Easton Staff Development Review
MEETING AGENDA

Monday, December 22, 2025 - 11:00 AM
Council Chambers, Easton Town Office
14 S Harrison Street

1. Discussion Items

a.

Application Number:	2025 - 1605 / ESDR 25 - 10
Applicant:	Rauch Engineering Inc. on behalf of Osprey Property Company II LLC
Location:	Dove Lane and Calvert Street Tax Map 0103, Grid 00EA, Parcels 885-905 & 907-928
Zoning District:	R-10A
Request:	Sketch PUD review for the development of residential units with associated stormwater management facilities and other facility improvements.

RAUCH inc.
Engineering | Survey | Architecture | Environmental

FOREST STAND DELINEATION AND NATURAL RESOURCES INVENTORY

Calvert Terrace
Easton, Talbot County, Maryland

November 2025



Prepared For:
Osprey Properties

Prepared By:
Kyle Kowalczyk, QP
RAUCH inc.

MD office | 106 N. Harrison St – Easton, MD 21601
[redacted]

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1.0 INTRODUCTION

This Natural Resource Inventory (NRI), Forest Stand Delineation, and specimen survey of trees 30-inches in diameter and larger have been prepared for Osprey Properties to characterize existing forest cover on a proposed, mixed use, residential development site. This study is intended to assess and aid in preliminary site plan development for the overall project site known as Calvert Terrace. It is located with road frontage on both Calvert Street and Dove Lane in Easton, MD. The subject parcel consists of 11.87 acres and is in Easton, Talbot County, Maryland. Forest stands were delineated according to guidelines within the *Maryland State Forest Conservation Technical Manual,* Third Edition, 1997, Maryland Department of Natural Resources. This is hereafter referred to as the State Manual, and satisfies the Town of Easton's, Forest Stand Delineation criteria.

The Maryland Forest Conservation Act was passed by the General Assembly in 1991 and subsequently amended in 1993, 1994, and 2009 (*Maryland State Bill 666, Natural Resources, No Net Loss of Forest Policy, Forest Conservation Act*) to conserve the State's forest resources during development. The Act requires identification of existing forest stands, protection of the most desirable forest stands, and establishment of areas where new forests can be planted. The Act and regulations require that any person submitting application for subdivision, grading, or sediment and erosion control permits on units of land 40,000 square feet (0.92 acres) or greater shall submit a forest stand delineation (FSD) and forest conservation plan (FCP). These must be approved by the county or municipal government, a locally adopted forest conservation program, or the Maryland Department of Natural Resources (DNR) where no local program is in effect before other development related approvals are given.

The purpose of the FSD is to provide a tool to be used during the preliminary plan and review process to determine the most suitable and practical areas for forest conservation. Using a combination of resource mapping and field methods of ecology, it inventories and describes existing forests, and locates priority areas for retention, reforestation, or afforestation on the site as required. The FSD becomes the methodology for evaluating the existing natural features and vegetation on a site proposed for development, accounting for the environmental elements that shape or influence the structure or makeup of a plant community. An approved FSD is valid for five (5) years in most Maryland Counties and two (2) years in others. To remain valid thereafter, it shall be updated and re-approved every five or two years (Environmental Division Natural Resources Program Manager (dependent in this case)). Unless it becomes part of an approved FCP, and then subsequently acted upon through the land development process.

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2.0 GENERAL SITE DESCRIPTION

The Calvert Terrace Site is located within the Mid-Atlantic Coastal Plain (U.S. Department of Agriculture, Natural Resource Conservation Service, MLRA 153C of LRR T). The property is bounded by residential and commercial development with agricultural practices located North of the parcel.

The subject property has been forested as far back as 1995. Between 1957 and 1981 the parcel was used for agricultural practices. It is anticipated that sometime in the late 1970's or early 1980's the property was released from agriculture and allowed to lay fallow and begin returning to forest.

The property includes a single wetland feature identified as North Fork Tanyard Branch which is a perennial stream under the jurisdiction of Maryland Department of the Environment (MDE) and the United States Army Corps of Engineers (USACE). The site has been historically impacted with multiple areas of fill material from dumping over the years as the property was then left to lay fallow. Topography of the site slopes gently in the cleared areas becoming steeper as the stream is approached in a Southeast to Northwest direction.

3.0 METHODOLOGY

The current State Manual requires that an FSD be performed to characterize and quantify existing forest resources, identify forest cover in the net tract area, and identify those areas of forest with priorities for retention. In addition to a general vegetation survey and identification of specimen trees (trees of 30-inches in diameter and trees within 75% of a current champion), the Manual requires the use of formal vegetation sampling techniques.

Our study protocol involves the delineation of all existing forest stands within the property boundaries. The forest stands are based on composition, density, size, condition, and age of the stand. The dominant, co-dominant, and associate tree species for each stand are identified and tabulated to indicate their relative frequencies and average tree diameter class and to provide descriptions of each tree stand including the identification of understory and herbaceous species. This information is utilized to isolate stands of higher quality vegetation (i.e. old growth forests, unique forest stands, contiguous forest, etc.) and any individual specimen trees, groves or clusters that should be considered for potential preservation in the planning and development process.

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A forest stand or type can be characterized by studying the results of variable plot sampling (a statistical survey method, typically averaging 80-feet across in pole stocked or larger timber). Variable point sampling refers to a method in which sample trees are located with a probability proportional to their basal areas, (i.e. larger trees with larger basal areas have higher probabilities of selection than smaller trees). Basal area is defined as a measurement of the cross-sectional area of a tree trunk at breast height. Basal area of a forest stand is the sum of the basal areas of the individual trees. Furthermore, since basal area is highly correlated with tree volume, variable point sampling is an efficient method for estimating frequency of occurrence, volume, and/or economic value. Using a 10-factor wedge prism for sampling, it can be shown that each tree selected within the variable plot represents 10 square feet of basal area per acre, hence the term 10-factor point sample.

Sample point locations within each vegetation type are randomly selected (minimum of one per every four-acres of homogenous forest type and a minimum of two per stand). At each sample point location, trees that fall within the sample area are tallied and measured. This data is used to estimate the number of trees per acre, per each one-inch diameter class. In addition, the condition of the overstory trees in each vegetation type is evaluated and the understory and ground cover species identified. Information included in the sample point data includes:

- Percent canopy closure and tree species observed including relative dominance,
- Percent and species of shrubs,
- Percent and species of forest floor covered by herbaceous plants,
- Percent of forest floor covered by downed woody debris,
- The presence or absence of exotic or invasive species.

A study of various aerial photography is also conducted to determine ground forest conditions and to make a preliminary determination of vegetation types occurring on the site. These vegetation types are then ground-authenticated to verify composition, extent, and ecological importance.

Both within and between the sample plots, specimen trees and trees associated with historic structures are identified and located on the plan. Plan species which are listed as threatened, endangered, or in need of conservation are also identified.

Interpretation of the field data allows us to make judgements as to the forest composition, structure, condition, function, retention potential, and management recommendations for each stand. The FSD map is prepared and includes the natural resources inventory, steep slopes, wetlands, buffer setbacks, and other natural features and constraints required by the *Manual* or State/County government. The NRI/FSD maps are enclosed at the end of this report (**Appendix E).** Completed data sheets and a forest stand summary are also included in **Appendix A** and **Appendix B**, respectively.

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4.0 RESULTS

This NRI/FSD and tree survey has been prepared for Osprey Properties. This parcel consists of approximately 6.86 acres of forested under consideration for forest conservation. Forestry fieldwork was performed in 2025 on October 29. Forestry field work identified a single stand of forest within the parcel as described below.

Mid-Seral Mixed Hardwoods (FS-1)

The Mid-Seral Mixed Hardwoods Forest (FS-1) stand totals approximately 6.86 acres. This stand is depicted in the map provided in **APPENDIX E**. The dominant indicator species of this stand is Sweet Gum. There is an estimated 366.3 trees per acre, having an average diameter of 7.6-inches, and a basal area of 150 feet^2 per acre. This basal area falls within the range of overstocked stands (130-160 feet^2 per acre), meaning trees are disadvantageously competing for resources, and there is no space for the addition of more trees.

Sweet Gum trees are estimated to be found at 140.9 trees per acre. Sweet Gum trees have an average diameter of 7.4-inches, and a frequency of occurrence of 38.5%. Based on calculations, the stand is estimated to be 30 years old dating the last most influential perturbation to 1995. This agrees with historical aerial photographs that indicate agricultural practices were ceased, and the field was left to begin early stages of succession.

This stand shows high amounts of disturbance throughout. Areas of grading and fill piles can be observed in multiple locations while systematically traversing the wooded area. It should also be noted that a significant presence of invasive vegetation is present both, adjacent to, and within the existing forest stand on site. No part of the existing forest other than 100 feet upslope from the perennial stream represents forest area with high retention potential. All efforts should be exhausted to maintain a 100’ forested buffer upslope of the stream to allow for nutrient uptake and the slowing of surface runoff and erosion. A summary of these results is provided in **APPENDIX C**.

Specimen Trees

A specimen tree is defined as any tree having a diameter at breast height of 30-inches or greater. A specimen tree survey was conducted as part of the delineation to locate any trees meeting the above definition so they can be shown and planned around for development. Specimen trees are considered undisturbed during construction if 30% or less of the critical root zone (a radius of 1.5x the diameter of the tree in feet) is disturbed during land development activities. The removal of specimen trees should be evaluated on a case-by-case basis dependent on the overall health of the tree and the ecological benefit the tree can provide.

The results of our specimen tree survey found there were 8 specimen trees within the project area. A complete list of the trees is shown below along with their diameter, critical root zone radius, and overall health. Locations of each tree can be seen on the environmental features map in **APPENDIX C**.

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GREATER THAN 30" DBH SPECIMEN TREE LIST

Tree #	Species	DBH (inches)	Critical Root Zone (feet)	Condition
ST-1	*Acer saccharinum*	30.8	46.2	Fair
ST-2	*Acer rubrum*	35.5	53.3	Good
ST-3	*Acer rubrum*	35.4	53.1	Fair
ST-4	*Acer rubrum*	31.1	46.7	Good
ST-5	*Acer saccharinum*	32.9	49.4	Fair
ST-6	*Quercus bicolor*	36.1	54.2	Fair
ST-7	*Acer rubrum*	35.9	53.9	Good
ST-8	*Quercus bicolor*	40	60	Good

Rare, Threatened, and Endangered Species

No watchlist, rare, threatened or endangered state or federal species (RTE's) were encountered during our surveys. Results of NWI inquires indicate that the parcel is habitat for the Long-Eared Bat and the Monarch Butterfly. Restrictions should be adhered to for development activities.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Approximately 6.86 acres of Mid Seral Mixed Hardwood Forest was found on the subject property outside of easement areas. This forest stand contains no steep slopes. There is one jurisdictional wetland feature on the northern portion of the parcel identified as a perennial stream and named North Fork Tanyard Branch. Determination of this feature was completed by RAUCH inc. and confirmed by David Haffner of Maryland Department of the Environment. A copy of the delineation plan and MDE concurrence of the delineation has been attached to this report for review.

The Forest Conservation Technical Manual states that subdivision and site development plans should make all reasonable attempts to preserve specimen trees, small groves, hedgerows, or other existing tree stands. It is recommended that impacts to existing forests are minimized to the greatest extent possible. This can be achieved by limiting clearing activities in the interior forest, and in circumstances where impacts cannot be avoided, locating all clearing adjacent to existing cleared areas to prevent loss of contiguous forest corridors in which wildlife will likely travel.

In conclusion, all the woodland areas containing the perennial stream and its associated 100' buffer are considered priority retention forest. Forest sampling data shows that this area is associated with wetlands and waters, therefore environmental impacts present a high risk of

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impact to biodiversity. Impacts to these areas should be avoided if feasible for project completion. Questions or comments regarding this NRI/FSD can be directed to RAUCH inc. at 410-770-9081.

APPENDICES:

- A- Forest Stand Delineation Field Data Sheets
- B- Point Sample Inventory Results
- C- Environmental Features Map
- D- NFWS and DNR RTE request information



Kyle A. Kowalczyk, Qualified Professional

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APPENDIX A- Forest Stand Delineation Field Data Sheets

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RAUCH inc. Forest Stand Delineation Field Data Sheet

Forest Stand : FS1 **Point Sample #:** 1

Project Name : Calvert Terrace **Date:** 10/27/2025

Field Crew : Evan Claggett & Bo Flint **Plot Size :** 1/10 acre (37' radius)/variable

BAF-10 Point Sample Inventory (variable plot size) Species and d.b.h. :

Species :	Diameter :
American Sycamore (*Platanus occidentalis L.)*	11,7
Northern Red Oak (*Quercus rubra L.)*	20,17
Red Maple (*Acer rubrum L.)*	7,7
Sweet Gum (*Liquidamber styraciflua L.*)	19,13,7,18,20
Black Cherry (*Prunus serotina Ehrh.)*	13

80% **% Canopy Closure :**

2% **% Understory Cover 3'-20' :**

5% **% Woody Debris :**

60% **% Herbaceous Cover :**

Dominant Overstory :
Sweet Gum (*Liquidamber styraciflua L.*)

Co-dominant :
N/A

Associates :
Platanus occidentalis L.
Quercus rubra L.
Acer rubrum L.

Understory & Shrub Layer :
Chinese Whisteria, Spice Bush
Amur Honeysuckle

Total # of Tree Species >6" dbh :
5

 # Snags :
2

Ground Cover :
English Ivy, Japanese Honeysuckle

List of Invasive Species :
English Ivy, Japanese Honeysuckle, Bamboo, Amur Honeysuckle
Chinese Whisteria

% Invasive Cover :
75%

Stand Description : (composition, structure, condition, observations, functions, retention potential, ecological importance, management recommendations)
Mid Seral Forest with heavy invasive undercover

RAUCH inc. Forest Stand Delineation Field Data Sheet

Forest Stand : FS1 **Point Sample #:** 2

Project Name : Calvert Terrace **Date:** 10/27/2025

Field Crew : Evan Claggett & Bo Flint **Plot Size :** 1/10 acre (37' radius)/variable

BAF-10 Point Sample Inventory (variable plot size) Species and d.b.h. :

Species :	Diameter :
Sweet Gum (*Liquidamber styraciflua L.*)	20,13,12,12,14,14,20,14,22
Red Maple (*Acer rubrum L.)*	9,5.5,10,11,21,6,7

75% **% Canopy Closure :**

10% **% Understory Cover 3'-20' :**

2% **% Woody Debris :**

50% **% Herbaceous Cover :**

Dominant Overstory :
Sweet Gum (*Liquidamber styraciflua L.*)

Co-dominant :
Red Maple (*Acer rubrum L.)*

Associates :

Understory & Shrub Layer :
Chinese Whisteria, Spice Bush
Amur Honeysuckle

Total # of Tree Species >6" dbh :
2

 # Snags :
1

Ground Cover :
English Ivy, Japanese Honeysuckle
Poison Ivy

List of Invasive Species :
English Ivy, Japanese Honeysuckle, Bamboo, Amur Honeysuckle
Chinese Whisteria

% Invasive Cover :
70%

Stand Description : (composition, structure, condition, observations, functions, retention potential, ecological importance, management recommendations)
Mid Seral Forest with heavy invasive undercover

RAUCH inc. Forest Stand Delineation Field Data Sheet

Forest Stand : FS1

Point Sample #: 3

Project Name : Calvert Terrace

Date: 10/27/2025

Field Crew : Evan Claggett & Bo Flint

Plot Size : 1/10 acre (37' radius)/variable

BAF-10 Point Sample Inventory (variable plot size) Species and d.b.h. :

Species :	Diameter :
Common Persimmon (*Diospyros virginiana L.)*	14,12
Sassafras (*Sassafras albidum (Nutt.) Nees)*	8,8,8,7,9,9
Black Cherry (*Prunus serotina Ehrh.)*	10,9
Sweet Gum (*Liquidamber styraciflua L.*)	26,28,3,6,14,12

75% **% Canopy Closure :**

15% **% Understory Cover 3'-20' :**

2% **% Woody Debris :**

80% **% Herbaceous Cover :**

Dominant Overstory :
Liquidamber styraciflua L.

Co-dominant :
Sassafras albidum (Nutt.) Nees

Associates :
Diospyros virginiana L.
Prunus serotina Ehrh

Understory & Shrub Layer :
Chinese Whisteria, Multiflora Rose
Amur Honeysuckle, Greenbriar

Total # of Tree Species >6" dbh :
4

 # Snags :
2

Ground Cover :
English Ivy, Japanese Honeysuckle
Poison Ivy

List of Invasive Species :
English Ivy, Japanese Honeysuckle, Bamboo, Amur Honeysuckle
Chinese Whisteria

% Invasive Cover :
70%

Stand Description : (composition, structure, condition, observations, functions, retention potential, ecological importance, management recommendations)
Mid Seral Forest with heavy invasive undercover

APPENDIX B-Point Sample Inventory Results

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Project Name: Calvert Terrace

Stand # : FS-1

Number of Point Samples: 3

Field Crew: Flint, Claggett

Date: 10.27.25

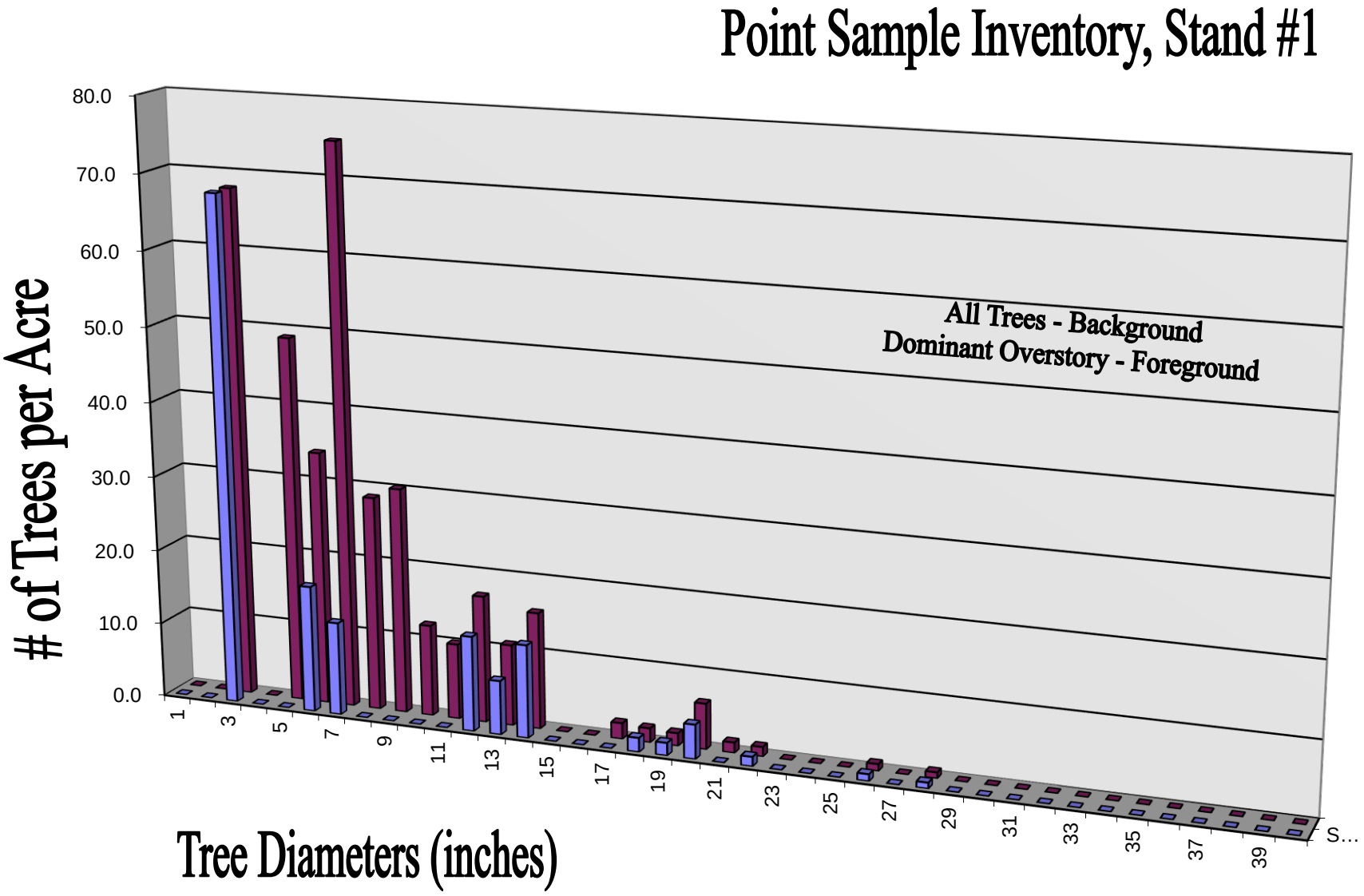
Point Sample Inventory Calculation Data Sheet, RAUCH, Inc.

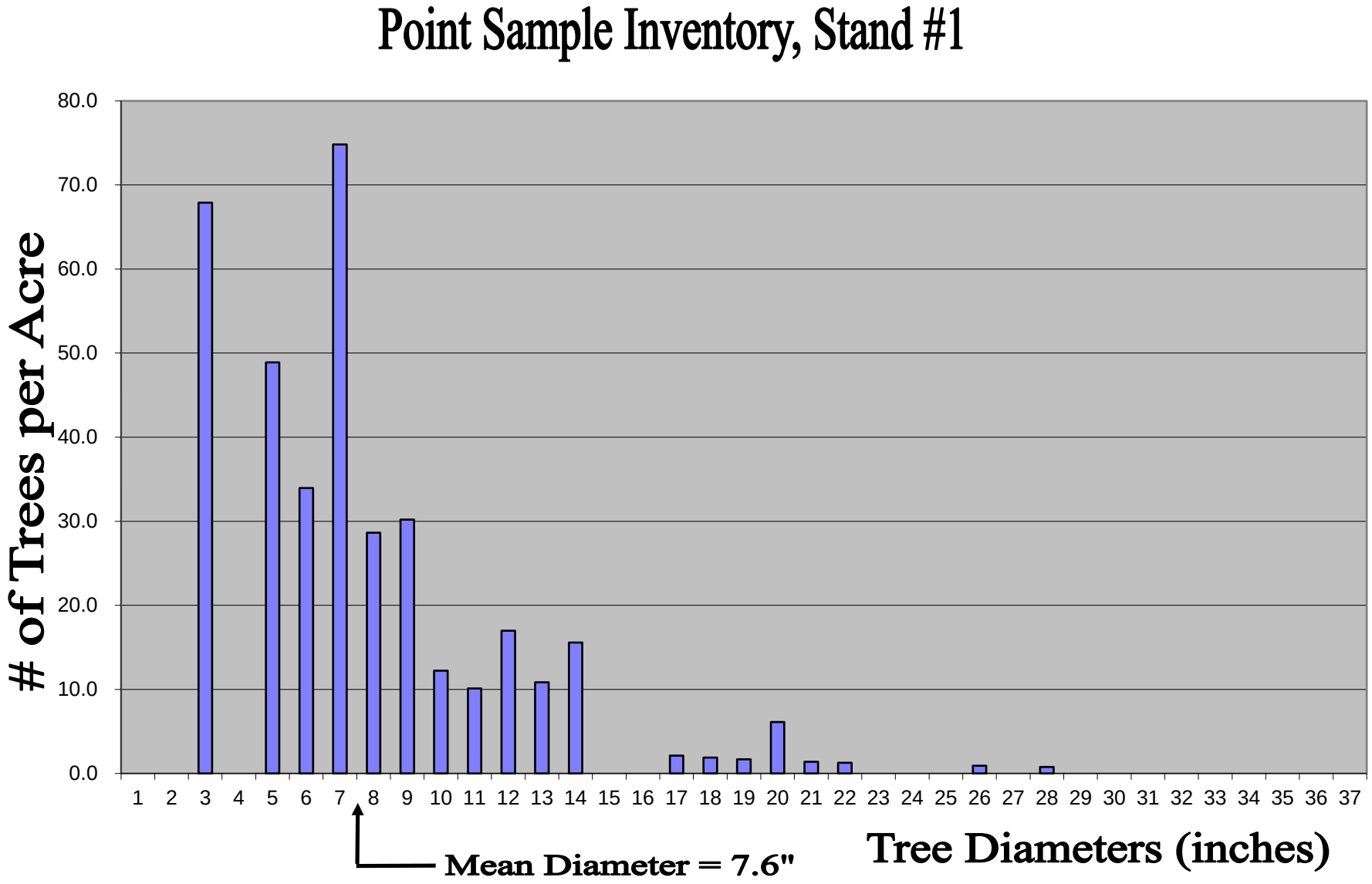
Elementary Timber Measurements, H.V. Wiant

WVU Division of Forestry, 1990, pgs. 74-81

DBH	FACTOR	BAF TOTALS	TREES PER AC	DOM SP BAF TOTALS	DOM SP T/A
1	1833.52	0	0.0	0	0.0
2	458.38	0	0.0	0	0.0
3	203.72	1	67.9	1	67.9
4	114.6	0	0.0	0	0.0
5	73.34	2	48.9	0	0.0
6	50.93	2	34.0	1	17.0
7	37.42	6	74.8	1	12.5
8	28.65	3	28.7	0	0.0
9	22.64	4	30.2	0	0.0
10	18.34	2	12.2	0	0.0
11	15.15	2	10.1	0	0.0
12	12.74	4	17.0	3	12.7
13	10.85	3	10.9	2	7.2
14	9.35	5	15.6	4	12.5
15	8.15	0	0.0	0	0.0
16	7.16	0	0.0	0	0.0
17	6.34	1	2.1	0	0.0
18	5.66	1	1.9	1	1.9
19	5.08	1	1.7	1	1.7
20	4.58	4	6.1	3	4.6
21	4.16	1	1.4	0	0.0
22	3.79	1	1.3	1	1.3
23	3.47	0	0.0	0	0.0
24	3.18	0	0.0	0	0.0
25	2.93	0	0.0	0	0.0
26	2.71	1	0.9	1	0.9
27	2.52	0	0.0	0	0.0
28	2.34	1	0.8	1	0.8
29	2.18	0	0.0	0	0.0
30	2.04	0	0.0	0	0.0
31	1.91	0	0.0	0	0.0
32	1.79	0	0.0	0	0.0
33	1.68	0	0.0	0	0.0
34	1.586	0	0.0	0	0.0
35	1.496	0	0.0	0	0.0
36	1.414	0	0.0	0	0.0
37	1.339	0	0.0	0	0.0
38	1.269	0	0.0	0	0.0
39	1.205	0	0.0	0	0.0
40	1.145	0	0.0	0	0.0
		45	366.3	20	140.9

ESTIMATED TREES PER ACRE:	366.3		
AVERAGE MEAN DIAMETER:	7.6	OR	12.37777778
BASAL AREA PER ACRE:	150.0		
DOMINANT SPECIES:	Sweet Gum		
DOM SPEC TREES PER ACRE:	140.9		
DOM SPEC AVG MEAN DIAMETER:	7.4	OR	15.35
% FREQUENCY OF OCCURENCE:	38.5		


Point Sample Inventory, Stand #1
# of Trees per Acre
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
All Trees - Background
Dominant Overstory - Foreground
1
3
5
7
9
11
13
15
17
19
21
23
25
27
29
31
33
35
37
39
S...
Tree Diameters (inches)


Point Sample Inventory, Stand #1
# of Trees per Acre
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37
Mean Diameter = 7.6"
Tree Diameters (inches)

APPENDIX C-Environmental Features Map

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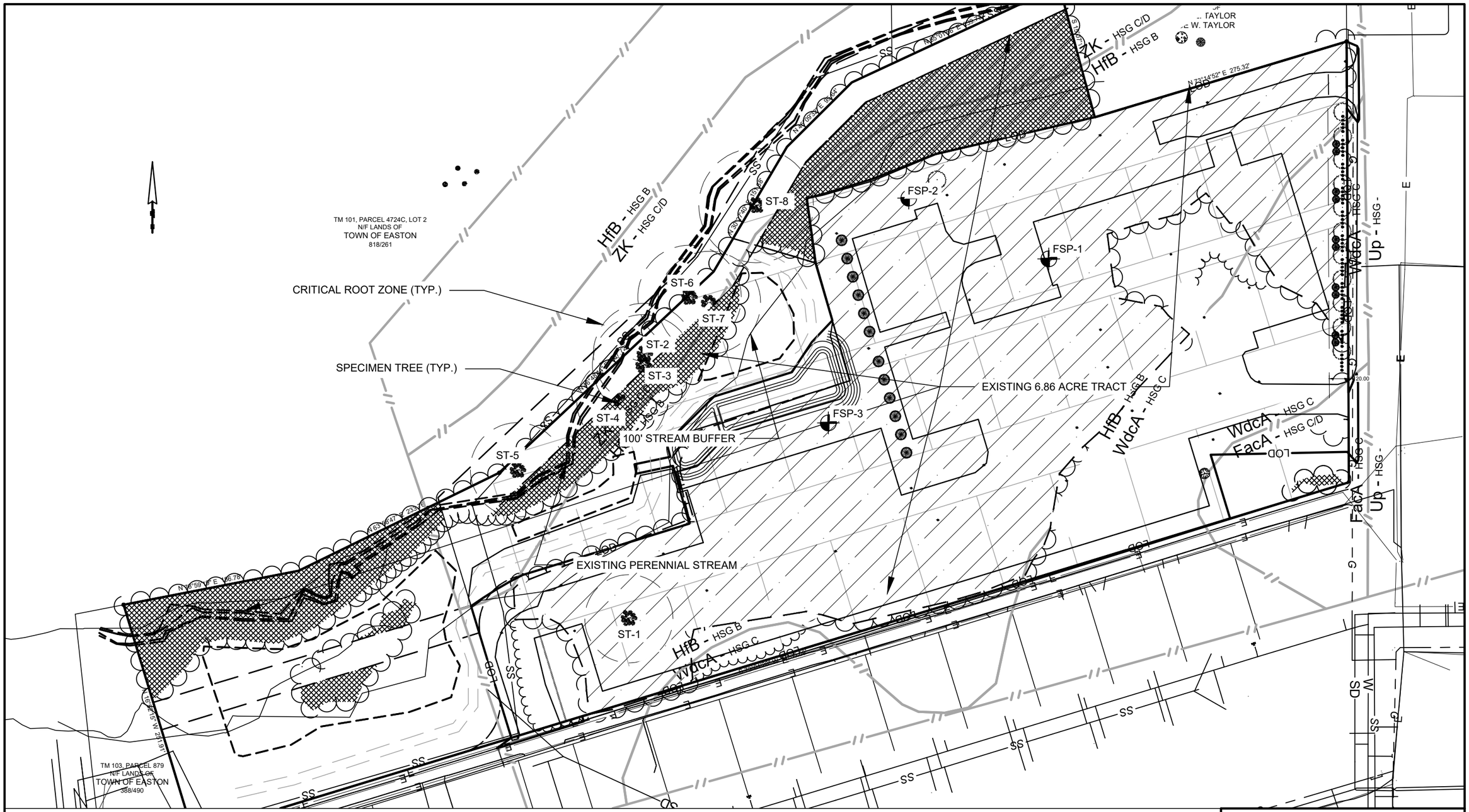

ENVIRONMENTAL FEATURES MAP

LANDS OF:

OSPREY PROPERTY DEVELOPMENT II, LLC.

MAP 103 GRID 00EA MULTIPLE PARCELS

FIRST ELECTION DISTRICT, TALBOT COUNTY, MARYLAND

DRAWN BY JTB

SCALE 1"=100'

DATE 11.5.2025

JOB NO. 250295

RAUCH inc.
engineering design & development services
office: 410.770.9081 | fax: 410.770.3667
email: design@raucheng.com | web: www.raucheng.com
address: 106 N Harrison St - Easton, MD 21601

APPENDIX D-NFWS RTE Request

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
Chesapeake Bay Ecological Services Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401-7307
[redacted]

In Reply Refer To: 10/31/2025 14:18:24 UTC
Project Code: 2026-0010945
Project Name: Calvert Terrace

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

- USFWS National Wildlife Refuges and Fish Hatcheries
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Chesapeake Bay Ecological Services Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401-7307
[redacted]

PROJECT SUMMARY

Project Code: 2026-0010945
Project Name: Calvert Terrace
Project Type: Commercial Development
Project Description: Residential apartment complex
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.78081845,-76.06279044030006,14z



Counties: Talbot County, Maryland

ENDANGERED SPECIES ACT SPECIES

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Tricolored Bat *Perimyotis subflavus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

WETLANDS

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

WETLAND INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED. PLEASE VISIT HTTPS://WWW.FWS.GOV/WETLANDS/DATA/MAPPER.HTML OR CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Kyle Kowalczyk
Address: 106 North Harrison Street
City: Easton
State: MD
Zip: 21601
[redacted]

FOREST CONSERVATION PLAN
FOR OSPREY PROPERTY COMPANY
CALVERT TERRACE
TALBOT COUNTY, MARYLAND

UNIFORM ACKNOWLEDGEMENT ACT

STATE OF MARYLAND, COUNTY OF _____ , ON THIS _____ DAY OF _____,2025. BEFORE ME THE UNDERSIGNED OFFICER PERSONALLY APPEARED BRIAN LOPEZ KNOWN TO ME (OR SATISFACTORILY PROVED) TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED THAT THEY EXECUTED THE SAME FOR THE PURPOSES THEREIN CONTAINED. IN WITNESS WHEREOF I HEREUNTO SET MY HAND AND OFFICIAL SEA.

_____
NOTARY PUBLIC

OWNERS SIGNATURE

I, THE OWNER OF THE PROPERTY SHOWN HEREON, HEREBY AGREE TO AND ADOPT THIS PLAN OF FOREST CONSERVATION AS SHOWN.

_____ _____
JOBAN LLC DATE

CERTIFICATION

This Forest Stand Delineation/Forest Conservation Plan is prepared by Kyle A. Kowalczyk of RAUCH inc. who meets the forestry requirements of Maryland COMAR 08.19.01.16 and is approved by the Maryland Department of Natural Resources, Forest Conservation Program, as a professional qualified to conduct FSD/FCP.

_____ _____
Kyle A. Kowalczyk - RAUCH inc. Date
106 N. Harrison St. - Easton, MD 21601
484-706-0218

DEPARTMENT OF PLANNING AND ZONING

THIS IS TO CERTIFY THAT THIS FOREST CONSERVATION PLAN _____ WAS APPROVED BY THE DEPARTMENT OF PLANNING AND ZONING OF THE TOWN OF EASTON ON THE _____ DAY OF _____, 20____.

_____
JOE MAYER, PLAN REVIEWER



VICINITY MAP
SCALE: 1" =2,000'

SITE ANALYSIS		
Feature	**Yes**	**No**
Forest On-Site	X	
Contiguous Forest	X	
Priority Forest	X	
Wetlands		X
Streams	X	
Floodplains		X
Hydric Soils	X	
Slopes > 15%		X
Historical or Cultural Features		X
Trees >30" DBH	X	
State Champion Trees		X
Easement or ROW Restrictions	X	
Existing Structures		X
Rare, Threatened or Endangered Flora		X
Rare, Threatened or Endangered Fauna		X
Forest Interior Dwelling Species		X

FOREST CONSERVATION WORKSHEET

NET TRACT AREA		
A. TOTAL TRACT AREA	A =	11.8735
B. DEDUCTIONS	B =	3.6561
C. NET TRACT AREA	C =	8.2174
LAND USE CATEGORY		
ARA MDR IDA HDR MPD CIA		
0 0 0 1 0 0		
D. AFFORESTATION THRESHOLD (NET TRACT AREA X 15%)	D =	1.2326
E. CONSERVATION THRESHOLD (NET TRACT AREA X 20%)	E =	1.6435
EXISTING FOREST COVER		
F. EXISTING FOREST COVER WITHIN THE NET TRACT AREA	F =	6.8578
G. AREA OF FOREST ABOVE CONSERVATION THRESHOLD	G =	5.2143
BREAK EVEN POINT		
H. BREAK EVEN POINT	H =	2.6863
I. FOREST CLEARING PERMITTED WITHOUT MITIGATION	I =	4.1715
PROPOSED FOREST CLEARING		
J. TOTAL AREA OF FOREST TO BE CLEARED	J =	5.4000
K. TOTAL AREA OF FOREST TO BE RETAINED	K =	1.4419
PLANTING REQUIREMENTS		
L. REFORESTATION FOR CLEARING ABOVE THE CONSERVATION THRESHOLD	L =	1.3036
M. REFORESTATION FOR CLEARING BELOW THE CONSERVATION THRESHOLD	M =	0.4032
N. CREDIT FOR RETENTION ABOVE THE CONSERVATION THRESHOLD	N =	0.0000
P. TOTAL REFORESTATION REQUIRED	P =	1.7067
Q. TOTAL AFFORESTATION REQUIRED	Q =	0.0000
R. TOTAL PLANTING REQUIREMENT	R =	1.7067

SOIL INFO FORM USDA NRCS WEBSITE

SOILS		
MAP SYMBOL	SOIL NAME	HYDROLOGIC SOIL GROUP
HfA	Hambrook- Sassafras Complex	B
ZkA	Kekiah Silt Loam 0 to 2% slopes	C/D
WdcA	Woodstown Sandy Loam 0 to 2% slopes	C
FacA	Woodstown Sandy Loam 0 to 2% slopes	C/D

LINETYPES

	PROPOSED	EXISTING
TOPOGRAPHY		
MAJOR CONTOURS	45	45
MINOR CONTOURS	44	44
TOP OF SLOPE BREAKLINE		
BOTTOM OF SLOPE BREAKLINE		
TOPOGRAPHY BREAKLINE		
CATCHMENT AREA		
Tc FLOW PATH		
PARCEL BOUNDARY		
PARCEL SETBACK/EASEMENT		
FENCELINE WOOD		
FENCELINE STEEL		X
TREELINE/VEGETATION		
ROADWAY CENTERLINE		
HIGHWAY BARRIER		
UTILITIES		
OVERHEAD ELECTRIC	OE	OE
UNDERGROUND ELECTRIC	UE	UE
TELEPHONE LINE	T	T
GAS PIPE LINE	G	G
COMMUNICATIONS (FIBER, ETC)	C	
WATER PIPE		W
STORMWATER PIPE		
UNDERDRAIN		
SANITARY SEWER		
FORCE MAIN SEWER		
ENVIRONMENTAL		
WETLAND LINE		Ψ
FLOOD PLANE 100/500 YR		
MEAN HIGH WATER		
MEAN LOW WATER		
CRITICAL AREA BOUNDARY		
BUFFER 25'/100'		
SOILS BOUNDARY		
EROSION AND SEDIMENT CONTROL		
SILT FENCE	SF	
SUPER SILT FENCE		
SILT FENCE ON PAVEMENT		
LIMITS OF DISTURBANCE		
LOD & SILT FENCE		
LOD & SUPER SILT FENCE	LOD SSF	
LOD & SILT FENCE ON PAVEMENT		
STANDARD INLET PROTECTION	SIP	
AT-GRADE INLET PROTECTION	AGIP	
CURB INLET PROTECTION	CIP	
SWM EASEMENT 5'/10'		

SYMBOLS

	PROPOSED	EXISTING
FLARED END SECTION		
YARD INLET	YI	YI
CURB INLET	CI	CI
CUSTOM INLET	CuI	CuI
NYLOPLAST INLET	N	N
STORM DRAIN MANHOLE	D	D
SANITARY SEWER MANHOLE	S	S
CLEANOUT	C	C
GATE VALVE		
STUB		
SIGN		
WATER METER	WM	WM
FIRE HYDRANT		
WELL	W	W
BOLLARD		
ELECTRIC TRANSFORMER	ELEC	ELEC
TELEPHONE PEDESTAL	T	T
UTILITY POLE		
GUY WIRE		
CONIFEROUS TREE		
DECIDUOUS TREE		
SPOT ELEVATION	X39.01	X 39.00
LAND SLOPE	2.41%	2.41%
BENCHMARK	ELEV. 123	
BOREHOLE/MONITORING WELL		

HATCHES

ASPHALT	
GRAVEL	
CONCRETE	
RIPRAP/ROCK	
ESD BED BOTTOM	
BRICK PAVING	
EXISTING,TO BE DEMOLISHED	
STEEP SLOPES	
ROOFTOP/NON-ROOFTOP DISCONNECT	
FOREST TO BE CLEARED	
EXISTING FOREST/ FOREST TO BE RETAINED	

ABBREVIATIONS

ADA	AMERICANS WITH DISABILITIES ACT
AGIP	AT GRADE INLET PROTECTION
@	AT
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	CENERLINE
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
KV	KILOVOLTS
L	ARC LENGTH
LF	LINEAR FEET
LOD	LIMITS OF DISTURBED AREA
LT	LEFT
MAX	MAXIMUM
MBR	MICRO-BIORETENTION
MD	MARYLAND
MEP	MECHANICAL, ELECTRICAL, AND PLUMBING
MH	MANHOLE
MHW	MEAN HIGH WATER
MIN	MINIMUM
MLW	MEAN LOW WATER
MSHA	MARYLAND STATE HIGHWAY ADMINISTRATION
MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
N	NORTH
NO	NUMBER
PC	POINT OF CURVATURE
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
SCE	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
TP	TAX PARCEL
TYP	TYPICAL
UE	UNDERGROUND ELECTRIC
UL	UNDERGROUND LIGHT CABLE
UT	UNDERGROUND TELEPHONE
V	VELOCITY
W	WEST
W/	WITH

FOREST PROTECTION PLAN

ANY CLEARING, GRADING AND/OR CONSTRUCTION PROPOSED WITHIN 50 FEET OF PROTECTED FOREST AREAS MUST COMPLY WITH THE FOLLOWING FOREST PROTECTION PLAN:

1) FIELD LOCATION OF PROTECTED FOREST AREA BOUNDARIES IN ACCORDANCE WITH SURVEY COURSES AND DISTANCES AND CRITICAL ROOT ZONE DETERMINATION GIVEN IN THIS APPROVED FOREST CONSERVATION PLAN.
2) INSTALLATION OF PROTECTIVE SIGNAGE AND FENCING ALONG THE PROTECTED FOREST AREA BOUNDARIES IN ACCORDANCE WITH DETAILS ENCLOSED IN THIS APPROVED FOREST CONSERVATION PLAN.
3) NOTIFY THE QUEEN ANNE'S COUNTY FOREST CONSERVATION COORDINATOR TO CONDUCT PRE-CLEARING/GRADING/CONSTRUCTION FIELD INSPECTION OF THE BOUNDARY LOCATIONS AND INSTALLED FOREST PROTECTION DEVICES.
4) AFTER INSPECTION APPROVAL IS GRANTED, CONDUCT THE CLEARING, GRADING AND/OR CONSTRUCTION.
5) AFTER COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND BEFORE REMOVAL OF THE FOREST PROTECTION DEVICES, NOTIFY THE QUEEN ANNE'S COUNTY FOREST CONSERVATION COORDINATOR TO CONDUCT A FIELD INSPECTION OF THE PROTECTED FOREST AREAS.

FOREST CONSERVATION PLAN NOTES

1) THE PROTECTED FOREST RETENTION AREA AND PROTECTED REFORESTATION AREA SHOWN HEREON ARE PROHIBITED FROM CLEARING, GRADING, CONSTRUCTION AND/OR DEVELOPMENT BY A DEEDS OF FOREST CONSERVATION EASEMENT RECORDED IN THE LAND RECORDS OF TOWN OF EASTON.

2) 1.4419 ACRES OF ON SITE EXISTING FOREST RETENTION, 1.7067 ACRES WORTH OF TREES TO BE PLANTED ON-SITE.

3) THE PROTECTED FOREST PROTECTION AREA IS REQUIRED TO BE MONITORED AND MAINTAINED IN ACCORDANCE WITH A 2-YEAR MAINTENANCE & INSPECTION AGREEMENT KEPT ON FILE WITH TOWN OF EASTON DEPARTMENT OF PLANNING & ZONING.

FOREST CONSERVATION PLAN

ON THE LANDS OF

OSPREY PROPERTY DEVELOPMENT II, LLC

TAX MAP 103 , GRID 06EA , PARCEL MULTIPLE
FIRST ELECTION DISTRICT, TALBOT COUNTY, MARYLAND
PREPARED FOR: OSPREY PROPERTY COMPANY

RAUCH inc.
Engineering | Survey | Architecture | Environmental
office: 410.770.9081 | fax: 410.770.3667
email: design@raucheng.com | web: www.raucheng.com
106 N. Harrison St - Easton, MD 21601

REVISIONS

REV. #	DATE	DESCRIPTION

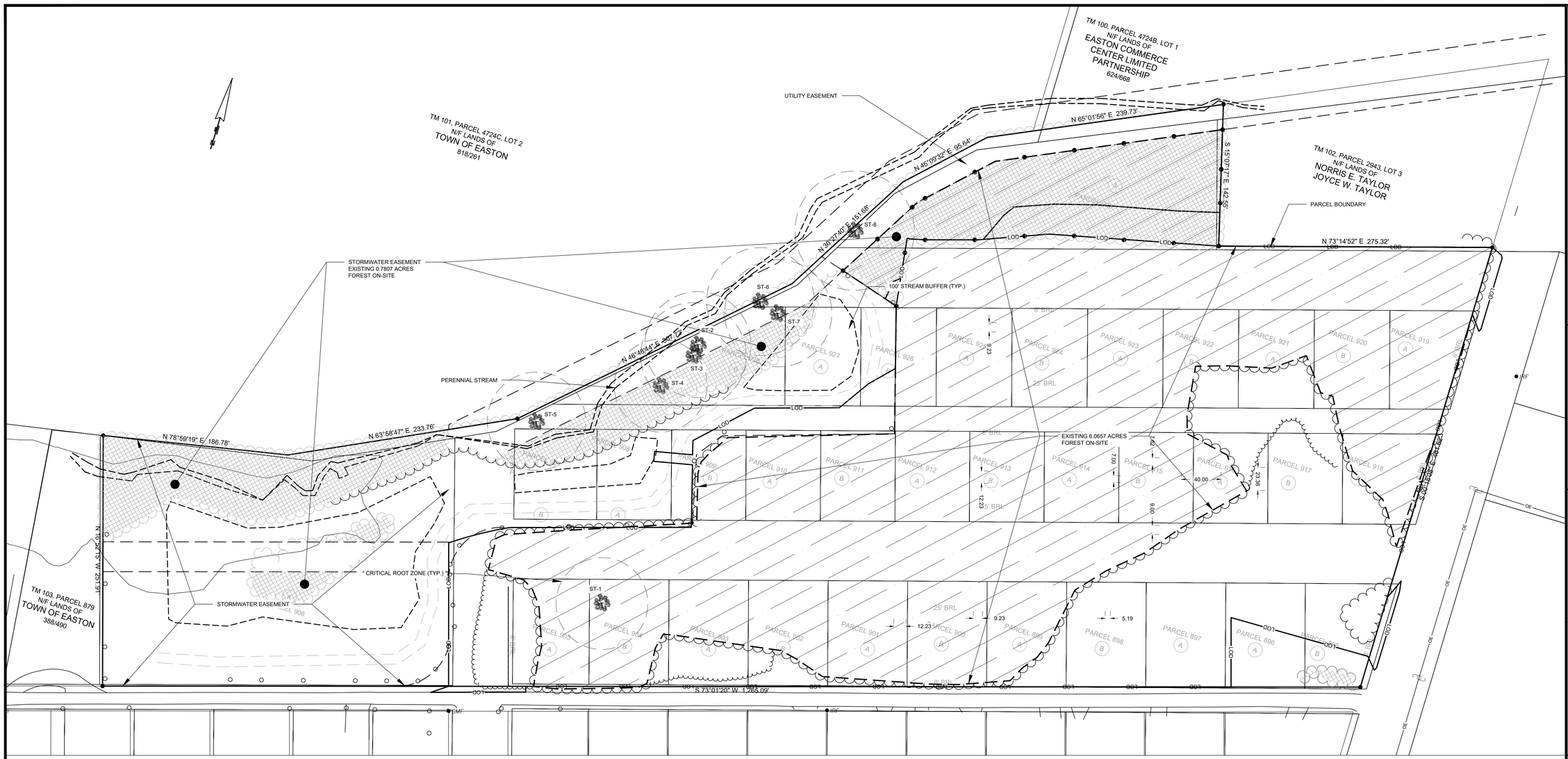
SCALE:

DRAWN:

PROJECT MGR:

SHEET NO.:

Z:\+PROJECTS\2025\25 - OSPREY PROPERTY COMPANY - CALVERT TERRACE\ENVIRONMENTAL\REVISED DELIVERABLE 12.5.2025\FCP 12.5.2025 REV-CUR.DWG



SITE NOTES

1. PROPERTY SHOWN HEREON IS DESIGNATED AS TAX MAP 103, GRID 00EA. PARCELS 895 THRU 928.
2. FOR DEED REFERENCE FOR SEE KBH 3300/125.
3. THIS SITE IS ZONED HDR - HIGH DENSITY RESIDENTIAL
4. CURRENT USE: VACANT. PROPOSED USE: MIXED USE RESIDENTIAL
5. PROPERTY LINES SHOWN HEREON ARE BASED ON A PLAT PREPARED BY RAUCH INC.
6. TOPOGRAPHY HEREON WITHIN THE LIMIT OF DISTURBANCE IS BASED ON A FIELD SURVEY BY RAUCH INC. HORIZONTAL DATUM IS NAD 83 AND VERTICAL DATUM IS NAVD 1988.
7. SOILS ON SITE CONSIST OF HAMBROOK-SASSAFRAS COMPLEX (HfA), WOODSTOWN SANDY LOAM (WdcA), ZEKIAH SILT LOAM 9Zk), AND FALSINGTON SANDY LOAM (FacA) AS PER THE USDA-NRCS SOIL SURVEY FOR TALBOT COUNTY AS RESEARCHED ONLINE IN OCTOBER 2025.
8. THIS SITE IS NOT LOCATED WITHIN THE ONE PERCENT CHANCE FLOOD PLAIN ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S F.I.R.M. MAP FOR TALBOT COUNTY COUNTY, PANEL NO. 24041C0189D DATED 7/20/2016 AND 24041C0193C DATED: 8/5/2013.
9. NO PORTION OF THIS SITE IS LOCATED WITHIN THE CHESAPEAKE BAY CRITICAL AREA.
10. A PERENNIAL STREAM WAS DELINEATED ONSITE AND LOCATED BY RAUCH INC. CONFIRMATION OF THE DELINEATION WAS COMPLETED BY DAVID HAEFFNER OF THE MARYLAND DEPARTMENT OF THE ENVIRONMENT.

GREATER THAN 30" DBH SPECIMEN TREE LIST

Tree	Species	DBH (inche	Critical Root Zone (feet	Condition
ST-1	*Acer saccharinum*	30.8	46.2	Fair
ST-2	*Acer rubrum*	35.5	53.3	Good
ST-3	*Acer rubrum*	35.4	53.1	Fair
ST-4	*Acer rubrum*	31.1	46.7	Good
ST-5	*Acer saccharinum*	32.9	49.4	Fair
ST-6	*Quercus bicolor*	36.1	54.2	Fair
ST-7	*Acer rubrum*	35.9	53.9	Good
ST-8	*Quercus bicolor*	40	60	Good

FOREST CONSERVATION PLAN

ON THE LANDS OF

OSPREY PROPERTY DEVELOPMENT II, LLC.

TAX MAP 103 , GRID 00EA , PARCEL MULTIPLE

FIRST ELECTION DISTRICT, TALBOT COUNTY, MARYLAND

PREPARED FOR: OSPREY PROPERTY COMPANY

RAUCH inc.
Engineering | Survey | Architecture | Environmental
office: 410.770.9081 | fax: 410.770.3667
email: design@raucheng.com | web: www.raucheng.com
106 N. Harrison St - Easton, MD 21601

STATE OF MARYLAND
ROBERT D. RAUCH
No. 11024
PROFESSIONAL ENGINEER

REVISIONS

REV. #	DATE	DESCRIPTION

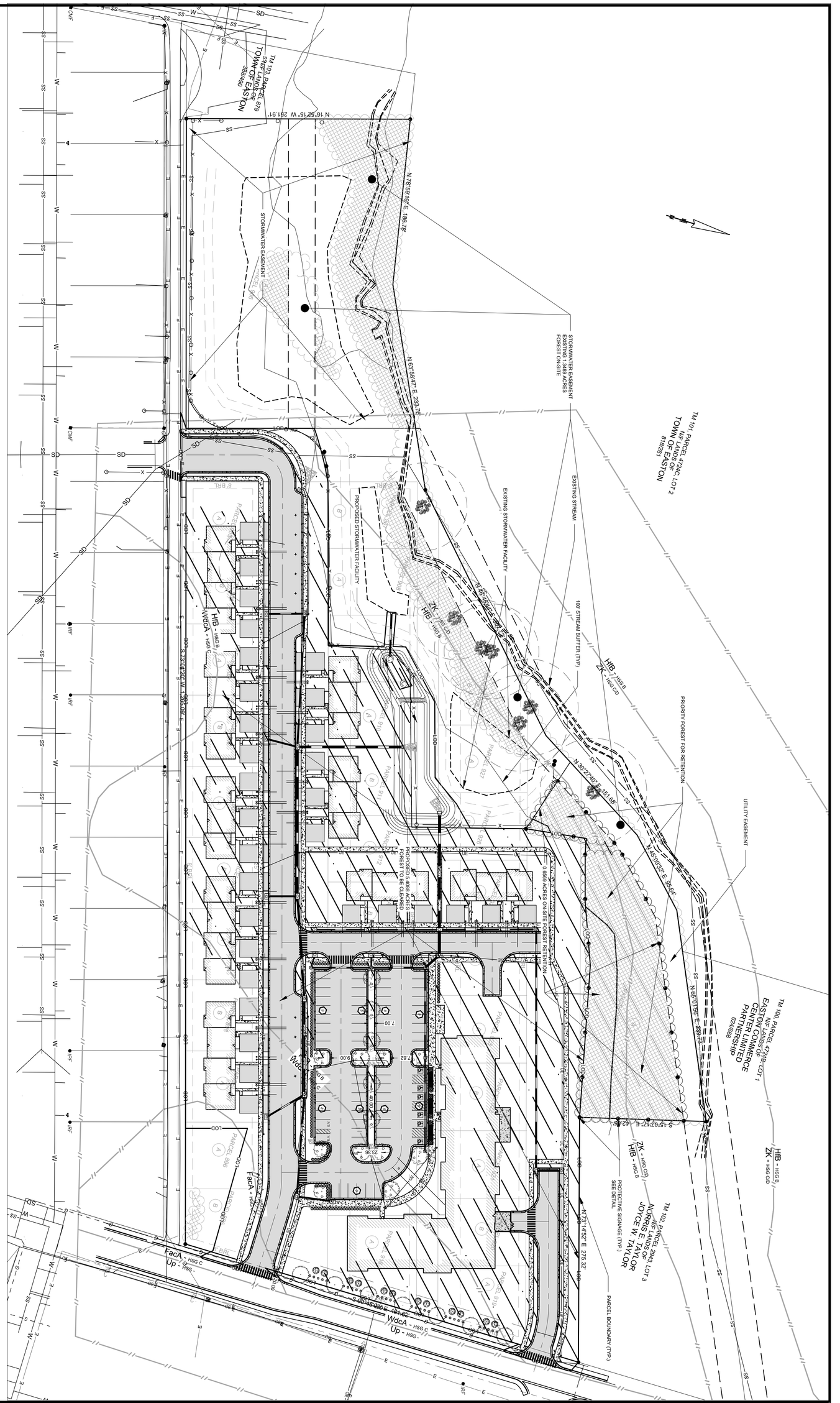
SCALE:

DRAWN:

PROJECT MGR:

SHEET NO.:

Z:\+PROJECTS\250295 - OSPREY PROPERTY COMPANY - CALVERT TERRACE\ENVIRONMENTAL\REVISED DELIVERABLE 12.5.2025\FCP 12.5.2025 REV-GJR.DWG



REVISIONS		
REV. #	DATE	DESCRIPTION

SCALE:

DRAWN:

PROJECT MGR:

SHEET NO.:

12/9/2025

RAUCH inc.
Engineering | Survey | Architecture | Environmental

office: 410.770.9081 | fax: 410.770.3667
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FOREST CONSERVATION PLAN

ON THE LANDS OF

OSPREY PROPERTY DEVELOPMENT II, LLC.

TAX MAP 103 , GRID 00EA , PARCEL MULTIPLE

FIRST ELECTION DISTRICT, TALBOT COUNTY, MARYLAND

PREPARED FOR: OSPREY PROPERTY COMPANY

PLANT LIST:

SYMBOL	QUANTITY	SCIENTIFIC NAME	COMMON NAME	SPECIFICATION
NATIVE STREET TREES				
QR	44	QUERCUS RUBRA	NORTHERN RED OAK	2" CALIPER
QA	14	QUERCUS ALBA	WHITE OAK	2" CALIPER
QP	18	QUERCUS PHELLOS	WILLOW OAK	2" CALIPER
AR	10	ACER RUBRUM	RED MAPLE	2" CALIPER
PS	2	PINUS STROBUS	WHITE PINE	2" CALIPER
TA	15	TILIA AMERICANA	LINDEN TREE	2" CALIPER
IO	17	ILEX OPACA 'MISS HELEN'	AMERICAN HOLLY	1.25" CALIPER
AL	3	AMELANCHIER LAEVIS 'CUMULUS'	ALLEGHENY SERVICEBERRY	1.25" CALIPER
TO	12	THUJA OCCIDENTALIS 'NIGRA'	EASTERN ARBORVITAE	1.25" CALIPER

TOTAL TREES: 135

TOTAL PLANTING CREDIT BASED ON TOWN OF EASTON ZONING ORDINANCE

TOTAL DECIDUOUS SHADE/CANOPY TREES: 101 — 101 X 400 SF = 40,400 SF
TOTAL EVERGREEN TREES: 31 — 31 X 250 SF = 7,750 SF
TOTAL UNDERSTORY TREES: 3 — 3 X 125 SF = 375 SF

TOTAL SF = 48,525 = 1.1140 ACRES

PLUS FOREST RETENTION CREDIT OF 62,809 SF = 1.442 ACRES

TOTAL PLANTING CREDIT FOR SITE = 111,334 SF = 2.559 ACRES

CALCULATIONS BASED ON MARYLAND FOREST CONSERVATION WORKSHEET 2.2

TOTAL PLANTING REQUIREMENT = 1.707 ACRES

TOWN OF EASTON ARTICLE X PAGE 10-63

C. Plant Size at Installation: Unless otherwise specifically stated in Section 28 – 615, all **required** plant material shall conform to the following minimum size specification at installation.

Caliper = tree trunk diameter measured at 12" above finished ground level
Height = tree or plant height measured from finished ground level
Spread = horizontal width (diameter) of plant

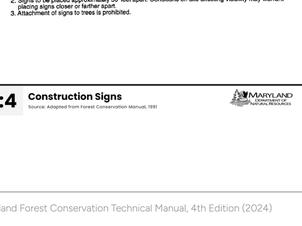
1. Deciduous, Shade/Canopy Trees — 2" Caliper
2. Understory, Flowering Trees — 1.25' caliper and minimum 7' height
3. Evergreen trees — minimum 7' height
4. Upright Shrubs — 18' height
5. Spreading Shrubs — 18' spread
6. Groundcovers or Low Spreading Plans — 12'spread

TOWN OF EASTON ARTICLE X PAGE 10-65

B. Landscape plantings required in this Section, and meeting the size and specification requirements of this Section, may be credited against afforestation or reforestation requirements of a related Forest Conservation Plan for the same site, in accordance with the following schedule:

1. Deciduous, shade/canopy trees (assumed 22' avg. canopy) — 400 sq. ft. area
2. Evergreen trees (assumed 18' avg. canopy) — 250 sq. ft. area
3. Understory trees (assumed 12' avg. canopy) — 125 sq. ft. area

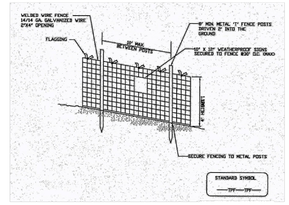
C. Afforestation or Reforestation plantings required under a related Forest Conservation Plan for the same site, may be credited against the required landscape improvements of this Section only when the plantings meet the minimum size and locational requirements outlined in this Section.



Notes:
1. Silt fence to be heeled into the soil.
2. Wire, snow fence, etc. for tree protection only.
3. Boundaries of Retention Area will be established as part of the forest conservation plan review process.
4. Boundaries of Retention Area should be staked and flagged prior to installing device.
5. Avoid root damage when placing anchor posts.
6. Device should be properly maintained throughout construction.
7. Protection signs are also required.
8. Locate fence outside the Critical Root Zone.

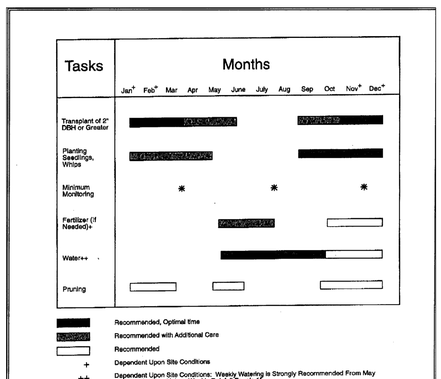
D:8 Silt Fence and Tree Protection
Source: Adapted from Steve Clark & Associates/ACAT, Inc.

Tree Protection Fence Detail
Not to scale



NOTES
1. Practice may be combined with sediment control fencing.
2. Location and limits of fencing should be coordinated in field with arborist.
3. Boundaries of protection area should be staked prior to installing protective device.
4. Root damage should be avoided.
5. Protection signage is required.
6. Fencing shall be maintained throughout construction.

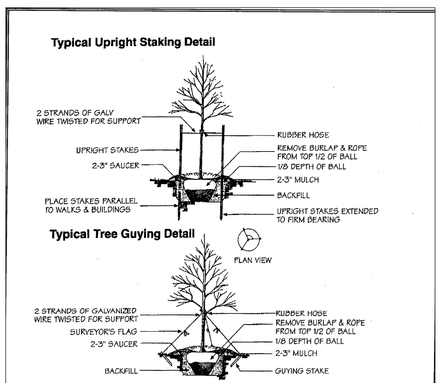
* FIELD ADJUST AND STAKE THE RETENTION BOUNDARY. IN GENERAL, IF MORE THAN 30% OF THE CRITICAL ROOT ZONEIS TO BE DISTURBED, THE TREE SHOULD NOT BE INCLUDED IN THE RETENTION AREA. SOME SOIL DISTURBANCE MAY BE MITIGATED BY SELECTIVE STRESS REDUCTION PRUNING OR OTHER METHODS.



Notes:
1. Activities during November through February depend on ground conditions.
2. No fall planting of oaks and pines.
3. The planting and care of trees is most successful when coordinated with the local conditions. This calendar summarizes some of the recommended time frames for basic reforestation and stress reduction activities.

Source: Adapted from Forest Conservation Manual, 1991

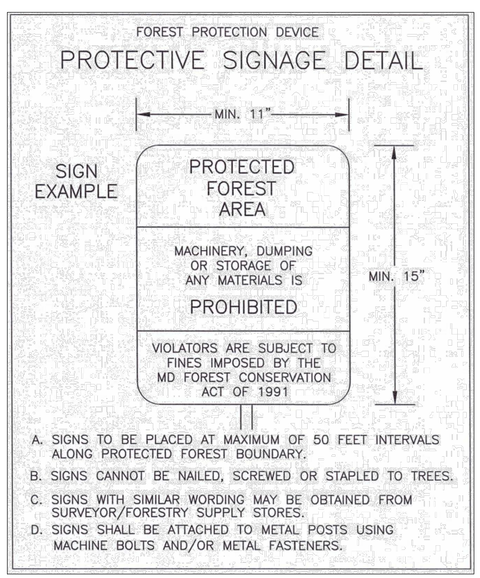
Tree Planting and Maintenance Calendar — **Figure A:20**

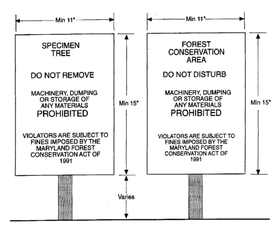


Tree Size Height	Tree Size Caliper	Stake	#	Wire or Cable	Hose
6-10'	1" to 1-1/2"	5-6' uprights	2	14 guage wire	1/2"
10-12'	2" to 2-1/2"	7-8' uprights	2	14 guage wire	1/2"
12-14'	2-1/2" to 3"	2" guy	3	12 guage wire	1/2"
14-16'	3-4"	2" guy	3	12 guage wire	3/4"

Source: Adapted from Forest Conservation Manual, 1991

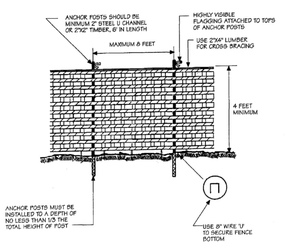
Tree Staking and Guying Specifications — **Figure D:20**





Notes:
1. Bottom of signs to be higher than top of tree protection fence.
2. Signs to be placed approximately 50' feet apart. Conditions on site affecting visibility may warrant placing signs closer or farther apart.
3. Attachment of signs to trees is prohibited.

D:4 Construction Signs
Source: Adapted from Forest Conservation Manual, 1991



Notes:
1. Blaze orange or blue plastic mesh fence for forest protection device, only.
2. Boundaries of Retention Area will be established as part of the forest conservation plan review process.
3. Boundaries of Retention Area should be staked and flagged prior to installing device.
4. Avoid damage to critical root zone. Do not damage of sever large roots when installing posts.
5. Protection signs are required.
6. Device should be maintained throughout construction.

D:5 Plastic Mesh Tree Protection
Source: Adapted from Prince George's County, Woodland Conservation Manual, 1991

FOREST CONSERVATION PLAN

ON THE LANDS OF

OSPREY PROPERTY DEVELOPMENT II, LLC.

TAX MAP 103 , GRID 00EA , PARCEL MULTIPLE
FIRST ELECTION DISTRICT, TALBOT COUNTY, MARYLAND
PREPARED FOR: OSPREY PROPERTY COMPANY

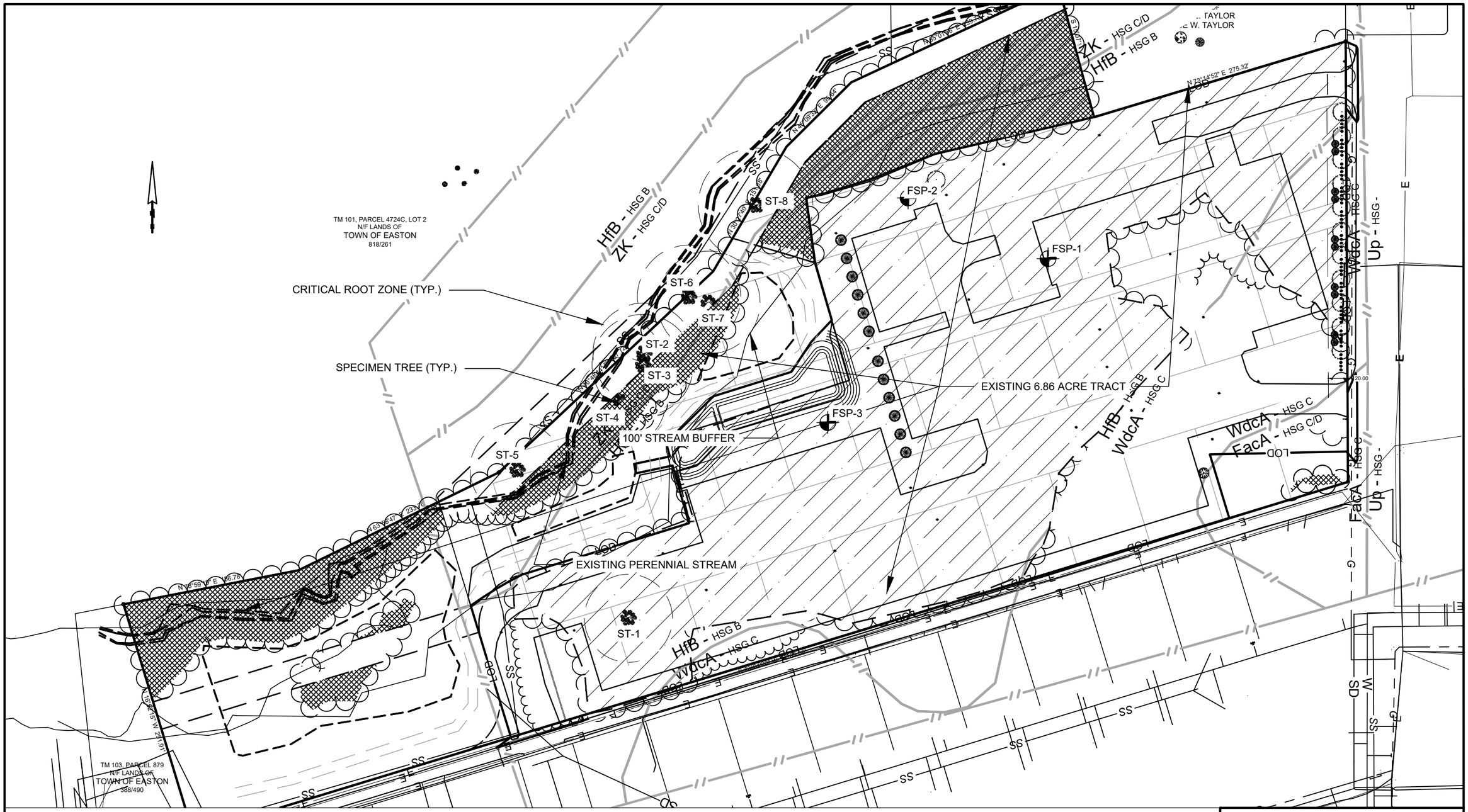
RAUCH inc.
Engineering | Survey | Architecture | Environmental
office: 410.770.9081 | fax: 410.770.3667
email: design@raucheng.com | web: www.raucheng.com
108 N. Harrison St. • Easton, MD 21601

STATE OF MARYLAND — TRACEY ANN CLARK — No. 21324 — REGISTERED PROFESSIONAL LANDSCAPE ARCHITECT

REVISIONS		
REV. #	DATE	DESCRIPTION

SCALE:
DRAWN:
PROJECT MGR:
SHEET NO.:

Z:\+PROJECTS\350295 - OSPREY PROPERTY COMPANY - CALVERT TERRACE\ENVIRONMENTAL\REVISED DELIVERABLE 12.5.2025\FCP 12.5.2025 REV-CJR.DWG



ENVIRONMENTAL FEATURES MAP	DRAWN BY JTB
LANDS OF:	SCALE 1"=100'
OSPREY PROPERTY DEVELOPMENT II, LLC.	DATE 11.5.2025
MAP 103 GRID 00EA MULTIPLE PARCELS	JOB NO. 250295
FIRST ELECTION DISTRICT, TALBOT COUNTY, MARYLAND	

RAUCH inc.
engineering design & development services
office: 410.770.9081 | fax: 410.770.3667
email: design@raucheng.com | web: www.raucheng.com
address: 106 N Harrison St - Easton, MD 21601

RAUCH
inc.
engineering design & development services

STORMWATER MANAGEMENT ANALYSIS
FOR
CALVERT TERRACE

PREPARED FOR
OSPREY PROPERTY COMPANY II, LLC

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

9th of December 2025



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

12/09/2025

ROBERT D. RAUCH, LICENCE NO. 11024 DATE
EXPIRATION DATE 7/24/2026

1.0 PROJECT OVERVIEW & SITE LOCATION

The proposed project consists of the development of a residential community with townhomes and an apartment building. The project is located on a vacant lot between Dove Lane and Calvert Street in the Town of Easton, Talbot County, Maryland. The project area is bounded by Dove Lane to the South, Calvert Street to the East, a stormwater pond to the West, and open land to the North.

There are no jurisdictional or non-jurisdictional non-tidal wetlands, or wetland buffers on the site, but there is an existing stream as well as a stormwater facility with a stormwater easement to the West of the project site. There are also existing trees onsite which are planned to be cleared and mitigated for as part of the proposed work.

The project, named Calvert Terrace, intends to develop and construct new public roads, townhome units, an apartment building, supporting utility infrastructure, sidewalks, driveways, and landscape areas (the “Project”).

The Site is located outside regulated FEMA 100-year floodplain areas as shown on Map numbers 24041C0270E and 24041C0275E, effective 9/3/2010. The Site is not located within the Chesapeake Bay Critical Area or Tier II Watershed. Based on USDA Web Soil Survey, the Property consists primarily of hydrologic group soils rated ‘B’ and ‘C’.

This report summarizes the design strategies implemented to meet the Environmental Site Design stormwater management and Soil Erosion and Sediment Control requirements and regulations of the Town of Easton (the “Town”), Talbot County (the “County”) and the Maryland Department of the Environment (“MDE”).

2.0 STORMWATER DESIGN STANDARDS & APPROACH

The Project is located within the limits of the Town of Easton, Talbot County, on the Eastern Shore of Maryland, therefore it is subject to the SWM regulations and requirements identified within the MDE 2000 Maryland Stormwater Design Manual, revised May 2009 (the “Maryland SWM Manual”). As identified in Chapter 5 of the SWM Manual, the Project is required to implement Environmental Site Design (“ESD”) to the Maximum Extent Practicable (“MEP”), to address post-construction Environmental Site Design Volume (ESDv) and water quality treatment standards.

Quantity control standards are satisfied by an existing downstream stormwater pond owned and maintained by the Town of Easton that was previously sized to accommodate full build-out of the site. This report focuses solely on water quality treatment.

An existing agreement was created when the existing pond was constructed that stormwater management requirements would be met for any future development, including this Calvert Terrace project, if the impervious surface was less than or equal to 65% of the project site. The approach to this project is to take 1” PE credit from the

original stormwater management pond/easement/agreement and provide treatment for the remaining PE required to treat ESDv for the project.

The stormwater management computations have been provided based on the requirements identified by the Maryland SWM Manual. refer to Appendix A.

The soil erosion and sediment controls have been implemented based on the requirements identified by the Talbot Soil Conservation District and 2011 Maryland Standards and Specification for Soil Erosion and Sediment Control (the “ESC Manual”).

3.0 PRE-DEVELOPMENT SITE CONDITIONS

The existing property consists of approximately 10.05 acres of vacant land with no structures or impervious cover. The property is located within the Tred Avon River watershed. The existing topography within the Property consists of gently sloping areas, generally draining from east to west toward an existing stormwater management pond owned by the Town of Easton located immediately downstream (West) of the site. The pond receives runoff from the site and discharges to an existing storm drain system along Calvert Street.
The existing land use is classified as open space in fair condition with no impervious area.

4.0 POST-DEVELOPMENT SITE CONDITIONS

The project area associated with the proposed limit of disturbance is approximately 7.60 acres, which includes approximately 4.01 acres of proposed impervious cover. The impervious area includes new public roads, sidewalks, driveways, parking areas, and building rooftops. Open space areas will be planted with turf grass and landscaped. The development efforts minimize grading to maintain existing drainage patterns to the maximum extent practicable.

The site is designed to meet MDE Chapter 5 ESD requirements. The proposed development will maintain the drainage patterns of the existing site to the maximum extent practicable. Though there will be grading and drainage improvements required to support the proposed facility, the existing topography and drainage patterns within the project area will generally be maintained in the post-development condition. Filling in low spots and raised building pads are proposed to promote positive drainage away from structures and Westward to the new submerged gravel wetland which will discharge to the existing pond.

Quantity control is managed by the existing downstream Town-owned stormwater pond previously sized for full site build-out. Stormwater quality control will be managed through the implementation of Environmental Site Design practices including rooftop disconnection for townhome rooftops and a submerged gravel wetland to treat downstream of all rooftops as well as roadway, parking, and hardscape impervious surfaces.

5.0 STORMWATER QUALITY & QUANTITY COMPLIANCE

5.1 STORMWATER QUALITY

The Maryland Stormwater management design manual states that because the existing on-site impervious area is 0% this project shall be considered new development and does not qualify for redevelopment credits. However, due to the existing pond and agreement, 1" of stormwater treatment (per the MDE stormwater regulations prior to Chapter 5) was provided for future development of this parcel. This 1" credit is applied in our ESDv calculations as a PE required reduction.

Based on the proposed impervious areas to be developed as part of this project, the impervious area requiring treatment will be the entire proposed 4.01 acres of impervious area. Based on the proposed impervious areas, the underlying soil conditions, the target PE for the site to treat ESDv is 1.80 inches. Crediting the existing pond creates a project PE required to treat ESDv of 0.80 inches and an ESDv required of 11,593; refer to Appendix A for the Environmental Site Design computations. ESDv treatment shall be provided through the implementation of Environmental Site Design (ESD) practices including rooftop disconnection (R-2) for townhome rooftops and a submerged gravel wetland (M-2) for roadways, driveways, and parking areas.

A 1:1 Rooftop disconnection (R-2) is provided for all townhome rooftops to adjacent pervious open space. Roof leaders discharge to grassed areas with a minimum disconnection path of 10 feet. Disconnection paths are graded to maintain sheet flow. Requirements for rooftop disconnection listed in the 2000 Maryland Stormwater Design Manual will be met throughout the site.

A submerged gravel wetland (M-2) is provided to assist in meeting the site ESDv requirement. The drainage area includes rooftops of the townhomes and apartment building, sidewalks, roadways, driveways, and parking areas. The impervious area requiring treatment by the

submerged gravel wetland is 3.50 acres. The submerged gravel wetland is providing 75% of the ESD storage above the filter storage area with 2 feet of proposed surface storage (ponding depth). Refer to Appendix A for the Submerged Gravel Wetland design computations.

After implementation of these practices, ESD to the MEP is met through the 1.00" PE credit from the existing pond and through use of ESD practices. A summary of the practices is shown below:

BMP SUMMARY CHART

BMP ID	TYPE OF ESD PRACTICE (STRUCTURE NAME)	MARYLAND GRID COORDINATE (NAD 83) METERS		BMP DRAINAGE AREA	IMPERVIOUS AREA	TARGET PE	ACTUAL PE	ACTUAL ESDv
		NORTHING	EASTING	(SF)	(SF)	(IN)	(IN)	(CF)
RD-1	ROOFTOP DISCONNECT	N/A	N/A	3,067	3,067	0.8	1	242.8
RD-2	ROOFTOP DISCONNECT	N/A	N/A	9,884	9,884	0.8	1	782.5
SGW-1	SUBMERGED GRAVEL WETLAND	407010.2500'	1579123.4076'	240,582	152,645	0.8	0.6	13,261
TOTAL				**253,533**	**165,596**			**14,286**

5.2 STORMWATER QUANTITY

The existing stormwater management pond, easement, and agreement state that if the development remains under the 65% impervious ratio, the existing pond satisfies stormwater management regulations and requirements which includes quantity management.

6.0 EROSION & SEDIMENT CONTROL DURING CONSTRUCTION

The project will implement standard and enhanced soil erosion and sediment control measures. The soil erosion and sediment controls have been implemented based on the requirements identified by the Talbot Soil Conservation District and 2011 Maryland Standards and Specification for Soil Erosion and Sediment Control. These measures include stabilized construction entrance, inlet protection, silt fence, temporary sediment traps, and temporary/permanent stabilization practices. Effort during construction will be made to limit disturbance and provide temporary stabilization in accordance with the Maryland Standards and Specifications for Soil Erosion and Sediment Control. All sediment control devices will remain in place throughout construction to prevent sediment laden runoff from leaving the site. The practices will remain in place until upstream areas are permanently stabilized.

7.0 NATURAL AREA PRESERVATION

The stormwater management facilities for this project have been designed to preserve natural areas, including the existing blue-line stream and trees as best as possible.

8.0 SUMMARY & REGULATORY COMPLIANCE

The Calvert Terrace project will comply with all MDE and Town requirements per the MDE Stormwater Manual as well as the MDE ESC Manual. The existing pond provided quantity management as well as 1.00” of PE credit. The remaining PE credit was provided in the form of rooftop disconnection treatment as well as a submerged gravel wetland.

ESD Calculations

Project Name:	**Calvert Terrace**								
Date:	**4-Nov-25**								
	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 PlantingWas Used at the Site to Convert Turf Areas into Forest			*YES*						
Step 2: Calculate Site Imperviousness and Water Quality Volume, WQv (for redevelopment)									
New development/redevelopment category is based on the the TOTAL SITE AREA whereas the ESD and WQ volume are based on the LOD AREA. The term "SITE" is 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 develoment is to be perfomed 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)	*10.05*								
Existing SITE Impervious Area (acres or sq-ft)									
SITE percent impervious	0%								
Development Category (for ESD)	**New Development**								
LOD Area, A (acres)	7.60								
Existing LOD Impervious Surface Area (acres)	0.00								
Proposed LOD Impervious Surface Area (acres)	4.01								
Rainfall Depth, P (in)	1.0								
Existing LOD Imperviousness, I_{pre}	0%								
Proposed LOD Imperviousness, I_{post}	53%								
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	70.69				
% Soil Type B	79%		RCN Soil Type B	80.56				
% Soil Type C	19%		RCN Soil Type C	87.13				
% Soil Type D	2%		RCN Soil Type D	89.56				
Target Pre-Developed Condition, RCN_{woods}	58.27335	Post-Developed Condition, RCN		81.98				
Soil Type A ESD Rainfall Target, P_E (in)	0.00							
Soil Type B ESD Rainfall Target, P_E (in)	1.80							
Soil Type C ESD Rainfall Target, P_E (in)	1.80							
Soil Type D ESD Rainfall Target, P_E (in)	1.80		Runnoff depths for H and H analysis					
	1yr		2yr	10yr	100yr			
Maximum P_E (in)	2.7		*3.4*	*5.3*	*7.6*			
Site ESD Rainfall Target, P_E (in)	1.80	**1" of rainfall is treated via the existing stormwater management pond**						
		Actual PE to treat = 1.80 in - 1 in = 0.80 in						
ESD Runoff Depth, Q_E (in)	0.95							
ESD Runoff Volume, ESDv (cf)	**11,593**							
Site Rainfall Target, P_E (in)	**0.80**							
Total Treatment Volume (cf)	**11,593**							

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

Nonstructural Practices	P_E Credit Description	Contributing Drainage Area (sf)	Direct WQv or ESDv Received by Practice (cf)	WQv or ESDv from Up-Gradient Practices (cf)	Average P_E 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.	12,951	2,768	N/A	1.00	1,025	1,743
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_E 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	240,582	33,617	25732	13,261	46,088
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	

Step 7: Check for ESDv to MEP compliance and Revise Site If Necessary								
	Drainage Area Treated (sf)		253,533		WQv or ESDv Treated (cf) using ESD practices			14,286
						P_E achieved (inches)		0.99
					Entire ESDv Treated Through ESD Practices?			YES
						ESDv Remaining? (cf)		0
					If ESDV is not fully treated, is ESD to MEP achieved?			YES

	Direct drainage										
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)	Practice Specific Parameter(s)		PE Credit	WQV or ESDv provided (cf)	Runoff Volume Remaining (cf)	Down-Gradient Practice and Row	SOIL TYPE
Disconnection of Rooftop Runoff #1	3,067	100% 0.95	2.51 610	656	Flow Path (ft) 60	East/West Eastern Shore	1.00	242.8	413	Submerged Gravel Wetlands 1	A/B
Disconnection of Rooftop Runoff #2	9,884	100% 0.95	2.51 1966	2,113	Flow Path (ft) 60	East/West Eastern Shore	1.00	782.5	1,330		A/B
Total	12,951			2,768			1.00	1,025	1,743		

M-2

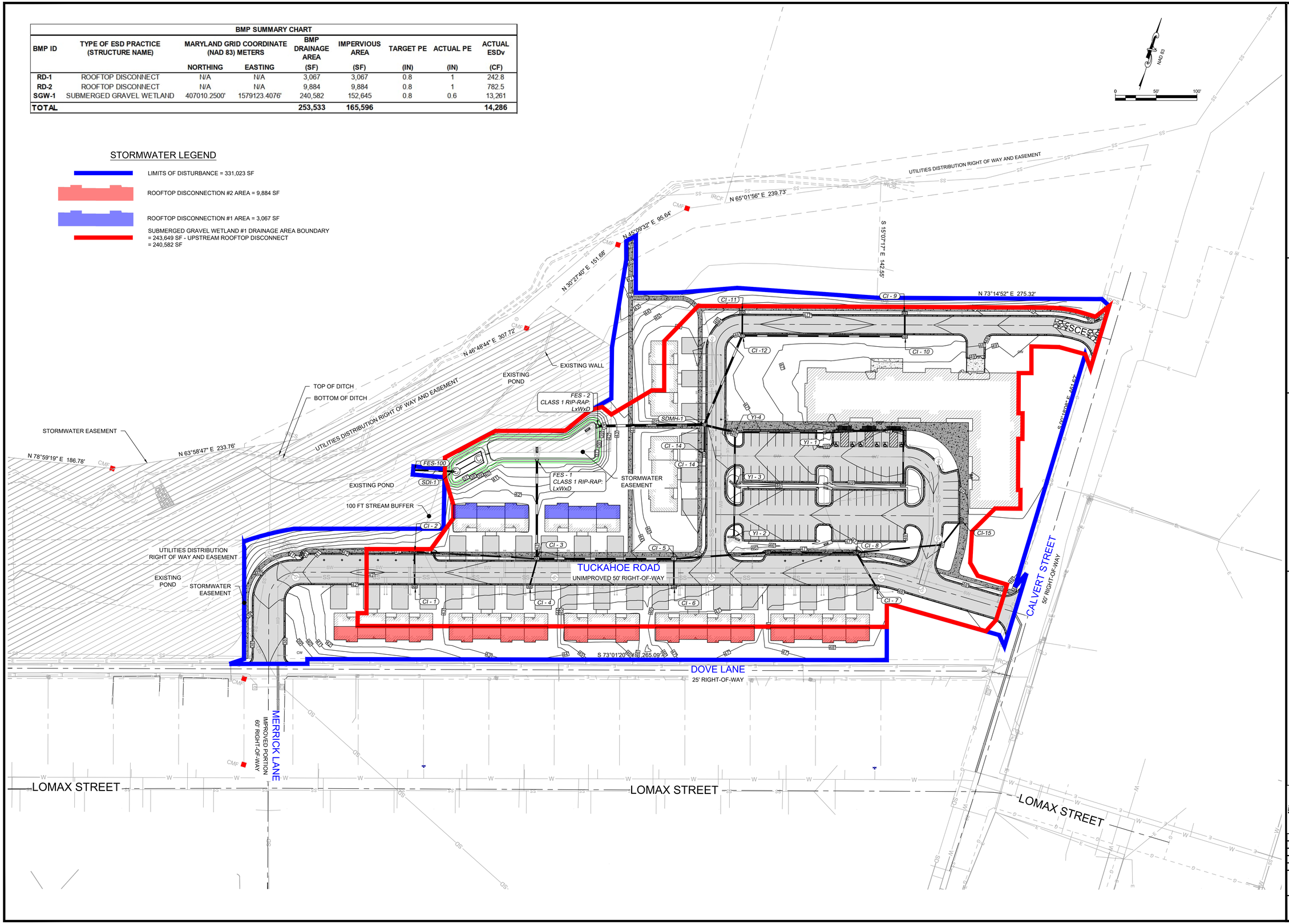
	Direct drainage				Indirect drainage											
Micro-Scale Practices	Contributing Drainage Area (sf)	% Impervious Cover ---------- RV	To fully treat sub area ------ PE required ------- WQV required	Max available WQv or ESDv from CDA (cf)	Area of upstream catchment (sf)	WQv or ESDv from Up-Gradient Practices (cf)	Total catchment area ----- Total ESDv to practice	Practice Specific Parameter(s)				WQV or ESDv provided (cf)	Runoff Volume Remaining (cf)	Down-Gradient Practice and Row	SOIL TYPE
		63%	0.80				243,649	Bed Surface Area (sf)	Top of Ponding Surface Area (sf)	Ponding Depth (ft)	Media Depth (ft)			Submerged Gravel Wetlands	
Forebay #1	240,582	0.621034	9961	33,617	3067	413	34030	3,314	5,397	2	0	8,711	25,319	2	A/B
			0.80				243,649	Bed Surface Area (sf)	Top of Ponding Surface Area (sf)	Ponding Depth (ft)	Media Depth (ft)				
Submerged Gravel Wetlands #1		0.05	0	0	243649	25319	25319	1,012	1,919	2	4	4,550	20,769		A/B
Total	240,582			33,617		25,732						13,261	46,088		

Stormwater Drainage Area Maps

BMP SUMMARY CHART								
BMP ID	TYPE OF ESD PRACTICE (STRUCTURE NAME)	MARYLAND GRID COORDINATE (NAD 83) METERS		BMP DRAINAGE AREA	IMPERVIOUS AREA	TARGET PE	ACTUAL PE	ACTUAL ESDv
		NORTHING	EASTING	(SF)	(SF)	(IN)	(IN)	(CF)
RD-1	ROOFTOP DISCONNECT	N/A	N/A	3,067	3,067	0.8	1	242.8
RD-2	ROOFTOP DISCONNECT	N/A	N/A	9,884	9,884	0.8	1	782.5
SGW-1	SUBMERGED GRAVEL WETLAND	407010.2500'	1579123.4076'	240,582	152,645	0.8	0.6	13,261
TOTAL				253,533	165,596			14,286

STORMWATER LEGEND

- LIMITS OF DISTURBANCE = 331,023 SF
- ROOFTOP DISCONNECTION #2 AREA = 9,884 SF
- ROOFTOP DISCONNECTION #1 AREA = 3,067 SF
- SUBMERGED GRAVEL WETLAND #1 DRAINAGE AREA BOUNDARY = 243,649 SF - UPSTREAM ROOFTOP DISCONNECT = 240,582 SF



STORMWATER QUALITY DRAINAGE MAP

OF THE LANDS OF

CALVERT TERRACE

TAX MAP 0103, GRID 00EA, PARCEL 885 - 928

ELECTION WARD 1, EASTON, TALBOT COUNTY, MARYLAND

PREPARED FOR OSPREY PROPERTY COMPANY II LLC

RAUCH inc.
Engineering | Survey | Architecture | Environmental
Main Office: 106 N Harrison St - Easton, MD 21601
Web: www.rauch-inc.com | Email: design@raucheng.com
Phone: 410 770 9081 | Fax: 410 770 3667

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.

PRELIMINARY PLANS NOT FOR CONSTRUCTION

License No. 11024
Expiration Date: July 24, 2026

08-28-2025

REVISIONS

REV. #	DATE	DESCRIPTION
1		

MISS UTILITY OF DELMARVA CALL BEFORE YOU DIG

811

DATE:	10/28/2025
SCALE:	1" = 50'
DRAWN BY:	AF
DESIGNED BY:	AF
APPROVED BY:	BBF

SHEET NO.:
SWM EXHIBIT

Soils Report

United States Department of Agriculture

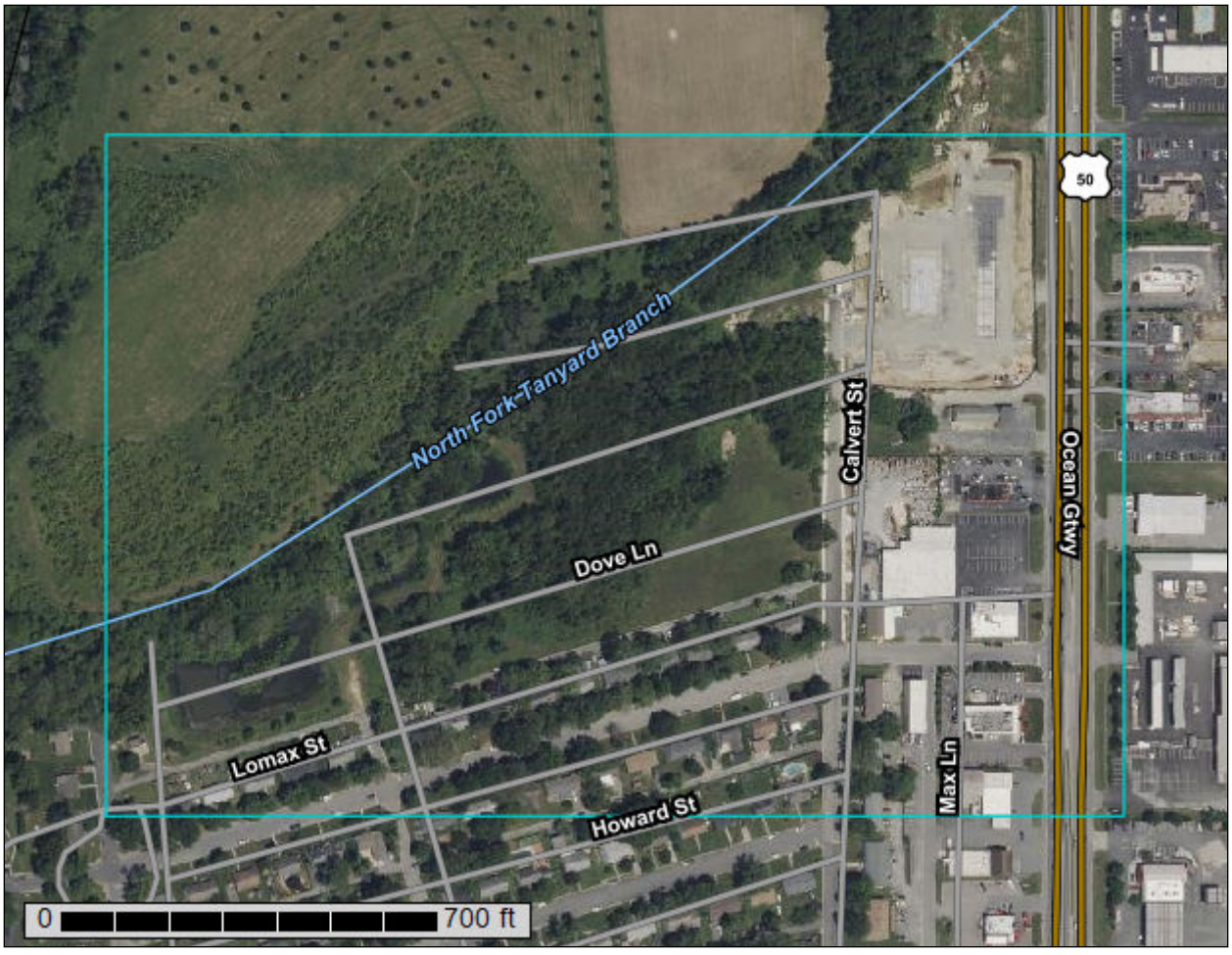
NRCS

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

Calvert Terrace



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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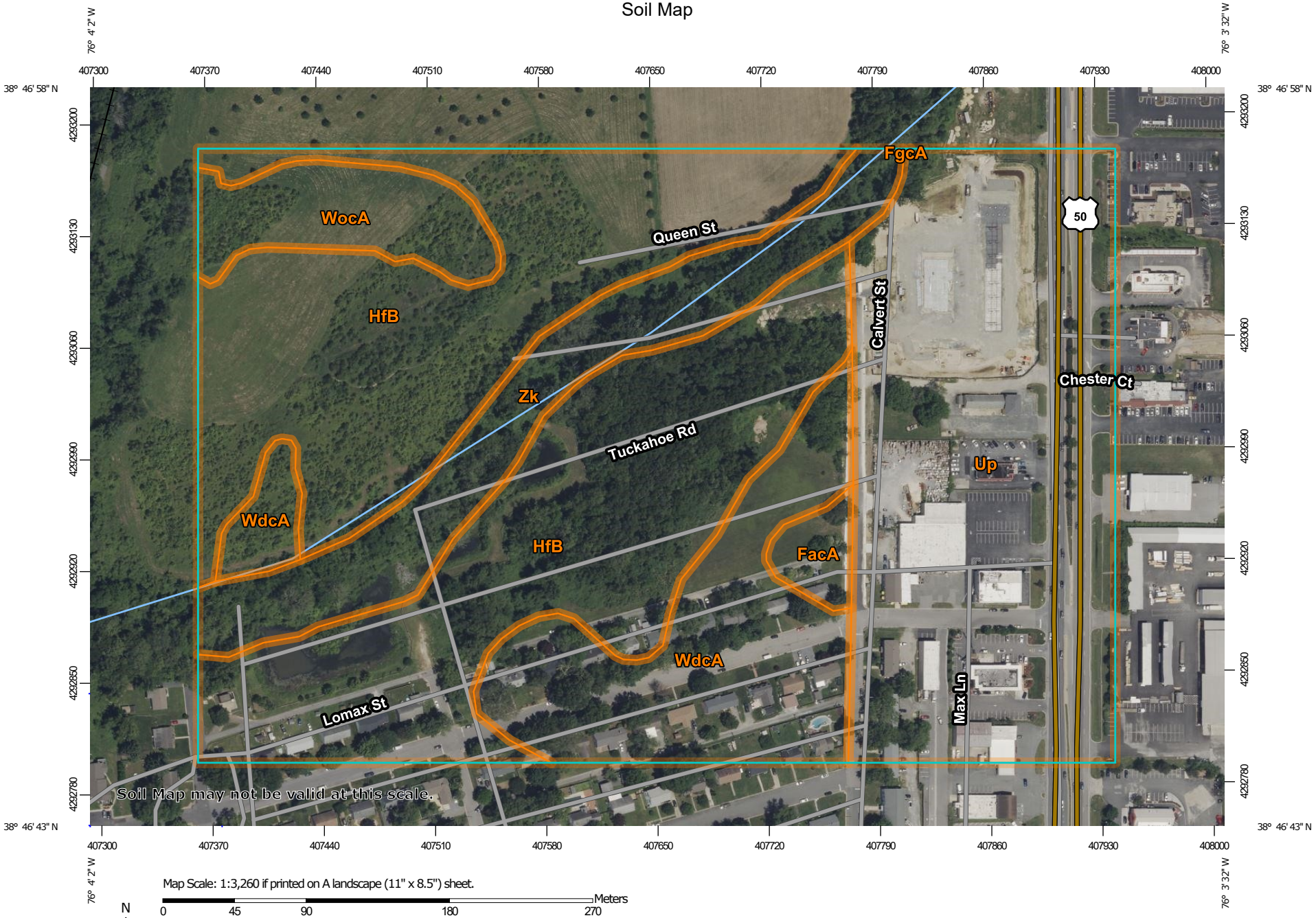
Soil Map

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.



Map Scale: 1:3,260 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 45 90 180 270

Feet
0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

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 22, Sep 9, 2025

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

Date(s) aerial images were photographed: May 30, 2022—Jul 4, 2022

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

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
FacA	Fallsington sandy loams, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain	0.7	1.2%
FgcA	Fallsington loams, 0 to 2 percent slopes, Mid-Altlantic Coastal Plain	0.0	0.0%
HfB	Hambrook-Sassafras complex, 2 to 5 percent slopes	23.5	42.6%
Up	Urban land	15.5	28.2%
WdcA	Woodstown sandy loam, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain	7.4	13.5%
WocA	Woodstown loam, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain	2.5	4.6%
Zk	Zekiah silt loam, frequently flooded	5.5	9.9%
Totals for Area of Interest		**55.1**	**100.0%**

Map Unit Descriptions

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

FacA—Fallsington sandy loams, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain

Map Unit Setting

National map unit symbol: 2s96z
Elevation: 40 to 50 feet
Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 52 to 58 degrees F
Frost-free period: 180 to 220 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Fallsington, undrained, and similar soils: 48 percent
Fallsington, drained, and similar soils: 25 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Fallsington, Undrained

Setting

Landform: Swales, drainageways, flats, depressions
Landform position (three-dimensional): Dip, talf
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Parent material: Loamy fluviomarine deposits

Typical profile

Oe - 0 to 2 inches: mucky peat
A - 2 to 10 inches: sandy loam
Btg - 10 to 32 inches: sandy clay loam
BCg - 32 to 39 inches: loamy sand
Cg1 - 39 to 46 inches: sandy clay loam
Cg2 - 46 to 80 inches: 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 high (0.01 to 1.98 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 2.3 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): 5w
Hydrologic Soil Group: C/D
Ecological site: F149AY090NJ - Coastal Plain Hardwood Swamp
Hydric soil rating: Yes

Description of Fallsington, Drained

Setting

Landform: Flats, depressions, swales
Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Parent material: Loamy fluviomarine deposits

Typical profile

Ap - 0 to 10 inches: sandy loam
Btg - 10 to 32 inches: sandy clay loam
BCg - 32 to 39 inches: loamy sand
Cg1 - 39 to 46 inches: sandy clay loam
Cg2 - 46 to 80 inches: 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 high (0.01 to 1.98 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 2.3 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Ecological site: F149AY090NJ - Coastal Plain Hardwood Swamp
Hydric soil rating: Yes

Minor Components

Marshyhope

Percent of map unit: 8 percent
Landform: Depressions, flats, drainageways
Landform position (three-dimensional): Dip, talf
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Ecological site: F149AY130NJ - Moist Loamy Upland
Hydric soil rating: No

Woodstown

Percent of map unit: 7 percent
Landform: Fluviomarine terraces, depressions, broad interstream divides, flats
Landform position (two-dimensional): Summit, footslope
Landform position (three-dimensional): Tread, dip, talf
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Ecological site: F149AY130NJ - Moist Loamy Upland
Hydric soil rating: No

Hammonton

Percent of map unit: 5 percent
Landform: Flats, drainageways
Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear
Ecological site: F149AY130NJ - Moist Loamy Upland
Hydric soil rating: No

Othello

Percent of map unit: 5 percent
Landform: Flats, depressions, swales, drainageways
Landform position (two-dimensional): Toeslope, footslope
Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Ecological site: F149AY090NJ - Coastal Plain Hardwood Swamp
Hydric soil rating: Yes

FgcA—Fallsington loams, 0 to 2 percent slopes, Mid-Altlantic Coastal Plain

Map Unit Setting

National map unit symbol: 2s96t
Elevation: 10 to 70 feet
Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 52 to 58 degrees F
Frost-free period: 180 to 220 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Fallsington, undrained, and similar soils: 38 percent
Fallsington, drained, and similar soils: 37 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Fallsington, Undrained

Setting

Landform: Drainageways, flats, depressions, swales
Landform position (three-dimensional): Dip, talf
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Parent material: Loamy fluviomarine deposits

Typical profile

Oe - 0 to 2 inches: mucky peat
A - 2 to 10 inches: loam

Btg - 10 to 32 inches: sandy clay loam
BCg - 32 to 39 inches: loamy sand
Cg1 - 39 to 46 inches: sandy clay loam
Cg2 - 46 to 80 inches: 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 high (0.01 to 1.98 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 2.3 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): 5w
Hydrologic Soil Group: C/D
Ecological site: F149AY090NJ - Coastal Plain Hardwood Swamp
Hydric soil rating: Yes

Description of Fallsington, Drained

Setting

Landform: Flats, depressions, swales
Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Parent material: Loamy fluviomarine deposits

Typical profile

Ap - 0 to 10 inches: loam
Btg - 10 to 32 inches: sandy clay loam
BCg - 32 to 39 inches: loamy sand
Cg1 - 39 to 46 inches: sandy clay loam
Cg2 - 46 to 80 inches: 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 high (0.01 to 1.98 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 2.3 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Ecological site: F149AY090NJ - Coastal Plain Hardwood Swamp

Hydric soil rating: Yes

Minor Components

Hammonton

Percent of map unit: 7 percent
Landform: Flats, drainageways
Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear
Ecological site: F149AY130NJ - Moist Loamy Upland
Hydric soil rating: No

Woodstown

Percent of map unit: 7 percent
Landform: Flats, fluviomarine terraces, depressions, broad interstream divides
Landform position (two-dimensional): Summit, footslope
Landform position (three-dimensional): Tread, talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Ecological site: F149AY130NJ - Moist Loamy Upland
Hydric soil rating: No

Othello

Percent of map unit: 6 percent
Landform: Depressions, swales, drainageways, flats
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Dip, talf
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Ecological site: F149AY090NJ - Coastal Plain Hardwood Swamp
Hydric soil rating: Yes

Marshyhope

Percent of map unit: 5 percent
Landform: Depressions, flats, drainageways
Landform position (three-dimensional): Dip, talf
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Ecological site: F149AY130NJ - Moist Loamy Upland
Hydric soil rating: No

HfB—Hambrook-Sassafras complex, 2 to 5 percent slopes

Map Unit Setting

National map unit symbol: 1vh09
Elevation: 0 to 330 feet
Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 52 to 58 degrees F
Frost-free period: 180 to 220 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Hambrook and similar soils: 41 percent
Sassafras and similar soils: 39 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hambrook

Setting

Landform: Flats, fluviomarine terraces, knolls, depressions
Landform position (three-dimensional): Rise
Down-slope shape: Linear, convex, concave
Across-slope shape: Linear, convex, concave

Typical profile

Ap - 0 to 10 inches: sandy loam
BE - 10 to 14 inches: loam
Bt - 14 to 28 inches: sandy clay loam
BC - 28 to 65 inches: loamy sand
2Cg - 65 to 80 inches: silt loam

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 1.98 in/hr)
Depth to water table: About 40 to 72 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.9 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: B
Ecological site: F149AY170MD - Well Drained Fine-Loamy Upland
Hydric soil rating: No

Description of Sassafras

Setting

Landform: Knolls, fluviomarine terraces, flats, low hills
Landform position (three-dimensional): Riser, dip
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear

Typical profile

Ap - 0 to 9 inches: sandy loam
E - 9 to 15 inches: sandy loam
Bt - 15 to 30 inches: loam
BC - 30 to 37 inches: sandy loam
C - 37 to 80 inches: loamy sand

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: B
Ecological site: F149AY170MD - Well Drained Fine-Loamy Upland
Hydric soil rating: No

Minor Components

Woodstown

Percent of map unit: 10 percent
Landform: Depressions, flats
Landform position (three-dimensional): Dip
Ecological site: F149AY130NJ - Moist Loamy Upland
Hydric soil rating: No

Ingleside

Percent of map unit: 5 percent
Landform: Flats
Landform position (three-dimensional): Talf
Ecological site: F153DY160NJ - Well Drained Coarse-Loamy Upland
Hydric soil rating: No

Mattapex

Percent of map unit: 5 percent
Landform: Depressions, flats
Landform position (three-dimensional): Dip
Ecological site: F153CY020MD - Moist Loess Upland
Hydric soil rating: No

Up—Urban land

Map Unit Setting

National map unit symbol: 1vh0w
Elevation: 0 to 300 feet
Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 52 to 58 degrees F

Frost-free period: 180 to 220 days
Farmland classification: Not prime farmland

Map Unit Composition
Urban land: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land

Setting
Landform: Flats
Down-slope shape: Linear
Across-slope shape: Linear

Minor Components

Udorthents, loamy
Percent of map unit: 10 percent
Landform: Broad interstream divides
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

WdcA—Woodstown sandy loam, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain

Map Unit Setting
National map unit symbol: 2thvt
Elevation: 0 to 90 feet
Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 52 to 58 degrees F
Frost-free period: 180 to 220 days
Farmland classification: All areas are prime farmland

Map Unit Composition
Woodstown and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Woodstown

Setting
Landform: Fluviomarine terraces, depressions, broad interstream divides, flats
Landform position (two-dimensional): Summit, footslope
Landform position (three-dimensional): Tread, dip, talf
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Parent material: Loamy fluviomarine deposits

Typical profile

Ap - 0 to 7 inches: sandy loam
E - 7 to 11 inches: sandy loam
Bt - 11 to 29 inches: sandy loam
BCg - 29 to 45 inches: fine sandy loam
Cg - 45 to 80 inches: loamy sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C
Ecological site: F149AY130NJ - Moist Loamy Upland
Hydric soil rating: No

Minor Components

Hammonton

Percent of map unit: 6 percent
Landform: Flats, broad interstream divides
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F149AY130NJ - Moist Loamy Upland
Hydric soil rating: No

Fallsington

Percent of map unit: 6 percent
Landform: Drainageways, depressions, swales, flats
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Dip, talf
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Ecological site: F149AY090NJ - Coastal Plain Hardwood Swamp
Hydric soil rating: Yes

Hambrook

Percent of map unit: 4 percent
Landform: Fluviomarine terraces, flats
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread, talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F149AY170MD - Well Drained Fine-Loamy Upland

Hydric soil rating: No

Mattapex

Percent of map unit: 4 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
Ecological site: F153CY020MD - Moist Loess Upland
Hydric soil rating: No

WocA—Woodstown loam, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain

Map Unit Setting

National map unit symbol: 2thx4
Elevation: 0 to 90 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 55 to 59 degrees F
Frost-free period: 210 to 240 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Woodstown and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Woodstown

Setting

Landform: Fluviomarine terraces, depressions, broad interstream divides, flats
Landform position (two-dimensional): Summit, footslope
Landform position (three-dimensional): Tread, dip, talf
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Parent material: Loamy fluviomarine deposits

Typical profile

Ap - 0 to 7 inches: loam
E - 7 to 11 inches: sandy loam
Bt - 11 to 29 inches: sandy loam
BCg - 29 to 45 inches: fine sandy loam
Cg - 45 to 80 inches: loamy sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)

Depth to water table: About 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C
Ecological site: F149AY130NJ - Moist Loamy Upland
Hydric soil rating: No

Minor Components

Hammonton

Percent of map unit: 6 percent
Landform: Flats, broad interstream divides
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F149AY130NJ - Moist Loamy Upland
Hydric soil rating: No

Fallsington

Percent of map unit: 6 percent
Landform: Drainageways, flats, depressions, swales
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Dip, talf
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Ecological site: F149AY090NJ - Coastal Plain Hardwood Swamp
Hydric soil rating: Yes

Hambrook

Percent of map unit: 4 percent
Landform: Fluviomarine terraces, flats
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread, talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F149AY170MD - Well Drained Fine-Loamy Upland
Hydric soil rating: No

Mattapex

Percent of map unit: 4 percent
Landform: Swales, broad interstream divides, flats, depressions
Landform position (two-dimensional): Footslope, summit
Landform position (three-dimensional): Dip, talf
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Ecological site: F153CY020MD - Moist Loess Upland
Hydric soil rating: No

Zk—Zekiah silt loam, frequently flooded

Map Unit Setting

National map unit symbol: 1vh0y
Elevation: 0 to 120 feet
Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 52 to 58 degrees F
Frost-free period: 180 to 220 days
Farmland classification: Not prime farmland

Map Unit Composition

Zekiah and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Zekiah

Setting

Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear

Typical profile

A - 0 to 3 inches: silt loam
Cg - 3 to 20 inches: silt loam
2Ab - 20 to 27 inches: sandy loam
2Cg1 - 27 to 37 inches: sandy loam
2Cg2 - 37 to 50 inches: loam
2Cg3 - 50 to 80 inches: sand

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.38 to 1.98 in/hr)
Depth to water table: About 0 to 10 inches
Frequency of flooding: Frequent
Frequency of ponding: Frequent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: C/D
Ecological site: R149AY060DE - Wet Alluvial Floodplain
Hydric soil rating: Yes

Minor Components

Longmarsh

Percent of map unit: 10 percent
Landform: Flood plains
Ecological site: R149AY060DE - Wet Alluvial Floodplain
Hydric soil rating: Yes

Hurlock

Percent of map unit: 5 percent
Landform: Flood plains
Ecological site: F149AY090NJ - Coastal Plain Hardwood Swamp
Hydric soil rating: Yes

Hammonton

Percent of map unit: 5 percent
Landform: Flats
Landform position (three-dimensional): Rise
Ecological site: F149AY130NJ - Moist Loamy Upland
Hydric soil rating: No

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

CALVERT STREET SENIOR

EASTON, MD

SCHEMATIC SET

SEPTEMBER 30, 2025



VICINITY MAP



ABBREVIATIONS

Above finished floor	AFF	Footing	FTG	Quality control	QC
Acoustic Ceiling Tile	ACT	Foundation	FDN	Quality	QUAL
Addendum	ADD	Furnish(ed), furniture	FURN	Quantity	QTY
Alternate	ALT	Furring	FURR	Quarry tile	QT
Aluminum	AL	Gage, (gauge)	GA	Radius	RAD
Approximate	APPROX	Galvanize(d)	GALV	Rain Leader	RL
Architecture, architectural	ARCH	Galvanized Iron	GALVI	Received	RCVD
Asphalt	ASPH	Glazed Wall Tile	GWT	Receptacle	RCPT
Assistant	ASST	Grab Bar	GB	Receptionist	RECEPT
Association	ASSN	Gravel	GVL	Recess(ed)	REC
Automatic	AUTO	Gypsum Wallboard	GWB	Refer, reference	REF
Average	AVG	Gypsum	GYP	Refrigerate, refrigerator	REFR
Base plate	BP	Handicapped	HC	Reinforce	REINF
Basement	BSMT	Hardware	HDW	Reinforced concrete	RC
Beam	BM	Heating ventilating and Air Conditioning	HVAC	Remove	RMV
Bearing	BRG		AC	Repair	RPR
Bedroom	BR	Height	HGT	Required	REQD
Board	BD	High Performance	HP	Revise, revision	REV
Boiler	BLR	High Performance Coating	HPC	Right hand	RH
Bottom	BOT	Hollow Metal	HM	Roof Drain	RD
Brick	BRK	Horizon(tal)	HORIZ	Room	RM
Building line	BL	Include(d), inclusive	INCL	Rubber tile floor	RTF
Building	BLDG	Incorporated	INC	Rubber	RBR
Built-up-roof	BUR	Information	INFO	Schedule	SCHED
Cabinet	CAB	Inside diameter	ID	Schematic	SCHEM
Carpet	CPT	Install(ed), installation	INSTL	Section	SECT
Catalog	CAT	Insulation	INSUL	Service	SERV
Ceiling height	CH	Interior	INT	"Sheet, sheeting"	SHT
Ceiling	CLG	Janitor	JAN	Similar	SIM
Center	CTR	Junction box	JB	Sound-transmission class	STC
Centerline	CL	Knock down	KD	Speaker	SPKR
Ceramic Tile	CT	Laboratory	LAB	Specification	SPEC
Ceramic	CER	Lavatory	LAV	Sprinkler	SPKR
Chalkboard	CB	Left Hand	LH	Square	SQ
Clear	CLR	Left	L	Stainless steel	SS
Closet	CLO	Length	LG	Standard	STD
Coated	CTD	Level	LVL	Standpipe	SP
Cold rolled	CR	Light	LT	Steel	STL
Column	COL	Machine	MACH	Storage	STOR
Composition	COMP	Maintenance	MAINT	Structural, structure	STRUCT
Concrete Masonry Unit	CMU	Manager	MGR	Substitute	SUBST
Concrete	CONC	Manual	MNL	Surface	SURF
Construction joint	CJ	Manufacturing	MFG	Suspend(ed)	SUSP
Construction	CONSTR	Markerboard	MB	Switch	SW
"Continue, Continuous"	CONT	Masonry opening	MO	Symmetrical	SYM
Corridor	CORR	Masonry	MSNRY	System	SYS
Countersink	CSK	Master bedroom	MBR	Tackboard	TB
Cubic Foot	CF	Material	MATL	Tackstrip	TS
Curve(d)	CRV	Maximum	MAX	Telephone	TEL
Degree	DEG	Mechanical	MECH	Television	TV
Department(al)	DEPT(L)	Membrane	MEMB	Temporary	TEMP
Detail	DET	Men	M	Terrazzo	TER
Diagonal	DIAG	Metal	MET, MTL	Thick	THK
Diameter	DIA	Mezzanine	MEZZ	Through	THRU
Dimension	DIM	Minimum	MIN	Tongue and groove	T&G
Dishwasher	DW	Mirror	MIR	Top and bottom	T&B
Dispenser	DISP	Miscellaneous	MISC	Top chord	TC
Double	DBL	Mounted	MTD	Top of Masonry Parapet	TMP
Double-hung	DH	Mounting	MTG	Top of Bearing	TOPB
Down	DN	Necessary	NEC	Top of Steel	T.O.S.
Downspout	DS	Noise-reduction coefficient	NRC	Topping	TOPG
Drain	DR	Nominal	NOM	Transformer	XFMR
Drawing	DWG	Non Combustible	NC, NONCOM	Transom	TR
Each	EA	North	N	Transparent	TRANS
Electric Water Cooler	EWC	Not in Contract	NIC	Threshold	THRESH
"Electric, electrical"	ELEC	Not to scale	NTS	Typical	TYP
Elevation	EL	Not available	NA	Underground	UG
Elevator	ELEV	Office	OFF	Underwriters Laboratories	UL
Engineer	ENGR	On center	OC	Unfinished	UNF
Entrance	ENTR	Opening	OPNG	Unit Ventilator	UV
Equal	EQ	Opposite	OPP	Unless Otherwise Noted	UON
Equipment	EQUIP	Outside diameter	OD	Urinal	UR
Existing	EX.	Overall	OA	US Gypsum Company	USG
Expansion joint	EXP JT	Overhead	OVHD	Vertical	VERT
Exposed	EXP	Painted	PTD	Vestibule	VEST, V
Exterior	EXT	Panel	PNL	Vinyl Reducing Strip	VRS
Face of Stud	F.O.S.	Partition	PTN	Vinyl Composite Tile	VCT
Fan Coil Unit	FCU	Perforate(d)	PERF	Vinyl asbestos tile	VAT
Fiberglass-reinforced plastics	FRP	Permanent	PERM	Wardrobe	WARD
Finished Floor	FF	Perpendicular	PERP	Water closet	WC
Fire Extinguisher	FE	Plastic Laminate	PLAM	Welded	WLD
Fire Extinguisher & Cabinet	FEC	Plumbing	PLMB	Welded Wire Mesh	WWM
Fire Retardant Treated	FRT	Plywood	PLYWD	With	W/
Fireproof	FPRF	Point	PT	Without	W/O
Fixture	FXTR	Polyvinyl chloride	PVC	Wood	WD
Flange	FLG	Precast	PRCST	Wrought Iron	WI
Floor drain	FD	Prefabricated	PREFAB		

SYMBOLS OF MATERIALS

- EARTH
- GRAVEL
- CONCRETE
- CONCRETE MASONRY UNITS
- SOLID CONCRETE MASONRY UNITS
- BRICK
- WOOD-FINISHED
- WOOD ROUGH
- PLYWOOD
- GYPSUM BOARD
- ACOUSTIC TILE
- STEEL-LARGE SCALE
- ALL METALS-SMALL SCALE
- CAST STONE
- GLASS-LARGE SCALE
- BATT INSULATION
- RIGID INSULATION
- CERAMIC TILE
- PLASTER OR STUCCO ON METAL
- PARTICLE BOARD
- CARPET

DRAWING KEY

- GRID LINES
- DETAIL NUMBER / SHEET NUMBER
- SECTIONS
- DETAILS IN PLAN/SECTION
- NAME / ROOM NUMBER
- H.M. FRAME NO. ON PLAN
- DOOR NO. ON PLAN
- REVISION: TYPE = A.S.I./ P.R./C.C.D./ADD.
- CASEWORK (FURNISHING PLANS ONLY)
- ALUM. FRAME/WINDOW TYPE
- INTERIOR ELEVATION
- WALL TYPE

UNIT MIX CHART

Unit Mix Chart -Multi-Family Updated 09/30/25

BEDROOMS	1								2										TOTAL	APT AREA	GROSS AREA
UNIT	1A		1A1		1B		1B1	1C-HC	1D		2A		2B		2B-HC		2D		2D1		
AREA (NSF)	654		684		776		719	680	747		906		1,079		1,079		949		886		
AREA (GSF)	692		723		819		759	716	794		955		1,136		1,136		1,006		942		
	QTY	AREA	QTY	AREA	QTY	AREA	QTY	AREA	QTY	AREA	QTY	AREA	QTY	AREA	QTY	AREA	QTY	AREA	QTY	AREA			
FIRST FL	4	2,768	0	0	1	819	1	759	1	716	1	794	4	3,820	0	0	1	1,136	1	1,006	2	1,884	16	13,702	22,272
SECOND FL	4	2,768	1	723	1	819	2	1,518	1	716	1	794	8	7,640	1	1,136	0	0	1	1,006	2	1,884	22	19,004	22,272
THIRD FL	4	2,768	1	723	1	819	2	1,518	1	716	1	794	8	7,640	1	1,136	0	0	1	1,006	2	1,884	22	19,004	22,272
SUBTOTAL	12	8,304	2	1,446	3	2,457	5	3,795	3	2,148	3	2,382	20	19,100	2	2,272	1	1,136	3	3,018	6	5,652	60	51,710	66,816
TOTAL	28												32												
PERCENTAGE	47%												53%												
UFAS UNITS	4	7%	VHI		2	2%													EFFICIENCY			77%			

Unit Mix Chart -Cottages Updated 12/09/25

BEDROOMS	2				2 LOFT		TOTAL	APT AREA	GROSS AREA
UNIT	A2		A2-HC		A3				
AREA (NSF)	862		862		1,339				
AREA (GSF)	916		916		1,424				
	QTY	AREA	QTY	AREA	QTY	AREA			
Site	20	18,320	2	1,832	9	12,816	31	32,968	32,968
TOTAL	22				9		31	32,968	32,968
PERCENTAGE	71%				29%				
UFAS UNITS	2	6%	VHI		1		EFFICIENCY		100%

D E S I G N T E A M

OSPREY PROPERTY COMPANY II LLC	OWNER	16 GREENMEADOW DRIVE, STE G107 TIMONIUM, MD 21093 (443) 509-0989	
STUDIO K ARCHITECTURE, LLC	ARCHITECT	7806 JAKI TER GLEN BURNIE, MD 21060 (301) 938-5195	
RAUCH ENGINEERING	CIVIL ENGINEER	106 N HARRISON ST EASTON, MD 21601 (410) 770-9081	
SPYDER ENGINEERS	STRUCTURAL ENGINEER	727 DOWERS ROAD ABINGDON, MD 21009 (410) 491-5161	
BOWMAN ENGINEERING	MECHANICAL AND ELECTRICAL ENGINEER	300 E JOPPA ROAD TOWSON, MD 21286 410-494-1111	
	GENERAL CONTRACTOR		

DRAWING LIST

A-TS	TITLE SHEET
A-0.2	DEVELOPMENT QUALITY NOTES
A-0.3	ENERGY STAR CHECKLIST
A-0.4	TYPICAL AIR SEALING AND ADVANCED FRAMING DETAILS
A-0.5	TYPICAL AIR SEALING AND ADVANCED FRAMING DETAILS
A-0.6	ACCESSIBILITY DETAILS
A-1.1	BUILDING PLANS
A-1.2	BUILDING PLANS
A-1.4	FIRST FLOOR FLOOR BUILDING PLAN
A-1.5	SECOND FLOOR FLOOR BUILDING PLAN
A-1.6	THIRD FLOOR BUILDING PLAN
A-1.8	ROOF PLAN
A-2.0	PERSPECTIVES
A-2.1	ELEVATIONS
A-2.2	ELEVATIONS
A-4.0	BUILDING SECTION
A-5.0	UNIT PLANS
A-5.1	UNIT PLANS
A-5.2	UNIT PLANS

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly registered Architect under the laws of the state of Maryland.
Registration No. 16763
Expiration Date: November 30, 2027

BUILDING DATA:

Use Group: R2

DRAWING NAME: TITLE SHEET

NO.	REVISION	DATE
#1	SCHEMATIC SET	12/9/25

STUDIO K ARCHITECTURE
7806 JAKI TER
GLEN BURNIE, MD 21060
301.935.5195
STUDIO_K@VERIZON.NET

PROJECT NAME AND ADDRESS
CALVERT STREET SENIOR
DOVE LANE, EASTON, MD 21601

PROJECT: AGER RD	SHEET: A-TS
DATE: 10/23/23	
SCALE: NOT TO SCALE	

3.13.1 CRITERIA APPLICABLE TO ALL PROJECTS

1. Project will be designed to comply with currently adopted State and local building codes, including the International Energy Conservation Code (IECC), MD COMAR 09.12.53, and the Uniform Federal Accessibility Standards (UFAS).
2. Calvert Street Senior will be new construction, and will comply with UFAS guidelines, Section 504 of the Rehabilitation Act, and the 2010 ADA Standards. Applicant will retain an accessibility consultant to review the design documents and construction installation for compliance.
3. The design team has extensive experience with the energy efficiency goals of DHCD, and will work cooperatively with the applicant's certified RESNET Rater to meet the energy goals and the DHCD minimum energy standards. The Rater will provide the Energy Audit, review of design documents, modeling services, field observations and final testing and inspection. Energy consultant will review design documents, and provide field observations and testing during construction.
4. The design documents will include pest and rodent preventative measures. In addition, a pest management program equal to the HUD Healthy Homes Initiative will be implemented by the property management company.
5. Architectural grade asphalt shingle roofing with a minimum 30 year warranty will be specified.
6. Doors – heavy (i.e. minimum twenty (20) gauge) metal, solid core wood, or top quality foam filled fiberglass must be used for entry doors; unit entrance doors must have durable frames and hardware for exterior entry; minimum twenty–two (22) gauge materials must be used for interior unit entry doors.
7. Laundry facilities must be adequate for the project and located for safe, convenient access. There must be a minimum of one (1) washer and dryer for every fourteen (14) units in family projects and one (1) washer and dryer for every twenty–five (25) units in elderly projects. a common or shared laundry room must include, at a minimum, a utility sink, folding table, and seating. Additionally, the laundry room should have a means to drain should an overflow occur, dryers vented to the exterior, and must meet all state and federal accessibility requirements. for in–unit laundry rooms, side by side units are preferred.
8. Each apartment will be wired with low voltage wiring suitable for high–speed internet service. Free wireless internet will be available to tenants at designated indoor community spaces, and indoor lovable places.
9. Project specifications will include detailed installation instructions including a requirement to comply with manufacturer's instructions.
10. Project will provide at least one dual level two electric vehicle charging station. Parking spaces with access to the EV charging station will be labeled for their intended use. The EV charging station will be on the accessible route, and conveniently accessible to residents.
11. There are no existing buildings necessitating a demolition plan.
12. Project will employ Maryland Department of the Environment (MDE) 2011 Standards for Soil Erosion and Sediment Control during construction. Limit area of disturbance to immediate work area. Site work at building pad, parking areas, and storm water structures must be completed with the approval and direction of the geotechnical engineer. Limit access to the site when vehicles or construction activity environmentally degrade the site.
13. Landscaping – New plantings shall utilize at least 50% native or regionally adapted plantings. Select native, highly suitable, drought /disease tolerant plantings suitable for the project soil and microclimate. Where there are healthy large existing trees, consider preserving mature trees in the site plan. Utilize shade, windbreak and screening benefits of plantings in the project design. Protect trees and root zones during construction.
14. Project will implement a construction waste recycling program in which construction waste materials are collected, separated, and recycled. Plan will include recordkeeping that identifies weight, type and disposition of materials.
15. For indoor air quality, project documents will specify Green Label carpeting and low toxic, low volatile organic compound (VOC) paint, primer, sealers, and adhesives. Specifications will include reference standards such as Green Seal, South Coast Air Quality Management District, or Bay Area Air Quality Management District. Wood products will be CARB 2 compliant or No Added Urea Formaldehyde (NAUF). The Architect will verify compliance of green products during the submittal review and construction verification process.
16. Carpet products will meet the Carpet and Rug Institute's Green Label or Green Label Plus Certification for carpet, pad and carpet adhesive.
17. HVAC equipment will be CFC free. Where CFC refrigerant equipment is being removed, CFC materials will be captured and properly disposed of.
18. Any observed areas of mold and mildew will be remediated. A mold and mildew remediation plans will be included in the drawings and specifications.
19. Talbot County is an EPA Radon Zone 3. No Radon mitigaiton is required.
20. Space will be provided for recycling containers, and management will distribute information on a site recycling program.
21. Watersense labeled fixtures will be specified, project water fixtures and faucets must conserve water with toilets that use 1.28 gallons per flush or less and shower heads and bath and kitchen faucets that use 2.0 gallons per minute (gpm) or less.
22. All interior spaces will have a non–smoking policy. Any exterior smoking areas will be designated, and will be at least 25' from entrances and air intake devices.
23. The project site is not located in a FEMA flood zone.
24. The site development does not remove prime habitat for any protected or endangered species.
25. All HVAC systems will be new, and will be Energy Star qualified electric. Split–systems will be ducted, and will provide an adequate return air path.
26. Appliances, including direct vent bathroom exhaust fans, will be Energy Star qualified where applicable.
27. All lighting will be Energy Star certified LED fixtures, or LED lamps. Commercial fixtures that are not available with Energy Star qualification will be approved by the Design Lights Consortium.
28. New construction windows will be Energy Star qualified vinyl.
29. Cabinetry is required to be plywood box construction, the doors are solid wood, and the finishes and hardware are durable.

3.13.2 CRITERIA APPLICABLE TO NEW CONSTRUCTION AND GUT REHABILITATION

1. The project will be certified under the Energy Star MF New Construction program.
2. Project will meet visitability standards for at least 25% of units, and incorporate universal design features into units and common areas. Mandatory universal design features are identified on enlarged apartment plans.
3. All supply ductwork for HVAC systems will be sealed with mastic and insulated.
4. Except for gut rehabilitation projects, paving at the dumpster pad, the access drive to the dumpster, and any turns or return path of the garbage truck route must equal local requirements for standard duty residential roadway or provide specifications which indicate a stone base of eight (8) inches or greater with the combination thickness of the asphalt base and top coat being at least five (5) inches.
5. No bi–fold doors will be installed.
6. There is no existing building to prepare an evaluation report.
7. Heating and cooling equipment, domestic hot water appliances, dryers and ranges/ovens will be high–performance electric. No gas appliances will be installed.

