POLE W/ LIGHT
- FIRE HYDRANT
- UTILITY POLE
- TREE
- DRAINAGE INLET
- STORM/SANITARY MANHOLE
- MAJOR & MINOR CONTOURS / ELEVATIONS
- SPOT ELEVATION
- SANITARY SEWER
- STORM PIPE

DRAWING LEGEND

PROPOSED FEATURES

- BUILDING
- RETAINING WALL
- CONCRETE CURB
- FLUSH CURB
- FENCE
- GUIDE RAIL
- ACCESSIBLE SYMBOL
- CROSSWALK
- RAMP
- BOLLARD
- TRAFFIC SIGN
- TREELINE
- AREA LIGHT
- DRAINAGE INLET
- MANHOLE
- ENDWALL
- RIPRAP
- CLEANOUT
- FIRE HYDRANT
- UTILITY POLE
- MAJOR & MINOR CONTOURS & ELEVATION
- SPOT ELEVATION
- WATER LINE
- SANITARY SEWER
- STORM PIPE

10 5 2.5 0 10

1"= 10'

UNIFORM PARCEL IDENTIFIER: 32-4-1090.1

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PROJECT No.: PC211160
DRAWN BY: LGU
CHECKED BY: J.R.K.
DATE: 03/15/2022
CAD I.D.: PC211160-LDVP-1A

PROJECT:

AMENDED FINAL PRD PLANS

FOR

PROSPERITY PROPERTY INVESTMENTS, LLC

"FINAL PLAN FOR LOT 2B OF PARCEL 5C" PROPOSED COMMERCIAL DEVELOPMENT

GRAPHITE MINE ROAD & STATION BOULEVARD
UPPER UWCHLAN TOWNSHIP
CHESTER COUNTY
COMMONWEALTH OF PENNSYLVANIA

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J.R. KORCZAK
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. GE045279
NEW JERSEY LICENSE No. 24GE04715400

SHEET TITLE:

ADA GRADING DETAILS

SHEET NUMBER:

C-402

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REVISION 1 - 05/25/2022

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COMCAST CABLE COMMUNICATION, INC.	215-918-3137
NEON TRANSCOM	202-842-4680
PECO	610-292-8057
UPPER UWCHLAN TOWNSHIP	610-458-9400
VERIZON	215-657-9260

DRAWING LEGEND

EXISTING FEATURES

PROPERTY BOUNDARY
LEGAL RIGHT-OF-WAY LINE
ADJACENT PROPERTY LINE
EASEMENT LINE
EXISTING STREAM LINE
RIPARIAN BUFFER LINE
BUILDING
RETAINING WALL
CONCRETE CURB
FLUSH CURB
FENCE
GUIDE RAIL
TREELINE
SIGN
AREA LIGHT
UTILITY POLE W/ LIGHT
FIRE HYDRANT
UTILITY POLE
TREE
DRAINAGE INLET
STORM/SANITARY MANHOLE
WATER/GAS VALVES
ROOF DRAIN/CLEANOUT
MAJOR & MINOR CONTOURS / ELEVATIONS
OVERHEAD UTILITY WIRES
ELECTRIC LINE
TELEPHONE LINE
GAS LINE
WATER LINE
SANITARY SEWER
STORM PIPE

DRAWING LEGEND

PROPOSED FEATURES

BUILDING
RETAINING WALL
CONCRETE CURB
FLUSH CURB
FENCE
GUIDE RAIL
ACCESSIBLE SYMBOL
CROSSWALK
RAMP
BOLLARD
TRAFFIC SIGN
TREELINE
AREA LIGHT
DRAINAGE INLET
MANHOLE
ENDWALL
RIPRAP
CLEANOUT
SANITARY VENT
FIRE HYDRANT
UTILITY POLE
OVERHEAD UTILITY WIRES
ELECTRIC LINE
TELEPHONE LINE
GAS LINE
WATER LINE
SANITARY SEWER
STORM PIPE

UNIFORM PARCEL IDENTIFIER: 32-4-1090.1

30 15 7.5 0 30
1"= 30'

R:\2019\PC211160\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\PC211160-LDVP-1A-----3-LAYOUT C-501 UTILITY

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CHECKED BY: J.R.K.
DATE: 03/15/2022
CAD I.D.: PC211160-LDVP-1A

PROJECT:

AMENDED FINAL PRD PLANS

FOR

PROSPERITY PROPERTY INVESTMENTS, LLC

"FINAL PLAN FOR LOT 2B OF PARCEL 5C"
PROPOSED COMMERCIAL DEVELOPMENT

GRAPHITE MINE ROAD & STATION BOULEVARD
UPPER UWCHLAN TOWNSHIP
CHESTER COUNTY
COMMONWEALTH OF PENNSYLVANIA

BOHLER
1600 MANOR DRIVE, SUITE 200
CHALFONT, PA 18914
Phone: (215) 996-9100
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www.BohlerEngineering.com

J.R. KORCZAK
COMMONWEALTH OF PENNSYLVANIA
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE074278
NEW JERSEY LICENSE No. 24GE04715400

SHEET TITLE:

UTILITY PLAN

SHEET NUMBER:

C-501

10 OF 37

REVISION 1 - 05/25/2022

DRAWING LEGEND
EXISTING FEATURES

PROPERTY BOUNDARY
LEGAL RIGHT-OF-WAY LINE
ADJACENT PROPERTY LINE
EASEMENT LINE
EXISTING STREAM LINE
RIPARIAN BUFFER LINE
SOIL BOUNDARY LINE
SOIL TYPE — DsA
BUILDING
RETAINING WALL
CONCRETE CURB
FLUSH CURB
FENCE
GUIDE RAIL
TREELINE
AREA LIGHT
UTILITY POLE W/ LIGHT
FIRE HYDRANT
UTILITY POLE
TREE
DRAINAGE INLET
STORM/SANITARY MANHOLE
WATER/GAS VALVES
ROOF DRAIN/CLEANOUT
MAJOR & MINOR CONTOURS / ELEVATIONS
OVERHEAD UTILITY WIRES
ELECTRIC LINE
TELEPHONE LINE
GAS LINE
WATER LINE
SANITARY SEWER
STORM PIPE

DRAWING LEGEND
PROPOSED FEATURES

BUILDING
RETAINING WALL
CONCRETE CURB
FLUSH CURB
TREELINE
AREA LIGHT
DRAINAGE INLET
MANHOLE
ENDWALL
RIPRAP
CLEANOUT
FIRE HYDRANT
UTILITY POLE
OVERHEAD UTILITY WIRES — OH
ELECTRIC LINE — E
TELEPHONE LINE — T
GAS LINE — G
WATER LINE — W
SANITARY SEWER — S
STORM PIPE

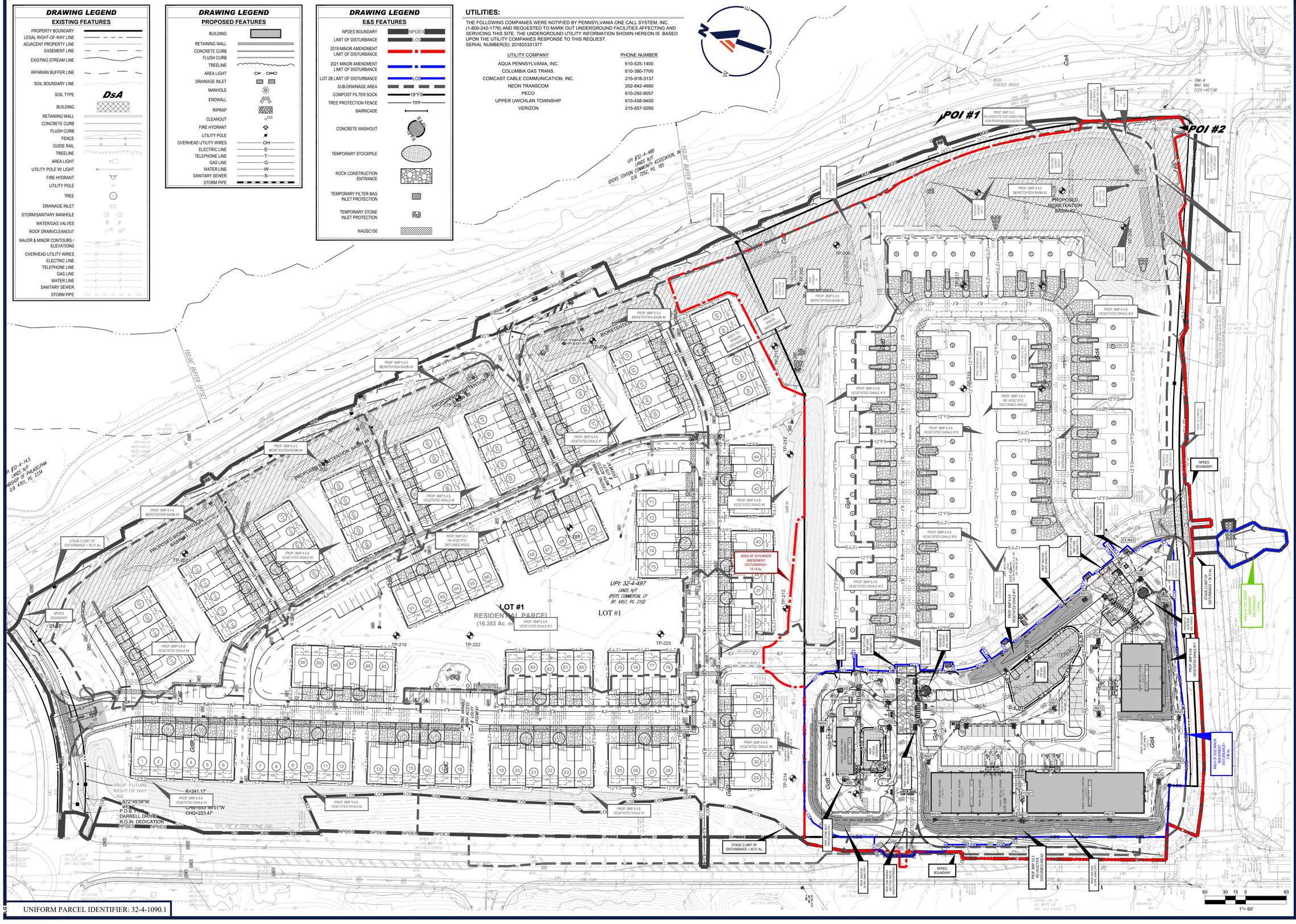
DRAWING LEGEND
E&S FEATURES

NPDES BOUNDARY — NPDES
LIMIT OF DISTURBANCE — LOD
2019 MINOR AMENDMENT LIMIT OF DISTURBANCE
2021 MINOR AMENDMENT LIMIT OF DISTURBANCE
LOT 2B LIMIT OF DISTURBANCE — LOD
SUB-DRAINAGE AREA
COMPOST FILTER SOCK — 18"FS
TREE PROTECTION FENCE — TPF
BARRICADE
CONCRETE WASHOUT — CW
TEMPORARY STOCKPILE
ROCK CONSTRUCTION ENTRANCE
TEMPORARY FILTER BAG INLET PROTECTION
TEMPORARY STONE INLET PROTECTION
NAGSC150

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(S): 201825331377

UTILITY COMPANY	PHONE NUMBER
AQUA PENNSYLVANIA, INC.	610-525-1400
COLUMBIA GAS TRANS.	610-380-7700
COMCAST CABLE COMMUNICATION, INC.	215-918-3137
NEON TRANSCOM	202-842-4680
PECO	610-292-8057
UPPER UWCHLAN TOWNSHIP	610-458-9400
VERIZON	215-657-9260


POI #1
POI #2
PROPOSED BIORETENTION BASIN #1
PROPOSED BIORETENTION BASIN #2
PROPOSED BIORETENTION BASIN #3
PROPOSED BIORETENTION BASIN #4
PROPOSED BIORETENTION BASIN #5
PROP. BMP 6.4.8 VEGETATED SWALE #1
PROP. BMP 6.4.8 VEGETATED SWALE #2
PROP. BMP 6.4.8 VEGETATED SWALE #3
PROP. BMP 6.4.8 VEGETATED SWALE #4
PROP. BMP 6.4.8 VEGETATED SWALE #5
PROP. BMP 6.4.8 VEGETATED SWALE #6
PROP. BMP 6.4.8 VEGETATED SWALE #7
PROP. BMP 6.4.8 VEGETATED SWALE #8
PROP. BMP 6.4.8 VEGETATED SWALE #9
PROP. BMP 6.4.8 VEGETATED SWALE #10
PROP. BMP 6.4.8 VEGETATED SWALE #11
PROP. BMP 6.4.8 VEGETATED SWALE #12
PROP. BMP 6.4.8 VEGETATED SWALE #13
PROP. BMP 6.4.8 VEGETATED SWALE #14
PROP. BMP 6.4.8 VEGETATED SWALE #15
PROP. BMP 6.4.8 VEGETATED SWALE #16
PROP. BMP 5.6.3 RE-VEGETATE DISTURBED AREAS
PROP. BMP 5.6.3 RE-VEGETATE DISTURBED AREA (FOR RIPARIAN EQUIVALENCY)
LOT #1 RESIDENTIAL PARCEL (16.353 Ac. ±)
LOT #1
UPI: 32-4-497 LANDS N/F BYERS COMMERCIAL LP BP. 6457, PG. 2102
UPI: 32-4-488 LANDS N/F BYERS STATION COMMUNITY ASSOCIATION, INC. D.B. 7252, PG. 185
UPI: 32-4-14.5 LANDS N/F TRUSTEES OF PHILADELPHIA D.B. 4701, PG. 234
AREA OF 2019 MINOR AMENDMENT DISTURBANCE= 14.14 Ac.
AREA OF 2021 MINOR AMENDMENT DISTURBANCE= 1.96 Ac.±
STAGE 2 LIMIT OF DISTURBANCE = 30.31 Ac.
NPDES BOUNDARY
150.00' BUFFER OFFSET
PROP. FUTURE RIGHT OF WAY LINE
S72°45'39"W
R=341.17'
CHD=223.47'
CHD=S33°30'51"W
P.O.B. PC
DARRELL DRIVE
R.O.W. DEDICATION
TP-200
TP-201
TP-202
TP-203
TP-204
TP-205
TP-206
TP-207
TP-208
TP-209
TP-210
TP-211
TP-212
TP-213
TP-214
TP-222
TP-223
PROP. 24' ACCESS EASEMENT
EX. 24' ACCESS EASEMENT
EX. 24' ACCESS EASEMENT (D.B. 7252, PG. 185)
PROP. 24' ACCESS EASEMENT (FOR ACCESS TO BASIN #1)
PROP. 24' ACCESS EASEMENT (FOR ACCESS TO BASIN #2)
PROP. 24' ACCESS EASEMENT (FOR ACCESS TO BASIN #3)
PROP. 24' ACCESS EASEMENT (FOR ACCESS TO BASIN #4)
PROP. 24' ACCESS EASEMENT (FOR ACCESS TO BASIN

PROP. STONE INLET PROTECTION (TYP.)

PROP. NAG S150 SLOPE LINING (TYP.)

PROP. TEMP. BARRIER (NOT TO BE USED AS CONSTRUCTION ENTRANCE)

NPDES BOUNDARY

PROP. BMP 5.6.3 RE-VEGETATE DISTURBED AREAS

PROP. NAG S150 SLOPE LINING (TYP.)

AREA OF 2022 MINOR AMENDMENT DISTURBANCE= 3.96 Ac.

PROP. FILTER BAG INLET PROTECTION (TYP.)

PROP. DRIVE-THRU RESTAURANT
BUILDING F.F.E. = 448.67

PROP. TOP SOIL STOCKPILE

PROP. 18" COMPOST FILTER SOCK (TYP.)

PROP. 100 FT. LONG TEMP. CONST. ENTRANCE (TYP.)

PROP. ON LOT CONST. ENTRANCE (TYP.)

PROPOSED 24" FILTER SOCK CONC. WASHOUT

PROP. BMP 6.4.8. VEGETATED SWALE #12

PROP. BMP 6.4.8. VEGETATED SWALE #14

PROP. BMP 6.4.8. VEGETATED SWALE #15

PROP. RETAIL STORE (1,800 S.F.)

PROP. RETAIL STORE (1,800 S.F.)

BUILDING F.F.E. = 445.00

PROP. RETAIL STORE (1,800 S.F.)

PROP. RETAIL STORE (1,800 S.F.)

LOT #2B

PROP. DAYCARE CENTER (10,500 S.F.)
BUILDING F.F.E. = 444.00

PROP. OUTDOOR PLAY AREA (5,500 S.F.)

PROP. RETAIL STORE (6,000 S.F.)
BUILDING F.F.E. = 442.00

PROP. BMP 6.4.8. VEGETATED SWALE #11

PROP. BMP 6.4.8. VEGETATED SWALE #17

PROP. TOP SOIL STOCKPILE

PROP. 12" ON LOT FILTER SOCK (TYP.)

UPI: 32-4-1090
LOT 2A
DEEDS N/F
TOLL MID-ATLANTIC L.P. CO. INC.
D.B. 10345, PG. 568

LOT #2A

PROP. NAG S150 SLOPE LINING (TYP.)

PROP. 100 FT. LONG TEMP. CONST. ENTRANCE (TYP.)

PROP. FILTER BAG INLET PROTECTION (TYP.)

PROP. TEMP. CONSTRUCTION ENTRANCE (TYP.)

PROPOSED 24" FILTER SOCK CONC. WASHOUT

PROP. BMP 6.4.8. VEGETATED SWALE #16

PROP. BMP 5.6.3 RE-VEGETATE DISTURBED AREAS

PROP. ON LOT SOIL STOCKPILE (TYP.)

PROP. ON LOT CONST.

PROP. 32" COMPOST FILTER SOCK (TYP.)

NPDES BOUNDARY

STAGE 2 LIMIT OF DISTURBANCE = 30.31 Ac.

BULK GRADING TO COMMENCE STARTING AT THE NORTH SIDE OF THE SITE AND WORK SOUTH. MAINTAIN POSITIVE DRAINAGE TO EXISTING SWALE

TP-216

TP-219

TP-220

IRIS LANE

GRAPHITE MINE ROAD

UNIFORM PARCEL IDENTIFIER: 32-4-1090.1

30 15 7.5 0 30
1"= 30'

DRAWING LEGEND
EXISTING FEATURES

PROPERTY BOUNDARY
LEGAL RIGHT-OF-WAY LINE
ADJACENT PROPERTY LINE
EASEMENT LINE
EXISTING STREAM LINE
RIPARIAN BUFFER LINE
SOIL BOUNDARY LINE
SOIL TYPE — DsA
BUILDING
RETAINING WALL
CONCRETE CURB
FLUSH CURB
FENCE
GUIDE RAIL
TREELINE
AREA LIGHT
UTILITY POLE W/ LIGHT
FIRE HYDRANT
UTILITY POLE
TREE
DRAINAGE INLET
STORM/SANITARY MANHOLE
WATER/GAS VALVES
ROOF DRAIN/CLEANOUT
MAJOR & MINOR CONTOURS / ELEVATIONS
OVERHEAD UTILITY WIRES
ELECTRIC LINE
TELEPHONE LINE
GAS LINE
WATER LINE
SANITARY SEWER
STORM PIPE

DRAWING LEGEND
PROPOSED FEATURES

BUILDING
RETAINING WALL
CONCRETE CURB
FLUSH CURB
TREELINE
AREA LIGHT
DRAINAGE INLET
MANHOLE
ENDWALL
RIPRAP
CLEANOUT
FIRE HYDRANT
UTILITY POLE
OVERHEAD UTILITY WIRES — OH
ELECTRIC LINE — E
TELEPHONE LINE — T
GAS LINE — G
WATER LINE — W
SANITARY SEWER — S
STORM PIPE

DRAWING LEGEND
E&S FEATURES

NPDES BOUNDARY — NPDES
LIMIT OF DISTURBANCE — LOD
2019 MINOR AMENDMENT LIMIT OF DISTURBANCE
2021 MINOR AMENDMENT LIMIT OF DISTURBANCE
LOT 2B LIMIT OF DISTURBANCE — LOD
SUB-DRAINAGE AREA
COMPOST FILTER SOCK — 18"FS
TREE PROTECTION FENCE — TPF
BARRIER
CONCRETE WASHOUT — SUPER SACK
TEMPORARY STOCKPILE
ROCK CONSTRUCTION ENTRANCE
TEMPORARY FILTER BAG INLET PROTECTION
TEMPORARY STONE INLET PROTECTION
NAGSC150

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
INDUSTRIAL DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	05/25/2022	REV. PER TOWNSHIP COMMENTS	LGU / MJB

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PENNSYLVANIA
YOU MUST CALL 811 BEFORE ANY EXCAVATION WHETHER IT'S ON PRIVATE OR PUBLIC LAND.
1-800-242-1776
www.pa1call.org
SERIAL No.: 201825331377

NOT APPROVED FOR CONSTRUCTION

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	PC211160
DRAWN BY:	LGU
CHECKED BY:	J.R.K.
DATE:	03/15/2022
CAD I.D.:	PC211160-LDVP-1A

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FOR

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J.R. KORCZAK
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE084279
NEW JERSEY LICENSE No. 24GE04715400

SHEET TITLE:

SOIL EROSION & SEDIMENT POLLUTION CONTROL PLAN

SHEET NUMBER:

C-602

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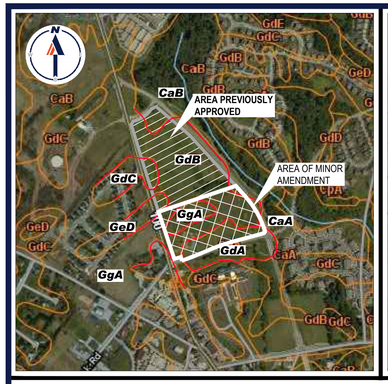
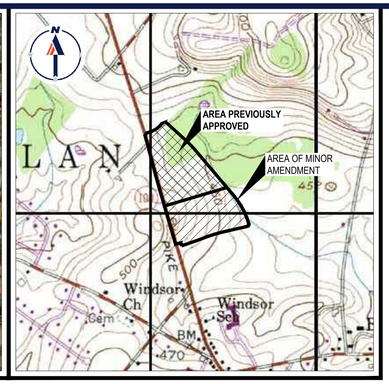
REVISION 1 - 05/25/2022

R:\21\PC211160\CAD\DRAWINGS\PLAN SET\CIVIL SITE PLANS\PC211160-LDVP-1A---LAYOUT C-602 E&S



SITE SOIL MAP

SCALE: 1"=800'



USGS MAP

(DOWINGTOWN QUAD)
SCALE: 1"=1,000'

NOTES:

1. SHOULD GROUNDWATER BE ENCOUNTERED DURING FOUNDATION OR UTILITY EXCAVATIONS, WATER SHALL BE PUMPED FROM TRENCH INTO FILTER BAG.
2. DUE TO GRADING LIMITATIONS OF SOILS DURING WINTER MONTHS, THE CONTRACTOR SHALL NOT GRADE THESE SOILS DURING FROSTING OR ICING CONDITIONS.
3. SHOULD BEDROCK BE ENCOUNTERED DURING FOUNDATION OR UTILITY EXCAVATION, ROCK SHALL BE REMOVED AND DISPOSED OF IN A LEGAL MANNER.
4. SOIL TEST SHOULD BE PERFORMED TO DETERMINE SOIL SUITABILITY FOR TOPSOIL. IF SOIL IS DETERMINED TO BE UNSUITABLE THEN TOPSOIL SHALL BE IMPORTED AND DISTURBED THROUGHOUT THE SITE AS REQUIRED.
5. THE SUBJECT SITE DRAINS TO PICKERING CREEK, WHICH HAS AN HQ,TSF,MF CHAPTER 93 CLASSIFICATION.

WATERSHED NOTES:

THIS SUBJECT SITE IS LOCATED IN THE PICKERING CREEK WATERSHED. EXTREME CARE SHOULD BE EXERCISED IN ALL DISTURBANCE ACTIVITIES TO PREVENT DEGRADATION TO THE WATERS OF THE COMMONWEALTH.

UPON COMPLETION OR TEMPORARY CESSATION OF EARTH DISTURBANCE ACTIVITY, OR ANY STAGE THEREOF, THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZED WITH THE APPROPRIATE TEMPORARY OR PERMANENT STABILIZATION.

ANY DISTURBANCE AREA ON WHICH ACTIVITY HAS CEASED MUST BE STABILIZED IMMEDIATELY. REFER TO E&S DETAILS SHEET FOR IMMEDIATE STABILIZATION CRITERIA.

THE NON-GERMINATING PERIODS ARE BETWEEN JUNE 15 THROUGH AUGUST 15 AND BETWEEN SEPTEMBER 30 THROUGH APRIL 15. AREAS DISTURBANCE DURING THESE PERIODS MUST BE STABILIZED IMMEDIATELY.

IF ANY SIGNIFICANT CHANGES ARE MADE TO THE EROSION AND SEDIMENTATION CONTROL PLANS, THE LANDOWNER MUST CONTACT THE CHESTER COUNTY CONSERVATION DISTRICT FOR THE ADEQUACY OF THE CHANGES.

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.
- SEQUENCE CONSTRUCTION ACTIVITIES BY LIMITING DISTURBANCES TO A SPECIFIC TASK SUCH THAT EACH TASK IS COMPLETED BEFORE THE NEXT TASK IS INITIATED.
- TEMPORARILY STABILIZE ALL BUILDING PADS THAT REACH FINAL GRADE THAT ARE NOT TO BE BUILT OUT IMMEDIATELY.

THE FOLLOWING MEASURES ARE TAKEN TO MAXIMIZE PROTECTION OF EXISTING DRAINAGE FEATURES AND VEGETATION:
- SEDIMENT BASINS AND TRAPS ARE PROPOSED TO MANAGE RUNOFF DURING CONSTRUCTION PRIOR TO DISCHARGE TO THE EXISTING STORM SEWERS/CONVEYANCE SYSTEM.
- PERIMETER FILTER SOCK WITHIN AREAS OF THE SITE WHICH DO NOT DRAIN TO SEDIMENT BASINS OR TRAPS.
- ACCESS THE SITE THRU DESIGNATED CONSTRUCTION ENTRANCE.

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
- CONSTRUCTION OF THE SITE IS SEQUENCED WITH APPROPRIATE TEMPORARY STABILIZATION METHODS TO MINIMIZE THE DURATION OF EARTH DISTURBANCE.
- AREAS THAT ARE NOT TO BE GRADED AS PART OF THESE LAND DEVELOPMENT ACTIVITIES SHALL BE PHYSICALLY MARKED TO AVOID MACHINERY FROM INADVERTENTLY COMPACTING THE SOILS.

THE FOLLOWING MEASURES ARE TAKEN TO PREVENT OR MINIMIZE GENERATION OF INCREASED STORM WATER RUNOFF:
- DIRECT RUNOFF TO STORM WATER BASINS TO CONTROL RUNOFF RATES
- RE-VEGETATE DISTURBED AREAS TO HELP REDUCE RUNOFF VOLUME
- MAINTAIN GENERALLY THE SAME DRAINAGE PATTERNS AS IN THE EXISTING CONDITION

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, AERIAL 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 BMP DRAINAGE AREAS

E&S BMP	*MAXIMUM DRAINAGE AREA*
SEDIMENT BASIN #2	23.62 Ac.*
FOREBAY #1	9.46 Ac.
SEDIMENT TRAP #3	2.83 Ac.
SEDIMENT TRAP #4	2.83 Ac.
SEDIMENT TRAP #5	3.43 Ac.
SEDIMENT TRAP #6	3.87 Ac.

* INCLUDES AREA TO FOREBAY #1

E+S - MONITORING, INSPECTION AND REPORTING REQUIREMENTS

VISUAL INSPECTIONS

THE PERMITTEE AND CO_PERMITTEE(S) MUST ENSURE THAT VISUAL SITE INSPECTIONS ARE CONDUCTED WEEKLY, AND WITHIN 24 HOURS AFTER EACH MEASURABLE RAINFALL EVENT THROUGHOUT THE DURATION OF CONSTRUCTION AND UNTIL THE RECEIPT AND ACKNOWLEDGEMENT OF THE NOT BY THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT. THE VISUAL SITE INSPECTIONS AND REPORTS SHALL BE COMPLETED IN A FORMAT PROVIDED BY THE DEPARTMENT, AND CONDUCTED BY QUALIFIED PERSONNEL, TRAINED AND EXPERIENCED IN EROSION AND SEDIMENT CONTROL, TO ASCERTAIN THAT E&S BMPs AND PCSM BMPs ARE PROPERLY CONSTRUCTED AND MAINTAINED TO EFFECTIVELY MINIMIZE POLLUTION TO THE WATERS OF THIS COMMONWEALTH. A WRITTEN REPORT OF EACH INSPECTION SHALL BE KEPT AND INCLUDE AT A MINIMUM:
(1) A SUMMARY OF SITE CONDITIONS, E&S BMP AND PCSM BMP, IMPLEMENTATION AND MAINTENANCE AND COMPLIANCE ACTIONS; AND
(2) THE DATE, TIME, NAME AND SIGNATURE OF THE PERSON CONDUCTING THE INSPECTION.

NONCOMPLIANCE REPORTING

WHERE E&S, PCSM OR PPC BMPs ARE FOUND TO BE INOPERATIVE OR INEFFECTIVE DURING AN INSPECTION, OR ANY OTHER TIME, THE PERMITTEE AND CO_PERMITTEE(S) SHALL, WITHIN 24 HOURS, CONTACT THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT, BY PHONE OR PERSONAL CONTACT, FOLLOWED BY THE SUBMISSION OF A WRITTEN REPORT WITHIN 5 DAYS OF THE INITIAL CONTACT. NONCOMPLIANCE REPORTS SHALL INCLUDE THE FOLLOWING INFORMATION:
(1) ANY CONDITION ON THE PROJECT SITE WHICH MAY ENDANGER PUBLIC HEALTH, SAFETY, OR THE ENVIRONMENT, OR INVOLVE INCIDENTS WHICH CAUSE OR THREATEN POLLUTION;
(2) THE PERIOD OF NONCOMPLIANCE, INCLUDING EXACT DATES AND TIMES AND/OR ANTICIPATED TIME WHEN THE ACTIVITY WILL RETURN TO COMPLIANCE;
(3) STEPS BEING TAKEN TO REDUCE, ELIMINATE, AND PREVENT RECURRENCE OF THE NONCOMPLIANCE; AND
(4) THE DATE OR SCHEDULE OF DATES, AND IDENTIFYING REMEDIES FOR CORRECTING NONCOMPLIANCE CONDITIONS.

REDUCTION, LOSS, OR FAILURE OF THE BMPs

UPON REDUCTION, LOSS, OR FAILURE OF THE BMPs, THE PERMITTEE AND CO_PERMITTEE SHALL TAKE IMMEDIATE ACTION TO RESTORE THE BMPs OR PROVIDE AN ALTERNATIVE METHOD OF TREATMENT. SUCH RESTORED BMPs OR ALTERNATIVE TREATMENT SHALL BE AT LEAST AS EFFECTIVE AS THE ORIGINAL BMPs.

TERMINATION OF COVERAGE

NOT: UPON PERMANENT STABILIZATION OF EARTH DISTURBANCE ACTIVITIES ASSOCIATED WITH CONSTRUCTION ACTIVITY THAT ARE AUTHORIZED BY THIS PERMIT AND WHEN BMPs IDENTIFIED IN THE PCSM PLAN HAVE BEEN PROPERLY INSTALLED, THE PERMITTEE AND/OR CO_PERMITTEE OF THE FACILITY MUST SUBMIT A NOT FORM THAT IS SIGNED IN ACCORDANCE WITH PART B, SECTION 1.C, SIGNATORY REQUIREMENTS, OF THIS PERMIT. ALL LETTERS CERTIFYING DISCHARGE TERMINATION ARE TO BE SENT TO THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT. THE NOT MUST CONTAIN THE FOLLOWING INFORMATION: FACILITY NAME, ADDRESS, AND LOCATION, OPERATOR NAME AND ADDRESS, PERMIT NUMBER, IDENTIFICATION AND PROOF OF ACKNOWLEDGMENT FROM THE PERSON(S) WHO WILL BE RESPONSIBLE FOR OPERATION AND MAINTENANCE OF THE PCSM BMPs IN ACCORDANCE WITH THE APPROVED PCSM PLAN, AND THE REASON FOR PERMIT TERMINATION. UNTIL THE PERMITTEE HAS RECEIVED WRITTEN ACKNOWLEDGEMENT OF THE NOT, THE PERMITTEE WILL REMAIN RESPONSIBLE FOR OPERATING AND MAINTAINING ALL E&S BMPs AND PCSM BMPs ON THE PROJECT SITE AND WILL BE RESPONSIBLE FOR VIOLATIONS OCCURRING ON THE PROJECT SITE.

COMPLETION CERTIFICATE AND FINAL PLANS

WITHIN 30 DAYS AFTER THE COMPLETION OF EARTH DISTURBANCE ACTIVITIES AUTHORIZED BY THIS PERMIT, INCLUDING THE PERMANENT STABILIZATION OF THE SITE AND PROPER INSTALLATION OF PCSM BMPs IN ACCORDANCE WITH THE APPROVED PCSM PLAN, OR UPON SUBMISSION OF THE NOT IF SOONER, THE PERMITTEE SHALL FILE WITH THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT A STATEMENT SIGNED BY A LICENSED PROFESSIONAL AND BY THE PERMITTEE CERTIFYING THAT WORK HAS BEEN PERFORMED IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THIS PERMIT AND THE APPROVED E&S AND PCSM PLANS.

SEDIMENT BASINS

1.) APPROVAL OF THE USE OF SKIMMERS DOES NOT APPROVE USE OF ANY SKIMMERS IN VIOLATION OF ANY PATENT, PATENT RIGHTS, AND/OR PATENT LAWS.
2.) BAFFLES MUST BE INSTALLED TO ALLOW BASIN MAINTENANCE AND CLEAN OUT.
3.) UPON INSTALLATION OF THE TEMPORARY SEDIMENT BASIN RISER(S), AN IMMEDIATE INSPECTION SHALL BE DONE BY A QUALIFIED SITE REPRESENTATIVE AND THE CHESTER COUNTY CONSERVATION DISTRICT SHALL BE NOTIFIED IN WRITING THAT THE RISER IS SEALED.
4.) SEDIMENT BASINS MUST BE STRUCTURALLY SOUND AND PROTECTED FROM UNAUTHORIZED ACTS OF THIRD PARTIES.

OTHER BMP'S

1.) SEDIMENT MUST BE REMOVED FROM STORM WATER INLET PROTECTION AFTER EACH RUNOFF EVENT.
2.) AT STREAM CROSSINGS, 50' BUFFER AREAS SHOULD BE MAINTAINED. ON 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.

TEMPORARY STABILIZATION AND PERMANENT STABILIZATION

1.) HAY OR STRAW MULCH MUST BE APPLIED AT 3.0 TONS PER ACRE.
2.) MULCH WITH MULCH CONTROL NETTING OR EROSION CONTROL BLANKETS MUST BE INSTALLED ON ALL SLOPES 3:1 OR STEEPER.
3.) STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN.
4.) UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMP'S MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL BMP'S AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGARDING, RESEEDING, REMULCHING, AND RENETTING, MUST BE DONE IMMEDIATELY. IF EROSION AND SEDIMENT CONTROL BMP'S FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMP'S, OR MODIFICATIONS TO THOSE INSTALLED WILL BE REQUIRED. E&SPCPM P. 168
5.) SEDIMENT REMOVED FROM BMP'S SHALL BE DISPOSED OF IN LANDSCAPE AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES.
6.) THE OPERATOR SHALL REMOVE FROM THIS SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1 ET SEQ. THE CONTRACTOR SHALL NOT ALLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THIS SITE.
7.) AN E&S PLAN SHALL BE SUBMITTED TO THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT AND IMPLEMENTED FOR ALL SPOIL AND BORROW AREAS, REGARDLESS OF THEIR LOCATION.
8.) 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. OFF-SITE FACILITIES SUCH AS: UTILITIES AND ROADWAYS.
9.) UPON COMPLETION OR TEMPORARY CESSATION OF THE EARTH DISTURBANCE ACTIVITY THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZED IN ACCORDANCE WITH THE RECOMMENDATIONS CONTAINED IN THE EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL (E&S MANUAL), COMMONWEALTH OF PENNSYLVANIA, DEPARTMENT OF ENVIRONMENTAL PROTECTION NO. 363-2134-008, APRIL 2000, AS AMENDED AND UPDATED. EROSION AND SEDIMENT CONTROL BMPs SHALL BE IMPLEMENTED AND MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED AND PCSM BMPs ARE OPERATIONAL.

UTILITY LINE TRENCH EXCAVATION NOTES

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

LOCATION OF ALL SURFACE WATERS AND THEIR CLASSIFICATION UNDER CHAPTER 93

THE SUBJECT SITE IS LOCATED WITHIN THE PICKERING CREEK WATERSHED, WHICH HAS A HQ (HIGH QUALITY), TSF (TROUT STOCKING FISHES) & MF (MIGRATORY FISHES) CHAPTER 93 CLASSIFICATION.

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

EXISTING RIPARIAN BUFFERS ARE WITHIN THE LIMITS OF DISTURANCE. THE RIPARIAN BUFFER IS WITHIN THE CARTWAY OF GRAPHITE MINE ROAD WHICH WILL BE RECONFIGURED TO PROVIDE AN INGRESS/EGRESS ROUTE TO THE SITE. THE DISTURBED AREA WITHIN THE BUFFER WILL ONLY REQUIRE AN EQUIVALENCY DEMONSTRATION AS THE LIMITS OF DISTURBANCE ARE GREATER THAN 100' FROM PICKERING CREEK, BUT LESS THAN 150'.

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.

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

§102.4(b)(5)(ii)

SOIL DESCRIPTIONS

SOILS SURVEY OF CHESTER COUNTY, PENNSYLVANIA. (NOT FIELD VERIFIED)
SOURCE OF MAP: NATURAL RESOURCES CONSERVATION SERVICE, AREA DATA: VERSION 7, 11/16/2015

SYMBOL	NAME	HYDROLOGIC SOIL GROUP	SLOPES (%)	DEPTH TO WATER TABLE	DEPTH TO RESTRICTIVE FEATRURE	CONTAINS HYDRIC COMPONENTS	SURFACE RUNOFF
CaA	CALIFON LOAM	D	0-3	6-36"	20-30 INCHES TO FRAGIPAN 72-99 INCHES TO LITHIE BEDROCK	NO	VERY HIGH
CaB	CALIFON LOAM	D	3-8	6-36"	20-30 INCHES TO FRAGIPAN 72-99 INCHES TO LITHIE BEDROCK	NO	VERY HIGH
GdA	GLADSTONE GRAVELLY LOAM	C	0-3	>80"	60-100 INCHES TO LITHIE BEDROCK	YES	LOW
GdB	GLADSTONE GRAVELLY LOAM	B	3-8	>80"	60-100 INCHES TO LITHIE BEDROCK	YES	LOW
GdC	GLADSTONE GRAVELLY LOAM	A	8-15	>80"	60-100 INCHES TO LITHIE BEDROCK	YES	LOW
GeD	GLADSTONE PARKER GRAVELLY LOAMS	A	15-25	>80"	60-118 INCHES TO LITHIE BEDROCK	YES	MEDIUM
GgA	GLENELG SILT LOAM	B	0-3	>80"	60-120 INCHES TO LITHIE BEDROCK	YES	LOW
UugB	URBAN LAND - ODORTHENTS, SCHIST AND GNEISS COMPLEX	C	0-8	+60"	10-99 INCHES TO LITHIE BEDROCK 20-70 INCHES TO PARALITHIC BEDROCK	NO	MEDIUM

SOIL USE LIMITATIONS AND THEIR RESOLUTIONS

SOIL NAME	CUTBANKS CAVE	CORROSIVE TO CONCRETE/STEEL	DROUGHTY	EASILY ERODIBLE	FLOODING	DEPTH TO SATURATED ZONE/SEASONAL HIGH WATER TABLE	HYDRIC/HYDRIC INCLUSIONS	LOW STRENGTH/ LANDSLIDE PRONE	SLOW PERCOLATION	PIPING	POOR SOURCE OF TOPSOIL	FROST ACTION	SHRINK-SWELL	POTENTIAL SINKHOLE	PONDING	WETNESS
CALFRON	X	C/S				X		X	X			X				X
GLADSTONE	X	C		X			X		X			X	X			
GLENELG	X	C		X			X	X	X	X	X	X				X

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

1. CUTBANKS CAVE RESOLUTIONS: CUT SLOPES SHALL BE TEMPORARILY OR PERMANENTLY STABILIZED AS SOON AS POSSIBLE IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS FOUND ON THE E&S PLANS. FINISHED SLOPES WILL NOT EXCEED 3:1. EXCAVATIONS SHALL BE PROPERLY SUPPORTED TO PREVENT CAVES.

2. CORROSIVE TO CONCRETE/STEEL RESOLUTIONS: STORM DRAIN PIPES FOR THIS SITE WILL BE HDPE.

3. EASILY ERODIBLE RESOLUTIONS: STABILIZATION SHALL TAKE PLACE UPON COMPLETION OR TEMPORARY CESSATION OF EARTH DISTURBANCE ACTIVITIES THAT WILL EXCEED FOUR DAYS, OR ANY STAGE THEREOF. STABILIZATION SHALL BE IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS FOUND ON THE E&S PLANS. E&S CONTROLS LIKE COMPOST FILTER SOCKS AND INLET PROTECTION SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.

4. HIGH WATER TABLE RESOLUTIONS: SHOULD A HIGH GROUND WATER TABLE BE ENCOUNTERED DURING CONSTRUCTION, WATER WILL BE DRAINED FROM DISTURBED AREAS TO A WELL VEGETATED AREA OR PLACED COMPOST FILTER SOCK PRIOR TO BEING DISCHARGED FROM SITE. SATURATED SOILS THAT REQUIRE COMPACTION SHALL BE DIRED PRIOR TO BEING USED ON SITE.

5. LOW STRENGTH/LANDSLIDE PRONE RESOLUTIONS: FINISHED SLOPES WILL NOT EXCEED 3:1. PRECAUTIONS SHALL BE TAKEN DURING CONSTRUCTION TO PREVENT SLOPE FAILURES.

6. PIPING RESOLUTIONS: PIPING IS THE EROSION BY PERCOLATING WATERS OR SEEPAGE IN LAYER OF SUBSOIL RESULTING IN CAVING AND THE FORMATION OF TUNNELS OR PIPES THROUGH WHICH THE SOLUBLE OR GRANULAR MATERIAL IS REMOVED. WHERE NECESSARY, ANTI-SEEP COLLARS WILL BE USED TO PREVENT PIPING.

7. SLOW PERCOLATION RESOLUTIONS: PROVIDE DEWATERING DURING CONSTRUCTION ACTIVITIES. INFILTRATION IS NOT FEASIBLE FOR THIS PROJECT; THEREFORE, A SLOW RELEASE BASIN HAS BEEN PROPOSED.

8. POOR SOURCE OF TOPSOIL RESOLUTIONS: SOIL TEST SHOULD BE PERFORMED TO DETERMINE SOIL SUITABILITY FOR TOPSOIL. IF SOIL IS DETERMINED TO BE UNSUITABLE THEN TOPSOIL SHALL BE IMPORTED AND DISTRIBUTED THROUGHOUT THE SITE AS REQUIRED.

9. FROST ACTION RESOLUTIONS: DUE TO GRADING LIMITATIONS OF SOILS DURING WINTER MONTHS, THE CONTRACTOR SHALL NOT GRADE THESE SOILS DURING FROSTING OR ICING CONDITIONS.

10. SHRINK-SWELL RESOLUTIONS: SOILS THAT ARE PRONE TO SHRINKAGE AND SWELL DUE TO EARTH MOVING OPERATIONS SHALL BE REPLACED WHERE PRACTICAL OR NECESSARY WITH STONE SINCE STONE IS NOT PRONE TO SHRINKAGE AND SWELL CONDITIONS. ALTERNATIVELY THE CONTRACTOR SHALL UNDERSTAND THE SHRINKAGE/SWELL FACTOR AND ADJUST BACKFILL OPERATIONS ACCORDINGLY.

11. WETNESS RESOLUTIONS: WET WEATHER CONSTRUCTION RECOMMENDATIONS SHALL BE PROVIDED BY A QUALIFIED GEOTECHNICAL ENGINEER AND WILL BE EMPLOYEED TO MINIMIZE THE EFFECTS OF SATURATED SOILS DURING GRADING OPERATIONS. POSITIVE DRAINAGE SHALL BE PROVIDED TO PREVENT RUNOFF FROM PONDING IN A GIVEN AREA AND FURTHER PREVENTING THE SOILS FROM DRYING OUT ONCE THE STORM EVENT HAS PASSED.

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 - EROSION CONTROL MATTING
- E&S BMP - INLET PROTECTION - FILTER BAG
- 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

SEQUENCE OF CONSTRUCTION - STAGE 2 (RESIDENTIAL)

§102.4(b)(5)vii)

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 TO ONLY THOSE AREAS DESCRIBED IN EACH STEP. IMMEDIATELY UPON COMPLETION OR TEMPORARY CESSATION OF EARTH DISTURBANCE ACTIVITIES OR ANY STEP THEREOF, THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZED WITH APPROPRIATE TEMPORARY OR PERMANENT STABILIZATION.

B. 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, E&S PLAN PREPARER, ALL APPROPRIATE MUNICIPAL OFFICIALS AND A REPRESENTATIVE OF THE CHESTER COUNTY CONSERVATION DISTRICT FOR AN ON-SITE PRE-CONSTRUCTION MEETING. A MINIMUM OF TWO (2) DAYS (48 HOURS) NOTICE SHALL BE GIVEN TO THE TOWNSHIP SEWER ENGINEER AND 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 UTILITY LOCATIONS.

C. BEFORE INITIATING ANY REVISION TO THE APPROVED EROSION AND SEDIMENT (E&S) 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 CHESTER COUNTY CONSERVATION DISTRICT. THE OPERATOR SHALL ENSURE THAT THE APPROVED E&S 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 OR SEDIMENT POLLUTION

D. 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 SHALL 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 CHESTER COUNTY CONSERVATION DISTRICT. AFTER CONSTRUCTION, THE SITE WILL BE STABILIZED, WHICH WILL REDUCE THE POTENTIAL FOR DUST GENERATION.

E. THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENTS SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ.

1. CONTINUE ROUTINE MAINTENANCE OF THE E&S BMPS INSTALLED DURING STAGE 1, WHICH INCLUDE THE STAGE 1 CONSTRUCTION ENTRANCE, SEDIMENT BASIN #2, FOREBAY #1, SEDIMENT TRAP #3 TO #6, ROCK FILTERS WITH COMPOST FILTER SOCKS, AND STONE INLET PROTECTION. THE STAGE 1 E&S PLANS AND SEQUENCE OF CONSTRUCTION CAN BE FOUND ON THE PLANS PREPARED BY BOHLER ENGINEERING, ENTITLED: SUBDIVISION & AMENDED FINAL PRD PLANS PARCEL 5-C - "THE VILLAGE AT BYERS STATION," DATED 5/20/16, REVISION 6, DATED 7/5/17.
2. INSTALL STAGE 2 PERIMETER CONTROLS. THIS INCLUDES THE SILT SOCK AND A SECOND CONSTRUCTION ENTRANCE ON DARRELL DRIVE. THE TEMPORARY STAGING AREA CAN REMAIN IN USE UNTIL THE SITE IS GRADED. WHEN FINAL GRADE IS ACHIEVED IN THE IS DONE, THEN ESTABLISH A NEW STAGING AREA AT THEIR DISCRETION. THE CONTRACTOR SHALL ALSO INSPECT ANY OTHER EXISTING INFRASTRUCTURE WITHIN THE STAGE 2 LIMIT OF DISTURBANCE THAT IS TO REMAIN TO ENSURE IT IS FUNCTIONING PROPERLY.
   NOTE: ONLY PERSONAL VEHICLES MAY USE THE EXISTING ENTRANCE TO ENTER AND LEAVE THE SITE UNTIL SUCH TIME AS THE TEMPORARY STAGING AREA IS RELOCATED DUE TO GRADING OPERATIONS AND STORM DRAINAGE SYSTEM INSTALLATION. THIS WILL PREVENT SEDIMENT, DUST, OR MUD FROM BEING TRACKED ONTO DARRELL DRIVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING PERSONAL VEHICLES DO NOT TRACK SEDIMENT OFF-SITE AND CONSTRUCTION VEHICLES USE THE CONSTRUCTION ENTRANCE.
3. COMMENCE BULK EARTH WORK NECESSARY TO ACHIEVE SUBGRADES FOR THE PROPOSED ACCESS DRIVEWAY, SASSAFRAS LANE, GINKGO LANE, CATALPA LANE, REDBUD LANE, JUNEBERRY COURT, MOCKERNUT COURT, AND HACKBERRY COURT.
4. INSTALL UTILITIES INCLUDING STORM SEWER, SANITARY SEWER, WATER, GAS, ELECTRIC AND TELECOMMUNICATIONS. RIPRAP APRONS SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILS PROVIDED ON THE EROSION AND SEDIMENT POLLUTION CONTROL NOTES AND DETAILS IMMEDIATELY UPON CONSTRUCTION OF THE ENDWALL.
5. INSTALL CURBING SHOWN ON THE PLANS AS WELL AS THE STONE AND BITUMINOUS BASE COURSE IN ROADWAYS.
6. CONSTRUCTION OF THE HOMES CAN NOW COMMENCE. THE CONTRACTOR IS TO USE ON-LOT E&S CONTROLS AS SHOWN ON THE PLANS AND ON STANDARD DETAIL 10-1, 10-2, AND 10-3 IN THE E&S DETAILS. ANY LOT THAT IS NOT GOING TO BE BUILT OUT IMMEDIATELY SHALL BE TEMPORARILY STABILIZED.
7. INITIATE FINAL GRADING AND PLACEMENT OF TOP SOIL IN ALL LANDSCAPE AREAS IN ACCORDANCE WITH THE LANDSCAPE PLANS. 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 SPECIFIED HAS BEEN ACHIEVED. AS DISTURBED AREAS APPROACH FINAL GRADE, PREPARATIONS SHOULD BE MADE FOR SEEDING AND MULCHING TO BEGIN (I.E. ANTICIPATE THE COMPLETION DATE AND SCHEDULE 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 AND IS NOT ACCEPTABLE. SEEDING AND MULCHING REQUIREMENTS ARE SPECIFIED IN THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS.
8. CONSTRUCT VEGETATED SWALES #1 TO #10. CONSTRUCTION OF VEGETATED SWALES SHALL NOT COMMENCE UNTIL THE TRIBUTARY AREA TO THE SWALE HAS BEEN PERMANENTLY STABILIZED.
   CRITICAL STAGE: THE PERMITTEE SHALL PROVIDE ENGINEERING OVERSIGHT DURING THE CONSTRUCTION OF THE VEGETATED SWALES. A LICENSED PROFESSIONAL OR DESIGNEE KNOWLEDGEABLE IN THE DESIGN AND CONSTRUCTION OF VEGETATED SWALES, PREFERABLY THE DESIGN ENGINEER, SHALL CONDUCT THE OVERSIGHT.

   CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE VEGETATED SWALE SEQUENCE OF CONSTRUCTION SHOWN ON THE PCSM DETAILS AND REQUIRED LANDSCAPING PER THE LANDSCAPE PLANS.
9. INSTALL REMAINING LAYERS OF BITUMINOUS PAVEMENT AND CONCRETE INCLUDING SIDEWALK. THE TRAIL TO BE PAVED ON THE WEST SIDE OF POTTSTOWN PIKE (RT 100) AND DARRELL DRIVE SHALL ONLY BE INSTALLED ONCE THE CONTRACTOR CAN BE PERMANENTLY STABILIZED WITH A MINIMUM OF THE BASE STONE LAYER PER DAY TO AVOID HAVING TO PUT IN PERIMETER CONTROLS IN THE AREA.
10. INITIATE FINAL VEGETATION AND LANDSCAPING IN ACCORDANCE WITH THE LANDSCAPE PLANS AND DETAILS.
    CRITICAL STAGE: THE PERMITTEE SHALL PROVIDE OVERSIGHT FOR THE INSTALLATION OF THE LANDSCAPING. A LICENSED PROFESSIONAL, OR DESIGNEE, KNOWLEDGEABLE IN THE IN THE INSTALLATION OF TREES AND PLANTINGS, PREFERABLY THE LANDSCAPE ARCHITECT WHO PUT THE PLAN TOGETHER, SHALL CONDUCT THE OVERSIGHT.
11. CONVERT SEDIMENT BASIN #2, FOREBAY #1 AND SEDIMENT TRAPS #3 TO #6 TO THEIR PERMANENT BIORETENTION BASIN CONFIGURATIONS. THE CONVERSION OF THESE FACILITIES SHALL NOT COMMENT UNTIL THE TRIBUTARY AREA TO THE BMP HAS BEEN PERMANENTLY STABILIZED. FOREBAY #1/BIORETENTION BASIN #1 SHALL BE CONVERTED AND PERMANENTLY STABILIZED PRIOR TO CONVERTING SEDIMENT BASIN #2/BIORETENTION BASIN #2 SINCE BIORETENTION BASIN #1 IS TRIBUTARY TO BIORETENTION BASIN #2. CONVERSION OF THESE FACILITIES SHALL COMMENCE ONLY IF THE EARTH DISTURBANCE TRIBUTARY TO THESE FACILITIES WITHIN THE COMMERCIAL AREA HAS BEEN PERMANENTLY STABILIZED.
    CRITICAL STAGE: THE PERMITTEE SHALL PROVIDE ENGINEERING OVERSIGHT DURING THE CONVERSION OF THE E&S FACILITIES TO THEIR PERMANENT BIORETENTION CONFIGURATION. A LICENSED PROFESSIONAL OR DESIGNEE KNOWLEDGEABLE IN THE CONVERSION OF E&S FACILITIES TO BIORETENTION BASINS, PREFERABLY THE DESIGN ENGINEER, SHALL CONDUCT THE OVERSIGHT.

    PRIOR TO CONVERTING ANY OF THE E&S FACILITIES TO THEIR PERMANENT CONDITION THE PERMITTEE SHALL CONTACT THE CHESTER COUNTY CONSERVATION DISTRICT AND REQUEST A SITE INSPECTION AND RECEIVE APPROVAL TO CONVERT SEDIMENT BASIN #2, FOREBAY #1, OR SEDIMENT TRAPS #3 TO #6 TO THEIR PERMANENT CONFIGURATION.

    CONVERSION TO A BIORETENTION FACILITY SHALL FOLLOW THE BIORETENTION BASIN SEQUENCE OF CONSTRUCTION FOUND ON THE PCSM DETAILS AND SHALL CONSIST OF THE FOLLOWING:
    A. FLUSH THE TRIBUTARY STORM DRAINAGE SYSTEM AND ENSURE NO SEDIMENT ENTERS THE FACILITY ONCE THE CONVERSION IS COMPLETE.
    B. REMOVE BAFFLE WALLS IF REQUIRED.
    C. ANY EARTHWORK NECESSARY TO REMOVE SEDIMENT FROM THE BASINS AND EXCAVATION REQUIRED TO PLACE THE SOIL/STONE OR SAND, DEPENDING ON THE FACILITY. AS PART OF THIS EARTHWORK BIORETENTION BASINS #4 AND #5 SHALL BE OVER EXCAVATED BY 1.0' DUE TO DEPTH OF SETTLING ZONES IN THESE FACILITIES.
    D. PLACE THE SAND/STONE AND PLANTING SOILS AND THE UNDERDRAIN IF REQUIRED.
    E. THE TEMPORARY E&S BMPS (SKIMMER OR TEMPORARY RISER) SHALL REMAIN IN PLACE AS ALONG AS PRACTICAL. ONCE THESE STRUCTURES CAN NO LONGER BE LEFT IN PLACE DUE TO HAVING TO PLACE SOILS/STONE OR SAND REMOVE THEM AND UNPLUG THE TEMPORARY DEWATERING ORIFICE AT THE BOTTOM OF THE OUTLET STRUCTURE.
    F. PLANT THE BASINS ACCORDING TO THE LANDSCAPE PLAN AND STABILIZE IMMEDIATELY.
    G. ONCE PLANT MATERIAL HAS ESTABLISHED THE TEMPORARY DEWATERING ORIFICE SHALL BE PERMANENTLY PLUGGED AND SHALL BE WATER TIGHT.

SEQUENCE OF CONSTRUCTION - STAGE 2 (LOT #2A RESIDENTIAL)

§102.4(b)(5)vii)

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 TO ONLY THOSE AREAS DESCRIBED IN EACH STEP. IMMEDIATELY UPON COMPLETION OR TEMPORARY CESSATION OF EARTH DISTURBANCE ACTIVITIES OR ANY STEP THEREOF, THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZED WITH APPROPRIATE TEMPORARY OR PERMANENT STABILIZATION.

B. 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, E&S PLAN PREPARER, ALL APPROPRIATE MUNICIPAL OFFICIALS AND A REPRESENTATIVE OF THE CHESTER COUNTY CONSERVATION DISTRICT FOR AN ON-SITE PRE-CONSTRUCTION MEETING. A MINIMUM OF TWO (2) DAYS (48 HOURS) NOTICE SHALL BE GIVEN TO THE TOWNSHIP SEWER ENGINEER AND 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 UTILITY LOCATIONS.

C. BEFORE INITIATING ANY REVISION TO THE APPROVED EROSION AND SEDIMENT (E&S) 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 CHESTER COUNTY CONSERVATION DISTRICT. THE OPERATOR SHALL ENSURE THAT THE APPROVED E&S 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 OR SEDIMENT POLLUTION

D. 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 SHALL 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 CHESTER COUNTY CONSERVATION DISTRICT. AFTER CONSTRUCTION, THE SITE WILL BE STABILIZED, WHICH WILL REDUCE THE POTENTIAL FOR DUST GENERATION.

E. THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENTS SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ.

1. AS APPLICABLE, CONTINUE ROUTINE MAINTENANCE OF THE E&S BMPS INSTALLED DURING STAGE 1 &STAGE 2 WHICH INCLUDES CONSTRUCTION ENTRANCES, SEDIMENT BASIN #2, FOREBAY #1, ROCK FILTERS WITH COMPOST FILTER SOCKS, AND STONE INLET PROTECTION. THE STAGE 1 E&S PLANS AND SEQUENCE OF CONSTRUCTION CAN BE FOUND ON THE PLANS PREPARED BY BOHLER ENGINEERING, ENTITLED: SUBDIVISION & AMENDED FINAL PRD PLANS PARCEL 5-C - "THE VILLAGE AT BYERS STATION," DATED 5/20/16, REVISION 6, DATED 7/5/17.
2. INSTALL STAGE 2 PERIMETER CONTROLS WITHIN LOT #2B. THIS INCLUDES THE SILT SOCK, CONSTRUCTION ENTRANCES, AND INLET PROTECTION.
3. COMMENCE BULK EARTH WORK NECESSARY TO ACHIEVE SUBGRADE WITHIN LOT #2B.
4. CONSTRUCT THE RETAINING WALLS WITHIN LOT #2B. CONSTRUCTION OF THE RETAINING WALLS SHALL BE DONE IN ACCORDANCE WITH THE WALL DESIGN ENGINEER'S DRAWINGS AND MANUFACTURER SPECIFICATIONS UNLESS OTHERWISE NOTED IN EITHER THE RETAINING WALL DESIGN ENGINEER'S DRAWINGS OR THE MANUFACTURER'S SPECIFICATIONS. AT NO POINT DURING CONSTRUCTION SHOULD THE WALL HEIGHT EXCEED ONE COURSE HIGHER THAN THE FILL MATERIAL BEHIND THE WALL THROUGHOUT WALL CONSTRUCTION AND ASSOCIATED FILLING OPERATIONS BEHIND THE WALL.
5. CONSTRUCTION OF THE COMMERCIAL BUILDINGS CAN NOW COMMENCE.
6. INSTALL UTILITIES WITHIN LOT #2B INCLUDING STORM SEWER, SANITARY SEWER, WATER, GAS, ELECTRIC AND TELECOMMUNICATIONS.
7. INSTALL CURBING WITHIN LOT #2B SHOWN ON THE PLANS AS WELL AS THE STONE AND BITUMINOUS BASE COURSE IN DRIVEWAYS AND PARKING AREAS.
8. INITIATE FINAL GRADING AND PLACEMENT OF TOP SOIL IN ALL LANDSCAPE AREAS WITHIN LOT #2B IN ACCORDANCE WITH THE LANDSCAPE PLANS. 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 SPECIFIED HAS BEEN ACHIEVED. AS DISTURBED AREAS APPROACH FINAL GRADE, PREPARATIONS SHOULD BE MADE FOR SEEDING AND MULCHING TO BEGIN (I.E. ANTICIPATE THE COMPLETION DATE AND SCHEDULE 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 AND IS NOT ACCEPTABLE. SEEDING AND MULCHING REQUIREMENTS ARE SPECIFIED IN THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS.
9. CONSTRUCT VEGETATED SWALES #11 AND #17. CONSTRUCTION OF VEGETATED SWALES SHALL NOT COMMENCE UNTIL THE TRIBUTARY AREA TO THE SWALE HAS BEEN PERMANENTLY STABILIZED.
   CRITICAL STAGE: THE PERMITTEE SHALL PROVIDE ENGINEERING OVERSIGHT DURING THE CONSTRUCTION OF THE VEGETATED SWALES. A LICENSED PROFESSIONAL OR DESIGNEE KNOWLEDGEABLE IN THE DESIGN AND CONSTRUCTION OF VEGETATED SWALES, PREFERABLY THE DESIGN ENGINEER, SHALL CONDUCT THE OVERSIGHT.

   CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE VEGETATED SWALE SEQUENCE OF CONSTRUCTION SHOWN ON THE PCSM DETAILS AND REQUIRED LANDSCAPING PER THE LANDSCAPE PLANS.
10. INSTALL REMAINING LAYERS OF BITUMINOUS PAVEMENT AND CONCRETE INCLUDING SIDEWALK WITHIN LOT #2B.
11. INITIATE FINAL VEGETATION AND LANDSCAPING WITHIN LOT #2B IN ACCORDANCE WITH THE LANDSCAPE PLANS AND DETAILS.
    CRITICAL STAGE: THE PERMITTEE SHALL PROVIDE OVERSIGHT FOR THE INSTALLATION OF THE LANDSCAPING. A LICENSED PROFESSIONAL, OR DESIGNEE, KNOWLEDGEABLE IN THE IN THE INSTALLATION OF TREES AND PLANTINGS, PREFERABLY THE LANDSCAPE ARCHITECT WHO PUT THE PLAN TOGETHER, SHALL CONDUCT THE OVERSIGHT.
12. INSTALL WATER QUALITY FILTERS WITHIN LOT #2B. INSTALLATION OF THE WATER QUALITY FILTERS SHALL BE DONE IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTION AND RECOMMENDATIONS.
    CRITICAL STAGE: THE PERMITTEE SHALL PROVIDE ENGINEERING OVERSIGHT DURING THE INSTALLATION OF THE WATER QUALITY FILTERS. A LICENSED PROFESSIONAL OR DESIGNEE KNOWLEDGEABLE IN THE INSTALLATION OF WATER QUALITY FILTERS, PREFERABLY THE DESIGN ENGINEER, SHALL CONDUCT THE OVERSIGHT.
13. UPON SITE STABILIZATION (UNIFORM COVERAGE OR DENSITY OF 70% ACROSS ALL DISTURBED AREAS) AND NOTIFICATION OF THE CHESTER COUNTY CONSERVATION DISTRICT, REMOVE E&S CONTROL FACILITIES INCLUDING SILT SOCK, INLET PROTECTION AND THE ROCK FILTER WITH COMPOST FILTER SOCK. ANY AREA DISTURBED DURING THE REMOVAL SHALL BE PERMANENTLY STABILIZED IMMEDIATELY.
14. CLEAR SITE OF REMAINING DEBRIS AND ALL UNWANTED MATERIALS. CONTRACTOR SHALL REMOVE FROM SITE, RECYCLE OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENTS SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTE ON SITE.
15. DEMOBILIZE
16. A NOTICE OF TERMINATION FORM SHOULD BE SUBMITTED TO THE CHESTER COUNTY CONSERVATION DISTRICT UPON STABILIZATION AND FINAL COMPLETION OF THE PROJECT.

SUPPLEMENTAL SEQUENCE OF CONSTRUCTION RELATED TO STAGE 2 (LOT #2B - COMMERCIAL):

15. AS APPLICABLE, CONTINUE ROUTINE MAINTENANCE OF THE E&S BMPS INSTALLED DURING STAGE 1 & STAGE 2 WHICH INCLUDES CONSTRUCTION ENTRANCES, SEDIMENT BASIN #2, FOREBAY #1, ROCK FILTERS WITH COMPOST FILTER SOCKS, AND STONE INLET PROTECTION. THE STAGE 1 E&S PLANS AND SEQUENCE OF CONSTRUCTION CAN BE FOUND ON THE PLANS PREPARED BY BOHLER ENGINEERING, ENTITLED: SUBDIVISION & AMENDED FINAL PRD PLANS PARCEL 5-C - "THE VILLAGE AT BYERS STATION," DATED 5/20/16, REVISION 6, DATED 7/5/17.
16. INSTALL STAGE 2 PERIMETER CONTROLS WITHIN LOT #2B. THIS INCLUDES THE SILT SOCK, CONSTRUCTION ENTRANCES, AND INLET PROTECTION.
17. COMMENCE BULK EARTH WORK NECESSARY TO ACHIEVE SUBGRADE WITHIN LOT #2B.
18. CONSTRUCT THE RETAINING WALLS WITHIN LOT #2B. CONSTRUCTION OF THE RETAINING WALLS SHALL BE DONE IN ACCORDANCE WITH THE WALL DESIGN ENGINEER'S DRAWINGS AND MANUFACTURER SPECIFICATIONS UNLESS OTHERWISE NOTED IN EITHER THE RETAINING WALL DESIGN ENGINEER'S DRAWINGS OR THE MANUFACTURER'S SPECIFICATIONS. AT NO POINT DURING CONSTRUCTION SHOULD THE WALL HEIGHT EXCEED ONE COURSE HIGHER THAN THE FILL MATERIAL BEHIND THE WALL THROUGHOUT WALL CONSTRUCTION AND ASSOCIATED FILLING OPERATIONS BEHIND THE WALL.
19. CONSTRUCTION OF THE COMMERCIAL BUILDINGS CAN NOW COMMENCE.
20. INSTALL UTILITIES WITHIN LOT #2B INCLUDING STORM SEWER, SANITARY SEWER, WATER, GAS, ELECTRIC AND TELECOMMUNICATIONS.
21. INSTALL CURBING WITHIN LOT #2B SHOWN ON THE PLANS AS WELL AS THE STONE AND BITUMINOUS BASE COURSE IN DRIVEWAYS AND PARKING AREAS.
22. INITIATE FINAL GRADING AND PLACEMENT OF TOP SOIL IN ALL LANDSCAPE AREAS WITHIN LOT #2B IN ACCORDANCE WITH THE LANDSCAPE PLANS. 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 SPECIFIED HAS BEEN ACHIEVED. AS DISTURBED AREAS APPROACH FINAL GRADE, PREPARATIONS SHOULD BE MADE FOR SEEDING AND MULCHING TO BEGIN (I.E. ANTICIPATE THE COMPLETION DATE AND SCHEDULE 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 AND IS NOT ACCEPTABLE. SEEDING AND MULCHING REQUIREMENTS ARE SPECIFIED IN THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS.
23. CONSTRUCT VEGETATED SWALES #11 AND #17. CONSTRUCTION OF VEGETATED SWALES SHALL NOT COMMENCE UNTIL THE TRIBUTARY AREA TO THE SWALE HAS BEEN PERMANENTLY STABILIZED.
    CRITICAL STAGE: THE PERMITTEE SHALL PROVIDE ENGINEERING OVERSIGHT DURING THE CONSTRUCTION OF THE VEGETATED SWALES. A LICENSED PROFESSIONAL OR DESIGNEE KNOWLEDGEABLE IN THE DESIGN AND CONSTRUCTION OF VEGETATED SWALES, PREFERABLY THE DESIGN ENGINEER, SHALL CONDUCT THE OVERSIGHT.

    CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE VEGETATED SWALE SEQUENCE OF CONSTRUCTION SHOWN ON THE PCSM DETAILS AND REQUIRED LANDSCAPING PER THE LANDSCAPE PLANS.
24. INSTALL REMAINING LAYERS OF BITUMINOUS PAVEMENT AND CONCRETE INCLUDING SIDEWALK WITHIN LOT #2B.
25. INITIATE FINAL VEGETATION AND LANDSCAPING WITHIN LOT #2B IN ACCORDANCE WITH THE LANDSCAPE PLANS AND DETAILS.
    CRITICAL STAGE: THE PERMITTEE SHALL PROVIDE OVERSIGHT FOR THE INSTALLATION OF THE LANDSCAPING. A LICENSED PROFESSIONAL, OR DESIGNEE, KNOWLEDGEABLE IN THE IN THE INSTALLATION OF TREES AND PLANTINGS, PREFERABLY THE LANDSCAPE ARCHITECT WHO PUT THE PLAN TOGETHER, SHALL CONDUCT THE OVERSIGHT.
26. INSTALL WATER QUALITY FILTERS WITHIN LOT #2B. INSTALLATION OF THE WATER QUALITY FILTERS SHALL BE DONE IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTION AND RECOMMENDATIONS.
    CRITICAL STAGE: THE PERMITTEE SHALL PROVIDE ENGINEERING OVERSIGHT DURING THE INSTALLATION OF THE WATER QUALITY FILTERS. A LICENSED PROFESSIONAL OR DESIGNEE KNOWLEDGEABLE IN THE INSTALLATION OF WATER QUALITY FILTERS, PREFERABLY THE DESIGN ENGINEER, SHALL CONDUCT THE OVERSIGHT.
27. UPON SITE STABILIZATION (UNIFORM COVERAGE OR DENSITY OF 70% ACROSS ALL DISTURBED AREAS) AND NOTIFICATION OF THE CHESTER COUNTY CONSERVATION DISTRICT, REMOVE E&S CONTROL FACILITIES INCLUDING SILT SOCK, INLET PROTECTION AND THE ROCK FILTER WITH COMPOST FILTER SOCK. ANY AREA DISTURBED DURING THE REMOVAL SHALL BE PERMANENTLY STABILIZED IMMEDIATELY.
28. CLEAR SITE OF REMAINING DEBRIS AND ALL UNWANTED MATERIALS. CONTRACTOR SHALL REMOVE FROM SITE, RECYCLE OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENTS SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTE ON SITE.
29. DEMOBILIZE
30. A NOTICE OF TERMINATION FORM SHOULD BE SUBMITTED TO THE CHESTER COUNTY CONSERVATION DISTRICT UPON STABILIZATION AND FINAL COMPLETION OF THE PROJECT.

CRITICAL STAGES

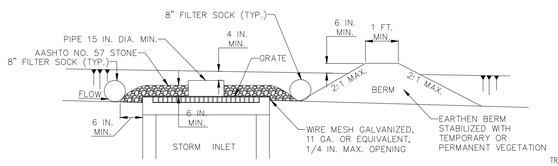
1. CONSTRUCTION OF SEDIMENT BASIN #2 AND FOREBAY #1
2. CONSTRUCTION OF SEDIMENT TRAPS #3 TO #6
3. CONSTRUCTION OF THE VEGETATED SWALES #1 THROUGH #17
4. CONVERSION OF SEDIMENT BASIN #2, FOREBAY #1, AND SEDIMENT TRAPS #3 TO #6 TO BIORETENTION BASINS
5. INSTALLATION OF LANDSCAPING
6. INSTALLATION OF WATER QUALITY FILTERS

CHESTER COUNTY GENERAL EROSION AND SEDIMENTATION CONTROL NOTES:

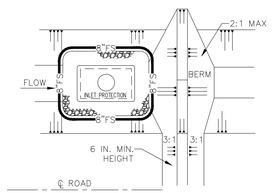
OWNER/OPERATOR WILL BE RESPONSIBLE FOR THE PROPER CONSTRUCTION, STABILIZATION, AND MAINTENANCE OF ALL EROSION AND SEDIMENTATION CONTROLS AND RELATED ITEMS INCLUDED WITHIN THESE PLANS.

ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS, SHALL BE DONE IN ACCORDANCE WITH APPROVED E&S PLANS. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN (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 THE IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.

THE OPERATOR SHALL ASSURE THAT AN EROSION AND SEDIMENT CONTROL PLAN HAS BEEN PREPARED, APPROVED BY THE CHESTER COUNTY CONSERVATION DISTRICT, AND IS BEING IMPLEMENTED



SECTION VIEW



PLAN VIEW

NOTES:

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS NOT LOCATED AT A LOW POINT.

ROLLED EARTHEN BERM IN ROADWAY SHALL BE PROVIDED AND MAINTAINED IMMEDIATELY DOWN GRADIENT OF THE PROTECTED INLET 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 TO REMAIN PERMANENTLY.

STONE INLET PROTECTION AND BERM FOR A TYPE M INLET CAN BE USED IN ONE ACRE MAXIMUM DRAINAGE AREA WITH 15 IN. OVERFLOW PIPE AND 4 IN. HEAD. A PERFORATED PLATE WELDED TO A METAL RISER MAY NOT BE SUBSTITUTED FOR THE WIRE MESH. A SLOTTED PLATE WELDED TO THE RISER MAY BE USED IN CONJUNCTION WITH THE WIRE MESH IF CALCULATIONS ARE PROVIDED TO SHOW SUFFICIENT CAPACITY OF THE INLET TO ACCEPT THE PEAK RUNOFF FOR A 2-YEAR STORM EVENT FROM THE TRIBUTARY DRAINAGE AREA. TOP OF PIPE SHALL BE AT LEAST 6 INCHES BELOW ADJACENT ROADWAY IF PONDED WATER WOULD POSE A SAFETY HAZARD TO TRAFFIC. EARTHEN BERM SHALL BE ROLLED.

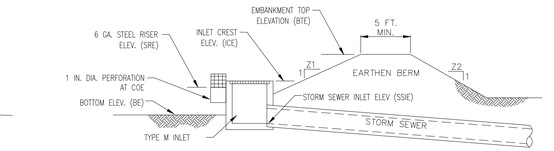
SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE HEIGHT OF THE STONE. DAMAGED OR CLOGGED INSTALLATIONS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

FOR SYSTEMS DISCHARGING TO HQ OR EV SURFACE WATER, PROVIDE AN 8" COMPOST FILTER SOCK AROUND, AND SECURED, THE THE STONE, TO MAKE PRACTICE ABACT COMPLIANT.

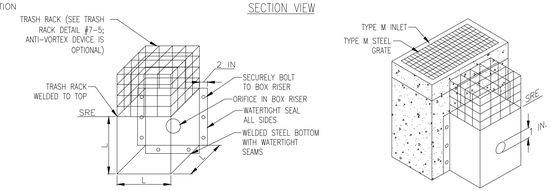
DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

STANDARD CONSTRUCTION DETAIL #4-20
STONE INLET PROTECTION AND BERM - TYPE M INLET

NOT TO SCALE



SECTION VIEW



FABRICATED STEEL RISER DETAIL

TYPE M WITH E&S RISER DETAIL

TRAP NO.	Z1 (FT)	Z2 (FT)	FABRICATED RISER			STORM SEWER INVERT ELEV. SSIE (FT)	INLET CREST ELEV. ICE (FT)	EMBANK. TOP ELEV. BTE (FT)	BOTTOM ELEV. BE (FT)
			LENGTH L (FT)	STEEL RISER ELEV. SRE (FT)	PERF. ELEV COE (FT)				
3	3	3	2.0	453.00	452.00	449.27	453.10	455.00	451.00
4	3	3	2.0	448.00	447.00	442.58	447.80	449.50	446.00
5	3	3	2.0	443.00	442.00	438.08	442.75	445.00	441.00
6	3	3	2.0	440.50	439.00	435.18	439.80	442.00	438.00

NOTES:

FILL MATERIAL FOR THE BERM SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS. THE BERM 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. ELEVATION BTE SHALL BE MINIMUM 24 IN. ABOVE INLET CREST ELEVATION (ICE).

UPON COMPLETION, THE BERM SHALL BE SEEDED, MULCHED, BLANKETED OR OTHERWISE STABILIZED ACCORDING TO THE SPECIFICATIONS OF THE E&S PLAN DRAWINGS. ALL SEDIMENT TRAPS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT.

ACCESS FOR SEDIMENT REMOVAL AND OTHER REQUIRED MAINTENANCE ACTIVITIES SHALL BE PROVIDED.

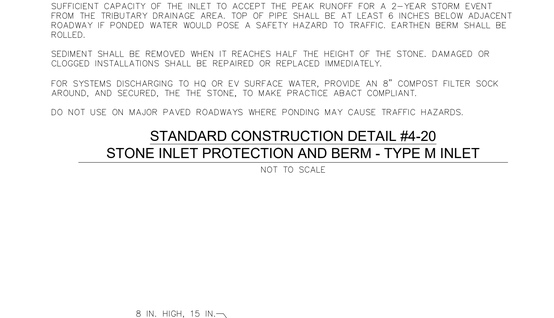
A CLEAN OUT STAKE SHALL BE PLACED NEAR THE CENTER OF EACH TRAP. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED THE CLEAN OUT ELEVATION ON THE STAKE AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS. DISPOSE OF MATERIALS REMOVED FROM THE TRAP IN THE MANNER DESCRIBED IN THE E&S PLAN.

CHECK BERMS FOR EROSION, PIPING AND SETTLEMENT. CLOGGED OR DAMAGED INLETS SHALL BE IMMEDIATELY RESTORED TO THE DESIGN SPECIFICATIONS.

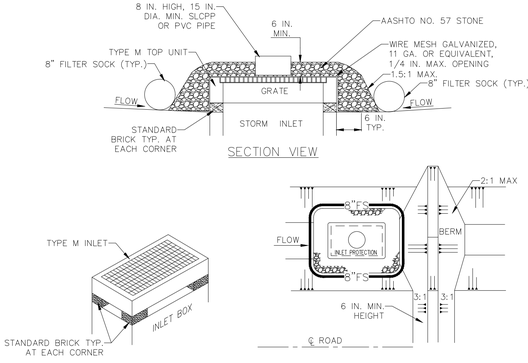
REMOVE ACCUMULATED SEDIMENT AND STABILIZE DISTURBED AREAS INSIDE THE TRAP BEFORE CONVERSION TO A STORMWATER MANAGEMENT FACILITY.

STANDARD CONSTRUCTION DETAIL #8-7
TYPE M INLET SEDIMENT TRAP

NOT TO SCALE



SECTION VIEW



ISOMETRIC VIEW

PLAN VIEW

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, AN 8" FILTER SOCK SHALL BE PLACED AROUND, AND SECURED AROUND THE STONE, TO MAKE PRACTICE ABACT COMPLIANT.

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

NOT TO SCALE

BASIN NO.	Z1 (FT)	Z2 (FT)	TEMP RISER EXT. ELEV TRE (FT)	EMBANKMENT				CLEAN OUT ELEV COE (FT)	BOTTOM ELEV BE (FT)
				TOP ELEV ETE (FT)	TOP WIDTH ETw (FT)	KEY TRENCH DEPTH (FT)	KEY TRENCH WIDTH (FT)		
2	3	3	426.08	428.84	10	2	12	423.00	422.00

BASIN NO.	SKIMMER			OUTLET BARREL				
	DIA SAd (IN)	LENGTH SAl (FT)	MAT'L	DIA Bd (IN)	INLET ELEV BIE (FT)	MAT'L	LENGTH BI (FT)	OUTLET ELEV BOE (FT)
2	4	5.8	PVC	18	420.23	RCP	36	420.05

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.

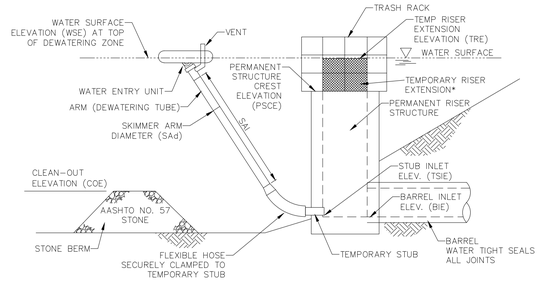
INSPECT ALL SEDIMENT BASINS ON AT LEAST A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. PROVIDE ACCESS FOR SEDIMENT REMOVAL AND OTHER REQUIRED MAINTENANCE ACTIVITIES. A CLEAN OUT STAKE SHALL BE PLACED NEAR THE CENTER OF EACH BASIN. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED THE CLEAN OUT ELEVATION 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
2	426.08	4.00	4.08	4	5.8	PVC	4	36	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		CREST ELEV TRE (FT)	HORIZ OPENING		INLET ELEV BIE (FT)
					LENGTH EI (IN)	WIDTH Ew (IN)		LENGTH (IN)	WIDTH (IN)	
2	4	422.00	PVC	426.00	48	24	426.08	48	24	420.23

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.

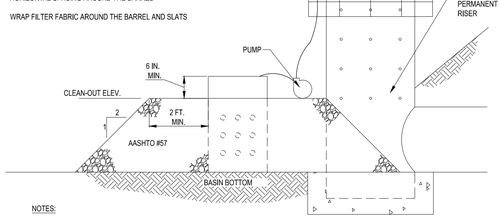
SKIMMER SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. ANY MALFUNCTIONING SKIMMER SHALL BE REPAIRED OR REPLACED WITHIN 24 HOURS OF INSPECTION.

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:

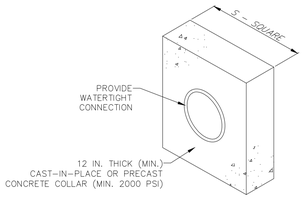
DEWATERING FACILITY SHALL BE INSTALLED IMMEDIATELY UPON COMPLETION OF BASIN/TRAP.

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



BASIN OR TRAP NO.	PIPE SIZE (IN)	S (IN)	NO. OF COLLARS	RISER TO FIRST COLLAR (FT)	COLLAR SPACING (FT)
2	18	66	2	11	10

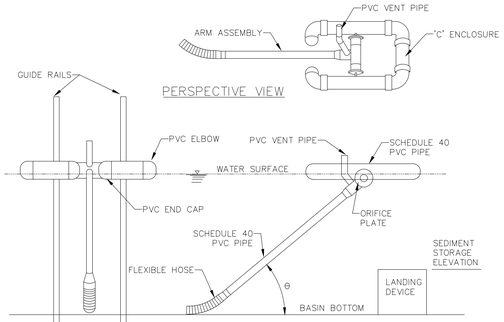
NOTES:

ALL COLLARS SHALL BE INSTALLED SO AS TO BE WATERTIGHT.

COLLAR SIZE AND SPACING SHALL BE AS INDICATED WITHIN TABLE.

STANDARD CONSTRUCTION DETAIL #7-16
CONCRETE ANTI-SEEP COLLAR FOR PERMANENT BASINS OR TRAPS

NOT TO SCALE



END VIEW

FRONT VIEW

BASIN NO.	WATER SURFACE ELEVATION (FT)	ARM LENGTH (FT)	ARM DIA. (IN)	ORIFICE DIA. (IN)	TOP OF LANDING DEVICE ELEVATION (FT)	FLEXIBLE HOSE LENGTH (IN)	FLEXIBLE HOSE ATTACHMENT ELEVATION (FT)
2	426.08	5.8	4	4	423.00	36	422.00

NOTES:

ORIFICE DIAMETER MUST BE EQUAL TO OR LESS THAN ARM DIAMETER

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.

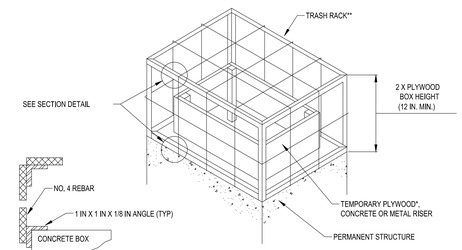
ICE OR SEDIMENT BUILDUP AROUND THE PRINCIPAL SPILLWAY SHALL BE REMOVED SO AS TO ALLOW THE SKIMMER TO RESPOND TO FLUCTUATING WATER ELEVATIONS.

SEDIMENT SHALL BE REMOVED FROM THE BASIN WHEN IT REACHES THE LEVEL MARKED ON THE SEDIMENT CLEAN-OUT STAKE OR THE TOP OF THE LANDING DEVICE.

A SEMI-CIRCULAR LANDING ZONE MAY BE SUBSTITUTED FOR THE GUIDE RAILS (STANDARD CONSTRUCTION DETAIL # 7-3).

STANDARD CONSTRUCTION DETAIL #7-1
SKIMMER

NOT TO SCALE



SECTION DETAIL

* 3/4 IN. PRESSURE TREATED PLYWOOD BOX WITH 2 IN. X 2 IN. PRESSURE TREATED CORNER SUPPORTS, SET INTO 1-1/2 IN. GRATE OFFSETS. CAULK ALL SEAMS TO FORM WATERTIGHT SEALS.
** TRASH RACK COMPOSED OF 1 IN. X 1 IN. X 1/8 IN. L (TYP.) AND #4 BARS (TYP.) WELDED TO THE ANGLES AND AT EACH INTERSECTION OF THE BARS; #4 BARS SPACED AT HALF THE DIAMETER OF THE BARREL MAX.

NOTES:

BOX SHALL BE BOLTED, STRAPPED, OR OTHERWISE SECURED TO THE PERMANENT RISER.

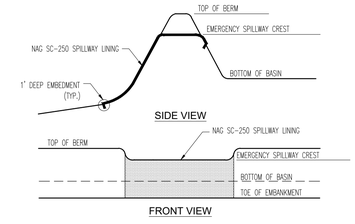
TOP OF TEMPORARY RISER EXTENSION SHALL BE AT LEAST AS HIGH AS SEDIMENT BASIN TEMPORARY RISER AND SHALL BE 6 IN. (MINIMUM) BELOW CREST OF EMERGENCY SPILLWAY.

ALL JOINTS SHALL BE WATER TIGHT.

CLOGGED OR DAMAGED SPILLWAYS SHALL BE REPAIRED IMMEDIATELY. TRASH AND OTHER DEBRIS SHALL BE REMOVED FROM THE BASIN AND RISER.

STANDARD CONSTRUCTION DETAIL #7-10
TEMPORARY RISER EXTENSION AND TRASH RACK FOR PERMANENT STRUCTURE

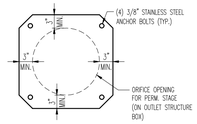
NOT TO SCALE



X 9 BASIN SPILLWAY LINING DETAIL

SCALE: N.T.S.

BASIN #	SPILLWAY CREST ELEV.	TOP OF BERM ELEV.	SPILLWAY WIDTH	SPILLWAY LINING
1	434.00	436.00	50.00	NAG SC-250
2	426.51	428.84	75.00	NAG SC-250
3	453.50	455.00	15.00	NAG SC-250
4	448.00	449.50	15.00	NAG SC-250
5	443.50	445.00	40.00	NAG SC-250
6	440.50	442.00	15.00	NAG SC-250



NOTE:
NON-SHRINK GROUT SHALL BE PROVIDED ALONG ALL EDGES OF THE ORIFICE PLATE

ORIFICE PLATE DETAIL

N.T.S.

UNIFORM PARCEL IDENTIFIER: 32-4-1090.1

R:\2PC211160\CADD\DRAWINGS\PLAN SETS\DWG, SITE PLANS\PC211160-CNDS-1A.....LAYOUT C-605 E&S DETAILS

BOHLER
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LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
INDUSTRIAL DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	05/25/2022	REV. PER TOWNSHIP COMMENTS	LGU / MJB

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PROJECT No.:	PC211160
DRAWN BY:	LGU
CHECKED BY:	J.R.K.
DATE:	03/15/2022
CAD I.D.:	PC211160-CNDS-1A

PROJECT:

AMENDED FINAL PRD PLANS

FOR

PROSPERITY PROPERTY INVESTMENTS, LLC

"FINAL PLAN FOR LOT 2B OF PARCEL 5C" PROPOSED COMMERCIAL DEVELOPMENT

GRAPHITE MINE ROAD & STATION BOULEVARD
UPPER UWCHLAN TOWNSHIP
CHESTER COUNTY
COMMONWEALTH OF PENNSYLVANIA

BOHLER
1600 MANOR DRIVE, SUITE 200
CHALFONT, PA 18914
Phone: (215) 996-9100
Fax: (215) 996-9102
www.BohlerEngineering.com

J.R. KORCZAK
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE NO. PE074279
NEW JERSEY LICENSE No. 24GE04715400

SHEET TITLE:

SOIL EROSION & SEDIMENT POLLUTION CONTROL DETAILS

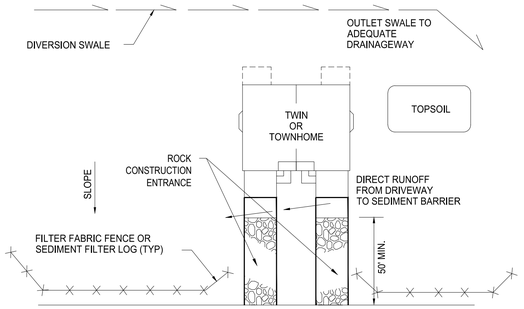
SHEET NUMBER:

C-605

15 OF 37

REVISION 1 - 05/25/2022

STANDARD CONSTRUCTION DETAIL #10-1
Typical On-Lot BMPs for Lot Above Roadway

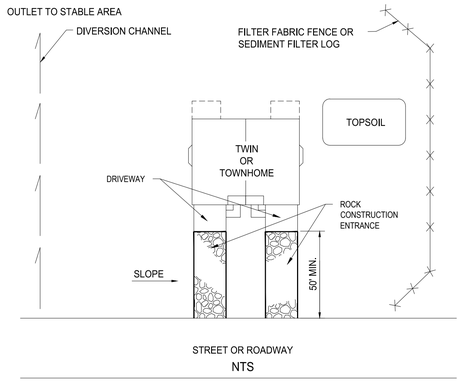


STREET OR ROADWAY
NTS

FOR USE WITH TWINS/TOWNHOMES

THE UPSLOPE DIVERSION CHANNEL SHOULD BE INSTALLED WHEREVER THE LOT EXTENDS MORE THAN 150 FEET ABOVE THE ROADWAY OR WHERE RUNOFF FROM AREAS ABOVE THE LOT IS NOT OTHERWISE DIVERTED AWAY FROM THE LOT. THE CHANNEL SHOULD BE PROPERLY SIZED AND PROVIDED WITH A SUITABLE PROTECTIVE LINING. THE DESIGNER MUST EXERCISE CAUTION TO PROTECT ALL DOWNSTREAM PROPERTY OWNERS WHEN SELECTING THE DISCHARGE POINT FOR THIS CHANNEL.

STANDARD CONSTRUCTION DETAIL #10-3
Typical On-Lot BMPs for Lot Located Along Ascending or Descending Roadway



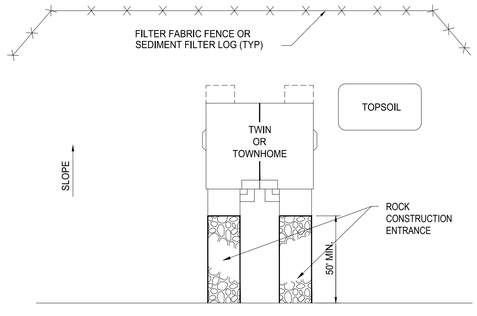
STREET OR ROADWAY
NTS

FOR USE WITH TWINS/TOWNHOMES

THE AREA DOWNSLOPE FROM THE FILTER FABRIC FENCE MAY NOT BE UNDER DEVELOPMENT OR OTHERWISE DISTURBED.

THE UPSLOPE DIVERSION CHANNEL SHOULD BE INSTALLED WHEREVER RUNOFF FROM AREAS ABOVE THE LOT S NOT OTHERWISE DIVERTED AWAY FROM THE LOT. THE CHANNEL SHOULD BE PROPERLY SIZED AND PROVIDED WITH A SUITABLE PROTECTIVE LINING.

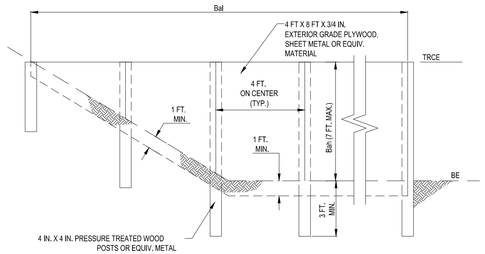
STANDARD CONSTRUCTION DETAIL #10-2
Typical On-Lot BMPs for Lot Below Roadway



STREET OR ROADWAY
NTS

FOR USE WITH TWINS/TOWNHOMES

THE AREA DOWNSLOPE FROM THE FILTER FABRIC FENCE MAY NOT BE UNDER DEVELOPMENT OR OTHERWISE DISTURBED.



BASIN OR TRAP NO.	BAFFLE		TEMPORARY RISER	BOTTOM
	LENGTH Bal (FT)	HEIGHT Bah (FT)	CREST ELEV. TRCE (FT)	BOTTOM ELEV BE (FT)
SED. BASIN 2	467	4.08	426.08	422.00
SED. TRAP 5	88	2.50	443.50	441.00
SED. TRAP 6	76	2.50	440.50	438.00

NOTES:

SEE APPROPRIATE BASIN DETAIL FOR PROPER LOCATION AND ORIENTATION.

AN ACCEPTABLE ALTERNATIVE IS TO INSTALL A SUPER SILT FENCE AT THE BAFFLE LOCATION

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.

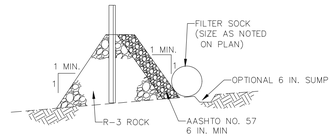
BAFFLES SHALL BE TIED INTO ONE SIDE OF THE BASIN UNLESS OTHERWISE SHOWN ON THE PLAN DRAWINGS.

SUBSTITUTION OF MATERIALS NOT SPECIFIED IN THIS DETAIL SHALL BE APPROVED BY THE DEPARTMENT OR THE LOCAL CONSERVATION DISTRICT BEFORE INSTALLATION.

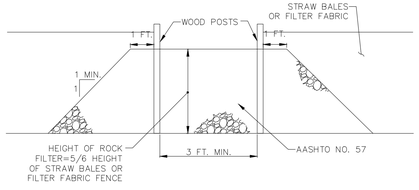
DAMAGED OR WARPED BAFFLES SHALL BE REPLACED WITHIN 7 DAYS OF INSPECTION.

BAFFLES REQUIRING SUPPORT POSTS SHALL NOT BE INSTALLED IN BASINS REQUIRING IMPERVIOUS LINERS.

STANDARD CONSTRUCTION DETAIL #7-14
BAFFLE
NOT TO SCALE



OUTLET CROSS-SECTION



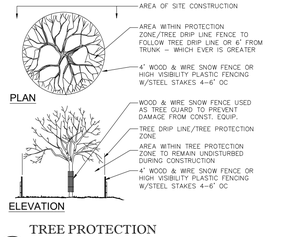
UP-SLOPE FACE

NOTES:

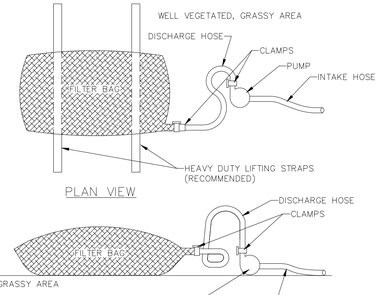
A ROCK FILTER OUTLET SHALL BE INSTALLED WHERE FAILURE OF A SILT FENCE OR STRAW BALE BARRIER HAS OCCURRED DUE TO CONCENTRATED FLOW. PROVIDE FILTER SOCK (SIZE AS NOTED ON PLAN) IN HQ AND EV WATERSHEDS TO MAKE PRACTICE ABACT COMPLIANT.

SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET.

STANDARD CONSTRUCTION DETAIL #4-6
ROCK FILTER OUTLET
NOT TO SCALE



TREE PROTECTION DURING SITE CONSTRUCTION
X / S11 SCALE: N.T.S. REV.: 2015.03.09



NOTES:

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

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

A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.

BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5% FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.

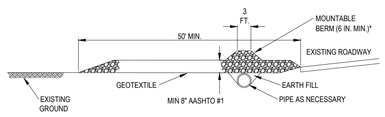
NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.

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

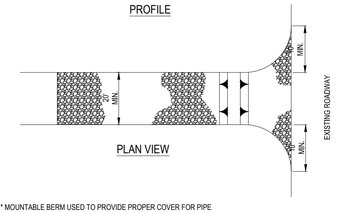
THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.

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

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



PROFILE



* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

NOTES:

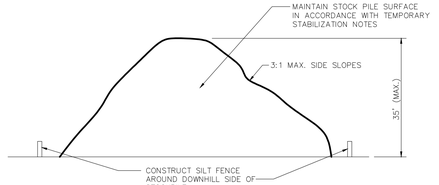
REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.

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

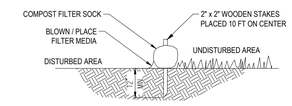
MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.

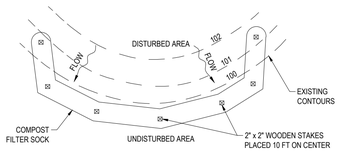
MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE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

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



TEMPORARY SOIL STOCKPILE DETAIL
X / S8 SCALE: N.T.S. REV.: 2015.03.09





NOTES:

- SOCK MATERIAL SHALL MEET THE STANDARDS OF PA DEP EROSION CONTROL MANUAL TABLE 4.1. COMPOST SHALL MEET THE STANDARDS OF PA DEP EROSION CONTROL MANUAL TABLE 4.2
- COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST EIGHT (8) FEET UP SLOPE AT 45° TO THE MAIN SOCK ALIGNMENT (PA DEP EROSION CONTROL MANUAL FIGURE 4.1). MAXIMUM SLOPE LENGTH ABOVE ANY SOCK SHALL NOT EXCEED THAT SHOWN ON PA DEP EROSION CONTROL MANUAL FIGURE 4.2. STAKES MAY BE INSTALLED IMMEDIATELY DOWNSLOPE OF THE SOCK IF SO SPECIFIED BY THE MANUFACTURER.
- TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.
- ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE ABOVE GROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.
- SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURERS SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
- BIODEGRADABLE FILTER SOCKS SHALL BE REPLACED AFTER SIX (6) MONTHS, PHOTODEGRADABLE SOCKS AFTER ONE (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.

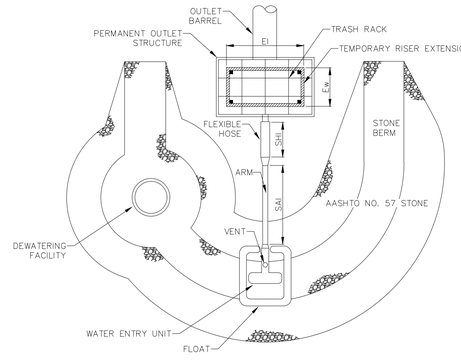
STANDARD CONSTRUCTION DETAIL #4-1
COMPOST FILTER SOCK
(NOT TO SCALE)

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	Bio-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 Continously 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 fuesed 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	80% - 100% (dry weight basis)
Organic Portion	Fibrous and elongated
pH	5.5 - 8.0
Moisture Content	35% - 55%
Particle Size	98% pass through 1" screen
Soluble Salt Concentration	5.0 dS/m (mmhos/cm) Maximum



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

UNIFORM PARCEL IDENTIFIER: 32-4-1090.1

R:\PC\PC211160\CAD\DRAWINGS\PLAN SET\DWG\ SITE PLANS\PC211160-CNDS-1A---LAYOUT C-606 ESS DETAILS

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REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	05/25/2022	REV. PER TOWNSHIP COMMENTS	LGU / MJB

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PROJECT No.: PC211160
DRAWN BY: LGU
CHECKED BY: J.R.K.
DATE: 03/15/2022
CAD I.D.: PC211160-CNDS-1A

PROJECT:

AMENDED FINAL PRD PLANS

FOR

PROSPERITY PROPERTY INVESTMENTS, LLC

"FINAL PLAN FOR LOT 2B OF PARCEL 5C"
PROPOSED COMMERCIAL DEVELOPMENT

GRAPHITE MINE ROAD & STATION BOULEVARD
UPPER UWCHLAN TOWNSHIP
CHESTER COUNTY
COMMONWEALTH OF PENNSYLVANIA

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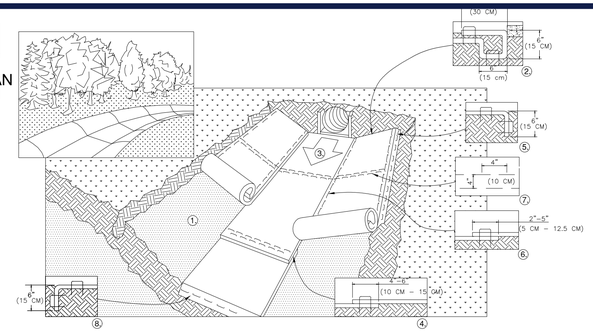
SHEET TITLE:
SOIL EROSION & SEDIMENT POLLUTION CONTROL DETAILS

SHEET NUMBER:
C-606
16 OF 37

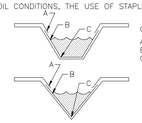
REVISION 1 - 05/25/2022

NORTH AMERICAN GREEN



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30 CM) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM™, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. PLACE CONSECUTIVE BLANKETS END OVER END (SHINGLE STYLE) WITH A 4" – 6" (10 CM –15 CM) OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (10 CM) APART AND 4" (10 CM) ON CENTER TO SECURE BLANKETS.
5. FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT BLANKETS MUST BE OVERLAPPED APPROXIMATELY 2" – 5" (5 CM –12.5 CM) (DEPENDING ON BLANKET TYPE) AND STAPLED.
7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT (9 M – 12 M) INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (10 CM) APART AND 4" (10 CM) ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

NOTE:
* IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS.

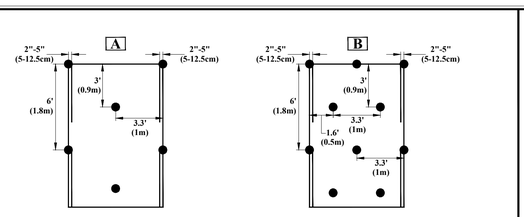


CRITICAL POINTS
A. OVERLAPS AND SEAMS
B. PROJECTED WATER LINE
C. CHANNEL BOTTOM/SIDE SLOPE VERTICES

NOTE:
* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.

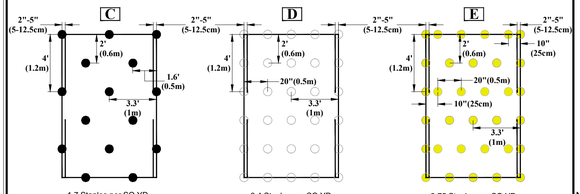
** IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 cm) MAY BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS.

STAPLE PATTERN GUIDE



0.7 Staples per SQ.YD.

1.15 Staples per SQ.YD.



1.7 Staples per SQ.YD.

3.4 Staples per SQ.YD.

3.75 Staples per SQ.YD.

- 4:1 Slopes (A)
- 3:1 Slopes (B)
- 2:1 Slopes (C)
- 1:1 & Steeper Slopes (D)
- Medium/High Flow Channel (D)
- High Flow Channel And Shoreline (E)

NOTES:

* Use ECMDS® for more accurate staple pattern selection.

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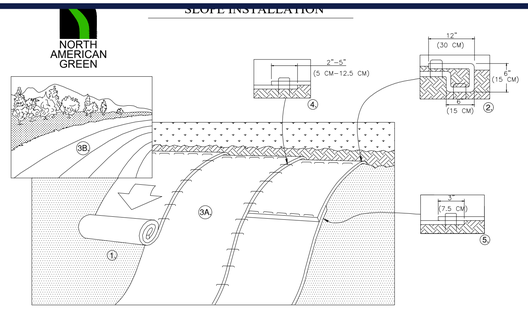
Drawn on: 3-16-11

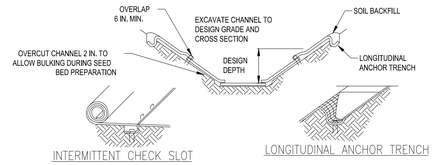
Drawing Not To Scale

SLOPE INSTALLATION

NORTH AMERICAN GREEN



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM™, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" – 5" (5 CM – 12.5 CM) OVERLAP DEPENDING ON BLANKET TYPE.
5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE BLANKET WIDTH.
NOTE:
*IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

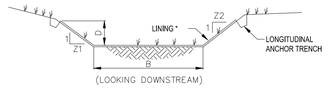


INTERMITTENT CHECK SLOT

LONGITUDINAL ANCHOR TRENCH

PREPARE SOIL AND APPLY SEED BEFORE INSTALLING BLANKETS, MATS, OR OTHER TEMPORARY CHANNEL LINER SYSTEM.

