



Planning Commission MEETING AGENDA

Thursday, September 15, 2022 - 1:00 PM
Council Chambers, Easton Town Office
14 S Harrison Street

1. Call to Order

2. Approval of Minutes.

- a. Approval of Minutes from the August 18, 2022 meeting.

3. New Business

- a. **Applicant:** Sierra Crist - Town of Easton
Owner: Town of Easton
Location: Mistletoe Drive Lot 9A
Nature of Request: The Town of Easton is relocating two buildings from 672 Glenwood Avenue (old DPW) to the lot across from the current DPW lot on Mistletoe Drive. The purpose of this request is to seek sketch site plan approval from the Town of Easton Planning Commission. The property is intended to be an extension of the Town's Public Work's facility. The site is currently improved with an entrance, improved surfaces and SWM.
- b. **Applicant:** Casey Rauch - Rauch Inc.
Owner: Town of Easton
Location: 9095 Mistletoe Drive
Nature of Request: The Applicant requests a Parking Waiver for an additional 15 parking spaces for training events.
- c. **Applicant:** Casey Rauch - Rauch Inc.
Owner: Chesapeake Community Development LLC
Location: Port Street Lot 1, Parcel 77
Nature of Request: The site is located in the **MXW District**. The Arc is proposing

affordable/workforce housing for low- and moderate-income households. Areas within the building will be reserved for job training, counseling, and behavioral health services. The building will be 3 stories high and have a square footage of 24,917 sf. A sidewalk will surround the building with 44 parking spaces and would require a Parking Waiver reduction of 14 parking spaces. A submerged gravel wetland facility will be provided to manage stormwater due to poor soil conditions. There are existing non-tidal wetlands and trees on site with a portion of them getting cleared and grubbed. Afforestation will be provided off site.

4. Old Business

a. Review and recommendations for the Subdivision Regulations.

b. **Applicant:** Mike Irons c/o K.Hovanian Homes of MD, LLC
Owner: Monahan, Sandra Brooks Trustee, et al.
Location: 29434 Dutchman's Lane
Nature of Request: The Applicant proposes a 252 single family lot subdivision with a community parcel, to establish a proposed 55+ age-restricted active adult community. In addition, the Applicant is seeking a "Planning Commission Determination" to allow the Applicant to use the community-owned open space as a credit for their requirement for dedication of community park land per Section 708 (d). This is a continuation of the Commission's review of this request held at their August 18, 2022 meeting. As part of their response to the Commission's comments, the Applicant is proposing to increase the community open space areas (exclusive of forest conservation, SWM areas and our Community Amenity Parcel) to 10.3 acres. The Park requirement for this

subdivision is 6.9 acres (1,200SF/lot x 252 lots).

5. Discussion Item

- a. Applicant:** Brendan S. Mullaney
Owner: Lands of Lot 16, LLC and Mr. Thomas Cohee
Location: 28580 Marys Court
Nature of Request: The Applicant formally requests an award for Growth Allocation for lots 16 & 20 in the Talbot Commerce Park project to reclassify Lot 20's 8.348 Acres+/- from RCA to IDA.

6. Adjournment.



TOWN OF EASTON

14 South Harrison Street
Easton, Maryland 21601

August 31, 2022

Dear Resident,

The Easton Planning Commission will hold a public meeting on **Thursday, September 15, 2022** at 1:00 p.m. in the Easton Town Council Chambers located on the second floor of 14 South Harrison Street. The Town of Easton Zoning Ordinance requires that owners of property located within 400 feet of a parcel on which certain types of applications are pending be given notice of upcoming meetings or hearings. If you are a tenant in or an owner of a multi-unit building, please distribute or post this notice in a visible location for all other tenants or owners to view. If you are a tenant of a rental property, please notify the property owner that this notice letter has been distributed to their property. Notice has also been sent to the Star Democrat, a sign has been posted at the subject property and the hearing agenda has been posted on the Town of Easton website: <http://eastonmd.gov/>.

This letter is sent to inform you that an application for Port Street Lot 1 has been filed for proposing affordable/workforce housing for low- and moderate-income households. Areas within the building will be reserved for job training, counseling, and behavioral health services. The building will be 3 stories high and have a square footage of 24,917 sf. A sidewalk will surround the building with 44 parking spaces and would require a Parking Waiver reduction of 14 parking spaces. A submerged gravel wetland facility will be provided to manage stormwater due to poor soil conditions. There are existing non-tidal wetlands and trees on site with a portion of them getting cleared and grubbed. Afforestation will be provided off site.

Copies of the proposed application are on file and available for public review in the Town's Planning Office at 14 South Harrison Street between the hours of 8:30 a.m. and 4:00 p.m., Monday through Friday. **In addition, digital copies are also available for review via e-mail request at jmayer@eastonmd.gov.** If you have any questions regarding this application, please contact the Planning Office at (410) 822-1943 or via e-mail at jmayer@eastonmd.gov.

Joseph A. Mayer, Jr.
Plan Reviewer
410-822-1943
jmayer@eastonMD.gov



Sign posted on September 1, 2022

INVOICE
09/06/22

Phone: Fax:

Cust. AcctID:	1001355	Creation Date:	09/06/22
		Ad Date:	09/08/22
		Class:	10
Name:	Joanne Drummer	Ad ID:	2998094
Company:	TOWN OF EASTON (L)	Words:	529
Address:	PO Box 520	Lines:	76
	EASTON, MD 21601	Agate Lines:	351
		Depth:	9.75
		Inserts:	2
		Blind Box:	
Telephone:	(410) 822-2525		
Description:	Agenda - Thursday,		

Other Charges:	\$0.00	Total:	\$511.88
Discount:	\$0.00		
Surcharge:	\$0.00	Paid Amount:	- \$0.00
Credits:	\$0.00		
Bill Depth:	9.75	Amount Due:	\$511.88

CREDIT CARD DETAILS

PT	CT	CN	Number	Exp.	Amnt.

Publication	Start	Stop	Inserts	
The Star Democrat	09/08/22	09/08/22	1	\$511.88

Ad Note:

Customer Note:

We Appreciate Your Business!
Thank You Joanne Drummer!

**Planning Commission
MEETING AGENDA**

Thursday, September 15, 2022 - 1:00 PM
Council Chambers, Easton Town Office
14 S Harrison Street

1. **Call to Order**
2. **Approval of Minutes.**
3. **New Business**
 - a. **Applicant:** Sierra Crest - Town of Easton
Location: The Town of Easton
Nature of Request: Malletts Drive off 6A
The Town of Easton is proposing two buildings from 672 Gannett Wood Avenue (old 6A) to the lot across from the current DPW lot. This request is for the Planning Commission to seek sketch site plan approval from the Town of Easton Planning Commission. The property is intended to be an extension of the Town's Public Works facility. The site is currently improved with an entrance, improved surfaces and SWM.
 - b. **Applicant:** Cassey Ranch - Rauch Inc.
Location: 9005 Malletts Drive
Nature of Request: The Applicant requests a Parking Waiver for an additional 15 parking spaces for parking events.
 - c. **Applicant:** Cassey Ranch - Rauch Inc.
Location: The applicant is requesting a Conditional Use Permit for Port Street Lot 1, Parcel 77.
Nature of Request: Construction is in the **B&O District**. The Act is proposing affordable/workforce housing for low- and moderate-income households. Within the project will be reserved for job training, construction, and behavioral health services. The building will be 3 stories high and have a square footage of 24,517 sq ft. A sidewalk will surround the building with 44 parking spaces. The applicant is requesting a parking lot reduction of 14 parking spaces. A submerged gravel wetland facility will be provided to manage sediment and debris from snow and ice storms. There are existing non-tidal wetlands and trees on the site with a portion of them getting cleared and graded. Afforestation will be provided as offset.
4. **Old Business**
 - a. Review and recommendations for the Subdivision Regulations.
- d. **Applicant:** Mile Irons c/o Hovian Homes of MD, LLC
Location: Morahan, Sandra Brooks Truett, et al.
Nature of Request: The Applicant proposes a 252 acre family lot subdivision with a community parking lot, a retail park for agriculture-related active adult community. In addition, the Applicant is seeking a Planning Commission Determination to allow the Applicant to use the community-owned open space as a credit for their requirement for dedication of community park and per Section 708 (b). This is a continuation of the Commission's review of this request filed at August 18, 2022 meeting. As part of their response to the Commission's comments, the Applicant is proposing to increase the community open space areas (exclusive of forest preservation, SWM areas and our Community Agriculture) to 10.3 acres. The Park requirement for this subdivision is 6.9 acres (200SF/1 ac @ 252 ac).
5. **Discussion Item**
 - a. **Applicant:** Brandon S. Mulvaney
Location: Lands of Lot 16, LLC and Mr. Thomas Cohee
Nature of Request: 26580 Mary Court
The Applicant formally requests an award for Gravel Allocation for lots 20-21 in the Tablert Community Park project to be reassigned to Lot 20-21 3.84 Acres (owned by RWA to IDA.
6. **Adjournment**

2025/09/15 STJ

6/8/2024 1



Town of Easton, Maryland

Docket/Case/Application Number: New Business

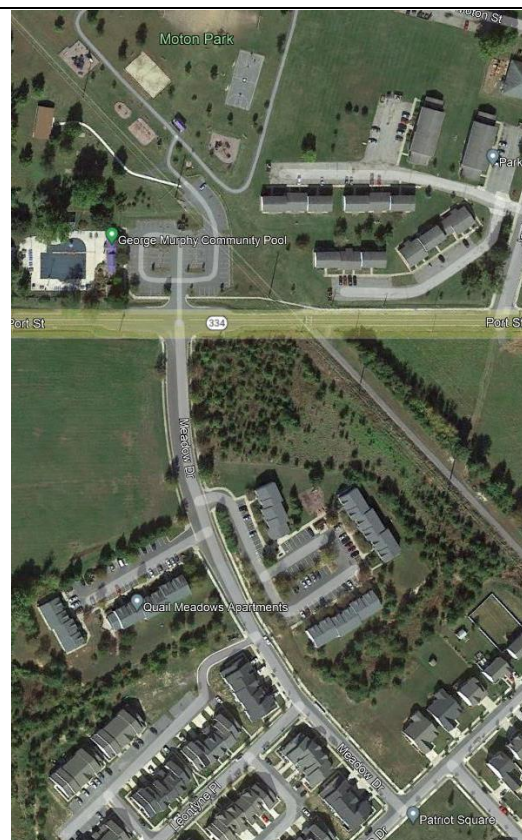
Applicant/Owner: Casey Rauch – Rauch, Inc. / Chesapeake Community Development, LLC - Owner	
Address/Location: Port Street	
Tax Map: 0034 Grid: 0015 Parcel: 0077 Lot: 1	Deed Reference: 2873/00398
Public Hearing Date: September 15, 2022, 1:00 PM	
Staff: Joseph A. Mayer	

BRIEF SUMMARY OF REQUEST

The Applicant is proposing a 9-unit affordable/workforce housing building for low - and moderate-income households. Additional areas within the building will be reserved for job training, counseling, and behavioral health services. The 3-story building will have a square footage of 24,917 square feet. A submerged gravel wetland facility will be provided to manage stormwater due to poor soil conditions. A sidewalk will surround the building.

The Applicant is proposing 44 parking spaces, which requires a Parking Waiver reduction of 14 parking spaces.

In addition, there's a Landscaping & Buffering Waiver request for the relief from Bufferyard "E" requirements within the Delmarva Power Easement. The Applicant has provided larger shrubs in that easement area that are not expected to create a maintenance concern. Afforestation will be provided off site.



MAP SOURCE: Town of Easton Planning and Zoning

EXISTING ZONING	EXISTING LAND USE	SURROUNDING ZONING & LAND USE	SITE IMPROVEMENTS	SIZE OF PROPERTY
MXW	Vacant	PUD, MXW, R10A Residential	24,917 SF, 3-story building.	Lot 1 1.82 Ac.



COMPATIBILITY with the COMPREHENSIVE PLAN

- The integrated use is desirable for the proximity and location to existing area and town amenities.
- There are compelling natural features, Non-Tidal Wetlands and the proposed layout utilizes the natural features.
- A Forest Conservation Plan is required and will be obtained via offsite.
- Automobiles should not determine the site design.
- Parking is directed to the rear of the building.
- Usable open spaces are not applicable.
- Architectural compatibility is consistent with the Town of Easton and Port Street.
- Signs should inform but not dominate per owner preference.
- The diversity of neighborhood housing types, having neighborhoods as interesting places with connectivity, is not applicable for this site.

PROPERTY HISTORY

- Annexed in 1967
- 2022/08/24 ESDR Submittal
- Current owner: "Chesapeake Community Development, LLC"

COMPATIBILITY with the ZONING ORDINANCE

The proposed uses qualify as "**Dwelling, multi-family**" and "**Office**". Both uses are Permitted within the **MXW** Port Street Subdistrict Zone (see Table 312A MXW Sub-Districts, Port Street).

28-114 page 1-14

"Dwelling, multi-family – A building designed for or used by three (3) or more families provided that the number of families does not exceed the number of units provided. Multi-family dwelling shall also include any "large group homes" for individuals suffering from a "mental disorder" as those terms are defined in the General Health Article of the Maryland Annotated Code."

28-114 page 1-39

"Office(s) – A building or portion of a building wherein services are performed involving predominantly administrative, professional, or clerical operations."

28 – 1001.3 PARKING REQUIREMENTS

- Except under the provisions of subsections B and C below, all uses of land and structures shall adhere to the following parking requirements:



	Use/Activity	Minimum Vehicle Spaces	Maximum Vehicle Spaces	Minimum Bicycle Spaces	Notes
	Residential Buildings				
4	Multifamily	1 per du	2.0 per du	0.5 per du	

Multifamily: 9 Dwelling Units (9 Spaces Minimum, 18 Spaces Maximum)

	Use/Activity	Minimum Vehicle Spaces	Maximum Vehicle Spaces	Minimum Bicycle Spaces	Notes
	Commercial Buildings				
	Office or Bank without Drive-Thru	1 per 250 sf GFA	1 per 140 sf GFA	1 per 10 vehicle spaces	

Office: 12,153 SF (49 Spaces Minimum, 87 Spaces Maximum)

Total Minimum Spaces required: 58 Parking Spaces

Total Maximum Spaces required: 105 Parking Spaces

Total Minimum Bicycle Spaces: 10

Total Provided Parking Spaces: 44 Parking Spaces

Total Provided Bicycle Spaces: 15

Note: A Parking Waiver is required for 14 spaces.

28-312 MIXED-USE WATERFRONT DISTRICT (MXW)

28-312.2 DEVELOPMENT STANDARDS

(A) Development shall require site plan approval by the Easton Planning and Zoning Commission in accordance with the standards of Section 28-301 of the Town Code (notwithstanding the threshold staff-Planning and Zoning Commission division as all site plans in the MXW Zoning District are subject to Planning and Zoning Commission review). In addition to the standards required in 28-301, the Planning and Zoning Commission shall consider the following in their review of site plans:

- a. Whether or not the proposed project is consistent with the Plan, and to the extent that it varies from said Plan, whether or not the proposed project is consistent with the vision, spirit and intent expressed in that document. Projects deemed to be inconsistent with the Plan shall be denied unless and until said Plan is amended in such a way as to make the proposed project consistent with the Plan. Consistency shall refer to both the proposed use, as well as architectural or design considerations.
- b. Whether or not the proposed use is likely to generate potentially adverse impacts to neighboring or nearby properties in the form of undue noise, smoke, odors, traffic, inadequate or excessive drainage, etc., and if finding that such potential exists, whether or not such impacts are determined to be sufficiently ameliorated as part of the proposed project.

28-312.2.1 Permitted Uses

(A) Uses permitted in this Zoning District shall be permitted in the various sub-districts in accordance with the following table (Note in the following table, P indicates a use that is permitted outright, SE indicates a use that may be permitted via Special Exception, A indicates a use that is permitted if accessory to another permitted use, and – indicates a use that is prohibited):



28-312.2.2 Prohibited Uses

- (A) *Uses not listed above are prohibited throughout this Zoning District.*
- (B) *Planned Unit Developments (PUDs) and Planned Healthcare (HC) applications are not permitted and shall not be considered for properties in this Zoning District.*

Retail equal to or in excess of 5,000 square feet of gross floor area per building. Such limitation shall apply to other types of retail, rather specifically listed in Table 414 A or not.

28-312.2.3 Accessory Uses

- (A) *Uses indicated as permitted Accessory Uses (A) in Table 312 A above, shall be permitted in the sub-districts so indicated, provided they are clearly associated with a permitted principle use.*
- (B) *Notwithstanding Table 312 A above, other accessory uses may be approved by the Planning and Zoning Commission during the site plan review process provided any such uses are clearly incidental to the permitted principle use and are uses generally associated with such use(s).*
- (C) *Piers and Floating docks may be permitted as accessory uses but shall require a special exception approval by the Easton Board of Zoning Appeals. No such application shall be approved unless and until all other necessary Federal, State, or Local permits are obtained and copies of such provided to the Town Planner.*

28-312.3 SITE PLANNING STANDARDS

- (A) *The following minimum site planning standards shall be observed:*

28-314.3.1 Lot Standards

- (A) *Sub District Development Standards – The following development standards may vary by sub district as indicated in Table 312 B below, subject to the provisions of Section 28-312.3.2 of this Code. All other development standards specified shall apply throughout the MXW District. Those standards listed under columns labelled “Base” represent by-right entitlements. Any and all development in excess of the Base Standards, up to the limits under the columns labelled “Max” shall only be permitted in accordance with the Bonus Provisions per Section 28.312.3.2 below.*
- (B) *Minimum lot dimensions - All lots hereafter established shall have a depth of at least sixty (60) feet.*
- (C) *Lot frontage - All lots hereafter established shall have a minimum frontage on a public street or way of at least 24 feet.*
- (D) *Maximum density - for any residential uses shall be as follows:*
 - a. *If residential use is part of a vertically-mixed use project (i.e., non-residential uses are present on the ground floor with residential units on non-ground floors), there shall be no limit on the residential density.*
 - b. *For all other development scenarios, the maximum permitted density shall be as indicated in Table 312 B above.*
- (E) *Base Elevation – The base elevation for structures in the Zoning District shall be a minimum of the base flood elevation plus 24 inches. The base flood elevation (BFE) must be determined for each project by a Civil Engineer, based on current Maryland DFIRM maps and the Town of Easton’s Floodplain Management Code.*
- (F) *The front yard required for a dwelling in any zone which permits residences may be reduced in the case of a dwelling to be located between two (2) existing dwellings which lack the required front yard and*



which are less than one hundred (100) feet apart. In such a case the front yard depth shall be not less than that of the deeper adjoining lot.

(G) On corner lots, all sides of the lot which face a street must comply with the applicable front setback.

28-312.3.2 Bonus Provisions

- (A) In order to effectively provide for the provision of public amenities identified in the Port Street Small Area Plan, which amenities are viewed as crucial to the character envisioned for this district by that Plan, the Town of Easton establishes the following Bonus Provisions. Developers may utilize these provisions to exceed some of the development standards as specified in, and subject to the limits of, Table 312 B above.*
- (B) An applicant may exceed the limits specified as "Base" in Table 312 B, up to the limits specified as "Max," upon the payment of a fee in the amount of \$9.50 per square foot of the area in excess of the base square footage as modified in Section 28-312.3.3 below.*
- (C) The Town, at its sole discretion, may accept land dedicated for the purpose of establishing or providing for such public amenities. If accepted, the fair market value of the land dedicated may be considered as a credit towards the fee resulting from Section 28-312.3.2 (B) above.*
- (D) Any development which utilizes these bonus provisions shall execute an Agreement prepared to Town Standards and formally accepted by the Town prior to execution. This agreement will, at a minimum, include details concerning:*
 - Total Payment to be made and the timing of such payment(s).*
 - A description of land to be dedicated, if any, and its fair market value.*
 - Summary of all development bonuses to be utilized.*
 - If applicable, phasing of the development and whether the payment of the fee is associated with these phases, and if so how.*

28-312.3.3 Development Incentives

- (A) The development of Easton Point in a manner consistent with the mixed-use concept expressed in the Port Street Small Area Plan and Town of Easton Comprehensive Plan is a major priority of the Town of Easton. To that end, the following measures are offered to further incentivize the Plan's Implementation:*
 - a. To encourage early economic activity and implementation of the Port Street Small Area Plan and act as a catalyst for development, the bonus fee described in Section 28-312.3.2 above shall be adjusted per the following schedule:*

28-312.3.4 Vehicular and Pedestrian Connectivity Standards

- (A) Lots shall be interconnected to all adjoining lots by providing the means to extend – connect on-site; sidewalks, pedestrian paths, service – access roads.*
- (B) Alleys shall be provided or dedicated for vehicle passageway within a block and access to garages, accessory buildings, and trash areas along the rear edges of lots. Each alley shall include at least two points of ingress/egress into the block, with a paved or gravel surface ranging between 16 to 20 feet in width. The Planning and Zoning Commission shall have the authority to waive this requirement when it is determined that the provision or dedication of an alley is not practicable for the proposed project.*

28-312.3.5 Off-Street Parking Standards

- (A) Off-street parking shall be required for uses within the Zoning District, in accordance with the provisions of 28-1001 of the Town Code. Furthermore, given the proximity to the headwaters of the Tred Avon River, all pavement used for parking areas shall be pervious. Alternately such parking areas shall be designed so as to achieve equivalent sediment runoff reduction as would be achieved with the use of pervious*



pavement, as determined by the Town Engineer. Any pervious pavement shall comply with maintenance and inspection requirements of the Town.

- (B) Shared off-street parking amongst multiple users, is encouraged in the Zoning District. To that end, any portion of off-street parking requirements may be satisfied off-site on land within 500 feet of the subject property. In such cases, evidence of the right to utilize such off-off-street parking spaces shall be provided at the time of site plan review.*
- (C) Parking for Residences, Employee and Business vehicles shall be designated and shall be located in a manner to not compete with patron and visitor parking.*
- (D) Off-street parking may not be located between the water's edge and the waterfront façade of any principal building, nor between the front property line and the front building façade, nor in any side yard. If the Planning and Zoning Commission determines that there are no practicable alternatives, in the Water's Edge sub-district, parking in side yards may be permitted.*
- (E) Setbacks for any portion of a parking lot or access drive shall be 3' for residential uses and 10' for non-residential uses, measured from the property line. Mixed-use projects shall adhere to the non-residential setback standard. The Planning and Zoning Commission may waive or modify these setback requirements when doing so may promote connectivity and the efficient utilization of space.*
- (F) The maximum setback requirements may be waived by the Planning and Zoning Commission for an area not to exceed 90% of the frontage in order to accommodate courtyards.*
- (G) Bicycle Parking spaces shall be required for all non-residential uses and structures. A minimum of one bicycle parking space shall be required for each 20 parking spaces.*
 - a. Bicycle parking spaces may be provided or bicycle racks. Bicycle spaces shall be at least 2 feet 6 inches in width and 6 feet in length, with a minimum overhead vertical clearance of 7 feet. Racks and other fixtures used to provide for nonresidential uses must be securely affixed to the ground and allow for the bicycle to be locked and chained.*
 - b. Where bicycle spaces are required by 28-314.3.3 (G), the spaces may be indoors or outdoors and shall be located within 50 feet of the primary building entrance. Outdoor bicycle parking spaces shall not be located behind any wall or landscaping, or other visual obstruction lying between the principal building and the bicycle spaces. If required bicycle spaces are not visible from the street, signs must be posted indicating their location. Outdoor areas used for required bicycle parking shall have an improved hardened surface, and shall be drained and well lighted. Common areas located within offices and commercial facilities or located on balconies or within residential dwelling units shall not be counted toward required parking.*
- (H) In the Water's Edge or Water View sub-districts, off-street parking may be provided beneath the ground floor of the structure. When such parking is provided, the area of such parking shall not be considered a story, and the structure above this parking area shall be entitled to the full number of stories specified for the sub-district. Building height shall still be measured from the BASE ELEVATION.*
 - a. Under-structure parking shall be designed such that all front facades shall be enclosed and provide a façade(s) that is architecturally compatible with the overall building.*
 - b. If located in a floodplain, the under-structure parking shall be screened from view through the use of berms and/or landscaping.*

28-312.3.6 Site Loading and Unloading Area Standards

- (A) All site loading and unloading areas shall be fully screened from view by architectural design feature or by permanent, decorative screens or natural plantings, a minimum of eight (8) feet in height.*



28-312.3.7 Water Front Access Standards

- (A) All lots fronting on the Tred Avon River shall dedicate a public access easement to the Town of Easton, over, under and across all strips of land adjacent to the water. Such required access easement shall be a minimum of 15'-0" wide, or that increased width determined as acceptable and appropriate by the Planning and Zoning Commission. The purpose of requiring such access easements is to provide and maintain unrestricted public access along the entire water frontage of such lots.

28-312.3.8 Lighting Standards

- (A) *All on-site lighting shall be low cut-off shielded luminaries at a maximum 15' height and light shall not shine off-site at levels greater than 1 foot candle. All on-site lighting shall be decorative lamps consistent with the design elements of the area.*

28-312.3.9 Underground and Screening of Utilities

- (A) *All new, replacement and/or modified utility facilities shall be located underground where practical, excluding appurtenances such as pedestals, cabinets, control structures, etc. All utility meters and connections (except water and wastewater) shall be made at the side or rear of a building and properly screened to prevent visibility from public streets.*

28-312.4 ARCHITECTURAL STANDARDS

- (A) *Building design and construction shall meet the minimum requirements of the International Code Council's International Green Construction Code or be US Green Building Council (USGBC) LEED rated, Bronze standard, or a generally accepted equivalent standard, provided, however that formal LEED certification shall not be required.*

28-312.4.1 Building Massing (Shape, Form and Size)

- (A) *For buildings with ground level commercial or mixed use, floor-to-ceiling height shall be a minimum of 14 feet at ground level and 10 feet for upper stories.*

For buildings with ground level non-commercial use, floor-to-ceiling height shall be a minimum of 10 feet for the ground floor and 9 feet for upper stories.

- (B) *Massing and scale of larger buildings shall generally be broken down into smaller and varied volumes or wrapped linearly in a series of smaller pedestrian-scaled buildings with doors and windows.*
- (C) *Buildings exceeding two stories shall incorporate a base, middle, and cap described as follows:*
- a. The base shall include an entry way with transparent windows and a molding or reveal placed between the first and second stories or over the second story. The molding or reveal shall have a depth of at least two inches and a height of at least four inches.*
 - b. The middle may include windows and/or balconies; and*
 - c. The cap shall include the area from the top floor to the roof of the building and including a cornice, eave, parapet or overhang.*
- (D) *Regulating lines and rhythms shall be included to create a pedestrian-scaled environment, including horizontal lines, transoms, cornices, eaves, recesses, courts and arcades that provide human scale to façades.*
- (E) *A clear pattern of building openings shall be provided. Windows, balconies, and bays should unify a building's street wall and add considerably to a façade's three-dimensional quality.*



- (F) *Major architectural expressions in the façade such as; corner massing, oversized windows-entrances, towers, chimneys, roof form and dormers, shall be employed to demarcate gateways, intersections and anchor key locations.*
- (G) *Window sills, moldings, and cornices shall align with those of adjacent buildings. The bottom and top line defining the edge of the windows (the “windowsill alignment”) shall vary not more than two feet from the alignment of surrounding buildings. If the adjoining buildings have windowsill alignments that vary by more than two feet from one another, the proposed building shall align with one of the adjoining buildings.*

28-312.4.2 Ground-Floor Design

- (A) *All buildings in the Zoning District shall have their principal entrance opening to a street, square, plaza, or sidewalk. The principal entrance shall not open to a parking lot. Pedestrian access from the public sidewalk, street right-of-way, or driveway to the principal structure shall be provided through an improved surface. Easements shall be provided to facilitate pedestrian access between parking lots and street frontages.*
- (B) *The ground floor of the entryway shall align with the sidewalk elevation. Sunken terraces or stairways to a basement shall not constitute entryways for purposes of this section. It is not the intent of this section to preclude the use of below-grade entryways, provided that such entryways shall not constitute a principal entryway.*

28-312.4.3 Façade Design

- (A) *Any façade which is oriented to the water’s edge or Boardwalk/promenade, shall be treated as a front façade*
- (B) *Building design shall be done in a manner to not have an apparent rear façade. Façades facing a rear property line shall be designed to be a secondary front and or side façade.*
- (C) *Solid walls shall not exceed 20 feet in length.*
- (D) *All building façades should be responsive to the context of the surrounding environment and neighboring buildings.*
- (E) *Exterior materials shall consist of materials that are traditional, durable and environmentally sustainable. The following list of materials is intended to serve as examples for the desired design aesthetic. Additional materials may be proposed, subject to review and approval by the Planning and Zoning Commission:*
 - a. *Roofing*
 - 1. *Sawn shingles or composition shingles; standing seam metal; slate; or cedar shakes*
 - b. *Soffits*
 - 1. *Composition board with smooth finish, tongue-and-groove wood boards, or fiber-cement panels*
 - c. *Gutters and Downspouts*
 - 1. *Half-round or ogee profile gutters with round or rectangular downspouts in copper, painted or pre-finished metal*
 - d. *Cladding*
 - 1. *Smooth-finish wood or fiber cement lap siding, 6- to 8-inch exposure or random-width cut shingles*
 - 2. *Sand-molded or smooth-finish brick in Common, English or Flemish Bond patterns*
 - 3. *Civic uses may look to incorporate more contemporary materials, such as steel and/ or curtain-wall glazing*



- e. *Windows*
 - 1. *Painted wood or composite, or clad wood or vinyl; true divided light or sash with traditional exterior muntin profile (7/8 inch wide)*
- f. *Doors*
 - 1. *Wood, fiberglass, or steel with traditional stile-and-rail proportions and raised panel profiles, painted or stained*
- g. *Shutters*
 - 1. *Wood or composite, sized to match window sash and mounted with hardware to either be or appear to be operable*
- h. *Columns*
 - 1. *Architecturally-correct classical proportions and details in wood, fiberglass, or composite material*
 - 2. *More informal square wooden box columns*
- i. *Railings*
 - 1. *Milled wood or composite top and bottom rails with square or turned balusters*
 - 2. *Wrought iron or solid bar stock square metal picket*

28-312.4.4 Windows and Entryways

- (A) *Windows above the ground floor shall have a ratio of height to width of at least 2:1.*
- (B) *The uses on the ground floor shall be visible from and/or accessible to the street through the use of windows and doors on at least 50% of the length of the first floor street frontage. At least 60% or more than 90% of the total surface area of the front elevation shall be in public entrances and windows (including retail display windows). Where windows are used, they shall be clear, non-reflective glass.*
- (C) *Ribbon windows and extensive use of mirrored glass are prohibited.*
- (D) *All street-level retail uses with sidewalk frontage shall be furnished with an individual entrance and direct access to the sidewalk in addition to any other access that may be provided.*
- (E) *Doors shall be recessed into the face of the building to provide a sense of entry and to add variety to the streetscape. An entryway shall not be less than one square foot for each 1,000 square feet of floor area, and in all cases shall not be less than 15 square feet.*
- (F) *Canopies, awnings, and similar appurtenances may be constructed at the entrance to any building and may encroach into any required front setback. Any such feature shall have a minimum depth of 5 feet, and shall have a minimum clearance height above the sidewalk of 8 feet and a maximum clearance height above the sidewalk of 13 feet 6 inches.*

28-312.4.5 Porches

- (A) *Minimum porch depth is 6 feet.*
- (B) *Minimum height from ground level to porch floor is 3 feet.*

28-312.4.6 Color Selections

- (A) *The color palette for projects in the Zoning District shall generally be designated as follows:*
 - a. *Facade surface colors shall recall natural materials, and avoid bright, artificial or metallic colors.*
 - b. *Accent colors shall be muted blues, greens, yellows, browns, and shades of white, beige, and gray.*
 - c. *Masonry materials, such as brick should typically be left unpainted.*
 - d. *Facades should contain no more than three colors.*
- (B) *The Planning and Zoning Commission shall have the authority to approve proposed architecture as compliant with the standards of this subsection, during their site plan review process. In so doing, the*



Planning and Zoning Commission shall focus their review on the more general architectural issues such as the appropriateness of the theme or style proposed, the general massing, shape, size, form and orientation of the buildings. The appropriateness of more detailed issues, such as materials and product specifications, shall be verified by Town staff (with the advice of a professional consulting architect, as needed).

28-312.4.7 Landscaping and Landscaping Features

(A) Landscaping shall be required for all development in accordance with the provisions of 28-1015 of the Town Code and shall utilize native vegetation.

*(B) Projects proposed on property which abuts any property that is not zoned MXW, shall adhere to the **Buffer Yard requirements** specified for “property lines adjoining more or less intense zoning or land use” as detailed in Subsection **28-1014.7 E 5** of the Town Code.*

28-312.4.8 Building Infrastructure

(A) Such as heating, ventilation, air conditioning, generators and other equipment - appliances, shall be fully screened from view by architectural design features.

28-312.4.9 Refuse, Solid Waste and Recycling Storage

(A) All building containment area(s) for the storage of refuse, solid waste and recycling, shall be fully screened from view and integrated into the architectural design.

28-312.4.10 Restaurant Seating

(A) Seating in restaurants shall be regulated as follows:

- a. Indoor seating shall be limited to 1 seat per 15 square feet (net)*
- b. Outdoor seating shall be limited to 100% of Total Indoor Seating and must be specified on site plans submitted for approval so that such areas are appropriately considered for calculation of such things as number of required parking spaces, the kitchen size and the restroom fixture counts.*

28-312.5 SIGNAGE STANDARDS

28-312.5.1 Premise Identification

(A) Address-suite numbers, shall be installed on building and dwelling walls in a position to be plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background.

- a. Address numbers shall be Arabic numerals or alphabet letters.*
- b. Numbers-letter shall be a minimum of 3 inches high with a minimum stroke width of 0.5 inch.*
- c. Rear entrance identification shall be provided on all non-residential structures.*

28-312.5.2 Façade Signage

(A) Building Wall, Projecting and Suspended Signs shall have the following features

- a. Signage area shall not exceed one (1) square foot of sign area for each lineal foot of building frontage of the front façade.*
- b. For a building facing more than one street, an additional one (1) square foot of sign area shall be permitted for every lineal foot of building frontage on the side street(s).*
- c. Numbers-Letter shall be a minimum of 6 inches high with a minimum stroke width of 1.25 inch.*
- d. Signs shall not project more than thirty inches (30”) from the building façade surface.*



- e. *Shall have molded perimeter frames plus carved and or raised letters for a minimum of 50% of the numbers, letters and or symbols on the signage.*
- f. *All lit on-site signs shall be illuminated indirectly by external fixtures with steady, stationary, shielded light sources directed solely onto the sign without causing glare. Light bulb, strips or tubes used for illuminating a sign shall not be visible from adjacent public rights-of-way or residential properties.*
- g. *Signage shall consider the visibility and approach to the site from both the vehicular and pedestrian experience.*

28-312.5.3 Site Signage

(A) Monument Sign shall be low freestanding signage, not exceeding fifty (50) square feet (per side) in area. The top shall not be more than five (5) feet in height. Signs shall be placed on a continuous base.

(B) One sidewalk sign shall be permitted for each tenant. Such sign shall be located in front of the business being advertised, must provide six (6) feet of unobstructed sidewalk, and shall be removed from the sidewalk daily at (or before) the close of business.

28-312.5.4 Prohibited Signage

(A) Signage, not listed above are prohibited.

(B) No alcohol sales licensee may display any advertisement or sign on the outside façade of the licensed premises upon which appears any brand name of an alcoholic beverage product.

(C) Animated or flashing signs.

28-312.6 OPERATING STANDARDS

(A) Storefront Windows for all commercial uses shall not be obstructed, contain signage and or lighting projecting toward the public way and shall allow natural light into the interior spaces. These storefront windows shall be used for display and or connection between the commercial use and the public way. All outdoor music conducted on private property shall end no later than 10:00 p.m.

Action Required by the Board/Commission:

“J. Review the proposed construction of any street, square, park, or other public way, ground or open space, or public building or structure, or public utility, whether public or privately owned to determine whether the location, character, and extent of such development is consistent with the Comprehensive Plan, as per Section 3.08 of Article 66B of the Annotated Code of Maryland.”

Items for Consideration and Staff Comments:

- This issue before the Commission is to approve or deny the Site Plan, Architecture, Parking and Landscape/Buffer Waiver, contingent upon the Amendment of the Zoning Ordinance for the MXW District. The Commission can defer the decision until the Zoning Amendment has been approved by the Town Council.



- Upon Planning Commission decision for approval, applicant will need to submit the Development Site Plans for staff level review and approval and obtain applicable Grading Permit Application, Building Permit Application, and Certificate of Occupancy & Signage Application.
- Applicant submitted an ESDR Sketch Subdivision Plan on August 3, 2022 depicting the subdivision. The plans were reviewed by Staff at the ESDR Meeting on August 24, 2022. ESDR review comments have been provided.

APPROVE the Site Plan, Architecture and Waiver Requests. If -

- The Commission finds that the proposed Site Plan, Architecture, Parking and Landscape/Buffer Waiver is in accordance with the Zoning Ordinance as outlined above.

DENY the Site Plan, Architecture and Waiver Requests. If -

- The Commission finds that the proposed Site Plan, Architecture, Parking and Landscape/Buffer Waiver is not in accordance with the Zoning Ordinance as outlined above and is so off the mark that a brand-new application should be submitted.

APPROVE THE Site Plan & Architectural Request subject to conditions. If -

- The Commission finds that the proposed use is not in accordance, but could be subject to specified conditions.
- Based on the information provided in the application, Staff recommends the Commission **DEFER** their decision until the Zoning Amendment has been approved by the Town Council.



Joe Mayer <jmayer@eastonmd.gov>

Port Street lot 1

2 messages

Rem <rem@goeaston.net>

Wed, Sep 7, 2022 at 9:25 AM

To: jmayer@eastonmd.gov

Mr. Mayer:

I am Rem Simpson, owner of the 3.5 acre parcel on the other side of Meadow Drive.

I have your letter regarding the referenced proposal.

Question: How many living units are to be in the building and on site?

Also, for the record, I am considering a formal objection to the parking requirement waiver.

A response would be appreciated.

Thank you,

Rem Simpson

52B Davis Ln Easton.MD

410-822-0076

rem@goeaston.net

PS your voice mailbox is full and will not accept any new messages.

Joe Mayer <jmayer@eastonmd.gov>

Wed, Sep 7, 2022 at 9:36 AM

To: Rem <rem@goeaston.net>

Mr. Simpson,

There will be 9 proposed dwelling units.

Regards,

Joseph Mayer

[Quoted text hidden]

--

Regards,

Joseph A. Mayer

Plan Reviewer

Town of Easton

14 South Harrison Street

Easton, MD 21601

410-822-1943

Easton Staff Development Review Comment Responses

Date: August 29, 2022

Town of Easton

14 S. Harrison Street

Easton, MD 21601

Project: Port Street Commons

ATTN: Joe Mayer

Mr. Mayer,

Rauch inc. has reviewed comments received August 26th, 2022 and offers the following responses to the Easton Town Engineer, and Town of Easton Planning and Zoning:

PLANNING & ZONING COMMENTS

Site Plan

1. Per MXW 28-312.3.5 (A) "Furthermore, given the proximity to the headwaters of the Tred Avon River, all pavement used for parking areas shall be pervious." Please address and justify recommendations for design type.
 - **Due to the high groundwater and C/D soils we looked at a different alternative to collect the sediment from the impervious parking/roadway. "Alternately such parking areas shall be designed so as to achieve equivalent sediment runoff reduction as would be achieved with the use of pervious pavement, as determined by the Town Engineer." For this we are using a forebay which will require maintenance to clear all sediment within it. All the parking is designed to flow to inlets and enter the forebay prior to getting treated within the submerged gravel wetlands. Submerged gravel wetlands provide better sediment removal than porous asphalt and are better suited in wet conditions.**
2. Per MXW 28-312.3.5 (E) "Setbacks for any portion of a parking lot or access drive shall be 3 feet for residential uses and **10' for non-residential uses.**" Please adjust parking spaces and travel way or obtain **variance** from the **Board of Zoning Appeals**. In addition, a Parking Waiver may be required.
 - **All parking has been removed from the 10' setback.**
3. Per MXW 28-312.4.2 (A) "Pedestrian access from the public sidewalk, street right-of-way, or driveway to the principal structure shall be provided through an improved surface." There's no direct connection to the principal entrance is shown.
 - **Two connections have been made to the sidewalk fronting Meadow Drive with one of the entrances near the future rails to trails.**
4. Per MXW 28-312.4.3 (B) "Building design shall be done in a manner to not have an apparent rear facade. Facades facing a rear property line shall be designed to be a

secondary front and or side facade." Based on the concept design, it is clear that the facade facing the stormwater area is different from the front facade and does not include the necessary architectural features for a three-story building.

- **Building has been updated accordingly.**
5. Per MXW 28-312.4.3 (C) "Solid walls shall not exceed 20 feet in length" please verify that the large wall on the south elevation does not exceed 20 feet in length.
 - **This has been revised.**
 6. Site Plan approval is contingent on the Town Council approving the requested Amendments to the Zoning Ordinance.
 - **Noted.**
 7. Determine Fire Lane for the building.
 - **Fire lane has been depicted on sheet C-101.**
 8. Avoid Forest Conservation Easements within the Delmarva Power & Light Company Easement. Has off-site location been determined for Afforestation?
 - **All afforestation will be paid fee-in-lieu and provided offsite.**

Site Plan (To be addressed at Final Site Plan submission)

- **Note that all comments below will be addressed prior to final site submission.**
1. Any Monument Sign will require a separate Signage Application.
 2. Any exterior lighting would require a photometric plan and light details for the site, upon final engineering.
 3. Prior to Final Engineering approval, verify site distance at entrance.
 4. Upon Development Site Plan review, provide spot elevations and cross-slopes for ADA access and parking spaces.
 5. Prior to Final Site plan approval, obtain approval from The Talbot County Soil Conservation District and add approved drawings to site plan.

Legal Agreements (To be addressed at Final Site Plan submission)

- **Note that all legal agreements below will be addressed prior to final site submission.**
1. There will be a required Declaration of Covenants that addresses maintenance and inspections for Storm Water Management. In addition, a Bond/Letter of Credit is required.
 2. There will be a required Public Works Agreement for construction along Dutchman's Lane. In addition, a Bond/Letter of Credit is required.
 3. A Storm Water Management Easement is required. Please provide SWM Exhibit upon instruction of Town Attorney. Exhibit should be on an 8 ½" x 11" or 8 ½ "x 14" sheet signed and sealed by a Maryland Licensed Surveyor.
 4. A Forest Conservation Easement is required. Please provide Exhibit upon instruction of Town Attorney. Exhibit should be on an 8 ½" x 11" or 8 ½ "x 14" sheet signed and sealed by

a Maryland Licensed Surveyor.

5. Prior to Final Site Plan approval, please provide a Construction Cost Estimate for the stormwater management and right-of-way improvements.
6. Please confirm or provide items listed below for preparing legal documents.
 - **Owner name**
Please confirm.
 - **Address for property**
Port Street, Easton, MD 21601
 - **Legal agreements required (To be prepared by the Town Attorney)**
Declaration of Covenants for SWM.
Public Works Agreement.
Forest Conservation Easement.
 - **Approved Cost Estimates**
To be submitted at Development Site Plan review.
 - **The Title of the Improvement Plans and who they were prepared by.**
Title: Please advise.
Prepared by: Rauch Inc.
 - **The Authorized Person who will be signing the documents and their title.**
Please advise.
7. Per the latest requirement of the Clerk's Office-Circuit Court of Talbot County, add the title Exhibit 'A' above the top boarder to all exhibit sheets.