4.6 DEVELOPMENT QUALITY ENHANCEMENTS

1. Building, parking areas, and other improvements are laid out for convenient access by the residents, including those with disabilities, to site and community amenities, including public transportation
2. Building entrances are designed and located to provide security and weather protection for the targeted resident group and the project includes green space areas, play areas, courtyards or exterior seating areas that provide recreational and social opportunities for the targeted resident community.
3. The building architecture, structure and mass complement the existing neighborhood and the project includes exterior architectural features and design elements that add interest and/or functionality, create unity with nearby architectural style, and generally improve the appearance of the building(s).
4. Architectural accessories such as decorative door surrounds, larger window trim, corner eave, cornice and column details or other special features are provided and are of composite or other durable materials.
5. Individual units, common areas, and community spaces are well designed for comfortable living and tenant activities. The layouts are efficient, with practical traffic flow and provide adequate space for furniture placement. (550 – 600 net sf. area for predominantly one (1)–bedroom units and 20% more area for each additional bedroom unit. Primary bedroom is not less than 10'x11' in clear size, and in multiple bedroom units the smallest bedroom is not less than 9'–0" in one direction with a minimum of ninety (90) net square feet in area).
6. At least one bathroom in each apartment will be visitable.
7. Interior doors are panel, and hardware is of grade 2 quality or better with lever handles.
8. Ceiling fans will be provided in each bedroom and at least one living area. Each fan must be equipped with a reverse setting to change blade direction.
9. Project is not located in an area with nearby land uses that are inconsistent with residential activities.
10. Floor coverings are quality long lasting products. Hard finish flooring must be products with a verifiable ten (10) year or longer warranty.
11. Kitchen countertops are solid surface with minimum 10 year warranty.
12. Bathroom floors are sheet goods with minimum 10 year warranty.
13. Shower surrounds are ceramic tile on cementitious backer board or backer board supported by the Tile Council of North America (TCNA) installation or better than builder grade quality fiberglass surrounds.

STRUCTURAL, MECHANICAL + ELECTRICAL SUMMARY

STRUCTURAL SUMMARY:

1. Roof is pre–engineered wood truss.
2. Exterior bearing wall is 2x6 wood stud with OSB sheathing.
3. Floor structure is pre–engineered wood trusses with t&g plywood sheathing (glued screwed) with 3/4" gypsum concrete underlayment and sound mat at hard surfaces on upper floors.
4. Bottom floor slab–on–grade is 4" concrete w/ wire mesh over gravel & 15 mil. vapor barrier.
5. Foundations are concrete with a thermal break on spread footings.

MECHANICAL/PLUMBING SUMMARY:

1. Risers and branch sanitary lines to be PVC as permitted by local water authority standards. Appropriate UL listed penetration assemblies to be used with each pipe type.
2. Above grade water supply piping will be CPVC.
3. Sprinkler piping will be plastic where concealed. Top floor will have side–wall sprinkler heads, and no wet piping will be installed in the unconditioned space. Sprinkler will conform to NFPA 13 guidelines.
4. Bath tubs will be enameled steel, toilets ceramic, kitchen sinks stainless steel, and bathroom sinks cultured marble or porcelain.
5. Energy efficient electric water heaters will be used in each apartment unit.
6. Apartment units will be heated and air conditioned with Energy Star split–system heatpumps.
7. Kitchens and bathrooms will be equipped with direct vent exhaust fans. Exhaust fans will be Energy Star qualified.
8. Hot water distribution piping shall not exceed the allowable pipe lengths indicated in the IgCC table 702.8.2.
9. Domestic water piping ¾"or larger will be insulated with minimum R–3 pipe insulation.

ELECTRICAL SUMMARY:

1. RG–6 and/or CAT 5e cabling will be provided in every apartment for TV and high speed internet.
2. A media box will be installed in each apartment for low voltage distribution.
3. Sprinkler system will be electronically monitored.
4. Apartment lighting will be high–efficacy led fixtures.

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly registered Architect under the laws of the state of Maryland.
Registration No. 16763
Expiration Date: November 30, 2025

BUILDING DATA:

Use Group: R2

DRAWING NAME: DEVELOPMENT QUALITY NOTES

NO.	REVISION	DATE
#1	SCHEMATIC SET	9/30/25

STUDIO K ARCHITECTURE
7806 JAKI TER
GLEN BURNIE, MD 21060
301.935.5195
STUDIO_K@VERIZON.NET

PROJECT NAME AND ADDRESS:
CALVERT STREET SENIOR
DOVE LANE, EASTON, MD 21601

PROJECT: AGER RD
DATE: 10/23/23
SCALE:
SHEET: A-0.2

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly registered Architect under the laws of the state of Maryland.
Registration No. 16763
Expiration Date: November 30, 2025

BUILDING DATA:

Use Group: R2

ENERGY STAR Multifamily New Construction National Rater Field Checklist [1], Version 1 / 1.1 / 1.2 (Rev. 04)

Building Name: ______ Number of Units: ______ Permit Date: ______
Building Address: ______ City: ______ State: ______

Thermal Enclosure System	Must Correct	Builder Verified [3]	Rater Verified [4]	N/A [5]
1. High-Performance Fenestration & Insulation				
1.1 Fenestration meets or exceeds specification in Items 2.1 & 2.2 of the Natl Rater Design Review Checklist.	☐	☐	☐	-
1.2 Insulation meets or exceeds specification in Items 3.1 & 3.2 of the Natl Rater Design Review Checklist.	☐	Up to 10% ☐	☐	-
1.3 All insulation achieves Grade I install. per ANSI / RESNET / ICC 301. Alternatives in Footnote 6. [7]	☐	Up to 10% ☐	☐	-
1.4 Prescriptive Path: Window-to-wall ratio ≤ 30%. [8]	☐	☐	☐	☐
1.5 Heated plenums in unconditioned space or ambient conditions must meet the following requirements: [9]				
1.5.1 Sides of heated plenum are an air barrier and insulated to ≥ R-3ci in CZ 1-4; ≥ R-5ci in CZ 5-6; ≥ R-7.5ci in CZ 7; ≥ R-9.5ci in CZ 8, [10] **AND;**	☐	☐	☐	☐
1.5.2 Insulation at top of heated plenum meets Item 3.6 where applicable. Otherwise, meets or exceeds the R-value for mass floors from the "All Other" column of Table 502.2(1) of 2009 IECC, [10, 11] **AND;**	☐	☐	☐	☐
1.5.3 Bottom of heated plenum must have at least R-13 insulation. [11, 12]	☐	☐	☐	☐
1.6 Garages with space heating must meet the following requirements: [9]				
1.6.1 Insulation on above grade walls and walls on the first story below grade ≥ R-5ci in CZ 5-6; ≥ R-7.5ci in CZ 7; ≥ R-9.5ci in CZ 8, [10] **AND;**	☐	☐	☐	☐
1.6.2 Ceiling insulation meets Item 3.6 where applicable. Otherwise, meets or exceeds the R-value for mass floors from the "All Other" column of Table 502.2(1) of 2009 IECC. [10]	☐	☐	☐	☐
2. Fully-Aligned Air Barriers [13] At each insulated location below, a complete air barrier is provided that is fully aligned as follows:				
Ceilings: At interior or exterior horizontal surface of ceiling insulation in Climate Zones 1-3; at interior horizontal surface of ceiling insulation in Climate Zones 4-8. Also, at exterior vertical surface of ceiling insulation in all climate zones (e.g., using a wind baffle that extends to the full height of the insulation in every bay or a tabbed baffle in each bay with a soffit vent that prevents wind washing in adjacent bays). [10, 14]				
2.1 Dropped ceilings / soffits below unconditioned attics, chase / dead space, and all other ceilings.	☐	☐	☐	☐
Walls: At exterior vertical surface of wall insulation in all climate zones; also at interior vertical surface of wall insulation in Climate Zones 4-8. [10, 15]				
2.2 Walls behind showers, tubs, staircases, and fireplaces.	☐	☐	☐	☐
2.3 Architectural bump-outs, dead space, and all other exterior walls.	☐	☐	☐	-
Floors: At exterior vertical surface of floor insulation in all climate zones and, if over unconditioned space, also at interior horizontal surface including supports to ensure alignment. Alternatives in Footnotes 15 & 16. [16, 17, 18]				
2.4 Floors above garages, floors above unconditioned spaces, and cantilevered floors.	☐	☐	☐	☐
2.5 All other floors adjoining unconditioned space (e.g., rim / band joists at exterior wall or at porch roof).	☐	☐	☐	☐
3. Reduced Thermal Bridging				
3.1 For insulated ceilings with attic space above (i.e., non-cathedralized), Grade I insulation extends to the inside face of the exterior wall below and is ≥ R-21 in CZ 1-5; ≥ R-30 in CZ 6-8. [10, 19]	☐	☐	☐	☐
3.2 For insulated ceilings with attic space above, attic access panels and drop-down stairs insulated ≥ R-10 or equipped with durable ≥ R-10 cover. [20]	☐	☐	☐	☐
3.3 Insulation beneath attic platforms (e.g., HVAC platforms, walkways) ≥ R-21 in CZ 1-5; ≥ R-30 in CZ 6-8. [10]	☐	☐	☐	☐
3.4 For slabs on grade in CZ 4-8, 100% of slab edge insulated to ≥ R-5 at a depth of 2 ft., or 4 ft. for heated slabs in CZ 6-8, & aligned with the thermal boundary of the walls. [10, 21, 22]	☐	☐	☐	☐
3.5 For above-grade and at-grade concrete floor edges (e.g., podiums, balconies) in CZ 4-8, 100% of floor edge insulated to ≥ R-5 & aligned with the thermal boundary of the walls. At this boundary, concrete floors resting on mass walls must provide insulation that extends ≥8 ft. below the bottom of the floor edge & for floors resting on columns, insulation must surround the column, at a depth of 4ft. Alternatives in Fn. 24. [10, 23]	☐	☐	☐	☐
3.6 For concrete slab floors in CZ 4-8 above ambient conditions, garages, or unconditioned spaces outside the thermal boundary, floor insulation meets the U-factor specified in Table 502.1.2 of the 2009 IECC for Group R when dwelling units are above the slab, & 'All Other' when common space is above the slab. [10, 25]	☐	☐	☐	☐
3.7 At above-grade walls and rim / band joists separating conditioned space from the exterior, one of the following options used: [26, 27]				
3.7.1 Continuous rigid insulation, insulated siding, or combination of the two is: ≥ R-3 in CZ 1-4; ≥ R-5 in CZ 5-8 [10, 27, 28, 29, 30], **OR;**	☐	☐	☐	☐
3.7.2 Structural Insulated Panels **OR**; Insulated Concrete Forms **OR**; Double-wall framing **OR**; [27, 28, 31]	☐	☐	☐	☐
3.7.3 For wood-framed walls in CZ 1-5 (all stories) & in CZ 6-8 (≤3 stories) only: 'advanced framing' details including all Items below: [27, 32]				
3.7.3a Corners insulated ≥ R-6 to edge [33], **AND;**	☐	☐	☐	☐
3.7.3b Headers above windows & doors insulated ≥ R-3 for 2x4 framing or equivalent cavity width, and ≥ R-5 for all other assemblies (e.g., with 2x6 framing) [34], **AND;**	☐	☐	☐	☐
3.7.3c Interior / exterior wall intersections insulated to same R-value as rest of exterior wall. [35]	☐	☐	☐	☐
3.7.3d In CZ 4C and 5, for > 3 stories, ≥ 5.5" framing depth used with wall cavity insulated ≥R-20.0.	☐	☐	☐	☐

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4. Air Sealing (Unless otherwise noted below, "sealed" indicates the use of caulk, foam, or equivalent material.)	Must Correct	Builder Verified [3]	Rater Verified [4]	N/A [5]
The following items must be verified in dwelling units and common spaces to reduce air leakage to exterior, adjacent buildings, or unconditioned spaces.				
4.1 Ducts, flues, shafts, plumbing, piping, wiring, exhaust fans, & other penetrations to unconditioned space sealed, with blocking / flashing as needed.	☐	☐	☐	-
4.2 Recessed lighting fixtures adjacent to unconditioned space ICAT labeled and gasketed. Also, if in insulated ceiling without attic above, exterior surface of fixture insulated to ≥ R-10 in CZ 4-8. [10]	☐	☐	☐	☐
4.3 Continuous top plate or blocking is at top of walls adjoining unconditioned space including at balloon-framed parapets, and sealed.	☐	☐	☐	☐
4.4 Drywall sealed to top plate at all unconditioned attic / wall interfaces using caulk, foam, drywall adhesive (but not other construction adhesives), or equivalent material. Either apply sealant directly between drywall and top plate or to the seam between the two from the attic above.	☐	☐	☐	☐
4.5 Rough opening around windows & exterior doors sealed. [36]	☐	☐	☐	-
4.6 Assemblies that separate attached garages from occupiable space sealed and, also, an air barrier installed, sealed, and aligned with these assemblies. [37]	☐	☐	☐	☐
4.7 Doors adjacent to unconditioned space (e.g., attics, garages, basements) or ambient conditions made substantially air-tight with door seal and weatherstripping or equivalent gasket.	☐	☐	☐	☐
4.8 Attic access panels, roof hatches and drop-down stairs are gasketed (i.e., not caulked) or equipped with durable covers that are gasketed. [20]	☐	☐	☐	☐
The following items must be additionally verified in dwelling units, to reduce air leakage between conditioned spaces.				
4.9 Doors serving as a unit entrance from a corridor/stairwell made substantially air-tight with door seal and weatherstripping or equivalent gasket.	☐	☐	☐	☐
4.10 Rater-measured compartmentalization is no greater than 0.30 CFM50 per square feet of dwelling unit enclosure area, following procedures in ANSI / RESNET / ICC 380. [38]	☐	-	☐	
4.10.1 For dwelling units with forced air distribution systems without ducted returns and air handlers located in a closet or space adjacent to unconditioned space, the Rater-measured pressure difference between the space containing the air handler and the conditioned space during the compartmentalization test is no greater than 5 Pa. [39]	☐	-	☐	☐

HVAC System [40] / 5. Heating & Cooling Eqpt. Complete Track A - HVAC Grading by Rater [41] or Track B - HVAC Testing by FT Agent [42]	Must Correct	Rater Verified [4]	N/A [5]
Track A: 5a.1 Blower fan volumetric airflow is Grade I or II per ANSI / RESNET / ACCA 310	☐	☐	☐
Track A: 5a.2 Blower fan watt draw is Grade I or II per ANSI / RESNET / ACCA 310	☐	☐	☐
Track A: 5a.3 Refrigerant charge is Grade I per ANSI / RESNET / ACCA 310. See Footnote 43 for exemptions.	☐	☐	☐
Track A: 5a.4 HVAC manufacturer & model number on installed equipment matches the HVAC Design Report in compliance with ANSI / RESNET / ACCA 310 or the HVAC Design Supplement to Std. 310 for Common Spaces and Central Systems. [44]	☐	☐	☐
Track B: 5b.1 HVAC manufacturer & model number on installed equipment matches either of the following (check box): [45] ☐ National HVAC Design Report (4.6-4.9 & 4.25-4.26) ☐ Written approval received from designer	☐	☐	-
Track B: 5b.2 External static pressure measured by Rater at contractor-provided test locations and documented below: [46] Return-Side External Static Pressure: ______ IWC Supply-Side External Static Pressure: ______ IWC	☐	☐	☐
5.5 Prescriptive Path: Heating and cooling equipment serving dwelling units, common spaces, and garages meet the efficiency levels specified in the Exhibit X. Electric resistance space heating is not installed in dwelling units. [47]	☐	☐	☐
5.6 ERI Path: Heating and cooling equipment serving common spaces and garages, but not serving dwelling units, meet the efficiency levels specified in the Exhibit X. See Exhibit X for restrictions on electric resistance space heating. [47]	☐	☐	☐
5.7 National HVAC Functional Testing Checklist(s) collected prior to certification, with all HVAC systems in the building fully documented. Exception: Where credentialed HVAC Contractor(s) are completing the National HVAC Functional Testing Checklist, the checklist is not required to be collected for the systems they verify. [48]	☐	☐	☐
5.8 Rater has verified and documented that Functional Testing Agent(s) ("FT Agent(s)") completing the National HVAC Functional Testing Checklist(s) hold one of the required credentials and completed orientation, if applicable. [48] Credential(s): ______ FT Agent Name(s): ______	☐	☐	☐

Equipment Controls	Must Correct	LP Verified [49]	Rater Verified [4]	N/A [5]
5.9 All heating and cooling systems serving a dwelling unit have thermostatic controls within the dwelling unit.	☐	-	☐	☐
5.9.1 Prescriptive Path: Dwelling unit thermostats are programmable.	☐	-	☐	☐
5.10 Where present, stair and elevator shaft vents are equipped with motorized dampers that are capable of being automatically closed during normal building operation and are interlocked to open as required by fire and smoke detection systems. Dampers are verified to be closed at the time of inspection.	☐	☐	☐	☐

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Equipment Controls (Continued)	Must Correct	LP Verified [49]	Rater Verified [4]	N/A [5]
5.11 Freeze protection systems, such as heat tracing of piping and heat exchangers, including self-regulating heat tracing, and garage / plenum heaters include automatic controls that are verified to shut off the systems when pipe wall or garage / plenum temperatures are above 40°F.	☐	☐	☐	☐
5.11.1 Where heat tracing is installed for freeze-protection, controls must be based on pipe wall temperature and a minimum of R-3 pipe insulation is also required.	☐	☐	☐	☐
5.12 Snow- and ice-melting systems include automatic controls that are verified to shut off the systems when the pavement temperature is above 50°F and no precipitation is falling, and an automatic or manual control is installed that is verified to shut off system when the outdoor temperature is above 40°F, so that the potential for snow or ice accumulation is negligible.	☐	☐	☐	☐
Hydronic Distribution Requirements – Applies to heating or cooling systems serving more than one dwelling unit				
5.13 For hydronic distribution systems, all terminal heating and cooling distribution equipment are separated from the riser or distribution loop by a control valve or terminal distribution pump, so that heated or cooled fluid is not delivered to the dwelling unit distribution equipment when there is no call from the thermostat.	☐	☐	☐	☐
5.14 Terminal units in hydronic distribution systems are equipped with pressure independent balancing valves or pressure independent control valves.	☐	☐	☐	☐
5.15 Piping of a heating or cooling system is insulated in accordance with Item 4.42 on the National HVAC Design Report, including where passing through planks or any other penetrations.	☐	☐	☐	☐
5.16 For circulating pumps serving hydronic heating or cooling systems with three-phase motors, 1 horse-power or larger, motors meet or exceed efficiency standards for NEMA Premium™ motors. If 5 horse-power or larger, also installed with variable frequency drives.	☐	☐	☐	☐

6. Duct Quality Installation – *Applies to Heating, Cooling, Ventilation, Exhaust, & Pressure Balancing Ducts, Unless Noted in Footnote.*	Must Correct	Rater Verified [4]	N/A [5]
6.1 Ductwork installed without kinks, sharp bends, compressions, or excessive coiled flexible ductwork. [50]	☐	☐	☐
6.2 All bedrooms provided with transfer grilles, jump ducts, dedicated return ducts, and/or undercut doors. Bedrooms with a design supply airflow ≥ 150 CFM (per Item 5.2 on the National HVAC Design Report) achieve a Rater-measured pressure differential ≥ -5 Pa and ≤ +5 Pa with respect to the main body of the dwelling unit when all air handlers are operating. Townhouses only: In addition, bedrooms with a design supply airflow < 150 CFM achieve a Rater-measured pressure differential ≥ - 3 Pa and ≤ +3 Pa. See Footnote 51 for test configuration.	☐	☐	☐
6.3 All supply and return ducts in unconditioned space, including connections to trunk ducts, are insulated to ≥ R-6. [52]	☐	☐	☐
6.3.1 Prescriptive Path: Dwelling unit ductwork meets the location and insulation requirements specified in the ENERGY STAR Multifamily Reference Design.	☐	☐	☐
6.4 Rater-measured total duct leakage in dwelling units (and common spaces using ANSI / RESNET / ACCA 310) meets one of the following: [53, 54]			
6.4.1 Rough-in: Tested per allowances below, with air handler & all ducts, building cavities used as ducts, & duct boots installed. In addition, all duct boots sealed to finished surface, Rater-verified at final. [55] No ducted returns [39]: The greater of ≤ 3 CFM25 per 100 sq. ft. of CFA or ≤ 30 CFM. Additionally, the Rater-measured pressure difference between the space containing the air handler and the conditioned space, with the air handler running at high speed, is ≤ 5 Pa. For systems > 1 ton, increase by 1 Pa per half ton. One or two ducted returns [39]: The greater of ≤ 4 CFM25 per 100 sq. ft. of CFA or ≤ 40 CFM. Three or more ducted returns [39]: The greater of ≤ 6 CFM25 per 100 sq. ft. of CFA or ≤ 60 CFM.	☐	☐	☐
6.4.2 Final: Tested per allowances below, with the air handler & all ducts, building cavities used as ducts, duct boots, & register grilles atop the finished surface (e.g., drywall, floor) installed. [56] No ducted returns [39]: The greater of ≤ 6 CFM25 per 100 sq. ft. of CFA or ≤ 60 CFM. Additionally, the Rater-measured pressure difference between the space containing the air handler and the conditioned space, with the air handler running at high speed, is ≤ 5 Pa. For systems > 1 ton, increase by 1 Pa per half ton. One or two ducted returns [39]: The greater of ≤ 8 CFM25 per 100 sq. ft. of CFA or ≤ 80 CFM. Three or more ducted returns [39]: The greater of ≤ 12 CFM25 per 100 sq. ft. of CFA or ≤ 120 CFM.	☐	☐	☐
6.5 Townhouses only: Rater-measured duct leakage to the outside the greater of ≤ 4 CFM25 per 100 sq. ft. of CFA or ≤ 40 CFM25. [53, 57]	☐	☐	☐
6.6 Common Space: Supply, return, and exhaust ductwork and all plenums serving common spaces are sealed at all transverse joints, longitudinal seams, and duct wall penetrations with mastic, mastic tape, or internal aerosol-based sealant.	☐	☐	☐
6.7 Duct leakage of central exhaust ductwork serving four or more dwelling units, meets one of the following two options:			
6.7.1 Rough-in: Tested including horizontal run outs, trunks, branches, and take-offs up to, but not including the grilles, the leakage does not exceed 25% of exhaust fan flow. [58]	☐	☐	☐
6.7.2 Final: Tested inclusive of all ductwork between the fan and the grilles, the leakage does not exceed 30% of exhaust fan flow. [58]	☐	☐	☐

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7. Dwelling-Unit & Common Space Mechanical Vent. Systems ("Vent Systems") [59] & Inlets in Return Duct [60] (National HVAC Design Report Item # indicated in parenthesis)	Must Correct	Rater Verified [4]	N/A [5]
7.1 Ventilation manufacturer & model number on installed equipment matches either of the following (check box): [45] ☐ National HVAC Design Report ☐ Written approval received from designer	☐	☐	-
7.2 Rater-measured ventilation rate is within either ± 15 CFM or ±15% of dwelling unit design values (2.7), and meets or exceeds rates required by ASHRAE 62.2-2010. [61]	☐	☐	-
7.3 Measured ventilation rate is within either ± 15 CFM or ±15% of common space design values (2.9), and meets or exceeds rates required by ASHRAE 62.1-2010 (2.8). [62, 63]	☐	☐	☐
7.4 A ventilation override control installed and also labeled if its function is not obvious (e.g., a label is required for a toggle wall switch, but not for a switch that's on the ventilation equipment). Townhouses only: In addition, the ventilation override control installed must be readily-accessible to the occupant.	☐	☐	-
7.5 For any outdoor air inlet connected to a ducted return of the dwelling unit HVAC system (Complete if present; otherwise check "N/A"): [60]			☐
7.5.1 Controls automatically restrict airflow using a motorized damper during vent. Off-cycle and occupant override. [64]	☐	☐	-
7.5.2 Rater-measured vent. Rate is ≤ 15 CFM or 15% above design value at highest HVAC fan speed. Alt. in Fn. 65. [65]	☐	☐	-
7.6 If located in the dwelling unit, system fan rated ≤ 3 sones if intermittent, ≤ 2 sones if continuous, or exempted. [66]	☐	☐	-
7.7 If dwelling-unit Vent System controller operates the dwelling unit HVAC fan, then HVAC fan operation is intermittent and either the fan type is ECM / ICM (4.12), or the controls will reduce the run-time by accounting for HVAC system heating or cooling hours. [67]	☐	☐	☐
7.8 In-unit bathroom fans or in-line fans are ENERGY STAR certified if used as part of the dwelling-unit mechanical ventilation system. [68]	☐	☐	☐
7.9 If central exhaust fans, ≤ 1 HP, are installed as part of the dwelling-unit mechanical ventilation system, then they are direct-drive, ECM, with variable speed controllers. If > 1 HP, their motors meet or exceed efficiency standards for NEMA Premium ™ motors. [69]	☐	☐	☐
7.10 Air inlet locations (Complete if ventilation air inlet locations were installed (2.23, 2.24); otherwise check "N/A"): [70, 71]	-	-	☐
7.10.1 Inlet(s) pull ventilation air directly from outdoors and not from attic, crawlspace, garage, or adjacent dwelling unit.	☐	☐	-
7.10.2 Inlet(s) are ≥ 2 ft. above grade or roof deck; ≥ 10 ft. of stretched-string distance from known contamination sources not exiting the roof, and ≥ 3 ft. distance from dryer exhausts and sources exiting the roof. [72]	☐	☐	-
7.10.3 Inlet(s) are provided with rodent / insect screen with ≤ 0.5 inch mesh.	☐	☐	-

8. Local Mechanical Exhaust (National HVAC Design Report Item # indicated in parenthesis)

Dwelling Unit Mechanical Exhaust – In each dwelling unit kitchen and bathroom, a system is installed that exhausts directly to the outdoors and meets one of the following Rater-measured airflow and manufacturer-rated sound level standards: [59, 73]

Location		Continuous Rate	Intermittent Rate [74]	Must Correct	Rater Verified [4]	N/A [5]
8.1 Kitchen	Airflow	≥ 5 ACH, based on kitchen volume [75, 76] (Alternative in Fn. 75)	≥ 100 CFM and, if not integrated with range, also ≥ 5 ACH based on kitchen volume [75, 76, 77]	☐	☐	-
	Sound	Recommended: ≤ 1 sone	Recommended: ≤ 3 sones			
8.2 Bathroom	Airflow	≥ 20 CFM	≥ 50 CFM	☐	☐	-
	Sound	Required: ≤ 2 sones	Recommended: ≤ 3 sones			

	Must Correct	Rater Verified [4]	N/A [5]
Mechanical Exhaust for Common Spaces [2] and Shared Garages			
8.3 Measured exhaust rates are ≥ ASHRAE 62.1-2010 rates (2c). [62]	☐	☐	☐
8.4 Where an exhaust system is installed in a shared garage, it is equipped with controls that sense CO and NO2.	☐	☐	☐
9. Filtration			
9.1 MERV 6+ filter(s) installed in each ducted mechanical system serving an individual dwelling unit, designed so all return and mechanically supplied outdoor air passes through filter(s) prior to conditioning, and located to facilitate access & regular service by the occupant, building owner, or building maintenance staff. [78]	☐	☐	☐
9.1.1 Filter access panel includes gasket and fits snugly against the exposed edge of filter when closed to prevent bypass. [79]	☐	☐	☐
10. Combustion Appliances			
10.1 Furnaces, boilers, and water heaters located within the building's pressure boundary are mechanically drafted or direct-vented. Alternatives in Footnote 82. [80, 81]	☐	☐	☐
10.2 Fireplaces located within the building's pressure boundary are direct-vented. [80, 81]	☐	☐	☐
10.3 No unvented combustion appliances other than cooking ranges or ovens are located inside the building's pressure boundary. [80]	☐	☐	☐

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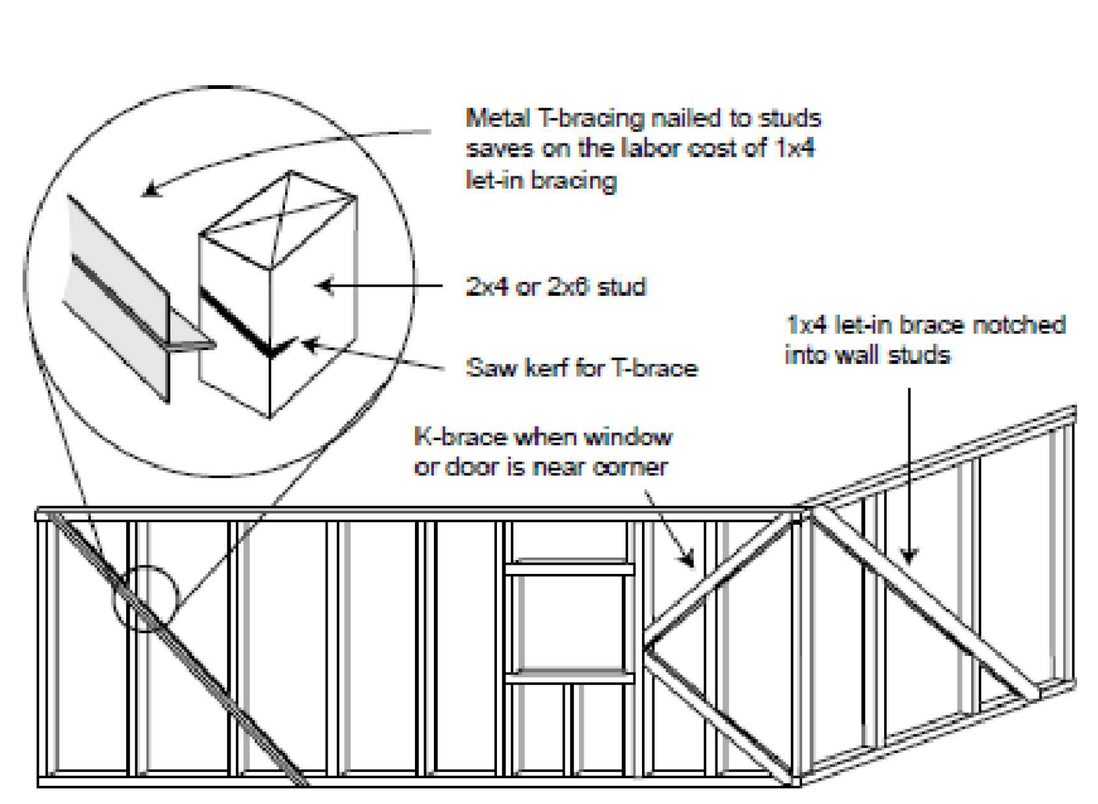
Other	Must Correct	LP Verified [49]	Rater Verified [4]	N/A [5]
11. Domestic Hot Water				
11.1 Prescriptive Path: Hot Water Equipment Minimum Efficiency Levels (must meet one of the following):				
11.1.1 Where rated in EF or UEF, meet or exceed the ENERGY STAR Multifamily Reference Design [83]	☐	-	☐	☐
11.1.2 Where rated in Et or COP:				
11.1.2a For all Versions except Nat'l v1.2, ≥ 95% Et if electric and ≥ 85% Et for other fuels.	☐	-	☐	☐
11.1.2b For Nat'l v1.2, ≥ 2.0 COP for electric serving dwelling units, ≥ 95% Et for electric serving common spaces, and ≥ 90% Et for other fuels.	☐	-	☐	☐
11.2 ERI Path: Hot Water Equipment Min. Efficiency Levels for equipment serving common spaces but not dwelling units nor shared laundry:				
11.2.1 For non-electric equipment: if rated in EF or UEF, meet the efficiency levels specified in the ENERGY STAR Multifamily Reference Design; if rated in Et ≥85%, or for Nat'l v1.2 ≥ 90%. [83]	☐	-	☐	☐
11.2.2 For electric equipment: ≥ 0.93 UEF, 0.95 EF or 95% Et. [83]	☐	-	☐	☐
12. Lighting				
12.1 Common Space [2] Lighting Controls:				
12.1.1 ERI and Prescriptive Path: All common spaces [2] (including shared garages), except the building lobby, mechanical equipment rooms, and where automatic shutoff would endanger the safety of occupants [84], have occupancy sensors, programmed timers, or automatic bi-level lighting controls installed and operation has been verified.	☐	☐	☐	☐
12.1.2 ASHRAE Path only: All common spaces [2] (including shared garages), except the building lobby, mechanical equipment rooms, corridors, and stairwells and where automatic shutoff would endanger the safety of occupants [84], have occupancy sensors or automatic bi-level lighting controls installed and operation has been verified.	☐	☐	☐	☐
12.2 Exterior lighting controls: Fixtures, including parking lot fixtures, must include automatic switching on timers or photocell controls except fixtures intended for 24-hour operation, required for security, or associated with the electric meter for an individual dwelling unit.	☐	☐	☐	☐
12.3 Common Spaces [2] and Garages: 90% of installed lighting fixtures are integrated LED fixtures or contain LED lamps. See Footnote 85 for alternate options.	☐	☐	☐	☐
12.4 ERI Path: All exterior and common space lighting fixtures meet the efficiency requirements in the ENERGY STAR Multifamily Reference Design, except fixtures located on dwelling unit balconies. [88, 89]	☐	-	☐	☐
12.5 Prescriptive Path: All lighting fixtures (i.e., dwelling units, common spaces, and exterior) meet the efficiency requirements in the ENERGY STAR Multifamily Reference Design. [88, 89]	☐	-	☐	☐
12.6 Prescriptive Path: Dwelling unit overall in-unit lighting power density ≤ 0.75 W/ft². When calculating overall lighting power density, use 1.1 W/ft² where lighting is not installed. [86]	☐	-	☐	☐

13. Appliances and Plumbing Fixtures	Must Correct	Rater Verified [4]	N/A [5]
13.1 Prescriptive Path: Installed appliances are ENERGY STAR certified. Installed bathroom faucets, bathroom aerators, and showerheads are WaterSense labeled. [90]	☐	☐	☐
13.2 ERI Path: Where installed in common spaces, refrigerators and dishwashers are ENERGY STAR certified and showerheads are WaterSense labeled.	☐	☐	☐
13.3 Prescriptive Path: Shower compartments with multiple fixtures cannot be operated simultaneously OR the total flow rate per shower compartment must not exceed 1.75 gallons per minute, as rated at 80 psi.	☐	☐	☐
14. Whole Building Energy Consumption Data Acquisition Strategy			
14.1 For buildings 50,000 ft² and larger, a strategy that enables the collection of monthly or annual building-level energy consumption data (electricity, natural gas, chilled water, steam, fuel oil, propane, etc.) has been confirmed. [91]	☐	☐	☐

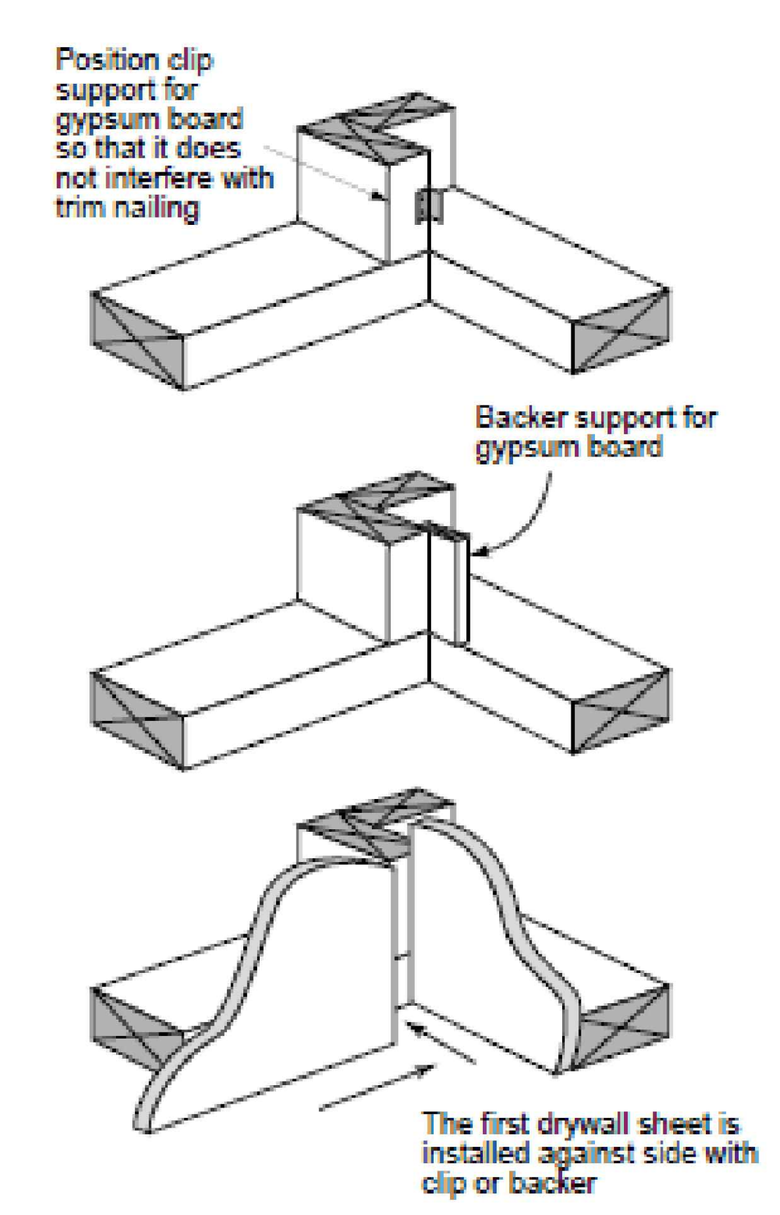
Rater Name: ______ Rater Pre-Drywall Inspection Date(s): [92] ______ Rater Initials: ______
Rater Company Name: ______
Rater Name: ______ Rater Final Inspection Date(s) [93]: ______ Rater Initials: ______
Rater Company Name: ______
Builder/Developer Employee: ______ Builder Inspection Date(s): ______ Builder Initials: ______
Builder/Developer Name: ______
Licensed Professional: ______ LP Inspection Date(s): ______ LP Initials: ______

Revised 12/01/2023 Page 5 of 15

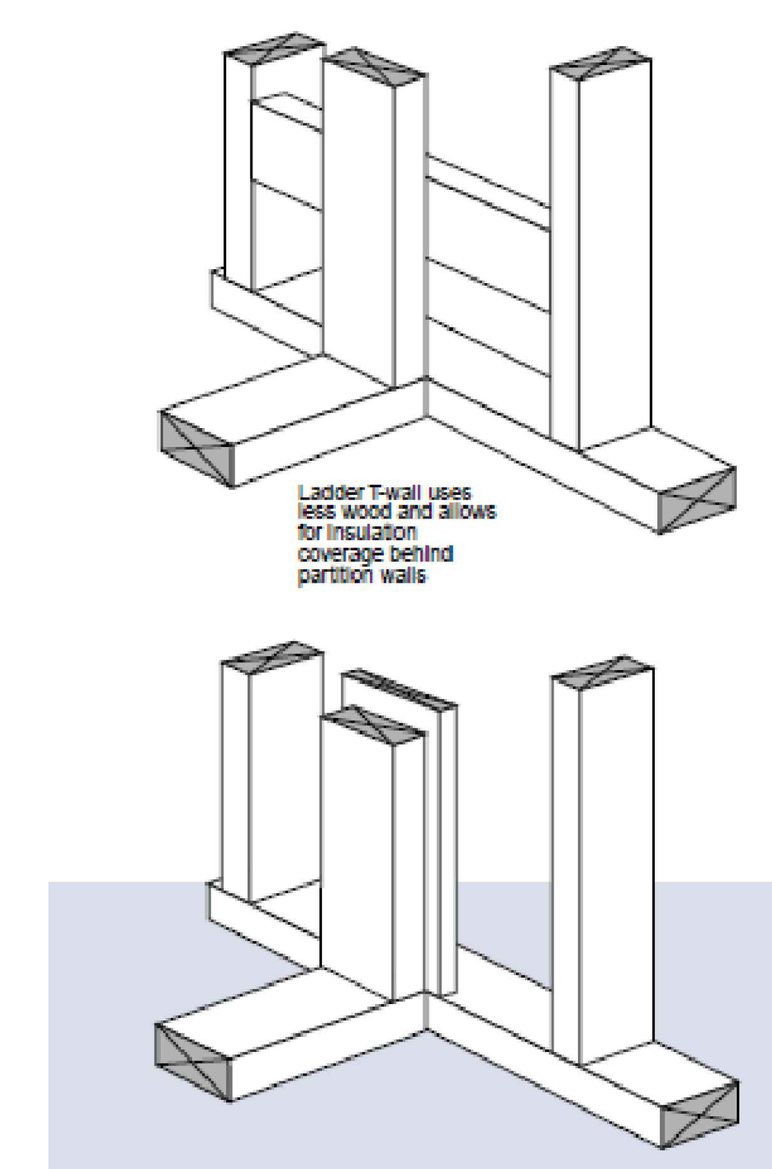
LET-IN BRACING



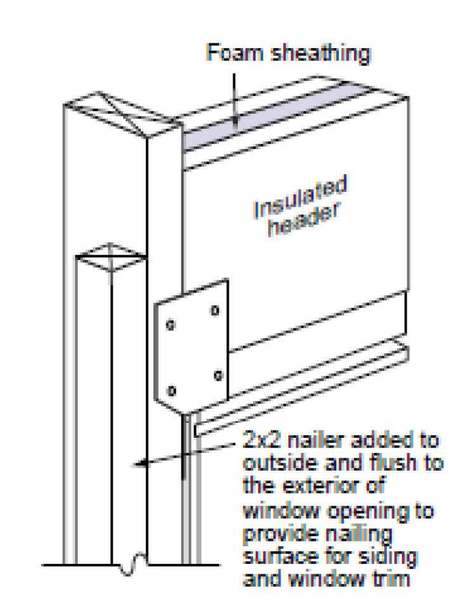
INSIDE "TWO-STUD" CORNERS



T-WALL ALTERNATIVES
The use of ladder blocking or a full-length 1x6 or 2x6 blocking allows for increased insulation in the outer wall



STACK FRAMING DETAILS



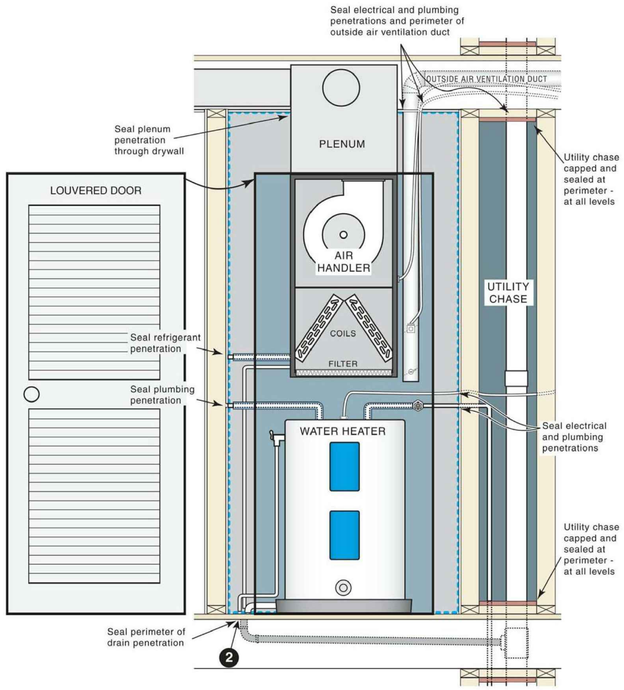
DRAWING NAME
ENERGY STAR CHECKLISTS

NO.	REVISION	DATE
#1	SCHEMATIC SET	9/30/25

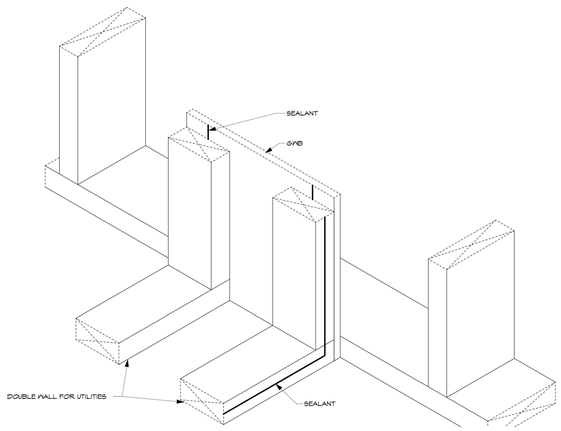
STUDIO K ARCHITECTURE
7806 JAKI TER
GLEN BURNIE, MD 21060
301.935.5195
STUDIO_K@VERIZON.NET

PROJECT NAME AND ADDRESS
CALVERT STREET SENIOR
DOVE LANE, EASTON, MD 21601

PROJECT: AGER RD
DATE: 10/23/23
SCALE:
SHEET: A-0.3



E1 MECH CLOSET AIR SEALING
Scale: n.t.s.



E5 CHASE DRAFTSTOPPING DETAIL
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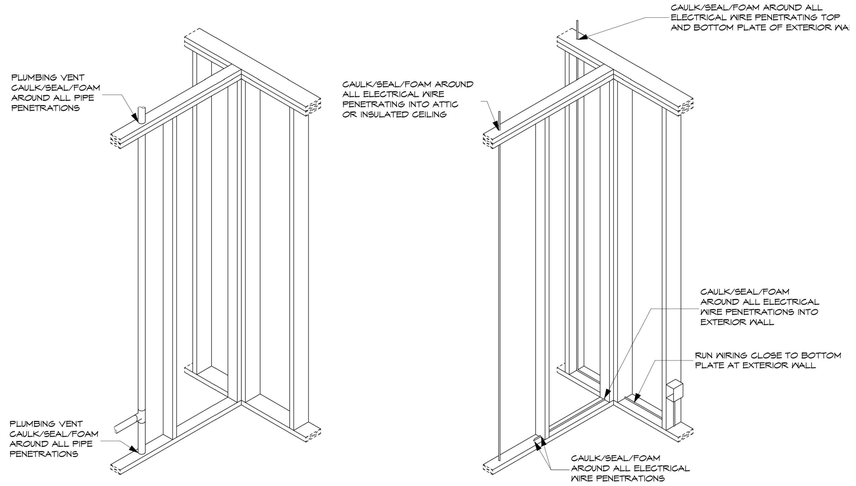
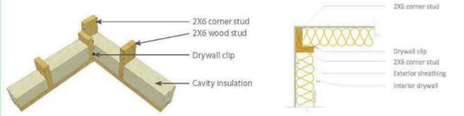


E8 PLUMBING AND ELECTRIC DETAILS
Scale: n.t.s.

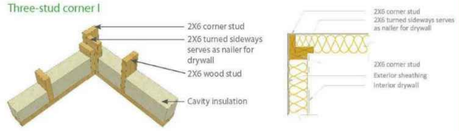
TWO AND THREE STUD CORNERS

Structural framed corners serve three main functions: holding the building up; providing attachment surfaces for exterior sheathing and drywall; and providing attachment surfaces for exterior trim and siding. Traditional three-corners provide these functions, but at a cost – an un-insulated void. Framed wall construction is normally performed in the sequence of framing-sheathing-insulation-drywall. Unfortunately this sequence closes off the void in the corner framing before the insulator gets to the job site, hence the un-insulated void. Alternates to the standard three-stud corner solve this problem while still accounting for the required structural and attachment attributes.

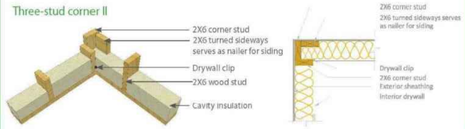
Two-stud corner



Three-stud corner I



Three-stud corner II



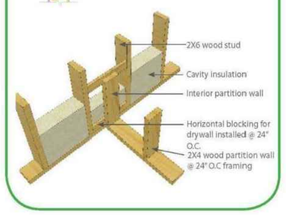
A1 ADVANCED FRAMING DETAIL- TWO AND THREE STUD CORNERS
Scale: n.t.s.

T- INTERSECTIONS

T- Intersections occur where an interior partition intersects an exterior wall. This intersection is usually (but not always) perpendicular, and with standard framing details, results in an un-insulated void because the exterior sheathing is applied prior to the wall being insulated. Horizontal ladder-blocking allows the elimination of two vertical studs and leaves the space open and accessible for insulation.







A5 ADVANCED FRAMING DETAIL- T-INTERSECTION
Scale: n.t.s.

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly registered Architect under the laws of the state of Maryland.
Registration No. 16763
Expiration Date: November 30, 2025

BUILDING DATA:

Use Group: R2

DRAWING NAME: TYPICAL AIR SEALING AND ADVANCED FRAMING DETAILS

NO.	REVISION	DATE
#1	SCHEMATIC SET	9/30/25

STUDIO K ARCHITECTURE
7806 JAKI TER
GLEN BURNIE, MD 21060
301.935.5195
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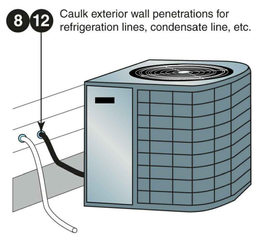
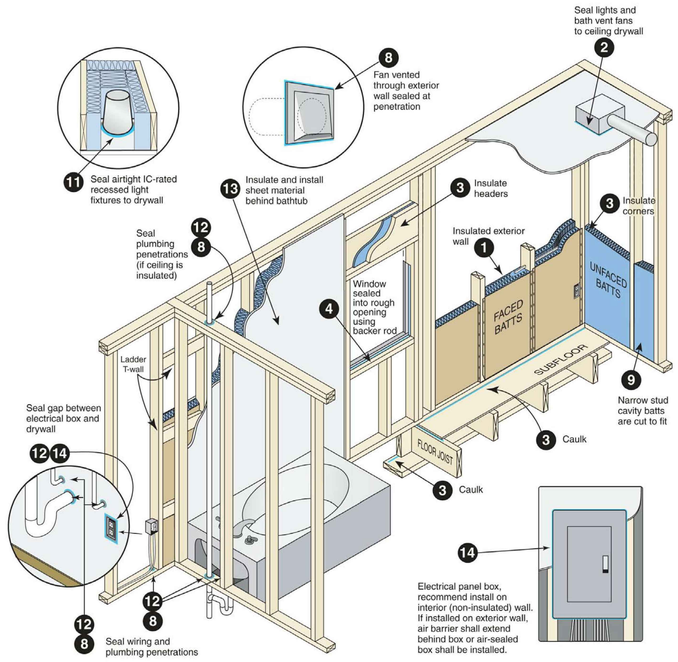
PROJECT NAME AND ADDRESS
CALVERT STREET SENIOR
DOVE LANE, EASTON, MD 21601

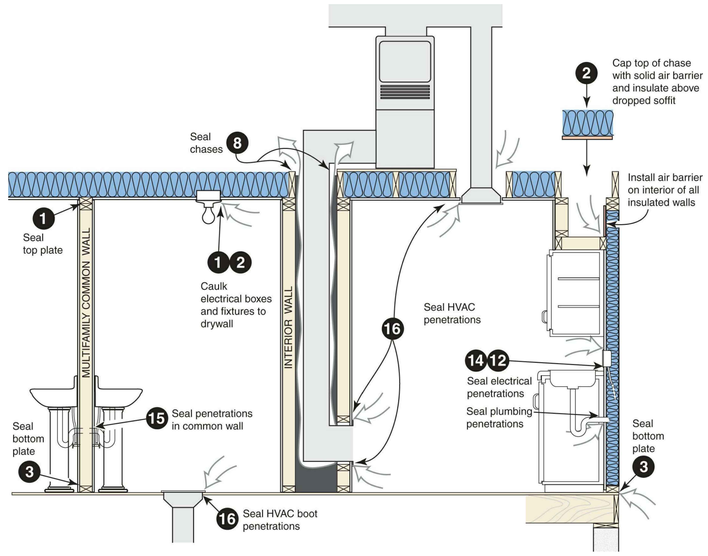
PROJECT	SHEET
AGER RD	A-0.4
DATE: 10/23/23	
SCALE:	



E1 SEALING- EXT. PENETRATIONS
Scale: n.t.s.



E5 AIR SEALING - KEY POINTS
Scale: n.t.s.



E8 PLUMBING AND ELECTRIC DETAILS
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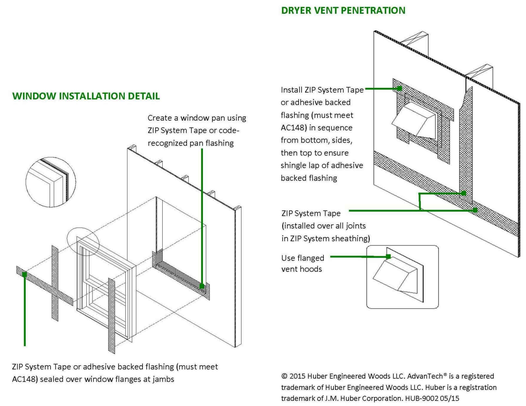
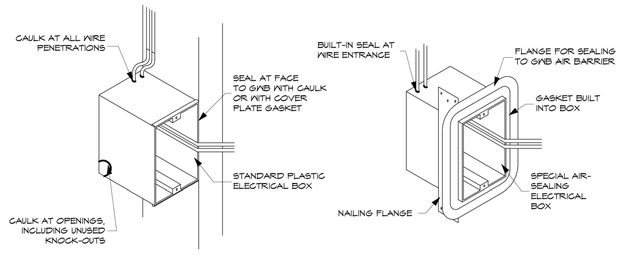
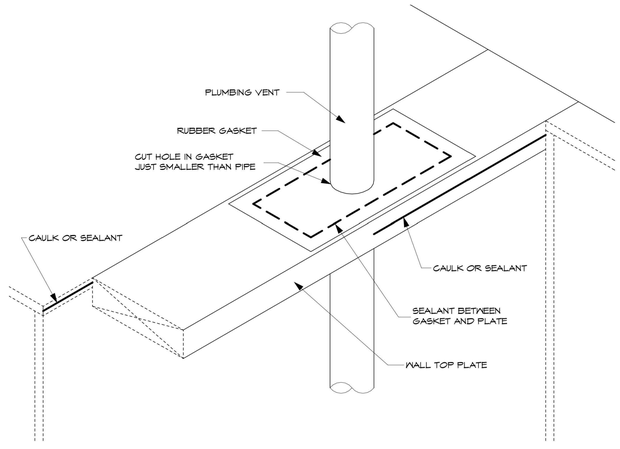


3 A-507 ZIP SYSTEM TAPE/SEALING DETAILS
SCALE: 1 1/2" = 1'-0"

A1 PENETRATION AIR SEALING
Scale: n.t.s.



A5 ELECTRIC BOX DETAIL AT EXT./ DEMISING
Scale: n.t.s.



A8 VENT STACK PENETRATION
Scale: n.t.s.

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly registered Architect under the laws of the state of Maryland.
Registration No. 16763
Expiration Date: November 30, 2025

BUILDING DATA:

Use Group: R2

DRAWING NAME: TYPICAL AIR SEALING AND ADVANCED FRAMING DETAILS

NO.	REVISION	DATE
#1	SCHEMATIC SET	9/30/25

STUDIO K ARCHITECTURE
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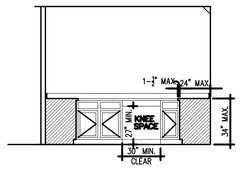
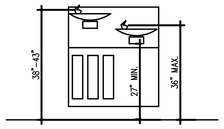
PROJECT NAME AND ADDRESS
CALVERT STREET SENIOR
DOVE LANE, EASTON, MD 21601

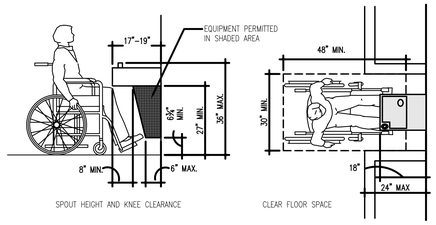
PROJECT: AGER RD
DATE: 10/23/23
SCALE:
SHEET: A-0.5



H1 TYPICAL COUNTERTOP & WORK SPACE
1/4" = 1'-0"

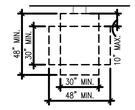


H2 DRINKING FOUNTAINS
1/2" = 1'-0"

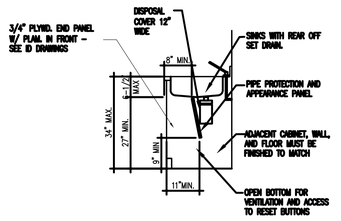


H4 DRINKING FOUNTAINS & WATER COOLERS
1/2" = 1'-0"

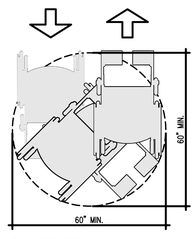




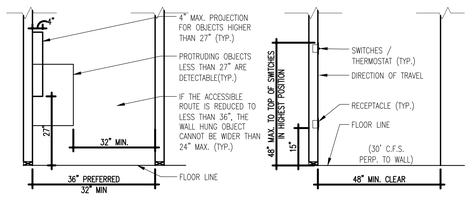
H7 TELEPHONE ENTRY SYSTEM
1/4" = 1'-0"



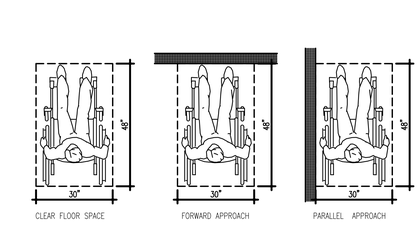
F1 KITCHEN SINK SECTION
1/2" = 1'-0"



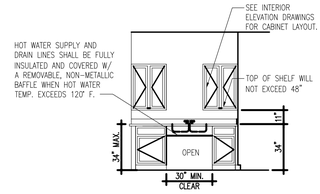
F2 CLEAR FLOOR SPACE REQUIREMENTS
1/2" = 1'-0"



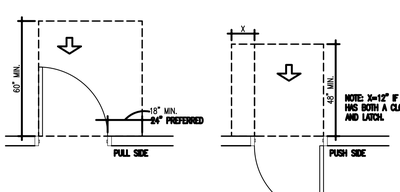
F4 TYPICAL MOUNTING HEIGHTS
NTS

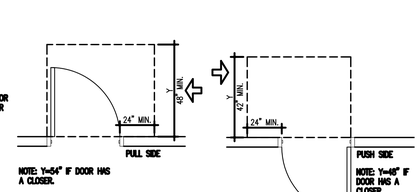


F7 CLEAR FLOOR SPACE REQUIREMENTS
NTS

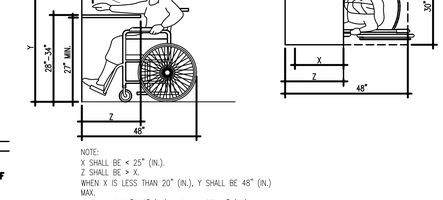


D1 TYP. ACCESS. KITCHEN SINK ELEV.
1/4" = 1'-0"





D2 ACCESSIBLE DOORS
3/8" = 1'-0"



D4 ACCESSIBLE DOORS
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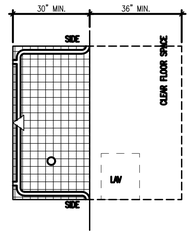
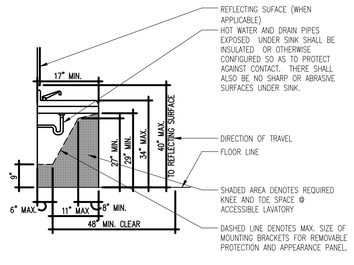
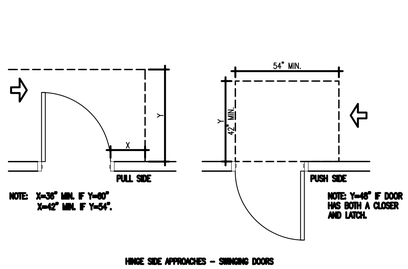


B1 SHOWER CLEAR SPACE
1/2" = 1'-0"



B2 ACCESSIBLE LAVATORY
1/2" = 1'-0"



B4 ACCESSIBLE DOORS
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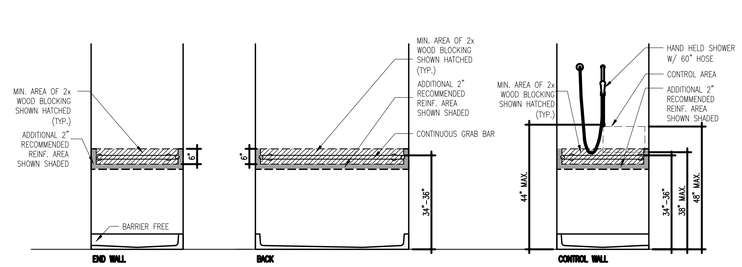

B7 UFAS SHOWER REQUIREMENTS
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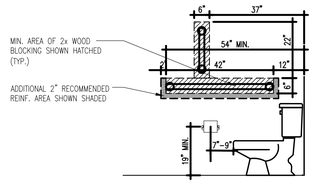
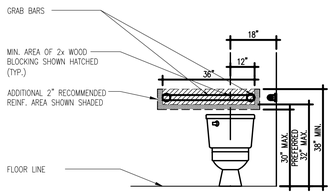


A1 BLOCKING @ TOILETS
1/2" = 1'-0"



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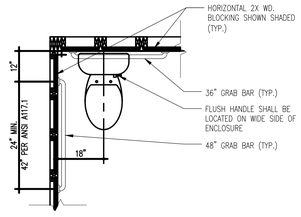
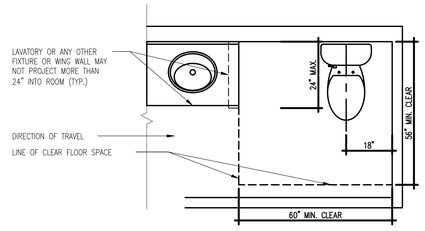
1/2" = 1'-0"



A4 BLOCKING @ TOILETS
1/2" = 1'-0"



A7 BLOCKING @ TOILETS
1/2" = 1'-0"

GENERAL NOTES

WHERE GROUP R-2 DWELLING OR SLEEPING UNITS ARE BEING ADDED, THE REQUIREMENTS OF SECTION 1107 OF THE INTERNATIONAL BUILDING CODE FOR ACCESSIBLE UNITS AND CHAPTER 9 OF THE INTERNATIONAL CODE FOR VISIBLE ALARMS APPLY ONLY TO THE QUANTITY OF SPACES BEING ADDED. FOR PRINCE GEORGE COUNTY THE APPLICABLE ACCESSIBILITY CODES ARE PRINCE GEORGE'S COUNTY SUBTITLE 4, SEC 4-180 CHAPTER 11 – ACCESSIBILITY, COMAR 09.12.53 MARYLAND ACCESSIBILITY CODE, AND 2010 ADA STANDARDS.

I. SITE:

1. ACCESSIBLE SITE & EXTERIOR FACILITIES:
   A. ACCESSIBLE ROUTES TO BE PROVIDED AT UFAS UNITS.
   B. ACCESSIBLE PARKING SPACES, LOADING ZONES AND CURB RAMPS TO BE PROVIDED, REFER TO CIVIL & LANDSCAPE PLANS FOR ALL ACCESSIBLE ROUTES TO ALL BUILDINGS AND AMENITIES.
   C. ACCESSIBLE PARKING SPACES, ACCESS AISLES AND ACCESSIBLE ROUTES AND AREAS SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION. ROUTES EXCEEDING 2% MUST MEET THE CRITERIA FOR A RAMP.

II. COMMON USE FACILITIES:

1. ACCESSIBLE STRUCTURES:
   A. BUILDINGS, MAIL ROOMS, EXERCISE/LAUNDRY FACILITIES, COMPUTER ROOMS, ETC., PUBLIC AND COMMON USE SPACES MUST BE READILY ACCESSIBLE TO AND USABLE BY PEOPLE WITH DISABILITIES, PER FEDERAL, STATE, AND LOCAL MUNICIPAL REGULATIONS AND ADA-2010 STANDARDS.
2. EXTERIOR DOORS:
   A. PROVIDE COMPLIANT THRESHOLD.
   B. LEVER TYPE HARDWARE WITH DEAD-BOLT LOCKS TO BE PROVIDED. MAX. HEIGHT OF 48" A.F.F.
   C. DOOR CLOSURE: MUST ALLOW FOR "LOW FORCE" TO BE APPLIED IN ORDER TO OPEN.
   D. SECURITY VIEWERS (PEEP HOLES) IF PROVIDED IN DOOR, TO BE INSTALLED AT A MAX. OF 44" A.F.F.
   E. PROVIDE A MINIMUM OF 32" CLEAR WIDTH OPENING.
3. INTERIOR DOORS:
   A. ALL DOORS TO PROVIDE A MINIMUM OF 32" CLEAR WIDTH WHEN OPENED 90° AND PROVIDE 1'-6" CLEAR SPACE ON THE "PULL" SIDE AT THE HANDLE
   B. LEVER TYPE HARDWARE TO BE PROVIDED. MAX. HEIGHT OF 48" A.F.F. AND MIN. HEIGHT OF 32" A.F.F.
4. KITCHEN/ BREAK ROOMS:
   A. PROVIDE KNEE CLEARANCE AS SHOWN IN DETAIL F1.
   B. PROVIDE A 2'-6" MIN. (30") WIDE WORK SPACE COUNTERTOP IN KITCHENS WITH A OVEN.
   C. MAXIMUM HEIGHT OF 34" AT TOP OF SINK AND TOP OF WORK SPACE SURFACE.
   D. SINK & PLUMBING TRIM TO BE H.C. ACCESSIBLE APPROVED FIXTURES.
   E. REFRIGERATOR MUST MEET REACH RANGE REQUIREMENTS FOR ALL OF THE REFRIGERATOR VOLUME AND AT LEAST 50% OF THE FREEZER VOLUME.
   F. ALL APPLIANCE CONTROLS NEED TO BE FRONT MOUNTED AND LESS THAN 4'-0" (48") A.F.F. TYP.
   G. PROVIDE A 2'-6" (30") x 4'-0" (48") CLEAR FLOOR SPACE (C.F.S.) APPROACH TO ALL APPLIANCES. C.F.S. MAY OVERLAP EACH OTHER.
   H. CLEAR FLOOR SPACE OF 30" X 48" IS REQUIRED WITHIN KITCHENS TO ALLOW FOR PARALLEL OR PERPENDICULAR APPROACH TO THE APPLIANCES AND FIXTURES, TYP. SEE UNIT PLANS FOR ADDITIONAL INFORMATION.
5. RESTROOMS:
   A. PROVIDE ACCESSIBLE KNEE SPACE UNDER SINK AS SHOWN IN DETAIL B2.
   B. ACCESSIBLE LAVATORY HEIGHT TO BE 34" MAXIMUM A.F.F.
   C. INSTALL GRAB BARS AT H.C. ACCESSIBLE TOILET STALLS AS SHOWN IN DETAILS A1 AND A2.
   D. TOILET ACCESSORIES TO MEET ALL H.C. ACCESSIBLE REACH RANGES, AND BE APPROVED H.C. FIXTURES.
   E. ALL PLUMBING FIXTURES & TRIM UTILIZED IN H.C. ACCESSIBLE STALLS AND LAVATORIES SHOULD BE H.C. APPROVED FIXTURE TYPES.
   F. PROVIDE A 60" DIAMETER CLEAR FLOOR SPACE TURNING RADIUS WITHIN ROOM.
   G. WALL DIMENSIONS AND FIXTURE LOCATIONS MUST BE HELD SO THAT THE MINIMUM CLEARANCES ARE PROVIDED AS SHOWN.
   H. PROVIDE 2x MEMBER SIZE REQUIRED WOOD BLOCKING IN LINE OF STUD PLANE FOR WALLS NOTED AS REQUIRING REINFORCING FOR ALL GRAB BARS. SEE DETAILS.
   I. LAVATORIES ARE TO BE INSTALLED WITH THE CENTERLINE OF THE FIXTURE A MINIMUM OF 1'-6" HORIZONTALLY FROM FINISHED SURFACE OF AN ADJOINING WALL OR FIXTURE.
6. FLOOR FINISHES:
   A. PROVIDE "NON-SLIP" ABRASIVE SURFACE THROUGHOUT BUILDINGS ALONG ALL ACCESSIBLE ROUTES.
   B. FLOOR TRANSITIONS BETWEEN DIFFERENT MATERIALS NEED TO BE FLUSH, OR MEET THE ½" MAX. THRESHOLD REQUIREMENTS.
7. ELECTRICAL/ENVIRONMENTAL CONTROLS:
   A. LIGHT SWITCHES, ELECTRICAL OUTLETS, THERMOSTATS AND OTHER ENVIRONMENTAL CONTROLS: ITEMS MUST BE POSITIONED SO THAT CONTROLS ARE LOCATED NOT HIGHER THAN 48" A.F.F. ELECTRICAL OUTLETS MOUNTED SO THAT THE MINIMUM HEIGHT IS 15" A.F.F. CONTROLS AND/OR OUTLETS MOUNTED NOT HIGHER THAN 44" (HORIZONTALLY) ABOVE THE COUNTERTOPS. SEE DETAILS, TYP.
8. MISCELLANEOUS/OTHER:
   A. CORRIDORS TO HAVE A MINIMUM CLEAR WIDTH OF 4'-0" (48") AND A MIN. HEAD HEIGHT OF 6'-8" (80").
   B. ELECTRIC WATER COOLERS & DRINKING FOUNTAINS TO BE MOUNTED AT 36" TO TOP OF SPOUT.
   C. DISPENSERS AT RESTROOMS, FITNESS ROOMS AND OTHER AREAS MUST HAVE CONTROLS/SLOTS WITHIN THE ACCESSIBLE REACH RANGE.

III. HANDICAP ACCESSIBLE APARTMENTS:

1. 5% OF THE APARTMENTS WILL BE RENOVATED TO COMPLY WITH CURRENT UFAS GUIDELINES FOR ACCESSIBLE DWELLING UNITS.
   A. KITCHENS WILL PROVIDE ACCESSIBLE COUNTERS, WORKSPACE, SINKS DEVICES AND CABINETRY.
   B. BATHROOMS WILL PROVIDE BARRIER FREE SHOWER PANS, HANDHELD SHOWER HEADS, GRAB BARS, ACCESSIBLE LAVATORIES AND ACCESSIBLE TOILETS.
   C. THRESHOLDS AND FLOOR TRANSITIONS SHALL NOT EXCEED ½" IN HEIGHT.
   D. A TURNING RADIUS SHALL BE PROVIDED IN ALL ROOMS AND PROPER CLEARANCE SHALL BE PROVIDED AT ALL DOORS AND APPLIANCES.
2. 2% OF THE APARTMENTS WILL BE RENOVATED TO COMPLY WITH VISUAL AND HEARING IMPAIRED STANDARDS.

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly registered Architect under the laws of the state of Maryland.
Registration No. 16763
Expiration Date: November 30, 2025

BUILDING DATA:

Use Group: R2

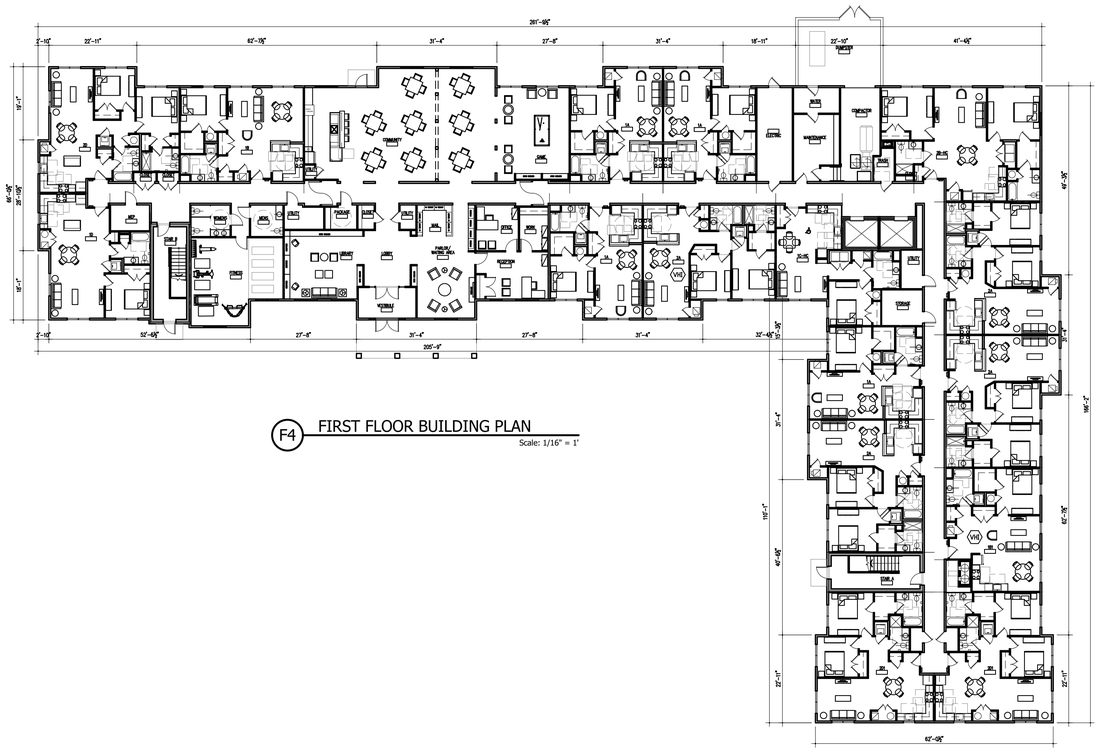
DRAWING NAME: ACCESSIBILITY DETAILS

NO.	REVISION	DATE
#1	SCHEMATIC SET	9/30/25

STUDIO K ARCHITECTURE
7806 JAKI TER
GLEN BURNIE, MD 21060
301.935.5195
STUDIO_K@VERIZON.NET

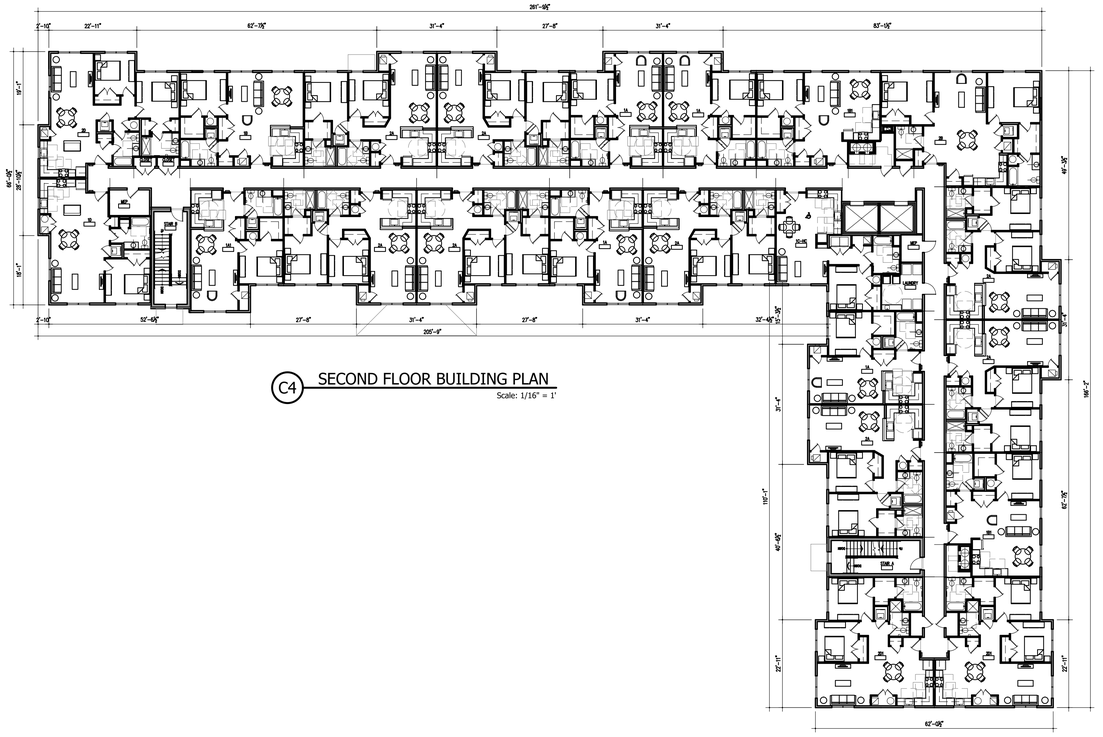
PROJECT NAME AND ADDRESS
CALVERT STREET SENIOR
DOVE LANE, EASTON, MD 21601

PROJECT	SHEET
AGER RD	A-0.6
DATE: 10/23/23	
SCALE:	



F4 FIRST FLOOR BUILDING PLAN

Scale: 1/16" = 1'



C4 SECOND FLOOR BUILDING PLAN

Scale: 1/16" = 1'

3.12.1 CRITERIA APPLICABLE TO ALL PROJECTS

1. Project will be designed to comply with currently adopted State and local building codes, including the International Energy Conservation Code (IECC), MD COMAR 09.12.53, and the Uniform Federal Accessibility Standards (UFAS).
2. Calvert Street Senior will be new construction, and will comply with UFAS guidelines, Section 504 of the Rehabilitation Act, and the 2010 ADA Standards. Applicant will retain an accessibility consultant to review the design documents and construction installation for compliance.
3. The design team has extensive experience with the energy efficiency goals of DHCD, and will work cooperatively with the applicant's certified RESNET Rater to meet the energy goals and the DHCD minimum energy standards. The Rater will provide the Energy Audit, review of design documents, modeling services, field observations and final testing and inspection. Energy consultant will review design documents, and provide field observations and testing during construction.
4. The design documents will include pest and rodent preventative measures. In addition, a pest management program equal to the HUD Healthy Homes Initiative will be implemented by the property management company.
5. Architectural grade asphalt shingle roofing with a minimum 30 year warranty will be specified.
6. Doors – heavy (i.e. minimum twenty (20) gauge) metal, solid core wood, or top quality foam filled fiberglass must be used for entry doors; unit entrance doors must have durable frames and hardware for exterior entry; minimum twenty–two (22) gauge materials must be used for interior unit entry doors.
7. Each apartment will be wired with low voltage wiring suitable for high–speed internet service.
8. Project specifications will include detailed installation instructions including a requirement to comply with manufacturer's instructions.
9. Project will implement a construction waste recycling program in which construction waste materials are collected, separated, and recycled. Plan will include recordkeeping that identifies weight, type and disposition of materials.
10. Project documents will specify Green Label carpeting and low toxic, low volatile organic compound (VOC) paint, primer, sealers, and adhesives. Specifications will include reference standards such as Green Seal, South Coast Air Quality Management District, or Bay Area Air Quality Management District. Wood products will be CARB 2 compliant or No Added Urea Formaldehyde (NAUF). The Architect will verify compliance of green products during the submittal review and construction verification process.
11. Carpet products will meet the Carpet and Rug Institute's Green Label or Green Label Plus Certification for carpet, pad and carpet adhesive.
12. HVAC equipment will be CFC free. Where CFC refrigerant equipment is being removed, CFC materials will be captured and properly disposed of.
13. Talbot County is an EPA Radon Zone 3. Radon mitigation measures will not be required.
14. Space will be provided for recycling containers, and management will distribute information on a site recycling program.
15. Watersense labeled fixtures will be specified, project water fixtures and faucets must conserve water with toilets that use 1.28 gallons per flush or less and shower heads and bath and kitchen faucets that use 2.0 gallons per minute (gpm) or less.
16. All interior spaces will have a non–smoking policy. Any exterior smoking areas will be designated, and will be at least 25' from entrances and air intake devices.
17. The project site is not located in a FEMA flood zone.
18. The site development does not remove prime habitat for any protected or endangered species.
19. All HVAC systems will be new, and will be Energy Star qualified electric. Split–systems will be ducted, and will provide an adequate return air path.
20. Appliances, including direct vent bathroom exhaust fans, will be Energy Star qualified where applicable.
21. All lighting will be Energy Star certified LED fixtures, or LED lamps. Commercial fixtures that are not available with Energy Star qualification will be approved by the Design Lights Consortium.
22. New construction windows will be Energy Star qualified vinyl.
23. Cabinetry is required to be plywood box construction, the doors are solid wood, and the finishes and hardware are durable.

4.6 DEVELOPMENT QUALITY ENHANCEMENTS

1. Building entrances are designed and located to provide security and weather protection for the targeted resident group and the project includes green space areas, play areas, courtyards or exterior seating areas that provide recreational and social opportunities for the targeted resident community.
2. The building architecture, structure and mass complement the existing neighborhood and the project includes exterior architectural features and design elements that add interest and/or functionality, create unity with nearby architectural style, and generally improve the appearance of the building(s).
3. Architectural accessories such as decorative door surrounds, larger window trim, corner eave, cornice and column details or other special features are provided and are of composite or other durable materials.
4. Individual units, common areas, and community spaces are well designed for comfortable living and tenant activities. The layouts are efficient, with practical traffic flow and provide adequate space for furniture placement. (550 – 600 net sf. area for predominantly one (1)–bedroom units and 20% more area for each additional bedroom unit. Primary bedroom is not less than 10'x11' in clear size, and in multiple bedroom units the smallest bedroom is not less than 9'–0" in one direction with a minimum of ninety (90) net square feet in area).
5. Interior doors are panel, and hardware is of grade 2 quality or better with lever handles.
6. Floor coverings are quality long lasting products. Hard finish flooring must be products with a verifiable ten (10) year or longer warranty.

STRUCTURAL, MECHANICAL + ELECTRICAL SUMMARY

STRUCTURAL SUMMARY:

1. Roof is pre–engineered wood truss.
2. Exterior bearing wall is 2x6 wood stud with OSB sheathing.
3. Floor structure is pre–engineered wood trusses with t&g plywood sheathing (glued screwed) with 3/4" gypsum concrete underlayment and sound mat at hard surfaces on upper floors.
4. Bottom floor slab–on–grade is 4" concrete w/ wire mesh over gravel & 15 mil. vapor barrier.
5. Foundations are concrete with a thermal break on spread footings.

MECHANICAL/PLUMBING SUMMARY:

1. Risers and branch sanitary lines to be PVC as permitted by local water authority standards. Appropriate UL listed penetration assemblies to be used with each pipe type.
2. Above grade water supply piping will be CPVC.
3. Sprinkler piping will be plastic where concealed. Top floor will have side–wall sprinkler heads, and no wet piping will be installed in the unconditioned space. Sprinkler will conform to NFPA 13 guidelines.
4. Bath tubs will be enameled steel, toilets ceramic, kitchen sinks stainless steel, and bathroom sinks cultured marble or porcelain.
5. Energy efficient electric water heaters will be used in each apartment unit.
6. Apartment units will be heated and air conditioned with Energy Star split–system heatpumps.
7. Kitchens and bathrooms will be equipped with direct vent exhaust fans. Exhaust fans will be Energy Star qualified.
8. Hot water distribution piping shall not exceed the allowable pipe lengths indicated in the IgCC table 702.8.2.
9. Domestic water piping ¾"or larger will be insulated with minimum R–3 pipe insulation.

ELECTRICAL SUMMARY:

1. RG–6 and/or CAT 5e cabling will be provided in every apartment for TV and high speed internet.
2. A media box will be installed in each apartment for low voltage distribution.
3. Sprinkler system will be electronically monitored.
4. Apartment lighting will be high–efficacy led fixtures.

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly registered Architect under the laws of the state of Maryland.
Registration No. 16763
Expiration Date: November 30, 2025

BUILDING DATA:

Use Group: R2

DRAWING NAME: BUILDING PLANS

#1	SCHEMATIC SET	9/30/25
NO.	REVISION	DATE

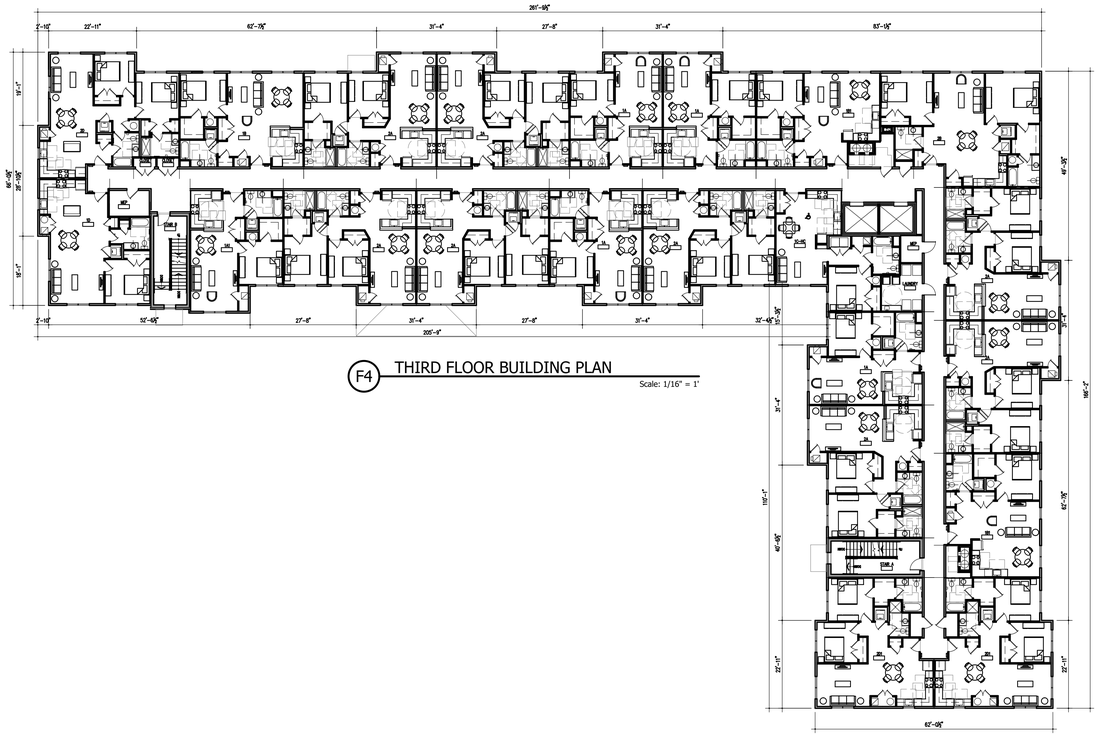
STUDIO K ARCHITECTURE
7806 JAKI TER
GLEN BURNIE, MD 21060
301.935.5195
STUDIO_K@VERIZON.NET

PROJECT NAME AND ADDRESS

CALVERT STREET SENIOR

DOVE LANE, EASTON, MD 21601

PROJECT: AGER RD	SHEET: A-1.1
DATE: 10/23/23	
SCALE:	



F4 THIRD FLOOR BUILDING PLAN

Scale: 1/16" = 1'

3.13.1 CRITERIA APPLICABLE TO ALL PROJECTS

1. Project will be designed to comply with currently adopted State and local building codes, including the International Energy Conservation Code (IECC), MD COMAR 09.12.53, and the Uniform Federal Accessibility Standards (UFAS).
2. Calvert Street Senior will be new construction, and will comply with UFAS guidelines, Section 504 of the Rehabilitation Act, and the 2010 ADA Standards. Applicant will retain an accessibility consultant to review the design documents and construction installation for compliance.
3. The design team has extensive experience with the energy efficiency goals of DHCD, and will work cooperatively with the applicant's certified RESNET Rater to meet the energy goals and the DHCD minimum energy standards. The Rater will provide the Energy Audit, review of design documents, modeling services, field observations and final testing and inspection. Energy consultant will review design documents, and provide field observations and testing during construction.
4. The design documents will include pest and rodent preventative measures. In addition, a pest management program equal to the HUD Healthy Homes Initiative will be implemented by the property management company.
5. Architectural grade asphalt shingle roofing with a minimum 30 year warranty will be specified.
6. Doors – heavy (i.e. minimum twenty (20) gauge) metal, solid core wood, or top quality foam filled fiberglass must be used for entry doors; unit entrance doors must have durable frames and hardware for exterior entry; minimum twenty-two (22) gauge materials must be used for interior unit entry doors.
7. Each apartment will be wired with low voltage wiring suitable for high-speed internet service.
8. Project specifications will include detailed installation instructions including a requirement to comply with manufacturer's instructions.
9. Project will implement a construction waste recycling program in which construction waste materials are collected, separated, and recycled. Plan will include recordkeeping that identifies weight, type and disposition of materials.
10. Project documents will specify Green Label carpeting and low toxic, low volatile organic compound (VOC) paint, primer, sealers, and adhesives. Specifications will include reference standards such as Green Seal, South Coast Air Quality Management District, or Bay Area Air Quality Management District. Wood products will be CARB 2 compliant or No Added Urea Formaldehyde (NAUF). The Architect will verify compliance of green products during the submittal review and construction verification process.
11. Carpet products will meet the Carpet and Rug Institute's Green Label or Green Label Plus Certification for carpet, pad and carpet adhesive.
12. HVAC equipment will be CFC free. Where CFC refrigerant equipment is being removed, CFC materials will be captured and properly disposed of.
13. Talbot County is an EPA Radon Zone 3. Radon mitigation measures will not be required.
14. Space will be provided for recycling containers, and management will distribute information on a site recycling program.
15. Watersense labeled fixtures will be specified, project water fixtures and faucets must conserve water with toilets that use 1.28 gallons per flush or less and shower heads and bath and kitchen faucets that use 2.0 gallons per minute (gpm) or less.
16. All interior spaces will have a non-smoking policy. Any exterior smoking areas will be designated, and will be at least 25' from entrances and air intake devices.
17. The project site is not located in a FEMA flood zone.
18. The site development does not remove prime habitat for any protected or endangered species.
19. All HVAC systems will be new, and will be Energy Star qualified electric. Split-systems will be ducted, and will provide an adequate return air path.
20. Appliances, including direct vent bathroom exhaust fans, will be Energy Star qualified where applicable.
21. All lighting will be Energy Star certified LED fixtures, or LED lamps. Commercial fixtures that are not available with Energy Star qualification will be approved by the Design Lights Consortium.
22. New construction windows will be Energy Star qualified vinyl.
23. Cabinetry is required to be plywood box construction, the doors are solid wood, and the finishes and hardware are durable.

4.6 DEVELOPMENT QUALITY ENHANCEMENTS

1. Building entrances are designed and located to provide security and weather protection for the targeted resident group and the project includes green space areas, play areas, courtyards or exterior seating areas that provide recreational and social opportunities for the targeted resident community.
2. The building architecture, structure and mass complement the existing neighborhood and the project includes exterior architectural features and design elements that add interest and/or functionality, create unity with nearby architectural style, and generally improve the appearance of the building(s).
3. Architectural accessories such as decorative door surrounds, larger window trim, corner eave, cornice and column details or other special features are provided and are of composite or other durable materials.
4. Individual units, common areas, and community spaces are well designed for comfortable living and tenant activities. The layouts are efficient, with practical traffic flow and provide adequate space for furniture placement. (550 – 600 net sf. area for predominantly one (1)-bedroom units and 20% more area for each additional bedroom unit. Primary bedroom is not less than 10'x11' in clear size, and in multiple bedroom units the smallest bedroom is not less than 9'-0" in one direction with a minimum of ninety (90) net square feet in area).
5. Interior doors are panel, and hardware is of grade 2 quality or better with lever handles.
6. Floor coverings are quality long lasting products. Hard finish flooring must be products with a verifiable ten (10) year or longer warranty.

STRUCTURAL, MECHANICAL + ELECTRICAL SUMMARY

STRUCTURAL SUMMARY:
1. Roof is pre-engineered wood truss.
2. Exterior bearing wall is 2x6 wood stud with OSB sheathing.
3. Floor structure is pre-engineered wood trusses with t&g plywood sheathing (glued screwed) with 3/4" gypsum concrete underlayment and sound mat at hard surfaces on upper floors.
4. Bottom floor slab-on-grade is 4" concrete w/ wire mesh over gravel & 15 mil. vapor barrier.
5. Foundations are concrete with a thermal break on spread footings.

MECHANICAL/PLUMBING SUMMARY:
1. Risers and branch sanitary lines to be PVC as permitted by local water authority standards. Appropriate UL listed penetration assemblies to be used with each pipe type.
2. Above grade water supply piping will be CPVC.
3. Sprinkler piping will be plastic where concealed. Top floor will have side-wall sprinkler heads, and no wet piping will be installed in the unconditioned space. Sprinkler will conform to NFPA 13 guidelines.
4. Bath tubs will be enameled steel, toilets ceramic, kitchen sinks stainless steel, and bathroom sinks cultured marble or porcelain.
5. Energy efficient electric water heaters will be used in each apartment unit.
6. Apartment units will be heated and air conditioned with Energy Star split-system heatpumps.
7. Kitchens and bathrooms will be equipped with direct vent exhaust fans. Exhaust fans will be Energy Star qualified.
8. Hot water distribution piping shall not exceed the allowable pipe lengths indicated in the IgCC table 702.8.2.
9. Domestic water piping ¾" or larger will be insulated with minimum R-3 pipe insulation.

ELECTRICAL SUMMARY:
1. RG-6 and/or CAT 5e cabling will be provided in every apartment for TV and high speed internet.
2. A media box will be installed in each apartment for low voltage distribution.
3. Sprinkler system will be electronically monitored.
4. Apartment lighting will be high-efficacy led fixtures.

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly registered Architect under the laws of the state of Maryland.
Registration No. 16763
Expiration Date: November 30, 2025

BUILDING DATA:

Use Group: R2

DRAWING NAME: BUILDING PLANS

NO.	REVISION	DATE
#1	SCHEMATIC SET	9/30/25

STUDIO K ARCHITECTURE
7806 JAKI TER
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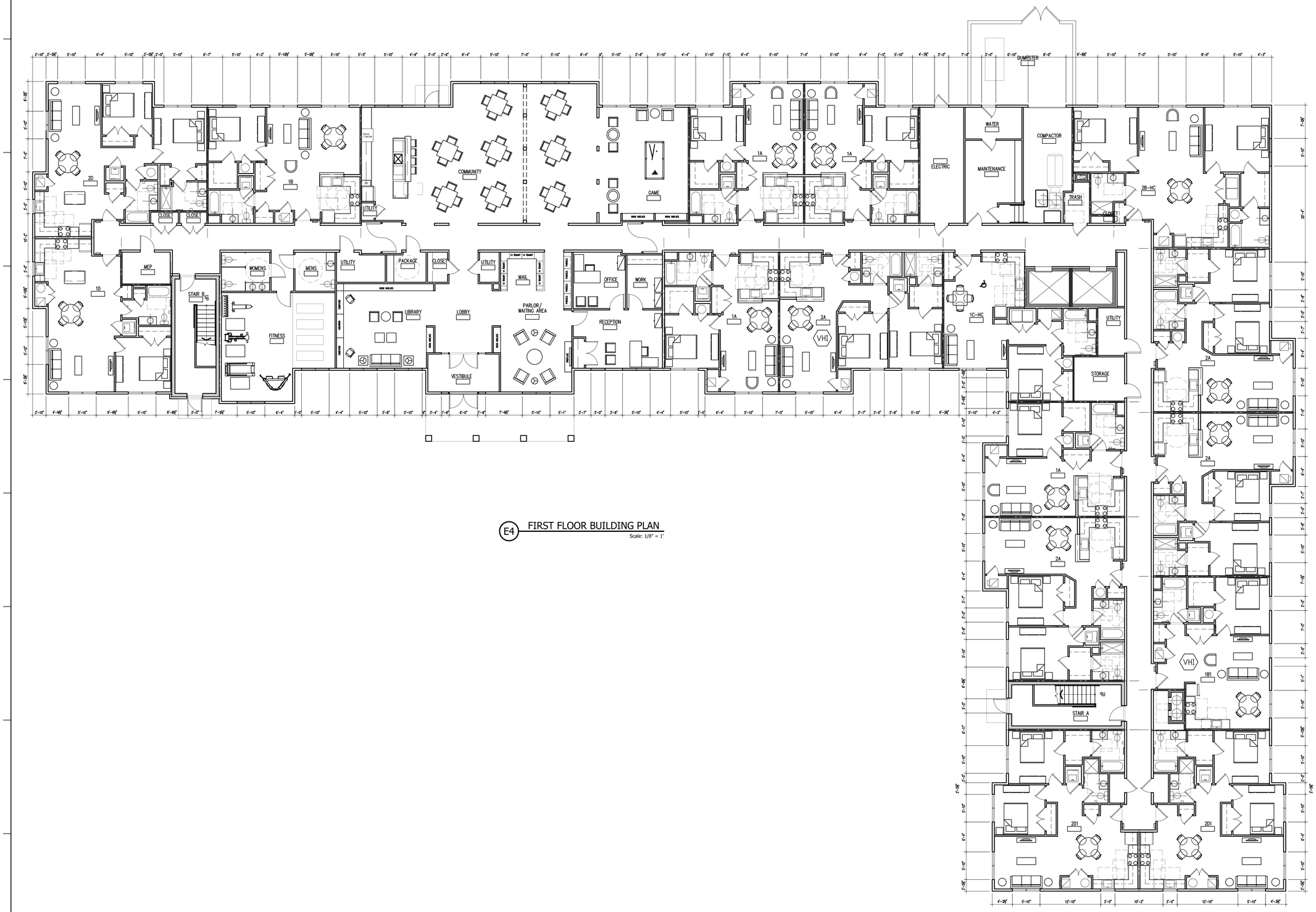
301.935.5195
STUDIO_K@VERIZON.NET

PROJECT NAME AND ADDRESS
CALVERT STREET SENIOR
DOVE LANE, EASTON, MD 21601

PROJECT: AGER RD
DATE: 10/23/23
SCALE:
SHEET: A-1.2



E4 FIRST FLOOR BUILDING PLAN

Scale: 1/8" = 1'

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly registered Architect under the laws of the state of Maryland.
Registration No. 16763
Expiration Date: November 30, 2025

BUILDING DATA:

Use Group: R2

DRAWING NAME: FIRST FLOOR BUILDING PLAN

NO.	REVISION	DATE
#1	SCHEMATIC SET	9/30/25

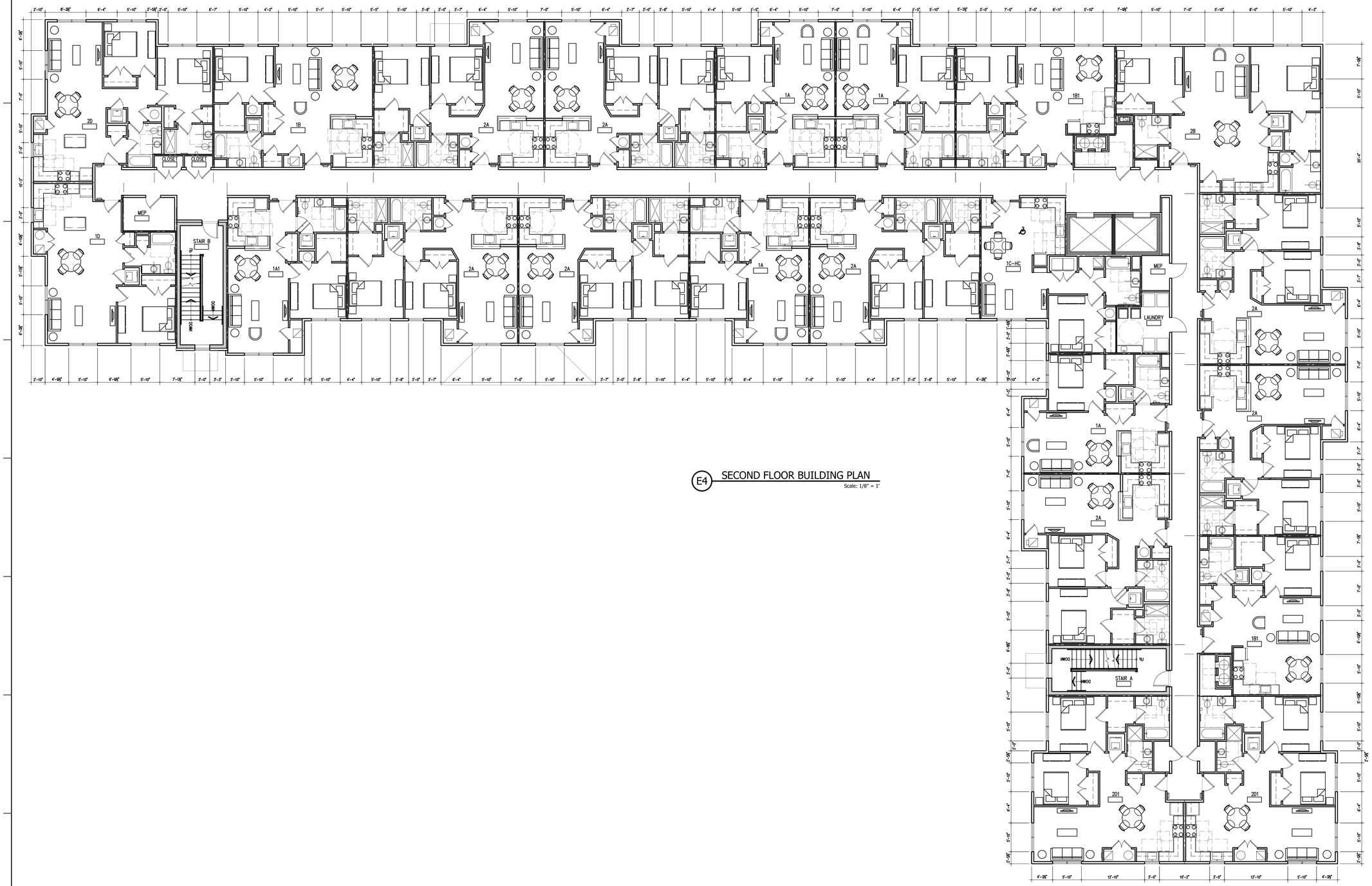
STUDIO K ARCHITECTURE
7806 JAKI TER
GLEN BURNIE, MD 21060
301.935.5195
STUDIO_K@VERIZON.NET

PROJECT NAME AND ADDRESS

CALVERT STREET SENIOR

DOVE LANE, EASTON, MD 21601

PROJECT	SHEET
AGER RD	A-1.4
DATE: 10/23/23	
SCALE:	



E4 SECOND FLOOR BUILDING PLAN

Scale: 1/8" = 1'

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly registered Architect under the laws of the state of Maryland.
Registration No. 16763
Expiration Date: November 30, 2025

BUILDING DATA:

Use Group: R2

DRAWING NAME: SECOND FLOOR BUILDING PLAN

NO.	REVISION	DATE
#1	SCHEMATIC SET	9/30/25

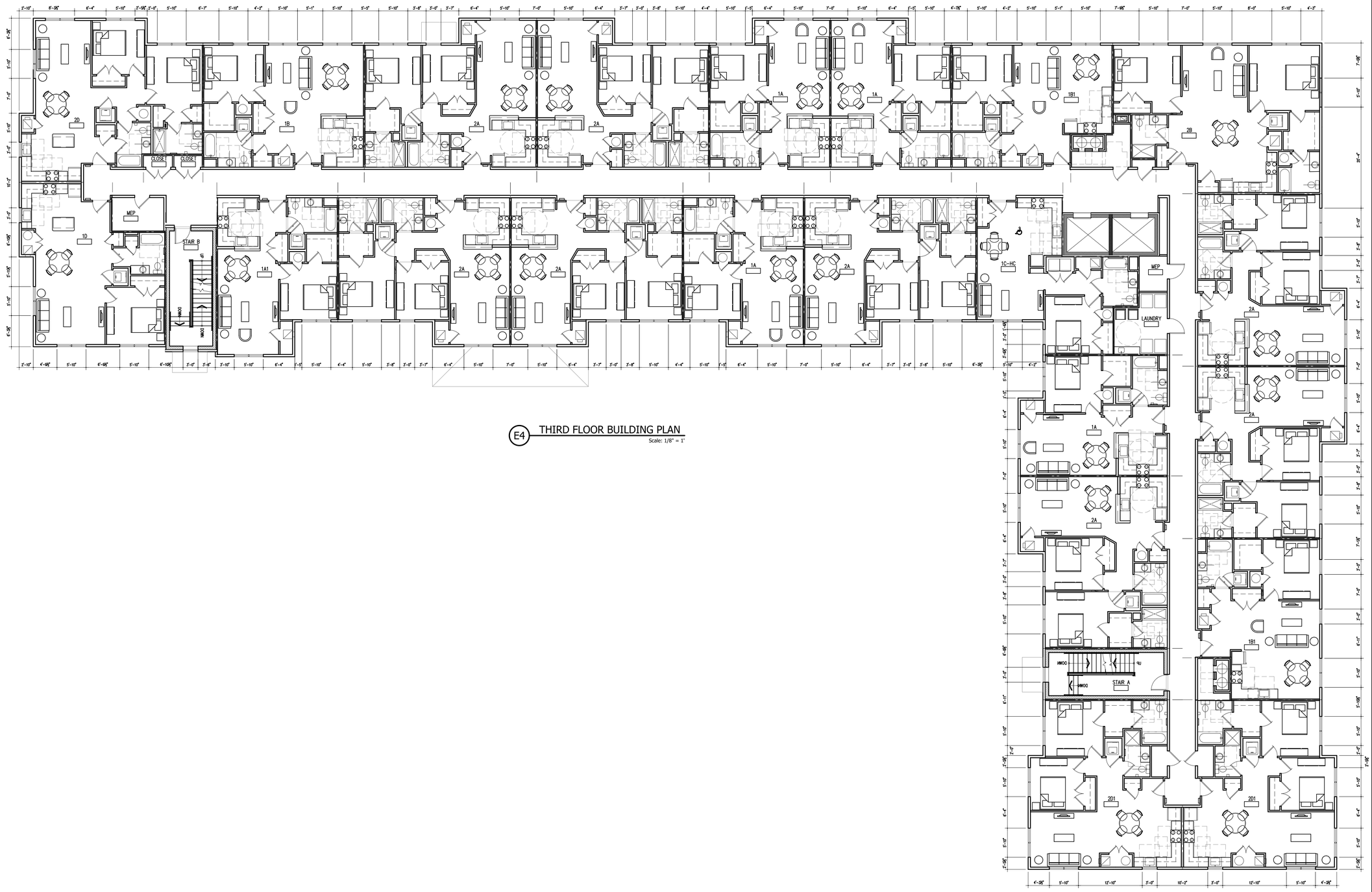
STUDIO K ARCHITECTURE
7806 JAKI TER
GLEN BURNIE, MD 21060
301.935.5195
STUDIO_K@VERIZON.NET

PROJECT NAME AND ADDRESS

CALVERT STREET SENIOR

DOVE LANE, EASTON, MD 21601

PROJECT: AGER RD
DATE: 10/23/23
SCALE:
SHEET: A-1.5



E4 THIRD FLOOR BUILDING PLAN

Scale: 1/8" = 1'

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly registered Architect under the laws of the state of Maryland.
Registration No. 16763
Expiration Date: November 30, 2025

BUILDING DATA:

Use Group: R2

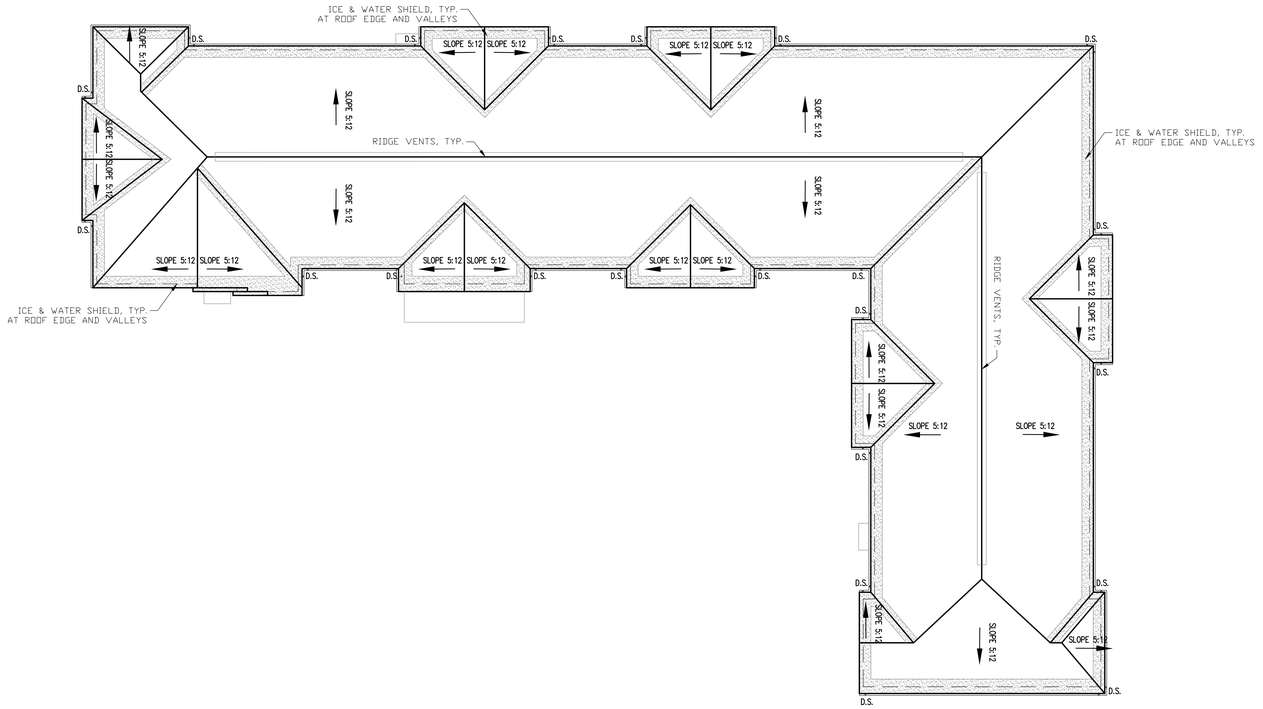
DRAWING NAME: THIRD FLOOR BUILDING PLAN

NO.	REVISION	DATE
#1	SCHEMATIC SET	9/30/25

STUDIO K ARCHITECTURE
7806 JAKI TER
GLEN BURNIE, MD 21060
301.935.5195
STUDIO_K@VERIZON.NET

PROJECT NAME AND ADDRESS:
CALVERT STREET SENIOR
DOVE LANE, EASTON, MD 21601

PROJECT: AGER RD
DATE: 10/23/23
SCALE:
SHEET: A-1.6



D5 ROOF PLAN
Scale: 1/16" = 1'

3.13.1 CRITERIA APPLICABLE TO ALL PROJECTS

1. Project will be designed to comply with currently adopted State and local building codes, including the International Energy Conservation Code (IECC), MD COMAR 09.12.53, and the Uniform Federal Accessibility Standards (UFAS).
2. Calvert Street Senior will be new construction, and will comply with UFAS guidelines, and the 2010 ADA Standards. Applicant will retain an accessibility consultant to review the design documents and construction installation for compliance.
3. The design team has extensive experience with the energy efficiency goals of DHCD, and will work cooperatively with the applicant's certified RESNET Rater to meet the energy goals and the DHCD minimum energy standards. The Rater will provide the Energy Audit, review of design documents, modeling services, field observations and final testing and inspection. Energy consultant will review design documents, and provide field observations and testing during construction.
4. The design documents will include pest and rodent preventative measures. In addition, a pest management program equal to the HUD Healthy Homes Initiative will be implemented by the property management company.
5. Architectural grade asphalt shingle roofing with a minimum 30 year warranty will be specified.
6. Project specifications will include detailed installation instructions including a requirement to comply with manufacturer's instructions.
7. Project will implement a construction waste recycling program in which construction waste materials are collected, separated, and recycled. Plan will include recordkeeping that identifies weight, type and disposition of materials.
8. Project documents will specify Green Label carpeting and low toxic, low volatile organic compound (VOC) paint, primer, sealers, and adhesives. Specifications will include reference standards such as Green Seal, South Coast Air Quality Management District, or Bay Area Air Quality Management District. Wood products will be CARB 2 compliant or No Added Urea Formaldehyde (NAUF). The Architect will verify compliance of green products during the submittal review and construction verification process.
9. Talbot County is an EPA Radon Zone 3. No radon mitigation is required.

3.13.2 CRITERIA APPLICABLE TO NEW CONSTRUCTION AND GUT REHABILITATION

1. This project will be certified under the Energy Star MF New Construction program.
2. All supply ductwork for HVAC systems will be sealed with mastic and insulated.
3. A building evaluation report has been prepared for the renovation portion of the project.

4.6 DEVELOPMENT QUALITY ENHANCEMENTS

1. Building entrances are designed and located to provide security and weather protection for the targeted resident group and the project includes green space areas, play areas, courtyards or exterior seating areas that provide recreational and social opportunities for the targeted resident community.
2. The building architecture, structure and mass complement the existing neighborhood and the project includes exterior architectural features and design elements that add interest and/or functionality, create unity with nearby architectural style, and generally improve the appearance of the building(s).
3. Architectural accessories such as decorative door surrounds, larger window trim, corner eave, cornice and column details or other special features are provided and are of composite or other durable materials.

STRUCTURAL, MECHANICAL + ELECTRICAL SUMMARY

STRUCTURAL SUMMARY:
1. Roof is pre-engineered wood truss.
2. Exterior bearing wall is 2x6 wood stud with OSB sheathing.
3. Floor structure is pre-engineered wood trusses with t&g plywood sheathing (glued screwed) with 3/4" gypsum concrete underlayment and sound mat at hard surfaces on upper floors.
4. Bottom floor slab-on-grade is 4" concrete w/ wire mesh over gravel & 15 mil. vapor barrier.
5. Foundations are concrete with a thermal break on spread footings.

MECHANICAL/PLUMBING SUMMARY:
1. Risers and branch sanitary lines to be PVC as permitted by local water authority standards. Appropriate UL listed penetration assemblies to be used with each pipe type.
2. Above grade water supply piping will be CPVC.
3. Sprinkler piping will be plastic where concealed. Top floor will have side-wall sprinkler heads, and no wet piping will be installed in the unconditioned space. Sprinkler will conform to NFPA 13 guidelines.
4. Bath tubs will be enameled steel, toilets ceramic, kitchen sinks stainless steel, and bathroom sinks cultured marble or porcelain.
5. Energy efficient electric water heaters will be used in each apartment unit.
6. Apartment units will be heated and air conditioned with Energy Star split-system heatpumps.
7. Kitchens and bathrooms will be equipped with direct vent exhaust fans. Exhaust fans will be Energy Star qualified.
8. Hot water distribution piping shall not exceed the allowable pipe lengths indicated in the IgCC table 702.8.2.
9. Domestic water piping ¾"or larger will be insulated with minimum R-3 pipe insulation.

ELECTRICAL SUMMARY:
1. RG-6 and/or CAT 5e cabling will be provided in every apartment for TV and high speed internet.
2. A media box will be installed in each apartment for low voltage distribution.
3. Sprinkler system will be electronically monitored.
4. Apartment lighting will be high-efficacy led fixtures.

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Registration No. 16763
Expiration Date: November 30, 2025

BUILDING DATA:

Use Group: R2

DRAWING NAME: ROOF PLAN

NO.	REVISION	DATE
#1	SCHEMATIC SET	9/30/25

STUDIO K ARCHITECTURE
7806 JAKI TER
GLEN BURNIE, MD 21060
301.935.5195
STUDIO_K@VERIZON.NET

PROJECT NAME AND ADDRESS:
CALVERT STREET SENIOR
DOVE LANE, EASTON, MD 21601

PROJECT: AGER RD
DATE: 10/23/23
SCALE:
SHEET: A-1.8



F5 BUILDING PERSPECTIVE
NOT TO SCALE



A5 BUILDING PERSPECTIVE
NOT TO SCALE

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly registered Architect under the laws of the state of Maryland.
Registration No. 16763
Expiration Date: November 30, 2025

BUILDING DATA:

Use Group: R2

DRAWING NAME
PERSPECTIVES

NO.	REVISION	DATE
#1	SCHEMATIC SET	9/30/25

STUDIO K ARCHITECTURE
7806 JAKI TER
GLEN BURNIE, MD 21060
301.935.5195
STUDIO_K@VERIZON.NET

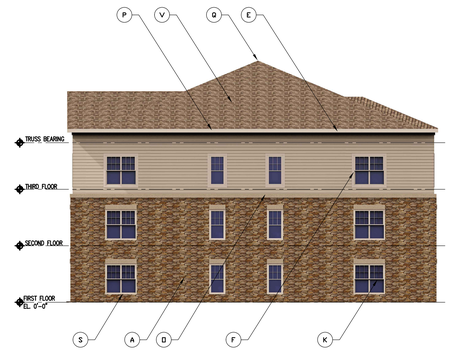
PROJECT NAME AND ADDRESS
CALVERT STREET SENIOR

DOVE LANE, EASTON, MD 21601

PROJECT: AGER RD
DATE: 10/23/23
SCALE:
SHEET: A-2.0



F4 FRONT ELEVATION
Scale: 3/32" = 1'



F9 FRONT ELEVATION
Scale: 3/32" = 1'



C4 SIDE ELEVATION
Scale: 3/32" = 1'



C9 FRONT ELEVATION
Scale: 3/32" = 1'

3.13.1 CRITERIA APPLICABLE TO ALL PROJECTS

1. Project will be designed to comply with currently adopted State and local building codes,which includes the 2021 International Energy Conservation Code (IECC), MD COMAR 05.02.02,and the Uniform Federal Accessibility Standards (UFAS).
2. The design team has extensive experience with the energy efficiency goals of DHCD, and will work cooperatively with the applicant's certified RESNET Rater. The Rater will provide review of the design documents, modeling services, field observations and final testing and inspection.
3. The design documents will include pest and rodent preventative measures. In addition, a pest management program will be implemented by the management company.
4. The project will be constructed with Architectural grade asphalt shingle roofing that provides a minimum of 30 year warranty.
5. Entry doors will be hollow metal with polyurethane core for improved durability and thermal resistance.
6. Project specifications will include detailed installation instructions including a requirement to comply with manufacturer's instructions.

3.13.2 ADDITIONAL CRITERIA FOR NEW CONSTRUCTION AND GUT REHAB

1. This project will be certified under the current Energy Star Multi-Family NC program.
2. Windows will be Energy Star qualified vinyl single hung.
3. Paving at the dumpster pad, the access drive to the dumpster, and any turns or return path of the garbage truck route will equal local requirements for standard duty residential roadway, or provide eight inches stone topped with five inches of bituminous asphalt.

4.6 DEVELOPMENT QUALITY ENHANCEMENTS

1. Building entrances are designed and located to provide security and weather protection for the targeted resident group and the project includes green space areas, play areas, courtyards or exterior seating areas that provide recreational and social opportunities for the targeted resident community.
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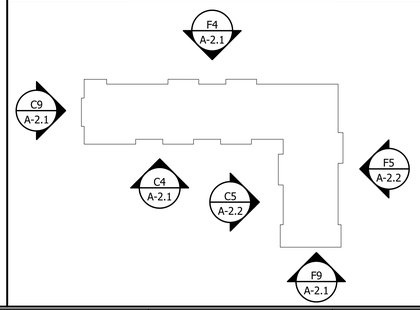
4. Individual units, common areas and community spaces are well designed for comfortable living and tenant activities. Layouts are efficient, with practical traffic flow, and provide adequate space for furniture placement.

ELEVATION KEY

- (A) MANUFACTURED STONE VENEER
- (B) MANUFACTURED STONE HEADER
- (C1) VINYL CLAPBOARD SIDING- FLAG STONE
- (C2) VINYL CLAPBOARD SIDING-HERRINGBONE
- (C3) VINYL CLAPBOARD SIDING-COLONIAL WHITE
- (D) PAINTED SMOOTH FIBER CEMENT PANELING
- (E) ALUMINUM FASCIA
- (F) 3-1/2" VINYL WINDOW TRIM
- (G) PAINTED SMOOTH FIBER CEMENT TRIM
- (H) HM DOOR W/ POLYURETHANE CORE
- (I) SINGLE CHANNEL VINYL TRIM BAND
- (J) BOARD ON BOARD DUMPSTER ENCLOSURE
- (K) ENERGY STAR VINYL WINDOW – WHITE
- (L) PAINTED FIBERGLASS COLUMN WRAP
- (M) UNPAINTED PVC BRACKETS
- (N) FIXED VINYL LOUVER – WHITE
- (O) PRECAST STONE CAP
- (P) PREFORMED ALUMINUM GUTTER
- (Q) RIDGE VENT
- (R) STANDING SEAM METAL ROOF
- (S) MANUFACTURED WAINSCOT STONE SILL
- (T) NATURAL STONE PLINTH CAP
- (U) STRUCTURAL KNEE BRACKETS
- (V) ARCHITECTURAL GRADE ROOF SHINGLES

KEY PLAN



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Registration No. 16763
Expiration Date: November 30, 2025

BUILDING DATA:

Use Group: R2

DRAWING NAME: ELEVATIONS

NO.	REVISION	DATE
#1	SCHEMATIC SET	9/30/25

STUDIO K ARCHITECTURE
7806 JAKI TER
GLEN BURNIE, MD 21060
301.935.5195
STUDIO_K@VERIZON.NET

PROJECT NAME AND ADDRESS
CALVERT STREET SENIOR
DOVE LANE, EASTON, MD 21601

PROJECT: AGER RD
DATE: 10/23/23
SCALE:
SHEET: A-2.1



F5 SIDE ELEVATION
Scale: 3/32" = 1'



C5 REAR ELEVATION
Scale: 3/32" = 1'

3.13.1 CRITERIA APPLICABLE TO ALL PROJECTS

1. Project will be designed to comply with currently adopted State and local building codes,which includes the 2021 International Energy Conservation Code (IECC), MD COMAR 05.02.02,and the Uniform Federal Accessibility Standards (UFAS).
2. The design team has extensive experience with the energy efficiency goals of DHCD, and will work cooperatively with the applicant's certified RESNET Rater. The Rater will provide review of the design documents, modeling services, field observations and final testing and inspection.
3. The design documents will include pest and rodent preventative measures. In addition, a pest management program will be implemented by the management company.
4. The project will be constructed with Architectural grade asphalt shingle roofing that provides a minimum of 30 year warranty.
5. Entry doors will be hollow metal with polyurethane core for improved durability and thermal resistance.
6. Project specifications will include detailed installation instructions including a requirement to comply with manufacturer's instructions.

3.13.2 ADDITIONAL CRITERIA FOR NEW CONSTRUCTION AND GUT REHAB

1. This project will be certified under the current Energy Star Multi-Family NC program.
2. Windows will be Energy Star qualified vinyl single hung.
3. Paving at the dumpster pad, the access drive to the dumpster, and any turns or return path of the garbage truck route will equal local requirements for standard duty residential roadway, or provide eight inches stone topped with five inches of bituminous asphalt.