ISOMETRIC VIEW



(LOOKING DOWNSTREAM)

CHANNEL CROSS-SECTION

* SEE MANUFACTURER'S LINING INSTALLATION DETAIL FOR STAPLE PATTERNS, VEGETATIVE STABILIZATION FOR SOIL AMENDMENTS, SEED MIXTURES AND MULCHING INFORMATION

CHANNEL NO.	STATIONS	BOTTOM WIDTH B (FT)	DEPTH D (FT)	TOP WIDTH W (FT)	Z1 (FT)	Z2 (FT)	LINING *
TEMPORARY							
VEGETATED SWALE 1	ENTIRE	2.75	1.00	11.25	5.5	3.0	NAG SC150
VEGETATED SWALE 2	ENTIRE	2.50	1.00	10.20	4.7	3.0	NAG SC150
VEGETATED SWALE 3	ENTIRE	2.00	1.00	7.55	2.55	3.0	NAG SC150
VEGETATED SWALE 4	ENTIRE	1.75	1.00	12.25	5.0	5.5	NAG SC150
VEGETATED SWALE 5	ENTIRE	1.50	1.00	10.00	4.0	4.5	NAG SC150
VEGETATED SWALE 6	ENTIRE	1.0	1.00	26.70	14.70	11.0	NAG SC150
VEGETATED SWALE 7	ENTIRE	1.25	1.00	19.85	3.0	15.6	NAG SC150
VEGETATED SWALE 8	ENTIRE	2.00	1.00	9.35	4.35	3.0	NAG SC150
VEGETATED SWALE 9	ENTIRE	2.00	1.00	9.35	4.35	3.0	NAG SC150
VEGETATED SWALE 10	ENTIRE	2.00	1.25	11.19	4.35	3.0	NAG SC150
VEGETATED SWALE 11	ENTIRE	2.00	1.50	11.00	3.0	3.0	NAG SC150
VEGETATED SWALE 12	ENTIRE	2.00	1.50	11.00	3.0	3.0	NAG SC150
VEGETATED SWALE 13	ENTIRE	1.75	1.50	10.75	3.0	3.0	NAG SC150
VEGETATED SWALE 14	ENTIRE	2.00	1.50	11.00	3.0	3.0	NAG SC150
VEGETATED SWALE 15	ENTIRE	2.00	1.50	11.00	3.0	3.0	NAG SC150
VEGETATED SWALE 16	ENTIRE	2.00	1.50	11.00	3.0	3.0	NAG SC150
VEGETATED SWALE 17	ENTIRE	1.50	1.50	10.50	3.0	3.0	NAG SC150

NOTES:

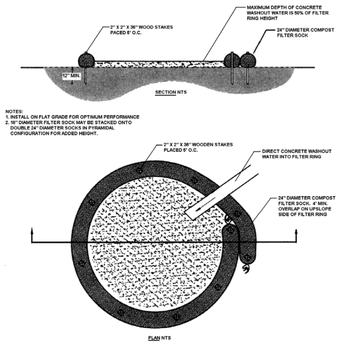
ANCHOR TRENCHES SHALL BE INSTALLED AT BEGINNING AND END OF CHANNEL IN THE SAME MANNER AS LONGITUDINAL ANCHOR TRENCHES.

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.

STANDARD CONSTRUCTION DETAIL #6-1
VEGETATED CHANNEL
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 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.

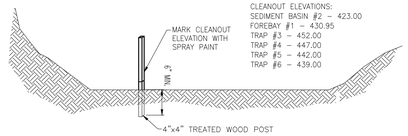
-SHOULD BE A MINIMUM OF 10 FEET WIDE AND PROVIDE AT LEAST 12 INCHES OF FREEBOARD ABOVE THE LIQUID AND SOLID WASTE ANTICIPATED BETWEEN CLEANOUT INTERVALS.

-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.

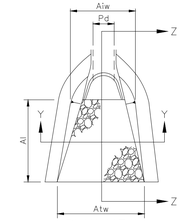
-ALL CONCRETE WASHOUT FACILITIES SHOULD BE INSPECTED DAILY. DAMAGED OR LEAKING WASHOUTS SHOULD BE DEACTIVATED AND REPAIRED OR REPLACED IMMEDIATELY.

-ACCUMULATED MATERIALS SHOULD BE REMOVED WHEN THEY REACH 75% CAPACITY.

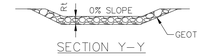
-PLASTIC LINERS SHOULD BE REPLACED WITH EACH CLEANING OF THE WASHOUT FACILITY.



X / S3 TEMPORARY SEDIMENT CLEANOUT STAKE
SCALE: N.T.S. REV.: 2015.03.09



PLAN VIEW



SECTION Y-Y

SECTION Z-Z

OUTLET NO.	PIPE DIA Pd (IN)	RIPRAP SIZE R--	RIPRAP THICK. Rt (IN)	APRON LENGTH Al (FT)	APRON INITIAL WIDTH Aiw (FT)	APRON TERMINAL WIDTH Atw (FT)
EW01	18	3	9.0	8.0	4.50	7.70
EW02	18	3	9.0	11.0	4.50	15.50
EW06	30	3	9.0	13.0	7.50	12.70
EW07	15	3	9.0	6.0	3.75	6.15
EW08	15	3	9.0	6.0	3.75	6.15
EW301	24	3	9.0	10.0	6.00	10.00
EW303	30	3	9.0	23.0	7.50	16.70
EW304	24	3	9.0	10.0	6.00	10.00
STATION BOULEVARD CULVERT	(3) 24x36	5	18.0	27.0	27.0	54.00

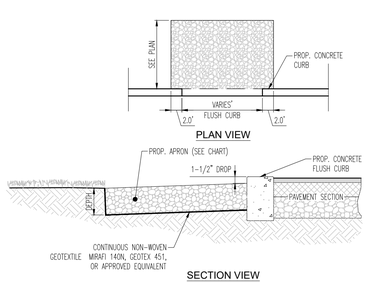
NOTES:

ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.

ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

STANDARD CONSTRUCTION DETAIL #9-1
RIPRAP APRON AT PIPE OUTLET
WITH FLARED END SECTION OR ENDWALL
NOT TO SCALE

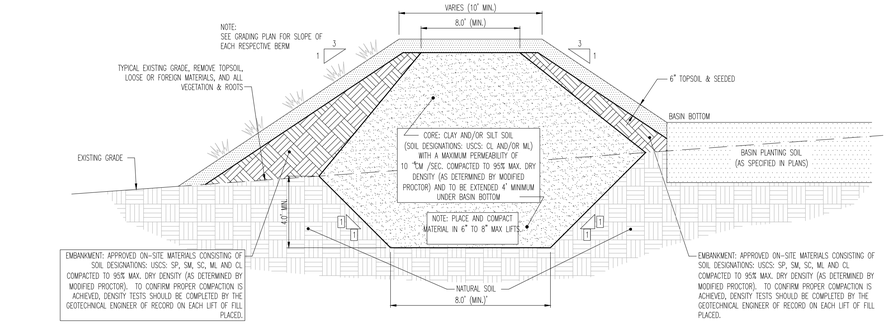
CURB BREAK	APRON	WIDTH
CB01	RIPRAP (R-3)	4'
CB02	RIPRAP (R-3)	4'
CB03	RIPRAP (R-3)	4'
CB04	RIPRAP (R-3)	4'
CB05	RIPRAP (R-3)	4'
CB06	RIPRAP (R-3)	4'
CB07	RIPRAP (R-3)	4'
CB08	RIPRAP (R-3)	4'
CB09	RIPRAP (R-3)	4'
CB10	RIPRAP (R-3)	4'
CB11	RIPRAP (R-3)	4'



PLAN VIEW

SECTION VIEW

DETAIL OF RIP-RAP AT CURB BREAK
N.T.S.



STANDARD BASIN BERM NOTES:

1.) PRIOR TO PLACEMENT OF FILL MATERIAL, THE EXISTING GROUND BENEATH THE EMBANKMENT SHALL BE CLEARED OF ALL TREE STUMPS, BRUSH, ROOTS, AND OTHER ORGANIC MATERIAL SUBJECT TO DECOMPOSITION, OVERSIZED STONES, AND ANY OTHER OBJECTIONABLE MATERIAL. FOLLOWING CLEARING, THE SURFACE ON OR AGAINST WHERE THE FILL IS TO BE PLACED SHALL BE SCARIFIED (BROKEN TO A DEPTH OF SIX (6) INCHES) PRIOR TO PLACEMENT OF FILL. THE CUT-OFF TRENCH SHALL BE EXCAVATED TO A DEPTH OF FOUR (4) FEET BELOW EXISTING GRADE. THE EXCAVATION SHALL BE DONE PARALLEL TO THE CENTERLINE OF THE EMBANKMENT. THE MINIMUM BOTTOM WIDTH OF THE CUT-OFF TRENCH SHALL BE EIGHT (8) FEET BUT WIDE ENOUGH TO PERMIT OPERATION OF COMPACTION EQUIPMENT. THE SIDE SLOPES SHALL BE NO STEEPER THAN 1:1. THE TRENCH SHALL BE KEPT FREE OF STANDING WATER DURING THE BACKFILL OPERATIONS.

2.) ALL FILL SHALL BE TAKEN FROM SELECT BORROW AREAS. IT SHALL BE FREE FROM BRUSH, ROOTS, AND OTHER ORGANIC MATERIAL SUBJECT TO DECOMPOSITION, OVERSIZED STONES, AND ANY OTHER OBJECTIONABLE MATERIAL.

4.) FILL MATERIAL IN ALL EMBANKMENTS SHALL PLACED IN 6 TO 8 INCH LIFTS AND SHALL BE CONTINUOUS OVER THE ENTIRE LENGHT OF THE FILL. FILL MATERIAL SHALL BE BE COMPACTED TO AT LEAST 95% OF THE MAXIMUM DENSITY OBTAINED FROM THE COMPACTION TESTS PERFORMED BY THE APPROPRIATE METHOD IN ASTM D698. COMPACTION SHALL BE OBTAINED BY USING MECHANICAL SHEEP FOOT ROLLERS.

5.) THE EMBANKMENT SHALL BE CONSTRUCTED TO AN ELEVATION 5% HIGHER THAN THE DESIGN HEIGHT TO ALLOW FOR SETTLEMENT.

6.) NO ROCK FILL AND/OR GRAVEL SHALL BE PLACED BELOW THE CLAY CORE.

X / S4 BERM & CUTOFF TRENCH DETAIL (FOR BERMS IN FILL CONDITION)
SCALE: N.T.S. REV.: 2016.06.03

UNIFORM PARCEL IDENTIFIER: 32-4-1090.1

R:\SITE\PC211160\CADD\DRAWINGS\PLAN SET\CIVIL SITE PLANS\PC211160-CNDS-1A---LAYOUT C-607 ESC DETAILS

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PROJECT No.:	PC211160
DRAWN BY:	LGU
CHECKED BY:	J.R.K.
DATE:	03/15/2022
CAD I.D.:	PC211160-CNDS-1A

PROJECT:

AMENDED FINAL PRD PLANS

FOR

PROSPERITY PROPERTY INVESTMENTS, LLC

"FINAL PLAN FOR LOT 2B OF PARCEL 5C"
PROPOSED COMMERCIAL DEVELOPMENT

GRAPHITE MINE ROAD & STATION BOULEVARD
UPPER UWCHLAN TOWNSHIP
CHESTER COUNTY
COMMONWEALTH OF PENNSYLVANIA

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1600 MANOR DRIVE, SUITE 200
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J.R. KORCZAK
PROFESSIONAL ENGINEER
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PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE044279
NEW JERSEY LICENSE No. 24GE04715400

SHEET TITLE:

SOIL EROSION & SEDIMENT POLLUTION CONTROL DETAILS

SHEET NUMBER:

C-607

17 OF 37

REVISION 1 - 05/25/2022

DRAWING LEGEND
EXISTING FEATURES

PROPERTY BOUNDARY
EXISTING STREAM LINE
RIPARIAN BUFFER LINE
SOIL BOUNDARY LINE
SOIL TYPE — DsA
BUILDING
RETAINING WALL
CONCRETE CURB
FLUSH CURB
TREE
DRAINAGE INLET
STORM/SANITARY MANHOLE
MAJOR & MINOR CONTOURS / ELEVATIONS
STORM PIPE

DRAWING LEGEND
PCSWM FEATURES

NPDES BOUNDARY — NPDES
LIMIT OF DISTURBANCE — LOD
2019 MINOR AMENDMENT LIMIT OF DISTURBANCE
2021 MINOR AMENDMENT LIMIT OF DISTURBANCE
LOT 2B LIMIT OF DISTURBANCE — LOD
SUB-DRAINAGE AREA
INLET W/ FABCO WATER QUALITY INSERT

DRAWING LEGEND
PROPOSED FEATURES

BUILDING
RETAINING WALL
CONCRETE CURB
FLUSH CURB
AREA LIGHT
DRAINAGE INLET
MANHOLE
ENDWALL
RIPRAP
SANITARY SEWER — S
STORM PIPE

POI #1
POI #2
PROP. BMP 5.6.3 RE-VEGETATE DISTURBED AREA (FOR RIPARIAN EQUIVALENCY)
TBM-B MAG. NAIL ELEV.=427.08
WOOD CONFINED BRIDGE
150.00' RIPARIAN BUFFER OFFSET
PROP. BMP 6.4.5 BIORETENTION BASIN #1
PROP. BMP 6.4.5 BIORETENTION BASIN #2
PROPOSED BIORETENTION BASIN #2
PROP. BMP 6.4.5 BIORETENTION BASIN #3
PROPOSED BIORETENTION BASIN #3
PROP. BMP 6.4.5 BIORETENTION BASIN #4
PROPOSED BIORETENTION BASIN #4
PROP. BMP 6.4.5 BIORETENTION BASIN #5
PROPOSED BIORETENTION BASIN #5
PROP. BMP 6.4.5 BIORETENTION BASIN #6
PROPOSED BIORETENTION BASIN #6
AREA OF MINOR AMENDMENT
AREA TO REMAIN UNDISTURBED
AREA OF 2019 MINOR AMENDMENT DISTURBANCE= 14.14 Ac.
AREA OF 2021 MINOR AMENDMENT DISTURBANCE= 0.91 Ac.
AREA OF 2021 MINOR AMENDMENT DISTURBANCE= 0.09 Ac.
STAGE 2 LIMIT OF DISTURBANCE = 30.31 Ac.
STAGE 2 LIMIT OF DISTURBANCE = 30.31 Ac.
NPDES BOUNDARY
LOT #1
PROP. BMP 6.4.8. VEGETATED SWALE #1
PROP. BMP 6.4.8. VEGETATED SWALE #2
PROP. BMP 6.4.8. VEGETATED SWALE #3
PROP. BMP 6.4.8. VEGETATED SWALE #4
PROP. BMP 6.4.8. VEGETATED SWALE #5
PROP. BMP 6.4.8. VEGETATED SWALE #6
PROP. BMP 6.4.8. VEGETATED SWALE #7
PROP. BMP 6.4.8. VEGETATED SWALE #8
PROP. BMP 6.4.8. VEGETATED SWALE #9
PROP. BMP 6.4.8. VEGETATED SWALE #10
PROP. BMP 6.4.8. VEGETATED SWALE #11
PROP. BMP 6.4.8. VEGETATED SWALE #12
PROP. BMP 6.4.8. VEGETATED SWALE #13
PROP. BMP 6.4.8. VEGETATED SWALE #14
PROP. BMP 6.4.8. VEGETATED SWALE #15
PROP. BMP 6.4.8. VEGETATED SWALE #16
PROP. BMP 5.6.3 RE-VEGETATE DISTURBED AREAS
PROP. BMP 5.6.3 RE-VEGETATE DISTURBED AREAS
TP-201
TP-202
TP-203
TP-204
TP-205
TP-206
TP-207
TP-208
TP-209
TP-210
TP-211
TP-212
TP-213
TP-214
TP-215
TP-216
TP-217
TP-218
TP-219
TP-220
TP-221
TP-222
TP-223
EX IN43
IN501 IN502 IN503 IN504 IN505 IN506 IN507 IN508 IN509 IN510 IN511 IN512 IN513 IN514 IN515 IN516 IN517 IN518 IN519 IN520 IN521 IN522
MH501 MH502
YD501
FF = 434.75
FF = 440.75
FF = 446.75
UNIFORM PARCEL IDENTIFIER: 32-4-1090.1
60 30 15 0 60
1"= 60'

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PROJECT No.:	PC211160
DRAWN BY:	LGU
CHECKED BY:	J.R.K.
DATE:	03/15/2022
CAD I.D.:	PC211160-LDVP-1A

PROJECT:

AMENDED FINAL PRD PLANS

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PROSPERITY PROPERTY INVESTMENTS, LLC

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NEW JERSEY LICENSE No. 24GE04715400

SHEET TITLE:

OVERALL POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

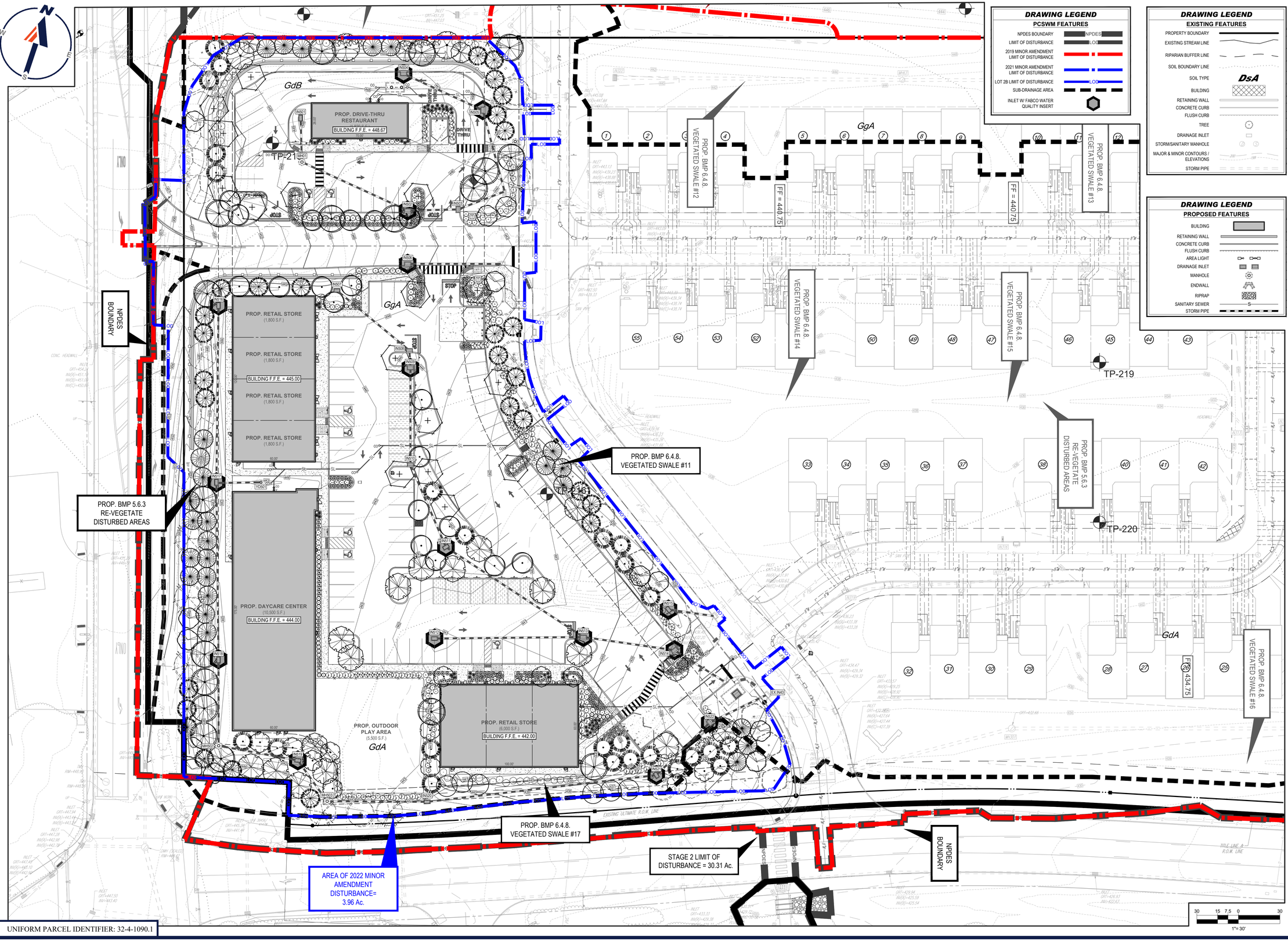
SHEET NUMBER:

C-608

18 OF 37

REVISION 1 - 05/25/2022

I:\21PC211160\CAD\DRAWINGS\PLAN SETS\OVAL SITE PLANS\PC211160-LDVP-1A-----LAYOUT: C-608 OVL PCSWM



UNIFORM PARCEL IDENTIFIER: 32-4-1090.1

DRAWING LEGEND
PCSWM FEATURES

- NPDES BOUNDARY
- LIMIT OF DISTURBANCE
- 2019 MINOR AMENDMENT LIMIT OF DISTURBANCE
- 2021 MINOR AMENDMENT LIMIT OF DISTURBANCE
- LOT 2B LIMIT OF DISTURBANCE
- SUB-DRAINAGE AREA
- INLET W/ FABCO WATER QUALITY INSERT

DRAWING LEGEND
EXISTING FEATURES

- PROPERTY BOUNDARY
- EXISTING STREAM LINE
- RIPARIAN BUFFER LINE
- SOIL BOUNDARY LINE
- SOIL TYPE (DsA)
- BUILDING
- RETAINING WALL
- CONCRETE CURB
- FLUSH CURB
- TREE
- DRAINAGE INLET
- STORM/SANITARY MANHOLE
- MAJOR & MINOR CONTOURS / ELEVATIONS
- STORM PIPE

DRAWING LEGEND
PROPOSED FEATURES

- BUILDING
- RETAINING WALL
- CONCRETE CURB
- FLUSH CURB
- AREA LIGHT
- DRAINAGE INLET
- MANHOLE
- ENDWALL
- RIPRAP
- SANITARY SEWER
- STORM PIPE

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DRAWN BY:	LGU
CHECKED BY:	J.R.K.
DATE:	03/15/2022
CAD I.D.:	PC211160-LDVP-1A

PROJECT:

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FOR

PROSPERITY PROPERTY INVESTMENTS, LLC

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NEW JERSEY LICENSE No. 24GE04715400

SHEET TITLE:

POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

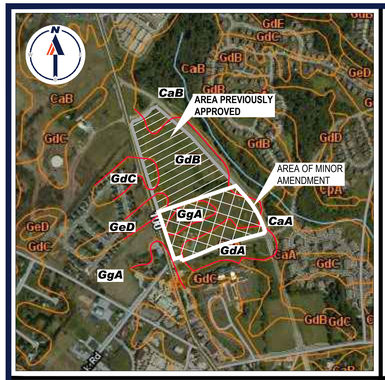
SHEET NUMBER:

C-609

19 OF 37

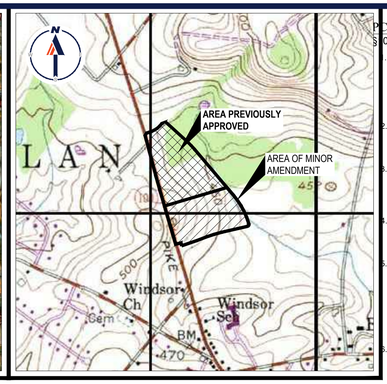
REVISION 1 - 05/25/2022

I:\2021\PC211160\CAD\DRAWINGS\PLAN SET\SOWIL SITE PLANS\PC211160-LDVP-1A.----LAYOUT C-609 PCSWM



SITE SOIL MAP

SCALE: 1"=800'



USGS MAP

(DOWINGTOWN QUAD)
SCALE: 1"=1,000'

NOTES:

1. SHOULD GROUNDWATER BE ENCOUNTERED DURING FOUNDATION OR UTILITY EXCAVATIONS, WATER SHALL BE PUMPED FROM TRENCH INTO FILTER BAG.
2. DUE TO GRADING LIMITATIONS OF SOILS DURING WINTER MONTHS, THE CONTRACTOR SHALL NOT GRADE THESE SOILS DURING FROSTING OR ICING CONDITIONS.
3. SHOULD BEDROCK BE ENCOUNTERED DURING FOUNDATION OR UTILITY EXCAVATION, ROCK SHALL BE REMOVED AND DISPOSED OF IN A LEGAL MANNER.
4. SOIL TEST SHOULD BE PERFORMED TO DETERMINE SOIL SUITABILITY FOR TOPSOIL. IF SOIL IS DETERMINED TO BE UNSUITABLE THEN TOPSOIL SHALL BE IMPORTED AND DISTURBED THROUGHOUT THE SITE AS REQUIRED.
5. THE SUBJECT SITE DRAINS TO PICKERING CREEK, WHICH HAS AN HQ,TSF,MF CHAPTER 93 CLASSIFICATION.

WATERSHED NOTES:

THIS SUBJECT SITE IS LOCATED IN THE PICKERING CREEK WATERSHED. EXTREME CARE SHOULD BE EXERCISED IN ALL DISTURBANCE ACTIVITIES TO PREVENT DEGRADATION TO THE WATERS OF THE COMMONWEALTH.

UPON COMPLETION OR TEMPORARY CESSATION OF EARTH DISTURBANCE ACTIVITY, OR ANY STAGE THEREOF, THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZED WITH THE APPROPRIATE TEMPORARY OR PERMANENT STABILIZATION.

ANY DISTURBANCE AREA ON WHICH ACTIVITY HAS CEASED MUST BE STABILIZED IMMEDIATELY. REFER TO E&S DETAILS SHEET FOR IMMEDIATE STABILIZATION CRITERIA.

THE NON-GERMINATING PERIODS ARE BETWEEN JUNE 15 THROUGH AUGUST 15 AND BETWEEN SEPTEMBER 30 THROUGH APRIL 15. AREAS DISTURBANCE DURING THESE PERIODS MUST BE STABILIZED IMMEDIATELY.

IF ANY SIGNIFICANT CHANGES ARE MADE TO THE EROSION AND SEDIMENTATION CONTROL PLANS, THE LANDOWNER MUST CONTACT THE CHESTER COUNTY CONSERVATION DISTRICT FOR THE ADEQUACY OF THE CHANGES.

DEFINITION OF CLEAN FILL AND IMPORT/EXPORT MATERIALS 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.

GEOLOGIC FORMATIONS OR SOIL CONDITIONS

§102.8(f)(12)

THERE ARE NO KNOWN SOILS ON THE SITE WHICH COULD CAUSE POLLUTION DURING CONSTRUCTION. HOWEVER, IF SOILS ARE DISCOVERED THAT COULD CAUSE POLLUTION BELOW ARE INSTRUCTIONS FOR THE PROPER HANDLING AND/OR DISPOSAL:

- 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 INSTRUCTIONS. 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.
- 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.
- 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.
- 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.
- 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.
- 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 CHESTER COUNTY CONSERVATION DISTRICT (610-925-4920)
- 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-PERMITTEE(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.
- 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.
     - 3.1. 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.
     - 3.2. 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.

UNIFORM PARCEL IDENTIFIER: 32-4-1090.1

PCSM - PLANNING AND DESIGN

§102.8(b)

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

- MAINTAIN GENERALLY THE SAME DRAINAGE PATTERNS AS IN THE EXISTING CONDITION
- DIRECT RUNOFF FROM IMPERVIOUS SURFACES INCLUDING ROADWAYS TO BMPS.
- THE USE OF CERTAIN NATIVE SPECIES, WHICH REQUIRES LESS FERTILIZATION AND CHEMICAL APPLICATION THAN NON-NATIVE SPECIES.

2. THE FOLLOWING MEASURES WERE TAKEN TO PREVENT AN INCREASE IN THE RATE OF STORM WATER RUNOFF:
   - DIRECT RUNOFF TO STORM WATER BASINS TO CONTROL RUNOFF RATES.
   - MAINTAIN GENERALLY THE SAME DRAINAGE PATTERNS AS IN THE EXISTING CONDITION
3. THE FOLLOWING MEASURES WERE TAKEN TO MINIMIZE ANY INCREASE IN STORM WATER RUNOFF VOLUME:
   - INTERCEPT RUNOFF & CONVEY TO BASINS.
   - RETAIN/INFILTRATE AS MUCH RUNOFF AS IS PRACTICAL FOR INFILTRATION BMPs.
   - RE-VEGETATE DISTURBED AREAS TO HELP REDUCE RUNOFF VOLUME.
4. THE FOLLOWING MEASURES WERE TAKEN TO MINIMIZE IMPERVIOUS AREAS:
   - MINIMIZE WIDTH OF ROADS.
   - ONLY PROVIDE THE AMOUNT OF ON STREET PARKING THAT IS REQUIRED PER UPPER UWCHLAN TOWNSHIP CODE.
5. THE FOLLOWING MEASURES ARE TAKEN TO MAXIMIZE PROTECTION OF EXISTING DRAINAGE FEATURES AND VEGETATION:
   - SEDIMENT BASINS AND ARE PROPOSED TO PREVENT SEDIMENT FROM LEAVING THE SITE DURING CONSTRUCTION WHICH COULD IMPAIR DOWNSTREAM WATER COURSES.
   - INFILTRATION/DETENTION BASINS ARE PROPOSED TO PREVENT EXCESSIVE FLOW AND VOLUME FROM LEAVING THE SITE.
   - ONLY AREAS THAT ARE TO BE GRADED AS PART OF THIS PROJECT WILL BE DISTURBED. AREAS NOT TO BE DISTURBED WILL BE PHYSICALLY MARKED TO PREVENT UNNECESSARY DISTURBANCE TO EXISTING VEGETATION.
6. THE FOLLOWING MEASURES WERE TAKEN TO MINIMIZE LAND CLEARING AND GRADING:
   - CONSTRUCTION OF THE SITE IS SEQUENCED WITH APPROPRIATE TEMPORARY STABILIZATION METHODS TO MINIMIZE THE DURATION OF EARTH DISTURBANCE.
   - ONLY AREAS THAT ARE TO BE GRADED WILL BE DISTURBED. ANY AREA THAT IS NOT TO BE GRADED WILL BE PHYSICALLY MARKED TO PREVENT UNNECESSARY DISTURBANCE.
7. THE FOLLOWING MEASURES ARE TAKEN TO MINIMIZE SOIL COMPACTION:
   - USE TREADED MACHINERY WHERE PRACTICAL DURING EARTHMOVING OPERATIONS.
   - ACCESS THE SITE THRU DESIGNATED CONSTRUCTION ENTRANCE.
   - PHYSICALLY MARK AREAS THAT ARE NOT TO BE GRADED TO PREVENT INADVERTENT COMPACTION OF SOILS.
8. THE FOLLOWING MEASURES WERE TAKEN TO UTILIZE OTHER STRUCTURAL OR NONSTRUCTURAL BMPS THAT PREVENT OR MINIMIZE CHANGES IN STORMWATER RUNOFF:
   - INFILTRATION BASINS ARE USED TO PREVENT EXCESSIVE FLOWS FROM LEAVING THE SITE.
   - VEGETATION WILL BE INSTALLED TO PROMOTE EVAPOTRANSPIRATION OF RUNOFF IN SATURATED SOILS.

P.C.S.W.M - RECYCLING OR DISPOSAL OF MATERIALS

§102.8(f)(11)

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. PORTABLE 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.

6.) ALL BUILDING MATERIAL AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED OR RECYCLED IN ACCORDANCE WITH DEP'S SOLID WASTE REGULATIONS (25 PA CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ., AND/OR ANY ADDITIONAL LOCAL, STATE OR FEDERAL REGULATIONS. NO BUILDING MATERIALS (USED OR UNUSED) OR WASTE MATERIALS SHALL BE BURNED, BURIED, DUMPED OR DISCHARGED AT THE SITE. 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 & CONCRETE
- E&S BMP - COMPOST FILTER SOCKS
- E&S BMP - TEMPORARY RISER
- E&S BMP - EROSION CONTROL MATTING
- E&S BMP - REGULATED FILL MATERIALS

GENERAL NOTES:

1.) THE POST-CONSTRUCTION BMPs ARE A MEANS FOR THIS DEVELOPMENT TO CONTRIBUTE TO THE PRESERVATION OF THE INTEGRITY OF THE STREAM CHANNELS AND MAINTAIN AND PROTECT THE PHYSICAL, BIOLOGICAL, AND CHEMICAL QUALITIES OF THE RECEIVING STREAM.

2.) THE POST-CONSTRUCTION DESIGN IS MEANT TO PREVENT AN INCREASE IN RATE OF STORMWATER RUNOFF BY IMPLEMENTING DETENTION FACILITIES THAT WILL ATTENUATE THE FLOW.

3.) POST-CONSTRUCTION BMPs, NAMELY THE RAINGARDENS, AND BASINS WILL MINIMIZE THE INCREASE IN STORMWATER VOLUME.

4.) THE LAYOUT MINIMIZES THE IMPERVIOUS AREAS BY DEVELOPING IN THE SMALLEST FOOTPRINT POSSIBLE.

5.) THE POST-CONSTRUCTION STORMWATER MANAGEMENT PLANS HAVE BEEN DESIGNED TO MAXIMIZE THE PROTECTION OF EXISTING DRAINAGE FEATURES AND EXISTING VEGETATION.

6.) LAND CLEARING AND GRADING HAS BEEN MINIMIZED TO THE GREATEST EXTENT POSSIBLE.

7.) SOIL COMPACTION HAS BEEN MINIMIZED TO THE GREATEST EXTENT POSSIBLE. CONTRACTOR SHALL TAKE ALL REASONABLE MEASURES TO LIMIT COMPACTION IN PERVIOUS AREAS.

8.) VARIOUS PCSWM BMPs, BOTH STRUCTURAL AND NONSTRUCTURAL, HAVE BEEN UTILIZED TO PREVENT OR MINIMIZE CHANGES IN STORMWATER RUNOFF. THESE INCLUDE RAINGARDENS, AND STORMWATER MANAGEMENT BASINS.

GENERAL MAINTENANCE AND INSPECTION NOTES

1.) VEHICLES SHALL NOT BE PARKED OR DRIVEN ON AN INFILTRATION BASIN, AND CARE SHOULD BE TAKEN TO AVOID EXCESSIVE COMPACTION BY MOWERS.

2.) INSPECT THE FACILITY AFTER RUNOFF EVENTS AND MAKE SURE THAT RUNOFF DRAINS DOWN WITHIN 72 HOURS.

ALSO INSPECT FOR ACCUMULATION OF SEDIMENT, DAMAGE TO OUTLET CONTROL STRUCTURES, EROSION CONTROL MEASURES, SIGNS OF WATER CONTAMINATION/SPILLS, AND SLOPE STABILITY IN THE BERMS.

3.) MOW ONLY AS APPROPRIATE FOR VEGETATIVE COVER SPECIES.

4.) REMOVE ACCUMULATED SEDIMENT FROM FACILITY AS REQUIRED. RESTORE ORIGINAL CROSS SECTION AND INFILTRATION RATE. PROPERLY DISPOSE OF SEDIMENT. REMOVE AND REPLACE SAND/STONE LAYER IF FACILITY DEWATERING TIME EXCEEDS 72 HOURS.

GENERAL SEQUENCING NOTES FOR PCSWM BMPs

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 B.M.P. BOTTOMS.

4.) INFILTRATION TESTING SHALL BE CONDUCTED UPON SEDIMENT BASIN CONVERSION TO ENSURE THE INFILTRATION RATES HAVE NOT BEEN COMPROMISED DURING CONSTRUCTION.

5.) REFER TO THE BMP CONSTRUCTION DETAILS FOR THE CONSTRUCTION OF ALL PROPOSED STORMWATER MANAGEMENT INFILTRATION/WATER QUALITY BMP'S.

6.) THE BOTTOM OF ALL INFILTRATION BMP'S SHALL BE UNDISTURBED OR UNCOMPACTED SUBGRADE. THE CONTRACTOR SHALL TAKE ALL APPROPRIATE MEASURES DURING CONSTRUCTION TO ENSURE THAT HEAVY CONSTRUCTION VEHICLES DO NOT COMPACT INFILTRATION AREAS

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

8.) 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 ENGINEER.

9.) 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.

RECEIVING SURFACE WATERS

§102.8(f)(5)

THE SUBJECT SITE IS LOCATED WITHIN THE PICKERING CREEK WATERSHED, WHICH HAS A HQ (HIGH QUALITY), TSF (TROUT STOCKING FISHES) & MF (MIGRATORY FISHES) CHAPTER 93 CLASSIFICATION.

THERE ARE NO HQ/EV WATERSHED BOUNDARIES FOUND ON-SITE. FURTHER THERE ARE NO WETLANDS LOCATED ON THIS SITE EITHER.

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

§102.8(f)(2)

SOIL DESCRIPTIONS

SOILS SURVEY OF CHESTER COUNTY, PENNSYLVANIA. (NOT FIELD VERIFIED)
SOURCE OF MAP: NATURAL RESOURCES CONSERVATION SERVICE, AREA DATA: VERSION 7, 11/16/2015

SYMBOL	NAME	HYDROLOGIC SOIL GROUP	SLOPES (%)	DEPTH TO WATER TABLE	DEPTH TO RESTRICTIVE FEATRURE	CONTAINS HYDRIC COMPONENTS	SURFACE RUNOFF
CaA	CALIFON LOAM	D	0-3	6-36"	20-30 INCHES TO FRAGIPAN 72-99 INCHES TO LITHIE BEDROCK	NO	VERY HIGH
CaB	CALIFON LOAM	D	3-8	6-36"	20-30 INCHES TO FRAGIPAN 72-99 INCHES TO LITHIE BEDROCK	NO	VERY HIGH
GdA	GLADSTONE GRAVELLY LOAM	C	0-3	>80"	60-100 INCHES TO LITHIE BEDROCK	YES	LOW
GdB	GLADSTONE GRAVELLY LOAM	B	3-8	>80"	60-100 INCHES TO LITHIE BEDROCK	YES	LOW
GdC	GLADSTONE GRAVELLY LOAM	A	8-15	>80"	60-100 INCHES TO LITHIE BEDROCK	YES	LOW
GeD	GLADSTONE PARKER GRAVELLY LOAMS	A	15-25	>80"	60-118 INCHES TO LITHIE BEDROCK	YES	MEDIUM
GgA	GLENELG SILT LOAM	B	0-3	>80"	60-120 INCHES TO LITHIE BEDROCK	YES	LOW
UugB	URBAN LAND - ODORTHENTS, SCHIST AND GNEISS COMPLEX	C	0-8	∞ 60"	10-99 INCHES TO LITHIE BEDROCK 20-70 INCHES TO PARALITHIC BEDROCK	NO	MEDIUM

SOIL USE LIMITATIONS AND THEIR RESOLUTIONS

SOIL NAME	CUTBANKS CAVE	CORROSIVE TO CONCRETE/STEEL	DROUGHTY	EASILY ERODIBLE	FLOODING	DEPTH TO SATURATED ZONE/SEASONAL HIGH WATER TABLE	HYDRICHYDRIC INCLUSIONS	LOW STRENGTH/ LANDSLIDE PRONE	SLOW PERCOLATION	PIPING	POOR SOURCE OF TOPSOIL	FROST ACTION	SHRINK-SWELL	POTENTIAL SINKHOLE	PONDING	WETNESS
CALFRON	X	C/S				X		X	X			X				X
GLADSTONE	X	C		X			X		X			X	X			
GLENELG	X	C			X		X	X	X	X	X	X				X

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

1. CUTBANKS CAVE RESOLUTIONS: CUT SLOPES SHALL BE TEMPORARILY OR PERMANENTLY STABILIZED AS SOON AS POSSIBLE IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS FOUND ON THE E&S PLANS. FINISHED SLOPES WILL NOT EXCEED 3:1. EXCAVATIONS SHALL BE PROPERLY SUPPORTED TO PREVENT CAVES.
2. CORROSIVE TO CONCRETE/STEEL RESOLUTIONS: STORM DRAIN PIPES FOR THIS SITE WILL BE HDPE.
3. EASILY ERODIBLE RESOLUTIONS: STABILIZATION SHALL TAKE PLACE UPON COMPLETION OR TEMPORARY CESSATION OF EARTH DISTURBANCE ACTIVITIES THAT WILL EXCEED FOUR DAYS, OR ANY STAGE THEREOF. STABILIZATION SHALL BE IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS FOUND ON THE E&S PLANS. E&S CONTROLS LIKE COMPOST FILTER SOCKS AND INLET PROTECTION SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.
4. HIGH WATER TABLE RESOLUTIONS: SHOULD A HIGH GROUND WATER TABLE BE ENCOUNTERED DURING CONSTRUCTION, WATER WILL BE DRAINED FROM DISTURBED AREAS TO A WELL VEGETATED AREA OR PLACED COMPOST FILTER SOCK PRIOR TO BEING DISCHARGED FROM SITE. SATURATED SOILS THAT REQUIRE COMPACTION SHALL BE DIRED PRIOR TO BEING USED ON SITE.
5. LOW STRENGTH/LANDSLIDE PRONE RESOLUTIONS: FINISHED SLOPES WILL NOT EXCEED 3:1. PRECAUTIONS SHALL BE TAKEN DURING CONSTRUCTION TO PREVENT SLOPE FAILURES.
6. PIPING RESOLUTIONS: PIPING IS THE EROSION BY PERCOLATING WATERS OR SEEPAGE IN LAYER OF SUBSOIL RESULTING IN CAVING AND THE FORMATION OF TUNNELS OR PIPES THROUGH WHICH THE SOLUBLE OR GRANULAR MATERIAL IS REMOVED. WHERE NECESSARY, ANTI-SEEP COLLARS WILL BE USED TO PREVENT PIPING.
7. SLOW PERCOLATION RESOLUTIONS: PROVIDE DEWATERING DURING CONSTRUCTION ACTIVITIES. INFILTRATION IS NOT FEASIBLE FOR THIS PROJECT; THEREFORE, A SLOW RELEASE BASIN HAS BEEN PROPOSED.
8. POOR SOURCE OF TOPSOIL RESOLUTIONS: SOIL TEST SHOULD BE PERFORMED TO DETERMINE SOIL SUITABILITY FOR TOPSOIL. IF SOIL IS DETERMINED TO BE UNSUITABLE THEN TOPSOIL SHALL BE IMPORTED AND DISTRIBUTED THROUGHOUT THE SITE AS REQUIRED.
9. FROST ACTION RESOLUTIONS: DUE TO GRADING LIMITATIONS OF SOILS DURING WINTER MONTHS, THE CONTRACTOR SHALL NOT GRADE THESE SOILS DURING FROSTING OR ICING CONDITIONS.
10. SHRINK-SWELL RESOLUTIONS: SOILS THAT ARE PRONE TO SHRINKAGE AND SWELL DUE TO EARTH MOVING OPERATIONS SHALL BE REPLACED WHERE PRACTICAL OR NECESSARY WITH STONE SINCE STONE IS NOT PRONE TO SHRINKAGE AND SWELL CONDITIONS. ALTERNATIVELY THE CONTRACTOR SHALL UNDERSTAND THE SHRINKAGE/SWELL FACTOR AND ADJUST BACKFILL OPERATIONS ACCORDINGLY.
11. WETNESS RESOLUTIONS: WET WEATHER CONSTRUCTION RECOMMENDATIONS SHALL BE PROVIDED BY A QUALIFIED GEOTECHNICAL ENGINEER AND WILL BE EMPLOYED TO MINIMIZE THE EFFECTS OF SATURATED SOILS DURING GRADING OPERATIONS. POSITIVE DRAINAGE SHALL BE PROVIDED TO PREVENT RUNOFF FROM PONDING IN A GIVEN AREA AND FURTHER PREVENTING THE SOILS FROM

SEQUENCE OF CONSTRUCTION - STAGE 2 (RESIDENTIAL)

§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 TO ONLY THOSE AREAS DESCRIBED IN EACH STEP. IMMEDIATELY UPON COMPLETION OR TEMPORARY CESSATION OF EARTH DISTURBANCE ACTIVITIES OR ANY STEP THEREOF, THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZED WITH APPROPRIATE TEMPORARY OR PERMANENT STABILIZATION.

B. 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, E&S PLAN PREPARER, ALL APPROPRIATE MUNICIPAL OFFICIALS AND A REPRESENTATIVE OF THE CHESTER COUNTY CONSERVATION DISTRICT FOR AN ON-SITE PRE-CONSTRUCTION MEETING. A MINIMUM OF TWO (2) DAYS (48 HOURS) NOTICE SHALL BE GIVEN TO THE TOWNSHIP SEWER ENGINEER AND 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 UTILITY LOCATIONS.

C. BEFORE INITIATING ANY REVISION TO THE APPROVED EROSION AND SEDIMENT (E&S) 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 CHESTER COUNTY CONSERVATION DISTRICT. THE OPERATOR SHALL ENSURE THAT THE APPROVED E&S 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 OR SEDIMENT POLLUTION

D. 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 SHALL 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 CHESTER COUNTY CONSERVATION DISTRICT. AFTER CONSTRUCTION, THE SITE WILL BE STABILIZED, WHICH WILL REDUCE THE POTENTIAL FOR DUST GENERATION.

E. THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENTS SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ.

1. CONTINUE ROUTINE MAINTENANCE OF THE E&S BMPS INSTALLED DURING STAGE 1, WHICH INCLUDE THE STAGE 1 CONSTRUCTION ENTRANCE, SEDIMENT BASIN #2, FOREBAY #1, SEDIMENT TRAP #3 TO #6, ROCK FILTERS WITH COMPOST FILTER SOCKS, AND STONE INLET PROTECTION. THE STAGE 1 E&S PLANS AND SEQUENCE OF CONSTRUCTION CAN BE FOUND ON THE PLANS PREPARED BY BOHLER ENGINEERING, ENTITLED: SUBDIVISION & AMENDED FINAL PRD PLANS PARCEL 5-C - "THE VILLAGE AT BYERS STATION," DATED 5/20/16, REVISION 6, DATED 7/5/17.

2. INSTALL STAGE 2 PERIMETER CONTROLS. THIS INCLUDES THE SILT SOCK AND A SECOND CONSTRUCTION ENTRANCE ON DARRELL DRIVE. THE TEMPORARY STAGING AREA CAN REMAIN IN USE UNTIL SUCH TIME AS GRADING THE IN THE IS DONE. THE CONTRACTOR SHALL THEN ESTABLISH A NEW STAGING AREA AT THEIR DISCRETION. THE CONTRACTOR SHALL ALSO INSPECT ANY OTHER EXISTING INFRASTRUCTURE WITHIN THE STAGE 2 LIMIT OF DISTURBANCE THAT IS TO REMAIN TO ENSURE IT IS FUNCTIONING PROPERLY.
NOTE: ONLY PERSONAL VEHICLES MAY USE THE EXISTING ENTRANCE TO ENTER AND LEAVE THE SITE UNTIL SUCH TIME AS THE TEMPORARY STAGING AREA IS RELOCATED DUE TO GRADING OPERATIONS AND STORM DRAINAGE SYSTEM INSTALLATION. THIS WILL PREVENT SEDIMENT, DUST, OR MUD FROM BEING TRACKED OFF-SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING PERSONAL VEHICLES DO NOT TRACK SEDIMENT OFF-SITE AND CONSTRUCTION VEHICLES USE THE CONSTRUCTION ENTRANCE.

3. COMMENCE BULK EARTH WORK NECESSARY TO ACHIEVE SUBGRADES FOR THE PROPOSED ACCESS DRIVEWAY, SASSAFRAS LANE, GINKGO LANE, CATALPA LANE, REDBUD LANE, JUNEBERRY COURT, MOCKERNUT COURT, AND HACKBERRY COURT.

4. INSTALL UTILITIES INCLUDING STORM SEWER, SANITARY SEWER, WATER, GAS, ELECTRIC AND TELECOMMUNICATIONS. RIPRAP APRONS SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILS PROVIDED ON THE EROSION AND SEDIMENT POLLUTION CONTROL NOTES AND DETAILS IMMEDIATELY UPON CONSTRUCTION OF THE ENDWALL.

5. INSTALL CURBING SHOWN ON THE PLANS AS WELL AS THE STONE AND BITUMINOUS BASE COURSE IN ROADWAYS.

6. CONSTRUCTION OF THE HOMES CAN NOW COMMENCE. THE CONTRACTOR IS TO USE ON-LOT E&S CONTROLS AS SHOWN ON THE PLANS AND ON STANDARD DETAIL 10-1, 10-2, AND 10-3 IN THE E&S DETAILS. ANY LOT THAT IS NOT GOING TO BE BUILT OUT IMMEDIATELY SHALL BE TEMPORARILY STABILIZED.

7. INITIATE FINAL GRADING AND PLACEMENT OF TOP SOIL IN ALL LANDSCAPE AREAS IN ACCORDANCE WITH THE LANDSCAPE PLANS. 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 SPECIFIED HAS BEEN ACHIEVED. AS DISTURBED AREAS APPROACH FINAL GRADE, PREPARATIONS SHOULD BE MADE FOR SEEDING AND MULCHING TO BEGIN (I.E. ANTICIPATE THE COMPLETION DATE AND SCHEDULE 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 AND IS NOT ACCEPTABLE. SEEDING AND MULCHING REQUIREMENTS ARE SPECIFIED IN THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS.

8. CONSTRUCT VEGETATED SWALES #1 TO #10. CONSTRUCTION OF VEGETATED SWALES SHALL NOT COMMENCE UNTIL THE TRIBUTARY AREA TO THE SWALE HAS BEEN PERMANENTLY STABILIZED.
CRITICAL STAGE: THE PERMITTEE SHALL PROVIDE ENGINEERING OVERSIGHT DURING THE CONSTRUCTION OF THE VEGETATED SWALES. A LICENSED PROFESSIONAL OR DESIGNEE KNOWLEDGEABLE IN THE DESIGN AND CONSTRUCTION OF VEGETATED SWALES, PREFERABLY THE DESIGN ENGINEER, SHALL CONDUCT THE OVERSIGHT.

CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE VEGETATED SWALE SEQUENCE OF CONSTRUCTION SHOWN ON THE PCSM DETAILS AND REQUIRED LANDSCAPING PER THE LANDSCAPE PLANS.

9. INSTALL REMAINING LAYERS OF BITUMINOUS PAVEMENT AND CONCRETE INCLUDING SIDEWALK. THE TRAIL TO BE PAVED ON THE WEST SIDE OF POTTSTOWN PIKE (RT 100) AND DARRELL DRIVE INTERSECTION SHALL ONLY DISTURB AREAS THAT THE CONTRACTOR CAN BE PERMANENTLY STABILIZED WITH A MINIMUM OF THE BASE STONE LAYER PER DAY TO AVOID HAVING TO PUT IN PERIMETER CONTROLS IN THE AREA.

10. INITIATE FINAL VEGETATION AND LANDSCAPING IN ACCORDANCE WITH THE LANDSCAPE PLANS AND DETAILS.
CRITICAL STAGE: THE PERMITTEE SHALL PROVIDE OVERSIGHT FOR THE INSTALLATION OF THE LANDSCAPING. A LICENSED PROFESSIONAL, OR DESIGNEE, KNOWLEDGEABLE IN THE IN THE INSTALLATION OF TREES AND PLANTINGS, PREFERABLY THE LANDSCAPE ARCHITECT WHO PUT THE PLAN TOGETHER, SHALL CONDUCT THE OVERSIGHT.