Impact Fees

- 1) Please note, there will be a required Impact Fee for all proposed building. The Town's Impact Fees and Inspection Fees are to be paid upon the time you pick up your Building Permit. Please provide building square footage with appropriate use for calculation of Impact Fee.
- 2) Talbot County Impact Fees are due prior to obtaining your Building Permit. Please provide receipt of payment to the Town's Building Inspection Division.
- 3) Please add estimated Town Impact Fee calculations to cover sheet and add note below calculations; *"Note: The Impact Fee indicated in this notation shall not be constructed as vested and until submission of the building application."*

Sketch Plan

The **Sketch Site Plan** is **acceptable to the Engineering Department with the following comment:**

1. **SHEET C-101** - Consider using a concrete entrance at Meadow Gate Drive (TOE-R-4.02). This helps with grade control for the ADA

compliant crosswalk and eliminates the need for ADA ramps as the sidewalk connects to the entrance.

- **Entrance has been updated accordingly. Detail has been added to sheet C-305.01.**

Please address the comments above and submit a Preliminary Site plan.

Stormwater Management

The **Sketch Stormwater Management Plan** is **approved with the following condition:**

2. Provide a Quality Management summary table indicating ESD Volume Required and Provided (for each Study Point) on the plans (possibly Sheet G-100) and in the Stormwater Management Report.

- **Table has been added to sheet G-100.**

Please address the comments above and submit a revised Sketch Stormwater Management Plan.

Please contact me if you have any questions. Thank you.

Casey Rauch – Rauch inc.

**Town of Easton**

Engineering, Planning and Zoning

14 South Harrison Street, Easton, MD 21601

Supplemental Waiver Request Application

Waiver Request TypeSidewalk ☐Parking Spaces ☐Parking/Aisle Dimension ☐Landscaping & Buffering ☒Signage ☐Other ☐**Project Information**

Address	tort Street, Easton, a 5 HMC/LM						
Tax Map	34	Grid	15	Parcel	77	Lot	1
Zoning District	MXW	PC Meeting Date	9/15/2022	Historic District	Yes ☐	No ☒	
Owner or Agent	Chesapeake Community Development LLC						
Mailing Address	1332 Donald Ave, Severn, MD 21144						
Telephone No.	(410) 384-4035	Email					

Request Details

Please attach a detailed description of the waiver request(s) being made and the justification(s) for requesting said waiver(s).

Relief from the bufferyard "E" requirements in all areas within the Delmarva Power easement. Delmarva Power will not permit plantings in their easement that could interfere with the maintenance of their transmission lines. We have provided large shrubs in that easement area that are not expected to create a maintenance concern.

☒ Ordinance Section Supporting Waiver Request.

28-1014.7

Any modifications during review shall warrant an updated application.

I do hereby solemnly declare and affirm that the information provided by this application and the documents attached hereto accurately represent the conditions of the request and that submission of an incomplete application will be returned for correction prior to processing.

Signature of Applicant or Agent

Date 10/1/2022

Printed Name of Applicant or Agent

Casey Rauch

**Town of Easton**

Engineering, Planning and Zoning

14 South Harrison Street, Easton, MD 21601

Supplemental Waiver Request Application

Waiver Request TypeSidewalk ☐Parking Spaces ☒Parking/Aisle Dimension ☐Landscaping & Buffering ☐Signage ☐Other ☐**Project Information**

Address	Port Street, Easton, а 5 нмслм						
Tax Map	34	Grid	15	Parcel	77	Lot	1
Zoning District	MXW	PC Meeting Date	9/15/2022	Historic District	Yes ☐	No ☒	
Owner or Agent	Chesapeake Community Development LLC						
Mailing Address	1332 Donald Ave, Severn, MD 21144						
Telephone No.	(410) 384-4035		Email				

Request Details

Please attach a detailed description of the waiver request(s) being made and the justification(s) for requesting said waiver(s).

Per Town of Easton Zoning Code, the minimum parking required = py spaces, and the maximum parking required = 10p spaces for the proposed site plan. Many patrons of the Arc are typically bused into the facility and the 44 spaces reflected on the plans are expected to be sufficient. Parking at the existing Arc facilities are proven to be adequate for their purposes. We are requesting a parking waiver for 14 parking spaces.

☒ Ordinance Section Supporting Waiver Request.

28-1001.3

Any modifications during review shall warrant an updated application.

I do hereby solemnly declare and affirm that the information provided by this application and the documents attached hereto accurately represent the conditions of the request and that submission of an incomplete application will be returned for correction prior to processing.

Signature of Applicant or Agent

Date 9/1/2022

Printed Name of Applicant or Agent

Casey Rauch



**SITE DEVELOPMENT
STORMWATER MANAGEMENT ANALYSIS
FOR
PORT STREET COMMONS
PORT STREET
EASTON, MD 21601**

**PREPARED FOR:
CHESAPEAKE COMMUNITY DEVELOPMENT LLC**

**PREPARED BY:
RAUCH, INC
106 N. HARRISON STREET
EASTON, MD 21601**

August 29, 2022

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

TABLE OF CONTENTS

SECTION 1.....Stormwater Management Narrative

SECTION 2.....ESD Calculation Spreadsheets

SECTION 3.....Existing & Proposed Drainage Area Plans

SECTION 4.....Pre/Post-Development Quantity Calculations

SECTION 5.....Soil Report

SECTION 1 – STORMWATER MANAGEMENT NARRATIVE

SITE DEVELOPMENT STORMWATER MANAGEMENT NARRATIVE

The proposed Port Street Commons development is located on a 1.82-acre parcel of land with existing woods and non-tidal wetlands. A portion of the existing woods will be cleared as part of this project. Afforestation will be provided on and off the site. 100% of the existing soils within the proposed limits of disturbance are Hydrologic Soil Type D.

The proposed development plan will add 0.88 acres of impervious surfaces, comprising of one building, asphalt road, and sidewalk. Based on the conditions of the existing parcel, the proposed development will be categorized as “New Development”. The spreadsheets found in Section 2 of this report calculates the required ESD volume to be 5,784 CF of ESD storage.

Water quality will be met through one submerged gravel wetland that has one forebay for pretreatment. The submerged gravel wetland will have a ponding depth of 1.45' and be controlled by an outfall pipe. Flow being collected from yard inlets and surface drain will discharge into the proposed forebay before entering the submerged gravel wetlands via a stone weir. The submerged gravel wetlands will have a series of distribution pipes that have risers to the surface to collect surface water. This water will flow through the stone reservoir and be collected by the collection pipes. The water will discharge into the existing ditch along Port Street. All Stormwater practices are designed in accordance to MDE Chap. 5 Guidelines.

Water quantity control is required for both the 2-year, and 10-year storm events. The table for all study points is shown below for existing and proposed.

Study Point #1		
	2-YR (CFS)	10-YR (CFS)
Existing	2.73	5.03
Proposed	0.59	2.82

SECTION 2 – ESD CALCULATION SPREADSHEETS

LIMITS OF DISTURBANCE

EXISTING LOD COVERAGE			
COVERAGE DESCRIPTION	COVERAGE CATEGORY	COVERAGE AREA SQ-FT	SOIL TYPE
TURF LAWN	PERVIOUS	69652	D

TOTAL SITE AREA	69652 SQ-FT
EXISTING IMPERVIOUS AREA	0 SQ-FT
PERCENT IMPERVIOUS	0%

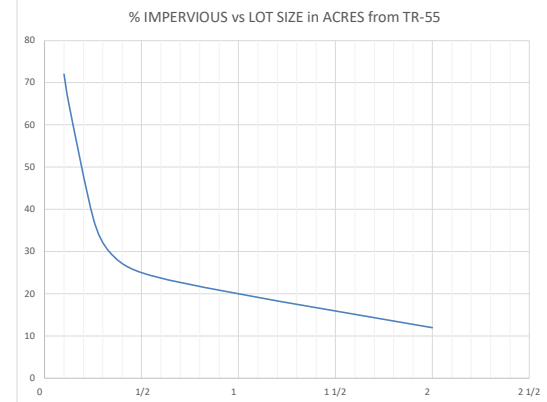
PROPOSED LOD COVERAGE		
COVERAGE DESCRIPTION	COVERAGE CATEGORY	COVERAGE AREA SQ-FT
IMPERVIOUS PARKING	IMPERVIOUS	38977

TOTAL SITE AREA	69652 SQ-FT
PROPOSED IMPERVIOUS AREA	38977 SQ-FT
PERCENT IMPERVIOUS	56%

PERCENT HSG A	0%
PERCENT HSG B	0%
PERCENT HSG C	0%
PERCENT HSG D	100%

FROM TR-55		
LOT SIZE	% IMPERVIOUS	
2.00	12	
1.00	20	
1/2	0.50	25
1/3	0.33	30
1/4	0.25	38
1/8	0.13	65
0.10	72	

0.166667



PERVIOUS	A	GRAVEL IMPERVIOUS
IMPERVIOUS	B	ROOFS IMPERVIOUS
	C	OUS PARKING IMPERVIOUS
	D	DRIVEWAY IMPERVIOUS
		ROADWAY IMPERVIOUS
		WATER IMPERVIOUS
		PAVEMENT IMPERVIOUS
		SIDEWALK IMPERVIOUS
		LANDSCAPING PERVIOUS
		PERVIOUS PARKING PERVIOUS
		TREES/VEGETATION PERVIOUS
		TURF LAWN PERVIOUS
		CONSERVATION AREA PERVIOUS
		PERMEABLE PAVEMENT PERVIOUS

Maryland ESD Calculations and 10% Phosphorus Removal

Last Update: 1/6/2019 Rauch Inc.

Project Name:	
Date:	
	data input cells
	calculation cells

Step 1: Complete ESD Implementation Checklist

Check all of the Following ESD Practices That Were Implemented at Site	Yes - No - N/A
Environmental Mapping Was Conducted at Site Prior to Layout	YES
Natural Areas Were Conserved (e.g., forests, wetlands, steep slopes, floodplains)	YES
Stream, Wetland and Shoreline Buffers Were Reserved	YES
Disturbance of Permeable Soils Was Minimized	YES
Natural Flow Paths Were Maintained Across the Site	YES
Building Layout Was Fingerprinted to Reduce Clearing and Grading at Site	YES
Site Grading Promoted Sheetflow From Impervious Areas to Pervious Ones	YES
Site Design Was Evaluated to Reduce Creation of Needless Impervious Cover	YES
Site Design Was Evaluated to Maximize Disconnection of Impervious Cover	YES
Site Design Was Evaluated to Identify Potential Hotspot Generating Area for Stormwater Treatment	YES
Erosion and Sediment Control Practices and Post Construction Stormwater Management Practices Were Integrated into a Comprehensive Plan	YES
Tree Planting Was Used at the Site to Convert Turf Areas into Forest	YES

Step 2: Calculate Site Imperviousness and Water Quality Volume, WQv (for redevelopment)

defined as A single tract, lot, parcel of land or combination of tracts, lots parcels of land that are in one ownership or are contiguous and in diverse ownership where development is to be performed as part of a unit, subdivision or project. See page 5.117 in the design handbook. This means that a project may be classed as redevelopment even if the LOD is less than 40% impervious

Total SITE Area, A (acres or sq-ft)	1.82
Existing SITE Impervious Area (acres or sq-ft)	0
SITE percent impervious	0%
Development Category (for ESD)	New Development
LOD Area, A (acres)	1.80
Existing LOD Impervious Surface Area (acres)	0.00
Proposed LOD Impervious Surface Area (acres)	0.89
Rainfall Depth, P (in)	1.0
Existing LOD Imperviousness, I_{imp}	0%
Proposed LOD Imperviousness, I_{post}	56%
Water Quality Calculation for Redevelopment Only	
Required Treatment Area (acres)	0.000
Runoff Coefficient, Rv	0.95
Water Quality Volume, WQv (cf)	0

Step 4: Calculate Environmental Site Design (ESD) Rainfall Target, P_E

% Soil Type A	0%	RCN Soil Type A	72.38
% Soil Type B	0%	RCN Soil Type B	81.38
% Soil Type C	0%	RCN Soil Type C	86.38
% Soil Type D	100%	RCN Soil Type D	90.19
Target Pre-Developed Condition, $RCN_{\text{pre-dev}}$	77.00000	Post-Developed Condition, RCN	90.19
Soil Type A ESD Rainfall Target, P_E (in)	0.00		
Soil Type B ESD Rainfall Target, P_E (in)	0.00		
Soil Type C ESD Rainfall Target, P_E (in)	0.00		
Soil Type D ESD Rainfall Target, P_E (in)	1.80		
	1yr		
Maximum P_E (in)	2.7		
Site ESD Rainfall Target, P_E (in)	1.80		
ESD Runoff Depth, Q_E (in)	1.00		
ESD Runoff Volume, ESD_v (cf)	5,784		
Total Treatment Volume (cf)	5,784		

Runoff depths for H and H analysis		
2yr	10yr	100yr
3.4	5.3	7.6

Step 3: Calculate Phosphorous Removal Requirement, RR for Critical Area Sites

Development Category (for 10%)	New Development
New Development	
Average Annual Predevelopment Load, L_{pre} (lbs P / yr)	0.80
Redevelopment:	
Predevelopment Runoff Coefficient, R_{pre}	0.05
Phosphorous Mean Concentration, C (mg/L)	0.3
Average Annual Predevelopment Load, L_{pre} (lbs P / yr)	0.20
Post-Development Runoff Coefficient, R_{post}	0.55
Average Annual Post-Development Load, L_{post} (lbs P / yr)	2.17
Removal Requirement, RR (lbs P / yr)	1.45

Step 5: Select Nonstructural Practices to Treat the ESD Rainfall Target

Nonstructural Practices	P _c Credit Description	Contributing Drainage Area (sf)	Direct WQv or ESDv Received by Practice (cf)	WQv or ESDv from Up-Gradient Practices (cf)	Average P _c Credit (in)	WQv or ESDv credit (cf)	Runoff Volume Remaining (cf)
Disconnection of Rooftop Runoff 1	Up to 1 inch credit provided based upon disconnection flow length.	0	0	N/A	#DIV/0!	0	0
Disconnection of Rooftop Runoff 2	Up to 1 inch credit provided based upon disconnection flow length.	0	0	N/A	#DIV/0!	0	0
Disconnection of Non-Rooftop Runoff 1	Up to 1 inch credit provided based upon disconnection and contributing flow lengths.	0	0	N/A	#DIV/0!	0	0
Disconnection of Non-Rooftop Runoff 2	Up to 1 inch credit provided based upon disconnection and contributing flow lengths.	0	0	N/A	#DIV/0!	0	0
Sheetflow to Conservation Areas 1	Up to 1 inch credit provided based upon conservation area width.	0	0	0	#DIV/0!	0	0
Sheetflow to Conservation Areas 2	Up to 1 inch credit provided based upon conservation area width.	0	0	0	#DIV/0!	0	0

Step 6: Select Micro-Scale Practices to Treat the ESD Rainfall Target

Micro-Scale Practices	P _c Credit Description	Contributing Drainage Area (sf)	Direct ESDv Received by Practice (cf)	WQv or ESDv from Up-Gradient Practices (cf)	WQv or ESDv credit (cf)	Runoff Volume Remaining (cf)
Green Roof (Level 1)	ESDv credit is based on roof thickness	0	0	N/A	0	0
Green Roof (Level 2)	ESDv credit is based on roof thickness	0	0	N/A	0	0
Pemeable Pavement (A Soils)	ESDv credit is based on subbase thickness	0	0	N/A	0	0
Pemeable Pavement (B Soils)	ESDv credit is based on subbase thickness	0	0	N/A	0	0
Pemeable Pavement (C Soils)	ESDv credit is based on subbase thickness	0	0	N/A	0	0
Rainwater Harvesting	ESDv credit is based on design storage volume and annual use	0	0	0	0	0
Submerged Gravel Wetlands	ESDv credit is based on design storage volume	57,431	8,367	0	6,498	1,870
Infiltration berms	ESDv credit is based on design storage volume	0	0	0	0	0
Rain Gardens 1	ESDv credit is based on design storage volume	0	0	0	0	0
Rain Gardens 2	ESDv credit is based on design storage volume	0	0	0	0	0
Micro-Bioretention 1	ESDv credit is based on design storage volume	0	0	0	0	0
Micro-Bioretention 2	ESDv credit is based on design storage volume	0	0	0	0	0
Landscape Infiltration	ESDv credit is based on design storage volume	0	0	0	0	0
Grass Swales 1	ESDv credit is based on design storage volume	0	0	0	0	0
Grass Swales 2	ESDv credit is based on design storage volume	0	0	0	0	0
Bio-swales 1	ESDv credit is based on design storage volume	0	0	0	0	0
Bio-swales 2	ESDv credit is based on design storage volume	0	0	0	0	0
Wet Swales	ESDv credit is based on design storage volume	0	0	0	0	0

Critical Area Credits

Baseline Phosphorous Removal Efficiency	Average Adjusted Removal Efficiency Rate	P Load to Practice (lbs/yr)	Load Reduction (lbs/yr)	Remaining Load (lbs/yr)
#DIV/0!	#DIV/0!	0.00	0.00	0.00
#DIV/0!	#DIV/0!	0.00	0.00	0.00
#DIV/0!	#DIV/0!	0.00	0.00	0.00
#DIV/0!	#DIV/0!	0.00	0.00	0.00
#DIV/0!	#DIV/0!	0.00	0.00	0.00
#DIV/0!	#DIV/0!	0.00	0.00	0.00

Baseline Phosphorous Removal Efficiency	Average Adjusted Removal Efficiency Rate	P Load to Practice (lbs/yr)	Load Reduction (lbs/yr)	Remaining Load (lbs/yr)
#DIV/0!	#DIV/0!	0.00	0.00	0.00
#DIV/0!	#DIV/0!	0.00	0.00	0.00
80%	#DIV/0!	0.00	0.00	0.00
80%	#DIV/0!	0.00	0.00	0.00
40%	#DIV/0!	0.00	0.00	0.00
45%	#DIV/0!	0.00	0.00	0.00
60%	74%	2.09	1.54	0.55
#DIV/0!	#DIV/0!	0.00	0.00	0.00
#DIV/0!	#DIV/0!	0.00	0.00	0.00
#DIV/0!	#DIV/0!	0.00	0.00	0.00
#DIV/0!	#DIV/0!	0.00	0.00	0.00
#DIV/0!	#DIV/0!	0.00	0.00	0.00
#DIV/0!	#DIV/0!	0.00	0.00	0.00
#DIV/0!	#DIV/0!	0.00	0.00	0.00
#DIV/0!	#DIV/0!	0.00	0.00	0.00

Step 7: Check for ESDv to MEP compliance and Revise Site If Necessary

Drainage Area Treated (sf)	57,431
----------------------------	--------

WQv or ESDv Treated (cf) using ESD practices	6,498
P _E achieved (inches)	2.02

Total Load Reduction (lbs P / year)	1.54
Total Load Reduction Remaining (lbs P / yr)	0.00

Entire ESDv Treated Through ESD Practices?	YES
ESDv Remaining? (cf)	0
If ESDv is not fully treated, is ESD to MEP achieved?	NO

Redevelopment WQv Requirements Met Through ESD Practices?	N/A
WQv Remaining? (cf)	0

New Development Water Quality Volume Requirements

Required Treatment Area (acres)	1.60
Runoff Coefficient, Rv	0.55
Water Quality Volume, WQv (cf)	3,213

New Development WQv Requirements Met Through ESD Practices?	YES
WQv Remaining? (cf)	0

Step 8: Determine Reduced RCN and Volume Management Requirements Based Upon P_E Achieved

Reduced RCN for Type A Soils	N/A
Reduced RCN for Type B Soils	N/A
Reduced RCN for Type C Soils	N/A
Reduced RCN for Type D Soils	N/A

Composite Reduced RCN CN* 1 yr	N/A
--------------------------------	-----

Target Reduced RCN _{100% 1 yr}	77.00
---	-------

Q _E (in) for Reduced RCN	N/A
V (ft ³) for Reduced RCN	N/A

Q _E (in) for pre developed RCN	0.87
V (ft ³) for pre developed RCN	5042

Volume Management Required (cf)	0
---------------------------------	---

Volume Required for structural practices (cf)	0
---	---

Composite reduced runoff curve number for H and H analysis (TR-55)			
S	Ia	Pe achieved x Rv	
1.09	0.22	1.12	
2 yr	10 yr	100 yr	
2.37	4.19	6.43	
Qr	1.25	3.07	5.32
Qr-(Pe achieved x Rv)	75.34	79.06	80.56
CN*			

Step 9: Select Structural Practices to Meet Volume Management Requirements

Structural Practices	Contributing Drainage Area (sf)	% Impervious Cover	Direct ESDv Received by Practice (cf)	ESDv from Upstream Practices (cf)	Treatment Volume (cf)
Stormwater Ponds (Level 1)	0	0%	0	0	0
Stormwater Ponds (Level 2)	0	0%	0	0	0
Stormwater Wetlands (Level 1)	0	0%	0	0	0
Stormwater Wetlands (Level 2)	0	0%	0	0	0
Stormwater Filtering Systems (Level 1)	0	0%	0	0	0
Stormwater Filtering Systems (Level 2)	0	0%	0	0	0
Stormwater Infiltration (Level 1)	0	0%	0	0	0
Stormwater Infiltration (Level 2)	0	0%	0	0	0

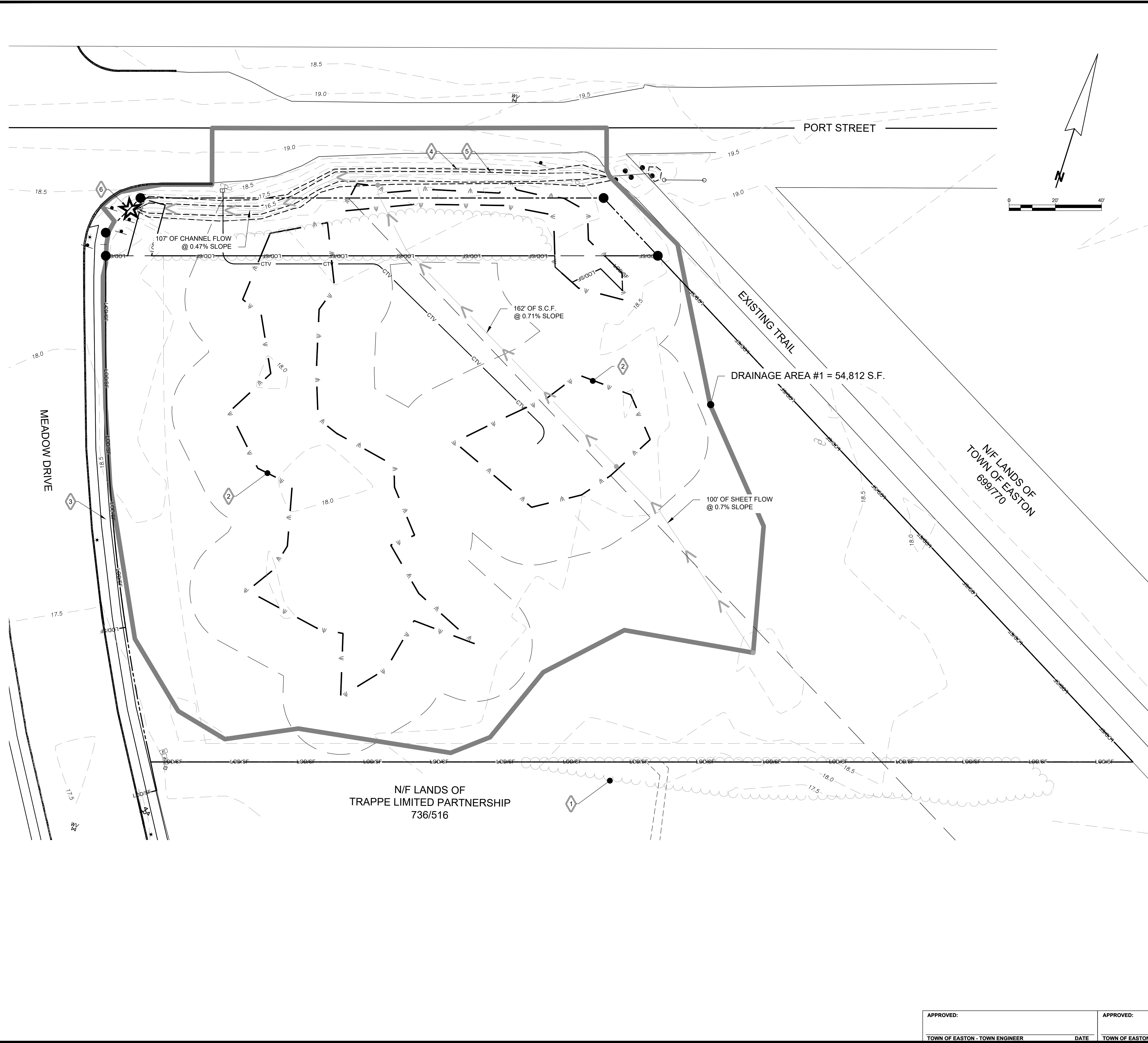
Total structural CPv or WQv provided	0
WQv Requirement Met through structural practices?	YES
WQv Remaining (cf)	0
CPv Requirement Met through structural practices?	YES
CPv Remaining (cf)	0

Critical Area Credits				
Phosphorous Removal Efficiency	Adjusted Phosphorus Removal Efficiency	P Load to Practice (lbs/yr)	Load Reduction (lbs/yr)	Remaining Load (lbs/yr)
50%	0%	0.00	0.00	0.00
75%	0%	0.00	0.00	0.00
50%	0%	0.00	0.00	0.00
75%	0%	0.00	0.00	0.00
60%	0%	0.00	0.00	0.00
65%	0%	0.00	0.00	0.00
60%	0%	0.00	0.00	0.00
90%	0%	0.00	0.00	0.00

Total Load Reduction (lbs P / year)	1.54
Total Load Reduction Remaining (lbs P / yr)	0.00

Micro-Scale Practices	Contributing Drainage Area (sf)	% Impervious Cover ----- RV	To fully treat sub area ----- PE required ----- WQV required	Max available WQv or ESDv from CDA (cf)	Area of upstream catchment (sf)	WQv or ESDv from Up- Gradient Practices (cf)	Total catchment area ----- Total ESDv to practice	Practice Specific Parameter(s)				WQV or ESDv provided (cf)	Runoff Volume Remainin g (cf)	Down-Gradient Practice and Row	SOIL TYPE	Baseline Phosphor ous Removal Efficiency	Adjusted Removal Rate	P Load to Practice (lbs/yr)	Load Reduction (lbs/yr)	Remainin g Load (lbs/yr)	Watershe d-inches treated (PE Provided)	Annual Rainfall Treated (%)
			Bed Surface Area (sf)					Top of Ponding Surface Area (sf)	Ponding Depth (ft)	Media Depth (ft)												
		66%	1.80				57,431															
Submerged Gravel Wetlands	57,431	0.6475031	5578	8,367	0	0	8367	2,878	4,361	1.45	2.5	6,498	1,870		C/D	60%	73.88%	2.09	1.54	0.55	2.10	101.67%
Total	57,431			8,367		0						6,498	1,870			60%	73.88%	2.09	1.54	0.55	2.10	101.67%

SECTION 3 – EXISTING & PROPOSED DRAINAGE AREA PLANS



- ## STORMWATER QUANTITY NOTES
- 1 TREE LINE
 - 2 NON-TIDAL WETLAND
 - 3 SIDEWALK
 - 4 TOP OF DITCH
 - 5 BOTTOM OF DITCH
 - 6 STUDY POINT #1

STORMWATER QUANTITY NOTES

EXISTING DRAINAGE AREA

OF THE LANDS OF

PORT STREET COMMONS

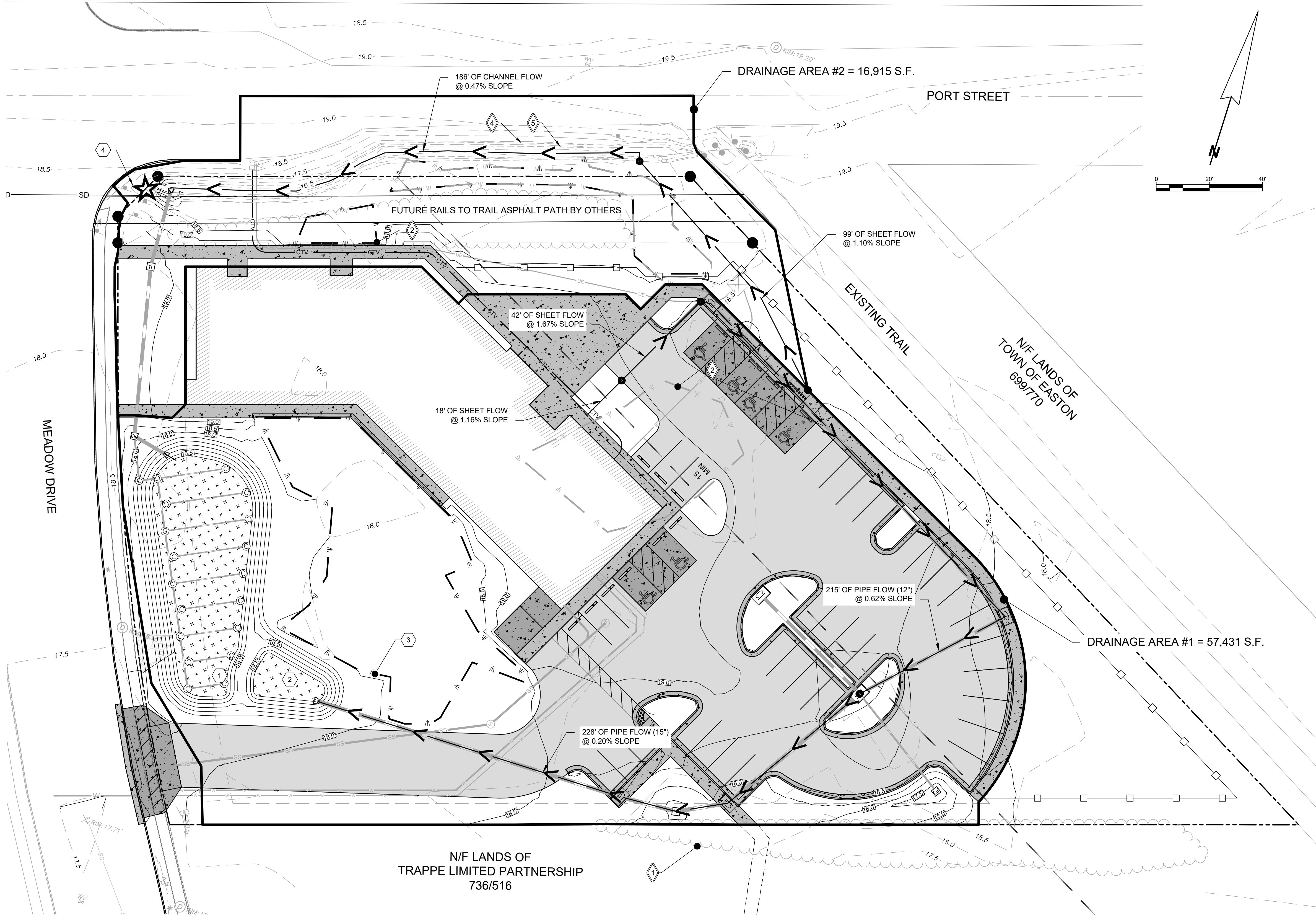
TAX MAP 0034, GRID 0015, PARCEL 0077

FIRST ELECTION DISTRICT, TALBOT COUNTY, MARYLAND

PREPARED FOR CHESAPEAKE COMMUNITY DEVELOPMENT LLC

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.			RAUCH INC. engineering design & development services office: 410.770.8881 fax: 410.770.9867 email: design@rauchinc.com web: www.rauchinc.com Maryland Office: 108 N. Harrison St., Elston, MD 21606 Virginia Office: 5625 Browns Bridge Rd., Vienna, VA 22182
Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.			
REVISIONS		License No. 11024 Expiration Date: July 24, 2022	
REV. #	DATE		DESCRIPTION
DATE: 8/3/2022		License No. 11024 Expiration Date: July 24, 2022	
SCALE: 1" = 20'			
DRAWN BY: MCF			
DESIGNED BY: JWJL			
APPROVED BY: CDR		License No. 11024 Expiration Date: July 24, 2022	
SHEET NO.: EX-DA MAP			

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STORMWATER QUANTITY NOTES

- 1 SUBMERGED GRAVEL WETLAND
- 2 FOREBAY
- 3 NON-TIDAL WETLANDS
- 4 STUDY POINT #1

EXISTING FEATURES

- 1 TREE LINE
- 2 NON-TIDAL WETLAND
- 3 TOP OF DITCH
- 4 BOTTOM OF DITCH

PROPOSED DRAINAGE AREA

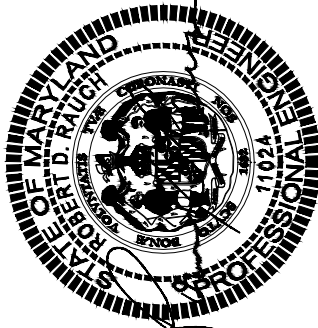
OF THE LANDS OF

PORT STREET COMMONS

TAX MAP 0034, GRID 0015, PARCEL 0077
FIRST ELECTION DISTRICT, TALBOT COUNTY, MARYLAND
PREPARED FOR CHESAPEAKE COMMUNITY DEVELOPMENT LLC

RAUCH
INC.
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Maryland Office: 105 N. Harrison St. - Easton, MD 21601
Virginia Office: 8229 Boone Blvd, Suite 625 - Vienna, VA 22182



Professional Certification.
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. 11024
Expiration Date: July 24, 2022

REVISIONS

REV. #	DATE	DESCRIPTION

DATE: 8/29/2022

SCALE: 1" = 20'

DRAWN BY: MCF

DESIGNED BY: JWJ

APPROVED BY: CDR

SHEET NO.: PR-DA MAP

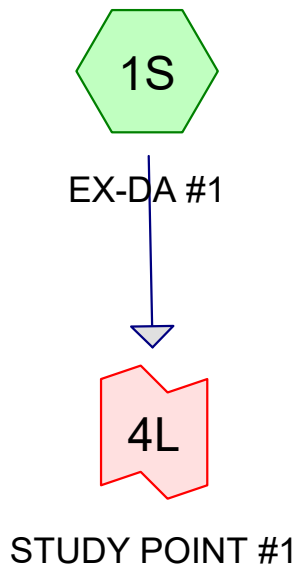
APPROVED:
TOWN OF EASTON - TOWN ENGINEER
DATE

APPROVED:
TOWN OF EASTON PLANNING AND ZONING
DATE

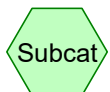
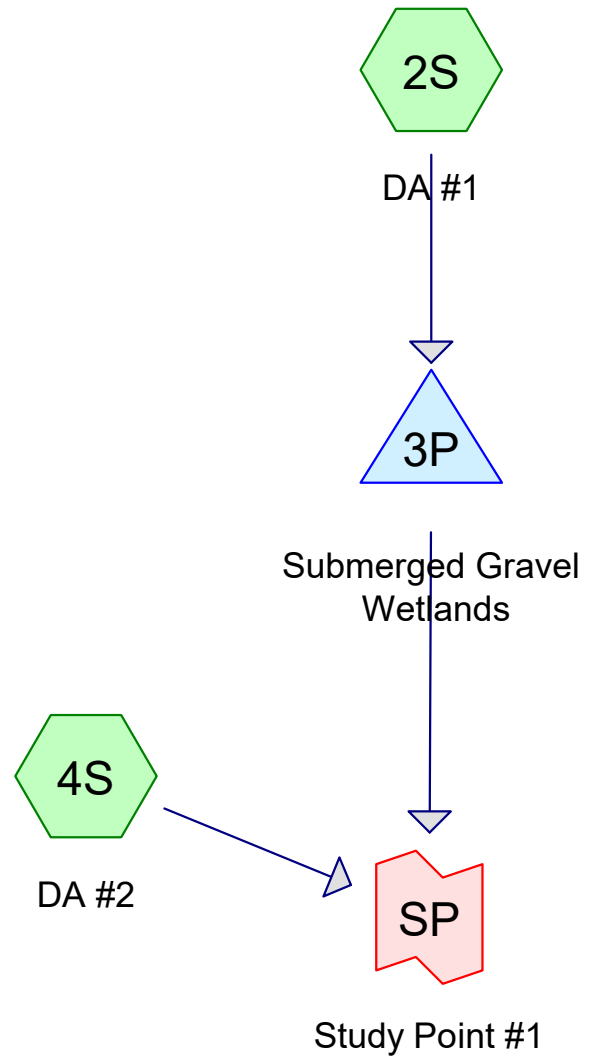
APPROVED:
EASTON UTILITIES - MANAGER OF ENGINEERING
DATE

SECTION 4 – PRE/POST-DEVELOPMENT QUANTITY CALCULATIONS

EXISTING



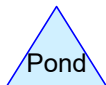
PROPOSED



Subcat



Reach



Pond



Link

Routing Diagram for Arc Pre and Post

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Arc Pre and Post

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Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.315	83	Brush, Poor, HSG D (4S)
1.002	98	Paved parking, HSG D (1S, 2S, 4S)
1.823	86	Woods/grass comb., Poor, HSG D (1S, 2S)

Arc Pre and Post

Type II 24-hr 2YR Rainfall=3.40"

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Time span=1.00-48.00 hrs, dt=0.02 hrs, 2351 points

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: EX-DA #1

Runoff Area=62,446 sf 3.75% Impervious Runoff Depth=2.01"
Flow Length=369' Tc=13.3 min CN=86 Runoff=2.73 cfs 0.240 af

Subcatchment 2S: DA #1

Runoff Area=57,431 sf 66.39% Impervious Runoff Depth=2.74"
Flow Length=503' Tc=6.0 min CN=94 Runoff=4.80 cfs 0.301 af

Subcatchment 4S: DA #2

Runoff Area=16,915 sf 18.85% Impervious Runoff Depth=2.01"
Flow Length=285' Tc=19.0 min CN=86 Runoff=0.59 cfs 0.065 af

Pond 3P: Submerged Gravel Wetlands

Peak Elev=16.79' Storage=9,396 cf Inflow=4.80 cfs 0.301 af
12.0" Round Culvert n=0.011 L=106.0' S=0.0065 '/' Outflow=0.19 cfs 0.108 af

Link 4L: STUDY POINT #1

Inflow=2.73 cfs 0.240 af
Primary=2.73 cfs 0.240 af

Link SP: Study Point #1

Inflow=0.59 cfs 0.173 af
Primary=0.59 cfs 0.173 af

Arc Pre and Post

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Type II 24-hr 2YR Rainfall=3.40"

Printed 8/3/2022

Summary for Subcatchment 1S: EX-DA #1

Runoff = 2.73 cfs @ 12.07 hrs, Volume= 0.240 af, Depth= 2.01"

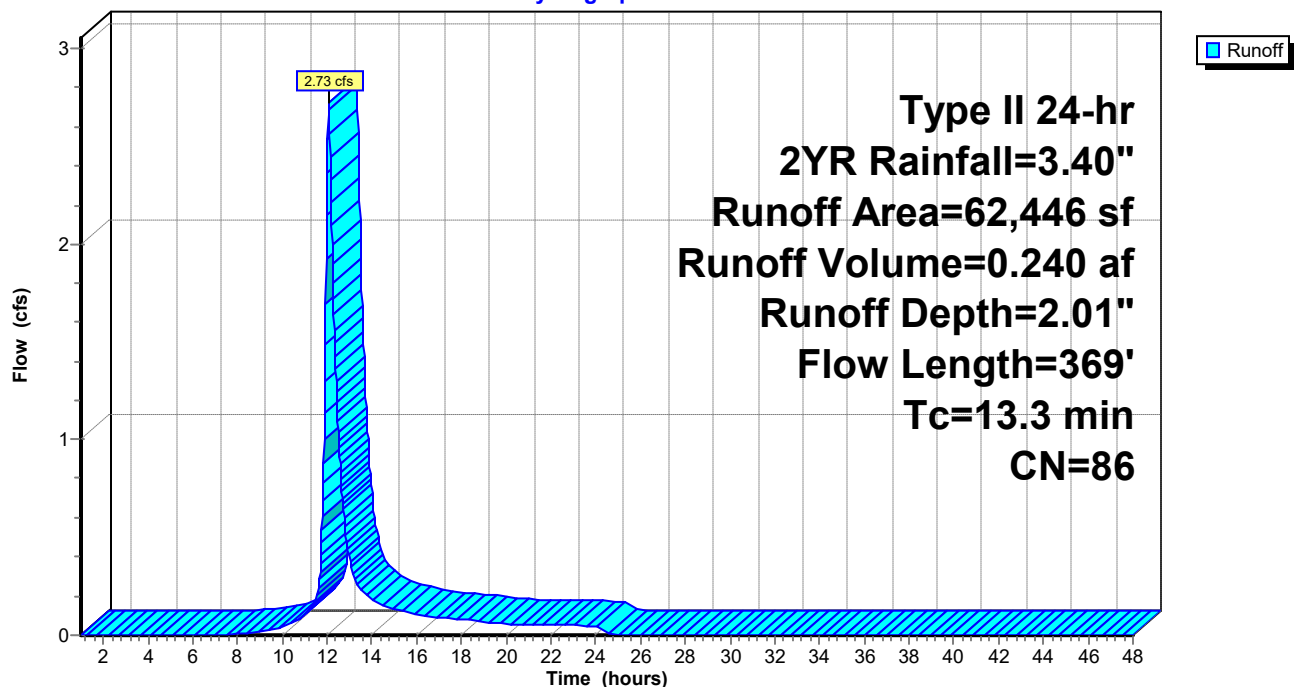
Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.02 hrs
Type II 24-hr 2YR Rainfall=3.40"

Area (sf)	CN	Description
60,106	86	Woods/grass comb., Poor, HSG D
2,340	98	Paved parking, HSG D
62,446	86	Weighted Average
60,106		96.25% Pervious Area
2,340		3.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	100	0.0070	0.28		Sheet Flow, Fallow n= 0.050 P2= 3.40"
6.4	162	0.0071	0.42		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.9	107	0.0047	1.99	6.97	Channel Flow, EX SWALE Area= 3.5 sf Perim= 7.8' r= 0.45' n= 0.030 Earth, grassed & winding
13.3	369	Total			

Subcatchment 1S: EX-DA #1

Hydrograph



Arc Pre and Post

Type II 24-hr 2YR Rainfall=3.40"

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Hydrograph for Subcatchment 1S: EX-DA #1

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
1.00	0.04	0.00	0.00
2.00	0.07	0.00	0.00
3.00	0.12	0.00	0.00
4.00	0.16	0.00	0.00
5.00	0.21	0.00	0.00
6.00	0.27	0.00	0.00
7.00	0.34	0.00	0.00
8.00	0.41	0.00	0.01
9.00	0.50	0.02	0.02
10.00	0.62	0.04	0.04
11.00	0.80	0.11	0.10
12.00	2.25	1.05	2.36
13.00	2.62	1.35	0.39
14.00	2.79	1.48	0.18
15.00	2.90	1.58	0.14
16.00	2.99	1.66	0.11
17.00	3.07	1.72	0.09
18.00	3.13	1.78	0.08
19.00	3.19	1.82	0.07
20.00	3.24	1.87	0.06
21.00	3.28	1.90	0.05
22.00	3.32	1.94	0.05
23.00	3.36	1.98	0.05
24.00	3.40	2.01	0.05
25.00	3.40	2.01	0.00
26.00	3.40	2.01	0.00
27.00	3.40	2.01	0.00
28.00	3.40	2.01	0.00
29.00	3.40	2.01	0.00
30.00	3.40	2.01	0.00
31.00	3.40	2.01	0.00
32.00	3.40	2.01	0.00
33.00	3.40	2.01	0.00
34.00	3.40	2.01	0.00
35.00	3.40	2.01	0.00
36.00	3.40	2.01	0.00
37.00	3.40	2.01	0.00
38.00	3.40	2.01	0.00
39.00	3.40	2.01	0.00
40.00	3.40	2.01	0.00
41.00	3.40	2.01	0.00
42.00	3.40	2.01	0.00
43.00	3.40	2.01	0.00
44.00	3.40	2.01	0.00
45.00	3.40	2.01	0.00
46.00	3.40	2.01	0.00
47.00	3.40	2.01	0.00
48.00	3.40	2.01	0.00