4.6 DEVELOPMENT QUALITY ENHANCEMENTS

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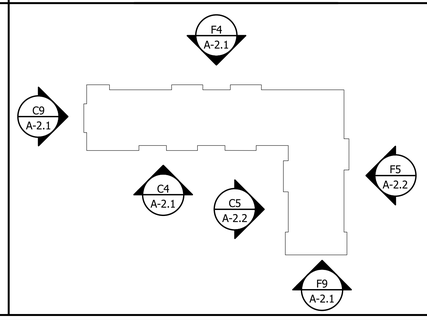
ELEVATION KEY

A MANUFACTURED STONE VENEER	G PAINTED SMOOTH FIBER CEMENT TRIM	O PRECAST STONE CAP
B MANUFACTURED STONE HEADER	H HM DOOR W/ POLYURETHANE CORE	P PREFORMED ALUMINUM GUTTER
C1 VINYL CLAPBOARD SIDING- FLAG STONE	I SINGLE CHANNEL VINYL TRIM BAND	Q RIDGE VENT
C2 VINYL CLAPBOARD SIDING-HERRINGBONE	J BOARD ON BOARD DUMPSTER ENCLOSURE	R STANDING SEAM METAL ROOF
C3 VINYL CLAPBOARD SIDING-COLONIAL WHITE	K ENERGY STAR VINYL WINDOW - WHITE	S MANUFACTURED WAINSCOT STONE SILL
D PAINTED SMOOTH FIBER CEMENT PANELING	L PAINTED FIBERGLASS COLUMN WRAP	T NATURAL STONE PLINTH CAP
E ALUMINUM FASCIA	M UNPAINTED PVC BRACKETS	U STRUCTURAL KNEE BRACKETS
F 3-1/2" VINYL WINDOW TRIM	N FIXED VINYL LOUVER - WHITE	V ARCHITECTURAL GRADE ROOF SHINGLES

KEY PLAN



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Registration No. 16763
Expiration Date: November 30, 2025

BUILDING DATA:

Use Group: R2

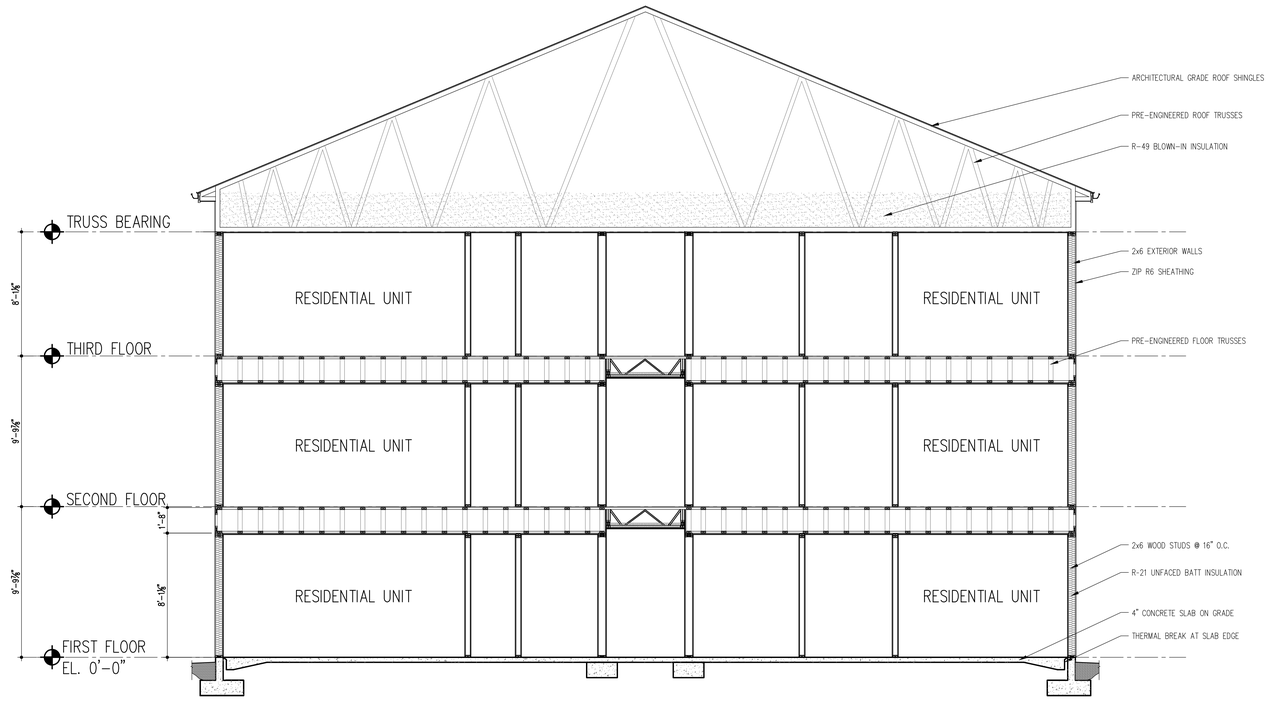
DRAWING NAME: ELEVATIONS

NO.	REVISION	DATE
#1	SCHEMATIC SET	9/30/25

STUDIO K ARCHITECTURE
7806 JAKI TER
GLEN BURNIE, MD 21060
301.935.5195
STUDIO_K@VERIZON.NET

PROJECT NAME AND ADDRESS
CALVERT STREET SENIOR
DOVE LANE, EASTON, MD 21601

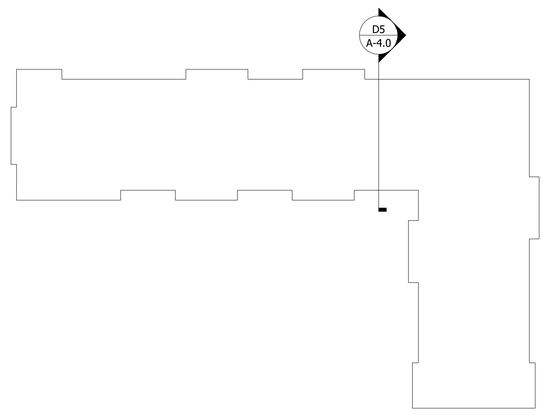
PROJECT: AGER RD
DATE: 10/23/23
SCALE:
SHEET: A-2.2



D5 BUILDING SECTION

Scale: 1/4" = 1'

KEY PLAN



Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly registered Architect under the laws of the state of Maryland.
Registration No. 16763
Expiration Date: November 30, 2025

BUILDING DATA:

Use Group: R2

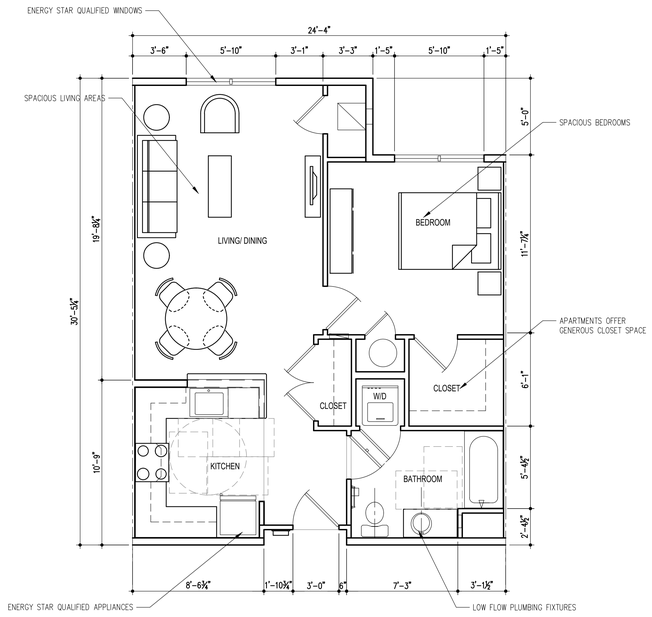
DRAWING NAME: BUILDING SECTION

NO.	REVISION	DATE
#1	SCHEMATIC SET	9/30/25

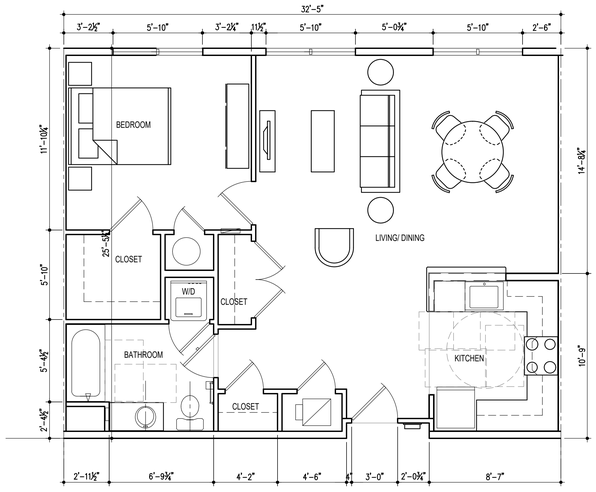
STUDIO K ARCHITECTURE
7806 JAKI TER
GLEN BURNIE, MD 21060
301.935.5195
STUDIO_K@VERIZON.NET

PROJECT NAME AND ADDRESS
CALVERT STREET SENIOR
DOVE LANE, EASTON, MD 21601

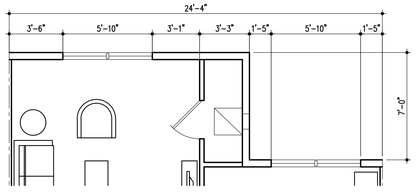
PROJECT	SHEET
AGER RD	A-4.0
DATE: 10/23/23	
SCALE:	



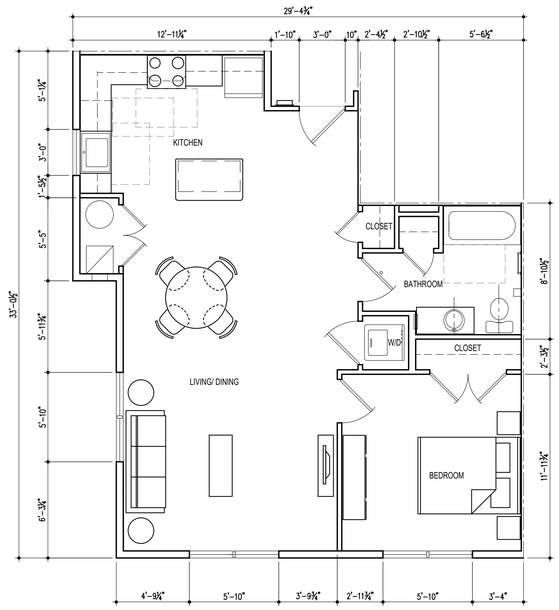
F2 UNIT 1A PLAN
Scale 1/4"=1'



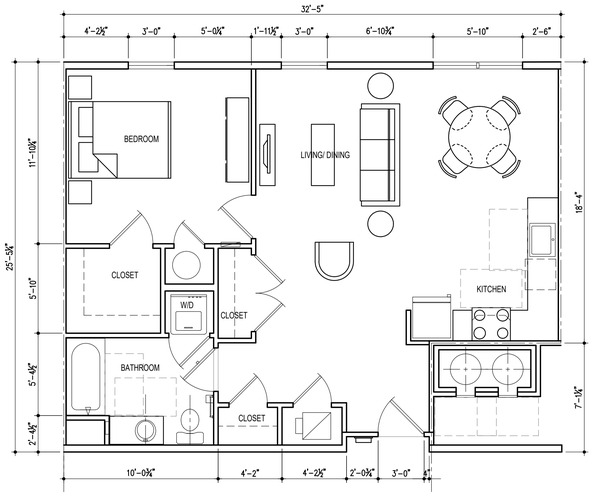
F6 UNIT 1B PLAN
Scale 1/4"=1'



E2 UNIT 1A1 PLAN
Scale 1/4"=1'



A2 UNIT 1D PLAN
Scale 1/4"=1'



A6 UNIT 1B1 PLAN
Scale 1/4"=1'

3.13.1 CRITERIA APPLICABLE TO ALL PROJECTS

1. Project will be designed to comply with currently adopted State and local building codes, including the International Energy Conservation Code (IECC), MD COMAR 09.12.53, and the Uniform Federal Accessibility Standards (UFAS).
2. Calvert Street Senior will be new construction addition, and will comply with UFAS guidelines, Section 504 of the Rehabilitation Act, and the 2010 ADA Standards. Applicant will retain an accessibility consultant to review the design documents and construction installation for compliance.
3. The design team has extensive experience with the energy efficiency goals of DHCD, and will work cooperatively with the applicant's certified RESNET Rater to meet the energy goals and the DHCD minimum energy standards. The Rater will provide the Energy Audit, review of design documents, modeling services, field observations and final testing and inspection. Energy consultant will review design documents, and provide field observations and testing during construction.
4. The design documents will include pest and rodent preventative measures. In addition, a pest management program equal to the HUD Healthy Homes Initiative will be implemented by the property management company.
5. Each apartment will be wired with low voltage wiring suitable for high-speed internet service.
6. Project specifications will include detailed installation instructions including a requirement to comply with manufacturer's instructions.
7. Project will implement a construction waste recycling program in which construction waste materials are collected, separated, and recycled. Plan will include recordkeeping that identifies weight, type and disposition of materials.
8. Project documents will specify Green Label carpeting and low toxic, low volatile organic compound (VOC) paint, primer, sealers, and adhesives. Specifications will include reference standards such as Green Seal, South Coast Air Quality Management District, or Bay Area Air Quality Management District. Wood products will be CARB 2 compliant or No Added Urea Formaldehyde (NAUF). The Architect will verify compliance of green products during the submittal review and construction verification process.
9. Carpet products will meet the Carpet and Rug Institute's Green Label or Green Label Plus Certification for carpet, pad and carpet adhesive.
10. HVAC equipment will be CFC free. Where CFC refrigerant equipment is being removed, CFC materials will be captured and properly disposed of.
11. Talbot County is an EPA Radon Zone 3. Radon mitigation is not required.
12. Watersense labeled fixtures will be specified, limiting toilets to 1.28 gpf, lavatories to 1.2 gpm, showers to 1.75 gpm, and kitchen sinks to 2.0 gpm.
13. All interior spaces will have a non-smoking policy. Any exterior smoking areas will be designated, and will be at least 25' from entrances and air intake devices.
14. All HVAC systems will be new, and will be Energy Star qualified electric. Split-systems will be ducted, and will provide an adequate return air path.
15. Appliances, including direct vent bathroom exhaust fans, will be Energy Star qualified where applicable.
16. All lighting will be Energy Star certified LED fixtures, or LED lamps. Commercial fixtures that are not available with Energy Star qualification will be approved by the Design Lights Consortium.
17. New construction windows will be Energy Star qualified vinyl.

3.13.2 CRITERIA APPLICABLE TO NEW CONSTRUCTION AND GUT REHAB

1. This project will be certified under the Energy Star MF New Construction program.
2. Project will meet visitability standards for at least 25% of units, and incorporate universal design features into units and common areas. Mandatory universal design features are identified on enlarged apartment plans.
3. All supply ductwork for HVAC systems will be sealed with mastic and insulated.
4. No bi-fold doors will be installed.
5. Heating and cooling equipment, domestic hot water appliances, dryers and ranges/ovens will be high-performance electric. No gas appliances will be installed.

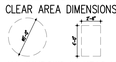
4.6 DEVELOPMENT QUALITY ENHANCEMENTS

1. Individual units, common areas, and community spaces are well designed for comfortable living and tenant activities. The layouts are efficient, with practical traffic flow and provide adequate space for furniture placement. (550 – 600 net sf. area for predominantly one (1)-bedroom units and 20% more area for each additional bedroom unit. Primary bedroom is not less than 10'x11' in clear size, and in multiple bedroom units the smallest bedroom is not less than 9'-0" in one direction with a minimum of ninety (90) net square feet in area).
2. At least one bathroom in each apartment will be visitable.
3. Interior doors are panel, and hardware is of grade 2 quality or better with lever handles.
4. Ceiling fans will be provided in each bedroom and at least one living area. Each fan must be equipped with a reverse setting to change blade direction.
5. Project is not located in an area with nearby land uses that are inconsistent with residential activities.
6. Floor coverings are quality long lasting products. Hard finish flooring must be products with a verifiable ten (10) year or longer warranty.
7. Kitchen countertops are solid surface with minimum 10 year warranty.
8. Bathroom floors are sheet goods with minimum 10 year warranty.
9. Shower surrounds are ceramic tile on cementitious backer board or backer board supported by the Tile Council of North America (TCNA) installation or better than builder grade quality fiberglass surrounds.

UFAS COMPLIANT UNIT NOTES

UFAS COMPLIANT UNITS ARE DESIGNED FOR PERMANENT ACCESSIBILITY PER UFAS. SEE SHEET A-0.4 FOR FURTHER INFORMATION

1. UFAS COMPLIANT UNITS TO HAVE WOOD BLOCKING PROVIDED FOR GRAB BARS, IN ADDITION TO GRAB BARS SHOWN ON DRAWINGS
2. UFAS COMPLIANT UNITS SHALL HAVE 29" CLEAR SPACE WITH KNEE AND TOE CLEARANCE UNDER KITCHEN SINKS AND ADJACENT COUNTER TOP (30" MINIMUM WIDE).
3. UFAS COMPLIANT UNITS SHALL HAVE 29" CLEAR SPACE WITH KNEE AND TOE CLEARANCE UNDER LAVATORIES.
4. IN UFAS COMPLIANT UNITS ALL PLUMBING TRAPS AND WATER SUPPLIES (HOT & COLD) TO BE INSULATED W/ PREFAB VINYL COVERED INSULATION JACKETS & BOOTS.
5. IN UFAS COMPLIANT UNITS PROVIDE HAND HELD SHOWER UNITS AT ALL SHOWERS & TUBS W/ CONTROLS TO BE OFFSET TO OUTSIDE EDGE OF TUB (SEE INTERIOR ELEVATIONS).
6. CLEAR AREA DIMENSIONS ARE AS SHOWN BELOW U.O.N.



7. ALL WINDOWS IN UFAS UNITS SHALL HAVE SLIDE BOLTS LOCKS ADDED TO THE WINDOWS AT THE SILL.
8. ♿ SYMBOL INDICATES UFAS COMPLIANT UNIT.

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Registration No. 16763
Expiration Date: November 30, 2025

BUILDING DATA:

Use Group: R2

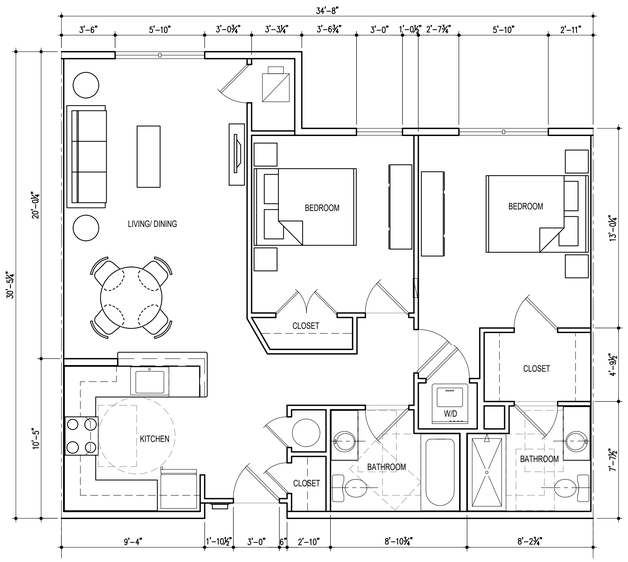
DRAWING NAME: UNIT PLANS

NO.	REVISION	DATE
#1	SCHEMATIC SET	9/30/25

STUDIO K ARCHITECTURE
7806 JAKI TER
GLEN BURNIE, MD 21060
301.935.5195
STUDIO_K@VERIZON.NET

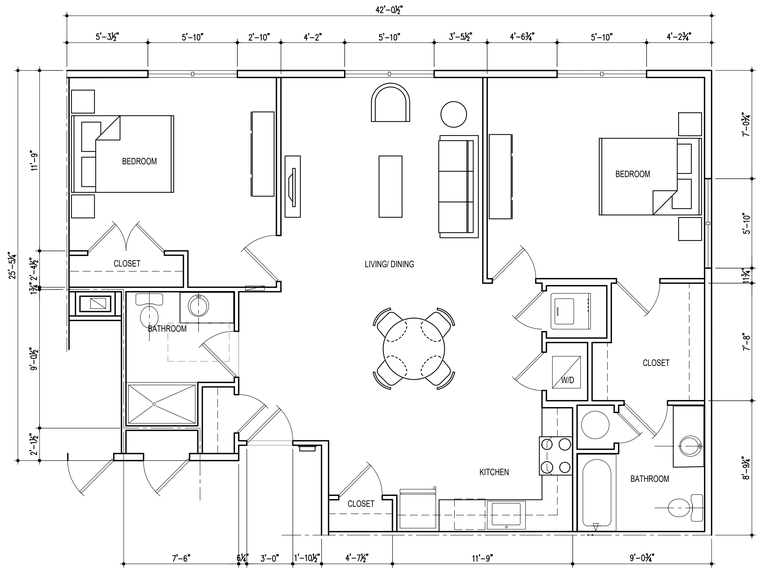
PROJECT NAME AND ADDRESS
CALVERT STREET SENIOR
DOVE LANE, EASTON, MD 21601

PROJECT	SHEET
AGER RD	A-5.0
DATE: 10/23/23	
SCALE: 1/4" = 1'-0"	



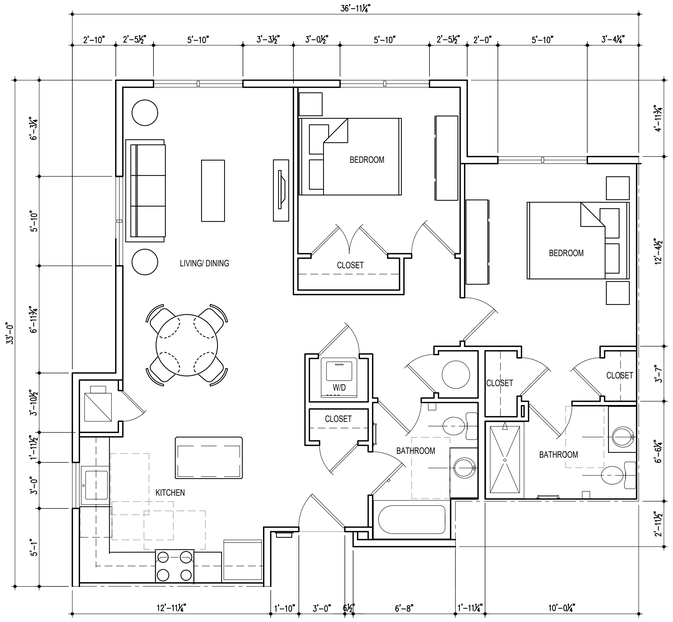
F2 UNIT 2A PLAN

Scale 1/4"=1'



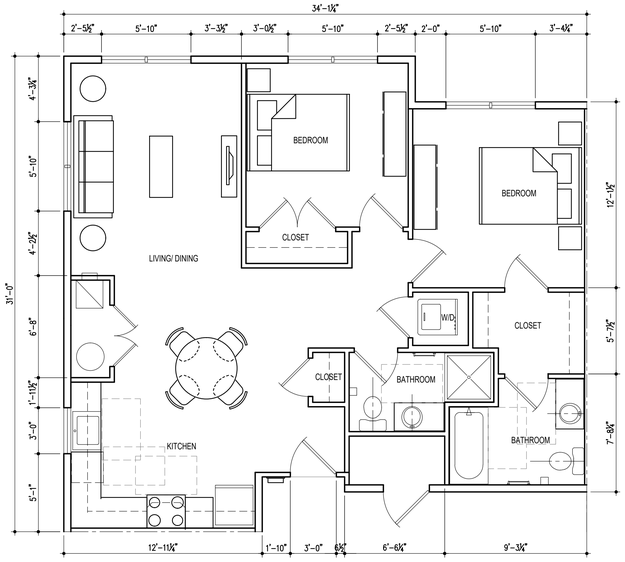
F6 UNIT 2B PLAN

Scale 1/4"=1'



A2 UNIT 2D PLAN

Scale 1/4"=1'



A6 UNIT 2D1 PLAN

Scale 1/4"=1'

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3. The design team has extensive experience with the energy efficiency goals of DHCD, and will work cooperatively with the applicant's certified RESNET Rater to meet the energy goals and the DHCD minimum energy standards. The Rater will provide the Energy Audit, review of design documents, modeling services, field observations and final testing and inspection. Energy consultant will review design documents, and provide field observations and testing during construction.
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9. Carpet products will meet the Carpet and Rug Institute's Green Label or Green Label Plus Certification for carpet, pad and carpet adhesive.
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12. Watersense labeled fixtures will be specified, limiting toilets to 1.28 gpf, lavatories to 1.2 gpm, showers to 1.75 gpm, and kitchen sinks to 2.0 gpm.
13. All interior spaces will have a non-smoking policy. Any exterior smoking areas will be designated, and will be at least 25' from entrances and air intake devices.
14. All HVAC systems will be new, and will be Energy Star qualified electric. Split-systems will be ducted, and will provide an adequate return air path.
15. Appliances, including direct vent bathroom exhaust fans, will be Energy Star qualified where applicable.
16. All lighting will be Energy Star certified LED fixtures, or LED lamps. Commercial fixtures that are not available with Energy Star qualification will be approved by the Design Lights Consortium.
17. New construction windows will be Energy Star qualified vinyl.

3.13.2 CRITERIA APPLICABLE TO NEW CONSTRUCTION AND GUT REHAB

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2. Project will meet visitability standards for at least 25% of units, and incorporate universal design features into units and common areas. Mandatory universal design features are identified on enlarged apartment plans.
3. All supply ductwork for HVAC systems will be sealed with mastic and insulated.
4. No bi-fold doors will be installed.
5. Heating and cooling equipment, domestic hot water appliances, dryers and ranges/ovens will be high-performance electric. No gas appliances will be installed.

4.6 DEVELOPMENT QUALITY ENHANCEMENTS

1. Individual units, common areas, and community spaces are well designed for comfortable living and tenant activities. The layouts are efficient, with practical traffic flow and provide adequate space for furniture placement. (550 – 600 net sf. area for predominantly one (1)-bedroom units and 20% more area for each additional bedroom unit. Primary bedroom is not less than 10'x11' in clear size, and in multiple bedroom units the smallest bedroom is not less than 9'-0" in one direction with a minimum of ninety (90) net square feet in area).
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6. Floor coverings are quality long lasting products. Hard finish flooring must be products with a verifiable ten (10) year or longer warranty.
7. Kitchen countertops are solid surface with minimum 10 year warranty.
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UFAS COMPLIANT UNIT NOTES

UFAS COMPLIANT UNITS ARE DESIGNED FOR PERMANENT ACCESSIBILITY PER UFAS. SEE SHEET A-0.4 FOR FURTHER INFORMATION

1. UFAS COMPLIANT UNITS TO HAVE WOOD BLOCKING PROVIDED FOR GRAB BARS, IN ADDITION TO GRAB BARS SHOWN ON DRAWINGS
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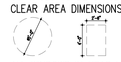


7. ALL WINDOWS IN UFAS UNITS SHALL HAVE SLIDE BOLTS LOCKS ADDED TO THE WINDOWS AT THE SILL.
8. ♿ SYMBOL INDICATES UFAS COMPLIANT UNIT.

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly registered Architect under the laws of the state of Maryland.
Registration No. 16763
Expiration Date: November 30, 2025

BUILDING DATA:

Use Group: R2

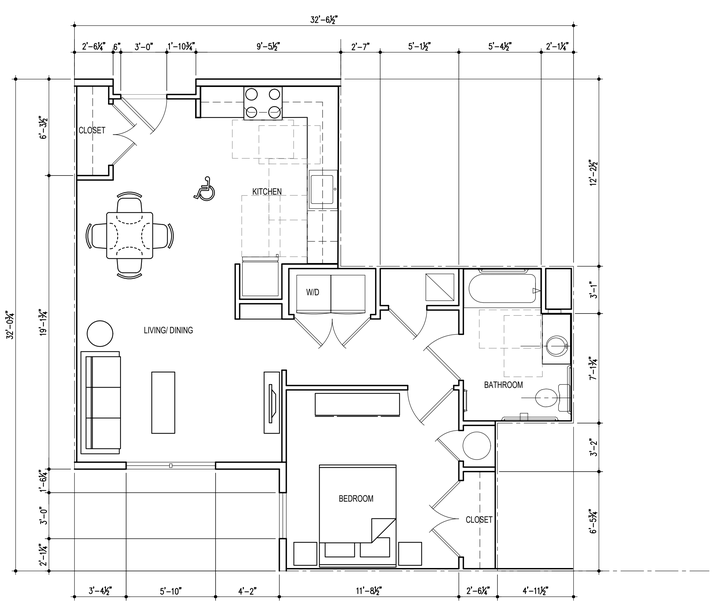
DRAWING NAME: UNIT PLANS

NO.	REVISION	DATE
#1	SCHEMATIC SET	9/30/25

STUDIO K ARCHITECTURE
7806 JAKI TER
GLEN BURNIE, MD 21060
301.935.5195
STUDIO_K@VERIZON.NET

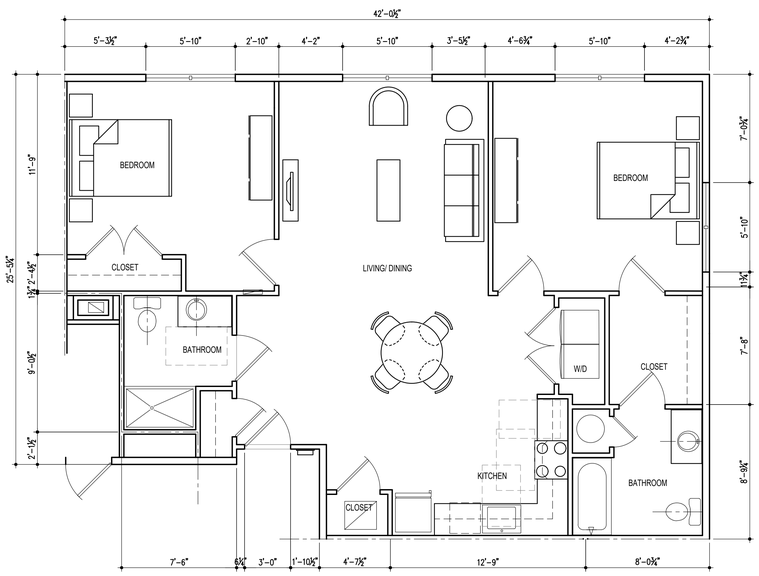
PROJECT NAME AND ADDRESS
CALVERT STREET SENIOR
DOVE LANE, EASTON, MD 21601

PROJECT	SHEET
AGER RD	A-5.1
DATE: 10/23/23	
SCALE: 1/4" = 1'-0"	



F2 UNIT 1C-HC PLAN

Scale 1/4"=1'



A2 UNIT 2B-HC PLAN

Scale 1/4"=1'

VISITABLE APARTMENT FEATURES

A unit is visitable when it meets three basic requirements:
- One zero-step entrance;
- All doorways on main the floor have 32" of clear passage space; and
- One bathroom on main floor that is accessible for wheelchairs.

The project must also incorporate the following universal design features in 25% of its units and common areas.
- Electrical outlets at least 18" above the finished floor.

Dedicated outlets and floor outlets are not required to meet this standard
- Interior door openings have a clear width opening of 32"
- Lever handles on all faucets, doors, and fixtures
- At least one no-step entry into the building and unit
- Clearly visible signage identifying buildings and units, with color contrasting print and braille
- Lighted doorbell at the primary entrance to each unit
- Non-glare lighting inside and outside entries
- Slip-resistant walkways and entryways
- Rocker, touch light, or hands-free light switches
- Non-glare task lighting over sink, stove, and kitchen work areas
- Pulls on drawers and cabinet doors in each unit
- Automatic door openers at building entrances on accessible routes and to accessible units
- Audible and visible smoke detectors in each unit
- Light switches between 44"-48" above finished floor
- Thermostats no more than 48" above finished floor
- Low-pile or hard non-slip flooring
- Front-loading washers and dryers with front controls, raised on platforms to reduce bending
- Adjustable height closet rods or a portion of each closet with two clothes rods at different heights in each unit
- Tubs and showers with slip-resistant floors
- Bathtub/shower controls located 48" maximum above the tub floor in each unit
- Toilet centered 18 inches from any side wall, tub, or cabinet
- Grab bars or wall- blocking for future installation in tub, shower and grab bars at visitable toilet and mirrors over bathroom sinks have the reflecting surface 40" maximum above finished floor.

3.13.1 CRITERIA APPLICABLE TO ALL PROJECTS

1. Project will be designed to comply with currently adopted State and local building codes, including the International Energy Conservation Code (IECC), MD COMAR 09.12.53, and the Uniform Federal Accessibility Standards (UFAS).
2. Calvert Street Senior will be new construction addition, and will comply with UFAS guidelines, Section 504 of the Rehabilitation Act, and the 2010 ADA Standards. Applicant will retain an accessibility consultant to review the design documents and construction installation for compliance.
3. The design team has extensive experience with the energy efficiency goals of DHCD, and will work cooperatively with the applicant's certified RESNET Rater to meet the energy goals and the DHCD minimum energy standards. The Rater will provide the Energy Audit, review of design documents, modeling services, field observations and final testing and inspection. Energy consultant will review design documents, and provide field observations and testing during construction.
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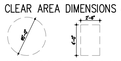

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PROJECT NAME AND ADDRESS
CALVERT STREET SENIOR
DOVE LANE, EASTON, MD 21601

PROJECT: AGER RD
DATE: 10/23/23
SCALE: 1/4" = 1'-0"
SHEET: A-5.2

STUDIO K ARCHITECTURE

Calvert St Senior Cottages
Elevations

Dove Lane, Easton, MD 21602
9/16/2025



Board and Batten Vinyl Siding



Horizontal Vinyl Siding



Stone Veneer



Roof Shingles





Town of Easton
Engineering, Planning and Zoning
14 South Harrison Street, Easton, MD 21601

Easton Staff Development Review

Property Information

Address	DOVE LANE & CALVERT STREET, EASTON MD 21601						
Tax Map	0103	Grid	00EA	Parcel	885-905 & 907-928	Lot	
Deed Refernce:	Liber	02696 & 02949	Folio	00060 & 00299			
Plat Reference:	Liber	24	Folio	0100			
Base Zoning District	R10A	Historic District Y ☐ N ☒		Planning Redevelopment Y ☐ N ☒			

Purpose of Application / Description of Work:

THE PURPOSE THIS PROPOSED NEIGHBORHOOD IS TO PROVIDE A DIVERSITY OF HOUSING AT AT DIFFERENT PRICE POINTS. THIS PROJECT OFFERS BOTH TOWN HOMES AND APARTMENT UNITS SURROUNDED BY OPEN SPACE AND WALKING PATHS. THE SITE DESIGN UTILIZES AND ENHANCES THE EXISTING NATURAL FEATURES WITHIN THE PROPERTY.

Owner

Name	OSPREY PROPERTY COMPANY II LLC		
Mailing Address	16 GREENMEADOW DR, STE G107, TIMONIUM, MD 21093		
Telephone No.	(443) 509-0989	Email	

Applicant / Agent

Name	BRIAN FITZGERALD		
Mailing Address	106 N HARRISON ST, EASTON, MD 21301		
Telephone No.		Email	

Surveyor / Engineer

Name	RAUCH INC	License No.	11024	Expiration Date	JULY 24, 2026
Mailing Address	106 N HARRISON ST, EASTON, MD 21301				
Telephone No.		Email			

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 12/10/2025

Printed Name of Applicant or Agent Robert D. Rauch

For Office Use Only

Easton Staff Development Review Meeting Required Y ☒ N ☐

Easton Staff Development Review Meeting Date 12/22/2025

2025 - 1605 / ESDR 25 - 10

Completeness Check Date 12/10/2025

Revisions/Resubmissions Required Y ☒ N ☐

Resubmission Date 12/10/2025 Documents Received Y ☒ N ☐

Staff Determination

Scheduled for November 26, 2025 ESDR

Resubmission required. Scheduled for December 22, 2025 ESDR

Planning Commission Required Y ☒ N ☐

BOZA Required Y ☐ N ☒

Historic District Commission Required Y ☐ N ☒

Resubmission for ESDR Required Y ☐ N ☐

Staff Signature Samantha N. Smith Date 12/10/2025

Revised 02-2019

RAUCH inc.
Engineering | Survey | Architecture | Environmental

Wednesday, December 3, 2025

Town of Easton
Engineering Department
9030 Mistletoe Dr
Easton, MD 21601

ATTN: Nancy Pinkney & Sierra Clem

RE: Osprey Property Company II, LLC – Calvert Terrace

Ms. Pinkney & Ms. Clem,

RAUCH inc. has reviewed comments received dated November 26, 2025, November 18, 2025, November 20, 2025, December 1, 2025, and November 26, 2025, and offers the following responses to the Town of Easton Planning & Zoning Department ESDR, Office of Building Inspection, Town of Easton Planning & Zoning Department, Town of Easton Engineering Department, and Easton Utilities :

TOWN OF EASTON – PLANNING & ZONING – ESDR

The Easton Staff Development Review (ESDR) Committee meeting was held on November 26th at 11:00 am. Staff reviewed the proposed Planned Unit Development application. The site includes the construction of a multifamily building and attached cottages with a parking lot, open space, utilities and SWM features on the property located at Calvert Street and Dove Lane, also known as Tax Map 103, Parcels 885 through 905 & 907 through 928.

The Committee determined that the project will need to address all agency comments as specified in the attached review letters and at ESDR. It was determined by the Committee that the application will need to return to ESDR for review. Please submit all revised documents.

At this time, based on the ESDR sketch plan submission, Staff did not identify any constraints which would require action by the Board of Zoning Appeals.

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The next ESDR meeting is scheduled for Monday, December 22, 2025 at 11:00 am. Submit all documentation to the Planning and Zoning Department no later than Friday, December 5th at 12:00 pm. All files for presentation at the ESDR meeting need to be provided by digital submission (via email) of all supporting documents necessary for the review, including three paper copies.

Understood. Submission deadline extended to noon on 12/10/2025 per email from S. Clem dated 12/2/2025

OFFICE OF BUILDING INSPECTION COMMENTS

Development Site Plan

A Town of Easton Building Permit is required for all new construction. Please contact this Department and verify current Building Codes including the Town of Easton's modifications prior to preparation of Building plans.

The following lists items required on the construction drawings in order to apply for a Building Permit.

- Construction Documents (3 sets) for any new construction will be required. Documents must be prepared by a registered Maryland Registered Architect, with original plans signed and sealed. A code analysis completed by a Registered Maryland Architect including, classification (use group), construction type, and occupant loads must be completed and included with the application materials. (See Maryland Architectural Act-Comar sect. 3-101, 102, 103)

  Understood
- Items that must be addressed by the construction documents will be structural strength, means of egress (include travel distance), facilities, stability, sanitation, light and ventilation, energy conservation, safety to life and property from fire and other hazards attributed to the built environment, Accessibility, and other safety requirements for public access.

  Understood
- All mechanical, electrical, and plumbing permits as required must include construction documents signed and sealed by a professional engineer and by a responsible party for the contractor receiving the permit. Be sure the Town of Easton modifications are included. Section 6-16 of the Town Code.

  Understood

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- An appointment may be set up with this department to review your permit application materials prior to permit application submission.
  Understood

State Fire Marshal, (410-822-7609) plan review and inspections are required. It is your responsibility to contact them and make applications.
Understood

TOWN OF EASTON PLANNING & ZONING COMMENTS

Sketch Site Plan Review #1

1. Indicate within the Site Data on sheet G-100 for the overall proposed parking spaces, including the minimum and maximum parking space requirements for designated uses, multifamily units and townhouses. Also, include the minimum number of bicycles for each use. The required minimum is two (2) vehicle parking spaces for each town home dwelling unit. Confirm the total number of parking spaces meets this requirement.
   Revised
2. Check the total number of parking spaces within the Code Narrative on sheet L-601. The proposed number of parking spaces should be 75.
   Revised
3. Elaborate a response to the parking note within the parking calculations on sheet G-100. Verify, in a statement, that the proposed parking on-site is adequate to support the proposed use.
   Revised
4. Is there sidewalk connectivity along the townhomes to access the proposed driveways?
   Revised
5. Provide sidewalk on the south side of Tuckahoe Road.
   Revised as noted
6. Revise the required 'maximum building height and maximum proposed building height' within the Site Data on sheet G-100. Provide the proposed height for the multifamily building and townhomes.
   Maximum height noted as 35' on sheet G-100

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[redacted]

7. Per § Section 28-701 G (1) through (8) from the Town's Zoning Ordinance, respond to the development requirements and add statements onto plan.
   Provided on sheet G-100
8. The maximum residential density for PUD-General is 16 du/acre. Revise the Site Data on sheet G-100 and provide the proposed density.
   Revised
9. Provide dimensions between all building units and buildings that are adjacent to property lines.
   Revised
10. Dimension the existing and proposed road widths on all applicable plan views.
    Revised
11. Per § Section 28-701 H(1)l from the Town's Zoning Ordinance, provide a 3-dimensional depiction of the project in a manipulatable file format (e.g., Google Sketchup).
    This is proprietary information and the Town of Easton shall be asked to sign an agreement prior to the provision of any manipulatable files.
12. Per § Section 28-701 H(1)m from the Town's Zoning Ordinance, write a narrative on sheet G-100 of how the project provides greater benefit to the Town than would development carried out in accordance with the underlying zoning requirements.
    Provided as noted
13. Provide an estimated tabulation that depicts the type and number of dwelling units devoted to affordable housing.
    Unit Mix Chart has been provided on sheet A-TS
14. There's only architectural renderings for the multifamily unit. Please provide renderings for the other proposed units.
    Provided
15. The Planning Commission may request you to address "Bird Strike" design options for the proposed buildings. Please address this prior to the Planning Commission meeting.
    Design options will be considered.
16. Label the total number of units for the proposed three-story muti-family building and number the townhomes on all applicable plan views.
    Revised
17. Revise the total number of units and its bedroom percentage rate within the 'Unit

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[redacted]

Mix Chart' on sheet A-TS.

Provided per comment 13

18. Provide first floor elevations for all proposed units on applicable plan views.

    Revised

19. Label the use for all proposed structures within the 'Site Data' on sheet G-100.

    Revised

20. Provide E.V. Charging Station Stalls for the multifamily units. E.V. Charging Station Stalls will need to have one available stall for ADA access within each parking facility. Please note within the Site Plan Data that new home construction with a garage, carport, or driveway must include a Level 2 EV charger or pre-wiring for one. For outdoor and indoor EV charging stations, they must be permanently connected and fastened, listed by an approved agency, rated for indoor/outdoor use, and installed according to manufacturer specifications. Additionally, cords must not cross sidewalks or driveways, and a clear path must be maintained.

    Noted. E.V. Charging provisions shall be provided

21. Per § Section 28-1014.6B.1a from the Town's Zoning Ordinance, Street Trees (both public and private streets) – one (1) 4 deciduous, shade/canopy tree per twenty five (25') of street 5 centerline length. Trees to be planted along both sides of street, 6behind curb and inside sidewalk wherever possible or otherwise 7 within fifteen feet (15') of curb line. The proposed Amelanchier Laevis 'Cumulus', Cercis Canadensis, and Cornus Florida 'Appalachian Spring' are understory trees that need to be replaced with deciduous, shade/canopy trees. Revise the plant list and all plan views. Please adjust for credited afforestation requirements.

    Revised. Smaller, less vigorous species were selected on the basis of the tight planting spaces and numerous utilities in the area. Street trees have been upgraded to canopy/shade trees per comment.

22. The evergreen trees, Ilex Opaca 'Miss Helen' and Thuja Occidentalis 'Nigra', must each be credited with 250 sq. ft. toward the afforestation requirement. The tree calculations and the Forest Conservation Worksheet require adjustment to reflect this.

    Revised based on comment 21.

23. Revise the Forest Conservation Plan and Landscape Plan to include the acreage/square footage for each designated forest retention area. There's also an existing Utilities Distribution Right-of-Way and Easement that overlaps the

MD office | 106 N. Harrison St – Easton, MD 21601

proposed retention areas. If the existing easement is required to remain, the Forest Conservation Easements must be adjusted to exclude this area. Once the easement requirements are determined, please revise all relevant drawings for the Site Plan, Forest Conservation Plan, and Subdivision Plat accordingly. See attached markup below.

Revised. Calculations and tree plantings have been updated to reflect these changes.

24. There are several specimen trees located within an existing Utilities Distribution Right-of-Way and Easement. Please confirm with Easton Utilities whether the removal of the trees would be necessary to maintain the easement. See attached markup below.

    RAUCH and Osprey will coordinate with Easton Utilities Commission.

25. The total Forest Conservation planting requirement for the site is 3.0787 acres. The applicant has proposed to retain a portion of the forest, totaling 0.6569 acres, planting credit for 1.51 acres and afforestation via a payment in-lieu of $20,812.21 for the remaining 1.5665 acres. There are multiple areas available within the site to potentially accommodate more landscape credit and potential easement areas. Please explore those options with a revised Forest Conservation Plan. See attached markup below.

    FCP and calculations revised and updated. Planting approach is now to meet the criteria per code on-site, meaning we will no longer pursue fee-in-lieu.

26. The plant species Magnolia Grandiflora ‘Little Gem’ is not native to the region. You could replace this with a Magnolia Acuminata or Magnolia Virginiana. Additionally, the cultivar Thuja Occidentalis 'Nigra' is not native to the Eastern Shore and can be replaced with American Arborvitae.

    Southern magnolia was selected based on its prevalence around Easton and aesthetic appeal compared to other coastal plain evergreen natives like pine, juniper, or cypress, which have less appeal (no flower). Southern magnolia is considered a Maryland native by the USDA and is on MD DNR’s recommended street tree list and can be observed around town at iconic locations like: Talbot County Courthouse, Thompson Park, Christ Church, Academy of the Arts, and Bartlett Pear Inn making it a staple of the local plant palate. Similarly, Ginko is also a common street tree in Easton although it is not native. Per your comment we will remove it from the palatte. Thuja Occidentalis IS American Arborvitae and is native

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[redacted]

to the Coastal Plain. Please double check this. Occidentalis refers to “western”, as in hemisphere. The non-native *plicata* is what Green Giants are.

27. Please submit the required fee for a Subdivision Minor Review ($400 Base fee plus $200per lot).

    Understood

28. Per Section 709 (a) from the Town’s Subdivision Regulations, with respect to all residential development, a park development fee of $199.70 per residential unit1 , as adjusted per subsection (c) below, shall be assessed, which fee shall be due and payable at the time of the approval of the final plat, or final site plan as the case may be, containing such dwelling units. It has been determined that this site is a residential development with proposed units per Section 709(a). Therefore, a required park development fee is to be paid before the final plat can be recorded. Based on the annual rate of inflation since adoption of these Regulations, the current (2025) fee is$213.79 per residential unit. The total estimated amount due would be $19,454.89 ($213.79 x 91 units). 1This figure was established at $133.33 per unit with the original adoption of this standard. It was adjusted as per subsection 709 (c) to $208.62 in 2024 (reflecting the cumulative annual rates of inflation as determined by averaging the three indices cited).

    Understood

TOWN OF EASTON ENGINEERING DEPARTMENT COMMENTS

Sketch Site Plan and Review

Sketch Stormwater Management Review

1. Provide a sheet that shows the vicinity of the proposed project and adjacent streets - access to 50, label Norris Taylor Drive, label adjacent property Owners.

   Revised

2. VISIBILITY TRIANGLES - Show Visibility Triangles (Detail TOE-R-2.05) on all plan view sheets.

   Revised

3. Provide a chart that includes the existing private property area and ROW area as well as the proposed private property area and ROW area. Since there are variations in the existing and proposed ROW area, the overall ROW area is decreasing, and the private property area is increasing.

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Provided

4. Label the existing and proposed road widths on all applicable plan views.
   Revised
5. Dove Lane is shown as unimproved. The existing alley is currently improved. Please revise.
   Revised. Existing edge of pavement for Dove lane has been shown on plan.
6. Label the existing sidewalk along Calvert.
   Revised
7. Provide typical sections for the proposed street types.
   Sections added to C-305
8. Provide a typical section of the on street parking bump outs for consideration.
   Sections added to C-305
9. Label the proposed Tuckahoe Road as Town of Easton Right of Way.
   Revised
10. Label Queen Street on the Improvement Plans. The following options may be selected when revising the design of Queen Street:
    a. Queen Street is a Town owned Road built to Town Standard TOE-R-2.02 which has a 55' ROW.
       Client has opted against this proposal
    b. Queen Street is a Private Road built to a modified standard with sidewalks on both sides of the street.
       Client has opted for this proposal. Plans revised.
11. Provide drainage improvements to Dove Lane as needed to convey proposed stormwater from the south side of the proposed project.
    Noted
12. Consider relocating the proposed driveways from Tuckahoe Road to be accessed from Dove Lane. If the desire is for the driveways to access off of Tuckahoe Road, please be prepared to address this to the Planning Commission.
    Client has opted against this proposal.
13. The relocated Tuckahoe Road intersection with Calvert Street appears too close to Dove Lane for safety. Label the distance between entrances and provide documentation supporting the revised location.
    Intersection revised to allow more distance between proposed and existing entrances

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[redacted]

14. Provide information that the horizontal curve specifications are acceptable and that the tangent is long enough. Provide an explanation for the change in street name from Merrick to Tuckahoe on the N-S orientation that was previously platted as Merrick.
    Intersection of Tuckahoe and Calvert has a horizontal curve with center line radius of 130'. No reverse curve is present. Intersection of "**SERVICE ENTRANCE**" and Calvert Street has a horizontal curve with center line radius of 125'. No reverse curve is present.
15. CROSSWALKS - Show crosswalks in plan view consistent with TOE-R-7.01 (Continental Crosswalk bars).
    Revised
16. HDPE Stormdrain is not permitted in Town Right of Ways.
    Revised
17. All submerged gravel wetland cross sections must provide a minimum 6' top of berm.
    Revised
18. Provide a chart showing the proposed improvements are under the 65% stormwater manager threshold.
    Table provided on G-100
19. Add the Drainage Area Maps from the Stormwater Management Report to the Plan Set. Add the Stormwater Management Summary Charts to the Drainage Area Maps.
    Revised as noted
20. Please address Section 708 of the Town Subdivision Regulations regarding the general Parks requirement.
    Noted on G-100 in Design Principles for Easton.
21. Consider providing a 10' multi-modal trail N-S and E-W along Queen Street in lieu of a sidewalk towards addressing Park requirements.
    Sidewalk has been provided
22. Our office recommends the application is reviewed by the Town's Park Advisory board.
    Understood
23. Provide the percent increase in traffic volumes at the intersections that were studied.

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[redacted]

Has been updated. Revised TIS to be provided prior to ESDR meeting

24. Are there any recommended pedestrian safety improvements proposed to existing roads.

    Has been updated. Revised TIS to be provided prior to ESDR meeting

25. Due to the percent increase in traffic volume, are there any recommended traffic signal improvements?

    Has been updated. Revised TIS to be provided prior to ESDR meeting

26. Acceptance of the TIS is based on the project operating as age-restricted senior housing (ITE LUC 251/252). Any change to land use operations requires updated TIS.

    Has been updated. Revised TIS to be provided prior to ESDR meeting

27. TIS is required to be resubmitted for review once crash and safety information has been received.

    Has been updated. Revised TIS to be provided prior to ESDR meeting

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EASTON UTILITIES COMMISSION COMMENTS

Sketch Site Plan – REVISE & RESUBMIT

1. C-401.02 – Move Hydrant end of street for a blow off point. Water mains shall be looped where possible

   Revised as noted

2. C-401.01 – Easton Utilities requires that Preliminary sets of drawings include Electric and Communication Designs. CAD drawings shall be provided as soon as possible to Lee Dennis (ldennis@eucmail.com) so Easton Utilities may provide an Electric and Communication Design for your preliminary set submission. Depending on the size of the project designs can take 15-60 business days. Please plan accordingly to not delay your drawing approvals. The shared CAD drawings should include:
   - Topo
   - Existing & Proposed Utilities
   - Landscaping (If Available)
   - Building Layouts
   - Locations Identified Where Electric & Communications Are To Enter Building
   - Service Requirements (Amps)
   - Metering Type (E.G. Meter Stack, CT Meter)

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[redacted]

Preliminary designs must include an approved Easton Utilities Electric & Communication Design. Submissions that don't include an approved Easton Utilities design or include a design provided by a party other than Easton Utilities will be rejected requiring resubmission.

Understood – Plans will be provided to EUC following ESDR review

3. C-401.02 – Easton Utilities requires that Preliminary sets of drawings include Electric and Communication Designs. CAD drawings shall be provided as soon as possible to Lee Dennis (ldennis@eucmail.com) so Easton Utilities may provide an Electric and Communication Design for your preliminary set submission. Depending on the size of the project designs can take 15-60 business days. Please plan accordingly to not delay your drawing approvals. The shared CAD drawings should include:
    - Topo
    - Existing & Proposed Utilities
    - Landscaping (If Available)
    - Building Layouts
    - Locations Identified Where Electric & Communications Are To Enter Building
    - Service Requirements (Amps)
    - Metering Type (E.G. Meter Stack, CT Meter)

    Preliminary designs must include an approved Easton Utilities Electric & Communication Design. Submissions that don't include an approved Easton Utilities design or include a design provided by a party other than Easton Utilities will be rejected requiring resubmission.

    Understood – Plans will be provided to EUC following ESDR review
4. C-401.03 – – Easton Utilities requires that Preliminary sets of drawings include Electric and Communication Designs. CAD drawings shall be provided as soon as possible to Lee Dennis (ldennis@eucmail.com) so Easton Utilities may provide an Electric and Communication Design for your preliminary set submission. Depending on the size of the project designs can take 15-60 business days. Please plan accordingly to not delay your drawing approvals. The shared CAD drawings should include:
    - Topo
    - Existing & Proposed Utilities
    - Landscaping (If Available)
    - Building Layouts
    - Locations Identified Where Electric & Communications Are To Enter Building

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- Service Requirements (Amps)
- Metering Type (E.G. Meter Stack, CT Meter)

Preliminary designs must include an approved Easton Utilities Electric & Communication Design. Submissions that don't include an approved Easton Utilities design or include a design provided by a party other than Easton Utilities will be rejected requiring resubmission.

Understood – Plans will be provided to EUC following ESDR review

5. C-401.04 – Easton Utilities requires that Preliminary sets of drawings include Electric and Communication Designs. CAD drawings shall be provided as soon as possible to Lee Dennis (ldennis@eucmail.com) so Easton Utilities may provide an Electric and Communication Design for your preliminary set submission. Depending on the size of the project designs can take 15-60 business days. Please plan accordingly to not delay your drawing approvals. The shared CAD drawings should include:
   - Topo
   - Existing & Proposed Utilities
   - Landscaping (If Available)
   - Building Layouts
   - Locations Identified Where Electric & Communications Are To Enter Building
   - Service Requirements (Amps)
   - Metering Type (E.G. Meter Stack, CT Meter)

   Preliminary designs must include an approved Easton Utilities Electric & Communication Design. Submissions that don't include an approved Easton Utilities design or include a design provided by a party other than Easton Utilities will be rejected requiring resubmission.

   Understood – Plans will be provided to EUC following ESDR review
6. C-203.01 – Sepreration

   Revised
7. C-203.02 – Why is water 10' deep?.

   Revised
8. C-305 – If Street lights are Town owned, Contact EUC Lee Dennis for street light design.

   Understood
9. G-401.02 – Stormwater profile shows water @ 10' deep – Water above stormwater.

   Revised

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10. C-401.02 – 1” meter pit shall have a 1” service – 2” meter pit shall have a 2” or4” service. After the meter pit, service size is the responsibility of the property owner.
    Understood
11. C-401.02 – 6”
    Revised
12. C-401.02 – Water meter pits shall be in the 2’ area between curb and sidewalk
    Due to conflicts with SWM pipes, Water meters and cleanouts cannot be located within the verge between curb and sidewalk. They will be located 2’ behind the back edge of the sidewalk within the permanent utility easement.
13. C-401.03 – valve on each branch
    Revised as noted
14. C-401.03 - Existing Manhole in curb
    Understood.
15. C-401.03 – Main shall enter manhole at not more than 90 degrees to the effluent of the manhole
    Revised
16. C-401.04 – valve on each branch
    Revised as noted
17. C-401.04 – Come to 90 degeres from the street, add valves and a tee branch heading north on Calvert
    Revised as noted
18. C-403.01 – New drop manhole required – Raise to proposed elevation.
    Revised as noted
19. C-403.01 – With Drop manhole decrease slope of run
    Revised
20. C-401.04 – Why is water below sewer?
    Revised
21. C-403.01 – Why is water so deep?
    Revised
22. C-403.02 – Why is water so deep?
    Revised
23. C-403.03 – Cover 42”?
    Revised
24. C-403.03 – Hydrant lateral should be flatter – why 66” bury depth?

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[redacted]

Revised

25. C-403.03 –Bury depth of watermain shall be 42”

    Revised

26. C-403.04 – BUBBLE

    Revised

27. C-403.04 – BUBBLE

    Revised

28. C-403.04 – 6” with hydrant at the end

    Revised

29. C-403.04 – Realign water

    Revised

30. L-601 – Trees shall not be planted on sewer

    Revised

31. G-100 – Capital Charge Assessment

    - 27 Town homes - 1 EDU/town home
    - 60 Apartments - 1 EDU / apartment

    87 DUs * $7,050/EDU = $613,350

    Capital Charges are due prior to the approval of a building permit

    Noted

32. C-401.02 – Water and sewer for structure not shown

    Revised

33. C-101 – Gas

    Understood

34. C-101 – Gas

    Understood

35. C-101 –Natural gas is available in most areas within the Easton town limits. If natural gas is desired, please contact Easton Utilities Customer Service at 410.822.6110

    Understood

36. C-401.03 – POLYLINE – Would this alignment allow water to be above sewer?

    Revised

37. C-403.03 – POLYLINE

    Revised

38. C-403.03 – POLYLINE – Alignment modification allows water to be 4’ shallower

    Revised

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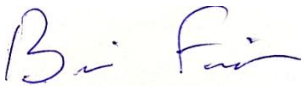
[redacted]

39. C-403.03 – POLYLINE – Alignment eliminates bends and keeps shallower.
    Revised
40. C-403.04 –POLYLINE
    Revised

Feel free to contact me at [redacted] with any questions.

Thank you,



Brian Fitzgerald, P.E.

MD office | 106 N. Harrison St – Easton, MD 21601
[redacted]

Town of Easton
Engineering, Planning and Zoning
14 South Harrison Street, Easton, MD 21601

Forest Conservation Application

Project Information

Project Name	Calvert Terrace	Project Number	
Project Location	Calvert Street, Easton, MD 21601		
Project Description	Mixed Use Residential Development		

Watershed Information

Watershed Name	Choptank River	Sub-watershed No.	02130403
County	Talbot	Municipality	Easton

Property Information

National Spatial Reference System (NSRS)
Alignment of passive control with the latest realization of the North American Datum of 1983:
NAD 83(2011), NAD 83(PA11), and NAD 83(MA11) Epoch 2010.00

Maryland Grid Coordinates centroid:	407,055.896	ft. North	1,579,442.197	ft. East			
ADC Map: Year		Page		Grid			
Tax Map:	103	Grid	00EA	Parcel	914	Block	
District / Account Number	1-048163					Lot	
Liber	2949	Folio	299				

Agent Information

Name	Kyle Kowalczyk	License No.	NA	Expiration Date	NA
Firm Name	RAUCH inc.				
Mailing Address	106 North Harrison St., Easton, MD 21601				
Telephone No.		Email			

Forest Stand Delineation Information

Details of Request (Acreage or portion thereof)

Total Tract Area	11.87 Ac.	*Net Tract Area*	8.22 Ac.
Area within 100-year Floodplain	0 Ac.	Area of Existing Forest	6.86 Ac.
Area Remaining in Agriculture	0 Ac.	Area of Existing NTW	0 Ac.
Other	0 Ac.	Sensitive Areas	0.49 Ac.

Forested Stream Buffers (minimum 50' wide):			X Yes		No
One Side		Both Sides	X		
Buffer Area Forested	0.49 Ac.	Length		Ft.	
Steep Slopes		Yes	X	No	
Threatened & Endangered Species		Yes	X	No	
Dominant & Co-dominant Species	X	Yes		No	

Forest Stand Delineation Prepared by: Kyle Kowalczyk

Licensed Landscape Architect | Licensed Forester | Qualified Professional

Forest Conservation Plan Information

Details of Request (Acreage or portion thereof)

Existing Land Use (zone)	HDR	Proposed Land Use (zone)	HDR
Afforestation Threshold	15%1.23 AC	Conservation Threshold	20%1.64 AC
Proposed Area of Disturbance	7.58 AC	in Sensitive Areas	0
Proposed Forest Clearing	5.40 AC	in Sensitive Areas	0
		in NTW	0

Forest Retention:

Onsite	1.44 AC	Offsite	0	in Long Term Protection	1.44 AC
Forest Conservation Required			1.71 AC	Forest Conservation Provided	1.30 AC

Planting:

Onsite	1.11 AC	Offsite	0	Sensitive Area Planting	0

Stream Buffer Established: Length 0 Width 0

Other:

Offsite Location:

County		Municipality					
ADC Map:		Year		Page		Grid	
Tax Map:		Grid		Parcel		Block	
Maryland Grid:		North American Datum Year				Lot	
District / Account Number		Sub-watershed No.					
Planting Responsibility:		Contact #					
Maintenance Responsibility:		Contact #					
Long Term Protection	0.66	% in Sensitive Areas	74				
Long Term Protection Agreement Type		Recorded Easement					
Fee-in Lieu Amount	0	Acreage					
Forest Conservation Plan Prepared by		Kyle Kowalczyk,Greg Remesch					
Licensed Landscape Architect							
Licensed Forester							
Qualified Professional	Yes						

Subject to previous FCP? Y / N

If yes, please provide a copy of previous approved FCP.

Subject to ESDR? Y/ N

Required:

- ☐ Completed Form
- ☐ Written Statement
- ☐ Signature of Applicant
- ☐ Hardcopy of Drawings
- ☐ Digital Copy of Drawings
- ☐ Copies Hard / Digital of Any Previous FCP + Application
- ☐ Review Fee

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.

By signing below, the applicant certifies that he of she has the legal right to implement proposed planting, maintenance and or a long-term protection agreement. The applicant further certifies that the property, subject to a long-term protection agreement is not otherwise protected under Federal, State or local programs.

Signature of Applicant or Agent 

Date 12/10/2025

Printed Name of Applicant or Agent Robert D. Rauch

For Office Use Only

Planning Commission Meeting Date			
Sketch Approval Date		Project No.	FC 25 - 01
Prelim/Dev. Approval Date		Application No.	2025-1605
Final Approval Date		Sketch Fee Paid	
Recordation Date		Develop. Fee Paid	

Revised 02-2019

Application for Grading Permit

Town of Easton
Engineering Department
14 South Harrison Street
Easton, Maryland 21601
Telephone 410-820-8822

A Grading Permit is required for all new single family homes, OR any site disturbing 4,000 or more sq.ft of land by cut or fill, OR 100 cubic yards cut & fill.
Additional Applications are required for ROW Access, and Building Construction. This application must be accompanied by three sets of construction documents prepared by a registered design professional.

Office Use Only
Received Date _____ / _____ / _____
Permit Number _____
Total Permit Fees $ _____

Part 1: Site Information

12/10/2025	Application Date	1013	Tax Map
DOVE LANE & CALVERT STREET	Site Address	00EA	Grid
	Subdivision (if any)	885-905 & 907-928	Parcel
EASTON, MD 21601	City, State and Zipcode		Lot
Indicate if the Project is located within the Overlay District's Below:		R10A	Zoning

	Planned Redevelopment		Historic		Critical Area	✓	Planned Unit Development		Planned Health Care

Part 2: Owner Information

OSPREY PROPERTY COMPANY II LLC	Property Owner(s)
16 GREENMEADOW DRIVE STE G107	Address
TIMONIUM, MD 21093	City, State and Zip Code
	E-Mail and Telephone Number

Part 3: Certification

Upon receiving the approved Grading Permit, work may commence. A Grading Permit will expire if work is not started within 6 months of Approval Date or if work is not completed within one (1) year of Approval Date. A Grading Permit extension must be requested in writing prior to expiration date(s).
An approved Sediment Erosion Control Plan by the Talbot Soil Conservation District (SCD) and a Storm Water Management Plan (SWM) which has been approved by the Town Engineer must be issued prior to issuing a Grading Permit.
The Grading Permit may be waived by the Town Engineer on a case-by-case basis for any Project that does not disturb over 5,000 square feet of land area. In addition, a Project that does not disturb over 5,000 square feet of land area does not require SCD and SWM approvals for this Application.
The applicant hereby certifies and agrees as follows: (1) that he/she is authorized to make this application; (2) that the information is correct; (3) that he/she will comply with all regulations of the Town of Easton which are applicable hereto; (4) that he/she will perform no work on the above property not specifically in this application; (5) that he/she grants Town Officials the right to enter onto the property for the purpose of inspecting work permitted and posting notices.

Signature of Applicant	Robert D. Rauch Printed Name of Applicant

Applicant Information

RAUCH, inc. - BRIAN FITZGERALD	Company/ Contact
106 N. HARRISON STREET	Address
EASTON, MD 21601	City, State and Zip Code
	E-Mail and Telephone Number

Part 4: Contractor Information

OSPREY PROPERTY COMPANY II LLC - BRIAN LOPEZ	Company / Contact
16 GREENMEADOW DRIVE STE. G107	Address
TIMONIUM, MD 21093	City, State and Zip Code
	E-Mail and Telephone Number
	License Numbers

Part 5: Project Details

Total Site Area	9.93 AC	Estimated Start Date	2026
Total Area Disturbed	7.60 AC	Estimated Completion Date	
Talbot Soil Conservation Approval Date			

Part 6: Description of Proposed Work

CONSTRUCTION OF 31 COTTAGE UNITS AND A SENIOR HOUSING BUILDING. WORK WILL INCUDE THE CONSTRUCTION OF UNDERGROUND UTILITIES, ON AND OFF-STREET PARKING, SIDEWALK, AND PARK SPACES.

Part 7: Required Submittals Prior to Grading Permit Approval

Single Lot Plan	Site Development Plan
☐ Completed Grading Permit Application	☐ Completed Grading Permit Application
☐ 2 Copies of Single Lot Site Plan and Erosion and Sediment Control Plan	☐ Digital Copy of Signed Approved Plan Set
☐ Fee	☐ Fee
☐ Copy of Talbot Soil Conservation District Approval letter.	☐ Talbot Soil Conservation District Signature on Plan and Copy of Approval letter
Single Lot Site Plan Requirements and Information:	**For All Plan Reviews (As Applicable)**
• Drawn to standard Engineering scale of 1"=10', 1"=20', 1"=50', etc. with scale noted on plan.	• SWM Easement and Declaration of Covenants Recorded
• The Site Plan and all existing and proposed structures and improvements including accessory utility equipment (ex: HVAC Units) shall be drawn to the same scale.	• Public Works Argeement Recorded
• Location and dimensions of all roads, easements, property lines and natural features. Label each item.	• Utility Easements Recorded
• Setbacks from property boundary lines, shorelines, streams, and wetlands to the proposed structures.	• Completed Cost Estimate Form
• The location of the driveway, labeled existing or proposed.	• SWM and ROW Surety/Bond/ Letter of Credit/ Cash Agreement (to follow approved Cost Estimate)
• Elevations including finish floor elevation, proposed grade elevations at building corners, driveway corners, etc.	• Copy of SHA Access Agreement
• Direction of proposed drainage and associated slope.	• MDE Non-Tidal Wetland Permit No. _____
• Proposed and existing countour lines.	MDE NPDES Notice of Intent No. _____
• Examples of Single Lot Plans can be provided upon Request.	

Part 8: Permit Information - Inspections

It shall be the duty of the holder of the Grading Permit or their duly authorized agent to : notify the Engineering Department when work is ready for inspections of such work and means for the inspections of such work, for all required inspections. Inspection requests shall be made twenty-four hours in advance of the time for the requested inspection. Final Site inspections should be requested at least 2 weeks prior to Occupancy Inspection.

Office Use Only

☐ Permit Number	_____	Date of Approval	_____
☐ Fee	_____	Date of Approval	_____

CALVERT TERRACE

INFRASTRUCTURE IMPROVEMENTS

FOR

OSPREY PROPERTY COMPANY II LLC

EASTON, TALBOT COUNTY, MARYLAND 21601

SITE DATA:

PROPERTY ADDRESS:	DOVE LANE & CALVERT STREET EASTON, MD 21601
LATITUDE:	38° 46' 51.96" N
LONGITUDE:	-76° 03' 44.73" W
PRESENT ZONING CLASSIFICATION:	R10A / PUD - GENERAL CENSUS BLOCK 1007 / BLOCK GROUP: 1 CENSUS TRACT: 960400
PRESENT USE:	RESIDENTIAL / FOREST
FUTURE USE:	RESIDENTIAL
TAX MAPS:	0103
GRIDS:	00EA
PARCELS:	885 - 905 / 907 - 928
DEED REFERENCE:	PARCEL 895 - 02696/ 00060 PARCEL 896 - 02949/ 00299 PARCEL 897 - 02949/ 00299 PARCEL 898 - 02696/ 00060 PARCEL 899 - 02949/ 00299 PARCEL 900 - 02696/ 00060 PARCEL 901 - 02949/ 00299 PARCEL 902 - 02696/ 00060 PARCEL 903 - 02949/ 00299 PARCEL 904 - 02696/ 00060 PARCEL 905 - 02949/ 00299 PARCEL 907 - 02696/ 00060 PARCEL 908 - 02949/ 00299 PARCEL 909 - 02696/ 00060 PARCEL 910 - 02949/ 00299 PARCEL 911 - 02696/ 00060 PARCEL 912 - 02949/ 00299 PARCEL 913 - 02696/ 00060 PARCEL 914 - 02949/ 00299 PARCEL 915 - 02696/ 00060 PARCEL 916 - 02949/ 00299 PARCEL 917 - 02696/ 00060 PARCEL 918 - 02949/ 00299 PARCEL 919 - 02949/ 00299 PARCEL 920 - 02696/ 00060 PARCEL 921 - 02949/ 00299 PARCEL 922 - 02696/ 00060 PARCEL 923 - 02949/ 00299 PARCEL 924 - 02696/ 00060 PARCEL 925 - 02949/ 00299 PARCEL 926 - 02696/ 00060 PARCEL 927 - 02949/ 00299 PARCEL 928 - 02696/ 00060
PROPERTY AREA:	9.93 ACRES
LIMITS OF DISTURBANCE:	330,091 SF - 7.578 ACRES
CUT:	2,560 SF
FILL:	11,672 SF
NET CUT/FILL:	9,112 SF (FILL)
EXISTING IMPERVIOUS:	0%
PROPOSED IMPERVIOUS:	40%
FEMA FLOOD MAPS:	PANEL 24041C0187D PANEL 24041C0189D PANEL 24041C0191C PANEL 24041C0193C
WATERSHED:	LOWER CHOPTANK 021304030465

NO PORTION OF THIS PROJECT SITE IS LOCATED WITHIN THE 100-YR FLOOD PLAIN

NO PORTION OF THIS PROJECT SITE IS LOCATED WITHIN THE CHESAPEAKE BAY CRITICAL AREA

DENSITY REQUIRED:	LESS THAN 16 UNITS PER ACRE
DENSITY PROVIDED:	9.16 UNITS PER ACRE
PROPOSED SETBACKS:	FRONT: 20 FT FROM PROPERTY LINE SIDE: 8 FT FROM PROPERTY LINE REAR: 20 FT FROM PROPERTY LINE
EXISITNG LOT COVERAGE:	0%
REQUIRED LOT COVERAGE:	2,330 SF
ACTUAL PR. LOT COVERAGE:	36,393 SF
MINIMUM LOT SIZE:	10,000 SF
MINIMUM LOT FRONTAGE:	35 LF
MINIMUM BUILDING ENVELOPE:	55 FT DEEP X 30 FT WIDE
MAXIMUM BUILDING HEIGHT:	50 FT
PROPOSED BUILDING HEIGHT:	42 FT
MULTIFAMILY BUILDING -	60 DWELLING UNITS
MIDDLE HOUSING UNITS -	31 DWELLING UNITS
FOREST CONSERVATION:	PLAN INCLUDED IN THIS SUBMISSION
OVERALL TREES REQUIRED:	366 TREES REQUIRED *REQUIRED TREES LESS TREE CREDITS* = 230 NEW TREES REQUIRED SEE SHEET L-601 FOR DETAILS
TOTAL TREES PROVIDED:	FOREST PRESERVATION CREDIT: 136 TREES STREET TREE CREDIT: 97 TREES PARKING LOT CREDIT: 16 TREES BUFFERYARD CREDIT: 34 TREES LANDSCAPE INFILL: 83 TREES
PARKING SPACES :	
MIDDLE HOUSING:	MIN: 0.75 SPACES /DU MAX: 1 SPACES/ DU PROVIDED: 62 SPACES
MULTIFAMILY:	MIN: 1 SPACE /DU MAX: 2 SPACES/ DU PROVIDED: 74 SPACES (THIS INCLUDES 6 ADA SPACES W/ AISLE & 2 EV CHARGING STALLS)
ON-STREET:	REQUIRED: N/A PROVIDED: 12 SPACES
TOTAL PARKING PROVIDED:	148 SPACES
BICYCLES:	MIN: N/A PROVIDED: 0.5 SPACES/ DU = 30 SPACES

PROVISIONS FOR EV CHARGING STATIONS ARE PROVIDED FOR EACH COTTAGE UNIT
(2) EV CHARGING STALLS LOCATED IN THE SOUTHEAST CORNER PARKING LOT

ADA ACCESSIBILITY	PROJECT IS GOVERNED BY 2021 IRC; SITE ACA ACCESSIBILITY GOVERNED BY COMAR 09.12.53
JUSTIFICATION:	PARKING PROVIDED FOR THE SENIOR APARTMENTS AND MIDDLE HOUSING IS ABOVE ADEQUATE. THE SPACE PROVIDED SUPPORTS THE DAILY NEEDS OF THE SENIOR OCCUPANTS AND OCCASIONAL GUESTS. MAJORITY OF THE OCCUPANTS ARE SINGLE VEHICLE HOUSEHOLDS.
REQUIRED OPEN SPACE:	30%
PROPOSED OPEN SPACE:	133,266 SF

PARKS ARE NOT INCLUDED IN THIS DEVELOPMENT AS WE HAVE PAID A FEE IN LIEU OF THE PARK REQUIREMENTS PER SUBDIVISION REGULATIONS SECTION 708.B OF THE SUBDIVISION REGULATIONS

BUFFERYARD:	SEE SHEET L-602.1
REQUIRED:	
BUFFERYARD "C":	300' L OF STREET FRONTAGE / 50' INTERVAL = 6 PLANTING UNITS 6 x 1 SHADE/CANOPY TREE, 2 EVERGREEN TREES, 5 LARGE SHRUBS
PROVIDED:	
BUFFERYARD "C":	BUFFERYARD C TO BE ESTABLISHED ALONG CALVERT STREET; 276' ROAD FRONTAGE (LESS SIGHT TRIANGLES) / 50' = 6 PLANTING UNITS

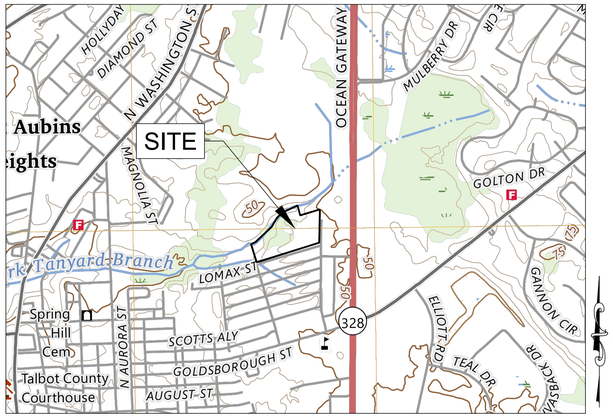
SURVEY DATUM

HORIZONTAL:	NAD83
VERTICAL:	NAVD88
DATE OF SURVEY:	SEPTEMBER 2025

NOTE: ALL ON-SITE LIGHTING UNLESS APPROVED OTHERWISE BY PLANNING AND ZONING COMMISSION SHALL BE LOW CUT-OFF SHIELDED LUMINARIES AT 18' HEIGHT AND LIGHT SHALL NOT SHINE OFF-SITE AT LEVEL GREATER THAN 1-FOOT CANDLE.

CONTACT INFORMATION

OWNER/DEVELOPER:	OSPREY PROPERTY COMPANY II LLC 16 GREENMEADOW DR, STE G107 TIMONIUM, MD 21093 (443) 509-0989
ENGINEER:	RAUCH INC 106 N HARRISON ST EASTON, MARYLAND 21301 (410)770-9081



VICINITY MAP

SCALE: 1" = 1000'

CAPITAL CHARGE ASSESSMENT

27 TOWN HOMES - 1 EDU/ TOWN HOME
60 APARTMENTS - 1 EDU/ APARTMENT

87 EDUS * $7,050/ EDU = $613,350

CAPITAL CHARGES ARE DUE PRIOR TO THE APPROVAL OF A BUILDING PERMIT

ROW COMPARISON CHART

	EXISTING	PROPOSED
PROPERTY AREA	432,467 SF	432,467 SF
ROW AREA	133,118 SF	94,830 SF

DRAWING LIST

DRAWING NUMBER	DRAWING TITLE
G-100	TITLE SHEET
G-200	LEGEND
V-101	EXISTING CONDITIONS PLAN
C-101	OVERALL SITE PLAN
C-103	PROJECT VICINITY MAP
C-201.01 - .04	ESC & STORMWATER MANAGEMENT PLAN
C-203.01 - .02	STORMWATER MANAGEMENT PROFILES
C-203.03	STORMWATER SCHEDULES AND SECTIONS
C-205.01 - .02	EROSION & SEDIMENT CONTROL DETAILS
C-205.03	STORMWATER MANAGEMANT DETAILS
C-301.01 - .03	SITE AND GRADING PLAN
C-303.01 - .03	GRADING PROFILES
C-305	SITE AND GRADING DETAILS
C-401.01 - .04	UTILITY PLAN
C-403.01 - .04	UTILITY PROFILES
C-405.01 - .02	UTILITY DETAILS
L-601	MASTER SCHEDULE, CODE CALCS, OVERVIEW
L-602.1	BUFFERYARDS
L-602.2	PARKING LOT
L-602.3	STREET TREES
L-602.4	LANDSCAPE INFILL
L-602.5	STORMWATER POND
L-603	OPEN SPACE & RECREATION PLAN
L-605	LANDSCAPE DETAILS

ARTICLE VII - PLANNED UNIT DEVELOPMENT

SECTION 28 - 701 - G

DEVELOPMENT STANDARDS NARRATIVE:

1. THE AREA OF THIS PUD IS IN A SINGLE OWNERSHIP
2. THE SITE IS IN A SUITABLE CONFIGURATION FOR THE PROPOSED DEVELOPMENT
3. THE PUD WILL BE SERVED BY EXISTING AND AVAILABLE PUBLIC WATER AND SEWER
4. THE PUD SITE IS LOCATED ADJACENT TO EXISTING AND ADEQUATE TRANSPORTATION FACILITIES SUCH AS CALVERT STREET AND DOVE LANE
5. THE OWNERS AND DEVELOPERS WOULD LIKE TO BEGIN CONSTRUCTION IN 2026.
6. THE SETBACKS(20' FRONT AND REAR, 8' SIDES), LOT SIZES (MINIMUM 10,000 SF), LOT COVERAGE (100% OF THE LAND WITHIN THE BUILDING ENVELOPE MAY BE COVERED WITH BUILDINGS AND/OR STRUCTURES), MINIMUM FRONTAGE (35'), OPEN SPACE (30%), YARD REQUIREMENTS AND BUFFERYARDS (C) SHALL BE ESTABLISHED FOR THIS PROJECT.
7. OFF-STREET PARKING IS PROVIDED. PEDESTRIAN AND BICYCLE CIRCULATION HAVE BEEN CONSIDERED AND INCORPORATED IN THE SITE DESIGN
8. NO MAJOR RETAIL OR SHOPPING CENTER IS PROPOSED IN THIS PUD.

PROPOSED IMPERVIOUS AREA TABLE

Description	Area (Sq.Ft.)	Area (Ac.)	Site Percentage
Total Site Area	432,467	9.93	100%
Buildings	55,108	1.27	13%
Roadway - Curb and gutters	79,711	1.83	18%
Sidewalk - Paths	23,641	0.54	5%
Driveways	16,445	0.38	4%

The following items have been addressed to meet the requirements of the GENERAL PERMIT FOR STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY (NPDES NUMBER MDR1[illegible], STATE DISCHARGE PERMIT NUMBER 09[illegible]:

1) Utilization of environmental site design
2) Maintenance of limits of disturbance to protect natural areas
3) Control of construction equipment and vehicles
4) Evaluation and appropriate limitation of site clearing
5) Evaluation and designation of site area for phasing or sequencing
6) Identification of soils at high risk for erosion and advanced stabilization techniques to be used
7) Identification of steep slopes and designation of limitations on clearing them
8) Evaluation and designation of stabilization requirements and time limits and protection measures for discharges to the Chesapeake Bay, impaired waters or waters with an established Total Maximum Daily Load (TMDL).

PLANNED UNIT DEVELOPMENT BENEFITS NARRATIVE

THE PROPOSED 91-UNIT, 100% AGE-RESTRICTED (55+) RESIDENTIAL COMMUNITY, DEVELOPED AS A PLANNED UNIT DEVELOPMENT, PROVIDES SUBSTANTIALLY GREATER PUBLIC BENEFITS TO THE TOWN OF EASTON THAN THE 25–28 CONVENTIONAL SINGLE-FAMILY HOMES THAT COULD BE CONSTRUCTED BY-RIGHT ON THIS 9.93-ACRE PARCEL UNDER THE CURRENT R-10A ZONING (MAXIMUM 3.5 DU/ACRE GROSS, REDUCED TO APPROXIMATELY 2.5–2.8 DU/ACRE NET AFTER REQUIRED ROADS, STORMWATER FACILITIES, AND BUFFERS).

THIS PUD DIRECTLY ADVANCES THE CORE HOUSING OBJECTIVES OF THE 2019 EASTON COMPREHENSIVE PLAN IN A MANNER THAT STRICT ADHERENCE TO UNDERLYING ZONING CANNOT. THE PLAN STATES THAT "A PRIMARY GOAL IS TO ENSURE THAT EASTON'S LONG-TERM RESIDENTS, INCLUDING SENIORS, HAVE THE OPPORTUNITY TO REMAIN IN THE COMMUNITY AS THEIR HOUSING NEEDS CHANGE" (GOAL H-1) AND DIRECTS THE TOWN TO "ENCOURAGE THE DEVELOPMENT OF SENIOR HOUSING… TO MEET THE NEEDS OF AN AGING POPULATION" (POLICY H-1.3). BY-RIGHT DEVELOPMENT WOULD YIELD ONLY MARKET-RATE FAMILY HOMES THAT ADD NO SENIOR-ORIENTED UNITS AND COMPETE DIRECTLY WITH YOUNGER FAMILIES FOR LIMITED HOUSING STOCK.

IN CONTRAST, THE PUD DELIVERS A VARIETY OF 91 LOW-MAINTENANCE DWELLINGS RESERVED EXCLUSIVELY FOR HOUSEHOLDS AGED 55 AND OLDER, ALLOWING LONGTIME EASTON RESIDENTS TO AGE IN PLACE AND FREEING EXISTING LARGER HOMES FOR THE NEXT GENERATION OF FAMILIES—PRECISELY THE OUTCOME THE COMPREHENSIVE PLAN PRIORITIZES.

ADDITIONALLY, THIS PUD PROVIDES AFFORDABLE HOUSING TO LONG-TERM RESIDENTS OF EASTON WHICH THE 2010 EASTON COMPREHENSIVE PLAN LISTS AMONG THEIR GOALS OF HOUSING IN THE "HOUSING GOALS AND OBJECTIVES" SUBSECTION OF THE HOUSING ELEMENT (PAGES 140-142). THERE, THE TOWN ADOPTS EXPLICIT GOAS THAT COMMIT TO INCREASING AND INTEGRAGINT AFFORDABLE HOUSING:

- GOAL: "TO INCREASE THE SUPPLY OF LOW-INCOME HOUSING IN THE TOWN OF EASTON"
  - OBJECTIVES INCLUDE SUPPORTING THE TALBOT HOUSING AUTHORITY AND EASTON AFFORDABLE HOUSING BOARD, CONSIDERING ZONING AMENDMENTS TO MAKE APARTMENTS MORE ATTRACTIVE TO PRIVE DEVELOPERS, ESTABLISHING A TOWN-INITIATED SELF-HELP HOUSING PROGRAM, PROMITING INFILL (INCLUDING MANUFACTURED HOMES), AND INSTITUTING SOME FORM OF INCLUSIONARY ZONING.
- GOAL: "TO INSURE A MORE HETEROGENEOUS MIX OF PRICE POINTS IN FUTURE RESIDENTIAL PROJECTS."
  - OBJECTIVES INCLUDE DENSITY BONUSES FOR INCLUDING LOW- AND MODERATE-INCOME UNITS AND ADOPTING AN INCLUSIONARY ZONING OR AFFORDABLE DWELLING UNIT ORDINANCE REQUIREING A MINIMUM NUMBER OF UNITS AT VARIOUS PRICE POINTS IN ALL RESIDENTIAL DEVELOPMENTS.
- GOAL: "TO PARTNER IN A COUNTRYWIDE AFFORDABLE HOUSING EFFORT," INCLUDING PARTICIPATING IN A JOINT COUNTY-TOWN COMMISSION AND SUPPORTING A COUNTYWIDE HOUSING TRUST FUND, WITH EXPLICIT REFERENCE TO EASTON CONTINUING TO HOUSE THE MAJORITY OF THE COUNTY'S AFFORDABLE HOUSING BECAUSE IT HAS THE INFRASTRUCTURE.

DESIGN PRINCIPLES FOR EASTON

(COMPREHENSIVE PLAN, PG. 29-31)

1. **INTEGRATED USES ARE DESIRABLE** - THE PROPOSED PUD CONSISTS OF RESIDENTIAL, OPEN SPACE, AND STORMWATER MANAGEMENT FEATURES. THIS PROJECT WILL HAVE A TOTAL OF 91 SENIOR DWELLING UNITS ADDRESSING THE NEED FOR AGE-IN-PLACE HOUSING AS STATED IN THE COMPREHENSIVE PLAN TO INCREASE THE NUMBER AND TYPES OF HOUSING AVAILABLE IN THE AREA.
2. **NATURAL FEATURES SHOULD DETERMINE DESIGN** - THE SITE IS DEVELOPED TO MAINTAIN EXISTING NATURAL CONTOURS AND DRAINAGE PATHS.
3. **AUTOMOBILES SHOULD NOT DETERMINE DESIGN** - AUTOMOBILES WERE NOT THE PRIORITY FOCUS FOR THE DESIGN BUT SUFFICIENT PARKING IS PROVIDED, WHICH INCLUDES AMPLE LANDSCAPING AND GREEN SPACE.
4. **AMPLE OPEN SPACES SHOULD BE PROVIDED WITHIN AND AROUND NEIGHBORHOODS** - THIS PROJECT PROVIDES OPEN AREAS AND GREEN SPACES THROUGHOUT THE DEVELOPMENT. PARKS ARE NOT INCLUDED IN THIS DEVELOPMENT AS WE HAVE PAID A FEE IN LIEU OF THE PARK REQUIREMENTS PER SECTION 708.
5. **ARCHITECTURE SHOULD RESPECT EASTON'S HISTORIC DISTRICT** - THIS PROJECT IS NOT WITHIN THE HISTORIC DISTRICT.
6. **SIGNS SHOULD INFORM BUT NOT DOMINATE** - THERE WILL BE MINIMAL SIGNAGE ON THIS PROPERTY. EACH UNIT WILL HAVE A STREET/HOUSE NUMBER THAT WILL INDICATE THE UNIT AND ADDRESS FOR THE PUBLIC AND FIRE/RESCUE SERVICES. FREE STANDING SIGNS AT EACH ENTRANCE WILL NOT DOMINATE THE ROAD FRONTAGE.
7. **NEIGHBORHOODS SHOULD CONTAIN A DIVERSITY OF HOUSING TYPES** - THIS PROJECT HAS BOTH TOWN HOMES AS WELL AS APARTMENT UNITS OFFERING DIVERSITY OF HOUSING AND PRICE POINTS .
8. **RESIDENTIAL DEVELOPMENTS SHOULD BE INTERESTING PLACES** - THE PROJECT EMBRACES THE EXISTING NEIGHBORHOOD AROUND IT AND DIVERSIFIES THE COMMUNITY AND HAS POTENTIAL TO INCREASE TRAFFIC TO NEARBY BUSINESSES.
9. **NEIGHBORHOODS SHOULD CONNECT** - THE WALKABLE LAYOUT OF THIS PROJECT CONNECTS TO THE EXISTING NEIGHBORHOOD ON DOVE LANE AS WELL AS TO CALVERT STREET.

GENERAL NOTES

PROJECT SHALL BE CONSTRUCTED TO COMPLY WITH THE TOWN OF EASTON DESIGN AND CONSTRUCTION STANDARDS.

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 ENGINEERING DEPARTMENT	410-822-8822
TALBOT COUNTY SCD	410-822-1583
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.

SEQUENCE OF CONSTRUCTION

1. NOTIFY MDE AT (410) 901-4020
   TALBOT COUNTY SOIL CONSERVATION DISTRICT AT (410) 822-1583
   TOWN OF EASTON ENGINEERING DEPARTMENT AT (410) 822-8822
2. PRE-CONSTRUCTION MEETING.
4. INSTALL ALL SEDIMENT AND EROSION CONTROL MEASURES PER PLANS.
5. CONSTRUCT SEDIMENT TRAP PER DETAILS ON C-205.01.
6. DEMO PER PLAN.
7. INSTALL STORMWATER MANAGEMENT NETWORK.
8. INSTALL UTILITIES.
9. START SITE GRADING.
10. CONSTRUCT CURBS INDICATED ON THE PLANS.
11. INSTALL BASE PAVEMENT
12. CONSTRUCT SIDEWALK AND HOMES AS INDICATED ON THE PLANS.
11. CONSTRUCT SUBMERGED GRAVEL WETLAND AREA AND INSTALL SKIMMER DE-WATERING DEVICE TO BE USED DURING CONSTRUCTION PER DETAILS ON C-205.01. DO NOT FINALIZE CONSTRUCTION OF THIS UNTIL EARTH DISTURBANCE IS COMPLETE.
12. PERMANENTLY STABILIZE REMAINING AREAS.
13. MAINTAIN ALL PERIMETER CONTROLS AND SEDIMENT CONTROL DEVICES UNTIL FINAL STABILIZATION HAS BEEN COMPLETELY ESTABLISHED.
14. REMOVE PERIMETER CONTROLS UPON APPROVAL BY THE MDE SEDIMENT CONTROL INSPECTOR.

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

1. 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.
2. 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.

APPROVED:	APPROVED:	APPROVED:	APPROVED:
TOWN OF EASTON - TOWN ENGINEER — DATE	TOWN OF EASTON PLANNING AND ZONING — DATE	EASTON UTILITIES - ENGINEER — DATE	TALBOT SOIL CONSERVATION DISTRICT - MANAGER — DATE

TITLE SHEET

OF THE LANDS OF

CALVERT TERRACE

TAX MAP 0103, GRID 00EA, PARCELS 885 - 928

ELECTION WARD 1, EASTON, TALBOT COUNTY, MARYLAND

PREPARED FOR OSPREY PROPERTY COMPANY II LLC

RAUCH inc.
Engineering | Survey | Architecture | Environmental
Main Office: 106 N Harrison St - Easton, MD 21601
Web: www.rauch-inc.com | Email: design@rauchengr.com
Phone: 410 770 9081 | Fax: 410 770 3867

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, 2026

PRELIMINARY FOR REVIEW ONLY

12-10-2025

REVISIONS

REV. #	DATE	DESCRIPTION
1		

MISS UTILITY OF DELMARVA — DIAL BEFORE YOU DIG — 811

DATE:	12/10/2025
SCALE:	AS SHOWN
DRAWN BY:	AF
DESIGNED BY:	AF
APPROVED BY:	BBF

SHEET NO.: G-100

FOR REVIEW

LINETYPES

	PROPOSED	EXISTING
TOPOGRAPHY		
MAJOR CONTOURS	45	45
MINOR CONTOURS	44	44
TOP OF SLOPE BREAKLINE		
BOTTOM OF SLOPE BREAKLINE		
TOPOGRAPHY BREAKLINE		
CATCHMENT AREA		
Tc FLOW PATH		
PARCEL BOUNDARY		
PARCEL SETBACK/EASEMENT		
FENCELINE WOOD		
FENCELINE STEEL		X
TREELINE/VEGETATION		
ROADWAY CENTERLINE		
HIGHWAY BARRIER		
UTILITIES		
OVERHEAD ELECTRIC	OE	OE
UNDERGROUND ELECTRIC	UE	UE
TELEPHONE LINE	T	T
GAS PIPE LINE	G	G
COMMUNICATIONS (FIBER, ETC)	C	CTV
WATER PIPE		W
STORMWATER PIPE		
UNDERDRAIN		
SANITARY SEWER	SS	SS
FORCE MAIN SEWER	FM	FM
ENVIRONMENTAL		
WETLAND LINE		
FLOOD PLANE 100/500 YR		
MEAN HIGH WATER		MHW
MEAN LOW WATER		MLW
CRITICAL AREA BOUNDARY		CAB
BUFFER 25'/100'		25'
SOILS BOUNDARY		
EROSION AND SEDIMENT CONTROL		
SILT FENCE	SF	
SUPER SILT FENCE	SSF	
SILT FENCE ON PAVEMENT	SFOP	
LIMITS OF DISTURBANCE	LOD	
LOD & SILT FENCE	LOD/SF	
LOD & SUPER SILT FENCE	LOD/SSF	
LOD & SILT FENCE ON PAVEMENT	LOD/SFOP	
STANDARD INLET PROTECTION	SIP	
AT-GRADE INLET PROTECTION	AGIP	
CURB INLET PROTECTION	CIP	
SWM EASEMENT 5'/10'		

SYMBOLS

	PROPOSED	EXISTING
FLARED END SECTION		
YARD INLET	YI	YI
CURB INLET	CI	CI
CUSTOM INLET	CuI	CuI
NYLOPLAST INLET	N	N
STORM DRAIN MANHOLE	D	D
SANITARY SEWER MANHOLE	S	S
CLEANOUT	C	C
GATE VALVE	GV	GV
STUB		
SIGN		
WATER METER	WM	WM
FIRE HYDRANT		
WELL	W	W
BOLLARD		
ELECTRIC TRANSFORMER	ELEC	ELEC
TELEPHONE PEDESTAL	T	T
UTILITY POLE		
GUY WIRE		
CONIFEROUS TREE		
DECIDUOUS TREE		
SPOT ELEVATION	39.01	39.00
LAND SLOPE	0.41%	0.41%
BENCHMARK	ELEV: 123	
BOREHOLE/MONITORING WELL		

HATCHES

- ASPHALT
- GRAVEL
- CONCRETE
- RIPRAP/ROCK
- ESD BED BOTTOM
- BRICK PAVING
- EXISTING,TO BE DEMOLISHED
- STEEP SLOPES
- ROOFTOP/NON-ROOFTOP DISCONNECT

ABBREVIATIONS

ADA	AMERICANS WITH DISABILITIES ACT
AGIP	AT GRADE INLET PROTECTION
@	AT
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	CENERLINE
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
KV	KILOVOLTS
L	ARC LENGTH
LF	LINEAR FEET
LOD	LIMITS OF DISTURBED AREA
LT	LEFT
MAX	MAXIMUM
MBR	MICRO-BIORETENTION
MD	MARYLAND
MEP	MECHANICAL, ELECTRICAL, AND PLUMBING
MH	MANHOLE
MHW	MEAN HIGH WATER
MIN	MINIMUM
MLW	MEAN LOW WATER
MSHA	MARYLAND STATE HIGHWAY ADMINISTRATION
MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
N	NORTH
NO	NUMBER
PC	POINT OF CURVATURE
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
SCE	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
TP	TAX PARCEL
TYP	TYPICAL
UE	UNDERGROUND ELECTRIC
UL	UNDERGROUND LIGHT CABLE
UT	UNDERGROUND TELEPHONE
V	VELOCITY
W	WEST
W/	WITH

ENVIRONMENTAL NOTES:

1. THE PROJECT SITE IS NOT LOCATED WITHIN THE CRITICAL AREA BUFFER
2. THE SITE IS NOT LOCATED WITHIN A 100 YEAR FLOODPLAIN
3. STEEP SLOPES ARE NOT PRESENT ON SITE
4. NON TIDAL WETLANDS ARE NOT PRESENT ON THIS PORTION OF THE PROJECT

HYDROLOGY NOTES:

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

STANDARD STABILIZATION NOTE

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

A. 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

B. SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING

APPROVED:	APPROVED:	APPROVED:	APPROVED:
TOWN OF EASTON - TOWN ENGINEER DATE	TOWN OF EASTON PLANNING AND ZONING DATE	EASTON UTILITIES - ENGINEER DATE	TALBOT SOIL CONSERVATION DISTRICT - MANAGER DATE

LEGEND

OF THE LANDS OF

CALVERT TERRACE

TAX MAP 0103, GRID 06EA, PARCELS 885 - 928

ELECTION WARD 1, EASTON, TALBOT COUNTY, MARYLAND

PREPARED FOR OSPREY PROPERTY COMPANY II LLC

RAUCH inc.
Engineering | Survey | Architecture | Environmental
Main Office: 106 N Harrison St - Easton, MD 21601
Web: www.rauch-inc.com | Email: design@raucheng.com
Phone: 410 770 8081 | Fax: 410 770 3887

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, 2026

PRELIMINARY FOR REVIEW

REVISIONS		
REV. #	DATE	DESCRIPTION
1		

MISS UTILITY OF DELMARVA — 1-800-282-8555 — CALL BEFORE YOU DIG

811

DATE:	12/10/2025
SCALE:	1" = 40'
DRAWN BY:	AF
DESIGNED BY:	AF
APPROVED BY:	BBF

SHEET NO.: G-200

FOR REVIEW

SOIL DATA

Map Unit Symbol	Name	Hydrologic Soil Group	K-Factor	Hydric?
FacA	Fallsington sandy loams, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain	C/D	-	Yes
HfB	Hambrook-Sassafras complex, 2 to 5 percent slopes	B	0.32	No
Up	Urban Land	-	-	No
WdcA	Woodstown sandy loam, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain	C	0.24	No
Zk	Zekiah silt loam, frequently flooded	C/D	0.37	Yes

PROPERTY DATA

A — TAYLOR NORRIS E, TAYLOR JOYCE W
M/G/P: 0102/00EA/2943 LOT 3 - B/P: -/-

B — TOWN OF EASTON
M/G/P: 0100/00EA/4724C LOT 2 - B/P: 00818/00261

C — EASTON COMMERCE CENTER LIMITED PARTNERSHIP
M/G/P: 0100/00EA/4724B LOT 1 - B/P: 00624/00668

D — TWO FARMS INC
M/G/P: 0102/00EA/2943 LOT 2 - B/P: 02938/00413

E — ELEY AND MOORE CONCRETE AND CINDER BLOCK CO
M/G/P: 0103/00EA/2945A - B/P: 00329/00296

F — 20/20 REAL ESTATE LLC
M/G/P: 0103/00EA/0934 - B/P: 02323/00138

G — TG LLC
M/G/P: 0103/00EA/0894 - B/P: 01307/00757

H — TG LLC
M/G/P: 0103/00EA/0893 - B/P: 01307/00757

I — TAYLOR DANIEL C
M/G/P: 0103/00EA/0892 - B/P: 01136/00537

J — CHAVEZ MARLEN MISHEL PEREZ
M/G/P: 0103/00EA/0891 - B/P: 02951/00001

K — TIMMS HERBERT WILLIAM SR., TIMMS CAROLYN T
M/G/P: 0103/00EA/0890 - B/P: 03066/00068

L — JUMP FRANCIS WILLIAM
M/G/P: 0103/00EA/0889 - B/P: 01242/00584

M — SOUTHWORTH FAMILY REVOCABLE LIVING TRUST ETAL
M/G/P: 0103/00EA/0888 - B/P: 02332/00106

N — CARRIERI JENNIFER ELAINE, CARRIERI WILLIAM JAMES
M/G/P: 0103/00EA/0887 - B/P: 03136/00178

O — GARDINER TAMRA
M/G/P: 0103/00EA/0886 - B/P: 02155/00485

P — WAZNIAK THOMAS M, WAZNIAK CATHERINE E
M/G/P: 0103/00EA/0885 - B/P: 00946/00840

Q — FINKER CODY EDWARD, MADINO JENNIFER DAWN
M/G/P: 0103/00EA/0884 - B/P: 02670/00220

R — ELEY PROPERTIES LLC
M/G/P: 0103/00EA/0906 - B/P: 02949/00299

NAD 83
0 50' 100'

TM 100, PARCEL 4724B, LOT 1
N/F LANDS OF
EASTON COMMERCE CENTER LIMITED PARTNERSHIP
624/668

TM 102, PARCEL 2943, LOT 3
N/F LANDS OF
NORRIS E. TAYLOR
JOYCE W. TAYLOR

TM 101, PARCEL 4724C, LOT 2
N/F LANDS OF
TOWN OF EASTON
818/261

HfB - HSG B
ZK - HSG C/D
ZK - HSG C/D
Up - HSG -
ZK - HSG C/D
HfB - HSG B
HfB - HSG B
ZK - HSG C/D
HfB - HSG B
WdcA - HSG C
HfB - HSG B
WdcA - HSG C
WdcA - HSG C
FacA - HSG C/D
FacA - HSG C
Up - HSG -
WdcA - HSG C
Up - HSG -

UTILITIES DISTRIBUTION RIGHT OF WAY AND EASEMENT
MULTI-FAMILY UNITS
N 65°01'56" E 239.73'
N 45°09'32" E 95.64'
N 80°27'40" E 151.68'
S 15°07'17" E 142.55'
N 73°14'52" E 275.32'
STORMWATER EASEMENT
N 46°46'44" E 307.72'
EXISTING SANITARY SEWER MAIN
EXISTING WALL
EXISTING POND
BOTTOM OF DITCH
TOP OF DITCH
STORMWATER EASEMENT
N 78°59'19" E 186.78'
N 63°58'47" E 233.76'
EXISTING POND
100 FT STREAM BUFFER
EXISTING SANITARY MANHOLE
UTILITIES DISTRIBUTION RIGHT OF WAY AND EASEMENT
EXISTING POND
EXISTING SANITARY MANHOLE
STORMWATER EASEMENT
S 73°01'20" W 1,265.09'
S 00°18'08" E 461.62'
CALVERT STREET
50' RIGHT-OF-WAY
CALVERT STREET
80' RIGHT-OF-WAY
DOVE LANE
IMPROVED 25' RIGHT-OF-WAY
MERRICK LANE
IMPROVED PORTION
60' RIGHT-OF-WAY
LOMAX STREET
LOMAX STREET
LOMAX STREET

EXISTING FEATURES

1. EXISTING PROPERTY LINE
2. EXISTING DRAINAGE PATH
3. EXISTING STREET LIGHT
4. EXISTING STORM WATER MANAGEMENT
5. EXISTING FIRE HYDRANT
6. EXISTING TRANSFORMER
7. EXISTING TELECOM PEDESTAL
8. EXISTING SANITARY SEWER MANHOLE
9. EXISTING OVERHEAD ELECTRIC
10. EXISTING ELECTRICAL BOX
11. EXISTING CONCRETE SIDEWALK
12. EXISTING GAS MAIN

DEMOLITION FEATURES

1. REPLACE ANY DISTURBED EXISTING FENCE WITH LIKE-IN-KIND
2. EXISTING TREES TO BE REMOVED

APPROVED:	APPROVED:	APPROVED:	APPROVED:
TOWN OF EASTON - TOWN ENGINEER DATE	TOWN OF EASTON PLANNING AND ZONING DATE	EASTON UTILITIES - ENGINEER DATE	TALBOT SOIL CONSERVATION DISTRICT - MANAGER DATE

EXISTING CONDITIONS PLAN

OF THE LANDS OF

CALVERT TERRACE

TAX MAP 0103, GRID 00EA, PARCEL 885 - 928
ELECTION WARD 1, EASTON, TALBOT COUNTY, MARYLAND
PREPARED FOR OSPREY PROPERTY COMPANY II LLC

RAUCH inc.
Engineering | Survey | Architecture | Environmental
Main Office: 106 N Harrison St - Easton, MD 21601
Web: www.rauch-inc.com | Email: design@raucheng.com
Phone: 410 770 8081 | Fax: 410 770 3867

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, 2026

PRELIMINARY NOT FOR SERVICE REVIEW

REVISIONS		
REV. #	DATE	DESCRIPTION
1		

MISS UTILITY OF DELMARVA — 811

DATE:	12/10/2025
SCALE:	1" = 50'
DRAWN BY:	AF
DESIGNED BY:	AF
APPROVED BY:	BBF

SHEET NO.: V-101

FOR REVIEW

SOIL DATA				
Map Unit Symbol	Name	Hydrologic Soil Group	K-Factor	Hydric?
FacA	Fallsington sandy loams, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain	C/D	-	Yes
HfB	Hambrook-Sassafras complex, 2 to 5 percent slopes	B	0.32	No
Up	Urban Land	-	-	No
WdcA	Woodstown sandy loam, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain	C	0.24	No
Zk	Zekiah silt loam, frequently flooded	C/D	0.37	Yes

NAD 83

0 50' 100'

C-X01.01

C-X01.02

C-X01.03

C-X01.04

HfB - HSG B
ZK - HSG C/D

UTILITIES DISTRIBUTION RIGHT OF WAY AND EASEMENT

N 65°01'56" E 239.73'

MULTI-FAMILY UNITS

S 15°07'17" E 142.55'

ZK - HSG C/D
HfB - HSG B

N 73°14'52" E 275.32'

STORMWATER EASEMENT

N 45°09'32" E 95.64'

N 30°27'40" E 151.66'

N 50°46'48" E 307.72'

EXISTING SANITARY SEWER MAIN

EXISTING WALL

EXISTING POND

BOTTOM OF DITCH

TOP OF DITCH

SUBMERGED GRAVEL WETLAND #1

STORMWATER EASEMENT

N 63°58'47" E 233.76'

N 78°59'19" E 186.78'

FOREBAY #1

EXISTING POND

100 FT STREAM BUFFER

EXISTING SANITARY MANHOLE

UTILITIES DISTRIBUTION RIGHT OF WAY AND EASEMENT

EXISTING POND

EXISTING SANITARY MANHOLE

STORMWATER EASEMENT

QUEEN STREET
PRIVATE ROAD

QUEEN STREET
PRIVATE ROAD

QUEEN STREET
PRIVATE ROAD

SCE

CALVERT STREET
50' RIGHT-OF-WAY

S 00°16'08" E 484.92'

WdcA - HSG C
Up - HSG -

TUCKAHOE ROAD
UNIMPROVED 50'
TOWN OF EASTON RIGHT-OF-WAY

TUCKAHOE ROAD
UNIMPROVED 50'
TOWN OF EASTON RIGHT-OF-WAY

HfB - HSG B
WdcA - HSG C

FacA - HSG C/D

S 73°01'20" W 1,265.09'

DOVE LANE
IMPROVED 25' RIGHT-OF-WAY

DOVE LANE
IMPROVED 25' RIGHT-OF-WAY

MERRICK LANE
IMPROVED PORTION
60' RIGHT-OF-WAY

LOMAX STREET

LOMAX STREET

OVERALL SITE PLAN AND KEY SHEET

OF THE LANDS OF

CALVERT TERRACE

TAX MAP 0103, GRID 00EA, PARCEL 885 - 928

ELECTION WARD 1, EASTON, TALBOT COUNTY, MARYLAND

PREPARED FOR OSPREY PROPERTY COMPANY II LLC

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PRELIMINARY PLAN REVIEW ONLY

REVISIONS			
REV. #	DATE	DESCRIPTION	
1			

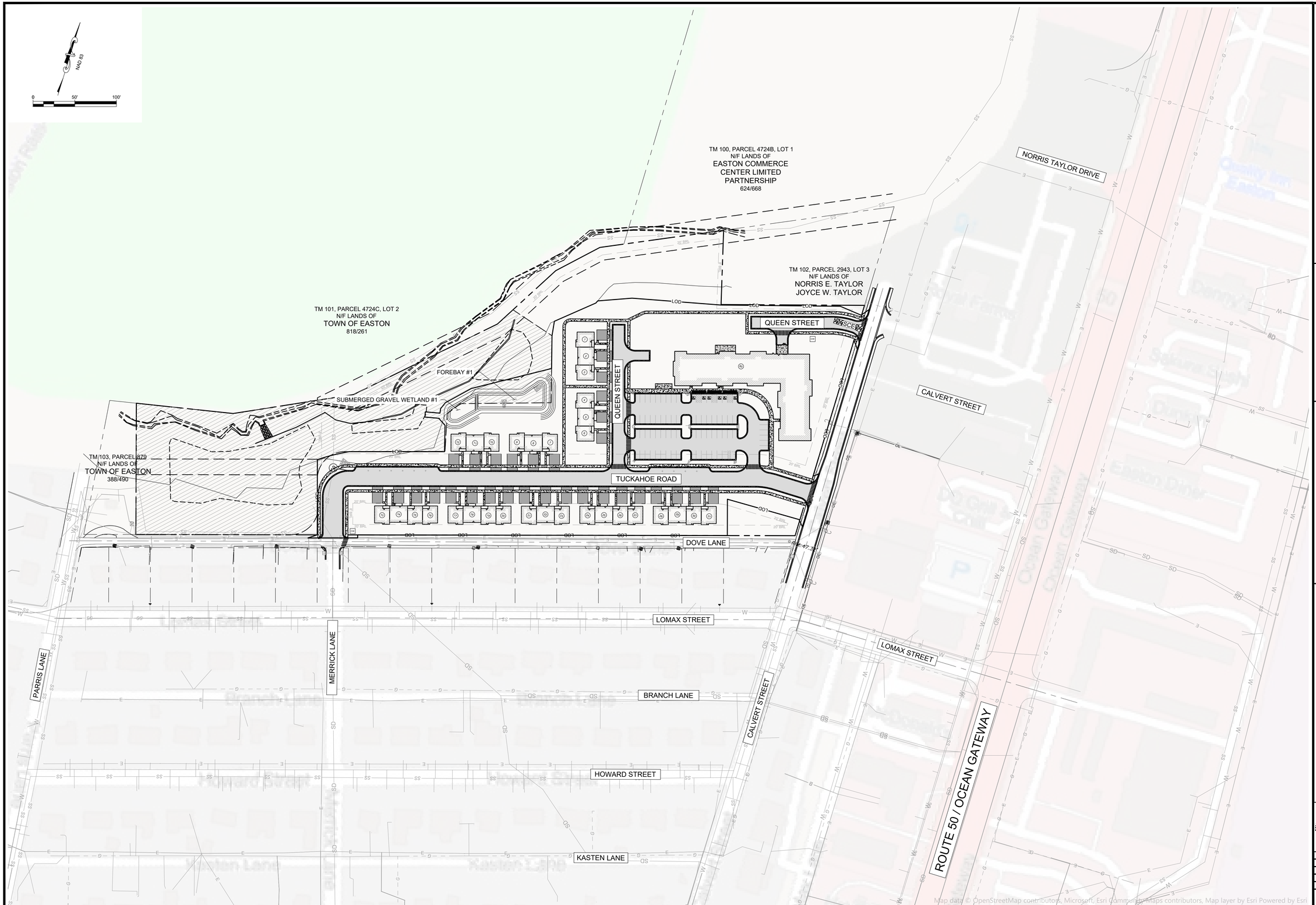
MISS UTILITY OF DELMARVA
811

DATE:	12/10/2025
SCALE:	1" = 50'
DRAWN BY:	AF
DESIGNED BY:	AF
APPROVED BY:	BBF

SHEET NO.:
C-101

FOR REVIEW

APPROVED:	APPROVED:	APPROVED:	APPROVED:
TOWN OF EASTON - TOWN ENGINEER DATE	TOWN OF EASTON PLANNING AND ZONING DATE	EASTON UTILITIES - ENGINEER DATE	TALBOT SOIL CONSERVATION DISTRICT - MANAGER DATE



PROJECT VICINITY MAP

OF THE LANDS OF

CALVERT TERRACE

TAX MAP 0103, GRID 00EA, PARCEL 885 - 928

ELECTION WARD 1, EASTON, TALBOT COUNTY, MARYLAND

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REVISIONS

REV. #	DATE	DESCRIPTION
1		

MISS UTILITY OF DELMARVA — CALL BEFORE YOU DIG — 811

DATE:	12/10/2025
SCALE:	1" = 50'
DRAWN BY:	AF
DESIGNED BY:	AF
APPROVED BY:	BBF

SHEET NO.: C-103

FOR REVIEW

APPROVED:	APPROVED:	APPROVED:	APPROVED:
TOWN OF EASTON - TOWN ENGINEER DATE	TOWN OF EASTON PLANNING AND ZONING DATE	EASTON UTILITIES - ENGINEER DATE	TALBOT SOIL CONSERVATION DISTRICT - MANAGER DATE

SOIL DATA

Map Unit Symbol	Name	Hydrologic Soil Group	K-Factor	Hydric?
FacA	Fallsington sandy loams, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain	C/D	-	Yes
HfB	Hambrook-Sassafras complex, 2 to 5 percent slopes	B	0.32	No
Up	Urban Land	-	-	No
WdcA	Woodstown sandy loam, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain	C	0.24	No
Zk	Zekiah silt loam, frequently flooded	C/D	0.37	Yes

EROSION & SEDIMENT CONTROL FEATURES

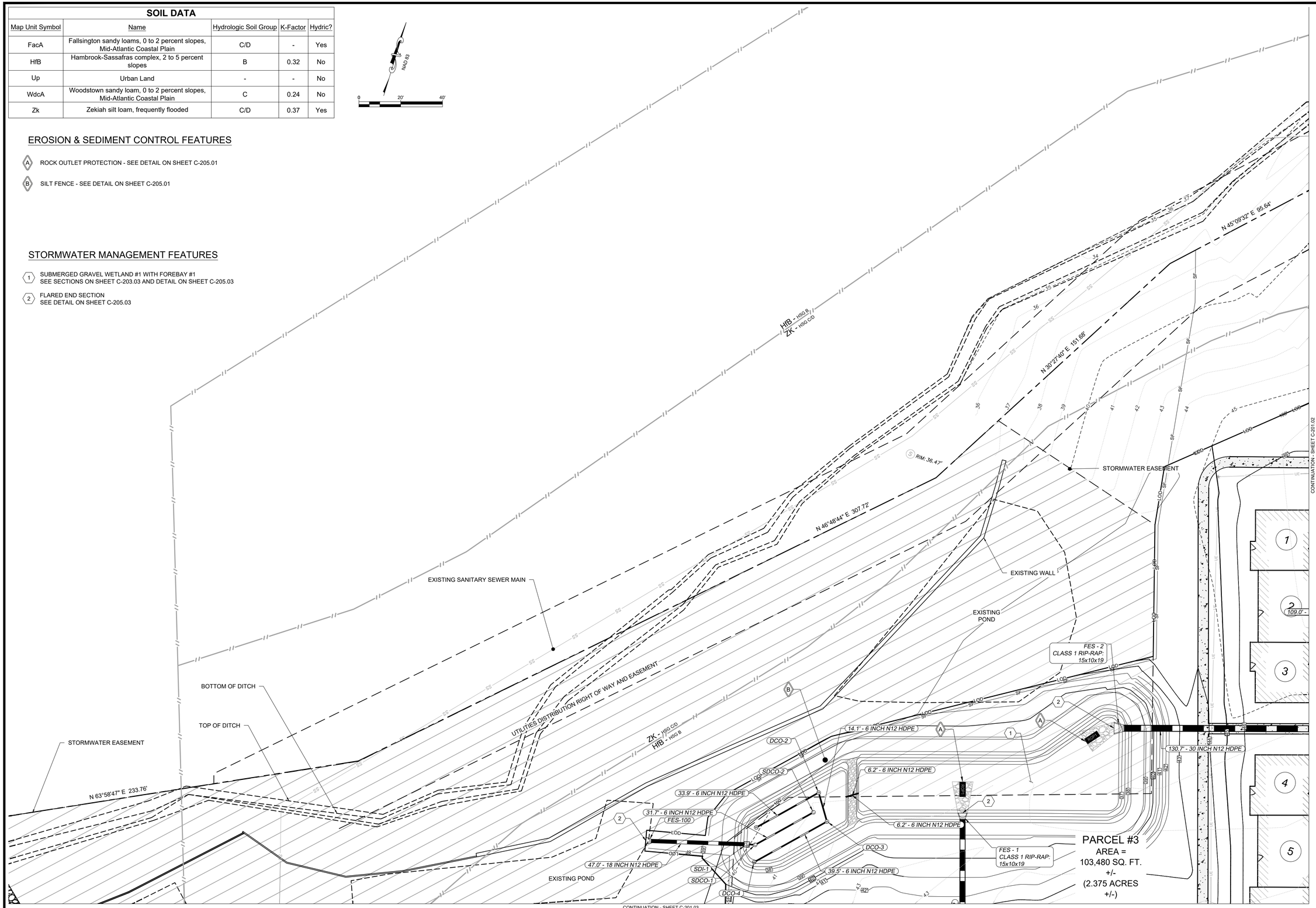
A ROCK OUTLET PROTECTION - SEE DETAIL ON SHEET C-205.01

B SILT FENCE - SEE DETAIL ON SHEET C-205.01

STORMWATER MANAGEMENT FEATURES

1 SUBMERGED GRAVEL WETLAND #1 WITH FOREBAY #1
SEE SECTIONS ON SHEET C-203.03 AND DETAIL ON SHEET C-205.03

2 FLARED END SECTION
SEE DETAIL ON SHEET C-205.03



APPROVED:	APPROVED:	APPROVED:	APPROVED:
TOWN OF EASTON - TOWN ENGINEER DATE	TOWN OF EASTON PLANNING AND ZONING DATE	EASTON UTILITIES - ENGINEER DATE	TALBOT SOIL CONSERVATION DISTRICT - MANAGER DATE

SWM & ESC PLAN

OF THE LANDS OF

CALVERT TERRACE

TAX MAP 0103, GRID 00EA, PARCEL 885 - 928
ELECTION WARD 1, EASTON, TALBOT COUNTY, MARYLAND
PREPARED FOR OSPREY PROPERTY COMPANY II LLC

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License No. 11024
Expiration Date: July 24, 2026

12-10-2025

PRELIMINARY
FOR REVIEW

REVISIONS

REV. #	DATE	DESCRIPTION
1		

MISS UTILITY OF DELMARVA
CALL BEFORE YOU DIG
811

DATE:	12/10/2025
SCALE:	1" = 20'
DRAWN BY:	AF
DESIGNED BY:	AF
APPROVED BY:	BBF

SHEET NO.: C-201.01

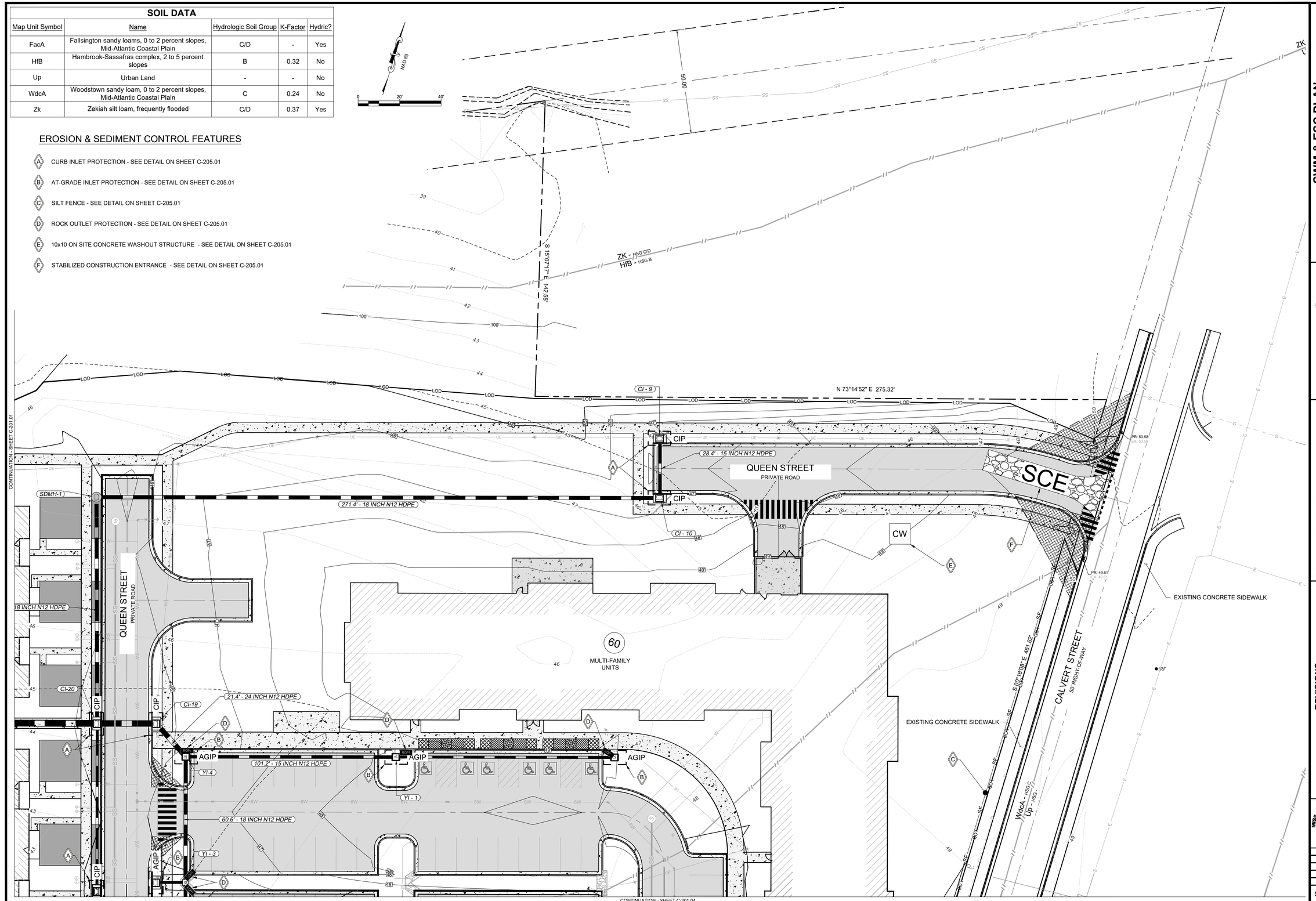
FOR REVIEW

SOIL DATA

Map Unit Symbol	Name	Hydrologic Soil Group	K-Factor	Hydric?
FacA	Fallsington sandy loams, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain	C/D	-	Yes
HfB	Hambrook-Sassafras complex, 2 to 5 percent slopes	B	0.32	No
Up	Urban Land	-	-	No
WdcA	Woodstown sandy loam, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain	C	0.24	No
Zk	Zekiah silt loam, frequently flooded	C/D	0.37	Yes

EROSION & SEDIMENT CONTROL FEATURES

- (A) CURB INLET PROTECTION - SEE DETAIL ON SHEET C-205.01
- (B) AT-GRADE INLET PROTECTION - SEE DETAIL ON SHEET C-205.01
- (C) SILT FENCE - SEE DETAIL ON SHEET C-205.01
- (D) ROCK OUTLET PROTECTION - SEE DETAIL ON SHEET C-205.01
- (E) 10x10 ON SITE CONCRETE WASHOUT STRUCTURE - SEE DETAIL ON SHEET C-205.01
- (F) STABILIZED CONSTRUCTION ENTRANCE - SEE DETAIL ON SHEET C-205.01



APPROVED:	APPROVED:	APPROVED:	APPROVED:
TOWN OF EASTON - TOWN ENGINEER DATE	TOWN OF EASTON PLANNING AND ZONING DATE	EASTON UTILITIES - ENGINEER DATE	TALBOT SOIL CONSERVATION DISTRICT - MANAGER DATE

SWM & ESC PLAN

OF THE LANDS OF

CALVERT TERRACE

TAX MAP 0103, GRID 00EA, PARCEL 885 - 928

ELECTION WARD 1, EASTON, TALBOT COUNTY, MARYLAND

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PRELIMINARY FOR REVIEW

12-10-2025

REVISIONS

REV. #	DATE	DESCRIPTION
1		

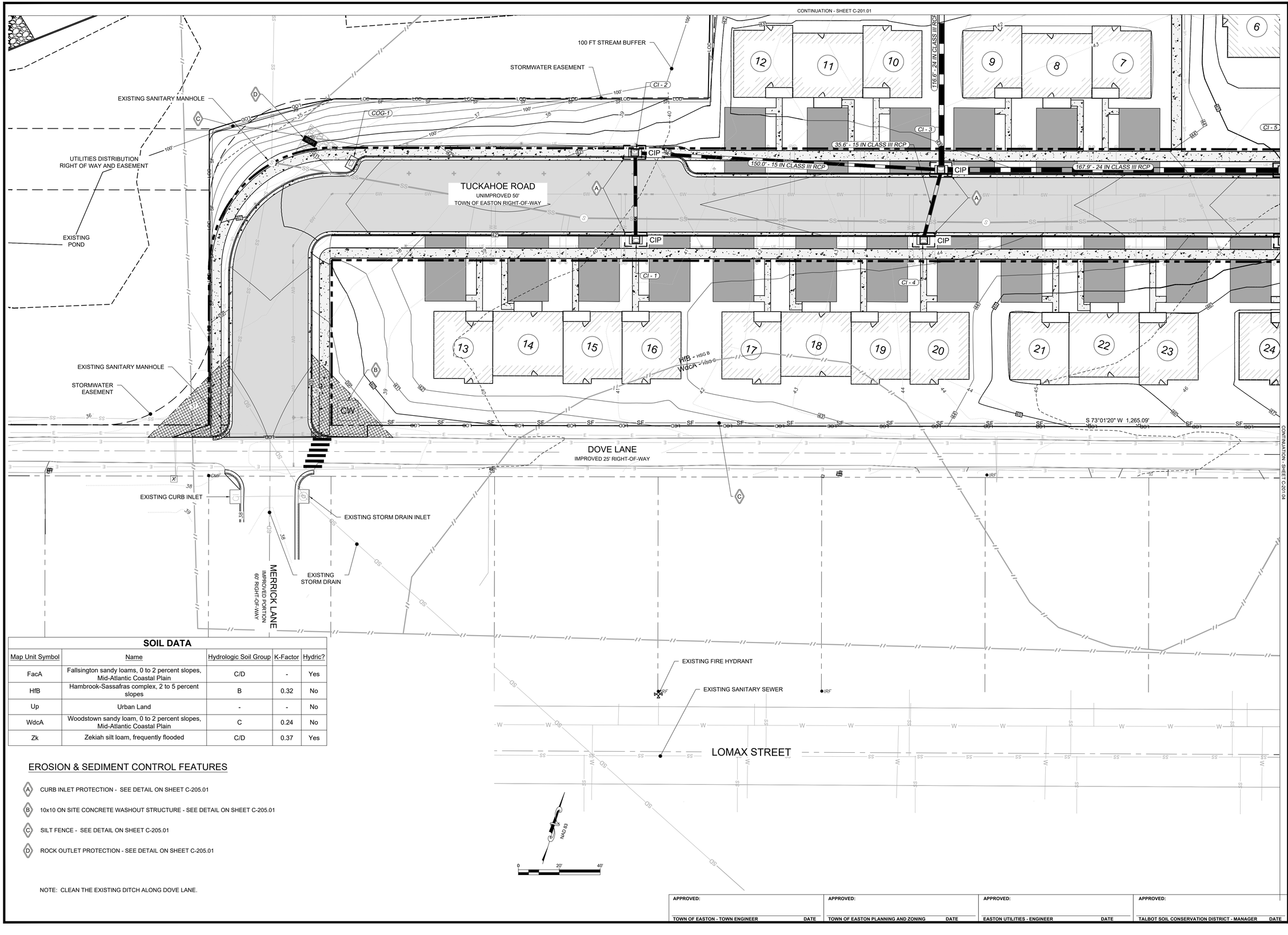
MISS UTILITY OF DELMARVA CALL BEFORE YOU DIG

811

DATE:	12/10/2025
SCALE:	1" = 20'
DRAWN BY:	AF
DESIGNED BY:	AF
APPROVED BY:	BBF

SHEET NO.: C-201.02

FOR REVIEW



SOIL DATA

Map Unit Symbol	Name	Hydrologic Soil Group	K-Factor	Hydric?
FacA	Fallsington sandy loams, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain	C/D	-	Yes
HfB	Hambrook-Sassafras complex, 2 to 5 percent slopes	B	0.32	No
Up	Urban Land	-	-	No
WdcA	Woodstown sandy loam, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain	C	0.24	No
Zk	Zekiah silt loam, frequently flooded	C/D	0.37	Yes

EROSION & SEDIMENT CONTROL FEATURES

- (A) CURB INLET PROTECTION - SEE DETAIL ON SHEET C-205.01
- (B) 10x10 ON SITE CONCRETE WASHOUT STRUCTURE - SEE DETAIL ON SHEET C-205.01
- (C) SILT FENCE - SEE DETAIL ON SHEET C-205.01
- (D) ROCK OUTLET PROTECTION - SEE DETAIL ON SHEET C-205.01

NOTE: CLEAN THE EXISTING DITCH ALONG DOVE LANE.

APPROVED:	APPROVED:	APPROVED:	APPROVED:
TOWN OF EASTON - TOWN ENGINEER DATE	TOWN OF EASTON PLANNING AND ZONING DATE	EASTON UTILITIES - ENGINEER DATE	TALBOT SOIL CONSERVATION DISTRICT - MANAGER DATE

SWM & ESC PLAN

OF THE LANDS OF

CALVERT TERRACE

TAX MAP 0103, GRID 00EA, PARCEL 885 - 928

ELECTION WARD 1, EASTON, TALBOT COUNTY, MARYLAND

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License No. 11024
Expiration Date: July 24, 2026

PRELIMINARY PLANS NOT FOR CONSTRUCTION

12-10-2025

REVISIONS

REV. #	DATE	DESCRIPTION
1		

MISS UTILITY OF DELMARVA — CALL BEFORE YOU DIG — 811

DATE:	12/10/2025
SCALE:	1" = 20'
DRAWN BY:	AF
DESIGNED BY:	AF
APPROVED BY:	BBF

SHEET NO.: C-201.03

FOR REVIEW

CONTINUATION - SHEET C-201.02

CONTINUATION - SHEET C-201.03

QUEEN STREET
PRIVATE ROAD

(68.0' - 15 INCH HYD HDPE)

TUCKAHOE ROAD
UNIMPROVED 50'
TOWN OF EASTON RIGHT-OF-WAY

DOVE LANE
IMPROVED 25' RIGHT-OF-WAY

LOMAX STREET

CALVERT STREET
50' RIGHT-OF-WAY

CI-13 | CI-14 | CI-15 | CI-16 | CI-18 | CI - 6 | CI - 7 | CI - 8

YI - 2

CIP

115.5' - 18 IN CLASS III RCP
107.8' - 18 IN CLASS III RCP
114.8' - 15 IN CLASS III RCP
49.4' - 15 IN CLASS III RCP
40.7' - 15 IN CLASS III RCP

25 | 26 | 27 | 28 | 29 | 30 | 31

HfB - HSG B
WdcA - HSG C
WdcA - HSG C
FacA - HSG C/D
FacA - HSG C
Up - HSG -

EXISTING GAS MAIN
EXISTING CONCRETE SIDEWALK
EXISTING UNDERGROUND ELECTRIC
EXISTING ELECTRIC MANHOLE
EXISTING STORM DRAIN INLET
EXISTING CONCRETE SIDEWALK
EXISTING GAS MAIN
EXISTING FIRE HYDRANT
EXISTING 6" WATER MAIN
EXISTING SANITARY SEWER
EXISTING STORM DRAIN
EXISTING 6" WATER MAIN
EXISTING SANITARY SEWER MAIN

IPF | IRF

RIM 4.32

NAD 83

0 | 20' | 40'

EROSION & SEDIMENT CONTROL FEATURES

- (A) CURB INLET PROTECTION - SEE DETAIL ON SHEET C-205.01
- (B) AT-GRADE INLET PROTECTION - SEE DETAIL ON SHEET C-205.01
- (C) SILT FENCE - SEE DETAIL ON SHEET C-205.01
- (D) ROCK OUTLET PROTECTION - SEE DETAIL ON SHEET C-205.01

NOTE: CLEAN THE EXISTING DITCH ALONG DOVE LANE.