11. CONVERT SEDIMENT BASIN #2, FOREBAY #1 AND SEDIMENT TRAPS #3 TO #6 TO THEIR PERMANENT BIORETENTION BASIN CONFIGURATIONS. THE CONVERSION OF THESE FACILITIES SHALL NOT COMMENT UNTIL THE TRIBUTARY AREA TO THE BMP HAS BEEN PERMANENTLY STABILIZED. FOREBAY #1/BIORETENTION BASIN #1 SHALL BE CONVERTED AND PERMANENTLY STABILIZED PRIOR TO CONVERTING SEDIMENT BASIN #2/BIORETENTION BASIN #2 SINCE BIORETENTION BASIN #1 IS TRIBUTARY TO BIORETENTION BASIN #2. CONVERSION OF THESE FACILITIES SHALL COMMENCE ONLY IF THE EARTH DISTURBANCE TRIBUTARY TO THESE FACILITIES WITHIN THE COMMERCIAL AREA HAS BEEN PERMANENTLY STABILIZED.
CRITICAL STAGE: THE PERMITTEE SHALL PROVIDE ENGINEERING OVERSIGHT DURING THE CONVERSION OF THE E&S FACILITIES TO THEIR PERMANENT BIORETENTION CONFIGURATION. A LICENSED PROFESSIONAL OR DESIGNEE KNOWLEDGEABLE IN THE CONVERSION OF E&S FACILITIES TO BIORETENTION BASINS, PREFERABLY THE DESIGN ENGINEER, SHALL CONDUCT THE OVERSIGHT.

PRIOR TO CONVERTING ANY OF THE E&S FACILITIES TO THEIR PERMANENT CONDITION THE PERMITTEE SHALL CONTACT THE CHESTER COUNTY CONSERVATION DISTRICT AND REQUEST A SITE INSPECTION AND RECEIVE APPROVAL TO CONVERT SEDIMENT BASIN #2, FOREBAY #1, OR SEDIMENT TRAPS #3 TO #6 TO THEIR PERMANENT CONFIGURATION.

CONVERSION TO A BIORETENTION FACILITY SHALL FOLLOW THE BIORETENTION BASIN SEQUENCE OF CONSTRUCTION FOUND ON THE PCSM DETAILS AND SHALL CONSIST OF THE FOLLOWING:
A. FLUSH THE TRIBUTARY STORM DRAINAGE SYSTEM AND ENSURE NO SEDIMENT ENTERS THE FACILITY ONCE THE CONVERSION IS COMPLETE.
B. REMOVE BAFFLE WALLS IF REQUIRED.
C. ANY EARTHWORK NECESSARY TO REMOVE SEDIMENT FROM THE BASINS AND EXCAVATION REQUIRED TO PLACE THE SOIL/STONE OR SAND, DEPENDING ON THE FACILITY. AS PART OF THIS EARTHWORK BIORETENTION BASINS #4 AND #5 SHALL BE OVER EXCAVATED BY 1.0' DUE TO DEPTH OF LIMITING ZONES IN THESE FACILITIES.
D. PLACE THE SAND/STONE AND PLANTING SOILS AND THE UNDERDRAIN IF REQUIRED.
E. THE TEMPORARY E&S BMPS (SKIMMER OR TEMPORARY RISER) SHALL REMAIN IN PLACE AS ALONG AS PRACTICAL. ONCE THESE STRUCTURES CAN NO LONGER BE LEFT IN PLACE DUE TO HAVING TO PLACE SOILS/STONE OR SAND REMOVE THEM AND UNPLUG THE TEMPORARY DEWATERING ORIFICE AT THE BOTTOM OF THE OUTLET STRUCTURE.
F. PLANT THE BASINS ACCORDING TO THE LANDSCAPE PLAN AND STABILIZE IMMEDIATELY.
G. ONCE PLANT MATERIAL HAS ESTABLISHED THE TEMPORARY DEWATERING ORIFICE SHALL BE PERMANENTLY PLUGGED AND SHALL BE WATER TIGHT.

12. UPON SITE STABILIZATION (UNIFORM COVERAGE OR DENSITY OF 70% ACROSS ALL DISTURBED AREAS) AND NOTIFICATION OF THE CHESTER COUNTY CONSERVATION DISTRICT, REMOVE E&S CONTROL FACILITIES INCLUDING SILT SOCK, INLET PROTECTION AND THE ROCK FILTER WITH COMPOST FILTER SOCK. ANY AREA DISTURBED DURING THE REMOVAL SHALL BE PERMANENTLY STABILIZED IMMEDIATELY.

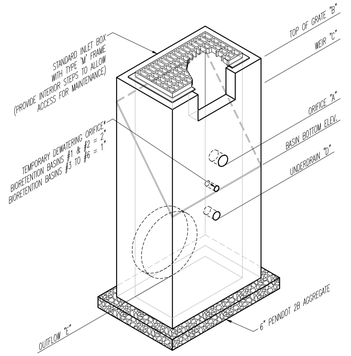
13. CLEAR SITE OF REMAINING DEBRIS AND ALL UNWANTED MATERIALS. CONTRACTOR SHALL REMOVE FROM SITE, RECYCLE OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENTS SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTE ON SITE.

14. DEMOBILIZE

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

CRITICAL STAGES

1. CONSTRUCTION OF SEDIMENT BASIN #2 AND FOREBAY #1
2. CONSTRUCTION OF SEDIMENT TRAPS #3 TO #6
3. CONSTRUCTION OF THE VEGETATED SWALES #1 THROUGH #17
4. CONVERSION OF SEDIMENT BASIN #2, FOREBAY #1, AND SEDIMENT TRAPS #3 TO #6 TO BIORETENTION BASINS
5. INSTALLATION OF LANDSCAPING
6. INSTALLATION OF WATER QUALITY FILTERS



NOTE: BUTYL RESIN MASTIC SEAL SHALL BE PLACED WITHIN ALL JOINTS OF THE STRUCTURE WHEN ASSEMBLED AND BETWEEN TOP OF GRATE AND TOP OF STRUCTURE.

BIORETENTION BASIN OUTLET STRUCTURES TABLE

BASIN #	OUTLET STRUCTURE	BASIN BOTTOM ELEV.	ORIFICE "A"		TOP OF GRATE "B"		WEIR "C"		UNDERDRAIN "D" **		OUTFLOW "E"	
			#	SIZE (IN.)	ELEV.	SIZE (FT.)	ELEV.	WIDTH (FT.)	ELEV.	SIZE (IN.)	ELEV.	SIZE (IN.)	ELEV.
BIORETENTION BASIN #1	OS01	429.00	1	6.0	430.95	2.0x4.0(12ft)	433.00	3.00	432.00	N/A	–	18.0	423.79
BIORETENTION BASIN #2	OS02	422.00	1	4.0	423.82	2.0x4.0(12ft)	426.00	3.00	425.00	N/A	–	18.0	420.23
BIORETENTION BASIN #3	OS03	451.00	1	3.0	452.00	2.0x4.0(12ft)	453.10	N/A	N/A	N/A	–	18.0	449.27
BIORETENTION BASIN #4	OS04	446.00	1	3.0	446.25	2.0x4.0(12ft)	447.80	3.00	447.00	4.0	443.75	18.0	442.58
BIORETENTION BASIN #5	OS05	441.00	1	3.0	441.25	2.0x4.0(12ft)	442.75	N/A	N/A	4.0	438.75	18.0	438.08
BIORETENTION BASIN #6	OS06	438.00	1	3.0	438.55	2.0x4.0(12ft)	439.80	N/A	N/A	N/A	–	18.0	435.18

* THE TEMPORARY DEWATERING ORIFICE SHALL BE PLUGGED DURING CONSTRUCTION AND ONLY UNPLUGGED ONCE BASINS ARE CONVERTED TO FACILITATE TEMORARY DEWATERING WHILE VEGETATION ESTABLISHES. ONCE VEGETATION HAS BEEN ESTABLISHED IN THE BIORETENTION BASIN THE TEMPORARY DEWATERING ORIFICE SHALL BE PLUGGED PERMANENTLY AND SHALL BE WATER TIGHT.
** THE 4" UNDERDRAIN SHALL BE EQUIPPED WITH A CONTROL ORIFICE TO REGULATE THE FLOW OUT OF THE BASIN. REFER TO THE UNDERDRAIN CONTROL ORIFICE DETAIL.

BIORETENTION BASIN OUTLET STRUCTURE DETAIL
N.T.S.

SEQUENCE OF CONSTRUCTION - STAGE 2 (COMMERCIAL)

§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 TO ONLY THOSE AREAS DESCRIBED IN EACH STEP. IMMEDIATELY UPON COMPLETION OR TEMPORARY CESSATION OF EARTH DISTURBANCE ACTIVITIES OR ANY STEP THEREOF, THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZED WITH APPROPRIATE TEMPORARY OR PERMANENT STABILIZATION.

B. 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, E&S PLAN PREPARER, ALL APPROPRIATE MUNICIPAL OFFICIALS AND A REPRESENTATIVE OF THE CHESTER COUNTY CONSERVATION DISTRICT FOR AN ON-SITE PRE-CONSTRUCTION MEETING. A MINIMUM OF TWO (2) DAYS (48 HOURS) NOTICE SHALL BE GIVEN TO THE TOWNSHIP SEWER ENGINEER AND 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 UTILITY LOCATIONS.

C. BEFORE INITIATING ANY REVISION TO THE APPROVED EROSION AND SEDIMENT (E&S) 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 CHESTER COUNTY CONSERVATION DISTRICT. THE OPERATOR SHALL ENSURE THAT THE APPROVED E&S 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 OR SEDIMENT POLLUTION

D. 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 SHALL 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 CHESTER COUNTY CONSERVATION DISTRICT. AFTER CONSTRUCTION, THE SITE WILL BE STABILIZED, WHICH WILL REDUCE THE POTENTIAL FOR DUST GENERATION.

E. THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENTS SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ.

1. AS APPLICABLE, CONTINUE ROUTINE MAINTENANCE OF THE E&S BMPS INSTALLED DURING STAGE 1 WHICH INCLUDE THE STAGE 1 CONSTRUCTION ENTRANCE, SEDIMENT BASIN #2, FOREBAY #1, ROCK FILTERS WITH COMPOST FILTER SOCKS, AND STONE INLET PROTECTION. THE STAGE 1 E&S PLANS AND SEQUENCE OF CONSTRUCTION CAN BE FOUND ON THE PLANS PREPARED BY BOHLER ENGINEERING, ENTITLED: SUBDIVISION & AMENDED FINAL PRD PLANS PARCEL 5-C - "THE VILLAGE AT BYERS STATION," DATED 5/20/16, REVISION 6, DATED 7/5/17. IN ADDITION THE BAFFLE WALL WITHIN SEDIMENT BASIN #2 SHALL BE EXTENDED AS SHOWN ON THE E&S PLAN.
2. INSTALL STAGE 2 PERIMETER CONTROLS. THIS INCLUDES THE SILT SOCK AND CONSTRUCTION ENTRANCES. THE TEMPORARY STAGING AREA CAN REMAIN IN USE UNTIL SUCH TIME AS GRADING IN THE AREA IS DONE. THE CONTRACTOR SHALL THEN ESTABLISH A NEW STAGING AREA AT THEIR DISCRETION. THE CONTRACTOR SHALL ALSO INSPECT ANY OTHER EXISTING INFRASTRUCTURE WITHIN THE STAGE 2 LIMIT OF DISTURBANCE THAT IS TO REMAIN TO ENSURE IT IS FUNCTIONING PROPERLY.
NOTE: ONLY PERSONAL VEHICLES MAY USE THE EXISTING ENTRANCE TO ENTER AND LEAVE THE SITE UNTIL SUCH TIME AS THE TEMPORARY STAGING AREA IS RELOCATED DUE TO GRADING OPERATIONS AND STORM DRAINAGE SYSTEM INSTALLATION. THIS WILL PREVENT SEDIMENT, DUST, OR MUD FROM BEING TRACKED OFF-SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING PERSONAL VEHICLES DO NOT TRACK SEDIMENT OFF-SITE AND CONSTRUCTION VEHICLES USE THE CONSTRUCTION ENTRANCE.
3. COMMENCE BULK EARTH WORK NECESSARY TO ACHIEVE SUBGRADE IN BEGONIA DRIVE, IRIS LANE, LOT #2A AND INTERIM GRADING ON LOT 89B. GRADING SHALL COMMENCE AT THE NORTHERN END OF THE SITE AND WORK SOUTH. POSITIVE DRAINAGE SHALL BE MAINTAINED TO THE EXISTING SWALE THAT DISCHARGES TO SEDIMENT BASIN #2. AS SOON AS PRACTICAL THE STORM RUN FROM EW304 TO IN210 SHALL BE INSTALLED. ONCE THIS STORM RUN IS INSTALLED THE EXISTING CULVERT AND HEADWALL WEST OF BEGONIA DRIVE SHALL BE REMOVED ALONG WITH THE E&S BMPS.
4. CONSTRUCT THE RETAINING WALLS WITHIN LOT #2A. CONSTRUCTION OF THE RETAINING WALLS SHALL BE DONE IN ACCORDANCE WITH THE WALL DESIGN ENGINEER'S DRAWINGS AND MANUFACTURER SPECIFICATIONS UNLESS OTHERWISE NOTED IN EITHER THE RETAINING WALL DESIGN ENGINEER'S DRAWINGS OR THE MANUFACTURER'S SPECIFICATIONS.
4.1. THE PIPE RUNS FROM EW303 TO MH303 SHALL BE INSTALLED AT THE SAME TIME THE WALL IS CONSTRUCTED. INSTALLATION OF THESE PIPE RUNS SHALL BE PER THE DIRECTION/RECOMMENDATION OF THE WALL DESIGNER AND AS SHOWN ON THE PLANS.
4.2. AT NO POINT DURING CONSTRUCTION SHOULD THE WALL HEIGHT EXCEED ONE COURSE HIGHER THAN THE FILL MATERIAL BEHIND THE WALL THROUGHOUT WALL CONSTRUCTION AND ASSOCIATED FILLING OPERATIONS BEHIND THE WALL.
5. INSTALL UTILITIES WITHIN BOGONIA DRIVE, IRIS LANE, AND LOT #2A SHOWN ON THE PLANS AS WELL AS THE STONE AND BITUMINOUS BASE COURSE IN ROADWAYS. RIPRAP APRONS SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILS PROVIDED ON THE EROSION AND SEDIMENT POLLUTION CONTROL NOTES AND DETAILS IMMEDIATELY UPON CONSTRUCTION OF THE ENDWALL.
6. INSTALL CURBING WITHIN BOGONIA DRIVE, IRIS LANE, AND LOT #2A SHOWN ON THE PLANS AS WELL AS THE STONE AND BITUMINOUS BASE COURSE IN ROADWAYS.
7. CONSTRUCTION OF THE TOWNHOMES WITHIN LOT #2A CAN NOW COMMENCE. THE CONTRACTOR SHALL USE ON-LOT E&S CONTROLS SHOWN ON THE PLANS AND STANDARD DETAILS 10-1, 10-2, AND 10-3 IN THE E&S DETAILS. ANY BUILDING THAT IS NOT GOING TO BE BUILT OUT IMMEDIATELY SHALL BE TEMPORARILY STABILIZED.
8. INITIATE FINAL GRADING AND PLACEMENT OF TOP SOIL IN ALL LANDSCAPE AREAS WITHIN LOT #2A IN ACCORDANCE WITH THE LANDSCAPE PLANS. 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 SPECIFIED HAS BEEN ACHIEVED. AS DISTURBED AREAS APPROACH FINAL GRADE, PREPARATIONS SHOULD BE MADE FOR SEEDING AND MULCHING TO BEGIN (I.E. ANTICIPATE THE COMPLETION DATE AND SCHEDULE 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 AND IS NOT ACCEPTABLE. SEEDING AND MULCHING REQUIREMENTS ARE SPECIFIED IN THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS.
9. CONSTRUCT VEGETATED SWALES #12 TO #16. CONSTRUCTION OF VEGETATED SWALES SHALL NOT COMMENCE UNTIL THE TRIBUTARY AREA TO THE SWALE HAS BEEN PERMANENTLY STABILIZED.
CRITICAL STAGE: THE PERMITTEE SHALL PROVIDE ENGINEERING OVERSIGHT DURING THE CONSTRUCTION OF THE VEGETATED SWALES. A LICENSED PROFESSIONAL OR DESIGNEE KNOWLEDGEABLE IN THE DESIGN AND CONSTRUCTION OF VEGETATED SWALES, PREFERABLY THE DESIGN ENGINEER, SHALL CONDUCT THE OVERSIGHT.
CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE VEGETATED SWALE SEQUENCE OF CONSTRUCTION SHOWN ON THE PCSM DETAILS AND REQUIRED LANDSCAPING PER THE LANDSCAPE PLANS.
10. INSTALL REMAINING LAYERS OF BITUMINOUS PAVEMENT AND CONCRETE INCLUDING SIDEWALK WITHIN LOT #2A.
11. INITIATE FINAL VEGETATION AND LANDSCAPING WITHIN LOT #2A IN ACCORDANCE WITH THE LANDSCAPE PLANS AND DETAILS.
CRITICAL STAGE: THE PERMITTEE SHALL PROVIDE OVERSIGHT FOR THE INSTALLATION OF THE LANDSCAPING. A LICENSED PROFESSIONAL, OR DESIGNEE, KNOWLEDGEABLE IN THE IN THE INSTALLATION OF TREES AND PLANTINGS, PREFERABLY THE LANDSCAPE ARCHITECT WHO PUT THE PLAN TOGETHER, SHALL CONDUCT THE OVERSIGHT.
13. INSTALL WATER QUALITY FILTERS WITHIN LOT #2A. INSTALLATION OF THE WATER QUALITY FILTERS SHALL BE DONE IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTION AND RECOMMENDATIONS.
CRITICAL STAGE: THE PERMITTEE SHALL PROVIDE ENGINEERING OVERSIGHT DURING THE INSTALLATION OF THE WATER QUALITY FILTERS. A LICENSED PROFESSIONAL OR DESIGNEE KNOWLEDGEABLE IN THE INSTALLATION OF WATER QUALITY FILTERS, PREFERABLY THE DESIGN ENGINEER, SHALL CONDUCT THE OVERSIGHT.
14. CONVERT SEDIMENT BASIN #2 AND FOREBAY #1 TO THEIR PERMANENT BIORETENTION BASIN CONFIGURATIONS. THE CONVERSION OF THESE FACILITIES SHALL NOT COMMENT UNTIL THE TRIBUTARY AREA TO THE BMP HAS BEEN PERMANENTLY STABILIZED. FOREBAY #1/BIORETENTION BASIN #1 SHALL BE CONVERTED AND PERMANENTLY STABILIZED PRIOR TO CONVERTING SEDIMENT BASIN #2/BIORETENTION BASIN #2 SINCE BIORETENTION BASIN #1 IS TRIBUTARY TO BIORETENTION BASIN #2. FOREBAY #1 AND SEDIMENT BASIN #2 SHALL ONLY BE CONVERTED IF EARTH DISTURBANCE TRIBUTARY TO THESE FACILITIES WITHIN THE RESIDENTIAL AREA HAS BEEN COMPLETED.
CRITICAL STAGE: THE PERMITTEE SHALL PROVIDE ENGINEERING OVERSIGHT DURING THE CONVERSION OF THE E&S FACILITIES TO THEIR PERMANENT BIORETENTION CONFIGURATION. A LICENSED PROFESSIONAL OR DESIGNEE KNOWLEDGEABLE IN THE CONVERSION OF E&S FACILITIES TO BIORETENTION BASINS, PREFERABLY THE DESIGN ENGINEER, SHALL CONDUCT THE OVERSIGHT.

PRIOR TO CONVERTING ANY OF THE E&S FACILITIES TO THEIR PERMANENT CONDITION THE PERMITTEE SHALL CONTACT THE CHESTER COUNTY CONSERVATION DISTRICT AND REQUEST A SITE INSPECTION AND RECEIVE APPROVAL TO CONVERT SEDIMENT BASIN #2 OR FOREBAY #1 TO THEIR PERMANENT CONFIGURATION.

CONVERSION TO A BIORETENTION FACILITY SHALL FOLLOW THE BIORETENTION BASIN SEQUENCE OF CONSTRUCTION FOUND ON THE PCSM DETAILS AND SHALL CONSIST OF THE FOLLOWING:
A. FLUSH THE TRIBUTARY STORM DRAINAGE SYSTEM AND ENSURE NO SEDIMENT ENTERS THE FACILITY ONCE THE CONVERSION IS COMPLETE.
B. REMOVE BAFFLE WALLS IF REQUIRED.
C. ANY EARTHWORK NECESSARY TO REMOVE SEDIMENT FROM THE BASINS AND EXCAVATION REQUIRED TO PLACE THE SOIL/STONE, DEPENDING ON THE FACILITY.
D. PLACE THE STONE AND PLANTING SOILS.
E. THE TEMPORARY E&S BMPS (SKIMMER OR TEMPORARY RISER) SHALL REMAIN IN PLACE AS ALONG AS PRACTICAL. ONCE THESE STRUCTURES CAN NO LONGER BE LEFT IN PLACE DUE TO HAVING TO PLACE SOILS/STONE, REMOVE THEM AND UNPLUG THE TEMPORARY DEWATERING ORIFICE AT THE BOTTOM OF

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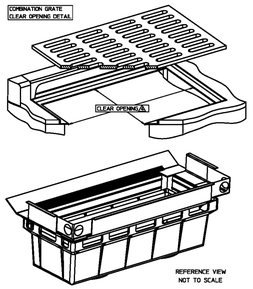
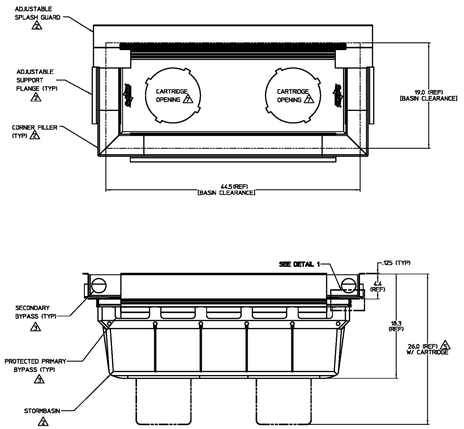
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
E	ECN9730-1E-000E	5/5/15	

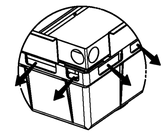
NOTES:

1. WEIGHT (EMPTY): 50 LB MAX. NO CARTRIDGES
2. MATERIAL:
   A) ADJUSTABLE FLANGE AND DEFLECTOR: ALUMINUM ALLOY 6063-T6
   B) BASIN (PLASTIC): POLYPROPYLENE POLYETHYLENE COPOLYMER
   C) CORNER FILL: ALUMINUM ALLOY: 5052-H32
   D) SUPPORT HARDWARE: CRES 300 SERIES
   E) SPLASH GUARD: NEOPRENE RUBBER (TRIM IF NECESSARY)
3. PERFORMANCE CHARACTERISTICS: (TYP):
   A) DEBRIS CAPACITY: 5.2 CU-FT
   B) FILTERED FLOW RATE (CLEAN STANDARD CARTRIDGE): 2.30 GPM (0.51 CFS)
   C) PRIMARY BYPASS FLOW RATE: 9.97 GPM (4.3 CFS)
   D) SECONDARY BYPASS FLOW RATE: 16.4 GPM (0.37 CFS)
   E) TOTAL BYPASS FLOW RATE: 2082 GPM (4.6 CFS)
4. CLEAR OPENING RANGE (0.5 INCH INCREMENTS):
   A) MINIMUM SIZE: 19.0 X 43.0
   B) MAXIMUM SIZE: 24.0 X 50.0
5. RECOMMENDED MINIMUM VAULT DEPTH 2-IN BELOW CARTRIDGE
6. TYPICAL INSTALLATION: REMOVE STORM GRATE, MEASURE CATCH BASIN CLEAR OPENING AND ADJUST FLANGES TO REST ON GRATE SUPPORT LEDGE. INSTALL STORMBASIN INSERT WITH RUBBER SPLASH GUARD EXTENDING INTO CURB-BOX AND VERIFY THE ADJUSTABLE FLANGES ARE SECURELY RESTING ON THE GRATE SUPPORT LEDGES. INSTALL THE CORNER FILL PIECES. REINSTALL THE STORM GRATE DIRECTLY ON STORMBASIN SUPPORT FLANGES.
7. USE WITH FABCO REPLACEABLE MEDIA CARTRIDGES ONLY.

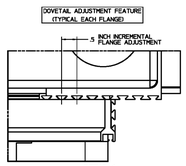


REFERENCE VIEW
NOT TO SCALE





PROTECTED BYPASS, TYPICAL
(NOT TO SCALE)



DETAIL 1
SCALE 1/1

NO	QTY	PART NUMBER	DESCRIPTION	REMARKS
			BILL OF MATERIALS	

	APPROVALS	DATE
DRAWN	ADELSMITH	7/21/07
CHKD	SCHUSTON	7/21/07
ENGR	J. PETERS	7/21/07
APPD		

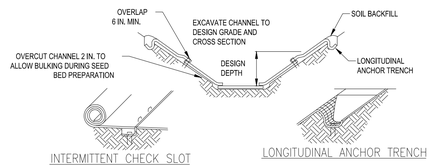
MATERIAL:	SEE NOTES
FINISH:	
MODEL NAME:	9730-1E_ASSY3

FABCO INDUSTRIES, INC.
44 CENTRAL AVENUE
FARMINGDALE, NY 11735
WWW.FABCO-INDUSTRIES.COM

TITLE: STORMBASIN, 19X43 CS

ITEM/CAGE CODE	DWG NO	REV
	9730-1E-000	E

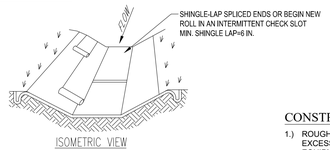
SCALE: 3/4 N.T.S. | WEIGHT: 1 OF 1



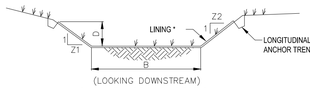
INTERMITTENT CHECK SLOT

LONGITUDINAL ANCHOR TRENCH

PREPARE SOIL AND APPLY SEED BEFORE INSTALLING BLANKETS, MATS, OR OTHER TEMPORARY CHANNEL LINER SYSTEM.



ISOMETRIC VIEW



(LOOKING DOWNSTREAM)

CHANNEL CROSS-SECTION

* SEE MANUFACTURER'S LINING INSTALLATION DETAIL FOR STAPLE PATTERNS, VEGETATIVE STABILIZATION FOR SOIL AMENDMENTS, SEED MIXTURES AND MULCHING INFORMATION

CONSTRUCTION SEQUENCE FOR VEGETATED SWALE

1.) ROUGH GRADE THE VEGETATED SWALE. EQUIPMENT SHALL AVOID EXCESSIVE COMPACTION AND/OR LAND DISTURBANCE. EXCAVATING EQUIPMENT SHOULD OPERATE FROM THE SIDE OF THE SWALE AND NEVER ON THE BOTTOM.

2.) EXCAVATE TO THE DEPTH OF THE SUBSOIL.

3.) PLACE 12" PLANTING SOIL MIX.

4.) PRE-SOAK THE PLANTING SOIL PRIOR TO PLANTING VEGETATION IN ORDER TO AID IN SETTLEMENT.

5.) SEED, VEGETATE, AND INSTALL PROTECTIVE LINING AS PER THE PLANS.

CRITICAL STAGE: THE PERMITTEE SHALL PROVIDE ENGINEERING OVERSIGHT FOR THE INSTALLATION OF THE VEGETATED SWALE. A LICENSED PROFESSIONAL OR DESIGNEE KNOWLEDGEABLE IN THE DESIGN AND CONSTRUCTION OF THE VEGETATED SWALES SHALL CONDUCT THE OVERSIGHT.

CHANNEL NO.	STATIONS	BOTTOM WIDTH B (FT)	DEPTH D (FT)	TOP WIDTH W (FT)	Z1 (FT)	Z2 (FT)	LINING *
TEMPORARY							
VEGETATED SWALE 1	ENTIRE	2.75	1.00	11.25	5.5	3.0	LAWN 2.5"
VEGETATED SWALE 2	ENTIRE	2.50	1.00	10.20	4.7	3.0	LAWN 2.5"
VEGETATED SWALE 3	ENTIRE	2.00	1.00	7.55	2.55	3.0	LAWN 2.5"
VEGETATED SWALE 4	ENTIRE	1.75	1.00	12.25	5.0	5.5	LAWN 2.5"
VEGETATED SWALE 5	ENTIRE	1.50	1.00	10.00	4.0	4.5	LAWN 2.5"
VEGETATED SWALE 6	ENTIRE	1.0	1.00	26.70	14.70	11.0	LAWN 2.5"
VEGETATED SWALE 7	ENTIRE	1.25	1.00	19.85	3.0	15.6	LAWN 2.5"
VEGETATED SWALE 8	ENTIRE	2.00	1.00	9.35	4.35	3.0	LAWN 2.5"
VEGETATED SWALE 9	ENTIRE	2.00	1.00	9.35	4.35	3.0	LAWN 2.5"
VEGETATED SWALE 10	ENTIRE	2.00	1.25	11.19	4.35	3.0	LAWN 2.5"
VEGETATED SWALE 11	ENTIRE	1.75	1.50	10.75	3.0	3.0	LAWN 2.5"
VEGETATED SWALE 12	ENTIRE	2.00	1.50	11.00	3.0	3.0	LAWN 2.5"
VEGETATED SWALE 13	ENTIRE	1.75	1.50	10.75	3.0	3.0	LAWN 2.5"
VEGETATED SWALE 14	ENTIRE	2.00	1.50	11.00	3.0	3.0	LAWN 2.5"
VEGETATED SWALE 15	ENTIRE	2.00	1.50	11.00	3.0	3.0	LAWN 2.5"
VEGETATED SWALE 16	ENTIRE	2.00	1.50	11.00	3.0	3.0	LAWN 2.5"
VEGETATED SWALE 17	ENTIRE	1.75	1.50	10.75	3.0	3.0	LAWN 2.5"

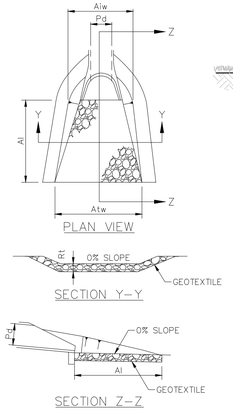
NOTES:

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.

STANDARD CONSTRUCTION DETAIL #6-1
VEGETATED CHANNEL
NOT TO SCALE



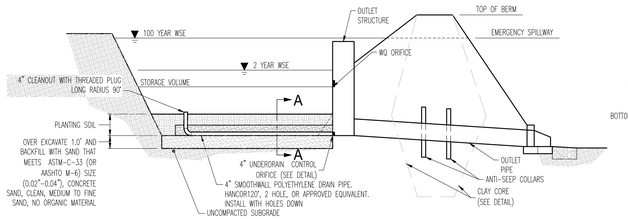
OUTLET NO.	PIPE DIA Pd (IN)	RIPRAP SIZE R—	RIPRAP THICK. RI (IN)	APRON LENGTH Ai (FT)	APRON INITIAL WIDTH Aiw (FT)	APRON TERMINAL WIDTH Atw (FT)
EW01	18	3	9.0	8.0	4.50	7.70
EW02	18	3	9.0	11.0	4.50	15.50
EW06	30	3	9.0	13.0	7.50	12.70
EW07	15	3	9.0	6.0	3.75	6.15
EW08	15	3	9.0	6.0	3.75	6.15
EW301	24	3	9.0	10.0	6.00	10.00
EW303	30	3	9.0	23.0	7.50	16.70
EW304	24	3	9.0	10.0	6.00	10.00
STATION BOULEVARD CULVERT	(3) 24x36	5	18.0	27.0	27.0	54.00

NOTES:

ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.

ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

STANDARD CONSTRUCTION DETAIL #9-1
RIPRAP APRON AT PIPE OUTLET
WITH FLARED END SECTION OR ENDWALL
NOT TO SCALE



CRITICAL STAGE: THE PERMITTEE SHALL PROVIDE ENGINEERING OVERSIGHT FOR THE INSTALLATION OF THE BIORETENTION BASINS. A LICENSED PROFESSIONAL OR DESIGNEE KNOWLEDGEABLE IN THE INSTALLATION OF BIORETENTION BASINS., PREFERABLY THE DESIGN ENGINEER, SHALL CONDUCT THE OVERSIGHT.

NOTES:

1.) THE AREA DESIGNATED FOR INFILTRATION SHALL BE ENCLOSED WITH HI-VIS ORANGE FENCE TO MINIMIZE THE IMPACTS OF SURROUNDING CONSTRUCTION ACTIVITIES ON THE INFILTRATION CAPABILITIES OF THE NATIVE SOIL.

2.) CARE MUST BE TAKEN DURING THE EXCAVATION PROCESS TO MAKE SURE THAT SOIL COMPACTION DOES NOT OCCUR WITHIN THE BIORETENTION BASIN. FOLLOWING CONSTRUCTION AND SITE STABILIZATION, SEDIMENT SHALL BE REMOVED FROM THE BASIN AND FINAL GRADES ESTABLISHED USING NON-MECHANICAL METHODS.

3.) ONCE THE BIORETENTION BASIN IS READY TO BE CONVERTED ALL INLETS, MANHOLES AND STORM SEWER PIPE SHALL BE FLUSHED TO PREVENT ANY SEDIMENT FROM ENTERING THE BIORETENTION BASIN ONCE IT HAS BEEN CONVERTED. ONCE ALL INLET/MANHOLES/PIPING HAS BEEN FLUSHED ALL SEDIMENT SHALL BE REMOVED FROM THE BASIN TO THE ELEVATIONS SPECIFIED TO PROVIDE THE 1' OF PLANTING SOIL.

3.) BIORETENTION BASINS SHALL BE PLANTED AS INDICATED ON THE PROJECT LANDSCAPE PLAN.

CROSS SECTION SCHEMATIC OF BIORETENTION BASIN - WITH UNDERDRAIN

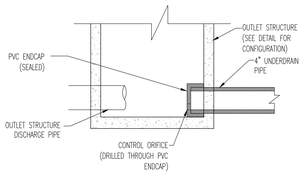
(APPLIES TO BIORETENTION BASINS #4, #5)

N.T.S.

BASIN	TOP OF BERM ELEV. (FT)	EMERGENCY SPILLWAY ELEV. (FT)	2 YEAR W.S.E. (FT)	100 YEAR W.S.E. (FT)	WQ ELEV. (FT)	BASIN BOTTOM ELEV. (FT)	SEDIMENT BASIN /TRAP BOTTOM ELEV. (FT)	BOTTOM OF PLANTING SOIL ELEV. (FT)	PLANTING SOIL DEPTH (FT)	BOTTOM OF SAND ELEV. (FT)	PLANTING SOIL DEPTH (FT)	UNDERDRAIN INV. ELEV. (FT)
BIORETENTION BASIN #4	449.50	448.00	446.64	447.71	446.25	446.00	446.00	445.00	1.0	444.00	1.0	443.75
BIORETENTION BASIN #5	445.00	443.50	441.78	442.94	441.25	441.00	441.00	440.00	1.0	439.00	1.0	438.75

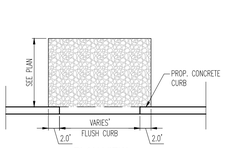
BIORETENTION #4 & #5 CONSTRUCTION SEQUENCE

1. THE BIORETENTION FACILITY SHALL BE EXCAVATED TO THE DEPTH AND SIZE REQUIRED. THE CONTRACTOR MUST TAKE CARE NOT TO COMPACT IN-SITU SOILS. DUE TO DEPTH OF LIMITING ZONE BIORETENTION BASINS #4 AND #5 SHALL BE OVER EXCAVATED BY 1.0' TO ALLOW FOR A SAND BACKFILL LAYER
2. SUBSOILS IN THE ENTIRE BIORETENTION AREA MUST BE THOROUGHLY AND DEEPLY SCARIFIED BEFORE THE CONTRACTOR PLACES THE PLANTING SOIL MATERIAL. SCARIFYING MUST BE DONE WITH A "TOOTHED" BACKHOE.
3. PLACE THE SANDBACKFILL LAYER TO 1.0' DEEP.
4. INSTALL UNDERDRAIN WITH SURROUNDING STONE AS SHOWN ON THE DETAIL.
5. INSTALL PLANTING SOIL MIX TO DEPTH REQUIRED.
6. PRE-SOAK THE PLANTING SOIL PRIOR TO PLANTING VEGETATION IN ORDER TO AID IN SETTLEMENT.
7. PLANT BIORETENTION FACILITIES WORKING FROM THE BOTTOM OF THE BASIN UP THE SIDES. BIORETENTION FACILITY SHRUBS AND TREES SHALL BE INSTALLED PER THE LANDSCAPE PLAN.



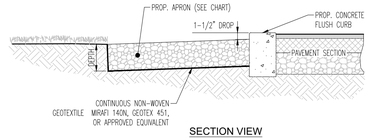
UNDERDRAIN CONTROL ORIFICE DETAIL
N.T.S.

CONTROL ORIFICE TABLE		
BASIN	CONTROL ORIFICE DIAMETER (INCHES)	INVERT OUT (FT)
AGB #4	0.50"	443.75
AGB #5	0.50"	438.75



PLAN VIEW

CURB BREAK	APRON	WIDTH
CB01	RIPRAP (R-3)	4'
CB02	RIPRAP (R-3)	4'
CB03	RIPRAP (R-3)	4'
CB04	RIPRAP (R-3)	4'
CB05	RIPRAP (R-3)	4'
CB06	RIPRAP (R-3)	4'
CB07	RIPRAP (R-3)	4'
CB08	RIPRAP (R-3)	4'
CB09	RIPRAP (R-3)	4'
CB10	RIPRAP (R-3)	4'
CB11	RIPRAP (R-3)	4'



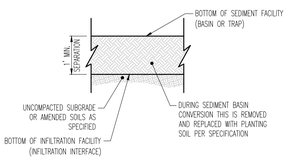
SECTION VIEW

DETAIL OF RIP-RAP AT CURB BREAK

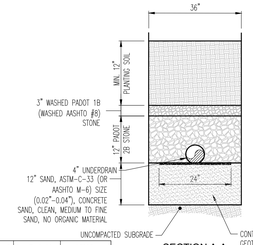
N.T.S.

PLANTING SOIL SPECIFICATIONS FOR B.M.P. FACILITIES

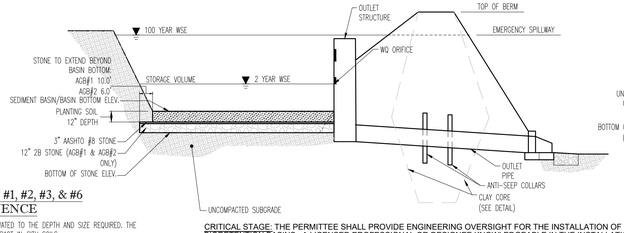
PLANTING SOIL SHALL BE A MANUFACTURED SOIL COMPRISED OF A CLEAN TOPSOIL SUPPLEMENTED WITH ORGANIC MATERIAL. THE TOPSOIL COMPONENT SHALL BE COMPRISED OF ROUGHLY 80% SAND, 10% CLAY AND 10% SILT BY VOLUME (PER PERMEABILITY CLASS K4 – SOILS WITH PERMEABILITY OF 6–20 IN/HR – OF THE USDA SOIL PERMEABILITY/TEXTURAL TRIANGLE). IT SHALL BE FREE OF ROCKS OR DEBRIS LARGER THAN 1/2" IN DIAMETER. THE ORGANIC MATTER COMPONENT SHALL BE COMPRISED OF COMPOST HIGH IN ORGANIC CONTENT (25%–40% ORGANIC MATTER). THESE COMPONENTS ARE TO BE KEPT SEPARATE UNTIL INSTALLATION. AT TIME OF INSTALLATION, THE TOPSOIL COMPONENT IS TO BE INSTALLED FIRST TO FULL DEPTH (PER THE DETAIL) WITH EXCEPTION OF THE TOP 2–3". 2–3" OF THE ORGANIC MATTER COMPONENT IS TO BE LAYERED ON TOP AND THEN TILLED TO A DEPTH OF 8–10" AND THEN HAND-RAKED SMOOTH. ONCE THE ORGANIC MATTER COMPONENT HAS BEEN PUT IN PLACE, HEAVY MACHINERY SHALL NOT PERMITTED WITHIN THE BMP AREA. THE FINISHED SOIL SHALL HAVE A pH OF 5.8–7.1 AND AN ORGANIC CONTENT 5–15%. THE CONTRACTOR SHALL SUBMIT DOCUMENTATION INCLUDING TEST DATA SHOWING, AT A MINIMUM, THE EXACT TEXTURAL COMPOSITION, THE pH AND SPECIFIC ORGANIC MATERIAL TO BE USED IN EACH BMP.



SEDIMENT CONTROL FACILITY
SEPARATION DETAIL
N.T.S.



SECTION A-A



BIORETENTION BASIN #1, #2, #3, & #6 CONSTRUCTION SEQUENCE

1. THE BIORETENTION FACILITY SHALL BE EXCAVATED TO THE DEPTH AND SIZE REQUIRED. THE CONTRACTOR MUST TAKE CARE NOT TO COMPACT IN-SITU SOILS.
2. SUBSOILS IN THE ENTIRE BIORETENTION AREA MUST BE THOROUGHLY AND DEEPLY SCARIFIED BEFORE THE CONTRACTOR PLACES THE PLANTING SOIL MATERIAL. SCARIFYING MUST BE DONE WITH A "TOOTHED" BACKHOE.
3. CONDUCT INFILTRATION TESTING IN BIORETENTION BASINS #1, #2, #3, & #6 TO ENSURE DESIGN RATES CAN BE ACHIEVED. PROVIDE RESULTS TO THE ENGINEER PROVIDING OVERSIGHT.
4. INSTALL THE 2B STONE TO THE DEPTH REQUIRED IN BIORETENTION BASINS #1 AND #2, FOR BIORETENTION BASINS #3 & #6 SKIP THIS STEP AND PROCEED TO STEP 5. ONCE THE 2B STONE HAS BEEN INSTALLED PLACE THE 3" OF AASHTO #8 STONE
5. INSTALL PLANTING SOIL MIX TO DEPTH REQUIRED.
6. PRE-SOAK THE PLANTING SOIL PRIOR TO PLANTING VEGETATION IN ORDER TO AID IN SETTLEMENT.
7. PLANT BIORETENTION FACILITIES WORKING FROM THE BOTTOM OF THE BASIN UP THE SIDES. BIORETENTION FACILITY SHRUBS AND TREES SHALL BE INSTALLED PER THE LANDSCAPE PLAN.

CRITICAL STAGE: THE PERMITTEE SHALL PROVIDE ENGINEERING OVERSIGHT FOR THE INSTALLATION OF THE BIORETENTION BASINS. A LICENSED PROFESSIONAL OR DESIGNEE KNOWLEDGEABLE IN THE INSTALLATION OF BIORETENTION BASINS., PREFERABLY THE DESIGN ENGINEER, SHALL CONDUCT THE OVERSIGHT.

NOTES:

1.) THE AREA DESIGNATED FOR INFILTRATION SHALL BE ENCLOSED WITH HI-VIS ORANGE FENCE TO MINIMIZE THE IMPACTS OF SURROUNDING CONSTRUCTION ACTIVITIES ON THE INFILTRATION CAPABILITIES OF THE NATIVE SOIL.

2.) CARE MUST BE TAKEN DURING THE EXCAVATION PROCESS TO MAKE SURE THAT SOIL COMPACTION DOES NOT OCCUR WITHIN THE BIORETENTION BASIN. FOLLOWING CONSTRUCTION AND SITE STABILIZATION, SEDIMENT SHALL BE REMOVED FROM THE BASIN AND FINAL GRADES ESTABLISHED USING NON-MECHANICAL METHODS.

3.) ONCE THE BIORETENTION BASIN IS READY TO BE CONVERTED ALL INLETS, MANHOLES AND STORM SEWER PIPE SHALL BE FLUSHED TO PREVENT ANY SEDIMENT FROM ENTERING THE INFILTRATION BASIN ONCE IT HAS BEEN CONVERTED. ONCE ALL INLET/MANHOLES/PIPING HAS BEEN FLUSHED ALL SEDIMENT SHALL BE REMOVED FROM THE BASIN TO THE ELEVATIONS SPECIFIED TO PROVIDE THE 1" OF PLANTING SOIL AND 1" OF STONE..

3.) BIORETENTION BASINS SHALL BE PLANTED AS INDICATED ON THE PROJECT LANDSCAPE PLAN.

CROSS SECTION SCHEMATIC OF BIORETENTION BASIN

(APPLIES TO BIORETENTION BASINS #1, #2, #3, #6)

N.T.S.

BASIN	TOP OF BERM ELEV. (FT)	EMERGENCY SPILLWAY ELEV. (FT)	2 YEAR W.S.E. (FT)	100 YEAR W.S.E. (FT)	WQ ELEV. (FT)	BASIN BOTTOM ELEV. (FT)	SEDIMENT BASIN /TRAP BOTTOM ELEV. (FT)	BOTTOM OF PLANTING SOIL ELEV. (FT)	PLANTING SOIL DEPTH (FT)	BOTTOM OF STONE ELEV. (FT)	STONE DEPTH SOIL DEPTH (FT)
BIORETENTION BASIN #1	436.00	434.00	430.16	432.74	430.95	429.00	429.00	428.00	1.0	427.00	1.0
BIORETENTION BASIN #2	428.84	426.51	424.00	426.29	423.82	422.00	422.00	421.00	1.0	420.00	1.0
BIORETENTION BASIN #3	455.00	453.50	452.09	453.29	452.00	451.00	451.00	450.00	1.0	N/A	N/A
BIORETENTION BASIN #6	442.00	440.50	438.68	439.89	438.55	438.00	438.00	437.00	1.0	N/A	N/A

UNIFORM PARCEL IDENTIFIER: 32-4-1090.1

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
INDUSTRIAL ARCHITECTURE
PERMITTING SERVICES
TRANSPORTATION SERVICES
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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	05/25/2022	REV. PER TOWNSHIP COMMENTS	LGU / MJB

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NOT APPROVED FOR CONSTRUCTION

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PROJECT No.:	PC211160
DRAWN BY:	LGU
CHECKED BY:	J.R.K.
DATE:	03/15/2022
CAD I.D.:	PC211160-CNDS-1A

PROJECT:

AMENDED FINAL PRD PLANS

FOR

PROSPERITY PROPERTY INVESTMENTS, LLC

"FINAL PLAN FOR LOT 2B OF PARCEL 5C"
PROPOSED COMMERCIAL DEVELOPMENT

GRAPHITE MINE ROAD & STATION BOULEVARD
UPPER UWCHLAN TOWNSHIP
CHESTER COUNTY
COMMONWEALTH OF PENNSYLVANIA

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1600 MANOR DRIVE, SUITE 200
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J.R. KORCZAK
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE084279
NEW JERSEY LICENSE No. 24GE04771400

SHEET TITLE:

POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS

SHEET NUMBER:

C-612

22 OF 37

REVISION 1 - 05/25/2022

I:\21PC\211160\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\PC211160-CNDS-1A-----LAYOUT: C-612 PCSWM DETAILS

PROP. DRIVE-THRU RESTAURANT (1,820 S.F.)
PROP. RETAIL STORE (1,800 S.F.)
PROP. DAYCARE CENTER (10,500 S.F.)
PROP. OUTDOOR PLAY AREA (5,000 S.F.)
PROP. RETAIL STORE (6,000 S.F.)
DRIVE THRU
DO NOT ENTER
EXISTING ULTIMATE RIGHT-OF-WAY LINE
EXISTING ULTIMATE RIGHT-OF-WAY LINE
APPROX. LOCATION OF ACCESS EASEMENT
EXISTING ULTIMATE RIGHT-OF-WAY LINE
EXISTING ULTIMATE RIGHT-OF-WAY LINE
EXISTING ULTIMATE RIGHT-OF-WAY LINE

GARDCO by Signify

Site & Area

EcoForm

ECF-S small area light

Gardco EcoForm Gen-2 combines economy with performance in an LED area luminaire. Capable of delivering up to 27,800 lumens or more in a compact, low profile LED luminaire, EcoForm offers a new level of customer value. EcoForm features an innovative retrofit arm kit, simplifying site conversions to LED by eliminating the need to drill additional holes in most existing poles. Integral control systems available for further energy savings. Includes Service Tag, our innovative way to provide assistance throughout the life of the product.

Project:

Location:

Cat.No.

Type:

Lamps: Qty:

Notes:

Ordering guide

example: ECF-S-64L-90G-NW-G2-AR-S-120-HIS-MGY

Style	Number of LEDs	Drive Current	LED Color - Generation	Mounting	Distribution	Voltage
ECF-S						
ECF-S EcoForm site and area	32L 32 LEDs (2 modules)	365 350 mA 530 530 mA 700 700 mA 1A 1,000 mA 1.5A 1,500 mA	WW-G2 Warm White 2000K, 70CRI Generation 2 NW-G2 Neutral White 4000K, 70CRI Generation 2 CW-G2 Cool White 5000K, 70CRI Generation 2	AR* Arm Mount (standard) The following mounting kits must be ordered separately (See accessories): SF* Slip Fitter Mount (7.0 lb max.) Wall mount with surface conduit entry, rear entry permitted Retrofit arm mount kit RAM* Retrofit Arm Mount kit	**Type 2** 2 Type 2 2-90 Rotated left 90° 2-270 Rotated right 270° **Type 3** 3 Type 3 3-90 Rotated left 90° 3-270 Rotated right 270° **Type 4** 4 Type 4 4-90 Rotated left 90° 4-270 Rotated right 270° **Type 5** 5 Type 5 **SW** Type SW	120 120V 208 208V 240 240V 277 277V 347 347V 480 480V UNV 120-277V (50/60Hz) HVU 347-480V (50/60Hz)
	48L 48 LEDs (3 modules)	900 900 mA 1.2A* 1,200 mA				
	64L 64 LEDs (4 modules)	900 900 mA*				

Options						
Dimming controls	Motion sensing lens	Photo sensing	Electrical	Luminaire	Finish	
DD[1,2] 0-10V External dimming (for controls by others) **DCC**[1,2,3,4] Dual Circuit Control **FASS**[1,2,5,6] Field Adjustable Wattage Selector **LLC**[1,2,7,8,9] Integral wireless module **SR**[1,2] Sensor Ready **SRDR**[1,2,4,5,6,7,8,9] SR driver connected to Zhaga socket **DynaDimmer:** Automatic Profile Dimming **CS50**[1,2,4,5,6,7,8,9] Safety 50% Dimming, 7 hours **CM50**[1,2,4,5,6,7,8,9] Median 50% Dimming, 7 hours **CS30**[1,2,4,5,6,7,8,9] Safety 30% Dimming, 7 hours **CM30**[1,2,4,5,6,7,8,9] Median 30% Dimming, 8 hours	**IMRS2**[10] Integral with #2 lens **IMRS7**[10] Integral with #7 lens	**PCB**[11] Photocontrol Button **TLRSC**[12,13,14,15,16] Twist Lock Receptacle **TLRSC**[12,13,14,15,16] Twist Lock Receptacle + 7 Pin **TLRPC**[12,13,14,15,16] Twist Lock Receptacle Photocell	**Fusing** **FF** Single (120, 277, 347VAC) **F2F** Double (208, 240, 480VAC) **Triple Mount Fusing** **FFF** Single (120, 277, 347VAC) **F2FF** Double (208, 240, 480VAC) **FFFF** Canadian Double Pull (208, 240, 480VAC) **Surge Protection** (10kA standard) **SPD** Increased 20kA	Square Pole Adapter (included 1 standard per product) **TBA**[17] Terminal Block **RPA**[17] Round Pole Adapter (fits to 3" O.D. tenon) **HIS**[18,19] External Hinge Side Shield	**Textured** **BK** Black **WH** White **BZ** Bronze **DGY** Dark Gray **MGY** Medium Gray **Customer specified** **RAL** Specify optional color or RAL **CC** Custom color (Must supply color chip for required factory quote)

1. BL-IMRS(7 equipped with out-boarded sensor housing when voltage is HVU (347-480V).
2. Mounts to a 4" round pole with adapter included for square poles.
3. Requires a minimum of 45 degrees aiming above horizontal.
4. Not available with other dimming control options.
5. Not available with motion sensor.
6. Not available with photocontrol.
7. Must specify a motion sensor lens.
8. Not available in 347 or 480V.
9. Must specify input voltage.
10. TLRSC, TLRSC7 and TLRPC receptacle pins 4 & 5 are capped off when ordered with any of the Dimming controls DD or FAMS or LLC.
11. Not available in 480V. Order photocell separately with TLRSC/7, TLRPC or specify PCB.
12. Not available with SF and RS. RPAs provided with black finish standard.
13. NEMA® twist-lock® is a registered trademark of Pass & Seymour, Inc.
14. HS not available with Type 5, SW, BL/ BL-IC-90, RL-270, LCL or RCL, optics.
15. Not available with DD, DCC, and FAMS dimming control options.
16. Not available with DC, DCC, FAMS and LLC dimming control options.
17. When ordering SRDR, controller (by others) to be used on socket must be 5ft c-impolite (See specifications for more details). Controller must be powered at all time. All 7 pin NEMA receptacle are connected to SR driver. SRDR not available with TLRSC or TLRPC.
18. 0-10V dimming driver standard.
19. LCL and RCL not available with 4RL-1 24 or 64L-1A.