Arc Pre and Post

Type II 24-hr 2YR Rainfall=3.40"

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Summary for Subcatchment 2S: DA #1

Runoff = 4.80 cfs @ 11.98 hrs, Volume= 0.301 af, Depth= 2.74"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.02 hrs
Type II 24-hr 2YR Rainfall=3.40"

Area (sf)	CN	Description
19,303	86	Woods/grass comb., Poor, HSG D
38,128	98	Paved parking, HSG D
57,431	94	Weighted Average
19,303		33.61% Pervious Area
38,128		66.39% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.0	18	0.0116	0.10		Sheet Flow, Grass: Short n= 0.150 P2= 3.40"
0.6	42	0.0167	1.11		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.40"
0.9	215	0.0062	3.87	3.04	Pipe Channel, 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
1.5	228	0.0020	2.55	3.13	Pipe Channel, 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
6.0	503	Total			

Arc Pre and Post

Prepared by {enter your company name here}

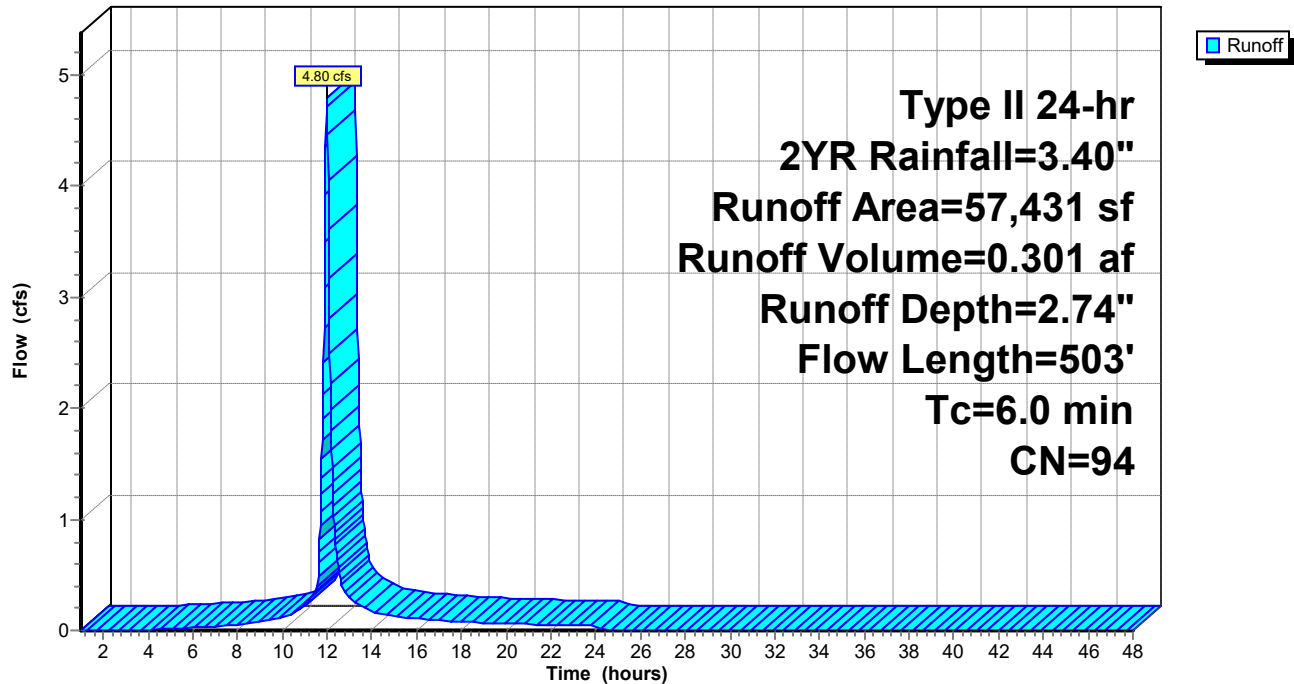
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Type II 24-hr 2YR Rainfall=3.40"

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Subcatchment 2S: DA #1

Hydrograph



Arc Pre and Post

Type II 24-hr 2YR Rainfall=3.40"

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Hydrograph for Subcatchment 2S: DA #1

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
1.00	0.04	0.00	0.00
2.00	0.07	0.00	0.00
3.00	0.12	0.00	0.00
4.00	0.16	0.00	0.01
5.00	0.21	0.01	0.01
6.00	0.27	0.03	0.03
7.00	0.34	0.05	0.04
8.00	0.41	0.09	0.05
9.00	0.50	0.14	0.08
10.00	0.62	0.21	0.11
11.00	0.80	0.34	0.22
12.00	2.25	1.64	4.72
13.00	2.62	1.99	0.30
14.00	2.79	2.15	0.17
15.00	2.90	2.26	0.14
16.00	2.99	2.34	0.11
17.00	3.07	2.41	0.09
18.00	3.13	2.48	0.08
19.00	3.19	2.53	0.07
20.00	3.24	2.58	0.06
21.00	3.28	2.62	0.06
22.00	3.32	2.66	0.05
23.00	3.36	2.70	0.05
24.00	3.40	2.74	0.05
25.00	3.40	2.74	0.00
26.00	3.40	2.74	0.00
27.00	3.40	2.74	0.00
28.00	3.40	2.74	0.00
29.00	3.40	2.74	0.00
30.00	3.40	2.74	0.00
31.00	3.40	2.74	0.00
32.00	3.40	2.74	0.00
33.00	3.40	2.74	0.00
34.00	3.40	2.74	0.00
35.00	3.40	2.74	0.00
36.00	3.40	2.74	0.00
37.00	3.40	2.74	0.00
38.00	3.40	2.74	0.00
39.00	3.40	2.74	0.00
40.00	3.40	2.74	0.00
41.00	3.40	2.74	0.00
42.00	3.40	2.74	0.00
43.00	3.40	2.74	0.00
44.00	3.40	2.74	0.00
45.00	3.40	2.74	0.00
46.00	3.40	2.74	0.00
47.00	3.40	2.74	0.00
48.00	3.40	2.74	0.00

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Type II 24-hr 2YR Rainfall=3.40"

Printed 8/3/2022

Summary for Subcatchment 4S: DA #2

Runoff = 0.59 cfs @ 12.13 hrs, Volume= 0.065 af, Depth= 2.01"

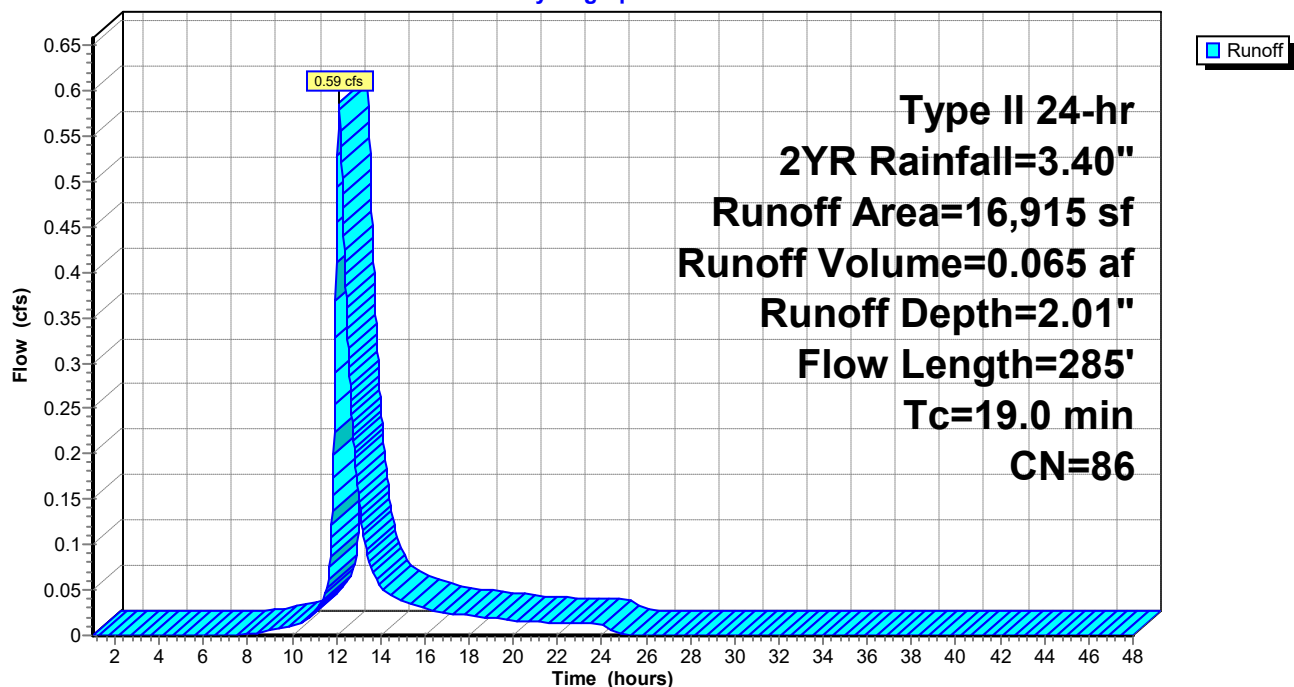
Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.02 hrs
Type II 24-hr 2YR Rainfall=3.40"

Area (sf)	CN	Description
13,726	83	Brush, Poor, HSG D
3,189	98	Paved parking, HSG D
16,915	86	Weighted Average
13,726		81.15% Pervious Area
3,189		18.85% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.4	99	0.0110	0.09		Sheet Flow, Grass: Dense n= 0.240 P2= 3.40"
1.6	186	0.0047	1.99	6.97	Channel Flow, Area= 3.5 sf Perim= 7.8' r= 0.45' n= 0.030 Earth, grassed & winding
19.0	285	Total			

Subcatchment 4S: DA #2

Hydrograph



Arc Pre and Post*Type II 24-hr 2YR Rainfall=3.40"*

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Hydrograph for Subcatchment 4S: DA #2

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
1.00	0.04	0.00	0.00
2.00	0.07	0.00	0.00
3.00	0.12	0.00	0.00
4.00	0.16	0.00	0.00
5.00	0.21	0.00	0.00
6.00	0.27	0.00	0.00
7.00	0.34	0.00	0.00
8.00	0.41	0.00	0.00
9.00	0.50	0.02	0.01
10.00	0.62	0.04	0.01
11.00	0.80	0.11	0.03
12.00	2.25	1.05	0.41
13.00	2.62	1.35	0.15
14.00	2.79	1.48	0.05
15.00	2.90	1.58	0.04
16.00	2.99	1.66	0.03
17.00	3.07	1.72	0.02
18.00	3.13	1.78	0.02
19.00	3.19	1.82	0.02
20.00	3.24	1.87	0.02
21.00	3.28	1.90	0.01
22.00	3.32	1.94	0.01
23.00	3.36	1.98	0.01
24.00	3.40	2.01	0.01
25.00	3.40	2.01	0.00
26.00	3.40	2.01	0.00
27.00	3.40	2.01	0.00
28.00	3.40	2.01	0.00
29.00	3.40	2.01	0.00
30.00	3.40	2.01	0.00
31.00	3.40	2.01	0.00
32.00	3.40	2.01	0.00
33.00	3.40	2.01	0.00
34.00	3.40	2.01	0.00
35.00	3.40	2.01	0.00
36.00	3.40	2.01	0.00
37.00	3.40	2.01	0.00
38.00	3.40	2.01	0.00
39.00	3.40	2.01	0.00
40.00	3.40	2.01	0.00
41.00	3.40	2.01	0.00
42.00	3.40	2.01	0.00
43.00	3.40	2.01	0.00
44.00	3.40	2.01	0.00
45.00	3.40	2.01	0.00
46.00	3.40	2.01	0.00
47.00	3.40	2.01	0.00
48.00	3.40	2.01	0.00

Arc Pre and Post

Type II 24-hr 2YR Rainfall=3.40"

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Summary for Pond 3P: Submerged Gravel Wetlands

Inflow Area = 1.318 ac, 66.39% Impervious, Inflow Depth = 2.74" for 2YR event
 Inflow = 4.80 cfs @ 11.98 hrs, Volume= 0.301 af
 Outflow = 0.19 cfs @ 13.81 hrs, Volume= 0.108 af, Atten= 96%, Lag= 109.7 min
 Primary = 0.19 cfs @ 13.81 hrs, Volume= 0.108 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-48.00 hrs, dt= 0.02 hrs
 Peak Elev= 16.79' @ 13.81 hrs Surf.Area= 4,537 sf Storage= 9,396 cf

Plug-Flow detention time= 440.9 min calculated for 0.108 af (36% of inflow)
 Center-of-Mass det. time= 307.3 min (1,092.8 - 785.5)

Volume	Invert	Avail.Storage	Storage Description	
#1	12.34'	15,755 cf	Custom Stage Data (Prismatic) Listed below (Recalc)	
Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
12.34	2,878	0.0	0	0
12.35	2,878	40.0	12	12
15.10	2,878	40.0	3,166	3,177
15.11	2,878	100.0	29	3,206
16.10	3,810	100.0	3,311	6,517
17.10	4,863	100.0	4,337	10,853
17.60	5,334	100.0	2,549	13,402
18.00	6,429	100.0	2,353	15,755

Device	Routing	Invert	Outlet Devices
#1	Primary	16.55'	12.0" Round Culvert L= 106.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 16.55' / 15.86' S= 0.0065 '/' Cc= 0.900 n= 0.011, Flow Area= 0.79 sf

Primary OutFlow Max=0.19 cfs @ 13.81 hrs HW=16.79' TW=0.00' (Dynamic Tailwater)
 ↑ **1=Culvert** (Inlet Controls 0.19 cfs @ 1.32 fps)

Arc Pre and Post

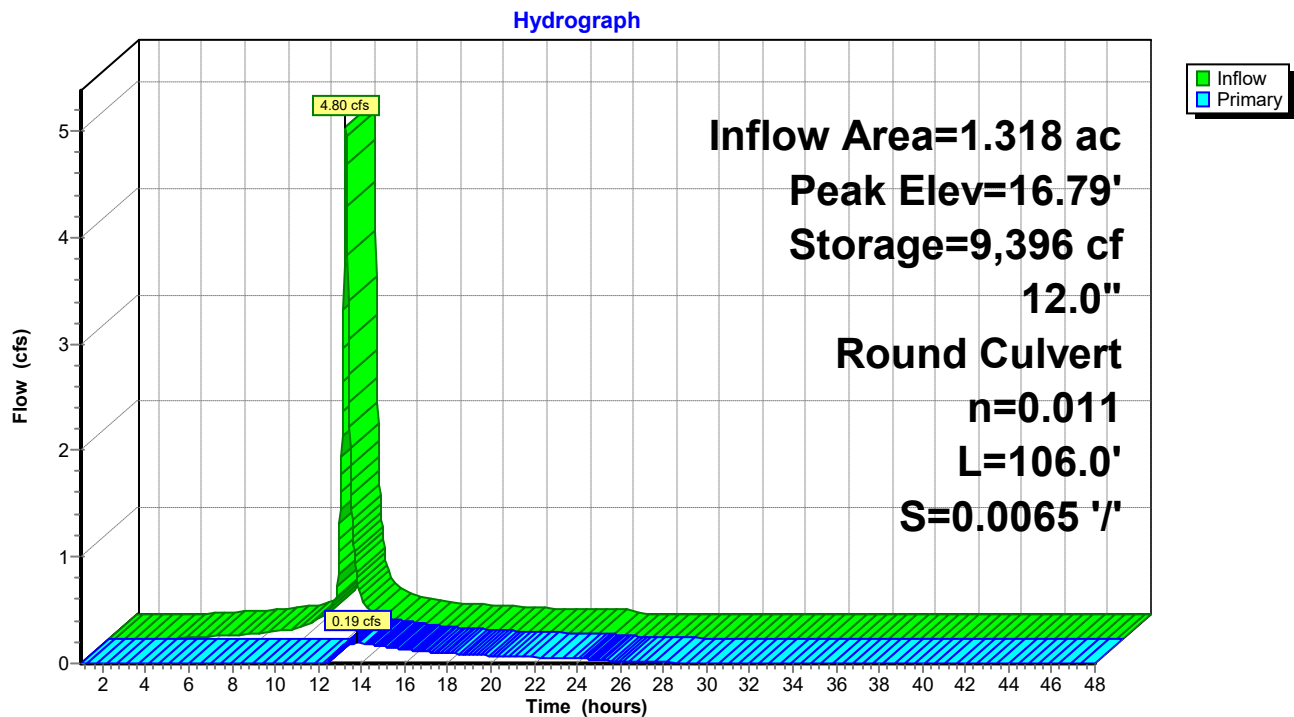
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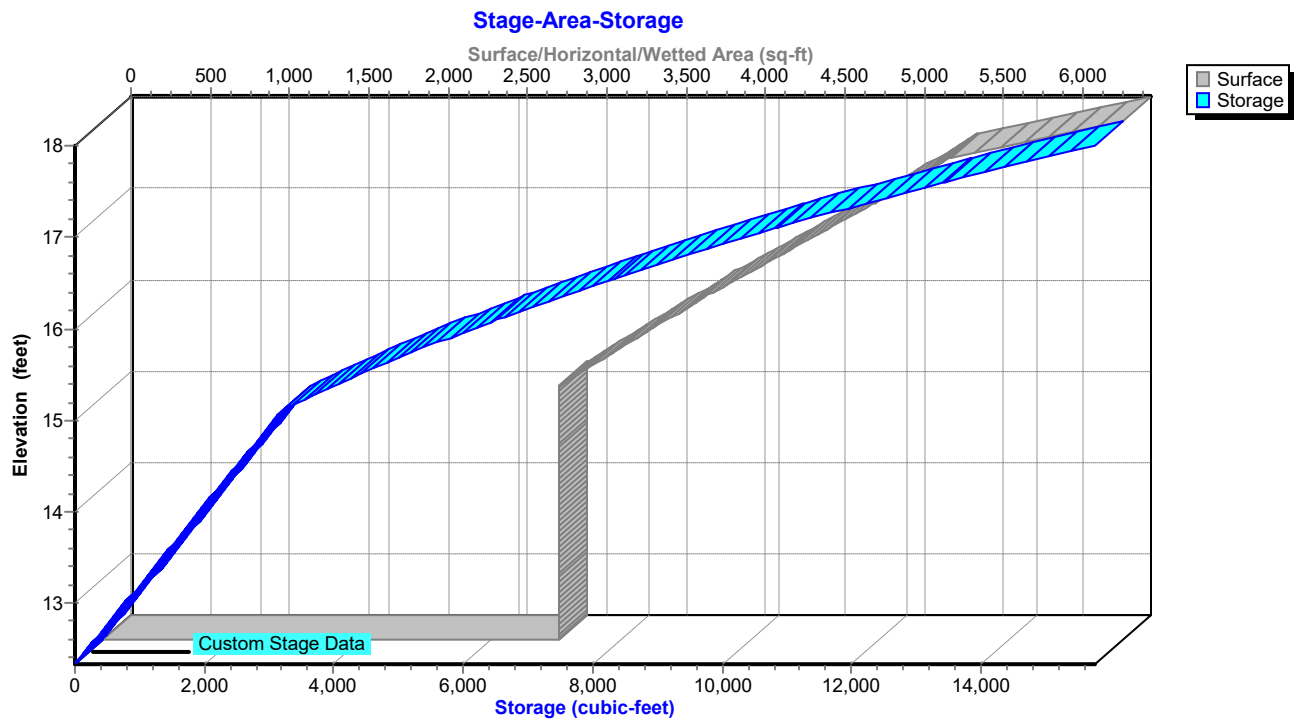
Type II 24-hr 2YR Rainfall=3.40"

Printed 8/3/2022

Pond 3P: Submerged Gravel Wetlands



Pond 3P: Submerged Gravel Wetlands



Arc Pre and Post

Type II 24-hr 2YR Rainfall=3.40"

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Hydrograph for Pond 3P: Submerged Gravel Wetlands

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
1.00	0.00	0	12.34	0.00
2.00	0.00	0	12.34	0.00
3.00	0.00	0	12.34	0.00
4.00	0.01	6	12.35	0.00
5.00	0.01	41	12.38	0.00
6.00	0.03	113	12.44	0.00
7.00	0.04	226	12.54	0.00
8.00	0.05	382	12.67	0.00
9.00	0.08	610	12.87	0.00
10.00	0.11	947	13.16	0.00
11.00	0.22	1,520	13.66	0.00
12.00	4.72	5,520	15.83	0.00
13.00	0.30	9,211	16.75	0.13
14.00	0.17	9,391	16.79	0.19
15.00	0.14	9,304	16.77	0.16
16.00	0.11	9,209	16.75	0.13
17.00	0.09	9,126	16.73	0.11
18.00	0.08	9,069	16.72	0.09
19.00	0.07	9,019	16.71	0.08
20.00	0.06	8,971	16.70	0.07
21.00	0.06	8,931	16.69	0.06
22.00	0.05	8,906	16.68	0.06
23.00	0.05	8,889	16.68	0.06
24.00	0.05	8,874	16.67	0.05
25.00	0.00	8,749	16.64	0.03
26.00	0.00	8,660	16.62	0.02
27.00	0.00	8,602	16.61	0.01
28.00	0.00	8,562	16.60	0.01
29.00	0.00	8,533	16.60	0.01
30.00	0.00	8,510	16.59	0.01
31.00	0.00	8,493	16.59	0.00
32.00	0.00	8,479	16.58	0.00
33.00	0.00	8,467	16.58	0.00
34.00	0.00	8,457	16.58	0.00
35.00	0.00	8,449	16.58	0.00
36.00	0.00	8,442	16.57	0.00
37.00	0.00	8,436	16.57	0.00
38.00	0.00	8,430	16.57	0.00
39.00	0.00	8,425	16.57	0.00
40.00	0.00	8,421	16.57	0.00
41.00	0.00	8,417	16.57	0.00
42.00	0.00	8,413	16.57	0.00
43.00	0.00	8,410	16.57	0.00
44.00	0.00	8,407	16.57	0.00
45.00	0.00	8,405	16.57	0.00
46.00	0.00	8,402	16.56	0.00
47.00	0.00	8,400	16.56	0.00
48.00	0.00	8,398	16.56	0.00

Arc Pre and Post*Type II 24-hr 2YR Rainfall=3.40"*

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Stage-Area-Storage for Pond 3P: Submerged Gravel Wetlands

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
12.34	2,878	0	17.54	5,277	13,084
12.44	2,878	115	17.64	5,443	13,618
12.54	2,878	230	17.74	5,717	14,176
12.64	2,878	345	17.84	5,991	14,761
12.74	2,878	460	17.94	6,265	15,374
12.84	2,878	576			
12.94	2,878	691			
13.04	2,878	806			
13.14	2,878	921			
13.24	2,878	1,036			
13.34	2,878	1,151			
13.44	2,878	1,266			
13.54	2,878	1,381			
13.64	2,878	1,497			
13.74	2,878	1,612			
13.84	2,878	1,727			
13.94	2,878	1,842			
14.04	2,878	1,957			
14.14	2,878	2,072			
14.24	2,878	2,187			
14.34	2,878	2,302			
14.44	2,878	2,418			
14.54	2,878	2,533			
14.64	2,878	2,648			
14.74	2,878	2,763			
14.84	2,878	2,878			
14.94	2,878	2,993			
15.04	2,878	3,108			
15.14	2,906	3,293			
15.24	3,000	3,588			
15.34	3,095	3,893			
15.44	3,189	4,207			
15.54	3,283	4,531			
15.64	3,377	4,864			
15.74	3,471	5,206			
15.84	3,565	5,558			
15.94	3,659	5,919			
16.04	3,754	6,290			
16.14	3,852	6,670			
16.24	3,957	7,060			
16.34	4,063	7,461			
16.44	4,168	7,873			
16.54	4,273	8,295			
16.64	4,379	8,728			
16.74	4,484	9,171			
16.84	4,589	9,624			
16.94	4,695	10,089			
17.04	4,800	10,563			
17.14	4,901	11,048			
17.24	4,995	11,543			
17.34	5,089	12,047			
17.44	5,183	12,561			

Arc Pre and Post

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Type II 24-hr 2YR Rainfall=3.40"

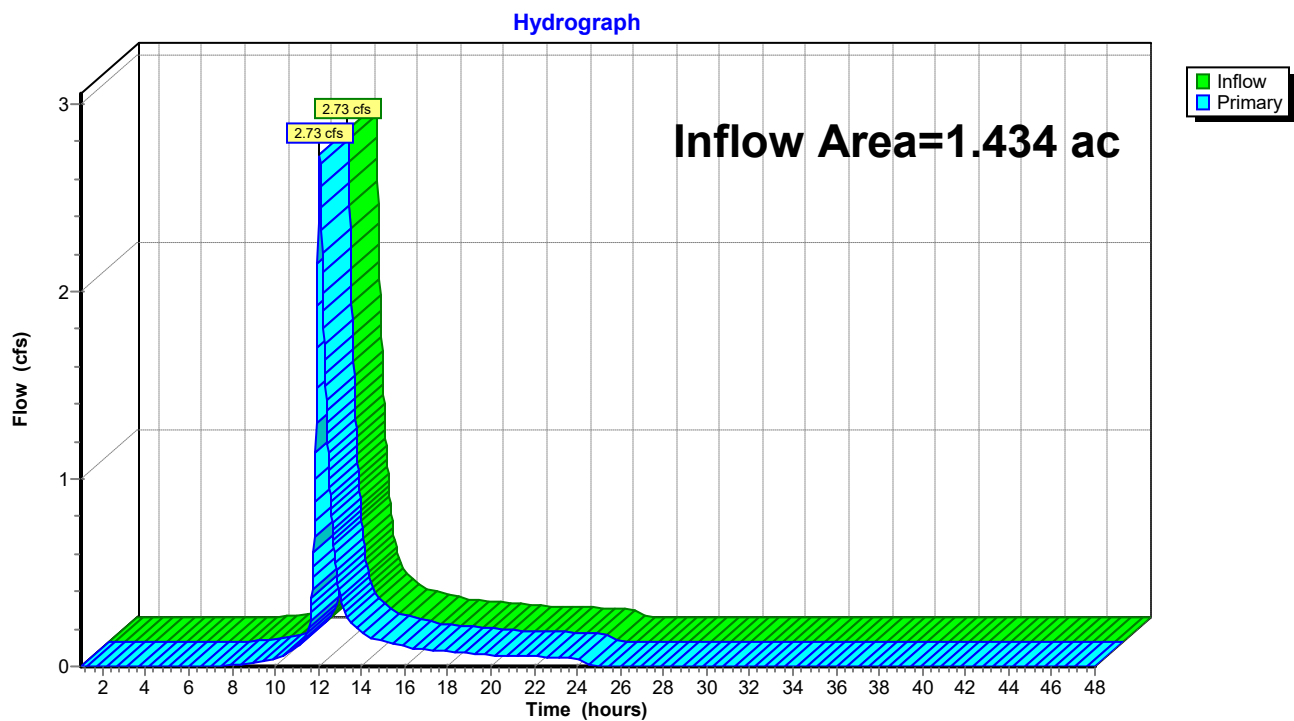
Printed 8/3/2022

Summary for Link 4L: STUDY POINT #1

Inflow Area = 1.434 ac, 3.75% Impervious, Inflow Depth = 2.01" for 2YR event
Inflow = 2.73 cfs @ 12.07 hrs, Volume= 0.240 af
Primary = 2.73 cfs @ 12.07 hrs, Volume= 0.240 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.02 hrs

Link 4L: STUDY POINT #1



Arc Pre and Post

Type II 24-hr 2YR Rainfall=3.40"

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Hydrograph for Link 4L: STUDY POINT #1

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
1.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00
3.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00
5.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00
7.00	0.00	0.00	0.00
8.00	0.01	0.00	0.01
9.00	0.02	0.00	0.02
10.00	0.04	0.00	0.04
11.00	0.10	0.00	0.10
12.00	2.36	0.00	2.36
13.00	0.39	0.00	0.39
14.00	0.18	0.00	0.18
15.00	0.14	0.00	0.14
16.00	0.11	0.00	0.11
17.00	0.09	0.00	0.09
18.00	0.08	0.00	0.08
19.00	0.07	0.00	0.07
20.00	0.06	0.00	0.06
21.00	0.05	0.00	0.05
22.00	0.05	0.00	0.05
23.00	0.05	0.00	0.05
24.00	0.05	0.00	0.05
25.00	0.00	0.00	0.00
26.00	0.00	0.00	0.00
27.00	0.00	0.00	0.00
28.00	0.00	0.00	0.00
29.00	0.00	0.00	0.00
30.00	0.00	0.00	0.00
31.00	0.00	0.00	0.00
32.00	0.00	0.00	0.00
33.00	0.00	0.00	0.00
34.00	0.00	0.00	0.00
35.00	0.00	0.00	0.00
36.00	0.00	0.00	0.00
37.00	0.00	0.00	0.00
38.00	0.00	0.00	0.00
39.00	0.00	0.00	0.00
40.00	0.00	0.00	0.00
41.00	0.00	0.00	0.00
42.00	0.00	0.00	0.00
43.00	0.00	0.00	0.00
44.00	0.00	0.00	0.00
45.00	0.00	0.00	0.00
46.00	0.00	0.00	0.00
47.00	0.00	0.00	0.00
48.00	0.00	0.00	0.00

Arc Pre and Post

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Type II 24-hr 2YR Rainfall=3.40"

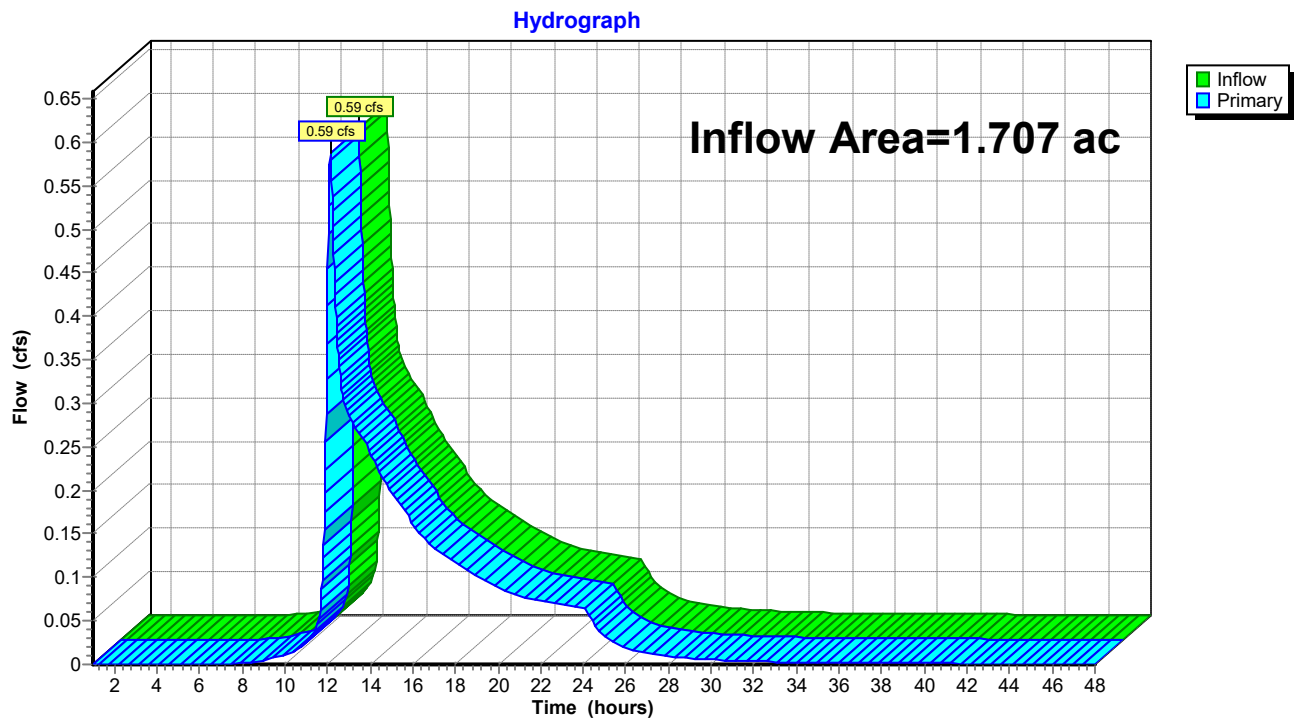
Printed 8/3/2022

Summary for Link SP: Study Point #1

Inflow Area = 1.707 ac, 55.57% Impervious, Inflow Depth > 1.22" for 2YR event
Inflow = 0.59 cfs @ 12.13 hrs, Volume= 0.173 af
Primary = 0.59 cfs @ 12.13 hrs, Volume= 0.173 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.02 hrs

Link SP: Study Point #1



Arc Pre and Post

Type II 24-hr 2YR Rainfall=3.40"

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Printed 8/3/2022

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Hydrograph for Link SP: Study Point #1

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
1.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00
3.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00
5.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00
7.00	0.00	0.00	0.00
8.00	0.00	0.00	0.00
9.00	0.01	0.00	0.01
10.00	0.01	0.00	0.01
11.00	0.03	0.00	0.03
12.00	0.41	0.00	0.41
13.00	0.29	0.00	0.29
14.00	0.24	0.00	0.24
15.00	0.20	0.00	0.20
16.00	0.16	0.00	0.16
17.00	0.13	0.00	0.13
18.00	0.12	0.00	0.12
19.00	0.10	0.00	0.10
20.00	0.09	0.00	0.09
21.00	0.08	0.00	0.08
22.00	0.07	0.00	0.07
23.00	0.07	0.00	0.07
24.00	0.07	0.00	0.07
25.00	0.03	0.00	0.03
26.00	0.02	0.00	0.02
27.00	0.01	0.00	0.01
28.00	0.01	0.00	0.01
29.00	0.01	0.00	0.01
30.00	0.01	0.00	0.01
31.00	0.00	0.00	0.00
32.00	0.00	0.00	0.00
33.00	0.00	0.00	0.00
34.00	0.00	0.00	0.00
35.00	0.00	0.00	0.00
36.00	0.00	0.00	0.00
37.00	0.00	0.00	0.00
38.00	0.00	0.00	0.00
39.00	0.00	0.00	0.00
40.00	0.00	0.00	0.00
41.00	0.00	0.00	0.00
42.00	0.00	0.00	0.00
43.00	0.00	0.00	0.00
44.00	0.00	0.00	0.00
45.00	0.00	0.00	0.00
46.00	0.00	0.00	0.00
47.00	0.00	0.00	0.00
48.00	0.00	0.00	0.00

Arc Pre and Post

Type II 24-hr 10YR Rainfall=5.30"

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Printed 8/3/2022

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Time span=1.00-48.00 hrs, dt=0.02 hrs, 2351 points

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: EX-DA #1

Runoff Area=62,446 sf 3.75% Impervious Runoff Depth=3.75"
Flow Length=369' Tc=13.3 min CN=86 Runoff=5.03 cfs 0.448 af

Subcatchment 2S: DA #1

Runoff Area=57,431 sf 66.39% Impervious Runoff Depth=4.60"
Flow Length=503' Tc=6.0 min CN=94 Runoff=7.83 cfs 0.506 af

Subcatchment 4S: DA #2

Runoff Area=16,915 sf 18.85% Impervious Runoff Depth=3.75"
Flow Length=285' Tc=19.0 min CN=86 Runoff=1.09 cfs 0.121 af

Pond 3P: Submerged Gravel Wetlands

Peak Elev=17.43' Storage=12,510 cf Inflow=7.83 cfs 0.506 af
12.0" Round Culvert n=0.011 L=106.0' S=0.0065 '/' Outflow=1.85 cfs 0.313 af

Link 4L: STUDY POINT #1

Inflow=5.03 cfs 0.448 af
Primary=5.03 cfs 0.448 af

Link SP: Study Point #1

Inflow=2.82 cfs 0.434 af
Primary=2.82 cfs 0.434 af

Arc Pre and Post

Prepared by {enter your company name here}

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Type II 24-hr 10YR Rainfall=5.30"

Printed 8/3/2022

Summary for Subcatchment 1S: EX-DA #1

Runoff = 5.03 cfs @ 12.06 hrs, Volume= 0.448 af, Depth= 3.75"

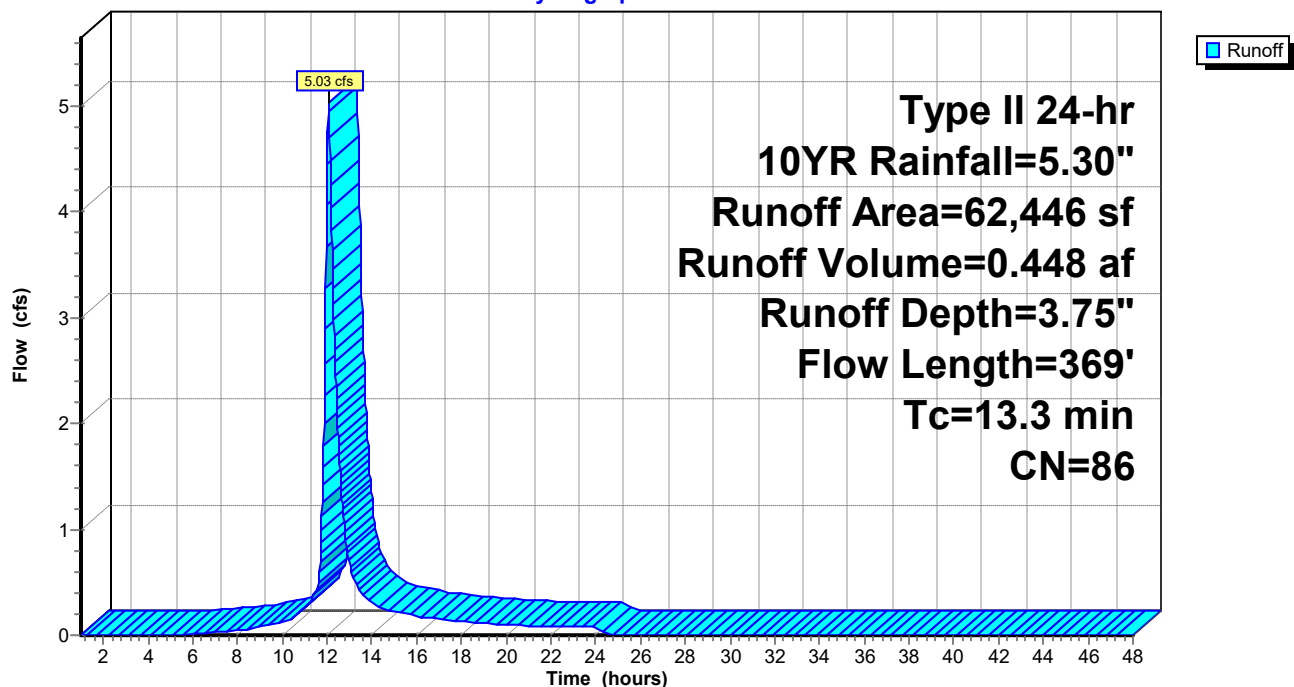
Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.02 hrs
Type II 24-hr 10YR Rainfall=5.30"

Area (sf)	CN	Description
60,106	86	Woods/grass comb., Poor, HSG D
2,340	98	Paved parking, HSG D
62,446	86	Weighted Average
60,106		96.25% Pervious Area
2,340		3.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	100	0.0070	0.28		Sheet Flow, Fallow n= 0.050 P2= 3.40"
6.4	162	0.0071	0.42		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.9	107	0.0047	1.99	6.97	Channel Flow, EX SWALE Area= 3.5 sf Perim= 7.8' r= 0.45' n= 0.030 Earth, grassed & winding
13.3	369	Total			

Subcatchment 1S: EX-DA #1

Hydrograph



Arc Pre and Post

Type II 24-hr 10YR Rainfall=5.30"

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Hydrograph for Subcatchment 1S: EX-DA #1

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
1.00	0.06	0.00	0.00
2.00	0.12	0.00	0.00
3.00	0.18	0.00	0.00
4.00	0.25	0.00	0.00
5.00	0.33	0.00	0.00
6.00	0.42	0.01	0.01
7.00	0.52	0.02	0.03
8.00	0.64	0.05	0.04
9.00	0.78	0.10	0.08
10.00	0.96	0.18	0.12
11.00	1.25	0.33	0.25
12.00	3.51	2.11	4.44
13.00	4.09	2.63	0.67
14.00	4.35	2.86	0.31
15.00	4.52	3.02	0.23
16.00	4.66	3.15	0.18
17.00	4.78	3.26	0.15
18.00	4.88	3.36	0.13
19.00	4.97	3.44	0.12
20.00	5.05	3.51	0.10
21.00	5.11	3.57	0.09
22.00	5.18	3.63	0.09
23.00	5.24	3.69	0.08
24.00	5.30	3.75	0.08
25.00	5.30	3.75	0.00
26.00	5.30	3.75	0.00
27.00	5.30	3.75	0.00
28.00	5.30	3.75	0.00
29.00	5.30	3.75	0.00
30.00	5.30	3.75	0.00
31.00	5.30	3.75	0.00
32.00	5.30	3.75	0.00
33.00	5.30	3.75	0.00
34.00	5.30	3.75	0.00
35.00	5.30	3.75	0.00
36.00	5.30	3.75	0.00
37.00	5.30	3.75	0.00
38.00	5.30	3.75	0.00
39.00	5.30	3.75	0.00
40.00	5.30	3.75	0.00
41.00	5.30	3.75	0.00
42.00	5.30	3.75	0.00
43.00	5.30	3.75	0.00
44.00	5.30	3.75	0.00
45.00	5.30	3.75	0.00
46.00	5.30	3.75	0.00
47.00	5.30	3.75	0.00
48.00	5.30	3.75	0.00

Arc Pre and Post

Type II 24-hr 10YR Rainfall=5.30"

Prepared by {enter your company name here}

Printed 8/3/2022

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Summary for Subcatchment 2S: DA #1

Runoff = 7.83 cfs @ 11.98 hrs, Volume= 0.506 af, Depth= 4.60"

Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.02 hrs
Type II 24-hr 10YR Rainfall=5.30"

Area (sf)	CN	Description
19,303	86	Woods/grass comb., Poor, HSG D
38,128	98	Paved parking, HSG D
57,431	94	Weighted Average
19,303		33.61% Pervious Area
38,128		66.39% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.0	18	0.0116	0.10		Sheet Flow, Grass: Short n= 0.150 P2= 3.40"
0.6	42	0.0167	1.11		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.40"
0.9	215	0.0062	3.87	3.04	Pipe Channel, 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
1.5	228	0.0020	2.55	3.13	Pipe Channel, 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.012
6.0	503	Total			