SOIL DATA

Map Unit Symbol	Name	Hydrologic Soil Group	K-Factor	Hydric?
FacA	Fallsington sandy loams, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain	C/D	-	Yes
HfB	Hambrook-Sassafras complex, 2 to 5 percent slopes	B	0.32	No
Up	Urban Land	-	-	No
WdcA	Woodstown sandy loam, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain	C	0.24	No
Zk	Zekiah silt loam, frequently flooded	C/D	0.37	Yes

APPROVED:	APPROVED:	APPROVED:	APPROVED:
TOWN OF EASTON - TOWN ENGINEER DATE	TOWN OF EASTON PLANNING AND ZONING DATE	EASTON UTILITIES - ENGINEER DATE	TALBOT SOIL CONSERVATION DISTRICT - MANAGER DATE

SWM & ESC PLAN

OF THE LANDS OF

CALVERT TERRACE

TAX MAP 0103, GRID 00EA, PARCEL 885 - 928
ELECTION WARD 1, EASTON, TALBOT COUNTY, MARYLAND
PREPARED FOR OSPREY PROPERTY COMPANY II LLC

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PRELIMINARY
NOT FOR CONSTRUCTION
FOR REVIEW

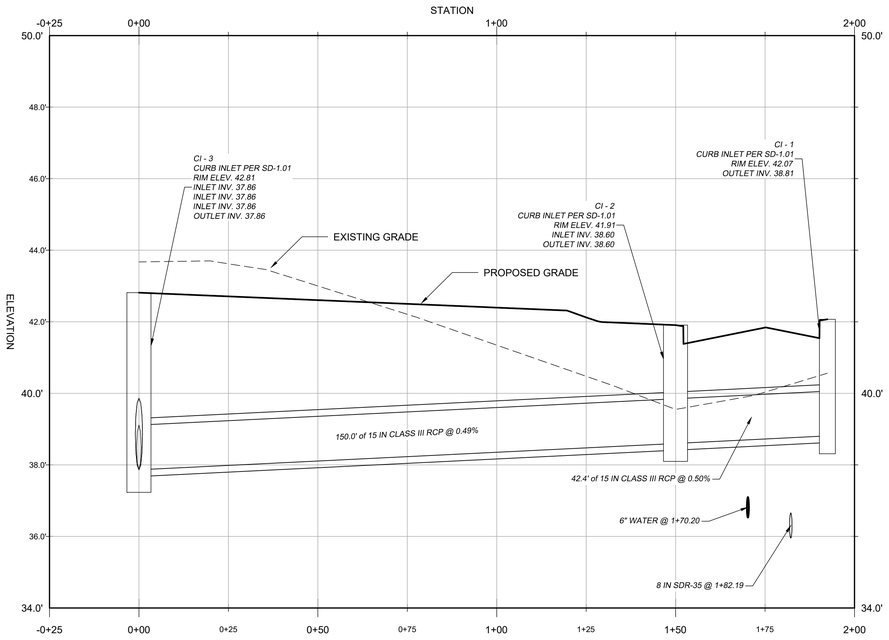
REVISIONS		
REV. #	DATE	DESCRIPTION
1		

MISS UTILITY OF DELMARVA
811

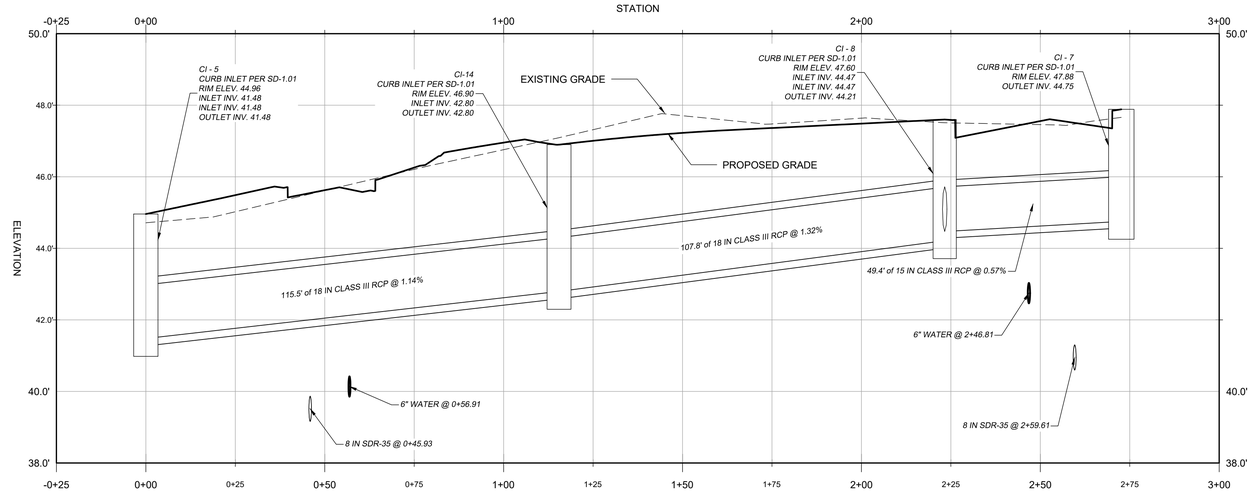
DATE:	12/10/2025
SCALE:	1" = 20'
DRAWN BY:	AF
DESIGNED BY:	AF
APPROVED BY:	BBF

SHEET NO.:
C-201.04

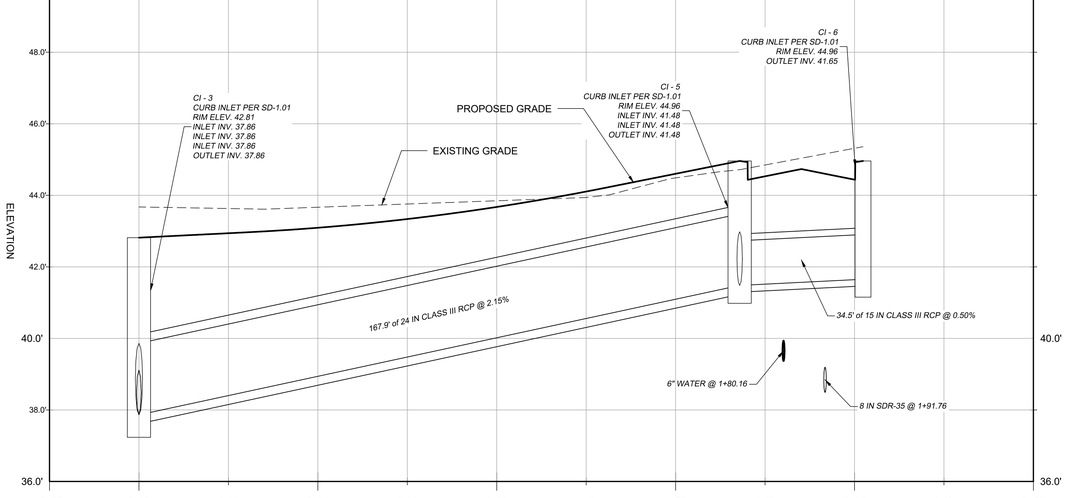
FOR REVIEW



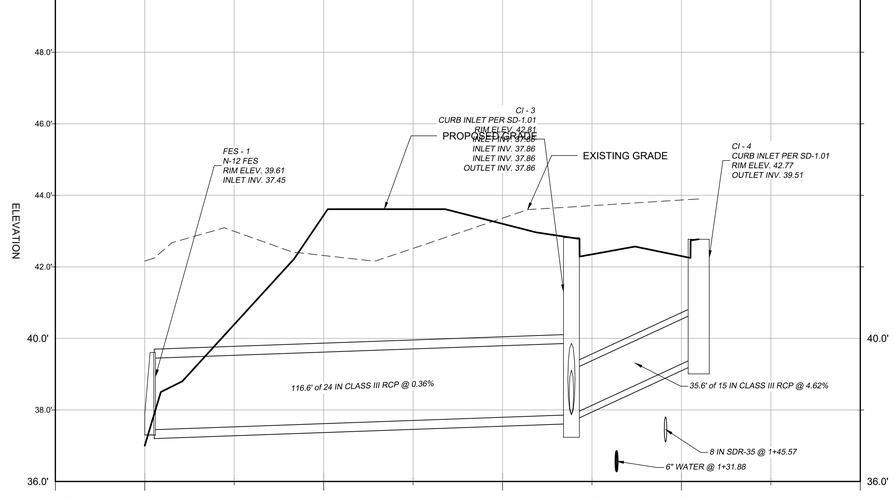
SWM - CI-1 TO CI-3
V. SCALE: 1" = 2' H. SCALE: 1" - 20'



SWM - CI-7 TO CI-5
V. SCALE: 1" = 2' H. SCALE: 1" - 20'



SWM - CI-6 TO CI-3
V. SCALE: 1" = 2' H. SCALE: 1" - 20'



SWM - CI-4 TO FES-1
V. SCALE: 1" = 2' H. SCALE: 1" - 20'

APPROVED:	APPROVED:	APPROVED:	APPROVED:
TOWN OF EASTON - TOWN ENGINEER DATE	TOWN OF EASTON PLANNING AND ZONING DATE	EASTON UTILITIES - ENGINEER DATE	TALBOT SOIL CONSERVATION DISTRICT - MANAGER DATE

SWM PROFILES

OF THE LANDS OF

CALVERT TERRACE

TAX MAP 0103, GRID 00EA, PARCEL 885 - 928
ELECTION WARD 1, EASTON, TALBOT COUNTY, MARYLAND
PREPARED FOR OSPREY PROPERTY COMPANY II LLC

RAUCH inc.
Engineering | Survey | Architecture | Environmental
Main Office: 106 N Harrison St - Easton, MD 21601
Web: www.rauch-inc.com | Email: design@raucheng.com
Phone: 410 770 8081 | Fax: 410 770 3867

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, 2026

PRELIMINARY PLAN REVIEW

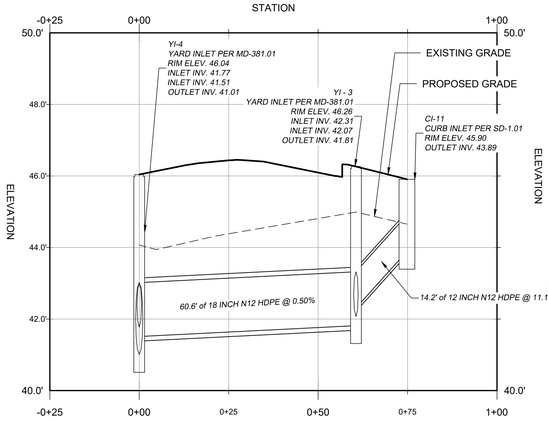
REVISIONS		
REV. #	DATE	DESCRIPTION
1		

MISS UTILITY OF DELMARVA — 811

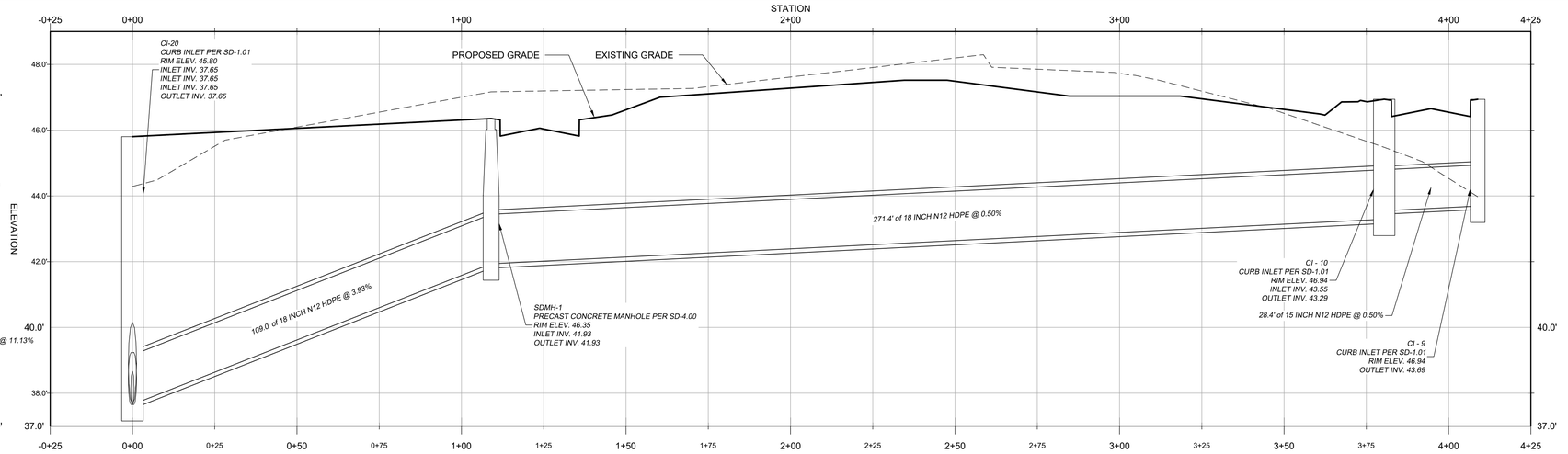
DATE:	12/10/2025
SCALE:	AS SHOWN
DRAWN BY:	AF
DESIGNED BY:	AF
APPROVED BY:	BBF

SHEET NO.: C-203.01

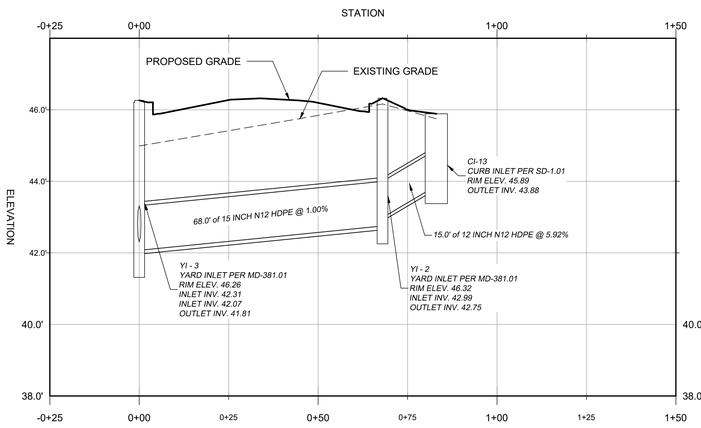
FOR REVIEW



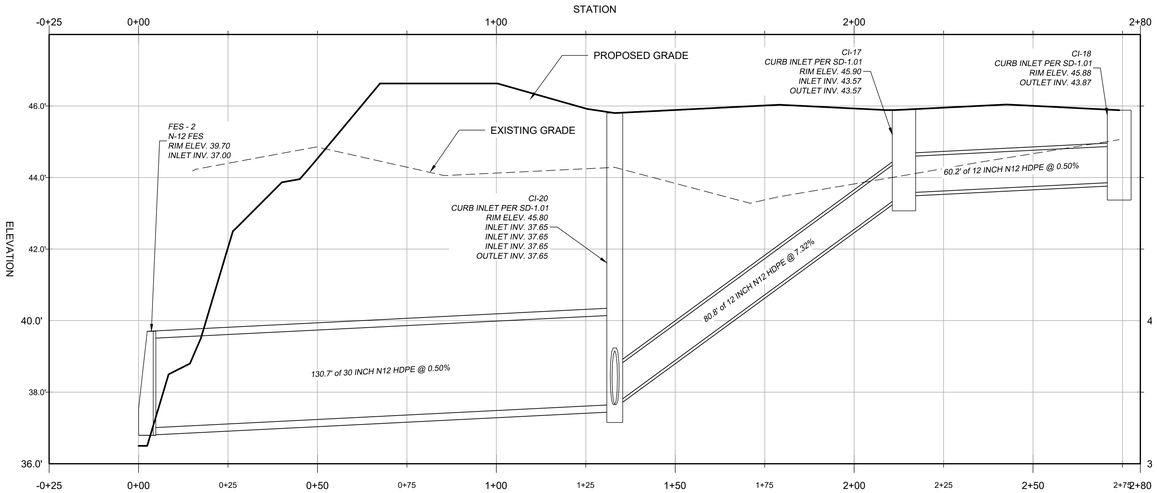
SWM - CI-11 TO YI-4
V. SCALE: 1" = 2' H. SCALE: 1" - 20'



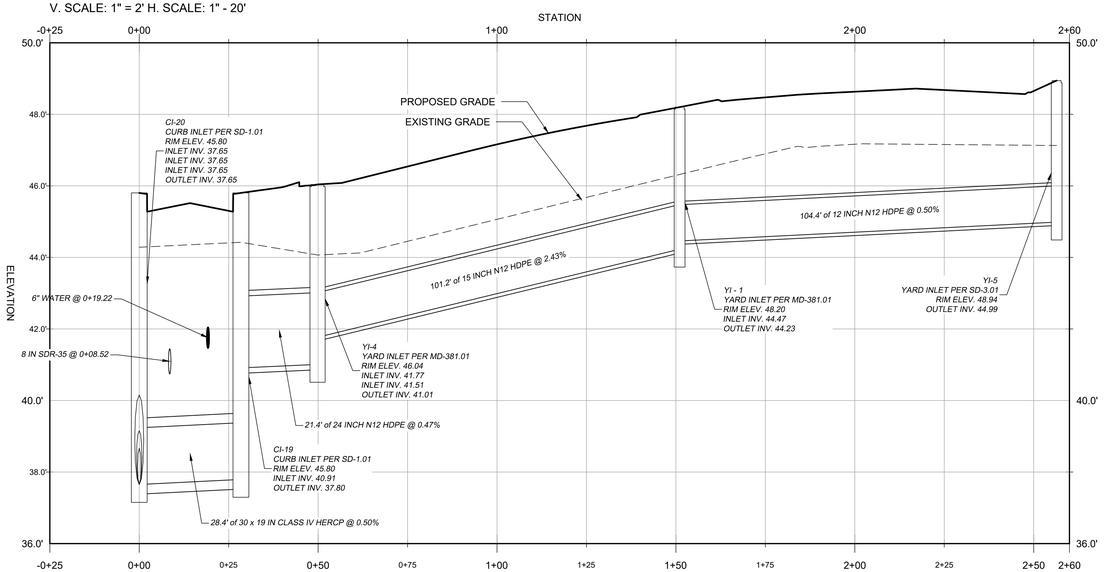
SWM - CI-9 TO CI-20
V. SCALE: 1" = 2' H. SCALE: 1" - 20'



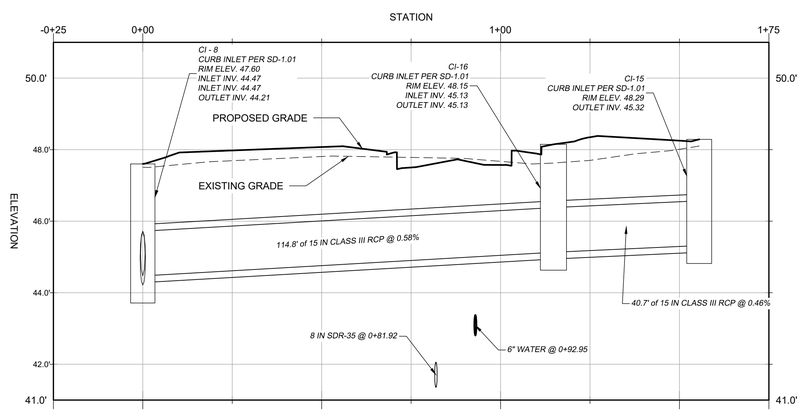
SWM - CI-13 TO YI-3
V. SCALE: 1" = 2' H. SCALE: 1" - 20'



SWM - CI-18 TO FES-2
V. SCALE: 1" = 2' H. SCALE: 1" - 20'



SWM - YI-5 TO CI-20
V. SCALE: 1" = 2' H. SCALE: 1" - 20'



SWM - CI-15 TO CI-8
V. SCALE: 1" = 2' H. SCALE: 1" - 20'

APPROVED:	APPROVED:	APPROVED:	APPROVED:
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SWM PROFILES

OF THE LANDS OF

CALVERT TERRACE

TAX MAP 0103, GRID 00EA, PARCEL 885 - 928

ELECTION WARD 1, EASTON, TALBOT COUNTY, MARYLAND

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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, 2026

PRELIMINARY PLAN REVIEW ONLY

12-10-2025

REVISIONS

REV. #	DATE	DESCRIPTION
1		

MISS UTILITY OF DELMARVA — 811

DATE:	12/10/2025
SCALE:	AS SHOWN
DRAWN BY:	AF
DESIGNED BY:	AF
APPROVED BY:	BBF

SHEET NO.: C-203.02

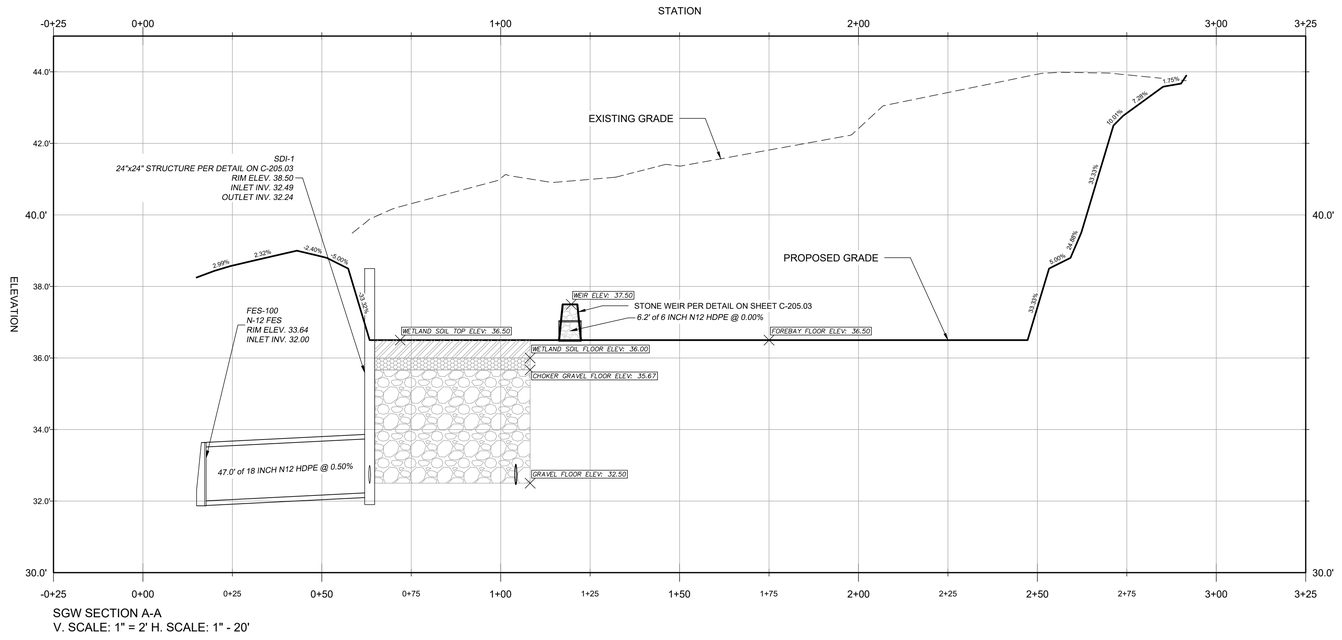
FOR REVIEW

STRUCTURE SCHEDULE
STORM SEWER

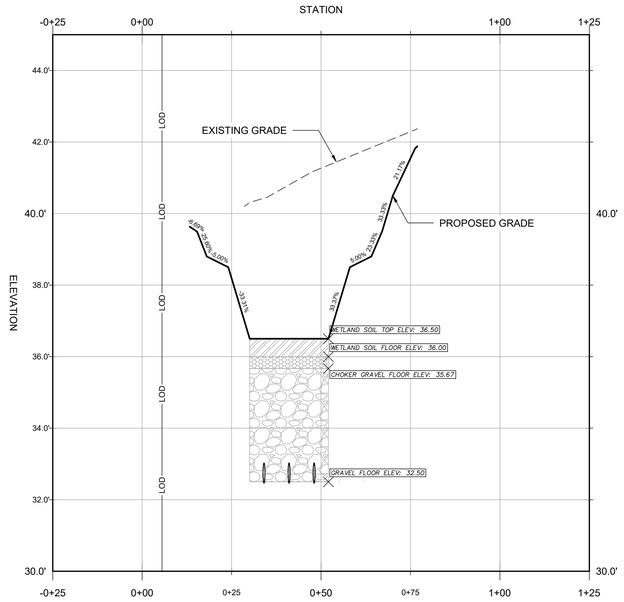
STRUCTURE NAME	LOCATION	STRUCTURE TYPE AND SIZE	CONNECTED PIPES	RIM ELEVATION
CI-11	N407043.78, E1579398.45	CURB INLET PER SD-1.01	SD-18 INV OUT = 43.89	45.90
CI-13	N406983.28, E1579416.92	CURB INLET PER SD-1.01	SD-23 INV OUT = 43.88	45.89
CI-14	N406986.16, E1579467.52	CURB INLET PER SD-1.01	SD-7 INV IN = 42.80 SD-21 INV OUT = 42.80	46.90
CI-15	N407083.45, E1579675.90	CURB INLET PER SD-1.01	SD-15 INV OUT = 45.32	48.29
CI-16	N407043.25, E1579682.49	CURB INLET PER SD-1.01	SD-15 INV IN = 45.13 SD-22 INV OUT = 45.13	48.15
CI-17	N407031.42, E1579372.51	CURB INLET PER SD-1.01	SD-24 INV IN = 43.57 SD-25 INV OUT = 43.57	45.90
CI-18	N406973.86, E1579390.04	CURB INLET PER SD-1.01	SD-24 INV OUT = 43.87	45.88
CI-19	N407117.02, E1579376.08	CURB INLET PER SD-1.01	SD-12 INV IN = 40.91 SD-26 INV OUT = 37.80	45.80
CI-20	N407108.73, E1579348.91	CURB INLET PER SD-1.01	SD-17 INV IN = 37.65 SD-26 INV IN = 37.65 SD-25 INV IN = 37.65 SD-11 INV OUT = 37.65	45.80
CI - 1	N406819.25, E1579066.14	CURB INLET PER SD-1.01	SD-1 INV OUT = 38.81	42.07
CI - 2	N406859.77, E1579053.51	CURB INLET PER SD-1.01	SD-1 INV IN = 38.60 SD-2 INV OUT = 38.60	41.91
CI - 3	N406895.84, E1579199.08	CURB INLET PER SD-1.01	SD-2 INV IN = 37.86 SD-3 INV IN = 37.86 SD-5 INV IN = 37.86 SD-4 INV OUT = 37.86	42.81
CI - 4	N406860.31, E1579200.64	CURB INLET PER SD-1.01	SD-3 INV OUT = 39.51	42.77
CI - 5	N406944.91, E1579359.65	CURB INLET PER SD-1.01	SD-21 INV IN = 41.48 SD-6 INV IN = 41.48 SD-5 INV OUT = 41.48	44.96
CI - 6	N406911.94, E1579369.75	CURB INLET PER SD-1.01	SD-6 INV OUT = 41.65	44.96
CI - 7	N406984.43, E1579607.12	CURB INLET PER SD-1.01	SD-10 INV OUT = 44.75	47.88
CI - 8	N407017.64, E1579570.61	CURB INLET PER SD-1.01	SD-10 INV IN = 44.47 SD-22 INV IN = 44.47 SD-7 INV OUT = 44.21	47.60
CI - 9	N407319.26, E1579567.78	CURB INLET PER SD-1.01	SD-20 INV OUT = 43.69	46.94
CI - 10	N407292.08, E1579576.13	CURB INLET PER SD-1.01	SD-20 INV IN = 43.55 SD-19 INV OUT = 43.29	46.94
COG-1	N406814.40, E1578922.52	COG PER MD 374.68 ON SHEET C-205.03 SEE ALSO MD 374.55-01 AND MD 374.65 ON C-205.03		41.28
DCO-1	N406974.34, E1579071.89	ADS Nyloplast Structure	UD-3 INV OUT = 32.49	36.50
DCO-2	N406999.06, E1579095.58	ADS Nyloplast Structure	UD-3 INV IN = 32.49 UD-4 INV OUT = 32.49	36.50
DCO-3	N406986.99, E1579103.41	ADS Nyloplast Structure	UD-4 INV IN = 32.49 UD-5 INV OUT = 32.49	36.50
DCO-4	N406958.21, E1579075.82	ADS Nyloplast Structure	UD-5 INV IN = 32.49	36.89
FES-100	N406953.09, E1579024.56	N-12 FES	SD-100 INV IN = 32.00	33.64
FES - 1	N407008.46, E1579164.68	N-12 FES	SD-4 INV IN = 37.45	39.61
FES - 2	N407070.70, E1579223.88	N-12 FES	SD-11 INV IN = 37.00	39.70
SDCO-1	N406966.27, E1579073.86	PVC CLEANOUT	UD-2 INV OUT = 32.49 UD-1 INV OUT = 32.49	36.50
SDCO-2	N406989.32, E1579095.94	PVC CLEANOUT	UD-2 INV IN = 32.49	36.50
SDI-1	N406965.33, E1579069.97	24"x24" STRUCTURE PER DETAIL ON C-205.03	UD-1 INV IN = 32.49 SD-100 INV OUT = 32.24	38.50
SDMH-1	N407212.82, E1579316.55	PRECAST CONCRETE MANHOLE PER SD-4.00	SD-19 INV IN = 41.93 SD-17 INV OUT = 41.93	46.35
YI-4	N407105.88, E1579394.38	YARD INLET PER MD-381.01	SD-13 INV IN = 41.77 SD-14 INV IN = 41.51 SD-12 INV OUT = 41.01	46.04
YI-5	N407166.20, E1579591.95	YARD INLET PER SD-3.01	SD-16 INV OUT = 44.99	48.94
YI - 1	N407135.43, E1579491.16	YARD INLET PER MD-381.01	SD-16 INV IN = 44.47 SD-13 INV OUT = 44.23	48.20
YI - 2	N406982.91, E1579431.92	YARD INLET PER MD-381.01	SD-23 INV IN = 42.99 SD-8 INV OUT = 42.75	46.32
				46.26

PIPE SCHEDULE
STORM SEWER

PIPE NAME	SIZE AND MATERIAL	LENGTH	SLOPE	UPSTREAM STRUCTURE AND INVERT	DOWNSTREAM STRUCTURE AND INVERT
SD-1	15 IN CLASS III RCP	42.44'	0.50%	CI - 1 INV. 38.81'	CI - 2 INV. 38.60'
SD-2	15 IN CLASS III RCP	149.97'	0.49%	CI - 2 INV. 38.60'	CI - 3 INV. 37.86'
SD-4	24 IN CLASS III RCP	116.59'	0.36%	CI - 3 INV. 37.86'	FES - 1 INV. 37.45'
SD-3	15 IN CLASS III RCP	35.56'	4.62%	CI - 4 INV. 39.51'	CI - 3 INV. 37.86'
SD-10	15 IN CLASS III RCP	49.35'	0.57%	CI - 7 INV. 44.75'	CI - 8 INV. 44.47'
SD-7	18 IN CLASS III RCP	107.79'	1.32%	CI - 8 INV. 44.21'	CI-14 INV. 42.80'
SD-5	24 IN CLASS III RCP	167.90'	2.15%	CI - 5 INV. 41.48'	CI - 3 INV. 37.86'
SD-6	15 IN CLASS III RCP	34.48'	0.50%	CI - 6 INV. 41.65'	CI - 5 INV. 41.48'
SD-8	15 INCH N12 HDPE	68.00'	1.00%	YI - 2 INV. 42.75'	YI - 3 INV. 42.07'
SD-15	15 IN CLASS III RCP	40.74'	0.46%	CI-15 INV. 45.32'	CI-16 INV. 45.13'
SD-14	18 INCH N12 HDPE	60.57'	0.50%	YI - 3 INV. 41.81'	YI-4 INV. 41.51'
SD-13	15 INCH N12 HDPE	101.20'	2.43%	YI - 1 INV. 44.23'	YI-4 INV. 41.77'
SD-12	24 INCH N12 HDPE	21.42'	0.47%	YI-4 INV. 41.01'	CI-19 INV. 40.91'
SD-11	30 INCH N12 HDPE	130.68'	0.50%	CI-20 INV. 37.65'	FES - 2 INV. 37.00'
SD-20	15 INCH N12 HDPE	28.43'	0.50%	CI - 9 INV. 43.69'	CI - 10 INV. 43.55'
SD-19	18 INCH N12 HDPE	271.42'	0.50%	CI - 10 INV. 43.29'	SDMH-1 INV. 41.93'
SD-17	18 INCH N12 HDPE	109.01'	3.93%	SDMH-1 INV. 41.93'	CI-20 INV. 37.65'
SD-9	6 INCH N12 HDPE	6.24'	0.00%	INV. 36.50'	INV. 36.50'
UD-3	6 INCH N12 HDPE	33.91'	0.00%	DCO-1 INV. 32.49'	DCO-2 INV. 32.49'
UD-4	6 INCH N12 HDPE	14.06'	0.00%	DCO-2 INV. 32.49'	DCO-3 INV. 32.49'
UD-5	6 INCH N12 HDPE	39.54'	0.00%	DCO-3 INV. 32.49'	DCO-4 INV. 32.49'
UD-2	6 INCH N12 HDPE	31.67'	0.00%	SDCO-1 INV. 32.49'	SDCO-2 INV. 32.49'
SD-100	18 INCH N12 HDPE	47.03'	0.50%	SDI-1 INV. 32.24'	FES-100 INV. 32.00'
UD-1	6 INCH N12 HDPE	4.00'	0.00%	SDCO-1 INV. 32.49'	SDI-1 INV. 32.49'
SD-22	15 IN CLASS III RCP	114.77'	0.58%	CI-16 INV. 45.13'	CI - 8 INV. 44.47'
SD-21	18 IN CLASS III RCP	115.49'	1.14%	CI-14 INV. 42.80'	CI - 5 INV. 41.48'
SD-16	12 INCH N12 HDPE	104.38'	0.50%	YI-5 INV. 44.99'	YI - 1 INV. 44.47'
SD-18	12 INCH N12 HDPE	14.24'	11.13%	CI-11 INV. 43.89'	YI - 3 INV. 42.31'
SD-23	12 INCH N12 HDPE	15.01'	5.92%	CI-13 INV. 43.88'	YI - 2 INV. 42.99'
SD-24	12 INCH N12 HDPE	60.16'	0.50%	CI-18 INV. 43.87'	CI-17 INV. 43.57'
SD-25	12 INCH N12 HDPE	80.83'	7.32%	CI-17 INV. 43.57'	CI-20 INV. 37.65'
SD-26	30 x 19 IN CLASS IV HERCP	28.42'	0.50%	CI-19 INV. 37.80'	CI-20 INV. 37.65'



SGW SECTION A-A
V. SCALE: 1" = 2' H. SCALE: 1" - 20'



SGW SECTION B-B
V. SCALE: 1" = 2' H. SCALE: 1" - 20'

APPROVED:	APPROVED:	APPROVED:	APPROVED:
TOWN OF EASTON - TOWN ENGINEER DATE	TOWN OF EASTON PLANNING AND ZONING DATE	EASTON UTILITIES - ENGINEER DATE	TALBOT SOIL CONSERVATION DISTRICT - MANAGER DATE

SWM SCHEDULES AND SECTIONS

OF THE LANDS OF

CALVERT TERRACE

TAX MAP 0103, GRID 00EA, PARCEL 885 - 928
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License No. 11024
Expiration Date: July 24, 2026

PRELIMINARY PLAN REVIEW

REVISIONS			
REV. #	DATE	DESCRIPTION	
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MISS UTILITY OF DELMARVA — 811

DATE:	12/10/2025
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DRAWN BY:	AF
DESIGNED BY:	AF
APPROVED BY:	BBF

SHEET NO.: C-203.03

FOR REVIEW

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
DORCHESTER COUNTY DPW	410-228-2920
DORCHESTER COUNTY SCD	410-228-3733
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.

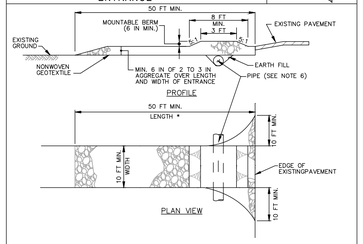
ANY PROPERTY LINE MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE REPLACED SOLELY AT THE CONTRACTORS EXPENSE.

CLEARING & GRUBBING NOTES :

1. ALL TREES TO BE LOGGED AND STUMPS TO BE REMOVED.
2. ALL AREAS/HOLES WHERE A STUMP ONCE WAS IS TO BE FILLED IN TO MEET SURROUNDING GRADES.
3. CLEARING AND GRUBBING SHALL INCLUDE ALL TREES. BUSH, DEBRIS, ROAD MATERIAL AND ORGANIC MATERIALS TO BE REMOVED.

DETAIL B-1 STABILIZED CONSTRUCTION ENTRANCE

STANDARD SYMBOL: SCE



CONSTRUCTION SPECIFICATIONS

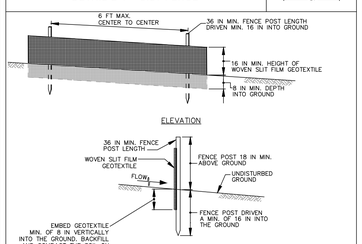
1. PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (*)50 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
2. PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE, MAINTAINING 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.

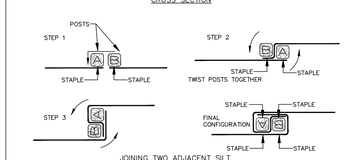
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL E-1 SILT FENCE

STANDARD SYMBOL: SF





JOINING TWO ADJACENT SILT FENCE SECTIONS (TOP VIEW)

1 OF 2

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

DETAIL E-1 SILT FENCE

STANDARD SYMBOL: SF

CONSTRUCTION SPECIFICATIONS

1. USE WOOD POSTS 1¾ x 1¾ ± ⅛ INCH (MINIMUM) SQUARE CUT OF SOUND QUALITY HARDWOOD. AS AN ALTERNATIVE TO WOODEN POST USE STANDARD "T" OR "U" SECTION STEEL POSTS WEIGHING NOT LESS THAN 1 POUND PER LINEAR FOOT.
2. USE 36 INCH MINIMUM POSTS DRIVEN 16 INCH MINIMUM INTO GROUND NO MORE THAN 6 FEET APART.
3. USE WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H–1 MATERIALS AND FASTEN GEOTEXTILE SECURELY TO UPSLOPE SIDE OF FENCE POSTS WITH WIRE TIES OR STAPLES AT TOP AND MID–SECTION.
4. PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H–1 MATERIALS.
5. EMBED GEOTEXTILE A MINIMUM OF 8 INCHES VERTICALLY INTO THE GROUND. BACKFILL AND COMPACT THE SOIL ON BOTH SIDES OF FABRIC.
6. WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, TWIST, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL.
7. EXTEND BOTH ENDS OF THE SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SILT FENCE.
8. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL FENCE.

2 OF 2

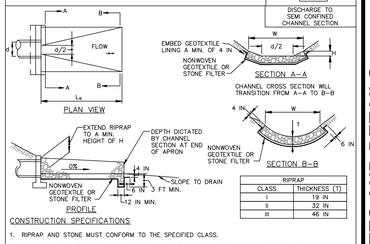
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL D-4-1-A ROCK OUTLET PROTECTION I

STANDARD SYMBOL: ROP1

DISCHARGE TO SEMI CONFINED CHANNEL SECTION



RIPRAP	
CLASS	THICKNESS (T)
I	19 IN
II	32 IN
III	46 IN

CONSTRUCTION SPECIFICATIONS

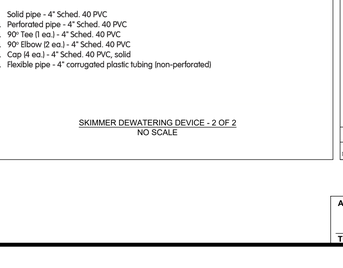
1. RIPRAP AND STONE MUST CONFORM TO THE SPECIFIED CLASS.
2. USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H–1 MATERIALS, AND PROTECT FROM PUNCTURING, CUTTING, OR TEARING. REPAIR ANY DAMAGE OTHER THAN AN OCCASIONAL SMALL HOLE BY PLACING ANOTHER PIECE OF GEOTEXTILE OVER THE DAMAGED PART OR BY COMPLETELY REPLACING THE GEOTEXTILE. PROVIDE A MINIMUM OF ONE FOOT OVERLAP FOR ALL REPAIRS AND FOR JOINING TWO PIECES OF GEOTEXTILE TOGETHER.
3. PREPARE THE SUBGRADE FOR GEOTEXTILE OR STONE FILTER (⅜ TO 13 INCH STONE FOR 6 INCH MINIMUM DEPTH) AND RIPRAP TO THE REQUIRED LINES AND GRADES. COMPACT ANY FILL REQUIRED IN THE SUBGRADE TO A DENSITY OF APPROXIMATELY THAT OF THE SURROUNDING UNDISTURBED MATERIAL.
4. EXTEND GEOTEXTILE AT LEAST 6 INCHES BEYOND EDGES OF RIPRAP AND EMBED AT LEAST 4 INCHES AT SIDES OF THE RIPRAP.
5. CONSTRUCT RIPRAP OUTLET TO FULL COURSE THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO AVOID DISPLACEMENT OF UNDERLYING MATERIALS. PLACE STONE FOR RIPRAP OUTLET IN A MANNER THAT WILL ENSURE THAT IT IS REASONABLY HOMOGENOUS WITH THE SMALLER STONES AND SPALLS FILLING THE VOIDS BETWEEN THE LARGER STONES. PLACE RIPRAP IN A MANNER TO PREVENT DAMAGE TO THE STONE FILTER BLANKET OR GEOTEXTILE. HAND PLACE TO THE EXTENT NECESSARY.
6. WHERE NO ENDWALL IS USED, CONSTRUCT THE UPSTREAM END OF THE APRON SO THAT THE WIDTH IS TWO TIMES THE DIAMETER OF THE OUTLET PIPE, AND EXTEND THE STONE UNDER THE OUTLET BY A MINIMUM OF 18 INCHES.
7. CONSTRUCT APRON WITH 0% SLOPE ALONG ITS LENGTH AND WITHOUT OBSTRUCTIONS. PLACE STONE SO THAT IT BLENDS IN WITH EXISTING GROUND.
8. MAINTAIN LINE, GRADE, AND CROSS SECTION. KEEP OUTLET FREE OF EROSION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. AFTER HIGH FLOWS INSPECT FOR SCOUR AND DISLODGED RIPRAP. MAKE NECESSARY REPAIRS IMMEDIATELY.

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

DETAIL E-9-2 AT-GRADE INLET PROTECTION

STANDARD SYMBOL: AGIP



CONSTRUCTION SPECIFICATIONS

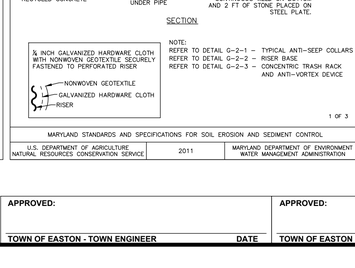
1. USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H–1 MATERIALS.
2. LIFT GRATE AND WRAP WITH NONWOVEN GEOTEXTILE TO COMPLETELY COVER ALL OPENINGS. SECURE WITH WIRE TIES AND SET GRATE BACK IN PLACE.
3. PLACE CLEAN ¾ TO 1½ INCH STONE OR EQUIVALENT RECYCLED CONCRETE 6 INCHES THICK ON THE GRATE.
4. STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE CLOGGING. 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

DETAIL E-9-3 CURB INLET PROTECTION

STANDARD SYMBOL: CIP



CONSTRUCTION SPECIFICATIONS

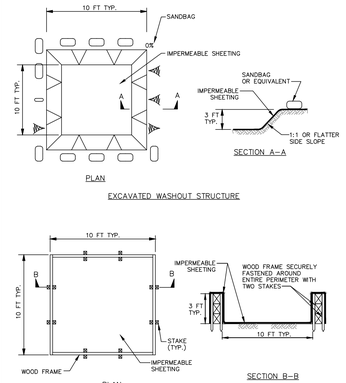
1. USE NOMINAL 2 INCH x 4 INCH LUMBER
2. USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H–1 MATERIALS.
3. NAIL THE 2x4 WEIR TO 9 INCH LONG VERTICAL SPACERS (MAXIMUM 6 FEET APART).
4. ATTACH A CONTINUOUS PIECE OF ¼ INCH GALVANIZED HARDWARE CLOTH, WITH A MINIMUM WIDTH OF 30 INCHES AND A MINIMUM LENGTH 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 BEYOND 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 ¾ TO 1½ 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 CLOGGING. 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

DETAIL H-6 ONSITE CONCRETE WASHOUT STRUCTURE

STANDARD SYMBOL: CWS



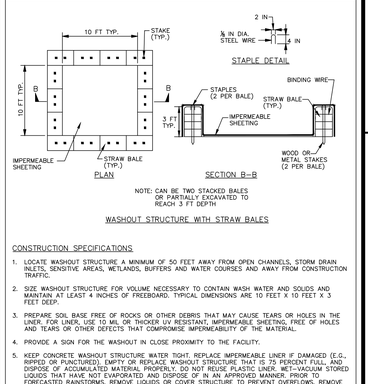
1 OF 2

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

DETAIL H-6 ONSITE CONCRETE WASHOUT STRUCTURE

STANDARD SYMBOL: CWS



CONSTRUCTION SPECIFICATIONS

1. LOCATE WASHOUT STRUCTURE A MINIMUM OF 50 FEET AWAY FROM OPEN CHANNELS, STORM DRAIN INLETS, SENSITIVE AREAS, WETLANDS, BUFFERS AND WATER COURSES AND AWAY FROM CONSTRUCTION TRAFFIC.
2. SIZE WASHOUT STRUCTURE FOR VOLUME NECESSARY TO CONTAIN WASH WATER AND SOLIDS AND MAINTAIN AT LEAST 4 INCHES OF FREEBOARD. TYPICAL DIMENSIONS ARE 10 FEET X 10 FEET X 3 FEET DEEP.
3. PREPARE SOIL BASE FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE LINER. FOR LINER, USE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEETING, FREE OF HOLES AND TEARS OR OTHER DEFECTS THAT COMPROMISE IMPERMEABILITY OF THE MATERIAL.
4. PROVIDE A SIGN FOR THE WASHOUT IN CLOSE PROXIMITY TO THE FACILITY.
5. KEEP CONCRETE WASHOUT STRUCTURE WATER TIGHT. REPLACE IMPERMEABLE LINER IF DAMAGED (E.G., RIPPED OR PUNCTURED). EMPTY OR REPLACE WASHOUT STRUCTURE THAT IS 75 PERCENT FULL, AND DISPOSE OF ACCUMULATED MATERIAL PROPERLY. DO NOT REUSE PLASTIC LINER. WET–VACUUM STORED LIQUIDS THAT HAVE NOT EVAPORATED AND DISPOSE OF IN AN APPROVED MANNER. PRIOR TO FORECASTED RAINSTORMS, REMOVE LIQUIDS OR COVER STRUCTURE TO PREVENT OVERFLOWS. REMOVE HARDENED SOLIDS, WHOLE OR BROKEN UP, FOR DISPOSAL OR RECYCLING. MAINTAIN RUNOFF DIVERSION AROUND EXCAVATED WASHOUT STRUCTURE UNTIL STRUCTURE IS REMOVED.

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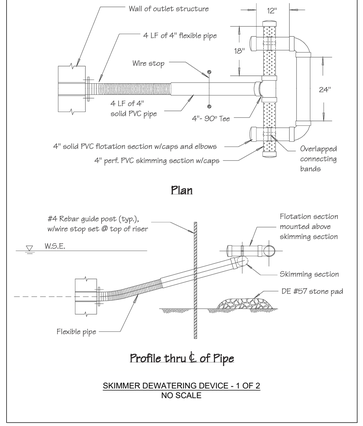
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION



SKIMMER DEWATERING DEVICE - 1 OF 2
NO SCALE

Construction Notes:

1. Pipe flotation section shall be solvent welded to ensure an airtight assembly. Contractor to conduct a test to check for leaks prior to installation.
2. Skimmer section shall have (12) rows of 1/2" dia. holes, 1-1/4" on center. If additional filtration is necessary, the filtering media shall consist of a Type GD-II geotextile fabric wrapped around the perforated portion of the skimmer and attached with plastic snap ties, bands, etc.
3. Flexible pipe shall be inserted into solid pipe and fastened with (2) #8 wood screws.
4. At a minimum, the structure shall be inspected after each rain and repairs made as needed. If vandalism is a problem, more frequent inspection may be necessary.
5. Construction operations shall be carried out in such a manner that erosion and water pollution are minimized.
6. The structure shall only be removed when the contributing drainage area has been properly stabilized.

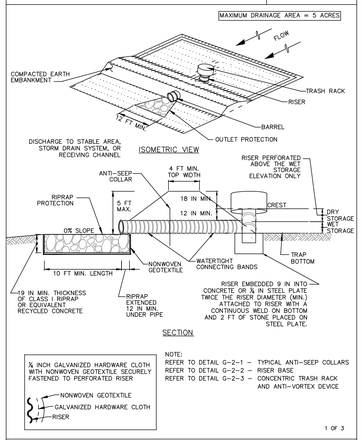
Materials:

1. Solid pipe - 4" Sched. 40 PVC
2. Perforated pipe - 4" Sched. 40 PVC
3. 90° Tee (1 ea.) - 4" Sched. 40 PVC
4. 90° Elbow (2 ea.) - 4" Sched. 40 PVC
5. Cap (4 ea.) - 4" Sched. 40 PVC, solid
6. Flexible pipe - 4" corrugated plastic tubing (non-perforated)

SKIMMER DEWATERING DEVICE - 2 OF 2
NO SCALE

DETAIL G-1-1 PIPE OUTLET SEDIMENT TRAP ST-I

STANDARD SYMBOL: ST-I



NOTE:
REFER TO DETAIL G–2–1 – TYPICAL ANTI–SEEP COLLARS
REFER TO DETAIL G–2–2 – RISER BASE
REFER TO DETAIL G–2–3 – CONCENTRIC TRASH RACK AND ANTI–VORTEX DEVICE

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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

DETAIL G-1-1 PIPE OUTLET SEDIMENT TRAP ST-I

STANDARD SYMBOL: ST-I

CONSTRUCTION SPECIFICATIONS

1. CONSTRUCT TRAP IN SUCH A MANNER THAT EROSION AND WATER POLLUTION ARE AVOIDED.
2. CLEAR, GRUB, AND STRIP ANY VEGETATION AND ROOT MAT FROM THE AREA UNDER THE EMBANKMENT AND TRAP BOTTOM.
3. PERFORATE THE RISER WITH 1 INCH DIAMETER HOLES SPACED 6 INCHES ON CENTER WITH THE LOWEST PERFORATIONS AT THE WET STORAGE ELEVATION OR PROVIDE A HORIZONTAL OR VERTICAL DRAW–DOWN DEVICE PERFORATED ACCORDING TO APPROVED PLAN. DO NOT PERFORATE THE RISER WITHIN 6 INCHES OF THE TOP OF THE HORIZONTAL BARREL.
4. SET RISER/BARREL ASSEMBLY PRIOR TO EMBANKMENT CONSTRUCTION. MAKE ALL PIPE CONNECTIONS WATERTIGHT. OFFSET RISER FROM EMBANKMENT TO ACCOMODATE PLACEMENT OF THE TRASH RACK. ANCHOR THE RISER WITH EITHER A REINFORCED CONCRETE BASE OR STEEL PLATE BASE TO PREVENT FLOTATION. MAKE CONCRETE BASES AT LEAST TWICE THE RISER DIAMETER AND 18 INCHES THICK WITH THE RISER EMBEDDED 9 INCHES.
5. USE FILL MATERIAL FREE OF ROOTS, WOODY VEGETATION, OVERSIZED STONES, ROCKS, ORGANIC MATERIAL, OR OTHER OBJECTIONABLE MATERIAL FOR THE EMBANKMENT.
6. HAND COMPACT IN 4 INCH LAYERS FILL MATERIAL AROUND THE PIPE SPILLWAY. PLACE A MINIMUM OF 2 FEET OF HAND COMPACTED BACKFILL OVER THE PIPE SPILLWAY BEFORE CROSSING IT WITH CONSTRUCTION EQUIPMENT.
7. CONSTRUCT TOP OF EMBANKMENT 1 FOOT MINIMUM ABOVE RISER CREST. COMPACT THE EMBANKMENT BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
8. MAKE ALL CUT AND FILL SLOPES 2:1 OR FLATTER.
9. WRAP THE RISER WITH ¼ INCH GALVANIZED HARDWARE CLOTH THEN WRAP WITH NONWOVEN GEOTEXTILE. DO NOT WRAP WITH MORE THAN ONE LAYER OF GEOTEXTILE. EXTEND HARDWARE CLOTH AND GEOTEXTILE AT LEAST 6 INCHES ABOVE THE HIGHEST PERFORATIONS AND AT LEAST 6 INCHES BELOW THE LOWEST PERFORATIONS. OVERLAP, FOLD AND FASTEN WHERE ENDS OF GEOTEXTILE COME TOGETHER TO PREVENT BYPASS. REPLACE GEOTEXTILE AS NECESSARY TO PREVENT CLOGGING.
10. USE STRAPS OR CONNECTING BANDS AT THE TOP AND BOTTOM OF THE GEOTEXTILE TO HOLD THE GEOTEXTILE AND HARDWARE CLOTH IN PLACE.
11. USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H–1 MATERIALS.
12. STABILIZE THE EMBANKMENT AND INTERIOR SLOPES WITH SEED AND MULCH. STABILIZE POINTS OF CONCENTRATED INFLOW AS SHOWN ON APPROVED PLAN.
13. CONSTRUCT AND MAINTAIN THE OUTLET ACCORDING TO THE APPROVED PLAN AND IN SUCH A MANNER THAT EROSION AT OR BELOW THE OUTLET DOES NOT OCCUR.
14. REMOVE SEDIMENT AND RESTORE TRAP TO ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO CLEANOUT ELEVATION (50% OF WET STORAGE DEPTH). DEPOSIT REMOVED SEDIMENT IN AN APPROVED AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE. KEEP POINTS OF INFLOW AND OUTFLOW AS WELL AS INTERIOR OF THE TRAP FREE FROM EROSION, AND REMOVE ACCUMULATED DEBRIS. MAINTAIN EMBANKMENTS TO CONTINUOUSLY MEET REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B–4 VEGETATIVE STABILIZATION. REMOVE ANY TREES, BRUSH, OR OTHER WOODY VEGETATION GROWING ON EMBANKMENT OR NEAR PRINCIPAL SPILLWAY. MAINTAIN LINE, GRADE, AND CROSS SECTION. MAINTAIN WATER TIGHT CONNECTIONS. REPLACE GEOTEXTILE AROUND PERFORATED RISER IF DRY STORAGE VOLUME DOES NOT DRAIN DOWN WITHIN 10 HOURS.
15. WHEN DEWATERING TRAP, PASS REMOVED WATER THROUGH AN APPROVED SEDIMENT CONTROL PRACTICE.
16. UPON REMOVAL, GRADE AND STABILIZE THE AREA OCCUPIED BY TRAP.

2 OF 3

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

DETAIL G-1-1 PIPE OUTLET SEDIMENT TRAP ST-I

STANDARD SYMBOL: ST-I

PIPE OUTLET SEDIMENT TRAP ST–I, TRAP NO._____		
DRAINAGE AREA – INITIAL		ACRES
DRAINAGE AREA – INTERIM		ACRES
DRAINAGE AREA – FINAL		ACRES
TOTAL STORAGE REQUIRED		CF
TOTAL STORAGE PROVIDED		CF
WET STORAGE REQUIRED		CF
WET STORAGE PROVIDED		CF
DRY STORAGE REQUIRED		CF
DRY STORAGE PROVIDED		CF
TRAP BOTTOM ELEVATION		FT
TRAP BOTTOM DIMENSIONS		FT x FT
RISER CREST (DRY STORAGE) ELEVATION		FT
OUTLET (WET STORAGE) ELEVATION		FT
CLEANOUT ELEVATION		FT
TOP OF EMBANKMENT ELEVATION		FT
SIDE SLOPE		H: V RATIO
EMBANKMENT TOP WIDTH		FT
PRINCIPAL SPILLWAY MATERIAL (BARREL, RISER, ANTI–SEEP COLLAR)		
RISER DIAMETER		IN
BARREL DIAMETER		IN
TRASH RACK DIAMETER		IN
TRASH RACK HEIGHT		IN
ANTI–SEEP COLLAR DIMENSIONS		FT
OUTLET PROTECTION – LENGTH		FT
OUTLET PROTECTION – WIDTH		FT
OUTLET

Table B.1: Temporary Seeding for Site Stabilization

Plant Species	Seeding Rate [1/] lb/ac	Seeding Rate [1/] lb/1000 ft²	Seeding Depth [2/] (inches)	Recommended Seeding Dates by Plant Hardiness Zone [3/] 5b and 6a	6b	7a and 7b
Cool-Season Grasses						
Annual Ryegrass (*Lolium perenne ssp. multiflorum*)	40	1.0	0.5	Mar 15 to May 31; Aug 1 to Sep 30	Mar 1 to May 15; Aug 1 to Oct 15	Feb 15 to Apr 30; Aug 15 to Nov 30
Barley (*Hordeum vulgare*)	96	2.2	1.0	Mar 15 to May 31; Aug 1 to Sep 30	Mar 1 to May 15; Aug 1 to Oct 15	Feb 15 to Apr 30; Aug 15 to Nov 30
Oats (*Avena sativa*)	72	1.7	1.0	Mar 15 to May 31; Aug 1 to Sep 30	Mar 1 to May 15; Aug 1 to Oct 15	Feb 15 to Apr 30; Aug 15 to Nov 30
Wheat (*Triticum aestivum*)	120	2.8	1.0	Mar 15 to May 31; Aug 1 to Sep 30	Mar 1 to May 15; Aug 1 to Oct 15	Feb 15 to Apr 30; Aug 15 to Nov 30
Cereal Rye (*Secale cereale*)	112	2.8	1.0	Mar 15 to May 31; Aug 1 to Oct 31	Mar 1 to May 15; Aug 1 to Nov 15	Feb 15 to Apr 30; Aug 15 to Dec 15
Warm-Season Grasses						
Foxtail Millet (*Setaria italica*)	30	0.7	0.5	Jun 1 to Jul 31	May 16 to Jul 31	May 1 to Aug 14
Pearl Millet (*Pennisetum glaucum*)	20	0.5	0.5	Jun 1 to Jul 31	May 16 to Jul 31	May 1 to Aug 14

NOTES:

1/ Seeding rates for the warm-season grasses are in pounds of Pure Live Seed (PLS). Actual planting rates shall be adjusted to reflect percent seed germination and purity, as tested. Adjustments are usually not needed for the cool-season grasses.

Seeding rates listed above are for temporary seedings, when planted alone. When planted as a nurse crop with permanent seed mixes, use 1/3 of the seeding rate listed above for barley, oats, and wheat. For smaller-seeded grasses (annual ryegrass, pearl millet, foxtail millet), do not exceed more than 5% (by weight) of the overall permanent seeding mix. Cereal rye generally should not be used as a nurse crop, unless planting will occur in very late fall beyond the seeding dates for other temporary seedings. Cereal rye has allelopathic properties that inhibit the germination and growth of other plants. If it must be used as a nurse crop, seed at 1/3 of the rate listed above.

Oats are the recommended nurse crop for warm-season grasses.

2/ For sandy soils, plant seeds at twice the depth listed above.
3/ The planting dates listed are averages for each Zone and may require adjustment to reflect local conditions, especially near the boundaries of the zone.

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, restabilize 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.

EROSION AND SEDIMENT CONTROL STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

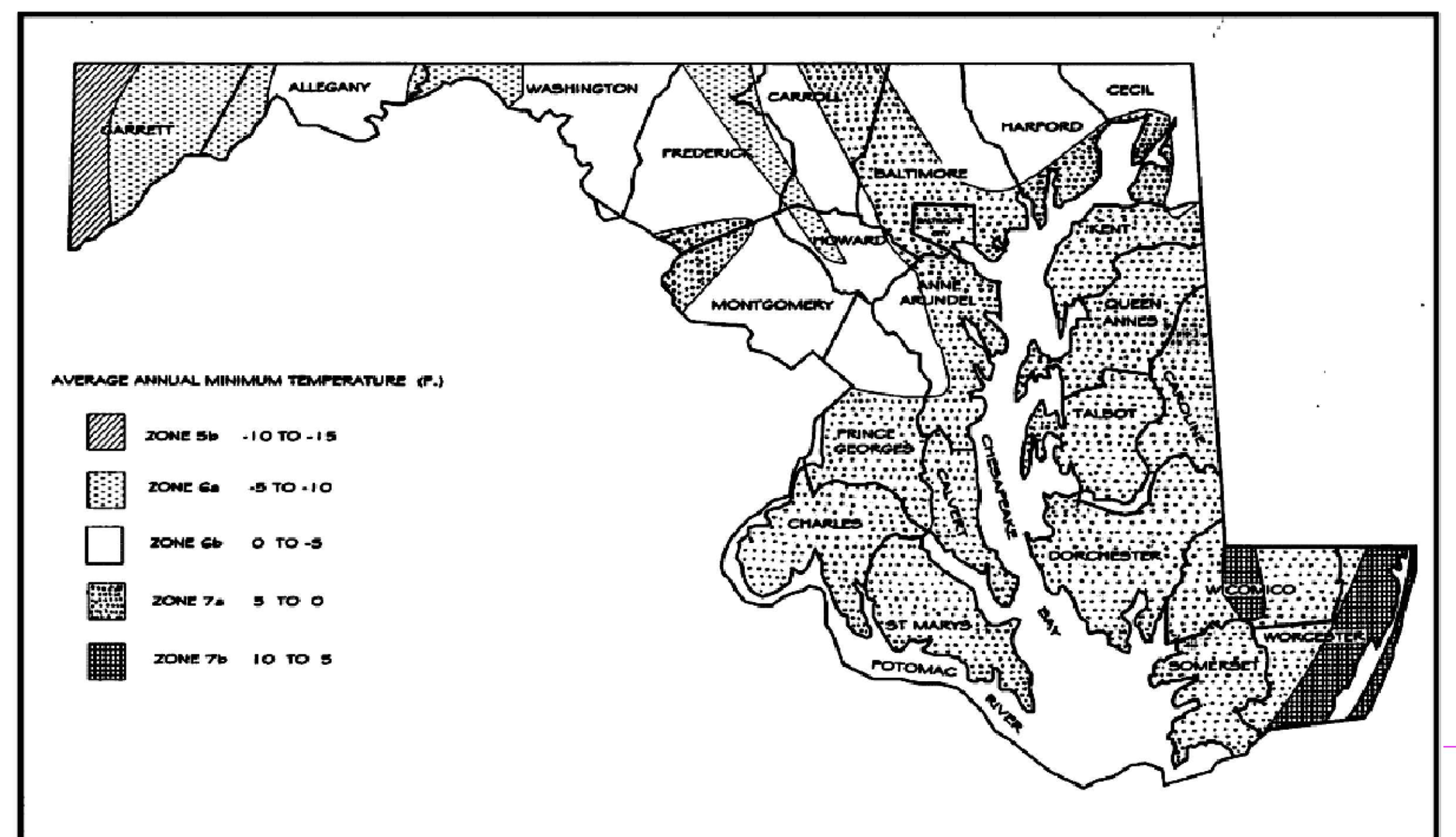
1. Contractor shall install soil erosion and sediment control devices prior to any grading. Following initial disturbance or re-disturbance, permanent or temporary stabilization shall be completed within three (3) calendar days as to the surface of all perimeter controls, dikes, swales, ditches, perimeter 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.

No.	Species	Appl. Rate (lbs./ac.)	Seeding Dates	Seeding Depths	Fertilizer Rate (10-20-20)	Lime Rate
Seed Mixture (For Hardiness Zone 7a) (From Table B.1)						
	ANNUAL RYEGRASS	50#	2/15 - 4/30 8/15 - 11/30	½"	436 lb/ac 10 lb/ 1000 sf	2 tons/ac 90 lb/ 1000 sf
	BARLEY OATS WHEAT CEREAL RYE	96# 72# 120# 112#	2/15 - 4/30 / 8/15 - 11/30 2/15 - 4/30 / 8/15 - 11/30 2/15 - 4/30 / 8/15 - 11/30 2/15 - 4/30 / 8/15 - 12/15	1" 1" 1" 1"		
	FOXTAIL MILLET PEARL MILLET	30# 20#	5/1 - 8/14 5/1 - 8/14	½" ½"		

6. Mulching shall be unchopped, unrotted, small grain straw applied at a rate of 2-2½ 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.

No.	Species	Appl Rate (lbs/ac)	Seeding Dates	Seeding Depths	Fertilizer Rate (10-20-20) N	P2O5	K2O	Lime Rate
Seed Mixture (For Hardiness Zone 7a) (From Table B.3)								
7	CREEPING RED FESCUE KENTUCKY BLUEGRASS	60# 15#	3/1 - 5/15 8/15 - 10/15	1/4" - 1/2"	45 lb/ac 1lb/ 1000 sf	90 lb/ac 2lb/ 1000 sf	90 lb/ac 2lb/ 1000 sf	2 tons/ac 90 lb/ 1000 sq
8	TALL FESCUE	100#	3/1 - 5/15 8/15 - 10/15	1/4" - 1/2"				
9	TALL FESCUE KENTUCKY BLUEGRASS PERRENIAL RYEGRASS	60# 40# 20#	3/1 - 5/15 8/15 - 10/15	1/4" - 1/2"				

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.



Plant Hardiness Zones delineate areas where a species can be successfully established based on average annual minimum temperatures.

Figure B.3: U.S.D.A. Plant Hardiness Zones

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 lovegrass 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 1½ 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 hydroseeding) 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.

B-4-3 STANDARDS AND SPECIFICATIONS
FOR
SEEDING AND MULCHING

Definition

The application of seed and mulch to establish vegetative cover.

Purpose

To protect disturbed soils from erosion during and at the end of construction.

Conditions Where Practice Applies

To the surface of all perimeter controls, slopes, and any disturbed area not under active grading.

Criteria

A. Seeding

1. Specifications
   a. All seed must meet the requirements of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory. All seed used must have been tested within the 6 months immediately preceding the date of sowing such material on any project. Refer to Table B.4 regarding the quality of seed. Seed tags must be available upon request to the inspector to verify type of seed and seeding rate.
   b. Mulch alone may be applied between the fall and spring seeding dates only if the ground is frozen.The appropriate seeding mixture must be applied when the ground thaws.
   c. Inoculants: The inoculant for treating legume seed in the seed mixtures must be a pure culture of nitrogen fixing bacteria prepared specifically for the species. Inoculants must not be used later than the date indicated on the container. Add fresh inoculants as directed on the package. Use four times the recommended rate when hydroseeding. Note: It is very important to keep inoculant as cool as possible until used. Temperatures above 75 to 80 degrees Fahrenheit can weaken bacteria and make the inoculant less effective. Sod or seed must not be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phyto-toxic materials.
2. Application
   a. Dry Seeding: This includes use of conventional drop or broadcast spreaders.
   i. Incorporate seed into the subsoil at the rates prescribed on Temporary Seeding Table B.1, Permanent Seeding Table B.3, or site-specific seeding summaries.
   ii. Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction. Roll the seeded area with a weighted roller to provide good seed to soil contact.
   b. Drill or Cultipacker Seeding: Mechanized seeders that apply and cover seed with soil.
   i. Cultipacking seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil covering. Seedbed must be firm after planting.
   ii. Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction.
   c. Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer).
   i. If fertilizer is being applied at the time of seeding, the application rates should not exceed the following: nitrogen, 100 pounds per acre total of soluble nitrogen; P2O5 (phosphorous), 200 pounds per acre; K2O (potassium), 200 pounds per acre.
   i. Lime: Use only ground agricultural limestone (up to 3 tons per acre may be applied by hydroseeding). Normally, not more than 2 tons are applied by hydroseeding at any one time. Do not use burnt or hydrated lime when hydroseeding.
   iii. Mix seed and fertilizer on site and seed immediately and without interruption.
   iv. When hydroseeding do not incorporate seed into the soil.

B. Mulching
1. Mulch Materials (in order of preference)
   a. Straw consisting of thoroughly threshed wheat, rye, oat, or barley and reasonably bright in color. Straw is to be free of noxious weed seeds as specified in the Maryland Seed Law and not musty, moldy, caked, decayed, or excessively dusty. Note: Use only sterile straw mulch in areas where one species of grass is desired.
   b. Wood Cellulose Fiber Mulch (WCFM) consisting of specially prepared wood cellulose processed into a uniform fibrous physical state.
   i. WCFM is to be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniformly spread slurry.
   ii. WCFM, including dye, must contain no germination or growth inhibiting factors.
   iii. WCFM materials are to be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer and other additives to form a homogeneous slurry. The mulch material must form a blotter-like ground cover, on application, having moisture absorption and percolation properties and must cover and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings.
   iv. WCFM material must not contain elements or compounds at concentration levels that will be phyto-toxic.
   v. WCFM must conform to the following physical requirements: fiber length of approximately 10 millimeters, diameter approximately 1 millimeter, pH range of 4.0 to 8.5, ash content of 1.6 percent maximum and water holding capacity of 90 percent minimum.

2. Application
   a. Apply mulch to all seeded areas immediately after seeding.
   b. When straw mulch is used, spread it over all seeded areas at the rate of 2 tons per acre to a uniform loose depth of 1 to 2 inches. Apply mulch to achieve a uniform distribution and depth so that the soil surface is not exposed. When using a mulch anchoring tool, increase the application rate to 2.5 tons per acre.
   c. Wood cellulose fiber used as mulch must be applied at a net dry weight of 1500 pounds per acre. Mix the wood cellulose fiber with water to attain a mixture with a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.
3. Anchoring
   a. Perform mulch anchoring immediately following application of mulch to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending upon the size of the area and erosion hazard:
   i. A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface a minimum of 2 inches. This practice is most effective on large areas, but is limited to flatter slopes where equipment can operate safely. If used on sloping land, this practice should follow the contour.
   ii. Wood cellulose fiber may be used for anchoring straw. Apply the fiber binder at a net dry weight of 750 pounds per acre. Mix the wood cellulose fiber with water at a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.
   iii. Synthetic binders such as Acrylic DLR (Agro-Tack), DCA-70, Petroset, Terra Tax II, Terra Tack AR or other approved equal may be used. Follow application rates as specified by the manufacturer. Application of liquid binders needs to be heavier at the edges where wind catches mulch, such as in valleys and on crests of banks. Use of asphalt binders is strictly prohibited.
   iv. Lightweight plastic netting may be stapled over the mulch according to manufacturer recommendations. Netting is usually available in rolls 4 to 15 feet wide and 300 to 3,000 feet long.

APPROVED:	APPROVED:	APPROVED:	APPROVED:
TOWN OF EASTON - TOWN ENGINEER DATE	TOWN OF EASTON PLANNING AND ZONING DATE	EASTON UTILITIES - ENGINEER DATE	TALBOT SOIL CONSERVATION DISTRICT - MANAGER DATE

ESC NOTES AND DETAILS

OF THE LANDS OF

CALVERT TERRACE

TAX MAP 0103, GRID 00EA, PARCEL 885 - 928
ELECTION WARD 1, EASTON, TALBOT COUNTY, MARYLAND
PREPARED FOR OSPREY PROPERTY COMPANY II LLC

RAUCH inc.
Engineering | Survey | Architecture | Environmental
Main Office: 106 N Harrison St - Easton, MD 21601
Web: www.rauch-inc.com | Email: design@raucheng com
Phone: 410 770 9081 | Fax: 410 770 3667

PRELIMINARY PLANS FOR REVIEW ONLY

STATE OF MARYLAND ROBERT D. RAUCH 11024 PROFESSIONAL ENGINEER

12-10-2025

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, 2026

REVISIONS

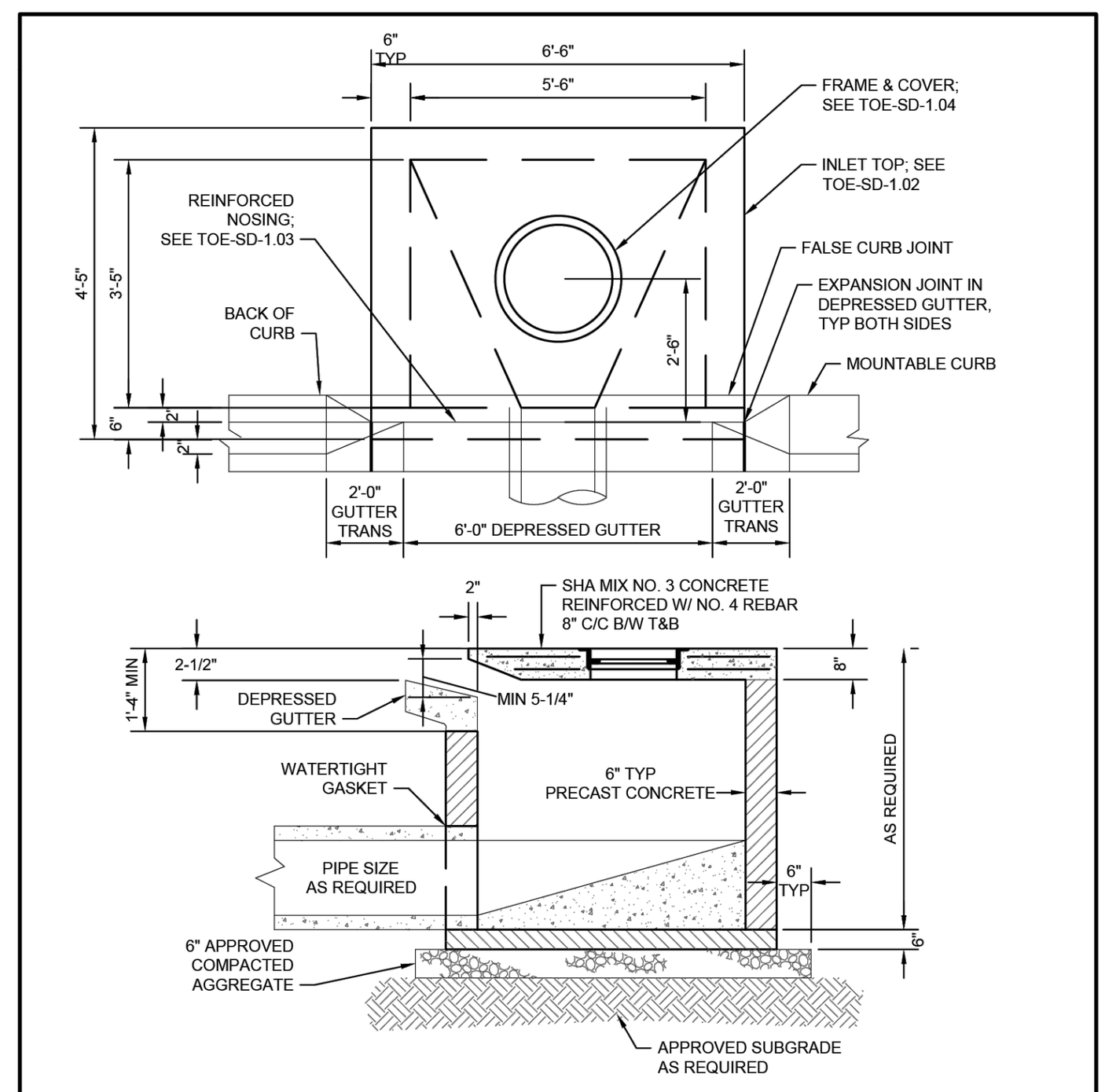
REV. #	DATE	DESCRIPTION
1		

MISS UTILITY OF DELMARVA CALL BEFORE YOU DIG
811

DATE:	12/10/2025
SCALE:	N/A
DRAWN BY:	AF
DESIGNED BY:	AF
APPROVED BY:	BBF

SHEET NO.: **C-205.02**

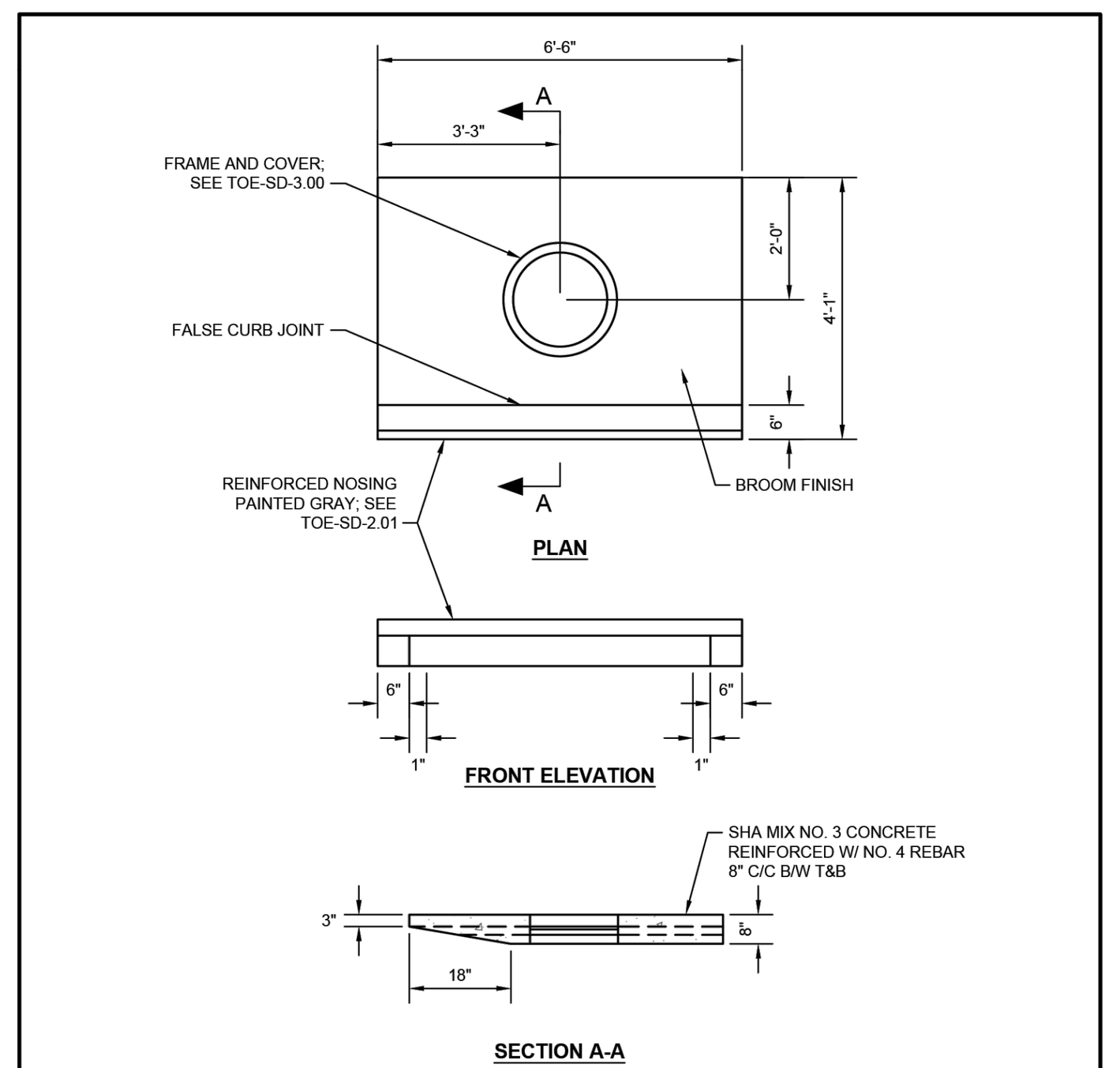
FOR REVIEW



NOTES:

1. PROVIDE LIFT HOOKS IN UNEXPOSED SURFACES TO ACCOMMODATE FIELD PLACEMENT.

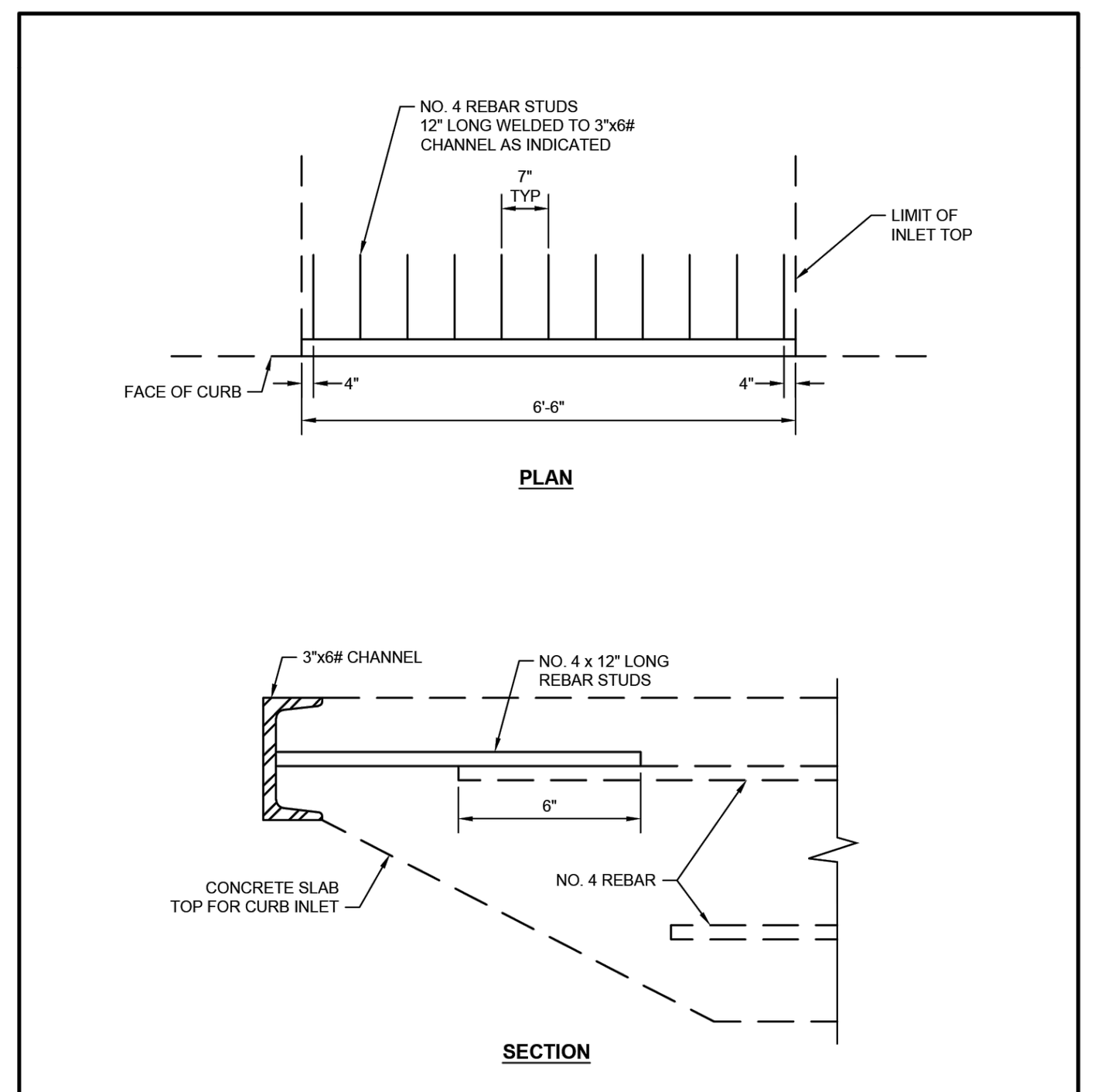
APPROVED	TOWN OF EASTON STANDARD DETAILS
RICK VAN EMBURGH TOWN ENGINEER	**CURB INLET**
ISSUED: JULY, 2025	STANDARD NO: **TOE-SD-1.01**



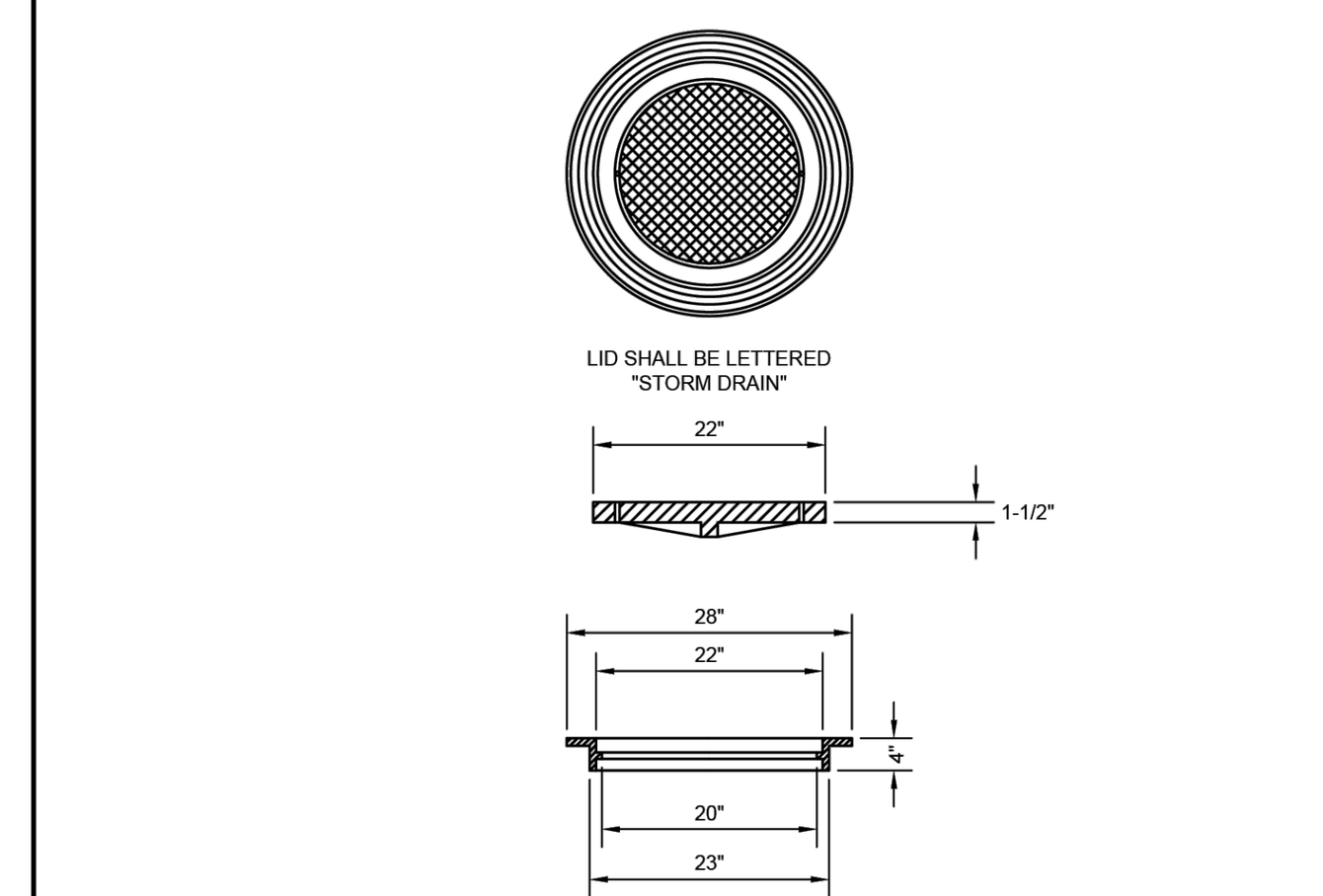
NOTES:

1. LIFTING DEVICE SHALL BE DETERMINED BY CONTRACTOR, NO DEVICES SHALL BE PERMITTED IN EXPOSED TOP SURFACES.

APPROVED	TOWN OF EASTON STANDARD DETAILS
RICK VAN EMBURGH TOWN ENGINEER	**INLET TOP**
ISSUED: JULY, 2025	STANDARD NO: **TOE-SD-1.02**



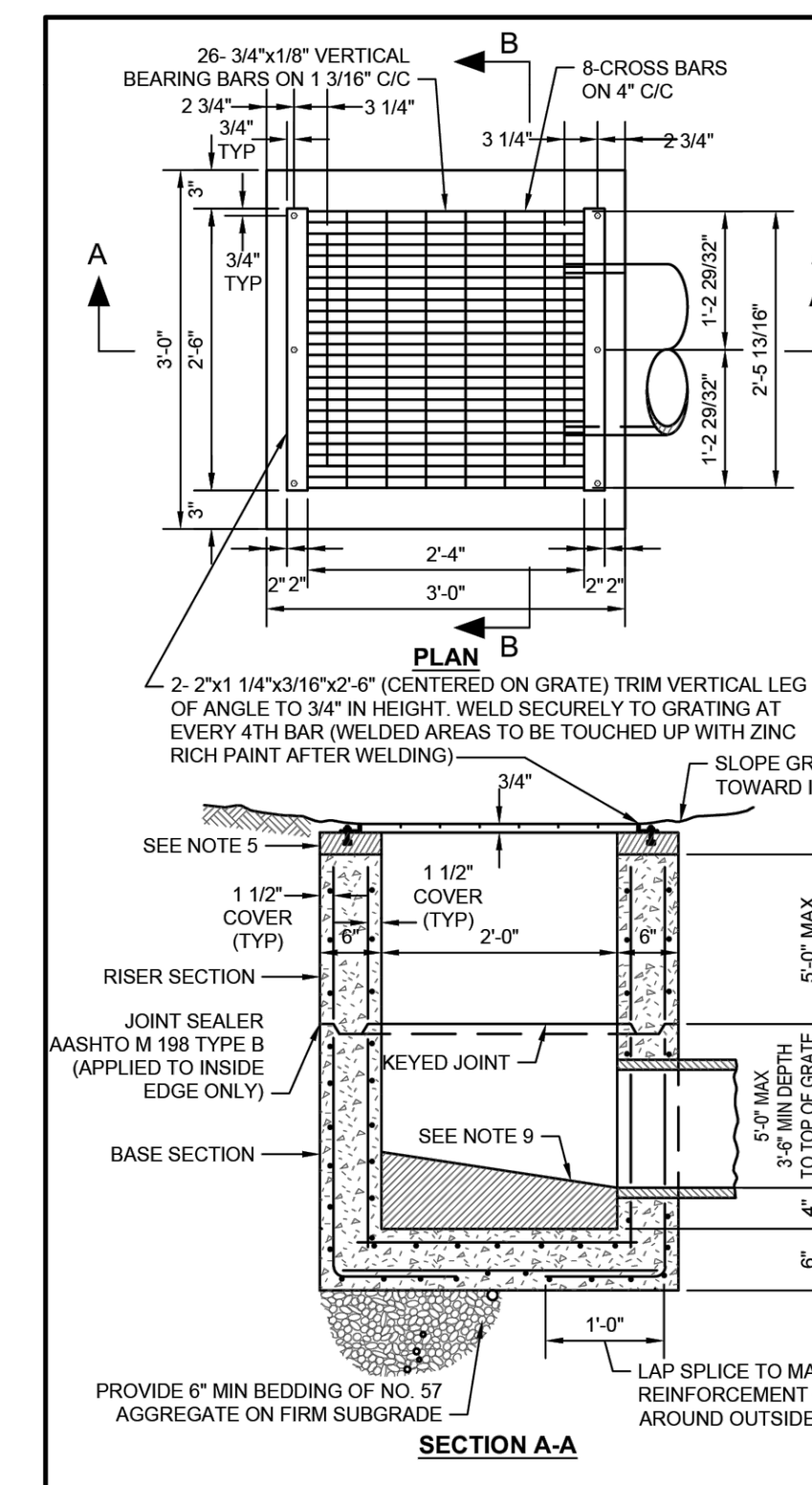
APPROVED	TOWN OF EASTON STANDARD DETAILS
RICK VAN EMBURGH TOWN ENGINEER	**REINFORCED NOSING**
ISSUED: JULY, 2025	STANDARD NO: **TOE-SD-1.03**



NOTES:

1. CASTING SHALL CONFORM TO ASTM A-48-64 CLASS 35B IRON MINIMUM.
2. CASTING SHALL HAVE GROUND OR MACHINED BEARING SURFACES.
3. CASTING SHALL BE OF UNIFORM QUALITY, FREE FROM BLOW HOLES, POROSITY, HARD SPOTS, SHRINKAGE DEFECTS, OR OTHER INJURIOUS DEFECTS.
4. CASTING SHALL BE LIGHT DUTY SIDEWALK TYPE.
5. "PICK HOLES" ARE REQUIRED IN LID.
6. FRAME AND COVER SHALL BE 1545Z1 & 1544C AS MANUFACTURED BY EAST JORDAN IRON WORKS, P.O. BOX 439 SPRING ST. EAST JORDAN, MICH. 49727, OR AN APPROVED EQUAL.

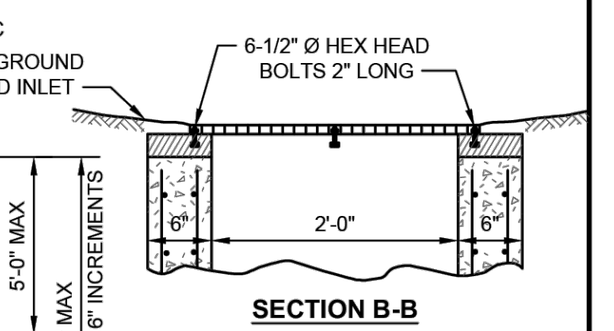
APPROVED	TOWN OF EASTON STANDARD DETAILS
RICK VAN EMBURGH TOWN ENGINEER	**INLET FRAME AND COVER**
ISSUED: JULY, 2025	STANDARD NO: **TOE-SD-1.04**



NOTES:

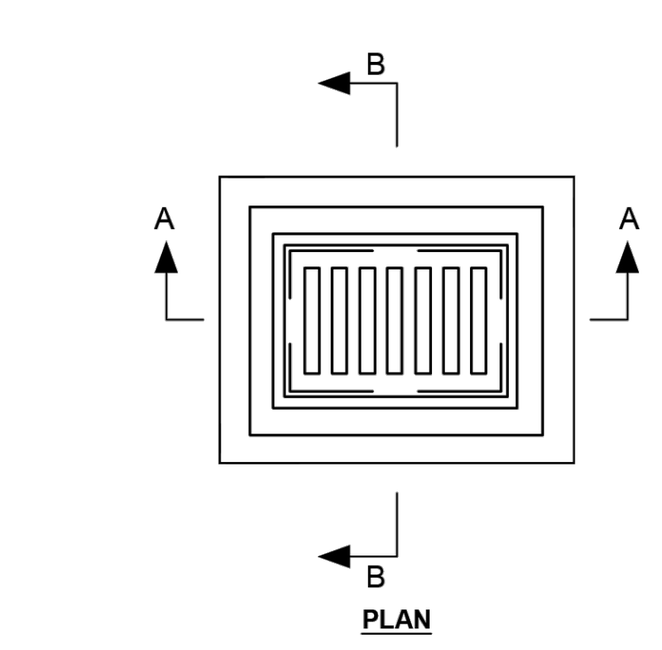
1. CONCRETE TO BE MIX 4500 PSI
2. REINFORCING-2 LAYERS OF 4x4-W4.0xW4.0 WELDED WIRE FABRIC.
3. THREADED PLASTIC INSERTS TO BE PROVIDED FOR HANDLING.
4. GRATING SHALL BE STEEL "IRVING X-BAR TYPE AA" OR APPROVED EQUIVALENT. ALL MATERIAL TO BE HOT DIPPED GALV.
5. GRADE AND SLOPE ADJUSTMENTS TO BE COMPLETED IN THE FIELD USING CONCRETE OR BRICK AND MORTAR. MIN ONE LAYER OF BRICK OR 3" OF CONCRETE.
6. PIPE OPENINGS TO BE PROVIDE AS REQUIRED, FOR SIZE, LOCATION AND INVERT ELEVATIONS.
7. MINIMUM DEPTH PAYMENT PER "EACH" INLET INCLUDES DEPTHS UP TO 3'-6" MEASURED FROM THE PIPE INVERT TO THE TOP OF THE GRATE. VERTICAL DEPTH PAYMENT PER LINEAR FOOT FOR DEPTHS IN EXCESS OF 3'-6".
8. INVERT TO BE CONCRETE OR BRICK AND SHALL SLOPE 2" PER FOOT TOWARD OUTLET OR AS DIRECTED BY THE ENGINEER.

NOTE: EXPANSION ANCHORS MAY BE USED INSTEAD OF BOLTS.



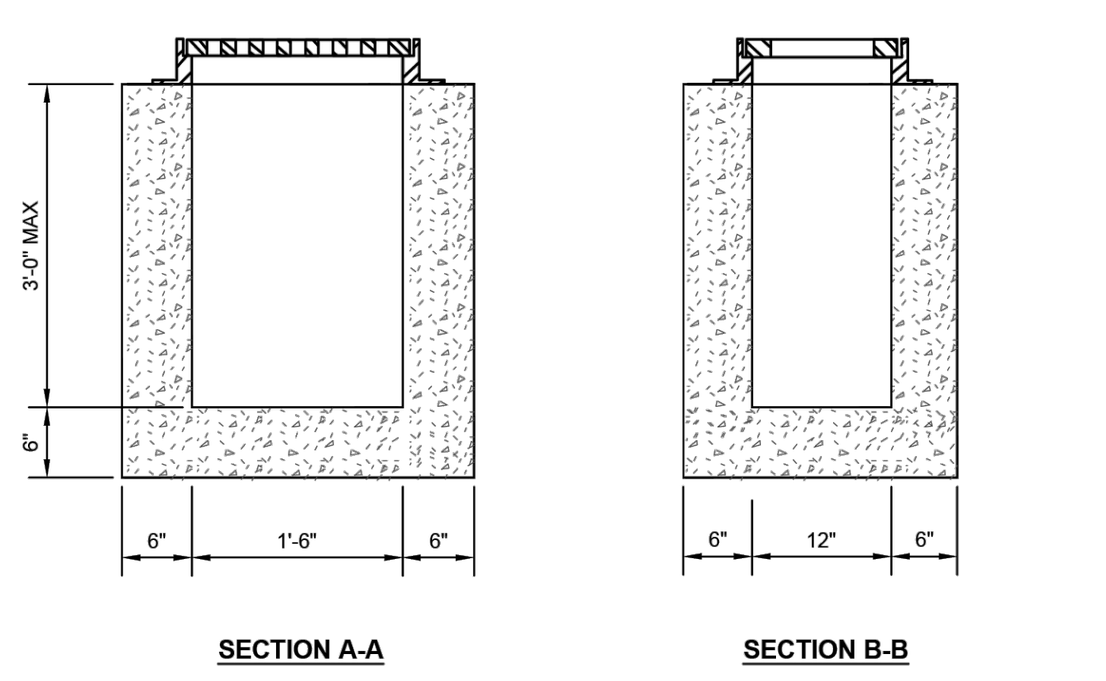
NOTE: MDSHA YARD INLET ST. NO. MD 381.02

APPROVED	TOWN OF EASTON STANDARD DETAILS
RICK VAN EMBURGH TOWN ENGINEER	**NON-TRAFFIC BEARING YARD INLET**
ISSUED: JULY, 2025	STANDARD NO: **TOE-SD-1.07**

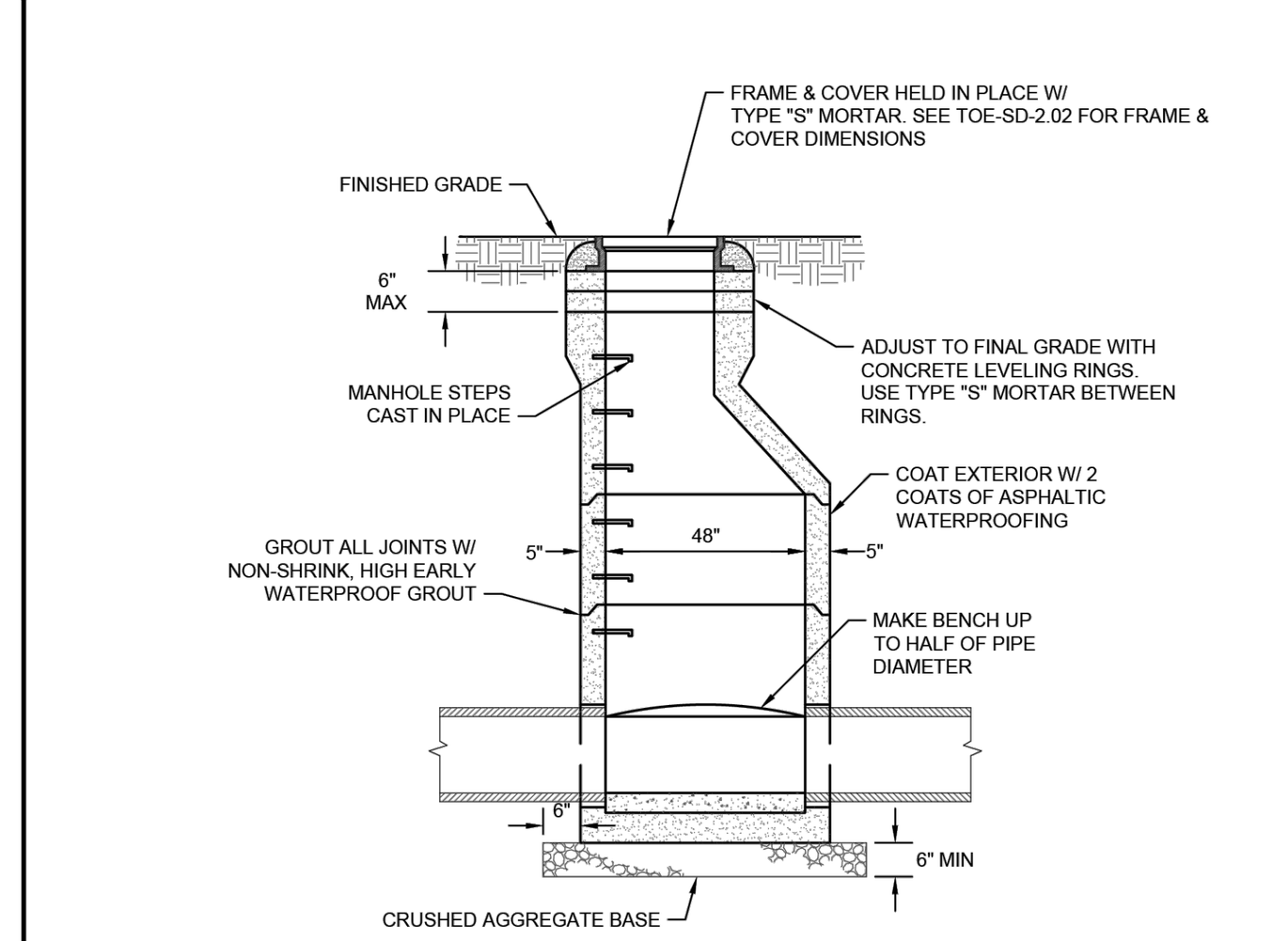


NOTES:

1. CONCRETE TO BE MIX 4500 PSI
2. PIPE OPENINGS PER SITE REQUIREMENTS.
3. INVERT TO BE FIELD INSTALLED BY OTHERS.
4. STEPS ARE NOT INSTALLED IN LAWN INLETS.
5. REINFORCEMENT TO BE 4"X4",W4XW4(W26XW26) WELDED WIRE.



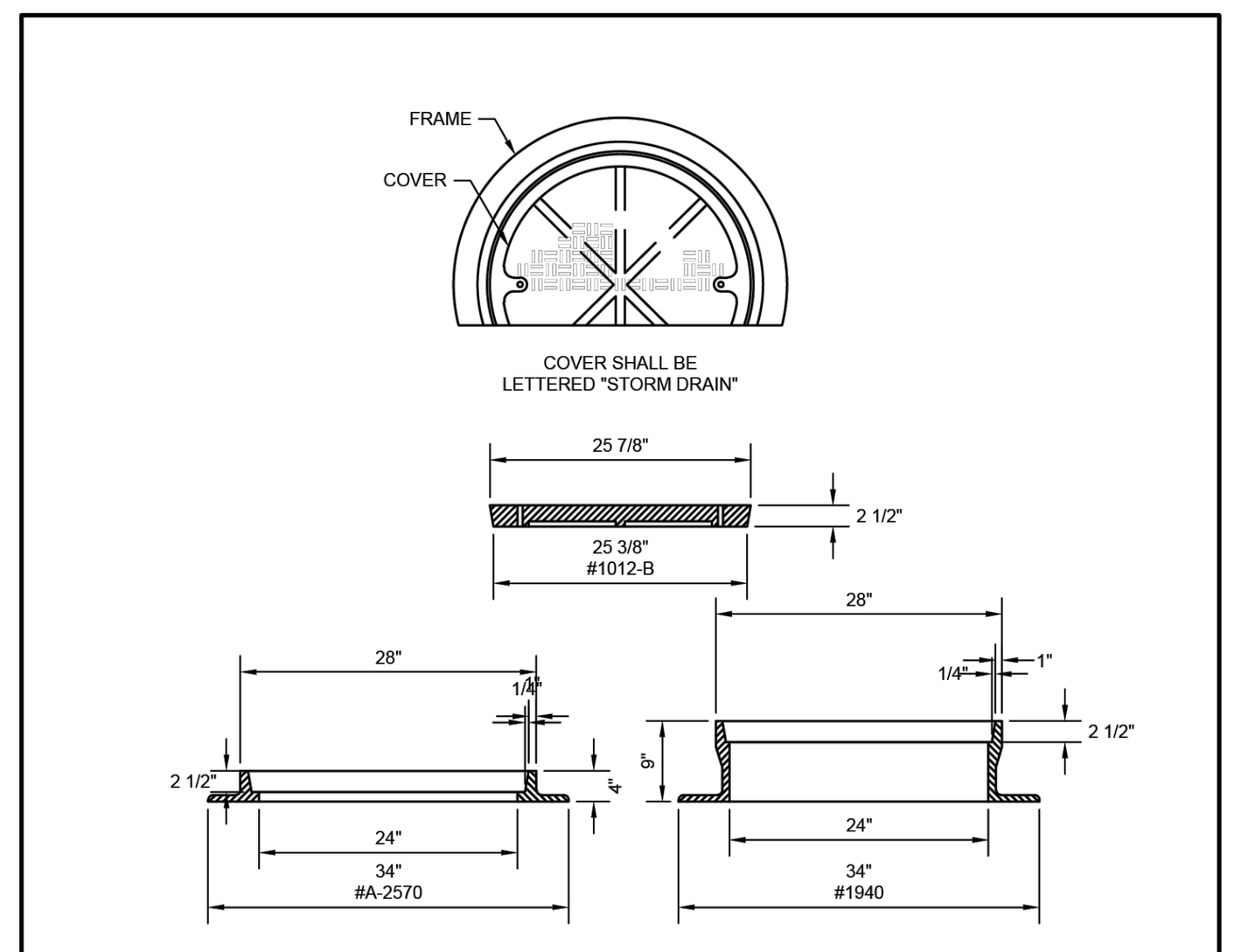
APPROVED	TOWN OF EASTON STANDARD DETAILS
RICK VAN EMBURGH TOWN ENGINEER	**LAWN INLET BOX W/ LAWN BASIC FRAME AND GRATE**
ISSUED: JULY, 2025	STANDARD NO: **TOE-SD-1.08**



NOTES:

1. PRECAST MANHOLE SHALL CONFORM TO ASTM C-478-78A AS MANUFACTURED BY: YORK CONCRETE SEPTIC TANKS INC. YORK PA. OR AN APPROVED EQUAL.
2. BENCH AND CHANNEL SHALL BE BRICK OR HAND FORMED CONCRETE. MIN. THICKNESS OF 4", BENCH SHALL SLOPE TO TOP OF PIPE 1/2" FALL PER FOOT.
3. MORTAR SHALL BE TYPE "S".
4. MANHOLE STEPS REQUIRED OVER THE EFFLUENT SIDE AS SHOWN.

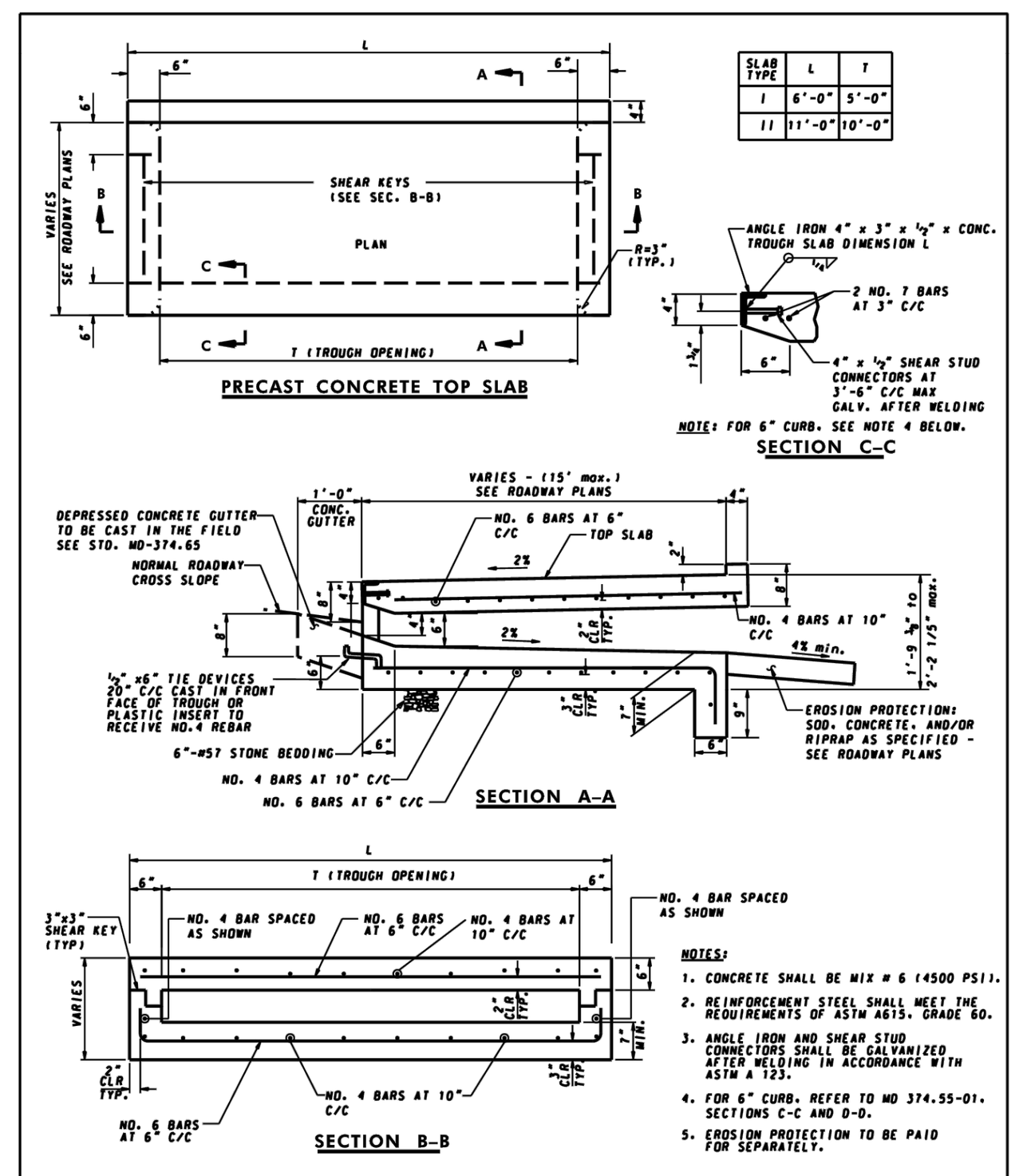
APPROVED	TOWN OF EASTON STANDARD DETAILS
RICK VAN EMBURGH TOWN ENGINEER	**PRECAST CONCRETE MANHOLE**
ISSUED: JULY, 2025	STANDARD NO: **TOE-SD-2.01**



NOTES:

1. CASTING SHALL CONFORM TO ASTM A-48-64 CLASS 35B IRON MINIMUM.
2. CASTING SHALL HAVE GROUND OR MACHINED BEARING SURFACES.
3. CASTING SHALL BE OF UNIFORM QUALITY, FREE FROM BLOW HOLES, POROSITY, HARD SPOTS, SHRINKAGE DEFECTS, OR OTHER INJURIOUS DEFECTS.
4. CASTING SHALL BE HEAVY DUTY ROADWAY TYPE.
5. "PICK HOLES" ARE REQUIRED IN COVER.
6. FRAME & COVER SHALL BE AS INDICATED AND AS MANUFACTURED BY E.A. QUIRIN FOUNDRY, BOX 98 ST. CLAIR, PA 17970, OR AN APPROVED EQUAL.

APPROVED	TOWN OF EASTON STANDARD DETAILS
RICK VAN EMBURGH TOWN ENGINEER	**MANHOLE FRAME AND COVER**
ISSUED: JULY, 2025	STANDARD NO: **TOE-SD-2.02**

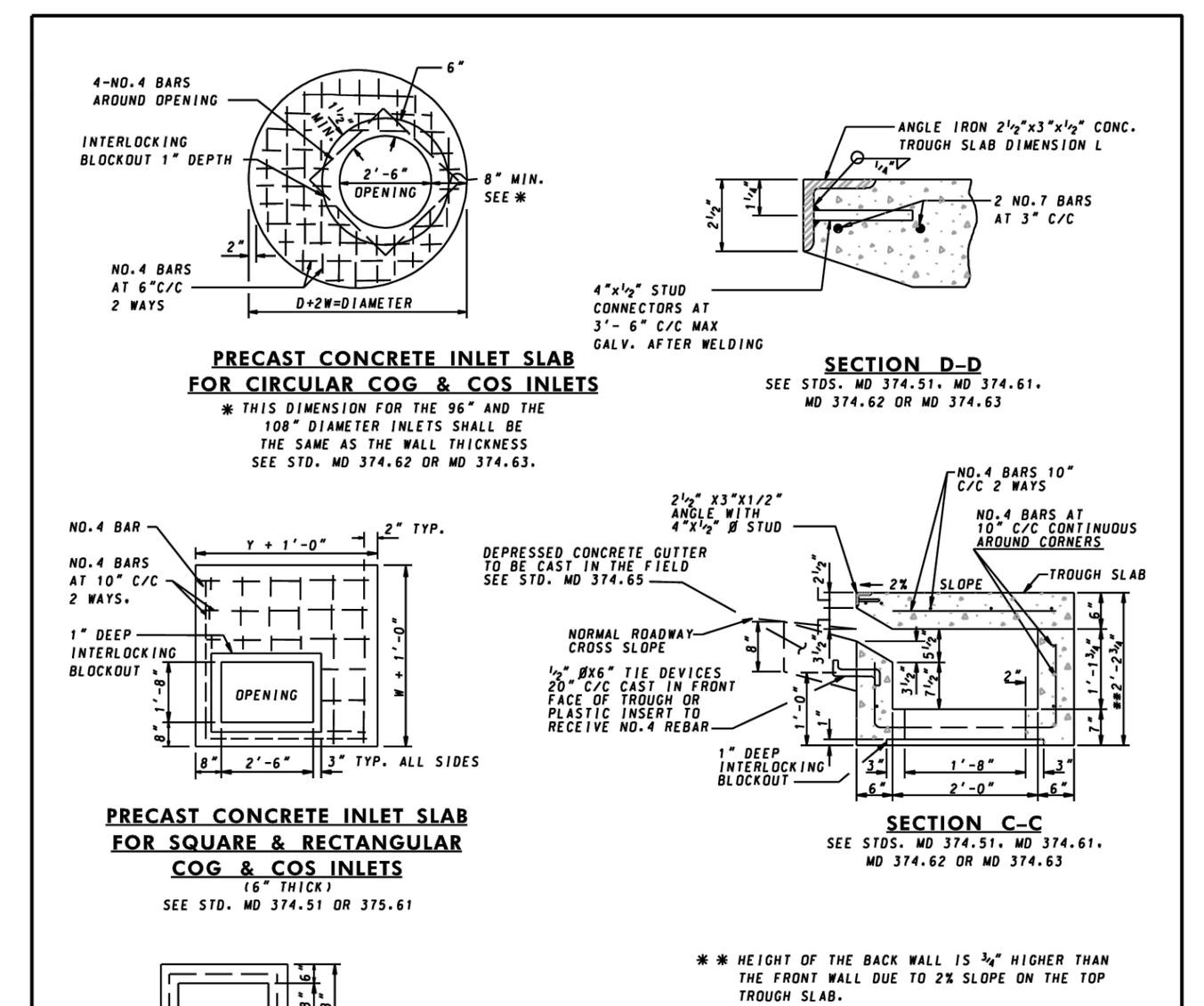


NOTES:

1. CONCRETE SHALL BE MIX # 6 (4500 PSI).
2. REINFORCEMENT STEEL SHALL MEET THE REQUIREMENTS OF ASTM A615, GRADE 60.
3. ANGLE IRON AND SHEAR STUD CONNECTORS SHALL BE GALVANIZED AFTER WELDING IN ACCORDANCE WITH ASTM A 123.
4. FOR 6" CURB, REFER TO MD 374.55-01, SECTIONS C-C AND D-D.
5. EROSION PROTECTION TO BE PAID FOR SEPARATELY.

SPECIFICATION 305 | CATEGORY CODE ITEMS | APPROVED: DIRECTOR – OFFICE OF HIGHWAY DEVELOPMENT

Maryland Department of Transportation
STATE HIGHWAY ADMINISTRATION
STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES
PRECAST OR CAST-IN-PLACE COG /COS OPENING FOR 8" CURB 5' OR 10' ONLY
STANDARD NO. MD 374.68



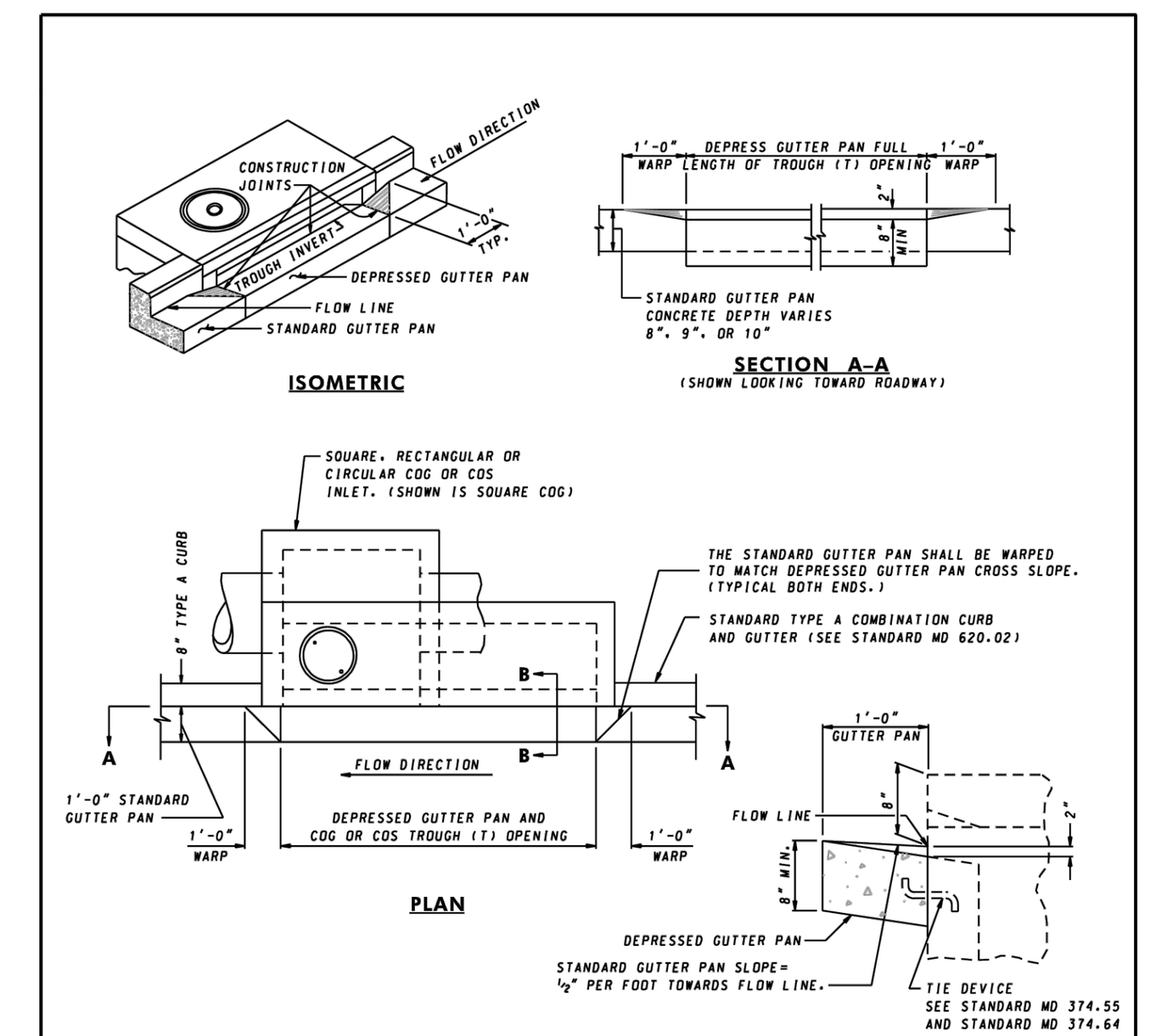
DETAILS FOR COG & COS INLETS ARE SHOWN ON THE FOLLOWING STANDARDS
MD 374.51 PRECAST OR CAST IN PLACE SQUARE & RECTANGULAR COG INLETS 5', 10', 15', & 20'
MD 374.61 PRECAST OR CAST IN PLACE SQUARE & RECTANGULAR COS INLETS 5', 10', 15', & 20'
MD 374.62 PRECAST OR CAST IN PLACE CIRCULAR COG INLETS 5', 10', 15', & 20'
MD 374.63 PRECAST OR CAST IN PLACE CIRCULAR COS INLETS 5', 10', 15', & 20'
MD 374.64 ALTERNATE PRECAST TROUGHS FOR COG AND COS INLETS
MD 374.65 DEPRESSED CONCRETE GUTTER PAN FOR COG & COS INLETS

NOTES

1. CONCRETE SHALL BE MIX NO.6 (4500 PSI).
2. ANGLE IRON AND SHEAR STUD CONNECTORS SHALL BE GALVANIZED AFTER WELDING IN ACCORDANCE WITH ASTM A 123.

SPECIFICATION 305 | CATEGORY CODE ITEMS | APPROVED: DIRECTOR – OFFICE OF HIGHWAY DEVELOPMENT

Maryland Department of Transportation
STATE HIGHWAY ADMINISTRATION
STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES
PRECAST CONCRETE INLET SLABS AND ADJUSTMENT COLLARS FOR COG/COS INLETS TO ACCOMODATE 6" CURB
STANDARD NO. MD 374.55-01



DETAILS FOR COG AND COS INLETS ARE SHOWN ON THE FOLLOWING STANDARDS
MD 374.51 PRECAST OR CAST IN PLACE SQUARE AND RECTANGULAR COG INLETS 5', 10', 15', & 20'
MD 374.55 PRECAST CONCRETE TROUGH INLET SLABS AND ADJUSTMENT COLLAR FOR COG AND COS INLETS
MD 374.61 PRECAST OR CAST IN PLACE SQUARE AND RECTANGULAR COS INLETS 5', 10', 15', & 20'
MD 374.62 PRECAST CIRCULAR COG INLETS 5', 10', 15', & 20'
MD 374.63 PRECAST CIRCULAR COS INLETS 5', 10', 15', & 20'
MD 374.64 ALTERNATE PRECAST TROUGHS FOR COG AND COS INLETS

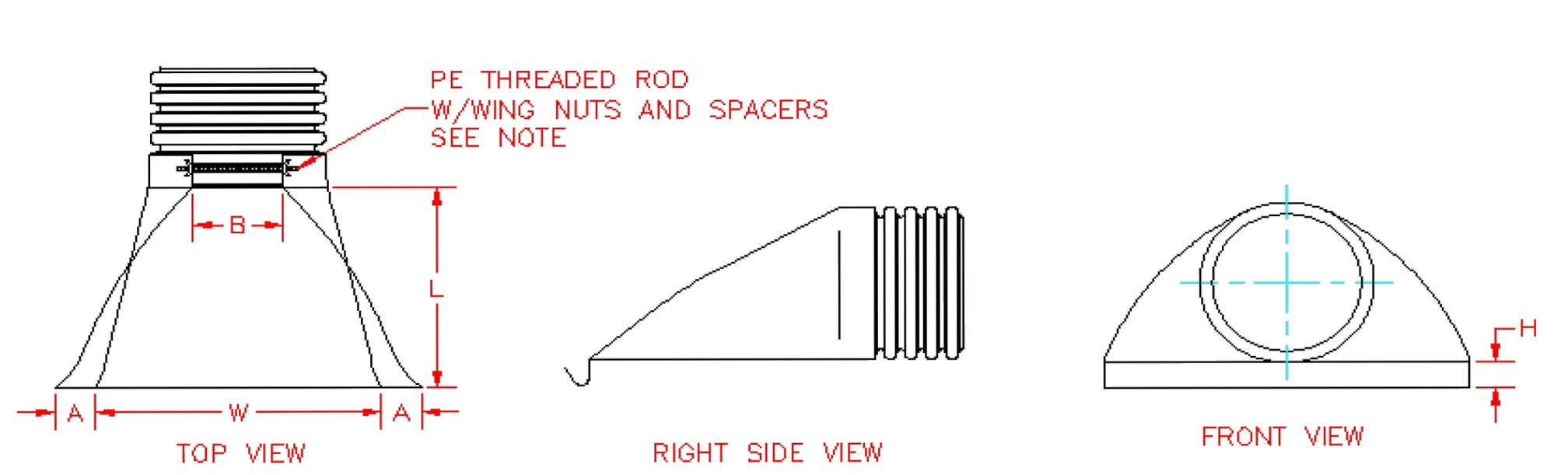
NOTES

1. COST OF DEPRESSED CONCRETE GUTTER PAN IS INCIDENTAL TO THE COST OF THE INLET.
2. STANDARD TYPE A COMBINATION CURB AND GUTTER PAID FOR SEPARATELY.

SPECIFICATION | CATEGORY CODE ITEMS | APPROVED: DIRECTOR – OFFICE OF HIGHWAY DEVELOPMENT

Maryland Department of Transportation
STATE HIGHWAY ADMINISTRATION
STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES
DEPRESSED CONCRETE GUTTER PAN FOR COG AND COS INLETS
STANDARD NO. MD 374.65

FLARED END SECTIONS



PART #	PIPE SIZE	A	B(MAX)	H	L	W
1015NP	10 in (250 mm)	3.8 in (95 mm)	10.0 in (254 mm)	6.5 in (165 mm)	28.0 in (711 mm)	34.5 in (876 mm)
1215NP	12 & 15 (300 & 375mm)	6.5 in (165 mm)	10.0 in (254 mm)	6.5 in (165 mm)	25.0 in (635 mm)	29.0 in (737 mm)
1810NP	18 in (450 mm)	7.5 in (191 mm)	15.0 in (381 mm)	6.5 in (165 mm)	32.0 in (813 mm)	35.0 in (889 mm)
2410NP	24 in (600 mm)	7.5 in (191 mm)	18.0 in (457 mm)	6.5 in (165 mm)	36.0 in (914 mm)	45.0 in (1143 mm)
3015NP	30 in (750 mm)	7.5 in (191 mm)	12.0 in (305 mm)	8.6 in (218 mm)	58.0 in (1473 mm)	63.0 in (1600 mm)

NOTE: ALL DIMENSIONS ARE NOMINAL

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ADS Advanced Drainage Systems, Inc.

DRAWING #:	6070	
DRAWN BY:	JCB	01.17.07
APPROVED BY:	JCB	06.28.07
REVISIONS:	TJR	6/7/2016

APPROVED:	APPROVED:	APPROVED:	APPROVED:
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SWM DETAILS

OF THE LANDS OF

CALVERT TERRACE

TAX MAP 0103, GRID 00EA, PARCEL 885 - 928
ELECTION WARD 1, EASTON, TALBOT COUNTY, MARYLAND
PREPARED FOR OSPREY PROPERTY COMPANY II LLC

RAUCH inc.
Engineering | Survey | Architecture | Environmental
Main Office: 106 N Harrison St - Easton, MD 21601
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PRELIMINARY PLANS FOR REVIEW ONLY

12-10-2025

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MISS UTILITY OF DELMARVA CALL BEFORE YOU DIG 811

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SCALE:	N/A
DRAWN BY:	AF
DESIGNED BY:	AF
APPROVED BY:	BBF

SHEET NO.: **C-205.03**

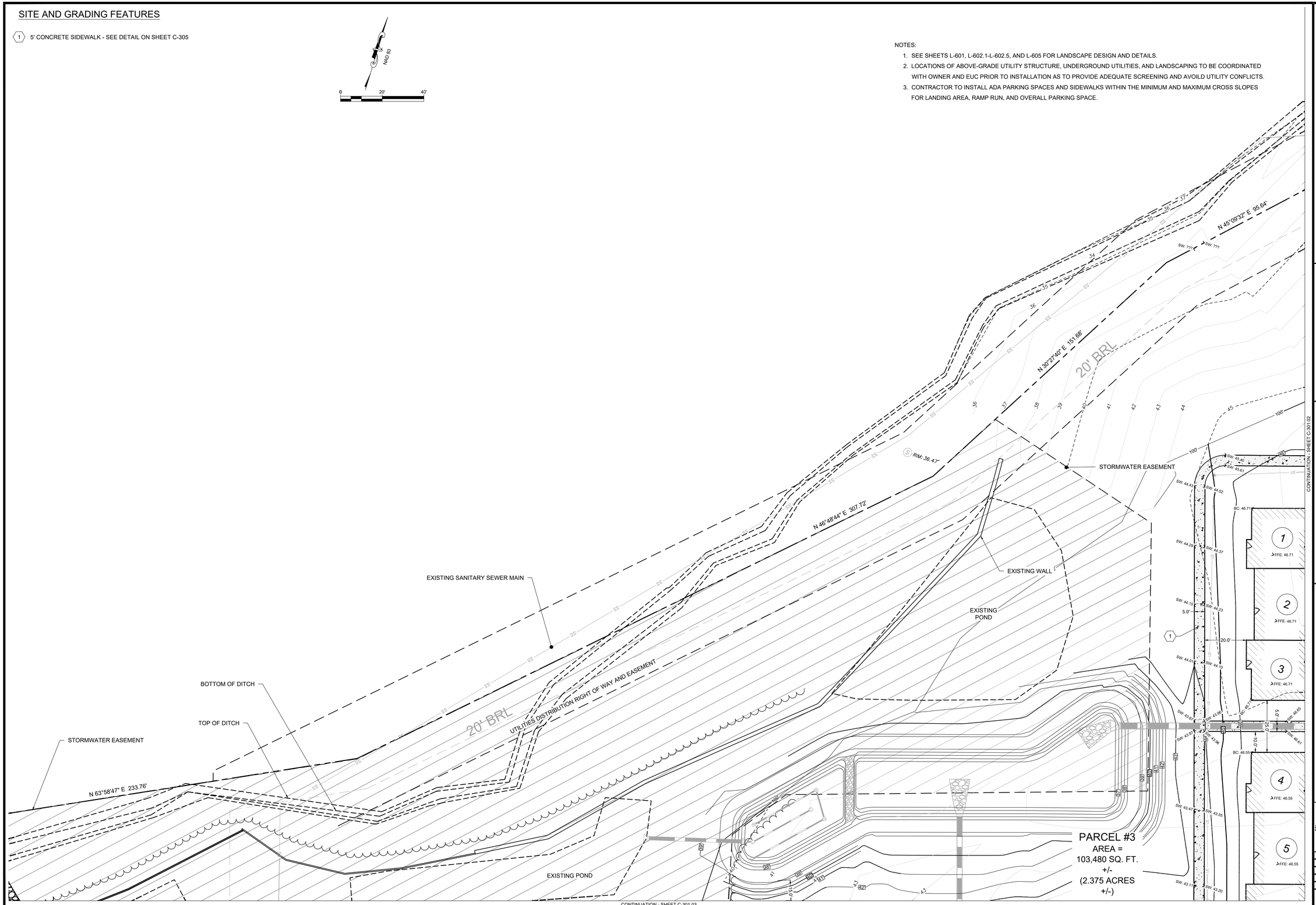
FOR REVIEW

SITE AND GRADING FEATURES

1 5' CONCRETE SIDEWALK - SEE DETAIL ON SHEET C-305

NOTES:

1. SEE SHEETS L-601, L-602.1-L-602.5, AND L-605 FOR LANDSCAPE DESIGN AND DETAILS.
2. LOCATIONS OF ABOVE-GRADE UTILITY STRUCTURE, UNDERGROUND UTILITIES, AND LANDSCAPING TO BE COORDINATED WITH OWNER AND EUC PRIOR TO INSTALLATION AS TO PROVIDE ADEQUATE SCREENING AND AVOILD UTILITY CONFLICTS.
3. CONTRACTOR TO INSTALL ADA PARKING SPACES AND SIDEWALKS WITHIN THE MINIMUM AND MAXIMUM CROSS SLOPES FOR LANDING AREA, RAMP RUN, AND OVERALL PARKING SPACE.