ECF-S EcoForm small

Area luminaire

EcoForm Accessories[21] (ordered separately, field installed)

Shielding Accessories

House Side shield
Standard optic orientation:
HS-12-H * Internal House Side Shield for 32 LEDs (2 modules)
HS-48-H * Internal House Side Shield for 48 LEDs (3 modules)
HS-64-H * Internal House Side Shield for 64 LEDs (4 modules)

Optic at 90 or 270 orientation:
HS-12-V * Internal House Side Shield for 32 LEDs (2 modules)
HS-48-V * Internal House Side Shield for 48 LEDs (3 modules)
HS-64-V * Internal House Side Shield for 64 LEDs (4 modules)

Luminaire Accessories

ECF-SD-G2 Bird deterrent
ECF-RAM-G2-(F) Retrofit Arm mount kit
ECF-SF-G2-(F) Slip Fitter Mount (fits to 2 3/8" O.D. tenon)
ECF-WS-G2-(F) Wall mount with surface conduit entry permitted
Wall mount with surface conduit entry

EcoForm PTF2
Pole Top Fitter fits 2-3/8-2" OD x 4" depth tenon)
PTF2-ECF-S/L-1-90-(F) 1 luminaire at 90°
PTF2-ECF-S/L-2-90-(F) 2 luminaires at 90°
PTF2-ECF-S/L-3-90-(F) 3 luminaires at 90°
PTF2-ECF-S/L-4-90-(F) 4 luminaires at 90°
PTF2-ECF-S/L-2-120-(F) 2 luminaires at 120°
PTF2-ECF-S/L-3-120-(F) 3 luminaires at 120°

EcoForm PTF3
Pole Top Fitter fits 3-3/8-2" OD x 6" depth tenon)
PTF3-ECF-S/L-1-90-(F) 1 luminaire at 90°
PTF3-ECF-S/L-2-90-(F) 2 luminaires at 90°
PTF3-ECF-S/L-3-90-(F) 3 luminaires at 90°
PTF3-ECF-S/L-4-90-(F) 4 luminaires at 90°
PTF3-ECF-S/L-2-120-(F) 2 luminaires at 120°
PTF3-ECF-S/L-3-120-(F) 3 luminaires at 120°

EcoForm PTF4
Pole Top Fitter fits 3½-4" OD x 6" depth tenon)
PTF4-ECF-S/L-1-90-(F) 1 luminaire at 90°
PTF4-ECF-S/L-2-90-(F) 2 luminaires at 90°
PTF4-ECF-S/L-3-90-(F) 3 luminaires at 90°
PTF4-ECF-S/L-4-90-(F) 4 luminaires at 90°
PTF4-ECF-S/L-2-120-(F) 2 luminaires at 120°
PTF4-ECF-S/L-3-120-(F) 3 luminaires at 120°

(F) = Specify finish

Ready to Go configurations (when ordered with the "RS-" catalog code, the following configurations will ship in 2 weeks):

Catalog Number	12NC
RS-ECF-S-32L-1A-NW-G2-AR-3-UNV-BZ	912401466002
RS-ECF-S-32L-1A-NW-G2-AR-3-UNV-MGY	912401466003
RS-ECF-S-32L-1A-NW-G2-AR-3-UNV-BK	912401534554
RS-ECF-S-32L-1A-NW-G2-AR-4-UNV-BZ	912401466004
RS-ECF-S-32L-1A-NW-G2-AR-4-UNV-MGY	912401466005
RS-ECF-S-32L-1A-NW-G2-AR-4-UNV-BK	912401534555
RS-ECF-S-32L-1A-NW-G2-AR-5-UNV-BZ	912401466006
RS-ECF-S-32L-1A-NW-G2-AR-5-UNV-MGY	912401466007
RS-ECF-S-32L-1A-NW-G2-AR-5-UNV-BK	912401534556
RS-ECF-S-48L-1A-NW-G2-AR-3-UNV-BZ	912401466008
RS-ECF-S-48L-1A-NW-G2-AR-3-UNV-MGY	912401466009
RS-ECF-S-48L-1A-NW-G2-AR-3-UNV-BK	912401534557
RS-ECF-S-48L-1A-NW-G2-AR-4-UNV-BZ	912401466010
RS-ECF-S-48L-1A-NW-G2-AR-4-UNV-MGY	912401466011
RS-ECF-S-48L-1A-NW-G2-AR-4-UNV-BK	912401534558
RS-ECF-S-48L-1A-NW-G2-AR-5-UNV-BZ	912401466012
RS-ECF-S-48L-1A-NW-G2-AR-5-UNV-MGY	912401466013
RS-ECF-S-48L-1A-NW-G2-AR-5-UNV-BK	912401534559
RS-ECF-S-64L-1A-NW-G2-AR-3-UNV-BZ	912401466014
RS-ECF-S-64L-1A-NW-G2-AR-3-UNV-MGY	912401466015
RS-ECF-S-64L-1A-NW-G2-AR-3-UNV-BK	912401534560
RS-ECF-S-64L-1A-NW-G2-AR-4-UNV-BZ	912401466016
RS-ECF-S-64L-1A-NW-G2-AR-4-UNV-MGY	912401466017
RS-ECF-S-64L-1A-NW-G2-AR-4-UNV-BK	912401534561
RS-ECF-S-64L-1A-NW-G2-AR-5-UNV-BZ	912401466018
RS-ECF-S-64L-1A-NW-G2-AR-5-UNV-MGY	912401466019
RS-ECF-S-64L-1A-NW-G2-AR-5-UNV-BK	912401534562
RS-ECF-RAM-G2-BZ	912401466487
RS-ECF-RAM-G2-MGY	912401466488
RS-ECF-RAM-G2-BK	912401466489
RS-HIS-32-H	912401466490
RS-HIS-48-H	912401466491
RS-HIS-64-H	912401466493

ECF-S EcoForm small

Area luminaire

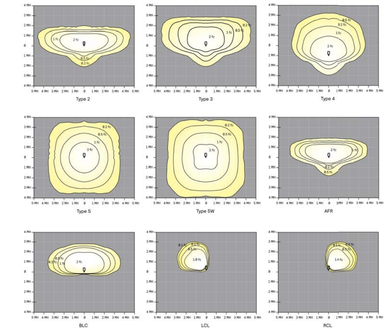
Predicted Lumen Depreciation Data

Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions.L_{70} is the predicted time when LED performance depreciates to 70% of initial lumen output. Calculated per IESNA TM21-11. Published L_{70} hours limited to 6 times actual LED test hours

Ambient Temperature °C	Driver mA	Calculated L_{70} Hours	L_{70} per TM-21	Lumen Maintenance % at 60,000 hrs
25°C	up to 1200 mA	>100,000 hours	>120,000 hours	>99%

Optical Distributions

Based on configuration ECF-S-48L-1A-NW-G2 (159W) mounted at 20ft.



Ready to Go configurations (when ordered with the "RS-" catalog code, the following configurations will ship in 2 weeks):

Catalog Number	12NC
RS-ECF-S-64L-1A-NW-G2-AR-3-UNV-BK	912401534560
RS-ECF-S-64L-1A-NW-G2-AR-4-UNV-BZ	912401466016
RS-ECF-S-64L-1A-NW-G2-AR-4-UNV-MGY	912401466017
RS-ECF-S-64L-1A-NW-G2-AR-4-UNV-BK	912401534561
RS-ECF-S-64L-1A-NW-G2-AR-5-UNV-BZ	912401466018
RS-ECF-S-64L-1A-NW-G2-AR-5-UNV-MGY	912401466019
RS-ECF-S-64L-1A-NW-G2-AR-5-UNV-BK	912401534562
RS-ECF-RAM-G2-BZ	912401466487
RS-ECF-RAM-G2-MGY	912401466488
RS-ECF-RAM-G2-BK	912401466489
RS-HIS-32-H	912401466490
RS-HIS-48-H	912401466491
RS-HIS-64-H	912401466493

ECF-S EcoForm small

Area luminaire

3000K LED Wattage and Lumen Values

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type 2 Lumen Output	Type 2 BUG Rating	Type 2 Efficacy (LPW)	Type 3 Lumen Output	Type 3 BUG Rating	Type 3 Efficacy (LPW)	Type 4 Lumen Output	Type 4 BUG Rating	Type 4 Efficacy (LPW)	Type 5 Lumen Output	Type 5 BUG Rating	Type 5 Efficacy (LPW)	Type SW Lumen Output	Type SW BUG Rating	Type SW Efficacy (LPW)
ECF-S-32L-365-WW-G2-x	32	365	3000	46	5,558	B1-U0-G1	121	5,403	B1-U0-G2	118	5,637	B1-U0-G2	123	5,760	B1-U0-G2	125	5,604	B1-U0-G2	122
ECF-S-32L-530-WW-G2-x	32	530	3000	66	7,958	B2-U0-G2	109	7,659	B1-U0-G2	107	7,937	B1-U0-G2	112	7,784	B1-U0-G2	110	7,884	B1-U0-G2	111
ECF-S-32L-700-WW-G2-x	32	700	3000	78	9,720	B2-U0-G2	101	9,357	B2-U0-G2	97	9,692	B2-U0-G2	100	9,507	B2-U0-G2	103	9,585	B2-U0-G2	99
ECF-S-32L-1A-WW-G2-x	32	1050	3000	106	13,001	B3-U0-G2	123	12,718	B2-U0-G2	120	13,306	B3-U0-G3	126	13,665	B4-U0-G2	129	13,237	B4-U0-G2	125
ECF-S-32L-1.2A-WW-G2-x	32	1200	3000	122	14,421	B3-U0-G2	119	14,108	B2-U0-G2	116	14,760	B3-U0-G3	121	14,766	B4-U0-G2	121	14,677	B4-U0-G2	121
ECF-S-48L-WW-G2-x	48	900	3000	155	19,784	B3-U0-G3	128	19,364	B3-U0-G3	125	17,139	B3-U0-G3	111	19,961	B4-U0-G3	129	17,453	B5-U0-G3	113
ECF-S-48L-1A-WW-G2-x	48	1050	3000	159	19,391	B3-U0-G3	122	18,960	B3-U0-G3	119	19,836	B3-U0-G4	125	20,072	B5-U0-G3	126	19,717	B5-U0-G3	124
ECF-S-48L-1.2A-WW-G2-x	48	1200	3000	178	22,048	B4-U0-G4	124	22,056	B3-U0-G4	124	22,050	B4-U0-G4	124	22,948	B5-U0-G4	129	22,706	B5-U0-G4	128
ECF-S-64L-900-WW-G2-x	64	900	3000	178	22,652	B3-U0-G3	127	22,161	B3-U0-G4	125	23,193	B3-U0-G4	130	23,910	B5-U0-G3	134	23,545	B5-U0-G3	132
ECF-S-64L-1A-WW-G2-x	64	1050	3000	206	25,533	B3-U0-G4	124	24,966	B3-U0-G4	121	26,106	B3-U0-G4	127	26,191	B5-U0-G4	127	25,964	B5-U0-G4	126

4000K LED Wattage and Lumen Values

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type 2 Lumen Output	Type 2 BUG Rating	Type 2 Efficacy (LPW)	Type 3 Lumen Output	Type 3 BUG Rating	Type 3 Efficacy (LPW)	Type 4 Lumen Output	Type 4 BUG Rating	Type 4 Efficacy (LPW)	Type 5 Lumen Output	Type 5 BUG Rating	Type 5 Efficacy (LPW)	Type SW Lumen Output	Type SW BUG Rating	Type SW Efficacy (LPW)
ECF-S-32L-365-NW-G2-x	32	365	4000	46	5,769	B1-U0-G1	125	5,607	B1-U0-G2	122	5,851	B1-U0-G2	127	5,980	B1-U0-G2	130	5,818	B1-U0-G2	126
ECF-S-32L-530-NW-G2-x	32	530	4000	66	8,256	B2-U0-G2	113	7,948	B1-U0-G2	109	8,236	B1-U0-G2	114	8,082	B2-U0-G2	110	8,182	B2-U0-G2	112
ECF-S-32L-700-NW-G2-x	32	700	4000	78	10,085	B2-U0-G2	105	9,713	B2-U0-G2	101	10,061	B2-U0-G2	104	9,867	B2-U0-G2	103	9,948	B2-U0-G2	103
ECF-S-32L-1A-NW-G2-x	32	1050	4000	106	13,491	B3-U0-G2	128	13,195	B2-U0-G2	124	13,806	B3-U0-G3	130	14,179	B4-U0-G2	134	13,736	B4-U0-G2	129
ECF-S-32L-1.2A-NW-G2-x	32	1200	4000	122	14,963	B3-U0-G2	123	14,639	B2-U0-G2	120	15,315	B3-U0-G3	126	15,318	B4-U0-G2	126	15,227	B4-U0-G2	125
ECF-S-48L-NW-G2-x	48	900	4000	155	19,276	B3-U0-G3	124	18,864	B3-U0-G3	122	19,443	B3-U0-G3	126	19,961	B4-U0-G3	129	19,717	B4-U0-G3	127
ECF-S-48L-1A-NW-G2-x	48	1050	4000	159	20,128	B3-U0-G3	127	19,692	B3-U0-G3	124	20,299	B3-U0-G4	128	20,072	B5-U0-G3	126	19,717	B5-U0-G3	124
ECF-S-48L-1.2A-NW-G2-x	48	1200	4000	178	22,881	B3-U0-G4	129	22,889	B3-U0-G4	129	22,882	B4-U0-G4	129	22,948	B5-U0-G4	129	22,706	B5-U0-G4	128
ECF-S-64L-900-NW-G2-x	64	900	4000	178	23,483	B3-U0-G3	132	22,982	B3-U0-G4	129	24,054	B3-U0-G4	135	24,793	B5-U0-G3	139	24,419	B5-U0-G3	137
ECF-S-64L-1A-NW-G2-x	64	1050	4000	206	26,483	B3-U0-G3	128	25,897	B3-U0-G4	126	27,063	B3-U0-G4	131	27,165	B5-U0-G4	132	26,909	B5-U0-G4	130

5000K LED Wattage and Lumen Values

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type 2 Lumen Output	Type 2 BUG Rating	Type 2 Efficacy (LPW)	Type 3 Lumen Output	Type 3 BUG Rating	Type 3 Efficacy (LPW)	Type 4 Lumen Output	Type 4 BUG Rating	Type 4 Efficacy (LPW)	Type 5 Lumen Output	Type 5 BUG Rating	Type 5 Efficacy (LPW)	Type SW Lumen Output	Type SW BUG Rating	Type SW Efficacy (LPW)
ECF-S-32L-365-CW-G2-x	32	365	5000	46	5,773	B1-U0-G1	125	5,611	B1-U0-G2	122	5,855	B1-U0-G2	127	5,984	B1-U0-G2	130	5,822	B1-U0-G2	126
ECF-S-32L-530-CW-G2-x	32	530	5000	66	8,262	B2-U0-G2	113	7,953	B1-U0-G2	109	8,242	B1-U0-G2	114	8,088	B2-U0-G2	110	8,188	B2-U0-G2	112
ECF-S-32L-700-CW-G2-x	32	700	5000	78	10,093	B2-U0-G2	105	9,721	B2-U0-G2	101	10,069	B2-U0-G2	104	9,875	B2-U0-G2	103	9,956	B2-U0-G2	103
ECF-S-32L-1A-CW-G2-x	32	1050	5000	106	14,176	B3-U0-G2	134	13,866	B2-U0-G2	131	14,509	B3-U0-G3	137	14,904	B4-U0-G2	141	14,440	B4-U0-G2	136
ECF-S-32L-1.2A-CW-G2-x	32	1200	5000	122	15,725	B3-U0-G2	129	15,387	B2-U0-G2	126	16,097	B3-U0-G3	132	16,102	B4-U0-G2	132	16,000	B4-U0-G2	131
ECF-S-48L-NW-G2-x	48	900	5000	155	18,864	B3-U0-G2	122	18,464	B3-U0-G2	119	19,031	B3-U0-G3	123	19,543	B4-U0-G3	126	19,304	B4-U0-G3	124
ECF-S-48L-1A-NW-G2-x	48	1050	5000	159	21,133	B3-U0-G3	133	20,693	B3-U0-G3	130	21,314	B3-U0-G4	134	21,083	B5-U0-G3	132	20,703	B5-U0-G3	130
ECF-S-48L-1.2A-NW-G2-x	48	1200	5000	178	24,025	B3-U0-G4	135	23,483	B3-U0-G4	132	24,034	B4-U0-G4	135	24,095	B5-U0-G4	135	23,841	B5-U0-G4	134
ECF-S-64L-900-NW-G2-x	64	900	5000	178	24,700	B3-U0-G3	139	24,159	B3-U0-G4	136	25,281	B3-U0-G4	142	26,068	B5-U0-G3	146	25,668	B5-U0-G3	144
ECF-S-64L-1A-NW-G2-x	64	1050	5000	206	27,828	B4-U0-G3	139	27,209	B3-U0-G4	132	28,443	B4-U0-G4	142	28,534	B5-U0-G4	142	28,234	B5-U0-G4	141

ECF-S EcoForm small

Area luminaire

3000K LED Wattage and Lumen Values

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type AFR Lumen Output	Type AFR BUG Rating	Type AFR Efficacy (LPW)	BLC Lumen Output	BLC BUG Rating	BLC Efficacy (LPW)	LCL or RCL Lumen Output	LCL or RCL BUG Rating	LCL or RCL Efficacy (LPW)
ECF-S-32L-365-WW-G2-x	32	365	3000	46	5,706	B2-U0-G1	143	3,691	B0-U0-G1	94	2,449	B0-U0-G1	62
ECF-S-32L-530-WW-G2-x	32	530	3000	66	7,347	B2-U0-G2	111	5,065	B0-U0-G1	81	3,360	B0-U0-G1	51
ECF-S-32L-700-WW-G2-x	32	700	3000	78	8,567	B2-U0-G2	101	6,428	B0-U0-G2	89	4,156	B0-U0-G2	57
ECF-S-32L-1A-WW-G2-x	32	1050	3000	106	11,457	B3-U0-G2	126	8,004	B1-U0-G2	87	5,781	B1-U0-G2	56
ECF-S-32L-1.2A-WW-G2-x	32	1200	3000	122	14,935	B3-U0-G2	122	10,015	B1-U0-G2	84	6,428	B1-U0-G2	53
ECF-S-48L-WW-G2-x	48	900	3000	155	17,733	B3-U0-G2	111	11,880	B1-U0-G2	89	7,690	B0-U0-G2	57
ECF-S-48L-1A-WW-G2-x	48	1050	3000	159	20,078	B3-U0-G2	127	13,453	B1-U0-G2	88	8,638	B1-U0-G2	55
ECF-S-48L-1.2A-WW-G2-x	48	1200	3000	193	23,288	B3-U0-G2	122	14,934	B1-U0-G2	83			
ECF-S-64L-900-WW-G2-x	64	900	3000	178	23,403	B3-U0-G2	132	15,723	B1-U0-G2	90	10,088	B0-U0-G2	58
ECF-S-64L-1A-WW-G2-x	64	1050	3000	206	26,431	B4-U0-G3	128	17,714	B1-U0-G3	87			

4000K LED Wattage and Lumen Values

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type AFR Lumen Output	Type AFR BUG Rating	Type AFR Efficacy (LPW)	BLC Lumen Output	BLC BUG Rating	BLC Efficacy (LPW)	LCL or RCL Lumen Output	LCL or RCL BUG Rating	LCL or RCL Efficacy (LPW)
ECF-S-32L-365-NW-G2-x	32	365	4000	46	5,769	B1-U0-G1	145	3,731	B0-U0-G1	95	2,475	B0-U0-G1	63
ECF-S-32L-530-NW-G2-x	32	530	4000	66	7,424	B2-U0-G2	112	5,118	B1-U0-G2	77	3,396	B0-U0-G2	51
ECF-S-32L-700-NW-G2-x	32	700	4000	78	9,703	B2-U0-G3	103	6,928	B2-U0-G2	100	9,949	B2-U0-G3	104
ECF-S-32L-1A-NW-G2-x	32	1050	4000	106	12,985	B3-U0-G3	122	10,346	B2-U0-G3	97	14,906	B3-U0-G3	140
ECF-S-32L-1.2A-NW-G2-x	32	1200	4000	122	15,160	B3-U0-G3	125	14,852	B2-U0-G2	122	15,537	B2-U0-G3	128
ECF-S-48L-NW-G2-x	48	900	4000	155	19,276	B3-U0-G3	124	11,905	B2-U0-G3	130	18,440	B3-U0-G3	119
ECF-S-48L-1A-NW-G2-x	48	1050	4000	159	21,417	B3-U0-G3	134	13,359	B2-U0-G3	124	21,444	B3-U0-G3	135
ECF-S-48L-1.2A-NW-G2-x	48	1200	4000	193	23,288	B3-U0-G3	129	18,359	B2-U0-G4	128	22,706	B3-U0-G3	118
ECF-S-64L-900-NW-G2-x	64	900	4000	178	24,700	B3-U0-G3	139	16,898	B1-U0-G3	97	10,883	B0-U0-G2	62
ECF-S-64L-1A-NW-G2-x	64	1050	4000	206	27,828	B4-U0-G3	135	18,950	B1-U0-G3	94			

ECF-S EcoForm small

Area luminaire

Dimensions

Standard Arm (AR)

Weight: 22 Lbs (9.9 Kg). EPA: 0.29ft² (.058m²)

Wall (WS)

Weight: 27 Lbs. (12.2Kg) EPA: 0.279ft² (.025m²)

Retrofit Arm (RAM)

Weight: 24 Lbs (10.9 Kg) EPA: 0.24ft² (.022m²)

Slip fitter (SF)

Weight: 27 Lbs (12.2 Kg) EPA: 0.331ft² (.031m²)

Outboard IMR-HVU sensor

Standard Arm (AR) drill pattern

Retrofit Arm (RAM) drill patterr

ECF-S EcoForm small

Area luminaire

Optical Orientation Information

Standard Optic Position

Luminaires ordered with asymmetric optical systems in the standard optic position will have the optical system oriented as shown below:

Note: The hand hole will normally be located on the pole at the 0° point.

Optic Rotated Right (270°) Optic Position

Luminaires ordered with optical systems in the Optic Rotated Right (270°) optic position will have the optical system oriented as shown below (Type 5 and SW optics are not available with factory set rotatable optics):

Note: The hand hole will normally be located on the pole at the 0° point.

Optic Rotated Left (90°) Optic Position

Luminaires ordered with optical systems in the Optic Rotated Left (90°) optic position will have the optical system oriented as shown below (Type 5 and SW optics are not available with factory set rotatable optics):

Note: The hand hole will normally be located on the pole at the 0° point.

Twin Luminaire Assemblies with Type-90/Type-270 Rotated Optical Systems

Twin luminaire assemblies installed with rotated optical systems are an excellent way to direct light toward the interior of the site (Street Side) without additional equipment. It is important, however, that care be exercised to insure that luminaires are installed in the proper location.

Note: The hand hole will normally be located on the pole at the 0° point.

Luminaires with Optic Rotated Right (270°) are installed on the LEFT Side of Pole

Luminaires with Optic Rotated Left (90°) are installed on the RIGHT Side of Pole

Note: The hand hole location will depend on the drilling configuration ordered for the pole.

ECF-S_E

Stonco
by ⓖsignify

Wall mount
LytePro
LPW16 medium wall sconce

Stonco LytePro LED medium wall sconce LPW16 features outstanding value in a compact, architectural design. This powerful and precise combination offers outstanding energy savings with excellent photometric performance. LPW16 is ideal for entryways and corridors in addition to wall lighting applications requiring strong lateral spacing and forward pattern projection.

Project:
Location:
Cat.No.
Type:
Lamps: Qty
Notes:

Ordering guide

Example: LPW16-20-NW-G3-3-120-PCB-BZ

	Options									
Prefix	Wattage	LED Color/Gen		Distribution	Voltage	Photocontrol	Location		Finish	
LPW16										
LPW16 LytePro 16 LED medium wall sconce	20 20W 30 30W 50 50W	NW-G3 Neutral White 4000K 70 CRI Generation 3 WW-G3 Warm White 3000K 70 CRI Generation 3		2 Type 2 3 Type 3 4 Type 4	120 120V 208 208V 240 240V 277 277V 347 347V 480 480V UNV 120-277V (50/60Hz) HVU 347-480V (50/60Hz)	--- None PCB Photocontrol Button[1]	BAC[2] Meets the requirements of the Buy American Act of 1933 (BAA)		Textured BK Black WH White BZ Bronze DGY Dark Gray MGY Medium Gray	
									Customer specified RAL Specify optional color or RAL (ex: QC-LGP or QC-RAL7024) CC Custom color (must supply color chip and required factory quote)	

Stocked luminaires – Ordering guide

Catalog Number	Description	Master Pack, Qty	UPC Code
LPW16-G3-B-BZ	LPW16, 30W, 650mA, 4000K, Type 3, 120-277V, Bronze textured paint	6	622252813872
LPW16-G3-B-DGY	LPW16, 30W, 650mA, 4000K, Type 3, 120-277V, Dark gray textured paint	6	622252813865

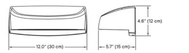
Stocked accessories – Ordering guide (Must be ordered separately)[4]

Catalog Number	Description	Master Pack, Qty	UPC Code
LPWCVRPLT-BZ[1]	LPW Universal wall cover mounting plate, Bronze textured paint	(none)	19009614860

1. Must specify voltage. Not available in 347V or 480V.
2. Other colors available upon request as made-to-order
3. Failure to properly select the "BAC" suffix could result in you receiving product that is not BAA compliant product with no recourse for an RMA or refund. This BAC designation hereunder applies to the Buy American Act of 1933 (BAA) only and does not apply to (i) the Trade Agreements Act, or (ii) the "Buy America" domestic content requirements imposed on states, localities, and other non-federal entities as a condition of receiving funds administered by the Department of Transportation or other federal agencies.
4. Consult Signify to confirm whether specific accessories are BAA-compliant.

LPW16 LytePro
LED medium wall sconce

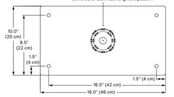
Dimensions



Luminaire weight: 6lbs (2.7 kg)

Accessory dimensions (ordered separately)

LPWCVRPLT-BZ LPW Universal wall cover mounting plate, 0.08" aluminum, bronze textured paint (used to cover larger pre-existing opening or surfaces, field installed). Offers same J-Box pattern as luminaire or may lagged to wall using (4) knockouts.



LED Wattage and Lumen Values

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type 2 Lumen Output	Type 2 BUG Rating	Type 2 Efficacy (LPW)	Type 3 Lumen Output	Type 3 BUG Rating	Type 3 Efficacy (LPW)	Type 4 Lumen Output	Type 4 BUG Rating	Type 4 Efficacy (LPW)
LPW-16-20-NW-G3	16	400	4000	22	3,720	B1-U0-G1	122	3,668	B1-U0-G1	120	3,632	B1-U0-G1	118
LPW-16-30-NW-G3	16	650	4000	34	4,089	B1-U0-G1	119	4,003	B1-U0-G1	117	3,950	B1-U0-G1	115
LPW-16-50-NW-G3	16	900	4000	48	5,448	B1-U0-G1	114	5,334	B1-U0-G1	111	5,263	B1-U0-G1	110
LPW-16-20-WW-G3	16	400	3000	22	2,510	B1-U0-G1	113	2,457	B1-U0-G1	110	2,425	B1-U0-G1	109
LPW-16-30-WW-G3	16	650	3000	34	3,766	B1-U0-G1	110	3,687	B1-U0-G1	107	3,638	B1-U0-G1	106
LPW-16-50-WW-G3	16	900	3000	48	5,207	B1-U0-G1	106	4,912	B1-U0-G1	103	4,848	B1-U0-G1	102

Values from photometric tests performed in accordance with IESNA LM-79 and are representative of the configurations shown.
Actual performance may vary due to installation and environmental variables. LED and driver tolerances, and field measurement considerations. It is highly recommended to confirm performance with a photometric layout.
NOTE: Some data may be scaled based on tests of similar (but not identical) luminaires. Contact factory for configurations not shown.

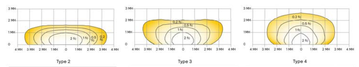
Predicted lumen depreciation data

Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology.
Actual experience may vary due to field application conditions Ly is the predicted time when LED performance depreciates to 70% of initial lumen output. Calculated per IESNA TM21-11. Published Ly hours limited to 6 times actual LED test hours

Ambient Temperature °C	Drive current	Calculated Ly Hours	Ly per TM-21	Lumen Maintenance % at 60,000 hrs
40°C	up to 1200 mA	>100,000 hours	>40,000 hours	>89%

Optical distributions

Based on LPW16-30-NW-G3 at 15' mounting height



LPW16 15' mounting height			
Mounting height	10 ft	12 ft	15 ft
Multiplier	1.39	1.14	1.00

LPW16 10' mounting height			
Mounting height	10%	12 %	15 %
Multiplier	1.67	1.34	1.00

LPW16 10' mounting height			
Mounting height	10 %	12 %	15 %
Type A=>	1.46	1.27	0.87

LPW16 LytePro
LED medium wall sconce

General Description

LytePro LED medium wall sconce LPW16 combines excellent performance, design and value to meet the needs of the energy and budget conscious. LPW16 is ideal for entry, corridor and general wall lighting surface mount applications, over recessed j-boxes or where power can be directly fed through back surface, whereby connections splices can be made inside the luminaire housing. Two SKU's are available w/ in-stock configurations only (2-day quick ship).

Housing

Die-cast housing houses both the LED and driver assemblies. Design incorporates an integrated heat sink to maximize thermal performance and reliability. Backplate is corrosion free, composite polycarbonate, with built-in level bubble, offers integrated locking hook and mount design for easy installation.

Mounting

Easy interlocking hook and mount housing/ backplate design for easy installation. Mounts over 3.5", 4" octagonal j-boxes and single gang switch boxes or can be directly lagged to surface. Ensure proper steps for gasket/sealing luminaire to surface.

IP Rating

Optical compartment is IP65 rated sealed with tempered glass, gasket and frame.

LED Board and Array

Provides up to 104 lm/W at the system level. Standard color temp is 4000K or 3000K +/- 250K, minimum 70 CRI.

Electrical

Driver efficiency (>90% standard). 120-277V and 347-480V available. All drivers are dimmable. Temp range: -40°C (-40°F) to 40°C (104°F). Open/short circuit protection. Inherent surge protection up to (6KVA). RoHS compliant.

Surge protection (SPD): Surge protection device tested in accordance with ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/10kA waveforms for Line-Ground, Line-Neutral and Neutral-Ground, and in accordance with DOE MSSLC Model Specification for LED Roadway Luminaires Appendix D Electrical immunity High test level 10kV/10kA.

Listings

Product is cETLus listed suitable for Wet Locations. Suitable for use in ambients from -40°C to 40°C (-40°F to 104°F). DesignLights Consortium® qualified.

Finish

Each luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish.

Warranty

LPW16 luminaires, the LED arrays, and the drivers are all covered by a 5-year limited warranty. See www.signify.com/warranties for details.

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GARDCO
by ⓖsignify

Wall Mount
LED Wall Sconce
101L

Gardco 101 LED wall sconces feature a low-profile design that provides wide flexibility in high performance exterior wall illumination. Full cutoff performance, usable illumination patterns, and powerful wattages combine into a compact and architecturally pleasing design. 101L sconces are available in Type 2, 3, and 4 distributions, and provide output of up to 12,000 lumens. Energy saving control options increase energy savings and offer California Title 24 compliance. Emergency Battery Backup option available for path of egress.

Project:
Location:
Cat.No.
Type:
Lamps: Qty
Notes:

Ordering guide

example: 101L-32L-700-NW-G2-3-120-BL-IMR2-BZ

Prefix	Number of LEDs	Drive Current	LED Color + Generation	Distribution	Emergency	Voltage
101L						
101L 101L LED Wall Sconce	16L 16 LEDs (1 module)	200 200mA 400 400mA 530 530mA 700 700mA 1000 1000mA 1200 1200mA	CW-G2 Cool White 5000K 70CRI Generation 2 NW-G2 Neutral White 4000K, 70 CRI Generation 2 WW-G2 Warm White 3000K 70 CRI Generation 2 WW-G3 Warm White 3000K 90 CRI Generation 3[1] NW-G3 Neutral White 4000K 90 CRI Generation 3[1] BW-G2 Balanced White 3500K 70 CRI Generation 2[1] BW-G3 Balanced White 3500K 90 CRI Generation 3[1]	2 Type 2 3 Type 3 4 Type 4	EMPC Emergency Battery Pack Cold Weather[2]	UNV 120-277V HVU 347-480V 120 120V 208 208V 240 240V 277 277V 347 347V 480 480V
	32L 32 LEDs (2 modules)	530 530mA 700 700mA 1000 1000mA			Leave blank to omit an emergency option	

Options					
Dimming Controls	Motion Sensing Ints	Photo-sensing	Electrical	Finish	
0-10V External dimming (controls by others)[3]	IMR2 Integral with #2 lens[4]	PCB Photocontrol Button[5]	Fusing F1 Single (120, 277, 347VAC)[6] F2 Double (208, 240, 480VAC)[6] CAN Canadian Double Pull (208, 240, 480VAC)[7]	Textured BK Black WH White BZ Bronze MGY Medium Gray	
DCC Dual Circuit Control[3,8,9]	IMR3 Integral with #3 lens[4]	TLRDS Twist Lock Receptacle 5 Pin Only[10]			
FAWS Field Adjustable Wattage[3,11]		TLRGT Twist Lock Receptacle 3 Pin Only[10]			
RL Bi-level functionality with motion sensor[3]		TLRPC Twist Lock Receptacle with Photocell[10,11]	Surge Protection (DNA standard) SPD Increased 20kA		
DynaDimmer: Automatic Profile Dimming[3,12]				Customer specified	
CSSD Security 50% Dimming, 7 hours				RAL Specify optional color or RAL (ex: QC-LGP or QC-RAL7024)	
CMSD Medium 50% Dimming, 6 hours				CC Custom color (must supply color chip and required factory quote)	
CSSS Security 30% Dimming, 7 hours					
CMSS Medium 30% Dimming, 6 hours					

1. Only 16L up to 700mA can be used with battery backup (EBPC) configuration.
2. Not available with lead times apply. Contact factory for details.
3. Available in 120° or 277V only.
4. Not available with other dimming control options.
5. Not available with motion sensor.
6. Not available with photocontrol.
7. Not available in 347 or 480V.
8. Must specify input voltage.
9. Not available with 200mA or 530mA.
10. Not available with DCC, and IMR3 dimming control options.
11. Must specify a motion sensor lens. Limited to 30°C ambient if combined with 3GL-1000mA (107W).
12. Not available with DCC and FAWS.
13. Not available with DCC.
14. Dimming will not be connected to NEMA receptacle when other dimming control options.
15. Not available in 120V. Order photocell separately with TLRGS/T.

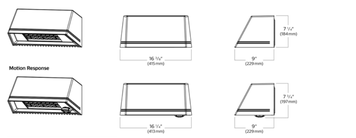
101L LED wall sconce

Luminaire Accessories[1] (order separately)

Mounting accessories	
Wall Mount	
WG	Wall Mounted Box for Surface Conduit

1. Consult Signify to confirm whether specific accessories are BAA-compliant.

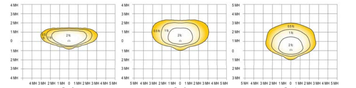
Dimensions



Luminaire Weights	
LED Wall Sconce 101L	**Weight**
Luminaire	13.5 lbs
Luminaire + EBPC (EM battery pack)	17.0 lbs

Optical Distributions

Based on configuration 101L-32L-530-NW-G2 (529lt) mounted at 15ft.



101L LED wall sconce

3000K LED Wattage and Lumen Values

Ordering Code	LED Qty	LED Current (mA)	Color Temp.	Average System Watts (W)	Type 2 Lumen Output	Type 2 Efficacy (LPW)	Type 2 BUG Rating	Type 3 Lumen Output	Type 3 Efficacy (LPW)	Type 3 BUG Rating	Type 4 Lumen Output	Type 4 Efficacy (LPW)	Type 4 BUG Rating
101L-16L-200-WW-G2-x	16	200	3000	12	1645	135	B1-U0-G1	1564	130	B1-U0-G1	1546	128	B1-U0-G1
101L-16L-400-WW-G2-x	16	400	3000	22	2840	129	B1-U0-G1	2582	118	B1-U0-G1	2660	120	B1-U0-G1
101L-16L-530-WW-G2-x	16	530	3000	28	3430	123	B1-U0-G1	3124	112	B1-U0-G1	3217	115	B1-U0-G1
101L-16L-700-WW-G2-x	16	700	3000	38	4425	116	B1-U0-G2	4038	105	B1-U0-G1	4139	108	B1-U0-G1
101L-16L-1000-WW-G2-x	16	1000	3000	55	6309	108	B2-U0-G1	5583	96	B1-U0-G2	5858	100	B1-U0-G2
101L-16L-1200-WW-G2-x	16	1200	3000	66	6709	101	B2-U0-G2	6231	93	B1-U0-G2	6253	95	B1-U0-G2
101L-32L-530-WW-G2	32	530	3000	52	6465	124	B2-U0-G1	6013	117	B1-U0-G2	6208	119	B1-U0-G2
101L-32L-700-WW-G2	32	700	3000	70	8603	123	B2-U0-G1	7778	111	B1-U0-G2	7892	112	B1-U0-G2
101L-32L-1000-WW-G2-x	32	1000	3000	107	11443	107	B3-U0-G2	10442	98	B2-U0-G2	10878	100	B2-U0-G2

4000K LED Wattage and Lumen Values

Ordering Code	LED Qty	LED Current (mA)	Color Temp.	Average System Watts (W)	Type 2 Lumen Output	Type 2 Efficacy (LPW)	Type 2 BUG Rating	Type 3 Lumen Output	Type 3 Efficacy (LPW)	Type 3 BUG Rating	Type 4 Lumen Output	Type 4 Efficacy (LPW)	Type 4 BUG Rating
101L-16L-200-NW-G2-x	16	200	4000	12	1697	139	B1-U0-G1	1628	134	B1-U0-G1	1661	137	B1-U0-G1
101L-16L-400-NW-G2-x	16	400	4000	22	2960	135	B1-U0-G1	2728	124	B1-U0-G1	2787	127	B1-U0-G1
101L-16L-530-NW-G2-x	16	530	4000	28	3620	129	B1-U0-G1	3333	119	B1-U0-G1	3377	120	B1-U0-G1
101L-16L-700-NW-G2-x	16	700	4000	38	4558	120	B1-U0-G2	4201	111	B1-U0-G1	4346	114	B1-U0-G1
101L-16L-1000-NW-G2-x	16	1000	4000	55	6509	113	B2-U0-G2	5997	104	B1-U0-G2	6035	105	B1-U0-G2
101L-16L-1200-NW-G2-x	16	1200	4000	66	7062	106	B2-U0-G2	6445	98	B1-U0-G2	6588	100	B1-U0-G2
101L-32L-530-NW-G2	32	530	4000	52	7005	135	B2-U0-G1	6393	123	B1-U0-G2	6535	126	B1-U0-G2
101L-32L-700-NW-G2	32	700	4000	70	8903	127	B2-U0-G1	8125	116	B1-U0-G2	8307	118	B2-U0-G2
101L-32L-1000-NW-G2-x	32	1000	4000	107	12045	113	B3-U0-G2	10993	103	B2-U0-G2	11237	105	B2-U0-G2

5000K LED Wattage and Lumen Values

Ordering Code	LED Qty	LED Current (mA)	Color Temp.	Average System Watts (W)	Type 2 Lumen Output	Type 2 Efficacy (LPW)	Type 2 BUG Rating	Type 3 Lumen Output	Type 3 Efficacy (LPW)	Type 3 BUG Rating	Type 4 Lumen Output	Type 4 Efficacy (LPW)	Type 4 BUG Rating
101L-16L-200-CW-G2-x	16	200	5000	12	1661	136	B1-U0-G1	1428	118	B1-U0-G1	1461	121	B1-U0-G1
101L-16L-400-CW-G2-x	16	400	5000	22	2892	132	B1-U0-G1	2392	109	B1-U0-G1	2443	111	B1-U0-G1
101L-16L-530-CW-G2-x	16	530	5000	28	3490	124	B1-U0-G1	2705	96	B1-U0-G1	3317	118	B1-U0-G1
101L-16L-700-CW-G2-x	16	700	5000	38	4458	121	B1-U0-G1	4261	111	B1-U0-G1	4346	113	B1-U0-G1
101L-16L-1000-CW-G2-x	16	1000	5000	55	6369	111	B2-U0-G2	5867	102	B1-U0-G2	5928	103	B1-U0-G2
101L-16L-1200-CW-G2-x	16	1200	5000	66	7062	106	B2-U0-G2	6445	98	B1-U0-G2	6588	100	B1-U0-G2
101L-32L-530-CW-G2	32	530	5000	52	6854	132	B2-U0-G1	6255	120	B1-U0-G2	6396	123	B1-U0-G2
101L-32L-700-CW-G2-x	32	700	5000	70	8903	127	B2-U0-G1	8125	116	B1-U0-G2	8307	118	B2-U0-G2
101L-32L-1000-CW-G2-x	32	1000	5000	107	12045	113	B3-U0-G2	10993	103	B2-U0-G2	11237	105	B2-U0-G2

LED Wattage and Lumen Values (Emergency Mode)

Ordering Code	LED Qty	LED Current (mA)	Color Temp.	Avg. System Watts Type 2 Normal Mode	Type 2 Emergency Mode	Type 3 Normal Mode	Type 3 Emergency Mode	Type 4 Normal Mode	Type 4 Emergency Mode
101L-16L-200-NW-G2-x-EBPC	16	200	4000	22	14	2990	1654	2728	1610
101L-16L-400-NW-G2-x-EBPC	16	400	4000	22	14	2990	1654	2728	1610
101L-16L-530-NW-G2-x-EBPC	16	530	4000	28	14	3620	1654	3333	1610
101L-16L-700-NW-G2-x-EBPC	16	700	4000	38	14	4558	1654	4201	1610

Values from photometric tests performed in accordance with IESNA LM-79 and are representative of the configurations shown. Actual performance may vary due to installation and environmental variables. LED and driver tolerances, and field measurement considerations. It is highly recommended to confirm performance with a photometric layout.
NOTE: Some data may be scaled based on tests of similar (but not identical) luminaires. Contact factory for configurations not shown.
For emergency EBPC option, published values are based on initial lumens.

Predicted Lumen Depreciation Data

Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology.
Actual experience may vary due to field application conditions Ly is the predicted time when LED performance depreciates to 70% of initial lumen output. Calculated per IESNA TM21-11. Published Ly hours limited to 6 times actual LED test hours.

Ambient Temperature °C	Driver Mark	Calculated Ly Hours	Ly per TM-21	Lumen Maintenance % at 60,000 hrs
25°C	700 mA	>100,000 hours	>60,000 hours	>86%

101L LED wall sconce

Specifications

Housing

Main body cast housing and back plate made of a low copper die cast Aluminum alloy for a high resistance to corrosion, 0.100" (2.5mm) minimum thickness. Hinged door allows access to driver and LED compartment.

Light Engine

Light engine comprises of a module of 16 LED aluminum metal clad board fully integrated with secondary optics, driver, and surge protection (SPD). Each LED Module is RoHS compliant. Standard color temperatures: 3000K +/-125K, 4000K, 5000K +/- 200K. Minimum CRI of 70. Also available in 2700K, 3500K, and Amber (590nm) with extended lead times. Contact factory for details. LED light engine is rated IP66 in accordance to Section 9 of IEC 60598-1.

Energy Saving Benefits

System efficacy up to 130 lms/W with significant energy savings over Pulse Start Metal Halide luminaires. Optional control options provide added energy savings during unoccupied periods.

Mounting

Mounting is completed through integral back plate that features a separate wiring compartment. Luminaire is secured to back plate using captive set screws from bottom of luminaire. Mounting plate is located in the center of the luminaire width and 3.5" above the luminaire bottom (lens down position). Luminaire ships fully assembled, ready to install.

Optical System

Type 2, 3, and 4 distributions available. Performance tested per LM-79 and TM-15 (IESNA) certifying its photometric performance. Luminaire designed with 0% uplight (US per IESNA TM-15).

Control Options

0-10V dimming (DCD): Access to 0-10V dimming leads supplied through back of luminaire (for secondary dimming controls by others). Cannot be used with other control options.

Dual Circuit Control (DCC): Luminaire equipped with the ability to have two separate circuits controlling drivers and light engines independently. Permits separate switching of 2 modules each at 50mA (525 models), controlled by two separate wires. Cannot be used with other control options. Cannot be used with other control options, motion response, or photocells.

Field Adjustable Wattage Selector (FAWS): Luminaire equipped with the ability to manually adjust the wattage in the field to reduce total luminaire lumen output and light levels. Comes pre-set to the highest position at the lumen output selected. Use chart below to estimate reduction in lumen output desired. Cannot be used with other control options or motion response.

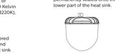
Wattage Reduction	Percent of Lumen Output
1	95%
2	90%
3	85%
4	80%
5	75%
6	80%
7	85%
8	90%
9	95%
10	100%

Note: Typical value accuracy +/- 5%

Optical system

Composed of high performance optical grade PMMA acrylic refractor lenses to achieve desired distribution optimized to get maximum spacing, target lumens and a superior lighting uniformity. Optical system is rated IP66 in accordance to Section 9 of IEC 60598-1. LM-79 and TM-15 (IESNA) certifying its photometric performance. Sheet side indicated. Flat lens (F optics) is Dark Sky compliant with 0% uplight and 0 per IESNA TM-15.

Prismatic globe: IP66 rated optical system, composed of individual pre-oriented lens to achieve desired distribution, assembled with a semi-permanent gasket providing a watertight seal. Impact resistant prismatic glass.



LE2A - Type II (4/5W) with globe (ACDR)
LE3A - Type III (4/5W) with globe (ACDR)
LE4A - Type IV (4/5W) with globe (ACDR)

Sag lens: IP66 rated optical system, composed of individual pre-oriented lens to achieve desired distribution, assembled with a semi-permanent gasket providing a watertight seal. Impact resistant prismatic glass.

LE2S - Type II (4/5W) flat glass lens
LE3S - Type III (4/5W) flat glass lens
LE4S - Type IV (4/5W) flat glass lens

Flat lens: IP66 rated optical system, composed of individual pre-oriented lens to achieve desired distribution, assembled with a semi-permanent gasket providing a watertight seal between base of the head unit.

LE2F - Type II (4/5W) flat glass lens
LE3F - Type III (4/5W) flat glass lens
LE4F - Type IV (4/5W) flat glass lens

Driver options

AST: Pre-set driver for progressive start-up of 50% for 5 seconds, 75% for 5 seconds, then 100% for 5 seconds.
CLO: Pre-set driver to manage the lumen depreciation by adjusting the power given to the LEDs offering the same lighting intensity during the entire lifespan of the LED module.
DALI: Pre-set driver compatible with the DALI control system.
OTL: Pre-set driver to signal end of life of the LED module(s) for better fixture management.
DMG: Dimmable driver 0-10V.
CDMG: Dynadimmer standard dimming functionalities including pre-programmed scenarios to suit many applications and needs from safety to maximum energy savings.

Ordering Code	Scenario	Dimming Time	Dimming Level
CDMG625	Safety	4 hours	25% power
CDMG640	Safety	4 hours	50% power
CDMG675	Safety	4 hours	75% power
CDMG805	Medium	6 hours	25% power
CDMG850	Medium	6 hours	50% power
CDMG875	Medium	6 hours	75% power
CDMG625	Economy	8 hours	25% power
CDMG650	Economy	8 hours	50% power
CDMG675	Economy	8 hours	75% power

Automatic Profile Dimming (CD/CM): Standard dimming profiles provide 50% dimming after midnight (CD) or 30% dimming after midnight (CM) for specific dark hours. Dimming profiles include two dimming settings including dim to 30% or 50% of the total lumen output. When used in combination with motion response the luminaire will operate at the dimmed level unless and until when motion is detected. After 5 minutes with no motion, it will return to the automatic dimming profile schedule. Automatic dimming profile scheduled with the following settings:

- **CDSD/CDSS**: Security for 7 hours night duration (Ex., 11 PM – 6 AM)
- **CMSD/CMSD**: Medium for 6 hours night duration (Ex., 10 PM – 6 AM)

All above profiles are calculated from mid point of the night. Dimming is set for 6 hours after the mid point and 2, or 3 hours before depending of the duration of dimming. Cannot be used with other dimming control options.

Emergency Battery Backup Cold Pack (EBPC): Emergency battery pack is cold weather rated down to -20°C (-4°F) and integral to the luminaire, allowing for a consistent look between emergency and non-emergency sconces. A separate remote test switch is required. The emergency battery backup pack is used with 16L configuration from 200mA to 700mA, operating in emergency mode to meet various redundancy requirements. Secondary driver with relay immediately detects AC power loss and powers luminaire for a minimum of 90 minutes from the time power is lost. Available in 120 or 277V only.

Motion Response Options

Bi-Level Infrared Motion Response (BL-IMR3): Motion Response module is mounted integral to luminaire factory pre-programmed to 50% dimming standby and 100% when motion is detected within the sensor's field of view. Using the following fashion: The motion sensor is set to a constant 50%. When motion is detected by the PIR sensor, the luminaire returns to full power/light output. Dimming on time is factory set to 50% with 5 minutes default in "full power" prior to dimming back to low. When no motion is detected for 5 minutes, the separate photocell daylight sensing system reduces the light level to 50% of the normal constant wattage reducing the light level. Other dimming settings can be changed if different dimming requirements are needed. Must be ordered with FSIR-100 Wireless Remote Programming Tool (contact Technical Support for details).

Infrared Motion Response with Other Controls (IMR3): When used in combination with other controls (Automatic Dimming Profile), motion response will override the controller's schedule when motion is detected. Added benefits of a combined dimming profile and sensor detection. In this configuration, the motion response device cannot be re-programmed with FSIR-100 Wireless Remote Programming Tool. The profile can only be reprogrammed via the controller. Infrared Motion Response Lenses (IMR2/IMR3): Infrared Motion Response high bay module is available with two different sensor lens types to accommodate various mounting heights and coverage area requirements. Lens #2 (IMR2) is designed for mounting heights up to 8' with larger coverage areas up to 44' diameter coverage area. Lens #3 (IMR3) is designed for mounting heights up to 20' with a 40' diameter coverage area. See charts for approximate detection patterns:

101L LED wall sconce

Specifications

Electrical

Driver: Driver efficiency (>90% standard). 120-480V available (restrictions apply). Class P overcurrent protection. Optional 0-10V dimming to 10% power. RoHS compliant.

Button Photocontrol (PCB): Button style design for internal luminaires mounting applications. The photocontrol is constructed of a high impact UV stabilized polycarbonate housing. Rated voltage of 120V or 208-277V with a load rating of 1000 VA. The photocell will turn on with 1-4fc of ambient light.

Twist-Lock Receptacle (TLRDS/TLRGT/TLRPC): Twist Lock Receptacle with 5 pins enabling dimming or with 3 pins with additional functionality (by others) can be used with a twistlock photoelectric cell or a shorting cap. Dimming leads are capped at 24" from the fixture. Twist Lock Receptacle is rated to ANSI C136.41. Can be used with third-party control system. Receptacle located on top of luminaire housing. When specifying receptacle with twistlock photoelectric cell, voltage must be specified. When ordering Twist-lock receptacle (TLRDS or TLRGT), photocell or shorting cap is not included. TLRPC is shipped standard with 5 pin.