Arc Pre and Post

Prepared by {enter your company name here}

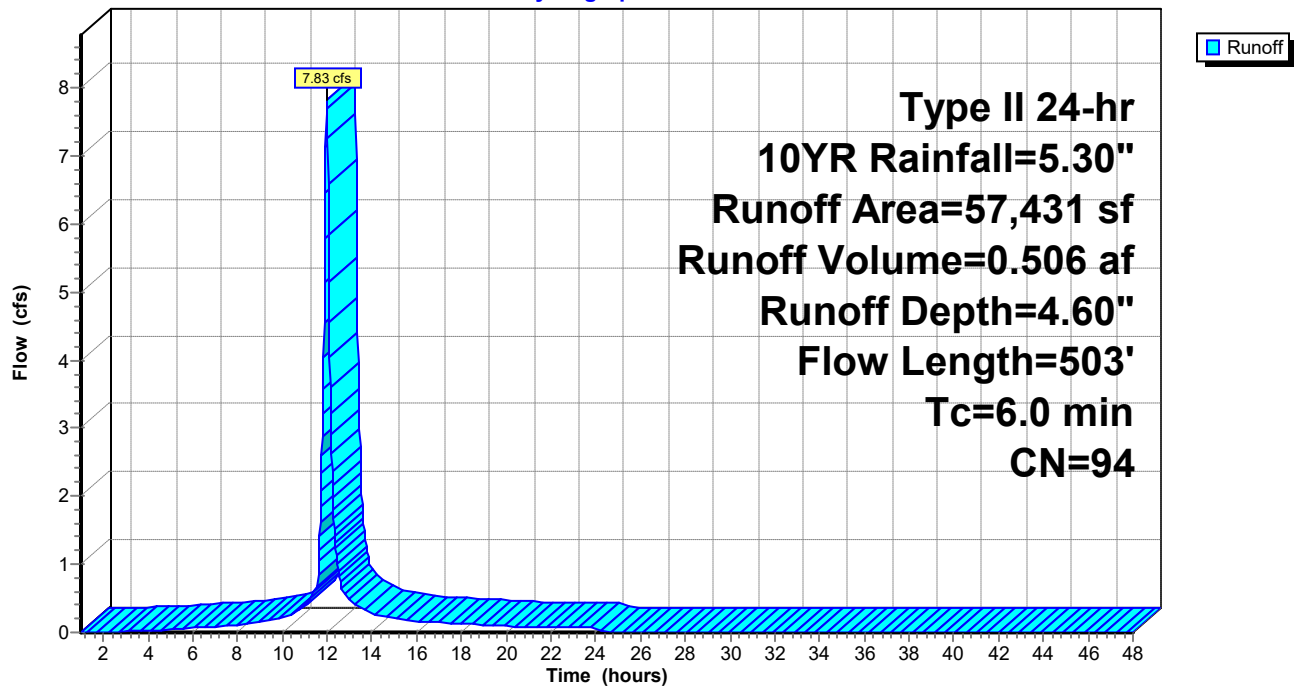
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Type II 24-hr 10YR Rainfall=5.30"

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Subcatchment 2S: DA #1

Hydrograph



Arc Pre and Post

Type II 24-hr 10YR Rainfall=5.30"

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Hydrograph for Subcatchment 2S: DA #1

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
1.00	0.06	0.00	0.00
2.00	0.12	0.00	0.00
3.00	0.18	0.00	0.01
4.00	0.25	0.02	0.03
5.00	0.33	0.05	0.05
6.00	0.42	0.09	0.06
7.00	0.52	0.15	0.08
8.00	0.64	0.23	0.10
9.00	0.78	0.33	0.16
10.00	0.96	0.47	0.21
11.00	1.25	0.71	0.40
12.00	3.51	2.85	7.69
13.00	4.09	3.41	0.48
14.00	4.35	3.66	0.28
15.00	4.52	3.84	0.22
16.00	4.66	3.98	0.17
17.00	4.78	4.09	0.14
18.00	4.88	4.19	0.13
19.00	4.97	4.28	0.11
20.00	5.05	4.35	0.09
21.00	5.11	4.42	0.09
22.00	5.18	4.48	0.08
23.00	5.24	4.55	0.08
24.00	5.30	4.60	0.08
25.00	5.30	4.60	0.00
26.00	5.30	4.60	0.00
27.00	5.30	4.60	0.00
28.00	5.30	4.60	0.00
29.00	5.30	4.60	0.00
30.00	5.30	4.60	0.00
31.00	5.30	4.60	0.00
32.00	5.30	4.60	0.00
33.00	5.30	4.60	0.00
34.00	5.30	4.60	0.00
35.00	5.30	4.60	0.00
36.00	5.30	4.60	0.00
37.00	5.30	4.60	0.00
38.00	5.30	4.60	0.00
39.00	5.30	4.60	0.00
40.00	5.30	4.60	0.00
41.00	5.30	4.60	0.00
42.00	5.30	4.60	0.00
43.00	5.30	4.60	0.00
44.00	5.30	4.60	0.00
45.00	5.30	4.60	0.00
46.00	5.30	4.60	0.00
47.00	5.30	4.60	0.00
48.00	5.30	4.60	0.00

Arc Pre and Post

Prepared by {enter your company name here}

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Type II 24-hr 10YR Rainfall=5.30"

Printed 8/3/2022

Summary for Subcatchment 4S: DA #2

Runoff = 1.09 cfs @ 12.13 hrs, Volume= 0.121 af, Depth= 3.75"

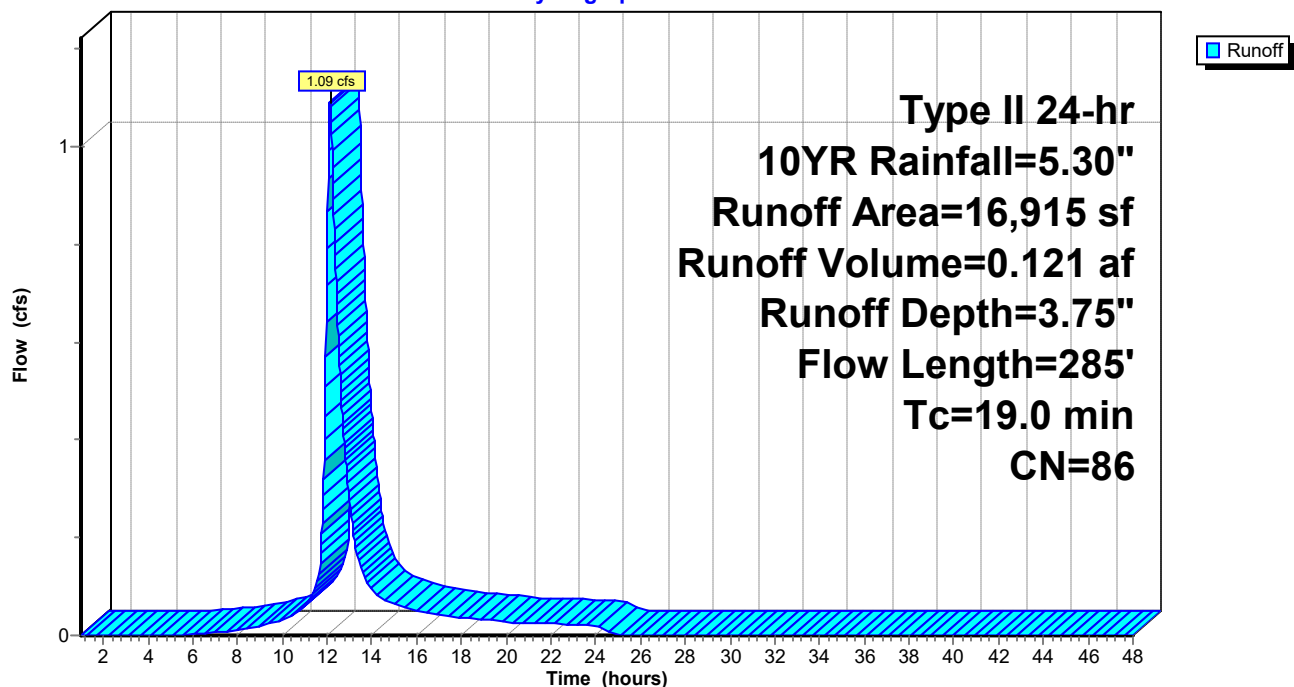
Runoff by SCS TR-20 method, UH=Delmarva, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.02 hrs
Type II 24-hr 10YR Rainfall=5.30"

Area (sf)	CN	Description
13,726	83	Brush, Poor, HSG D
3,189	98	Paved parking, HSG D
16,915	86	Weighted Average
13,726		81.15% Pervious Area
3,189		18.85% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.4	99	0.0110	0.09		Sheet Flow, Grass: Dense n= 0.240 P2= 3.40"
1.6	186	0.0047	1.99	6.97	Channel Flow, Area= 3.5 sf Perim= 7.8' r= 0.45' n= 0.030 Earth, grassed & winding
19.0	285	Total			

Subcatchment 4S: DA #2

Hydrograph



Arc Pre and Post

Type II 24-hr 10YR Rainfall=5.30"

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Hydrograph for Subcatchment 4S: DA #2

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
1.00	0.06	0.00	0.00
2.00	0.12	0.00	0.00
3.00	0.18	0.00	0.00
4.00	0.25	0.00	0.00
5.00	0.33	0.00	0.00
6.00	0.42	0.01	0.00
7.00	0.52	0.02	0.01
8.00	0.64	0.05	0.01
9.00	0.78	0.10	0.02
10.00	0.96	0.18	0.03
11.00	1.25	0.33	0.06
12.00	3.51	2.11	0.79
13.00	4.09	2.63	0.27
14.00	4.35	2.86	0.09
15.00	4.52	3.02	0.06
16.00	4.66	3.15	0.05
17.00	4.78	3.26	0.04
18.00	4.88	3.36	0.04
19.00	4.97	3.44	0.03
20.00	5.05	3.51	0.03
21.00	5.11	3.57	0.02
22.00	5.18	3.63	0.02
23.00	5.24	3.69	0.02
24.00	5.30	3.75	0.02
25.00	5.30	3.75	0.00
26.00	5.30	3.75	0.00
27.00	5.30	3.75	0.00
28.00	5.30	3.75	0.00
29.00	5.30	3.75	0.00
30.00	5.30	3.75	0.00
31.00	5.30	3.75	0.00
32.00	5.30	3.75	0.00
33.00	5.30	3.75	0.00
34.00	5.30	3.75	0.00
35.00	5.30	3.75	0.00
36.00	5.30	3.75	0.00
37.00	5.30	3.75	0.00
38.00	5.30	3.75	0.00
39.00	5.30	3.75	0.00
40.00	5.30	3.75	0.00
41.00	5.30	3.75	0.00
42.00	5.30	3.75	0.00
43.00	5.30	3.75	0.00
44.00	5.30	3.75	0.00
45.00	5.30	3.75	0.00
46.00	5.30	3.75	0.00
47.00	5.30	3.75	0.00
48.00	5.30	3.75	0.00

Arc Pre and Post

Type II 24-hr 10YR Rainfall=5.30"

Prepared by {enter your company name here}

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Summary for Pond 3P: Submerged Gravel Wetlands

Inflow Area = 1.318 ac, 66.39% Impervious, Inflow Depth = 4.60" for 10YR event
 Inflow = 7.83 cfs @ 11.98 hrs, Volume= 0.506 af
 Outflow = 1.85 cfs @ 12.28 hrs, Volume= 0.313 af, Atten= 76%, Lag= 17.6 min
 Primary = 1.85 cfs @ 12.28 hrs, Volume= 0.313 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-48.00 hrs, dt= 0.02 hrs
 Peak Elev= 17.43' @ 12.28 hrs Surf.Area= 5,174 sf Storage= 12,510 cf

Plug-Flow detention time= 261.8 min calculated for 0.313 af (62% of inflow)
 Center-of-Mass det. time= 157.7 min (929.6 - 772.0)

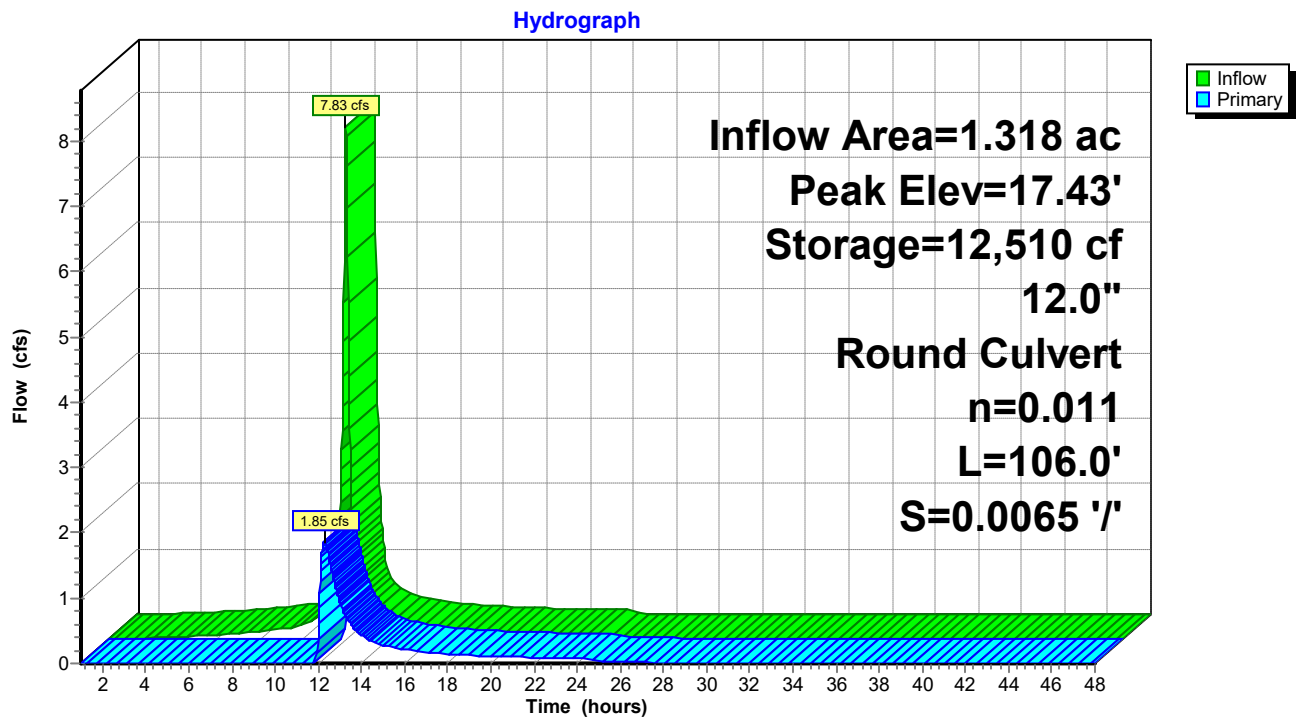
Volume	Invert	Avail.Storage	Storage Description
#1	12.34'	15,755 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
12.34	2,878	0.0	0	0
12.35	2,878	40.0	12	12
15.10	2,878	40.0	3,166	3,177
15.11	2,878	100.0	29	3,206
16.10	3,810	100.0	3,311	6,517
17.10	4,863	100.0	4,337	10,853
17.60	5,334	100.0	2,549	13,402
18.00	6,429	100.0	2,353	15,755

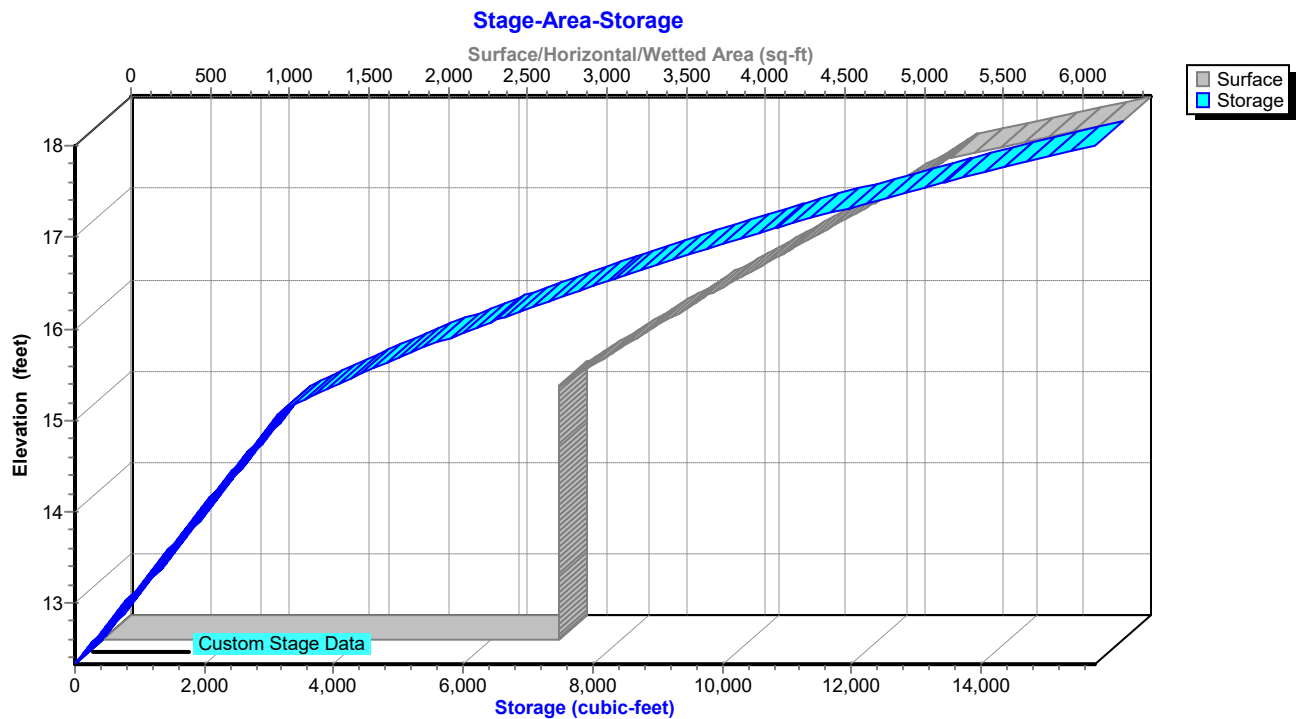
Device	Routing	Invert	Outlet Devices
#1	Primary	16.55'	12.0" Round Culvert L= 106.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 16.55' / 15.86' S= 0.0065 '/' Cc= 0.900 n= 0.011, Flow Area= 0.79 sf

Primary OutFlow Max=1.85 cfs @ 12.28 hrs HW=17.43' TW=0.00' (Dynamic Tailwater)
 ↑**1=Culvert** (Inlet Controls 1.85 cfs @ 2.52 fps)

Pond 3P: Submerged Gravel Wetlands



Pond 3P: Submerged Gravel Wetlands



Arc Pre and Post

Type II 24-hr 10YR Rainfall=5.30"

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Hydrograph for Pond 3P: Submerged Gravel Wetlands

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
1.00	0.00	0	12.34	0.00
2.00	0.00	0	12.34	0.00
3.00	0.01	14	12.35	0.00
4.00	0.03	85	12.41	0.00
5.00	0.05	215	12.53	0.00
6.00	0.06	413	12.70	0.00
7.00	0.08	682	12.93	0.00
8.00	0.10	1,021	13.23	0.00
9.00	0.16	1,485	13.63	0.00
10.00	0.21	2,132	14.19	0.00
11.00	0.40	3,179	15.10	0.00
12.00	7.69	9,861	16.89	0.37
13.00	0.48	10,953	17.12	0.94
14.00	0.28	9,991	16.92	0.43
15.00	0.22	9,635	16.84	0.28
16.00	0.17	9,454	16.80	0.21
17.00	0.14	9,332	16.78	0.17
18.00	0.13	9,256	16.76	0.15
19.00	0.11	9,192	16.74	0.13
20.00	0.09	9,130	16.73	0.11
21.00	0.09	9,079	16.72	0.10
22.00	0.08	9,050	16.71	0.09
23.00	0.08	9,030	16.71	0.09
24.00	0.08	9,013	16.70	0.08
25.00	0.00	8,829	16.66	0.04
26.00	0.00	8,708	16.64	0.03
27.00	0.00	8,634	16.62	0.02
28.00	0.00	8,584	16.61	0.01
29.00	0.00	8,549	16.60	0.01
30.00	0.00	8,523	16.59	0.01
31.00	0.00	8,503	16.59	0.00
32.00	0.00	8,487	16.58	0.00
33.00	0.00	8,474	16.58	0.00
34.00	0.00	8,463	16.58	0.00
35.00	0.00	8,454	16.58	0.00
36.00	0.00	8,446	16.58	0.00
37.00	0.00	8,439	16.57	0.00
38.00	0.00	8,433	16.57	0.00
39.00	0.00	8,428	16.57	0.00
40.00	0.00	8,423	16.57	0.00
41.00	0.00	8,419	16.57	0.00
42.00	0.00	8,416	16.57	0.00
43.00	0.00	8,412	16.57	0.00
44.00	0.00	8,409	16.57	0.00
45.00	0.00	8,406	16.57	0.00
46.00	0.00	8,404	16.57	0.00
47.00	0.00	8,401	16.56	0.00
48.00	0.00	8,399	16.56	0.00

Arc Pre and Post*Type II 24-hr 10YR Rainfall=5.30"*

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Stage-Area-Storage for Pond 3P: Submerged Gravel Wetlands

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
12.34	2,878	0	17.54	5,277	13,084
12.44	2,878	115	17.64	5,443	13,618
12.54	2,878	230	17.74	5,717	14,176
12.64	2,878	345	17.84	5,991	14,761
12.74	2,878	460	17.94	6,265	15,374
12.84	2,878	576			
12.94	2,878	691			
13.04	2,878	806			
13.14	2,878	921			
13.24	2,878	1,036			
13.34	2,878	1,151			
13.44	2,878	1,266			
13.54	2,878	1,381			
13.64	2,878	1,497			
13.74	2,878	1,612			
13.84	2,878	1,727			
13.94	2,878	1,842			
14.04	2,878	1,957			
14.14	2,878	2,072			
14.24	2,878	2,187			
14.34	2,878	2,302			
14.44	2,878	2,418			
14.54	2,878	2,533			
14.64	2,878	2,648			
14.74	2,878	2,763			
14.84	2,878	2,878			
14.94	2,878	2,993			
15.04	2,878	3,108			
15.14	2,906	3,293			
15.24	3,000	3,588			
15.34	3,095	3,893			
15.44	3,189	4,207			
15.54	3,283	4,531			
15.64	3,377	4,864			
15.74	3,471	5,206			
15.84	3,565	5,558			
15.94	3,659	5,919			
16.04	3,754	6,290			
16.14	3,852	6,670			
16.24	3,957	7,060			
16.34	4,063	7,461			
16.44	4,168	7,873			
16.54	4,273	8,295			
16.64	4,379	8,728			
16.74	4,484	9,171			
16.84	4,589	9,624			
16.94	4,695	10,089			
17.04	4,800	10,563			
17.14	4,901	11,048			
17.24	4,995	11,543			
17.34	5,089	12,047			
17.44	5,183	12,561			

Arc Pre and Post

Prepared by {enter your company name here}

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Type II 24-hr 10YR Rainfall=5.30"

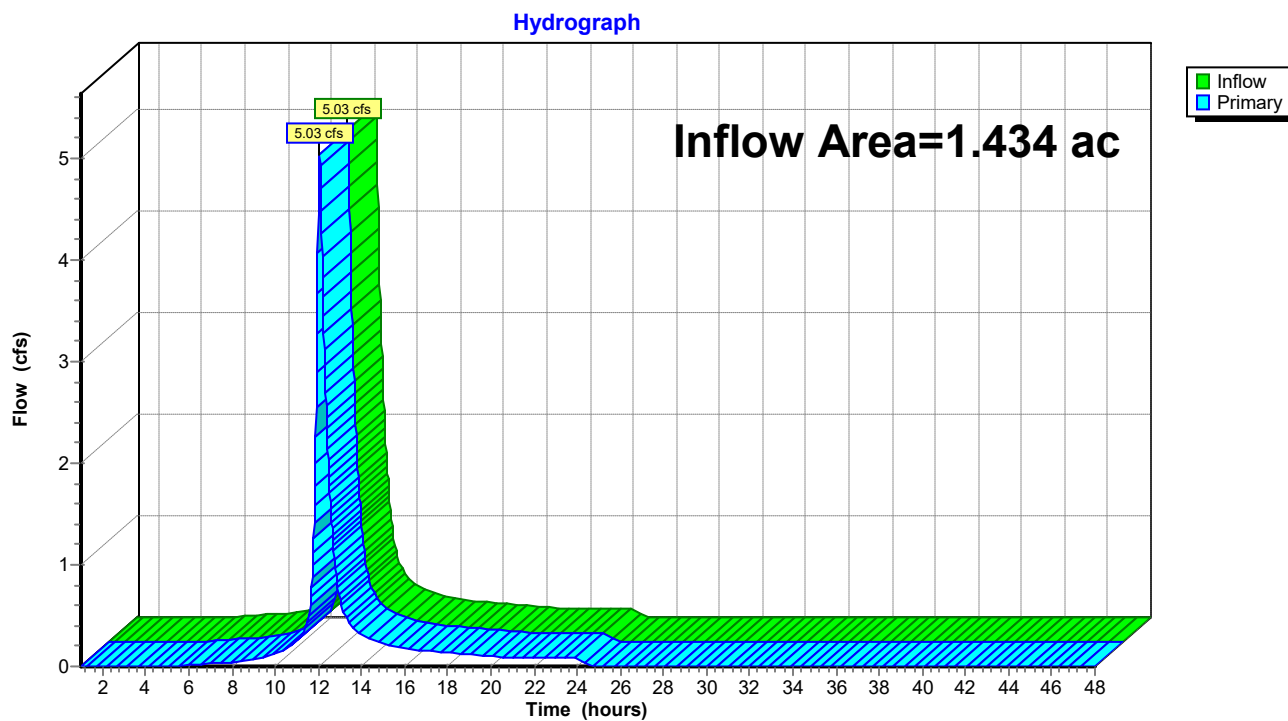
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Summary for Link 4L: STUDY POINT #1

Inflow Area = 1.434 ac, 3.75% Impervious, Inflow Depth = 3.75" for 10YR event
Inflow = 5.03 cfs @ 12.06 hrs, Volume= 0.448 af
Primary = 5.03 cfs @ 12.06 hrs, Volume= 0.448 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.02 hrs

Link 4L: STUDY POINT #1



Arc Pre and Post

Type II 24-hr 10YR Rainfall=5.30"

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Hydrograph for Link 4L: STUDY POINT #1

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
1.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00
3.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00
5.00	0.00	0.00	0.00
6.00	0.01	0.00	0.01
7.00	0.03	0.00	0.03
8.00	0.04	0.00	0.04
9.00	0.08	0.00	0.08
10.00	0.12	0.00	0.12
11.00	0.25	0.00	0.25
12.00	4.44	0.00	4.44
13.00	0.67	0.00	0.67
14.00	0.31	0.00	0.31
15.00	0.23	0.00	0.23
16.00	0.18	0.00	0.18
17.00	0.15	0.00	0.15
18.00	0.13	0.00	0.13
19.00	0.12	0.00	0.12
20.00	0.10	0.00	0.10
21.00	0.09	0.00	0.09
22.00	0.09	0.00	0.09
23.00	0.08	0.00	0.08
24.00	0.08	0.00	0.08
25.00	0.00	0.00	0.00
26.00	0.00	0.00	0.00
27.00	0.00	0.00	0.00
28.00	0.00	0.00	0.00
29.00	0.00	0.00	0.00
30.00	0.00	0.00	0.00
31.00	0.00	0.00	0.00
32.00	0.00	0.00	0.00
33.00	0.00	0.00	0.00
34.00	0.00	0.00	0.00
35.00	0.00	0.00	0.00
36.00	0.00	0.00	0.00
37.00	0.00	0.00	0.00
38.00	0.00	0.00	0.00
39.00	0.00	0.00	0.00
40.00	0.00	0.00	0.00
41.00	0.00	0.00	0.00
42.00	0.00	0.00	0.00
43.00	0.00	0.00	0.00
44.00	0.00	0.00	0.00
45.00	0.00	0.00	0.00
46.00	0.00	0.00	0.00
47.00	0.00	0.00	0.00
48.00	0.00	0.00	0.00

Arc Pre and Post

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Type II 24-hr 10YR Rainfall=5.30"

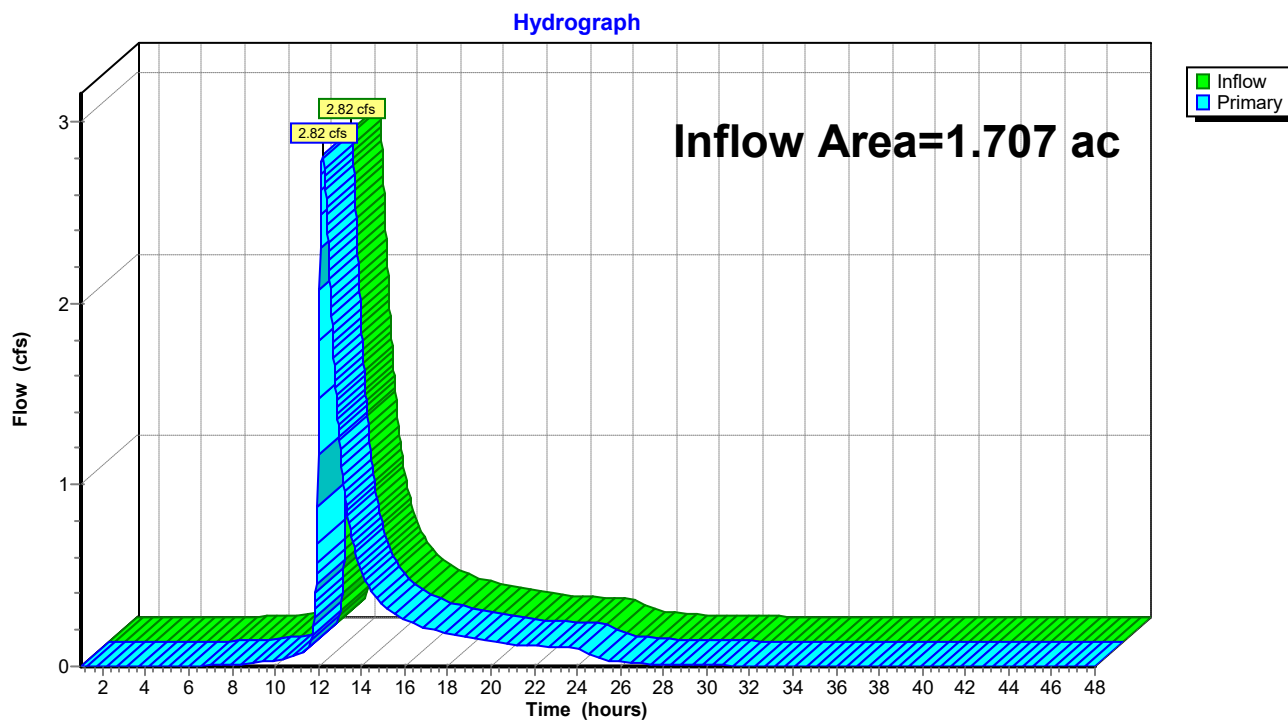
Printed 8/3/2022

Summary for Link SP: Study Point #1

Inflow Area = 1.707 ac, 55.57% Impervious, Inflow Depth > 3.05" for 10YR event
Inflow = 2.82 cfs @ 12.20 hrs, Volume= 0.434 af
Primary = 2.82 cfs @ 12.20 hrs, Volume= 0.434 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.02 hrs

Link SP: Study Point #1



Arc Pre and Post

Type II 24-hr 10YR Rainfall=5.30"

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Hydrograph for Link SP: Study Point #1

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
1.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00
3.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00
5.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00
7.00	0.01	0.00	0.01
8.00	0.01	0.00	0.01
9.00	0.02	0.00	0.02
10.00	0.03	0.00	0.03
11.00	0.06	0.00	0.06
12.00	1.16	0.00	1.16
13.00	1.21	0.00	1.21
14.00	0.52	0.00	0.52
15.00	0.34	0.00	0.34
16.00	0.26	0.00	0.26
17.00	0.21	0.00	0.21
18.00	0.18	0.00	0.18
19.00	0.16	0.00	0.16
20.00	0.14	0.00	0.14
21.00	0.12	0.00	0.12
22.00	0.11	0.00	0.11
23.00	0.11	0.00	0.11
24.00	0.10	0.00	0.10
25.00	0.05	0.00	0.05
26.00	0.03	0.00	0.03
27.00	0.02	0.00	0.02
28.00	0.01	0.00	0.01
29.00	0.01	0.00	0.01
30.00	0.01	0.00	0.01
31.00	0.00	0.00	0.00
32.00	0.00	0.00	0.00
33.00	0.00	0.00	0.00
34.00	0.00	0.00	0.00
35.00	0.00	0.00	0.00
36.00	0.00	0.00	0.00
37.00	0.00	0.00	0.00
38.00	0.00	0.00	0.00
39.00	0.00	0.00	0.00
40.00	0.00	0.00	0.00
41.00	0.00	0.00	0.00
42.00	0.00	0.00	0.00
43.00	0.00	0.00	0.00
44.00	0.00	0.00	0.00
45.00	0.00	0.00	0.00
46.00	0.00	0.00	0.00
47.00	0.00	0.00	0.00
48.00	0.00	0.00	0.00

SECTION 5 – SOIL REPORTS



United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for Talbot County, Maryland



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map (The Arc)



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Talbot County, Maryland
Survey Area Data: Version 18, Aug 27, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 1, 2021—Oct 1, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend (The Arc)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
OtA	Othello silt loams, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain	2.1	100.0%
Totals for Area of Interest		2.1	100.0%

Map Unit Descriptions (The Arc)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Talbot County, Maryland

OtA—Othello silt loams, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain

Map Unit Setting

National map unit symbol: 2thwn

Elevation: 0 to 100 feet

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 46 to 68 degrees F

Frost-free period: 210 to 240 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Othello, drained, and similar soils: 48 percent

Othello, undrained, and similar soils: 28 percent

Minor components: 24 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Othello, Drained

Setting

Landform: Flats, depressions, swales

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Talf, dip

Down-slope shape: Linear, concave

Across-slope shape: Linear, concave

Parent material: Silty eolian deposits over fluviomarine deposits

Typical profile

Ap - 0 to 9 inches: silt loam

Btg - 9 to 29 inches: silt loam

2BCg - 29 to 34 inches: sandy loam

2Cg - 34 to 80 inches: loamy sand

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.57 in/hr)

Depth to water table: About 10 to 20 inches

Frequency of flooding: None

Frequency of ponding: Rare

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water supply, 0 to 60 inches: Moderate (about 8.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: C/D

Hydric soil rating: Yes

Description of Othello, Undrained

Setting

Landform: Flats, depressions, swales, drainageways
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Parent material: Silty eolian deposits over fluviomarine deposits

Typical profile

Oe - 0 to 2 inches: peat
A - 2 to 4 inches: silt loam
Eg - 4 to 10 inches: silt loam
Btg - 10 to 29 inches: silt loam
2BCg - 29 to 35 inches: sandy loam
2Cg - 35 to 80 inches: loamy sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.57 in/hr)
Depth to water table: About 0 to 10 inches
Frequency of flooding: None
Frequency of ponding: Occasional
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: C/D
Hydric soil rating: Yes

Minor Components

Crosiadore

Percent of map unit: 7 percent
Landform: Flats, fluviomarine terraces, depressions
Landform position (two-dimensional): Summit, footslope
Landform position (three-dimensional): Tread, talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Hydric soil rating: No

Mattapex

Percent of map unit: 7 percent
Landform: Flats, depressions, swales, broad interstream divides
Landform position (two-dimensional): Summit, footslope
Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Hydric soil rating: No

Fallsington, undrained

Percent of map unit: 5 percent
Landform: Flats, depressions, swales, drainageways
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Hydric soil rating: Yes

Kentuck, undrained

Percent of map unit: 5 percent
Landform: Flats, depressions, swales
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Hydric soil rating: Yes

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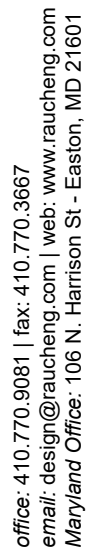
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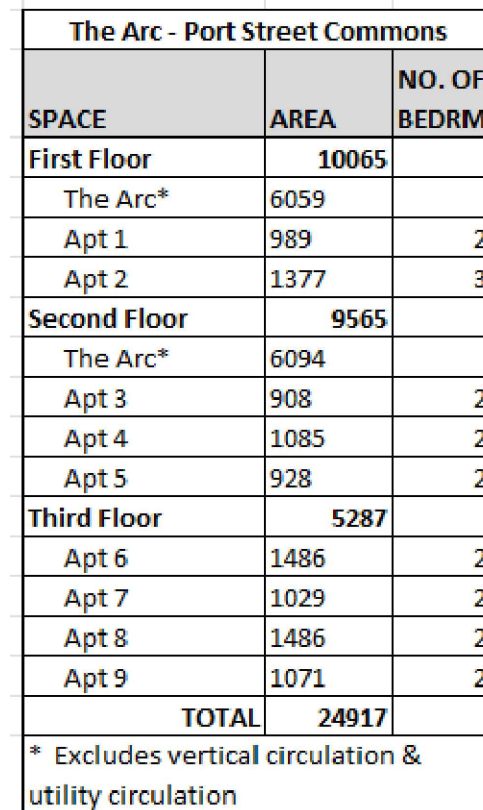
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LICENSED ARCHITECT UNDER
THE LAWS OF THE STATE OF
MARYLAND.
LICENSE NUMBER 20221
EXPIRATION DATE 01/19/2024

DATE:	8-29-22	PC SUBMITTAL
SCALE:	AS SHOWN	
DRAWN BY:		
DESIGNED BY:		
APPROVED BY:	AS SHOWN	
SHEET NO.:		

A-101



1 FIRST FLOOR - PROPOSED

Scale: 1/8" = 1'-0"



2 SECOND FLOOR - PROPOSED

Scale: 1/8" = 1'-0"

PORT STREET COMMONS

EASTON, MARYLAND
PREPARED FOR THE ARC



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I CERTIFY THAT THESE
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MARYLAND.

LICENSE NUMBER 20221
EXPIRATION DATE 01/19/2024

[illegible]

DATE: 8-29-22 PC SUBMITTAL

SCALE: AS SHOWN

DRAWN BY:

DESIGNED BY:

APPROVED BY: AS SHOWN

SHEET NO.:

A-102



North Elevation - Port Street Facade



Northeast Elevation - Main Entrance



South Elevation



West Elevation



Site features may vary. Refer to civil/site plans.



Site features may vary. Refer to civil/site plans.









Site features may vary. Refer to civil/site plans.

CONTACT INFORMATION

OWNER/DEVELOPER: CHESAPEAKE COMMUNITY DEVELOPMENT LLC
1332 DONALD AVE
SEVERN, MD 21144

ENGINEER: RAUCH Inc.
106 N HARRISON ST
EASTON, MARYLAND 21301
(410)770-9081

SITE DATA

PROPERTY ADDRESS: PORT STREET
EASTON, MD 21601

LONGITUDE: 38°77'01.49" N

LATITUDE: -76°08'46.61" W

PRESENT ZONING CLASSIFICATION: MXW - MIXED-USE WATERFRONT DISTRICT

PRESENT USE: COMMERCIAL

TAX MAP: 0034
GRID: 0015
PARCEL: 0077
DEED REFERENCE: 02873 / 00398

SITE AREA: 1.82 AC

FEMA FLOOD MAP: PANEL 24041C0189D

LIMITS OF DISTURBANCE: 1.589 A.C ±

CUT: 1,057.5 CY

FILL: 856 CY

NET: 201.5 CY CUT

DRAWING LIST	
SHEET NUMBER	DRAWING TITLE
G-100	COVER SHEET
V-101	EXISTING & DEMOLITION PLAN
C-101	SITE PLAN
C-201.01	EROSION AND SEDIMENT CONTROL PLAN
C-205.01-.02	EROSION AND SEDIMENT CONTROL DETAILS
C-301.01	SITE GRADING PLAN
C-305.01-.02	SITE DETAILS
C-401.01	STORMWATER & STORM DRAIN PLAN
C-403.01	STORMWATER & STORM DRAIN PROFILES
C-405.01	STORMWATER DETAILS
C-501	UTILITY PLAN
C-503.01	UTILITY PROFILE
C-505.01	UTILITY DETAILS
C-601	LANDSCAPING PLAN
C-605.01	LANDSCAPING NOTES & DETAILS

ENVIRONMENTAL NOTES:

- THE PROJECT SITE IS NOT LOCATED WITHIN THE CRITICAL AREA BUFFER
- THE SITE IS NOT LOCATED WITHIN A 100 YEAR FLOODPLAIN
- NON-TIDAL WETLANDS ARE PRESENT ON-SITE

STANDARD STABILIZATION NOTE

FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILATION MUST BE COMPLETE WITHIN:

- THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) AND
- SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING

HYDROLOGY NOTES:

- THE PROJECT WILL NOT ALTER HYDROLOGY TO OR FROM THE SITE
- NO OUTLETS WILL BE ALTERED BY THIS PROJECT

REVIEWED FOR THE TALBOT SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

APPROVED:

TALBOT SOIL CONSERVATION DISTRICT DATE

NOTE: THE TALBOT SOIL CONSERVATION DISTRICT RESERVES THE RIGHT TO ADD, DELETE, MODIFY OR OTHERWISE ALTER THE EROSION CONTROL PROVISIONS OF THIS PLAN IN THE EVENT THAT ADDITIONAL PROTECTION BECOMES NECESSARY.

DEVELOPER'S CERTIFICATION

I HEREBY CERTIFY THAT ALL OF THE DEVELOPMENT AND/OR CONSTRUCTION SHALL BE DONE IN ACCORDANCE TO THIS PLAN OF EROSION AND SEDIMENT CONTROL.