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TOWN OF EASTON - TOWN ENGINEER DATE	TOWN OF EASTON PLANNING AND ZONING DATE	EASTON UTILITIES - ENGINEER DATE	TALBOT SOIL CONSERVATION DISTRICT - MANAGER DATE

SITE AND GRADING PLAN

OF THE LANDS OF

CALVERT TERRACE

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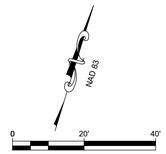
DESIGNED BY:	AF
APPROVED BY:	BBF

SHEET NO.: C-301.01

FOR REVIEW

SITE AND GRADING FEATURES

1. 5' CONCRETE SIDEWALK - SEE DETAIL ON C-305
2. 10' CONCRETE SIDEWALK - SEE DETAIL ON SHEET C-305
3. STANDARD CURB & GUTTER - SEE DETAIL ON SHEET C-305
4. STANDARD DEPRESSED CURB & GUTTER - SEE DETAIL ON SHEET C-305
5. ASPHALT PAVEMENT - SEE DETAIL ON SHEET C-305
6. SINGLE FAMILY RESIDENTIAL DRIVEWAY - SEE DETAIL ON SHEET C-305
7. PARKING STALL STRIPING, HANDICAP PARKING SYMBOL, AND ACCESS AISLE - SEE DETAIL ON SHEET C-305
8. HANDICAP CURB/RAMP WITH DETECTABLE WARNING SURFACE - SEE DETAIL ON SHEET C-305
9. HANDICAP PARKING SIGN - SEE DETAIL ON SHEET C-305
10. 3' CONCRETE SIDEWALK - SEE DETAIL ON C-305
11. 32' X 6' CONCRETE BICYCLE PARKING PAD (30 SPACES)



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SITE AND GRADING PLAN

OF THE LANDS OF

CALVERT TERRACE

TAX MAP 0103, GRID 00EA, PARCEL 885 - 928

ELECTION WARD 1, EASTON, TALBOT COUNTY, MARYLAND

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PRELIMINARY PLAN REVIEW ONLY

12-10-2025

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APPROVED BY:	BBF

SHEET NO.: C-301.02

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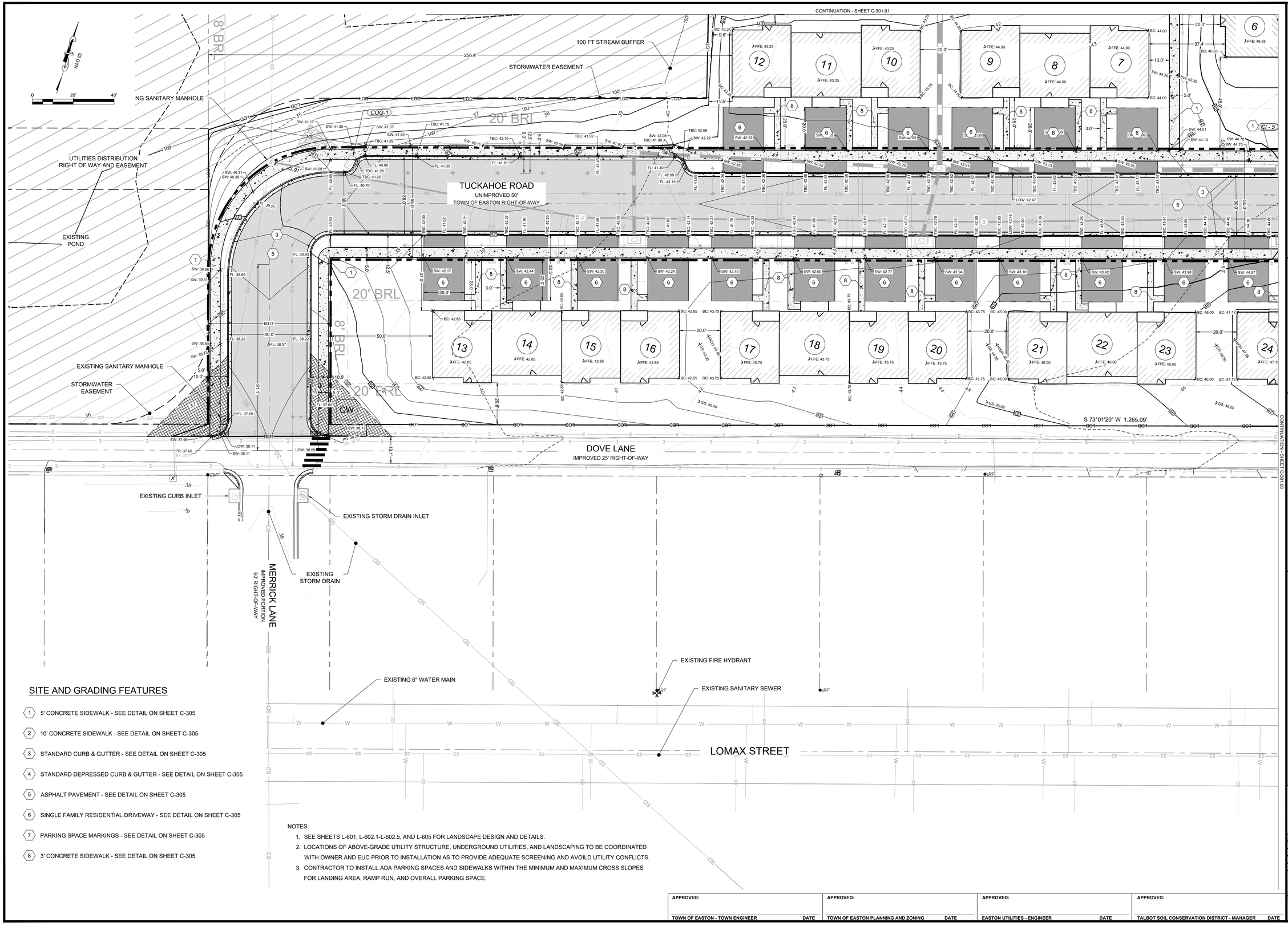

SITE AND GRADING FEATURES

1. 5' CONCRETE SIDEWALK - SEE DETAIL ON SHEET C-305
2. 10' CONCRETE SIDEWALK - SEE DETAIL ON SHEET C-305
3. STANDARD CURB & GUTTER - SEE DETAIL ON SHEET C-305
4. STANDARD DEPRESSED CURB & GUTTER - SEE DETAIL ON SHEET C-305
5. ASPHALT PAVEMENT - SEE DETAIL ON SHEET C-305
6. SINGLE FAMILY RESIDENTIAL DRIVEWAY - SEE DETAIL ON SHEET C-305
7. PARKING SPACE MARKINGS - SEE DETAIL ON SHEET C-305
8. 3' CONCRETE SIDEWALK - SEE DETAIL ON SHEET C-305

NOTES:

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SITE AND GRADING PLAN

OF THE LANDS OF

CALVERT TERRACE

TAX MAP 0103, GRID 00EA, PARCEL 885 - 928

ELECTION WARD 1, EASTON, TALBOT COUNTY, MARYLAND

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SHEET NO.: C-301.03

FOR REVIEW

CONTINUATION - SHEET C-301.01

CONTINUATION - SHEET C-301.03

QUEEN STREET
PRIVATE ROAD

TUCKAHOE ROAD
UNIMPROVED 50'
TOWN OF EASTON RIGHT-OF-WAY

CALVERT STREET
50' RIGHT-OF-WAY

DOVE LANE
IMPROVED 25' RIGHT-OF-WAY

LOMAX STREET

EXISTING GAS MAIN
20' BRL

EXISTING CONCRETE SIDEWALK

EXISTING ELECTRIC MANHOLE

EXISTING STORM DRAIN INLET

EXISTING UNDERGROUND ELECTRIC

EXISTING FIRE HYDRANT

EXISTING 6" WATER MAIN

EXISTING SANITARY SEWER

EXISTING STORM DRAIN

EXISTING 6" WATER MAIN

EXISTING SANITARY SEWER MAIN

25 FFE: 47.12
26 FFE: 47.12
27 FFE: 47.12
28 FFE: 48.38
29 FFE: 48.38
30 FFE: 48.38
31 FFE: 48.38

NAD 83
0 20' 40'

NOTES:

1. SEE SHEETS L-601, L-602.1-L-602.5, AND L-605 FOR LANDSCAPE DESIGN AND DETAILS.
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SITE AND GRADING FEATURES

1. 5' CONCRETE SIDEWALK - SEE DETAIL ON SHEET C-305
2. 10' CONCRETE SIDEWALK - SEE DETAIL ON SHEET C-305
3. STANDARD CURB & GUTTER - SEE DETAIL ON SHEET C-305
4. STANDARD DEPRESSED CURB & GUTTER - SEE DETAIL ON SHEET C-305
5. ASPHALT PAVEMENT - SEE DETAIL ON SHEET C-305
6. SINGLE FAMILY RESIDENTIAL DRIVEWAY - SEE DETAIL ON SHEET C-305
7. PARKING STALL STRIPING - SEE DETAIL ON SHEET C-305
8. 3' CONCRETE SIDEWALK - SEE DETAIL ON SHEET C-305

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SITE AND GRADING PLAN

OF THE LANDS OF

CALVERT TERRACE

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811

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DESIGNED BY:	AF
APPROVED BY:	BBF

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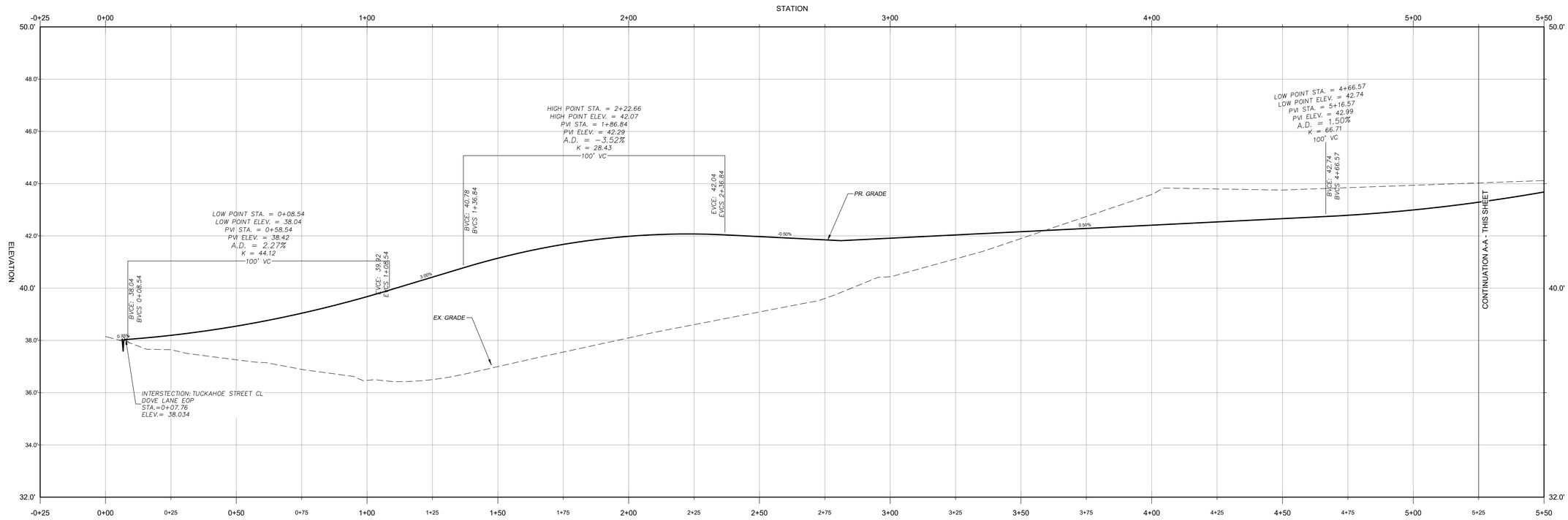
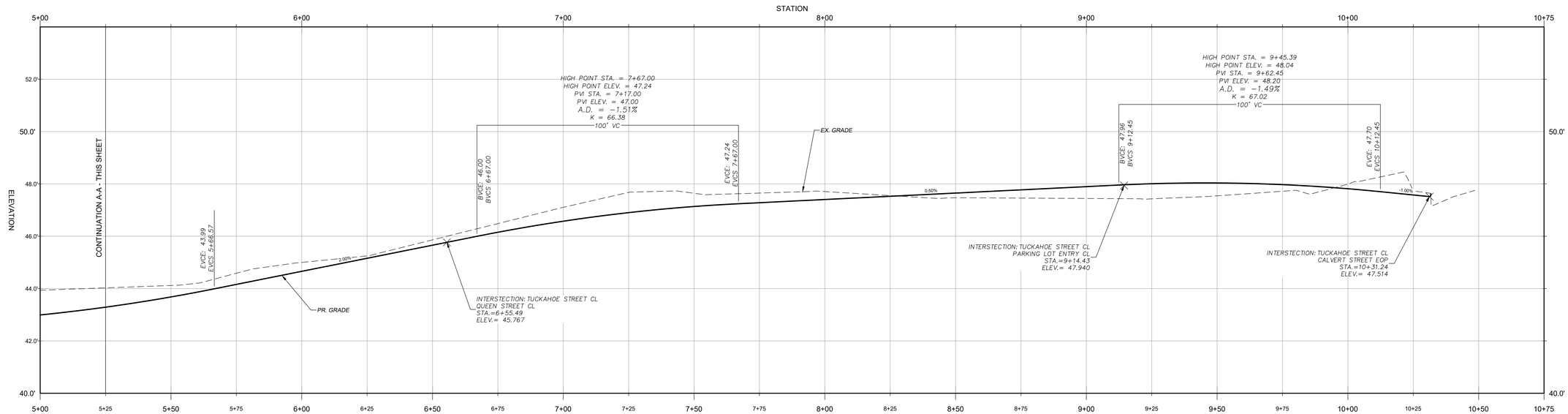


GRADING - TUCKAHOE STREET CL
V. SCALE: 1" = 2' H. SCALE: 1" - 20'



GRADING - TUCKAHOE STREET CL
V. SCALE: 1" = 2' H. SCALE: 1" - 20'

APPROVED:	APPROVED:	APPROVED:	APPROVED:
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GRADING PROFILES

OF THE LANDS OF

CALVERT TERRACE

TAX MAP 0103, GRID 00EA, PARCEL 888 - 928

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SHEET NO.: C-303.01

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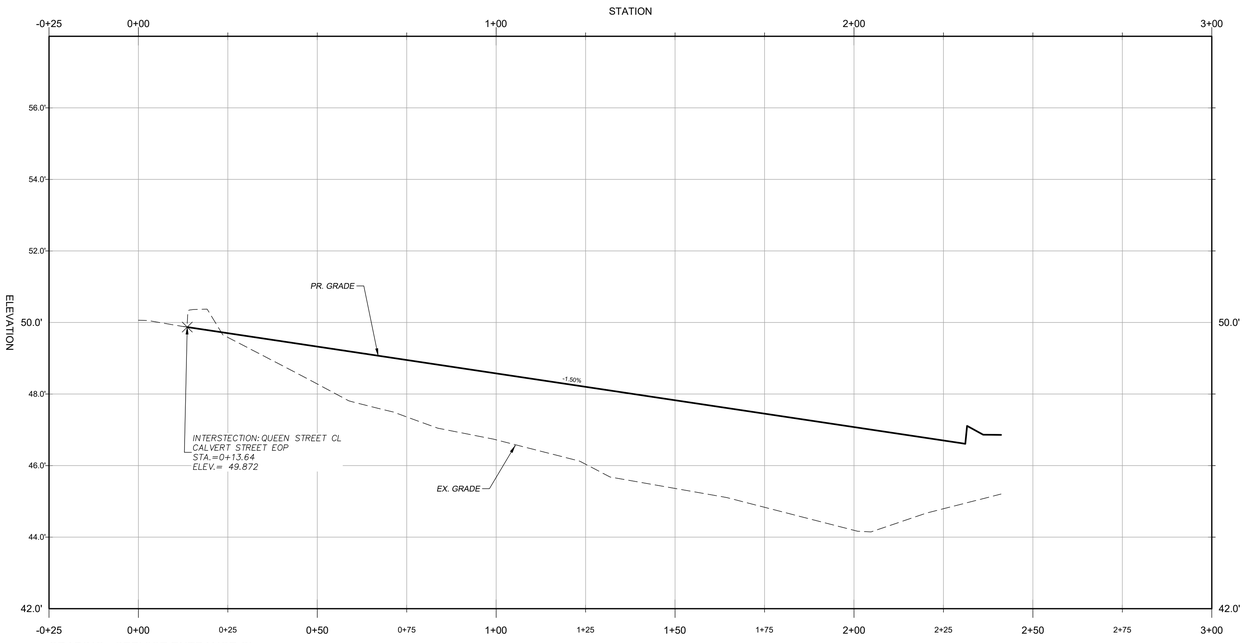
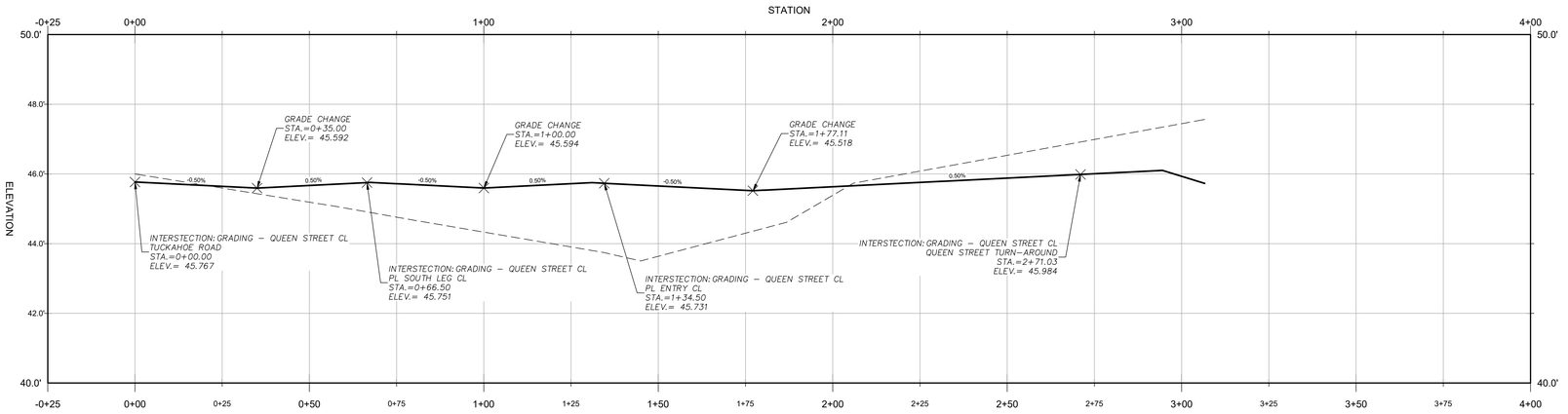


GRADING - SERVICE ENTRANCE CL
V. SCALE: 1" = 2' H. SCALE: 1" - 20'



GRADING - QUEEN STREET CL
V. SCALE: 1" = 2' H. SCALE: 1" - 20'

APPROVED:	APPROVED:	APPROVED:	APPROVED:
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GRADING PROFILES

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APPROVED BY:	BBF

SHEET NO.: C-303.02

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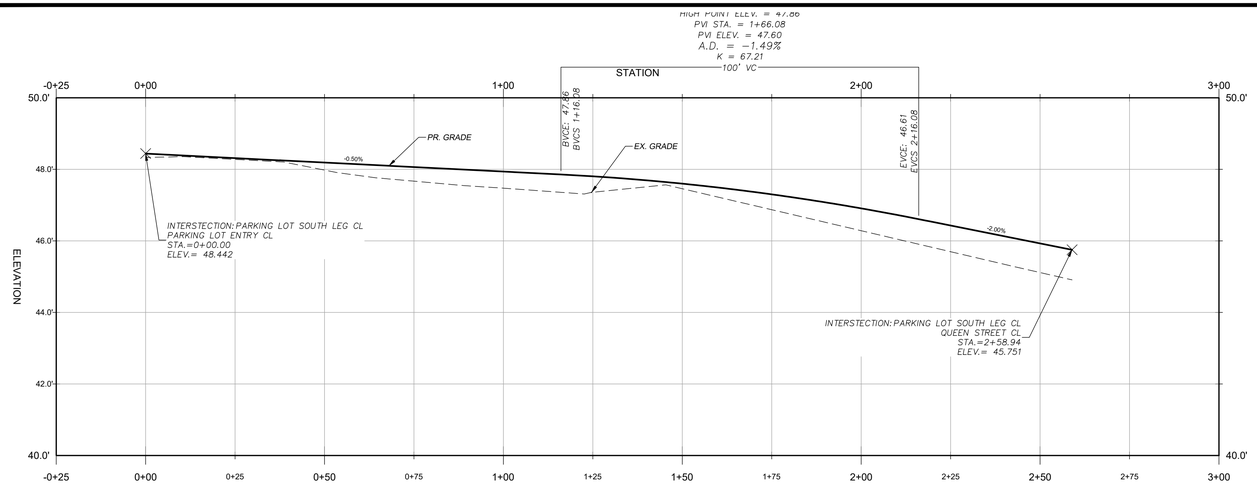
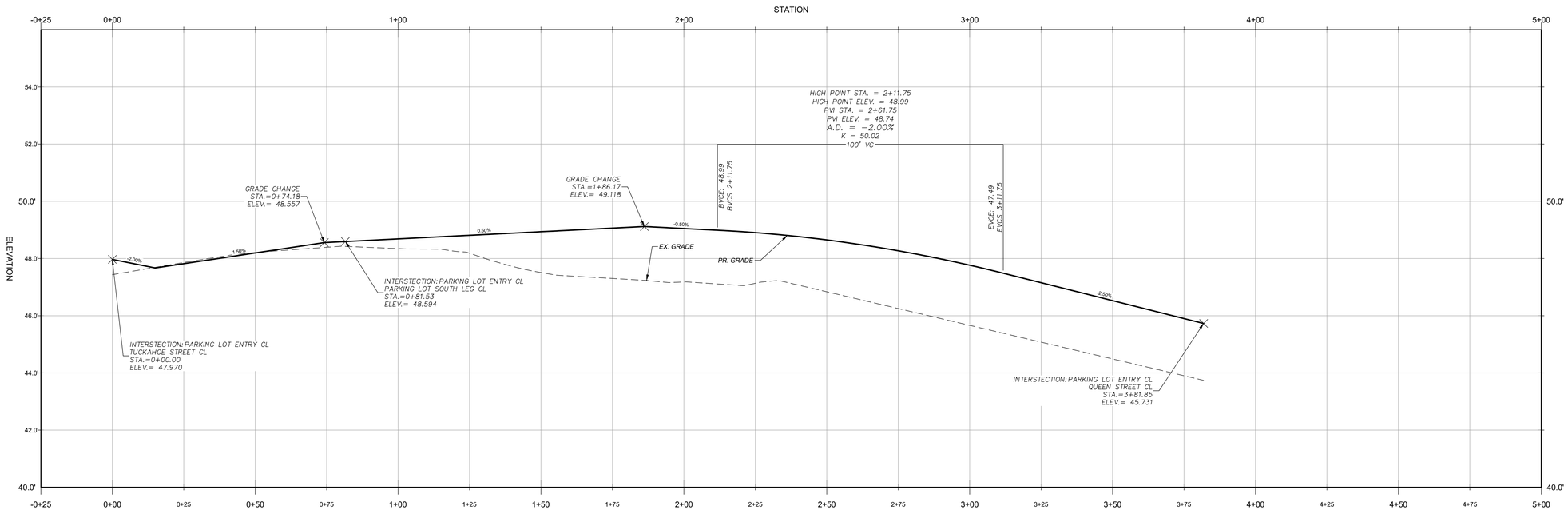


GRADING - PARKING LOT SOUTH LEG
V. SCALE: 1" = 2' H. SCALE: 1" - 20'



GRADING - PARKING LOT ENTRY CL
V. SCALE: 1" = 2' H. SCALE: 1" - 20'

APPROVED:	APPROVED:	APPROVED:	APPROVED:
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GRADING PROFILES

OF THE LANDS OF

CALVERT TERRACE

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12-10-2025

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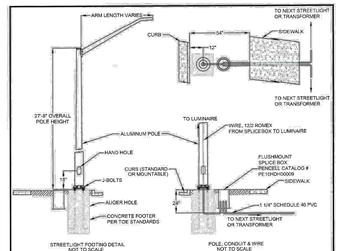


NOTES:
1. STREETLIGHT LOCATION, POLE SPACING, ARM LENGTH, LUMINAIRE HEIGHT AND TYPE TO BE DETERMINED BY PHOTOMETRIC DESIGN. CONTACT EASTON UTILITIES.
2. STREETLIGHT POLE AND LUMINAIRE PART NUMBERS CHANGE BASED ON THE TOWN OF EASTON'S STANDARD. CONTACT EASTON UTILITIES TO COORDINATE THE PURCHASE OF ANY STREETLIGHT EQUIPMENT TO BE ASSURED ITS ACCEPTANCE.
3. INSTALL STREETLIGHT TO MANUFACTURES SPECIFICATIONS.
4. UNDERGROUND DUCT
   A. UNDERGROUND DUCT TO BE 1 ½" SCHEDULE 40 PVC WITH DETECTABLE PULL TAPE FROM STREETLIGHT TO STREETLIGHT OR TRANSFORMER.
   B. DUCT TO HAVE A MINIMUM OF 24" OF COVER. ALL DUCT TO BE INSPECTED BY EASTON UTILITIES BEFORE BACKFILLING.
   C. 1 ½" CONDUIT SHALL BE INSTALLED IN POURED FOOTER 2" BELOW FINISHED GRADE.
   D. UNDERGROUND DUCT SHALL BE STUBBED UP INSIDE POLE APPROXIMATELY 1' FROM HANDHOLE DOOR.

APPROVAL	REVISED	EASTON UTILITIES STANDARD DETAILS
EU ENGINEERING DEPARTMENT		ALUMINUM POLE STREETLIGHT INSTALLATION
DATE: 10/10/2025		
ISSUED: DEC 2024		STANDARD NO.: E-106.1.2

V:\Dwgs\Standard Details 2025\E-106.1.2.dwg Dec 09, 2024 - 7:18pm, ellismills

SUB-BASE
1. SUB-GRADE SHALL BE PLACED ON PREPARED AND COMPACTED REFILLED EXCAVATIONS. MATERIALS AND METHODS OF CONSTRUCTION SHALL MEET THE PROVISIONS OF MD SHA STANDARDS, SECTION 208.
2. GRADED AGGREGATE BASE COURSE:
   a. GRADED AGGREGATE BASE SHALL BE PLACED ON PREPARED AND COMPACTED REFILLED EXCAVATIONS TO THE COMPACTED DEPTH AS SHOWN ON THE DRAWING DETAILS.
   b. GRADED AGGREGATE SHALL BE PER MD SHA STANDARD, SECTION 901.
   c. 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.

TACK COAT
1. COATING SHALL BE RESIDUAL ASPHALT UNIFORMLY SPREAD BY AN ASPHALT DISTRIBUTOR AT A RATE OF 0.05 GALS/Y (+/- 0.01 GAL/SY).
2. CONTRACTOR SHALL TAKE CARE NOT TO TRACK COAT ON SURFACE COURSES.

HOT MIX ASPHALT PAVEMENT
1. 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.
2. MATERIALS AND METHODS OF CONSTURCTION SHALL MEET THE PROVISIONS OF SECTION 504 AND SECTION 904 OF THE MD SHA STANDARDS AND DETAILS.
3. SURFACE COURSES OF BITUMINOUS CONCRETE MIXES SHALL HAVE LESS THAN 15% RECYCLED ASPHALT PAVEMENT (RAP), UNLESS OTHERWISE APPROVED BY THE TOWN ENGINEER.
4. BASE COURSES SHALL HAVE NOT MORE THAN 20% RAP.
5. WEATHER RESTRICTIONS:
   a. SURFACE COURSE - MINIMUM SURFACE TEMPERATURE 40° AND RISING.
   b. BASE COURSE - MINIMUM SURFACE TEMPERATURE 32° AND RISING.

CONCRETE PAVEMENT
1. CONCRETE USED IN THE RESTORATION OF STREETS 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 OVERLAY OR A FINISHED SURFACE COURSE.
2. CONCRETE PAVEMENT SHALL MEET THE PROVISIONS OF MD SHA STANDARDS, SECTION 522.
3. CONCRETE SIDEWALK AND CURB AND GUTTER RESTORATION SHALL BE AS INDICATED WITHIN THE TOWN STANDARDS.

SOIL CEMENT
1. WHERE THE CBR VALUES ARE FOUND TO BE LOW WITHIN THE PAVED AREA, THE TOWN WILL ALLOW THE SUB-GRADE TO BE REINFORCED BY A CEMENTITIOUS MATERIAL BEING MIXED IN THE SUBGRADE. APPLICATION SHALL BE SUBJECT TO THE GEOTECHNICAL INVESTIGATION.
2. A MINIMUM OF 2" OF GRADED AGGREGATE SHALL BE INSTALLED BETWEEN THE AMEND-ED SOIL AND BITUMINOUS PAVEMENT.
3. MINIMUM MIX DEPTH OF THE SOIL CEMENT MIXTURE SHALL BE 8" WITH A 5-5.5% MIN. CEMENT CONTENT.

TOLERANCES
1. SURFACE PAVEMENT SHALL NOT DEVIATE MORE THAN 0.25" OVER 10', WHEN MEASURED PARALLEL AND PERPENDICULAR TO THE DIRECTION OF TRAVEL.

APPROVED	TOWN OF EASTON STANDARD DETAILS
Rick Van Emburgh, TOWN ENGINEER	PAVING NOTES
ISSUED: JULY, 2025	STANDARD NO: TOE-R-1.02

SUBMITTALS
1. SUBMIT MIX DESIGN FOR APPROVAL PRIOR TO PLACING CONCRETE (MD SHA MIX #3 FOR ALL CONCRETE SIDEWALKS, AIR ENTRAINED, MINIMUM 3,500 PSI MIX). FOR CURB AND GUTTER, UTILIZE MD SHA MIX #3, EXCEPT MAXIMUM WATER CEMENTITIOUS RATIO OF 0.45 AND 611 POUNDS MINIMUM CEMENTITIOUS MATERIALS, AIR ENTRAINED, MINIMUM 4,200 PSI MIX.
2. SUBMIT CONCRETE TESTING AGENCY FOR APPROVAL, WHICH CONTRACTOR OR PROJECT OWNER SHALL EMPLOY FOR INFIELD AND LABORATORY TESTING.

CONCRETE PLACEMENT
1. NOTIFY TOWN OF INTENTION TO POUR CONCRETE 24 HOURS PRIOR TO PERFORMING WORK. (PHONE: 410-820-8622).
2. DRIVER SHALL PRESENT COMPUTER GENERATED MIX DELIVERY TICKET UPON ARRIVAL TO SITE.
3. DO NOT ADD WATER TO MIX AT JOB SITE UNLESS APPROVED BY ENGINEER. DO NOT POUR CONCRETE DURING RAIN EVENTS.
4. TESTING AGENCY SHALL TEST FOR SLUMP, TEMPERATURE AND AIR ENTRAINMENT AT THE JOB SITE. THE MAXIMUM TIME FROM ADDING WATER AT PLANT TO DISCHARGE AT SITE SHALL BE WITHIN 1.5 HOURS. TESTING AGENCY SHALL VERIFY THAT SUB-GRADE IS PROPERLY COMPACTED.
5. TESTING AGENCY SHALL COLLECT CYLINDERS FOR COMPRESSION TESTING ON EACH TRUCK LOAD OF CONCRETE DELIVERED TO SITE PER ACI 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.
6. ENGINEER OF HISHER 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, RAMPS, VALLEY GUTTERS, ETC. IS IN PLACE AND PROPERLY SUPPORTED.
7. COLD WEATHER CONCRETE PLACEMENT SHALL BE PROTECTED FROM DAMAGE AND FROST. FREEZING ACTION OR LOW TEMPERATURES. NO UNAPPROVED ADMIXTURES ARE PERMITTED.
8. CONCRETE CURB AND SIDEWALKS SHALL HAVE PROPER CONTROL JOINTS INSTALLED AT 10' INTERVALS FOR CURB AND 5' INTERVALS FOR SIDEWALK. EXPANSION JOINTS FOR CURBING SHALL BE AT EACH 100' INTERVAL PLUS AT EACH POINT OF TANGENT OR CURVE. SIDEWALKS SHALL HAVE EXPANSION JOINTS AT 20' INTERVALS OR AT A CHANGE OF DIRECTION.

APPROVED	TOWN OF EASTON STANDARD DETAILS
Rick Van Emburgh, TOWN ENGINEER	CONCRETE QUICK REFERENCE LIST
ISSUED: JULY, 2025	STANDARD NO: TOE-R-1.03

CENTERLINE PAVEMENT MARKINGS
1. CENTERLINE PAVEMENT MARKINGS SHALL BE USED TO DELINEATE THE SEPARATION OF TRAFFIC LANES THAT HAVE OPPOSITE DIRECTION OF TRAVEL.
2. THE CENTERLINE SHALL BE IN THE GEOMETRICAL CENTER OF THE ROADWAY UNLESS OTHERWISE REQUIRED BY FIELD CONDITIONS.
3. ALL TWO WAY STREETS WITH AT LEAST 10' TRAVEL LANES SHALL HAVE A CENTERLINE.
4. THE CENTERLINE MARKING SHALL BE YELLOW LINES, CONFIGURATION TO BE APPROVED BY THE TOWN ENGINEER.
5. WHILE SEPARATING TRAFFIC LANES TRAVELING IN THE SAME DIRECTION, A SINGLE BROKEN WHITE LINE SHALL BE USED WHERE CROSSING LANES IS PERMITTED.

EDGE LINE PAVEMENT MARKINGS
1. EDGE LINE PAVEMENT MARKINGS SHALL BE USED TO DELINEATE THE SHOULDER AND TRAVEL LANES.
2. THE EDGE OF THE TRAVEL LANE SHALL CONSIST OF A SINGLE SOLID WHITE LINE.
3. EXCEPT FOR DOTTED EDGE LINE EXTENSIONS, EDGE LINES SHALL NOT BE EXTENDED THROUGH INTERSECTIONS OR MAJOR DRIVEWAYS.

MARKING TYPE AND COMPOSITION
1. MATERIAL SHALL BE HIGHLY DURABLE RETROREFLECTIVE POLYMERIC MATERIALS DESIGNED FOR USE AS TRANSVERSE LINES, NUMBERS, SYMBOLS AND ARROW MARKINGS SUBJECTED TO HIGH VOLUMES AND SEVERE WEAR CONDITIONS SUCH AS SHEAR ACTION FROM CROSSOVER OR ENCROACHMENT.
2. MATERIAL SHALL ADHERE TO ALL ASPHALT AND PORTLAND CEMENT CONCRETE PAVEMENT SURFACES AND ANY EXISTING PAVEMENT MARKINGS WHEN APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
3. THE MATERIAL SHALL BE CAPABLE OF CONFORMING TO PAVEMENT CONTOURS, BREAKS AND FAULTS, AND SHALL REMAIN IN PLACE ON PAVEMENT WITHOUT BEING DISPLACED BY TRAFFIC.
4. THE MATERIAL SHALL CONSIST OF POLYMERIC MATERIALS, PIGMENTS, BINDERS AND GLASS BEADS DISTRIBUTED ACROSS THE ENTIRE CROSS-SECTIONAL AREA.
5. THE MATERIAL SHALL PROVIDE A MINIMUM AVERAGE SKID RESISTANCE VALUE OF 50 BPN WHEN TESTED.
6. THE MATERIAL SHALL HAVE A MINIMUM THICKNESS OF 120 MILS WITHOUT ADHESIVE.
7. THE MATERIAL SHALL RETAIN A MINIMUM OF 65% ADHESIVE BOND AFTER 100 FREEZE-THAW CYCLES.

APPROVED	TOWN OF EASTON STANDARD DETAILS
Rick Van Emburgh, TOWN ENGINEER	PAVEMENT MARKINGS
ISSUED: JULY, 2025	STANDARD NO: TOE-R-1.04

VISIBILITY TRIANGLE REQUIREMENTS:
1. NO STRUCTURES OR IMPROVEMENTS CAN BE PLACED IN THE VISIBILITY TRIANGLE EXCEPT FENCES, WALLS OR BERMS NOT HIGHER THAN 3 FEET.
2. NO MOTOR VEHICLE, TRAILER OR OTHER EQUIPMENT IS ALLOWED TO PARK, STAND, OR STOP IN THE VISIBILITY TRIANGLE.
3. TREES ARE PERMITTED BUT NOT ALLOWED TO GROW HIGHER THAN 3 FEET, EXCEPT FOR STREET TREES IN THE TOWN RIGHT-OF-WAY WITH BRANCHES NO LOWER THAN 8 FEET FROM GROUND LEVEL
4. VISIBILITY TRIANGLE EXEMPTIONS INCLUDE:
   • TOWN OF EASTON SIGNS AND SIGN POSTS
   • OFFICIAL TRAFFIC CONTROL DEVICES
   • UTILITY POLES
   • BENCHES
   • FIRE HYDRANTS



STREET INTERSECTION

NOTES:
THE VISIBILITY TRIANGLE FOR A STREET INTERSECTION IS A TRIANGLE WITH 40' SIDES, STARTING AT THE CORNER WHERE TWO FLOW LINES INTERSECT AND EXTENDING OUT AWAY FROM THE CORNER INTERSECTION BUT STILL FOLLOWING THE FLOWCURB LINES.

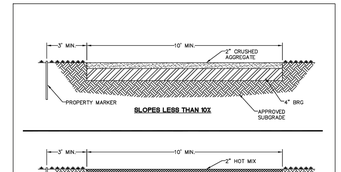
THE VISIBILITY TRIANGLE FOR INTERSECTIONS OF ALLEYS, DRIVEWAYS OR COMMERCIAL ENTRANCES WITH STREETS IS A TRIANGLE WITH 10' SIDES EXTENDING FROM THE INTERSECTION OF THE FLOW LINE BUT FOLLOWING THE EDGE OF THE ALLEY, DRIVEWAY OR COMMERCIAL ENTRANCE.

THE VISIBILITY TRIANGLE FOR INTERESECTIONS OF ALLEYS, DRIVEWAYS OR COMMERCIAL ENTRANCES WITH SIDEWALKS IS A TRIANGLE 5' BY 5' SIDES EXTENDING FROM THE INTERSECTION FORMED USING THE EDGE OF THE SIDEWALK NEAREST FROM THE STREET AND THE EDGE OF THE ALLEY, DRIVEWAY, OR COMMERCIAL ENTRANCES.



INTERSECTION OF ALLEY, DRIVEWAY OR COMMERCIAL ENTRANCE W STREET OR SIDEWALK

APPROVED	TOWN OF EASTON STANDARD DETAILS
Rick Van Emburgh, TOWN ENGINEER	VISIBILITY TRIANGLE
ISSUED: JULY, 2025	STANDARD NO: TOE-R-2.05



NOTES:
1. DRIVEWAY SECTIONS TO BE SHOWN OR AS APPROVED BY THE TOWN ENGINEER'S OFFICE.
2. DRIVEWAY TO BE A MIN. OF 35' LONG AND A MIN. OF 10' WIDE.
3. DRIVEWAY TO BE A MIN. OF 3' FROM PROPERTY LINE.

SINGLE FAMILY RESIDENTIAL DRIVEWAY DETAILS
NO SCALE

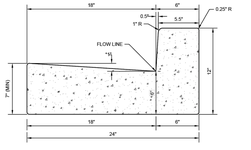
GENERAL NOTES
1. THIS SPECIFICATION SHALL APPLY TO ANY AND ALL UTILITY WORK OR STREET MODIFICATIONS, SUCH AS DRAINAGE IMPROVEMENTS, OR OTHER CONSTRUCTION DEEMED APPROPRIATE BY THE TOWN ENGINEER. THE CONTRACTOR SHALL RESTORE ALL SURFACES DAMAGED BY THEIR OPERATIONS TO THE WIDTHS AND EXTENT DETAILED OR SPECIFIED WITH.
2. SURFACE RESTORATION IN TOWN STREETS AND ROADS SHALL BE IN ACCORDANCE WITH THE MD STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS AND THESE TOWN STANDARDS.
3. EXISTING PAVEMENT SHALL BE TRIMMED TO SECURE A STRAIGHT, CLEAN EDGE FOR REMOVING. SAW CUT PAVEMENT AS SHOWN ON TOE-R-3.03 OR AS DIRECTED TO OBTAIN A CLEAN PAVEMENT EDGE. ALL TRENCHES SHALL BE CUT BACK BY ONE (1) FOOT TO EITHER SIDE OF THE TRENCH.
4. NO STAGGERED OR IRREGULAR LONGITUDINAL TRENCH REPAIRS WIDTHS SHALL BE ALLOWED. REPAIRS SHALL BE A UNIFORM WIDTH AND IN A STRAIGHT LINE.
5. MINIMUM TEMPORARY TRENCH RESTORATION WIDTH IS FIVE (5) FEET. ACTUAL WIDTH SHALL VARY BASED ON FIELD CONDITIONS AS DETERMINED BY TOWN ENGINEERS.
6. WHERE MULTIPLE CROSS ROAD TRENCH RESTORATION WHERE APPLICABLE, PLUS MILL AND OVERLAY. MILL AND OVERLAY SHALL INCLUDE THE FULL LANE WIDTH OF ANY STREET DISTURBED. ON HORIZONTAL CROSSINGS, THE MINIMUM RUN OF THE STREET TO BE MILLED AND OVERLAID SHALL BE THIRTY (30) FEET, CENTERED ON THE DISTURBANCE. WHERE MULTIPLE CROSS ROAD REPAIRS ARE CREATED, MILL AND OVERLAY SHALL CONTINUE THE FULL LANE WIDTH TO INCLUDE ALL TRENCHES WHERE CROSS ROAD REPAIRS ARE LESS THAN FIFTY (50) FEET APART. LONGITUDINAL TRENCHES SHALL INCLUDE MILL AND OVERLAY FOR ONE (1) FULL LANE FOR FIFTEEN (15) FEET BEYOND EXCAVATION FOR EACH LANE DISTURBED.
7. UNDERMINED AREAS SHALL BE GROUT FILLED OR CUT BACK.
8. A TEMPORARY TWO (2) INCH LAYER OF COLD PATCH SHALL BE PLACED ON UTILITY TRENCHES WHERE WEATHER CONDITIONS, OR OTHER DELAYS DO NOT PERMIT FINAL REPAIRS WITHIN SEVEN (7) CALENDAR DAYS.
9. METAL PLATING MAY BE USED AT THE END POINT OF THE UTILITY LAYING OPERATION AND MUST BE USED TO PROTECT THE INTEGRITY OF CONCRETE PATCHES. CONTRACTOR SHALL POST WARNING SIGNS.
10. ALL ADJUSTMENTS TO EXISTING UTILITIES MUST BE PRIOR TO PAVING OPERATIONS AND REPEATED IF THERE IS ANY DAMAGE DUE TO COMPACTING AND ROLLING OPERATIONS. MANHOLE OR CATCH-BASIN ADJUSTMENTS SHALL BE DONE WITH ADJUSTMENT RINGS, BRICK COURSES, OR MORTAR LAYERS, SUBJECT TO TOWN OF EASTON AND/ OR EASTON UTILITIES APPROVAL.
11. PAVING OPERATIONS SHALL BE PERFORMED WHEN THE FOLLOWING MINIMUM TEMPERATURES ARE MET:
    a. 32° AND RISING FOR HOT MIX BASE COURSE.
    b. 40° AND RISING FOR HOT MIX SURFACE COURSE.
12. COMPACTED LIFT THICKNESS SHALL BE LIMITED TO:
    a. 2" FOR 9.5MM SUPERPAVE
    b. 3" FOR 12.5MM SUPERPAVE
    c. 4" FOR 19MM SUPERPAVE
    d. 6" FOR GRADED AGGREGATE
    e. 8"FOR BANK RUN GRAVEL
13. CATCH BASIN, INLETS, CURBS AND ALL OTHER APPURTENANCES SHALL BE ADEQUATELY COVERED AND PROTECTED PRIOR TO THE APPLICATION OF ANY BITUMINOUS MATERIAL SO EARTH OR BITUMINOUS SHALL BE ALLOWED TO ENTER STORM DRAINAGE SYSTEM. SUITABLE CONTAINMENT PROVISIONS SHALL BE EMPLOYED TO PREVENT ANY SPILLAGE OF BITUMINOUS MATERIALS.
14. THE FINAL SURFACE SHALL PROVIDE A SMOOTH TRANSITION, FREE OF ABRUPT CHANGES IN GRADE, IS MADE WITH WITH ADJACENT PAVEMENTS AND/OR SIDEWALK. NO DEPRESSIONS OR OTHER MISALIGNMENT SHALL OBSTRUCT, TRAP OR OTHERWISE MISDIRECT THE FLOW OF SURFACE WATER DRAINAGE.

MAINTENANCE OF TRENCH REPAIRS
1. ALL DEPRESSIONS APPEARING IN THE TRENCH REPAIR, STABILIZED BASE AND TEMPORARY PAVING SHALL BE PROPERLY BE RELIFTED. IF THE CONTRACTOR FAILS TO MAKE REPAIRS WITHIN 48 HOURS AFTER RECEIPT OF WRITTEN NOTICE FROM THE TOWN ENGINEER, THE TOWN MAY REFILL SAID DEPRESSIONS, AND THE COST SHALL BE BILLED TO THE CONTRACTOR. IN CASE OF EMERGENCY, THE TOWN MAY REFILL ANY DEPRESSIONS, OR PROTECT WITH BARRICADES, WITHOUT GIVING PREVIOUS NOTICE TO THE CONTRACTOR, AND THE COST WILL BE BILLED TO THE CONTRACTOR.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY INJURY OR DAMAGE THAT MAY RESULT FROM LACK OF MAINTENANCE OF ANY TRENCH REPAIR AT ANY TIME.

APPROVED	TOWN OF EASTON STANDARD DETAILS
Rick Van Emburgh, TOWN ENGINEER	SURFACE RESTORATION & PAVING NOTES
ISSUED: JULY, 2025	STANDARD NO: TOE-R-3.04

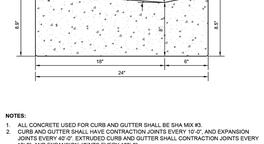
TOPSOIL AND SEEDING
1. TOPSOIL SHALL BE PLACED IN AREAS WHERE GRASS HAS BEEN DISTURBED BY THE CONTRACTOR'S OPERATIONS. DEPTH OF TOPSOIL SHALL BE FOUR (4) INCHES MINIMUM. TOPSOIL SALVAGED AND STOCKPILED DURING TRENCH AND STRUCTURE EXCAVATION MAY BE USED FOR THIS PURPOSE. WHEN TOPSOILING, ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL MEET THE PROVISIONS OF MD SHA STANDARDS, SECTIONS 701-705, AND 920. IF DIRECTED, THE CONTRACTOR SHALL HAVE THE TOPSOIL TESTED BY A STATE CERTIFIED LABORATORY AND SHALL SUBMIT CERTIFICATION THAT TOPSOIL MEETS THE SPECIFIED STANDARD. TOPSOIL SHALL BE CLEAN, FREE OF ROOTS, STONES, AND OTHER DEBRIS.
2. SEEDING SHALL CONSIST OF FURNISHING AND PLACING SEED AND SOIL SUPPLEMENTS ON TOPSOILED AREAS AND AT ANY LOCATIONS, AS DIRECTED BY THE TOWN ENGINEER. WHEN SEEDING, ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL MEET THE PROVISIONS OF MD SHA STANDARDS, SECTIONS 705 AND 920.
3. FERTILIZER SHALL BE A NECOGNIZED COMMERCIAL FERTILIZER CONFORMING TO MD SHA STANDARDS, SECTION 921.
4. MULCH SHALL BE APPLIED TO DISTURBED AREAS WITH SLOPES <3:1. MULCH FOR THESES AREAS SHALL CONSIST OF STRAW MULCH. AS SPECIFIED IN MD SHA STANDARDS SECTION 70, MULCHING OF AREAS WHERE SLOPES ARE ≥3:1, SHALL UTILIZE CURLEX OR EQUAL.

APPROVED	TOWN OF EASTON STANDARD DETAILS
Rick Van Emburgh, TOWN ENGINEER	UNPAVED AREA RESTORATION NOTES
ISSUED: JULY, 2025	STANDARD NO: TOE-R-3.05



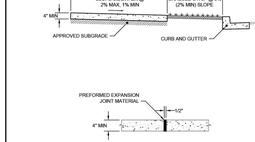
NOTES:
1. ALL CONCRETE USED FOR CURB AND GUTTER SHALL BE SHA MIX #3.
2. CURB AND GUTTER SHALL HAVE CONTRACTION JOINTS EVERY 10'-0", AND EXPANSION JOINTS EVERY 40'-0". EXTRUDED CURB AND GUTTER SHALL CONTRACTION JOINTS EVERY 10'-0", AND EXPANSION JOINTS EVERY 100'-0".
3. DEPRESSED CURB AND GUTTER SHALL BE UTILIZED AT HANDICAPPED RAMPS WHEN TRANSITIONING FROM STANDARD CURB AND GUTTER.
4. MAXIMUM GUTTER SLOPE ON CURB RETURNS SHALL BE 2% WHERE HANDICAPPED RAMPS ARE REQUIRED.
5. SUBGRADE SHALL BE 2" MIN. #57 STONE, BRG, GAB, CR6, CR8, OR MILLINGS.

APPROVED	TOWN OF EASTON STANDARD DETAILS
Rick Van Emburgh, TOWN ENGINEER	STANDARD CURB & GUTTER
ISSUED: JULY, 2025	STANDARD NO: TOE-R-4.01



NOTES:
1. ALL CONCRETE USED FOR CURB AND GUTTER SHALL BE SHA MIX #3.
2. CURB AND GUTTER SHALL HAVE CONTRACTION JOINTS EVERY 10'-0", AND EXPANSION JOINTS EVERY 40'-0". EXTRUDED CURB AND GUTTER SHALL CONTRACTION JOINTS EVERY 10'-0", AND EXPANSION JOINTS EVERY 100'-0".
3. MAXIMUM GUTTER SLOPE ON CURB RETURNS SHALL BE 2% WHERE HANDICAPPED RAMPS ARE REQUIRED.
4. SUBGRADE SHALL BE 2". MIN. #57 STONE; BRG, GAB, CR6, CR8, OR MILLINGS.

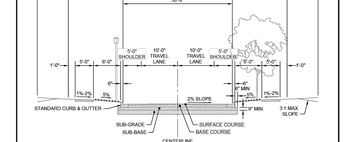
APPROVED	TOWN OF EASTON STANDARD DETAILS
Rick Van Emburgh, TOWN ENGINEER	STANDARD DEPRESSED CURB & GUTTER FOR SIDEWALK RAMPS
ISSUED: JULY, 2025	STANDARD NO: TOE-R-4.03



EXPANSION JOINT DETAIL

NOTES:
1. CONCRETE SHALL BE SHA MIX #3.
2. CONTRACTION JOINTS SHALL BE TOOLED AT 5'-0" INTERVALS (4' INTERVALS FOR 4' WIDE SIDEWALK). EXPANSION JOINTS AT INTERVALS NOT GREATER THAN 25'-0".
3. ALL UNPAVED AREAS WITHIN STREET SIDELINES SHALL BE SEEDED OR SODDED PER SPECIFICATIONS.
4. SIDEWALKS AT DRIVEWAY LOCATIONS TO BE 7" THICK.
5. WHERE CONTINUOUS WIDTH OF TRAVEL IS LESS THAN 5'-0", PROVIDE PASSING ZONES AT AN INTERVAL NOT TO EXCEED 200' CENTER TO CENTER. ENTRANCES SHALL BE ACCEPTABLE PASSING ZONES PROVIDED PAVING WIDTH OF 5'-0" IS MAINTAINED AT 2% SLOPE.
6. GRASS STRIPS SHALL BE SLOPED TO PROVIDE POSITIVE DRAINAGE TOWARD STORMWATER FEATURES.
7. WHERE REVERSE SLOPES OF GRASS STRIPS AND SIDEWALKS ARE REQUIRED TO PROVIDE POSITIVE DRAINAGE TOWARDS A STORMWATER FEATURE, SPOT ELEVATIONS SHALL BE PROVIDED ON FRONT AND BACK OF SIDEWALK. (REVERSE SLOPES MUST BE APPROVED BY THE TOWN ENGINEER PRIOR TO CONSTRUCTION)
8. MAXIMUM SLOPE IN THE DIRECTION OF TRAVEL SHALL BE 5% IN LOCATIONS WITHOUT HANDICAPPED RAMPS.
9. SIDEWALKS SHALL COMPLY WITH ADA REQUIREMENTS PER THE MOST UP TO DATE DEPARTMENT OF JUSTICE REGULATION 28CFR PART 36.

APPROVED	TOWN OF EASTON STANDARD DETAILS
Rick Van Emburgh, TOWN ENGINEER	CONCRETE SIDEWALK
ISSUED: JULY, 2025	STANDARD NO: TOE-R-5.01

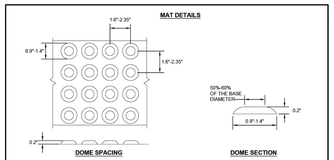


NOTES:
1. PROVIDE 4" MIN. TOPSOIL, FERTILIZE, SEED AND MULCH ALL DISTURBED AREAS.
2. MOUNTABLE CURB AND GUTTER MAY BE USED IN LIEU OF STANDARD CURB AND GUTTER WHEN APPROVED BY THE TOWN ENGINEER.

NOTE: TYPICAL SECTION OF 50'ROW/30'ROAD WILL BE USED FOR STATIONS 1+58 THRU 7+43, 3+16 THRU 7+09, 8+37 THRU INTERSECTION AT CALVERT STREET

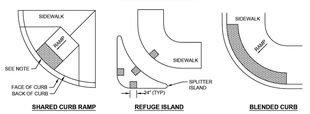
APPROVED	TOWN OF EASTON STANDARD DETAILS
Rick Van Emburgh, TOWN ENGINEER	ROAD SECTION W/ CURB & GUTTER & SIDEWALK
ISSUED: JULY, 2025	STANDARD NO: TOE-R-2.02

MAT DETAILS



DOME SPACING | DOME SECTION

PLACEMENT GUIDELINES



NOTES:
1. THE DETECTABLE WARNING SURFACE SHALL BE LOCATED SO THAT THE EDGE NEAREST THE CURB LINE IS 6"-8" FROM THE FACE OF THE CURB.
2. FOR SKEWED APPLICATIONS, DETECTABLE WARNING SHALL BE PLACED SUCH THAT THE DOMES CLOSEST TO THE BACK OF THE CURB ARE NO LESS THAN 0.5" AND NO MORE THAN 3.0" FROM THE BACK OF THE CURB.
3. TRUNCATED DOME SURFACES SHALL BE FABRICATED TO PROVIDE FULL DOMES ONLY.
4. DETECTABLE WARNING SURFACES ARE REQUIRED AT STREET CROSSINGS AND SIGNALIZED INTERSECTIONS.
5. WHERE ISLANDS OR MEDIANS ARE LESS THAN 6' WIDE, THE DETECTABLE WARNING SHOULD EXTEND ACROSS THE FULL LENGTH OF THE CUT THROUGH THE ISLAND OR MEDIAN.

APPROVED	TOWN OF EASTON STANDARD DETAILS
Rick Van Emburgh, TOWN ENGINEER	DETECTABLE WARNING SURFACES
ISSUED: JULY, 2025	STANDARD NO: TOE-R-5.08

CAST-IN-PLACE CONCRETE SIDEWALK AND CURBING

A. SUBMITTALS
1. SUBMIT MIX DESIGN FOR APPROVAL PRIOR TO PLACING CONCRETE. FOR ALL CONCRETE 1. SIDEWALKS, UTILIZE MD SHA MIX #3, AIR ENTRAINED, MINIMUM 3,500 PSI MIX. FOR CURB AND GUTTER, UTILIZE MD SHA MIX #3, EXCEPT MAXIMUM WATER CEMENTITIOUS RATIO OF 0.45 AND 611 POUNDS MINIMUM CEMENTITIOUS MATERIALS, AIR ENTRAINED, MINIMUM 4,200 PSI MIX.
2. SUBMIT CONCRETE TESTING AGENCY FOR APPROVAL, WHICH CONTRACTOR OR PROJECT OWNER SHALL EMPLOY FOR INFIELD AND LABORATORY TESTING.

B. CONCRETE PLACEMENT
1. NOTIFY THE TOWN ENGINEERING DEPARTMENT OF INTENTION TO POUR CONCRETE 24 HOURS PRIOR TO PERFORMING WORK AT 410-820-8622.
2. DRIVER SHALL PRESENT TO TOWN 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, RAMPS, VALLEY GUTTERS, ETC. IS IN PLACE AND PROPERLY SUPPORTED.
3. TESTING AGENCY SHALL VERIFY THAT SUBGRADE IS PROPERLY COMPACTED.
4. DRIVER SHALL PRESENT COMPUTER GENERATED MIX DELIVERY TICKET UPON ARRIVAL TO SITE.
5. DO NOT ADD WATER TO MIX AT JOB SITE UNLESS APP

SOIL DATA

Map Unit Symbol	Name	Hydrologic Soil Group	K-Factor	Hydric?
FacA	Fallsington sandy loams, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain	C/D	-	Yes
HfB	Hambrook-Sassafras complex, 2 to 5 percent slopes	B	0.32	No
Up	Urban Land	-	-	No
WdcA	Woodstown sandy loam, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain	C	0.24	No
Zk	Zekiah silt loam, frequently flooded	C/D	0.37	Yes

EROSION & SEDIMENT CONTROL FEATURES

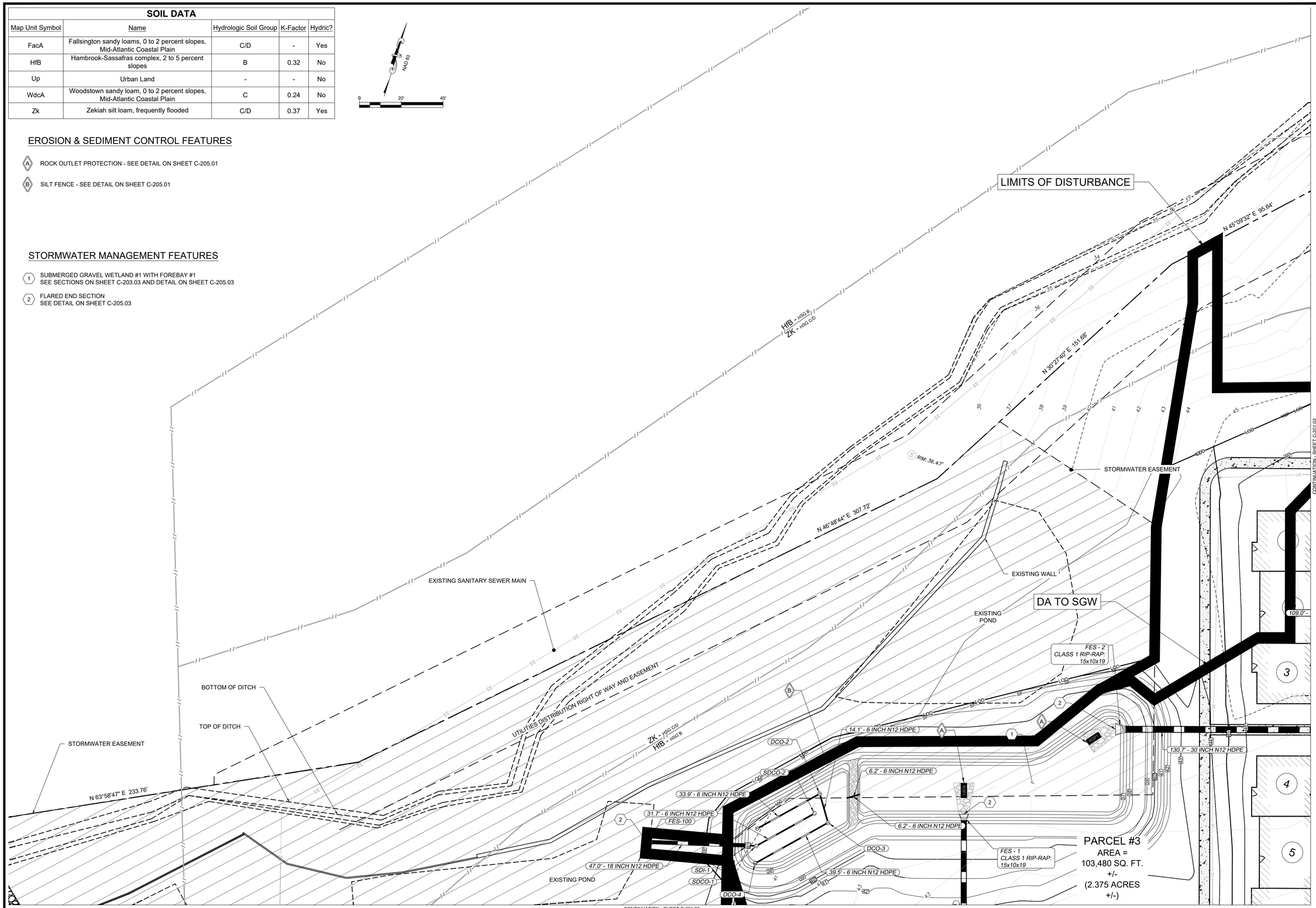
A ROCK OUTLET PROTECTION - SEE DETAIL ON SHEET C-205.01

B SILT FENCE - SEE DETAIL ON SHEET C-205.01

STORMWATER MANAGEMENT FEATURES

1 SUBMERGED GRAVEL WETLAND #1 WITH FOREBAY #1
SEE SECTIONS ON SHEET C-203.03 AND DETAIL ON SHEET C-205.03

2 FLARED END SECTION
SEE DETAIL ON SHEET C-205.03



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TOWN OF EASTON - TOWN ENGINEER DATE	TOWN OF EASTON PLANNING AND ZONING DATE	EASTON UTILITIES - ENGINEER DATE	TALBOT SOIL CONSERVATION DISTRICT - MANAGER DATE

SWM & ESC PLAN

OF THE LANDS OF

CALVERT TERRACE

TAX MAP 0103, GRID 00EA, PARCEL 885 - 928

ELECTION WARD 1, EASTON, TALBOT COUNTY, MARYLAND

PREPARED FOR OSPREY PROPERTY COMPANY II LLC

RAUCH inc.
Engineering | Survey | Architecture | Environmental
Main Office: 106 N Harrison St - Easton, MD 21601
Web: www.rauch-inc.com | Email: design@raucheng.com
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License No. 11024
Expiration Date: July 24, 2026

PRELIMINARY FOR REVIEW

12-10-2025

REVISIONS

REV. #	DATE	DESCRIPTION
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MISS UTILITY OF DELMARVA CALL BEFORE YOU DIG

811

DATE:	12/10/2025
SCALE:	1" = 20'
DRAWN BY:	AF
DESIGNED BY:	AF
APPROVED BY:	BBF

SHEET NO.: C-201.01

FOR REVIEW

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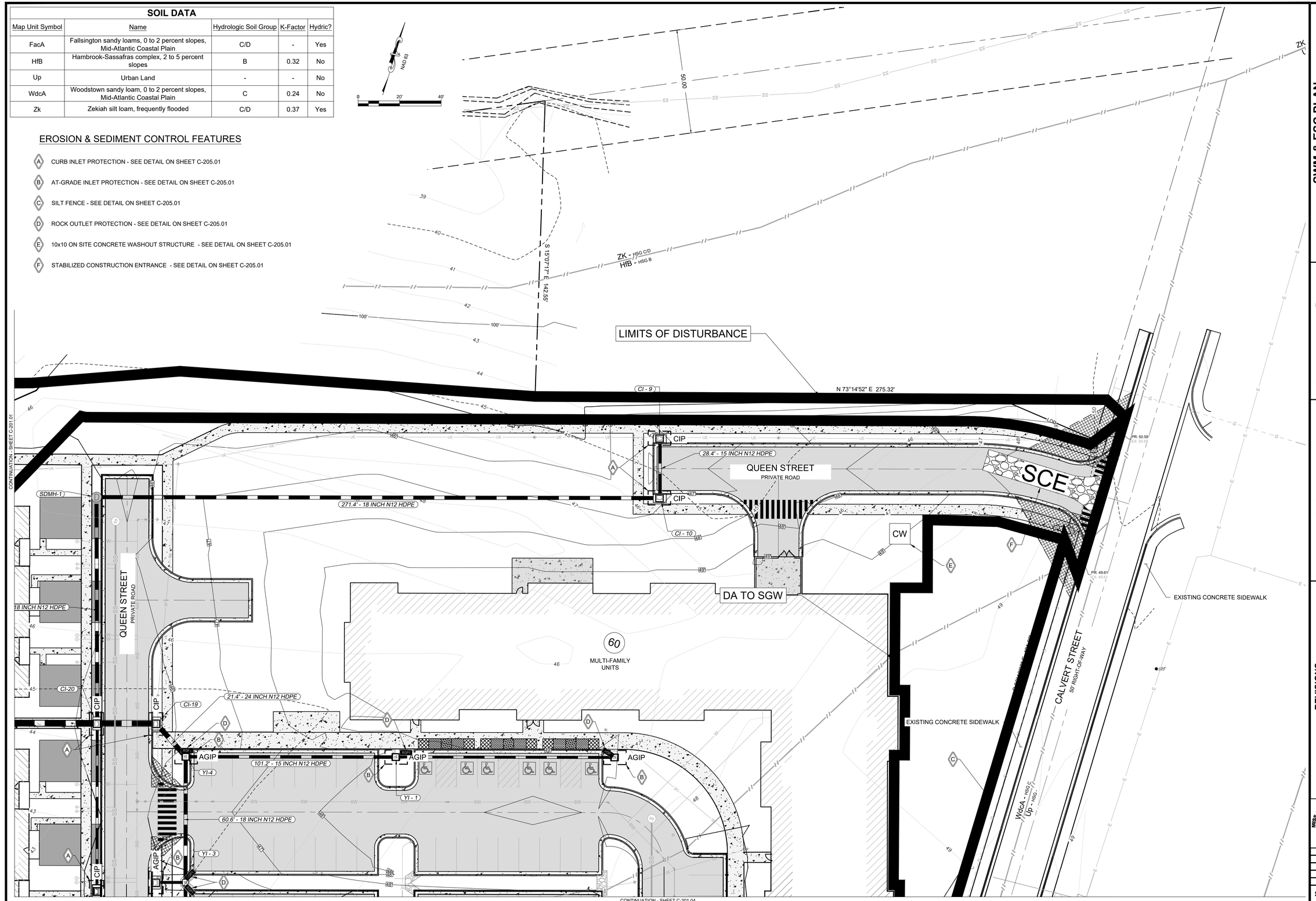
- B — AT-GRADE INLET PROTECTION - SEE DETAIL ON SHEET C-205.01
- C — SILT FENCE - SEE DETAIL ON SHEET C-205.01
- D — ROCK OUTLET PROTECTION - SEE DETAIL ON SHEET C-205.01
- E — 10x10 ON SITE CONCRETE WASHOUT STRUCTURE - SEE DETAIL ON SHEET C-205.01
- F — STABILIZED CONSTRUCTION ENTRANCE - SEE DETAIL ON SHEET C-205.01



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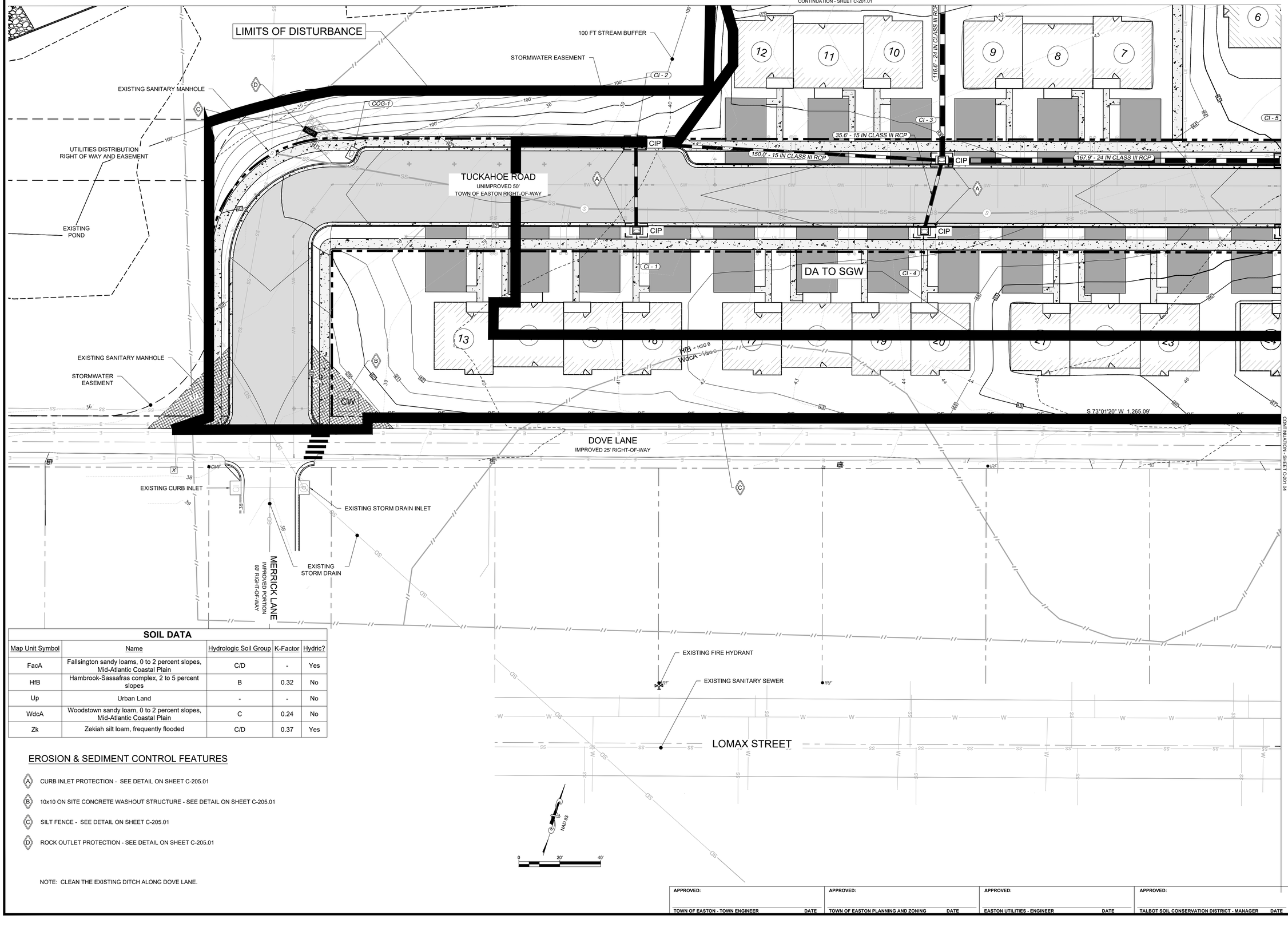
CONTINUATION - SHEET C-201.01



SOIL DATA

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EROSION & SEDIMENT CONTROL FEATURES

- (A) CURB INLET PROTECTION - SEE DETAIL ON SHEET C-205.01
- (B) 10x10 ON SITE CONCRETE WASHOUT STRUCTURE - SEE DETAIL ON SHEET C-205.01
- (C) SILT FENCE - SEE DETAIL ON SHEET C-205.01
- (D) ROCK OUTLET PROTECTION - SEE DETAIL ON SHEET C-205.01

NOTE: CLEAN THE EXISTING DITCH ALONG DOVE LANE.

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FOR REVIEW

CONTINUATION - SHEET C-201.02

CONTINUATION - SHEET C-201.03

QUEEN STREET
PRIVATE ROAD

(68.0' - 15 INCH HYD HDPE)

DA TO SGW

CI-13 CI-14 CI-15 CI-16 CI-18 CI - 6 CI - 7 CI - 8

YI - 2

CIP

115.5' - 18 IN CLASS III RCP

107.8' - 18 IN CLASS III RCP

114.8' - 15 IN CLASS III RCP

40.7' - 15 IN CLASS III RCP

49.4' - 15 IN CLASS III RCP

TUCKAHOE ROAD
UNIMPROVED 50'
TOWN OF EASTON RIGHT-OF-WAY

EXISTING GAS MAIN

CALVERT STREET
50' RIGHT-OF-WAY

EXISTING CONCRETE SIDEWALK

LIMITS OF DISTURBANCE

DOVE LANE
IMPROVED 25' RIGHT-OF-WAY

EXISTING UNDERGROUND ELECTRIC

EXISTING ELECTRIC MANHOLE

EXISTING STORM DRAIN INLET

EXISTING CONCRETE SIDEWALK

EXISTING GAS MAIN

EXISTING FIRE HYDRANT

EXISTING 6" WATER MAIN

EXISTING SANITARY SEWER

LOMAX STREET

EXISTING STORM DRAIN

EXISTING 6" WATER MAIN

EXISTING SANITARY SEWER MAIN

IPF

IRF

NAD 83

0 20' 40'

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- (B) AT-GRADE INLET PROTECTION - SEE DETAIL ON SHEET C-205.01
- (C) SILT FENCE - SEE DETAIL ON SHEET C-205.01
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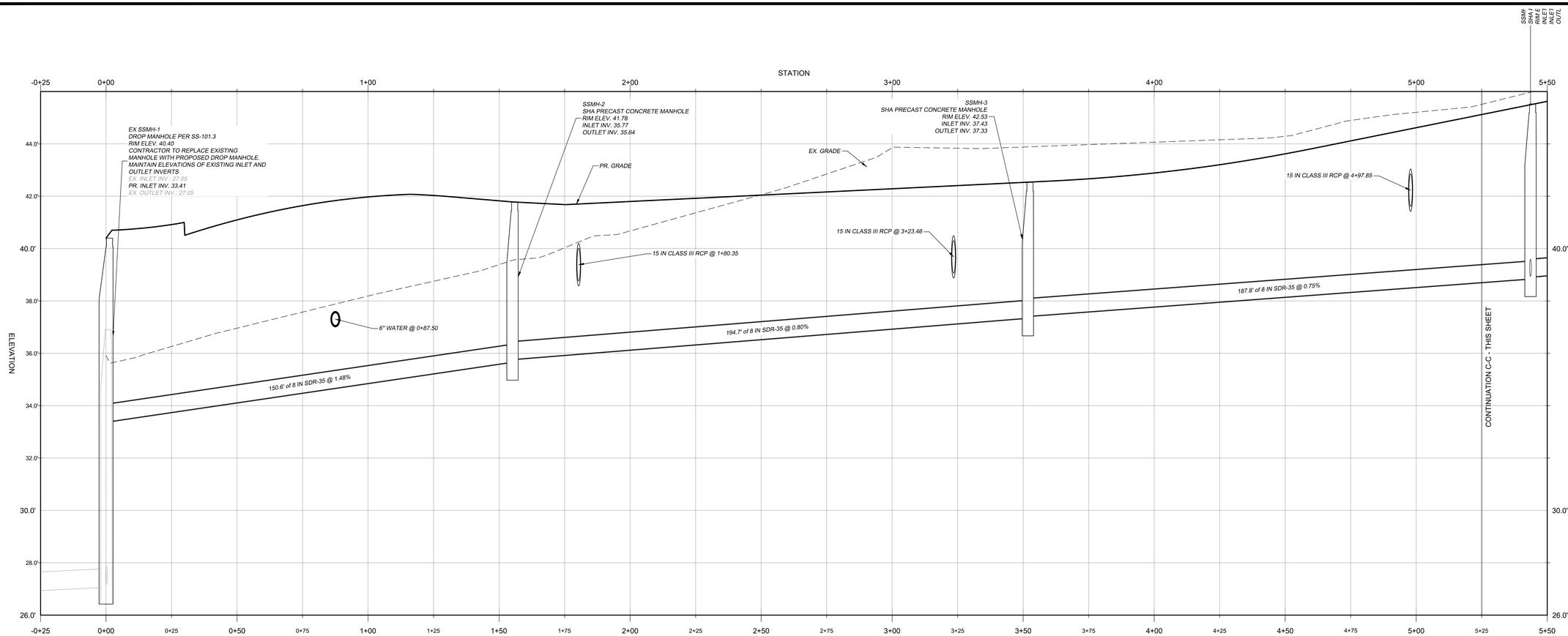
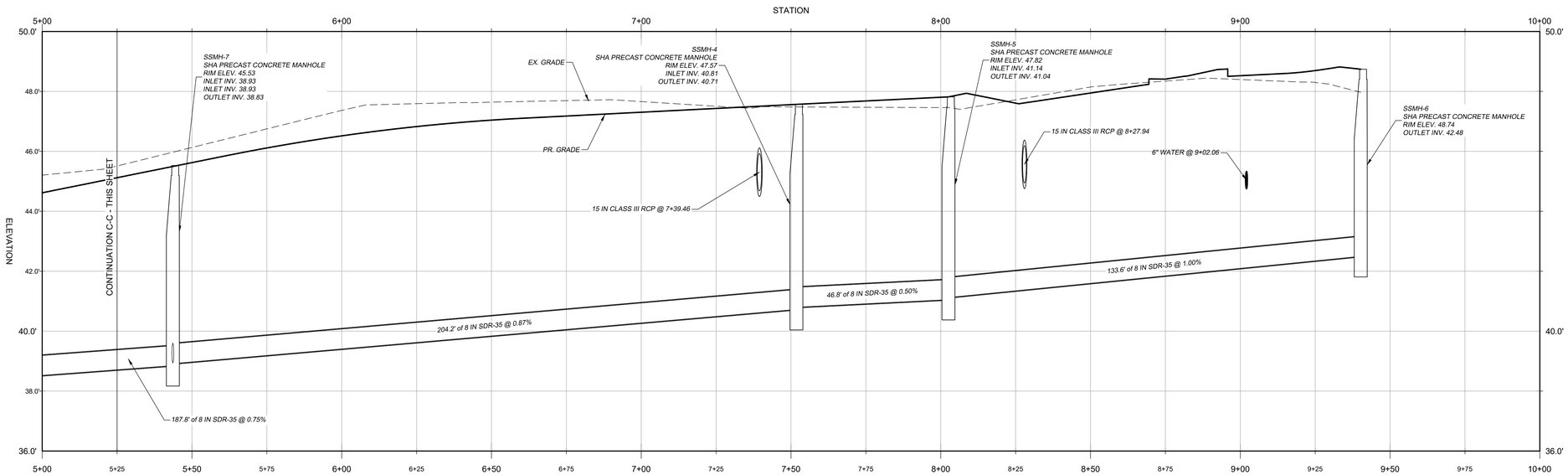
APPROVED BY:	BBF

SHEET NO.:
C-201.04

FOR REVIEW



SANITARY SEWER - SSMH-6 TO EX SSMH-1
V. SCALE: 1" = 2' H. SCALE: 1" - 20'



SANITARY SEWER - SSMH-6 TO EX SSMH-1
V. SCALE: 1" = 2' H. SCALE: 1" - 20'

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SHEET NO.:
C-403.01

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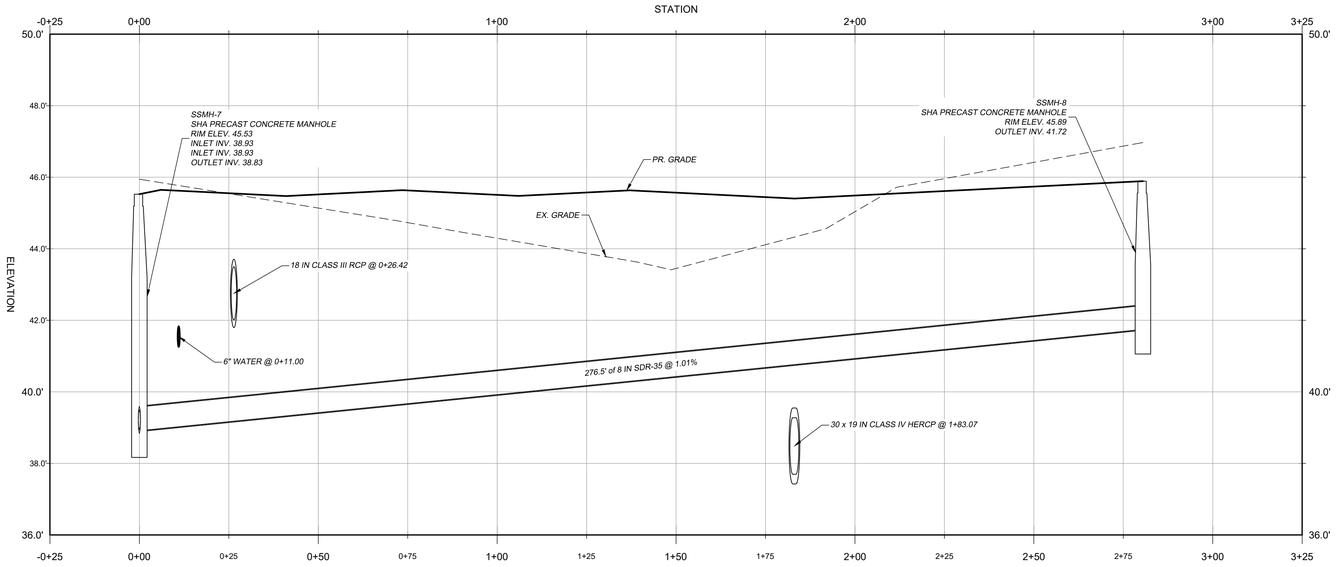

SANITARY SEWER - SSMH-8 TO SSMH-7
V. SCALE: 1" = 2' H. SCALE: 1" - 20'

STRUCTURE SCHEDULE
SANITARY SEWER

STRUCTURE NAME	LOCATION	STRUCTURE TYPE AND SIZE	CONNECTED PIPES	RIM ELEVATION
EX SSMH-1	N406803.08, E1578884.92	SHA PRECAST CONCRETE MANHOLE	SS-1 INV IN = 33.41	40.40
SSMH-2	N406821.86, E1579038.89	SHA PRECAST CONCRETE MANHOLE	SS-2 INV IN = 35.77 SS-1 INV OUT = 35.64	41.78
SSMH-3	N406877.62, E1579227.49	SHA PRECAST CONCRETE MANHOLE	SS-3 INV IN = 37.43 SS-2 INV OUT = 37.33	42.53
SSMH-4	N406996.82, E1579609.33	SHA PRECAST CONCRETE MANHOLE	SS-4 INV IN = 40.81 SS-6 INV OUT = 40.71	47.57
SSMH-5	N407011.64, E1579657.88	SHA PRECAST CONCRETE MANHOLE	SS-5 INV IN = 41.14 SS-4 INV OUT = 41.04	47.82
SSMH-6	N407143.29, E1579617.69	SHA PRECAST CONCRETE MANHOLE	SS-5 INV OUT = 42.48	48.74
SSMH-7	N406936.03, E1579410.22	SHA PRECAST CONCRETE MANHOLE	SS-7 INV IN = 38.93 SS-6 INV IN = 38.93 SS-3 INV OUT = 38.83	45.53
SSMH-8	N407204.44, E1579328.76	SHA PRECAST CONCRETE MANHOLE	SS-7 INV OUT = 41.72	45.89

PIPE SCHEDULE
SANITARY SEWER

PIPE NAME	SIZE AND MATERIAL	LENGTH	SLOPE	UPSTREAM STRUCTURE AND INVERT	DOWNSTREAM STRUCTURE AND INVERT
SS-2	8 IN SDR-35	194.67'	0.80%	SSMH-2 INV. 35.77'	SSMH-3 INV. 37.33'
SS-3	8 IN SDR-35	187.84'	0.75%	SSMH-3 INV. 37.43'	SSMH-7 INV. 38.83'
SS-4	8 IN SDR-35	46.77'	0.50%	SSMH-4 INV. 40.81'	SSMH-5 INV. 41.04'
SS-5	8 IN SDR-35	133.65'	1.00%	SSMH-5 INV. 41.14'	SSMH-6 INV. 42.48'
SS-6	8 IN SDR-35	204.18'	0.87%	SSMH-7 INV. 38.93'	SSMH-4 INV. 40.71'
SS-7	8 IN SDR-35	276.50'	1.01%	SSMH-7 INV. 38.93'	SSMH-8 INV. 41.72'
SS-1	8 IN SDR-35	150.61'	1.48%	EX SSMH-1 INV. 33.41'	SSMH-2 INV. 35.64'

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CALVERT TERRACE

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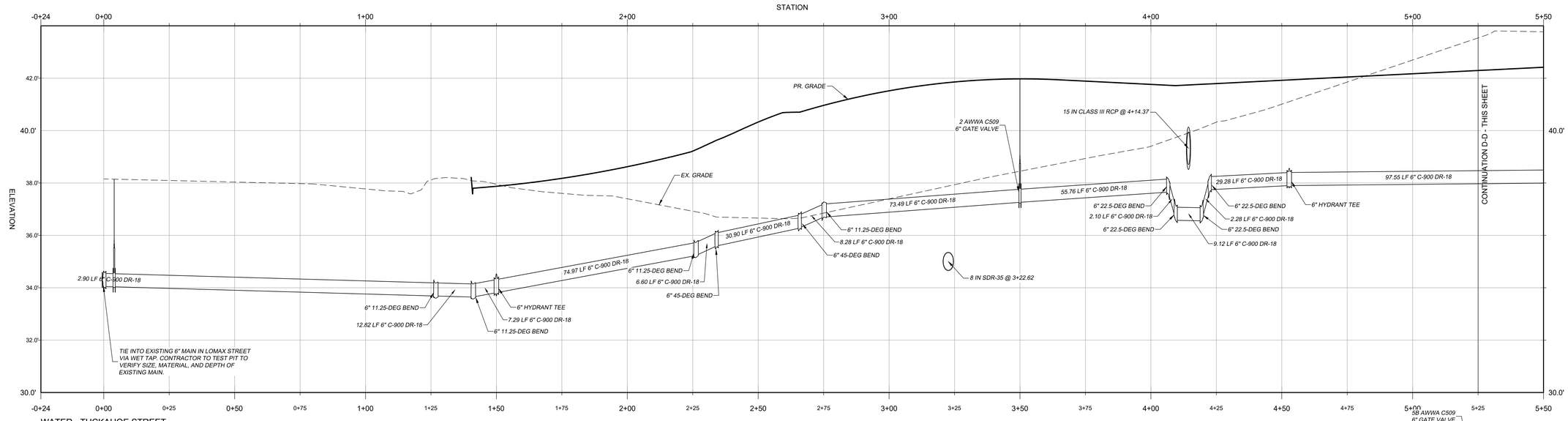
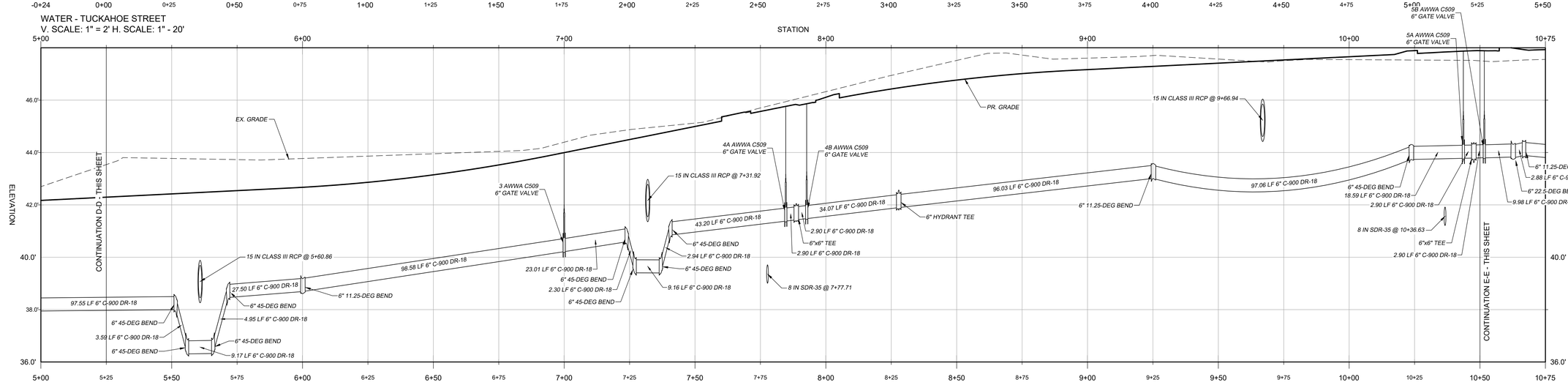
APPROVED BY:	BBF

SHEET NO.: C-403.02

FOR REVIEW



WATER - TUCKAHOE STREET
V. SCALE: 1" = 2' H. SCALE: 1" - 20'



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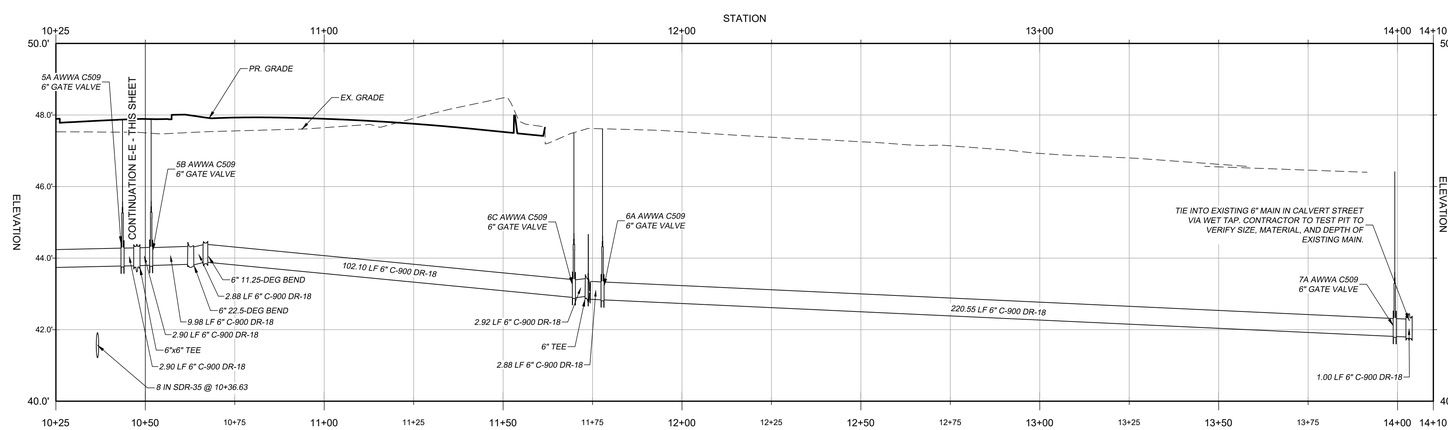

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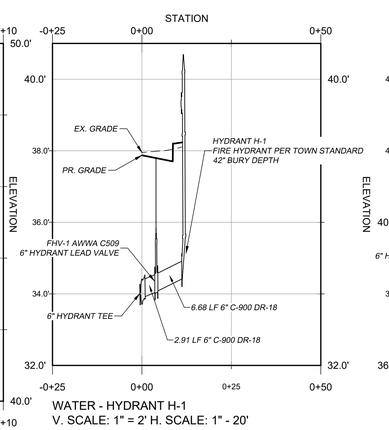
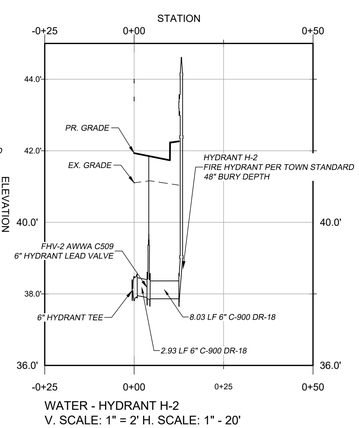


WATER - HYDRANT H-1
V. SCALE: 1" = 2' H. SCALE: 1" - 20'



WATER - HYDRANT H-2
V. SCALE: 1" = 2' H. SCALE: 1" - 20'

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APPROVED BY:	BBF

SHEET NO.: C-403.03

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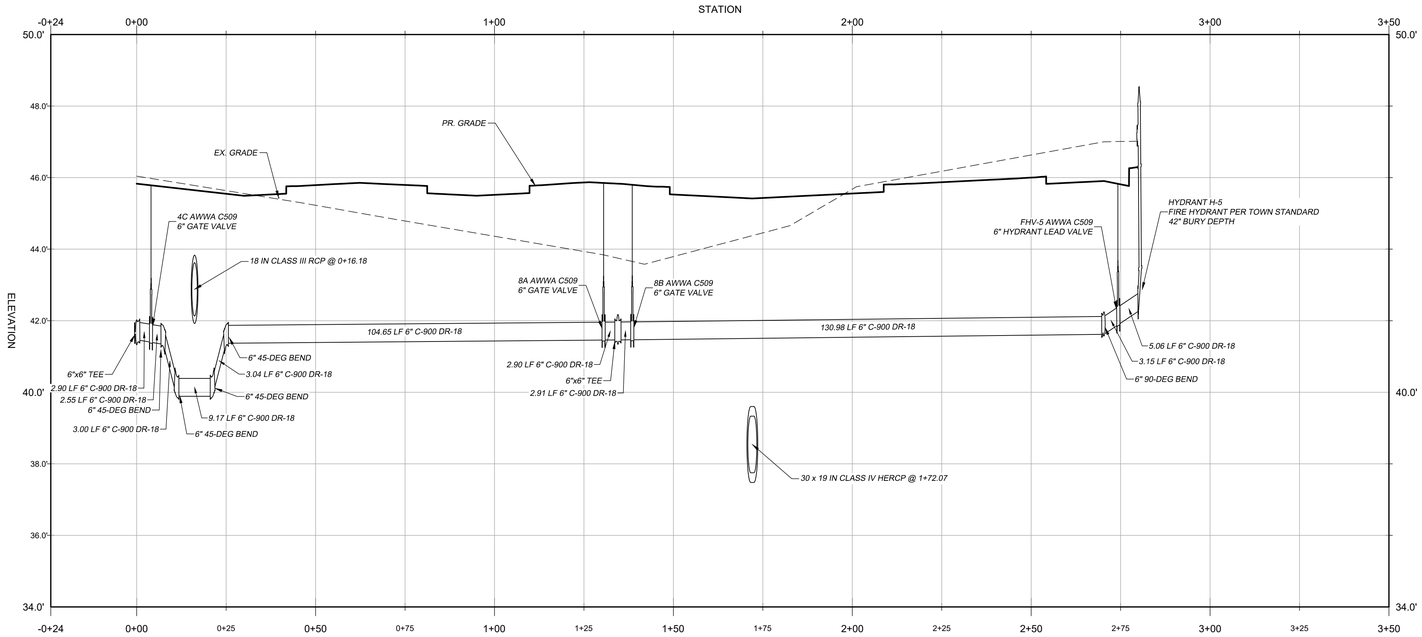
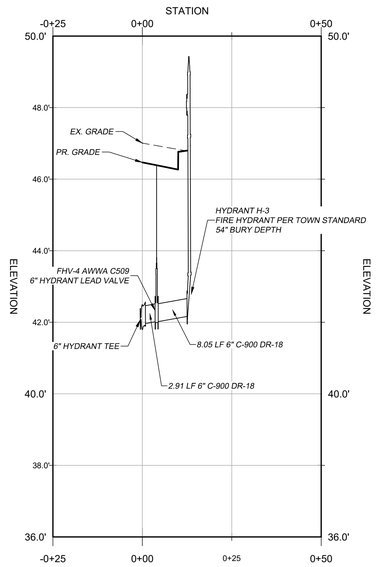
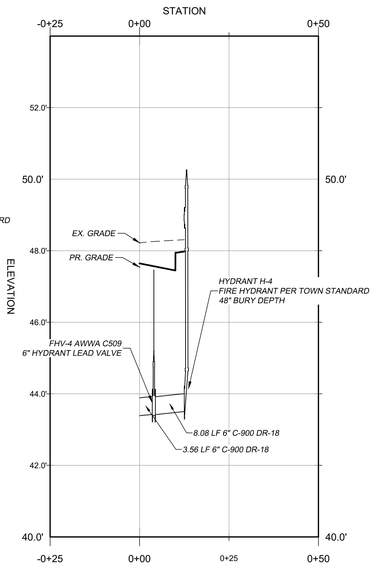


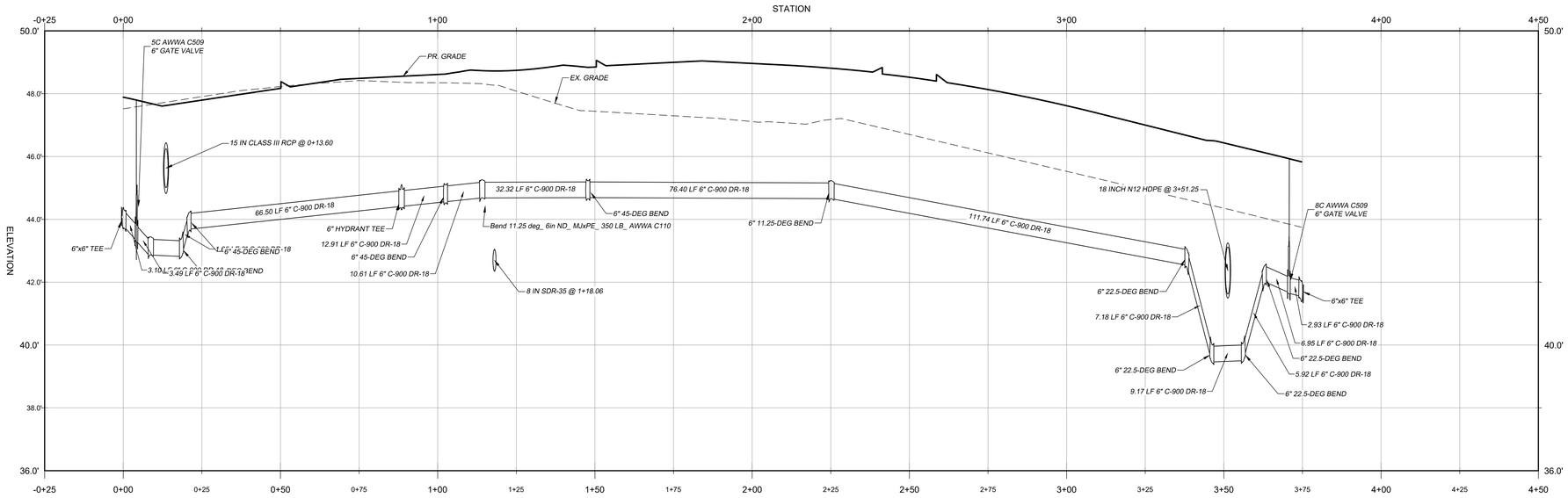
WATER - QUEEN STREET TO HYDRANT H-5
V. SCALE: 1" = 2' H. SCALE: 1" - 20'



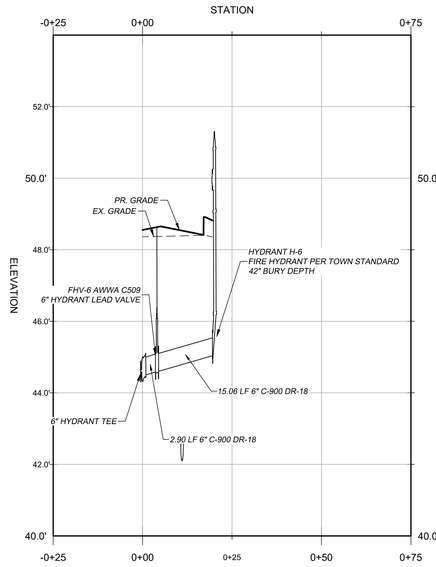
WATER - HYDRANT H-3
V. SCALE: 1" = 2' H. SCALE: 1" - 20'



WATER - HYDRANT H-4
V. SCALE: 1" = 2' H. SCALE: 1" - 20'



WATER - PARKING LOT LOOP FROM TUCKAHOE TO QUEEN
V. SCALE: 1" = 2' H. SCALE: 1" - 20'



WATER - HYDRANT H-6
V. SCALE: 1" = 2' H. SCALE: 1" - 20'

APPROVED:	APPROVED:	APPROVED:	APPROVED:
TOWN OF EASTON - TOWN ENGINEER DATE	TOWN OF EASTON PLANNING AND ZONING DATE	EASTON UTILITIES - ENGINEER DATE	TALBOT SOIL CONSERVATION DISTRICT - MANAGER DATE

UTILITY PROFILES

OF THE LANDS OF

CALVERT TERRACE

TAX MAP 0103, GRID 00EA, PARCEL 885 - 928
ELECTION WARD 1, EASTON, TALBOT COUNTY, MARYLAND
PREPARED FOR OSPREY PROPERTY COMPANY II LLC

RAUCH inc.
Engineering | Survey | Architecture | Environmental
Main Office: 106 N Harrison St - Easton, MD 21601
Web: www.rauch-inc.com | Email: design@rauchorg.com
Phone: 410 770 8081 | Fax: 410 770 3867

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, 2026

PRELIMINARY PLAT REVIEW

12-10-2025

REVISIONS			
REV. #	DATE	DESCRIPTION	
1			

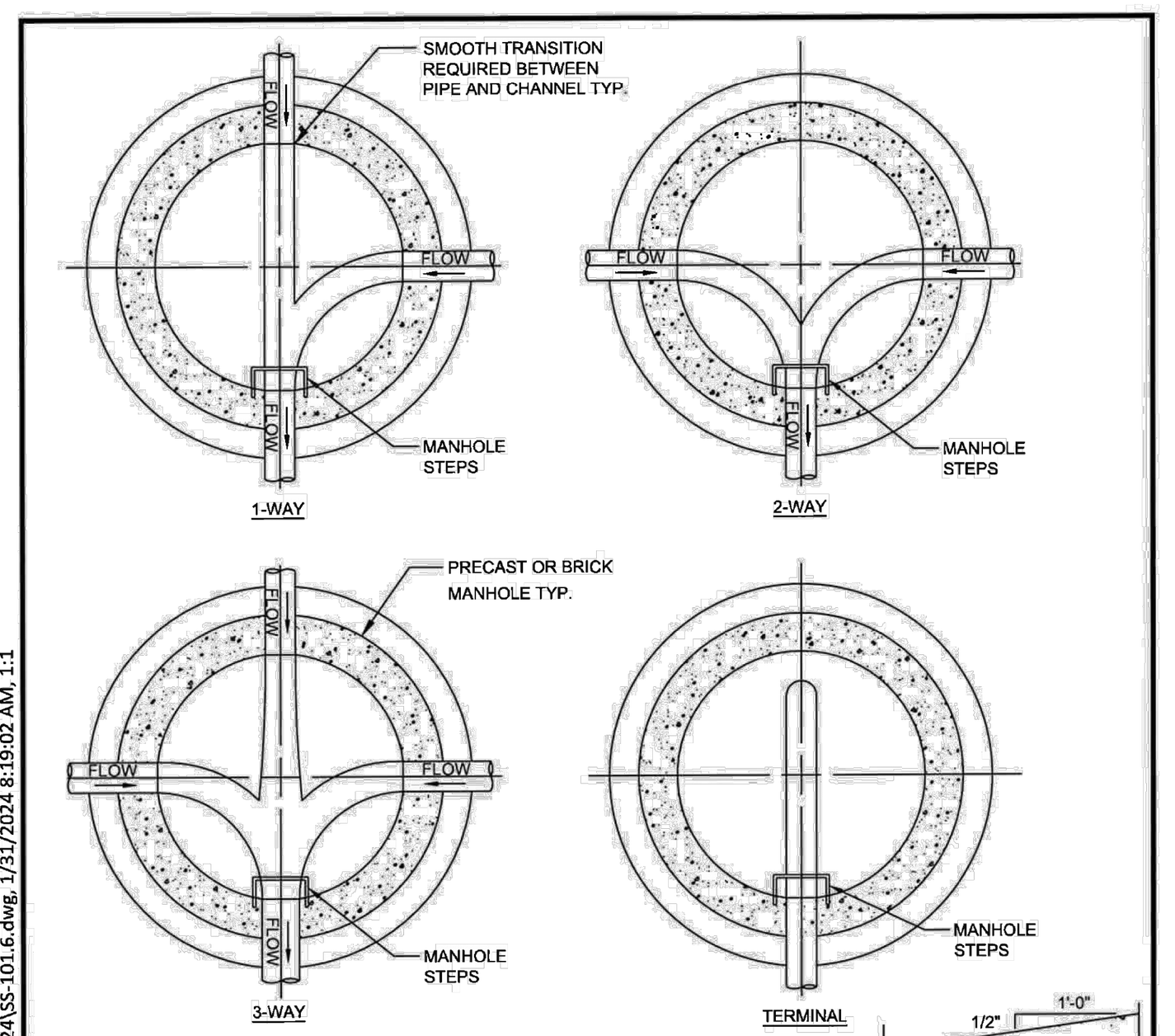
MISS UTILITY OF DELMARVA — DIG SAFE BEFORE YOU DIG — 811

DATE:	12/10/2025
SCALE:	AS SHOWN
DRAWN BY:	AF
DESIGNED BY:	AF
APPROVED BY:	BBF

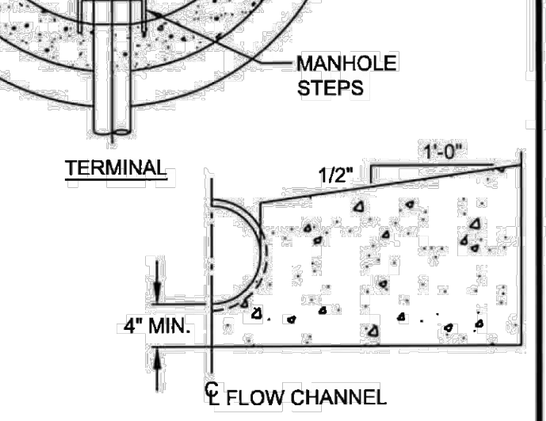
SHEET NO.: C-403.04

FOR REVIEW

UTILITY DETAILS



FLOW CHANNEL NOTES:
1. FLOW CHANNELS SHALL BE EITHER BRICK OR CONCRETE, 4" MIN. THICKNESS. USE "TYPE S" MORTAR FOR BRICK CHANNELS. CONCRETE SHALL BE SHA MIX NO. 1.
2. CHANNEL WIDTH SHALL MATCH INSIDE DIAMETER OF INCOMING AND OUTGOING PIPES. BLEND CHANNEL FOR SMOOTH TRANSITION.
3. BENCH SHALL BE INSTALLED TO TOP OF PIPE, SEE DETAIL.



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ISSUED: JANUARY 2024 | STANDARD NO.: SS-101.6

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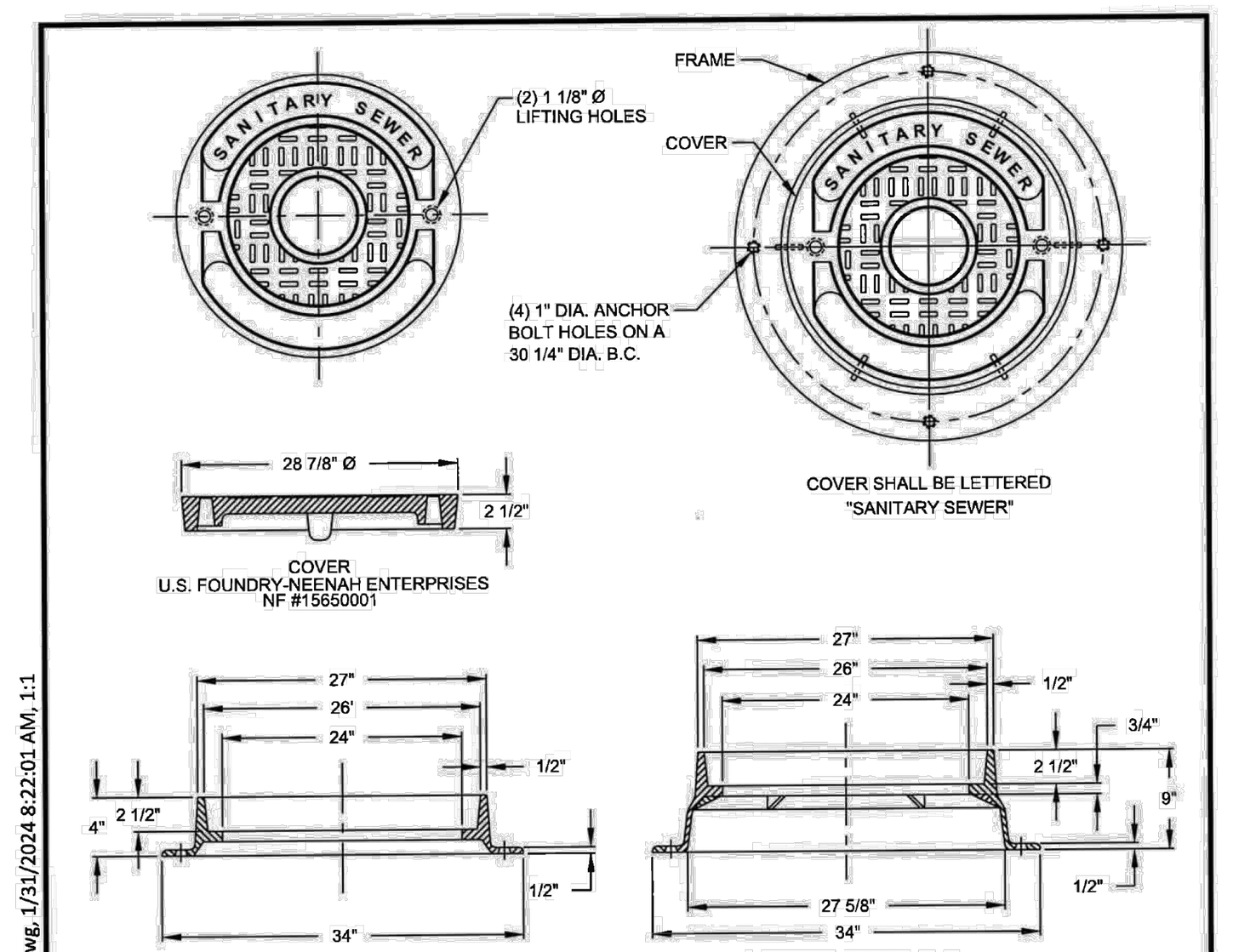

NOTES:
1. CASTING SHALL CONFORM TO ASTM A-48-64 CLASS 35B IRON MINIMUM.
2. CASTING SHALL HAVE GROUND OR MACHINED BEARING SURFACES.
3. CASTING SHALL BE OF UNIFORM QUALITY, FREE FROM BLOW HOLES, POROSITY, HARD SPOTS, SHRINKAGE DEFECTS, OR OTHER INJURIOUS DEFECTS.
4. CASTING SHALL BE HEAVY DUTY ROADWAY TYPE.
5. FRAME & COVER SHALL BE R-1565 AS MANUFACTURED BY NEENAH FOUNDRY COMPANY OR AN APPROVED EQUAL.
6. CONTRACTOR TO FURNISH AND INSTALL PARSON MANHOLE INSERT, MODEL V2P AT ALL LOCATIONS EXCEPT ARV MANHOLES.

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ISSUED: JANUARY 2024 | STANDARD NO.: SS-101.7

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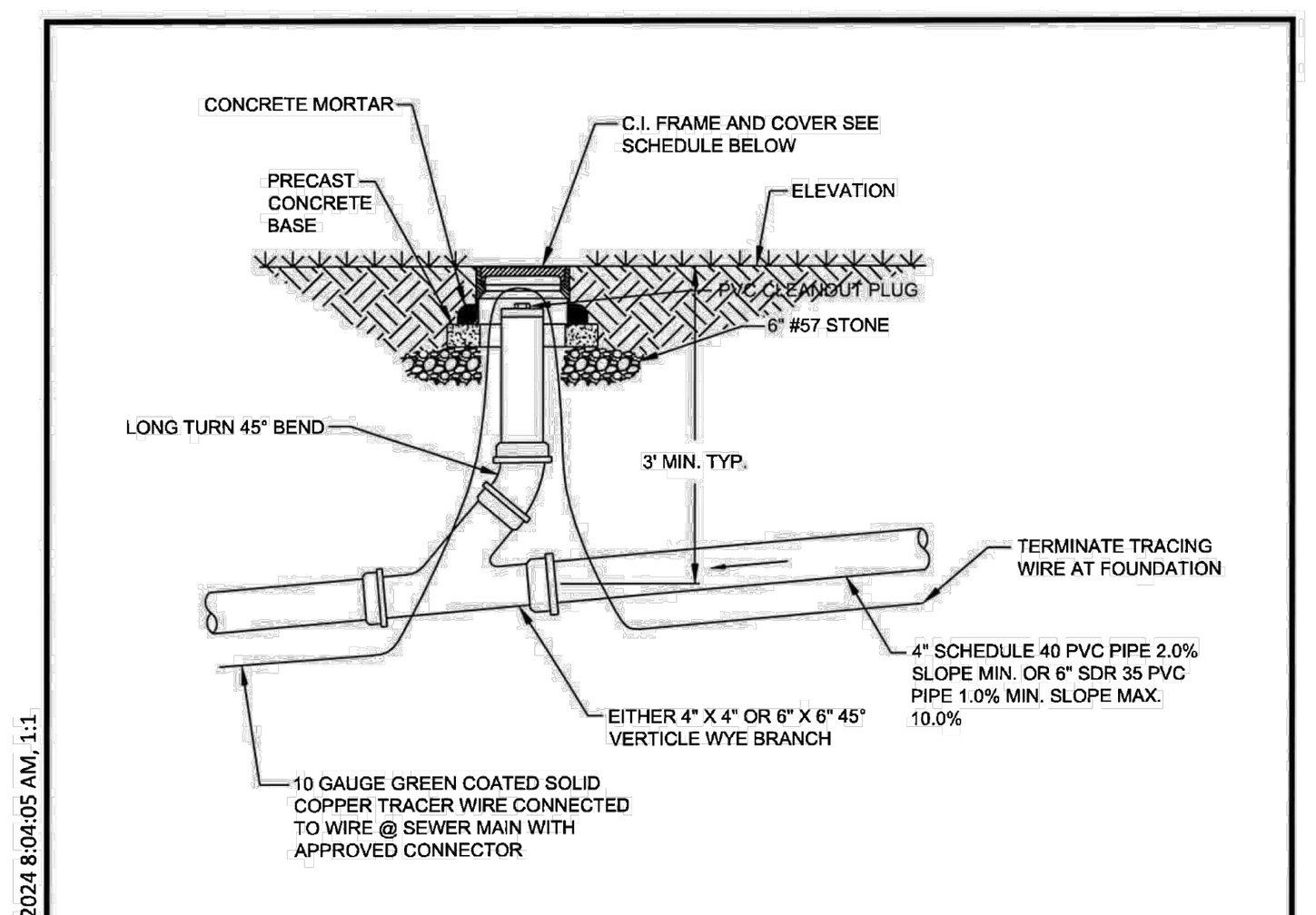

FRAME AND COVER REQUIRED (NON TRAFFIC BEARING)	
PIPE SIZE	CASTING NUMBER
4"	EAST JORDAN IRON WORKS NO. 1570
6"	EAST JORDAN IRON WORKS NO. 1566

NOTES:
1. SERVICE CONNECTION SHALL BE PERPENDICULAR TO MAIN.
2. WARNING TAPE SHALL BE 12" ABOVE PIPE AND 12" BELOW GROUND SURFACE.
3. USE CLASS 50 DUCTILE IRON FOR SERVICES WITH LESS THAN 3' OF COVER.
4. NO SPLICES ON TRACER WIRE. MECHANICAL CONNECTORS ONLY IN CLEANOUTS.
5. EMBED PIPE IN #57 STONE FROM 6" BELOW INVERT TO 2" ABOVE CROWN.
6. SEWER LATERAL SHALL BE 6" FROM THE MAIN TO THE PROPERTY LINE.
7. PROVIDE 12" OF SLACK TRACER WIRE INSIDE CLEANOUT FRAME.

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ISSUED: JANUARY 2024 | STANDARD NO.: SS-102.1

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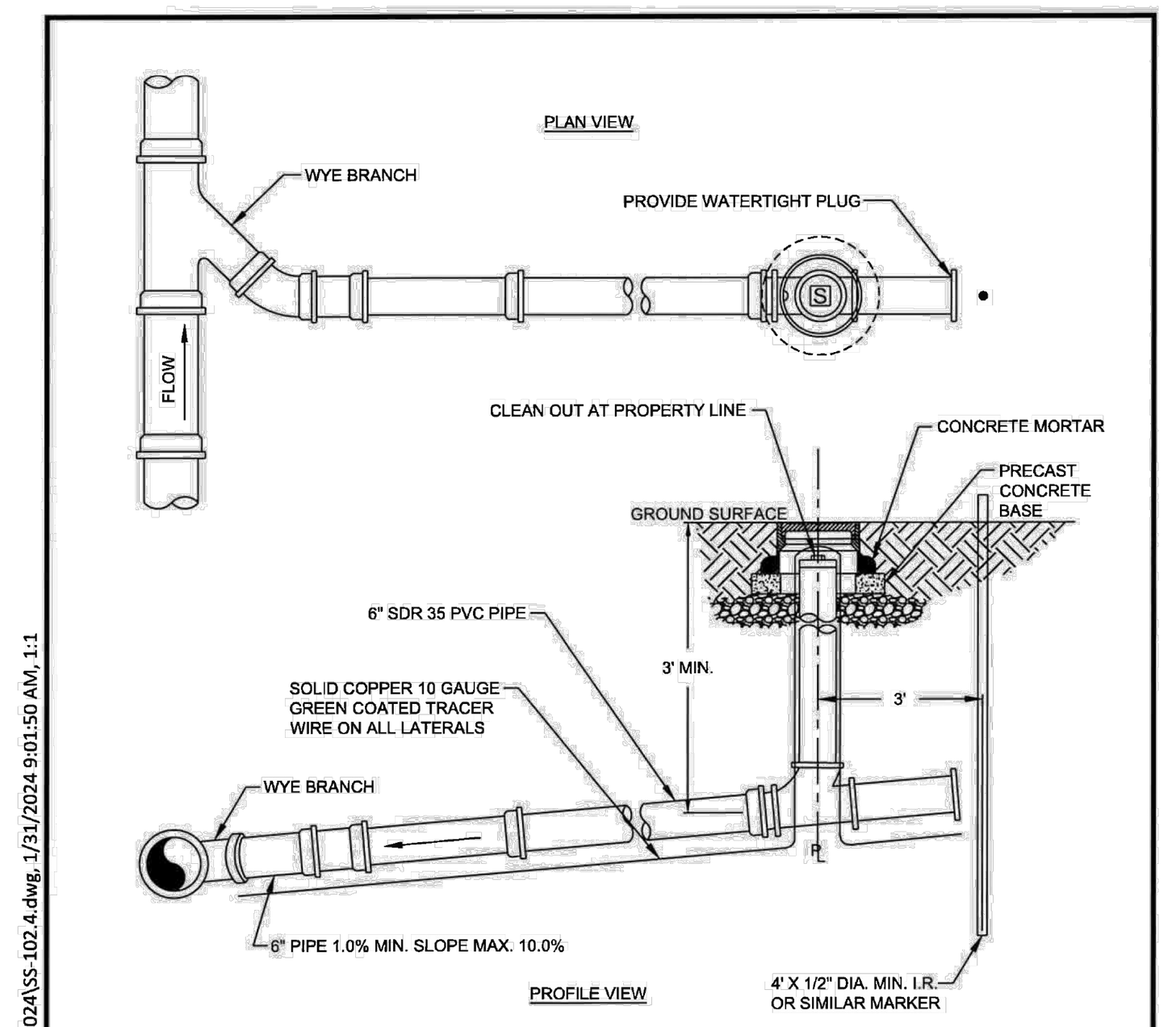

NOTES:
1. SERVICE CONNECTION SHALL BE PERPENDICULAR TO MAIN.
2. WARNING TAPE SHALL BE 12" ABOVE PIPE AND 12" BELOW GROUND SURFACE.
3. USE CLASS 50 DUCTILE IRON FOR SERVICES WITH LESS THAN 3' OF COVER.
4. NO SPLICES ON TRACER WIRE. MECHANICAL CONNECTORS ONLY IN CLEANOUTS.
5. EMBED PIPE IN #57 STONE FROM 6" BELOW INVERT TO 2" ABOVE CROWN.

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ISSUED: JANUARY 2024 | STANDARD NO.: SS-102.4

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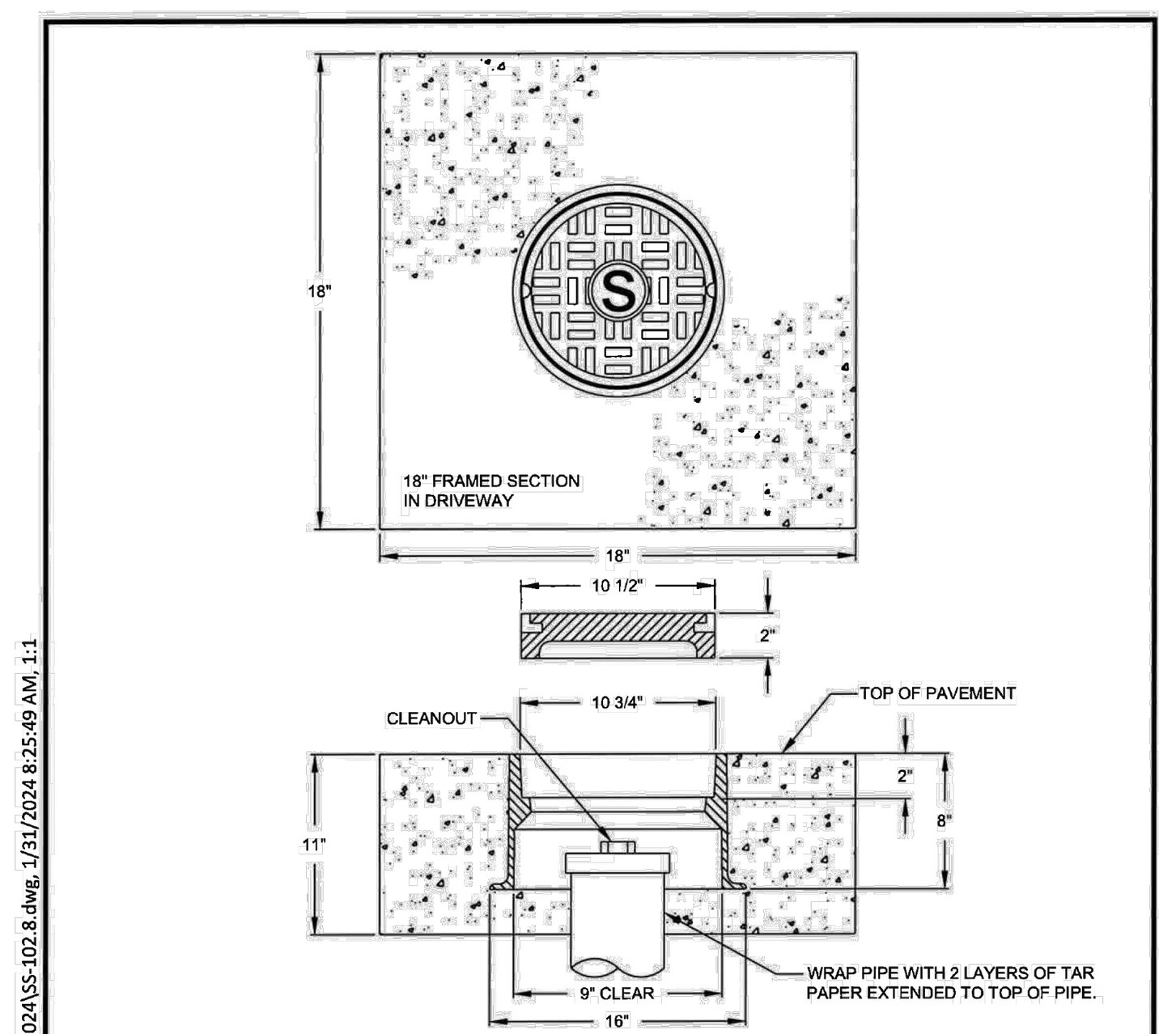

NOTES:
1. ALL CASTINGS SHALL CONFORM TO ASTM A48-76 CLASS 35B IRON MINIMUM.
2. CASTING SHALL HAVE GROUND OR MACHINED BEARING SURFACES.
3. CASTING SHALL BE OF UNIFORM QUALITY, FREE FROM BLOW HOLES, POROSITY, HARD SPOTS, SHRINKAGE DEFECTS, OR OTHER INJURIOUS DEFECTS.
4. CASTING SHALL BE HEAVY DUTY ROADWAY TYPE.
5. CASTING SHALL BE 1565Z FRAME AND 1565 COVER AS MANUFACTURED BY EAST JORDAN IRON WORKS OR AN APPROVED EQUAL.
6. ASSEMBLY TO BE USED IN ROADWAYS, SIDEWALKS, DRIVEWAYS AND ALL OTHER PAVED AREAS.