Surge protection (SPD/SPD2): Each luminaire is provided as standard with surge protection device tested in accordance with ANSI/IEEE C62.41.2 and IEEE C62.41.2 Scenario I Category C High Exposure 10kV/10kA waveforms for Line Ground, Line Neutral and Neutral Ground, and in accordance with U.S. DOE (Department of Energy) MSSLC (Municipal Solid-State Street Lighting Consortium) Model Specification for LED Roadway Luminaires Appendix D electrical immunity High Test Level 10kV / 5kA. Optional 20kV is available for additional immunity.

Finish

Five standard colors matte finish in textured black, white, bronze, dark gray and medium gray. Color in accordance with the AAMA 2604 standard. Application of polyester powder coat paint 2.5 mils minimum. The thermosetting resins provides a discoloration resistant finish in accordance with the ASTM D2244 standard, and salt fog resistance per ASTM B117 standard and humidity proof in accordance with the ASTM D2247 standard. RAL and custom colors available.

Listings

cULus Listed for Canada and USA suitable for wet locations when mounted downward facing. cULus Listed for Canada and USA suitable for damp locations when mounted vertical. Luminaire is shielded in covered ceiling application. Emergency Battery Backup option is tested per UL924 and CSA C22.2 No. 141-10 Designs Lights Consortium qualified on models as listed on DLC QPL. CCTs 3000K and warmer are Dark Sky Approved. Luminaire is rated for operation in ambient temperature of -40°C (-40°F) up to +40°C (104°F).

Warranty

10YL LED sconce luminaires feature a 5-year limited warranty.
See signify.com/warranties for complete details and exclusions.

Buy American Act of 1933 (BAA):

This product is manufactured in one of our US factories and, as of the date of this document, this product was considered a commercially available off-the-shelf (COTS) item meeting the requirements of the BAA. This BAA designation hereunder does not address (i) the applicability of, or availability of a waiver under, the Trade Agreements Act, or (ii) the "Buy America" domestic content requirements imposed on states, localities, and other non-federal entities as a condition of receiving funds administered by the Department of Transportation or other federal agencies. Prior to ordering, please visit www.signify.com/baa to view a current list of BAA-compliant products to confirm this product's current compliance.

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UNIFORM PARCEL IDENTIFIER: 32-4-1090.1

COMPLIANCE CHART

SECTION	REQUIREMENT	CALCULATIONS (REQUIRED / PROVIDED)	COMPLIANCE
SALDO: 162-67: LANDSCAPE DESIGN, INSTALLATION AND MAINTENANCE STANDARDS	C.(6) STREET TREES. ANY SUBDIVISION OR LAND DEVELOPMENT SHALL PROVIDE STREET TREES ALONG THE ENTIRE LENGTH OF ANY PUBLIC STREET. (B) THE SPACING BETWEEN STREET TREES SHALL BE NO GREATER THAN 50 FEET.	ALONG STATION BOULEVARD AND POTTSTOWN PIKE 18 TREES PROVIDED PER PREVIOUSLY APPROVED PLANS, LOCATIONS MODIFIED, SEE GENERAL NOTE 7	COMPLIES
	C.(7) PARKING LOT LANDSCAPING. (C) THE INTERIOR OF EACH PARKING AREA OR LOT SHALL HAVE AT LEAST ONE SHADE TREE FOR EVERY FIVE PARKING SPACES.	TOTAL COMMERCIAL PARKING SPACES = 131 REQUIRED: 131 / 5 = 26.2 OR 27 SHADE TREES PROVIDED: 16 GTIK, 11 LSR (27 SHADE TREES)	COMPLIES
	D.(1) MINIMUM PLANTING STANDARDS PER 1,000 SQUARE FEET GROSS BUILDING AREA, GROUND FLOOR ONLY (BUILDING "FOOTPRINT"); RESIDENTIAL SUBDIVISIONS EXEMPT PER 2,000 SQUARE FEET OFF-STREET PARKING OR LOADING AREA, EXCLUDING DRIVEWAYS LESS THAN 18 FEET WIDE; RESIDENTIAL SUBDIVISIONS EXEMPT PER 100 LINEAR FEET OF NEW AND EXISTING PUBLIC OR PRIVATE ROAD FRONTAGE, MEASURE ON BOTH SIDES WHERE APPLICABLE PER 100 LINEAR FEET OF EXISTING TRACT BOUNDARY, WHERE NOT COINCIDENT WITH EXISTING OR PROPOSED ROAD FRONTAGE DECIDUOUS TREE: 2 / 1 / 2 / 1 EVERGREEN TREE: 1 / 1 / 1 / 2 SHRUB: 8 / 4 / 5 / 8	TOTAL COMMERCIAL BUILDING AREA = 25,520± SF. REQUIRED: 25,520 / 1000 = 25.52 25.52 x 2 = 51.04 OR 52 DECIDUOUS TREES 25.52 x 1 = 25.52 OR 26 EVERGREEN TREES 25.52 x 8 = 204.16 OR 205 SHRUBS PROVIDED: 1 LSR, 19 OA, 14 PSC, 18 PXAB (52 DECIDUOUS TREES); 9 PIAB, 12 PGL, 5 PP (26 EVERGREEN TREES); 7 CA, 14 CS, 21 HQSQ, 17 IGS, 1 IMBB, 3 IMBG, 33 IV, 16 IVRS, 38 KLE, 8 PXOL, 35 RDW, 12 VR (205 SHRUBS)	COMPLIES
		TOTAL COMMERCIAL PARKING AREA = 52,065± SF. REQUIRED: 52,065 / 2000 = 26.03 26.03 x 1 = 26.03 OR 27 DECIDUOUS TREES 26.03 x 1 = 26.03 OR 27 EVERGREEN TREES 26.03 x 4 = 104.12 OR 105 SHRUBS PROVIDED: 16 GTIK, 11 LSR (27 DECIDUOUS TREES); 16 PIAB, 11 PP (27 EVERGREEN TREES); 5 AAB, 19 CA, 31 IGS, 3 IMBB, 30 IMBG, 1 IVJD, 9 VDC, 7 VR (105 SHRUBS)	COMPLIES
		TOTAL LINEAR FEET OF ROAD FRONTAGE = 2,089± SF. REQUIRED: 2,089 / 100 = 20.89 20.89 x 2 = 41.78 OR 42 DECIDUOUS TREES 20.89 x 1 = 20.89 OR 21 EVERGREEN TREES 20.89 x 5 = 104.45 OR 105 SHRUBS PROVIDED: 18 PROVIDED PER PREVIOUSLY APPROVED PLANS, PLUS 13 AGB, 6 CC, 5 LSR (42 DECIDUOUS TREES); 9 PGL, 12 PP (21 EVERGREEN TREES); 21 CS, 22 IGS, 12 IVAW, 3 IVJD, 24 PXOL, 20 VDC, 3 VR (105 SHRUBS)	COMPLIES
		TRACT BOUNDARY LENGTH (NORTH PROPERTY LINE) = 242± LF. REQUIRED: 242 / 100 = 2.42 2.42 x 1 = 2.42 OR 3 DECIDUOUS TREES 2.42 x 2 = 4.84 OR 5 EVERGREEN TREES 2.42 x 8 = 19.36 OR 20 SHRUBS PROVIDED: 3 OA (3 DECIDUOUS TREES); 5 PGL (5 EVERGREEN TREES); 7 AAB, 13 VR (20 SHRUBS)	COMPLIES

PLANT SCHEDULE

CANOPY TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
GTIK	16	GLEDITSIA TRIACANTHOS INERMIS 'SKYCOLE'	SKYLINE THORNLESS HONEY LOCUST	3"-3.5" CAL.	B&B
LSR	17	LIQUIDAMBAR STYRACIFLUA 'ROTUNDILOBA'	ROUND-LOBED SEEDLESS SWEET GUM	3"-3.5" CAL.	B&B
PXAB	18	PLATANUS X ACERIFOLIA 'BLOODGOOD'	LONDON PLANE TREE	3"-3.5" CAL.	B&B
QA	3	QUERCUS ALBA	WHITE OAK	3"-3.5" CAL.	B&B
EVERGREEN TREES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**CONTAINER**
PGL	26	PICEA GLAUCA	WHITE SPRUCE	8' HT.	B&B
PIAB	25	PICEA ABIES	NORWAY SPRUCE	8' HT.	B&B
PP	28	PICEA PUNGENS	COLORADO SPRUCE	8' HT.	B&B
ORNAMENTAL TREES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**CONTAINER**
AGB	13	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE'	AUTUMN BRILLIANCE SERVICEBERRY	3"-3.5" CAL.	B&B
CC	6	CERCIS CANADENSIS	EASTERN REDBUD	3"-3.5" CAL.	B&B
CF	4	CORNUS FLORIDA	EASTERN DOGWOOD	3"-3.5" CAL.	B&B
OA	19	OXYDENDRUM ARBOREUM	SOURWOOD TREE	3"-3.5" CAL.	B&B
PSC	14	PRUNUS SARGENTII 'COLUMNARIS'	COLUMNAR SARGENT CHERRY	3"-3.5" CAL.	B&B
SHRUBS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**CONTAINER**
AAB	12	ARONIA ARBUTIFOLIA 'BRILLIANTISSIMA'	BRILLIANT RED CHOKEBERRY	3-4'	B&B
CA	26	CLETHRA ALNIFOLIA	SUMMERSWEET CLETHRA	24-30"	CONTAINER
CS	35	CORNUS SERICEA	RED TWIG DOGWOOD	2-3'	B&B
HQSQ	21	HYDRANGEA QUERCIFOLIA `SNOW QUEEN`	SNOW QUEEN OAKLEAF HYDRANGEA	24-30"	CONTAINER
IGS	70	ILEX GLABRA `SHAMROCK`	SHAMROCK INKBERRY	24-30"	CONTAINER
IMBB	4	ILEX X MESERVEAE `BLUE BOY`	BLUE BOY HOLLY	24-30"	CONTAINER
IMBG	33	ILEX X MESERVEAE `BLUE GIRL`	BLUE GIRL HOLLY	24-30"	CONTAINER
IV	33	ITEA VIRGINICA `HENRY`S GARNET`	HENRY`S GARNET SWEETSPIRE	24-30"	CONTAINER
IVAW	12	ILEX VERTICILLATA `AFTERGLOW`	AFTERGLOW WINTERBERRY	3-4'	CONTAINER
IVJD	4	ILEX VERTICILLATA `JIM DANDY`	JIM DANDY WINTERBERRY	30-36"	CONTAINER
IVRS	16	ILEX VERTICILLATA `RED SPRITE`	RED SPRITE WINTERBERRY	24-30"	CONTAINER
JHIB	238	JUNIPERUS HORIZONTALIS `MONBER`	ICEE BLUE JUNIPER	15-18" SPRD	CONTAINER
KLE	38	KALMIA LATIFOLIA `ELF`	DWARF MOUNTAIN LAUREL	24-30"	B&B
PXOL	32	PRUNUS LAUROCERASUS `OTTO LUYKEN`	OTTO LUYKEN CHERRY LAUREL	24-30"	CONTAINER
RDW	35	RHODODENDRON AZALEA `DELAWARE VALLEY WHITE`	`DELAWARE VALLEY WHITE` AZALEA	24-30"	CONTAINER
VDC	29	VIBURNUM DENTATUM `CHRISTOM`	BLUE MUFFIN VIBURNUM	3-4'	B&B
VR	35	VIBURNUM RHYTIDOPHYLLUM	LEATHERLEAF VIBURNUM	3-4'	B&B
GRASSES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**CONTAINER**
CAKF	56	CALAMAGROSTIS X ACUTIFLORA `KARL FOERSTER`	FEATHER REED GRASS	1 GAL.	CONTAINER

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.
7. STREET TREES AND OTHER PREVIOUSLY APPROVED PLANT MATERIAL SHOWN ON THIS SITE WERE PROPOSED - AND APPROVED - AS PART OF THE RESIDENTIAL APPLICATION. THE PROPOSED LOCATIONS OF SOME OF THE PLANT MATERIAL HAS BEEN SHIFTED TO ACCOMMODATE CHANGES IN THE OVERALL DESIGN. THE SAME QUANTITY AND DESIGN INTENT HAS BEEN MAINTAINED. THESE PLANTS WILL NOT BE ACCOUNTED FOR IN THE LANDSCAPE SCHEDULE.

LEGEND

- PREVIOUSLY APPROVED PLANT MATERIAL (RELOCATED)
- PROPOSED PLANT MATERIAL PER THIS APPLICATION
- PREVIOUSLY APPROVED PLANT MATERIAL
- PROPOSED LED AREA LUMINAIRE
- PROPOSED LED STREET LUMINAIRE

30 15 7.5 0 30
1"= 30'

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
INDUSTRIAL & ELECTRICAL
PERMITTING SERVICES
TRANSPORTATION SERVICES

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	05/25/2022	REV. PER TOWNSHIP COMMENTS	LGU / MJB

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PROJECT No.:	PC211160
DRAWN BY:	LGU
CHECKED BY:	J.R.K.
DATE:	03/15/2022
CAD I.D.:	PC211160-LLGT-1A

PROJECT:

AMENDED FINAL PRD PLANS

FOR

PROSPERITY PROPERTY INVESTMENTS, LLC

"FINAL PLAN FOR LOT 2B OF PARCEL 5C" PROPOSED COMMERCIAL DEVELOPMENT

GRAPHITE MINE ROAD & STATION BOULEVARD
UPPER UWCHLAN TOWNSHIP
CHESTER COUNTY
COMMONWEALTH OF PENNSYLVANIA

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COMMONWEALTH OF PENNSYLVANIA
DANIEL J. NORTH
REGISTERED LANDSCAPE ARCHITECT
PENNSYLVANIA/NJ LICENSE No.: LA002729

SHEET TITLE:

LANDSCAPE PLAN

SHEET NUMBER:

C-704

26 OF 37

REVISION 1 - 05/25/2022

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LANDSCAPE SPECIFICATIONS:

1. SCOPE OF WORK:
THE LANDSCAPE 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 5%, 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 DISEASEPEST 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 TO UTILIZE 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 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 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. 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 LANDSCAPE 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. LANDSCAPE 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 LANDSCAPE 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 LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF FINE-GRADING WITHIN THE DISTURBANCE AREA OF THE SITE.

B. LANDSCAPE 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 (7"+).

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 8.A.]):
I. 25 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. INSOFAR THAT IT IS FEASIBLE, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THAT THIS IS NOT POSSIBLE, LANDSCAPE 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 15 TO DECEMBER 15
II. LAWN: MARCH 15 TO JUNE 15 OR SEPT. 1 TO NOVEMBER 1

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 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 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 10 AND JUNE 30.

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 LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF EIGHTEEN (18) MONTHS 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.

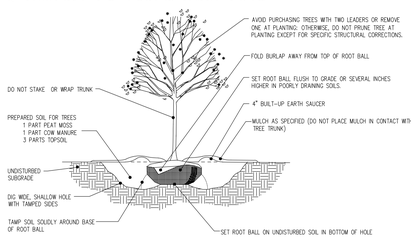
C. TREES AND SHRUBS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND UNTIL TURNOVER TO THE OWNER/OPERATOR. CULTIVATION, WEEDING, WATERING AND THE PREVENTATIVE TREATMENTS SHALL BE PERFORMED AS NECESSARY TO KEEP PLANT MATERIAL IN GOOD CONDITION AND FREE OF INSECTS AND DISEASE.

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, RESEARDING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF ERODED OR BARE AREAS.

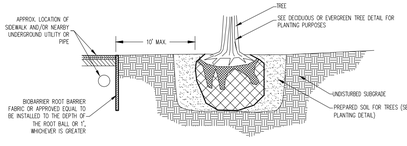
13. CLEANUP
A. UPON THE COMPLETION OF ALL LANDSCAPE INSTALLATION AND BEFORE THE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL UNUSED MATERIALS, EQUIPMENT AND DEBRIS FROM THE SITE. ALL PAVED AREAS ARE TO BE CLEANED.

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

NOTES:
1.) NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
2.) REMOVE ALL NON-BIODEGRADABLE MATERIAL AND ROPE FROM TRUNK & TOP OF ROOT BALL. FOLD OR CUT BURLAP BACK FROM TOP 1/3 OF ROOT BALL.
3.) PLANTING DEPTH SHALL BE THE SAME AS GROWN IN NURSERY.
4.) THOUROUGHLY SOAK THE TREE ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS.
5.) THE BOTTOM OF PLANTING PIT EXCAVATIONS SHOULD BE ROUGH TO AVOID MATTING OF SOIL LAYERS AS NEW SOIL IS ADDED. IT IS PREFERABLE TO TILL THE FIRST LIFT (2 TO 3 IN.) OF PLANTING SOIL INTO THE SUBSOIL.
6.) THE MINIMUM DIAMETER OF THE TREE PIT SHALL BE 3 TIMES THE DIAMETER OF THE ROOT BALL.



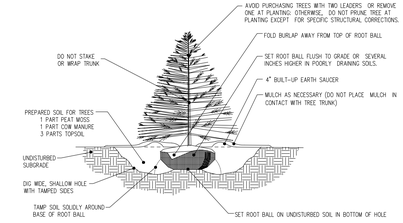
L S1 **DECIDUOUS TREE PLANTING DETAIL**
SCALE: N.T.S.



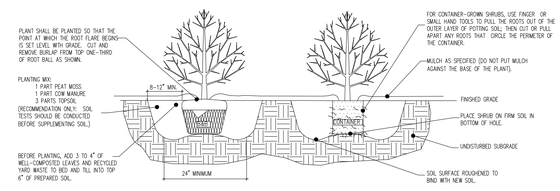
NOTES:
1. ANY TREE INSTALLED WITHIN 10 FT. OF NEW CONCRETE SIDEWALKS SHOULD BE INSTALLED WITH BIOBARRIER ROOT BARRIER FABRIC AS SHOWN.
2. TREES SHALL BE INSTALLED ACCORDING TO THE APPROPRIATE PLANTING DETAIL.

L S12 **BIOBARRIER ROOT BARRIER DETAIL**
SCALE: N.T.S. REV.: 2015.03.19

NOTES:
1.) NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
2.) REMOVE ALL NON-BIODEGRADABLE MATERIAL AND ROPE FROM TRUNK & TOP OF ROOT BALL. FOLD BURLAP BACK 1/3 FROM ROOT BALL.
3.) PLANTING DEPTH SHALL BE THE SAME AS GROWN IN NURSERY.
4.) THOUROUGHLY SOAK THE TREE ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS.
5.) THE BOTTOM OF PLANTING PIT EXCAVATIONS SHOULD BE ROUGH TO AVOID MATTING OF SOIL LAYERS AS NEW SOIL IS ADDED. IT IS PREFERABLE TO TILL THE FIRST LIFT (2 TO 3 IN.) OF PLANTING SOIL INTO THE SUBSOIL.
6.) THE MINIMUM DIAMETER OF THE TREE PIT SHALL BE 3 TIMES THE DIAMETER OF THE ROOT BALL.



L S2 **EVERGREEN TREE PLANTING DETAIL**
SCALE: N.T.S.



L S5 **DECIDUOUS & EVERGREEN SHRUB PLANTING DETAIL**
SCALE: N.T.S.

UNIFORM PARCEL IDENTIFIER: 32-4-1090.1

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
INDUSTRIAL DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES
THE INFORMATION, DESIGN AND CONTENT OF THIS PLAN IS PROPRIETARY AND SHALL NOT BE DISCLOSED OR USED FOR ANY PURPOSE, EXCEPT THOSE WRITTEN AUTHORIZATION FROM BOHLER, ONLY APPROVED AND ACCEPTED PLANS SHALL BE UTILIZED OR CONSTRUCTION PURPOSES BY BOHLER, INC.

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	05/25/2022	REV. PER TOWNSHIP COMMENTS	LGU / MJB

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PROJECT No.: PC211160
DRAWN BY: LGU
CHECKED BY: J.R.K.
DATE: 03/15/2022
CAD I.D.: PC211160-LLGT-1A

PROJECT:

AMENDED FINAL PRD PLANS

FOR

PROSPERITY PROPERTY INVESTMENTS, LLC

"FINAL PLAN FOR LOT 2B OF PARCEL 5C"
PROPOSED COMMERCIAL DEVELOPMENT

GRAPHITE MINE ROAD & STATION BOULEVARD
UPPER UWCHLAN TOWNSHIP
CHESTER COUNTY
COMMONWEALTH OF PENNSYLVANIA

BOHLER
1600 MANOR DRIVE, SUITE 200
CHALFONT, PA 18914
Phone: (215) 996-9100
Fax: (215) 996-9102
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D.Y. NORTH
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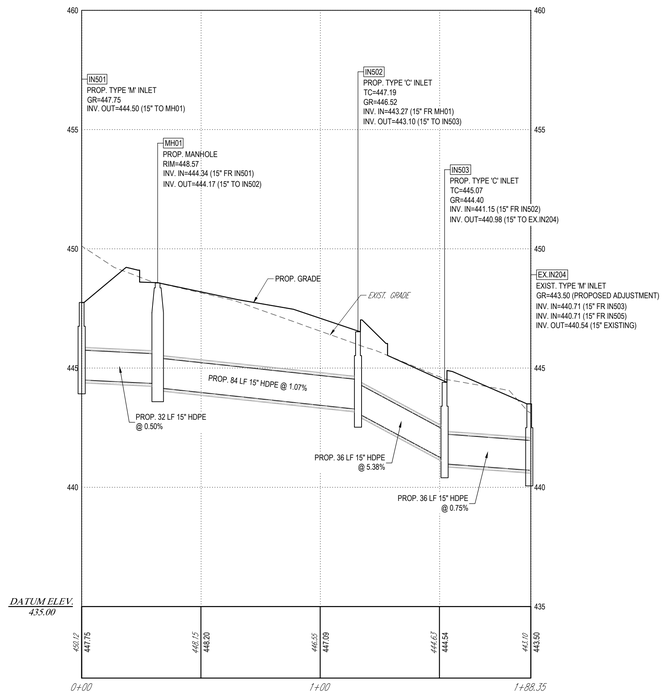
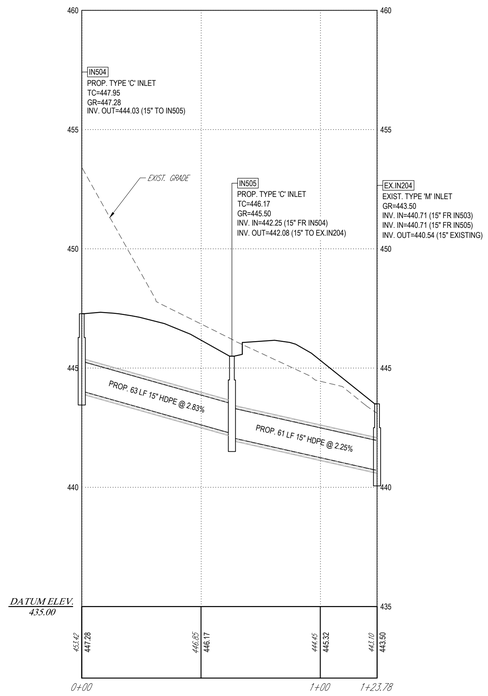


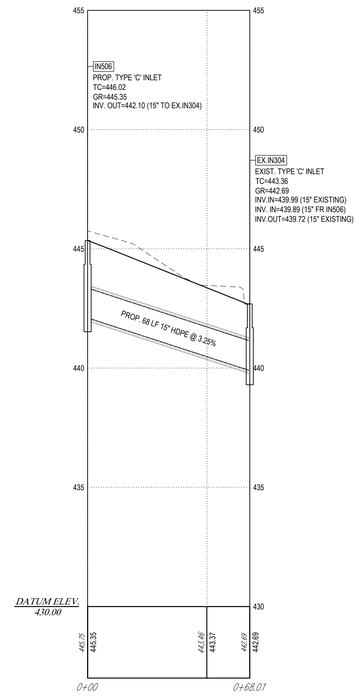
PROPOSED IN501 TO EXISTING IN204

SCALE: 1"= 30 (H); 1"= 3 (V)



PROPOSED IN504 TO EXISTING IN204

SCALE: 1"= 30 (H); 1"= 3 (V)



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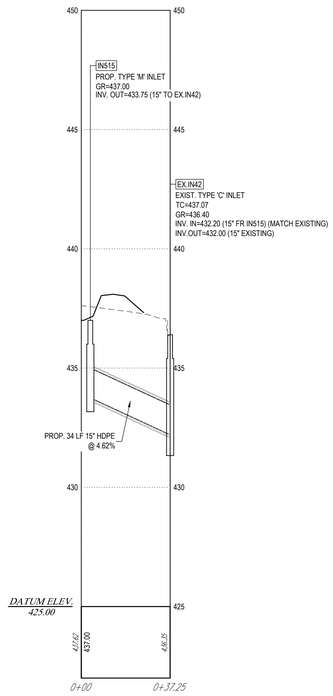
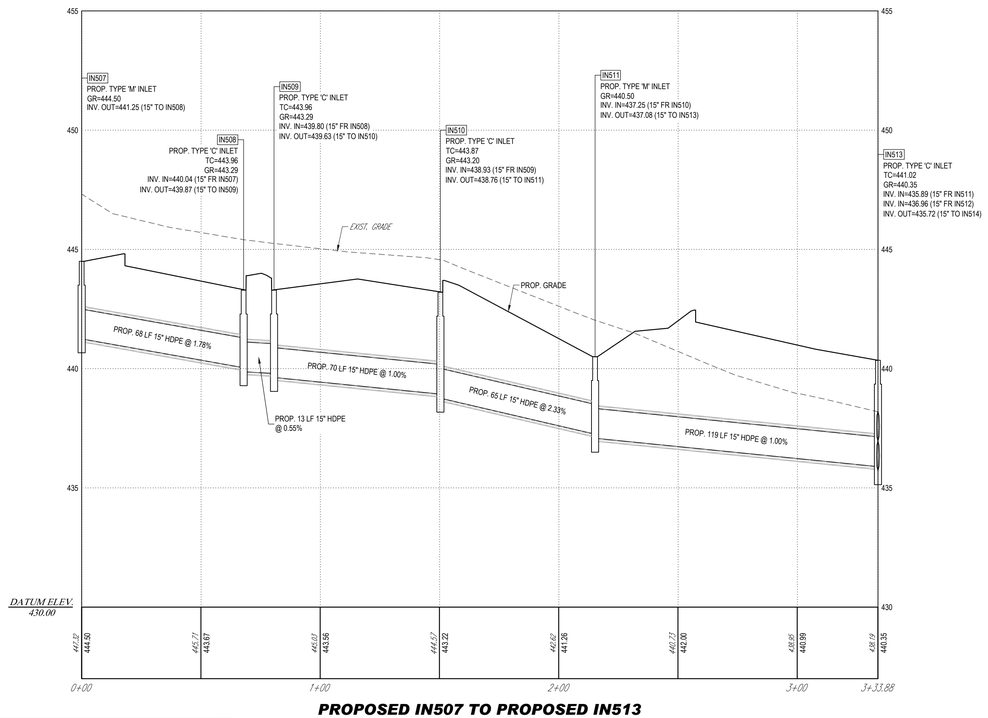


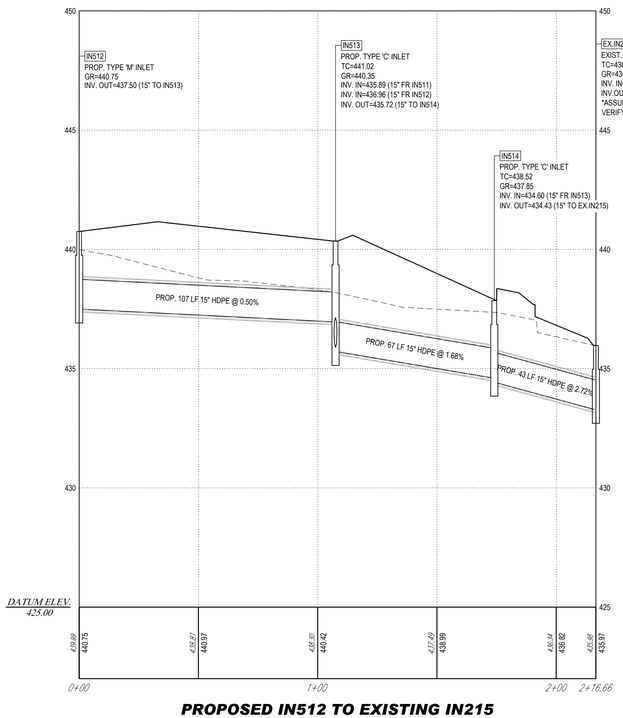
PROPOSED IN515 TO EXISTING IN42

SCALE: 1"= 30 (H); 1"= 3 (V)



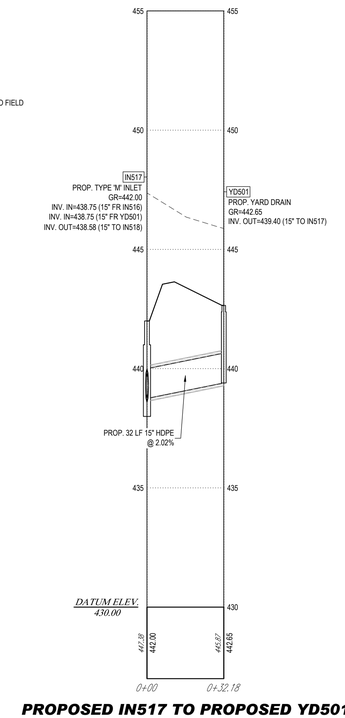
PROPOSED IN507 TO PROPOSED IN513

SCALE: 1"= 30 (H); 1"= 3 (V)



PROPOSED IN512 TO EXISTING IN215

SCALE: 1"= 30 (H); 1"= 3 (V)



PROPOSED IN517 TO PROPOSED YD501

SCALE: 1"= 30 (H); 1"= 3 (V)

UNIFORM PARCEL IDENTIFIER: 32-4-1090.1

I:\21PC\211160\CAD\DRAWINGS\PLAN SETS\OVIL SITE PLANS\PC211160-PROF-1A-----LAYOUT C-801 STORM PROFILES

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REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	05/25/2022	REV. PER TOWNSHIP COMMENTS	LGU / MJB

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CAD I.D.:	PC211160-PROF-1A

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J.R. KORCZAK
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE NO. PE074278
NEW JERSEY LICENSE No. 24GE04715400

SHEET TITLE:

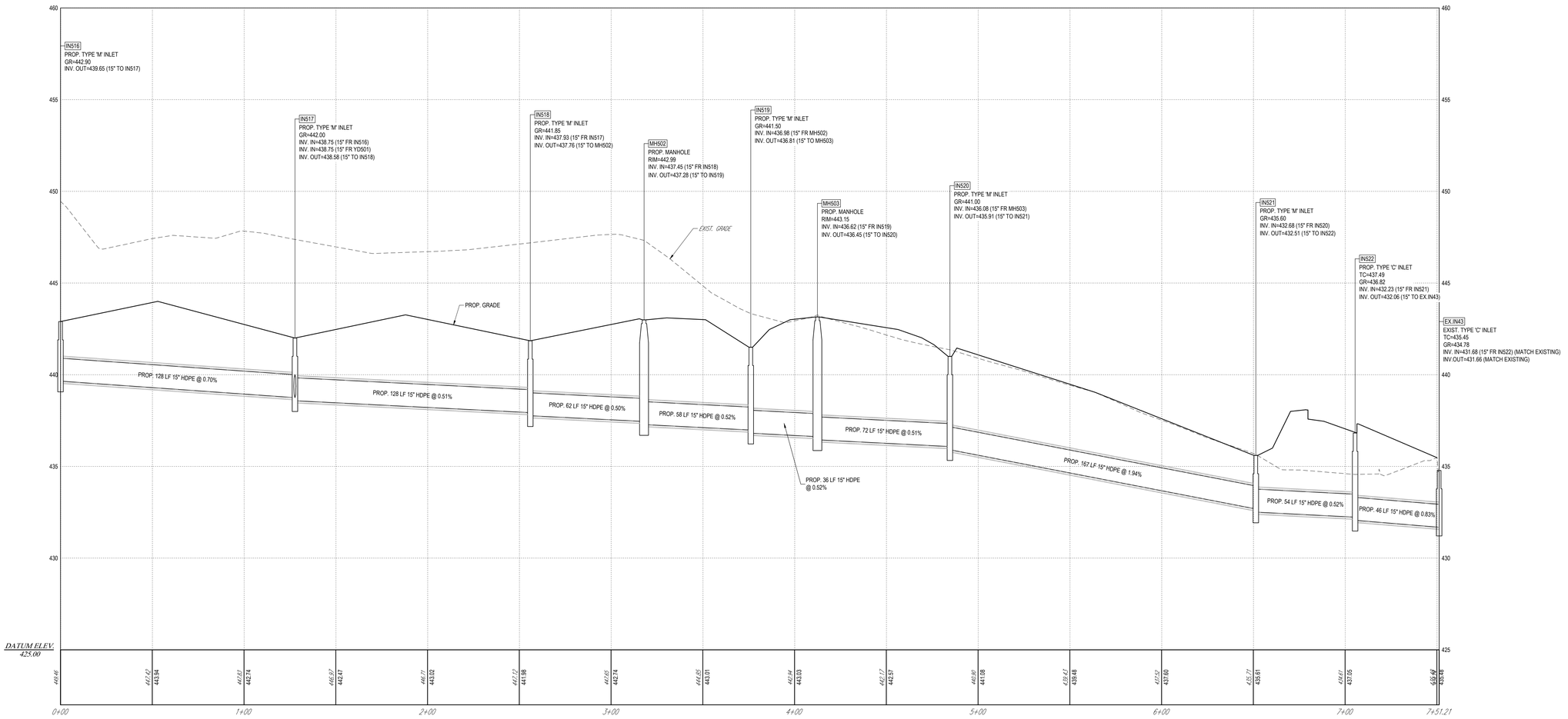
STORM SEWER PROFILES

SHEET NUMBER:

C-801

28 OF 37

REVISION 1 - 05/25/2022



PROPOSED IN516 TO EXISTING IN43

SCALE: 1"= 30 (H); 1"= 3 (V)

UNIFORM PARCEL IDENTIFIER: 32-4-1090.1

I:\21PC\211160\CAD\DRAWINGS\PLAN SETS\OVNL SITE PLANS\PC211160-PROF-1A-----LAYOUT C-802 STORM PROFILES

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J.R. KORCZAK
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE074279
NEW JERSEY LICENSE No. 24GE04771400

SHEET TITLE:

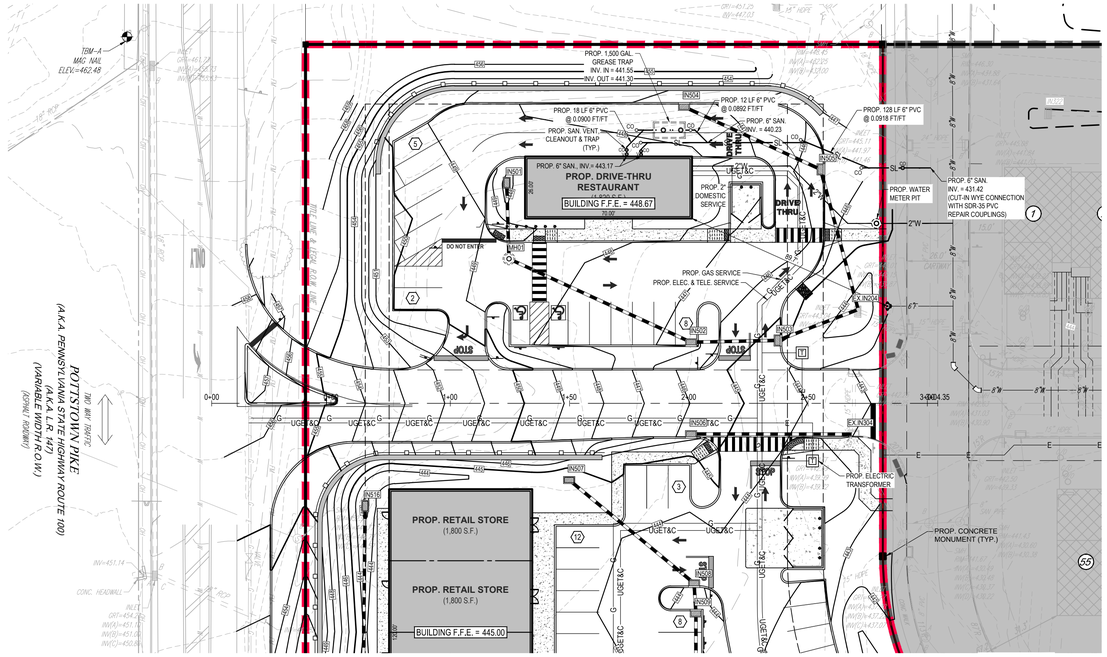
STORM SEWER PROFILES

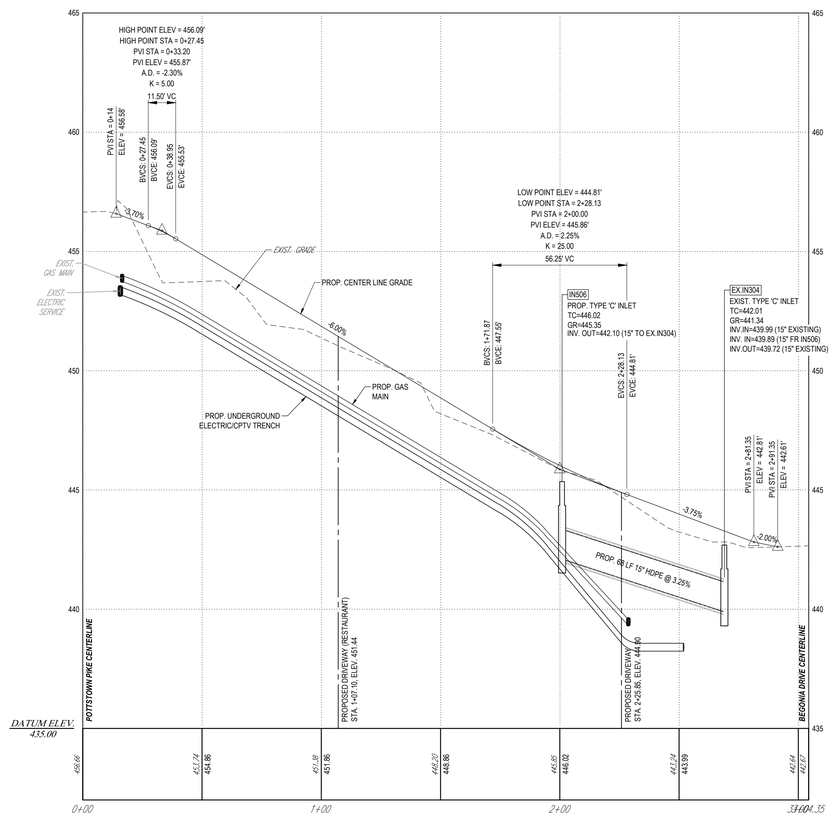
SHEET NUMBER:

C-802

29 OF 37

REVISION 1 - 05/25/2022





PROPOSED ACCESS DRIVEWAY PROFILE

SCALE: 1"= 30 (H); 1"= 3 (V)

30 15 7.5 0 30

1"= 30'

UNIFORM PARCEL IDENTIFIER: 32-4-1090.1

R:\2\PC211160\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\PC211160-PROF-1A---LAYOUT, C-803 ACCESS DRIVEWAY

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PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE074279
NEW JERSEY LICENSE No. 24GE04715400

SHEET TITLE:

PROPOSED ACCESS DRIVEWAY PROFILE

SHEET NUMBER:

C-803

30 OF 37

REVISION 1 - 05/25/2022

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 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 – 45M	INLET TOPS, GRATES AND FRAMES
RC – 46M	INLET BOXES
RC – 64M	CURBS AND GUTTERS
RC – 65M	CONCRETE MOUNTABLE CURBS
RC – 67M	CURB RAMPS AND SIDEWALKS

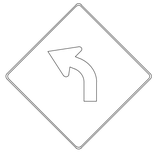
24"x24"
STOP SIGN
(R1-1)

VAR. x 6"
STREET NAME SIGN
(D3-1)

12"x18"
RESERVED PARKING PENALTIES SIGN
(R7-8F)

30"x30"
DO NOT ENTER SIGN
(R5-1)

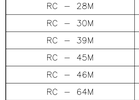
12"x6"
VAN ACCESSIBLE SIGN
(R7-8P)



18"X18"
LEFT CURVE SIGN
(W1-2L)

12"x18"
RESERVED PARKING SIGN
(R7-8)

24"x30"
SPEED LIMIT SIGN
(R2-1)



36"x12"
HORIZONTAL RIGHT ONE WAY SIGN
(R6-1L)

36"x12"
HORIZONTAL RIGHT ONE WAY SIGN
(R6-1R)

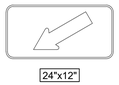
30"x30"
RIGHT LANE MUST TURN RIGHT SIGN
(R3-7R)

30"x36"
RIGHT TURN SIGN
(R3-5R)

30"x30"
LEFT LANE MUST TURN LEFT SIGN
(R3-7L)

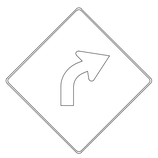
24"x30"
NO PARKING SIGN
(R8-3a)

30"x30"
PEDESTRIAN SIGN
(W11-2)

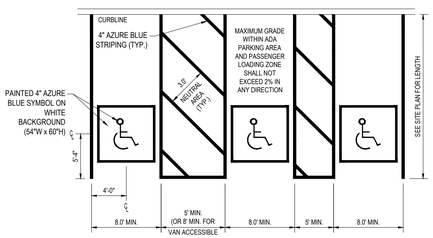


24"x12"
DIAGONAL DOWNWARD POINTING ARROW
(W16-7P)

18"X18"
SPEED ADVISORY PLAQUE
(W13-1P)

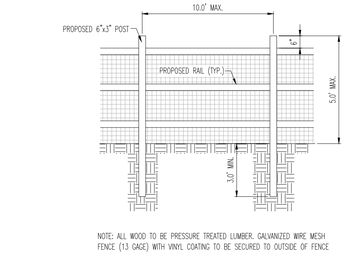


18"x18"
RIGHT CURVE SIGN
(W1-2R)



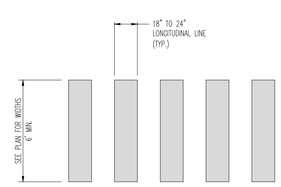
NOTES:
1.) CURB RAMPS MAY NOT EXTEND INTO ANY PORTION OF THE PARKING SPACE OR ASSOCIATED STRIPED PASSENGER LOADING ZONE.
2.) CURB RAMPS, PAVEMENT MARKINGS, AND APPLICABLE SIGNAGE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST A.D.A. ACCESSIBILITY GUIDELINES.

T / S10 ADA ACCESSIBLE PARKING SPACE STRIPING (3 SPACES)
SCALE: N.T.S. REV.: 2019.07.17



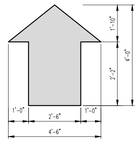
NOTE: ALL WOOD TO BE PRESSURE TREATED LUMBER, GALVANIZED WIRE MESH FENCE (13 GAGE) WITH VINYL COATING TO BE SECURED TO OUTSIDE OF FENCE

A / S4 POST & RAIL FENCE DETAIL
SCALE: N.T.S. REV.: 2015.03.09

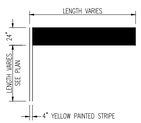


NOTES:
1.) THIS TYPE OF MARKING SHOULD BE USED AT LOCATIONS WHERE SUBSTANTIAL NUMBERS OF PEDESTRIANS CROSS WITHOUT ANY OTHER TRAFFIC CONTROL DEVICE, AT LOCATIONS WHERE PHYSICAL CONDITIONS ARE SUCH THAT ADDED VISIBILITY OF THE CROSSWALK IS NECESSARY, OR AT PLACES WHERE PEDESTRIANS MIGHT NOT BE EXPECTED.
2.) ALL CROSSWALKS SHALL COMPLY WITH THE FEDERAL HIGHWAY ADMINISTRATION'S "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), AS AMENDED.
3.) LONGITUDINAL LINES SHALL BE PERPENDICULAR TO TRAVELLED WAY THE EXTEND ACROSS THE FULL WIDTH OF PAVEMENT OR TO THE EDGE OF THE INTERSECTING CROSSWALK TO DISCOURAGE DIAGONAL WALKING BETWEEN CROSSWALKS.
4.) ALL CROSSWALK LONGITUDINAL LINES SHALL BE WHITE THERMOPLAST. ALL LINES AND NEUTRAL AREAS SHALL BE OF EQUAL WIDTHS.
5.) WARNING SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH MUTCD, AS AMENDED.
6.) THE SPACING OF THE LINES SHALL BE SELECTED TO AVOID THE WHEEL PATH.

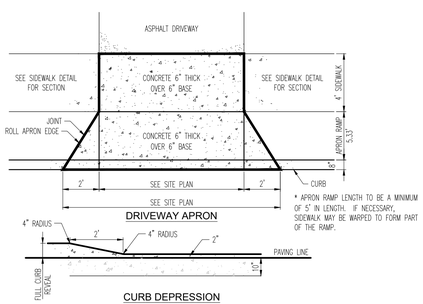
T / S20 HIGH VISIBILITY CROSSWALK DETAIL (PERPENDICULAR TO INTERSECTION)
SCALE: N.T.S. REV.: 2015.03.09



T / S5 WHITE PAINTED TRAFFIC ARROW DETAIL
SCALE: N.T.S. REV.: 2015.03.09



T / S4 WHITE PAINTED STOP BAR DETAIL
SCALE: N.T.S. REV.: 2015.03.09

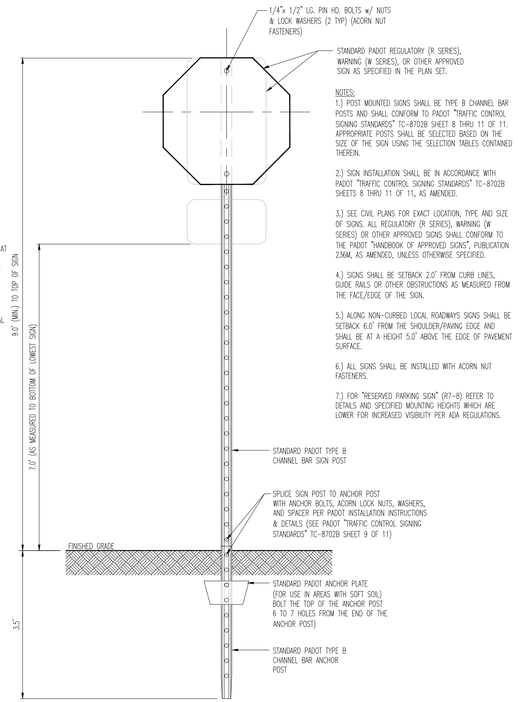


* APRON RAMP LENGTH TO BE A MINIMUM OF 5' IN LENGTH. IF NECESSARY, SIDEWALK MAY BE WARPED TO FORM PART OF THE RAMP.

CURB DEPRESSION

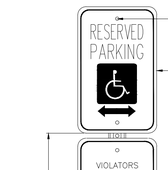
NOTES:
1. ALL CONCRETE TO BE WHITE PA CLASS "A" (4,000 PSI @ 28 DAYS)
2. BASE TO BE 2A MODIFIED, MECHANICALLY TAMPED.
3. ALL JOINTS TO BE FILLED WITH 1/4" PREMOLDED EXPANSION JOINT MATERIAL.
4. WELDED WIRE FABRIC (6/6–10/10) SHALL BE PROVIDED IN ALL SIDEWALK CONSTRUCTED AT DRIVEWAYS

P / S3 CONCRETE DRIVEWAY APRON DETAIL
SCALE: N.T.S. REV.: 2015.03.09

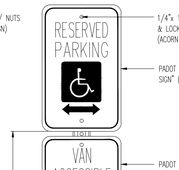


NOTES:
1.) POST MOUNTED SIGNS SHALL BE TYPE B CHANNEL BAR POSTS AND SHALL CONFORM TO PADOT "TRAFFIC CONTROL SIGNING STANDARDS" TC–8702B SHEET 8 THRU 11 OF 11. APPROPRIATE POSTS SHALL BE SELECTED BASED ON THE SIZE OF THE SIGN USING THE SELECTION TABLES CONTAINED THEREIN.
2.) SIGN INSTALLATION SHALL BE 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 / S9 STANDARD POLE MOUNTED SIGN INSTALLATION DETAIL
SCALE: N.T.S. REV.: 2015.03.09



T / S13 RESERVE PARKING SPACE & PENALTIES SIGNS
SCALE: N.T.S. REV.: 2016.01.05



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, AS AMENDED.
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), 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 OR OTHER OBSTRUCTIONS AS MEASURED FROM THE FACE/EDGE OF THE SIGN.
5.) RESERVED PARKING SPACE SIGNS SHALL CONFORM TO DEPARTMENT OF JUSTICE "ADA STANDARDS FOR ACCESSIBLE DESIGN" AS AMENDED.
6.) ALL SIGNS SHALL BE INSTALLED WITH ACORN NUT FASTENERS.

T / S12 RESERVE PARKING SPACE w/ PENALTIES & VAN ACCESSIBLE SIGNS
SCALE: N.T.S. REV.: 2016.01.05

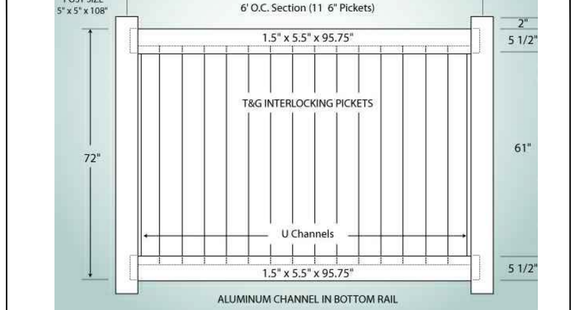
24"x12"
BEGIN SIGN
(R3-9CP)

24"x12"
END SIGN
(R3-9DP)

24"x24"
PENNSYLVANIA ROUTE MARKER
(M1-5)

24"x12"
NORTH MARKER
(M3-1)

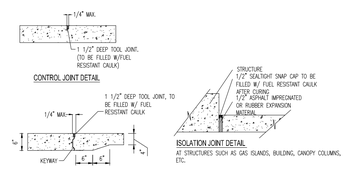
24"x12"
TO MARKER
(M4-5)



NOTE: POSTS, RAILS, PICKETS, GATE UPRIGHTS, POST CAPS, AND ACCESSORIES SHALL BE OF HIGH IMPACT, ULTRAVIOLET (U.V.) RESISTANT, RIGID PVC, AND SHALL COMPLY WITH ASTM D 1784, CLASS 14344B

6' HIGH PVC PRIVACY FENCE

NOT TO SCALE



CONSTRUCTION JOINT DETAIL

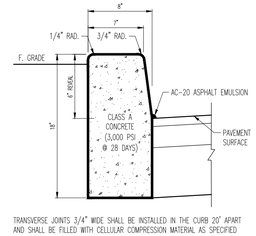
NOTES:

SEE ARCHITECTURAL SPECIFICATION FOR COMPLETE DETAILS

CONTROL JOINT SPACING IS 15'–0" MAXIMUM PARALLEL TO PARKING STALLS AND A SINGLE CONTROL AT THE CENTERLINE PERPENDICULAR TO PARKING STALLS.

EXPANSION JOINTS ARE REQUIRED AT THE INTERFACE OF THE BUILDING AND THE SIDEWALK AND ANY CURBED ISLANDS.

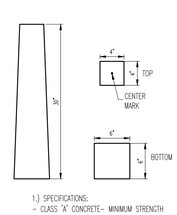
A CONSTRUCTION JOINT IS REQUIRED AT THE INTERFACE BETWEEN THE SIDEWALK AND PARKING AREA.



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.