SIGNATURE DATE

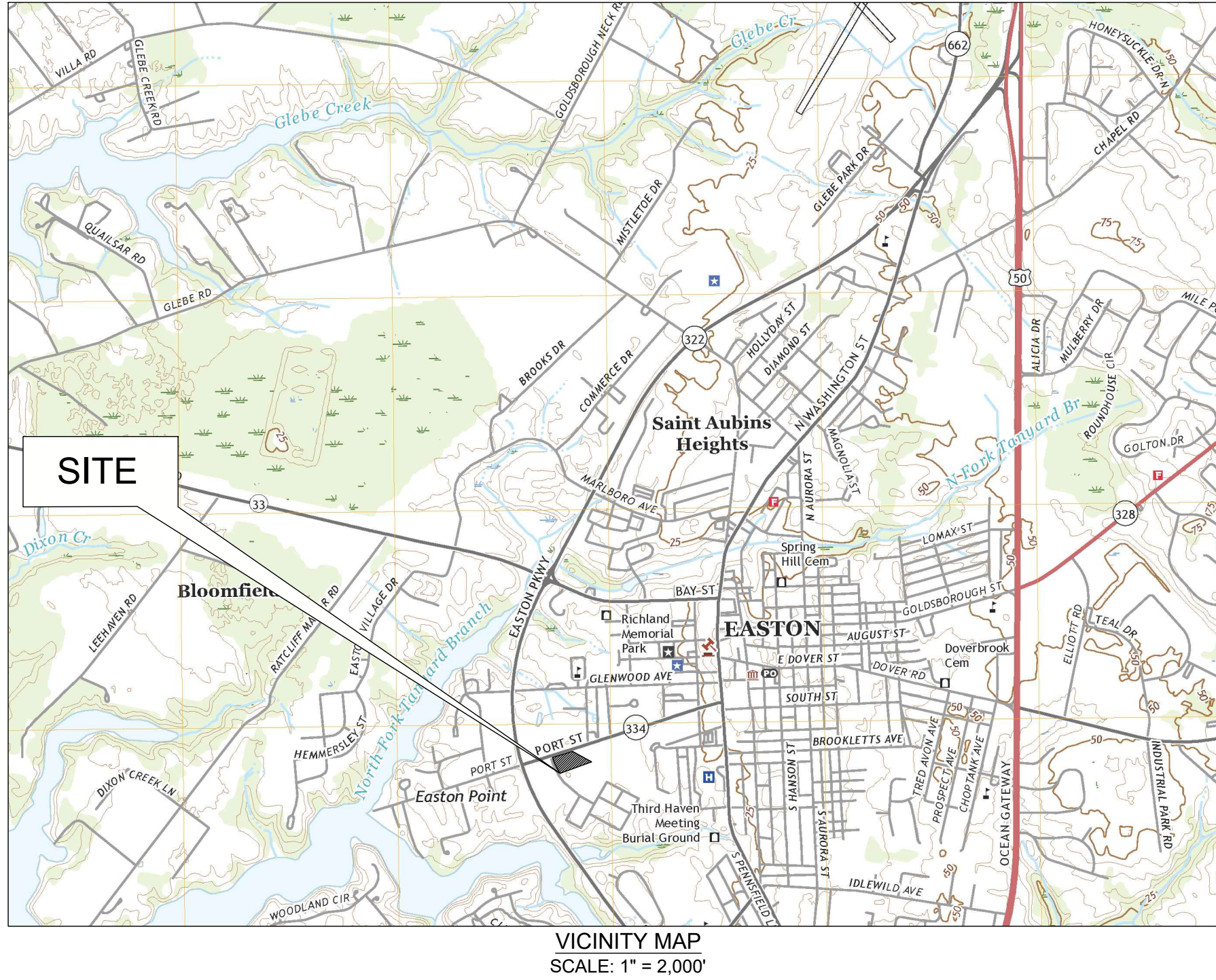
- IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR OR SUBCONTRACTOR TO NOTIFY THE ENGINEER OF ANY DEVIATION MADE IN THIS PLAN. ANY CHANGE MADE TO THIS PLAN WITHOUT WRITTEN AUTHORIZATION FROM THE ENGINEER WILL PLACE RESPONSIBILITY FOR SAID CHANGE ON THE CONTRACTOR OR SUBCONTRACTOR.
- ANY RESPONSIBLE PERSONNEL INVOLVED IN THIS CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT THE DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF EROSION AND SEDIMENT BEFORE BEGINNING THE PROJECT.

SOIL DATA		HYDROLOGIC SOIL GROUP	K-FACTOR	HYDRIC
MAP UNIT SYMBOL	MAP UNIT NAME			
01A	OTHELLO SILT LOAMS, 0 TO 2 PERCENT SLOPES, MID ATLANTIC COASTAL PLAIN	C/D	0.06	YES

PORT STREET COMMONS

INFRASTRUCTURE IMPROVEMENT PLANS

FOR
CHESAPEAKE COMMUNITY DEVELOPMENT LLC
TALBOT COUNTY, MARYLAND 21601



GENERAL NOTES

ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, LOCAL BUILDING CODES, BEST PRACTICES OF THE RESPECTIVE TRADES AND THE STANDARD SPECIFICATIONS AND DETAILS REFERRED TO HEREON.

THIS DRAWING SHOWS INFORMATION OBTAINED FROM AVAILABLE RECORDS REGARDING PIPES, CONDUITS, TELEPHONE LINES AND OTHER STRUCTURES AND CONDITIONS WHICH EXIST WITHIN LIMITS OF THE WORK AT AND BELOW THE SURFACE OF THE GROUND. THE CONTRACTOR IS RESPONSIBLE FOR SUPPORTING AND PROTECTING ALL PIPES, CONDUITS, TELEPHONE LINES, AND OTHER STRUCTURES.

THE CONTRACTOR SHALL NOTIFY THE FOLLOWING TWO (2) WEEKS PRIOR TO START OF CONSTRUCTION AND SHALL COORDINATE ALL CONSTRUCTION PHASES WITH THEM:

MDE (Main Number) 410-537-3000
MDE (Eastern Shore Field Office) 410-901-4020
TOWN OF EASTON DPW 410-882-0513
EASTON UTILITIES 410-822-6110
TALBOT COUNTY SCD 410-882-1577 x 3
MISS UTILITY 800-257-7777 or 811

SHOULD ANY DAMAGE OCCUR TO ANY MARKED UTILITIES, THEY SHALL BE REPAIRED SOLELY AT THE CONTRACTORS EXPENSE.

ALL LANDSCAPING SHALL BE PERFORMED BY QUALIFIED PROFESSIONALS. ALL PLANT MATERIALS SHALL BE FROM CERTIFIED NURSERYMAN AND BE GUARANTEED FOR ONE (1) YEAR FROM THE DATE OF PLANTING.

ANY PROPERTY LINE MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE REPLACED SOLELY AT THE CONTRACTORS EXPENSE.

FIRE LANE AND ACCESS WILL MEET REQUIREMENTS FOR THE PROPOSED BUILDING PRIOR TO THE FINAL SITE PLAN.

ESD SUMMARY CHART

DRAINAGE AREA	TYPE OF ESD PRACTICE	NAME OF ESD PRACTICE (STRUCTURE NAME)	ON-SITE OR STRUCTURE	RUNOFF CURVE NUMBER (RON)	MARYLAND GRID COORDINATE 83 METERS NORTHING	MARYLAND GRID COORDINATE 83 METERS EASTING	ESD PRACTICE TOTAL DRAINAGE AREA (ACRES)	ESD PRACTICE IMPERVIOUS DRAINAGE AREA (ACRES)	SURFACE AREA OF ESD PRACTICE (ACRES)	TARGET PE (IN.)	ACTUAL PE (IN.)	TARGET ESDv (FT. ³)	ACTUAL ESDv (ft ³)
1	SGW	SUBMERGED GRAVEL WETLANDS #1	ON	94	413914.5189	1576345.0767	1.318	0.875	0.066	1.80	2.10		11,102
2													
3													
4													
5													
6													
7													
8													
9													
10													
TOTAL/AVERAGE				94			1.318	0.875	0.066	1.80	2.10	5,784	6,498

LINETYPES

TOPOGRAPHY
MAJOR CONTOURS
MINOR CONTOURS
TOP OF SLOPE BREAKLINE
BOTTOM OF SLOPE BREAKLINE
TOPOGRAPHY BREAKLINE

CATCHMENT AREA

To FLOW PATH

PARCEL BOUNDARY
PARCEL SETBACK/EASEMENT
FENCELINE WOOD
FENCELINE STEEL
TREELINE/VEGETATION
ROADWAY CENTERLINE
HIGHWAY BARRIER

UTILITIES
OVERHEAD ELECTRIC
UNDERGROUND ELECTRIC
TELEPHONE LINE
GAS PIPE LINE
CABLE TV
WATER PIPE
STORMWATER PIPE

UNDERDRAIN
SANITARY SEWER
FORCE MAIN SEWER

ENVIRONMENTAL
WETLAND LINE
FLOOD PLANE 100/500 YR
MEAN HIGH WATER
MEAN LOW WATER
CRITICAL AREA BOUNDARY
BUFFER 25'/100'
SOILS BOUNDARY
SWM EASEMENT 5'/10'

EROSION AND SEDIMENT CONTROL
SILT FENCE
SUPER SILT FENCE
SILT FENCE ON PAVEMENT
LIMITS OF DISTURBANCE
LOD & SILT FENCE
LOD & SUPER SILT FENCE
LOD & SILT FENCE ON PAVEMENT
STANDARD INLET PROTECTION

AT-GRADE INLET PROTECTION
CURB INLET PROTECTION

PROPOSED

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SYMBOLS

FLARED END SECTION

YARD INLET

CURB INLET

CUSTOM INLET

NYLOPLAST INLET

STORM DRAIN MANHOLE

SANITARY SEWER MANHOLE

CLEANOUT

GATE VALVE

STUB

SIGN

WATER METER

FIRE HYDRANT

WELL

BOLLARD

ELECTRIC TRANSFORMER

TELEPHONE PEDESTAL

UTILITY POLE

GUY WIRE

CONIFEROUS TREE

DECIDUOUS TREE

SPOT ELEVATION

LAND SLOPE

BENCHMARK

BOREHOLE/MONITORING WELL

LIGHTING

RIPRAP OUTLET SEDIMENT

TRAP

STONE OUTLET SEDIMENT

TRAP

TYPE-1 INLET PROTECTION

TYPE-1 INLET PROTECTION

TYPE-1 INLET PROTECTION

PROPOSED

EXISTING

EXISTING

EXISTING

EXISTING

EXISTING

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HATCHES

ASPHALT

GRAVEL

CONCRETE

RIPRAP/ROCK

ESD BED BOTTOM

BRICK PAVING

EXISTING, TO BE DEMOLISHED

STEEP SLOPES

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ABBREVIATIONS

ADA AMERICANS WITH DISABILITIES ACT

AGIP AT GRADE INLET PROTECTION

BC BACK OF CURB

BM BENCHMARK

BRL BUILDING RESTRICTION LINE

CES CONCRETE END SECTION

C/O CLEAN OUT

CHRD CHORD

CI CURB INLET

CIP CURB INLET PROTECTION

CL CENTERLINE

CMF CONCRETE MONUMENT FOUND

CMP CORRUGATED METAL PIPE

Cui CUSTOM INLET

CY CUBIC YARD

DI DUCTILE IRON

E EAST

EL/ELEV ELEVATION

EP EDGE OF PAVE

ESC EROSION AND SEDIMENT CONTROL

EX EXISTING

FES FLARED END SECTION

FFE FINISHED FLOOR ELEVATION

FH FIRE HYDRANT

FL FLOW LINE

FT FOOT

GFA GROSS FLOOR AREA

GPD GALLONS PER DAY

GV GATE VALVE

HDPE HIGH DENSITY POLYETHYLENE

I INLET

INV INVERT

INV INVERT

PE POLYETHYLENE

PERF PERFORATED

PR PROPOSED

PT POINT OF TANGENCY

PVC POLYVINYL CHLORIDE

PVI POINT OF VERTICAL INTERSECTION

Q DISCHARGE

R RADIUS

RCP REINFORCED CONCRETE PIPE

RCN RUNOFF CURVE NUMBER

ROW RIGHT-OF-WAY

RT RIGHT

S SOUTH

SCS STABILIZED CONSTRUCTION ENTRANCE

SD STORM DRAIN

SDMH STORM DRAIN MANHOLE

SF FRICTION SLOPE

SF SILT FENCE

SHA STATE HIGHWAY ADMINISTRATION

SIP STANDARD INLET PROTECTION

SQ SQUARE

SS SANITARY SEWER

SSF SUPER SILT FENCE

SSMH SANITARY SEWER MANHOLE

STA STATION

STD STANDARD

SWM STORM WATER MANAGEMENT

TAN TANGENT

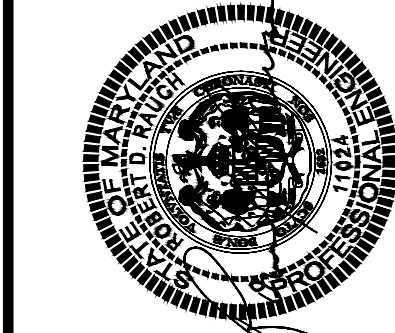
TB THRUST BLOCK

TBR TO BE REMOVED

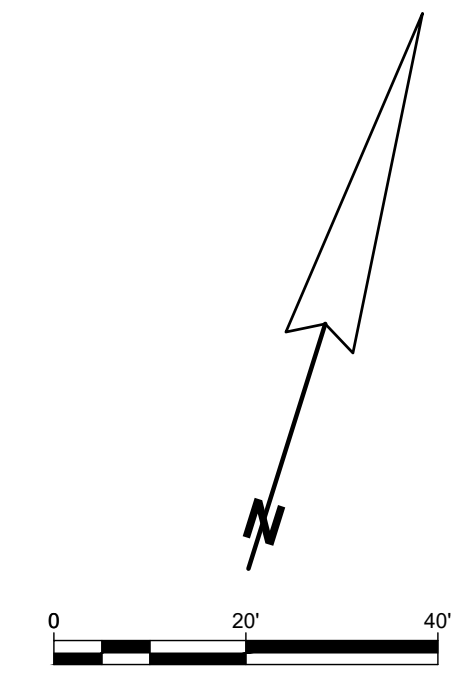
TC TOP OF CURB

Tc TIME OF CONCENTRATION

Tc TIME OF CONCENTRATION



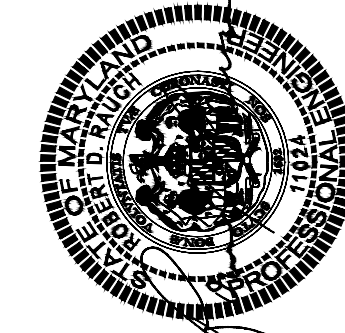
Professional Certification.
I hereby certify that these documents were prepared or approved by me, and



- | | | |
|--------------------------------|------------------------------------|---|
| APPROVED: | APPROVED: | APPROVED: |
| TOWN OF EASTON - TOWN ENGINEER | TOWN OF EASTON PLANNING AND ZONING | EASTON UTILITIES - MANAGER OF ENGINEERING |
| DATE | DATE | DATE |

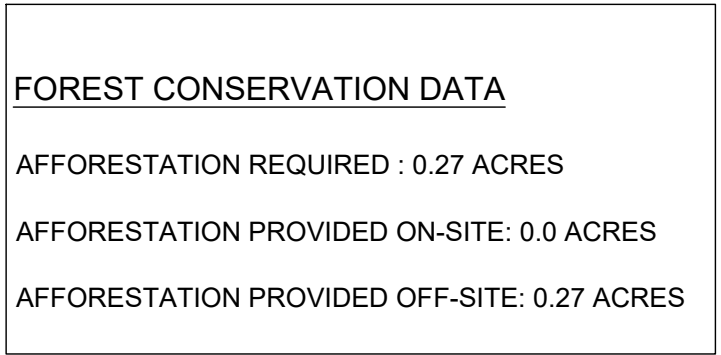
PORT STREET COMMONS

RAUCH INC.
engineering design &
development services
Office: 410.770.0841 Fax: 410.770.3867



License No. 11024
Expiration Date: July 24, 2022

Page 104 of 133



- 44 PROPOSED 9'X18' PARKING SPACES.
INCLUDING 6 VAN ACCESSIBLE PARKING SPACES/
HANDICAP PARKING SPACES, AND 2 ELECTRIC
VEHICLE SPACES (E.V.).

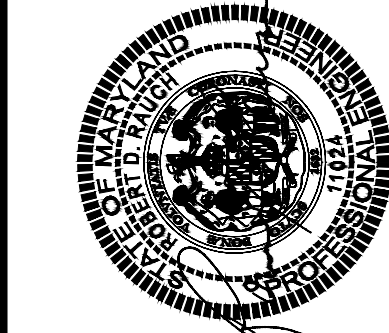
- 1 TREE LINE
- 2 NON-TIDAL WETLAND
- 3 SIDEWALK
- 4 TOP OF DITCH
- 5 BOTTOM OF DITCH
- 6 APPROXIMATE LOCATION OF EXISTING SEWER

APPROVED:	APPROVED:	APPROVED:
TOWN OF EASTON - TOWN ENGINEER	TOWN OF EASTON PLANNING AND ZONING	EASTON UTILITIES - MANAGER OF ENGINEERING
DATE	DATE	DATE

RAUCH inc.

engineering design &
development services

office: 410/770-9081 | fax: 410/770-9667
email: design@rauch.com | web: www.rauch.com
10000 W. Jefferson Ave., Suite 200 • Baltimore, MD 21237
Virginia Office: 8229 Boone Blvd., Suite 625 • Vienna, VA 22182



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. 11024
Expiration Date: July 24, 2022

[illegible]

DATE: 8/29/2022

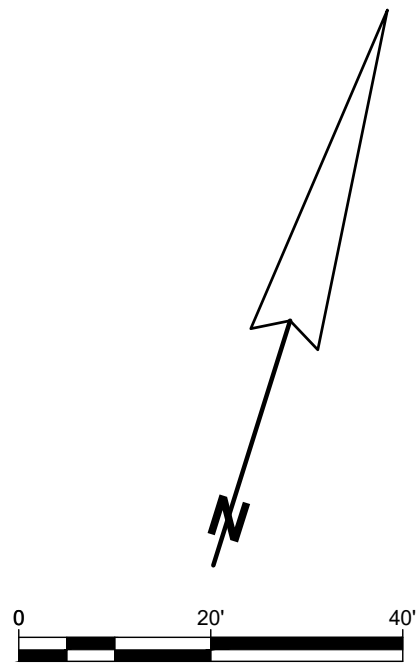
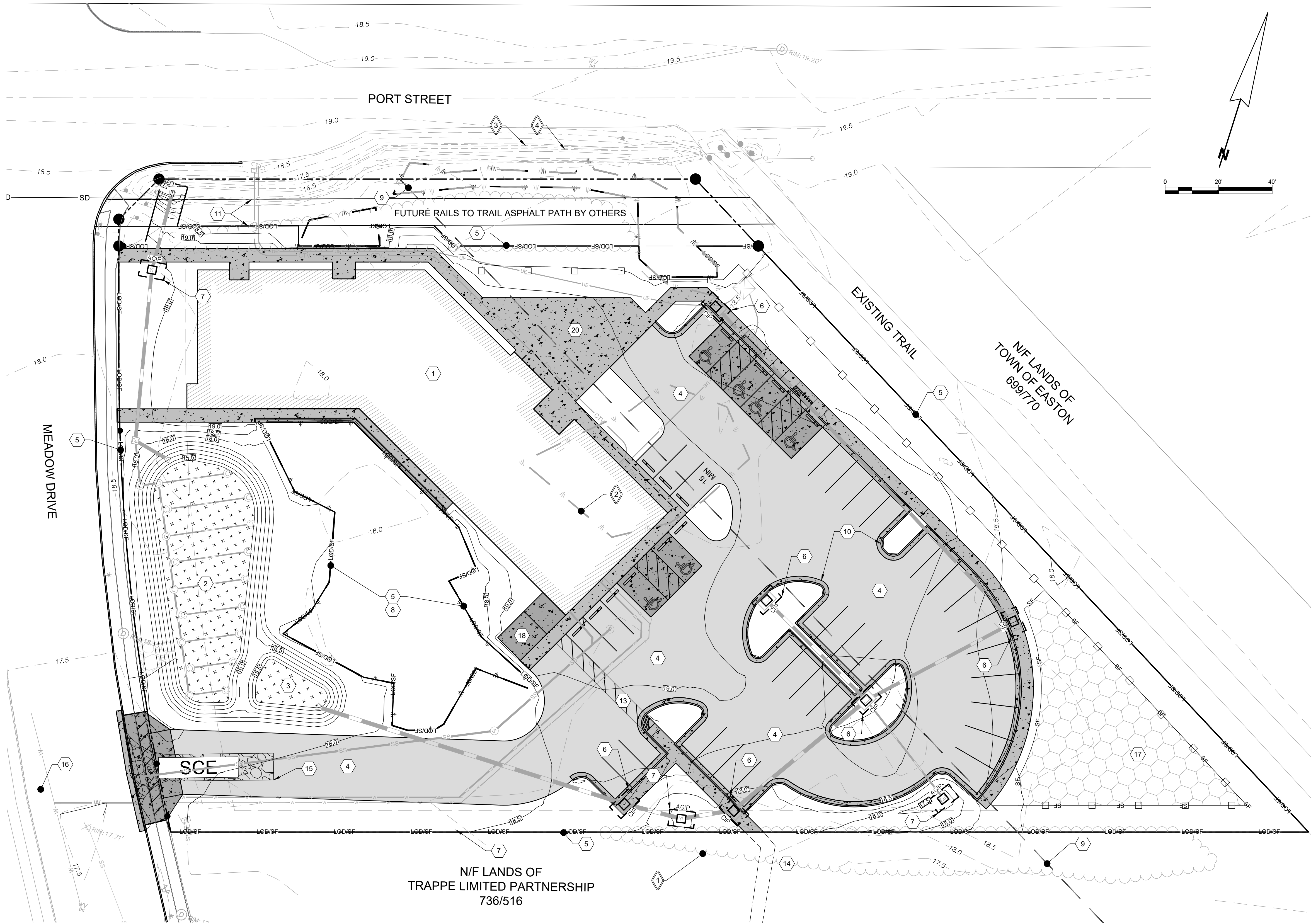
SCALE: 1" = 20'

DRAWN BY: MCF

DESIGNED BY: JWJ

APPROVED BY: CDR

SHEET NO.. C-101



EROSION & SEDIMENT CONTROL NOTES

- 1 PORT COMMONS BUILDING F.F.E = 19.40'
- 2 SUBMERGED GRAVEL WETLAND
- 3 SUBMERGED GRAVEL WETLAND FOREBAY
- 4 ASPHALT PARKING/ ROAD
- 5 LIMIT OF DISTURBANCE & SILT FENCE. SEE DETAIL ON SHEET C-205.01
- 6 CURB INLET PROTECTION. SEE DETAIL ON SHEET C-205.01
- 7 AT-GRADE INLET PROTECTION. SEE DETAIL ON SHEET C-205.01
- 8 NON-TIDAL WETLANDS TO REMAIN
- 9 DELMARVA POWER & LIGHT COMPANY EASEMENT LINE
- 10 STANDARD CURB AND GUTTER
- 11 FUTURE RAILS TO TRAIL ASPHALT PATH BY OTHERS
- 12 3' WIDE VALLEY GUTTER. SEE DETAIL ON SHEET C-305.02
- 13 5' WIDE CROSS WALK
- 14 FUTURE CONCRETE SIDEWALK BY OTHERS
- 15 STABILIZED CONSTRUCTION ENTRANCE SEE DETAIL ON SHEET C-205.01
- 16 LIMIT OF DISTURBANCE
- 17 STOCKPILE / STAGING AREA
- 18 DUMPSTER PAD
- 19 SILT FENCE. SEE DETAIL ON SHEET C-205.01
- 20 CONCRETE PATIO

EXISTING FEATURES

- 1 TREE LINE
- 2 NON-TIDAL WETLAND
- 3 TOP OF DITCH
- 4 BOTTOM OF DITCH

SITE SEQUENCE OF CONSTRUCTION:

- 1. NOTIFY MDE AT (410) 901-4020
TALBOT SOIL CONSERVATION DISTRICT AT (410) 822-1577
TOWN OF EASTON AT (410) 822-0513
- 2. PRE-CONSTRUCTION MEETING.
- 3. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
- 4. INSTALL ALL SEDIMENT AND EROSION CONTROL MEASURES (SILT FENCING & INLET PROTECTION) PER PLANS.
- 5. COMPLETE SITE DEMOLITION AND HAUL OFF SITE (SEE SHEETS V-101).
- 6. REMOVE TOPSOIL AND PLACE IN STOCKPILE AREA.
- 7. ROUGH GRADE SITE INSIDE LIMITS OF DISTURBANCE.
- 8. COORDINATE WITH EUC TO INSTALL WATER AND SANITARY SEWER SERVICE CONNECTION.
- 9. INSTALL ALL PROPOSED STORM DRAIN PIPES/STRUCTURES ACCORDING TO PLANS. ALL INLETS TO HAVE INLET PROTECTION
- 10. FINE GRADE SITE TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDING PAD.
- 11. INSTALL CONCRETE SIDEWALK/CURB/TO SPECIFIED GRADE
- 12. ONCE ALL UTILITIES/ STORM DRAIN PIPES/LINES HAVE BEEN INSTALLED, CONSTRUCT PAVEMENT BASE COURSE
- 13. CONSTRUCT BUILDING.
- 14. CONSTRUCT SUBMERGED GRAVEL WETLANDS.
- 15. CONSTRUCT PAVEMENT ASPHALT COURSE.
- 16. ALL DISTURBED AREAS TO BE PERMANENTLY STABILIZED.
- 17. MAINTAIN ALL PERIMETER CONTROLS AND SEDIMENT CONTROL DEVICES UNTIL FINAL STABILIZATION HAS BEEN COMPLETELY ESTABLISHED.
- 18. REMOVE PERIMETER CONTROLS UPON APPROVAL BY THE MDE SEDIMENT CONTROL INSPECTOR

APPROVED: TOWN OF EASTON - TOWN ENGINEER DATE

APPROVED: TOWN OF EASTON PLANNING AND ZONING DATE

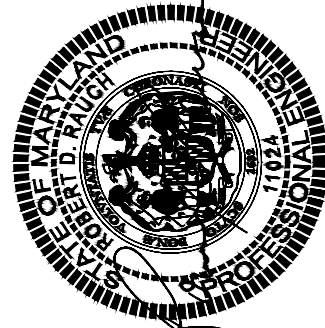
APPROVED: EASTON UTILITIES - MANAGER OF ENGINEERING DATE

EROSION & SEDIMENT CONTROL PLAN

OF THE LANDS OF
PORT STREET COMMONS
TAX MAP 0034, GRID 0015, PARCEL 0077
FIRST ELECTION DISTRICT, TALBOT COUNTY, MARYLAND
PREPARED FOR CHESAPEAKE COMMUNITY DEVELOPMENT LLC

RAUCH
INC.
engineering design &
development services

office: 410.770.0081 | fax: 410.770.9867
www.rauchinc.com
Maryland Office: 105 N. Harrison St., Easton, MD 21601
Virginia Office: 8229 Boone Blvd, Suite 625 - Vienna, VA 22182



Professional Certification.
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. 11024
Expiration Date: July 24, 2022

REVISIONS

REV. #	DATE	DESCRIPTION	
		DATE	DESCRIPTION

DATE: 8/29/2022

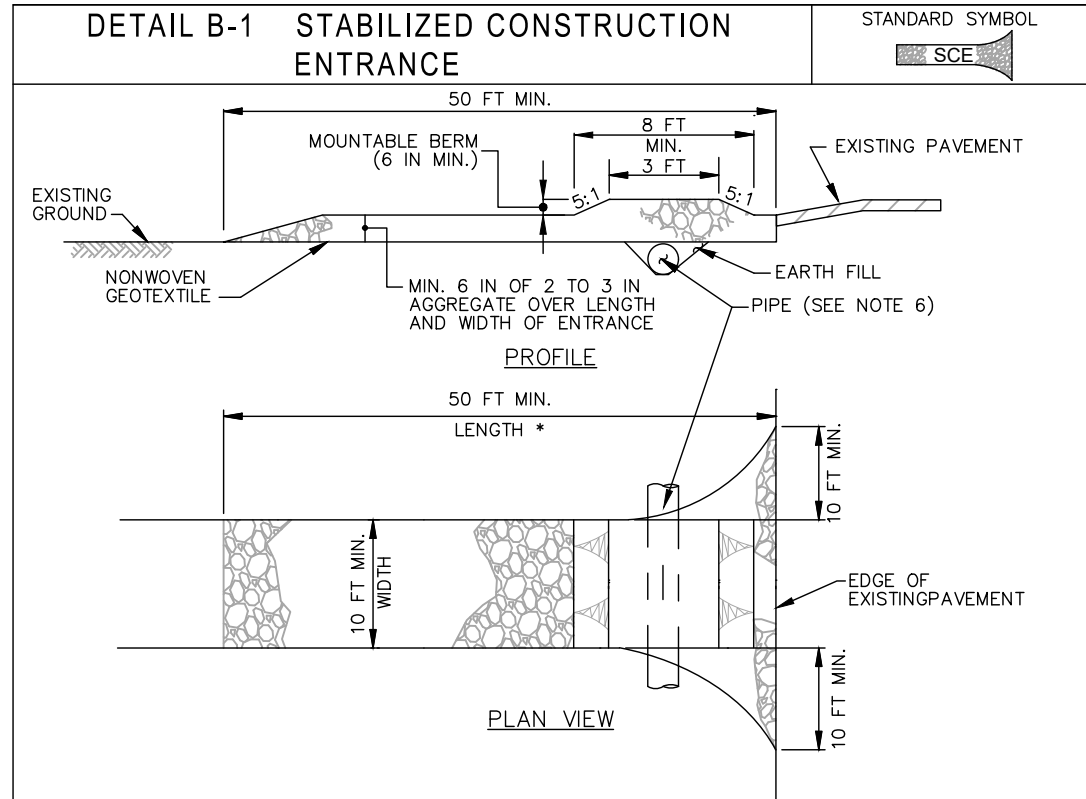
SCALE: 1" = 20'

DRAWN BY: MCF

DESIGNED BY: JWJ

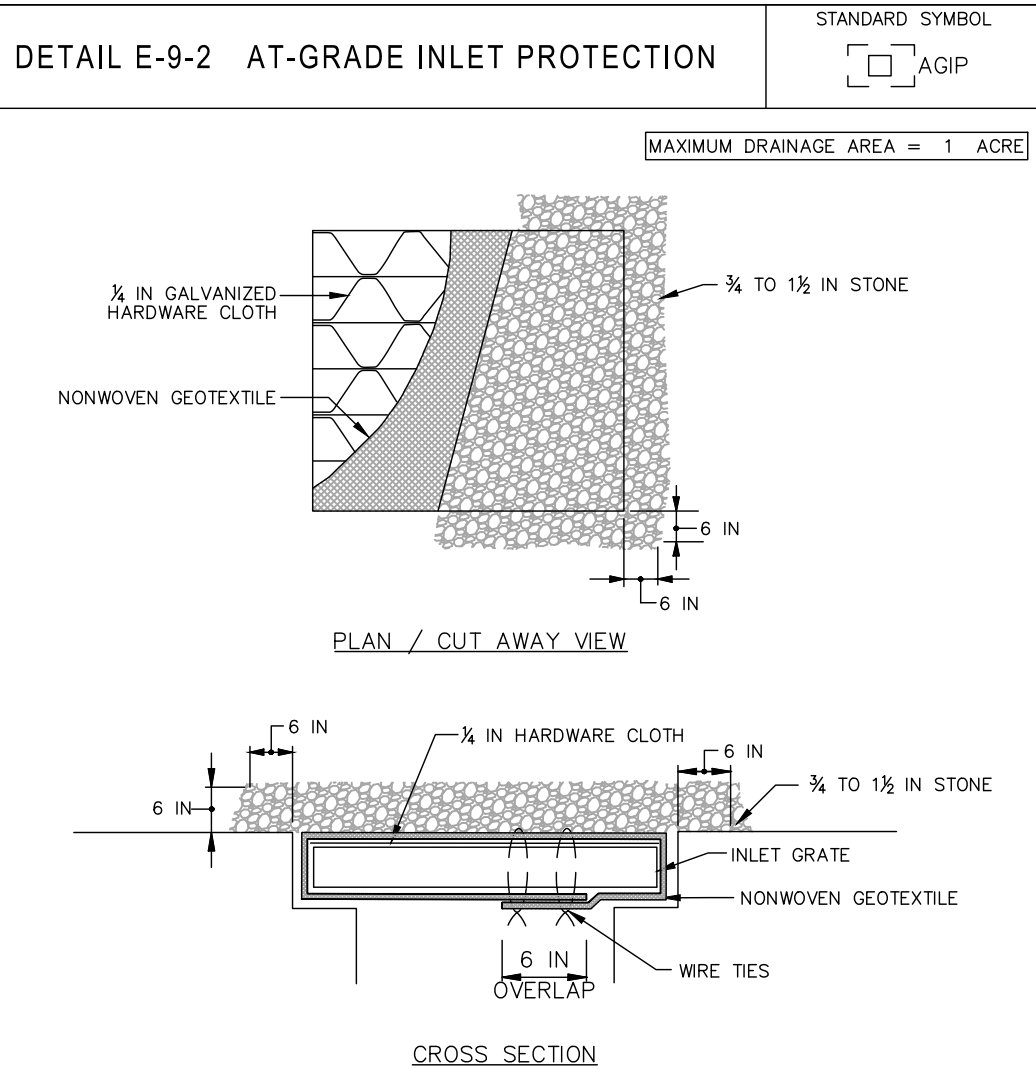
APPROVED BY: CDR

SHEET NO.: C-201.01



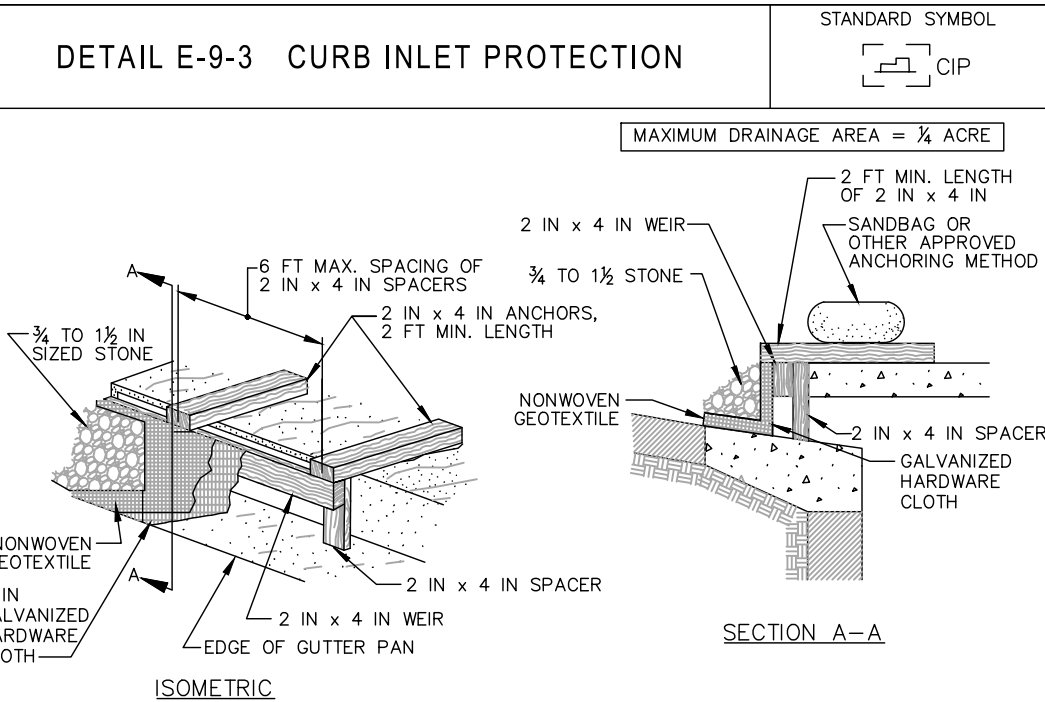
- CONSTRUCTION SPECIFICATIONS**
1. PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (30 FEET FOR SINGLE RESURFACING LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SIZE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
 2. PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE. MAINTAIN POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT.
 3. PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.
 4. PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.
 5. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL			
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION	



- CONSTRUCTION SPECIFICATIONS**
1. USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.
 2. LIFT GRATE AND WRAP WITH NONWOVEN GEOTEXTILE TO COMPLETELY COVER ALL OPENINGS. SECURE WITH WIRE TIES AND SET GRATE BACK IN PLACE.
 3. PLACE CLEAN 3/4 TO 1 1/2 INCH STONE OR EQUIVALENT RECYCLED CONCRETE 6 INCHES THICK ON THE GRATE.
 4. STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE CLOSING. IF INLET PROTECTION DOES NOT COMPLETELY DRAIN WITHIN 24 HOURS AFTER A STORM EVENT, IT IS CLOGGED. WHEN THIS OCCURS, REMOVE ACCUMULATED SEDIMENT AND CLEAN, OR REPLACE GEOTEXTILE AND STONE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL			
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION	



- CONSTRUCTION SPECIFICATIONS**
1. USE NOMINAL 2 INCH x 4 INCH LUMBER
 2. USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.
 3. NAIL THE 2x4 WEIR TO 9 INCH LONG VERTICAL SPACERS (MAXIMUM 6 FEET APART).
 4. ATTACH A CONTINUOUS PIECE OF 1/4 INCH GALVANIZED HARDWARE CLOTH, WITH A MINIMUM WIDTH OF 30 INCHES AND A MINIMUM LENGTH OF 4 FEET LONGER THAN THE THROAT OPENING, TO THE 2x4 WEIR, EXTENDING IT 2 FEET BEYOND THROAT ON EACH SIDE.
 5. PLACE A CONTINUOUS PIECE OF NONWOVEN GEOTEXTILE OF THE SAME DIMENSIONS AS THE HARDWARE CLOTH OVER THE HARDWARE CLOTH AND SECURELY ATTACH TO THE 2x4 WEIR.
 6. PLACE THE ASSEMBLY AGAINST THE INLET THROAT AND NAIL TO 2x4 ANCHORS (MINIMUM 2 FEET LENGTH). EXTEND THE ANCHORS ACROSS THE INLET TOP AND HOLD IN PLACE BY SANDBAGS OR OTHER APPROVED ANCHORING METHOD.
 7. INSTALL END SPACERS A MINIMUM OF 1 FOOT BETWEEN THE ENDS OF THE THROAT OPENING.
 8. FORM THE HARDWARE CLOTH AND THE GEOTEXTILE TO THE CONCRETE GUTTER AND FACE OF CURB TO SPAN THE INLET OPENING. COVER THE HARDWARE CLOTH AND GEOTEXTILE WITH CLEAN 3/4 TO 1 1/2 INCH STONE OR EQUIVALENT RECYCLED CONCRETE.
 9. AT NON-SUMP LOCATIONS, INSTALL A TEMPORARY SANDBAG OR ASPHALT BERM TO PREVENT INLET BYPASS.
 10. STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE CLOSING. IF INLET PROTECTION DOES NOT COMPLETELY DRAIN WITHIN 24 HOURS AFTER A STORM EVENT, IT IS CLOGGED. WHEN THIS OCCURS, REMOVE ACCUMULATED SEDIMENT AND CLEAN, OR REPLACE GEOTEXTILE AND STONE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL			
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION	

B-4 STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

- Definition**
- Using vegetation as cover to protect exposed soil from erosion.
- Purpose**
- To promote the establishment of vegetation on exposed soil.
- Conditions Where Practice Applies**
- On all disturbed areas not stabilized by other methods. This specification is divided into sections on incremental stabilization; soil preparation, soil amendments and topsoiling; seeding and mulching; temporary stabilization; and permanent stabilization.
- Effects on Water Quality and Quantity**
- Stabilization practices are used to promote the establishment of vegetation on exposed soil. When soil is stabilized with vegetation, the soil is less likely to erode and more likely to allow infiltration of rainfall, thereby reducing sediment loads and runoff to downstream areas.
- Planting vegetation in disturbed areas will have an effect on the water budget, especially on volumes and rates of runoff, infiltration, evaporation, transpiration, percolation, and groundwater recharge. Over time, vegetation will increase organic matter content and improve the water holding capacity of the soil and subsequent plant growth.
- Vegetation will help reduce the movement of sediment, nutrients, and other chemicals carried by runoff to receiving waters. Plants will also help protect groundwater supplies by assimilating those substances present within the root zone.
- Sediment control practices must remain in place during grading, seedbed preparation, seeding, mulching, and vegetative establishment.**
- Adequate Vegetative Establishment**
- Inspect seeded areas for vegetative establishment and make necessary repairs, replacements, and reseedings within the planting season.

1. Adequate vegetative stabilization requires 95 percent groundcover.
2. If an area has less than 40 percent groundcover, reestablish following the original recommendations for lime, fertilizer, seedbed preparation, and seeding.
3. If an area has between 40 and 94 percent groundcover, over-seed and fertilize using half of the rates originally specified.
4. Maintenance fertilizer rates for permanent seeding are shown in Table B.6.

B-4-2 STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS

- Definition**
- The process of preparing the soils to sustain adequate vegetative stabilization.
- Purpose**
- To provide a suitable soil medium for vegetative growth.
- Conditions Where Practice Applies**
- Where vegetative stabilization is to be established.
- Criteria**
- A. Soil Preparation
1. Temporary Stabilization
 - a. Seedbed preparation consists of loosening soil to a depth of 3 to 5 inches by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows or rippers mounted on construction equipment. After the soil is loosened, it must not be rolled or dragged smooth but left in the roughened condition. Slopes 3:1 or flatter are to be tracked with ridges running parallel to the contour of the slope.
 - b. Apply fertilizer and lime as prescribed on the plans.
 - c. Incorporate lime and fertilizer into the top 3 to 5 inches of soil by disking or other suitable means.
 2. Permanent Stabilization
 - a. A soil test is required for any earth disturbance of 5 acres or more. The minimum soil conditions required for permanent vegetative establishment are:
 - i. Soil pH between 6.0 and 7.0.
 - ii. Soluble salts less than 500 parts per million (ppm).
 - iii. Soil contains less than 40 percent clay but enough fine grained material (greater than 30 percent silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception: if lowgrass will be planted, then a sandy soil (less than 30 percent silt plus clay) would be acceptable.
 - iv. Soil contains 1.5 percent minimum organic matter by weight.
 - v. Soil contains sufficient pore space to permit adequate root penetration.
 - b. Application of amendments or topsoil is required if on-site soils do not meet the above conditions.
 - c. Graded areas must be maintained in a true and even grade as specified on the approved plan, then scarified or otherwise loosened to a depth of 3 to 5 inches.
 - d. Apply soil amendments as specified on the approved plan or as indicated by the results of a soil test.
 - e. Mix soil amendments into the top 3 to 5 inches of soil by disking or other suitable means. Rake lawn areas to smooth the surface, remove large objects like stones and branches, and ready the area for seed application. Loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface where site conditions will not permit normal seedbed preparation. Track slopes 3:1 or flatter with tracked equipment leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. Leave the top 1 to 3 inches of soil loose and friable. Seedbed loosening may be unnecessary on newly disturbed areas.

- B. Topsoiling
1. Topsoil is placed over prepared subsoil prior to establishment of permanent vegetation. The purpose is to provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.
 2. Topsoil salvaged from an existing site may be used provided it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-NRCS.
 3. Topsoiling is limited to areas having 2:1 or flatter slopes where:
 - a. The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
 - b. The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
 - c. The original soil to be vegetated contains material toxic to plant growth.
 - d. The soil is so acidic that treatment with limestone is not feasible.
 4. Areas having slopes steeper than 2:1 require special consideration and design.
 5. Topsoil Specifications: Soil to be used as topsoil must meet the following criteria:
 - a. Topsoil must be a loam, sandy loam, clay loam, silt loam, sandy clay loam, or loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Topsoil must not be a mixture of contrasting textured subsoils and must contain less than 5 percent by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1 1/2 inches in diameter.
 - b. Topsoil must be free of noxious plants or plant parts such as Bermuda grass, quack grass, Johnson grass, nut sedge, poison ivy, thistle, or others as specified.
 - c. Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.
 6. Topsoil Application
 - a. Erosion and sediment control practices must be maintained when applying topsoil.
 - b. Uniformly distribute topsoil in a 5 to 8 inch layer and lightly compact to a minimum thickness of 4 inches. Spreading is to be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations must be corrected in order to prevent the formation of depressions or water pockets.
 - c. Topsoil must not be placed if the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.
 - C. Soil Amendments (Fertilizer and Lime Specifications)
 1. Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas of 5 acres or more. Soil analysis may be performed by a recognized private or commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses.
 2. Fertilizers must be uniform in composition, free flowing and suitable for accurate application by appropriate equipment. Manure may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers must all be delivered to the site fully labeled according to the applicable laws and must bear the name, trade name or trademark and warranty of the producer.
 3. Lime materials must be ground limestone (hydrated or burnt lime may be substituted except when hydrosedding) which contains at least 50 percent total oxides (calcium oxide plus magnesium oxide). Limestone must be ground to such fineness that at least 50 percent will pass through a #100 mesh sieve and 98 to 100 percent will pass through a #20 mesh sieve.
 4. Lime and fertilizer are to be evenly distributed and incorporated into the top 3 to 5 inches of soil by disking or other suitable means.
 5. Where the subsoil is either highly acidic or composed of heavy clays, spread ground limestone at the rate of 4 to 8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil.