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ISSUED: JANUARY 2024 | STANDARD NO.: SS-102.8

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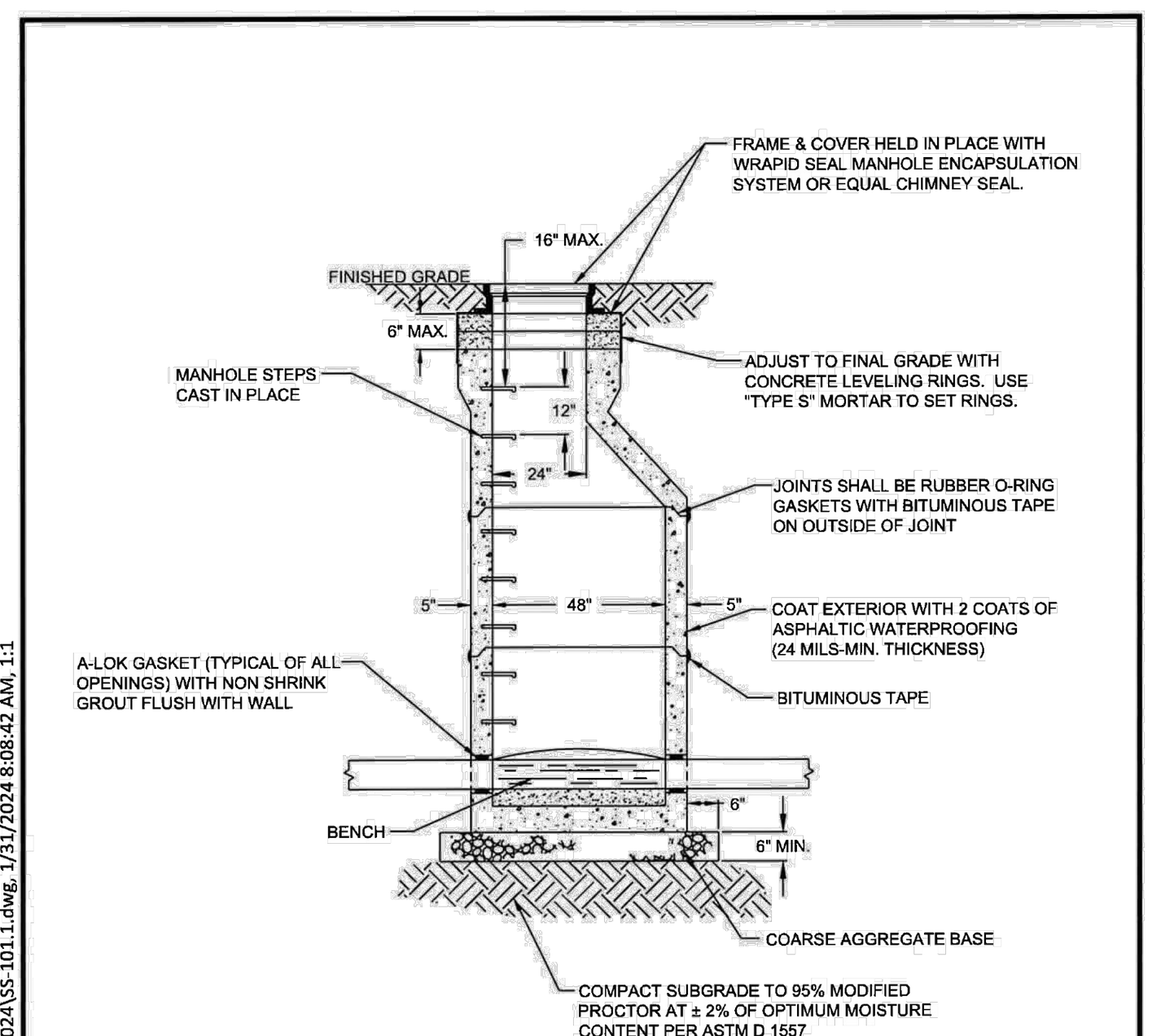

NOTES:
1. PRECAST MANHOLE SHALL BE 4000 PSI REINFORCED CONCRETE THAT CONFORMS TO ASTM C-478 (LATEST) AS MANUFACTURED BY: GILLESPIE PRECAST OR AN APPROVED EQUAL.
2. BENCH AND CHANNEL SHALL BE BRICK, PRECAST OR HAND FORMED CONCRETE. ELEVATION DROP ACROSS MANHOLE SHALL BE A MINIMUM OF 0.1' FROM INVERT IN TO INVERT OUT.
3. MANHOLE STEPS, FRAME AND COVER REQUIRED OVER EFFLUENT SIDE AS SHOWN.

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ISSUED: JANUARY 2024 | STANDARD NO.: SS-101.1

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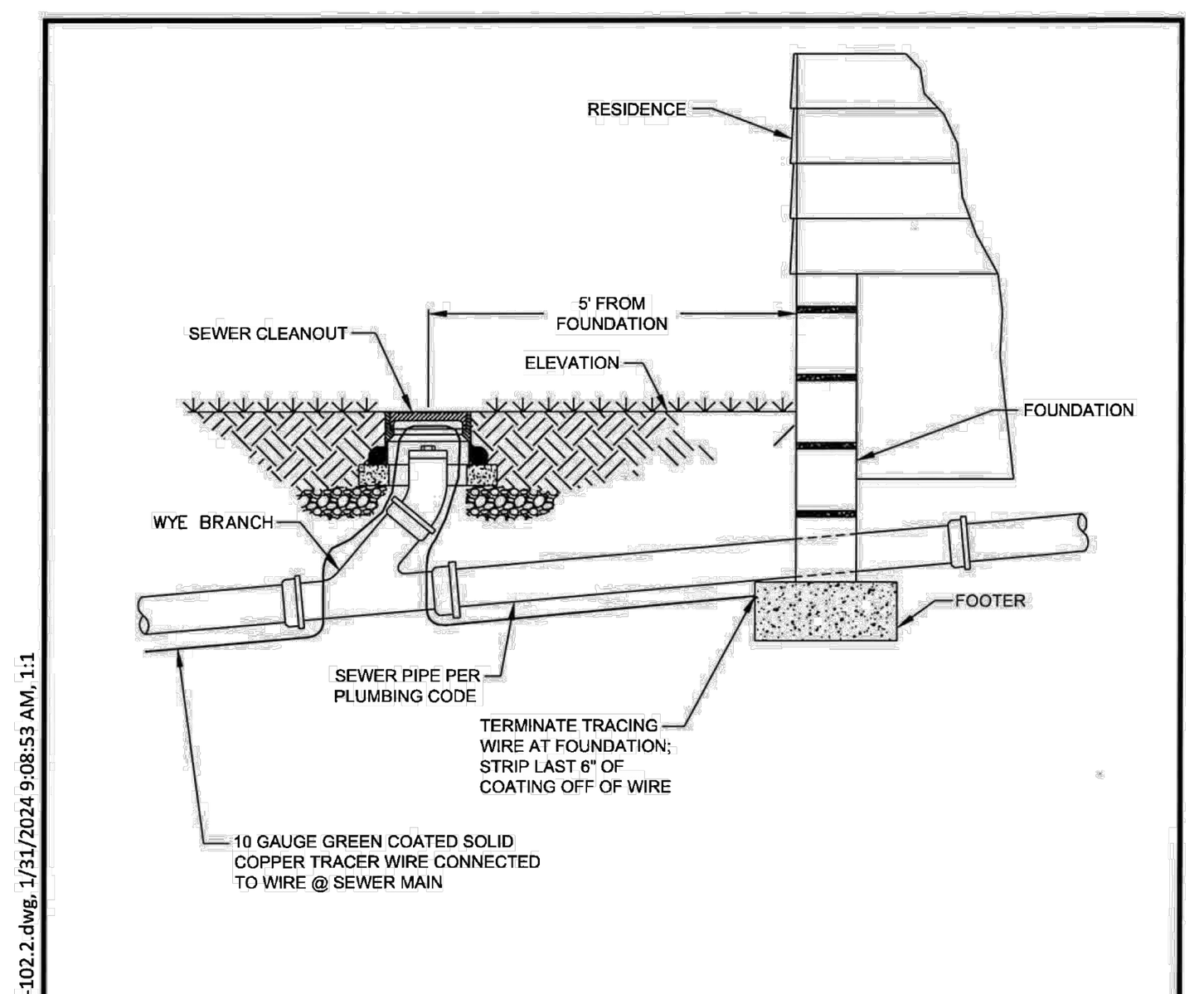

NOTES:
1. SERVICE CONNECTION SHALL BE PERPENDICULAR TO MAIN.
2. ADD DETECTOR TAPE TO ALL PIPE.
3. USE CLASS 50 DUCTILE IRON FOR SERVICES WITH LESS THAN 3' OF COVER.
4. NO SPLICES ON TRACER WIRE. MECHANICAL CONNECTORS ONLY IN CLEANOUTS.
5. EMBED PIPE IN #57 STONE FROM 6" BELOW INVERT TO 2" ABOVE CROWN.
6. INSTALLATION OF SEWER LATERAL INTO FOUNDATION PER TOWN OF EASTON BUILDING AND PLUMBING CODE.
7. PROVIDE VIDEO INSPECTION OF LATERAL FROM CLEANOUT AT HOUSE/STRUCTURE, TO MAIN.

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ISSUED: JANUARY 2024 | STANDARD NO.: SS-102.2

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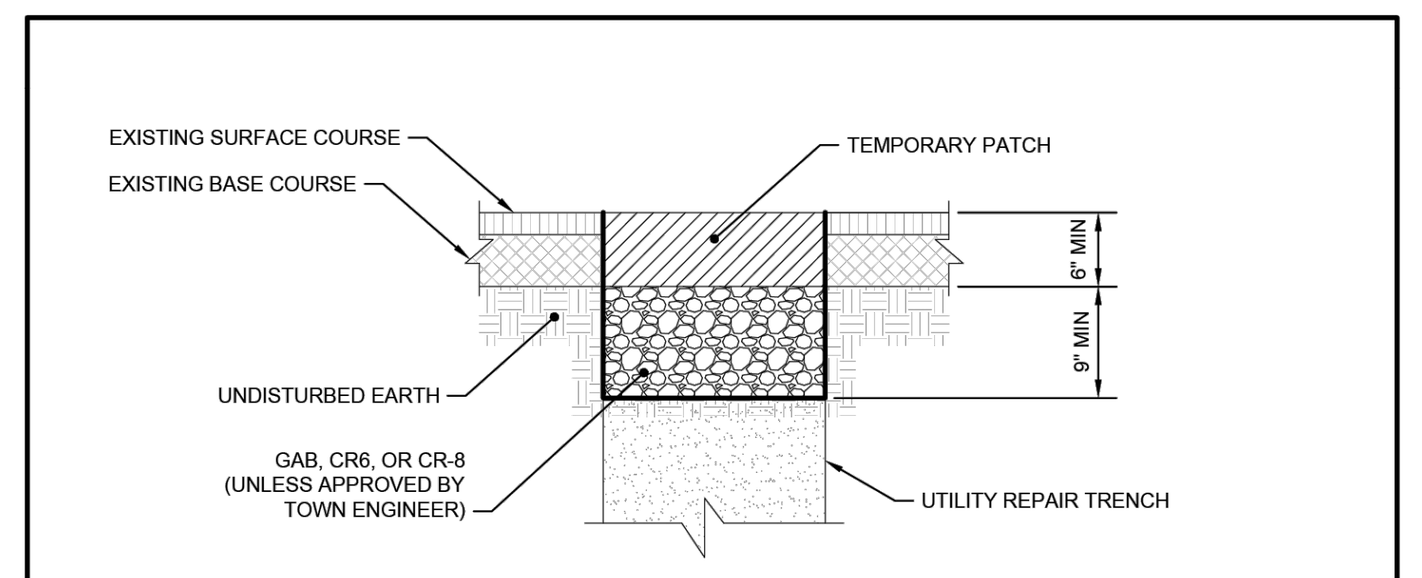

NOTES:
1. PAVEMENT SHALL BE SAW CUT TO THE FULL DEPTH OF THE EXISTING PAVEMENT SECTION. ALL CUTS SHALL BE MADE IN STRAIGHT LINES.
2. TEMPORARY PATCH SHALL BE ONE OF THE FOLLOWING, PLACED AND COMPACTED IN LIFTS. (REFER TO TOE-R-1.01 FOR LIFT THICKNESS).
   a. GAB (CR6 OR CR8 MAY BE USED IN LIEU OF GAB)
   b. 9.5MM,12.5MM, OR 19.5MM HMA
   c. COLD PATCH
3. GAB MUST BE COMPACTED TO 95% MODIFIED PROCTOR, BASE/SURFACE PAVE MUST BE COMPACTED TO 92% MODIFIED PROCTOR.
4. A TEMPORARY GAB PATCH MUST BE CONVERTED TO COLD PATCH OR SUPERPAVE WITHIN 1 WEEK OF COMPLETION OF TRENCH WORK, UNLESS APPROVED BY THE TOWN ENGINEER.
5. TEMPORARY TRENCH RESTORATION MUST BE CONVERTED TO A PERMANENT TRENCH RESTORATION WITHIN 30 DAYS OF COMPLETION OF TRENCH WORK, UNLESS APPROVED BY THE TOWN ENGINEER. TEMPORARY TRENCH RESTORATION DONE AFTER NOVEMBER 20TH MUST BE CONVERTED TO A PERMANENT TRENCH RESTORATION BEFORE MAY 30TH OF THE FOLLOWING YEAR.
6. TEMPORARY RESTORATION MUST BE INSPECTED AND MAINTAINED EVERY 30 DAYS UNTIL THE PERMANENT RESTORATION IS COMPLETED. AN INSPECTION AND MAINTENANCE LOG MUST BE MAINTAINED.
7. CONTRACTOR MUST CONFIRM LIMITS OF PATCH REQUIRED WITH THE TOWN ENGINEER PRIOR TO START OF PATCH WORK.
8. A GEOTECHNICAL ENGINEER IS REQUIRED TO PROVIDE TESTING IN TRAFFIC BEARING AREAS. A VISUAL INSPECTION MAY BE PERFORMED IN NON-TRAFFIC BEARING AREAS.

APPROVED — TOWN ENGINEER | TOWN OF EASTON STANDARD DETAILS — TEMPORARY PAVEMENT REPAIR FOR UTILITY TRENCHES
ISSUED: JULY, 2025 | STANDARD NO: TOE-R-3.02

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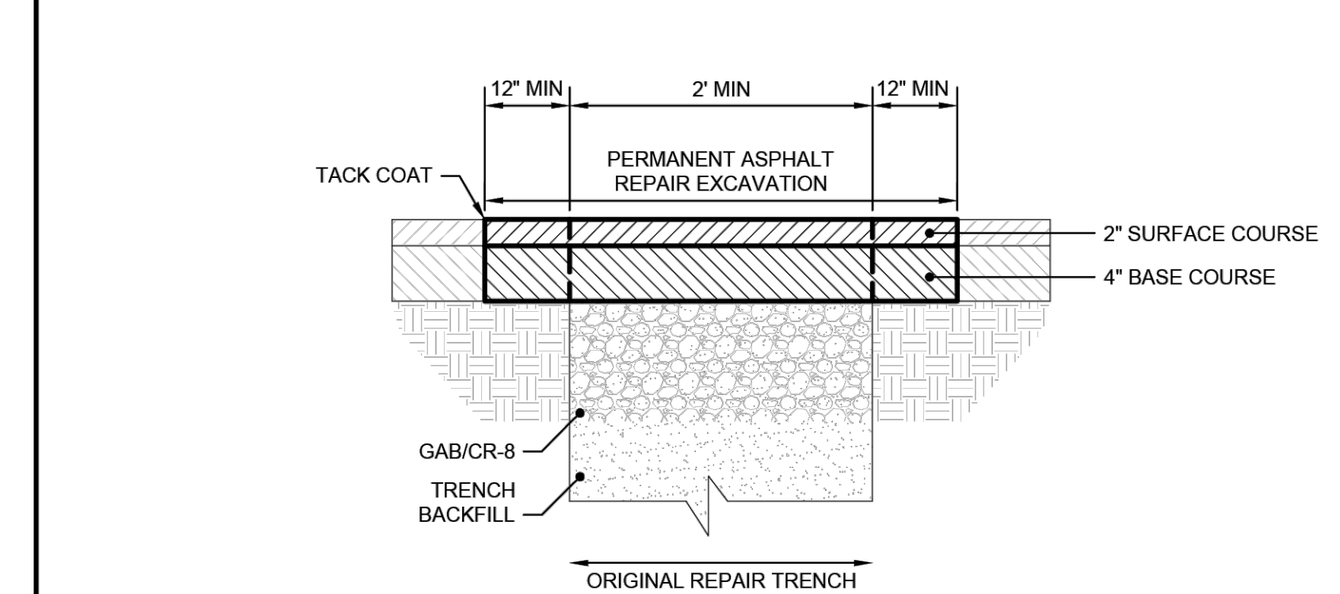

NOTES:
1. PAVEMENT SHALL BE SAW CUT TO THE FULL DEPTH OF THE EXISTING PAVEMENT SECTION. ALL CUTS SHALL BE MADE IN STRAIGHT LINES.
2. IF PATCH FALLS WITHIN 2' OF EXISTING CURB OR EDGE OF PAVING, CONTINUE RESTORATION TO EXISTING CURB OR EDGE OF PAVING.
3. GAB MUST BE COMPACTED TO 95% MODIFIED PROCTOR, BASE/SURFACE PAVE MUST BE COMPACTED TO 92% MODIFIED PROCTOR.
4. SURFACE COURSE: 2" OF 9.5MM SUPERPAVE. BASE COURSE: 4" OF 9.5MM, 12.5MM OR 19.0MM SUPERPAVE. (REFER TO TOE-R-1.01 FOR LIFT THICKNESS).
5. ADDITIONAL MILL AND OVERLAY MAY BE REQUIRED WHEN MULTIPLE PAVEMENT REPAIRS ARE LOCATED IN THE SAME RELATIVE VICINITY. LIMITS OF MILL AND OVERLAY, WHEN REQUIRED, WILL BE DETERMINED BY THE TOWN ENGINEER.
6. WHEN SURFACE AREAS OF REPAIR EXCEEDS 100 SF, THE 2" SURFACE COURSE SHALL EXTEND THE ENTIRE WIDTH OF THE TRAVEL LANE(S) AND/OR SHOULDER LIMITS OF MILL AND OVERLAY, WHEN REQUIRED, WILL BE DETERMINED BY THE TOWN ENGINEER.
7. CONTRACTOR MUST CONFIRM LIMITS OF PATCH REQUIRED WITH THE TOWN ENGINEER PRIOR TO START OF PATCH WORK.
8. ALL TEMPORARY PATCH ASPHALT MUST BE REMOVED PRIOR TO CONVERTING TO PERMANENT ASPHALT PAVEMENT REPAIR.
9. LIMIT OF ASPHALT PAVING SHALL EXTEND TO PATCHES WITHIN 20' OF MINIMUM ASPHALT LIMITS.

APPROVED — TOWN ENGINEER | TOWN OF EASTON STANDARD DETAILS — PERMANENT PAVEMENT REPAIR FOR UTILITY TRENCHES
ISSUED: JULY, 2025 | STANDARD NO: TOE-R-3.03

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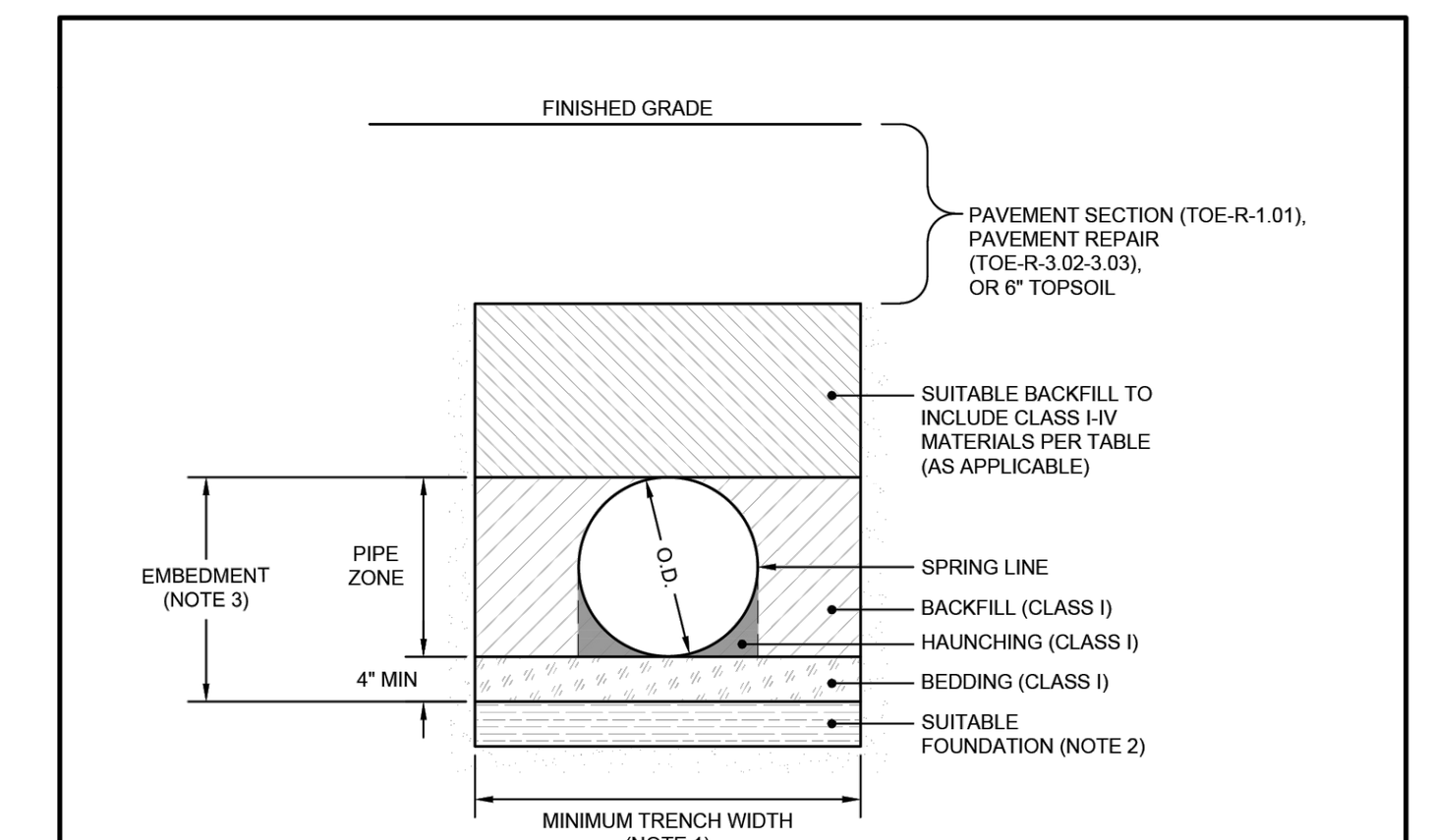

SOIL CLASS	UNITED SOIL CLASSIFICATION SYSTEM	MIN. SPD %
CLASS I	CRUSHED ANGULAR ROCK, OPEN-GRADED (e.g. #57 STONE)	DUMPED AND VIBRATED
CLASS II	CLEAN, COARSE GRAINED SOILS (e.g. SW, SP, GW, GP)	85%
CLASS III	COARSE GRAINED SOILS WITH FINES (e.g. GM, GC, SM, SC)	90%
CLASS IV	FINE GRAINED SOILS (e.g. CL, ML) GEOTECH. EVAL. REQUIRED	95%
CLASS V	NOT FOR USE (e.g. MH, CH, OL, OH, PT)	N/A

NOTES:
1. MINIMUM TRENCH WIDTH IS EQUAL TO O.D.+16", OR O.D.x1.25+12". SPACE BETWEEN PIPE AND TRENCH MUST BE GREATER THAN WIDTH OF COMPACTION EQUIPMENT.
2. IF EXISTING FOUNDATION CONDITIONS ARE UNSUITABLE, REMOVE UNSUITABLE MATERIAL AND REPLACE WITH CLASS I-III SOILS. CLASS III SOILS SHOULD NOT BE USED WHERE WATER IS PRESENT IN TRENCH.
3. EMBED PIPE UTILIZING CLASS I-IV SOILS AND COMPACT TO ACHIEVE MIN. STANDARD PROCTOR DENSITY. CLASS III-IV CAN ONLY BE USED WHEN SIEVE TEST ANALYSIS RESULTS HAVE BEEN PROVIDED TO TOWN ENGINEER AND WITH TOWN ENGINEER APPROVAL.
4. WHEN GROUNDWATER OR SURFACE RUNOFF IS PRESENT, DEWATER TO MAINTAIN STABILITY OF NATIVE AND IMPORTED MATERIALS. MAINTAIN WATER BELOW PIPE FOUNDATION TO PROVIDE A STABLE TRENCH BOTTOM.
5. DURING HAUNCHING, CONTRACTOR SHALL CAREFULLY WORK GRAVEL DOWN AROUND THE BOTTOM OF THE PIPE.
6. NON-WOVEN GEOTEXTILE SHALL BE PLACED ON TOP OF CLASS I MATERIAL (E.G. #57 STONE) TO PREVENT FINES FROM MIGRATING INTO VOID AREAS WHEN THE DEPTH OF STONE EXCEEDS 24".
7. THE TOWN ENGINEER CAN, AT THEIR DISCRETION, REQUIRE GEOTECHNICAL TESTING TO ENSURE REQUIRED COMPACTION IS ACHIEVED.

APPROVED — TOWN ENGINEER | TOWN OF EASTON STANDARD DETAILS — TRENCH DETAIL (THERMOPLASTIC PIPE)
ISSUED: JULY, 2025 | STANDARD NO: TOE-R-3.01a

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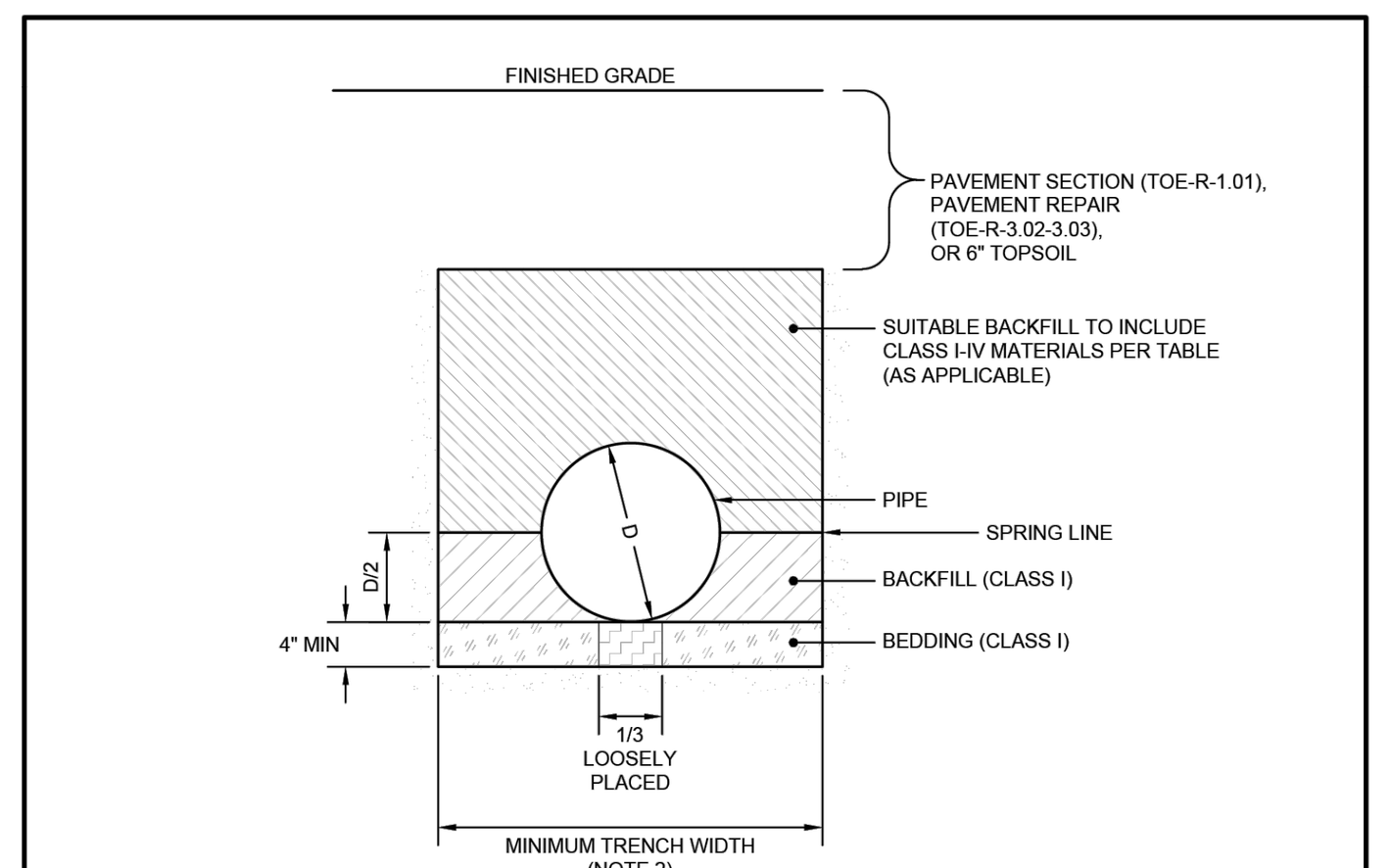

SOIL CLASS	UNITED SOIL CLASSIFICATION SYSTEM	MIN. SPD %
CLASS I	CRUSHED ANGULAR ROCK, OPEN-GRADED (e.g. #57 STONE)	DUMPED AND VIBRATED
CLASS II	CLEAN, COARSE GRAINED SOILS (e.g. SW, SP, GW, GP)	85%
CLASS III	COARSE GRAINED SOILS WITH FINES (e.g. GM, GC, SM, SC)	90%
CLASS IV	FINE GRAINED SOILS (e.g. CL, ML) GEOTECH. EVAL. REQUIRED	95%
CLASS V	NOT FOR USE (e.g. MH, CH, OL, OH, PT)	N/A

NOTES:
1. FOR CIRCULAR PIPE USE ONLY. FOR ALL OTHER PIPE SHAPES, PROVIDE TRENCH DETAIL TO TOWN ENGINEER FOR APPROVAL.
2. WIDTH OF TRENCH EXCAVATION SHOULD BE AS NARROW AS POSSIBLE, WITH SIDE CLEARANCE ADEQUATE ENOUGH TO INSURE PROPER COMPACTION ON BOTH SIDES OF THE PIPE.
3. BEDDING AND BACKFILL MATERIAL SHALL BE COARSE AGGREGATE MEETING THE REQUIREMENTS OF ASHTO M43-SIZE #57, UNLESS OTHERWISE SPECIFIED BY THE PIPE MANUFACTURER AND APPROVED BY THE TOWN ENGINEER.
4. DURING HAUNCHING, CONTRACTOR SHALL CAREFULLY WORK GRAVEL DOWN AROUND THE BOTTOM OF THE PIPE.
5. IN NON-STRUCTURAL AREAS, FILL CR6 OR BRG TO 6" BELOW FINISHED GRADE, PLACED AND COMPACTED IN 12" LIFTS TO 95% MODIFIED PROCTOR. TOP 6" SHALL BE TOPSOIL.
6. NON-WOVEN GEOTEXTILE SHALL BE PLACED ON TOP OF CLASS I MATERIAL (E.G. #57 STONE) TO PREVENT FINES FROM MIGRATING INTO VOID AREAS WHEN THE DEPTH OF STONE EXCEEDS 24".
7. THE TOWN ENGINEER CAN, AT THEIR DISCRETION, REQUIRE GEOTECHNICAL TESTING TO ENSURE REQUIRED COMPACTION IS ACHIEVED.

APPROVED — TOWN ENGINEER | TOWN OF EASTON STANDARD DETAILS — TRENCH DETAIL (REINFORCED CONCRETE PIPE)
ISSUED: JULY, 2025 | STANDARD NO: TOE-R-3.01b

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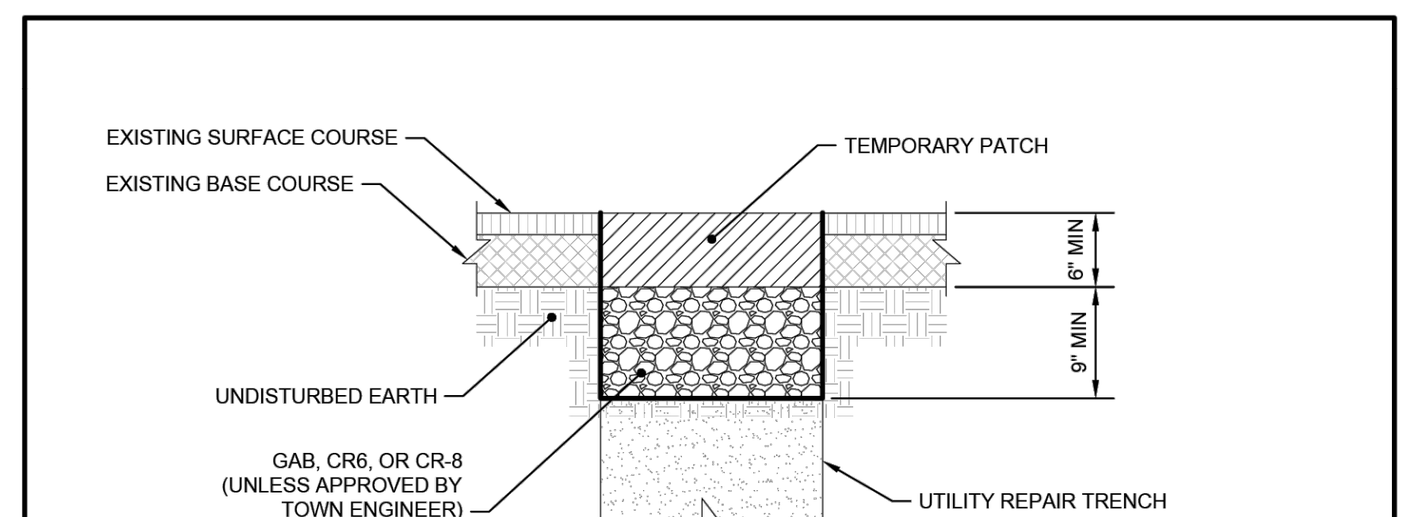
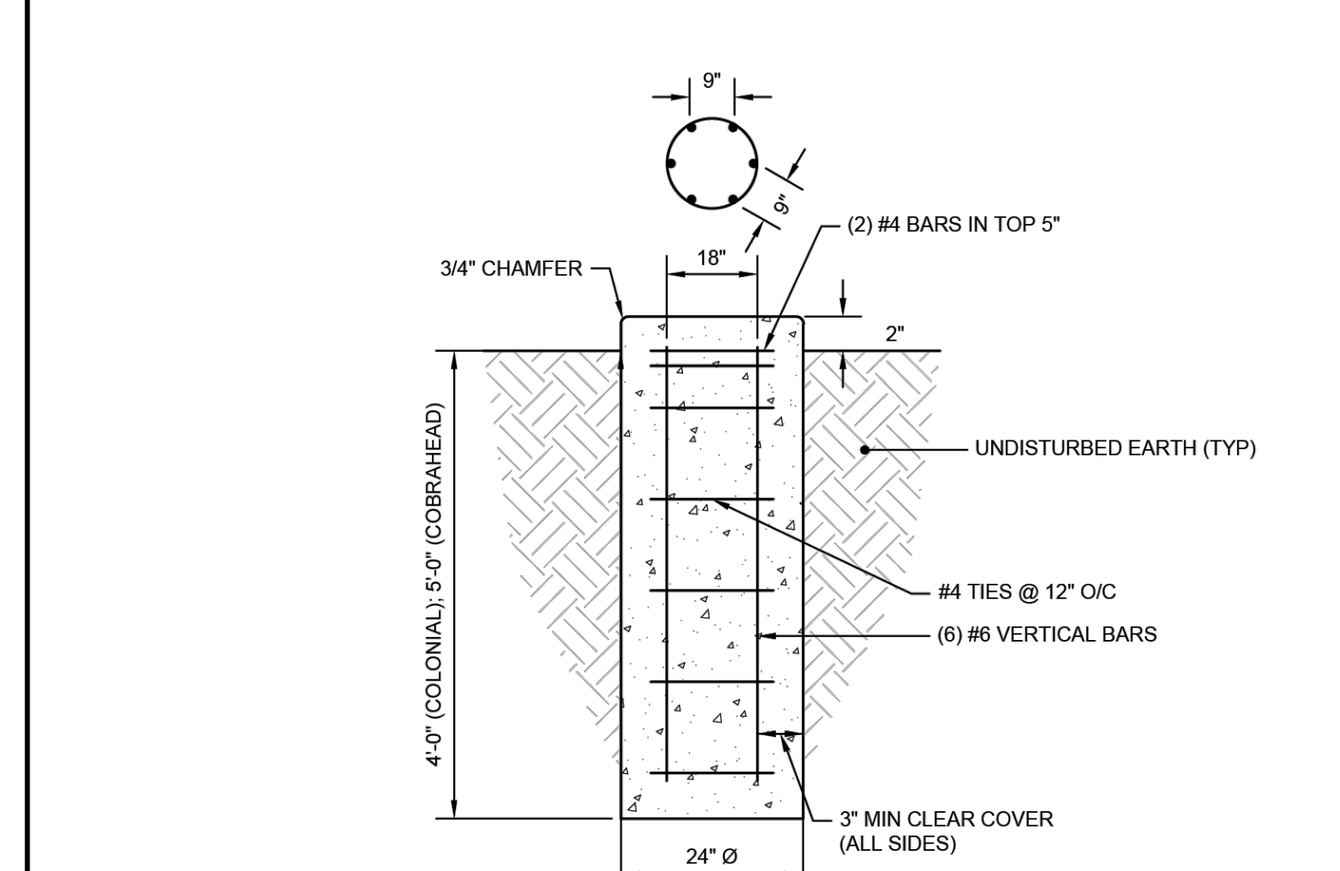


NOTES:
1. PAVEMENT SHALL BE SAW CUT TO THE FULL DEPTH OF THE EXISTING PAVEMENT SECTION. ALL CUTS SHALL BE MADE IN STRAIGHT LINES.
2. TEMPORARY PATCH SHALL BE ONE OF THE FOLLOWING, PLACED AND COMPACTED IN LIFTS. (REFER TO TOE-R-1.01 FOR LIFT THICKNESS).
   a. GAB (CR6 OR CR8 MAY BE USED IN LIEU OF GAB)
   b. 9.5MM,12.5MM, OR 19.5MM HMA
   c. COLD PATCH
3. GAB MUST BE COMPACTED TO 95% MODIFIED PROCTOR, BASE/SURFACE PAVE MUST BE COMPACTED TO 92% MODIFIED PROCTOR.
4. A TEMPORARY GAB PATCH MUST BE CONVERTED TO COLD PATCH OR SUPERPAVE WITHIN 1 WEEK OF COMPLETION OF TRENCH WORK, UNLESS APPROVED BY THE TOWN ENGINEER.
5. TEMPORARY TRENCH RESTORATION MUST BE CONVERTED TO A PERMANENT TRENCH RESTORATION WITHIN 30 DAYS OF COMPLETION OF TRENCH WORK, UNLESS APPROVED BY THE TOWN ENGINEER. TEMPORARY TRENCH RESTORATION DONE AFTER NOVEMBER 20TH MUST BE CONVERTED TO A PERMANENT TRENCH RESTORATION BEFORE MAY 30TH OF THE FOLLOWING YEAR.
6. TEMPORARY RESTORATION MUST BE INSPECTED AND MAINTAINED EVERY 30 DAYS UNTIL THE PERMANENT RESTORATION IS COMPLETED. AN INSPECTION AND MAINTENANCE LOG MUST BE MAINTAINED.
7. CONTRACTOR MUST CONFIRM LIMITS OF PATCH REQUIRED WITH THE TOWN ENGINEER PRIOR TO START OF PATCH WORK.
8. A GEOTECHNICAL ENGINEER IS REQUIRED TO PROVIDE TESTING IN TRAFFIC BEARING AREAS. A VISUAL INSPECTION MAY BE PERFORMED IN NON-TRAFFIC BEARING AREAS.

APPROVED — TOWN ENGINEER | TOWN OF EASTON STANDARD DETAILS — TEMPORARY PAVEMENT REPAIR FOR UTILITY TRENCHES
ISSUED: JULY, 2025 | STANDARD NO: TOE-R-3.02



NOTES:
1. ANCHOR BOLTS SHALL BE PER MANUFACTURER RECOMMENDATION.
2. CONCRETE SHALL BE 5,000 PSI.

APPROVED — TOWN ENGINEER | TOWN OF EASTON STANDARD DETAILS — STREET LIGHT FOUNDATION
ISSUED: JULY, 2025 | STANDARD NO: TOE-R-7.05

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HDPE & DIRECTIONAL DRILLING NOTES

1. HDPE PIPE MUST BE SDR11 UNLESS OTHERWISE SPECIFIED.
2. HDPE 4" IN DIAMETER AND LARGER SHALL BE STICK PIPE ONLY. THE USE OF COILED OR ROLLED PIPE ON REELS IS NOT APPROVED.
3. ANY INTERNAL BEAD FORMED DURING THE JOINT FUSION PROCESS SHALL BE REMOVED WITH AN INTERNAL PIPE DE-BEADER AND WITNESSED BY A REPRESENTATIVE OF EASTON UTILITIES.
4. AFTER PIPE INSTALLATION IS COMPLETE, A VERIFICATION MANDREL 6-INCHES LONG AND NOT MORE THAN 1/4-INCH DIAMETER SMALLER THAN THE TRADE SIZE DIAMETER OF THE DUCT SHALL BE DRAWN THROUGH EACH DUCT TO ENSURE THAT PIPE HAS NOT BEEN DEFORMED. WHEREVER A PIPE IS FOUND NOT TO BE ABLE TO PASS THE MANDREL TEST, THE CONTRACTOR, AT NO ADDITIONAL COST TO EASTON UTILITIES SHALL MAKE REPAIRS OR REDRILL FOR EACH FAILED PIPE.
5. AFTER THE MANDREL HAS BEEN DRAWN THROUGH THE PIPE, A DUCT BRUSH AND OR SWAB SHALL BE PULLED THROUGH EACH PIPE TO ENSURE THAT THE DUCT INTERIOR IS CLEAN.
6. A DETECTABLE PULL TAPE (1800-POUND MIN TENSILE STRENGTH) SHALL BE INSTALLED IN EACH PIPE; PROVIDE 10' SLACK AT EACH END.
7. AFTER PIPE INSTALLATION, ENDS SHALL BE CLOSED WITH PULL TAB EQUIPPED PUSH-IN POLYVINYL CHLORIDE (PVC) PLASTIC DUCT PLUGS TO PREVENT SOIL OR WATER ENTRY.
8. TRANSITION OF CONDUIT MATERIALS REQUIRES THE USE OF POLY-CAM SERIES 737 ID CONTROLLED TRANSITION FITTINGS (SCHEDULE 40 PVC TO HDPE).
9. AS AN ALTERNATIVE TO HDPE, CANTEX CANGRIP MAY BE USED WHEN DIRECTIONAL DRILLING UP TO 1000'.
10. A BORE LOG SHALL BE KEPT FOR EVERY DRILL AND SUBMITTED WITH AN AS-BUILT DRAWING AFTER THE COMPLETION OF A DIRECTIONAL DRILL.

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ISSUED: JANUARY 2024 | STANDARD NO.: E-100.1.3

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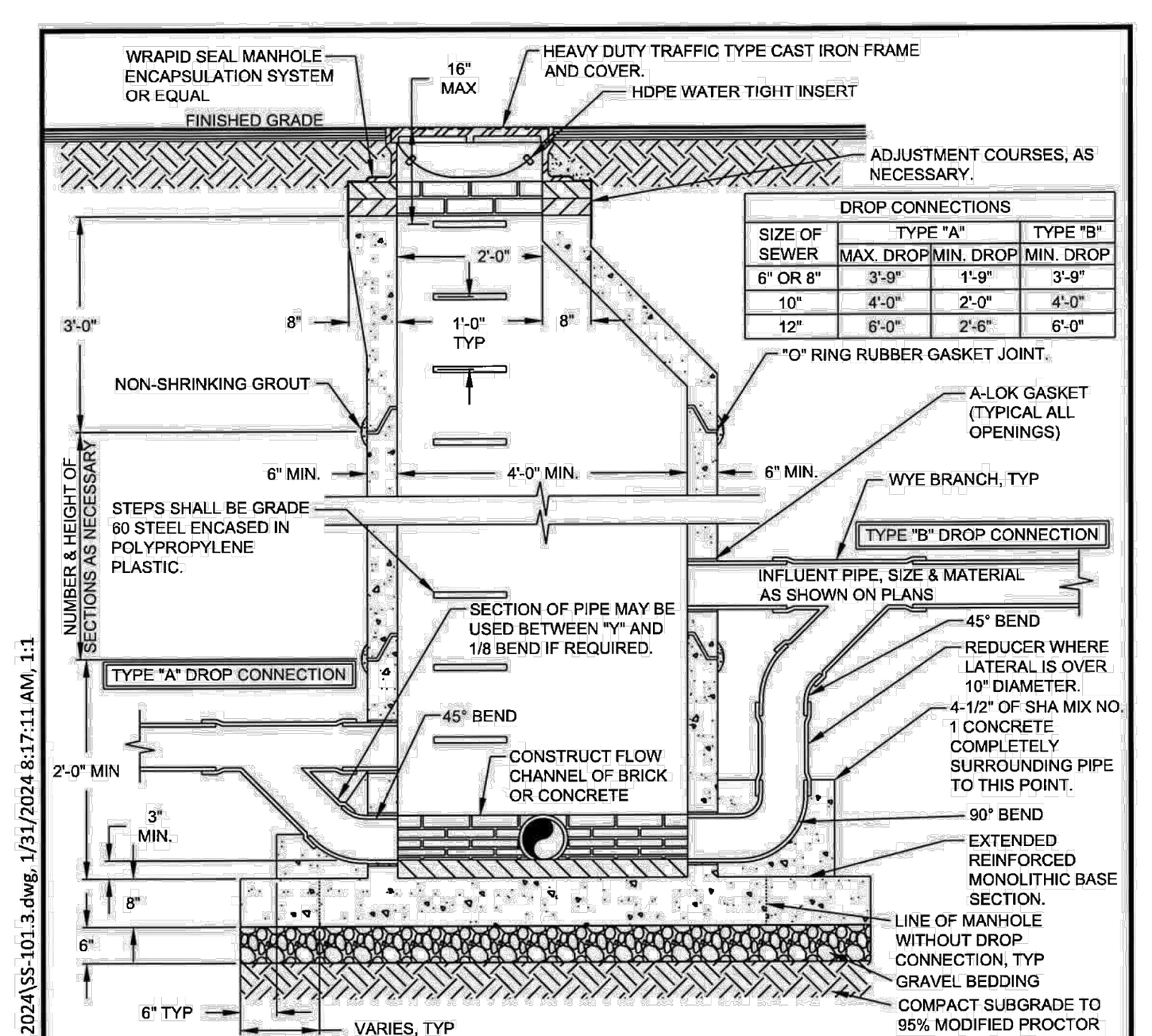

DROP CONNECTIONS			
SIZE OF SEWER	TYPE "A" MAX. DROP	TYPE "A" MIN. DROP	TYPE "B" MIN. DROP
6" OR 8"	3'-9"	1'-9"	3'-9"
10"	4'-0"	2'-0"	4'-0"
12"	6'-0"	2'-6"	6'-0"

NOTES:
1. STRUCTURE TO BE PRECAST AND CONFORM TO ASTM C-478 AND AASHTO M199, CONTRACTOR TO SUBMIT SHOP DRAWINGS TO ENGINEER FOR APPROVAL.
2. INSTALL FRAME AND COVER AT PROPOSED FINISHED GRADE, AS DIRECTED, UTILIZING PRECAST ADJUSTMENT COURSES, AS NECESSARY. MINIMUM ONE LAYER OF 3" OF CONCRETE WITH A MAXIMUM 12" STACKING HEIGHT.
3. PIPE OPENINGS SHALL BE AS NECESSARY FOR SIZE, LOCATION AND INVERTS PROVIDED ON THE SITE PLANS.
4. EXTERIOR TO BE COATED WITH TWO (2) COATS OF WATERPROOF BITUMASTIC COMPOUND (24 MILS MIN. THICKNESS).
5. MANHOLE DIAMETER MAY VARY DEPENDING ON PIPE SIZES AND ANGLES OF DEFLECTION.

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ISSUED: JANUARY 2024 | STANDARD NO.: SS-101.3

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TOWN OF EASTON - TOWN ENGINEER — DATE	TOWN OF EASTON PLANNING AND ZONING — DATE	EASTON UTILITIES - ENGINEER — DATE	TALBOT SOIL CONSERVATION DISTRICT - MANAGER — DATE

OF THE LANDS OF
CALVERT TERRACE
TAX MAP 0103, GRID 00EA, PARCEL 885 - 928
ELECTION WARD 1, EASTON, TALBOT COUNTY, MARYLAND
PREPARED FOR OSPREY PROPERTY COMPANY II LLC

RAUCH inc.
Engineering | Survey | Architecture | Environmental
Main Office: 106 N Harrison St - Easton, MD 21601
Web: www.rauch-inc.com | Email: design@raucheng com
Phone: 410 770 9081 | Fax: 410 770 3667

PRELIMINARY PLANS FOR REVIEW ONLY
12-10-2025

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, 2026

REVISIONS

REV. #	DATE	DESCRIPTION
1		

MISS UTILITY OF DELMARVA — CALL BEFORE YOU DIG — 811

DATE:	12/10/2025
SCALE:	N/A
DRAWN BY:	AF
DESIGNED BY:	AF
APPROVED BY:	BBF

SHEET NO.: C-405.01

FOR REVIEW

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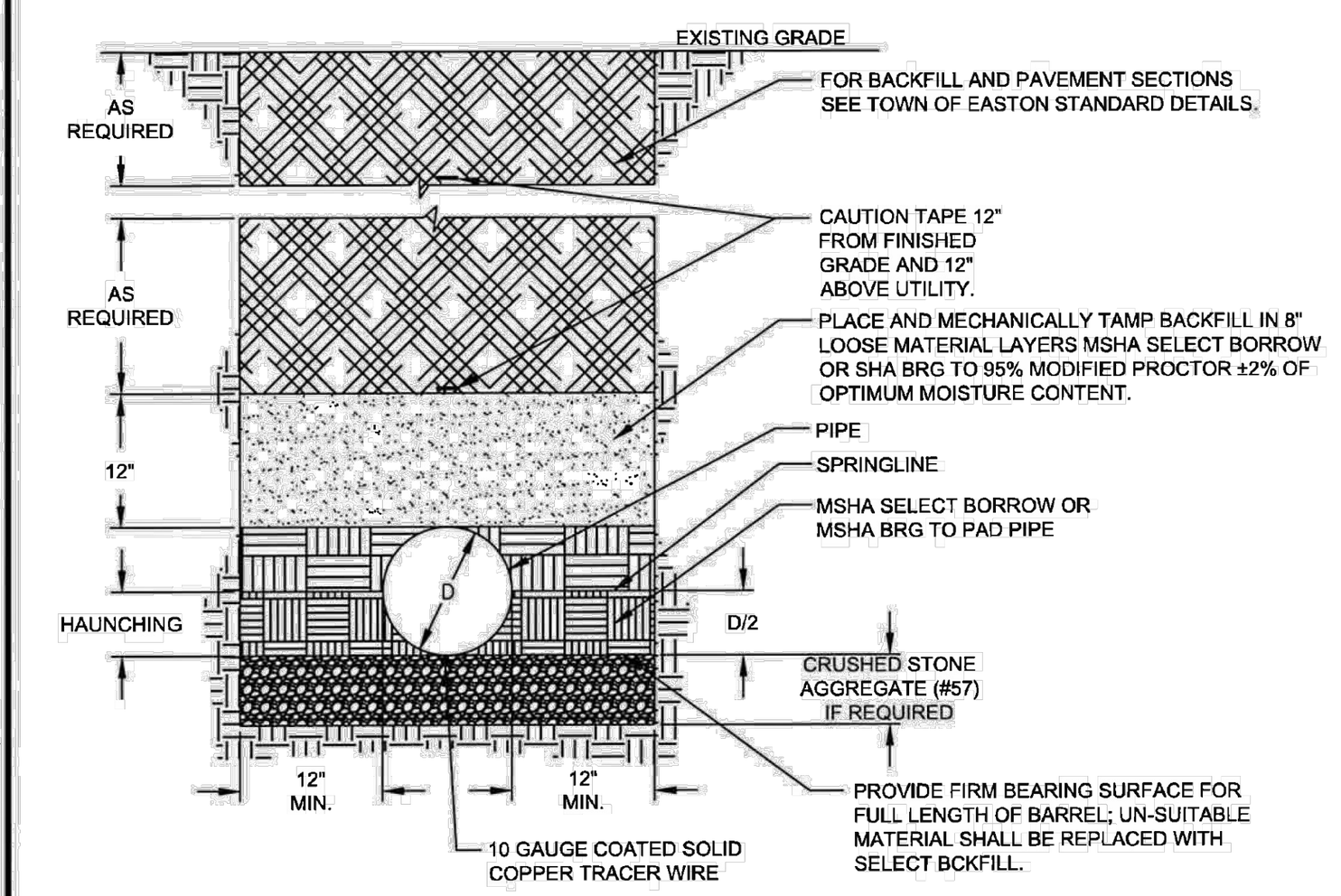

NOTES:
1. WARNING TAPE SHALL BE PLACED 12" ABOVE PIPE AND 12" BELOW GRADE SURFACE.
2. THE TRACING WIRE SHALL BE A CONTINUOUS CONDUCTOR CONNECTED TO ALL FITTINGS, FIRE HYDRANTS AND SERVICES.
3. ALL FITTINGS SHALL BE AS SPECIFIED IN AWWA C110, MECHANICAL JOINT, DUCTILE IRON, PRESSURE RATED AT 350 PSI.
4. ALL FITTINGS SHALL BE RESTRAINED BY THRUST BLOCKS ACCORDING TO EUC STANDARD DETAILS.
5. FIRM BEARING SHALL BE PROVIDED FOR FULL LENGTH OF BARREL. EXCAVATE FOR BELL HOLES.
6. AFTER PIPE IS INSTALLED ON BEDDING, PLACE BACKFILL IN LIFTS TO SPRINGLINE, CROWN AND COVER, TAMPING AFTER EACH LIFT. LIFTS NOT TO EXCEED 6".
7. THOROUGHLY TAPE MECHANICAL CONNECTIONS OF TRACER WIRE WITH ELECTRICAL TAPE.

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EU ENGINEERING DEPARTMENT
1/31/2024 DATE
EASTON UTILITIES STANDARD DETAILS
WATER MAIN INSTALLATION
ISSUED: JANUARY 2024 | STANDARD NO.: W-100.1

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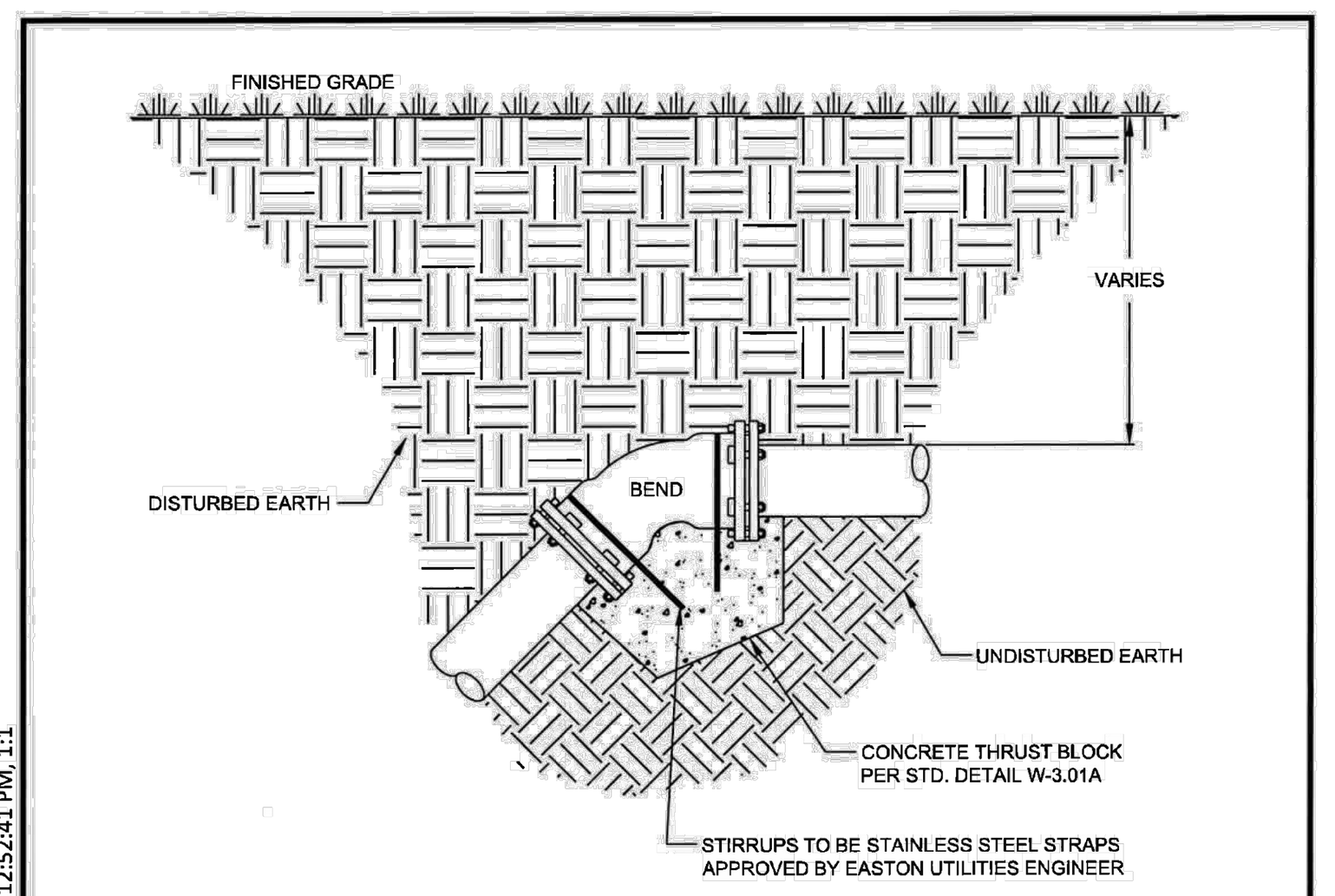

1. CONTRACTOR TO PROVIDE BLOCKING ADEQUATE TO WITHSTAND FULL TEST PRESSURE.
2. POUR CONCRETE BLOCKING AGAINST UNDISTURBED EARTH.
3. ALL CONCRETE SHALL BE SHA MIX #1.
4. WRAP PIPE AND/OR FITTINGS WITH 2 LAYERS OF POLYETHYLENE FILM WHERE IN CONTACT WITH CONCRETE.
5. KEEP CONCRETE CLEAR OF ALL JOINTS AND ACCESSORIES.
6. STIRRUPS SHALL BE STAINLESS STEEL STRAPS APPROVED BY EASTON UTILITIES ENGINEER.
7. CONTRACTOR MAY UTILIZE JOINT RESTRAINTS AND STAINLESS STEEL ALL THREADS IN PLACE OF VERTICAL BEND THRUST BLOCK WHEN APPROVED BY EASTON UTILITIES ENGINEER.
8. SAKRETE SHALL NOT BE PERMISSBLE.

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1/31/2024 DATE
EASTON UTILITIES STANDARD DETAILS
THRUST BLOCK VERTICAL BEND
ISSUED: JANUARY 2024 | STANDARD NO.: W-101.2

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DIMENSION TABLE

PIPE DIA. IN.	TABLE PRESSURE PSI	BEND ANGLE (DEG.)	CONCRETE VOLUME (CY)	CUBE SIZE (FT.)	STIRRUP DIA. (IN.)	STIRRUP EMBEDMENT (IN.)	STIRRUP BAR #
		11.25	0.21	1.8			
4"	250	22.5	0.43	2.3	5/8	17	5
		45	0.77	2.8			
		11.25	0.48	2.4			
6"	250	22.5	0.95	3.0	5/8	17	5
		45	1.79	3.6			
		11.25	0.86	2.9			
8"	250	22.5	1.65	3.5	5/8	17	5
		45	3.22	4.4			
		11.25	1.39	3.3			
10"	250	22.5	2.62	4.1	5/8	17	5
		45	4.97	4.1			
		11.25	1.94	3.7	5/8	17	5
12"	250	22.5	3.91	4.7			
		45	6.89	5.7	7/8	24	7
		11.25	2.62	4.1	5/8	17	5
14"	250	22.5	5.26	5.2	3/4	20	6
		45	9.70	6.4	1	27	8
		11.25	3.44	4.5	5/8	17	5
16"	250	22.5	6.89	5.7	7/8	24	7
		45	12.63	7.0	1 1/8	30	9

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1/31/2024 DATE
EASTON UTILITIES STANDARD DETAILS
THRUST BLOCK VERTICAL BEND DIMENSION TABLE
ISSUED: JANUARY 2024 | STANDARD NO.: W-101.2.1

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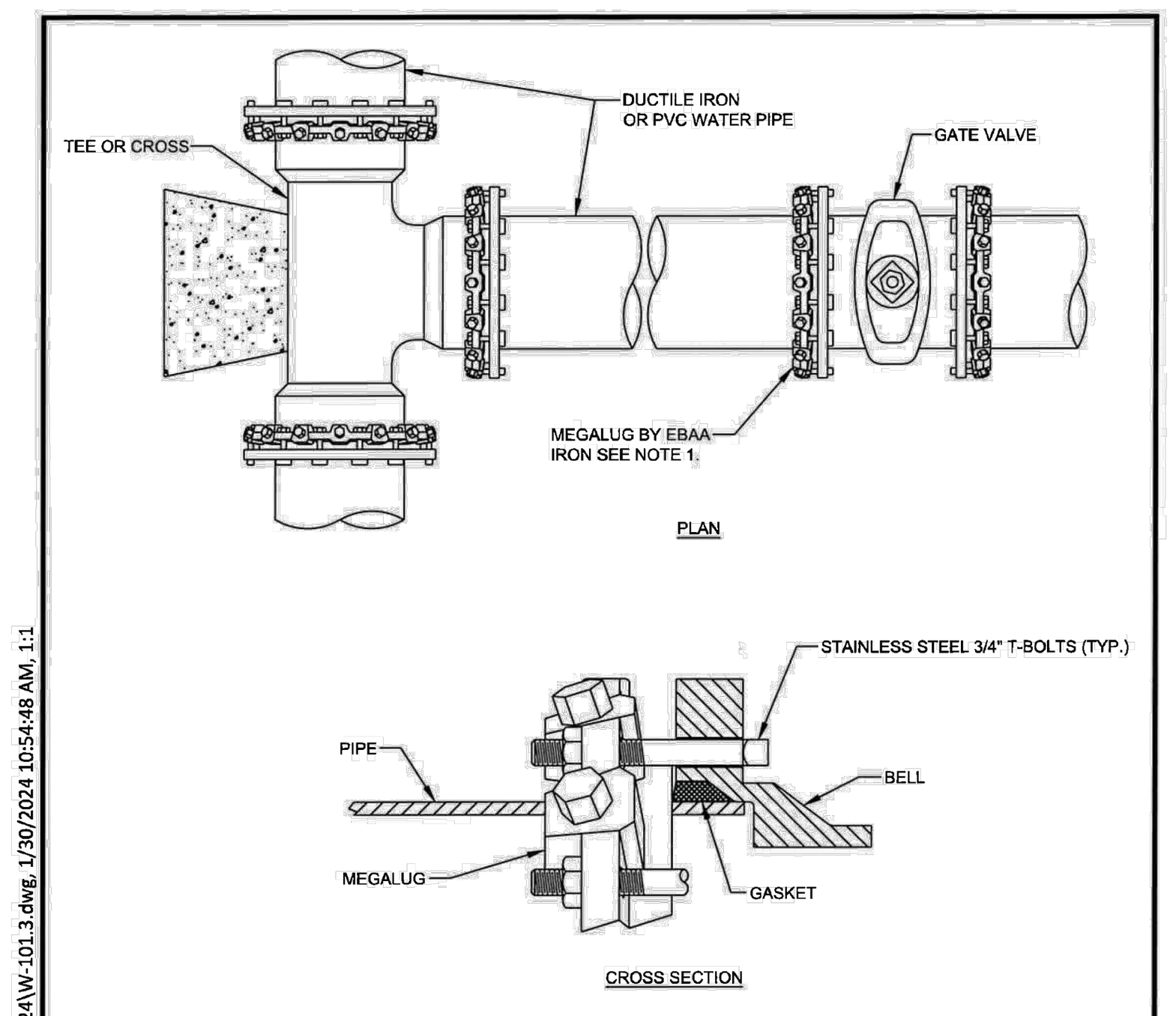

NOTES:
1. MEGALUG BY EBAA IRON: 1100 SERIES FOR DUCTILE IRON PIPE AND 2200 SERIES FOR PVC PIPE.
2. JOINT RESTRAINTS MAY BE USED IN PLACE OF BUTTRESSES WHEN APPROVED BY EASTON UTILITIES ENGINEER.

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1/31/2024 DATE
EASTON UTILITIES STANDARD DETAILS
MECHANICAL JOINT RESTRAINT: DUCTILE IRON & PVC PIPE
ISSUED: JANUARY 2024 | STANDARD NO.: W-101.3

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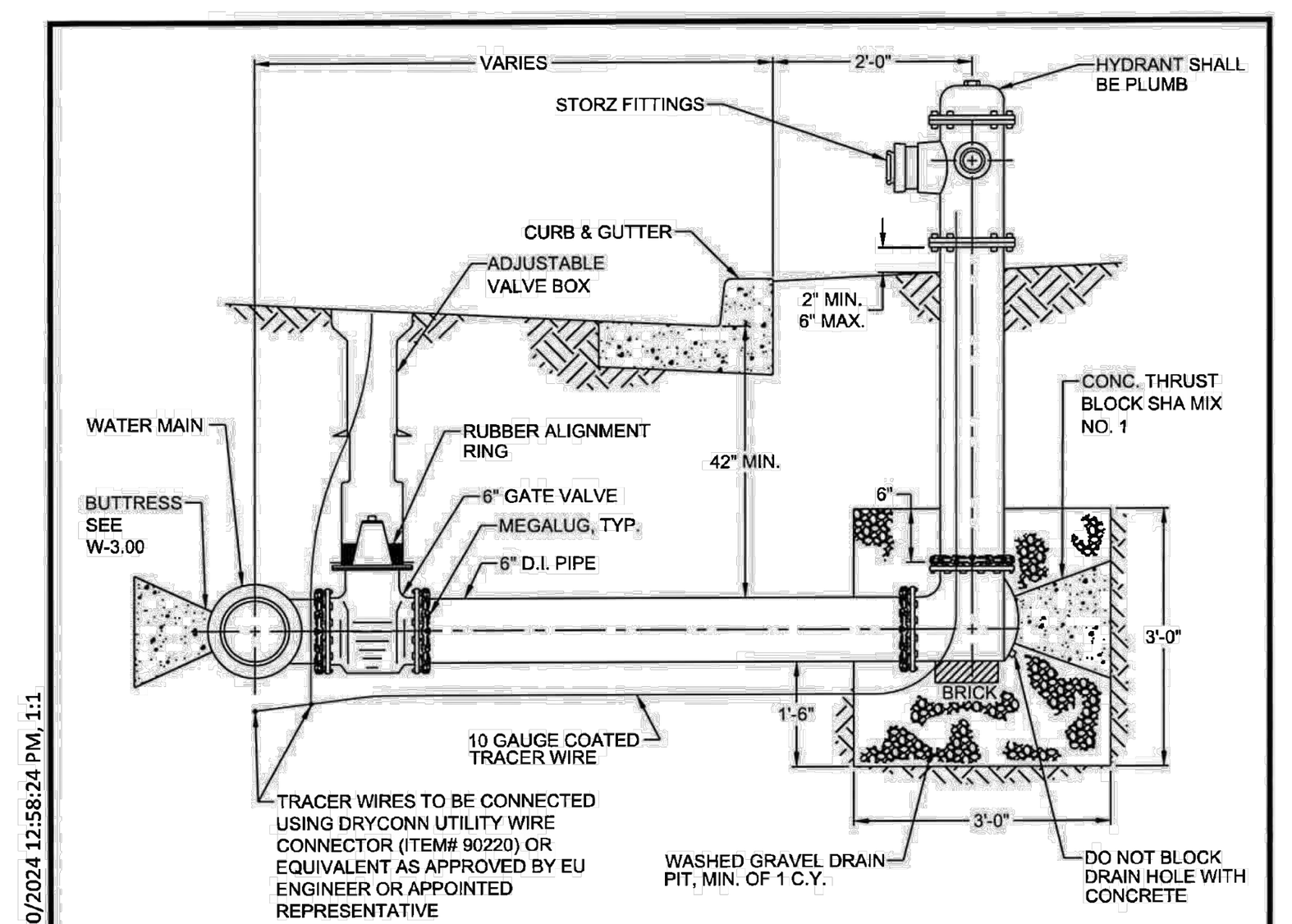

NOTES:
1. FIRE HYDRANTS SHALL BE MUELLER A423 OR APPROVED EQUAL MEETING AWWA C502.
2. FIRE HYDRANT SPECIFICATIONS:
   A. TRAFFIC TYPE, PAINTED FOREST GREEN
   B. OPERATING NUT-HEXAGON 1 1/2" FLAT TO FLAT-OPEN LEFT
   C. 6" MECHANICAL JOINT BASE
   D. STEAMER NOZZLE-5" INTEGRAL STORZ FITTING AND CAP-FITTING SHALL HAVE BRASS METAL FACE AND HARD ANODIZED ALUMINUM RAMPS AND LUGS MADE OF FORGED OR EXTRUDED 6061-T6 ALUMINUM. CAP SHALL BE FITTED WITH A SUCTION SEAL AND CONNECTED TO THE HYDRANT WITH A 0.125" VINYL COATED AIRCRAFT CABLE.
   E. 2-2 1/2"-HOSE NOZZLES-HOSE THREAD 3 1/2" DIA., 8 THREADS/INCH
3. GATE VALVES SHALL MEET AWWA C509 CONFORMING TO EASTON UTILITIES REGULATIONS REGARDING GATE VALVES. VALVES SHALL BE OPEN RIGHT. SEE GATE VALVE DETAIL.
4. FIRE HYDRANTS SHALL BE INSTALLED ON PROPERTY LINES WHERE POSSIBLE.
5. MINIMUM HYDRANT SPACING SHALL BE 500' MAX FOR SINGLE FAMILY RESIDENTIAL, 375' MAX FOR MULTI-FAMILY, COMMERCIAL, ETC. AS MEASURED ALONG THE IMPROVED RIGHT OF WAY.
6. BONNETS SHALL BE PAINTED AS DIRECTED BY EASTON UTILITIES.

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1/31/2024 DATE
EASTON UTILITIES STANDARD DETAILS
FIRE HYDRANT
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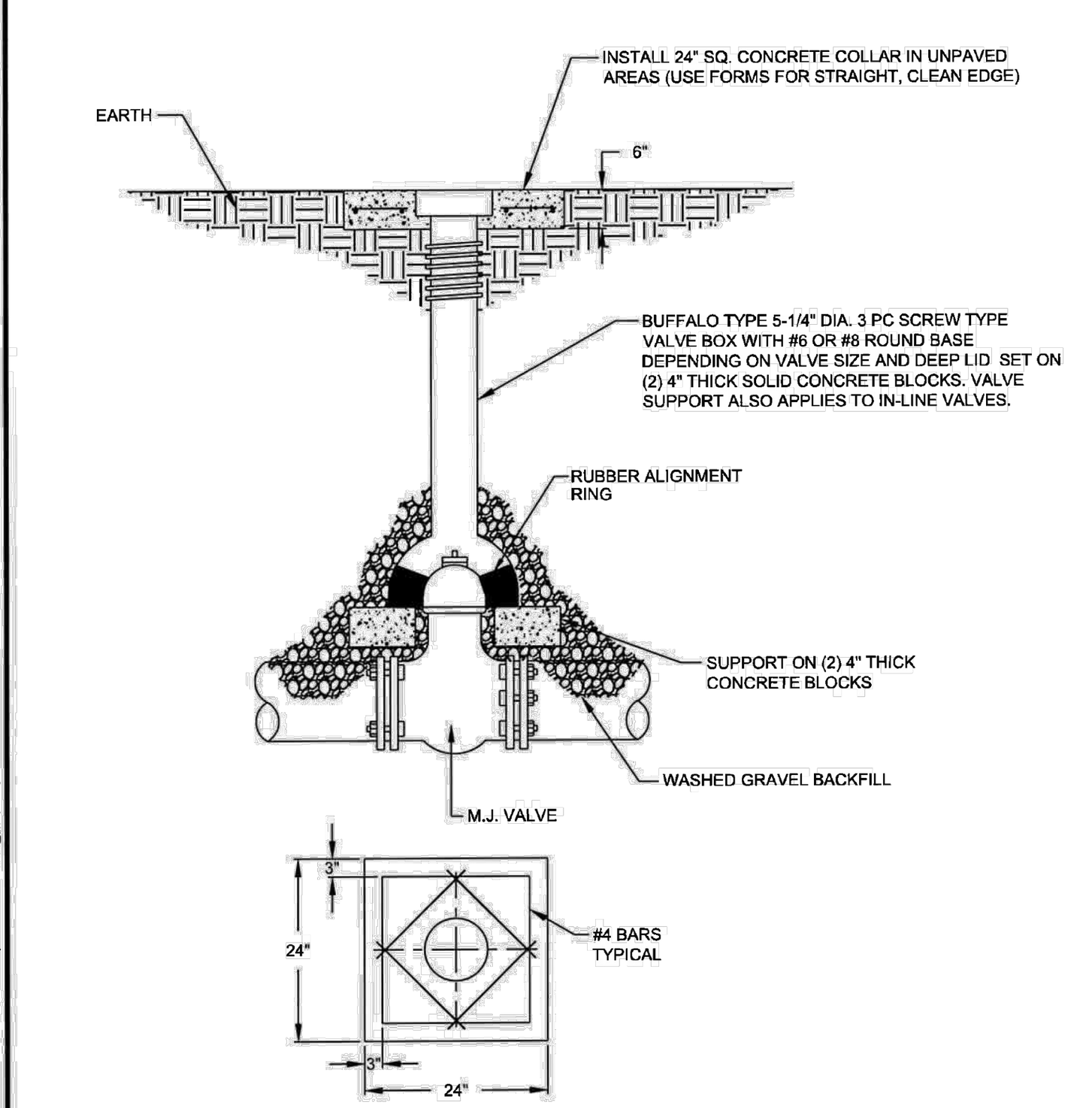

NOTES :
1. ALL REINFORCEMENT SHALL BE #4 REBAR UNLESS OTHERWISE NOTED.

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1/31/2024 DATE
EASTON UTILITIES STANDARD DETAILS
GATE VALVE BOX ASSEMBLY
ISSUED: JANUARY 2024 | STANDARD NO.: W-102.2

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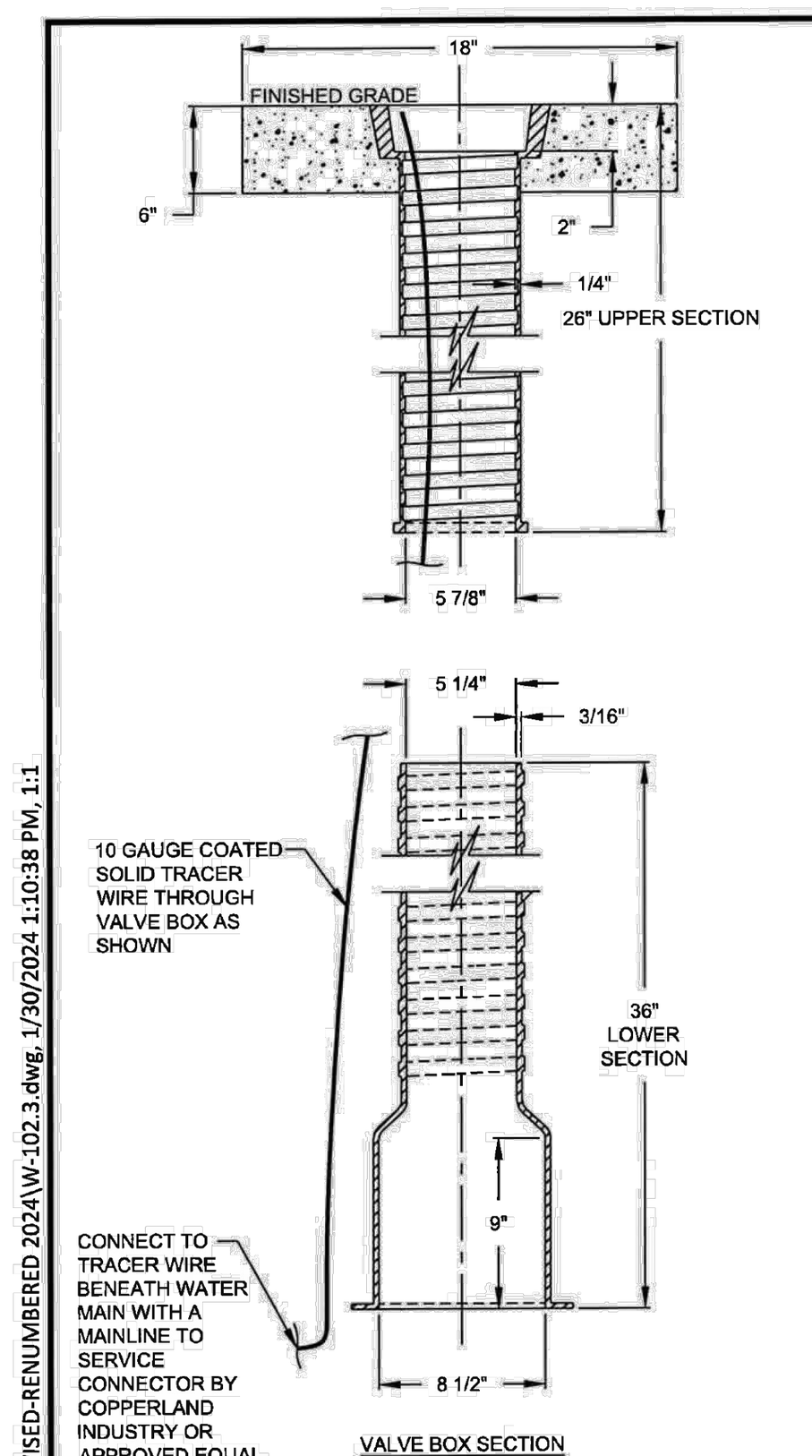

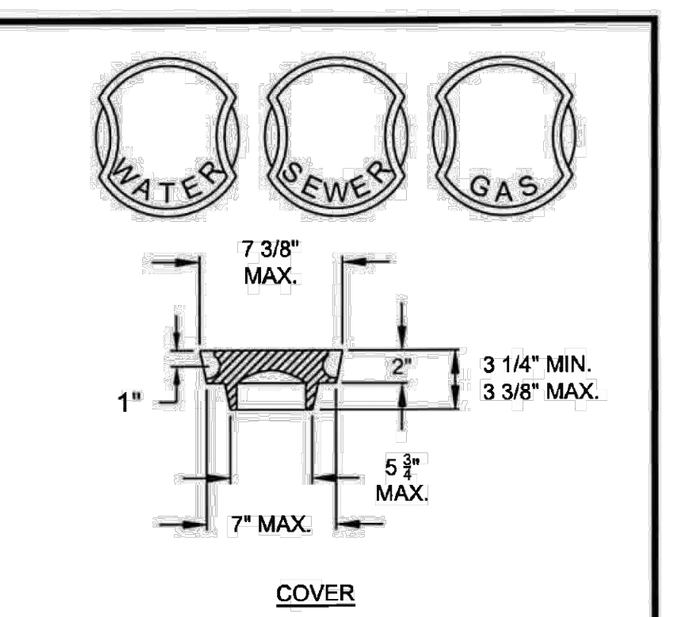

NOTES:
1. TO BE PLUMB AND CENTERED OVER VALVE.
2. ALL SECTIONS SHOWN TO BE GRAY IRON CASTINGS, CLASS NO. 35 ASTM A-48.
3. LOWER SECTION TO REST ON VALVE BONNET. VALVE BOX ALIGNMENT DEVICE BY TRUMBULL OR AN APPROVED EQUAL.
4. UPPER SECTION TO REST ON SELECT FILL COMPACTED TO 95% MODIFIED PROCTOR.
5. VALVE BOX TO BE #4905 MANUFACTURED BY BINGHAM & TAYLOR OR AN APPROVED EQUAL.
6. REINFORCED COATED TRACER WIRE AS MANUFACTURED BY COPPERHEAD INDUSTRIES, LLC OR AN APPROVED EQUAL.
7. COVER TO BE MARKED FOR OTHER UTILITIES (SEWER, GAS, ETC.)

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1/31/2024 DATE
EASTON UTILITIES STANDARD DETAILS
SCREW TYPE VALVE BOX
ISSUED: JANUARY 2024 | STANDARD NO.: W-102.3

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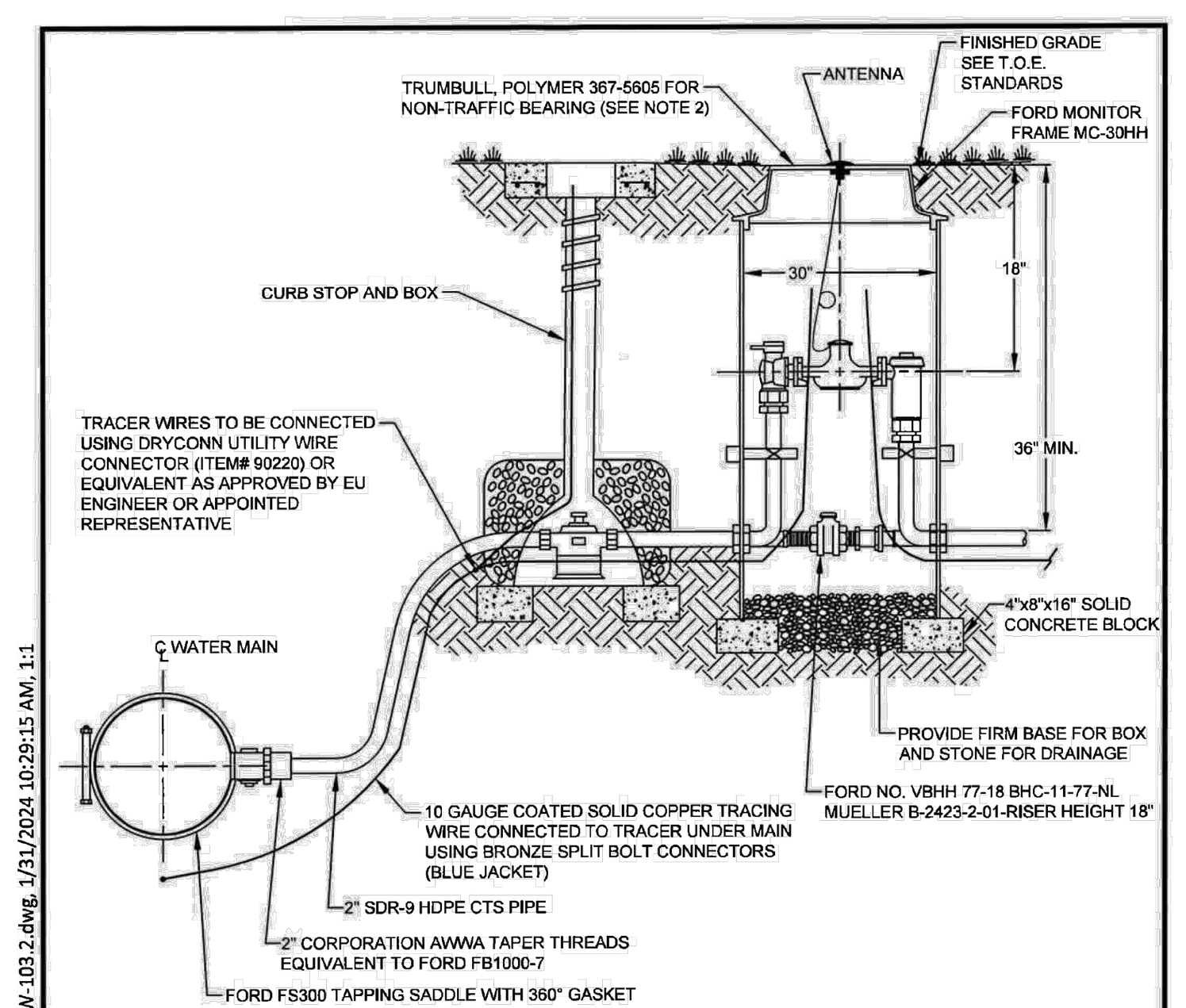

NOTES:
1. METER PIT, FRAME AND COVER, AND CUSTOM SETTER SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR.
2. COVER MUST BE TRUMBULL, POLYMER 367-5610 FOR TRAFFIC BEARING AREAS WITH WATER LOGO. A 3/4" HOLE SHALL BE DRILLED IN THE CENTER OF ALL LIDS FOR EXTERNAL ANTENNA INSTALLATION.
3. THOROUGHLY TAPE MECHANICAL CONNECTIONS OF TRACER WIRE WITH ELECTRICAL TAPE.
4. CONTRACTOR TO PROVIDE METER SETTER TO EASTON UTILITIES INSPECTOR FOR SIZING. METER SETTER AND METER SHALL BE RETURNED TO THE CONTRACTOR WITH EASTON UTILITIES LOCKS INSTALLED. LOCKS SHALL ONLY BE REMOVED BY EASTON UTILITIES PERSONNEL.
5. METER SHALL BE FURNISHED BY EASTON UTILITIES.
6. CONTRACTOR SHALL PROVIDE A 7" SPOOL PIECE TO ALLOW A 10" METER TO HAVE A 17" LAY LENGTH.

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1/31/2024 DATE
EASTON UTILITIES STANDARD DETAILS
2" WATER SERVICE INSTALLATION
ISSUED: JANUARY 2024 | STANDARD NO.: W-103.2

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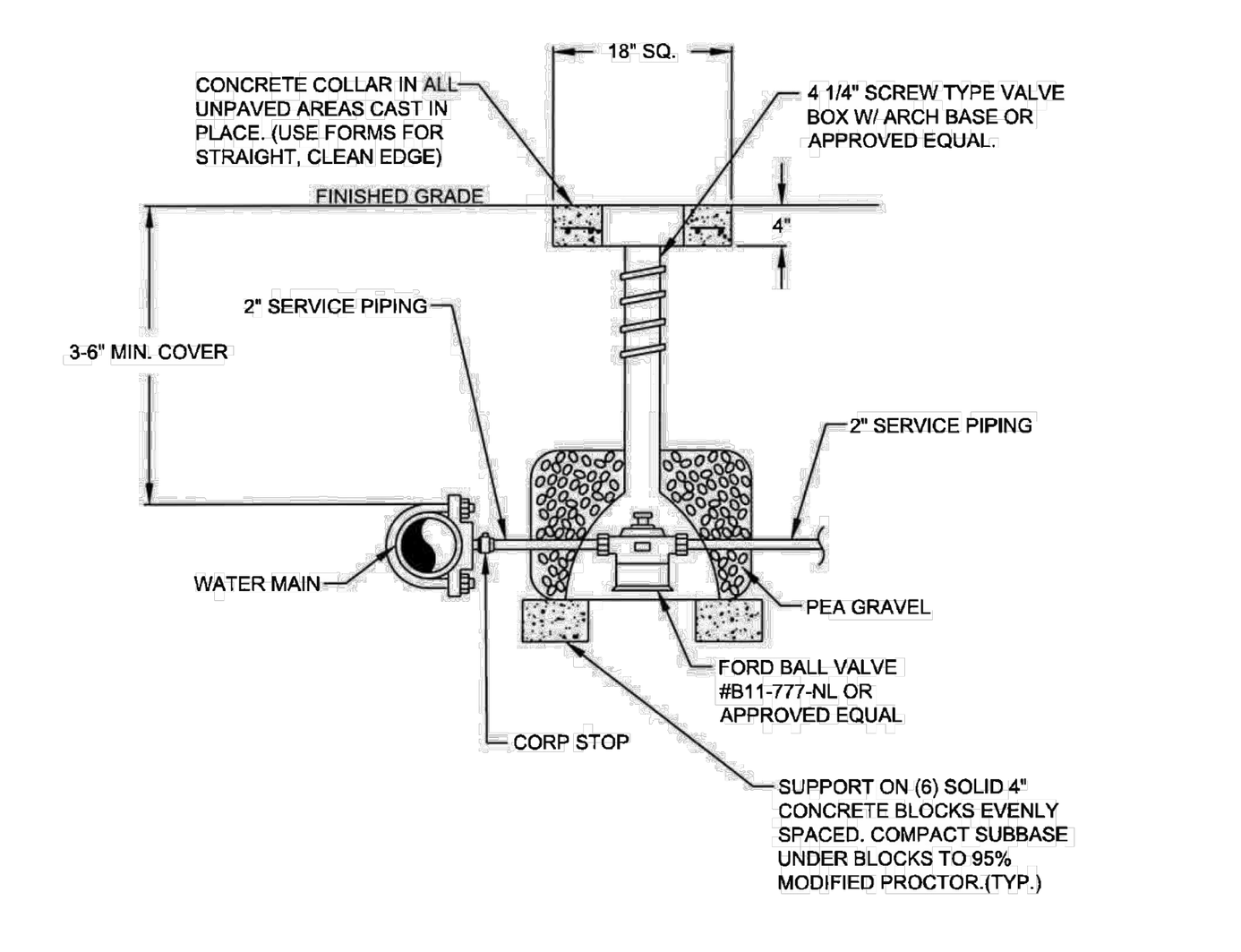

NOTE:
VALVE BOX SHALL BE A 4 1/4" PLASTIC VALVE BOX; MODEL P4B BY BINGHAM AND TAYLOR OR AN APPROVED EQUAL.

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EU ENGINEERING DEPARTMENT
1/31/2024 DATE
EASTON UTILITIES STANDARD DETAILS
CURB STOP AND BOX
ISSUED: JANUARY 2024 | STANDARD NO.: W-103.3

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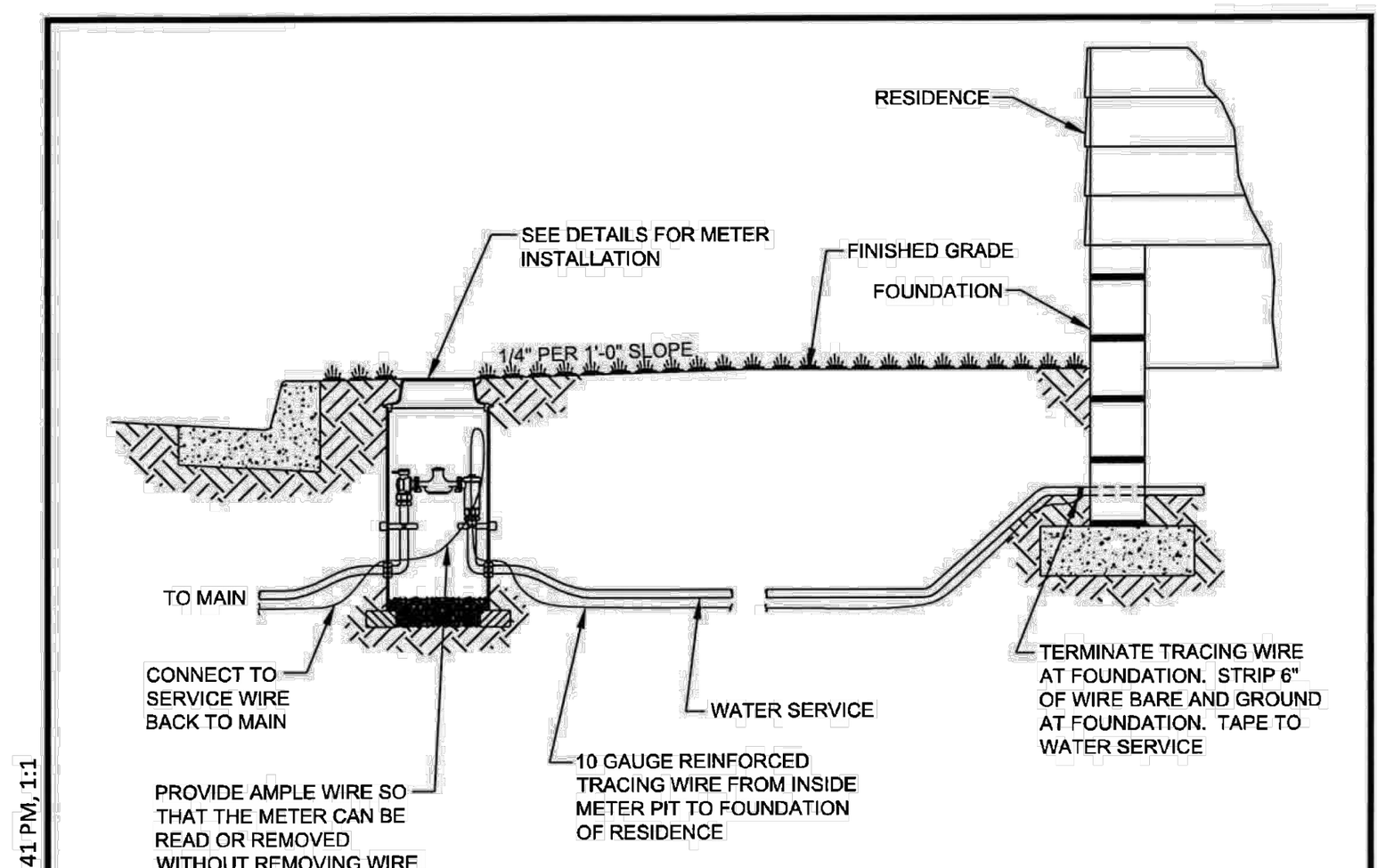

NOTES:
1. 10 GAUGE SOLID COPPER TRACER WIRE; BLUE JACKET.
2. THOROUGHLY TAPE MECHANICAL CONNECTIONS ON TRACER WIRE WITH ELECTRICAL TAPE.
3. INSTALLATION OF WATER SERVICE INTO FOUNDATION PER TOWN OF EASTON APPROVED PLUMBING CODE.

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1/31/2024 DATE
EASTON UTILITIES STANDARD DETAILS
WATER SERVICE CONNECTION
ISSUED: JANUARY 2024 | STANDARD NO.: W-103.4

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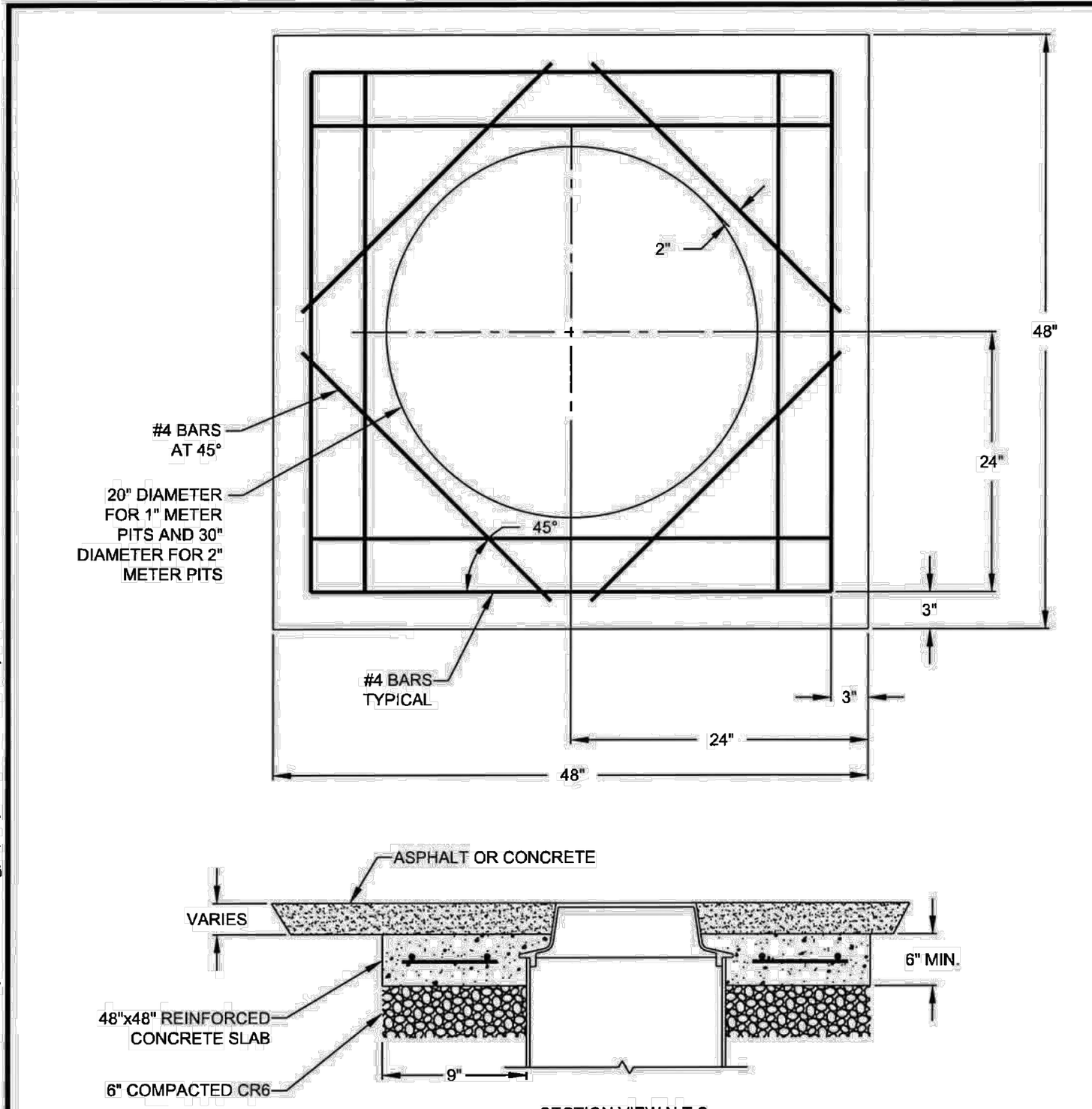

NOTES:
1. CONTRACTOR SHALL CONTACT EASTON UTILITIES PRIOR TO THE WATER METER PIT INSTALLATION FOR ALL TRAFFIC BEARING INSTALLATIONS.
2. PORTLAND CEMENT MIXTURE SHALL MEET OR EXCEED SHA MIX #2.
3. ALL REINFORCEMENT SHALL BE #4 REBAR UNLESS OTHERWISE NOTED.

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1/31/2024 DATE
EASTON UTILITIES STANDARD DETAILS
WATER METER PIT INSTALLATION-TRAFFIC BEARING
ISSUED: JANUARY 2024 | STANDARD NO.: W-103.6

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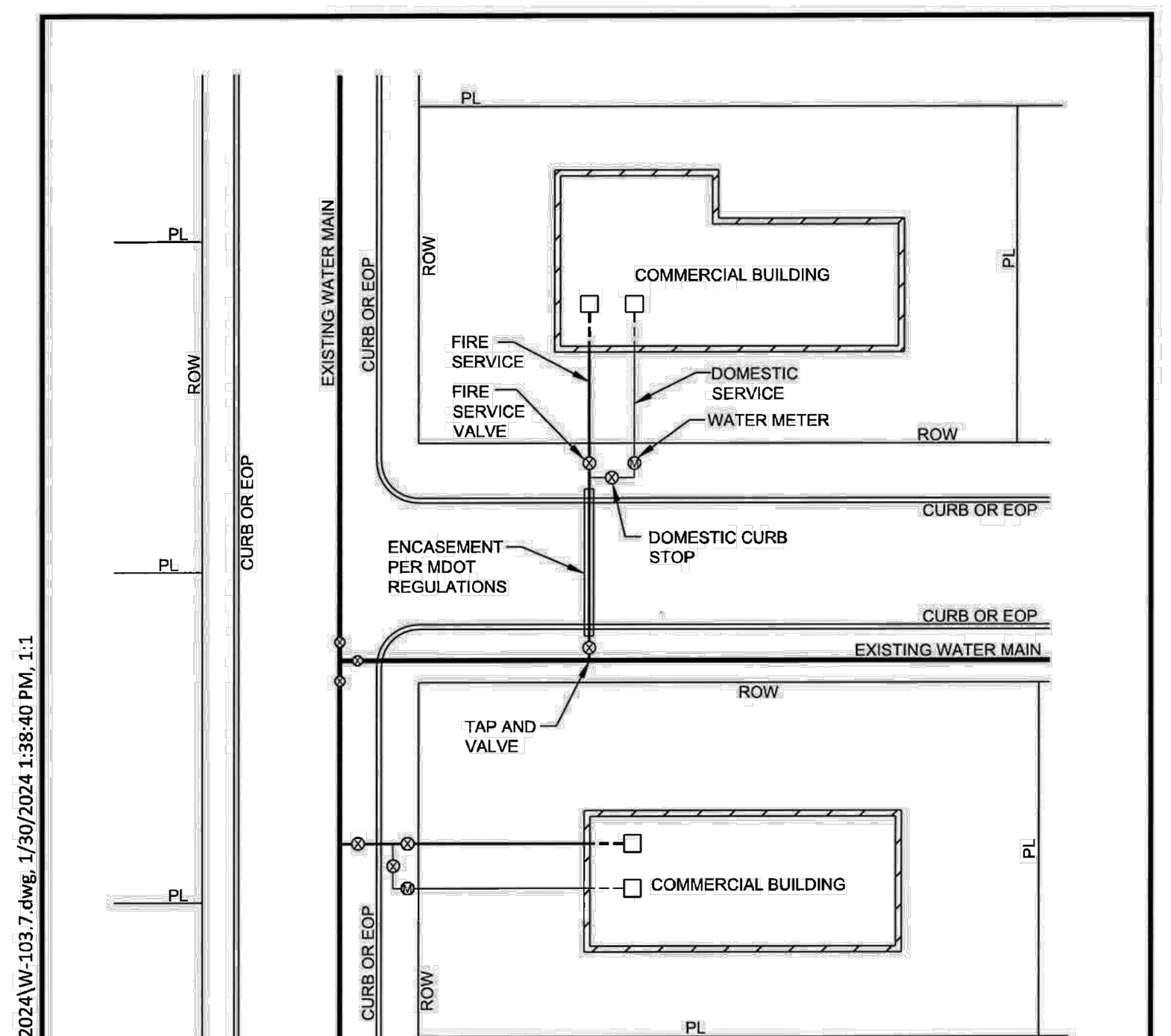

NOTES:
1. SIZE OF FIRE AND DOMESTIC SERVICE SHALL BE PROVIDED BY THE DESIGN ENGINEER.
2. RESIDENTIAL FIRE SERVICE FOR SINGLE FAMILY HOMES SHALL RUN THROUGH METER.

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1/31/2024 DATE
EASTON UTILITIES STANDARD DETAILS
COMMERCIAL FIRE SERVICE
ISSUED: JANUARY 2024 | STANDARD NO.: W-103.7

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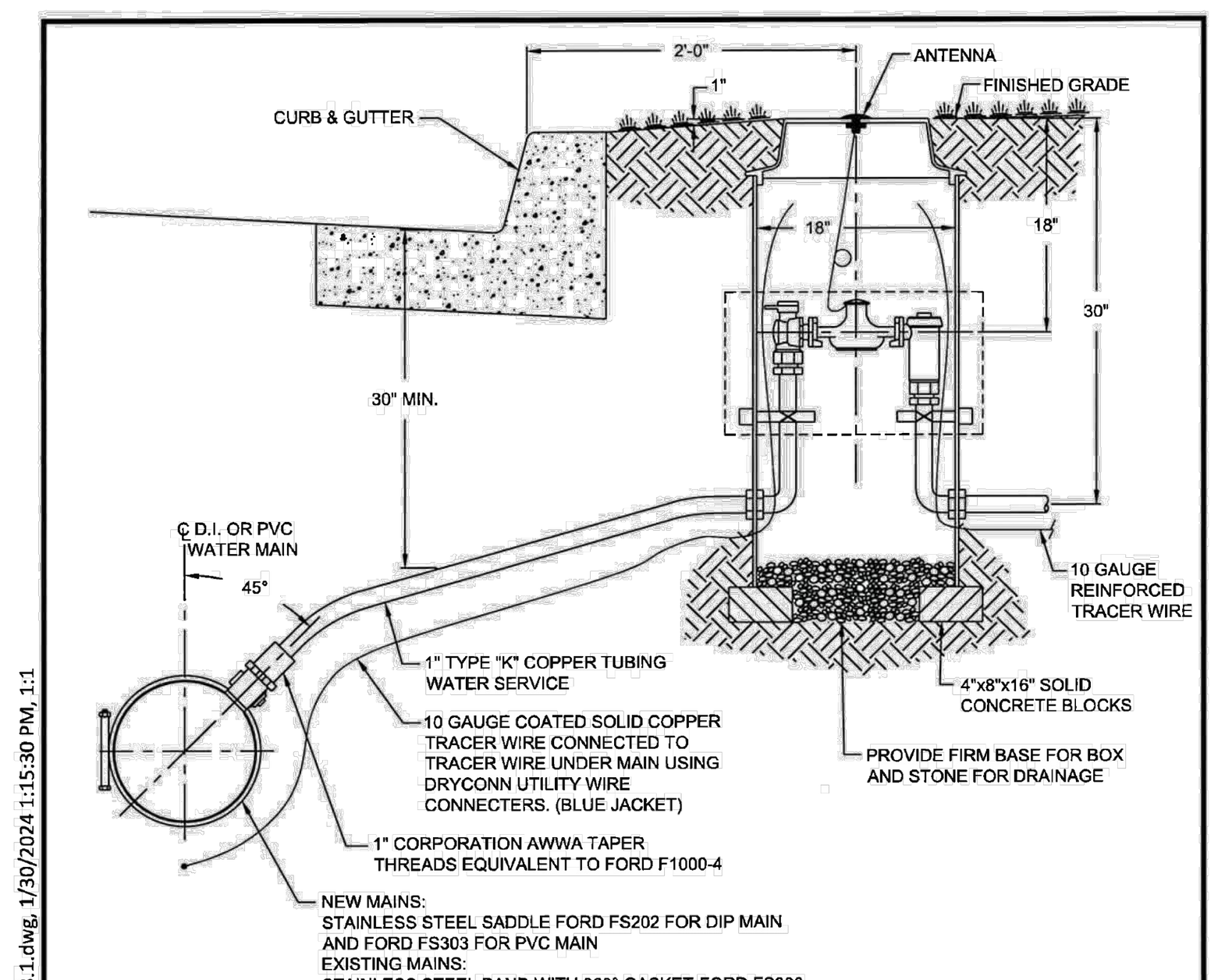

NOTES:
1. TUBING TO BE LAID LEVEL WITH TOP OF MAIN UNLESS OTHERWISE DIRECTED BY ENGINEER.
2. CORPORATION COCK TO BE LEFT OPEN, METER ANGLE VALVE LEFT CLOSED.
3. METER BOX MUELLER NO. 330RS1826FBBNN OR AN APPROVED EQUAL FURNISHED AND INSTALLED BY CONTRACTOR. COVER SHALL BE TRUMBULL, POLYMER 367-5771 LID WITH WATER LOGO AND 367-5680 FOR TRAFFIC BEARING. FRAME SHALL BE AY MCDONALD TYPE C OR APPROVED EQUAL. A 3/4" DIA. HOLE SHALL BE DRILLED IN THE CENTER OF ALL LIDS FOR EXTERNAL ANTENNA INSTALLATION.
4. SURFACE RESTORATION SHALL BE PER TOWN OF EASTON STANDARDS.
5. PIPE SHALL BE TAPPED WITH A HOLE CUTTER THAT WILL RETAIN THE COUPON IN ACCORDANCE WITH UNI-BELL PLASTIC PIPE ASSOCIATION UNI-B-3.
6. THOROUGHLY TAPE MECHANICAL CONNECTIONS WITH ELECTRICAL TAPE.
7. METER SHALL BE FURNISHED BY EASTON UTILITIES.

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EU ENGINEERING DEPARTMENT
1/31/2024 DATE
EASTON UTILITIES STANDARD DETAILS
1" WATER SERVICE
ISSUED: JANUARY 2024 | STANDARD NO.: W-103.1

APPROVED:	APPROVED:	APPROVED:	APPROVED:
TOWN OF EASTON - TOWN ENGINEER DATE	TOWN OF EASTON PLANNING AND ZONING DATE	EASTON UTILITIES - ENGINEER DATE	TALBOT SOIL CONSERVATION DISTRICT - MANAGER DATE

UTILITY DETAILS

OF THE LANDS OF

CALVERT TERRACE

TAX MAP 0103, GRID 00EA, PARCEL 885 - 928
ELECTION WARD 1, EASTON, TALBOT COUNTY, MARYLAND
PREPARED FOR OSPREY PROPERTY COMPANY II LLC

RAUCH inc.
Engineering | Survey | Architecture | Environmental
Main Office: 106 N Harrison St - Easton, MD 21601
Web: www.rauch-inc.com | Email: design@raucheng.com
Phone: 410 770 9081 | Fax: 410 770 3667

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, 2026
12-10-2025
PRELIMINARY PLANS FOR REVIEW ONLY

REVISIONS

REV. #	DATE	DESCRIPTION
1		

MISS UTILITY OF DELMARVA CALL BEFORE YOU DIG
811

DATE: 12/10/2025
SCALE: N/A
DRAWN BY: AF
DESIGNED BY: AF
APPROVED BY: BBF

SHEET NO.: **C-405.02**

FOR REVIEW

LANDSCAPE SHEET INDEX:

L-601	MASTER SCHEDULE, CODE CALCULATIONS, OVERVIEW
L-602.1	BUFFERYARDS
L-602.2	PARKING LOT
L-602.3	STREET TREES
L-602.4	LANDSCAPE INFILL
L-602.5	STORMWATER POND
L-603	OPEN SPACE & RECREATION PLAN
L-605	LANDSCAPE DETAILS

EXISTING FEATURES

1. EXISTING PROPERTY LINE
2. EXISTING STORMWATER FEATURE / EASEMENT
3. UTILITIES EASEMENT
4. RETAINED/PRESERVED TREE CANOPY
5. 10' STORMWATER ACCESS EASEMENT
6. EXISTING DRAINAGE DITCH

LANDSCAPE FEATURES

1. PROPOSED L.O.D.
2. PROPOSED OPEN SPACE BOUNDARY (TYP.)
3. PROPOSED STORMWATER POND
4. CLASS C BUFFERYARD - CALVERT STREET

TREE CALCULATIONS:

REQUIRED: 273 TREES (116 WITHOUT CREDIT)

PROPOSED
- FOREST PRESERVATION CREDIT: 157 TREES
- STREET TREES (LESS BUFFER): 58 TREES
- PARKING LOT TREES PROVIDED: 15 TREES
- BUFFERYARD TREES PROVIDED: 19 TREES
- ADDITIONAL LANDSCAPE INFILL: 43 TREES

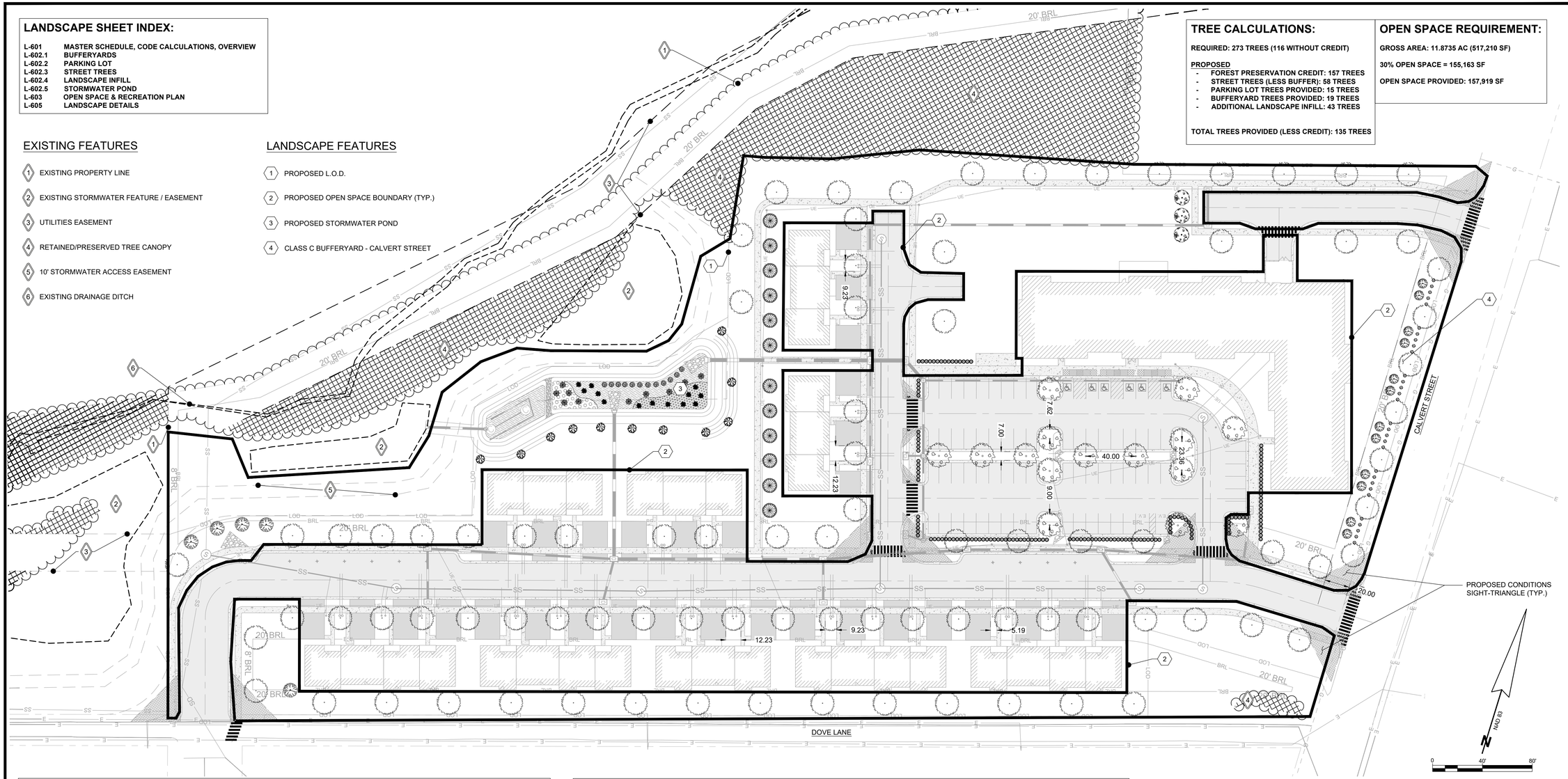
TOTAL TREES PROVIDED (LESS CREDIT): 135 TREES

OPEN SPACE REQUIREMENT:

GROSS AREA: 11.8735 AC (517,210 SF)

30% OPEN SPACE = 155,163 SF

OPEN SPACE PROVIDED: 157,919 SF



PLANT LIST:

SYMBOL	QUANTITY	SCIENTIFIC NAME	COMMON NAME	SPECIFICATION
NATIVE STREET TREES				
QR	44	QUERCUS RUBRA	NORTHERN RED OAK	2" CALIPER
QA	14	QUERCUS ALBA	WHITE OAK	2" CALIPER
QP	18	QUERCUS PHELLOS	WILLOW OAK	2" CALIPER
AR	10	ACER RUBRUM	RED MAPLE	2" CALIPER
PS	2	PINUS STROBUS	WHITE PINE	2" CALIPER
TA	15	TILIA AMERICANA	LINDEN TREE	2" CALIPER
IO	17	ILEX OPACA 'MISS HELEN'	AMERICAN HOLLY	1.25" CALIPER
AL	3	AMELANCHIER LAEVIS 'CUMULUS'	ALLEGHENY SERVICEBERRY	1.25" CALIPER
TO	12	THUJA OCCIDENTALIS 'NIGRA'	EASTERN ARBORVITAE	1.25" CALIPER
TOTAL TREES: 135				
NATIVE SHRUBS				
MC	11	MYRICA CERIFERA	BAYBERRY	3-4' #10
IV	10	ITEA VIRGINICA	SWEETSPIRE	3-4' #10
AA	10	ARONIA ARBUTIFOLIA	RE CHOKEBERRY	3-4' #10
VA	10	VIBURNUM ACERIFOLIUM	MAPLELEAF VIBURNUM	3-4' #10
STORMWATER PLANTS				
CA	12	CLETHRA ALNIFOLIA	SUMMERSWEET	#5
CO	10	CEPHALANTHUS OCCIDENTALIS	BUTTONBUSH	#7
VC	13	VACCINIUM CORYMBOSUM	HIGHBUSH BLUEBERRY	#5
PV	1,600	PANICUM VIGRATUM	SWITCHGRASS	2" PLUG
AI	430	ASCLEPIAS INCARNATA	SWAMP MILKWEED	1 QUART
AN	430	ASTER NOVAE-ANGLIAE	NEW ENGLAND ASTER	1 QUART

NOTE ON SUBSTITUTIONS:
THUJA OCCIDENTALIS 'NIGRA' MAY BE SUBSTITUTED FOR THUJA OCC. 'TECHNY,' 'WINTERGREEN,' OR 'VIRGINIAN' - ALL ARE COMPARABLE SIZES.
THUJA OCCIDENTALIS 'LITTLE GIANT' MAY BE SUBSTITUTED FOR THUJA OCC. 'HETZ MIDGET,' 'RHEINGOLD,' OR 'FIRE CHIEF.'

CODE NARRATIVE:

LANDSCAPE IMPROVEMENTS
§ 28 1014.6 B.1
OVERALL MINIMUM OF 3 TREES PER RESIDENTIAL UNIT:60 APARTMENT UNITS + 31 COTTAGES = 91 UNITS X 3 TREES = 273 SITE TREES REQUIRED

FOREST RETENTION CREDIT
§ 28 1014.5
FOREST CANOPY RETAINED/PRESERVED ON-SITE: 62,809 SF / 400 SF PER CANOPY TREE CREDIT = 157 TREES CREDITED

REQUIRED TREES *LESS **TREE CREDITS*** = *116 NEW TREES REQUIRED*

PROPOSED TREES (LESS BUFFERYARD): 91 CANOPY TREES + 25 UNDERSTORY TREES = **116 NEW TREES PROVIDED**

STREET TREE REQUIREMENT
§ 28 1014.6 B.1 . a
CENTERLINE OF ROADWAY (LESS SIGHT TRIANGLES AND ROW) = 1,623' ROADWAY / 25' L INCREMENTS = 64.92 STREET TREES

***58 PLANTED ALONG STREETS + 7 ALONG CALVERT STREET IN BUFFERYARD** = **65 STREET CANOPY TREES PROVIDED**

PARKING LOTS
§ 28 1014.6 B.1 b - c
1 DECIDUOUS / CANOPY TREE PER 5 SPACES PROVIDED: 75 SPACES / 5 = 15 = 15 PARKING LOT TREES PROVIDED

ALL LOTS LANDSCAPED WITH EVERGREEN SHRUB HEDGE GROWN UP TO 42" IN 5 YEARS. TO SCREEN LOT FROM ADJACENT STREET VIEWS. *551 ' L PERIMETER SCREEN / (3' O.C.) = 145 SHRUBS PROVIDED*

BUFFERYARD STANDARDS
§ 28 1014.7 (D-4.), (E-1.)
- BUFFERYARD C TO BE ESTABLISHED ALONG CALVERT STREET; 279' ROAD FRONTAGE (LESS SIGHT TRIANGLES) / 50' = 5.58 = 6 PLANTING UNITS
- SOUTH PROPERTY LINE - NOT A COLLECTOR STREET - **EXEMPT**
- WEST PROPERTY LINE - EXISTING STORMWATER BUFFER - **EXEMPT**
- NORTH PROPERTY LINE - EXISTING STORMWATER BUFFER/CANOPY - **EXEMPT**

STANDARD LANDSCAPE NOTES:

1. LANDSCAPE INSTALLER SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO COMMENCING WORK. INSTALLER SHALL ENSURE THAT FINAL GRADES HAVE BEEN ESTABLISHED AND THE SITE IS READY FOR LANDSCAPE INSTALLATION.
2. LANDSCAPE INSTALLER SHALL MAINTAIN THE LANDSCAPE IMPROVEMENT AREAS IN A CLEAN CONDITION, REMOVING DEBRIS DAILY AND AT THE COMPLETION OF THE INSTALLATION.
3. INSTALLER SHALL LAYOUT ALL BEDS AND POSITION PLANTS PER THE PLANS. ADJUST AS REQUIRED FOR FIELD CONDITIONS. REPORT SIGNIFICANT ADJUSTMENTS TO THE OWNER FOR APPROVAL PRIOR TO PLANT INSTALLATION. ALL BED AREAS SHALL BE SPRAYED WITH HERBICIDE AS NEEDED TO KILL AND/OR REMOVE ALL WEED OR GRASS VEGETATION.
4. EXCEPT FOR TREE SPADE INSTALLATIONS, ALL TREE PITS SHALL BE EXCAVATED TO A DEPTH SO THAT THE ROOT BALL WILL REST ON SOLID SOIL AT THE PROPER HEIGHT. STREET TREES PLANTING PITS SHALL BE EXCAVATED AND WORKED IN A RECTANGULAR FORM WITH THE SMALL DIMENSION TWICE THE DIAMETER OF THE ROOT BALL AND THE LARGE DIMENSION AT LEAST THREE (3) TIMES THE DIAMETER OF THE ROOT BALL. OPEN AREA TREE PITS SHALL BE EXCAVATED TO A MINIMUM DIMENSION OF TWICE THE ROOTBALL WIDTH. TREES PLANTED ON SLOPES OR SIDE SWALES SHALL BE INSTALLED AT A HEIGHT RELATING TO THE UPHILL SIDE OF THE PIT, AND MOUNDED WITH SOIL AROUND THE LOWER SIDE. ALL SIDES AND BOTTOM OF TREE PLANTING PITS SHALL BE SCARIFIED OR LOOSENED TO PERMIT ROOT GROWTH. EXCAVATED SOILS THAT HAVE BEEN PREVIOUSLY UNDISTURBED SHALL BE LOOSENED AND UTILIZED FOR BACKFILL. COMPACTED SOILS THAT CANNOT BE RESTORED TO A REASONABLE PLANTING SOIL SHALL BE REMOVED AND REPLACED WITH FRIABLE NATIVE SOILS FROM THE REGION.
5. ALL SHRUB PLANTING PITS, LANDSCAPE BEDS AND PLANTING MASS AREAS SHALL BE WORKED TO A DEPTH OF TWELVE INCHES (12") (OR RAISED SLIGHTLY TO ACHIEVE A TWELVE INCH (12") FRIABLE SOIL DEPTH). SHRUB PLANTING AREAS SHALL BE WORKED TO TWELVE INCH (12") MINIMUM OUTSIDE THE ROOT BALL.
6. ALL LANDSCAPE BEDS SHALL BE "V" EDGED AND MULCHED WITH MINIMUM THREE INCH (3") DOUBLE SHREDDED HARDWOOD BARK MULCH, OR APPROVED EQUAL. MULCH TO FENCE LINES OR BACK OF CURBS WHERE APPROPRIATE TO ELIMINATE NARROW GRASS AREAS. AVOID MULCH PILED AGAINST TREE TRUNKS, ETC.
7. ALL TREES TO BE STAKED AND GUYED WITH HARDWOOD STAKES, MINIMUM OF TWO (2) - FIVE FEET (5') LONG, OR OTHER APPROVED GUYING SYSTEM. STAKES SHALL BE DRIVEN INTO STABLE SOILS. PROVIDE WIRE GUYS WITH RUBBER PROTECTANT OR OTHER APPROVED INDUSTRY PRACTICE.
8. LANDSCAPE INSTALLER SHALL MAINTAIN ALL PLANT MATERIALS THROUGH THE COMPLETION OF THE LANDSCAPE INSTALLATION, AND THEN AS REQUIRED BY THE OWNER.
9. AT THE COMPLETION OF THE LANDSCAPE INSTALLATION (OR BY PHASED COMPLETION IF PROVIDED FOR ON THE PLAN), THE OWNER, OR HIS DESIGNATED REPRESENTATIVE SHALL REQUEST AN INSPECTION BY TOWN OF EASTON.

NOTE ON WARRANTY OF LANDSCAPE IMPROVEMENTS:
THE OWNER/DEVELOPER SHALL MAINTAIN ALL LANDSCAPE IMPROVEMENTS PROVIDING ADEQUATE GROWING CONDITIONS TO ENSURE HEALTHY, VIGOROUS PLANT SURVIVAL AND GROWTH. THE TOWN RESERVES THE RIGHT TO PERIODICALLY REVIEW INSTALLED LANDSCAPE AND REPORT AND SIGNIFICANT DEFICIENCIES TO THE OWNER/DEVELOPER. AT THE END OF TWO (2) GROWING SEASONS, AND/OR AT ANY TIME PRIOR TO, THE TOWN SHALL ASSESS THE LANDSCAPE IMPROVEMENTS AND DIRECT REPLACEMENT OR REVITALIZATION OF ANY DEFICIENT AREAS. THE OWNER SHALL REPAIR OR REPLACE DEFICIENT ITEMS WITHIN THIRTY (30) DAYS.

LANDSCAPE PLAN

OF THE LANDS OF

CALVERT TERRACE

TAX MAP 0103, GRID 00EA, PARCEL 885 - 928
ELECTION WARD 1, EASTON, TALBOT COUNTY, MARYLAND
PREPARED FOR OSPREY PROPERTY COMPANY II LLC

RAUCH inc.
Engineering | Survey | Architecture | Environmental
Main Office: 106 N Harrison St - Easton, MD 21601
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Phone: 410 770 8081 | Fax: 410 770 3887

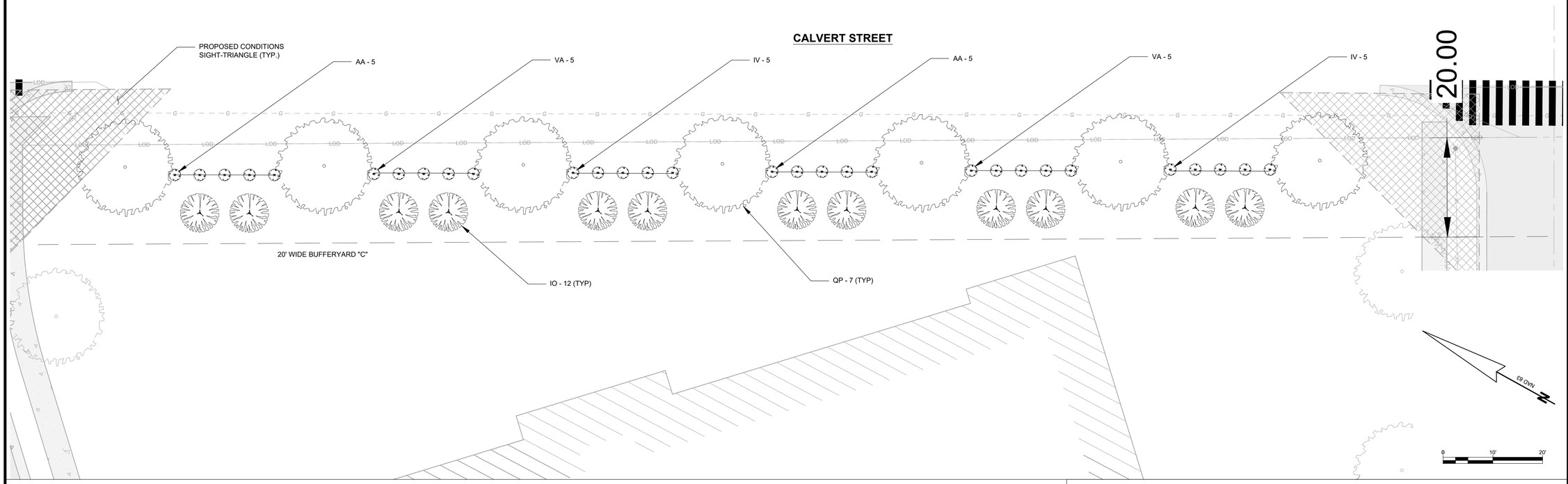
REVISIONS		
REV. #	DATE	DESCRIPTION
1		

MISS UTILITY OF DELMARVA — CALL BEFORE YOU DIG — 811

DATE:	11/26/2025
SCALE:	1" = 40'
DRAWN BY:	GJR
DESIGNED BY:	GJR
APPROVED BY:	

SHEET NO.: L-601

FOR REVIEW



BUFFERYARD PLANT LIST:

SYMBOL	QUANTITY	SCIENTIFIC NAME	COMMON NAME	SPECIFICATION
NATIVE STREET TREES				
QP	7	QUERCUS PHELLOS	WILLOW OAK	2" CALIPER
EVERGREEN TREES				
IO	12	ILEX OPACA	AMERICAN HOLLY	MIN. 7' H
NATIVE SHRUBS				
IV	10	ITEA VIRGINICA	SWEETSPIRE	#5
VA	10	VIBURNUM ACERIFOLIUM	MAPLELEAF VIBURNUM	#5
AA	10	ARONIA ARBUTIFOLIA	RED CHOKEBERRY	#5

NOTES ON SUBSTITUTIONS:

THUJA OCCIDENTALIS 'NIGRA' MAY BE SUBSTITUTED FOR THUJA OCC. 'TECHNY,' 'WINTERGREEN,' OR 'VIRGINIAN' - ALL ARE COMPARABLE SIZES.

THUJA OCCIDENTALIS 'LITTLE GIANT' MAY BE SUBSTITUTED FOR THUJA OCC. 'HETZ MIDGET,' 'RHEINGOLD,' OR 'FIRE CHIEF.'