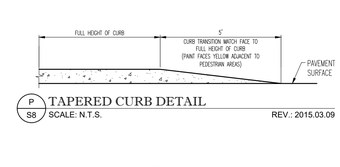
P / S5 TYPICAL CONCRETE CURB DETAIL
SCALE: N.T.S. REV.: 2015.03.09

P / S4 CONCRETE JOINTS DETAIL
SCALE: N.T.S. REV.: 2015.03.09

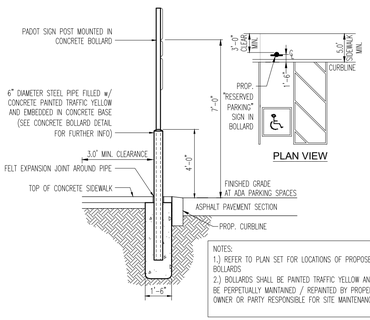


1.) SPECIFICATIONS:
– CLASS 'A' CONCRETE– MINIMUM STRENGTH (3,000 P.S.I. @ 28 DAYS)
– STEEL REINFORCEMENT (#4 REBAR)

A / S11 SURVEYOR'S MONUMENT DETAIL
SCALE: N.T.S. REV.: 2015.03.09

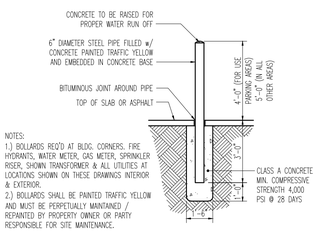


P / S8 TAPERED CURB DETAIL
SCALE: N.T.S. REV.: 2015.03.09



NOTES:
1.) REFER TO PLAN SET FOR LOCATIONS OF PROPOSED BOLLARDS
2.) BOLLARDS SHALL BE PAINTED TRAFFIC YELLOW AND MUST BE PERPETUALLY MAINTANED / REPAINTED BY PROPERTY OWNER OR PARTY RESPONSIBLE FOR SITE MAINTENANCE.

T / 16 "RESERVED PARKING" SIGN WITHIN BOLLARD DETAIL
SCALE: N.T.S.



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 MAINTANED / REPAINTED BY PROPERTY OWNER OR PARTY RESPONSIBLE FOR SITE MAINTENANCE.

T / 18 BOLLARD DETAIL
SCALE: N.T.S.

UNIFORM PARCEL IDENTIFIER: 32-4-1090.1

R:\21\PC211160\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\PC211160-CNDS-1A—LAYOUT C-901 DETAILS

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
INDUSTRIAL ENGINEERING
SUSTAINABILITY SERVICES
PERMITTING SERVICES
TRANSPORTATION SERVICES

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	05/25/2022	REV. PER TOWNSHIP COMMENTS	LGU / MJB

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NOT APPROVED FOR CONSTRUCTION

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PROJECT No.:	PC211160
DRAWN BY:	LGU
CHECKED BY:	J.R.K.
DATE:	03/15/2022
CAD I.D.:	PC211160-CNDS-1A

PROJECT:

AMENDED FINAL PRD PLANS

FOR

PROSPERITY PROPERTY INVESTMENTS, LLC

"FINAL PLAN FOR LOT 2B OF PARCEL 5C" PROPOSED COMMERCIAL DEVELOPMENT

GRAPHITE MINE ROAD & STATION BOULEVARD UPPER UWCHLAN TOWNSHIP CHESTER COUNTY COMMONWEALTH OF PENNSYLVANIA

BOHLER
1600 MANOR DRIVE, SUITE 200
CHALFONT, PA 18914
Phone: (215) 996-9100
Fax: (215) 996-9102
www.BohlerEngineering.com

J.R. KORCZAK — PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE NO. PE084279
NEW JERSEY LICENSE NO. GE24A0715400

SHEET TITLE:

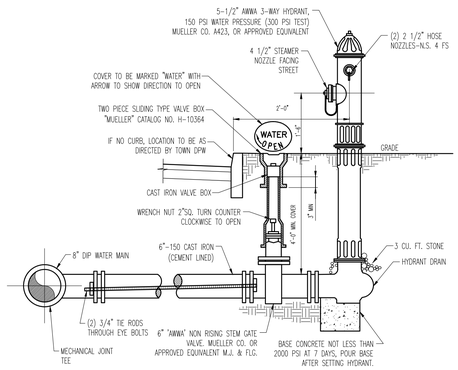
DETAILS

SHEET NUMBER:

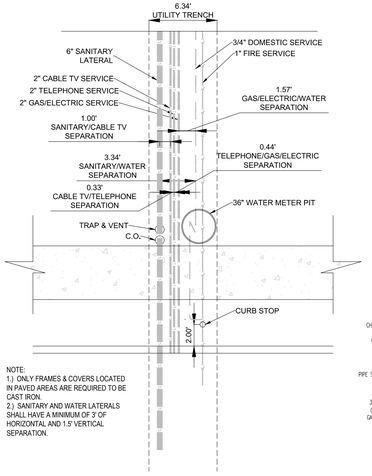
C-901

31 OF 37

REVISION 1 - 05/25/2022

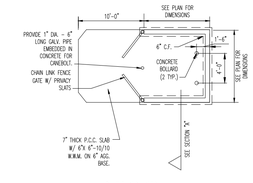


W S3 TYPICAL HYDRANT & VALVE INSTALLATION
SCALE: N.T.S. REV.: 2015.03.09

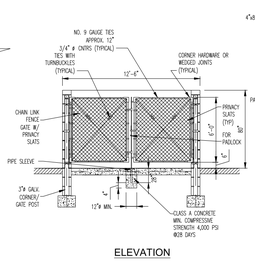


NOTE:
1.) ONLY FRAMES & COVERS LOCATED IN PAVED AREAS ARE REQUIRED TO BE CAST IRON.
2.) SANITARY AND WATER LATERALS SHALL HAVE A MINIMUM OF 3' OF HORIZONTAL AND 1.5' VERTICAL SEPARATION.

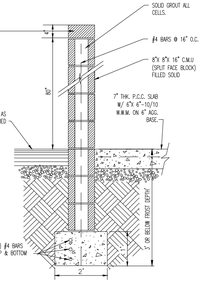
TYPICAL BUILDING SERVICES DETAIL
N.T.S.



PLAN VIEW



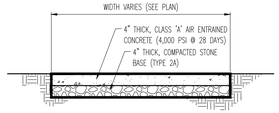
ELEVATION



SECTION "A"

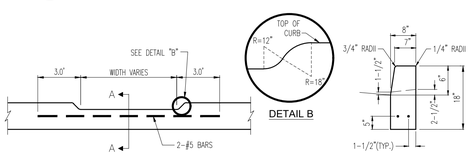
NOTE: TRASH ENCLOSURE FINISH TO BE COORDINATED WITH OWNER.

CMU TRASH ENCLOSURE DETAIL
SCALE: N.T.S.



NOTES:
1. EXPANSION JOINTS 1/2" WIDE PREMOULDED BIT. MATERIAL SHALL BE INSTALLED AT 30' INTERVALS. CONTRACTION JOINTS TO BE SPACED AT EQUAL INTERVALS, 5' MAXIMUM LENGTH.
2. WELDED WIRE FABRIC (6/6-10/10) SHALL BE PROVIDED IN ALL SIDEWALK CONSTRUCTED IN DRIVEWAYS.

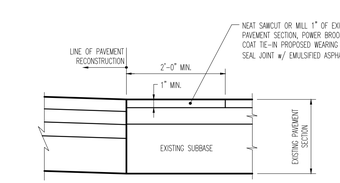
P S6 CONCRETE SIDEWALK DETAIL
SCALE: N.T.S. REV.: 2015.03.09



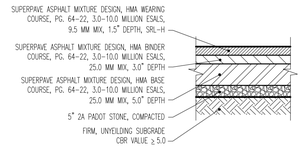
PLAN VIEW SECTION A-A

PROVIDE STANDARD DEPRESSED CURB ONLY AT CROSSWALK RAMPS

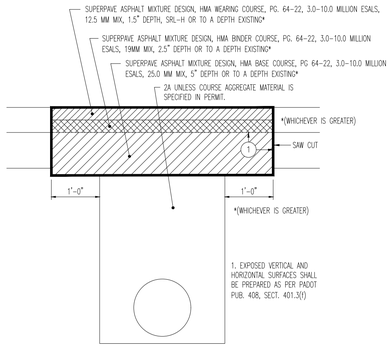
P 1 DEPRESSED CURB DETAIL
SCALE: N.T.S.



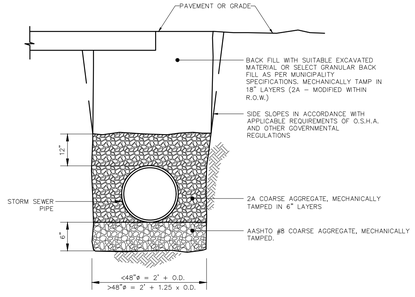
P S7 PAVEMENT TIE-IN DETAIL
SCALE: N.T.S. REV.: 2015.03.09



P S14 STANDARD ASPHALT PAVEMENT DETAIL
SCALE: N.T.S. REV.: 2015.03.09



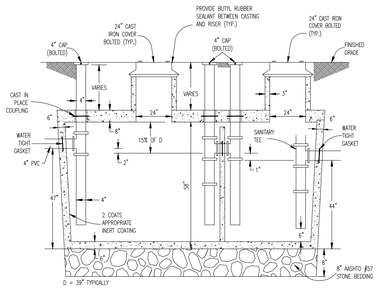
P S21 FLEXIBLE PAVEMENT RESTORATION
SCALE: N.T.S. REV.: 2015.03.09



EXCAVATIONS IN EXISTING PAVED ROADWAYS SHALL BE COORDINATED WITH THE LOCAL PERMITTING AGENCY, AND ALL EXCAVATION SHALL BE PAVED WITH TEMPORARY BITUMINOUS PAVEMENT FROM THE DATE OF ORIGINAL EXCAVATION UNTIL PERMANENT PAVEMENT IS INSTALLED. (MINIMUM = 90 DAYS, MAXIMUM = 120 DAYS)

THIS DETAIL IS NOT FOR USE WITHIN A STATE RIGHT-OF-WAY. REFER TO THE LATEST APPROVED DOT SPECIFICATIONS FOR TRENCH BEDDING WITHIN A STATE RIGHT-OF-WAY.

R S8 TRENCH BEDDING CLASSIFICATION (STORM)
SCALE: N.T.S. REV.: 2015.03.09



ALL INLET AND OUTLET PIPES SHALL BE INSTALLED NO MORE THAN 6" FROM THE BOTTOM OF THE GREASE TRAP.

TANK TAPERS TOP TO BOTTOM AND IS TRAPEZOIDAL IN CROSS SECTION.

TANK IS 5000 PSI CONCRETE-STEEL REINFORCED (@ 28 DAYS) CONCRETE CONFORMS TO ACI 318-16-4.5.1 AND 318-16-4.5.2, ASTM A615 AND A185

-DIMENSION: 151" INTERIOR/ 163" EXTERIOR LENGTH x 72" INTERIOR/ 84" EXTERIOR WIDTH

NOTES:

1) WHEN LOCATED IN DRIVEWAYS OR PAVED AREAS, GREASE TRAP TO BE DESIGNED FOR APPROPRIATE LOAD BEARING CONDITIONS. GREASE TRAP SHALL BE CAPABLE OF WITHSTANDING HS-20 LOADING.

2) ALL PIPE PENETRATIONS SHALL BE WATERTIGHT.

3) GREASE TRAP SHALL BE PROVIDED WITH GAS-TIGHT MANHOLE COVERS, IN ACCORDANCE WITH TOWNSHIP STANDARD SPECIFICATIONS.

4) PRECAST CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH 5000 PSI.

5) EXTERIOR CONCRETE SURFACES BELOW GRADE SHALL HAVE 2 COATS OF COAL TAR EPOXY.

6) SPECIFIC SEALANT DETAIL AT CONCRETE RISER TO CONCRETE VAULT INTERFACE SHALL BE WATERTIGHT. AT A MINIMUM, THE JOINT SHALL BE SEALED WITH BUTYL RUBBER SEALANT (KENT SEAL #2 OR APPROVED EQUIVALENT) AND THE EXTERIOR OF THE JOINT SHALL BE SEALED WITH NON-SHRINK GROUT IN CONFORMANCE WITH THE TOWNSHIP STANDARD GREASE TRAP DETAIL.

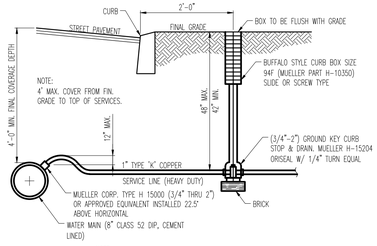
7) TANK SHALL BE TESTED FOR WATER TIGHTNESS BY FILLING FOR 24 HRS. TO SOAK, THEN TOPPED OFF, AND THEN WATCHED FOR 24 HRS. NO DROP IN WATER IS ALLOWED.

8) CAST IRON SHALL BE BOLTED TO CONCRETE WITH MASTIC TAPE (KENT SEAL OR APPROVED EQUIVALENT) SEALANT.

9) MAXIMUM EARTH COVER=5.0', HS-20 LOADING.

10) INLET AND OUTLET EQUIPPED WITH PIPE SEALS.

GREASE TRAP DETAIL
1500 GALLON (2 COMPARTMENT) TANK
SCALE: N.T.S.



NOTE:
MODIFIED 2A STONE (8" LIFTS) SHALL BE PLACED WHEN BACKFILLING WATER SERVICE CONNECTION FROM MAIN TO BEHIND CURB.

W S2 WATER SERVICE CONNECTION DETAIL
SCALE: N.T.S. REV.: 2015.03.09

SITESCAPES P.O. Box 22326 Lincoln, NE 68542
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E-MAIL: info@sitescapesonline.com

TITLE: ATHENS BIKE RACK
PRODUCT NO.: AT2-03-SM
INCH TOLERANCES U.O.S.: FRACTION=±1/16" ANG.=±1°

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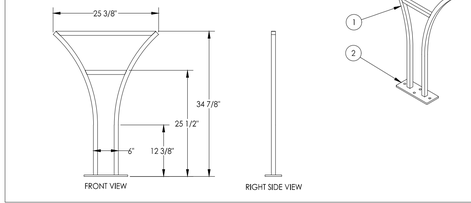
*Available in powder coat and DuraCoat finishes

MATERIALS LIST:
(1) Frame - 1" Sq. Solid Steel Bar
(2) Base Plate - 3/8" Stainless Steel Plate
(3) Mounted with Four Ø 1/2" x 4-5" Stainless Steel Anchor Bolts (Customer Supplied)

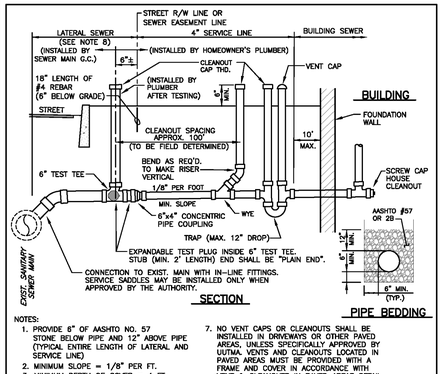


BIKE RACK DETAIL
SCALE: N.T.S.

REV	DATE	REVISION
6	4/21	
5	9/15	
4	10/14	
3	1/13	
2	6/05	
1	11/04	

Upper Uwchlan Township Municipal Authority
STANDARD DETAIL – SEWER SYSTEM
LATERAL & SERVICE LINE

ARRO Suite 200, 321 N. Furnace St. Birdsboro, PA 19508 Tel 610.374.5265 Fax 610.374.5287
DATE: APRIL 2021
DETAIL: 7000SD17



SECTION

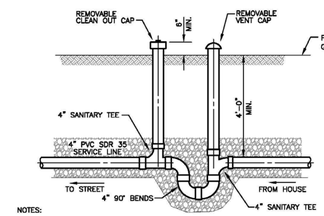
PIPE BEDDING

NOTES:
1. PROVIDE 6" OF AASHTO NO. 57 STONE BELOW PIPE AND 12" ABOVE PIPE (TYPICAL ENTIRE LENGTH OF LATERAL AND SERVICE LINE)
2. MINIMUM SLOPE = 1/8" PER FT.
3. MINIMUM DEPTH OF COVER = 4 FT
4. PIPE MATERIALS: LATERAL SEWER – PVC SDR 35 OR DIP CLASS 52 WHEN INSTALLED IN FILL MATERIAL SERVICE LINE – PVC SDR 35 OR SCH. 40
5. TO CONDUCT AIR TESTING OF SERVICE LINE, INSTALL EXPANDABLE PLUGS AT LOCATIONS SHOWN.
6. NO SEWER SERVICE LINE VENT CAPS SHALL BE INSTALLED WITHIN A 100-YR FLOOD PLAIN OR WITHIN FLOOD PRONE AREAS.
7. NO VENT CAPS OR CLEANOUTS SHALL BE INSTALLED IN DRIVEWAYS OR OTHER PAVED AREAS, UNLESS SPECIFICALLY APPROVED BY UUTMA. VENTS AND CLEANOUTS LOCATED IN PAVED AREAS MUST BE PROVIDED WITH A FRAME AND COVER IN ACCORDANCE WITH VENT & CLEANOUTS IN PAVED AREAS DETAIL.
8. THE LATERAL SEWER SHALL BE INSTALLED TO THE EDGE OF THE SEWER EASEMENT FOR SEWERS LOCATED IN AN EASEMENT OR TO THE STREET RIGHT-OF-WAY AS A MINIMUM, OR TO SUCH POINT, AS REQUIRED, TO CLEAR STREET SIDEWALKS AND UNDERGROUND UTILITIES.
9. CLEANOUTS AND VENTS IN LAWN AREAS MUST BE 6" MINIMUM ABOVE GRADE.

REV	DATE	REVISION
4	4/21	
3	1/13	
2	6/05	
1	11/04	

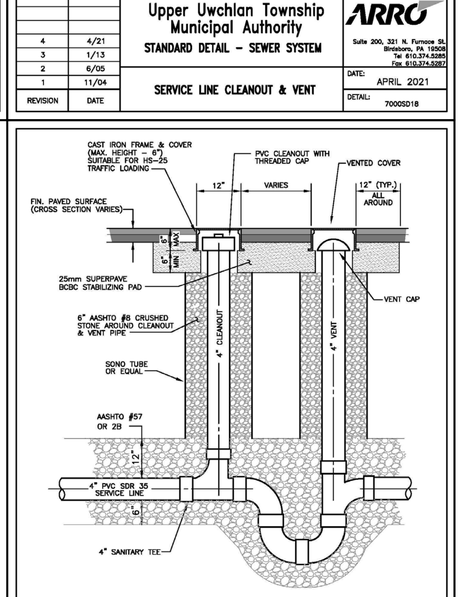
Upper Uwchlan Township Municipal Authority
STANDARD DETAIL – SEWER SYSTEM
SERVICE LINE CLEANOUT & VENT

ARRO Suite 200, 321 N. Furnace St. Birdsboro, PA 19508 Tel 610.374.5265 Fax 610.374.5287
DATE: APRIL 2021
DETAIL: 7000SD18



NOTES:
1. FOR CLEANOUTS LOCATED IN YARDS, CAPS TO REMAIN ABOVE GRADE AT ALL TIMES DURING & AFTER INSTALLATION.
2. CLEANOUTS LOCATED IN PAVED AREAS MUST BE PROVIDED WITH FRAME AND COVER SIMILAR TO CAPS SHOWN ON DETAIL 7000SD19.

SECTION



REV	DATE	REVISION
3	4/21	
2	1/13	
1	6/05	

Upper Uwchlan Township Municipal Authority
STANDARD DETAIL – SEWER SYSTEM
SERVICE LINE CLEANOUT & VENT IN PAVED AREAS

ARRO Suite 200, 321 N. Furnace St. Birdsboro, PA 19508 Tel 610.374.5265 Fax 610.374.5287
DATE: APRIL 2021
DETAIL: 7000SD19

UNIFORM PARCEL IDENTIFIER: 32-4-1090.1

R:\SITES\211160\CAD\DRAWINGS\PLAN SET\CIVIL SITE PLANS\PC211160-CNDS-1A-----1A LAYOUT C-902 DETAILS

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	05/25/2022	REV. PER TOWNSHIP COMMENTS	LGU / MJB

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PROJECT No.: PC211160
DRAWN BY: LGU
CHECKED BY: J.R.K.
DATE: 03/15/2022
CAD I.D.: PC211160-CNDS-1A

PROJECT:

AMENDED FINAL PRD PLANS

FOR

PROSPERITY PROPERTY INVESTMENTS, LLC

"FINAL PLAN FOR LOT 2B OF PARCEL 5C" PROPOSED COMMERCIAL DEVELOPMENT

GRAPHITE MINE ROAD & STATION BOULEVARD
UPPER UWCHLAN TOWNSHIP
CHESTER COUNTY
COMMONWEALTH OF PENNSYLVANIA

BOHLER
1600 MANOR DRIVE, SUITE 200
CHALFONT, PA 18914
Phone: (215) 996-9100
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J.R. KORCZAK — COMMONWEALTH OF PENNSYLVANIA — PROFESSIONAL ENGINEER
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE074279
NEW JERSEY LICENSE No. 24GE04715400

SHEET TITLE:

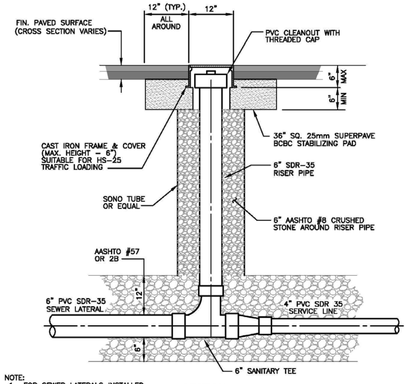
DETAILS

SHEET NUMBER:

C-902

32 OF 37

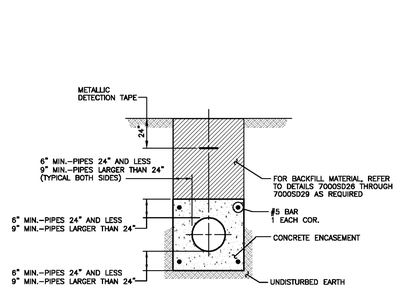
REVISION 1 - 05/25/2022



NOTE:
1. FOR SEWER LATERALS INSTALLED IN FILL MATERIAL, USE CLASS 52 DUCTILE IRON PIPE.

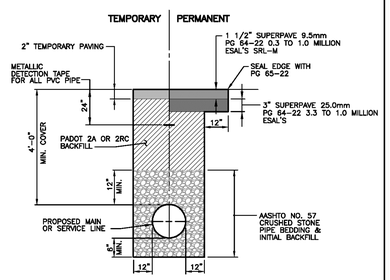
SECTION

REVISION	DATE	Upper Uwchlan Township Municipal Authority STANDARD DETAIL – SEWER SYSTEM CLEANOUT/TEST TEE IN PAVED AREAS	ARRO Suite 200, 321 N. Furnace St, Birdsboro, PA 19508 Tel 610.374.5285 Fax 610.374.5287 DATE: APRIL 2021 DETAIL: 7000SD20
3	4/21		
2	1/13		
1	6/05		



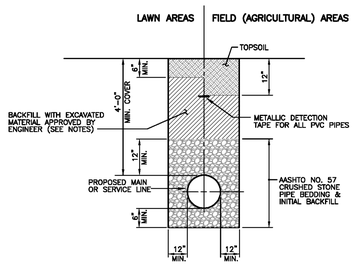
SECTION

REVISION	DATE	Upper Uwchlan Township Municipal Authority STANDARD DETAIL – SEWER SYSTEM CONCRETE ENCASEMENT	ARRO Suite 200, 321 N. Furnace St, Birdsboro, PA 19508 Tel 610.374.5285 Fax 610.374.5287 DATE: APRIL 2021 DETAIL: 7000SD24
4	4/21		
3	1/13		
2	6/05		
1	11/04		



SECTION

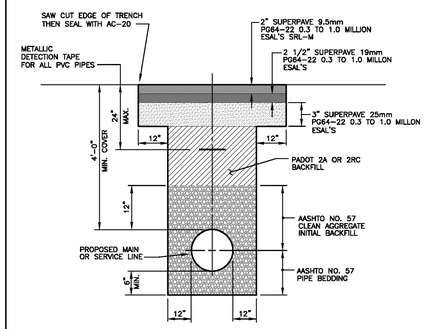
REVISION	DATE	Upper Uwchlan Township Municipal Authority STANDARD DETAIL – SEWER SYSTEM TRENCH RESTORATION PARKING AREAS & DRIVEWAYS	ARRO Suite 200, 321 N. Furnace St, Birdsboro, PA 19508 Tel 610.374.5285 Fax 610.374.5287 DATE: APRIL 2021 DETAIL: 7000SD28
4	4/21		
3	1/13		
2	6/05		
1	11/04		



SECTION

NOTES:
1. BACKFILL TRENCHES WITH EXCAVATED MATERIAL CONTAINING NO STONES LARGER THAN FOUR (4) INCHES IN ANY DIMENSION.
2. A MAXIMUM OF 20% OF BACKFILL CAN CONSIST OF STONES (NOTED ABOVE) IF EVENLY DISTRIBUTED THROUGHOUT BACKFILL.
3. BACKFILL MATERIAL SHALL BE FREE OF ORGANIC MATERIAL, REFUSE, AND FROZEN MATERIAL SUBJECT TO LIMITATIONS SPECIFIED.
4. BACKFILL SHALL BE PLACED IN 4" LOOSE LIFTS WITH THE USE OF A MECHANICAL TAMPER AND 8" LOOSE LIFTS WITH THE USE OF A VIBRATORY TAMPER.

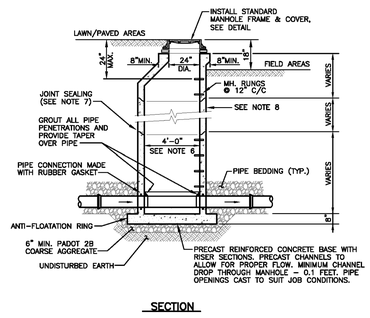
REVISION	DATE	Upper Uwchlan Township Municipal Authority STANDARD DETAIL – SEWER SYSTEM TRENCH RESTORATION LAWN/FIELD AREAS	ARRO Suite 200, 321 N. Furnace St, Birdsboro, PA 19508 Tel 610.374.5285 Fax 610.374.5287 DATE: APRIL 2021 DETAIL: 7000SD29
4	4/21		
3	1/13		
2	6/05		
1	11/04		



SECTION

REVISION	DATE	Upper Uwchlan Township Municipal Authority STANDARD DETAIL – SEWER SYSTEM TRENCH RESTORATION TOWNSHIP ROADS	ARRO Suite 200, 321 N. Furnace St, Birdsboro, PA 19508 Tel 610.374.5285 Fax 610.374.5287 DATE: APRIL 2021 DETAIL: 7000SD27
4	4/21		
3	1/13		
2	6/05		
1	11/04		

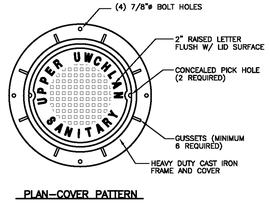
NOTES:
1. ADJUST TO GRADE WITH CONCRETE GRADE RINGS (MAXIMUM VERTICAL ADJUSTMENT 6") SEE FRAME & COVER DETAILS
2. MECHANICALLY VIBRATED PRECAST CONCRETE SHALL CONFORM TO A.S.T.M. SPEC. C-478.
3. IF INCOMING INVERT EXCEEDS OUTGOING INVERT BY GREATER THAN OR EQUAL TO 6", SEE INSIDE SPLASH/INSIDE DROP MANHOLE DETAILS.
4. FOR MANHOLES WHERE TOP OF RIM TO INVERT DISTANCE IS LESS THAN 5'-0", USE FLAT TOP MANHOLE IN LIEU OF CONE TOP.
5. FILL ALL LIFTING HOLES WITH NON-SHRINK, NON-METALLIC GROUT.
6. LARGER DIAMETER MANHOLE REQUIRED ON INSIDE DROP AND INSIDE SPLASH CONNECTION GREATER THAN 12". SEE MANHOLE DETAILS FOR INSIDE SPLASH/INSIDE DROP
7. PROVIDE 2 RINGS OF PREFORMED BUTYL RUBBER SEALING COMPOUND (INSIDE & OUTSIDE) AT ALL MANHOLE JOINTS.
8. COAT EXTERIOR WITH BITUMASTIC, 20-MIL DFT (TYP.).



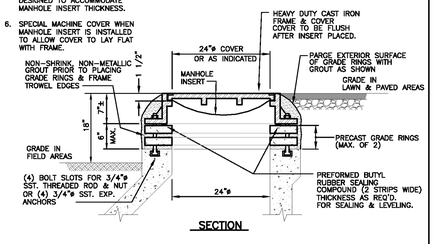
SECTION

REVISION	DATE	Upper Uwchlan Township Municipal Authority STANDARD DETAIL – SEWER SYSTEM PRECAST MANHOLE 8" THROUGH 24" SEWERS	ARRO Suite 200, 321 N. Furnace St, Birdsboro, PA 19508 Tel 610.374.5285 Fax 610.374.5287 DATE: APRIL 2021 DETAIL: 7000SD01
4	4/21		
3	1/13		
2	6/05		
1	11/04		

NOTES:
1. MANHOLE FRAME & COVER SHALL BE CAT. NO. 1045 FRAME & 1040AGS COVER, BY EAST JORDAN IRON WORKS, DESIGNED FOR AASHTO HS-25 LOADING.
2. MANHOLE INSERT IS NOT REQ'D. WHEN INSTALLING A WATERTIGHT FRAME & COVER.
3. ANCHOR BOLT HOLES SHALL BE DRILLED WITH A PERCUSSION OR ROTARY HAMMER DRILL UTILIZING A CARBIDE DRILL BIT. CORE DRILLING, OR ROTATIONAL ONLY DRILLING, OF ANY KIND, IS NOT ALLOWED.
4. FRAME ANCHORS SHALL BE TIGHTENED PRIOR TO CURING OF NON-SHRINK, NON-METALLIC GROUT.
5. COVER RECESS SHALL BE DESIGNED TO ACCOMMODATE MANHOLE INSERT THICKNESS.
6. SPECIAL MACHINE COVER WHEN MANHOLE INSERT IS INSTALLED TO ALLOW COVER TO LAY FLAT WITH FRAME.



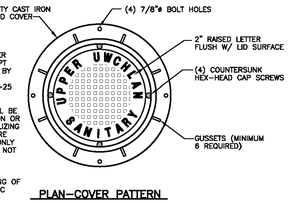
PLAN–COVER PATTERN



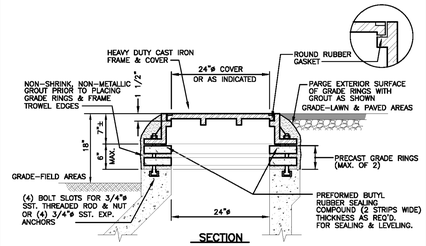
SECTION

REVISION	DATE	Upper Uwchlan Township Municipal Authority STANDARD DETAIL – SEWER SYSTEM MANHOLE FRAME & COVER	ARRO Suite 200, 321 N. Furnace St, Birdsboro, PA 19508 Tel 610.374.5285 Fax 610.374.5287 DATE: APRIL 2021 DETAIL: 7000SD04
4	4/21		
3	1/13		
2	6/05		
1	11/04		

NOTES:
1. WATERTIGHT FRAME & COVER SHALL BE CAT. NO. 1045ZPT FRAME & 1040APT COVER, BY EAST JORDAN IRON WORKS, DESIGNED FOR AASHTO HS-25 LOADING.
2. ANCHOR BOLT HOLES SHALL BE DRILLED WITH A PERCUSSION OR ROTARY HAMMER DRILL UTILIZING A CARBIDE DRILL BIT. CORE DRILLING, OR ROTATIONAL ONLY DRILLING, OF ANY KIND, IS NOT ALLOWED.
3. FRAME ANCHORS SHALL BE TIGHTENED PRIOR TO CURING OF NON-SHRINK, NON-METALLIC GROUT.



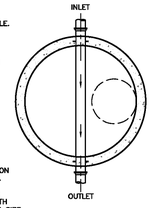
PLAN–COVER PATTERN

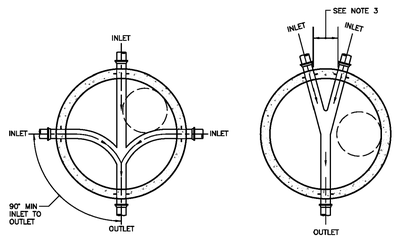


SECTION

REVISION	DATE	Upper Uwchlan Township Municipal Authority STANDARD DETAIL – SEWER SYSTEM MANHOLE FRAME & COVER (WATERTIGHT)	ARRO Suite 200, 321 N. Furnace St, Birdsboro, PA 19508 Tel 610.374.5285 Fax 610.374.5287 DATE: APRIL 2021 DETAIL: 7000SD05
4	4/21		
3	1/13		
2	6/05		
1	11/04		

NOTES:
1. THREE INLET PIPES AND ONE OUTLET PIPE MAX INTO MANHOLE.
2. NO LATERALS INTO MANHOLES, EXCEPT BY SPECIAL EXCEPTION FROM TOWNSHIP AUTHORITY.
3. MINIMUM 12" SEPARATION FROM EDGE OF PIPE PENETRATION TO EDGE OF PIPE PENETRATION.
4. MINIMUM CHANNEL DROP THROUGH MANHOLE:
   STRAIGHT THROUGH – 0.1 FEET
   BEND – 0.2 FEET
5. ALL CHANNELS SHALL BE PRECAST, UNLESS OTHERWISE SPECIFICALLY NOTED OR APPROVED.
6. THESE DETAILS APPLY TO PRECAST CHANNELS IN NEW MANHOLES, AND FIELD-FORMED CHANNELS IN EXISTING MANHOLES.
7. CHANNEL BENCH AT PIPE SHALL MATCH 3/4 CROWN ELEVATION OF PIPE AND RISE 1/2" PER FOOT TO THE MANHOLE WALLS.
8. CHANNELS SHALL MATCH THE CROSS-SECTIONAL DIMENSIONS OF THE PIPES ENTERING AND EXITING THE MANHOLE. SMOOTH TRANSITIONS SHALL BE PROVIDED BETWEEN CHANGES IN PIPE SIZE.





REVISION	DATE	Upper Uwchlan Township Municipal Authority STANDARD DETAIL – SEWER SYSTEM PRECAST MANHOLE CHANNELS	ARRO Suite 200, 321 N. Furnace St, Birdsboro, PA 19508 Tel 610.374.5285 Fax 610.374.5287 DATE: APRIL 2021 DETAIL: 7000SD06
4	4/21		
3	1/13		
2	6/05		
1	11/04		

UNIFORM PARCEL IDENTIFIER: 32-4-1090.1

R:\SP\2111\60\CAD\DRAWINGS\PLAN SET\CIVIL SITE PLANS\PC211160-CNDS-1A-----LAYOUT C-903 DETAILS

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PROJECT No.:	PC211160
DRAWN BY:	LGU
CHECKED BY:	J.R.K.
DATE:	03/15/2022
CAD I.D.:	PC211160-CNDS-1A

PROJECT:

AMENDED FINAL PRD PLANS

FOR

PROSPERITY PROPERTY INVESTMENTS, LLC

"FINAL PLAN FOR LOT 2B OF PARCEL 5C" PROPOSED COMMERCIAL DEVELOPMENT

GRAPHITE MINE ROAD & STATION BOULEVARD
UPPER UWCHLAN TOWNSHIP
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J.R. KORCZAK
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE NO. PE074279
NEW JERSEY LICENSE NO. GE45471400

SHEET TITLE:

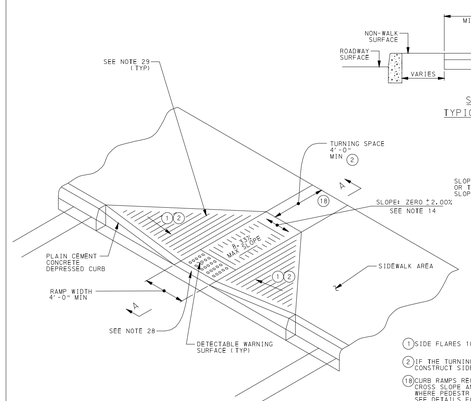
DETAILS

SHEET NUMBER:

C-903

33 OF 37

REVISION 1 - 05/25/2022



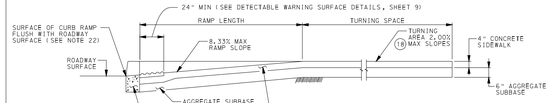
SIDEWALK
TYPICAL SECTION

DEPRESSED CURB
FOR CURB RAMPS

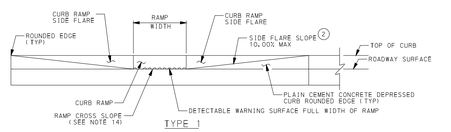
TYPE 1
CURB RAMP

NOTES

1. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PUBLICATION 408, SECTIONS 350, 409, 630, 676, 694, AND 695.
2. PROVIDE EXPANSION JOINT MATERIAL½" THICK WHERE CURB RAMP ADJOINS ANY RIGID PAVEMENT, SIDEWALK OR STRUCTURE WITH THE TOP OF JOINT FILLER FLUSH WITH ADJACENT CONCRETE SURFACE.
3. CONSTRUCT CURB RAMPS WITH A MINIMUM 4'-0"X 4'-0" CLEAR SPACE BEYOND THE CURB FACE, WITHIN THE WIDTH OF THE CROSSWALK AND WHOLLY OUTSIDE THE PARALLEL VEHICLE TRAVEL LANE, SEE SHEET 7 FOR CROSSWALK DETAILS.
4. SEAL JOINTS WITH AN APPROVED SEALING MATERIAL.
5. PROVIDE SLIP RESISTANT TEXTURE ON CURB RAMP BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP, EXTEND TEXTURE THE FULL WIDTH AND LENGTH OF THE CURB RAMP INCLUDING SIDE FLARES.
6. MODIFY CONSTRUCTION DETAILS TO ADAPT DIMENSIONS TO EXISTING CURB HEIGHTS WHERE THE CURB IS LESS THAN THE STANDARD 8" HEIGHT.
7. CURB RAMP AND SIDE FLARE LENGTHS ARE VARIABLE AND BASED ON CURB HEIGHT AND THE SIDEWALK SLOPE.
8. TO AVOID CHASING GRADE INDEFINITELY WHEN TRAVERSING THE HEIGHT OF CURB, RAMP LENGTH NOT TO EXCEED 15'-0". ADJUST RAMP SLOPES AS NEEDED TO PROVIDE ACCESS TO MAXIMUM EXTENT FEASIBLE.
9. NON-WALK AREA IS AN OBSTRUCTED OR GRASS/NON-PAVED AREA ADJACENT TO THE PEDESTRIAN ACCESS ROUTE THAT IS NOT USED BY THE PEDESTRIAN FOR ACCESS.
10. THE DETAILS DEPICT PEDESTRIAN PUSHBUTTON POLES TO ILLUSTRATE THE RECOMMENDED PLACEMENT OF PEDESTRIAN PUSHBUTTONS. FOR ALTERATIONS PROJECTS, PROVIDE ACCESS TO EXISTING PEDESTRIAN PUSHBUTTONS TO THE MAXIMUM EXTENT FEASIBLE. INSTALL PEDESTRIAN PUSHBUTTON STUB POLES, WHERE APPLICABLE, SO AS NOT TO CREATE PEDESTRIAN OBSTRUCTIONS.
11. SEE TC-8803 FOR ADDITIONAL PEDESTRIAN PUSHBUTTON DETAILS NOT SHOWN.
12. ALIGN DETECTABLE WARNING SURFACE TRUNCATED DOMES ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL OF THE RAMP AND RAMP SURFACES PERPENDICULAR TO CURB, SEE SHEET 9 FOR INSTALLATIONS ALONG CURVED SURFACES.
13. PROVIDE DETECTABLE WARNING SURFACES (DWS) 24" MINIMUM LIN THE DIRECTION OF PEDESTRIAN TRAVEL ACROSS FULL WIDTH OF RAMP AT THE GRADE BREAK NEAR STREET EDGE. PROVIDE DWS THAT CONTRAST VISUALLY WITH ADJACENT WALKWAY SURFACES, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT FOR THE FULL WIDTH OF RAMP.
14. FOR NEW CONSTRUCTION, DO NOT EXCEED 2.00% CROSS SLOPE ON THE CURB RAMP OR PEDESTRIAN ACCESS ROUTE.
15. FOR NEW CONSTRUCTION AND ALTERATIONS, CONSTRUCT CURB RAMP AND FLARE SLOPES WITH THE FLATTEST SLOPE POSSIBLE. THE SLOPES INDICATED IN THE DETAILS SHOW THE MAX SLOPE ALLOWED. SLOPES THAT EXCEED THOSE INDICATED IN THE DETAILS, OR CONTRACT DOCUMENTS AS APPLICABLE, WILL NOT BE ACCEPTED AND WILL BE RECONSTRUCTED.
16. CONSTRUCT SIDEWALKS AT A LONGITUDINAL SLOPE NOT TO EXCEED 5.00%. FOR ROADWAY PROFILE SLOPES THAT EXCEED 5.00%, CONSTRUCT PARALLEL SIDEWALK ADJACENT TO ROADWAY AT A LONGITUDINAL SLOPE NOT TO EXCEED ROADWAY PROFILE SLOPE.
17. ANY CHANGE IN GRADE AT THE BREW OF THE CURB RAMP AND ADJOINING ROAD SURFACE IS NOT TO EXCEED AN ALGEBRAIC DIFFERENCE OF 13.5%. THE COUNTER SLOPE OF THE GUTTER OR ROAD AT THE FOOT OF A CURB RAMP, TURNING SPACE OR BLENDED TRANSITION IS NOT TO EXCEED 5.00%. SEE SHEET 8 FOR DETAILS.
18. THE CONSTRUCTION STANDARDS DEPICTED ARE MOST APPROPRIATE FOR NEW CONSTRUCTION. ALL CONSTRUCTION MUST MEET THE STANDARDS CONTAINED HEREIN UNLESS OTHERWISE NOTED OR DIRECTED.
19. ALL SLOPES ARE MEASURED WITH RESPECT TO A LEVEL PLANE, THEREFORE, THE LENGTH OF RAMP IS NOT SOLELY DEPENDANT ON THE HEIGHT OF CURB. (FOR EXAMPLE, A 6" CURB DOES NOT NECESSARILY MEAN A RAMP LENGTH OF 6'-0" FOR A 12:1 SLOPE.
20. SIDEWALK WIDTH MAY BE REDUCED TO 4'-0", WHEN PASSING AREAS 5'-0" X 5'-0" ARE PROVIDED EVERY 200'.
21. THE TRAVEL LANE IS DEFINED BY THE OUTSIDE EDGE OF THE WHITE PAVEMENT MARKING LINE. IF A WHITE PAVEMENT MARKING LINE DOES NOT EXIST, THE TRAVEL LANE IS DEFINED BY THE CONTRACT DOCUMENTS.
22. CONSTRUCT DEPRESSED CURB FOR CURB RAMPS FLUSH TO ADJACENT ROADWAY. GRADE EDGE OF ROAD ELEVATIONS AT THE FLOW LINE TO ENSURE POSITIVE DRAINAGE AND PREVENT PONDING. FOR LEVEL TURNING SPACES BEHIND DEPRESSED CURB, ADJUST SLOPES TO PROVIDE POSITIVE DRAINAGE AT THE JOINT BETWEEN DEPRESSED CURB AND ROADWAYS. REMOVE EXCESS JOINT SEALER AND COVER THE SEALED AREA WITH A LIGHT APPLICATION OF DRY SAND.
23. CHEEK WALLS ARE PERMITTED WHEN ADJACENT TO NON-WALK AREAS OR ELEVATION DIFFERENCES CANNOT BE ACCOMMODATED BY FLARES OR GRADING. USE GRASS AREAS OR OTHER NON-WALK AREAS AT 3:1 OR FLATTER. DO NOT INSTALL CHEEK WALLS THAT INTERSECT THE PEDESTRIAN PATH.
24. CONSTRUCT TOP OF PLAIN CEMENT CONCRETE DEPRESSED CURB TO BE FLUSH WITH ADJACENT SURFACES (RAMPS, SIDEWALKS, FLARES).
25. FOR CURB RAMPS THAT LEAD TO A SINGLE CROSSWALK, THE RAMP (EXCLUDING FLARES) TO BE FULLY INSIDE OF MARKED CROSSWALK LINES. SEE SHEET 7 FOR DETAILS.
26. A 4'-0" MAXIMUM DIGITAL DISPLAY LEVEL WILL BE USED TO VERIFY THE SLOPES OF CURB RAMPS AND SIDEWALKS.
27. INSTALL DUMMY JOINTS WHERE RAMPS, TURNING SPACES, FLARES, AND SIDEWALKS ABUT.
28. CONSTRUCT DEPRESSED CURB SLOPE TO MATCH ROADWAY PROFILE AND HAVE A FLUSH CONNECTION. TRANSITION CURB RAMP CROSS SLOPE TO MATCH ROADWAY PROFILE AS GRADUALLY AS POSSIBLE, DO NOT EXCEED 5.00% PER 1'-0" CROSS SLOPE RATE OF CHANGE WHEN TRANSITIONING TO ROADWAY PROFILE.
29. DO NOT SCORE OR MAKE GROOVES ON SLOPED SURFACES. LINES SHOWN ON DETAILS ARE FOR ILLUSTRATION ONLY. SEE NOTE 5.



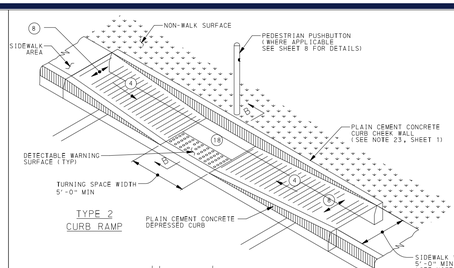
TYPE 1
SECTION A-A



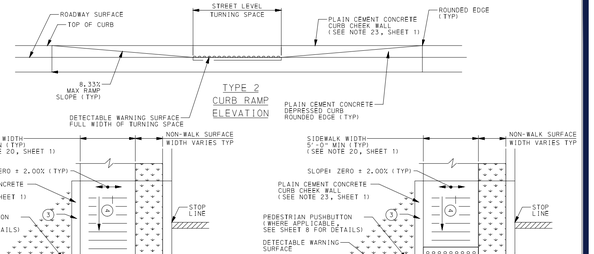
TYPE 1
ELEVATION

PERCENT SLOPE	EQUIVALENT SLOPE
10.00%	10:1
8.33%	12:1
7.14%	14:1
5.00%	20:1
2.00%	50:1
1.00%	100:1

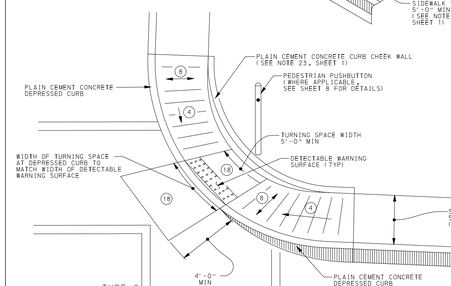
EQUIVALENT SLOPES



TYPE 2
CURB RAMP

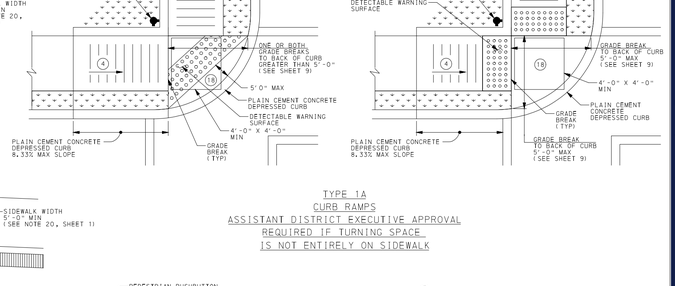


TYPE 2
CURB RAMP
ELEVATION

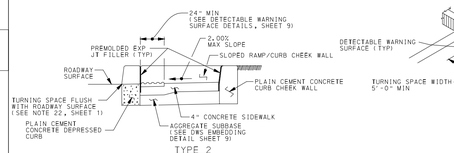


TYPE 2
CURB RAMP

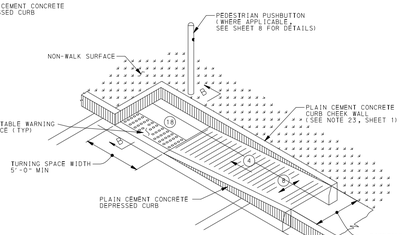
ASSISTANT DISTRICT EXECUTIVE APPROVAL
REQUIRED IF TURNING SPACE
IS NOT ENTIRELY ON SIDEWALK



TYPE 1A
CURB RAMPS
ASSISTANT DISTRICT EXECUTIVE APPROVAL
REQUIRED IF TURNING SPACE
IS NOT ENTIRELY ON SIDEWALK



TYPE 2
CURB RAMP
SECTION B-B



TYPE 2 PARTIAL
CURB RAMP

3 OPTIONAL CONCRETE ROLLED FLARE OR REGRADE SLOPE CAN BE USED TO MEET THE ADJACENT SURFACES IN LIEU OF PLAIN CEMENT CONCRETE CURB CHEEK WALL. SEE SHEET 4.
4 8.33% MAX RAMP SLOPE, SEE NOTE 8 SHEET 1
8 SLOPE= ZERO ± 2.00%
18 CURB RAMPS REQUIRE A TURNING SPACE WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SEE DETAILS FOR LOCATIONS AND DIMENSIONS.

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CURB RAMPS AND SIDEWALKS
NEW CONSTRUCTION OR
ALTERATION DETAILS
TYPE 1 CURB RAMPS AND
TYPICAL SECTIONS

RECOMMENDED JUN.10, 2013	RECOMMENDED JUN.10, 2013	SHT 1 OF 14
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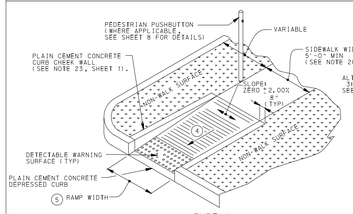
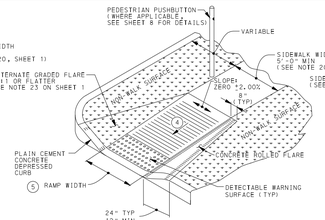
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF PROJECT DELIVERY
CURB RAMPS AND SIDEWALKS
NEW CONSTRUCTION OR
ALTERATION DETAILS
TYPE 1A AND TYPE 2 CURB RAMPS

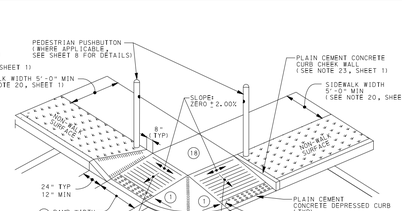
RECOMMENDED JUN.10, 2013	RECOMMENDED JUN.10, 2013	SHT 3 OF 14
CHIEF, HWY. DELIVERY DIVISION	ACTING DIR. BUREAU OF PROJECT DELIVERY	RC-67M



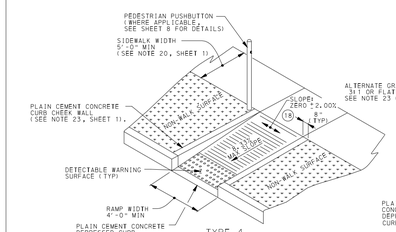
TYPE 4
CURB RAMP
(PARALLEL)



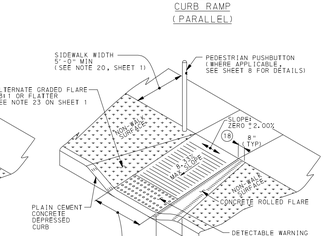
ALTERNATE
TYPE 4A
CURB RAMP
(PARALLEL)



TYPE 4/4A CURB RAMPS
WITH SHARED TURNING SPACE

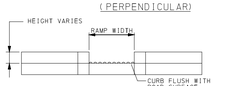


TYPE 4
CURB RAMP
(PERPENDICULAR)

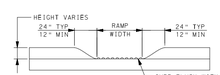


ALTERNATE
TYPE 4A
CURB RAMP
(PERPENDICULAR)

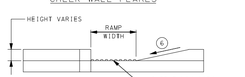
1 SIDE FLARES 10.00% MAX SLOPE.
4 8.33% MAX RAMP SLOPE, SEE NOTE 8 SHEET 1.
5 CURB RAMP WIDTH IS EQUAL TO SIDEWALK WIDTH WHEN THE SIDEWALK WIDTH IS GREATER THAN OR EQUAL TO THE MINIMUM 4'-0".
6 SLOPE VARIES SEE RAMP DETAILS.
18 CURB RAMPS REQUIRE A TURNING SPACE WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SEE DETAILS FOR LOCATIONS AND DIMENSIONS.