EROSION AND SEDIMENT CONTROL STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

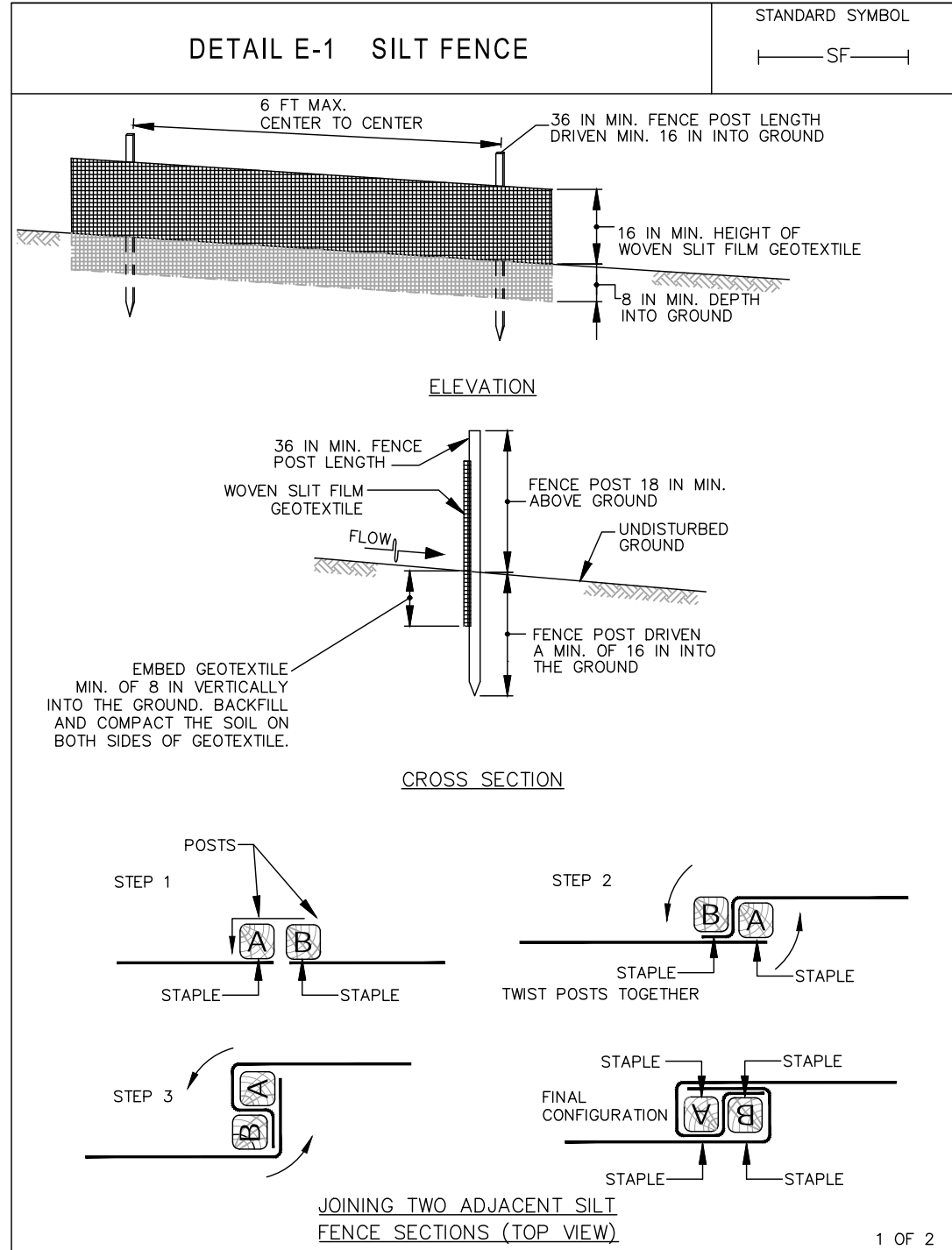
1. Contractor shall install soil erosion and sediment control devices prior to any grading. Following initial disturbance or re-disturbance, permanent or temporary stabilization shall be completed within three (3) calendar days as to the surface of all perimeter controls, dikes, swales, ditches, perimeter slopes greater than three (3) horizontal to one (1) vertical (3:1) and seven (7) days as to all other disturbed or graded areas on the project site not under active grading.
2. All temporary erosion and sediment control devices are to be provided as indicated on this plan, with location adjustments to be made in the field as necessary, and to be maintained at the end of each working day until project completion. The minimum area practical shall be disturbed for the minimal amount of time possible.
3. Clearing and grubbing shall include all trees, brush, debris, root mat and organic materials to be removed.
4. Temporary seeding shall be accomplished between February 15th through April 30th, or August 15th through November 30th. During other times, temporary mulching shall be provided.
5. Temporary seeding shall conform to the following applications: 436 lbs. per acre of 10-20-20; 4,000 lbs. per acre of ground limestone, to be incorporated into the soil by disking or other suitable means. Annual ryegrass shall be applied at a rate of 50 lbs. per acre using suitable equipment. Mulching shall be accomplished immediately after seeding.

Seed Mixture (For Hardness Zone 7a) (From Table B.1)					
No.	Species	Appl. Rate (lbs./ac.)	Seeding Dates	Seeding Depths	Fertilizer Rate (10-20-20)
	ANNUAL RYEGRASS	50#	2/15 - 4/30 8/15 - 11/01	1/2"	
	BARLEY	90#	2/15 - 4/30 / 8/15 - 11/30	1"	436 lb/ac
	OATS	72#	2/15 - 4/30 / 8/15 - 11/30	1"	10 lb
	WHEAT	120#	2/15 - 4/30 / 8/15 - 11/30	1"	90 lb
	CEREAL RYE	112#	2/15 - 4/30 / 8/15 - 12/15	1"	1000 sf
	FOXTAIL MILLET	30#	5/1 - 8/14	1/2"	
	PEARL MILLET	20#	5/1 - 8/14	1/2"	

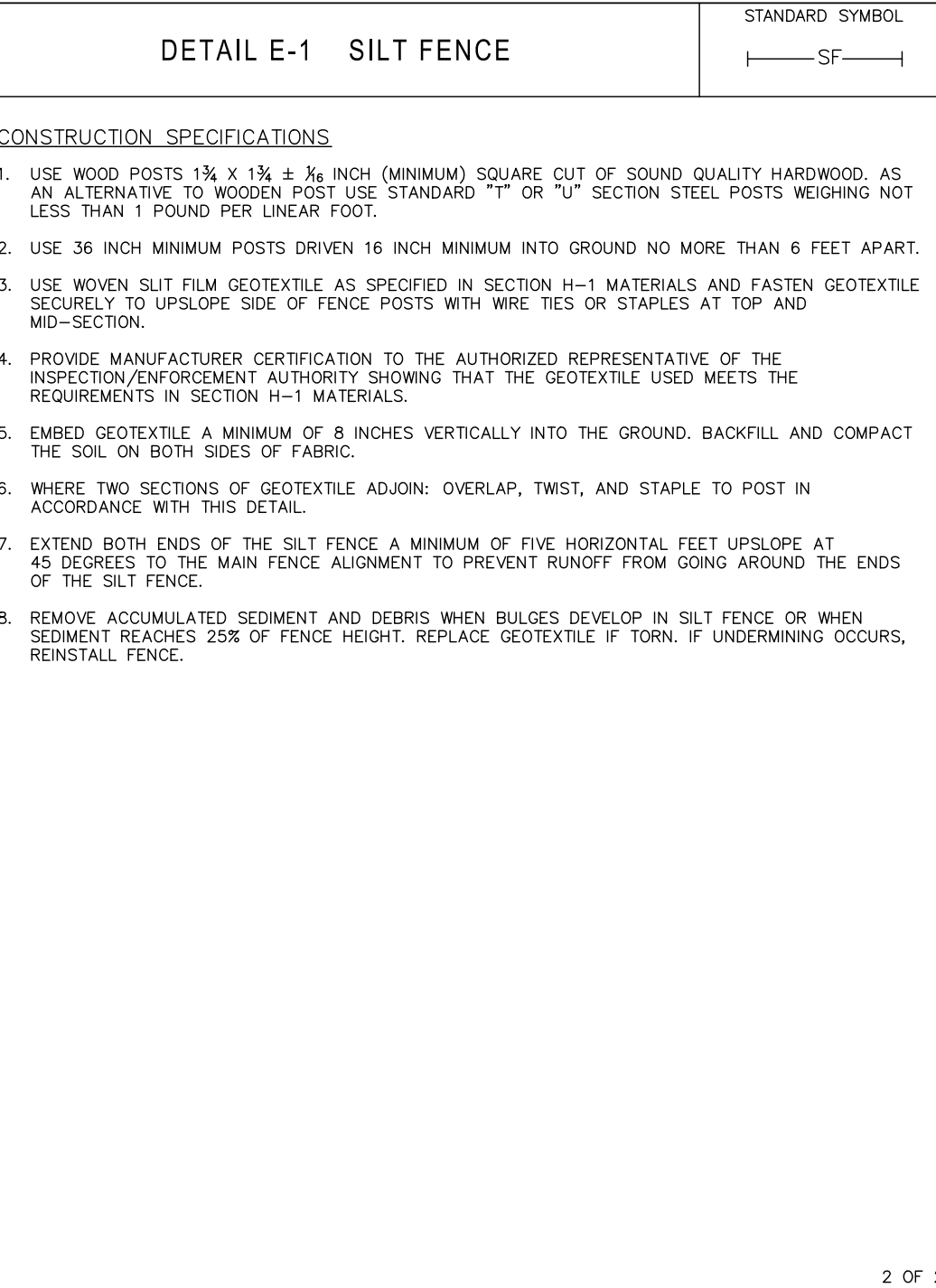
6. Mulching shall be unchopped, unrotted, small grain straw applied at a rate of 2-2 1/2 tons per acre. Anchor mulch with a mulch anchoring tool on the Contour. Wood cellulose fiber may be used for anchoring straw at a rate of 750 lbs. per acre mixed with water at a maximum of 50 lbs. of wood cellulose fiber per 100 gals. of water, or with a synthetic liquid binder according to manufacturer recommendations. Wood cellulose fiber used as mulch must be applied at a net dry weight of 1,500 lbs. per acre. Mix wood cellulose fiber with water to attain a mixture with a maximum of 50 lbs. of wood cellulose fiber per 100 gals. of water.
7. Permanent seeding shall be accomplished between March 1st through May 15th, or August 15th through October 15th. Permanent seeding at other than specified times will be allowed only upon written approval. Permanent seeding shall conform to the following applications: Permanent seeding for sites having disturbed over five (5) acres shall use fertilizer rates recommended by a soil testing agency and the recommendations provided in the Permanent Seeding Summary Table. Permanent seeding for conditions other than listed above shall be performed at the rates and dates as provided in the Permanent Seeding Summary Table below. Fertilizer and lime amendments shall be incorporated into the top 3"-5" of the soil by disking or other suitable means. Mulching shall be accomplished as discussed in Item #6 of these specifications.

Seed Mixture (For Hardness Zone 7a) (From Table B.3)					
No.	Species	Appl. Rate (lbs./ac.)	Seeding Dates	Seeding Depths	Fertilizer Rate (10-20-20)
	7 CREEPING RED FESCUE KENTUCKY BLUEGRASS	60# 15#	3/1 - 5/15 8/15 - 10/15	1/4" - 1/2"	
	8 TALL FESCUE	100#	3/1 - 5/15 8/15 - 10/15	1/4" - 1/2"	45 lb/ac 10 lb
	9 TALL FESCUE KENTUCKY BLUEGRASS PERENNIAL RYEGRASS	60# 40# 20#	3/1 - 5/15 8/15 - 10/15	1/4" - 1/2"	90 lb/ac 20 lb 1000 sf

8. Any spoil or borrow will be placed at a site approved by the Soil Conservation District.
9. All areas remaining or intended to remain disturbed for longer than seven (7) days shall be stabilized in accordance with the USDA, Natural Resources Conservation Service Standards and Specifications for Soil Erosion and Sediment Control in developing areas for critical area stabilization.
10. It will be the responsibility of the Contractor or Subcontractor to notify the Engineer of any deviation from this plan. Any change made in this plan without written authorization from the Engineer will place responsibility of said change on the Contractor or Subcontractor.

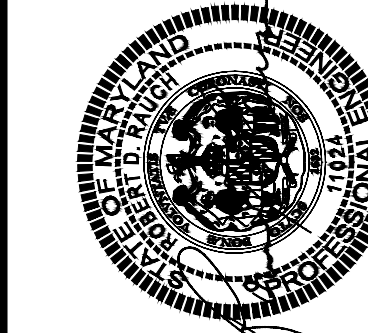


MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL			
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION	



MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL			
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION	

RAUCH
INC.
engineering design &
development services



Professional Certification.
I hereby certify that these documents were prepared or approved by me, and I am a duly licensed professional engineer under the laws of the State of Maryland.

REVISIONS	DESCRIPTION	DATE
REV. #		

REVISIONS			
DATE:	8/29/2022		

SCALE:	N/A
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DRAWN BY:	MCF
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DESIGNED BY:	JWL
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APPROVED BY:	CDR
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SHEET NO.:	C-205.01
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APPROVED:

TOWN OF EASTON - TOWN ENGINEER

DATE

APPROVED:

TOWN OF EASTON PLANNING AND ZONING

DATE

APPROVED:

EASTON UTILITIES - MANAGER OF ENGINEERING

DATE

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EASTON UTILITIES - MANAGER OF ENGINEERING

OVERLAY	- HMA SUPERPAVE 9.5 MM, PG 64-22, LEVEL 2, FOR 1-1/2" OVERLAYS. - HMA SUPERPAVE 12.5 MM, PG 64-22, LEVEL 2, FOR 2" OVERLAYS. - WATCH THE SURFACE COURSE SPECIFIED FOR THE ADJUSTMENT FULL DEPTH PAVING IF DIFFERENT FROM THE ABOVE.
COMMERCIAL ASPHALT PAVEMENT FOR ROADS	SURFACE COURSE: 2" HOT MIX ASPHALT SUPERPAVE 9.5 MM BASE COURSE: 4" HOT MIX ASPHALT SUPERPAVE, 19.0 MM PLACED IN 2-2" LIFTS SUB BASE: 6" CR-6 GRADED AGGREGATE COMPACTED TO 95% OF ASTM D1557, MODIFIED PROCTOR METHOD.
RESIDENTIAL ASPHALT PAVEMENT FOR ALLEYS	SURFACE COURSE: 2" HOT MIX ASPHALT SUPERPAVE 9.5 MM BASE COURSE: 2 1/2" HOT MIX ASPHALT SUPERPAVE, 19.0 MM SUB BASE: 6" CR-6 GRADED AGGREGATE COMPACTED TO 95% OF ASTM D1557, MODIFIED PROCTOR METHOD.
CONCRETE PAVEMENT	8" PORTLAND CEMENT CONCRETE MIX #7 SUB BASE: 6" CR-6 GRADED AGGREGATE COMPACTED TO 95% OF ASTM D1557, MODIFIED PROCTOR METHOD.

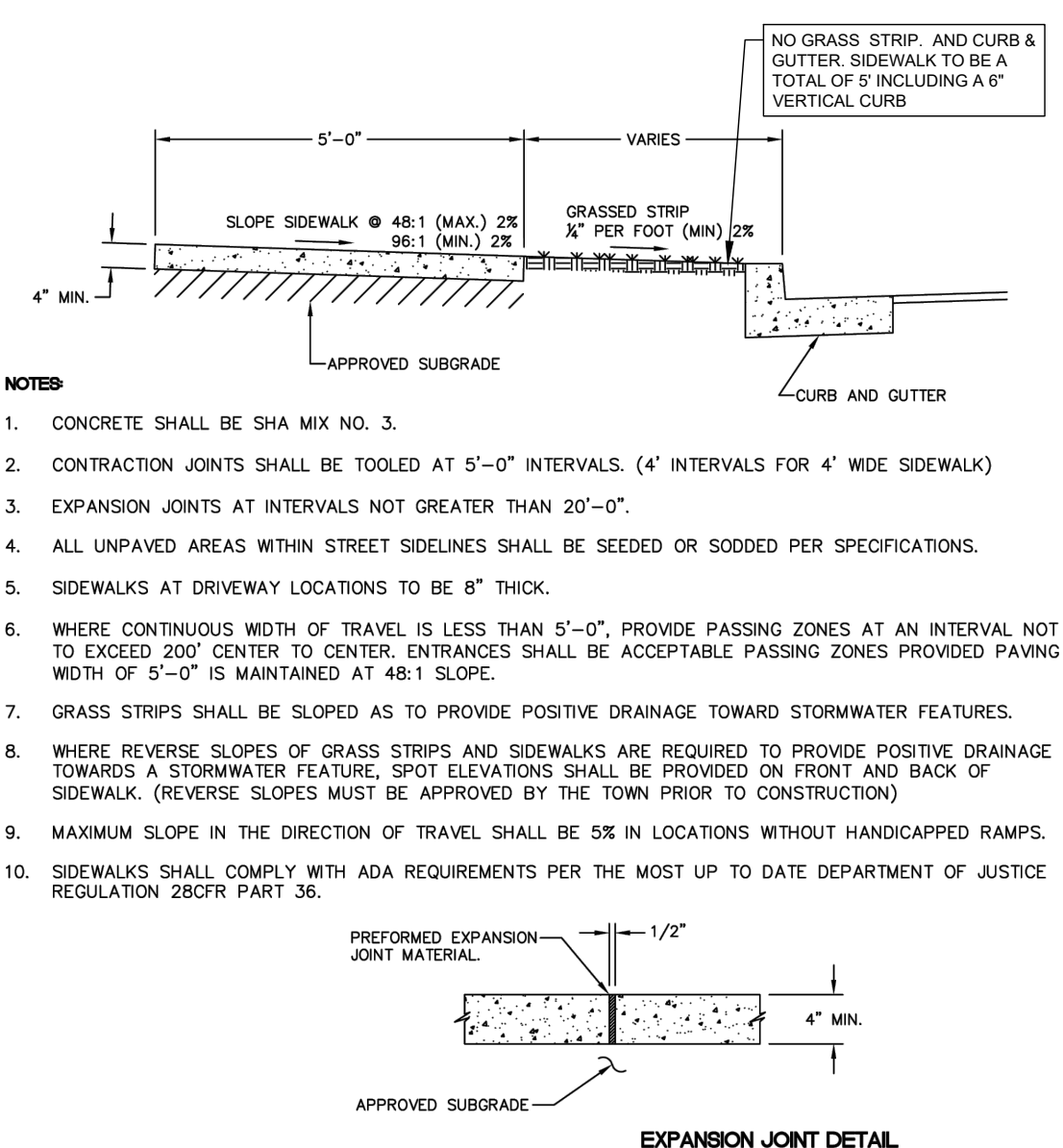
	APPROVAL <i>[Signature]</i> TOWN ENGINEER DATE: 1/1/2020 ISSUED: JANUARY 2020	TOWN OF EASTON STANDARD DETAILS PAVING SPECIFICATIONS STANDARD NO: TOE-R-101
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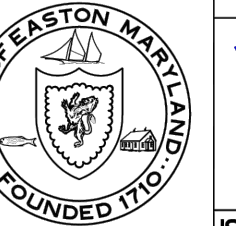
- PAVING NOTES**
- A. BASE COURSE**
- SUB-GRADE SHALL BE PLACED ON PREPARED AND COMPACTED REFILLED EXCAVATIONS TO THE COMPACTED DEPTH AS SHOWN ON DETAIL 9W-1.03. MATERIALS AND METHODS OF CONSTRUCTION SHALL MEET THE PROVISIONS OF MD SHA STANDARDS, SECTION 208.
 - GRADED AGGREGATE BASE COURSE:
 - GRADED AGGREGATE BASE COURSE SHALL BE SPREAD ON PREPARED AND COMPACTED REFILLED EXCAVATION TO THE COMPACTED DEPTH SHOWN ON THE DRAWING DETAILS.
 - GRADED AGGREGATE SHALL BE PER MD SHA STANDARDS, SECTION 901
 - RECYCLED CRUSHED CONCRETE IS AN ACCEPTABLE ALTERNATIVE PROVIDED THICKNESS ADJUSTMENTS ARE MADE BASED ON SUPPLEMENTAL TESTING TO BE SUBMITTED BY A QUALIFIED TESTING LABORATORY AND APPROVED BY THE TOWN ENGINEER.
- B. TACK COAT**
- COATING SHALL BE RESIDUAL ASPHALT UNIFORMLY SPREAD BETWEEN .01 AND .05 GALLONS/SQ. YARD. CONTRACTOR SHALL TAKE CARE NOT TO TRACK COAT ON SURFACE COURSES.
- C. HOT MIX ASPHALT PAVEMENT**
- HOT MIX ASPHALT PAVEMENT SHALL CONSIST OF A NUMBER OF COURSES OF HMA SUPERPAVE MATERIAL AND AGGREGATE ON A PREPARED SUB-BASE AS SHOWN WITHIN THE TOWN STANDARDS.
 - MATERIALS AND METHODS OF CONSTRUCTION SHALL MEET THE PROVISIONS OF SECTION 504 AND SECTION 904 OF THE MD SHA STANDARDS AND DETAILS.
 - SURFACE COURSES OF BITUMINOUS CONCRETE MIXES SHALL HAVE LESS THAN 15% OF RECYCLED ASPHALT PAVEMENT (RAP).
 - BASE COURSES SHALL HAVE NO MORE THAN 20% RAP.
 - WEATHER RESTRICTIONS:
 - PLANT MIXED SEAL - MINIMUM SURFACE TEMPERATURE 60° AND RISING.
 - SURFACE COURSE - MINIMUM SURFACE TEMPERATURE 40° AND RISING.
 - BASE COURSE - MINIMUM SURFACE TEMPERATURE 32° AND RISING.
- D. CONCRETE PAVEMENT**
- CONCRETE USED IN THE RESTORATION OF STREET AND ROADS SHALL BE PLACED TO THE MINIMUM THICKNESS THAT SHALL BE APPROVED BY THE TOWN. CONCRETE MAY BE A BASE COURSE WITH A BITUMINOUS CONCRETE OVERLAY OR A FINISHED SURFACE COURSE.
 - CONCRETE PAVEMENT SHALL MEET THE PROVISIONS OF MD SHA STANDARDS, SECTION 522.
 - CONCRETE SIDEWALK AND CURB AND GUTTER RESTORATION SHALL BE AS INDICATED WITHIN THE TOWN STANDARDS.
- E. SOIL CEMENT**
- WHERE THE CBR VALUES ARE FOUND TO BE LOW WITHIN THE PAVED AREA, THE TOWN WILL ALLOW THE SUB-GRADE BE REINFORCED BY A CEMENTITIOUS MATERIAL BEING MIXED IN THE SUBGRADE. APPLICATION SHALL BE SUBJECT TO THE GEOTECHNICAL INVESTIGATION.
 - A MINIMUM OF 2" OF GRADED AGGREGATE SHALL BE INSTALLED BETWEEN THE AMENDED SOIL AND BITUMINOUS PAVEMENT.
 - MINIMUM MIX DEPTH OF THE SOIL CEMENT MIXTURE SHALL BE 8" WITH A 5-5.5% MINIMUM CEMENT CONTENT.

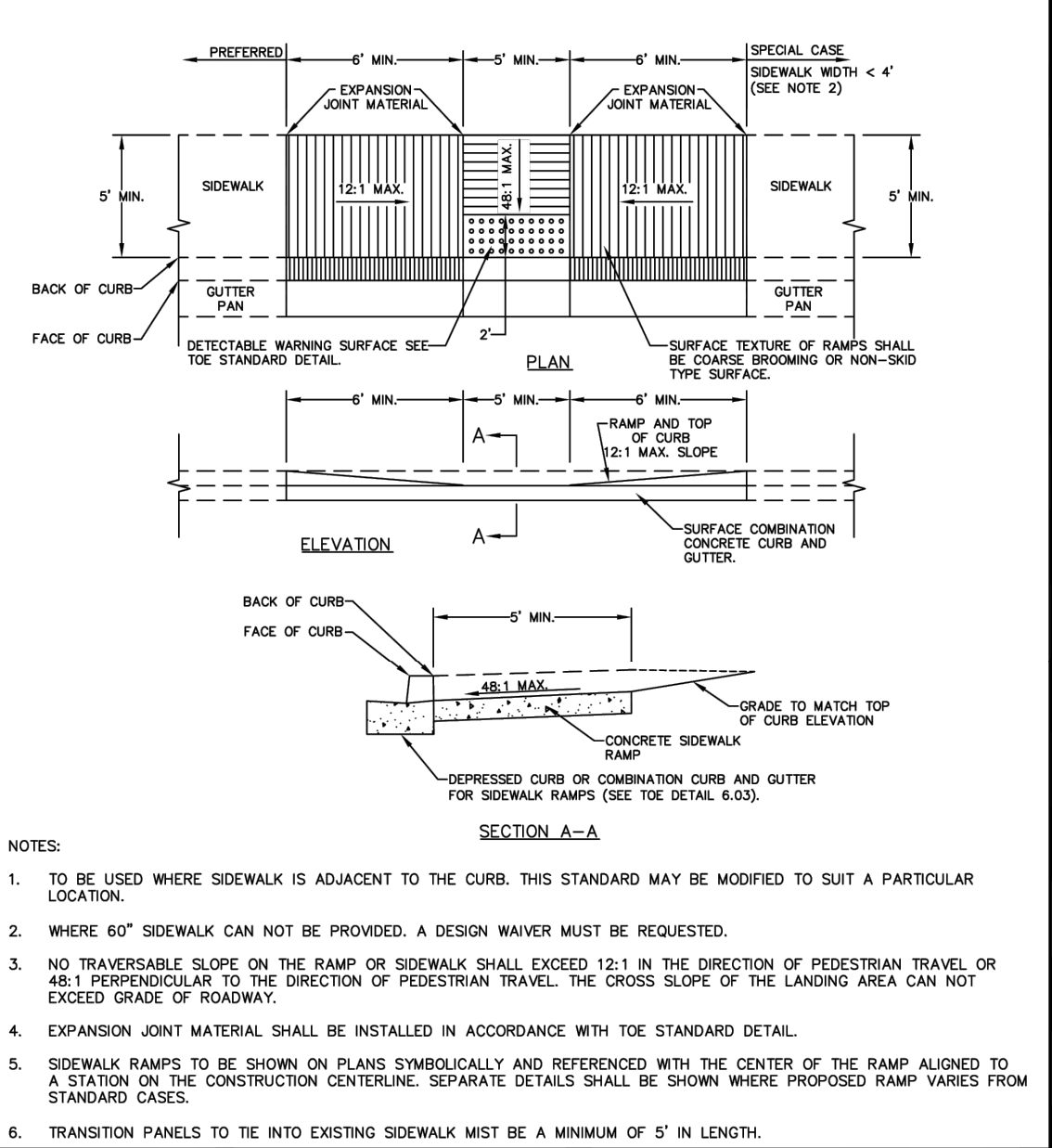
	APPROVAL <i>[Signature]</i> TOWN ENGINEER DATE: 1/1/2020 ISSUED: JANUARY 2020	TOWN OF EASTON STANDARD DETAILS PAVING NOTES STANDARD NO: TOE-R-102
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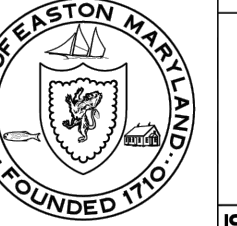
- CONCRETE QUICK REFERENCE LIST**
- CAST-IN-PLACE CONCRETE SIDEWALKS AND CURBING**
- A. SUBMITTALS**
- SUBMIT MIX DESIGN FOR APPROVAL PRIOR TO PLACING CONCRETE (MSHA MIX #3 FOR ALL CONCRETE SIDEWALKS, AIR ENTRAINED, MINIMUM 3500 PSI MIX). FOR CURB AND GUTTER, UTILIZE MSHA MIX #7, EXCEPT MAXIMUM WATER CEMENTITIOUS RATIO OF 0.45 AND 611 POUNDS MINIMUM CEMENTITIOUS MATERIALS - AIR ENTRAINED, MINIMUM 4200 PSI MIX.
 - SUBMIT CONCRETE TESTING AGENCY FOR APPROVAL, WHICH CONTRACTOR OR PROJECT OWNER SHALL EMPLOY FOR INFELD AND LABORATORY TESTING.
- B. CONCRETE PLACEMENT**
- NOTIFY TOWN OF INTENTION TO POUR CONCRETE 24 HOURS PRIOR TO PERFORMING WORK. (PHONE: 410-822-8822).
 - DRIVER SHALL PRESENT COMPUTER GENERATED MIX DELIVERY TICKET UPON ARRIVAL TO SITE.
 - DO NOT ADD WATER TO MIX AT JOB SITE UNLESS APPROVED BY ENGINEER. DO NOT POUR CONCRETE DURING RAIN EVENTS.
 - TESTING AGENCY SHALL TEST FOR SLUMP, TEMPERATURE AND AIR ENTRAINMENT AT THE JOB SITE. PRIOR TO POURING EACH TRUCK LOAD DELIVERED TO SITE, THE MAXIMUM TIME FROM ADDING WATER TO BATCH AT PLANT TO DISCHARGE AT SITE SHALL BE WITHIN 1 1/2 HOURS. TESTING AGENCY SHALL VERIFY THAT SUB-GRADE IS PROPERLY COMPACTED.
 - TESTING AGENCY SHALL COLLECT CYLINDERS FOR COMPRESSION TESTING ON EACH TRUCK LOAD OF CONCRETE DELIVERED TO SITE PER AER REQUIREMENTS. TEST RESULTS SHALL BE PROVIDED TO THE ENGINEER WITHIN 48 HOURS OF 7 AND 28 DAY BREAKS. REPORT SHALL INCLUDE LOCATION OF POUR PER PLAN STATIONING.
 - ENGINEER OF HIS/HER REPRESENTATIVE SHALL VERIFY THAT AREA OF CONCRETE WORK IS PROPERLY PREPARED, FREE OF WATER, FREE OF UNSTABLE MATERIALS AND THAT ALL REINFORCEMENT REQUIRED AT DRIVEWAYS, RAMP, VALLEY GUTTERS, ETC. IS IN PLACE AND PROPERLY SUPPORTED.
 - COLD WEATHER CONCRETE PLACEMENT SHALL BE PROTECTED FROM DAMAGE AND FROST, FREEZING ACTION OR LOW TEMPERATURES. NO UNAPPROVED ADJUSTMENTS ARE PERMITTED.
 - CONCRETE CURB AND SIDEWALKS SHALL HAVE PROPER CONTROL JOINTS INSTALLED AT 10 FOOT INTERVALS FOR CURB AND 5 FOOT INTERVALS FOR SIDEWALK. EXPANSION JOINTS FOR CURBING SHALL BE AT EACH 100 FOOT INTERVAL PLUS AT EACH POINT OF TANGENT OR CURVE. SIDEWALKS SHALL HAVE EXPANSION JOINTS AT 20 FOOT INTERVALS OR AT CHANGE OF DIRECTION.

	APPROVAL <i>[Signature]</i> TOWN ENGINEER DATE: 1/1/2020 ISSUED: JANUARY 2020	TOWN OF EASTON STANDARD DETAILS CONCRETE QUICK REFERENCE LIST STANDARD NO: TOE-R-103
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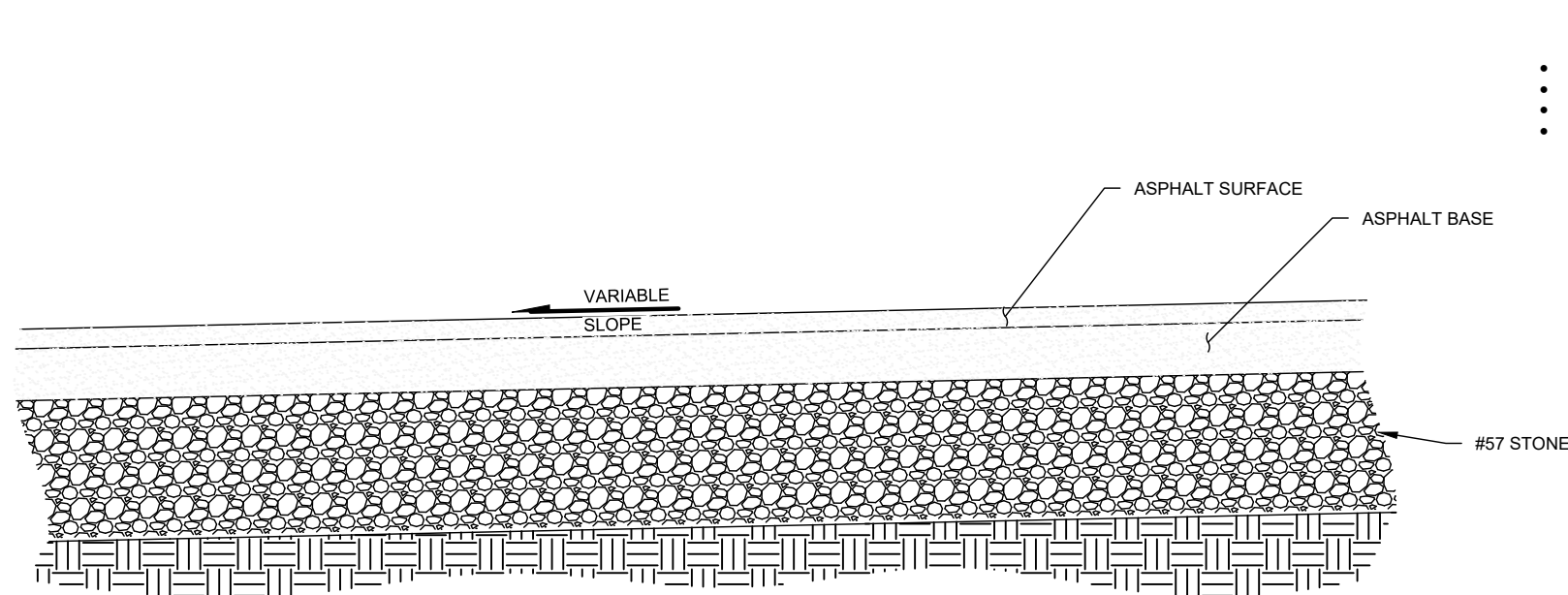


	APPROVAL <i>[Signature]</i> TOWN ENGINEER DATE: 1/1/2020 ISSUED: JANUARY 2020	TOWN OF EASTON STANDARD DETAILS CONCRETE SIDEWALK STANDARD NO: TOE-R-7-01
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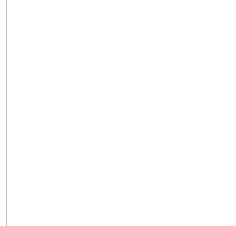
	APPROVAL <i>[Signature]</i> TOWN ENGINEER DATE: 1/1/2020 ISSUED: JANUARY 2020	TOWN OF EASTON STANDARD DETAILS SIDEWALK RAMPS PARALLEL STANDARD NO: TOE-R-7-04
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1 TYPICAL LIGHT DUTY ROAD CROSS SECTION STANDARD DETAIL N.T.S.

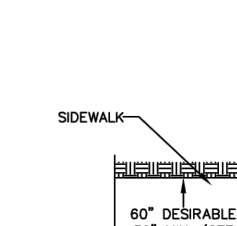


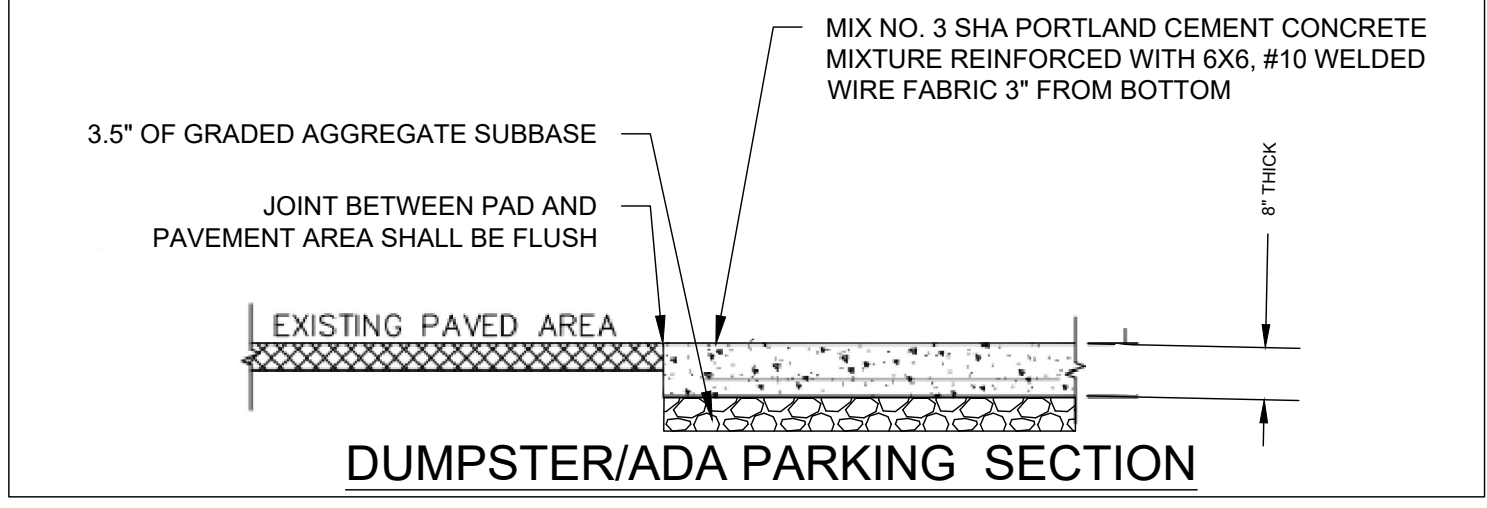
- PAVEMENT SECTION:**
- HOT MIX ASPHALT SURFACE COURSE (SUPERPAVE 9.5 MM) 2 INCHES
 - HOT MIX ASPHALT BASE COURSE (SUPERPAVE 19 MM) 2.5 INCHES
 - GRADED AGGREGATE SUBBASE (MARYLAND TYPE CR-6 OR GA SUBBASE) 6 INCHES
 - SUBGRADE MATERIAL TO BE SUITABLE AND COMPACTABLE TO 95% ASTM D698

	APPROVAL <i>[Signature]</i> TOWN ENGINEER DATE: 1/1/2020 ISSUED: JANUARY 2020	TOWN OF EASTON STANDARD DETAILS DETECTABLE WARNING SURFACES STANDARD NO: TOE-R-7-08
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	APPROVAL <i>[Signature]</i> TOWN ENGINEER DATE: 1/1/2020 ISSUED: JANUARY 2020	TOWN OF EASTON STANDARD DETAILS STANDARD DEPRESSED CURB AND GUTTER FOR SIDEWALK RAMPS STANDARD NO: TOE-R-6-03
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	APPROVAL <i>[Signature]</i> TOWN ENGINEER DATE: 1/1/2020 ISSUED: JANUARY 2020	TOWN OF EASTON STANDARD DETAILS MOUNTABLE CURB AND GUTTER STANDARD NO: TOE-R-6-02
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	APPROVAL <i>[Signature]</i> TOWN ENGINEER DATE: 1/1/2020 ISSUED: JANUARY 2020	TOWN OF EASTON STANDARD DETAILS RESIDENTIAL AND COMMERCIAL ENTRANCE #2 STANDARD NO: TOE-R-4-02
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APPROVED:	APPROVED:	APPROVED:
TOWN OF EASTON - TOWN ENGINEER	TOWN OF EASTON PLANNING AND ZONING	EASTON UTILITIES - MANAGER OF ENGINEERING
DATE	DATE	DATE

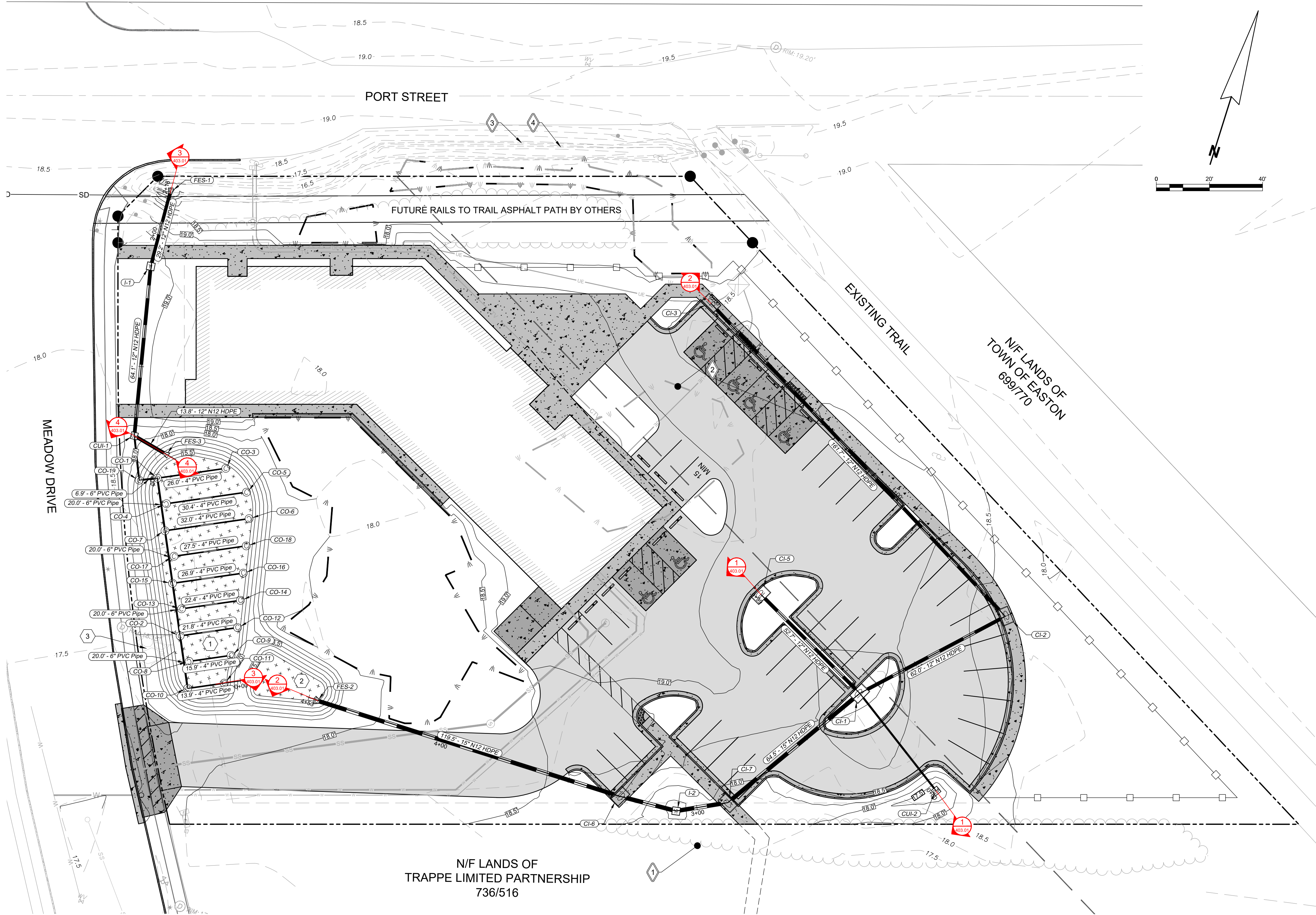
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engineering design & development services

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www.rauchinc.com
Maryland Office: 105 N. Harrison St., Easton, MD 21601
Virginia Office: 8229 Boone Blvd., Suite 625 - Vienna, VA 22182