BUFFERYARD CALCULATIONS: § 1014.7 D-5 & E-3

BUFFERYARD C - CALVERT STREET - RESIDENTIAL ZONE - COLLECTOR DESIGNATION - 20' W

300'L OF STREET FRONTAGE / 50' INTERVAL = 6 PLANTING UNITS

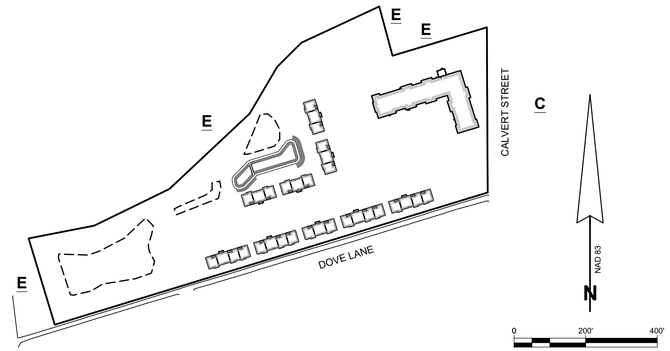
6 x 1 SHADE/CANOPY TREE, 2 EVERGREEN TREES, 5 LARGE SHRUBS

REQUIRED PLANTINGS:
- 6 SHADE TREES
- 12 EVERGREEN TREES
- 30 LARGE SHRUBS

PROVIDED PLANTINGS:
- 7 SHADE TREES
- 12 EVERGREEN TREES
- 30 LARGE SHRUBS

CREDIT PLANTINGS: 7 STREET TREES

BUFFERYARD KEY



NOTES:

BUFFERYARD ZONES CLASSIFIED E ARE EXEMPT FROM BUFFERYARD PLANTINGS AS THE EXISTING CANOPY WITHIN THESE UNDEVELOPED PARCELS WILL BE RETAINED AND PRESERVED.

BUFFERYARD PLAN

OF THE LANDS OF

CALVERT TERRACE

TAX MAP 0103, GRID 00EA, PARCEL 885 - 928
ELECTION WARD 1, EASTON, TALBOT COUNTY, MARYLAND
PREPARED FOR OSPREY PROPERTY COMPANY II LLC

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REVISIONS

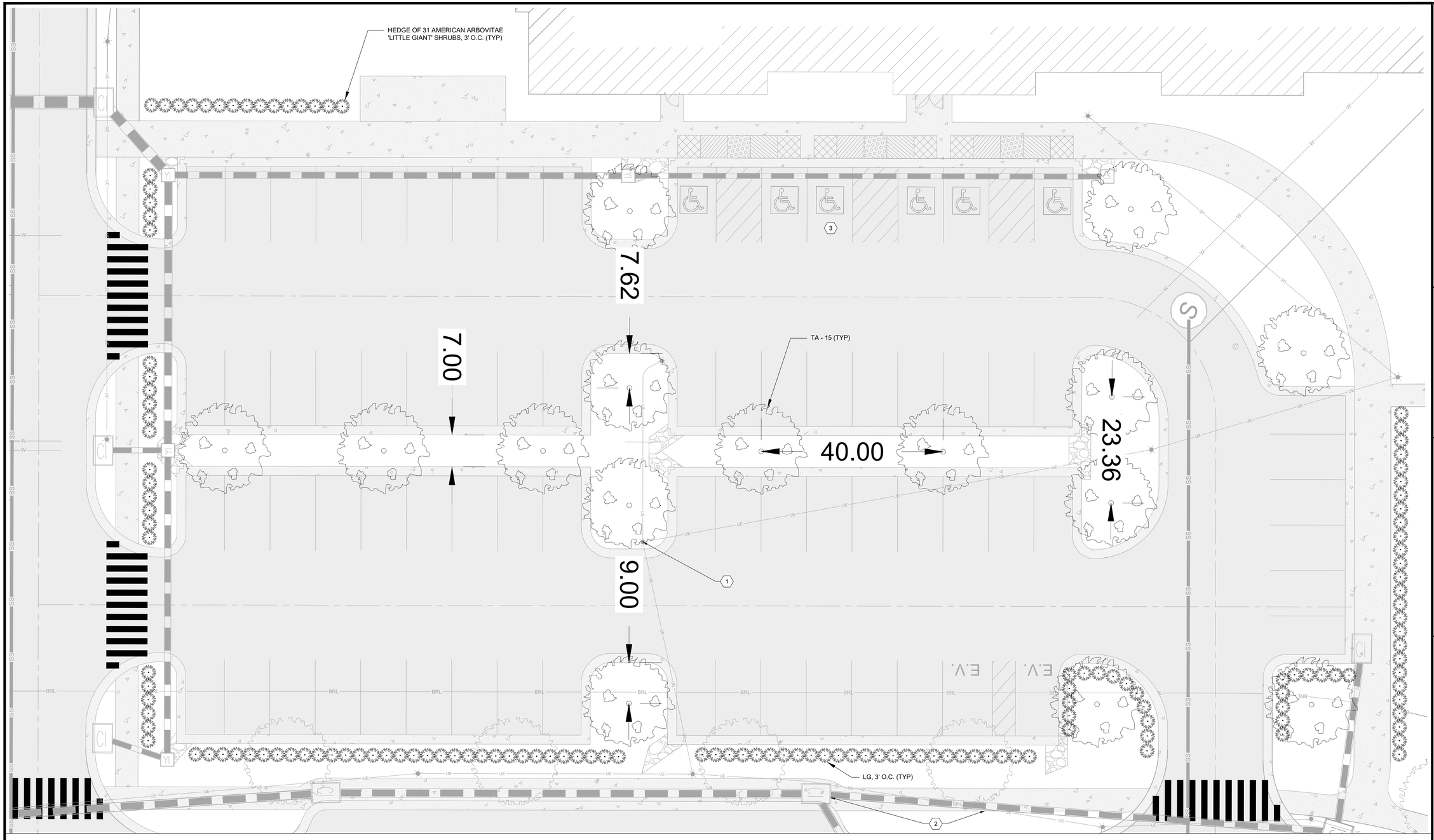
REV. #	DATE	DESCRIPTION
1		

MISS UTILITY OF DELMARVA — 811

DATE:	12/9/2025
SCALE:	AS SHOWN
DRAWN BY:	GJR
DESIGNED BY:	GJR
APPROVED BY:	

SHEET NO.: L-602.1

FOR REVIEW



PLANT LIST:

SYMBOL	QUANTITY	SCIENTIFIC NAME	COMMON NAME	SPECIFICATION
NATIVE PARKING LOT TREES				
TA	15	TILIA AMERICANA	LINDEN TREE	2" CALIPER
NATIVE EVERGREEN SHRUBS				
LG	145	THUJA OCCIDENTALIS 'LITTLE GIANT'	AMERICAN ARBORVITAE SHRUB	#5

NOTES ON SUBSTITUTIONS:
THUJA OCCIDENTALIS 'LITTLE GIANT' MAY BE SUBSTITUTED FOR THUJA OCC. 'HETZ MIDGET,' 'RHEINGOLD,' OR 'FIRE CHIEF.'

PARKING LOT CALCULATIONS: § 1014.6 B

75 SPACES / 1 TREE PER 5 SPACES = 15 TREES

PROPOSED FEATURES

1. PROPOSED SITE LIGHTING (TYP.)
2. PROPOSED PIPE NETWORK
3. PROPOSED ADA PARKING

NAD 83

0 10' 20'

PARKING LOT PLANT PLAN

OF THE LANDS OF

CALVERT TERRACE

TAX MAP 0103, GRID 00EA, PARCEL 885 - 928
ELECTION WARD 1, EASTON, TALBOT COUNTY, MARYLAND
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REVISIONS		
REV. #	DATE	DESCRIPTION
1		

MISS UTILITY OF DELMARVA
811

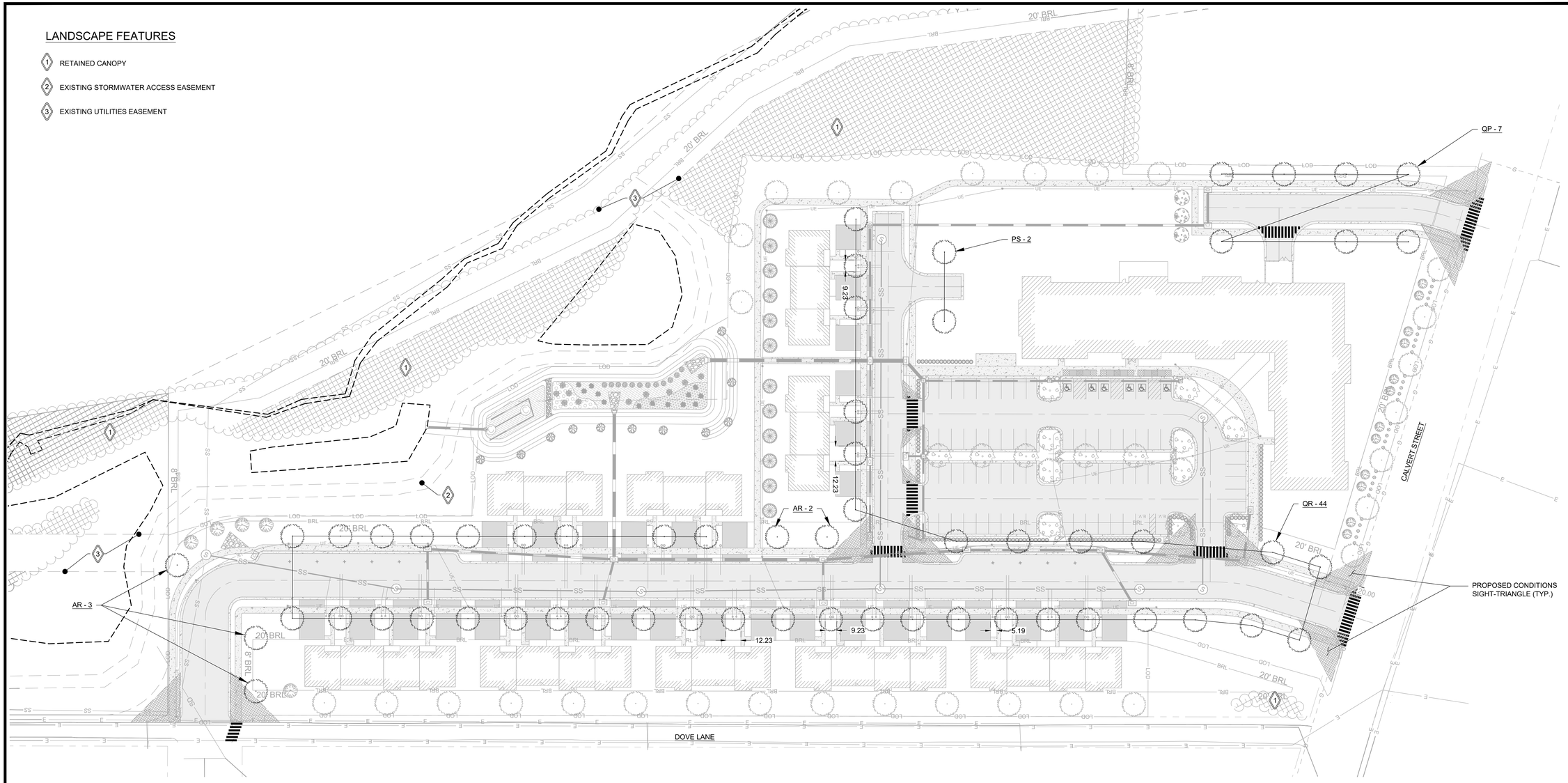
DATE:	12/9/2025
SCALE:	1" = 10'
DRAWN BY:	GJR
DESIGNED BY:	GJR
APPROVED BY:	

SHEET NO.: L-602.2

FOR REVIEW

LANDSCAPE FEATURES

1. RETAINED CANOPY
2. EXISTING STORMWATER ACCESS EASEMENT
3. EXISTING UTILITIES EASEMENT



PLANT LIST:

SYMBOL	QUANTITY	SCIENTIFIC NAME	COMMON NAME	SPECIFICATION
NATIVE STREET TREES				
QR	44	QUERCUS RUBRA	NORTHERN RED OAK	2" CALIPER
QP	7	QUERCUS PHELLOS	WILLOW OAK	2" CALIPER
AR	5	ACER RUBRUM	RED MAPLE	2" CALIPER
PS	2	PINUS STROBUS	WHITE PINE	2" CALIPER

TOTAL TREES: 58

NAD 83

0 40' 80'

STREET TREE PLAN

OF THE LANDS OF

CALVERT TERRACE

TAX MAP 0103, GRID 00EA, PARCEL 885 - 928

ELECTION WARD 1, EASTON, TALBOT COUNTY, MARYLAND

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MISS UTILITY OF DELMARVA — 811

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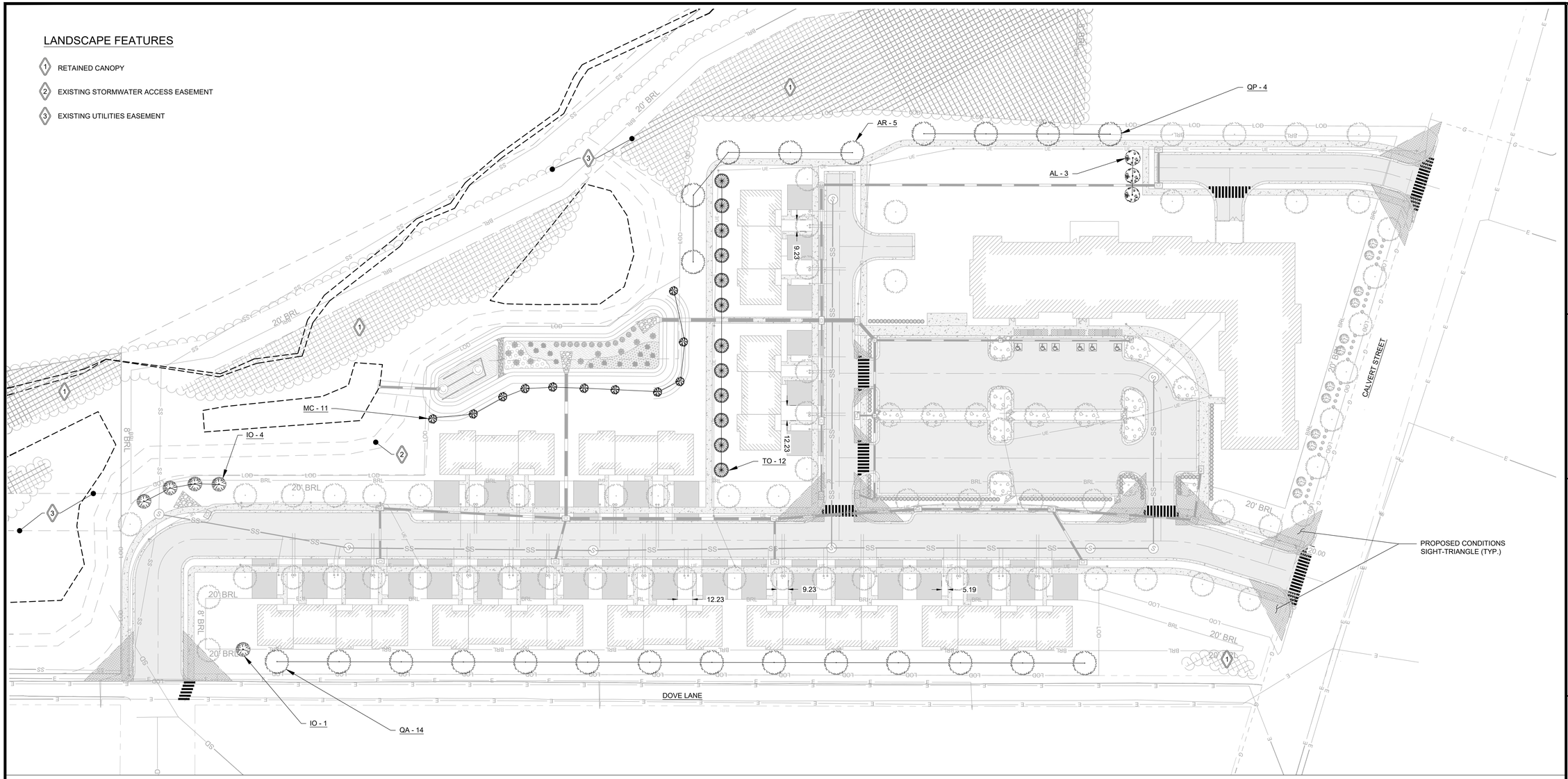
DESIGNED BY:	GJR
APPROVED BY:	

SHEET NO.: L-602.3

FOR REVIEW

LANDSCAPE FEATURES

1. RETAINED CANOPY
2. EXISTING STORMWATER ACCESS EASEMENT
3. EXISTING UTILITIES EASEMENT



PLANT LIST:

SYMBOL	QUANTITY	SCIENTIFIC NAME	COMMON NAME	SPECIFICATION
NATIVE TREES				
QA	14	QUERCUS ALBA	WHITE OAK	2" CALIPER
QP	2	QUERCUS PHELLOS	WILLOW OAK	2" CALIPER
AR	5	ACER RUBRUM	RED MAPLE	2" CALIPER
TO	12	THUJA OCCIDENTALIS 'NIGRA'	AMERICAN ARBORVITAE	1.25" CALIPER
IO	5	ILEX OPACA 'MISS HELEN'	AMERICAN HOLLY	1.25" CALIPER
AL	3	AMELANCHIER LAEVIS 'CUMULUS'	ALLEGHENY SERVICEBERRY	1.25" CALIPER
	TOTAL TREES: 41			
NATIVE SHRUBS				
MC	12	MYRICA CERIFERA	BAYBERRY	#5

NOTES ON SUBSTITUTIONS:
THUJA OCCIDENTALIS 'NIGRA' MAY BE SUBSTITUTED FOR THUJA OCC. 'TECHNY,' 'WINTERGREEN,' OR 'VIRGINIAN' - ALL ARE COMPARABLE SIZES.

NAD 83

0 40' 80'

TREE INFILL PLAN

OF THE LANDS OF

CALVERT TERRACE

TAX MAP 0103, GRID 00EA, PARCEL 885 - 928
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DESIGNED BY:	GJR
APPROVED BY:	

SHEET NO.: L-602.4

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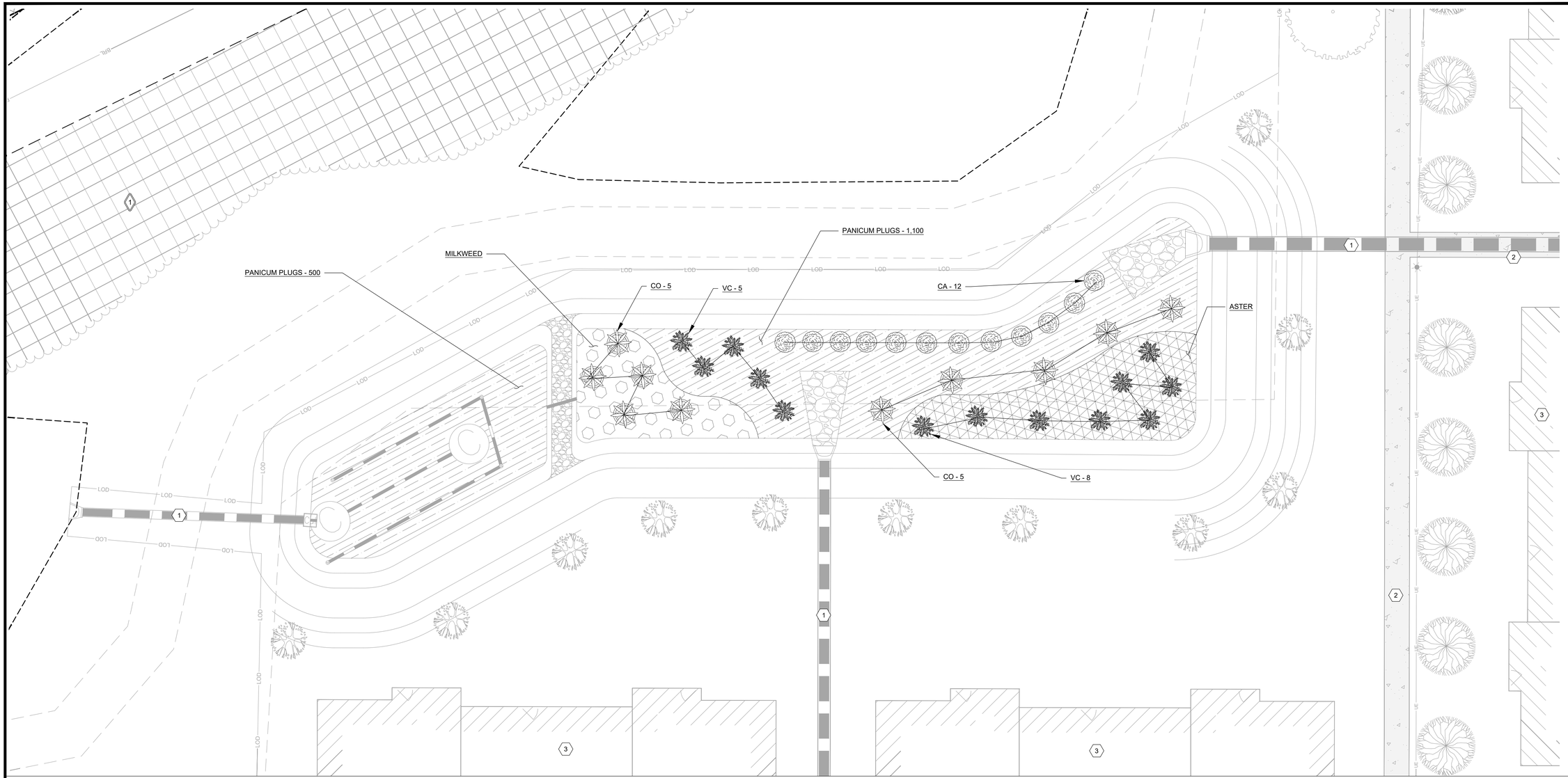

PLANT LIST:

SYMBOL	QUANTITY	SCIENTIFIC NAME	COMMON NAME	SPECIFICATION
NATIVE STORMWATER PLANTS				
CA	12	CLETHRA ALNIFOLIA	SUMMERSWEET	#5
CO	10	CEPHALANTHUS OCCIDENTALIS	BUTTONBUSH	#7
VC	13	VACCINIUM CORYMBOSUM	HIGHBUSH BLUEBERRY	#5
NATIVE HERBACEOUS PLANTS				
PV	1,600	PANICUM VIGRATUM	SWITCHGRASS	2" PLUG
AI	430	ASCLEPIAS INCARNATA	SWAMP MILKWEED	1 QUART
AN	430	ASTER NOVAE-ANGLIAE	NEW ENGLAND ASTER	1 QUART

PROPOSED FEATURES

1. STORMWATER PIPES
2. SIDEWALKS
3. COTTAGES

EXISTING FEATURES

1. RETAINED CANOPY

NAD 83

0 10' 20'

STORMWATER PLANT PLAN

OF THE LANDS OF

CALVERT TERRACE

TAX MAP 0103, GRID 00EA, PARCEL 885 - 928

ELECTION WARD 1, EASTON, TALBOT COUNTY, MARYLAND

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MISS UTILITY OF DELMARVA CALL BEFORE YOU DIG

811

DATE:	12/9/2025
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DRAWN BY:	GJR
DESIGNED BY:	GJR
APPROVED BY:	

SHEET NO.: L-602.5

FOR REVIEW

LANDSCAPE FEATURES

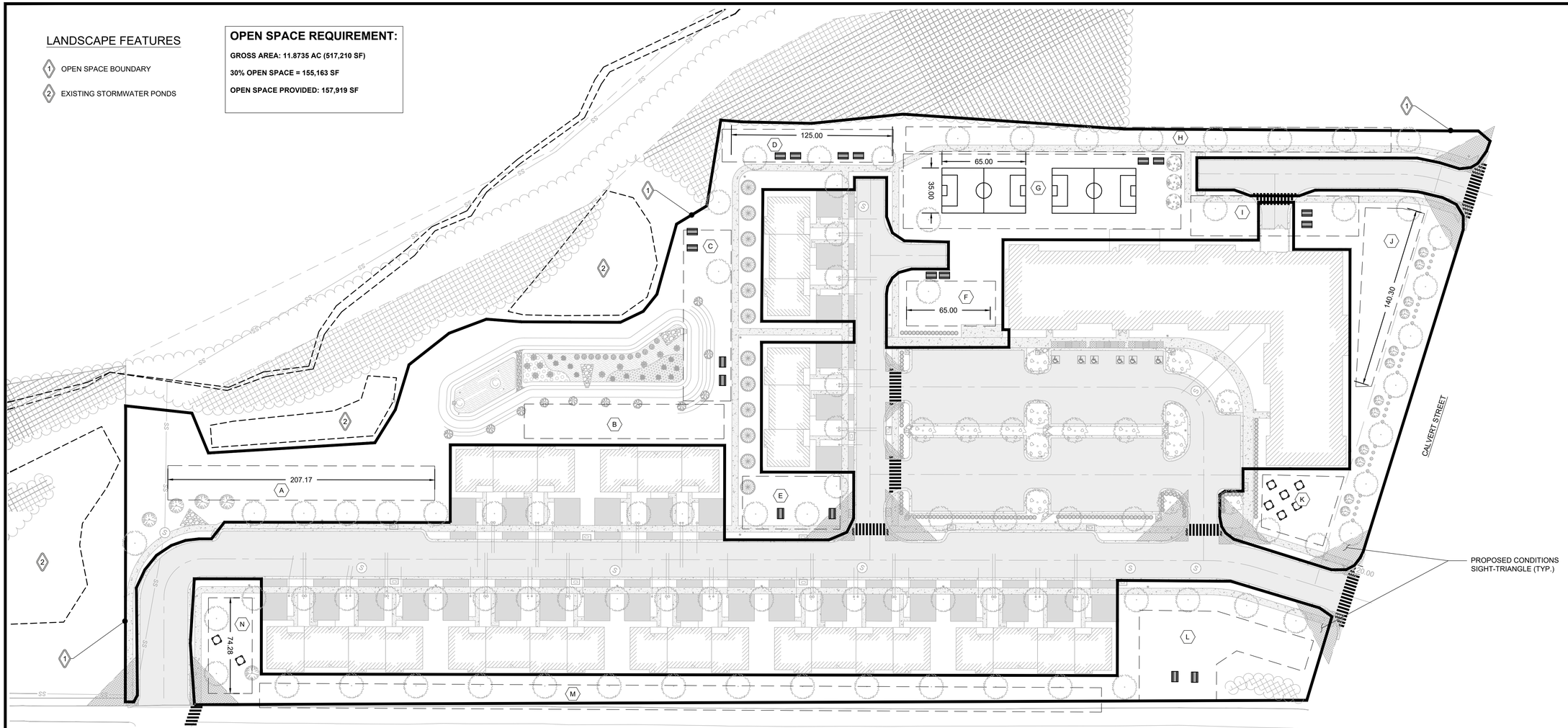
1. OPEN SPACE BOUNDARY
2. EXISTING STORMWATER PONDS

OPEN SPACE REQUIREMENT:

GROSS AREA: 11.8735 AC (517,210 SF)

30% OPEN SPACE = 155,163 SF

OPEN SPACE PROVIDED: 157,919 SF



OPEN SPACE OPPORTUNITIES

- A ACTIVE RECREATION: DOG WALKING, BIRDING
- B PASSIVE RECREATION: PICNIC, BIRDING, READING, LOUNGING
- C PASSIVE RECREATION: PICNIC, BIRDING, READING, MEET - UP / CLUB
- D PASSIVE / ACTIVE: FOOTBALL / FRISBEE, DOG WALKING, MEET - UP / CLUB
- E PASSIVE / ACTIVE: FRISBEE, READING, MEET - UP / CLUB
- F PASSIVE: MEET - UP, BIKE RACK, SCULPTURE PARK, INFORMATION KIOSK
- G ACTIVE / PASSIVE: SPORTS FIELDS, FLEA / FARMERS MARKET, OUTDOOR CONCERT / EVENTS
- H ACTIVE: WALKING, DOG WALKING, ROYAL FARMS
- I PASSIVE: PICK - UP, DROP - OFF, MEET - UP, MAPS & INFORMATION
- J ACTIVE / PASSIVE: FOOTBALL, FRISBEE, ORGANIZED PRIVATE FAMILY EVENTS
- K ACTIVE / PASSIVE: EMPLOYEE OUTDOOR LUNCH, FOOTBALL / FRISBEE CATCH, MEET - UP, CLUBS
- L ACTIVE / PASSIVE: ORGANIZED FAMILY EVENTS, READING, LOUNGING, DOG WALKS, CLUBS
- M ACTIVE: WALKING, DOG WALKING, BIRDING
- N PASSIVE / ACTIVE: READING, MEET - UP, OUTDOOR LUNCH, DOG WALKING

NAD 83

0 40' 80'

OPEN SPACE & RECREATION PLAN

OF THE LANDS OF

CALVERT TERRACE

TAX MAP 0103, GRID 00EA, PARCEL 885 - 928

ELECTION WARD 1, EASTON, TALBOT COUNTY, MARYLAND

PREPARED FOR OSPREY PROPERTY COMPANY II LLC

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REV. #	DATE	DESCRIPTION
1		

MISS UTILITY OF DELMARVA — DIG SAFE BEFORE YOU DIG — 811

DATE:	12/9/2025
SCALE:	1" = 40'
DRAWN BY:	GJR
DESIGNED BY:	GJR
APPROVED BY:	

SHEET NO.: L-603

FOR REVIEW

LANDSCAPE PLANTING REQUIREMENTS

GENERAL REQUIREMENTS:

- COMPLIANCE WITH THE TERMS OF THIS LANDSCAPE PLAN, INCLUDING ALL MAINTENANCE AND WARRANTY REQUIREMENTS PRESCRIBED HEREON IS THE RESPONSIBILITY OF THE OWNER. MAINTENANCE AND WARRANTY TERMS AND RESPONSIBILITIES OF THE CONTRACTOR SHALL BE NEGOTIATED BETWEEN OWNER AND CONTRACTOR.
- THE CONTRACTOR (CONTRACTOR) IS RESPONSIBLE FOR THE COMPLETE INSTALLATION OF ALL LANDSCAPING SHOWN OR IMPLIED ON THIS PLAN. PLANT QUANTITIES ARE SHOWN FOR CONVENIENCE ONLY AND SHALL BE VERIFIED PRIOR TO INSTALLATION. THE CONTRACTOR SHALL NOTIFY THE OWNER, OR DESIGNATED REPRESENTATIVE IF PROPOSED SPECIES AND/OR SITE PLANTING CONDITIONS WARRANT RE-DESIGN CONSIDERATIONS.
- THE CONTRACTOR SHALL DILIGENTLY ATTEMPT TO LOCATE THE SPECIFIED NATIVE PLANT MATERIAL. IF SPECIFIED PLANT MATERIALS CANNOT BE LOCATED, ALTERNATIVES MAY BE CONSIDERED AND APPROVED, IN ADVANCE, BY THE OWNER, OR DESIGNATED REPRESENTATIVE.
- PRIOR TO LANDSCAPE INSTALLATION, THE CONTRACTOR SHALL COORDINATE A SITE MEETING WITH THE OWNER, OR DESIGNATED REPRESENTATIVE TO REVIEW THE PLAN, SITE DRAINAGE CONDITIONS AND TO DETERMINE ANY FIELD ADJUSTMENTS NECESSARY.
- THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO COMMENCING WORK, AND SHALL COORDINATE WITH OTHER CONTRACTORS ON SITE AND MISS UTILITY TO VERIFY UTILITY LOCATIONS. ANY REPAIRS TO EXISTING UNDERGROUND UTILITIES REQUIRED AS A RESULT OF ACTIONS OF THE CONTRACTOR AND/OR HIS ASSIGNS SHALL BE BORNE BY CONTRACTOR.
- THE CONTRACTOR SHALL VERIFY THAT FINAL ROUGH GRADES HAVE BEEN ESTABLISHED AND THAT THE SITE IS READY FOR LANDSCAPE INSTALLATION. THE CONTRACTOR SHALL ENSURE THAT PLANTINGS WILL HAVE ADEQUATE DRAINAGE. THE CONTRACTOR SHALL INSTALL PLANT MATERIAL FACTORING IN ANY "FINAL" GRADING WORK TO BE COMPLETED AFTER LANDSCAPE INSTALLATION.
- THE CONTRACTOR SHALL LAY OUT BEDS AND POSITION PLANTS FOR APPROVAL BY OWNER, OR DESIGNATED REPRESENTATIVE. THE CONTRACTOR SHALL REVIEW ANY SIGNIFICANT FIELD ADJUSTMENTS PRIOR TO INSTALLATION.
- ** **NOTE:** PLANTING WITHIN THE ROOT ZONE OF EXISTING TREES REQUIRES ADDITIONAL CARE. HAND DIGGING OF PLANTING HOLES AND ADJUSTMENT OF PLANTING LAYOUT MAY BE NECESSARY.
- THE CONTRACTOR SHALL MAINTAIN A CLEAN JOB SITE AND REMOVE ALL PLANTING AND RELATED DEBRIS DAILY DURING THE COURSE OF IMPLEMENTATION.
- THE OWNER, OR DESIGNATED REPRESENTATIVE SHALL REJECT ANY AND ALL PLANT MATERIAL THAT DOES NOT MEET SPECIFICATIONS, IS DISEASED OR OTHERWISE UNHEALTHY.
- ALL LANDSCAPE INSTALLATION SHALL BE ACCOMPLISHED WITH QUALIFIED PERSONNEL, UTILIZING INDUSTRY STANDARD PRACTICES AND TECHNIQUES.

PLANT MATERIAL:

- ALL PLANT MATERIAL SHALL CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK AS APPROVED BY THE AMERICAN NATIONAL STANDARDS INSTITUTE INC: LATEST EDITIONS.
- ALL PLANT MATERIAL SHALL BE NURSERY GROWN WITH SOUND HORTICULTURAL PRACTICES AND UNLESS OTHERWISE APPROVED BY THE OWNER, OR DESIGNATED REPRESENTATIVE, GROWN IN SOIL AND CLIMATE CONDITIONS SIMILAR TO THIS PROJECT SITE.
- ALL MATERIAL SHALL EXHIBIT HEALTHY GROWTH WITH GOOD BRANCHING STRUCTURE, DENSE FOLIAGE AND A FIBROUS, DEVELOPED ROOT SYSTEM.
- ALL MATERIAL SHALL BE FREE OF INSECT INFESTATION AND DISEASE. THE OWNER RESERVES THE RIGHT TO HAVE THE PLANT MATERIAL INSPECTED AND TAGGED AT THE GROWING SITE, AND TO REJECT ANY DEFICIENT MATERIAL AT THE JOB SITE.

PLANT MATERIAL HANDLING:

- ALL PLANT MATERIAL SHALL ARRIVE AT THE JOB SITE IN A HEALTHY CONDITION.
- THE CONTRACTOR SHALL STAGE DELIVERY AND PLANT INSTALLATION TO MINIMIZE STRESS ON PLANT MATERIAL.
- PLANT MATERIAL TO BE STAGED ON OR OFF THE JOB SITE SHALL BE LOCATED TO MAXIMIZE PROTECTION FROM HOT SUN AND DRYING WINDS, AND SHALL BE WATERED TO MAINTAIN A STRESS FREE CONDITION. ON-SITE WATER MAY NOT BE AVAILABLE FOR THE CONTRACTOR TO USE. THE LACK OF AVAILABLE WATER SHALL NOT RELIEVE THE CONTRACTOR OF ADEQUATE MAINTENANCE.

PLANTING SCHEDULE:

- PLANTING SCHEDULES SHALL COINCIDE WITH THE OVERALL PROGRESS OF SITE CONSTRUCTIONS.
- CERTAIN PLANT SPECIES REQUIRE SPECIFIC SEASON INSTALLATION AND SHALL BE COORDINATED APPROPRIATELY.
- PLANTING IS DISCOURAGED IN THE HOT, DRY PERIODS OF SUMMER AND DURING FROZEN GROUND CONDITIONS IN WINTER, BUT MAY BE CONSIDERED YEAR-ROUND WITH MAINTENANCE REQUIREMENTS ADDRESSED ACCORDINGLY.
- THE CONTRACTOR IS RESPONSIBLE FOR PLANT MATERIAL HEALTH AND VIGOR REGARDLESS OF WHEN THE MATERIAL IS INSTALLED.

TREE & SHRUB PLANTINGS:

- ALL TREE/SHRUB PLANTING PITS SHALL BE EXCAVATED TO A DEPTH SO THAT THE PLANT ROOT FLARE SHALL LIE AT THE FINISHED GRADE SURROUNDING THE PLANT. SOIL THAT MAY HAVE BEEN PLACED ON TOP OF ROOT BALL OR SETTLED AROUND TRUNK OR ROOT FLARE DURING TRANSPORT SHALL BE REMOVED TO ADEQUATELY EXPOSE ROOT FLARE SO PROPER PLANTING DEPTH CAN BE ESTABLISHED.
- THE ROOT BALL SHALL REST ON UNDISTURBED OR STABILIZED SOIL. THE CONTRACTOR SHALL NOTIFY THE OWNER, OR DESIGNATED REPRESENTATIVE IF THIS PLANTING DEPTH SPECIFICATION CANNOT BE IMPLEMENTED.
- TREE PLANTING PITS SHALL BE EXCAVATED DEPTH EQUAL TO THE HEIGHT OF THE ROOT BALL AND TO A WIDTH EQUALING TWICE THE ROOT BALL DIAMETER.
- EXCAVATED SOILS NOT PREVIOUSLY COMPACTED OR OTHERWISE DEGRADED SHALL BE RE-USED FOR PLANTING PIT BACKFILL. EXCAVATED SOILS UNSUITABLE FOR BACKFILL SHALL BE AMENDED WITH FRIABLE TOPSOIL TO CREATE A SUITABLE PLANTING SOIL AS APPROVED BY THE OWNER, OR DESIGNATED REPRESENTATIVE. EXCAVATED SOILS THAT CANNOT BE RESTORED TO A REASONABLE PLANTING SOIL SHALL BE REMOVED AND REPLACED WITH A SUITABLE PLANTING SOIL. NOTE: FOR BEDDING PURPOSES OR UNLESS OTHERWISE SPECIFIED HERON, THE CONTRACTOR SHALL ASSUME EXCAVATED SOILS ARE SUITABLE FOR PLANTING BACKFILL.
- SLOW RELEASE FERTILIZER TAB(S) (20-10-5, 21 GRAM, 2-YEAR) SHALL BE ADDED TO PLANTING HOLES AS PER MANUFACTURER'S SPECIFICATIONS.
- THE SIDES OF CONTAINER GROWN STOCK SHALL BE CUT OR SCARIFIED TO ELIMINATE BOUND ROOTS AND PROMOTE HEALTHY ROOT GROWTH.
- ALL SYNTHETIC MATERIALS FROM AROUND THE TREE TRUNK AND ROOT BALL SHALL BE REMOVED AND NOT EVIDENT WITHIN THE BACKFILL SOIL MIX. STRING, ROPE, SYNTHETIC BURLAP, PLASTIC, STRAPPING, AND OTHER MATERIALS THAT WILL NOT DECOMPOSE IN THE SOIL SHALL BE REMOVED AT THE TIME OF PLANTING
- SOIL GRADES SHALL BE FEATHERED AROUND PLANTINGS TO BLEND WITH SURROUNDING LANDSCAPE OR TURF AREAS. EXCESS EXCAVATED SOIL SHALL BE REMOVED FROM JOB SITE.
- ALL TREES AND SHRUBS SHALL BE WATERED DURING PLANTING TO MINIMIZE AIR POCKETS AND TO ENSURE SOIL CONTACT WITH ROOTS.

TREE STAKING/ GUYING:

- TREES SHALL BE STAKED TO PREVENT TOPPLING BY STRONG WIND.
- STAKES SHALL BE INSTALLED ACORDING TO DETAIL PROVIDED ON PLAN. ANOTHER STAKING/GUYING METHOD MAY BE USED WITH APPROVAL OF OWNER'S REPRESENTATIVE.

HERBACEOUS PLANT INSTALLATION:

- ROOT MASSES SHALL BE MOIST, BUT NOT SATURATED, AT THE TIME OF PLANTING.
- PLANT PITS SHALL BE PREPARED USING A DIBBLE, SPADE OR MECHANICAL AUGER BY OPENING A HOLE AT THE PLANTING SITE. FOR PLANTINGS UNDER EXISTING TREES, PLANTING HOLES SHALL BE HAND-DUG AND LOCATIONS ADJUSTED TO ACCOMMODATE EXISTING TREE ROOTS.
- PLANTS SHALL BE PLACED IN PLANTING PITS IN A VERTICAL POSITION.
- SOIL SHALL BE BACKFILLED INTO PLANT PITS, LIGHTLY COMPRESSED TO ELIMINATE AIR POCKETS, AND FIRMED AROUND THE PLANTS.
- ALL PLANTS SHALL BE WATERED DURING PLANTING TO MINIMIZE AIR POCKETS AND TO ENSURE SOIL CONTACT WITH ROOTS.

MULCHING:

- THREE INCHES OF HARDWOOD MULCH SHALL BE APPLIED TO ALL NEWLY PLANTED TREES AND SHRUBS.
- THREE INCHES OF HARDWOOD MULCH SHALL BE APPLIED TO UPLAND HERBACEOUS PLANTING AREAS AS SHOWN ON THE PLANTING PLAN.
- WOOD CHIPS STOCKPILED FROM TREE REMOVAL PROCESS, OR COMPOSTED LEAVES, MAY BE USED AS MULCH UNDER EXISTING TREES.
- MULCH SHALL NOT BE APPLIED TO SWALE, FOREBAY, OR WETLAND PLANTING SHELF AREAS.

MAINTENANCE

DURING CONSTRUCTION PERIOD:

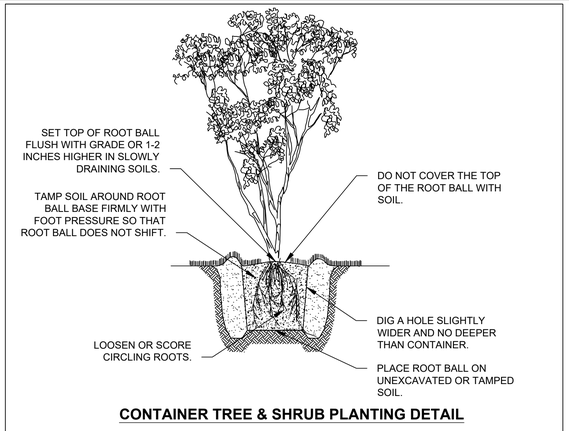
- THE CONTRACTOR SHALL MAINTAIN ALL PLANT MATERIAL THROUGHOUT JOB COMPLETION AND FINAL ACCEPTANCE. ALL PLANT MATERIAL SHALL BE WATERED, WEEDED, MULCHED, PRUNED AND TREATED FOR INSECT DAMAGE, FUNGUS OR DISEASE TO INSURE HEALTHY GROWING CONDITIONS. WATERING SHALL PROVIDE ADEQUATE MOISTURE TO SUPPORT VIGOROUS GROWTH. DURING TIMES OF NORMAL PRECIPITATION, ALL TREES SHALL RECEIVE 1", OR APPROX. 5-10 GALLONS OF WATER PER WEEK. PLANTS IN HEAVIER SOILS SHALL BE MONITORED TO AVOID OVER-WATERING. GATOR BAGS, WATERING TRAYS, IRRIGATION, HAND WATERING, OR OTHER INDUSTRY STANDARD TECHNIQUES SHALL BE EMPLOYED TO MAINTAIN ADEQUATE MOISTURE SUPPLY TO THE PLANT MATERIAL. THE CONTRACTOR SHALL INSTRUCT THE OWNER REGARDING THE REQUIRED AND PROPER ON-GOING MAINTENANCE OF LANDSCAPE MATERIAL.

DURING WARRANTY PERIOD:

- THE CONTRACTOR SHALL VISIT THE SITE PERIODICALLY TO ADVISE OWNER OF ANY DEFICIENT CONDITIONS AFFECTING PLANT SURVIVABILITY. DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED (SEE WARRANTY BELOW).

LANDSCAPE WARRANTIES

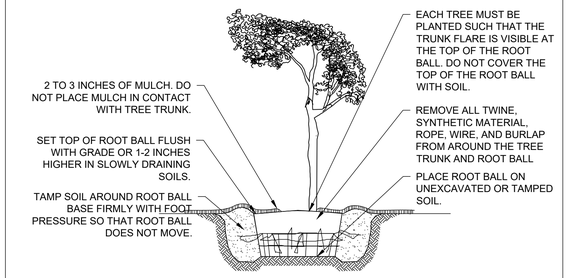
- THE CONTRACTOR SHALL GUARANTEE THAT ALL PLANTS ARE TRUE TO NAME, HAVE BEEN GROWN IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES, ARE FREE OF DISEASE, INSECTS, EGGS, LARVAE AND OTHER DEFECTS, ARE HEALTHY AT THE TIME OF PLANTING AND THAT ALL PLANTS HAVE BEEN PLANTED ACCORDING TO ACCEPTED LANDSCAPING PRACTICES.
- THE OWNER SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND CARE OF THE PLANTS IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES; INCLUDING: (A) ADEQUATE WATERING; (B) WEED CONTROL; (C) PROTECTION FROM HERBIVORY; (D) DISEASE AND INSECT CONTROL AFTER PLANTINGS HAVE BEEN ACCEPTED BY THE OWNER.
- SUBJECT TO THE ABOVE CONDITIONS, THE CONTRACTOR SHALL GUARANTEE 85% PLANT SURVIVAL FOR ONE YEAR FROM THE TIME OF INSTALLATION. IF AFTER ONE YEAR, THE TOTAL NUMBER OF PLANTS HAS FALLEN BELOW THIS THRESHOLD, THE CONTRACTOR SHALL MAKE A ONE-TIME REPLACEMENT OF PLANTINGS TO BRING PLANT NUMBERS TO THE TOTALS SPECIFIED FOR EACH SPECIES, OR FUNCTIONAL EQUIVALENT.
- THIS SURVIVAL GUARANTEE SHALL BE VOID IF: (A) PLANTS ARE NOT MAINTAINED BY THE OWNER ACCORDING TO GOOD HORTICULTURAL PRACTICES, INCLUDING, BUT NOT LIMITED TO THE PRACTICES SPECIFIED ABOVE; (B) PLANTINGS HAVE BEEN DAMAGED AS A RESULT OF NATURALLY OCCURRING EVENTS, INCLUDING BUT NOT LIMITED TO FLOODING, WIND, FIRE, OR DISEASE/PEST INFESTATIONS; (C) PLANTINGS HAVE BEEN DAMAGED BY OTHERS, INCLUDING CONTRACTORS OR UTILITIES PERFORMING WORK IN THE AREA; (D) PLANTINGS HAVE BEEN DAMAGED BY CONDITIONS NOT PRESENT AT THE TIME OF PLANTING, INCLUDING BUT NOT LIMITED TO CHANGES IN DRAINAGE PATTERNS, OR INAPPROPRIATE APPLICATION OF HERBICIDES.



CONTAINER TREE & SHRUB PLANTING DETAIL

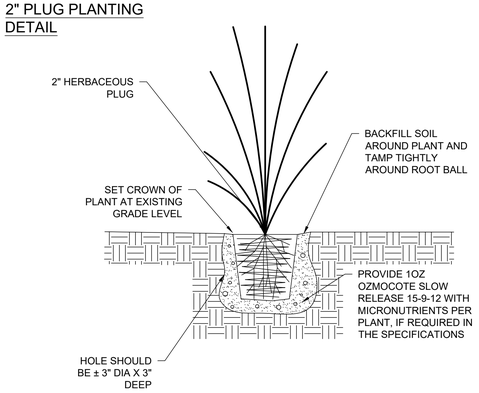
STAKE TREES ONLY UPON THE APPROVAL OF THE LANDSCAPE ARCHITECT.

PRUNE ONLY CROSSOVER LIMBS, CO-DOMINANT LEADERS, AND BROKEN OR DEAD BRANCHES ONLY UPON THE APPROVAL OF LANDSCAPE ARCHITECT.

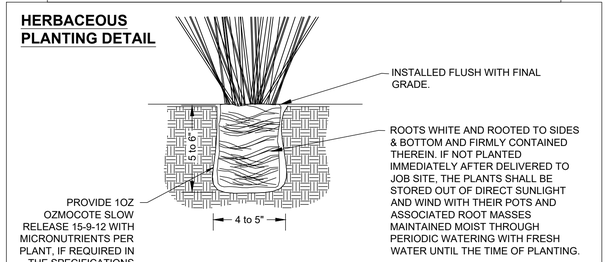


B&B TREE & SHRUB PLANTING DETAIL

2" PLUG PLANTING DETAIL



HERBACEOUS PLANTING DETAIL



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 lovegrass 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 1½ 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 hydroseeding) 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.

1. LANDSCAPE INSTALLER SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO COMMENCING WORK. INSTALLER SHALL ENSURE THAT FINAL GRADES HAVE BEEN ESTABLISHED AND THE SITE IS READY FOR LANDSCAPE INSTALLATION.
2. LANDSCAPE INSTALLER SHALL MAINTAIN THE LANDSCAPE IMPROVEMENT AREAS IN A CLEAN CONDITION, REMOVING DEBRIS DAILY AND AT THE COMPLETION OF THE INSTALLATION.
3. INSTALLER SHALL LAYOUT ALL BEDS AND POSITION PLANTS PER THE PLANS. ADJUST AS REQUIRED FOR FIELD CONDITIONS. REPORT SIGNIFICANT ADJUSTMENTS TO THE OWNER FOR APPROVAL PRIOR TO PLANT INSTALLATION. ALL BED AREAS SHALL BE SPRAYED WITH HERBICIDE AS NEEDED TO KILL AND/OR REMOVE ALL WEED OR GRASS VEGETATION.
4. EXCEPT FOR TREE SPADE INSTALLATIONS, ALL TREE PITS SHALL BE EXCAVATED TO A DEPTH SO THAT THE ROOT BALL WILL REST ON SOLID SOIL AT THE PROPER HEIGHT. STREET TREES PLANTING PITS SHALL BE EXCAVATED AND WORKED IN A RECTANGULAR FORM WITH THE SMALL DIMENSION TWICE THE DIAMETER OF THE ROOT BALL AND THE LARGE DIMENSION AT LEAST THREE (3) TIMES THE DIAMETER OF THE ROOT BALL. OPEN AREA TREE PITS SHALL BE EXCAVATED TO A MINIMUM DIMENSION OF TWICE THE ROOTBALL WIDTH. TREES PLANTED ON SLOPES OR SIDE SWALES SHALL BE INSTALLED AT A HEIGHT RELATING TO THE UPHILL SIDE OF THE PIT, AND MOUNDED WITH SOIL AROUND THE LOWER SIDE. ALL SIDES AND BOTTOM OF TREE PLANTING PITS SHALL BE SCARIFIED OR LOOSENED TO PERMIT ROOT GROWTH. EXCAVATED SOILS THAT HAVE BEEN PREVIOUSLY UNDISTURBED SHALL BE LOOSENED AND UTILIZED FOR BACKFILL. COMPACTED SOILS THAT CANNOT BE RESTORED TO A REASONABLE PLANTING SOIL SHALL BE REMOVED AND REPLACED WITH FRIABLE NATIVE SOILS FROM THE REGION.
5. ALL SHRUB PLANTING PITS, LANDSCAPE BEDS AND PLANTING MASS AREAS SHALL BE WORKED TO A DEPTH OF TWELVE INCHES (12") (OR RAISED SLIGHTLY TO ACHIEVE A TWELVE INCH (12") FRIABLE SOIL DEPTH). SHRUB PLANTING AREAS SHALL BE WORKED TO TWELVE INCH (12") MINIMUM OUTSIDE THE ROOT BALL.
6. ALL LANDSCAPE BEDS SHALL BE "V" EDGED AND MULCHED WITH MINIMUM THREE INCH (3") DOUBLE SHREDDED HARDWOOD BARK MULCH, OR APPROVED EQUAL. MULCH TO FENCE LINES OR BACK OF CURBS WHERE APPROPRIATE TO ELIMINATE NARROW GRASS AREAS. AVOID MULCH PILED AGAINST TREE TRUNKS, ETC.
7. ALL TREES TO BE STAKED AND GUYED WITH HARDWOOD STAKES, MINIMUM OF TWO (2) - FIVE FEET (5') LONG, OR OTHER APPROVED GUYING SYSTEM. STAKES SHALL BE DRIVEN INTO STABLE SOILS. PROVIDE WIRE GUYS WITH RUBBER PROTECTANT OR OTHER APPROVED INDUSTRY PRACTICE.
8. LANDSCAPE INSTALLER SHALL MAINTAIN ALL PLANT MATERIALS THROUGH THE COMPLETION OF THE LANDSCAPE INSTALLATION, AND THEN AS REQUIRED BY THE OWNER.
9. AT THE COMPLETION OF THE LANDSCAPE INSTALLATION (OR BY PHASED COMPLETION IF PROVIDED FOR ON THE PLAN), THE OWNER, OR HIS DESIGNATED REPRESENTATIVE SHALL REQUEST AN INSPECTION BY TOWN OF EASTON.

EROSION AND SEDIMENT CONTROL STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

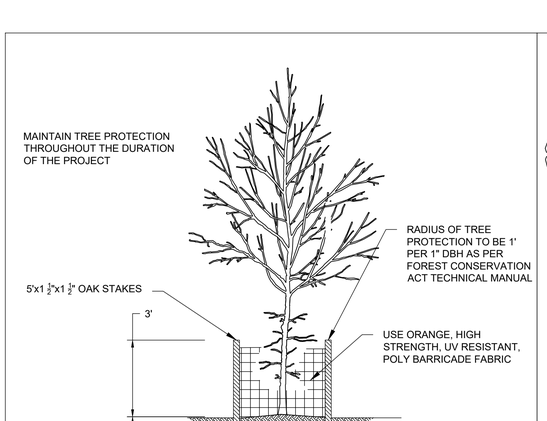
1. Contractor shall install soil erosion and sediment control devices prior to any grading. Following initial disturbance or re-disturbance, permanent or temporary stabilization shall be completed within three (3) calendar days as to the surface of all perimeter controls, dikes, swales, ditches, perimeter 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 Hardiness Zone 7a) (From Table B.1)					Fertilizer Rate (10-20-20)	Lime Rate
No.	Species	Appl. Rate (lbs./ac.)	Seeding Dates	Seeding Depths		
	ANNUAL RYEGRASS	50#	2/15 - 4/30 8/15 - 11/30	½"		
	BARLEY	96#	2/15 - 4/30 / 8/15 - 11/30	1"	436 lb/ac 10 lb/ 1000 sf	2 tons/ac 90 lb/ 1000 sf
	OATS	72#	2/15 - 4/30 / 8/15 - 11/30	1"		
	WHEAT	120#	2/15 - 4/30 / 8/15 - 11/30	1"		
	CEREAL RYE	112#	2/15 - 4/30 / 8/15 - 12/15	1"		
	FOXTAIL MILLET	30#	5/1 - 8/14	½"		
	PEARL MILLET	20#	5/1 - 8/14	½"		

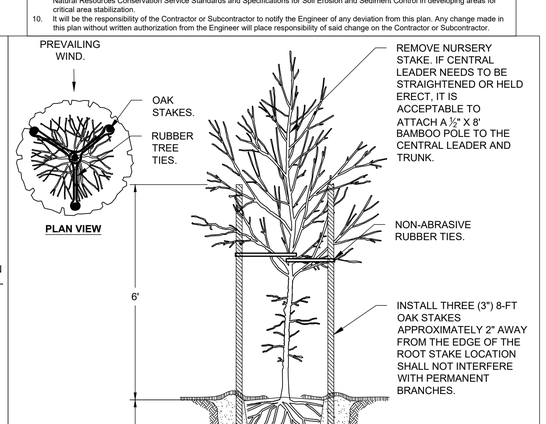
6. Mulching shall be unchopped, unrotted, small grain straw applied at a rate of 2-2½ tons per acre. Anchor mulch with a mulch anchoring tool on the Contour. Wood cellulose fiber may be used for anchoring straw at a rate of 750 lbs. per acre mixed with water at a maximum of 50 lbs. of wood cellulose 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 Hardiness Zone 7a) (From Table B.3)					Fertilizer Rate (10-20-20)			Lime Rate
No.	Species	Appl Rate (lbs/ac)	Seeding Dates	Seeding Depths	N	P2O5	K2O	
7	CREEPING RED FESCUE KENTUCKY BLUEGRASS	60# 15#	3/1 - 5/15 8/15 - 10/15	1/4" - 1/2"	45 lb/ac 1lb/ 1000 sf	90 lb/ac 2lb/ 1000 sf	90 lb/ac 2lb/ 1000 sf	2 tons/ac 90 lb/ 1000 sq
8	TALL FESCUE	100#	3/1 - 5/15 8/15 - 10/15	1/4" - 1/2"				
9	TALL FESCUE KENTUCKY BLUEGRASS PERRENIAL RYEGRASS	60# 40# 20#	3/1 - 5/15 8/15 - 10/15	1/4" - 1/2"				

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.



STANDARD TREE PROTECTION FENCE



STANDARD TREE STAKE DETAIL

LANDSCAPE PLAN DETAILS

OF THE LANDS OF

CALVERT TERRACE

TAX MAP 0103, GRID 00EA, PARCEL 885 - 928

ELECTION WARD 1, EASTON, TALBOT COUNTY, MARYLAND

PREPARED FOR OSPREY PROPERTY COMPANY II LLC

RAUCH inc.
Engineering | Survey | Architecture | Environmental
Main Office: 106 N Harrison St - Easton, MD 21601
Web: www.rauch-inc.com | Email: design@rauchorg.com
Phone: 410 770 8

TOWN OF EASTON
PLANNING AND ZONING
14 SOUTH HARRISON STREET, EASTON, MD 21601

PLANNING COMMISSION CONCEPT, USE, AND DESIGN APPLICATION

SITE INFORMATION

STRUCTURE'S FLOOR AREA	53,941 SF		STRUCTURE'S SQUARE FEET	53,941 SF	
AREA OF DISTURBANCE	7.578 AC		NUMBER OF DWELLING UNITS	91	
PROPERTY SIZE	ACRES	9.93 AC	SQUARE FOOTAGE	432, 467 SF	
ADDRESS	DOVE LANE & CALVERT STREET, EASTON, MD 21601				
TAX MAP	0103	GRID 00EA	PARCEL 885-905 & 907-928	LOT	
ZONING DISTRICT	R10A	HISTORIC DISTRICT: Y ☐ N ☐		PLANNED REDEVELOPMENT: Y ☐ N ☐	
OTHER INFORMATION					
EXISTING USE	RESIDENTIAL				

OWNER

NAME	OSPREY PROPERTY COMPANY II LLC		
MAILING ADDRESS	16 GREENMEADOW DR, STE G107, TIMONIUM, MD 21093		
TELEPHONE NO.		EMAIL	

APPLICANT/AGENT

NAME	RAUCH, inc. - BRIAN FITZGERALD, P.E.		
MAILING ADDRESS	106 N. HARRISON ST, EASTON, MD 21601		
TELEPHONE NO.		EMAIL	

GENERAL INFORMATION:

THE PURPOSE OF THIS PROPOSED NEIGHBORHOOD IS TO PROVIDE A DIVERSITY OF HOUSING AT DIFFERENT PRICE POINTS.
THIS PROJECT OFFERS BOTH COTTAGE HOMES AND APARTMENT UNITS SURROUNDED BY OPEN SPACE AND WALKING PATHS
THE SITE DESIGN UTILIZES AND ENHANCES THE EXISTING NATURAL FEATURES WITHIN THE PROPERTY.

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	12/10/2025
PRINTED NAME OF APPLICANT OR AGENT	Robert D. Rauch

For Office Use Only

Planned Commission Meeting Date	TBD	
Review Fee Amount		2025-1605
Review Fee Paid Date		
ESDR Y / N Date	11/26/2025	& 12/22/2025

Revised 11-2021

Town of Easton
Engineering, Planning and Zoning
14 South Harrison Street, Easton, MD 21601

Site Plan, PUD, Planned Healthcare Application

Application Type

Planned Unit Development ☒ Amendment ☐ Health Care (HC) ☐ Site Plan ☒

Subdivision Information

Name	CALVERT TERRACE				
Original Property Size	Acres	9.93 AC	Square Feet	437,467 SF	
Telephone No.	(443) 509-0989	Email			

Site Plan Information

Property Size	Acres	9.93 AC	Square Feet	437,467 SF	
Structure's Floor Area	53,941 SF		Structure's Square Feet	53,941 SF	
Area of Disturbance	7.60 AC		Number of Dwelling Units	91	

Property Information

Address	DOVE LANE & MERRICK LANE, EASTON, MD 21601						
Tax Map	0103	Grid	00EA	Parcel	885-905	Lot	
Deed Refernce:	Liber	02696 & 02949	Folio	00060 & 00299	^ & 907-928		
Plat Reference:	Liber	24	Folio	0100			
Base Zoning District	R10A	Historic	Y ☐	N ☒	Planned Redevelopment	Y ☐	N ☒
Source of Electricity	MISS UTILITY						

Owner

Name	OSPREY PROPERTY COMPANY II LLC
Mailing Address	16 GREENMEADOW DR, STE G107, TIMONIUM, MD 21093
Telephone No.	(443) 509-0989 Email

Applicant or Agent

Name	BRIAN FITZGERALD
Mailing Address	106 N HARRISON ST, EASTON, MD 21301
Telephone No.	(410) 770-9061 Email BRIAN@RAUCHENG.COM

Surveyor / Engineer

Name	RAUCH INC	License No.	11024	Expiration Date JULY 24, 2026
Mailing Address	106 N HARRISON ST, EASTON, MD 21301			
Telephone No.	(410) 770-9061	Email	DESIGN@RAUCHENG.COM	

Any modifications during review shall warrant an updated application.

I hereby certify that I have reviewed and satisfied the Town of Easton Development Standards and that submission of an incomplete application will be returned for correction prior to processing.

Signature of Applicant or Agent

Date 12/10/2025

Printed Name of Applicant or Agent Robert D. Rauch

For Office Use Only

Planning Commission Required	Y ☐ N ☐		
Planning Commission Meeting Date	TBD		
Sketch Approval Date		Project No.	
Prelim/Dev. Approval Date		Application No.	2025 - 1605
Final Approval Date		Sketch Fee Paid	
Recordation Date		Develop. Fee Paid	

Revised 02-2019



















Town of Easton
Engineering, Planning and Zoning
13 South Harrison Street, Easton, MD 21601

Subdivision & Property Line Adjustment Application

Application Type

Subdivision ☑ Minor Subdivision ☐ Lot Line Revision ☐

Subdivision Information

Name	CALVERT TERRACE			
Property Size	Acres	11.874	Square Feet	
Number of Lots Proposed	2			

Property Information

Address	DOVE LANE & CALVERT STREET, EASTON MD 21601						
Tax Map	0103	Grid	00EA	Parcel	60 & 299	Lot	
Deed Refernce:	Liber	2696 & 2949	Folio	60 & 299			
Plat Reference:	Liber	24	Folio	100			
Zoning District	R10A	Planned Redevelopment	Y ☑	N ☐	Historic District	Y ☐	N ☐
Source of Electricity	EASTON UTILITIES						

Owner

Name	OSPREY PROPERTY COMPANY II LLC
Mailing Address	16 GREENMEADOW DR, STE G107, TIMONIUM, MD 21093
Telephone No.	[redacted] Email

Surveyor / Engineer

Name	BILL EWALD	License No.	21544	Expiration Date	12/22/2025
Mailing Address	106 N HARRISON ST, EASTON, MD 21601				
Telephone No.	[redacted]	Email	[redacted]		

Applicant or Agent

Name	BILL EWALD
Mailing Address	106 N. HARRISON ST., EASTON, MD 21601
Telephone No.	[redacted] Email [redacted]

Additional Comments:

Minimum Lot Size	1.589 acres	Minimum Lot Frontage	
Minimum Lot Envelope		Existing Lot Coverage	n/a
		Proposed Lot Coverage	

- ☐ ESDR Letter
- ☐ $200 Per Subdivided Lot Fee
- ☐ $500 Lot Line Revision Fee

Any modifications during review shall warrant an updated application.

I hereby certify that I have reviewed and satisfied the Town of Easton Subdivision Regulations Article 4, Procedures and Requirements and that submission of an incomplete application will be returned for correction prior to processing.

Signature of Applicant or Agent

Date 12-10-2025

Printed Name of Applicant or Agent Bill Ewald

For Office Use Only

Planning Commission Y ☐ N ☐			
Planning Commission Meeting Date		TBD	
PC Approval Date		Subdivision No.	
Conditions? Y / N		Application No.	2025 - 1605
Recordation Date		Fee Amount	
ESDR Y / N Date	12/22/2025	Review Fee Paid	
			Revised 02-2019

OWNER CERTIFICATION

ELEY PROPERTIES, LLC, OWNER OF THE PROPERTY SHOWN AND DESCRIBED HEREON, HEREBY ADOPTS THIS PLAN OF SUBDIVISION.

_____
ELEY PROPERTIES, LLC DATE
APPROVED SIGNER

THE OWNER HAS SWORD TO AND SUBSCRIBED BEFORE ME
THIS ____ DAY OF _____ 2025
MY COMMISSION EXPIRES _____

OWNER CERTIFICATION

SARAH ELEY KAGAN, OWNER OF THE PROPERTY SHOWN AND DESCRIBED HEREON, HEREBY ADOPTS THIS PLAN OF SUBDIVISION.

_____
SARAH ELEY KAGAN DATE

THE OWNER HAS SWORD TO AND SUBSCRIBED BEFORE ME
THIS ____ DAY OF _____ 2025
MY COMMISSION EXPIRES _____

OWNER CERTIFICATION

HEIRS OF HOWARD ELEY, OWNER OF THE PROPERTY SHOWN AND DESCRIBED HEREON, HEREBY ADOPTS THIS PLAN OF SUBDIVISION.

_____
HEIRS OF HOWARD ELEY DATE
APPROVED SIGNER

THE OWNER HAS SWORD TO AND SUBSCRIBED BEFORE ME
THIS ____ DAY OF _____ 2025
MY COMMISSION EXPIRES _____

APPROVALS

LOTS 1 AND 2 AS SHOWN HEREON ARE APPROVED FOR COMMUNITY SEWER AND WATER SUPPLY AND THEIR USE IS IN ACCORDANCE WITH THE TALBOT COUNTY COMPREHENSIVE WATER AND SEWER PLAN AND CODE OF MARYLAND REGULATIONS 26.04.03.

_____
TALBOT COUNTY APPROVING AUTHORITY DATE

APPROVED:

_____
CHAIRMAN OF PLANNING AND ZONING COMMISSION DATE

_____
THE TOWN PLANNER DATE

AREA CALCULATIONS

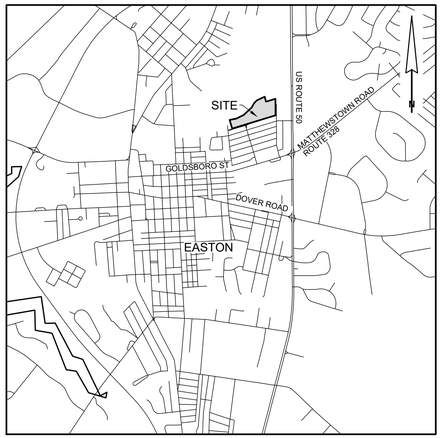
BEFORE REVISION	
"THIRD SECTION OF CALVERT TERRACE"	11.874 ACRES±
AFTER REVISION	
LOT 1	1.589 ACRES±
LOT 2	8.997 ACRES±
ROW	1.288 ACRES±

BUILDING SETBACKS

PROPERTY IS ZONED R10-A
SETBACKS
FRONT 20'
SIDE 8'
REAR 20'

LEGEND

N/F	DENOTES NOW OR FORMERLY
CMF	DENOTES CONCRETE MONUMENT FOUND
IPF	DENOTES IRON PIPE FOUND
IRF	DENOTES IRON ROD FOUND
IRCF	DENOTES IRON ROD WITH CAP FOUND
IRCS	DENOTES IRON ROD WITH CAP SET
	DENOTES STORMWATER MANAGEMENT EASEMENT
X	DENOTES EXISTING FENCE
	DENOTES STORMWATER MANAGEMENT POND
	DENOTES LOT LINES HEREBY ABANDONED
	DENOTES PROPERTY LINE TO REMAIN
	DENOTES PROPERTY LINES HEREBY CREATED



VICINITY MAP
SCALE: 1" = 2,000'

GENERAL NOTES

1. CURRENT OWNERS: ALL PROPERTIES MARKED A
ELEY PROPERTIES, LLC
8448 OCEAN GATEWAY, SUITE 3
EASTON, ME 21601

2. ALL PROPERTIES MARKED B
SARAH ELEY KAGAN REVOCABLE TRUST
8448 OCEAN GATEWAY, SUITE 3
EASTON, MD 21601

3. CURRENT DEED REFERENCE FOR LOTS MARKED A 2949/299

4. CURRENT DEED REFERENCE FOR LOTS MARKED B 2696/60

5. INTERNAL LOT LINES SHOWN HEREON ARE PURSUANT TO PLAT 24/100

6. THE PROPERTY SHOWN HEREON IS LOCATED WITHIN FLOOD ZONE "X" AS SHOWN ON THE FLOOD INSURANCE RATE MAPS COMMUNITY PANEL NO. 24041C0189D WITH A REVISION DATE OF 07/16/2016

7. THE PROPERTY SHOWN HEREON IS LOCATED ENTIRELY OUTSIDE OF THE CHESAPEAKE BAY CRITICAL AREA.

8. WATER AND SEWAGE DISPOSAL PROVIDED BY TOWN OF EASTON

9. UTILITIES DISTRIBUTION RIGHT-OF-WAY AND EASEMENT IS HEREBY DEDICATED TO THE TOWN OF EASTON IN AND OVER STRIPS OF LAND TEN (10) FEET IN WIDTH ALONG THOSE BOUNDARY LINES CONTIGUOUS TO ANY STREET OR ALLEY AND FIVE (5) FEET IN WIDTH IN EACH SIDE LOT LINE.

10. THE PURPOSE OF THIS PLAT IS TO RECONFIGURE THE MULTIPLE EXISTING PARCELS INTO THREE PARCELS.

11. ALL STREETS AND STREET WIDENINGS, PARKS AND OTHER LANDS INTENDED FOR PUBLIC USE ARE RESERVED BY THE OWNER FOR FUTURE CONVEYANCE TO THE TOWN OF EASTON.

12. ALL EASEMENTS SHOWN ARE HEREBY DEDICATED TO THE TOWN OF EASTON (UNLESS OTHERWISE NOTED) FOR PUBLIC USE.

13. BUILDING PERMITS SHALL BE ISSUED ONLY IF SUFFICIENT CAPACITY IS AVAILABLE IN THE COMMUNITY WATER SUPPLY SYSTEM, SEWERAGE SYSTEM, AND SLID WASTE ACCEPTANCE FACILITY SERVING THE SUBDIVISION.

SURVEYOR'S CERTIFICATION

I HEREBY CERTIFY THAT TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, INFORMATION AND BELIEF, THE SUBDIVISION SHOWN HEREON WAS PREPARED BY RAUCH inc. AT WHICH TIME THE UNDERSIGNED REGISTERED SURVEYOR WAS IN RESPONSIBLE CHARGE OF ITS PREPARATION AND THE SURVEYING WORK REFLECTED IN IT IS IN COMPLIANCE WITH THE REQUIREMENTS STATED IN COMAR 09.13.06.12 OF THE MINIMUM STANDARDS FOR SURVEYORS.

_____
WILLIAM M. EWALD, SR. DATE
PROFESSIONAL LAND SURVEYOR #21544 (RENEWAL DATE 12-22-2027)

SUBDIVISION

CALVERT TERRACE

TAX MAP 103, GRID "EA"

IN THE TOWN OF EASTON, FIRST ELECTION DISTRICT, TALBOT COUNTY, MARYLAND

PREPARED FOR: OSPREY PROPERTY COMPANY

RAUCH inc.
Engineering | Survey | Architecture | Environmental
Main Office: 106 N Harrison St - Easton, MD 21601
Web: www.rauch-inc.com | Email: design@raucheng.com
Phone: 410.770.9081

SEAL

DATE

REVISIONS

REV. #	DATE	DESCRIPTION
1	12/10/2025	REVISED PER COMMENTS

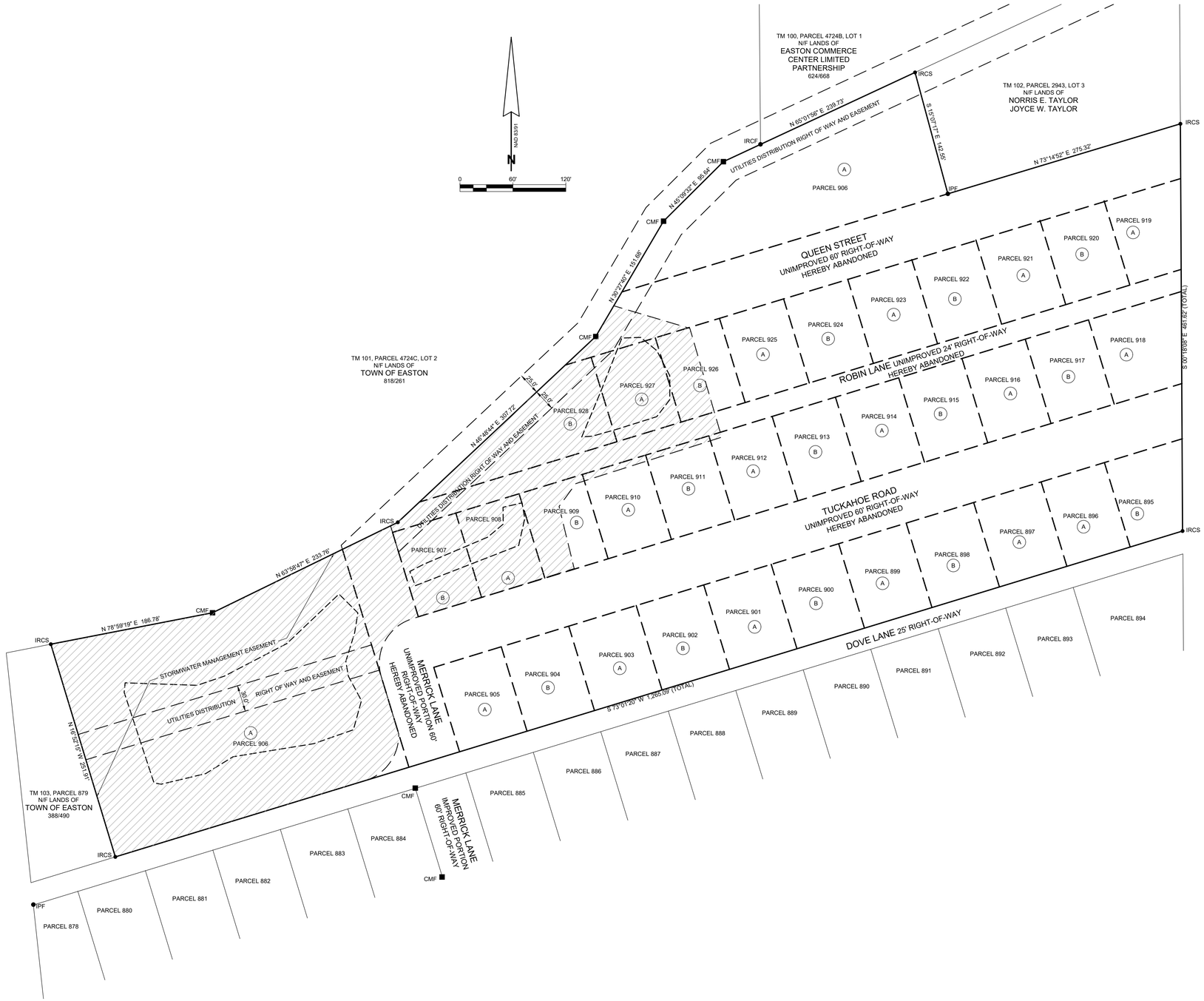
DATE: NOVEMBER 2025

SCALE: 1" = 60'

DRAWN BY: T.COCHRUN

PROJECT NO: 250295

SHEET NO.: 1 OF 3



GENERAL NOTES

CURRENT OWNERS:

ALL PROPERTIES MARKED (A)
ELEY PROPERTIES, LLC
8448 OCEAN GATEWAY, SUITE 3
EASTON, ME 21601

ALL PROPERTIES MARKED (B)
SARAH ELEY KAGAN REVOCABLE TRUST
8448 OCEAN GATEWAY, SUITE 3
EASTON, MD 21601

1. CURRENT DEED REFERENCE FOR LOTS MARKED (A) 2949/299
2. CURRENT DEED REFERENCE FOR LOTS MARKED (B) 2696/60
3. INTERNAL LOT LINES SHOWN HEREON ARE PURSUANT TO PLAT 24/100
4. TUCKAHOE ROAD, ROBIN LANE, QUEEN ANNE STREET AND A PORTION OF MERRICK LANE (ALL UNIMPROVED RIGHT-OF-WAYS) DO NOT APPEAR TO HAVE BEEN CONVEYED BY HOWARD C. ELEY BASED ON AN IN-DEPTH SEARCH OF TALBOT COUNTY LAND RECORDS BY RAUCH INC.
5. AREA SURVEYED = 11.874 ACRES±

ADJACENT OWNERS

PARCEL	OWNER	DEED
878	HARRY L. PANNELL, ET AL	614/455
879	TOWN OF EASTON	388/490
880	ROLAND E. OLAJIDE	927/53
881	MARSHA H. KEMP	1150/18
882	PEAC INVESTMENTS, LLP	2291/32
883	JEFFREY E. MEINTZER	1632/27
884	CODY EDWARD FINKNER, ET AL	2670/220
885	THOMAS M. WAZNIAK, ET AL	946/840
886	TAMARA GARDINER	2155/485
887	JENNIFER ELAINE CARRIERI	3136/178
888	SOUTHWORTH FAMILY REVOCABLE LIVING TRUST	2332/106
889	FRANCIS WILLIAM JUMP	1242/584
890	HERBERT WILLIAM TIMMS, SR. ET AL	3066/68
891	MARLEN MISHEL PEREZ CHAVEZ	2951/1
892	DANIEL C. TAYLOR	1136/537
893	TG, LLC	1307/757
894	TG, LLC	1307/757

LEGEND

N/F	DENOTES NOW OR FORMERLY
CMF	DENOTES CONCRETE MONUMENT FOUND
IPF	DENOTES IRON PIPE FOUND
IRF	DENOTES IRON ROD FOUND
IRCF	DENOTES IRON ROD WITH CAP FOUND
IRCS	DENOTES IRON ROD WITH CAP SET
	DENOTES STORMWATER MANAGEMENT EASEMENT
X	DENOTES EXISTING FENCE
	DENOTES STORMWATER MANAGEMENT POND
	DENOTES LOT LINES HEREBY ABANDONED
	DENOTES PROPERTY LINE TO REMAIN

SUBDIVISION - EXISTING

CALVERT TERRACE

TAX MAP 103, GRID "EA"

IN THE TOWN OF EASTON, FIRST ELECTION DISTRICT, TALBOT COUNTY, MARYLAND

PREPARED FOR: OSPREY PROPERTY COMPANY

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Phone: 410.770.9081

SEAL

DATE

REVISIONS

REV. #	DATE	DESCRIPTION
1	12/10/2025	REVISED PER COMMENTS

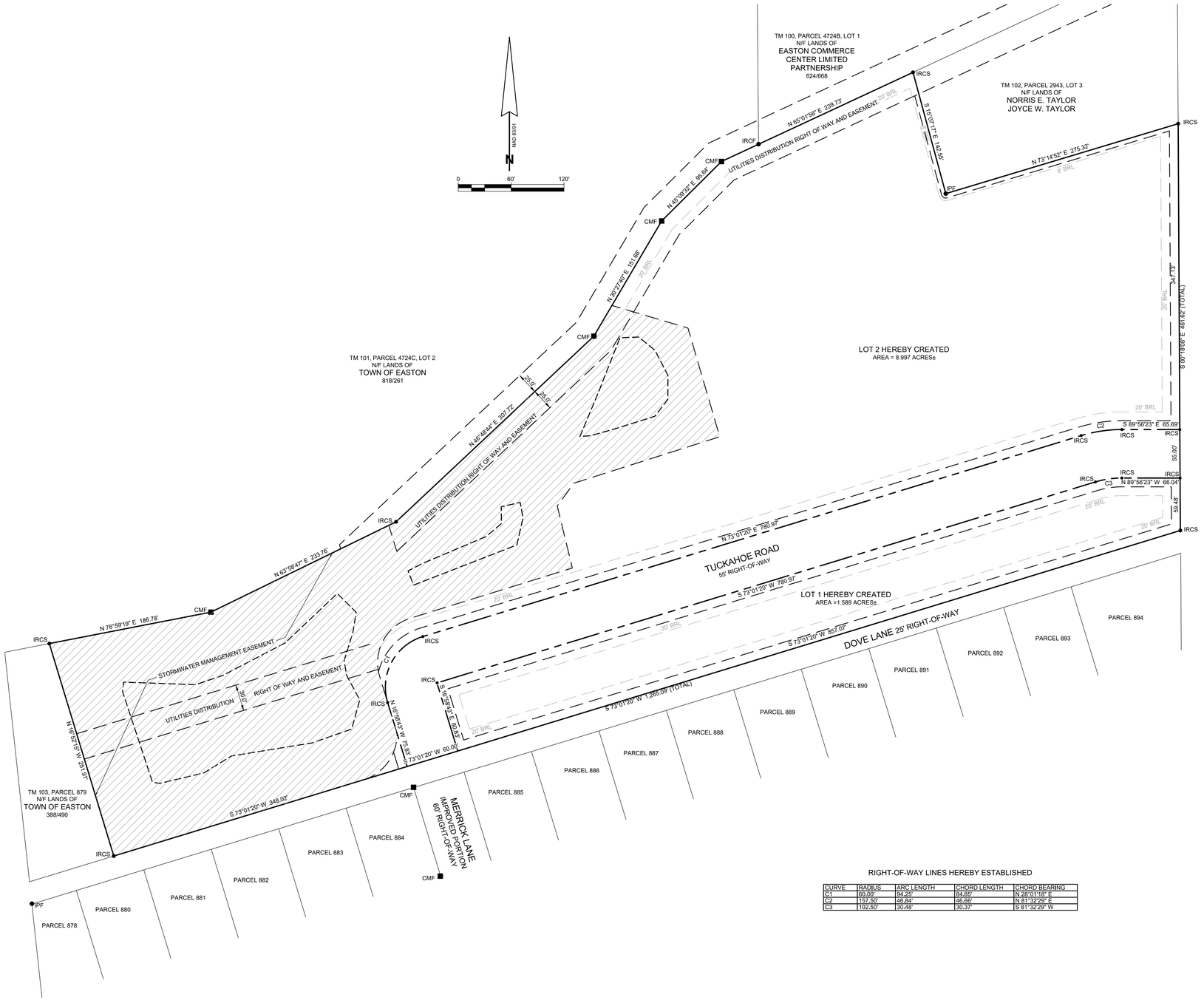
DATE: NOVEMBER 2025

SCALE: 1" = 60'

DRAWN BY: T.COCHRUN

PROJECT NO: 250295

SHEET NO.: 2 OF 3



RIGHT-OF-WAY LINES HEREBY ESTABLISHED

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING
C1	60.00'	94.25'	84.85'	N 28°01'18" E
C2	157.50'	46.84'	46.66'	N 81°32'29" E
C3	102.50'	30.48'	30.37'	S 81°32'29" W

LEGEND

N/F	DENOTES NOW OR FORMERLY
CMF	DENOTES CONCRETE MONUMENT FOUND
IPF	DENOTES IRON PIPE FOUND
IRF	DENOTES IRON ROD FOUND
IRCF	DENOTES IRON ROD WITH CAP FOUND
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	DENOTES PROPERTY LINES HEREBY CREATED

ADJACENT OWNERS

PARCEL	OWNER	DEED
878	HARRY L. PANNELL, ET AL	614/455
879	TOWN OF EASTON	388/490
880	ROLAND E. OLAJIDE	927/53
881	MARSHA H. KEMP	1150/18
882	PEAC INVESTMENTS, LLP	2291/32
883	JEFFREY E. MEINTZER	1632/27
884	CODY EDWARD FINKNER, ET AL	2670/220
885	THOMAS M. WAZNIAK, ET AL	946/840
886	TAMARA GARDINER	2155/485
887	JENNIFER ELAINE CARRIERI	3136/179
888	SOUTHWORTH FAMILY REVOCABLE LIVING TRUST	2332/106
889	FRANCIS WILLIAM JUMP	1242/584
890	HERBERT WILLIAM TIMMS, SR. ET AL	3066/68
891	MARLEN MISHEL PEREZ CHAVEZ	2951/1
892	DANIEL C. TAYLOR	1136/537
893	TG, LLC	1307/757
894	TG, LLC	1307/757

SIBDIVISION - RESULTING

CALVERT TERRACE

TAX MAP 103, GRID "EA"

IN THE TOWN OF EASTON, FIRST ELECTION DISTRICT, TALBOT COUNTY, MARYLAND

PREPARED FOR: OSPREY PROPERTY COMPANY

RAUCH INC.
Engineering | Survey | Architecture | Environmental
Main Office: 106 N Harrison St - Easton, MD 21601
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Phone: 410.770.9081

SEAL

DATE

REVISIONS

REV. #	DATE	DESCRIPTION
1	12/10/2025	REVISED PER COMMENTS

DATE: NOVEMBER 2025

SCALE: 1" = 60'

DRAWN BY: T.COCHRUN

PROJECT NO: 250295

SHEET NO.: 3 OF 3

TRAFFIC CONCEPTS, INC.
7525 Connelley Drive • Suite B • Hanover, MD 21076 • 410-760-2911

December 12, 2025

Mr. Rick Van Emburgh, P.E.
Director of Easton Public Works
Town of Easton
14 South Harrison Street
Easton, MD 21076

RE: Calvert Terrace TIS
Age-restricted Senior Housing
Town of Easton
TC #4286

Dear Mr. Van Emburgh

This letter is a point-by-point response to Town review comments of the Calvert Terrace TIS (dated November 3, 2025).

Town of Easton DPW - TIS Review Comments:

23. Provide the percent increase in traffic volumes at the intersections that were studied.

Response: The project will generate only 29 AM and 32 PM peak hour trips. These trips, when distributed through the roadway network, will have a minimal impact on traffic volumes at nearby key intersections. However, to address your comment we have compared the Critical Lane Volume (CLV) results using the percent increase in the number of critical trips at each intersection. The CLV concept is the sum of the highest volume of opposing movements during peak hours. These trips are the critical trips.

The CLV table is provided below to provide context for the report findings.

Critical Lane Volume	LOS
0-999	A
1000-1149	B
1150-1299	C
1300-1450	D
1451-1600	E
>1600	F

Regarding the CLV results, the number of critical trips recorded at each key intersection is quite low. As a result, a large percentage increase in critical trips does not necessarily indicate a significant change in the overall traffic volume or level of service. For instance, at the Calvert Street and Dove Lane intersection, the site adds 19 critical trips to the 21 background critical trips, which is a percent change of 90.5 percent. However, the LOS remains "A" and would not move to a LOS "B" until the critical trips reach 1000.

Therefore, with the minimal overall site trips added to the road network, the level of service does not change when comparing the background condition to the future condition.

CRITICAL LANE VOLUME ANALYSIS – AM PEAK HOUR					
KEY INTERSECTIONS	BACKGROUND CLV / LOS	FUTURE[1] (W/out Connection)		FUTURE[1] (WITH Connection)	
		CLV / LOS	**CLV Change (%)**	CLV / LOS	**CLV Change (%)**
US 50 @ MD 328/ Goldsborough St	1037 / B	1041 / B	+4 (0.4%)	1035 / B	-2 (-0.2%)
US 50 @ Norris Taylor Dr	551 / A	552 / A	+1 (0.2%)	572 / A	+21 (3.8%)
US 50 @ Lomax St	569 / A	582 / A	+13 (2.3%)	571 / A	+2 (0.4%)
Goldsborough St @ Calvert St	483 / A	487 / A	+4 (0.8%)	480 / A	-3 (-0.6%)
Goldsborough St @ Merrick Ln/ The Country School entrance	639 / A	641 / A	+2 (0.3%)	637 / A	-2 (-0.3%)
Calvert St @ Lomax St	59 / A	73 / A	+14 (23.7%)	81 / A	+22 (37.3%)
Calvert St @ Dove Ln	21 / A	40 / A	+19 (90.5%)	54 / A	+33 (157.1%)
Calvert St Extended @ Norris Taylor Dr	-	-	NA	64 / A	NA
CRITICAL LANE VOLUME ANALYSIS – PM PEAK HOUR					
KEY INTERSECTIONS	BACKGROUND CLV / LOS	FUTURE[1] (W/out Connection)		FUTURE[1] (WITH Connection)	
		CLV / LOS	**CLV % Change**	CLV / LOS	**CLV % Change**
US 50 @ MD 328/Goldsborough St	1060 / B	1066 / B	+6 (0.6%)	1056 / B	-4 (-0.4%)
US 50 @ Norris Taylor Dr	545 / A	546 / A	+1 (0.2%)	570 / A	+25 (4.6%)
US 50 @ Lomax St	566 / A	586 / A	+20 (3.5%)	577 / A	+11 (1.9%)
Goldsborough St @ Calvert St	617 / A	619 / A	+2 (0.3%)	602 / A	-15 (-2.4%)
Goldsborough St @ Merrick Ln/ The Country School entrance	638 / A	644 / A	+6 (0.9%)	636 / A	-2 (-0.3%)
Calvert St @ Lomax St	75 / A	97 / A	+22 (29.3%)	105 / A	+30 (40.0%)
Calvert St @ Dove Ln	33 / A	56 / A	+23 (69.7%)	73 / A	+40 (121.2%)
Calvert St Extended @ Norris Taylor Dr	-	-	NA	71 / A	NA
[1.]Future traffic conditions were analyzed with and without the Calvert Street connection to Norris Taylor Drive/US 50.					

24. Are there any recommended pedestrian safety improvements proposed to existing roads?

    Response: Based on the low number of trips generated by the project and the low traffic volume observed on the adjacent road system, we have concluded that pedestrian improvements are not warranted for this development.

    We noted that there are existing sidewalks along both sides of Calvert Street, past Dove Lane (site access). The Safety Study in the TIS describes the pedestrian amenities at all study intersections and includes low pedestrian/bicycle counts. At the Country School access, there are sidewalks along each side of Goldsborough Street and a brick crosswalk with a posted "Stop here for pedestrians" sign.

25. Due to the percent increase in traffic volume, are there any recommended traffic signal improvements?

    Response: The small number of trips generated by the proposed age-restricted residential project does not warrant traffic signal timing changes or any improvements to nearby traffic signals. The levels of service at the existing traffic signals located within the study area would continue to operate at acceptable levels of service with the added new site trips.

26. Acceptance of the TIS is based on the project operating as age-restricted senior housing (ITE LUC 251/252). Any change to land use operations requires updated TIS.

    Response: This comment is acknowledged.

27. TIS is required to be resubmitted for review once crash and safety information has been received.

    Response: The attached TIS includes crash data in Study Appendix VI. Additionally, the safety study was updated to include the crash data information (TIS page 16).

If you have any questions or need additional information, please do not hesitate to contact our office at your convenience.

Sincerely,

TRAFFIC CONCEPTS, INC.

J. Mark Keeley

J. Mark Keeley, PTP
Project Manager
[redacted]

Attachments: Revised Traffic Impact Study to include crash data

CALVERT TERRACE
Senior Housing
TOWN OF EASTON, MARYLAND

NOVEMBER 21, 2025
UPDATED DECEMBER 11, 2025

TRAFFIC IMPACT STUDY

PREPARED FOR:
OSPREY PROPERTY COMPANY

PREPARED BY:

TRAFFIC CONCEPTS, INC.

7525 CONNELLEY DRIVE
SUITE B
HANOVER, MARYLAND 21076
410-760-2911
[redacted]

TC#4286

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EXECUTIVE SUMMARY

Traffic Concepts, Inc. conducted a traffic impact study for the proposed Calvert Terrace senior adult housing development. The development site is located within the Town of Easton, west of Calvert Street and north of Dove Lane, at the terminus of Merrick Lane. The proposed project consists of 90 senior adult housing units.

Scope of Services: The key intersections listed below define the study area.

- US 50 (Ocean Gateway) @ Norris Taylor Dr (Signal)
- US 50 (Ocean Gateway) @ Lomax St (Unsignalized)
- US 50 (Ocean Gateway) @ MD 328 (Matthewstown RD)/Goldsborough St (Signal)
- Calvert St @ Dove Ln (Unsignalized)
- Calvert St @ Lomax St (Unsignalized)
- Calvert St @ Goldsborough St (Unsignalized)
- Goldsborough St @ Merrick Ln/ The Country School entrance (Unsignalized)

Analysis Methodology: The traffic study is comprised of an Existing, Background, and Future[1] traffic conditions. The key intersections were analyzed under each traffic condition, which is explained by the following formula:

Total Future Traffic = (***Existing Condition*** *– current intersection turning movement volumes +* ***Background Condition*** *– 2.0% Growth Rate compounded over 2 years + pipeline development traffic +* ***Future Condition***[1] *- site generated traffic)*

All key intersections were analyzed with the Critical Lane Volume (CLV) methodology and the Highway Capacity Manual software (HCM).

New Site Generated (Peak Hour) Trips: The new site generated peak hour trips were generated with land use data contained in the *Institute of Transportation Engineers, Trip Generation Manual 12th Edition* for senior adult housing for single family units (ITE LUC 251) and multifamily units (ITE LUC 252). Based on the ITE data, the site will generate 29 total AM and 32 total PM peak hour trips.

Site Access: The site will have vehicle access to Merrick Lane and Dove Lane.

CONCLUSION: The results of the intersection capacity analysis indicate that the key intersections would continue to operate at "D" or better levels of service with the proposed redevelopment project.

With the submittal of this traffic report, we respectfully request that this project be approved from a traffic impact standpoint

[1]. Future traffic conditions were analyzed with and without the Calvert Street connection to US 50 via Norris Taylor Drive.

INTRODUCTION

Traffic Concepts, Inc. has prepared a traffic impact study for a proposed senior adult housing development known as Calvert Terrace. The site is located along the west side of Calvert Street and north of Dove Lane, at the terminus of Merrick Lane. This project will create 90 total senior adult housing units (30 single-family and 60 multi-family units). The site will have vehicle access to Merrick Lane and Dove Lane. The site location is depicted on Exhibit 1.

Scope of Services

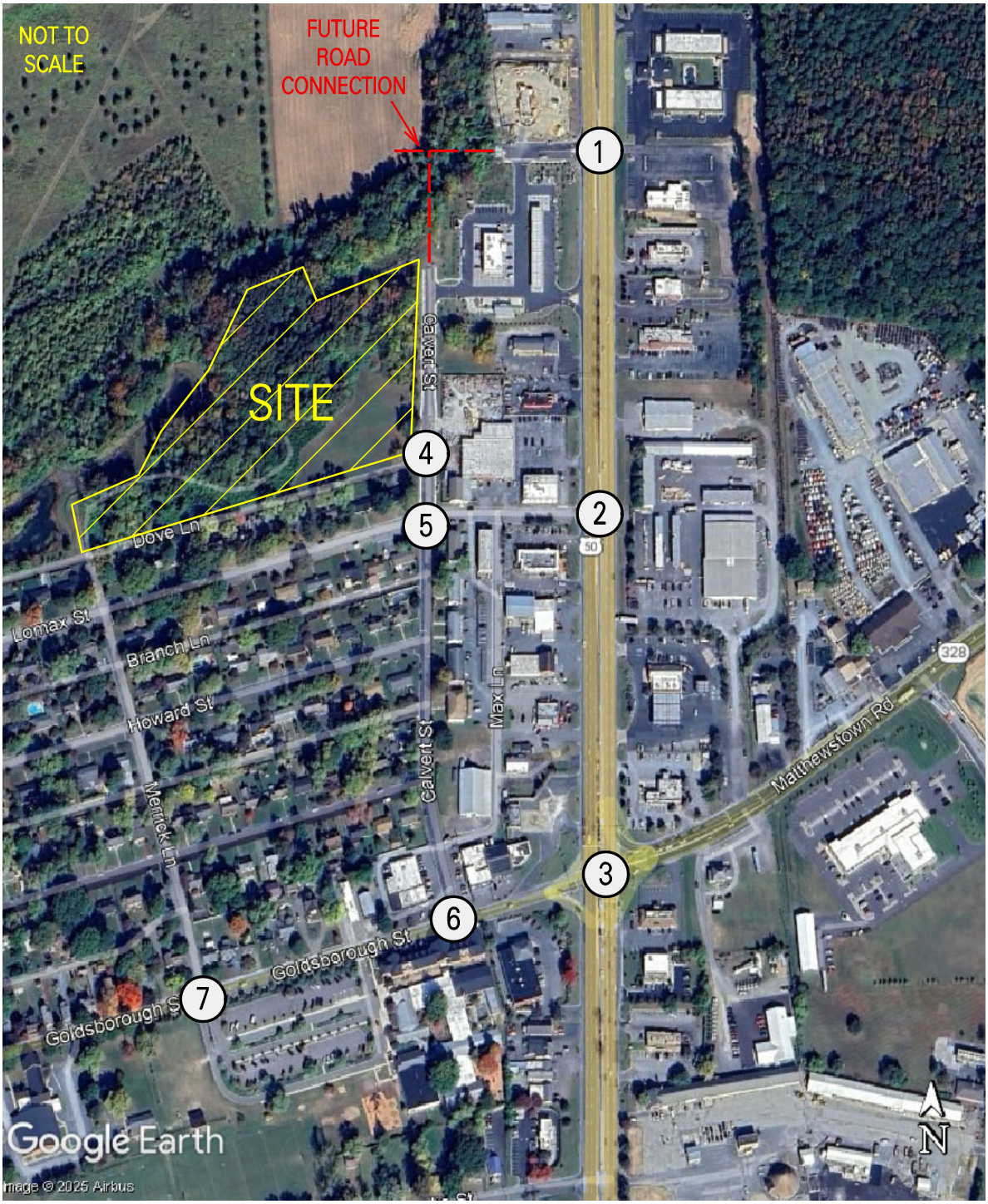
The study limits were established by the Town and a scope of services memo is included in the study appendix. The following key intersections were counted during the weekday morning (7:00 AM to 9:00 AM) and afternoon (4:00 PM to 6:00 PM) peak hours:

- US 50 (Ocean Gateway) @ MD 328 (Matthewstown RD)/Goldsborough St (Signal)
- US 50 (Ocean Gateway) @ Norris Taylor Dr (Signal)
- US 50 (Ocean Gateway) @ Lomax St (Unsignalized)
- Calvert St @ Dove Ln (Unsignalized)
- Calvert St @ Lomax St (Unsignalized)
- Calvert St @ Goldsborough St (Unsignalized)
- Goldsborough St @ Merrick Ln/ The Country School entrance (Unsignalized)

Study Methodology

The study was conducted in three study conditions that analyze the existing, traffic volumes, the background volumes, and future traffic volumes. The existing baseline traffic conditions are created with intersection turning movement counts that were conducted at the key intersections. The total background condition traffic volumes are determined by applying growth rates for the site build-out period. Finally, the total future traffic conditions were determined by incorporating trips generated by the proposed new development. Future traffic conditions were analyzed with and without the Calvert Street connection to US 50. The future Calvert Street connection is also shown on Exhibit 1.

To determine intersection levels of service, the key intersections were analyzed during study conditions using the Critical Lane Volume (CLV) and the Highway Capacity Manual (HCM) methods.



Key Intersections:

1. US 50 (Ocean Gateway) @ Norris Taylor Drive
2. US 50 (Ocean Gateway) @ Lomax Street
3. US 50 @ MD 328 (Mattewstown RD)/Goldsborough St
4. Calvert Street @ Dove Lane
5. Calvert Street @ Lomax Street
6. Calvert Street @ Goldsborough Street
7. Goldsborough Street @ Merrick Lane/ The Country School entrance

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EXHIBIT 1
Site Location Map

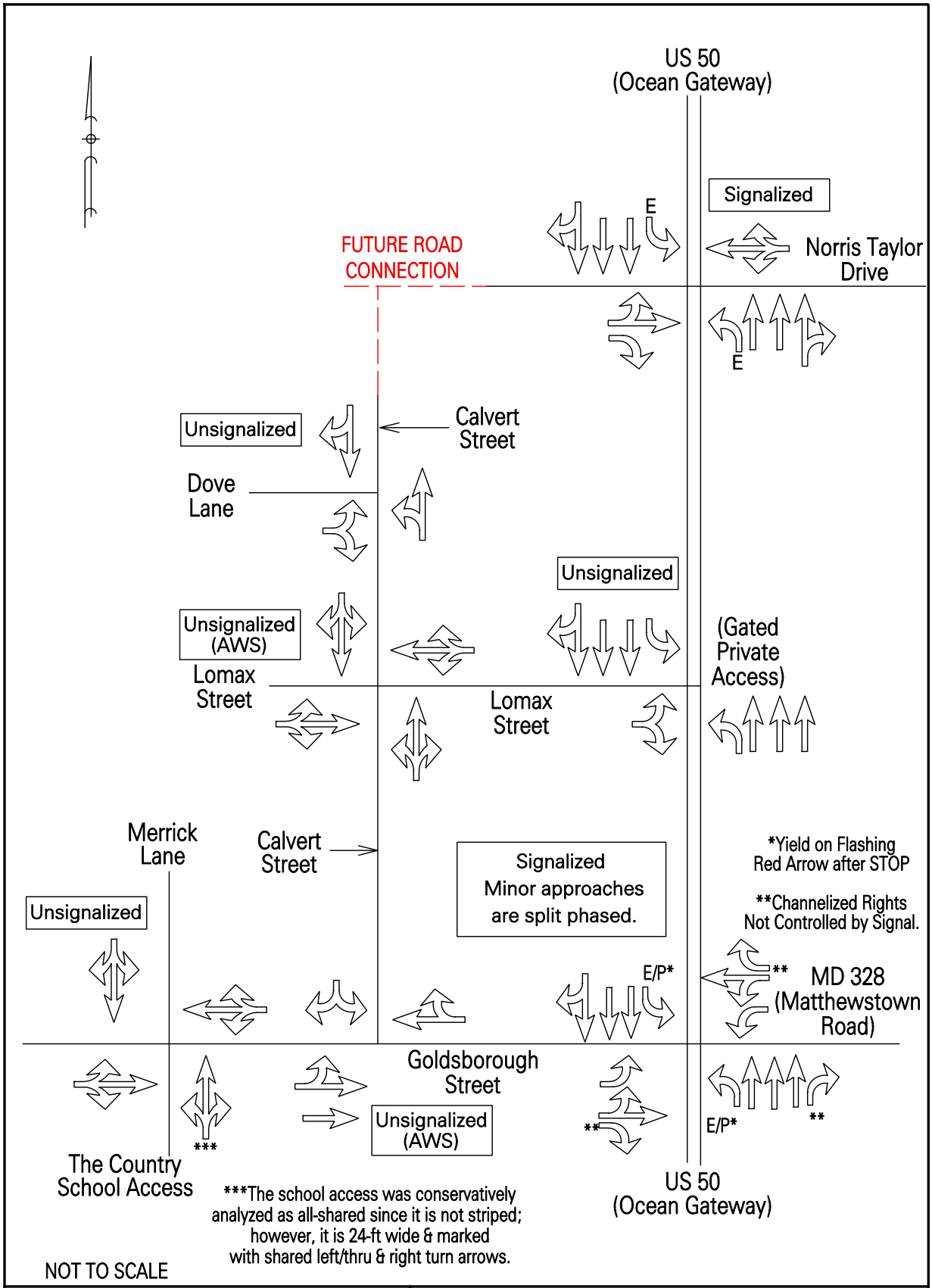

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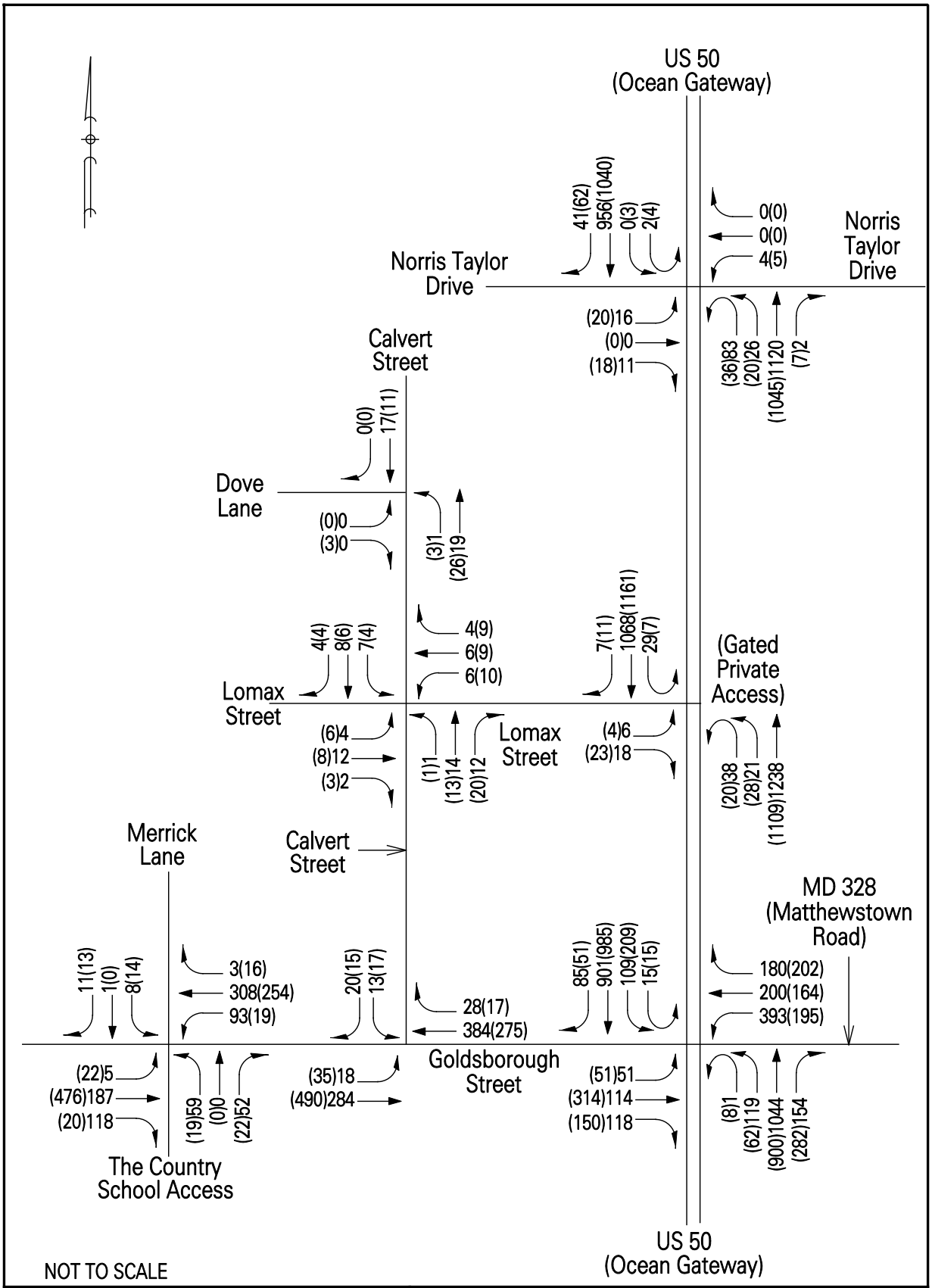
EXHIBIT 2
Lane Configuration

EXISTING CONDITION

As stated, the existing traffic condition establishes the baseline intersection levels of service at the key intersections.

Existing lane configurations at the key intersections are depicted on Exhibit 2. The weekday intersection turning movement counts were conducted on Tuesday, October 14, 2025, from 7:00-9:00 AM and 4:00-6:00 PM when schools were in session. The resulting existing peak hour volumes are displayed on Exhibit 3. Bicycle/pedestrian counts were also conducted at all key intersections. The count data and intersection condition aerial exhibits are provided in Appendix III.

Intersection	AM Peak Hour	PM Peak Hour
US 50 @ Norris Taylor Dr	7:15 - 8:15	4:00 – 5:00
US 50 @ Lomax St	7:15 - 8:15	4:15 – 5:15
US 50 @ Goldsborough St/ MD 328	7:15 - 8:15	4:15 – 5:15
Calvert St @ Dove Ln	7:15 - 8:15	4:00 – 5:00
Calvert St @ Lomax St	7:15 - 8:15	4:00 – 5:00
Calvert St @ Goldsborough St	7:30 – 8:30	4:00 – 5:00
Goldsborough St @ Merrick Ln/School access	7:30 – 8:30	4:00 – 5:00



TRAFFIC CONCEPTS, INC. 7525 Connelley Drive Suite B Hanover, Maryland 21076 410-760-2911	EXHIBIT 3 Existing Traffic Volumes

BACKGROUND CONDITION

The background traffic conditions evaluate the key intersections with consideration given to a regional growth rate and trips generated by other approved developments that are not yet constructed.

The regional growth rate represents the annual increase in through traffic volumes within the study area that originates from outside the localized study area. To determine this rate, we analyzed MDOT SHA historical traffic data from the past three years, retrieved from the Internet Traffic Monitoring System (I-TMS) webpage. This data can be found in Appendix II. Our analysis of this data indicates that traffic volumes have remained stable over the last three years.

However, to be conservative a two percent growth rate, compounded over the two-year project build-out period, was applied to all existing movements at the study intersections. The total background traffic volumes shown on Exhibit 4 include the projected growth in traffic.

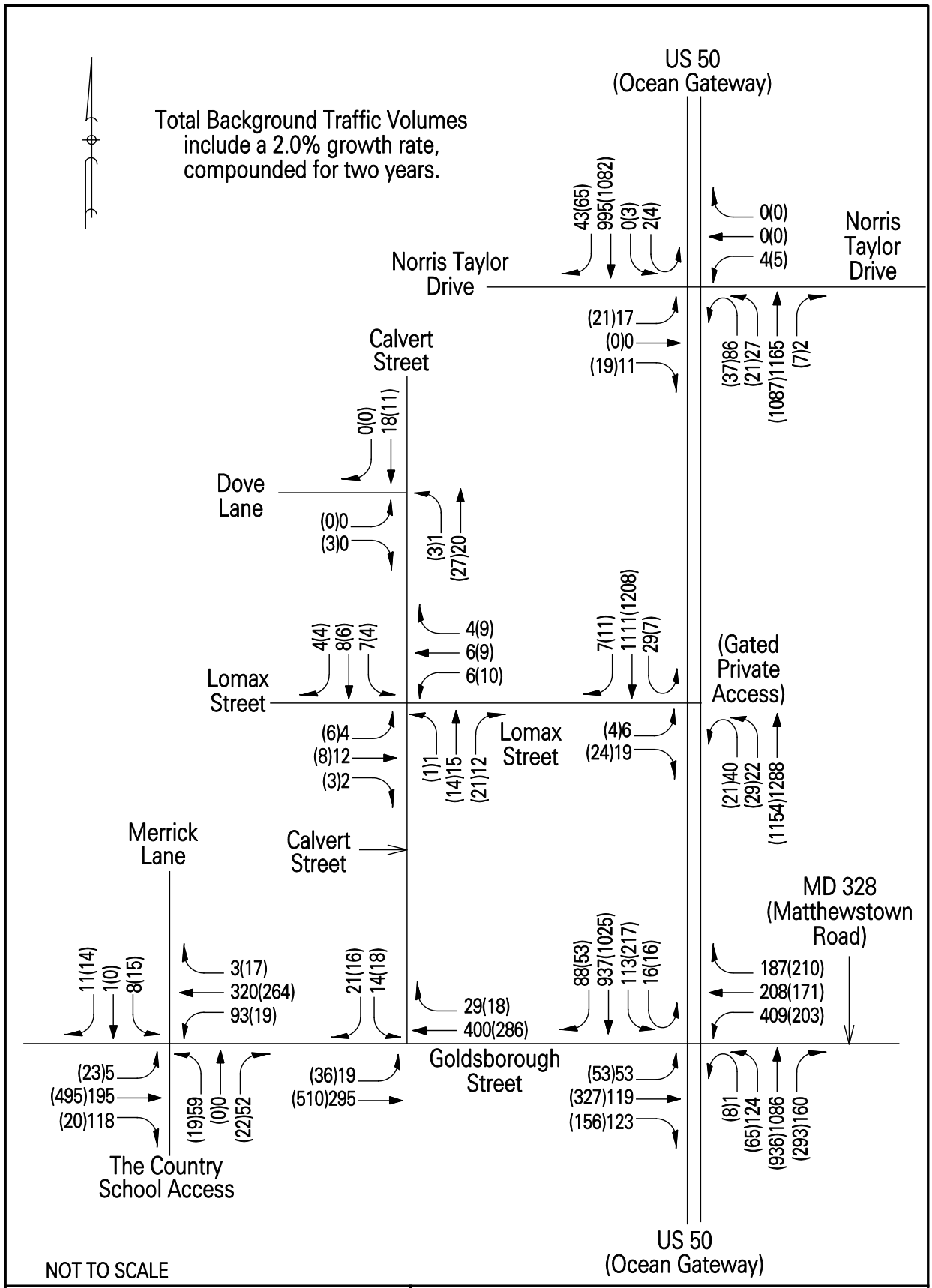


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EXHIBIT 4
Total Background Traffic Volumes

FUTURE CONDITION

The future condition analysis determines the new site generated trips and analyzes the key intersections with the total future traffic volumes. As stated, two future scenarios were analyzed. The key intersections were analyzed without a road connection between US 50 and Calvert Street (via Norris Taylor Drive), and again with the road connection.

The proposed new site trips generated by 90 senior adult housing units (30 single-family and 60 multi-family units) were determined with data contained in the *Institute of Transportation Engineers', Trip Generation Manual (ITE), 12th Edition.* The new site generated peak hour trips are shown in the table below and the detailed ITE data is included in the scope of services memo that is provided in Appendix IV.

NEW SITE TRIPS: PEAK HOUR TRIP GENERATION						
	AM			PM		
	IN	OUT	TOTAL	IN	OUT	TOTAL
Senior Adult Housing—Multifamily (252) 60 UNITS	4	8	12	8	7	15
Senior Adult Housing—Single-Family (251) 30 UNITS	6	11	17	10	7	17
TOTAL PEAK HOUR TRIPS	**10**	**19**	**29**	**18**	**14**	**32**

Source: ITE, Trip Generation Manual, 12th Edition (ITE)

WITHOUT ROAD CONNECTION

The site generated trip distribution and assignment pattern is based on distribution patterns that were approved in traffic studies for other nearby residential developments. Exhibit 5 shows the site generated trips, using the existing road network. These trips were added to the total background traffic volumes to arrive at total future traffic volumes (without a road connection), as shown on Exhibit 6.

WITH ROAD CONNECTION

A traffic scenario was also developed with the Calvert Street extension project. As shown on Exhibit 1, Calvert Street would intersect with Norris Taylor Drive creating an alternate travel route to and from US 50 at the signalized US 50 and Norris Taylor Drive intersection.

Exhibit 7 shows the trip diversion pattern resulting from the Calvert Street extension project. Generally, the new Calvert Street connection would be used by local traffic. This includes traffic coming to and from the residential streets intersecting with Calvert Street and traffic from Merrick Lane and Calvert Street intersecting with Goldsborough Street.

The new traffic pattern diverts half of the eastbound trips along Lomax Street and half of the southbound US 50 right turning trips at Lomax Street to the intersection at US 50 and Norris Taylor Drive. Additionally, half of the southbound left turns from Merrick Lane and Calvert Street at Goldsborough Street were diverted from the US 50/Goldsborough signalized intersection to US 50 at Norris Taylor Drive.

Exhibit 8 shows the redistributed new site trips with the Calvert Street connection. The diverted trips (Exhibit 7) and redistributed site trips (Exhibit 8), were added to total background traffic volumes (Exhibit 4) to determine total future traffic volumes (with a road connection), as depicted on Exhibit 9.

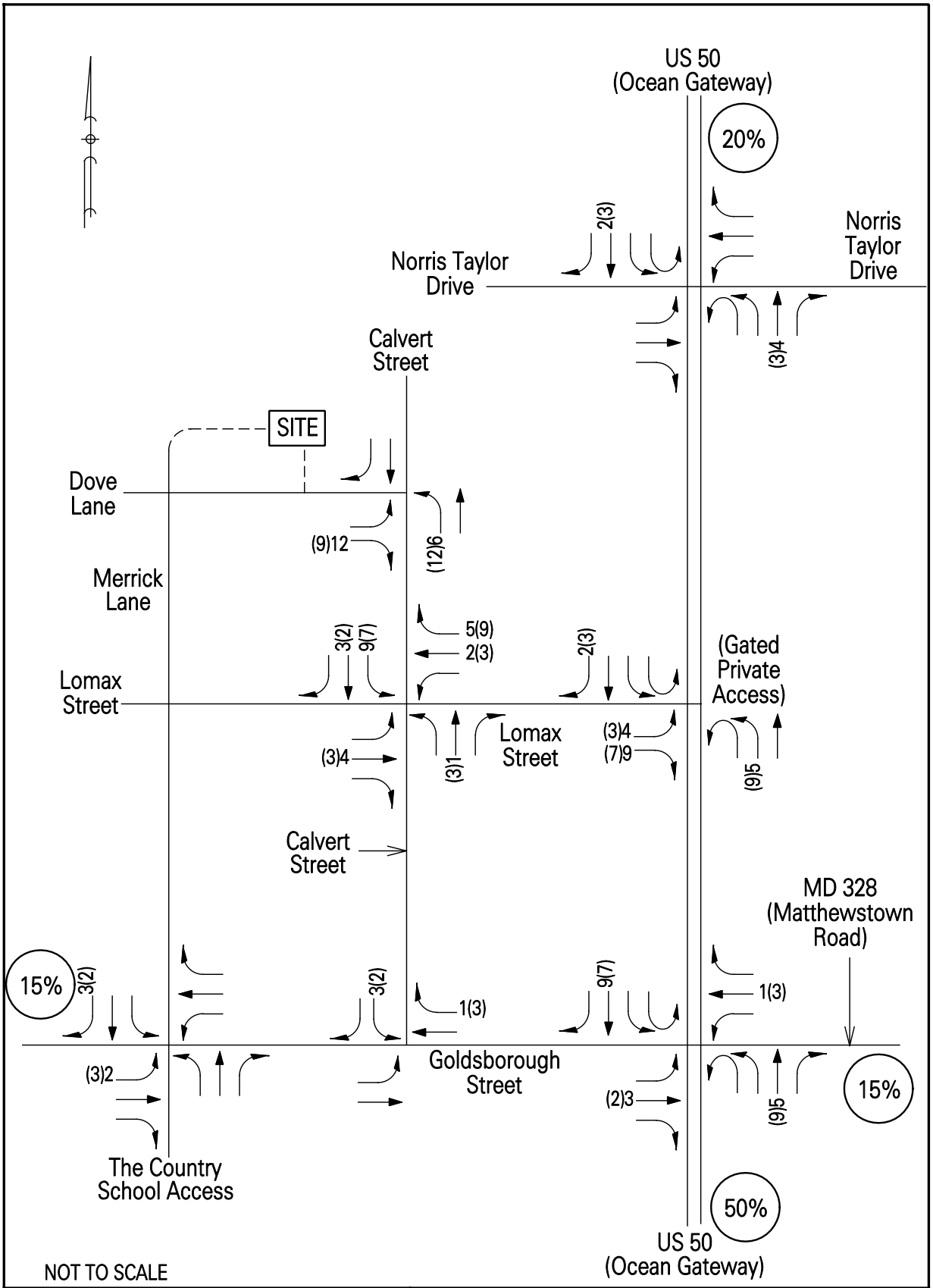

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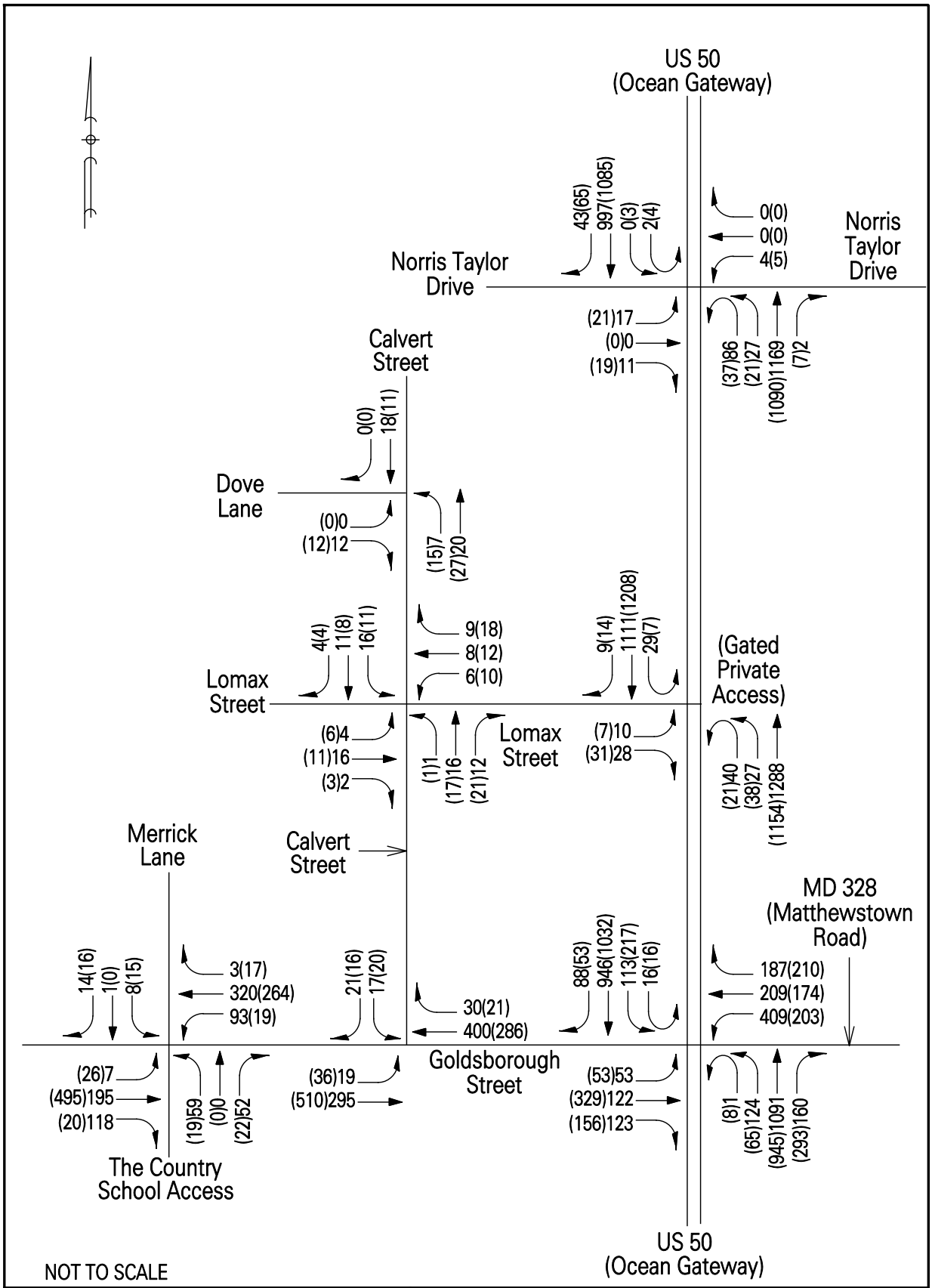
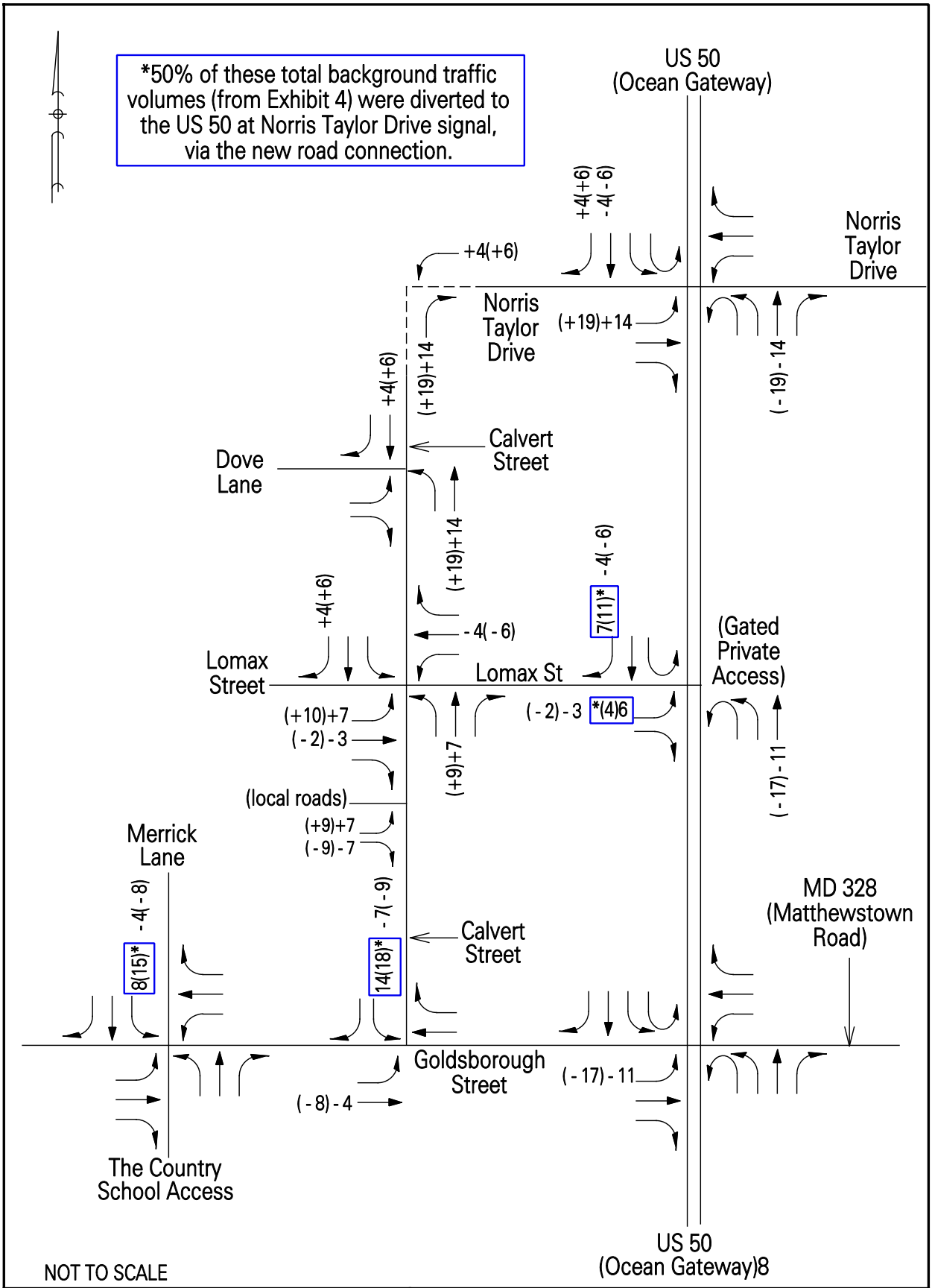
EXHIBIT 5
Site Generated Trips
(Without Road Connection)



TRAFFIC CONCEPTS, INC. 7525 Connelley Drive Suite B Hanover, Maryland 21076 410-760-2911	EXHIBIT 6 Total Future Traffic Volumes (Without Road Connection)



TRAFFIC CONCEPTS, INC. 7525 Connelley Drive Suite B Hanover, Maryland 21076 410-760-2911	EXHIBIT 7 Diverted Traffic Volumes (Due to New Road Connection)

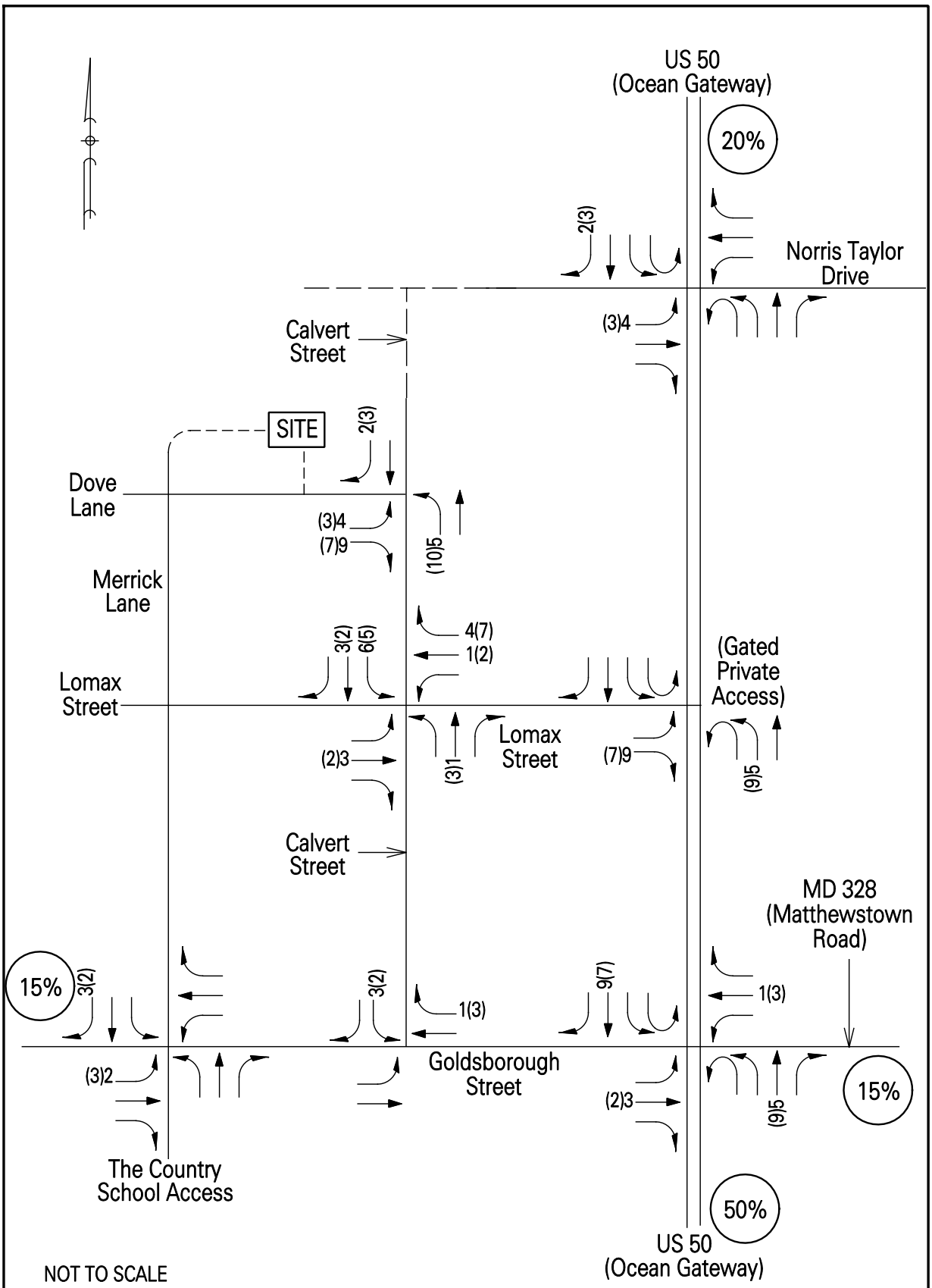


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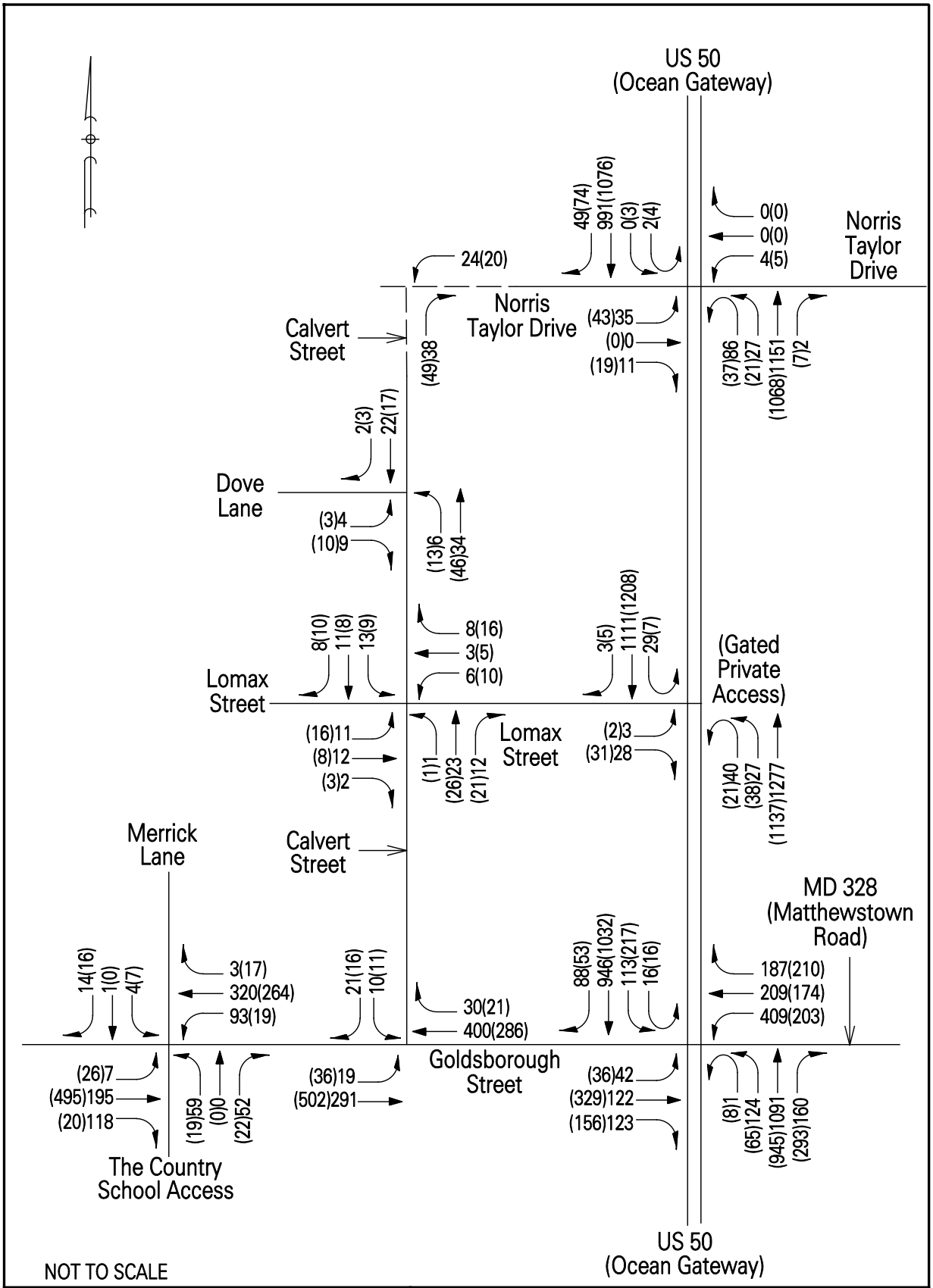
EXHIBIT 8
Site Generated Trips
(With Road Connection)



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SAFETY STUDY

CRASH DATA

Crash data (between January 1, 2022 and December 31, 2024) was provided by MDOT SHA at the key intersections. The most crashes occurred at the US 50 at MD 328 intersection, and about half of the crashes at this signalized intersection were rear end collisions. The crash data revealed no fatalities at any of the intersections. A copy of the detailed crash data is included in Appendix VI, and the data is summarized in the following table.