TYPE 4 CURB
CHEEK WALL FLARES



TYPE 4A NON-TRAVERSABLE
ROLLED FLARES



COMBINATION
FLARES

TYPICAL ELEVATIONS
FOR DEPRESSED CURBS

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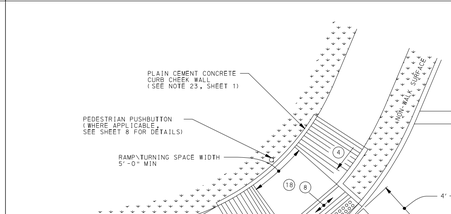
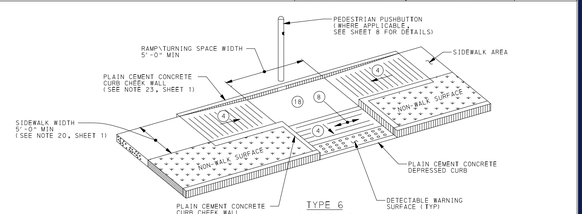
CURB RAMPS AND SIDEWALKS
NEW CONSTRUCTION OR
ALTERATION DETAILS
TYPE 4 CURB RAMPS AND
TYPICAL ELEVATIONS

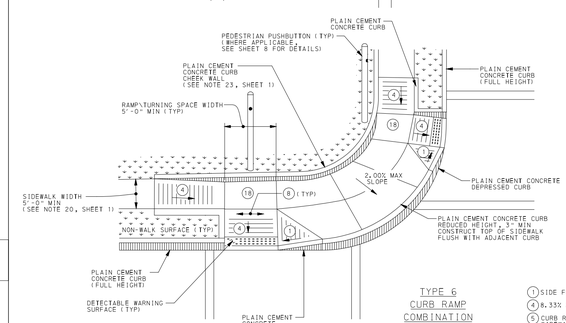
RECOMMENDED JUN.10, 2013	RECOMMENDED JUN.10, 2013	SHT 4 OF 14
CHIEF, HWY. DELIVERY DIVISION	ACTING DIR. BUREAU OF PROJECT DELIVERY	RC-67M



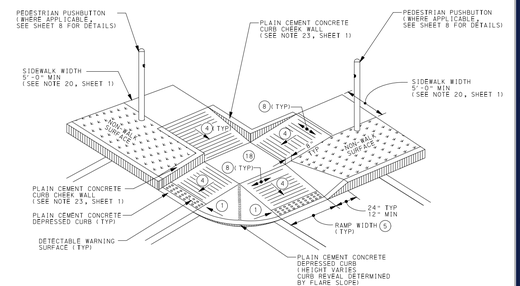
TYPE 6
CURB RAMP
COMBINATION
DIAGONAL - REQUIRES ASSISTANT
DISTRICT EXECUTIVE APPROVAL



TYPE 6
CURB RAMP
COMBINATION



TYPE 6
CURB RAMP
COMBINATION



TYPE 6 CURB RAMPS
WITH SHARED TURNING SPACE

1 SIDE FLARES 10.00% MAX SLOPE.
4 8.33% MAX RAMP SLOPE, SEE NOTE 8 SHEET 1.
5 CURB RAMP WIDTH IS EQUAL TO SIDEWALK WIDTH WHEN THE SIDEWALK WIDTH IS GREATER THAN OR EQUAL TO 4'-0".
8 SLOPE= ZERO ± 2.00%.
18 CURB RAMPS REQUIRE A TURNING SPACE WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SEE DETAILS FOR LOCATIONS AND DIMENSIONS.

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BUREAU OF PROJECT DELIVERY
CURB RAMPS AND SIDEWALKS
NEW CONSTRUCTION OR
ALTERATION DETAILS
TYPE 6 CURB RAMPS

RECOMMENDED JUN.10, 2013	RECOMMENDED JUN.10, 2013	SHT 5 OF 14
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UNIFORM PARCEL IDENTIFIER: 32-4-1090.1

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DRAWN BY: LGU
CHECKED BY: J.R.K.
DATE: 03/15/2022
CAD I.D.: PC211160-CNDS-1A

PROJECT:

AMENDED FINAL PRD PLANS

FOR

PROSPERITY PROPERTY INVESTMENTS, LLC

"FINAL PLAN FOR LOT 2B OF PARCEL 5C" PROPOSED COMMERCIAL DEVELOPMENT

GRAPHITE MINE ROAD & STATION BOULEVARD
UPPER UWCHLAN TOWNSHIP
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J.R. KORCZAK
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. GE074279
NEW JERSEY LICENSE No. 24GE04715400

SHEET TITLE:

DETAILS

SHEET NUMBER:

C-904

34 OF 37

REVISION 1 - 05/25/2022

PRE-DEVELOPMENT DRAINAGE AREA PLAN DRAWING LEGEND

OVERALL DRAINAGE AREA

SUB-DRAINAGE AREA

TIME OF CONCENTRATION FLOW PATH

DA-2E DRAINAGE AREA NUMBER

UNIFORM PARCEL IDENTIFIER: 32-4-1090.1

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DRAWN BY:	LGU
CHECKED BY:	J.R.K.
DATE:	03/15/2022
CAD I.D.:	PC211160-DRIN-1A

PROJECT:

1"=60'

AMENDED FINAL PRD PLANS

FOR

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"FINAL PLAN FOR LOT 2B OF PARCEL 5C" PROPOSED COMMERCIAL DEVELOPMENT

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PENNSYLVANIA LICENSE No. PE084276
NEW JERSEY LICENSE No. 24GE04271400

SHEET TITLE:

PRE-DEVELOPMENT DRAINAGE PLAN

SHEET NUMBER:

C-910

35 OF 37

REVISION 1 - 05/25/2022

1"= 60'

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DRAWING LEGEND
EXISTING FEATURES

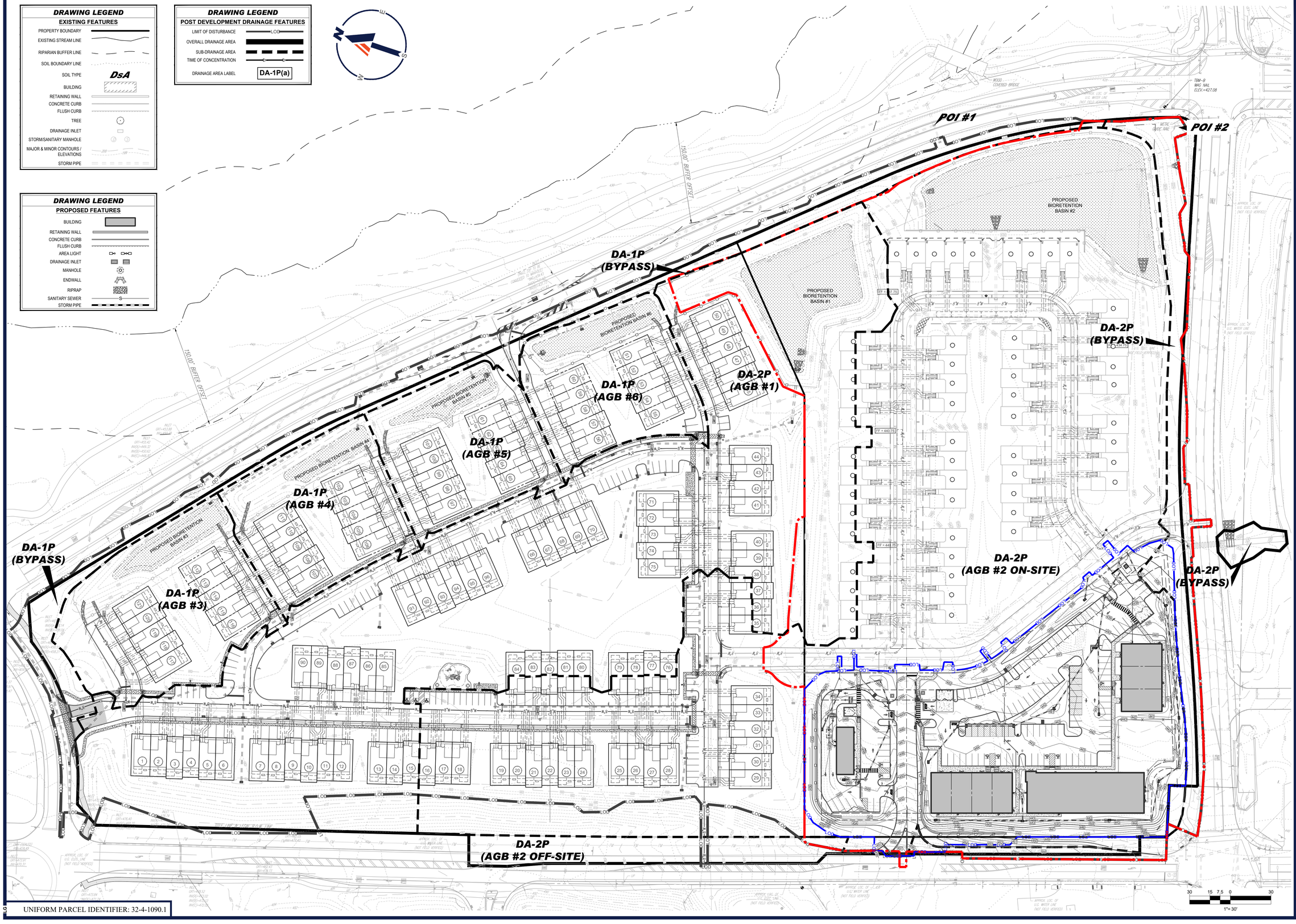
- PROPERTY BOUNDARY
- EXISTING STREAM LINE
- RIPARIAN BUFFER LINE
- SOIL BOUNDARY LINE
- SOIL TYPE — DsA
- BUILDING
- RETAINING WALL
- CONCRETE CURB
- FLUSH CURB
- TREE
- DRAINAGE INLET
- STORM/SANITARY MANHOLE
- MAJOR & MINOR CONTOURS / ELEVATIONS — 200 / 199
- STORM PIPE

DRAWING LEGEND
POST DEVELOPMENT DRAINAGE FEATURES

- LIMIT OF DISTURBANCE — LOD
- OVERALL DRAINAGE AREA
- SUB-DRAINAGE AREA
- TIME OF CONCENTRATION — TC
- DRAINAGE AREA LABEL — DA-1P(a)

DRAWING LEGEND
PROPOSED FEATURES

- BUILDING
- RETAINING WALL
- CONCRETE CURB
- FLUSH CURB
- AREA LIGHT
- DRAINAGE INLET
- MANHOLE
- ENDWALL
- RIPRAP
- SANITARY SEWER — S
- STORM PIPE



UNIFORM PARCEL IDENTIFIER: 32-4-1090.1

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PROJECT No.:	PC211160
DRAWN BY:	LGU
CHECKED BY:	J.R.K.
DATE:	03/15/2022
CAD I.D.:	PC211160-LDVP-1A

PROJECT:

AMENDED FINAL PRD PLANS

FOR

PROSPERITY PROPERTY INVESTMENTS, LLC

"FINAL PLAN FOR LOT 2B OF PARCEL 5C"
PROPOSED COMMERCIAL DEVELOPMENT

GRAPHITE MINE ROAD &
STATION BOULEVARD
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J.R. KORCZAK
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE073279
NEW JERSEY LICENSE No. 24GE04715400

SHEET TITLE:

POST DEVELOPMENT DRAINAGE PLAN

SHEET NUMBER:

C-911

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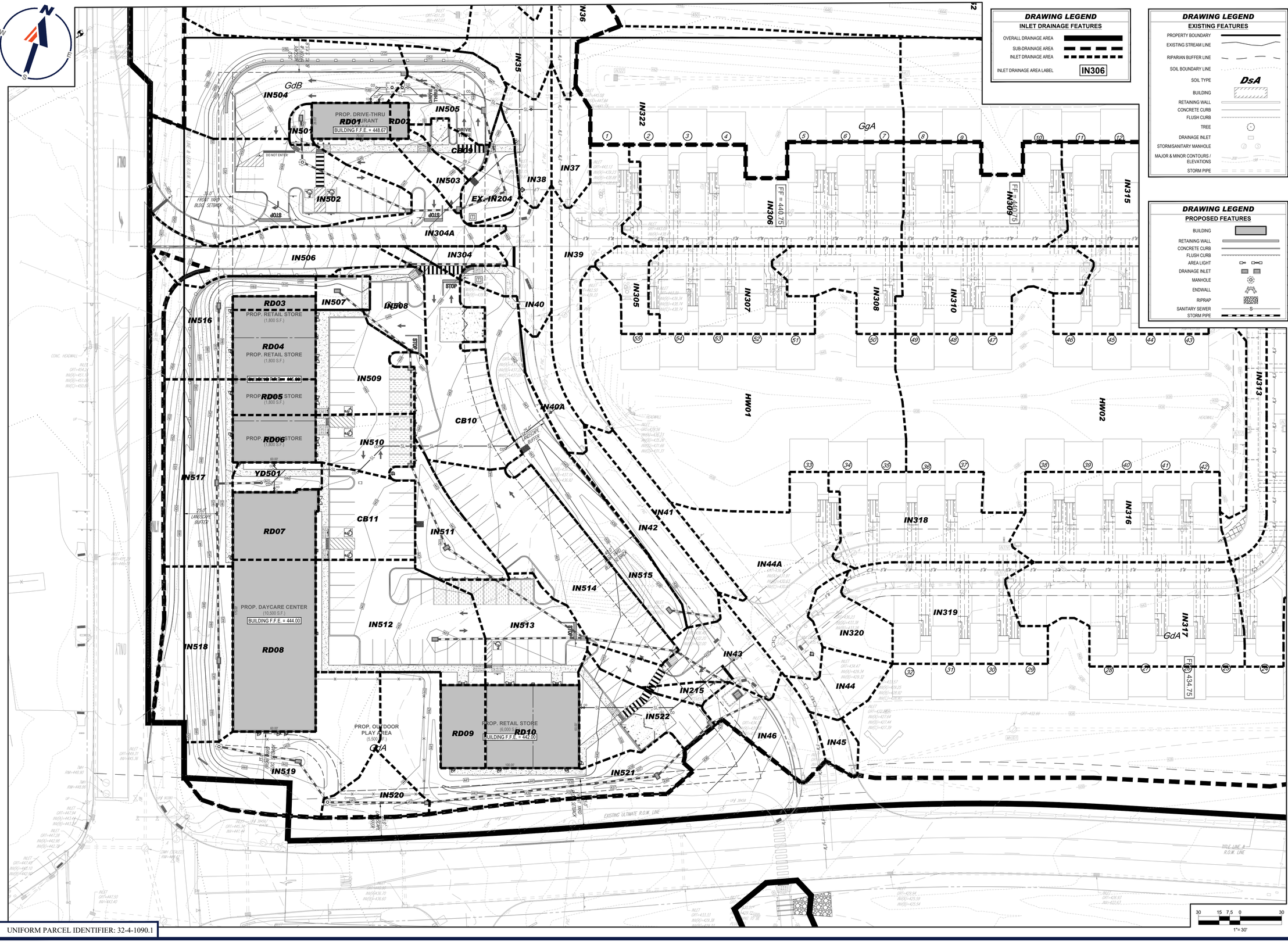
REVISION 1 - 05/25/2022



UNIFORM PARCEL IDENTIFIER: 32-4-1090.1

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PROJECT No.:	PC211160
DRAWN BY:	LGU
CHECKED BY:	J.R.K.
DATE:	03/15/2022
CAD I.D.:	PC211160-LDVP-1A

PROJECT:

AMENDED FINAL PRD PLANS

FOR

PROSPERITY PROPERTY INVESTMENTS, LLC

"FINAL PLAN FOR LOT 2B OF PARCEL 5C"
PROPOSED COMMERCIAL DEVELOPMENT

GRAPHITE MINE ROAD &
STATION BOULEVARD
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J.R. KORCZAK
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE084278
NEW JERSEY LICENSE No. 24GE04719000

SHEET TITLE:

INLET DRAINAGE PLAN

SHEET NUMBER:

C-912

37 OF 37

REVISION 1 - 05/25/2022

Est. 1989
TRAFFIC PLANNING AND DESIGN, INC.

WWW.TRAFFICPD.COM

March 30, 2022

Richard Huffman, CEO
Allan Greenberg, CFO
CELEBREE, Inc.
1306 Bellona Avenue
Lutherville, MD 21093

RE: Byers Station – Parking Analysis
Upper Uwchlan Township, Chester County, PA
TPD No. CELE.00001

Dear Richard and Allan:

Traffic Planning and Design, Inc. (TPD) has completed a parking analysis for the proposed development, located on the northeast corner of the intersection of Pottstown Pike and Station Boulevard in Upper Uwchlan Township, Chester County, Pennsylvania. The development is proposed to consist of a 10,500 square foot (140-student) daycare, an 1,820 square foot fast-food restaurant with a drive-through window, and 13,200 square feet of retail/comment space. Based on information provided to TPD, it is our understanding that the daycare will have a maximum of 24 teachers/staff. Please note, for the purpose of this parking analysis, medical/dental office space was assumed for the 13,200 square foot space. This provides a conservative analysis (i.e. highest parking demand) when compared to a general retail/shopping center use.

PARKING ANALYSIS

The current site plan proposes a total of 131 parking spaces. To determine if the proposed parking is sufficient to support the site, the peak demand of each use was evaluated based on the Institute of Transportation Engineers' (ITE) Parking Generation Manual, 5th Edition, 2019. For the current plan, Land Use Code 565 (Day Care), Land Use Code 720 (Medical-Dental Office), and Land Use Code 934 (Fast-Food Restaurant with Drive-Thru) were used to calculate the peak parking demand. As noted above, for the purpose of this parking analysis, medical/dental office space was assumed for the 13,200 square foot space as this provides a conservative analysis (i.e. highest parking demand). **Table 1** shows the rates/equations and directional percentages for each use.

TABLE 1
ITE PEAK PARKING DEMAND

Land Use	ITE #	X	Average Rate	Peak Parking Demand
Day Care	565	140 students	P =0.24*(X)	34
Medical-Dental Office	720	13.2 ksf	P =3.23*(X)	43
Fast-Food Restaurant with Drive-Thru	934	1.82 ksf	P =12.41*(X)	23
Total Peak Parking Demand				***100***

P = Peak Parking Demand; X = Size

As shown in **Table 1**, if all the uses on-site experienced their peak parking demand simultaneously, the peak parking demand for the site would be 100 occupied spaces. Therefore, the 131 parking spaces proposed is sufficient to serve the proposed uses if all the uses had their highest parking demand/usage at the same time. However, mixed-use sites such as the proposed development have opportunities for shared parking. For example, the daycare use experiences the highest parking demand in the morning and late afternoon during typical arrival and departures, while the restaurant use experiences the highest peak parking demand during the midday. As such, the parking occupancy time of day methodology outlined in the 3rd edition of the Urban Land Institute's (ULI) Shared Parking Manual was utilized to evaluate the shared parking for the site. This time of day data is relatively consistent and similar to the time of day parking occupancy date in the ITE Parking Generation Manual. As shown in **Table 2**, the ULI time-of-day parking demand distribution is summarized for the proposed uses. **Table 3** applies the time-of-day distributions to peak parking demand noted in **Table 1**, in order to determine the shared parking demand on an hourly basis.

TABLE 2
WEEKDAY TIME-OF-DAY VARIATION IN PARKING DEMAND (%)

Hour of Day	Percent of Peak Period		
	Office[1]	Restaurant	Day Care[2]
6:00 AM	0%	20%	71%
7:00 AM	20%	20%	100%
8:00 AM	100%	30%	100%
9:00 AM	100%	40%	100%
10:00 AM	100%	75%	71%
11:00 AM	100%	100%	71%
12:00 PM	100%	100%	71%
1:00 PM	100%	100%	71%
2:00 PM	100%	95%	71%
3:00 PM	100%	70%	71%
4:00 PM	100%	60%	100%
5:00 PM	100%	70%	100%
6:00 PM	67%	90%	100%
7:00 PM	30%	90%	0%
8:00 PM	15%	60%	0%
9:00 PM	0%	40%	0%
10:00 PM	0%	30%	0%
11:00 PM	0%	20%	0%
12:00 AM	0%	20%	0%

1. *Utilized office data; no medical-dental office time-of-day data.*
2. *No day care data. Assumed 100% occupancy during the morning and late afternoon. The midday occupancy is based on 24 employees being on-site (i.e. 24/34 peak parking demand = 71%).*

TABLE 3
WEEKDAY TIME-OF-DAY VARIATION IN PARKING DEMAND

Hour of Day	Occupied Parking Spaces			
	Office	Restaurant	Day Care	Total
6:00 AM	0	5	24	29
7:00 AM	9	5	34	48
8:00 AM	43	7	34	84
9:00 AM	43	9	34	86
10:00 AM	43	17	24	84
11:00 AM	43	23	24	90
12:00 PM	43	23	24	90
1:00 PM	43	23	24	90
2:00 PM	43	22	24	89
3:00 PM	43	16	24	83
4:00 PM	43	14	34	91
5:00 PM	43	16	34	**93**
6:00 PM	29	21	34	84
7:00 PM	13	21	0	34
8:00 PM	6	14	0	20
9:00 PM	0	9	0	9
10:00 PM	0	7	0	7
11:00 PM	0	5	0	5
12:00 AM	0	5	0	5

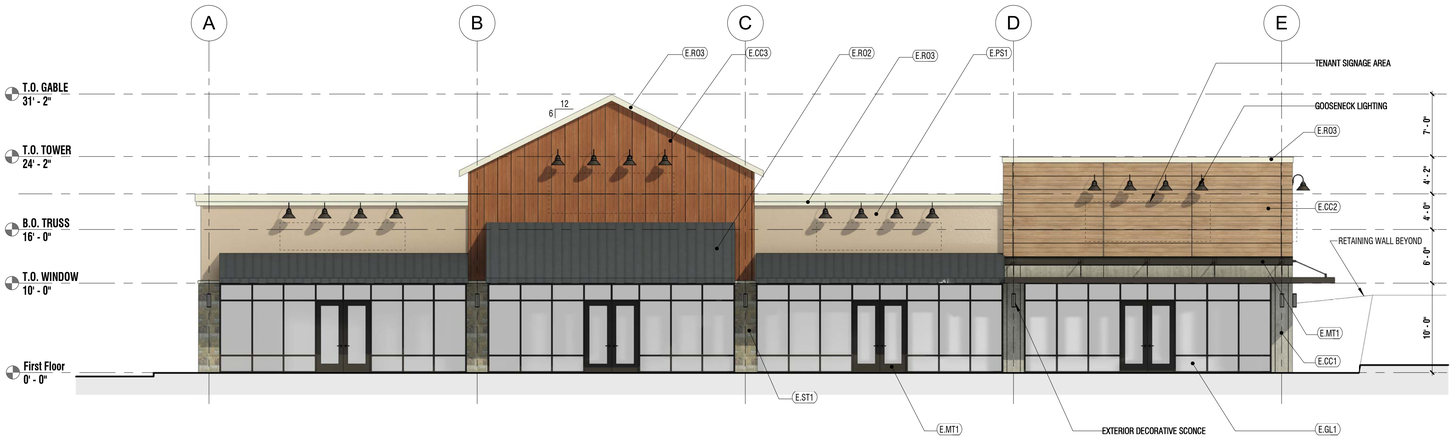
As shown in **Table 3**, per the referenced data, the maximum peak parking demand at any point during the day is anticipated to be 93 spaces. Therefore, it is TPD's opinion that the 131 parking spaces proposed is sufficient to serve the proposed uses throughout the day. It should be noted that the restaurant pad is proposed to have 13 parking spaces. TPD recommends that restaurant employees be directed to park in the larger parking area south of the "spine-road" to keep the parking spaces adjacent to the restaurant available to patrons.

If you have any questions or comments, please feel free to contact us.

Sincerely,
TRAFFIC PLANNING AND DESIGN, INC.

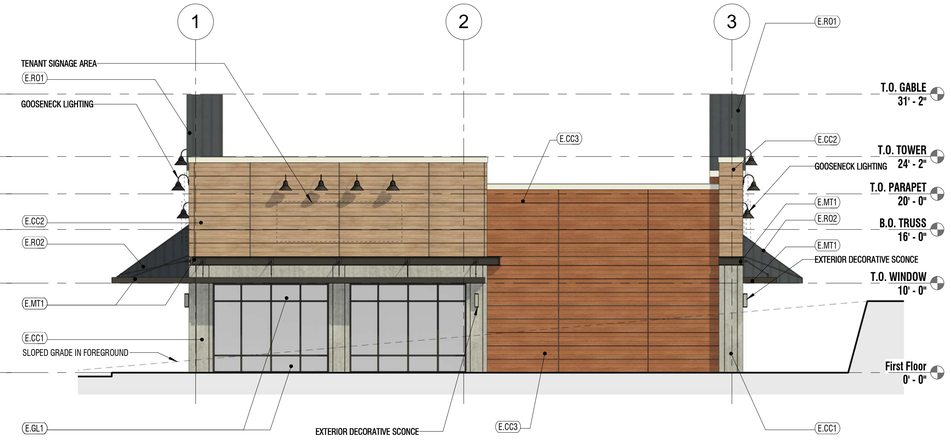
Guido W. DiMartino, P.E.
Regional Leader – Transportation Planning

PROPOSED PROJECT AREA: 7,200 SF



1 FRONT (EAST) ELEVATION

SCALE: 1/8" = 1'-0"

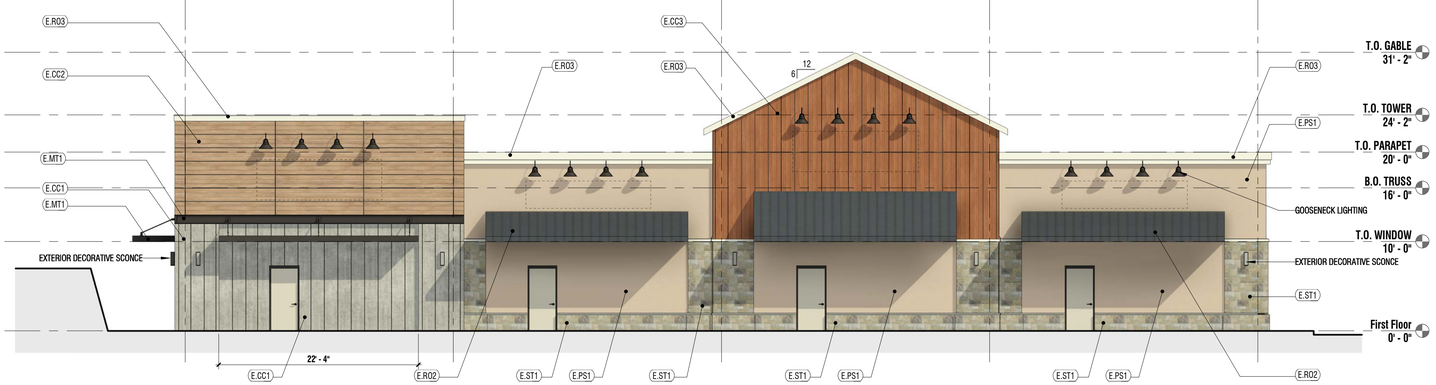


2 RIGHT (NORTH) ELEVATION

SCALE: 1/8" = 1'-0"

3 LEFT (SOUTH) ELEVATION

SCALE: 1/8" = 1'-0"



4 REAR (WEST) ELEVATION

SCALE: 1/8" = 1'-0"

LEGEND - EXTERIOR FINISHES	
Mark	**Description**
E.CC1	CEMENTITIOUS WALL PANELS, CONCRETE LOOK
E.CC2	CEMENTITIOUS WALL PANELS, HORIZONTAL WOOD LOOK
E.CC3	CEMENTITIOUS WALL PANELS, VERTICAL WOOD LOOK
E.GL1	GLAZING - INSULATED - 1"
E.MT1	DARK BRONZE PAINTED METAL
E.PS1	PAINTED STUCCO
E.RO1	STANDING SEAM METAL CANOPY
E.RO2	STANDING SEAM METAL ROOF
E.RO3	PAINTED SHEET METAL COPING & TRIM
E.ST1	CULTURED STONE

8' 4' 0' 8'
1/8" = 1'-0"

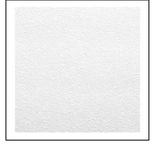
E.CC1

E.CC2

E.CC3

E.GL1 / E.MT1

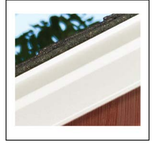
E.PS1



E.RO1

E.RO2

E.RO3



E.RO4

E.ST1

373 US HIGHWAY ROUTE 46 WEST
BUILDING D, SUITE 240
FAIRFIELD, NEW JERSEY 07004
p: 973.291.3730 f: 973.291.3740
e: jmihalik@jam-arch.com

LOT #2B: NEW MULTI-TENANT RETAIL BUILDING

PR2.1: PROPOSED BUILDING ELEVATIONS

POTTSTOWN PIKE & STATION BLVD.
UPPER UWCHLAN, PA 19425

05.12.2022

JAM ARCH

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PROPOSED PROJECT AREA: 10,500 SF

1 NORTH ELEVATION

SCALE: 1/8" = 1'-0"

2 SOUTH ELEVATION

SCALE: 1/8" = 1'-0"

3 EAST ELEVATION

SCALE: 1/8" = 1'-0"

4 WEST ELEVATION

SCALE: 1/8" = 1'-0"

LEGEND - EXTERIOR FINISHES	
Mark	**Description**
E.GL1	GLAZING - INSULATED - 1"
E.MT1	DARK BRONZE PAINTED METAL
E.PS1	PAINTED STUCCO
E.RO2	STANDING SEAM METAL ROOF
E.RO3	PAINTED SHEET METAL COPING &TRIM
E.RO4	PREMIUM ASPHALT SHINGLES
E.ST1	CULTURED STONE

E.CC1

E.CC2

E.CC3

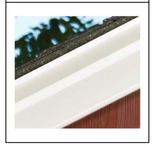
E.GL1 / E.MT1

E.PS1

E.RO1

E.RO2

E.RO3



E.RO4

E.ST1

8' 4' 0' 8'

1/8" = 1'-0"

373 US HIGHWAY ROUTE 46 WEST
BUILDING D, SUITE 240
FAIRFIELD, NEW JERSEY 07004
p: 973.291.3730 f: 973.291.3740
e: jmihalik@jam-arch.com

LOT 2B: NEW CELEBREE SCHOOL

PR2.1: PROPOSED BUILDING ELEVATIONS

POTTSTOWN PIKE & STATION BLVD.
UPPER UWCHLAN, PA 19425

05.12.2022

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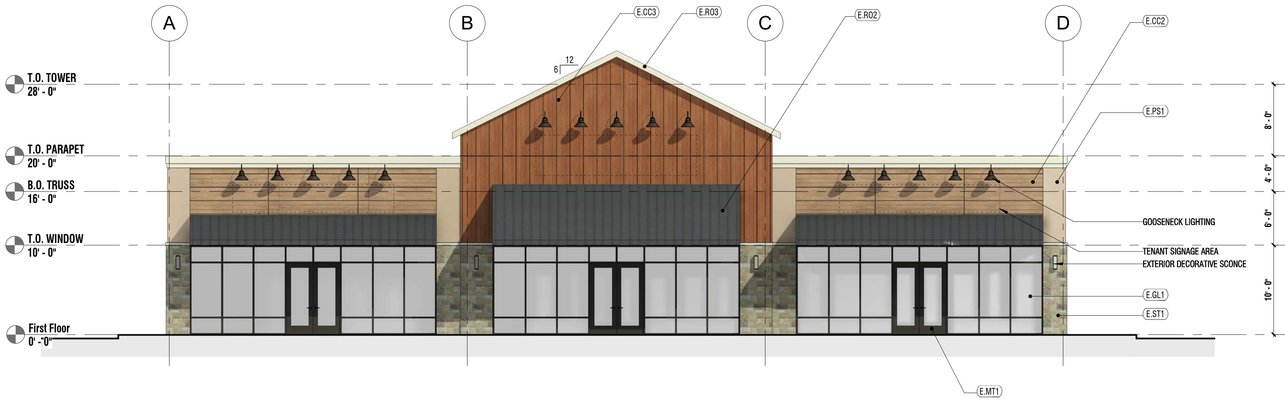
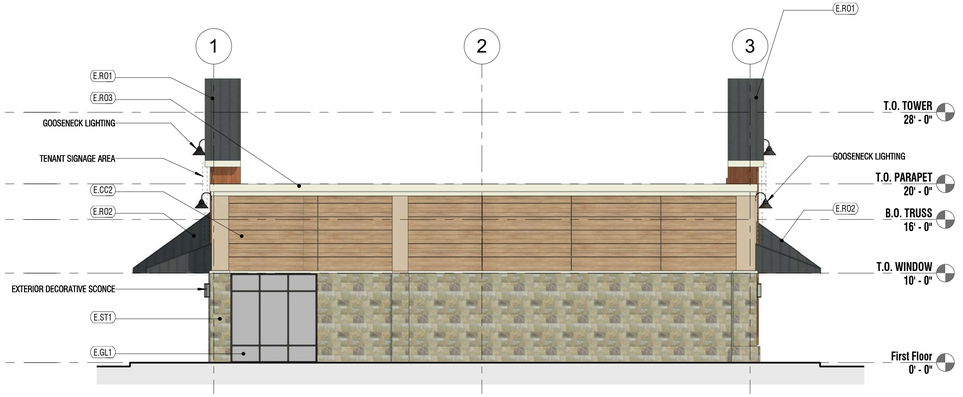
PROPOSED PROJECT AREA: 6,000 SF



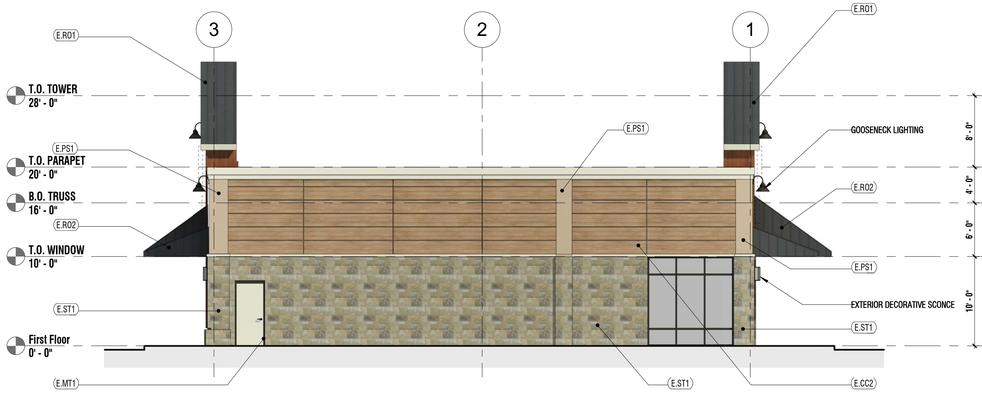
1 FRONT (NORTH) ELEVATION

SCALE: 1/8" = 1'-0"



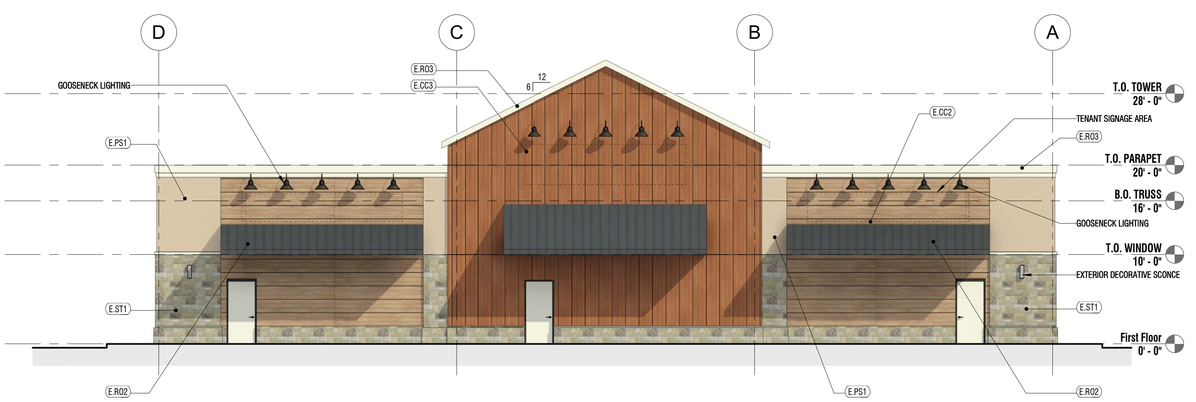
2 RIGHT (WEST) ELEVATION

SCALE: 1/8" = 1'-0"



3 LEFT (SOUTH) ELEVATION

SCALE: 1/8" = 1'-0"



4 REAR (SOUTH) ELEVATION

SCALE: 1/8" = 1'-0"

LEGEND - EXTERIOR FINISHES

Mark	Description
E.CC2	CEMENTITIOUS WALL PANELS, HORIZONTAL WOOD LOOK
E.CC3	CEMENTITIOUS WALL PANELS, VERTICAL WOOD LOOK
E.GL1	GLAZING - INSULATED - 1"
E.MT1	DARK BRONZE PAINTED METAL
E.PS1	PAINTED STUCCO
E.RO1	STANDING SEAM METAL CANOPY
E.RO2	STANDING SEAM METAL ROOF
E.RO3	PAINTED SHEET METAL COPING & TRIM
E.ST1	CULTURED STONE

8' 4' 0' 8'
1/8" = 1'-0"

E.CC1

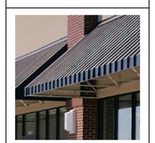
E.CC2

E.CC3

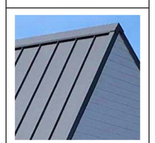
E.GL1 / E.MT1

E.PS1

E.RO1



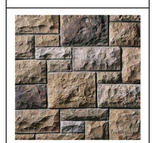
E.RO2



E.RO3

E.RO4

E.ST1



373 US HIGHWAY ROUTE 46 WEST
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e: jmihalik@jam-arch.com

LOT #2B: NEW SINGLE TENANT RETAIL BUILDING

PR2.1: PROPOSED BUILDING ELEVATIONS

POTTSTOWN PIKE & STATION BLVD.
UPPER UWCHLAN, PA 19425

05.12.2022

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UPPER UWCHLAN TOWNSHIP
Planning Commission Meeting
May 12, 2022
6:00 p.m. Workshop
7:00 p.m. Meeting
Minutes
Draft

LOCATION: Township Building, 140 Pottstown Pike, Chester Springs PA 19425

In attendance:
Sally Winterton, Chair; Joe Stoyack, Vice-Chair; Chad Adams, David Colajezzi, Jim Dewees (meeting), Stephen Fean, Jim Shrimp, Jeff Smith

Mary Lou Lowrie, P.E. – Gilmore & Associates (meeting)
Gwen Jonik, Planning Commission Secretary

Absent: Ravi Mayreddy

6:00 p.m. Workshop
Discuss ordinances relating to parking, shared parking in the Village of Eagle, F-1 and F-2 Flexible Development Overlay Districts.

The Commission discussed the proposed elimination of the F1 and F2 Overlay Districts, which provides flexible development design and increased density for residential-zoned parcels over 10 acres as there are only a few of those sized properties left in the overlay districts. Recently there have been comments at public meetings calling for limitations on new residential development. Discussion included: if the overlays would be repealed, property owners can still develop their properties, but not as densely; increased density was intended to encourage open space, however, most of the open space is storm water management facilities or treated wastewater disposal facilities and not usable; elimination of the overlays at this time would provide time, as we update the Township's comprehensive plan, to determine location(s) and particular density we may want in the future; increased traffic from high-density development has become an issue.

Conversation included consideration of an agricultural-related zoning, and review of the by-right uses in the Limited Industrial (LI) and commercial (C1, C2 and C3) districts.

Parking. Joe Stoyack is researching other Townships' ordinances related to parking, shared parking, 'stealth' camping – sleeping in cars on public roads or in public parks. Some Townships prohibit camping and sleeping in public parks. Discussion included whether commercial properties/businesses may allow overnight sleeping; the Police Department hasn't had any 'stealth camping' issues to date anywhere in the Township; overnight parking / camping would be a police issue, not a zoning issue; the Township does have "no stopping, standing or parking" ordinances.

Shared parking in the Village is currently permitted via conditional use approval. Discussion included: modifications to required parking in Township Codes Section 200-73.K. can be confusing; should it remain as conditional use or structure the ordinance to remove some of the formality; encourage it where appropriate; would like to make the process easier on businesses;

allow Agreements between businesses and write into the Agreement that it has to be reviewed every “x” number of years, so they don’t take advantage of their neighbor.

The Workshop concluded at 6:55 p.m.

Sally Winterton called the Planning Commission Meeting to order at 7:00 p.m. There were 7 citizens in attendance.

Byers Station Parcel 5C Lot 2B Commercial Lot ~ Amended Final PRD Plan

Alyson Zarro, Esq., representing Prosperity Property, Allan Greenberg of Celebree Schools, Guy DiMartino of TPD and Michael Baginski of Bohler Engineering were in attendance to discuss the consultants’ reviews of the Amended Final PRD Plan dated March 15, 2022.

Ms. Zarro advised the developer would comply with most of the comments contained in Gilmore & Associates’ May 5, 2022 review letter and the Lionville Fire Company/Fire Marshal letter dated May 12, 2022. Just a few comments needed to be discussed.

Updated elevations were provided, with Mr. Baginski providing details of the site plan which shows a drive-through restaurant, a separate building with retail space and a daycare center, a standalone pad to the south and 131 parking spaces. There is a play area next to the daycare center. Ms. Zarro distributed an aerial map showing the road connections to the residential developments on Parcel 5C – the Villages (on Lot 1) and Enclave (on Lot 2A).

Discussion included: the elevations were updated to address the comments made at the April meeting, with a break in the façade at the center and 2 additional 60’ offsets; there are secondary exits for the retail shops and sidewalks will be added between the buildings; a monument sign would be at the corner of Pottstown Pike and Station Boulevard, and signs on both the front and back of the buildings; roof heights won’t be higher than 1.5 story; there will be a 6-8’ high retaining wall along Pottstown Pike (Route 100); we don’t want travelers looking at utilities on the roofs; will Begonia Drive be a private or public road [post-meeting research determined it will be private]; PC members are concerned with whether the length of the left-in turn from southbound Route 100 to Iris Lane is adequate, and safe; County Planning Commission comment regarding right-of-way is provided for in the approved PennDOT highway occupancy permit; concerns with traffic congestion inside the site at peak hours with a drive-through and a daycare center; store deliveries, loading/unloading would be during the day, in certain parking spaces for off-peak hour unloading, which could be a lease restriction or written in the Plan Notes; restricted to box trucks; planned concrete curbs; stormwater served by the basin on the Enclave property, which was previously approved; single ownership of Lot 2B by Celebree but potential for condo agreements in the future; will comply with the Fire Marshal’s comments; provide ADA compliant sidewalks; the updated Plan provides pedestrian connections from the retail stores to the Begonia Drive sidewalk; a mid-block trail crossing will connect the site with the trail across Station Boulevard, along Pickering Valley Elementary School, keeping the crossing further away from the Route 100 intersection; shared parking study takes advantage of the PRD approval to use discretion, and 131 parking spaces are provided rather than 160+; number of drive-through stacking spaces is critical; location of trash dumpsters?; there are a few McMahon comments that need to be clarified – a sidewalk location and number of stacking spaces from the drive-through window; the interior sidewalks will be 6’ or 8’ wide, not 10’; sewer capacity was previously approved but they’ll recalculate; they’ll comply with lighting comments; the daycare will be sprinklered, most likely all the buildings will be sprinklered; the daycare offers before- and after-school care – unknown if they’ll need busing but they’d use 15-seat buses.

The Planning Commission would like to see projections of the internal traffic flow and they are concerned with the left-turn in from southbound Route 100.

Ms. Zarro advised revised Plans will be submitted most likely in June.

F1, F2 Flexible Development Overlay Districts Ordinance Amendment

The Commission discussed the elimination of the overlay districts, at least for the time being. The overlays were intended to encourage development with usable open space on residential-zoned parcels greater than 10 acres. While reviewing land use during the Comprehensive Plan update, the Township would like to reconsider where higher density development may be appropriate. The Township Solicitor had prepared a draft ordinance to propose the elimination of the overlay districts.

Joe Stoyack moved, seconded by David Colajezzi, to recommend the Board of Supervisors approve the Ordinance eliminating the F1 and F2 Flexible Development Overlay Districts. The motion carried with seven (7) in favor and one (1) opposed (Dewees).

Planning Commission Liaisons to the Historical Commission (HC) and Environmental Advisory Council (EAC)

Sally Winterton asked for volunteers to be liaisons to these 2 commissions. The liaisons would attend the HC or EAC meetings and advise them of the Planning Commission's activities and advise the Planning Commission of the HC's and EAC's activities.

Joe Stoyack has been serving as the HC's liaison and he'll continue in that capacity.
Jeff Smith volunteered for the liaison to the EAC.

Joe Stoyack noted he'd attended a PaDEP presentation on their climate action plan, which provides interns and support of Environmental Advisory Councils.

Approval of Minutes

Jim Dewees moved, seconded by Jeff Smith, to approve as presented the minutes of the April 14, 2022 Planning Commission meeting. The motion carried unanimously.

Sally Winterton announced the next Planning Commission meeting is June 9, 2022, beginning at 7:00 p.m. A Work Session might be held at 6:00 p.m.

Open Session

Joe Stoyack advised that the Village Concept Plan review kick-off meeting will be held May 26 beginning at 7:00 p.m.; at the Board of Supervisors Workshop earlier this week, the Board had talked of the priorities they'd like to set during the update of the Comprehensive Plan; and the Solicitor is drafting the proposed amendment to the outdoor dining regulations.

Sally Winterton reminded attendees that the Historical Commission is hosting a "Chester County Town Tour & Village Walk" of the Village of Eagle, Thursday, May 23, and they're asking for volunteers to assist at this event.

Gwen Jonik advised that Natural Lands Trust/Shryock had provided an extension to July 31, 2022 regarding their lot line change plan review and scheduling a conditional use hearing; the Historical

Commission will participate in the “Life & Times of the Struble Trail” activity on May 15, 1:00-4:00; and the Township Block Party will be held Saturday June 18.

Sue Quake, Lauren Lane, appreciated the Commission’s traffic-related comments.
Gerry Stein, Greenridge Road, made comment of the aesthetics of the buildings proposed for Parcel 5C Lot 2B Commercial.

Adjournment
Joe Stoyack moved, seconded by Jim Dewees, to adjourn the meeting at 9:10 p.m. All were in favor.

Respectfully submitted,

Gwen A. Jonik
Planning Commission Secretary

UPPER UWCHLAN TOWNSHIP
Planning Commission Meeting
June 9, 2022
7:00 p.m. Meeting
Minutes
Draft

LOCATION: Township Building, 140 Pottstown Pike, Chester Springs PA 19425

In attendance:
Sally Winterton, Chair; Joe Stoyack, Vice-Chair; David Colajezzi, Stephen Fean

Gwen Jonik, Planning Commission Secretary

Absent: Chad Adams, Jim Dewees, Ravi Mayreddy, Jim Shrimp, Jeff Smith

Sally Winterton called the meeting to order at 7:04 p.m. No quorum was present. Two citizens were in attendance.

Village Concept Plan
Review of the "Issues & Recommendations" contained in the 2010 Village Concept Plan (VCP) included whether the recommendation has been accomplished, remains valid or are there new recommendations. All input will be provided to Brandywine Conservancy for updating the VCP.

Issue #1 on page 11: *are there sufficient provisions and landowner incentives in the Township's Zoning or Subdivision/Land Development Ordinances to guide future development in ways that will help to achieve the Village planning objectives?* The consensus is this is still a valid issue and should be retained.

Issue #1 Recommendations
1. Retain re: historic resource protection.
2. Evaluate the feasibility of establishing a HARB; we don't know what is involved with a HARB - would we need to hire an Historic Architect? Are there specific regulations for HARBs?
3. Retain re: grant funding.
4. Retain re: C-1 and C-3 detail design guidelines. We're working on updating the Village Design Guidelines and would like them to be adopted, providing for greater enforcement.
5. A. Traditional Neighborhood Development (TNDs) – has merit, evaluate further.
   B. Evaluate replacing C-1 and C-3 districts with a new district.

Issue # 2 on page 12: *is there a need for additional supporting infrastructure?* Yes, this is still valid. Example: E-vehicle and E-bike charging stations.

Issue #2 Recommendations
1. Retain re: updating the Township's Official Map. Swap ownership of Pottstown Pike and Graphite Mine Road, talk about road improvements, new neighborhoods, etc.
2. Retain re: walkability study

3. Retain re: apply for grants
4. Move street tree regulations to updated Village Design Guidelines, which may become Ordinances.
5. Move sidewalk regulations to updated Village Design Guidelines, which may become Ordinances.

Issue # 3 on page 13: *transportation related items.* Retain.

Issue #3 Recommendations

1. An Access Management Ordinance was adopted in July 2010 (#2010-05). Determine the consistency in the village with that ordinance -- are any changes necessary?
2. Retain re: parking requirements. Evaluate current and future parking requirements. More parking is needed in the village, perhaps a parking garage?
3. Completed. C-1 and C-3 ordinances amended June 2020 (#2020-01) regarding shared uses such as residential above retail/office uses.
4. Retain re: alternative modes of travel – public transportation

Issue #4 on page 14: *Architectural Standards.* Retain and codify the architectural guidelines.

Issue #4 Recommendations

1, 2, and 3. Retain re: review, update and approve the Village Design Guidelines as an Ordinance.

4 Retain a. and b.

5. As in Issue 1, Recommendation 2: Evaluate the feasibility of establishing a HARB; we don't know what is involved with a HARB - would we need to hire an Historic Architect? Are there specific regulations for HARBs?
6. Retain re: sign ordinance

Issue #5 on page 15: *Zoning provisions.* Retain.

Issue 5 Recommendations

1. Completed. As in Issue #3 Recommendation 3, C-1 and C-3 ordinances amended June 2020 (#2020-01) regarding shared uses such as residential above retail/office uses.
2. Retain.

"Summary" on page 17

1, 2 and 3 retain. Evaluate bike lanes, bike racks, add "re-development" to provide civic space.

4 Replace 'granny flats' with "extended family"

5 Retain.

6 Remove.

7 Retain. Add electric vehicle charging stations, remove 'reduce car parking requirements' and add "encourage shared parking"

"Mission Statement" on page 3: remove the first paragraph.

1. remove
2. remove
3. Retain, IF needed

4. Overlay district?
5. Retain.

*New 6. recommend a framework which encourages a robust and vibrant village community
*New 7. environmentally friendly community – charging stations, walkability circuits,

General Comments:
We need sidewalks in Byers Village;
We need to promote the adaptive reuse of historic structures within this Document.

"Site Analysis" on page 4. Needs to be updated;

Page 5 bullet points are good.
First bullet: add adaptive reuse of historic resources

Page 6 Historic resources
Byers Village Historic District – raise awareness and understanding of the Historic District;
Recommend adding sidewalks, and signage at the historic structures, such as a plaque stating the historic name of the structure.

The Commission will review the subsections on pages 7-10 next time.

Steve Egnaczyk, Stonehedge resident, asked how some of the recommendation can move forward prior to the entire VCP being revised and approved. Joe Stoyack encourages residents to suggest to the Boards and Commission what is important and can be accomplished in the near-term.

Approval of Minutes
No quorum was present to approve the May 12, 2022 Planning Commission meeting minutes.

Open Session
Steve Egnaczyk noted scout troops might be looking for a list from the township of tasks or projects that they or High School seniors could do when they have the time.

Sally Winterton announced the next meeting is July 14, 2022, the Block Party is June 18, and the Eagle Village Walk is June 23, 2022.

Adjournment
Joe Stoyack moved, seconded by David Colajezzi, to adjourn at 9:00 p.m. All were in favor.

Respectfully submitted,

Gwen A. Jonik
Planning Commission Secretary