21722

Professional Certification.	
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.	
License No. 11024	
Expiration Date: July 24, 2022	
REVISIONS	DESCRIPTION
REV. #	DATE
DATE:	8/29/2022
SCALE:	N/A
DRAWN BY:	MCF
DESIGNED BY:	JWL
APPROVED BY:	CDR
SHEET NO.:	C-305.01



STORMWATER QUANTITY NOTES

- 1 SUBMERGED GRAVEL WETLAND. DETAIL ON SHEET 405.01
- 2 FOREBAY
- 3 EMERGENCY RIP-RAP SPILLWAY

EXISTING FEATURES

- 1 TREE LINE
- 2 NON-TIDAL WETLAND
- 3 TOP OF DITCH
- 4 BOTTOM OF DITCH

STORMWATER & STORM DRAIN PLAN

OF THE LANDS OF

PORT STREET COMMONS

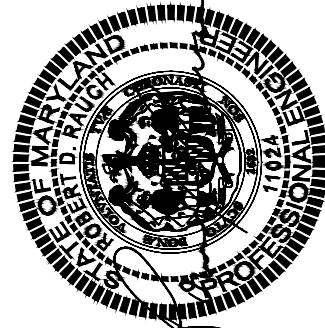
TAX MAP 0034, GRID 0015, PARCEL 0077

DR

PREPARED FOR CHESAPEAKE COMMUNITY DEVELOPMENT LLC

RAUCH
INC.
engineering design &
development services

Office: 410.770.0081 | Fax: 410.770.9867
www.rauchinc.com
Maryland Office: 105 N. Harrison St., Easton, MD 21601
Virginia Office: 8229 Boone Blvd., Suite 625 - Vienna, VA 22182



Professional Certification.
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. 11024
Expiration Date: July 24, 2022

REVISIONS

REV. #	DATE	DESCRIPTION

DATE: 8/29/2022

SCALE: 1" = 20'

DRAWN BY: MCF

DESIGNED BY: JWJ

APPROVED BY: CDR

SHEET NO.: C-401.01

APPROVED:

TOWN OF EASTON - TOWN ENGINEER

DATE

APPROVED:

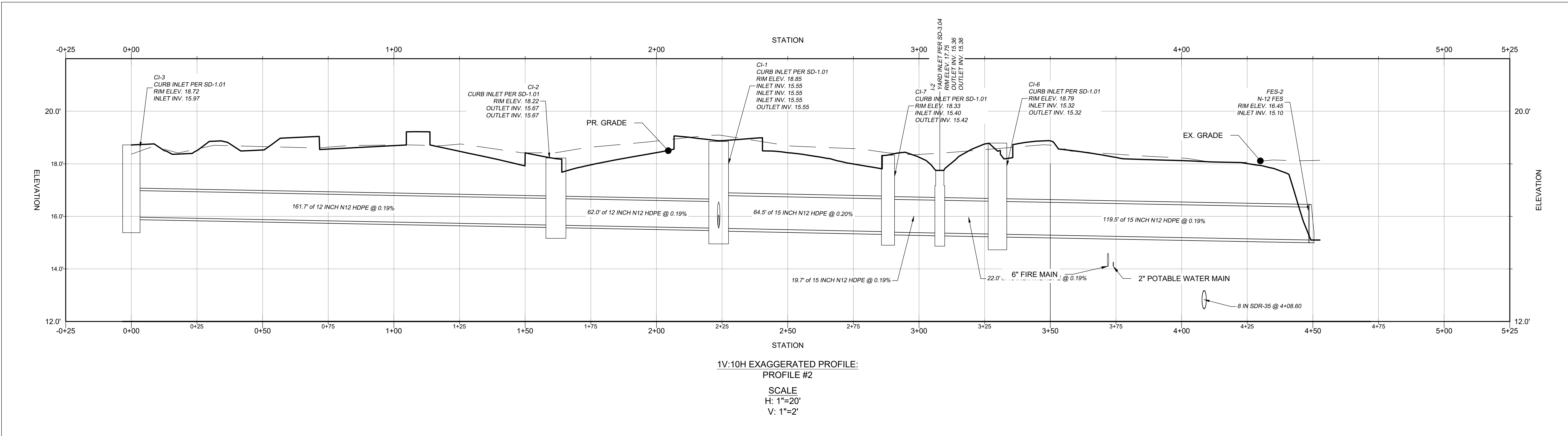
TOWN OF EASTON PLANNING AND ZONING

DATE

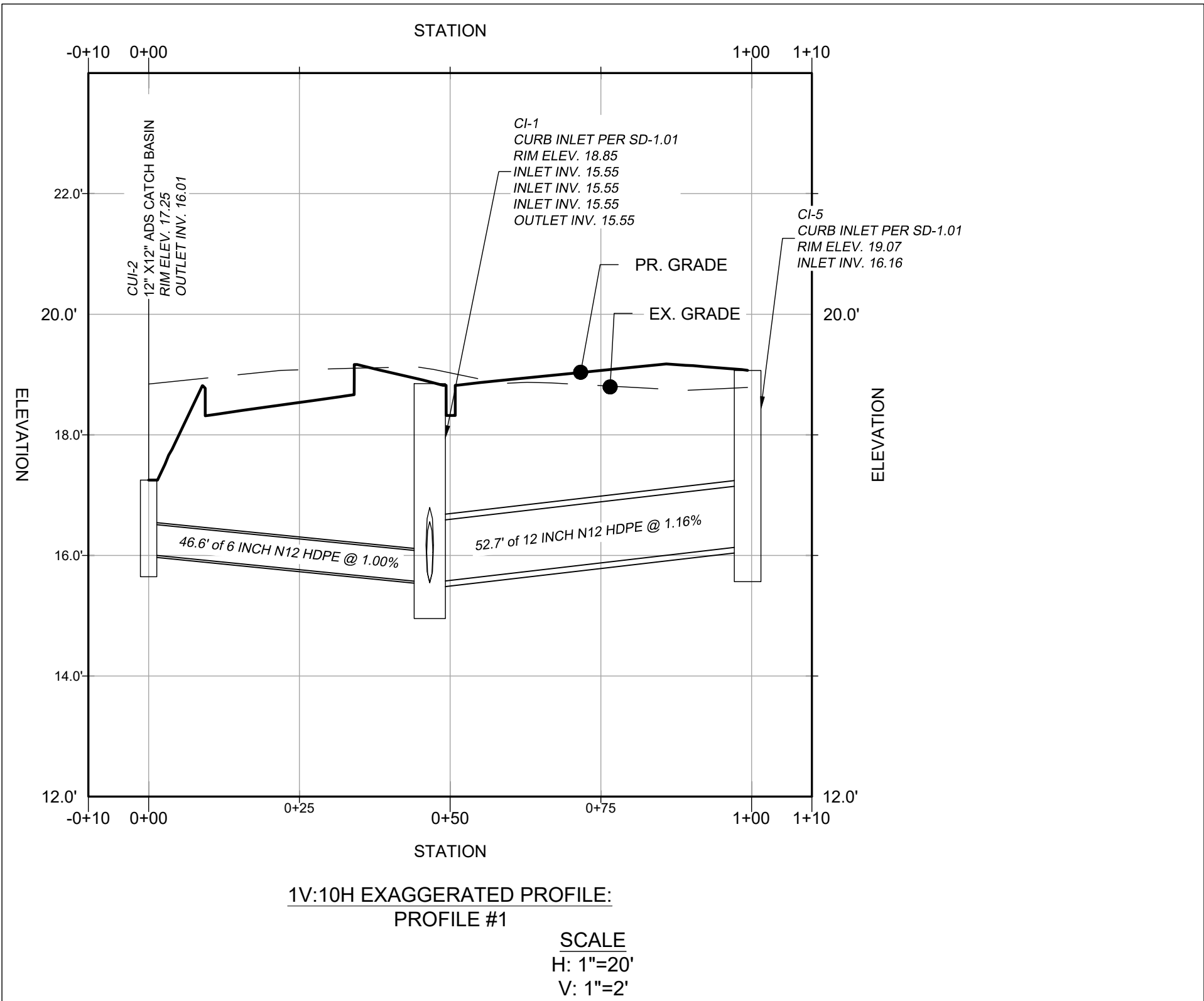
APPROVED:

EASTON UTILITIES - MANAGER OF ENGINEERING

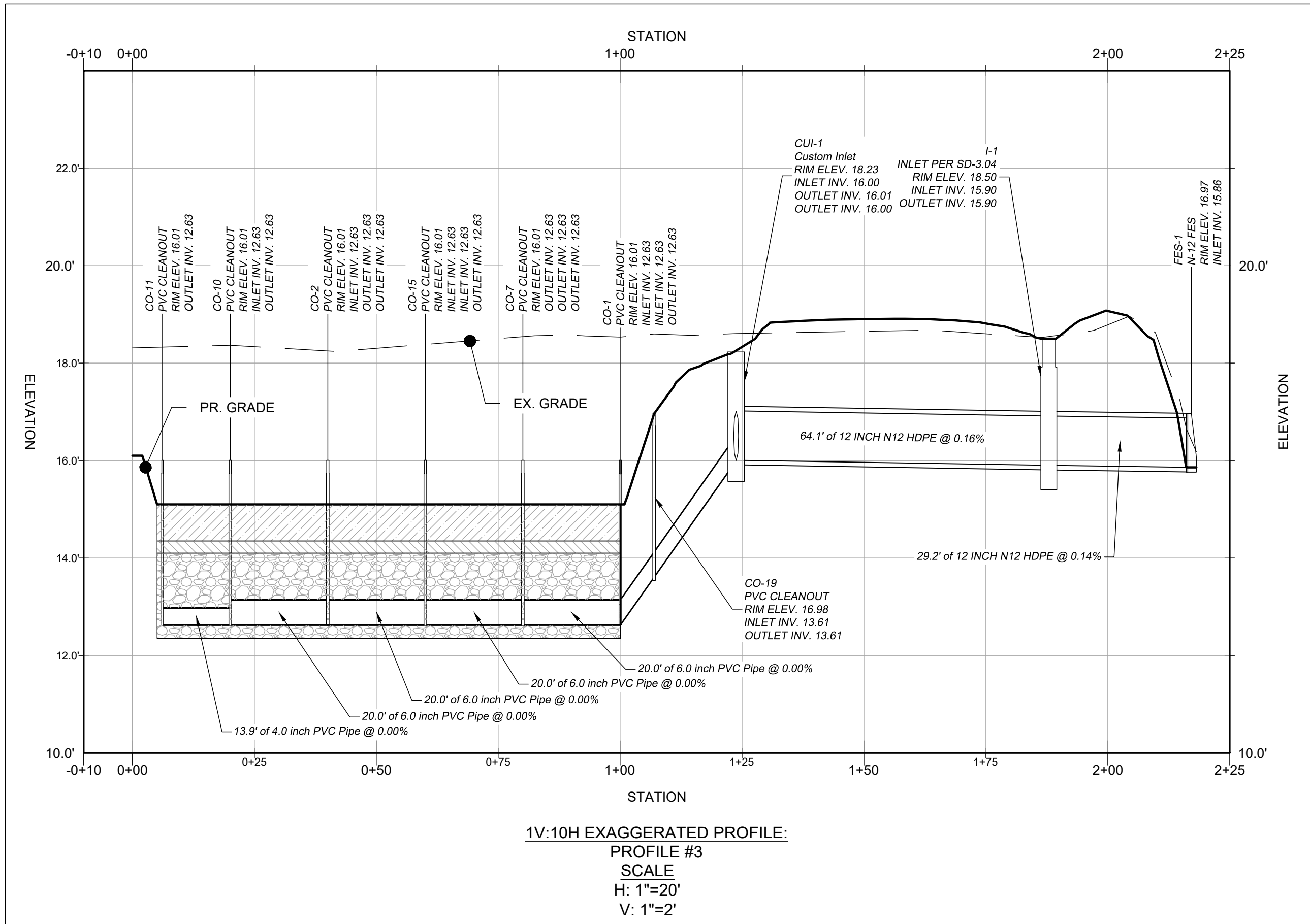
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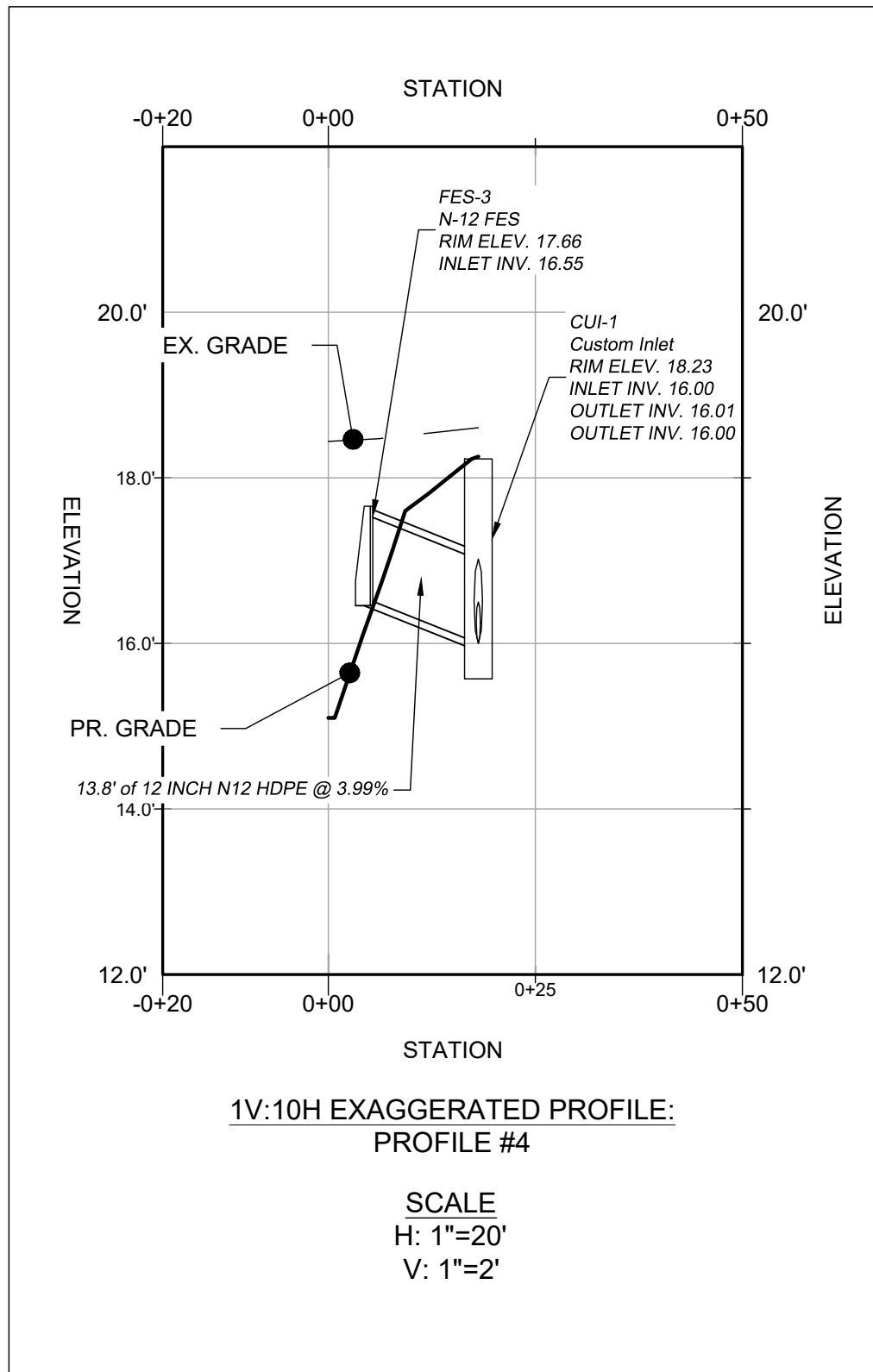
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PROFILE #2
SCALE
H: 1"=20'
V: 1"=2'



1V:10H EXAGGERATED PROFILE:
PROFILE #1
SCALE
H: 1"=20'
V: 1"=2'



1V:10H EXAGGERATED PROFILE:
PROFILE #3
SCALE
H: 1"=20'
V: 1"=2'



1V:10H EXAGGERATED PROFILE:
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APPROVED:

TOWN OF EASTON - TOWN ENGINEER

APPROVED:

TOWN OF EASTON PLANNING AND ZONING

APPROVED:

EASTON UTILITIES - MANAGER OF ENGINEERING

STORMWATER PROFILES

OF THE LANDS OF

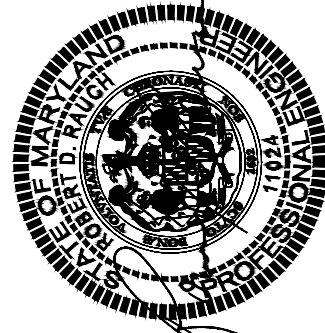
PORT STREET COMMONS

TAX MAP 0034, GRID 0015, PARCEL 0077

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DATE: 8/29/2022

SCALE: N/A

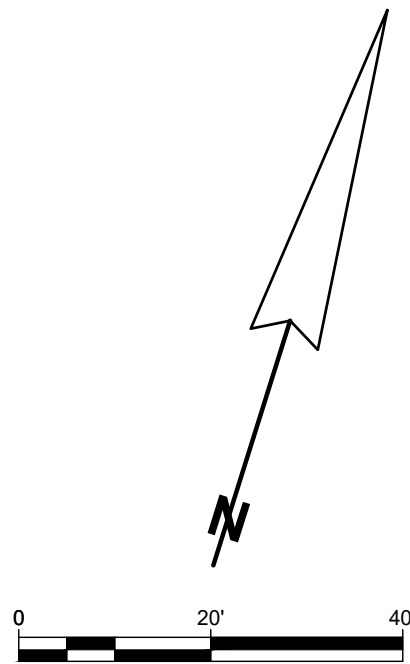
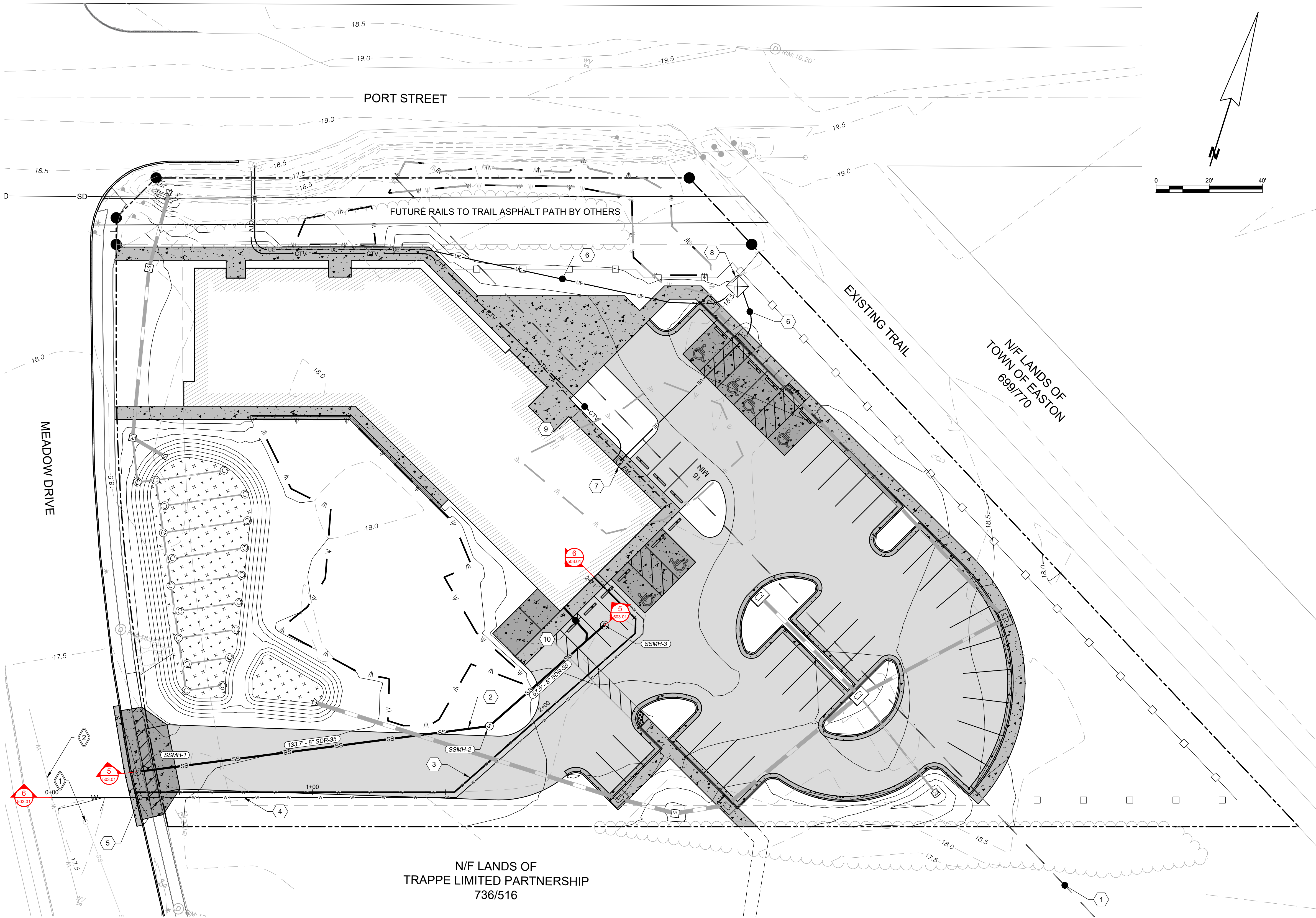
DRAWN BY: MCF

DESIGNED BY: JWJ

APPROVED BY: CDR

SHEET NO.: C-403.01

Z:\ARC/CIVIL/PRODUCTION/PLAN/ARC PRODUCTION SITE PLAN.DWG



PROPOSED UTILITY FEATURES

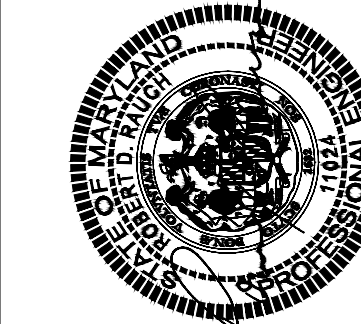
- 1 DELMARVA POWER & LIGHT COMPANY EASEMENT LINE
- 2 8" SDR-35 SEWER MAIN
- 3 6" FIRE C-900 WATER LINE
- 4 2" POTABLE SDR-9 HDPE PIPE WATER LINE
- 5 WATER METER
- 6 UNDERGROUND ELECTRIC
- 7 ELECTRIC METER
- 8 TRANSFORMER
- 9 COMMUNICATION LINE
- 10 8" SDR-35 SEWER LATERAL

EXISTING FEATURES

- 1 APPROXIMATE LOCATION OF EXISTING SEWER
- 2 EXISTING WATER

UTILITY PLAN
OF THE LANDS OF
PORT STREET COMMONS
TAX MAP 0034, GRID 0015, PARCEL 0077
FIRST ELECTION DISTRICT, TALBOT COUNTY, MARYLAND
PREPARED FOR CHESAPEAKE COMMUNITY DEVELOPMENT LLC

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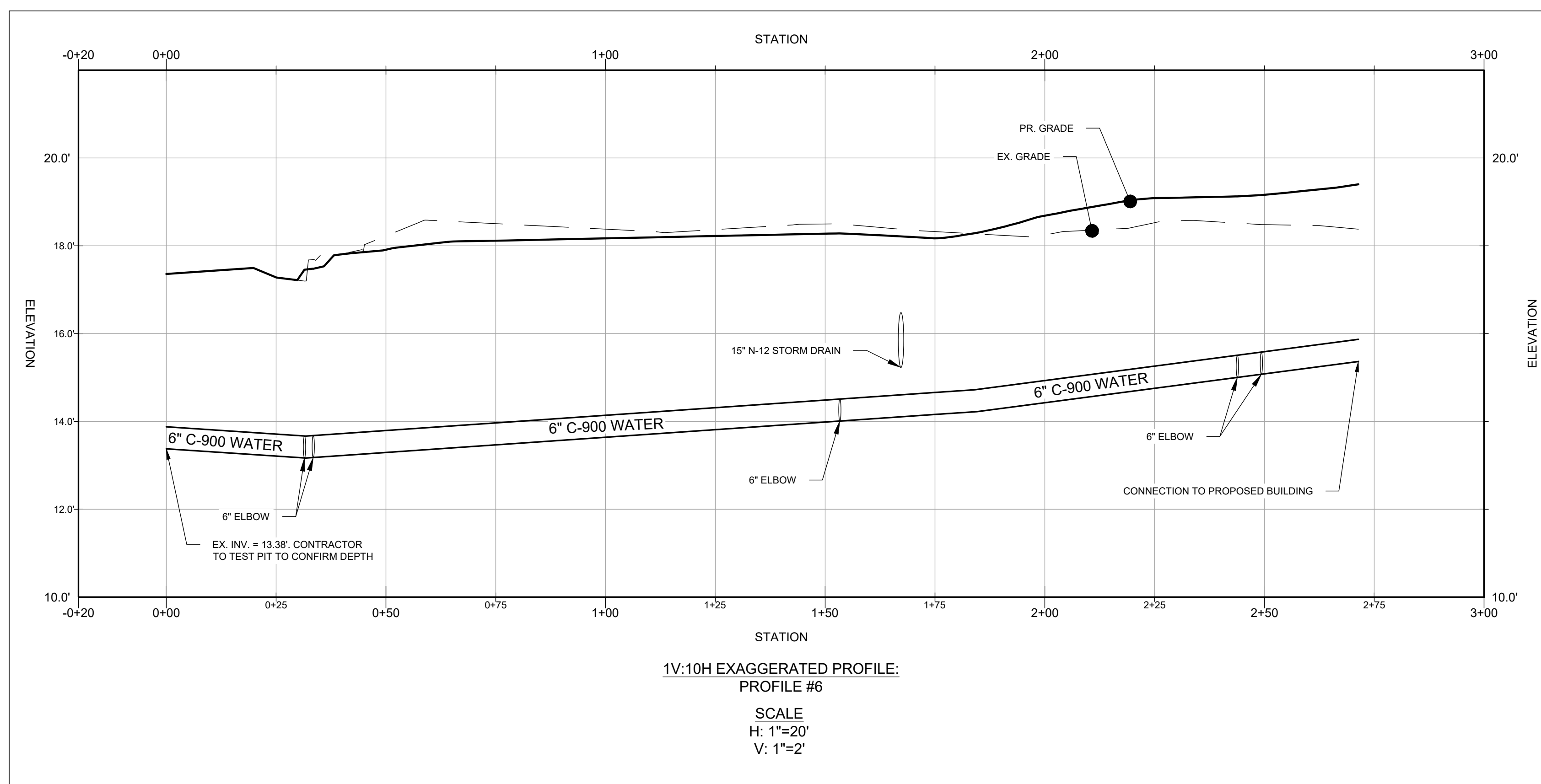
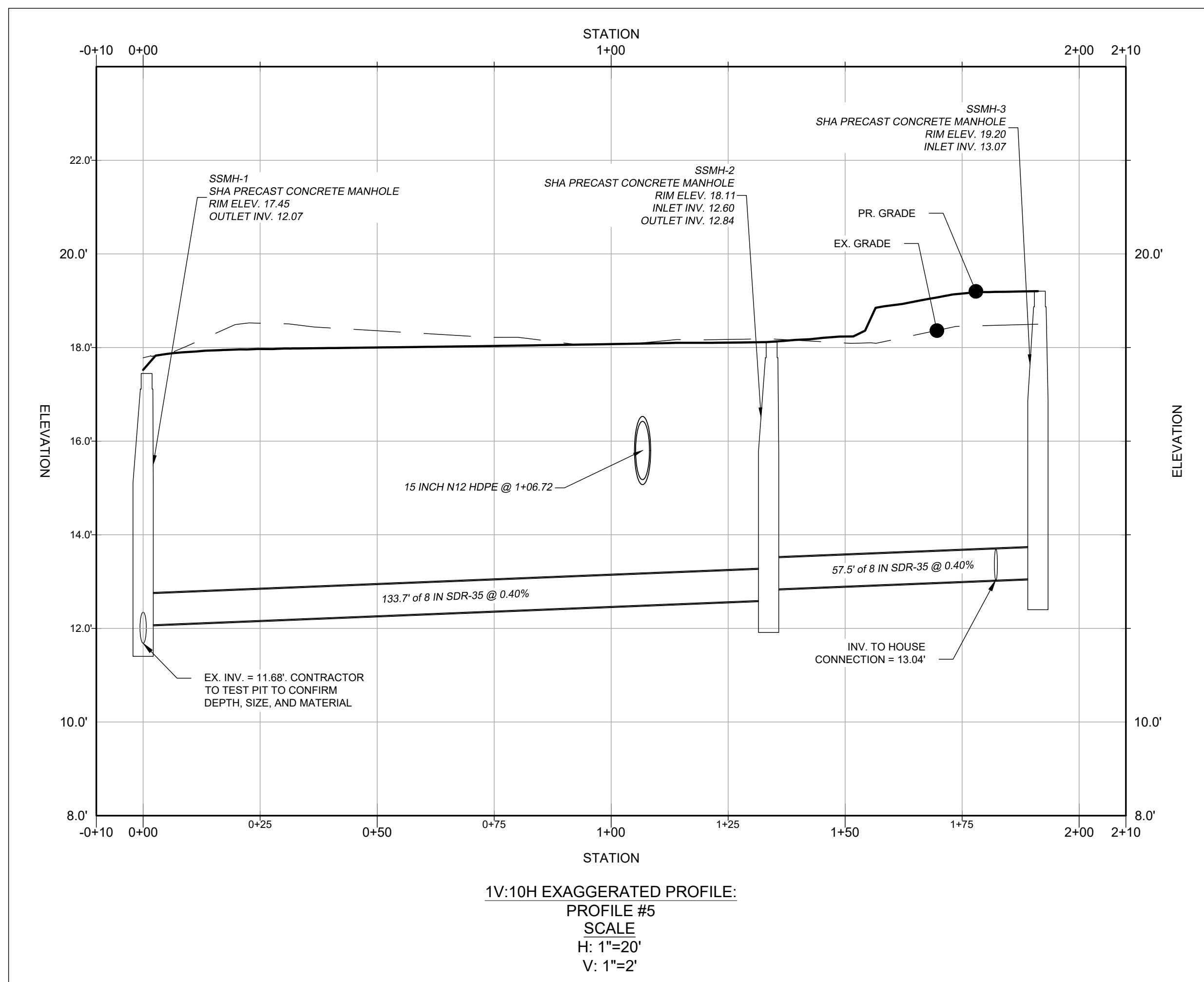


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License No. 11024
Expiration Date: July 24, 2022

REVISIONS	
REV. #	DESCRIPTION

DATE:	8/29/2022
SCALE:	
DRAWN BY:	MCF
DESIGNED BY:	JWL
APPROVED BY:	CDR
SHEET NO.:	C-501.01

APPROVED:	APPROVED:	APPROVED:
TOWN OF EASTON - TOWN ENGINEER	TOWN OF EASTON PLANNING AND ZONING	EASTON UTILITIES - MANAGER OF ENGINEERING
DATE	DATE	DATE



STRUCTURE SCHEDULE SEWER				
STRUCTURE NAME	LOCATION	STRUCTURE TYPE AND SIZE	CONNECTED PIPES	RIM ELEVATION
SSMH-1	N403021.47, E1573228.70	48 DIA PRECAST CONCRETE MANHOLE PER MD 384.01	INV OUT = 12.07	17.45
SSMH-2	N403079.29, E1573349.20	48 DIA PRECAST CONCRETE MANHOLE PER MD 384.01	INV IN = 12.80 INV OUT = 12.84	18.11
SSMH-3	N403128.86, E1573378.38	48 DIA PRECAST CONCRETE MANHOLE PER MD 384.01	INV IN = 13.07	19.20

PIPE SCHEDULE SEWER				
SIZE AND MATERIAL	LENGTH	SLOPE	UPSTREAM STRUCTURE AND INVERT	DOWNSTREAM STRUCTURE AND INVERT
8 IN SDR-35	133.65'	-0.40%	SSMH-1 INV. 12.07'	SSMH-2 INV. 12.60'
8 IN SDR-35	57.54'	-0.40%	SSMH-2 INV. 12.84'	SSMH-3 INV. 13.07'

UTILITY PROFILE

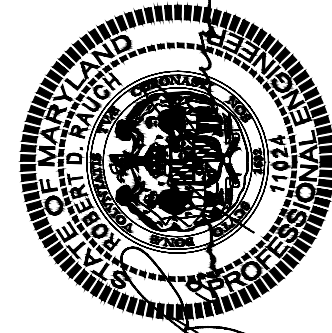
OF THE LANDS OF

PORT STREET COMMONS

TAX MAP 0034, GRID 0015, PARCEL 0077

FIRST ELECTION DISTRICT, TALBOT COUNTY, MARYLAND

PREPARED FOR CHESAPEAKE COMMUNITY DEVELOPMENT LLC



Professional Certification.
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[illegible]

DATE: 8/29/2022

SCALE: N/A

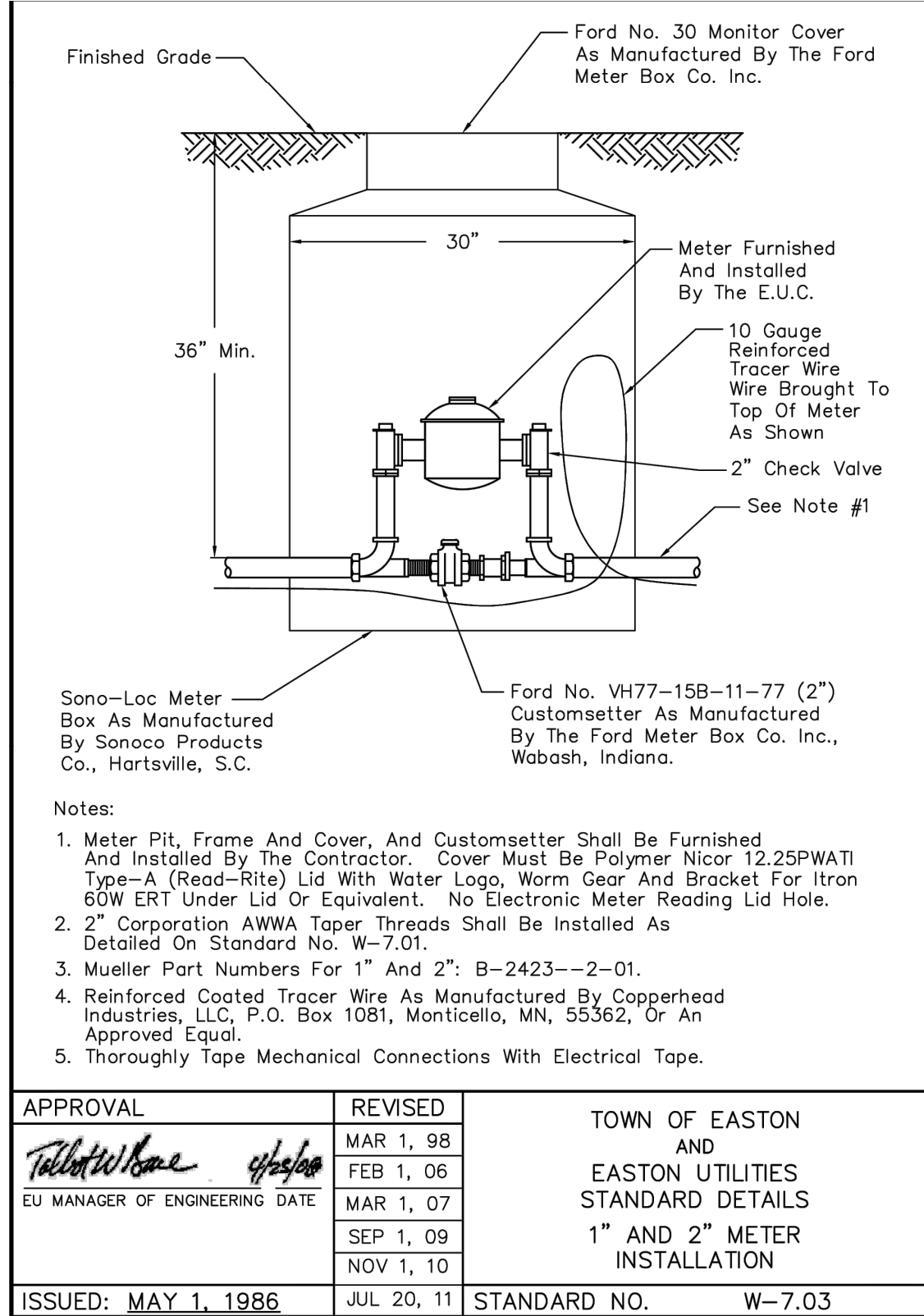
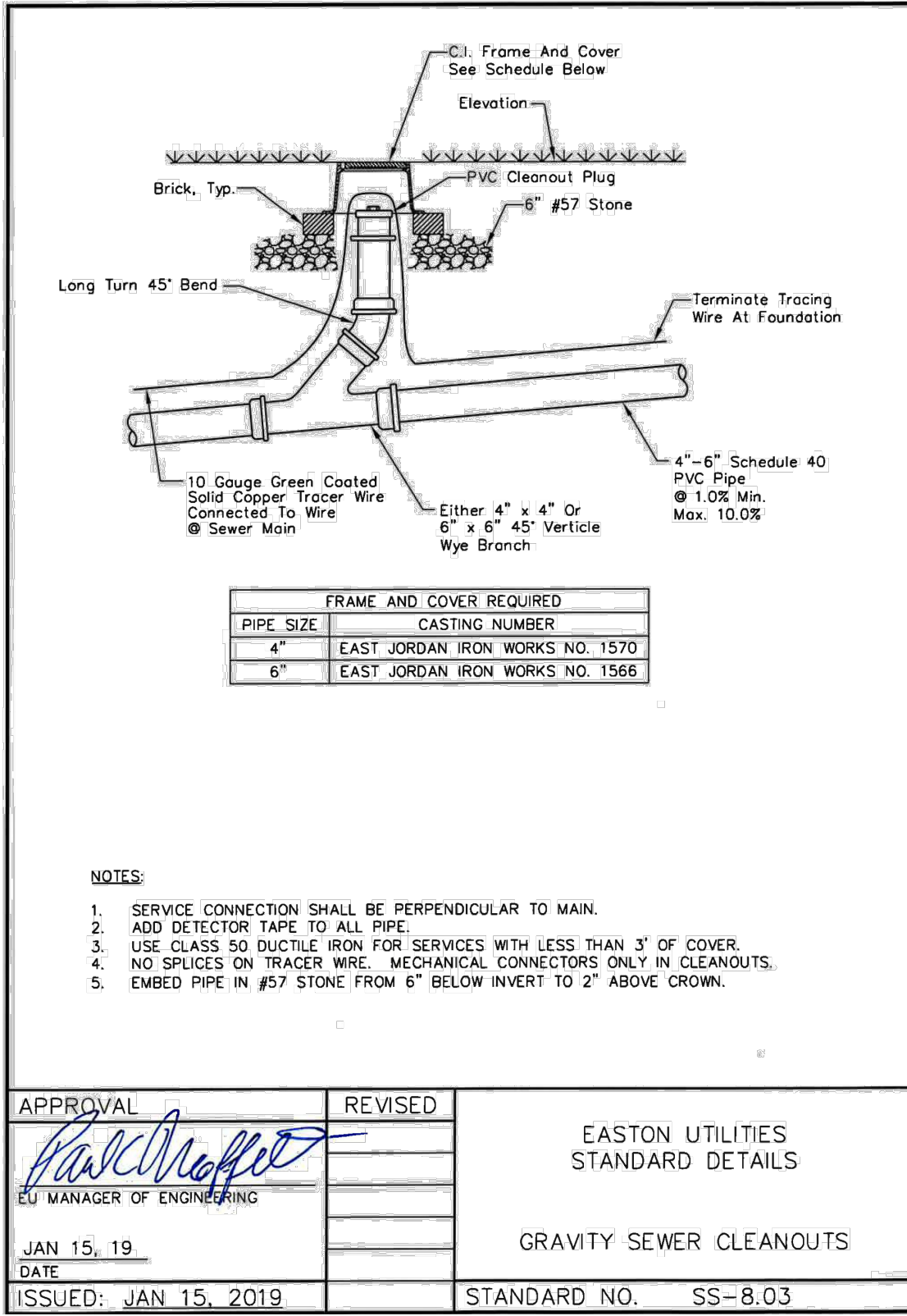
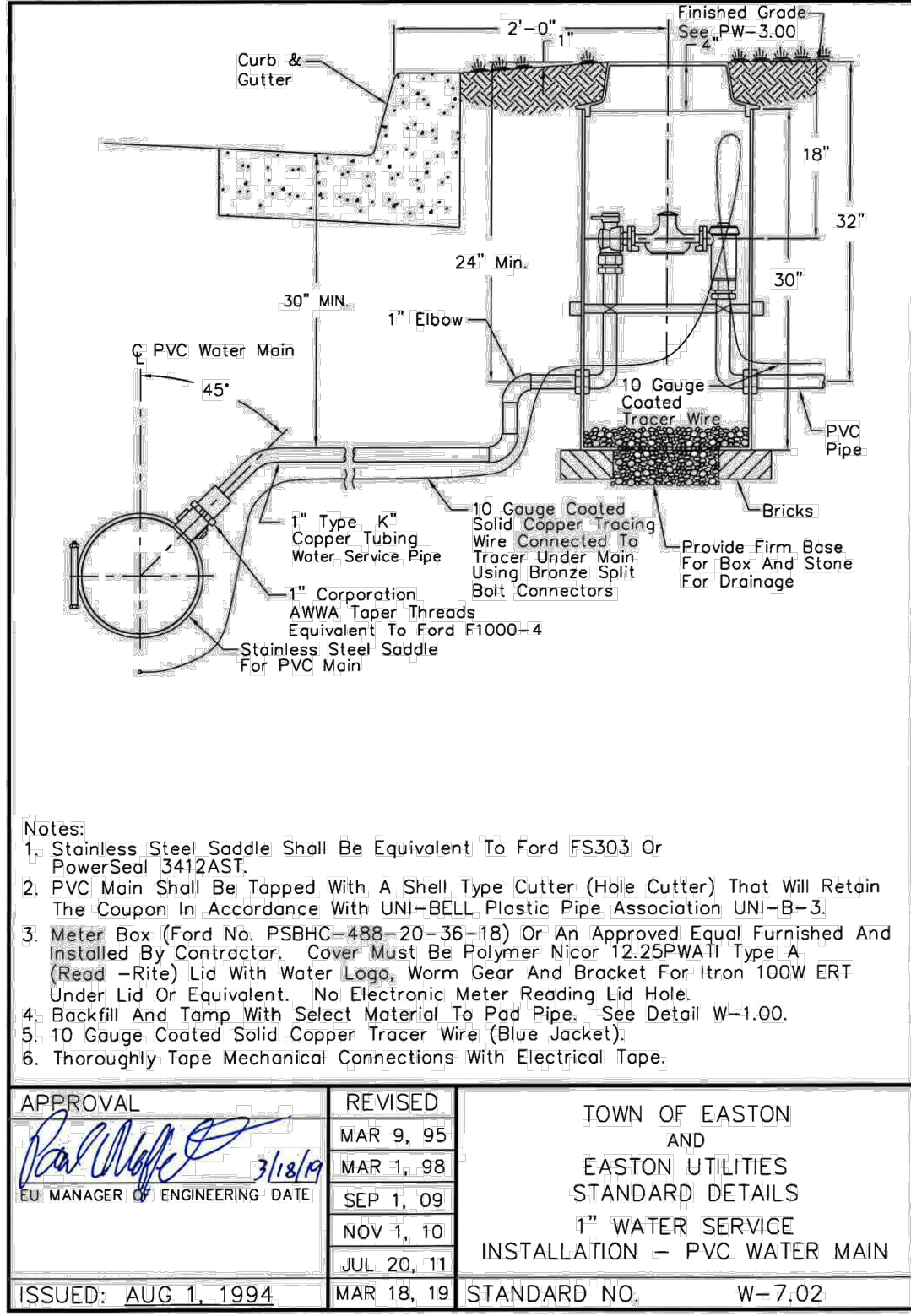
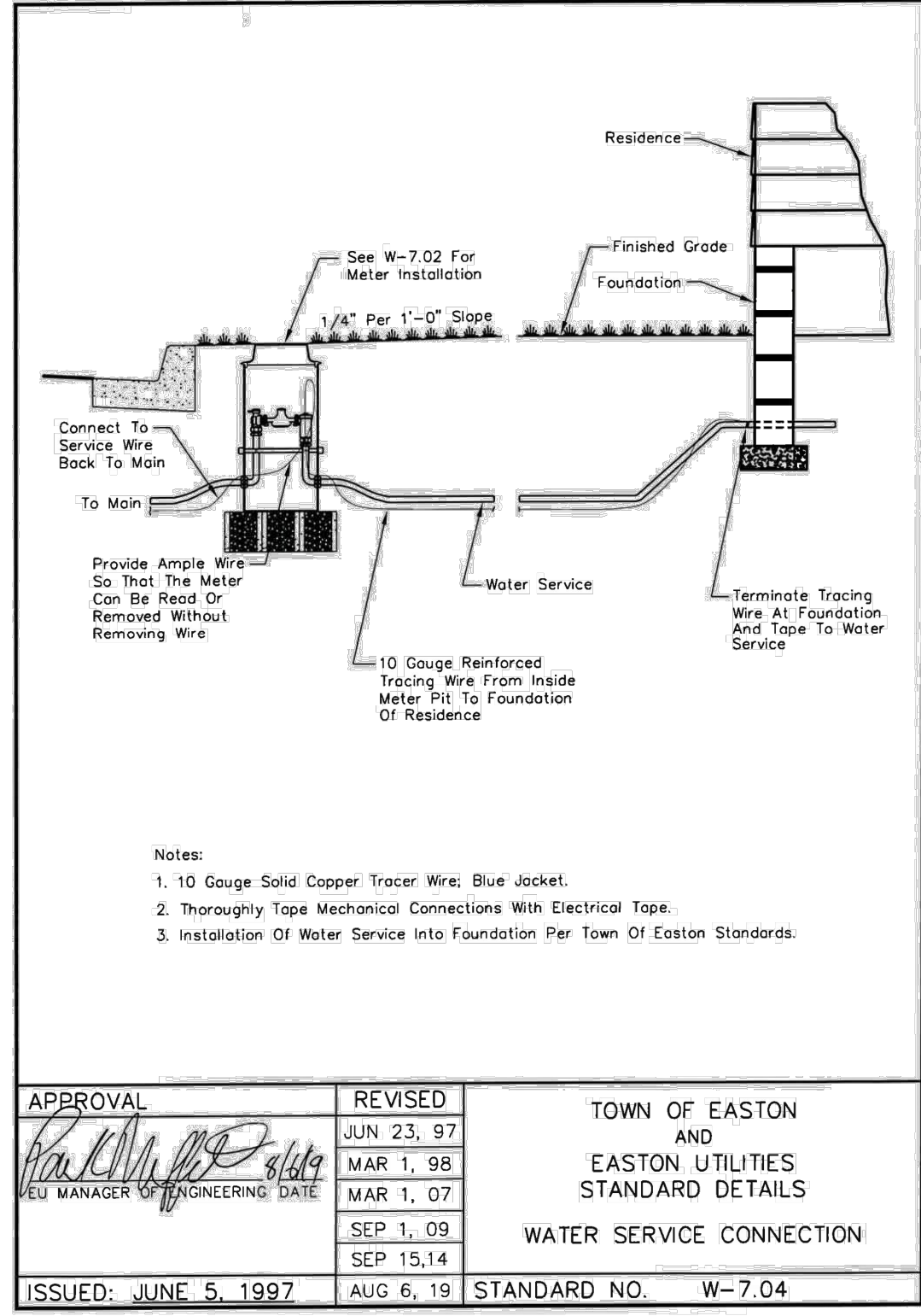
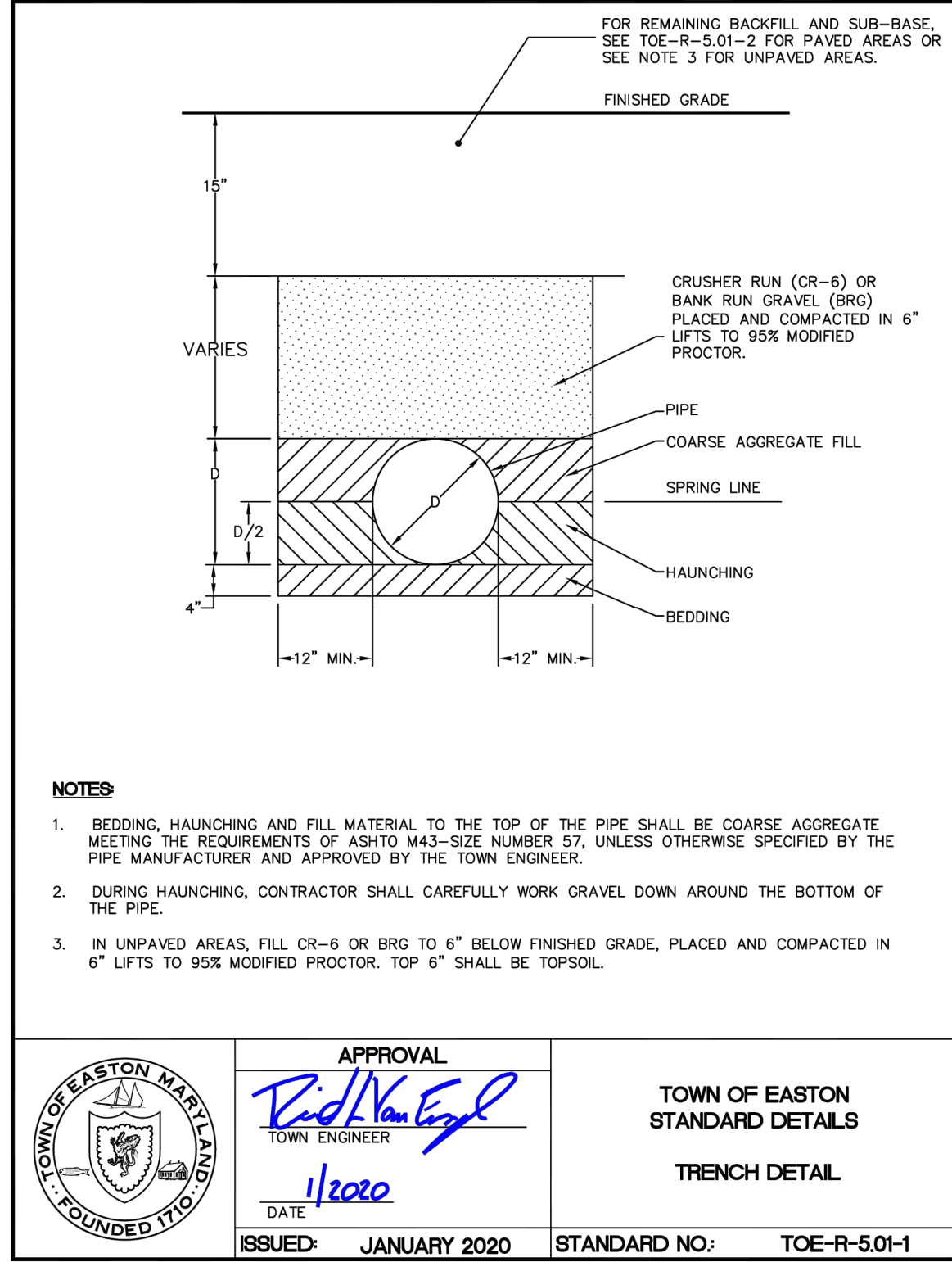
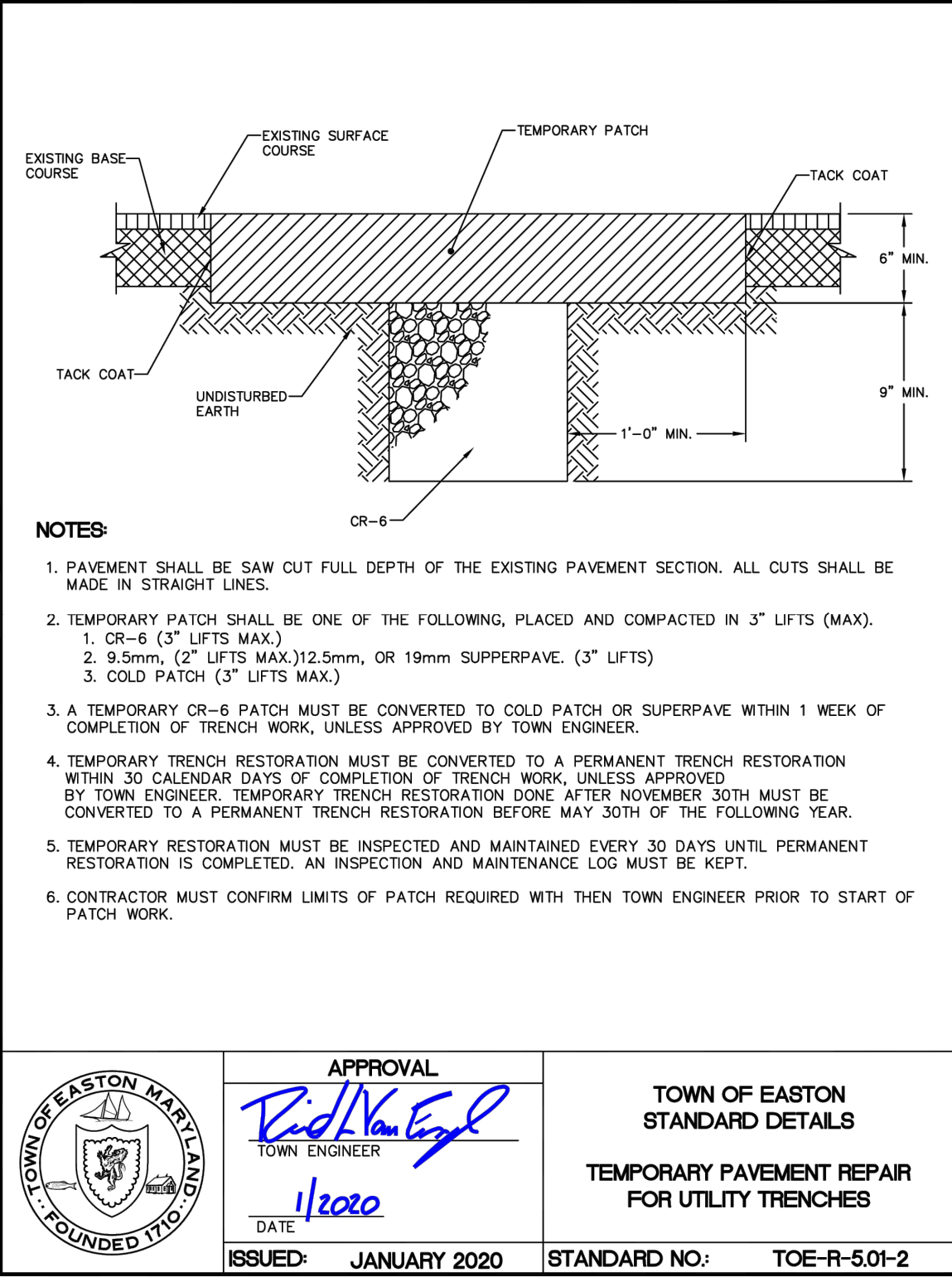
DRAWN BY: MCF

DESIGNED BY: JWJ

APPROVED BY: CDR

SHEET NO.: C-503.01

APPROVED:		APPROVED:		APPROVED:	
TOWN OF EASTON - TOWN ENGINEER	DATE	TOWN OF EASTON PLANNING AND ZONING	DATE	EASTON UTILITIES - MANAGER OF ENGINEERING	DATE



APPROVED: TOWN OF EASTON - TOWN ENGINEER DATE

APPROVED: TOWN OF EASTON PLANNING AND ZONING DATE

APPROVED: EASTON UTILITIES - MANAGER OF ENGINEERING DATE

UTILITY DETAILS
OF THE LANDS OF
PORT STREET COMMONS
TAX MAP 0034, GRID 0015, PARCEL 0077
FIRST ELECTION DISTRICT, TALBOT COUNTY, MARYLAND
PREPARED FOR CHESAPEAKE COMMUNITY DEVELOPMENT LLC

RAUCH
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www.rauchdesign.com
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Virginia Office: 8229 Boone Blvd., Suite 625 - Vienna, VA 22182

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License No. 11024
Expiration Date: July 24, 2022

REVISIONS	
REV. #	DESCRIPTION

DATE: 8/29/2022
SCALE: N/A
DRAWN BY: MCF
DESIGNED BY: JWJ
APPROVED BY: CDR
SHEET NO.: C-505.01



Planning Commission MEETING AGENDA

Thursday, September 15, 2022 - 1:00 PM
Council Chambers, Easton Town Office
14 S Harrison Street

affordable/workforce housing for low- and moderate-income households. Areas within the building will be reserved for job training, counseling, and behavioral health services. The building will be 3 stories high and have a square footage of 24,917 sf. A sidewalk will surround the building with 44 parking spaces and would require a Parking Waiver reduction of 14 parking spaces. A submerged gravel wetland facility will be provided to manage stormwater due to poor soil conditions. There are existing non-tidal wetlands and trees on site with a portion of them getting cleared and grubbed. Afforestation will be provided off site.

1. Call to Order

2. Approval of Minutes.

- a. Approval of Minutes from the August 18, 2022 meeting.

3. New Business

a. Applicant:

Owner:

Location:

Nature of Request:

Sierra Crist - Town of Easton

Town of Easton

Mistletoe Drive Lot 9A

The Town of Easton is relocating two buildings from 672 Glenwood Avenue (old DPW) to the lot across from the current DPW lot on Mistletoe Drive. The purpose of this request is to seek sketch site plan approval from the Town of Easton Planning Commission. The property is intended to be an extension of the Town's Public Work's facility. The site is currently improved with an entrance, improved surfaces and SWM.

b. Applicant:

Owner:

Location:

Nature of Request:

Casey Rauch - Rauch Inc.

Town of Easton

9095 Mistletoe Drive

The Applicant requests a Parking Waiver for an additional 15 parking spaces for training events.

c. Applicant:

Owner:

Location:

Nature of Request:

Casey Rauch - Rauch Inc.
Chesapeake Community Development LLC

Port Street Lot 1, Parcel 77

The site is located in the **MXW District**. The Arc is proposing

4. Old Business

- a. Review and recommendations for the Subdivision Regulations.

b. Applicant:

Owner:

Location:

Nature of Request:

Mike Irons c/o K.Hovanian Homes of MD, LLC

Monahan, Sandra Brooks Trustee, et al.
29434 Dutchman's Lane

The Applicant proposes a 252 single family lot subdivision with a community parcel, to establish a proposed 55+ age-restricted active adult community. In addition, the Applicant is seeking a "Planning Commission Determination" to allow the Applicant to use the community-owned open space as a credit for their requirement for dedication of community park land per Section 708 (d). This is a continuation of the Commission's review of this request held at their August 18, 2022 meeting. As part of their response to the Commission's comments, the Applicant is proposing to increase the community open space areas (exclusive of forest conservation, SWM areas and our Community Amenity Parcel) to 10.3 acres. The Park requirement for this

subdivision is 6.9 acres (1,200SF/lot x 252 lots).

5. Discussion Item

**a. Applicant:
Owner:**

Brendan S. Mullaney
Lands of Lot 16, LLC and Mr. Thomas
Cohee

Location:

28580 Manys Court

Nature of Request:

The Applicant formally requests an
award for Growth Allocation for lots 16 &
20 in the Talbot Commerce Park project
to reclassify Lot 20's 8.348 Acres+/-
from RCA to IDA.

6. Adjournment.

**Town of Easton**

Engineering, Planning and Zoning

14 South Harrison Street, Easton, MD 21601

Supplemental Waiver Request Application

Waiver Request TypeSidewalk ☐Parking Spaces ☒Parking/Aisle Dimension ☐Landscaping & Buffering ☐Signage ☐Other ☐**Project Information**

Address	9095 MISTLETOE DRIVE, EASTON, MD 21601						
Tax Map	25	Grid	16	Parcel	138	Lot	8
Zoning District	I	PC Meeting Date		Historic District	Yes ☐	No ☒	
Owner or Agent	TOWN OF EASTON						
Mailing Address	P.O. BOX 520						
Telephone No.	(410) 822-1943		Email				

Request Details

Please attach a detailed description of the waiver request(s) being made and the justification(s) for requesting said waiver(s).

MINIMUM PARKING REQUIRED = 2 SPACES, MAXIMUM PARKING REQUIRED = 10 SPACES
DURING TRAINING EVENTS THE CLIENT IS EXPECTING THE PARKING LOT OF 25 DESIGNED SPACES TO BE AT OR NEAR FULL CAPACITY SO WE ARE ASKING FOR A WAIVER FOR THE ADDITIONAL 15 PARKING SPACES.

☒ Ordinance Section Supporting Waiver Request.

28-1001.3

Any modifications during review shall warrant an updated application.

I do hereby solemnly declare and affirm that the information provided by this application and the documents attached hereto accurately represent the conditions of the request and that submission of an incomplete application will be returned for correction prior to processing.

Signature of Applicant or Agent

Date 8/12/2022

Printed Name of Applicant or Agent

CASEY RAUCH

Easton Staff Development Review Comment Responses

Date: August 11, 2022

Town of Easton
14 S. Harrison Street
Easton, MD 21601

Project: 9095 Mistletoe Drive – Easton Volunteer Fire Department
ATTN: Joe Mayer

Mr. Mayer,
Rauch inc. has reviewed comments received January 26th, 2022 and offers the following responses to the Easton Town Engineer, Town of Easton Planning and Zoning, and Easton Utilities:

- Provide the square footage of warehouse and training facility. If the combined structures are over 5,000 square feet, the Applicant must submit a Planning Commission Concept, Use and Design Application for the next available Planning Commission Meeting.
 - Combined building square footage is 4,985 s.f.
- If the Applicant is required to obtain Site Plan and Architectural Approval from the Planning Commission, please provide a general landscaping plan and conceptual building elevations or renderings illustrating the character, scale, and materials of all proposed structures.
 - N/A
- Add the total maximum building height to the Site Data on sheet G-100.
 - Maximum height has been added to sheet G-100.
- Address the total volume of water being used for the training facility and confirm this is incorporated in the calculations in the Stormwater Management Report.
 - Please see SWM Report narrative for calculations.
- Verify the required parking spaces per Zoning Ordinance Section 28-1001.3. Please determine if a Parking Waiver Request is required.
 - Parking waiver is required due to the excess amount of parking spaces provided.
- Address potential impacts to Non-Tidal Wetlands and or Forest Conservation if proposing perimeter fencing on the north side of the site.
 - Wetland impacts will be at the proposed discharge point. A wetland permit is in the process of being completed.

PLANNING & ZONING COMMENTS

Site Plan

1. Show and label existing paving widths and utilities along Mistletoe Drive. Provide existing road name on all plan views.
 - Widths, utilities, and road names have been added to all sheets.

2. Show and label adjacent Non-Tidal Wetlands/25' NTW Buffer, 100' Perennial Stream Buffer, Open Space Area #3 and Forest Conservation Area on all plan views. See attached Record Plat KMD 89/178 & 179 for reference.
 - These have been added accordingly.
3. Include a scaled dimension between the proposed building and property line.
 - This has been added to sheet C-101.00.
4. Prior to Site Development Plan Review, provide spot elevations for all handicap parking areas.
 - Spot elevations have been provided on sheet C-301.01.
5. Will there be a proposed monument sign? If so, a *"Certificate of Occupancy Update & Signage Application"* will be required prior to the installation of the Monument Sign. In addition, proposed fence onsite will require a *"Fence Application"* prior to installation.
 - This will be submitted under a separate cover.
6. The proposed refuse collection area will require screening prior to Final Site Plan approval.
 - A screening fence has been provided.
7. Prior to Site Development Plan Review, provide photometric plan and light details for the site.
 - Photometric plan will be submitted prior to final plan approval.
8. The storm drain outfall areas will require MDE approval prior to Final Site Plan approval.
 - Duly noted.
9. Please be advised, that due to the close proximity to Easton Airport, FAA Form 7460-1 Notice of Proposed Construction or Alteration must be filed in accordance with the Title 14 of the Code of federal Regulations (14 CFR) Part 77. Please contact Mr. Micha Risher, Airport Manager at (410)-770-8055 to coordinate.
 - Noted.
10. Verify and label on the Site Sketch Plan that all proposed landscape material will be native plant species. Please see the attached "Talbot County Buffer Management Plan Guideline & Plant List" for reference.
 - Landscaping plan has been provided.
11. Prior to Site Development Plan Review add a separate Landscape Plan with landscape requirements described under section 28-1014. Include applicable notes from section 28-1014.2. Label and quantify proposed landscaping on the plan view sheet.

- Landscaping plan has been added.
12. Revise Parking Calculations on sheet C-101.00 to include the minimum and maximum vehicle spaces required per Zoning Ordinance Section 28-1001.3. Please determine if a Parking Waiver Request is required. See attached parking requirements.
- Parking calculations have been revised. A parking waiver will be required.
13. Please note, this site is under an active Grading Permit #21-16489 for clearing & grubbing of trees and rough grading of existing ground to provide positive drainage. Upon approval of site construction drawings, a grading permit is required for proposed construction.
- Duly noted.

Environmental Review

1. The proposed site is located within the approved subdivision of Mistletoe Hall, Record Plats MSA C2399-14903-1 thru 5. The subdivisions Forest Conservation requirements were addressed under the approved Forest Conservation Plan, dated June 5, 2020. However, the proposed storm drain outfalls will impact the Forest Conservation Area; as well as, the Non-Tidal Wetlands and 100' Perennial Stream Buffer. Please submit a Forest Conservation Plan and Application. Attached, please find the approved June 5, 2020-Forest Conservation Plan.
- Site has been redesigned as to not disturb any forest conservation area and perennial stream buffer areas. Wetland areas will be impacted in the location of the outfall pipe.

DEPARTMENT OF ENGINEERING COMMENTS

Plan Review

The **Sketch Plan** is **acceptable to the Engineering Department**.

Stormwater Management

The Stormwater Management Sketch Plan includes two (2) Micro-Biorention practices and a Bio-Swale to treat impervious area where burning will not take place. The Plan includes a Contech CDS Separator, Submerged Gravel Wetland, and Pond to treat the impervious area where burning will take place.

The **Stormwater Management Sketch Plan** (also called the "Sketch Site Plan" in the Stormwater Management Ordinance) is **Approved with the following condition:**

1. Provide a table in the SWM Report indicating the Required and Provided ESDv for EACH Practice/Drainage Area as well as the Total ESDv Required and Provided for the site.
 - **Table has been added.**

Please note that the application was reviewed for compliance with Stormwater Management regulations. The Town of Easton Engineering Department will continue to work with the Applicant to determine how the unique amount of water used for training will affect the stormwater management facilities and the site if the Planning Commission approves the concept and the project moves forward to technical design.

The project may proceed to the Stormwater Management Preliminary Plan.

EASTON UTILITIES COMMENTS

1. Extend or install 2" conduit for fiber optic communication
 - Fiber not needed within the site. Connection into the existing electric will need to be verified by Easton Utilities.
2. Show existing utilities that property will connect to
 - Existing utilities have been shown.
3. Will runoff from activities using water distribution water affect stormwater design?
 - We do not believe this will affect stormwater design but are in talks with the engineering dept. to confirm.
4. Provide approval from MDE to allow chlorinated water to be discharged to surface water without dichlorination
 - Noted.
5. Note #1 connection point is not believed to be 12"
 - This has been revised to reflect 10".
6. Provide a separation of 1' between crossings
 - 1.1' has been provided.
7. 12" watermain should be reduced and discussed. Provide projected water usage and need (pressure & flow)
 - 12" has been changed to 10". Projected water usage has been attached with this submittal.
8. Abandon existing 4" service if unused
 - Gas will be needed.
9. Provide access easement if meter not at property line
 - Noted.
10. Confirm use of pole barn does not require sprinklers
 - Pole building is 3,200 s.f. therefore sprinklers aren't required.
11. Gas shall not be under stormwater
 - Gas isn't under stormwater facilities.
12. 1" water service shall be per detail – copper
 - Added.
13. Show gas profile for service
 - Profile has been added.

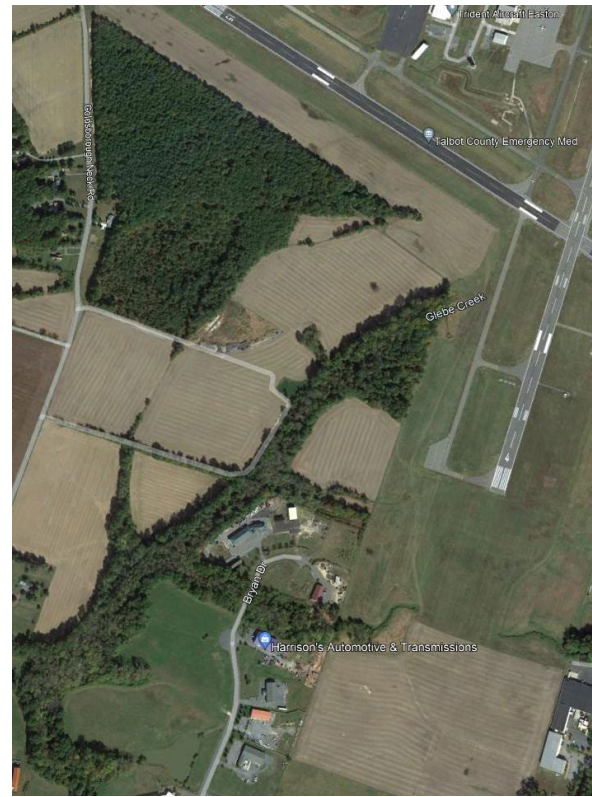
Please contact me if you have any questions. Thank you.
Casey Rauch – Rauch inc.



Docket/Case/Application Number: New Business
Applicant/Owner: Mr. Casey Rauch – Rauch, Inc./ Town of Easton- Owner
Address/Location: 9095 Mistletoe Drive
Tax Map: 0025 Parcel: 0138 Grid: 16 Deed Reference: 743/703 Plat Reference: 87/124
Public Hearing Date: 1:00 PM, September 15, 2022
Staff: Joseph A. Mayer

BRIEF SUMMARY OF REQUEST

The Applicant is requesting a Parking Waiver for 15 additional spaces for training events at the proposed Easton Volunteer Fire Department-Fire Training Facility and Warehouse. The site is zoned I.



MAP SOURCE: Google Earth

EXISTING ZONING	EXISTING LAND USE	SURROUNDING ZONING & LAND USE	SITE IMPROVEMENTS	SIZE OF PROPERTY
I	Vacant	I & BC Warehouse Offices	Easton Volunteer Fire Department-Fire Training Facility and Warehouse.	Lot 8 2.742 Ac.

**PARKING WAIVER**

The applicant proposes to construct a fire training facility for the Easton Volunteer Fire Department.

PROPERTY HISTORY

- Annexed in 1979.
- 2022.01.26 ESDR
- 2022.08.25 Development Site Plan Review

COMPATIBILITY with the ZONING ORDINANCE

The proposed use qualifies as “**Warehouse**” is Permitted within the **I Zone**.

	Use/Activity	Minimum Vehicle Spaces	Maximum Vehicle Spaces	Minimum Bicycle Spaces	Notes
	Industrial Buildings				
40	Warehouse	1 per 2000 sf GFA	1 per 350 sf GFA	--	

Warehouse Gross Floor Area: 3,200 SF (1.6 = 2 Spaces Minimum, 9.1 = 10 Spaces Maximum)

Proposed Parking Spaces = 25 spaces total (23 parking spaces and 2 ADA spaces)

28-114 page -51

“Warehouse - A building used primarily for the storage of goods and materials.”

28-201 table 2.1 (5) 520**I**

520	Warehousing, Wholesale, storage & distribution	--	--	--	--	--	P	SE	P	P	--	
-----	--	----	----	----	----	----	---	----	---	---	----	--

SECTION 28 – 309 I – INDUSTRIAL DISTRICT**28 – 309.1 PURPOSE**

The purpose of this district is to provide areas for industrial and related uses which can operate in a clean and quiet manner, with an emphasis on reserving land for uses of a truly industrial nature. Certain public facilities needed to serve the district and adjoining residential and commercial districts are permitted. Regulations are designed to protect abutting or surrounding districts; to establish standards for intensity of use and to guide the character of development. In keeping with the purpose of this district, no use may be permitted which may be detrimental to the area because of odor, smoke, dust, fumes, fire, noise, explosion, or open storage.

28 – 309.2 DEVELOPMENT STANDARDS

The following minimum development standards shall be observed in the I District:

- A. *The minimum lot size for all uses hereafter established shall be 40,000 square feet.*



- B. *Off-street parking shall be provided in accordance with the provisions of Section 28 – 1001.*
- C. *All lots hereafter established shall have a frontage on a public street or way of at least one hundred (100) feet.*
- D. *Minimum setbacks for all uses shall be as follows:*
 - 1. *Front – twenty-five (25) feet from the property line.*
 - 2. *Side – ten (10) feet on each side of the property line. A setback of twenty-five (25) feet shall be maintained from any adjacent residentially zoned property.*
 - 3. *Rear – thirty (30) feet from the property line. A setback of twenty-five (25) feet shall be maintained from any adjacent residentially zoned property.*
- E. *Height limitations – forty (40) feet.*
- F. *Building Envelope – All lots shall have a minimum building envelope of thirty (30) feet deep by eighty (80) feet wide.*
- G. *Lot coverage by all buildings and structures shall not exceed fifty (50%) percent of the lot area.*
- H. *All storage areas shall be adequately screened and landscaped in accordance with provisions of Section 28 – 1014 of this Ordinance.*
- I. *All on-site lighting unless approved otherwise by the Planning and Zoning Commission shall be low cut-off shielded luminaries at 18’ height and light shall not shine off-site at levels greater than 1-foot candle.*
- J. *All off-street loading and unloading areas shall be screened from view by permanent decorative screens or natural planting, either of which shall be a minimum of eight (8) feet in height, in accordance with the provisions of Section 28 – 1014 of this Ordinance.*
- K. *All areas not devoted to buildings or parking areas shall be landscaped and maintained in a suitable manner, in accordance with the provisions of Section 28 – 1014 of this Ordinance.*
- L. *Sidewalks shall be constructed along any public right-of-way (except for alleys) adjacent to the site along the entire frontage(s) of the property. To the extent practicable, walkways shall be constructed on the site to tie building entrances and/or pedestrian pathway systems into existing or proposed public sidewalk systems.*

Action Required by the Board/Commission:

“J. Review the proposed construction of any street, square, park, or other public way, ground or open space, or public building or structure, or public utility, whether public or privately owned to determine whether the location, character, and extent of such development is consistent with the Comprehensive Plan, as per Section 3.08 of Article 66B of the Annotated Code of Maryland.”

Items for Consideration and Staff Comments:

- **This issue is before the Commission to approve or deny the Parking Waiver.**
- Upon Planning Commission decision, applicant will need to obtain Final Site Plan approval, Grading Permit Application and Certificate of Occupancy & Signage Application.



APPROVE the Parking Waiver Request. *If* -

- The Commission finds that the proposed Parking Waiver is in accordance with the Zoning Ordinance as outlined above.

DENY the Parking Waiver Request. *If* -

- The Commission finds that the proposed Parking Waiver is not in accordance with the Zoning Ordinance as outlined above and is so off the mark that a brand-new application should be submitted.

APPROVE THE Parking Waiver Request subject to conditions. *If* -

- The Commission finds that the proposed use is not in accordance, but could be subject to specified conditions.

Based on the information provided in the application, Staff recommends the Commission

APPROVE the Parking Waiver for the Dunkin' Donuts – Fast Food Restaurant subject to the following conditions:

- The applicant submits a Grading Permit Application and obtains Final Site Plan, for Staff level review, depicting the location and any associated changes.
- The applicant submits a Certificated of Occupancy Update & Signage Application.

INVOICE
09/06/22

Phone: Fax:

Cust. AcctID:	1001355	Creation Date:	09/06/22
		Ad Date:	09/08/22
Name:	Joanne Drummer	Class:	10
Company:	TOWN OF EASTON (L)	Ad ID:	2998094
Address:	PO Box 520	Words:	529
	EASTON, MD 21601	Lines:	76
		Agate Lines:	351
		Depth:	9.75
		Inserts:	2
Telephone:	(410) 822-2525	Blind Box:	
Description:	Agenda - Thursday,		

Other Charges:	\$0.00	Total:	\$511.88
Discount:	\$0.00		
Surcharge:	\$0.00	Paid Amount:	- \$0.00
Credits:	\$0.00		
Bill Depth:	9.75	Amount Due:	\$511.88

CREDIT CARD DETAILS

PT	CT	CN	Number	Exp.	Amnt.

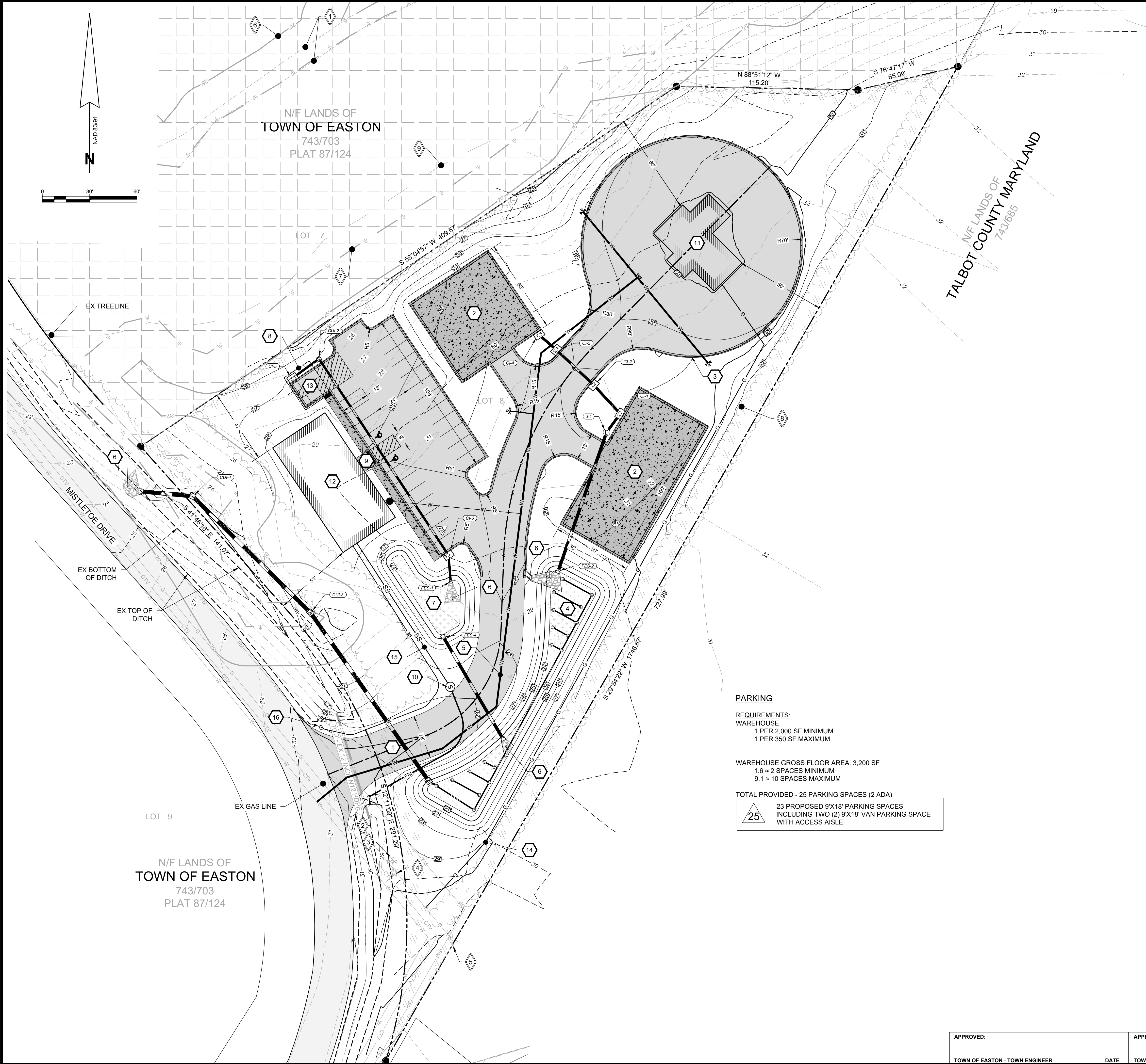
Publication	Start	Stop	Inserts	
The Star Democrat	09/08/22	09/08/22	1	\$511.88

Ad Note:

Customer Note:

We Appreciate Your Business!
Thank You Joanne Drummer!

 Planning Commission MEETING AGENDA Thursday, September 15, 2022 Council Chambers, Easton Town Office 14 S Harrison Street 	
1.	Call to Order Approval of Minutes. a. Approval of Minutes from the August 18, 2022 meeting.
3.	New Business a. Applicant: Sierra Crist - Town of Easton Owner: Town of Easton Location: Mistletoe Drive Lot 9A Nature of Request: The Town of Easton is relocating two buildings from 672 Glenwood Avenue (old DPW) to the lot across from the current DPW lot on Mistletoe Drive. The purpose of this request is to seek sketch site plan approval from the Town of Easton Planning Commission. The property is intended to be an extension of the Town's Public Work's facility. The site is currently improved with an entrance, improved surfaces and SWM. b. Applicant: Casey Rauch - Rauch Inc. Owner: Town of Easton Location: 6095 Mistletoe Drive Nature of Request: The Applicant requests a Parking Waiver for an additional 15 parking spaces for training events. c. Applicant: Casey Rauch - Rauch Inc. Owner: Chesapeake Community Development LLC Location: Port Street Lot 1, Parcel 77 Nature of Request: The site is located in the MOW District . The Arc is proposing affordable/workforce housing for low- and moderate-income households. Areas within the building will be reserved for job training, counseling, and behavioral health services. The building will be 3 stories high and have a square footage of 24,917 sf. A sidewalk will surround the building with 44 parking spaces and would require a Parking Waiver reduction of 14 parking spaces. A submerged gravel wetland facility will be provided to manage stormwater due to poor soil conditions. There are existing non-ideal wetlands and trees on site with a portion of them getting cleared and graded. Mitigation will be provided off site.
4.	Old Business a. Review and recommendations for the Subdivision Regulations. b. Applicant: Mike Irons c/o K.Hovian Homes of MD, LLC Owner: Moraine, Sandra Brooks Trustee, et al. Location: 29434 Dutchman's Lane Nature of Request: The Applicant proposes a 252 single family lot subdivision with a community parcel, to establish a proposed 55+ age-restricted active adult community. In addition, the Applicant is seeking a "Planning Commission Determination" to allow the Applicant to use the community-owned open space as a credit for their requirement for dedication of community park land per Section 709 (6). This is a continuation of the Commission's review of this request held at their August 18, 2022 meeting. As part of their response to the Commission's comments, the Applicant is proposing to increase the community open space areas (exclusive of forest conservation, SWM and eas) and our Community Amenity Parcel(s) to 10.3 acres. The Park requirement for this subdivision is 6.9 acres (1,203SF, Pat lot x 252 lots).
5.	Discussion Item a. Applicant: Brendan S. Mulvaney Owner: Lands of Lot 16, LLC and Mr. Thomas Cohee Location: 26560 Marys Court Nature of Request: The Applicant formally requests an award for Growth Allocation for lots 16 & 20 in the Tabbot Commerce Park project to reacquire Lot 20's 8.348 Acres+ from RNC to IDA.
6.	Adjournment.
2998094 SD 9/8/2022	



PROPOSED SITE FEATURES

- 1 ASPHALT ROAD. DETAIL ON C-305.01
- 2 6" THICK CONCRETE BURN PAD
- 3 6" VERTICAL CURB WITH 12" GUTTER. DETAIL ON C-305.01
- 4 SUBMERGED GRAVEL WETLANDS #1
- 5 WATER MAIN
- 6 OUTFALL PROTECTION. SEE DETAIL ON C-205.01
- 7 FOREBAY #1
- 8 SCREENING FENCE
- 9 5' CONCRETE SIDEWALK. DETAIL ON C-305.01
- 10 E-ONE GRINDER OR SIMILAR
- 11 TRAINING FACILITY BUILDING
- 12 POLE BUILDING
- 13 DUMPSTER PAD. DETAIL ON C-305.01
- 14 1" P.E. GAS MAIN. DETAIL ON C-505.01
- 15 SEWER SERVICE. DETAIL ON C-505.01
- 16 RELOCATED UTILITY PEDESTAL

EXISTING & DEMOLITION FEATURES

- 1 PERENNIAL STREAM
- 2 PRESSURE CLEAN-OUT
- 3 FIRE HYDRANT
- 4 WATER VALVE
- 5 GAS VALVE
- 6 25' NON-TIDAL WETLAND BUFFER
- 7 NON-TIDAL WETLAND
- 8 TREELINE
- 9 100' PERENNIAL STREAM BUFFER

PARKING

REQUIREMENTS:
WAREHOUSE
1 PER 2,000 SF MINIMUM
1 PER 350 SF MAXIMUM

WAREHOUSE GROSS FLOOR AREA: 3,200 SF
1.6 = 2 SPACES MINIMUM
9.1 = 10 SPACES MAXIMUM

TOTAL PROVIDED - 25 PARKING SPACES (2 ADA)

25 23 PROPOSED 9'X18' PARKING SPACES
INCLUDING TWO (2) 9'X18' VAN PARKING SPACE
WITH ACCESS AISLE

APPROVED:
TOWN OF EASTON - TOWN ENGINEER

APPROVED:
TOWN OF EASTON PLANNING AND ZONING

APPROVED:
EASTON UTILITIES - MANAGER OF ENGINEERING

SITE PLAN

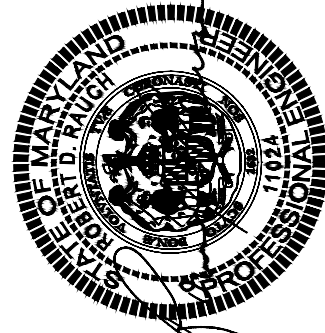
OF THE LANDS OF

TOWN OF EASTON

TAX MAP 25, GRID 16, PARCEL 138
FIRST ELECTION DISTRICT, TALBOT COUNTY, MARYLAND
PREPARED FOR EASTON VOLUNTEER FIRE DEPARTMENT

RAUCH
INC.
engineering design &
development services

office: 410.770.0081 | fax: 410.770.9867
www.rauchinc.com
Maryland Office: 105 N. Harrison St. - Easton, MD 21601
Virginia Office: 8229 Boone Blvd, Suite 625 - Vienna, VA 22182



Professional Certification.
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. 11024
Expiration Date: July 24, 2022

REVISIONS

REV. #	DATE	DESCRIPTION
1		

DATE: 8/12/2022

SCALE: 1" = 30'

DRAWN BY: JWL

DESIGNED BY: JWL

APPROVED BY:

SHEET NO.:

C-101.00

FOR
REVIEW