TOTAL CRASHES (JANUARY 1, 2022 - DECEMBER 31, 2024)			
Intersection	2022	2023	2024
US 50 @ Norris Taylor Dr	2	1	4
US 50 @ Lomax St	1	3	1
US 50 @ Goldsborough St/ MD 328	9	6	10
Calvert St @ Dove Ln	*	*	*
Calvert St @ Lomax St	*	*	*
Calvert St @ Goldsborough St	*	*	*
Goldsborough St @ Merrick Ln/Country School	*	*	*
*No crashes reported at these locations.			

NON-MOTORIZED INVENTORY

The following information provides a non-motorized inventory of the bicycle/pedestrian and transit amenities within the study area. This information also includes peak hour pedestrians, and bicycle counts at the key intersections.

Transit Facilities

Bus stop located approximately ½ mile from the site are shown on Exhibit 10. The bus routes that utilize these stops are listed below and the route maps and bus schedules are included in Appendix V.

- **Route C:** (A fixed route within Easton that loops through various points in town)
  - Stop S188 – Sunoco Station Easton (612/Greyhound stop)
  - Stop S154 – Quality Inn Easton
  - Stop S069 – East Ave at Goldsborough St
- **Route 5:** (Runs from Denton to Easton)
  - Stop S025 – Calvert St @ Goldsborough St

Transit Facilities (Continued)

- **Route 4:** (Rock Hall – Chestertown – Centreville – Easton)
  Stop S194 – The Country School
  Stop 188 – Sunoco Station Easton
- **Route 9A:** (Cambridge – Trappe – Easton)
  Stop S194 – The Country School
- **St. Michaels Shuttle:**(Shuttle service that runs between Easton & St. Michaels)
  Stop S194 – The Country School

Delmarva Community Transit (DCT) also offers other specialized transportation options to area residents. DCT offers One Stop Service for people 60 years and older and people with disabilities, providing door-to-door service in vans or cars, with 24-hour advance notice. In compliance with the ADA (Americans with Disabilities Act), DCT also provides complementary origin to destination service up to 3/4 mile off of fixed routes for certified individuals with disabilities.

Pedestrian and Bicycle - Facilities & Counts

Within the study area, there are continuous sidewalks along both sides of Goldsborough Street, west of Calvert Street. There are sidewalks along both sides of Calvert Street, north of Lomax Street, that extend past the site access (Dove Lane) to the current northern terminus of the road. There are also sidewalks along both sides of the recently reconstructed Norris Taylor Drive, west of US 50. As shown on Exhibit 10, the Easton Rails-To-Trails, is also located near the site, providing a scenic almost 3-mile trail that spans Easton north to south with access to local stores, parks, destinations, and schools.

With the installation of the new signal at the US 50 at Norris Taylor Drive intersection, there are painted crosswalks along the west leg (Norris Taylor Drive) and south leg (US 50) of the intersection. These crosswalks have ADA compliant ramps and ground-mounted push button pedestrian signals. A copy of the signal plan included in Appendix III provides details of the newly constructed amenities.

Brick crosswalks are also located across the west legs of Goldsborough Street at the intersections of Merrick Lane and Calvert Street, with posted “Stop here for pedestrians” signs.

The pedestrian/bicycle counts included in Appendix III are summarized in the following tables:

US 50 @ MD 328		
Peak Hour	Pedestrian Volume	Bicycle Volume
7:15 – 8:15 AM	1	1
4:15 – 5:15 PM	1	1

US 50 @ Norris Taylor Drive		
Peak Hour	Pedestrian Volume	Bicycle Volume
7:15 – 8:15 AM	0	0
4:00 – 5:00 PM	0	0

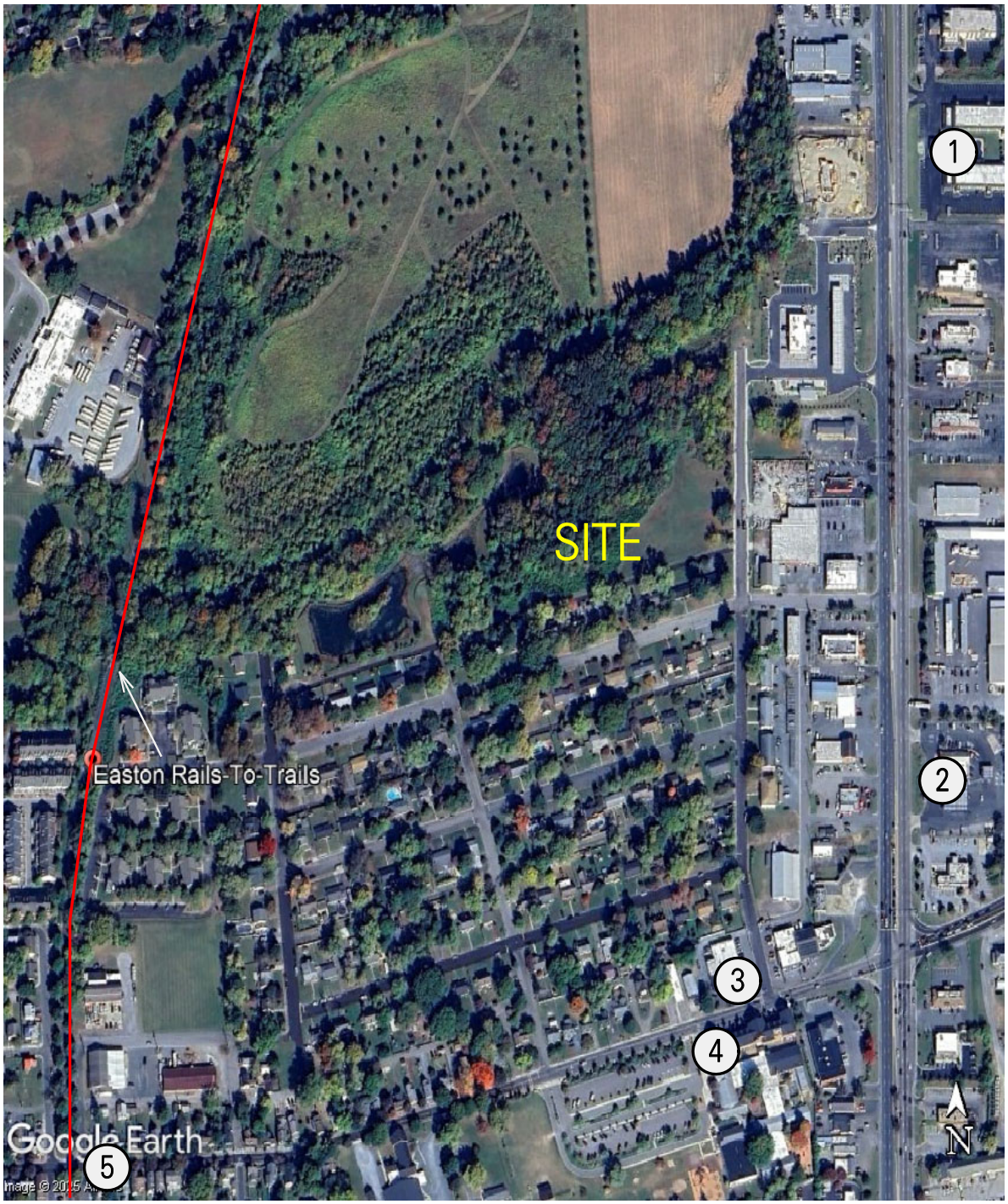
US 50 @ Lomax Street		
Peak Hour	Pedestrian Volume	Bicycle Volume
7:15 – 8:15 AM	2	0
4:15 – 5:15 PM	0	0

Calvert St @ Lomax St		
Peak Hour	Pedestrian Volume	Bicycle Volume
7:15 – 8:15 AM	0	0
4:00 – 5:00 PM	0	2

Goldsborough Street @ Calvert Street		
Peak Hour	Pedestrian Volume	Bicycle Volume
7:30 – 8:30 AM	1	0
4:00 – 5:00 PM	1	1

Goldsborough Street @ Merrick Lane / The Country School Access		
Peak Hour	Pedestrian Volume	Bicycle Volume
7:30 – 8:30 AM	16	0
4:00 – 5:00 PM	4	0

Calvert Street @ Dove Lane		
Peak Hour	Pedestrian Volume	Bicycle Volume
7:15 – 8:15 AM	0	0
4:00 – 5:00 PM	0	0



Bus Stops:
1. Stop S154 - Quality Inn Easton
2. Stop S188 - Sunoco Station Easton (612/Greyhound Stop)
3. Stop S025 - Calvert St @ Goldsborough St
4. Stop S194 - The Country School
5. Stop S069 - East Ave at Goldsborough

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EXHIBIT 10
Bus Stop Locations

INTERSECTION CAPACITY ANALYSIS

As stated, the key intersections were analyzed during the existing, background, and future traffic conditions[1], using the Critical Lane Volume (CLV) and Highway Capacity Manual (HCM) methods. The HCM analyses at the signalized intersections were conducted using signal timing data provided by MDOT SHA. At the US 50 study intersections, the US 50 corridor was analyzed as it runs geographically with north-south orientation.

The levels of service results are listed on the following tables, and the detailed calculations are provided in Appendix I.

CRITICAL LANE VOLUME ANALYSIS – AM PEAK HOUR				
KEY INTERSECTIONS	EXISTING CLV / LOS	BACKGROUND CLV / LOS	FUTURE[1] (W/out Connection) CLV / LOS	FUTURE[1] (WITH Connection) CLV / LOS
US 50 @ MD 328/Goldsborough St	996 / A	1037 / B	1041 / B	1035 / B
US 50 @ Norris Taylor Dr	530 / A	551 / A	552 / A	572 / A
US 50 @ Lomax St	548 / A	569 / A	582 / A	571 / A
Goldsborough St @ Calvert St	463 / A	483 / A	487 / A	480 / A
Goldsborough St @ Merrick Ln/ The Country School entrance	543 / A	639 / A	641 / A	637 / A
Calvert St @ Lomax St	58 / A	59 / A	73 / A	81 / A
Calvert St @ Dove Ln	20 / A	21 / A	40 / A	54 / A
Calvert St Extended @ Norris Taylor Dr	-	-	-	64 / A
CRITICAL LANE VOLUME ANALYSIS – PM PEAK HOUR				
KEY INTERSECTIONS	EXISTING CLV / LOS	BACKGROUND CLV / LOS	FUTURE[1] (W/out Connection) CLV / LOS	FUTURE[1] (WITH Connection) CLV / LOS
US 50 @ MD 328/Goldsborough St	1018 / B	1060 / B	1066 / B	1056 / B
US 50 @ Norris Taylor Dr	524 / A	545 / A	546 / A	570 / A
US 50 @ Lomax St	544 / A	566 / A	586 / A	577 / A
Goldsborough St @ Calvert St	593 / A	617 / A	619 / A	602 / A
Goldsborough St @ Merrick Ln/ The Country School entrance	616 / A	638 / A	644 / A	636 / A
Calvert St @ Lomax St	73 / A	75 / A	97 / A	105 / A
Calvert St @ Dove Ln	32 / A	33 / A	56 / A	73 / A
Calvert St Extended @ Norris Taylor Dr	-	-	-	71 / A
[1]. Future traffic conditions were analyzed with and without the Calvert Street connection to Norris Taylor Drive/US 50.				

HIGHWAY CAPACITY MANUAL: SIGNAL CONTROL - AM PEAK HOUR				
KEY INTERSECTIONS	EXISTING Delay / LOS	BACKGROUND Delay / LOS	FUTURE[1] (W/out Connection) Delay / LOS	FUTURE[1] (WITH Connection) Delay / LOS
US 50 @ MD 328/Goldsborough St	34.8 / C	35.9 / D	36.1 / D	36.0 / D
US 50 @ Norris Taylor Dr	22.2 / C	22.5 / C	22.9 / C	23.0 / C
HIGHWAY CAPACITY MANUAL: SIGNAL CONTROL - PM PEAK HOUR				
KEY INTERSECTIONS	EXISTING Delay / LOS	BACKGROUND Delay / LOS	FUTURE[1] (W/out Connection) Delay / LOS	FUTURE[1] (WITH Connection) Delay / LOS
US 50 @ MD 328/Goldsborough St	41.5 / D	42.3 / D	42.5 / D	42.4 / D
US 50 @ Norris Taylor Dr	18.2 / B	18.4 / B	18.4 / B	18.8 / B

HIGHWAY CAPACITY MANUAL: STOP CONTROL - AM PEAK HOUR				
KEY INTERSECTIONS	EXISTING Delay / LOS	BACKGROUND Delay / LOS	FUTURE[1] (W/out Connection) Delay / LOS	FUTURE[1] (WITH Connection) Delay / LOS
US 50 (Ocean Gateway) @ Lomax St				
EB Approach – Lomax St	20.7 / C	21.5 / C	23.6 / C	18.2 / C
NB Left – US 50	15.3 / C	16.0 / C	16.8 / C	16.7 / C
SB U-Turn - US 50	13.7 / B	14.2 / B	14.2 / B	14.1 / B
Goldsborough St @ Calvert St Intersection (AWS)	15.9 / C	17.3 / C	17.6 / C	17.2 / C
EB Approach -– Goldsborough St	10.2 / B	10.4 / B	10.5 /B	10.3 /B
WB Approach – Goldsborough St	20.5 / C	23.1 / C	23.5 / C	22.7 / C
SB Approach – Calvert St	9.3 / A	9.5 / A	9.6 / A	9.3 / A
Goldsborough St @ Merrick Lane				
EB Left -– Goldsborough St	8.2 / A	8.2 / A	8.3 / A	8.3 / A
WB Left – Goldsborough St	8.6 / A	8.6 / A	8.6 / A	8.6 / A
NB Approach - The Country School	28.6 / D	30.5 / D	31.7 / D	31.7 / D
SB Approach – Merrick Lane	21.1 / C	21.7 / C	20.7 / C	17.1 / C
Calvert St @ Lomax St Overall Intersection (AWS)	7.0 / A	7.0 / A	7.1 / A	7.1 / A
EB Approach – Lomax St	7.1 / A	7.1 / A	7.2 / A	7.3 / A
WB Approach – Lomax St	7.0 / A	7.0 / A	7.0 / A	6.9 / A
NB Approach – Calvert St	6.9 / A	6.9 / A	6.9 / A	7.0 / A
SB Approach – Calvert St	7.1 / A	7.1 / A	7.3 / A	7.2 / A
Calvert St @ Dove Ln				
EB Approach – Dove Lane	0	0	8.4 / A	8.6 / A
NB Left – Calvert St	7.2 / A	7.2 / A	7.3 / A	7.3 / A

1. **Future traffic conditions were analyzed with and without the Calvert Street connection to Norris Taylor Drive/US 50.**

HIGHWAY CAPACITY MANUAL: STOP CONTROL - AM PEAK HOUR				
KEY INTERSECTIONS	EXISTING Delay / LOS	BACKGROUND Delay / LOS	FUTURE[1] (W/out Connection) Delay / LOS	FUTURE[1] (WITH Connection) Delay / LOS
Calvert St Extended @ Norris Taylor Dr				
WB Left – Norris Taylor	-	-	-	7.3 / A
NB Approach - Calvert St Extended	-	-	-	8.5 / A

HIGHWAY CAPACITY MANUAL: STOP CONTROL - PM PEAK HOUR				
KEY INTERSECTIONS	EXISTING Delay / LOS	BACKGROUND Delay / LOS	FUTURE[1] (W/out Connection) Delay / LOS	FUTURE[1] (WITH Connection) Delay / LOS
US 50 (Ocean Gateway) @ Lomax St				
EB Approach - Left/Right	17.7 / C	18.3 / C	19.8 / C	16.9 / C
NB Left – US 50	16.3 / C	17.0 / C	18.0 / C	17.8 / C
SB U-Turn - US 50	11.6 / B	11.9 / B	11.9 / B	11.8 / B
Goldsborough St @ Calvert St Intersection (AWS)	10.3 / B	10.6 / B	10.6 / B	10.5 / B
EB Approach -– Goldsborough St	10.4 / B	10.6 / B	10.6 / B	10.5 / B
WB Approach – Goldsborough St	10.4 /B	10.7 / B	10.7 / B	10.6 / B
SB Approach – Calvert St	8.7 / A	8.8 / A	8.9 / A	8.6 / A
Goldsborough St @ Merrick Lane				
EB Left -– Goldsborough St	7.9 / A	7.9 / A	7.9 / A	7.9 / A
WB Left – Goldsborough St	8.5 / A	8.6 / A	8.6 / A	8.6 / A
NB Approach - The Country School	12.6 / B	13.0 / B	13.2 / B	13.2 / B
SB Approach – Merrick Lane	15.8 / C	16.4 / C	16.3 / C	13.7 / B
Calvert St @ Lomax St Overall Intersection (AWS)	7.0 / A	7.0 / A	7.1 / A	7.2 / A
EB Approach – Lomax St	7.1 / A	7.2 / A	7.2 / A	7.4 / A
WB Approach – Lomax St	7.0 / A	7.1 / A	7.1 / A	7.1 / A
NB Approach – Calvert St	6.9 / A	6.9 / A	7.0 / A	7.1 / A
SB Approach – Calvert St	7.1 / A	7.1 / A	7.3 / A	7.1 / A
Calvert St @ Dove Ln				
EB Approach – Dove Lane	8.4 / A	8.4 / A	8.4 / A	8.6 / A
NB Left – Calvert St	7.2 / A	7.2 / A	7.2 / A	7.3 / A
Calvert St Extended @ Norris Taylor Dr				
WB Left – Norris Taylor	-	-	-	7.3 / A
NB Approach - Calvert St Extended	-	-	-	8.5 / A

1. **Future traffic conditions were analyzed with and without the Calvert Street connection to Norris Taylor Drive/US 50.**

QUEUING ANALYSIS

A queuing analysis was conducted for the dedicated left turn lanes at all signalized key intersections that do not share continuous storage with through movements. The Highway Capacity Manual (HCM) 95th percentile back of queues are listed in the table below, and the HCM reports are included in Appendix I.

HIGHWAY CAPACITY MANUAL - 95TH PERCENTILE BACK-OF-QUEUE (FEET)					
KEY INTERSECTIONS	EXISTING AM(PM)	BACKGROUND AM(PM)	FUTURE[1] (W/out Connection) AM(PM)	FUTURE[1] (WITH Connection) AM(PM)	STORAGE (ft)
US 50 @ MD 328					
NB Left – US 50	112(74)	117(77)	117(77)	117(77)	140
SB Left - US 50	116(244)	122(253)	122(253)	122(253)	475
US 50 @ Norris Taylor Dr					
NB Left – US 50	133(101)	139(104)	147(104)	147(104)	150
SB Left - US 50	2(12)	2(12)	3(12)	3(12)	475

[1]. Future traffic conditions were analyzed with and without the Calvert Street connection to Norris Taylor Drive/US 50.

CONCLUSIONS AND RECOMMENDATIONS

Upon the build-out of the Calvert Terrace project, the study results show all key intersections are projected to operate at acceptable future levels of service (LOS), with or without a Calvert Street connection to US 50.

- Critical Lane Volume (CLV) Analysis - The results of the CLV calculations show that all key intersections are projected to operate at “B” or better levels of service (LOS)

- HCM Signalized Intersection Analysis – The results determined adequate “D” or better overall future levels of service and storage for left turn queues, for the signalized intersections along US 50.

- HCM Unsignalized Intersection Analysis – The results show adequate “D” or better levels of service for all movements at the future build-out conditions.

We note that a traffic study was not required by MDOT SHA, since this project generates fewer than 50 total trips during either peak hour and the project does not require a Maryland State access permit. Based on the study results and minimal impacts, we respectfully request approval of this project from a traffic impact standpoint.



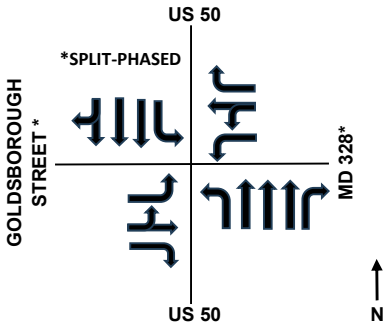
APPENDIX I-A

CRITICAL LANE VOLUME ANALYSIS

INTERSECTION: US 50 AT MD 328

CONDITION: EXISTING

		TOTAL VOLUME						OPPOSING LEFTS			SUBTOTALS		INTERSECTION	
		VOL 1	VOL 2	VOL 3	x LUF	TOTAL	Split-Phased (Y or N)	VOL	x LUF	TOTAL	VOL	CLV	CLV	LOS
AM	NB	1044	0	0	0.4	418	N	124	1	124	542	541.6	996	A
	SB	901	85	0	0.4	394	N	120	1	120	514			
	EB	51	114	0	0.6	99	Y	0	1	0	99	454.8		
	WB	393	200	0	0.6	356	Y	0	1	0	356			
PM	NB	900	0	0	0.4	360	N	224	1	224	584	584.0	1018	B
	SB	985	51	0	0.4	414	N	70	1	70	484			
	EB	51	314	0	0.6	219	Y	0	1	0	219	434.4		
	WB	195	164	0	0.6	215	Y	0	1	0	215			



CLV = CRITICAL LANE VOLUME
LOS = LEVEL OF SERVICE

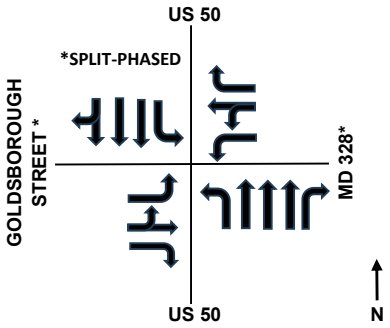
ANALYST = J. CAREY

CRITICAL LANE VOLUME ANALYSIS

INTERSECTION: US 50 AT MD 328

CONDITION: BACKGROUND

		TOTAL VOLUME						OPPOSING LEFTS			SUBTOTALS		INTERSECTION	
		VOL 1	VOL 2	VOL 3	x LUF	TOTAL	Split-Phased (Y or N)	VOL	x LUF	TOTAL	VOL	CLV	**CLV**	**LOS**
AM	NB	1086	0	0	0.4	434	N	129	1	129	563	563.4	**1037**	**B**
	SB	937	88	0	0.4	410	N	125	1	125	535			
	EB	53	119	0	0.6	103	Y	0	1	0	103	473.4		
	WB	409	208	0	0.6	370	Y	0	1	0	370			
PM	NB	936	0	0	0.4	374	N	233	1	233	607	607.4	**1060**	**B**
	SB	1025	53	0	0.4	431	N	73	1	73	504			
	EB	53	327	0	0.6	228	Y	0	1	0	228	452.4		
	WB	203	171	0	0.6	224	Y	0	1	0	224			



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LOS = LEVEL OF SERVICE

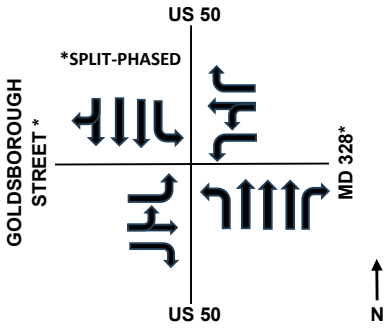
ANALYST = J. CAREY

CRITICAL LANE VOLUME ANALYSIS

INTERSECTION: US 50 AT MD 328

CONDITION: FUTURE (NO CONNECTION)

		TOTAL VOLUME						OPPOSING LEFTS			SUBTOTALS		INTERSECTION	
		VOL 1	VOL 2	VOL 3	x LUF	TOTAL	Split-Phased (Y or N)	VOL	x LUF	TOTAL	VOL	CLV	CLV	LOS
AM	NB	1091	0	0	0.4	436	N	129	1	129	565	565.4	1041	B
	SB	946	88	0	0.4	414	N	125	1	125	539			
	EB	53	122	0	0.6	105	Y	0	1	0	105	475.8		
	WB	409	209	0	0.6	371	Y	0	1	0	371			
PM	NB	945	0	0	0.4	378	N	233	1	233	611	611.0	1066	B
	SB	1032	53	0	0.4	434	N	73	1	73	507			
	EB	53	329	0	0.6	229	Y	0	1	0	229	455.4		
	WB	203	174	0	0.6	226	Y	0	1	0	226			



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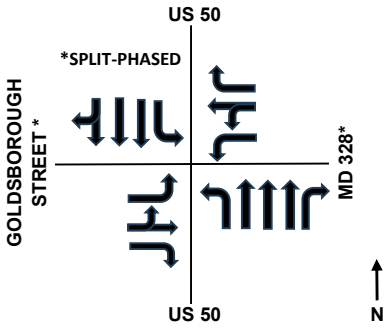
CRITICAL LANE VOLUME ANALYSIS

INTERSECTION: US 50 AT MD 328

CONDITION: FUTURE (WITH CONNECTION)

		TOTAL VOLUME						OPPOSING LEFTS			SUBTOTALS		INTERSECTION	
		VOL 1	VOL 2	VOL 3	x LUF	TOTAL	Split-Phased (Y or N)	VOL	x LUF	TOTAL	VOL	CLV	**CLV**	**LOS**
AM	NB	1091	0	0	0.4	436	N	129	1	129	565	565.4	**1035**	**B**
	SB	946	88	0	0.4	414	N	125	1	125	539			
	EB	42	122	0	0.6	98	Y	0	1	0	98	469.2		
	WB	409	209	0	0.6	371	Y	0	1	0	371			
PM	NB	945	0	0	0.4	378	N	233	1	233	611	611.0	**1056**	**B**
	SB	1032	53	0	0.4	434	N	73	1	73	507			
	EB	36	329	0	0.6	219	Y	0	1	0	219	445.2		
	WB	203	174	0	0.6	226	Y	0	1	0	226			



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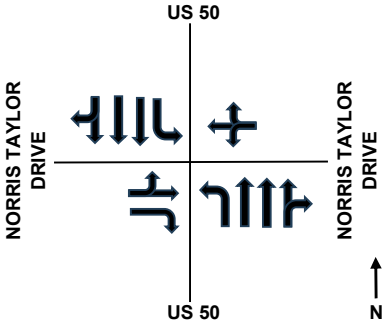
CRITICAL LANE VOLUME ANALYSIS

INTERSECTION: US 50 AT NORRIS TAYLOR DRIVE

CONDITION: EXISTING

		TOTAL VOLUME						OPPOSING LEFTS			SUBTOTALS		INTERSECTION	
		VOL 1	VOL 2	VOL 3	x LUF	TOTAL	Split-Phased (Y or N)	VOL	x LUF	TOTAL	VOL	CLV	CLV	LOS
AM	NB	1120	2	0	0.4	449	N	2	1	2	451	507.8	530	A
	SB	956	41	0	0.4	399	N	109	1	109	508			
	EB	18	0	0	1	18	N	4	1	4	22	22.0		
	WB	4	0	0	1	4	N	16	1	16	20			
PM	NB	1045	7	0	0.4	421	N	7	1	7	428	496.8	524	A
	SB	1040	62	0	0.4	441	N	56	1	56	497			
	EB	22	0	0	1	22	N	5	1	5	27	27.0		
	WB	6	0	0	1	6	N	20	1	20	26			

EB ADJUSTED LEFTS			
AM	16	1.1	18
PM	20	1.1	22



WB ADJUSTED LEFTS			
AM	4	1.1	4
PM	5	1.1	6

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ANALYST = J. CAREY

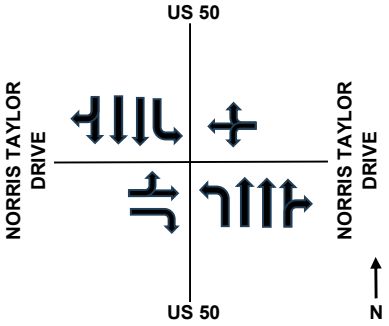
CRITICAL LANE VOLUME ANALYSIS

INTERSECTION: US 50 AT NORRIS TAYLOR DRIVE

CONDITION: BACKGROUND

		TOTAL VOLUME						OPPOSING LEFTS			SUBTOTALS		INTERSECTION	
		VOL 1	VOL 2	VOL 3	x LUF	TOTAL	Split-Phased (Y or N)	VOL	x LUF	TOTAL	VOL	CLV	**CLV**	**LOS**
AM	NB	1165	2	0	0.4	467	N	2	1	2	469	528.2	**551**	**A**
	SB	995	43	0	0.4	415	N	113	1	113	528			
	EB	19	0	0	1	19	N	4	1	4	23	23.0		
	WB	4	0	0	1	4	N	17	1	17	21			
PM	NB	1087	7	0	0.4	438	N	7	1	7	445	516.8	**545**	**A**
	SB	1082	65	0	0.4	459	N	58	1	58	517			
	EB	23	0	0	1	23	N	5	1	5	28	28.0		
	WB	6	0	0	1	6	N	21	1	21	27			

EB ADJUSTED LEFTS			
AM	17	1.1	19
PM	21	1.1	23



WB ADJUSTED LEFTS			
AM	4	1.1	4
PM	5	1.1	6

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LOS = LEVEL OF SERVICE

ANALYST = J. CAREY

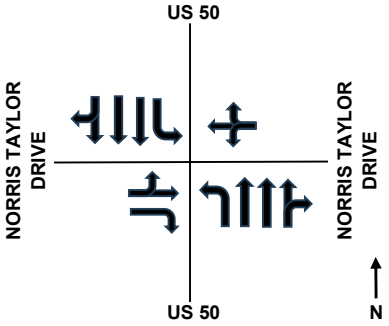
CRITICAL LANE VOLUME ANALYSIS

INTERSECTION: US 50 AT NORRIS TAYLOR DRIVE

CONDITION: FUTURE (NO CONNECTION)

		TOTAL VOLUME						OPPOSING LEFTS			SUBTOTALS		INTERSECTION	
		VOL 1	VOL 2	VOL 3	x LUF	TOTAL	Split-Phased (Y or N)	VOL	x LUF	TOTAL	VOL	CLV	CLV	LOS
AM	NB	1169	2	0	0.4	468	N	2	1	2	470	529.0	552	A
	SB	997	43	0	0.4	416	N	113	1	113	529			
	EB	19	0	0	1	19	N	4	1	4	23	23.0		
	WB	4	0	0	1	4	N	17	1	17	21			
PM	NB	1090	7	0	0.4	439	N	7	1	7	446	518.0	546	A
	SB	1085	65	0	0.4	460	N	58	1	58	518			
	EB	23	0	0	1	23	N	5	1	5	28	28.0		
	WB	6	0	0	1	6	N	21	1	21	27			

EB ADJUSTED LEFTS			
AM	17	1.1	19
PM	21	1.1	23



WB ADJUSTED LEFTS			
AM	4	1.1	4
PM	5	1.1	6

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ANALYST = J. CAREY

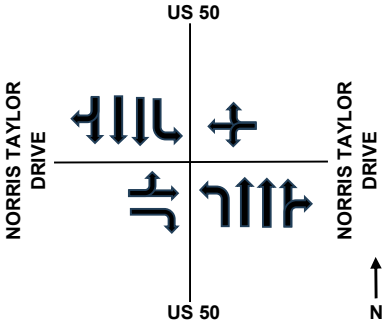
CRITICAL LANE VOLUME ANALYSIS

INTERSECTION: US 50 AT NORRIS TAYLOR DRIVE

CONDITION: FUTURE (WITH CONNECTION)

		TOTAL VOLUME						OPPOSING LEFTS			SUBTOTALS		INTERSECTION	
		VOL 1	VOL 2	VOL 3	x LUF	TOTAL	Split-Phased (Y or N)	VOL	x LUF	TOTAL	VOL	CLV	CLV	LOS
AM	NB	1151	2	0	0.4	461	N	2	1	2	463	529.0	572	A
	SB	991	49	0	0.4	416	N	113	1	113	529			
	EB	39	0	0	1	39	N	4	1	4	43	43.0		
	WB	4	0	0	1	4	N	35	1	35	39			
PM	NB	1068	7	0	0.4	430	N	7	1	7	437	518.0	570	A
	SB	1076	74	0	0.4	460	N	58	1	58	518			
	EB	47	0	0	1	47	N	5	1	5	52	52.0		
	WB	6	0	0	1	6	N	43	1	43	49			

EB ADJUSTED LEFTS			
AM	35	1.1	39
PM	43	1.1	47



WB ADJUSTED LEFTS			
AM	4	1.1	4
PM	5	1.1	6

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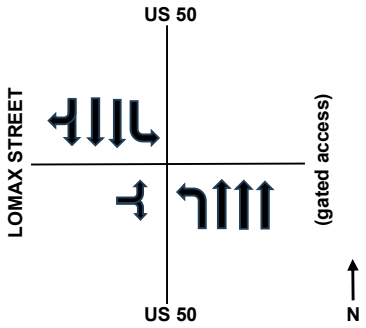
ANALYST = J. CAREY

CRITICAL LANE VOLUME ANALYSIS

INTERSECTION: US 50 AT LOMAX STREET

CONDITION: EXISTING

		TOTAL VOLUME						OPPOSING LEFTS			SUBTOTALS		INTERSECTION	
		VOL 1	VOL 2	VOL 3	x LUF	TOTAL	Split-Phased (Y or N)	VOL	x LUF	TOTAL	VOL	CLV	**CLV**	**LOS**
AM	NB	1238	0	0	0.4	495	N	29	1	29	524	524.2	**548**	**A**
	SB	1068	7	0	0.4	430	N	59	1	59	489			
	EB	6	18	0	1	24	N	0	1	0	24	24.0		
	WB	0	0	0	1	0	N	0	1	0	0			
PM	NB	1109	0	0	0.4	444	N	7	1	7	451	516.8	**544**	**A**
	SB	1161	11	0	0.4	469	N	48	1	48	517			
	EB	4	23	0	1	27	N	0	1	0	27	27.0		
	WB	0	0	0	1	0	N	0	1	0	0			



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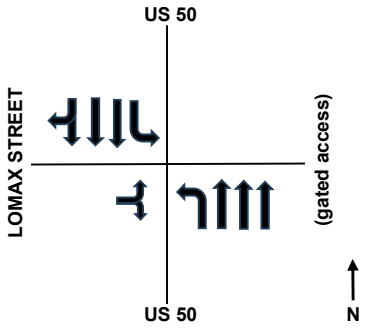
CRITICAL LANE VOLUME ANALYSIS

INTERSECTION: US 50 AT LOMAX STREET

CONDITION: BACKGROUND

		TOTAL VOLUME						OPPOSING LEFTS			SUBTOTALS		INTERSECTION	
		VOL 1	VOL 2	VOL 3	x LUF	TOTAL	Split-Phased (Y or N)	VOL	x LUF	TOTAL	VOL	CLV	**CLV**	**LOS**
AM	NB	1288	0	0	0.4	515	N	29	1	29	544	544.2	**569**	**A**
	SB	1111	7	0	0.4	447	N	62	1	62	509			
	EB	6	19	0	1	25	N	0	1	0	25	25.0		
	WB	0	0	0	1	0	N	0	1	0	0			
PM	NB	1154	0	0	0.4	462	N	7	1	7	469	537.6	**566**	**A**
	SB	1208	11	0	0.4	488	N	50	1	50	538			
	EB	4	24	0	1	28	N	0	1	0	28	28.0		
	WB	0	0	0	1	0	N	0	1	0	0			



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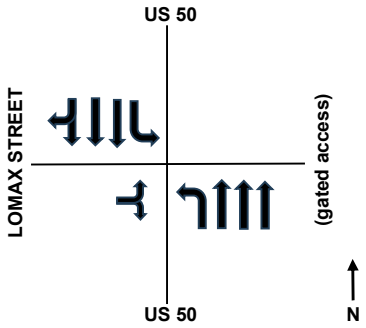
ANALYST = J. CAREY

CRITICAL LANE VOLUME ANALYSIS

INTERSECTION: US 50 AT LOMAX STREET

CONDITION: FUTURE (NO CONNECTION)

		TOTAL VOLUME						OPPOSING LEFTS			SUBTOTALS		INTERSECTION	
		VOL 1	VOL 2	VOL 3	x LUF	TOTAL	Split-Phased (Y or N)	VOL	x LUF	TOTAL	VOL	CLV	**CLV**	**LOS**
AM	NB	1288	0	0	0.4	515	N	29	1	29	544	544.2	**582**	**A**
	SB	1111	9	0	0.4	448	N	67	1	67	515			
	EB	10	28	0	1	38	N	0	1	0	38	38.0		
	WB	0	0	0	1	0	N	0	1	0	0			
PM	NB	1154	0	0	0.4	462	N	7	1	7	469	547.8	**586**	**A**
	SB	1208	14	0	0.4	489	N	59	1	59	548			
	EB	7	31	0	1	38	N	0	1	0	38	38.0		
	WB	0	0	0	1	0	N	0	1	0	0			



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LOS = LEVEL OF SERVICE

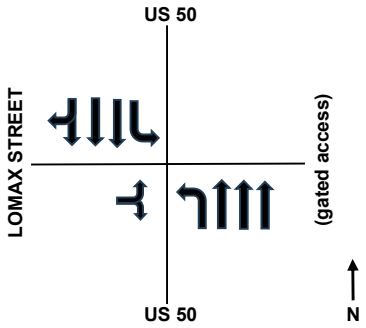
ANALYST = J. CAREY

CRITICAL LANE VOLUME ANALYSIS

INTERSECTION: US 50 AT LOMAX STREET

CONDITION: FUTURE (WITH CONNECTION)

		TOTAL VOLUME						OPPOSING LEFTS			SUBTOTALS		INTERSECTION	
		VOL 1	VOL 2	VOL 3	x LUF	TOTAL	Split-Phased (Y or N)	VOL	x LUF	TOTAL	VOL	CLV	CLV	LOS
AM	NB	1277	0	0	0.4	511	N	29	1	29	540	539.8	571	A
	SB	1111	3	0	0.4	446	N	67	1	67	513			
	EB	3	28	0	1	31	N	0	1	0	31	31.0		
	WB	0	0	0	1	0	N	0	1	0	0			
PM	NB	1137	0	0	0.4	455	N	7	1	7	462	544.2	577	A
	SB	1208	5	0	0.4	485	N	59	1	59	544			
	EB	2	31	0	1	33	N	0	1	0	33	33.0		
	WB	0	0	0	1	0	N	0	1	0	0			



CLV = CRITICAL LANE VOLUME
LOS = LEVEL OF SERVICE

ANALYST = J. CAREY

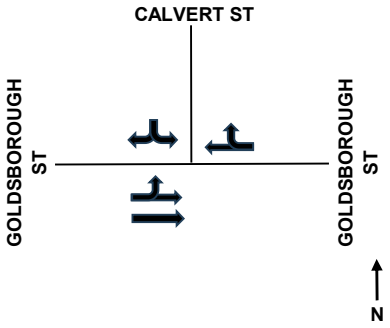
CRITICAL LANE VOLUME ANALYSIS

INTERSECTION: GOLDSBOROUGH ST AT CALVERT ST

CONDITION: EXISTING

		TOTAL VOLUME						OPPOSING LEFTS			SUBTOTALS		INTERSECTION	
		VOL 1	VOL 2	VOL 3	x LUF	TOTAL	Split-Phased (Y or N)	VOL	x LUF	TOTAL	VOL	CLV	CLV	LOS
AM	NB	0	0	0	1	0	N	0	1	0	0	33.0	463	A
	SB	13	20	0	1	33	N	0	1	0	33			
	EB	36	284	0.55	1	321	N	0	1	0	321	430.0		
	WB	384	28	0	1	412	N	18	1	18	430			
PM	NB	0	0	0	1	0	N	0	1	0	0	32.0	593	A
	SB	17	15	0	1	32	N	0	1	0	32			
	EB	70	490	0.55	1	561	N	0	1	0	561	560.6		
	WB	275	17	0	1	292	N	35	1	35	327			

EB ADJUSTED LEFTS			
AM	18	2	36
PM	35	2	70



CLV = CRITICAL LANE VOLUME
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ANALYST = J. CAREY

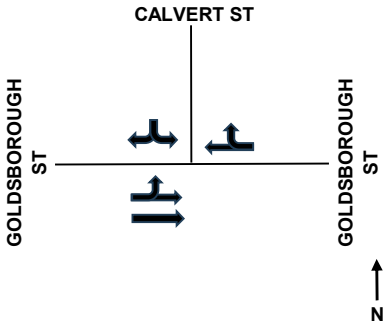
CRITICAL LANE VOLUME ANALYSIS

INTERSECTION: GOLDSBOROUGH ST AT CALVERT ST

CONDITION: BACKGROUND

		TOTAL VOLUME						OPPOSING LEFTS			SUBTOTALS		INTERSECTION	
		VOL 1	VOL 2	VOL 3	x LUF	TOTAL	Split-Phased (Y or N)	VOL	x LUF	TOTAL	VOL	CLV	CLV	LOS
AM	NB	0	0	0	1	0	N	0	1	0	0	35.0	483	A
	SB	14	21	0	1	35	N	0	1	0	35			
	EB	38	295	0.55	1	334	N	0	1	0	334	448.0		
	WB	400	29	0	1	429	N	19	1	19	448			
PM	NB	0	0	0	1	0	N	0	1	0	0	34.0	617	A
	SB	18	16	0	1	34	N	0	1	0	34			
	EB	72	510	0.55	1	583	N	0	1	0	583	582.6		
	WB	286	18	0	1	304	N	36	1	36	340			

EB ADJUSTED LEFTS			
AM	19	2	38
PM	36	2	72



CLV = CRITICAL LANE VOLUME
LOS = LEVEL OF SERVICE

ANALYST = J. CAREY

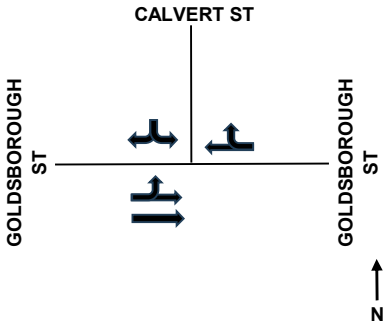
CRITICAL LANE VOLUME ANALYSIS

INTERSECTION: GOLDSBOROUGH ST AT CALVERT ST

CONDITION: FUTURE (NO CONNECTION)

		TOTAL VOLUME						OPPOSING LEFTS			SUBTOTALS		INTERSECTION	
		VOL 1	VOL 2	VOL 3	x LUF	TOTAL	Split-Phased (Y or N)	VOL	x LUF	TOTAL	VOL	CLV	CLV	LOS
AM	NB	0	0	0	1	0	N	0	1	0	0	38.0	487	A
	SB	17	21	0	1	38	N	0	1	0	38			
	EB	38	295	0.55	1	334	N	0	1	0	334	449.0		
	WB	400	30	0	1	430	N	19	1	19	449			
PM	NB	0	0	0	1	0	N	0	1	0	0	36.0	619	A
	SB	20	16	0	1	36	N	0	1	0	36			
	EB	72	510	0.55	1	583	N	0	1	0	583	582.6		
	WB	286	21	0	1	307	N	36	1	36	343			

EB ADJUSTED LEFTS			
AM	19	2	38
PM	36	2	72



CLV = CRITICAL LANE VOLUME
LOS = LEVEL OF SERVICE

ANALYST = J. CAREY

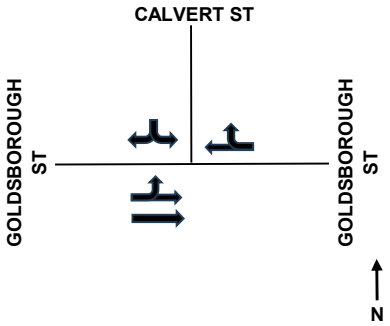
CRITICAL LANE VOLUME ANALYSIS

INTERSECTION: GOLDSBOROUGH ST AT CALVERT ST

CONDITION: FUTURE (WITH CONNECTION)

		TOTAL VOLUME						OPPOSING LEFTS			SUBTOTALS		INTERSECTION	
		VOL 1	VOL 2	VOL 3	x LUF	TOTAL	Split-Phased (Y or N)	VOL	x LUF	TOTAL	VOL	CLV	CLV	LOS
AM	NB	0	0	0	1	0	N	0	1	0	0	31.0	480	A
	SB	10	21	0	1	31	N	0	1	0	31			
	EB	38	291	0.55	1	330	N	0	1	0	330	449.0		
	WB	400	30	0	1	430	N	19	1	19	449			
PM	NB	0	0	0	1	0	N	0	1	0	0	27.0	602	A
	SB	11	16	0	1	27	N	0	1	0	27			
	EB	72	502	0.55	1	575	N	0	1	0	575	574.6		
	WB	286	21	0	1	307	N	36	1	36	343			

EB ADJUSTED LEFTS			
AM	19	2	38
PM	36	2	72



CLV = CRITICAL LANE VOLUME
LOS = LEVEL OF SERVICE

ANALYST = J. CAREY

CRITICAL LANE VOLUME ANALYSIS

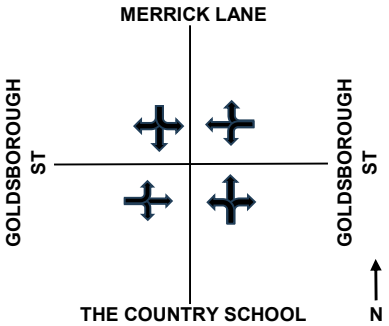
INTERSECTION: GOLDSBOROUGH ST AT MERRICK LN / COUNTRY SCHOOL

CONDITION: EXISTING

		TOTAL VOLUME						OPPOSING LEFTS			SUBTOTALS		INTERSECTION	
		VOL 1	VOL 2	VOL 3	x LUF	TOTAL	Split-Phased (Y or N)	VOL	x LUF	TOTAL	VOL	CLV	CLV	LOS
AM	NB	65	52	0	1	117	N	8	1	8	125	125.0	543	A
	SB	9	1	11	1	21	N	59	1	59	80			
	EB	10	187	118	1	315	N	93	1	93	408	418.0		
	WB	102	308	3	1	413	N	5	1	5	418			
PM	NB	21	22	0	1	43	N	14	1	14	57	57.0	616	A
	SB	15	13	0	1	28	N	19	1	19	47			
	EB	44	476	20	1	540	N	19	1	19	559	559.0		
	WB	38	254	16	1	308	N	22	1	22	330			

EB ADJUSTED LEFTS			
AM	5	2	10
PM	22	2	44

NB ADJUSTED LEFTS			
AM	59	1.1	65
PM	19	1.1	21



SB ADJUSTED LEFTS			
AM	8	1.1	9
PM	14	1.1	15

WB ADJUSTED LEFTS			
AM	93	1.1	102
PM	19	2	38

CLV = CRITICAL LANE VOLUME
LOS = LEVEL OF SERVICE

ANALYST = J. CAREY

CRITICAL LANE VOLUME ANALYSIS

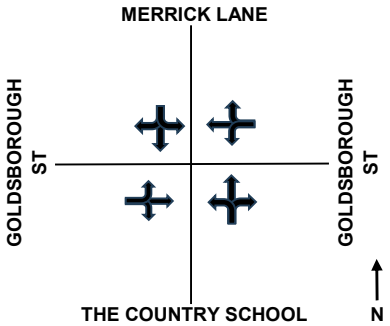
INTERSECTION: GOLDSBOROUGH ST AT MERRICK LN / COUNTRY SCHOOL

CONDITION: BACKGROUND

		TOTAL VOLUME						OPPOSING LEFTS			SUBTOTALS		INTERSECTION	
		VOL 1	VOL 2	VOL 3	x LUF	TOTAL	Split-Phased (Y or N)	VOL	x LUF	TOTAL	VOL	CLV	CLV	LOS
AM	NB	65	52	0	1	117	N	8	1	8	125	125.0	639	A
	SB	9	1	11	1	21	N	59	1	59	80			
	EB	10	195	118	1	323	N	93	1	93	416	514.0		
	WB	186	320	3	1	509	N	5	1	5	514			
PM	NB	21	22	0	1	43	N	15	1	15	58	58.0	638	A
	SB	17	14	0	1	31	N	19	1	19	50			
	EB	46	495	20	1	561	N	19	1	19	580	580.0		
	WB	38	264	17	1	319	N	23	1	23	342			

EB ADJUSTED LEFTS			
AM	5	2	10
PM	23	2	46

NB ADJUSTED LEFTS			
AM	59	1.1	65
PM	19	1.1	21



SB ADJUSTED LEFTS			
AM	8	1.1	9
PM	15	1.1	17

WB ADJUSTED LEFTS			
AM	93	2	186
PM	19	2	38

CLV = CRITICAL LANE VOLUME
LOS = LEVEL OF SERVICE

ANALYST = J. CAREY

CRITICAL LANE VOLUME ANALYSIS

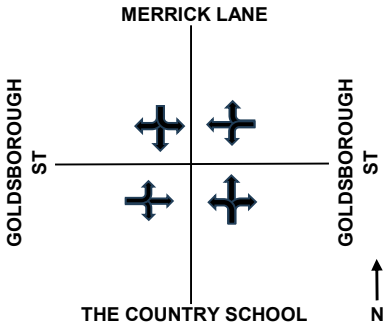
INTERSECTION: GOLDSBOROUGH ST AT MERRICK LN / COUNTRY SCHOOL

CONDITION: FUTURE (NO CONNECTION)

		TOTAL VOLUME						OPPOSING LEFTS			SUBTOTALS		INTERSECTION	
		VOL 1	VOL 2	VOL 3	x LUF	TOTAL	Split-Phased (Y or N)	VOL	x LUF	TOTAL	VOL	CLV	CLV	LOS
AM	NB	65	52	0	1	117	N	8	1	8	125	125.0	641	A
	SB	9	1	14	1	24	N	59	1	59	83			
	EB	14	195	118	1	327	N	93	1	93	420	516.0		
	WB	186	320	3	1	509	N	7	1	7	516			
PM	NB	21	22	0	1	43	N	15	1	15	58	58.0	644	A
	SB	17	16	0	1	33	N	19	1	19	52			
	EB	52	495	20	1	567	N	19	1	19	586	586.0		
	WB	38	264	17	1	319	N	26	1	26	345			

EB ADJUSTED LEFTS			
AM	7	2	14
PM	26	2	52

NB ADJUSTED LEFTS			
AM	59	1.1	65
PM	19	1.1	21



SB ADJUSTED LEFTS			
AM	8	1.1	9
PM	15	1.1	17

WB ADJUSTED LEFTS			
AM	93	2	186
PM	19	2	38

CLV = CRITICAL LANE VOLUME
LOS = LEVEL OF SERVICE

ANALYST = J. CAREY

CRITICAL LANE VOLUME ANALYSIS

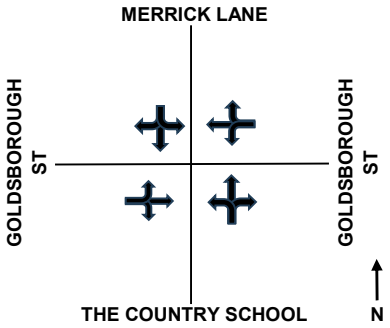
INTERSECTION: GOLDSBOROUGH ST AT MERRICK LN / COUNTRY SCHOOL

CONDITION: FUTURE (WITH CONNECTION)

		TOTAL VOLUME						OPPOSING LEFTS			SUBTOTALS		INTERSECTION	
		VOL 1	VOL 2	VOL 3	x LUF	TOTAL	Split-Phased (Y or N)	VOL	x LUF	TOTAL	VOL	CLV	CLV	LOS
AM	NB	65	52	0	1	117	N	4	1	4	121	121.0	637	A
	SB	4	1	14	1	19	N	59	1	59	78			
	EB	14	195	118	1	327	N	93	1	93	420	516.0		
	WB	186	320	3	1	509	N	7	1	7	516			
PM	NB	21	22	0	1	43	N	7	1	7	50	50.0	636	A
	SB	8	16	0	1	24	N	19	1	19	43			
	EB	52	495	20	1	567	N	19	1	19	586	586.0		
	WB	38	264	17	1	319	N	26	1	26	345			

EB ADJUSTED LEFTS			
AM	7	2	14
PM	26	2	52

NB ADJUSTED LEFTS			
AM	59	1.1	65
PM	19	1.1	21



SB ADJUSTED LEFTS			
AM	4	1.1	4
PM	7	1.1	8

WB ADJUSTED LEFTS			
AM	93	2	186
PM	19	2	38

CLV = CRITICAL LANE VOLUME
LOS = LEVEL OF SERVICE

ANALYST = J. CAREY

CRITICAL LANE VOLUME ANALYSIS

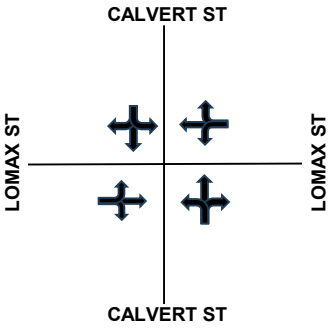
INTERSECTION: CALVERT ST AT LOMAX ST

CONDITION: EXISTING

		TOTAL VOLUME						OPPOSING LEFTS			SUBTOTALS		INTERSECTION	
		VOL 1	VOL 2	VOL 3	x LUF	TOTAL	Split-Phased (Y or N)	VOL	x LUF	TOTAL	VOL	CLV	CLV	LOS
AM	NB	1	14	12	1	27	N	7	1	7	34	34.0	58	A
	SB	8	8	4	1	20	N	1	1	1	21			
	EB	4	12	2	1	18	N	6	1	6	24	24.0		
	WB	7	6	4	1	17	N	4	1	4	21			
PM	NB	1	13	20	1	34	N	4	1	4	38	38.0	73	A
	SB	4	6	4	1	14	N	1	1	1	15			
	EB	7	8	3	1	18	N	10	1	10	28	35.0		
	WB	11	9	9	1	29	N	6	1	6	35			

EB ADJUSTED LEFTS			
AM	4	1.1	4
PM	6	1.1	7

NB ADJUSTED LEFTS			
AM	1	1.1	1
PM	1	1.1	1



SB ADJUSTED LEFTS			
AM	7	1.1	8
PM	4	1.1	4

WB ADJUSTED LEFTS			
AM	6	1.1	7
PM	10	1.1	11

CLV = CRITICAL LANE VOLUME
LOS = LEVEL OF SERVICE

ANALYST = J. CAREY

CRITICAL LANE VOLUME ANALYSIS

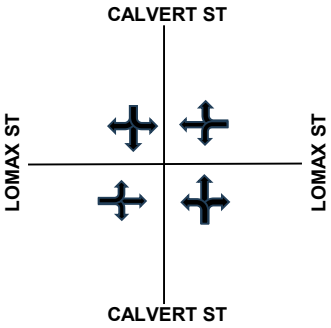
INTERSECTION: CALVERT ST AT LOMAX ST

CONDITION: BACKGROUND

		TOTAL VOLUME						OPPOSING LEFTS			SUBTOTALS		INTERSECTION	
		VOL 1	VOL 2	VOL 3	x LUF	TOTAL	Split-Phased (Y or N)	VOL	x LUF	TOTAL	VOL	CLV	CLV	LOS
AM	NB	1	15	12	1	28	N	7	1	7	35	35.0	59	A
	SB	8	8	4	1	20	N	1	1	1	21			
	EB	4	12	2	1	18	N	6	1	6	24	24.0		
	WB	7	6	4	1	17	N	4	1	4	21			
PM	NB	1	14	21	1	36	N	4	1	4	40	40.0	75	A
	SB	4	6	4	1	14	N	1	1	1	15			
	EB	7	8	3	1	18	N	10	1	10	28	35.0		
	WB	11	9	9	1	29	N	6	1	6	35			

EB ADJUSTED LEFTS			
AM	4	1.1	4
PM	6	1.1	7

NB ADJUSTED LEFTS			
AM	1	1.1	1
PM	1	1.1	1



SB ADJUSTED LEFTS			
AM	7	1.1	8
PM	4	1.1	4

WB ADJUSTED LEFTS			
AM	6	1.1	7
PM	10	1.1	11

CLV = CRITICAL LANE VOLUME
LOS = LEVEL OF SERVICE

ANALYST = J. CAREY

CRITICAL LANE VOLUME ANALYSIS

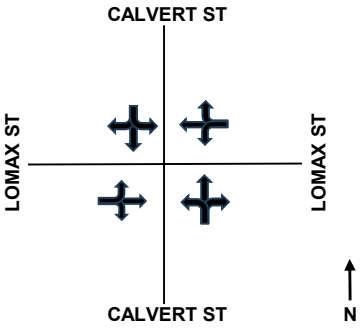
INTERSECTION: CALVERT ST AT LOMAX ST

CONDITION: FUTURE (NO CONNECTION)

		TOTAL VOLUME						OPPOSING LEFTS			SUBTOTALS		INTERSECTION	
		VOL 1	VOL 2	VOL 3	x LUF	TOTAL	Split-Phased (Y or N)	VOL	x LUF	TOTAL	VOL	CLV	**CLV**	**LOS**
AM	NB	1	16	12	1	29	N	16	1	16	45	45.0	**73**	**A**
	SB	18	11	4	1	33	N	1	1	1	34			
	EB	4	16	2	1	22	N	6	1	6	28	28.0		
	WB	7	8	9	1	24	N	4	1	4	28			
PM	NB	1	17	21	1	39	N	11	1	11	50	50.0	**97**	**A**
	SB	12	8	4	1	24	N	1	1	1	25			
	EB	7	11	3	1	21	N	10	1	10	31	47.0		
	WB	11	12	18	1	41	N	6	1	6	47			

EB ADJUSTED LEFTS			
AM	4	1.1	4
PM	6	1.1	7

NB ADJUSTED LEFTS			
AM	1	1.1	1
PM	1	1.1	1



SB ADJUSTED LEFTS			
AM	16	1.1	18
PM	11	1.1	12

WB ADJUSTED LEFTS			
AM	6	1.1	7
PM	10	1.1	11

CLV = CRITICAL LANE VOLUME
LOS = LEVEL OF SERVICE

ANALYST = J. CAREY

CRITICAL LANE VOLUME ANALYSIS

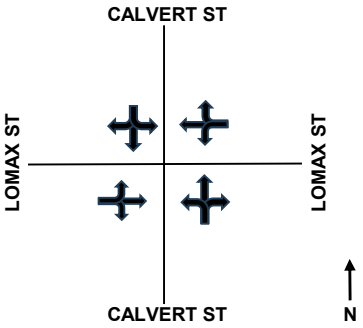
INTERSECTION: CALVERT ST AT LOMAX ST

CONDITION: FUTURE (WITH CONNECTION)

		TOTAL VOLUME						OPPOSING LEFTS			SUBTOTALS		INTERSECTION	
		VOL 1	VOL 2	VOL 3	x LUF	TOTAL	Split-Phased (Y or N)	VOL	x LUF	TOTAL	VOL	CLV	**CLV**	**LOS**
AM	NB	1	23	12	1	36	N	13	1	13	49	49.0	**81**	**A**
	SB	14	11	8	1	33	N	1	1	1	34			
	EB	12	12	2	1	26	N	6	1	6	32	32.0		
	WB	7	3	8	1	18	N	11	1	11	29			
PM	NB	1	26	21	1	48	N	9	1	9	57	57.0	**105**	**A**
	SB	10	8	10	1	28	N	1	1	1	29			
	EB	18	8	3	1	29	N	10	1	10	39	48.0		
	WB	11	5	16	1	32	N	16	1	16	48			

EB ADJUSTED LEFTS			
AM	11	1.1	12
PM	16	1.1	18

NB ADJUSTED LEFTS			
AM	1	1.1	1
PM	1	1.1	1



SB ADJUSTED LEFTS			
AM	13	1.1	14
PM	9	1.1	10

WB ADJUSTED LEFTS			
AM	6	1.1	7
PM	10	1.1	11

CLV = CRITICAL LANE VOLUME
LOS = LEVEL OF SERVICE

ANALYST = J. CAREY

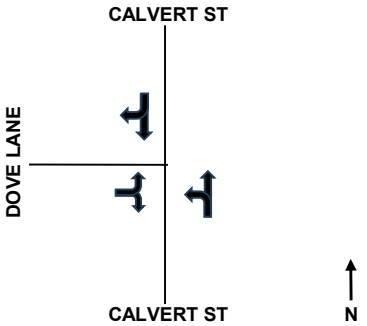
CRITICAL LANE VOLUME ANALYSIS

INTERSECTION: CALVERT ST AT DOVE LANE

CONDITION: EXISTING

		TOTAL VOLUME						OPPOSING LEFTS			SUBTOTALS		INTERSECTION	
		VOL 1	VOL 2	VOL 3	x LUF	TOTAL	Split-Phased (Y or N)	VOL	x LUF	TOTAL	VOL	CLV	CLV	LOS
AM	NB	1	19	0	1	20	N	0	1	0	20	20.0	20	A
	SB	17	0	0	1	17	N	1	1	1	18			
	EB	0	0	0	1	0	N	0	1	0	0	0.0		
	WB	0	0	0	1	0	N	0	1	0	0			
PM	NB	3	26	0	1	29	N	0	1	0	29	29.0	32	A
	SB	11	0	0	1	11	N	3	1	3	14			
	EB	3	0	0	1	3	N	0	1	0	3	3.0		
	WB	0	0	0	1	0	N	0	1	0	0			

NB ADJUSTED LEFTS			
AM	1	1.1	1
PM	3	1.1	3



CLV = CRITICAL LANE VOLUME
LOS = LEVEL OF SERVICE

ANALYST = J. CAREY

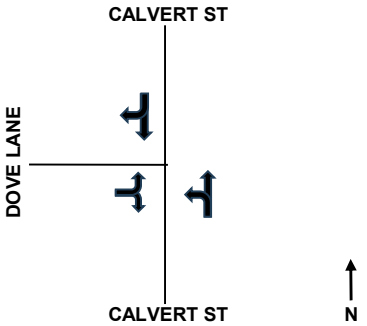
CRITICAL LANE VOLUME ANALYSIS

INTERSECTION: CALVERT ST AT DOVE LANE

CONDITION: BACKGROUND

		TOTAL VOLUME						OPPOSING LEFTS			SUBTOTALS		INTERSECTION	
		VOL 1	VOL 2	VOL 3	x LUF	TOTAL	Split-Phased (Y or N)	VOL	x LUF	TOTAL	VOL	CLV	**CLV**	**LOS**
AM	NB	1	20	0	1	21	N	0	1	0	21	21.0	**21**	**A**
	SB	18	0	0	1	18	N	1	1	1	19			
	EB	0	0	0	1	0	N	0	1	0	0	0.0		
	WB	0	0	0	1	0	N	0	1	0	0			
PM	NB	3	27	0	1	30	N	0	1	0	30	30.0	**33**	**A**
	SB	11	0	0	1	11	N	3	1	3	14			
	EB	3	0	0	1	3	N	0	1	0	3	3.0		
	WB	0	0	0	1	0	N	0	1	0	0			

NB ADJUSTED LEFTS			
AM	1	1.1	1
PM	3	1.1	3



CLV = CRITICAL LANE VOLUME
LOS = LEVEL OF SERVICE

ANALYST = J. CAREY

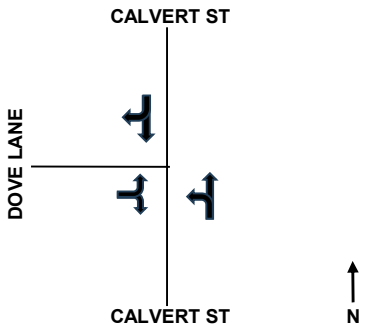
CRITICAL LANE VOLUME ANALYSIS

INTERSECTION: CALVERT ST AT DOVE LANE

CONDITION: FUTURE (NO CONNECTION)

		TOTAL VOLUME						OPPOSING LEFTS			SUBTOTALS		INTERSECTION	
		VOL 1	VOL 2	VOL 3	x LUF	TOTAL	Split-Phased (Y or N)	VOL	x LUF	TOTAL	VOL	CLV	**CLV**	**LOS**
AM	NB	8	20	0	1	28	N	0	1	0	28	28.0	**40**	**A**
	SB	18	0	0	1	18	N	7	1	7	25			
	EB	12	0	0	1	12	N	0	1	0	12	12.0		
	WB	0	0	0	1	0	N	0	1	0	0			
PM	NB	17	27	0	1	44	N	0	1	0	44	44.0	**56**	**A**
	SB	11	0	0	1	11	N	15	1	15	26			
	EB	12	0	0	1	12	N	0	1	0	12	12.0		
	WB	0	0	0	1	0	N	0	1	0	0			

NB ADJUSTED LEFTS			
AM	7	1.1	8
PM	15	1.1	17



CLV = CRITICAL LANE VOLUME
LOS = LEVEL OF SERVICE

ANALYST = J. CAREY

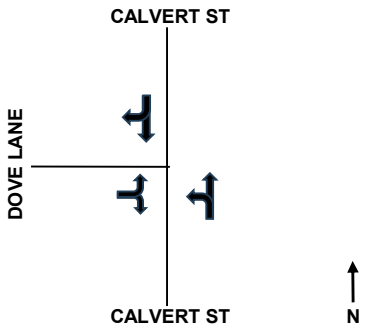
CRITICAL LANE VOLUME ANALYSIS

INTERSECTION: CALVERT ST AT DOVE LANE

CONDITION: FUTURE (WITH CONNECTION)

		TOTAL VOLUME						OPPOSING LEFTS			SUBTOTALS		INTERSECTION	
		VOL 1	VOL 2	VOL 3	x LUF	TOTAL	Split-Phased (Y or N)	VOL	x LUF	TOTAL	VOL	CLV	**CLV**	**LOS**
AM	NB	7	34	0	1	41	N	0	1	0	41	41.0	**54**	**A**
	SB	22	2	0	1	24	N	6	1	6	30			
	EB	4	9	0	1	13	N	0	1	0	13	13.0		
	WB	0	0	0	1	0	N	0	1	0	0			
PM	NB	14	46	0	1	60	N	0	1	0	60	60.0	**73**	**A**
	SB	17	3	0	1	20	N	13	1	13	33			
	EB	3	10	0	1	13	N	0	1	0	13	13.0		
	WB	0	0	0	1	0	N	0	1	0	0			

NB ADJUSTED LEFTS			
AM	6	1.1	7
PM	13	1.1	14



CLV = CRITICAL LANE VOLUME
LOS = LEVEL OF SERVICE

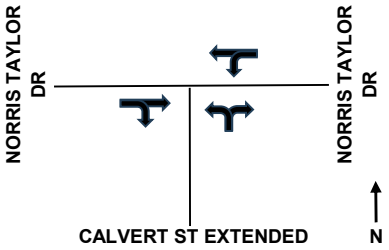
ANALYST = J. CAREY

CRITICAL LANE VOLUME ANALYSIS

INTERSECTION: CALVERT ST EXTENDED AT NORRIS TAYLOR DR

CONDITION: FUTURE (WITH CONNECTION)

		TOTAL VOLUME						OPPOSING LEFTS			SUBTOTALS		INTERSECTION	
		VOL 1	VOL 2	VOL 3	x LUF	TOTAL	Split-Phased (Y or N)	VOL	x LUF	TOTAL	VOL	CLV	CLV	LOS
AM	NB	38	0	0	1	38	N	0	1	0	38	38.0	64	A
	SB	0	0	0	1	0	N	0	1	0	0			
	EB	0	0	0	1	0	N	0	1	0	0	26.0		
	WB	26	0	0	1	26	N	0	1	0	26			
PM	NB	49	0	0	1	49	N	0	1	0	49	49.0	71	A
	SB	0	0	0	1	0	N	0	1	0	0			
	EB	0	0	0	1	0	N	0	1	0	0	22.0		
	WB	22	0	0	1	22	N	0	1	0	22			



WB ADJUSTED LEFTS			
AM	24	1.1	26
PM	20	1.1	22

CLV = CRITICAL LANE VOLUME
LOS = LEVEL OF SERVICE

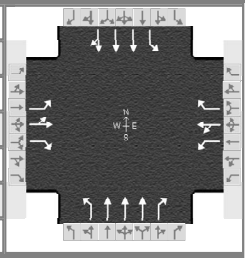
ANALYST = J. CAREY



APPENDIX I-B

HCS Signalized Intersection Input Data

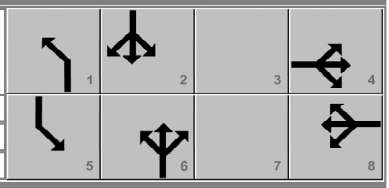
General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	J. Carey	Analysis Date	Oct 19, 2025	Area Type	Other
Jurisdiction	Easton, MD	Time Period	AM Peak	PHF	0.87
Urban Street		Analysis Year	Existing	Analysis Period	1> 7:15
Intersection	US 50 @ MD 328	File Name	US 50 at MD 328 - Ex AM - SHA timing - 135 sec.…		
Project Description	4286				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	51	114	118	393	200	180	120	1044	154	124	901	85

Signal Information			
Cycle, s	135.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	18.5	42.5	18.0	32.0	0.0	0.0	
Yellow	3.5	5.0	4.0	4.0	0.0	0.0	
Red	2.0	1.5	2.0	2.0	0.0	0.0	



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	51	114	118	393	200	180	120	1044	154	124	901	85
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	2	2	2	2	2	2	2	6	2	2	6	
Ped / Bike / RTOR, /h	0	0	0	0	1	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	4	3	3	4	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0	12.0	10.0	10.0	10.0	11.0	12.0	11.0	12.0	11.0	
Turn Bay Length, ft	80	0	0	385	0	400	140	0	280	475	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	25	25	25	30	30	30	35	35	35	35	35	35

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		24.0		38.0	24.0	49.0	24.0	49.0
Yellow Change Interval (*Y*), s		4.0		4.0	3.5	5.0	3.5	5.0
Red Clearance Interval (R_c), s		2.0		2.0	2.0	1.5	2.0	1.5
Minimum Green (G_{min}), s		7		7	5	20	5	20
Start-Up Lost Time (*l*t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Passage (*PT*), s		2.0		2.0	2.0	2.0	2.0	2.0
Recall Mode		Off		Off	Off	Min	Off	Min
Dual Entry		Yes		Yes	No	Yes	No	Yes
Walk (*Walk*), s		0.0		0.0		1.0		1.0
Pedestrian Clearance Time (*PC*), s		0.0		7.0		7.0		7.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	0.0	0.0	9.0	0.0	0.0	9.0	0.0	0.0	9.0	0.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No		0.50	No		0.50	No		0.50	No		0.50

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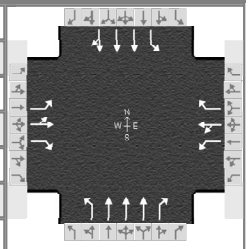
HCS Signalized Intersection Results Summary

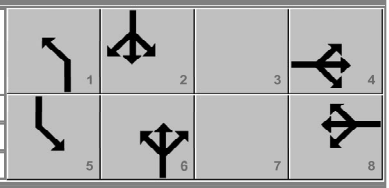
General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	J. Carey	Analysis Date	Oct 19, 2025	Area Type	Other
Jurisdiction	Easton, MD	Time Period	AM Peak	PHF	0.87
Urban Street		Analysis Year	Existing	Analysis Period	1> 7:15
Intersection	US 50 @ MD 328	File Name	US 50 at MD 328 - Ex AM - SHA timing - 135 sec.…		
Project Description	4286				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	51	114	118	393	200	180	120	1044	154	124	901	85

Signal Information			
Cycle, s	135.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	18.5	42.5	18.0	32.0	0.0	0.0
Yellow	3.5	5.0	4.0	4.0	0.0	0.0
Red	2.0	1.5	2.0	2.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	1	6	5	2
Case Number		9.0		9.0	1.1	3.0	1.1	4.0
Phase Duration, s		24.0		38.0	24.0	49.0	24.0	49.0
Change Period, (*Y+R c*), s		6.0		6.0	5.5	6.5	5.5	6.5
Max Allow Headway (*MAH*), s		3.3		3.2	3.1	0.0	3.1	0.0
Queue Clearance Time (*g s*), s		12.8		29.1	7.9		8.1	
Green Extension Time (*g e*), s		0.4		0.8	0.2	0.0	0.2	0.0
Phase Call Probability		1.00		1.00	1.00		1.00	
Max Out Probability		0.24		1.00	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	1	6	16	5	2	12
Adjusted Flow Rate (*v*), veh/h	50	140	136	294	388	207	138	1200	177	143	767	367
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1865		1781	1834		1781	1644		1781	1811	1728
Queue Service Time (*g s*), s	3.3	9.3		19.9	27.1		5.9	27.2		6.1	22.3	23.0
Cycle Queue Clearance Time (*g c*), s	3.3	9.3		19.9	27.1		5.9	27.2		6.1	22.3	23.0
Green Ratio (*g/C*)	0.15	0.15		0.25	0.25		0.48	0.33		0.48	0.33	0.33
Capacity (*c*), veh/h	264	276		449	462		388	1626		370	1194	570
Volume-to-Capacity Ratio (*X*)	0.189	0.506		0.654	0.840		0.355	0.738		0.386	0.642	0.644
Back of Queue (*Q*), ft/ln (95 th percentile)	69	202		359	510		112	412		116	380	378
Back of Queue (*Q*), veh/ln (95 th percentile)	2.7	7.9		14.1	20.1		4.4	15.7		4.6	14.5	15.1
Queue Storage Ratio (*RQ*) (95 th percentile)	0.86	0.00		0.93	0.00		0.80	0.00		0.24	0.00	0.00
Uniform Delay (*d 1*), s/veh	50.4	53.0		45.2	47.9		23.4	33.7		24.9	32.3	33.5
Incremental Delay (*d 2*), s/veh	0.1	0.6		2.7	12.3		0.2	3.0		0.2	2.7	5.5
Initial Queue Delay (*d 3*), s/veh	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Control Delay (*d*), s/veh	50.5	53.6	0.0	48.0	60.2	0.0	23.6	36.8	0.0	25.2	35.0	39.0
Level of Service (LOS)	D	D	A	D	E	A	C	D	A	C	C	D
Approach Delay, s/veh / LOS	30.8	C		42.2	D		31.3	C		35.0	D	
Intersection Delay, s/veh / LOS	34.8						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS								
Bicycle LOS Score / LOS								

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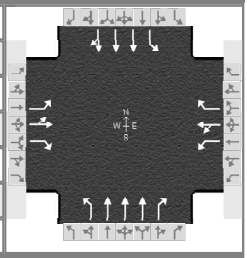
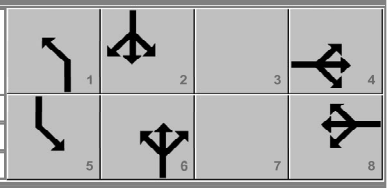
HCS Signalized Intersection Input Data

General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	J. Carey	Analysis Date	Oct 19, 2025	Area Type	Other
Jurisdiction	Easton, MD	Time Period	PM Peak	PHF	0.97
Urban Street		Analysis Year	Existing	Analysis Period	1> 4:15
Intersection	US 50 @ MD 328	File Name	US 50 at MD 328 - Ex PM - SHA timing - 180 sec.…		
Project Description	4286				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	51	314	150	195	164	202	70	900	282	224	985	51

Signal Information										
Cycle, s	180.0	Reference Phase	2							
Offset, s	0	Reference Point	End							
Uncoordinated	No	Simult. Gap E/W	On							
Force Mode	Fixed	Simult. Gap N/S	On							
				Green	32.5	55.5	41.0	27.0	0.0	0.0
				Yellow	3.5	5.0	4.0	4.0	0.0	0.0
				Red	2.0	1.5	2.0	2.0	0.0	0.0



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	51	314	150	195	164	202	70	900	282	224	985	51
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	2	2	2	2	2	2	2	6	2	2	6	
Ped / Bike / RTOR, /h	0	0	0	1	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	4	3	3	4	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0	12.0	10.0	10.0	10.0	11.0	12.0	11.0	12.0	11.0	
Turn Bay Length, ft	80	0	0	385	0	400	140	0	280	475	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	25	25	25	30	30	30	35	35	35	35	35	35

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		47.0		33.0	38.0	62.0	38.0	62.0
Yellow Change Interval (*Y*), s		4.0		4.0	3.5	5.0	3.5	5.0
Red Clearance Interval (R_c), s		2.0		2.0	2.0	1.5	2.0	1.5
Minimum Green (G_{min}), s		7		7	5	20	5	20
Start-Up Lost Time (*l*t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Passage (*PT*), s		2.0		2.0	2.0	2.0	2.0	2.0
Recall Mode		Off		Off	Off	Min	Off	Min
Dual Entry		Yes		Yes	No	Yes	No	Yes
Walk (*Walk*), s		0.0		0.0		1.0		1.0
Pedestrian Clearance Time (*PC*), s		0.0		7.0		7.0		7.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No		0.50	No		0.50	No		0.50	No		0.50

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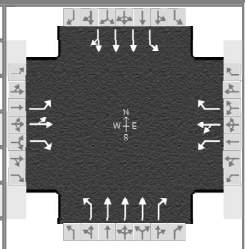
HCS Signalized Intersection Results Summary

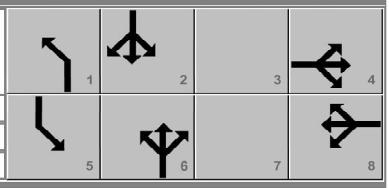
General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	J. Carey	Analysis Date	Oct 19, 2025	Area Type	Other
Jurisdiction	Easton, MD	Time Period	PM Peak	PHF	0.97
Urban Street		Analysis Year	Existing	Analysis Period	1> 4:15
Intersection	US 50 @ MD 328	File Name	US 50 at MD 328 - Ex PM - SHA timing - 180 sec.…		
Project Description	4286				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	51	314	150	195	164	202	70	900	282	224	985	51

Signal Information			
Cycle, s	180.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	32.5	55.5	41.0	27.0	0.0	0.0
Yellow	3.5	5.0	4.0	4.0	0.0	0.0
Red	2.0	1.5	2.0	2.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	1	6	5	2
Case Number		9.0		9.0	1.1	3.0	1.1	4.0
Phase Duration, s		47.0		33.0	38.0	62.0	38.0	62.0
Change Period, ($Y+R_c$), s		6.0		6.0	5.5	6.5	5.5	6.5
Max Allow Headway (*MAH*), s		3.3		3.2	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s		31.6		24.9	5.7		15.1	
Green Extension Time (g_e), s		0.9		0.4	0.1	0.0	0.4	0.0
Phase Call Probability		1.00		1.00	1.00		1.00	
Max Out Probability		0.04		1.00	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	1	6	16	5	2	12
Adjusted Flow Rate (*v*), veh/h	45	332	155	181	189	208	72	928	291	231	718	350
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1868		1781	1861		1781	1644		1781	1811	1763
Queue Service Time (g_s), s	3.5	29.6		17.1	17.1		3.7	25.9		13.1	27.8	28.3
Cycle Queue Clearance Time (g_c), s	3.5	29.6		17.1	17.1		3.7	25.9		13.1	27.8	28.3
Green Ratio (*g/C*)	0.24	0.24		0.16	0.16		0.51	0.32		0.51	0.32	0.32
Capacity (*c*), veh/h	426	446		287	300		455	1576		474	1157	563
Volume-to-Capacity Ratio (*X*)	0.105	0.743		0.630	0.631		0.158	0.589		0.487	0.620	0.622
Back of Queue (*Q*), ft/ln (95 th percentile)	74	542		325	337		74	410		244	476	466
Back of Queue (*Q*), veh/ln (95 th percentile)	2.9	21.3		12.8	13.3		2.9	15.6		9.6	18.2	18.6
Queue Storage Ratio (*RQ*) (95 th percentile)	0.93	0.00		0.84	0.00		0.52	0.00		0.51	0.00	0.00
Uniform Delay (d_1), s/veh	53.5	63.4		70.5	70.5		25.8	43.3		28.8	43.8	44.5
Incremental Delay (d_2), s/veh	0.0	5.9		3.4	3.2		0.1	1.6		0.3	2.5	5.1
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Control Delay (*d*), s/veh	53.5	69.2	0.0	73.9	73.7	0.0	25.8	44.9	0.0	29.0	46.3	49.6
Level of Service (LOS)	D	E	A	E	E	A	C	D	A	C	D	D
Approach Delay, s/veh / LOS	47.7	D		47.2	D		33.7	C		44.1	D	
Intersection Delay, s/veh / LOS	41.5						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS								
Bicycle LOS Score / LOS								

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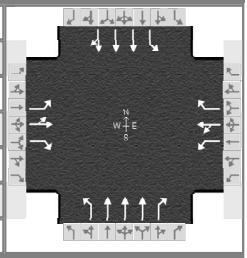
HCS Signalized Intersection Input Data

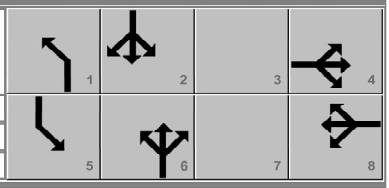
General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	J. Carey	Analysis Date	Oct 19, 2025	Area Type	Other
Jurisdiction	Easton, MD	Time Period	AM Peak	PHF	0.87
Urban Street		Analysis Year	Background	Analysis Period	1> 7:15
Intersection	US 50 @ MD 328	File Name	US 50 at MD 328 - Back AM - SHA timing - 135 s…		
Project Description	4286				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	53	119	123	409	208	187	125	1086	160	129	937	88

Signal Information			
Cycle, s	135.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	18.5	42.5	18.0	32.0	0.0	0.0	
Yellow	3.5	5.0	4.0	4.0	0.0	0.0	
Red	2.0	1.5	2.0	2.0	0.0	0.0	



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	53	119	123	409	208	187	125	1086	160	129	937	88
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	2	2	2	2	2	2	2	6	2	2	6	
Ped / Bike / RTOR, /h	0	0	0	0	1	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	4	3	3	4	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0	12.0	10.0	10.0	10.0	11.0	12.0	11.0	12.0	11.0	
Turn Bay Length, ft	80	0	0	385	0	400	140	0	280	475	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	25	25	25	30	30	30	35	35	35	35	35	35

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		24.0		38.0	24.0	49.0	24.0	49.0
Yellow Change Interval (*Y*), s		4.0		4.0	3.5	5.0	3.5	5.0
Red Clearance Interval (R_c), s		2.0		2.0	2.0	1.5	2.0	1.5
Minimum Green (G_{min}), s		7		7	5	20	5	20
Start-Up Lost Time (*l*t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Passage (*PT*), s		2.0		2.0	2.0	2.0	2.0	2.0
Recall Mode		Off		Off	Off	Min	Off	Min
Dual Entry		Yes		Yes	No	Yes	No	Yes
Walk (*Walk*), s		0.0		0.0		1.0		1.0
Pedestrian Clearance Time (*PC*), s		0.0		7.0		7.0		7.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

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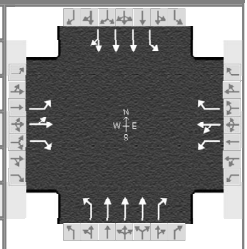
HCS Signalized Intersection Results Summary

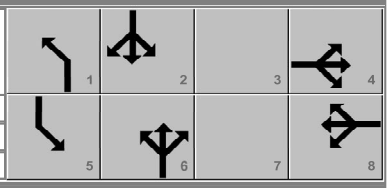
General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	J. Carey	Analysis Date	Oct 19, 2025	Area Type	Other
Jurisdiction	Easton, MD	Time Period	AM Peak	PHF	0.87
Urban Street		Analysis Year	Background	Analysis Period	1> 7:15
Intersection	US 50 @ MD 328	File Name	US 50 at MD 328 - Back AM - SHA timing - 135 s…		
Project Description	4286				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	53	119	123	409	208	187	125	1086	160	129	937	88

Signal Information			
Cycle, s	135.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	18.5	42.5	18.0	32.0	0.0	0.0
Yellow	3.5	5.0	4.0	4.0	0.0	0.0
Red	2.0	1.5	2.0	2.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	1	6	5	2
Case Number		9.0		9.0	1.1	3.0	1.1	4.0
Phase Duration, s		24.0		38.0	24.0	49.0	24.0	49.0
Change Period, (*Y+R c*), s		6.0		6.0	5.5	6.5	5.5	6.5
Max Allow Headway (*MAH*), s		3.3		3.2	3.1	0.0	3.1	0.0
Queue Clearance Time (*g s*), s		13.3		30.5	8.1		8.4	
Green Extension Time (*g e*), s		0.3		0.5	0.2	0.0	0.2	0.0
Phase Call Probability		1.00		1.00	1.00		1.00	
Max Out Probability		0.36		1.00	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	1	6	16	5	2	12
Adjusted Flow Rate (*v*), veh/h	52	146	141	306	404	215	144	1248	184	148	797	381
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1865		1781	1834		1781	1644		1781	1811	1728
Queue Service Time (*g s*), s	3.4	9.8		20.9	28.5		6.1	28.9		6.4	23.6	24.2
Cycle Queue Clearance Time (*g c*), s	3.4	9.8		20.9	28.5		6.1	28.9		6.4	23.6	24.2
Green Ratio (*g/C*)	0.15	0.15		0.25	0.25		0.48	0.33		0.48	0.33	0.33
Capacity (*c*), veh/h	264	276		449	462		381	1626		362	1194	570
Volume-to-Capacity Ratio (*X*)	0.196	0.528		0.681	0.874		0.377	0.768		0.409	0.668	0.669
Back of Queue (*Q*), ft/ln (95 th percentile)	72	210		376	545		117	434		122	398	397
Back of Queue (*Q*), veh/ln (95 th percentile)	2.8	8.3		14.8	21.5		4.6	16.6		4.8	15.2	15.9
Queue Storage Ratio (*RQ*) (95 th percentile)	0.90	0.00		0.98	0.00		0.84	0.00		0.26	0.00	0.00
Uniform Delay (*d 1*), s/veh	50.4	53.1		45.6	48.4		24.0	34.2		25.6	32.7	33.8
Incremental Delay (*d 2*), s/veh	0.1	1.0		3.5	16.1		0.2	3.5		0.3	3.0	6.1
Initial Queue Delay (*d 3*), s/veh	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Control Delay (*d*), s/veh	50.6	54.1	0.0	49.1	64.6	0.0	24.2	37.8	0.0	25.9	35.6	39.9
Level of Service (LOS)	D	D	A	D	E	A	C	D	A	C	D	D
Approach Delay, s/veh / LOS	31.0	C		44.4	D		32.1	C		35.8	D	
Intersection Delay, s/veh / LOS	35.9						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS								
Bicycle LOS Score / LOS								

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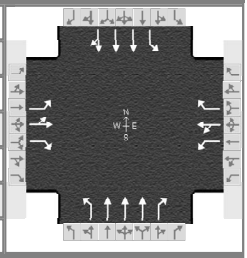
HCS Signalized Intersection Input Data

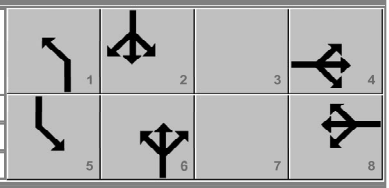
General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	J. Carey	Analysis Date	Oct 19, 2025	Area Type	Other
Jurisdiction	Easton, MD	Time Period	PM Peak	PHF	0.97
Urban Street		Analysis Year	Background	Analysis Period	1> 4:15
Intersection	US 50 @ MD 328	File Name	US 50 at MD 328 - Back PM - SHA timing - 180 s…		
Project Description	4286				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	53	327	156	203	171	210	73	936	293	233	1025	53

Signal Information			
Cycle, s	180.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	32.5	55.5	41.0	27.0	0.0	0.0
Yellow	3.5	5.0	4.0	4.0	0.0	0.0
Red	2.0	1.5	2.0	2.0	0.0	0.0



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	53	327	156	203	171	210	73	936	293	233	1025	53
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	2	2	2	2	2	2	2	6	2	2	6	
Ped / Bike / RTOR, /h	0	0	0	1	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	4	3	3	4	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0	12.0	10.0	10.0	10.0	11.0	12.0	11.0	12.0	11.0	
Turn Bay Length, ft	80	0	0	385	0	400	140	0	280	475	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	25	25	25	30	30	30	35	35	35	35	35	35

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		47.0		33.0	38.0	62.0	38.0	62.0
Yellow Change Interval (*Y*), s		4.0		4.0	3.5	5.0	3.5	5.0
Red Clearance Interval (R_c), s		2.0		2.0	2.0	1.5	2.0	1.5
Minimum Green (G_{min}), s		7		7	5	20	5	20
Start-Up Lost Time (*l*t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Passage (*PT*), s		2.0		2.0	2.0	2.0	2.0	2.0
Recall Mode		Off		Off	Off	Min	Off	Min
Dual Entry		Yes		Yes	No	Yes	No	Yes
Walk (*Walk*), s		0.0		0.0		1.0		1.0
Pedestrian Clearance Time (*PC*), s		0.0		7.0		7.0		7.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

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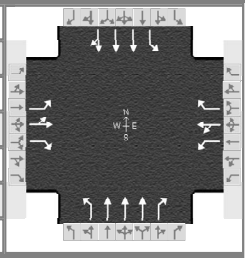
HCS Signalized Intersection Results Summary

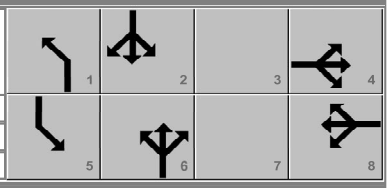
General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	J. Carey	Analysis Date	Oct 19, 2025	Area Type	Other
Jurisdiction	Easton, MD	Time Period	PM Peak	PHF	0.97
Urban Street		Analysis Year	Background	Analysis Period	1> 4:15
Intersection	US 50 @ MD 328	File Name	US 50 at MD 328 - Back PM - SHA timing - 180 s…		
Project Description	4286				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	53	327	156	203	171	210	73	936	293	233	1025	53

Signal Information			
Cycle, s	180.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	32.5	55.5	41.0	27.0	0.0	0.0
Yellow	3.5	5.0	4.0	4.0	0.0	0.0
Red	2.0	1.5	2.0	2.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	1	6	5	2
Case Number		9.0		9.0	1.1	3.0	1.1	4.0
Phase Duration, s		47.0		33.0	38.0	62.0	38.0	62.0
Change Period, ($Y+R_c$), s		6.0		6.0	5.5	6.5	5.5	6.5
Max Allow Headway (*MAH*), s		3.3		3.2	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s		33.1		25.9	5.9		15.7	
Green Extension Time (g_e), s		0.9		0.2	0.1	0.0	0.4	0.0
Phase Call Probability		1.00		1.00	1.00		1.00	
Max Out Probability		0.09		1.00	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	1	6	16	5	2	12
Adjusted Flow Rate (*v*), veh/h	46	345	161	188	197	216	75	965	302	240	747	364
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1868		1781	1861		1781	1644		1781	1811	1763
Queue Service Time (g_s), s	3.7	31.1		17.9	17.9		3.9	27.3		13.7	29.4	29.9
Cycle Queue Clearance Time (g_c), s	3.7	31.1		17.9	17.9		3.9	27.3		13.7	29.4	29.9
Green Ratio (*g/C*)	0.24	0.24		0.16	0.16		0.51	0.32		0.51	0.32	0.32
Capacity (*c*), veh/h	426	446		287	300		448	1576		466	1157	563
Volume-to-Capacity Ratio (*X*)	0.109	0.774		0.656	0.658		0.168	0.612		0.515	0.646	0.647
Back of Queue (*Q*), ft/ln (95 th percentile)	77	570		340	352		77	429		253	498	489
Back of Queue (*Q*), veh/ln (95 th percentile)	3.0	22.5		13.4	13.9		3.0	16.4		10.0	19.0	19.6
Queue Storage Ratio (*RQ*) (95 th percentile)	0.97	0.00		0.88	0.00		0.55	0.00		0.53	0.00	0.00
Uniform Delay (d_1), s/veh	53.5	64.0		70.8	70.8		26.2	43.7		29.5	44.3	44.9
Incremental Delay (d_2), s/veh	0.0	7.5		4.3	4.2		0.1	1.8		0.4	2.8	5.6
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Control Delay (*d*), s/veh	53.6	71.5	0.0	75.1	75.0	0.0	26.3	45.5	0.0	30.0	47.1	50.6
Level of Service (LOS)	D	E	A	E	E	A	C	D	A	C	D	D
Approach Delay, s/veh / LOS	49.2	D		48.1	D		34.2	C		45.0	D	
Intersection Delay, s/veh / LOS	42.3						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS								
Bicycle LOS Score / LOS								

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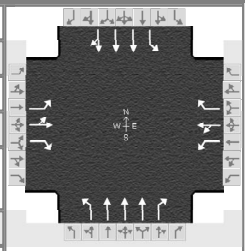
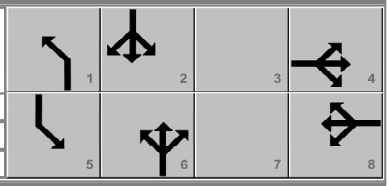
HCS Signalized Intersection Input Data

General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	J. Carey	Analysis Date	Oct 19, 2025	Area Type	Other
Jurisdiction	Easton, MD	Time Period	AM Peak	PHF	0.87
Urban Street	1	Analysis Year	Future (NO Connection)	Analysis Period	1> 7:15
Intersection	US 50 @ MD 328	File Name	US 50 at MD 328 - Future AM - SHA timing - 135…		
Project Description	4286				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	53	122	123	409	209	187	125	1091	160	129	946	88

Signal Information					EB			WB			NB			SB		
Cycle, s	135.0	Reference Phase	2													
Offset, s	0	Reference Point	End	Green	18.5	42.5		18.0	32.0	0.0	0.0					
Uncoordinated	No	Simult. Gap E/W	On	Yellow	3.5	5.0		4.0	4.0	0.0	0.0					
Force Mode	Fixed	Simult. Gap N/S	On	Red	2.0	1.5		2.0	2.0	0.0	0.0					



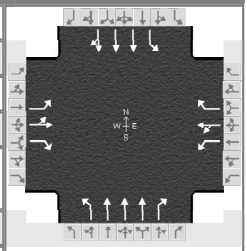
Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	53	122	123	409	209	187	125	1091	160	129	946	88
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	2	2	2	2	2	2	2	6	2	2	6	
Ped / Bike / RTOR, /h	0	0	0	0	1	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	4	3	3	4	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0	12.0	10.0	10.0	10.0	11.0	12.0	11.0	12.0	11.0	
Turn Bay Length, ft	80	0	0	385	0	400	140	0	280	475	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	25	25	25	30	30	30	35	35	35	35	35	35

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		24.0		38.0	24.0	49.0	24.0	49.0
Yellow Change Interval (*Y*), s		4.0		4.0	3.5	5.0	3.5	5.0
Red Clearance Interval (R_c), s		2.0		2.0	2.0	1.5	2.0	1.5
Minimum Green (G_{min}), s		7		7	5	20	5	20
Start-Up Lost Time (*l*t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (e), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Passage (*PT*), s		2.0		2.0	2.0	2.0	2.0	2.0
Recall Mode		Off		Off	Off	Min	Off	Min
Dual Entry		Yes		Yes	No	Yes	No	Yes
Walk (*Walk*), s		0.0		0.0		1.0		1.0
Pedestrian Clearance Time (*PC*), s		0.0		7.0		7.0		7.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

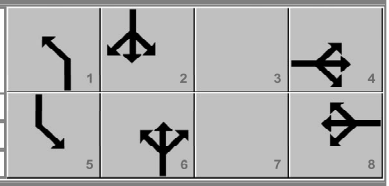
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	J. Carey	Analysis Date	Oct 19, 2025	Area Type	Other
Jurisdiction	Easton, MD	Time Period	AM Peak	PHF	0.87
Urban Street	1	Analysis Year	Future (NO Connection)	Analysis Period	1> 7:15
Intersection	US 50 @ MD 328	File Name	US 50 at MD 328 - Future AM - SHA timing - 135…		
Project Description	4286				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	53	122	123	409	209	187	125	1091	160	129	946	88

Signal Information												
Cycle, s	135.0	Reference Phase	2									
Offset, s	0	Reference Point	End	Green	18.5	42.5	18.0	32.0	0.0	0.0		
Uncoordinated	No	Simult. Gap E/W	On	Yellow	3.5	5.0	4.0	4.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Red	2.0	1.5	2.0	2.0	0.0	0.0		



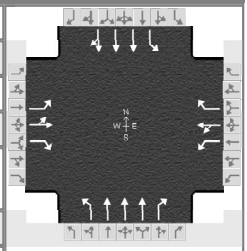
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	1	6	5	2
Case Number		9.0		9.0	1.1	3.0	1.1	4.0
Phase Duration, s		24.0		38.0	24.0	49.0	24.0	49.0
Change Period, ($Y+R_c$), s		6.0		6.0	5.5	6.5	5.5	6.5
Max Allow Headway (*MAH*), s		3.3		3.2	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s		13.3		30.6	8.1		8.4	
Green Extension Time (g_e), s		0.4		0.4	0.2	0.0	0.2	0.0
Phase Call Probability		1.00		1.00	1.00		1.00	
Max Out Probability		0.36		1.00	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	1	6	16	5	2	12
Adjusted Flow Rate (*v*), veh/h	52	149	141	306	405	215	144	1254	184	148	804	384
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1865		1781	1834		1781	1644		1781	1811	1729
Queue Service Time (g_s), s	3.4	10.0		20.9	28.6		6.1	29.1		6.4	23.9	24.5
Cycle Queue Clearance Time (g_c), s	3.4	10.0		20.9	28.6		6.1	29.1		6.4	23.9	24.5
Green Ratio (*g/C*)	0.15	0.15		0.25	0.25		0.48	0.33		0.48	0.33	0.33
Capacity (*c*), veh/h	264	276		449	462		380	1626		361	1194	570
Volume-to-Capacity Ratio (*X*)	0.196	0.541		0.681	0.876		0.378	0.771		0.410	0.673	0.674
Back of Queue (*Q*), ft/ln (95 th percentile)	72	215		376	548		117	437		122	402	401
Back of Queue (*Q*), veh/ln (95 th percentile)	2.8	8.4		14.8	21.6		4.6	16.7		4.8	15.4	16.0
Queue Storage Ratio (*RQ*) (95 th percentile)	0.90	0.00		0.98	0.00		0.84	0.00		0.26	0.00	0.00
Uniform Delay (d_1), s/veh	50.4	53.2		45.6	48.5		24.1	34.3		25.7	32.7	33.9
Incremental Delay (d_2), s/veh	0.1	1.2		3.5	16.5		0.2	3.6		0.3	3.0	6.3
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Control Delay (*d*), s/veh	50.6	54.4	0.0	49.1	64.9	0.0	24.3	37.9	0.0	26.0	35.8	40.2
Level of Service (LOS)	D	D	A	D	E	A	C	D	A	C	D	D
Approach Delay, s/veh / LOS	31.4	C		44.6	D		32.2	C		36.0	D	
Intersection Delay, s/veh / LOS	36.1						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS								
Bicycle LOS Score / LOS								

HCS Signalized Intersection Input Data

General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	J. Carey	Analysis Date	Oct 19, 2025	Area Type	Other
Jurisdiction	Easton, MD	Time Period	PM Peak	PHF	0.97
Urban Street		Analysis Year	Future (No Connection)	Analysis Period	1> 4:15
Intersection	US 50 @ MD 328	File Name	US 50 at MD 328 - Future PM - SHA timing - 180…		
Project Description	4286				

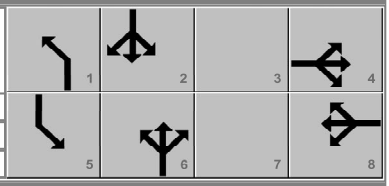


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	53	329	156	203	174	210	73	945	293	233	1032	53

Signal Information			
Cycle, s	180.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	32.5	55.5	41.0	27.0	0.0	0.0
Yellow	3.5	5.0	4.0	4.0	0.0	0.0
Red	2.0	1.5	2.0	2.0	0.0	0.0



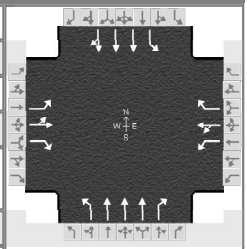
Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	53	329	156	203	174	210	73	945	293	233	1032	53
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	2	2	2	2	2	2	2	6	2	2	6	
Ped / Bike / RTOR, /h	0	0	0	1	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	4	3	3	4	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0	12.0	10.0	10.0	10.0	11.0	12.0	11.0	12.0	11.0	
Turn Bay Length, ft	80	0	0	385	0	400	140	0	280	475	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	25	25	25	30	30	30	35	35	35	35	35	35

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		47.0		33.0	38.0	62.0	38.0	62.0
Yellow Change Interval (*Y*), s		4.0		4.0	3.5	5.0	3.5	5.0
Red Clearance Interval (R_c), s		2.0		2.0	2.0	1.5	2.0	1.5
Minimum Green (G_{min}), s		7		7	5	20	5	20
Start-Up Lost Time (*l*t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (e), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Passage (*PT*), s		2.0		2.0	2.0	2.0	2.0	2.0
Recall Mode		Off		Off	Off	Min	Off	Min
Dual Entry		Yes		Yes	No	Yes	No	Yes
Walk (*Walk*), s		0.0		0.0		1.0		1.0
Pedestrian Clearance Time (*PC*), s		0.0		7.0		7.0		7.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

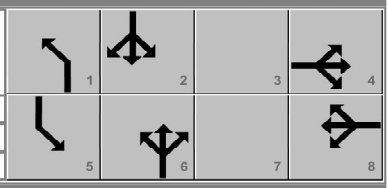
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	J. Carey	Analysis Date	Oct 19, 2025	Area Type	Other
Jurisdiction	Easton, MD	Time Period	PM Peak	PHF	0.97
Urban Street		Analysis Year	Future (No Connection)	Analysis Period	1> 4:15
Intersection	US 50 @ MD 328	File Name	US 50 at MD 328 - Future PM - SHA timing - 180…		
Project Description	4286				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	53	329	156	203	174	210	73	945	293	233	1032	53

Signal Information											
Cycle, s	180.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On								
Force Mode	Fixed	Simult. Gap N/S	On								
				Green	32.5	55.5	41.0	27.0	0.0	0.0	
				Yellow	3.5	5.0	4.0	4.0	0.0	0.0	
				Red	2.0	1.5	2.0	2.0	0.0	0.0	



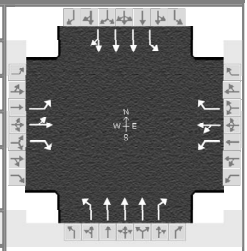
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	1	6	5	2
Case Number		9.0		9.0	1.1	3.0	1.1	4.0
Phase Duration, s		47.0		33.0	38.0	62.0	38.0	62.0
Change Period, ($Y+R_c$), s		6.0		6.0	5.5	6.5	5.5	6.5
Max Allow Headway (*MAH*), s		3.3		3.2	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s		33.3		25.9	5.9		15.7	
Green Extension Time (g_e), s		0.9		0.2	0.1	0.0	0.4	0.0
Phase Call Probability		1.00		1.00	1.00		1.00	
Max Out Probability		0.10		1.00	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	1	6	16	5	2	12
Adjusted Flow Rate (*v*), veh/h	46	347	161	188	200	216	75	974	302	240	752	367
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1868		1781	1861		1781	1644		1781	1811	1764
Queue Service Time (g_s), s	3.7	31.3		17.9	18.2		3.9	27.7		13.7	29.7	30.1
Cycle Queue Clearance Time (g_c), s	3.7	31.3		17.9	18.2		3.9	27.7		13.7	29.7	30.1
Green Ratio (*g/C*)	0.24	0.24		0.16	0.16		0.51	0.32		0.51	0.32	0.32
Capacity (*c*), veh/h	426	446		287	300		447	1576		464	1157	563
Volume-to-Capacity Ratio (*X*)	0.109	0.778		0.656	0.668		0.168	0.618		0.518	0.650	0.651
Back of Queue (*Q*), ft/ln (95 th percentile)	77	575		340	358		77	433		253	502	493
Back of Queue (*Q*), veh/ln (95 th percentile)	3.0	22.6		13.4	14.1		3.0	16.5		10.0	19.2	19.7
Queue Storage Ratio (*RQ*) (95 th percentile)	0.97	0.00		0.88	0.00		0.55	0.00		0.53	0.00	0.00
Uniform Delay (d_1), s/veh	53.5	64.0		70.8	71.0		26.3	43.8		29.6	44.4	45.0
Incremental Delay (d_2), s/veh	0.0	7.8		4.3	4.6		0.1	1.8		0.5	2.8	5.7
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Control Delay (*d*), s/veh	53.6	71.8	0.0	75.1	75.5	0.0	26.3	45.6	0.0	30.1	47.2	50.8
Level of Service (LOS)	D	E	A	E	E	A	C	D	A	C	D	D
Approach Delay, s/veh / LOS	49.5	D		48.4	D		34.4	C		45.1	D	
Intersection Delay, s/veh / LOS	42.5						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS								
Bicycle LOS Score / LOS								

HCS Signalized Intersection Input Data

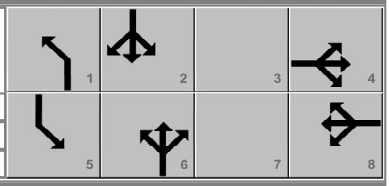
General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	J. Carey	Analysis Date	Oct 19, 2025	Area Type	Other
Jurisdiction	Easton, MD	Time Period	AM Peak	PHF	0.87
Urban Street		Analysis Year	Future (WITH Connection)	Analysis Period	1> 7:15
Intersection	US 50 @ MD 328	File Name	US 50 at MD 328 - Future AM + CONNECTION -…		
Project Description	4286				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	42	122	123	409	209	187	125	1091	160	129	946	88

Signal Information			
Cycle, s	135.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	18.5	42.5	18.0	32.0	0.0	0.0	
Yellow	3.5	5.0	4.0	4.0	0.0	0.0	
Red	2.0	1.5	2.0	2.0	0.0	0.0	



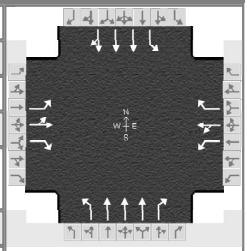
Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	42	122	123	409	209	187	125	1091	160	129	946	88
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	2	2	2	2	2	2	2	6	2	2	6	
Ped / Bike / RTOR, /h	0	0	0	0	1	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	4	3	3	4	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0	12.0	10.0	10.0	10.0	11.0	12.0	11.0	12.0	11.0	
Turn Bay Length, ft	80	0	0	385	0	400	140	0	280	475	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	25	25	25	30	30	30	35	35	35	35	35	35

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		24.0		38.0	24.0	49.0	24.0	49.0
Yellow Change Interval (*Y*), s		4.0		4.0	3.5	5.0	3.5	5.0
Red Clearance Interval (R_c), s		2.0		2.0	2.0	1.5	2.0	1.5
Minimum Green (G_{min}), s		7		7	5	20	5	20
Start-Up Lost Time (*l*t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (e), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Passage (*PT*), s		2.0		2.0	2.0	2.0	2.0	2.0
Recall Mode		Off		Off	Off	Min	Off	Min
Dual Entry		Yes		Yes	No	Yes	No	Yes
Walk (*Walk*), s		0.0		0.0		1.0		1.0
Pedestrian Clearance Time (*PC*), s		0.0		7.0		7.0		7.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

HCS Signalized Intersection Results Summary

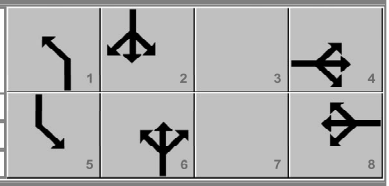
General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	J. Carey	Analysis Date	Oct 19, 2025	Area Type	Other
Jurisdiction	Easton, MD	Time Period	AM Peak	PHF	0.87
Urban Street		Analysis Year	Future (WITH Connection)	Analysis Period	1> 7:15
Intersection	US 50 @ MD 328	File Name	US 50 at MD 328 - Future AM + CONNECTION -…		
Project Description	4286				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	42	122	123	409	209	187	125	1091	160	129	946	88

Signal Information			
Cycle, s	135.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	18.5	42.5	18.0	32.0	0.0	0.0	
Yellow	3.5	5.0	4.0	4.0	0.0	0.0	
Red	2.0	1.5	2.0	2.0	0.0	0.0	



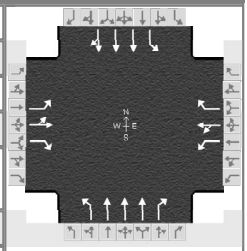
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	1	6	5	2
Case Number		9.0		9.0	1.1	3.0	1.1	4.0
Phase Duration, s		24.0		38.0	24.0	49.0	24.0	49.0
Change Period, ($Y+R_c$), s		6.0		6.0	5.5	6.5	5.5	6.5
Max Allow Headway (*MAH*), s		3.3		3.2	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s		13.3		30.6	8.1		8.4	
Green Extension Time (g_e), s		0.3		0.4	0.2	0.0	0.2	0.0
Phase Call Probability		1.00		1.00	1.00		1.00	
Max Out Probability		0.36		1.00	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	1	6	16	5	2	12
Adjusted Flow Rate (*v*), veh/h	41	147	141	306	405	215	144	1254	184	148	804	384
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1866		1781	1834		1781	1644		1781	1811	1729
Queue Service Time (g_s), s	2.7	9.9		20.9	28.6		6.1	29.1		6.4	23.9	24.5
Cycle Queue Clearance Time (g_c), s	2.7	9.9		20.9	28.6		6.1	29.1		6.4	23.9	24.5
Green Ratio (*g/C*)	0.15	0.15		0.25	0.25		0.48	0.33		0.48	0.33	0.33
Capacity (*c*), veh/h	264	276		449	462		380	1626		361	1194	570
Volume-to-Capacity Ratio (*X*)	0.155	0.533		0.681	0.876		0.378	0.771		0.410	0.673	0.674
Back of Queue (*Q*), ft/ln (95 th percentile)	56	212		376	548		117	437		122	402	401
Back of Queue (*Q*), veh/ln (95 th percentile)	2.2	8.3		14.8	21.6		4.6	16.7		4.8	15.4	16.0
Queue Storage Ratio (*RQ*) (95 th percentile)	0.71	0.00		0.98	0.00		0.84	0.00		0.26	0.00	0.00
Uniform Delay (d_1), s/veh	50.1	53.2		45.6	48.5		24.1	34.3		25.7	32.7	33.9
Incremental Delay (d_2), s/veh	0.1	1.1		3.5	16.5		0.2	3.6		0.3	3.0	6.3
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Control Delay (*d*), s/veh	50.2	54.2	0.0	49.1	64.9	0.0	24.3	37.9	0.0	26.0	35.8	40.2
Level of Service (LOS)	D	D	A	D	E	A	C	D	A	C	D	D
Approach Delay, s/veh / LOS	30.5	C		44.6	D		32.2	C		36.0	D	
Intersection Delay, s/veh / LOS	36.0						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS								
Bicycle LOS Score / LOS								

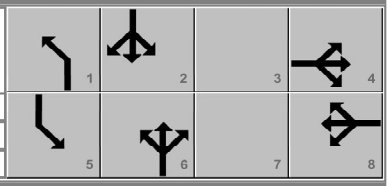
HCS Signalized Intersection Input Data

General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	J. Carey	Analysis Date	Oct 19, 2025	Area Type	Other
Jurisdiction	Easton, MD	Time Period	PM Peak	PHF	0.97
Urban Street		Analysis Year	Future (WITH Connection)	Analysis Period	1> 4:15
Intersection	US 50 @ MD 328	File Name	US 50 at MD 328 - Future PM + CONNECTION -…		
Project Description	4286				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	36	329	156	203	174	210	73	945	293	233	1032	53

Signal Information										
Cycle, s	180.0	Reference Phase	2							
Offset, s	0	Reference Point	End							
Uncoordinated	No	Simult. Gap E/W	On							
Force Mode	Fixed	Simult. Gap N/S	On							
				Green	32.5	55.5	41.0	27.0	0.0	0.0
				Yellow	3.5	5.0	4.0	4.0	0.0	0.0
				Red	2.0	1.5	2.0	2.0	0.0	0.0



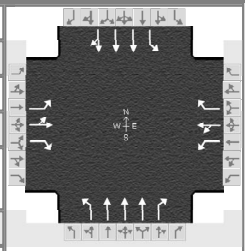
Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	36	329	156	203	174	210	73	945	293	233	1032	53
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	2	2	2	2	2	2	2	6	2	2	6	
Ped / Bike / RTOR, /h	0	0	0	1	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	4	3	3	4	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0	12.0	10.0	10.0	10.0	11.0	12.0	11.0	12.0	11.0	
Turn Bay Length, ft	80	0	0	385	0	400	140	0	280	475	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	25	25	25	30	30	30	35	35	35	35	35	35

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		47.0		33.0	38.0	62.0	38.0	62.0
Yellow Change Interval (*Y*), s		4.0		4.0	3.5	5.0	3.5	5.0
Red Clearance Interval (R_c), s		2.0		2.0	2.0	1.5	2.0	1.5
Minimum Green (G_{min}), s		7		7	5	20	5	20
Start-Up Lost Time (*l*t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (e), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Passage (*PT*), s		2.0		2.0	2.0	2.0	2.0	2.0
Recall Mode		Off		Off	Off	Min	Off	Min
Dual Entry		Yes		Yes	No	Yes	No	Yes
Walk (*Walk*), s		0.0		0.0		1.0		1.0
Pedestrian Clearance Time (*PC*), s		0.0		7.0		7.0		7.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

HCS Signalized Intersection Results Summary

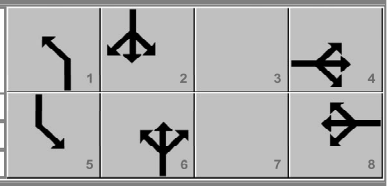
General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	J. Carey	Analysis Date	Oct 19, 2025	Area Type	Other
Jurisdiction	Easton, MD	Time Period	PM Peak	PHF	0.97
Urban Street		Analysis Year	Future (WITH Connection)	Analysis Period	1> 4:15
Intersection	US 50 @ MD 328	File Name	US 50 at MD 328 - Future PM + CONNECTION -…		
Project Description	4286				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	36	329	156	203	174	210	73	945	293	233	1032	53

Signal Information			
Cycle, s	180.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	32.5	55.5	41.0	27.0	0.0	0.0	
Yellow	3.5	5.0	4.0	4.0	0.0	0.0	
Red	2.0	1.5	2.0	2.0	0.0	0.0	



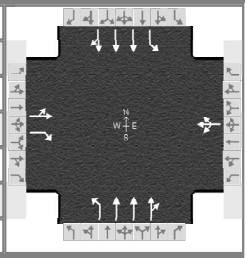
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	1	6	5	2
Case Number		9.0		9.0	1.1	3.0	1.1	4.0
Phase Duration, s		47.0		33.0	38.0	62.0	38.0	62.0
Change Period, ($Y+R_c$), s		6.0		6.0	5.5	6.5	5.5	6.5
Max Allow Headway (*MAH*), s		3.3		3.2	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s		33.0		25.9	5.9		15.7	
Green Extension Time (g_e), s		0.8		0.2	0.1	0.0	0.4	0.0
Phase Call Probability		1.00		1.00	1.00		1.00	
Max Out Probability		0.08		1.00	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	1	6	16	5	2	12
Adjusted Flow Rate (*v*), veh/h	32	345	161	188	200	216	75	974	302	240	752	367
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1869		1781	1861		1781	1644		1781	1811	1764
Queue Service Time (g_s), s	2.5	31.0		17.9	18.2		3.9	27.7		13.7	29.7	30.1
Cycle Queue Clearance Time (g_c), s	2.5	31.0		17.9	18.2		3.9	27.7		13.7	29.7	30.1
Green Ratio (*g/C*)	0.24	0.24		0.16	0.16		0.51	0.32		0.51	0.32	0.32
Capacity (*c*), veh/h	426	446		287	300		447	1576		464	1157	563
Volume-to-Capacity Ratio (*X*)	0.074	0.772		0.656	0.668		0.168	0.618		0.518	0.650	0.651
Back of Queue (*Q*), ft/ln (95 th percentile)	52	569		340	358		77	433		253	502	493
Back of Queue (*Q*), veh/ln (95 th percentile)	2.0	22.4		13.4	14.1		3.0	16.5		10.0	19.2	19.7
Queue Storage Ratio (*RQ*) (95 th percentile)	0.65	0.00		0.88	0.00		0.55	0.00		0.53	0.00	0.00
Uniform Delay (d_1), s/veh	53.1	63.9		70.8	71.0		26.3	43.8		29.6	44.4	45.0
Incremental Delay (d_2), s/veh	0.0	7.4		4.3	4.6		0.1	1.8		0.5	2.8	5.7
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Control Delay (*d*), s/veh	53.1	71.3	0.0	75.1	75.5	0.0	26.3	45.6	0.0	30.1	47.2	50.8
Level of Service (LOS)	D	E	A	E	E	A	C	D	A	C	D	D
Approach Delay, s/veh / LOS	48.9	D		48.4	D		34.4	C		45.1	D	
Intersection Delay, s/veh / LOS	42.4						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS								
Bicycle LOS Score / LOS								

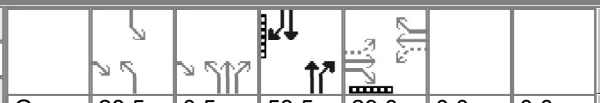
HCS Signalized Intersection Input Data

General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	J. Carey	Analysis Date	Oct 19, 2025	Area Type	Other
Jurisdiction	Easton, MD	Time Period	AM Peak	PHF	0.97
Urban Street		Analysis Year	Existing	Analysis Period	1> 4:00
Intersection	US 50 @ Norris Taylor…	File Name	US 50 at Norris Taylor - Ex AM - SHA timing - 135…		
Project Description	4286				

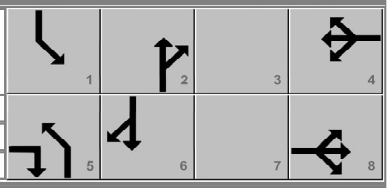


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	16	0	11	4	0	0	109	1120	2	2	956	41

Signal Information			
Cycle, s	135.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	28.5	0.5	53.5	29.0	0.0	0.0
Yellow	4.0	4.0	5.0	4.0	0.0	0.0
Red	1.5	1.5	1.5	2.0	0.0	0.0



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	16	0	11	4	0	0	109	1120	2	2	956	41
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %		2	2		2		2	6		2	6	
Ped / Bike / RTOR, /h	0	0	0	0	0		0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	4	3	3	4	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft		11.0	11.0		12.0		11.0	12.0		10.0	11.0	
Turn Bay Length, ft		0	0		0		150	0		475	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	25	25	25	25	25	25	35	35	35	35	35	35

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		35.0		35.0	40.0	66.0	34.0	60.0
Yellow Change Interval (*Y*), s		4.0		4.0	4.0	5.0	4.0	5.0
Red Clearance Interval (R_c), s		2.0		2.0	1.5	1.5	1.5	1.5
Minimum Green (G_{min}), s		5		5	5	25	5	25
Start-Up Lost Time (*l*t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Passage (*PT*), s		2.0		2.0	2.0	2.0	2.0	2.0
Recall Mode		Off		Off	Off	Min	Off	Min
Dual Entry		Yes		Yes	No	Yes	No	Yes
Walk (*Walk*), s		5.0		0.0		0.0		5.0
Pedestrian Clearance Time (*PC*), s		27.0		0.0		0.0		17.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No		0.50	No		0.50	No		0.50	No		0.50

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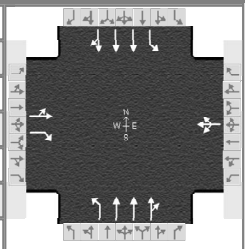
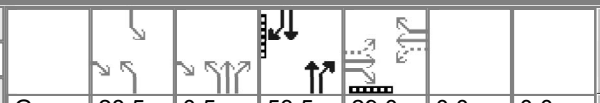
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	J. Carey	Analysis Date	Oct 19, 2025	Area Type	Other
Jurisdiction	Easton, MD	Time Period	AM Peak	PHF	0.97
Urban Street		Analysis Year	Existing	Analysis Period	1> 4:00
Intersection	US 50 @ Norris Taylor…	File Name	US 50 at Norris Taylor - Ex AM - SHA timing - 135…		
Project Description	4286				

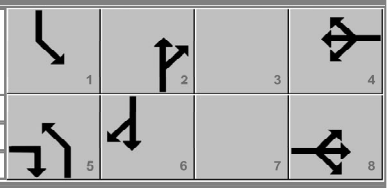


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	16	0	11	4	0	0	109	1120	2	2	956	41

Signal Information			
Cycle, s	135.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	28.5	0.5	53.5	29.0	0.0	0.0
Yellow	4.0	4.0	5.0	4.0	0.0	0.0
Red	1.5	1.5	1.5	2.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8		4	5	2	1	6
Case Number		7.0		8.0	2.0	4.0	2.0	4.0
Phase Duration, s		35.0		35.0	40.0	66.0	34.0	60.0
Change Period, ($Y+R_c$), s		6.0		6.0	5.5	6.5	5.5	6.5
Max Allow Headway (*MAH*), s		3.3		3.3	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s		3.2		2.3	8.6		2.1	
Green Extension Time (g_e), s		0.0		0.0	0.2	0.0	0.0	0.0
Phase Call Probability		1.00		1.00	1.00		1.00	
Max Out Probability		0.00		0.00	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h		16	11		4		112	771	385	2	690	338
Adjusted Saturation Flow Rate (*s*), veh/h/ln		1418	1585		1418		1781	1811	1809	1781	1811	1771
Queue Service Time (g_s), s		0.9	0.5		0.0		6.6	15.8	15.8	0.1	15.6	16.0
Cycle Queue Clearance Time (g_c), s		1.2	0.5		0.3		6.6	15.8	15.8	0.1	15.6	16.0
Green Ratio (*g/C*)		0.23	0.50		0.23		0.27	0.46	0.46	0.23	0.41	0.41
Capacity (*c*), veh/h		379	793		379		482	1650	824	402	1489	728
Volume-to-Capacity Ratio (*X*)		0.044	0.014		0.011		0.233	0.467	0.467	0.005	0.463	0.464
Back of Queue (*Q*), ft/ln (95 th percentile)		20	8		5		133	259	259	2	267	267
Back of Queue (*Q*), veh/ln (95 th percentile)		0.8	0.3		0.2		5.3	9.9	10.2	0.1	10.2	10.7
Queue Storage Ratio (*RQ*) (95 th percentile)		0.00	0.00		0.00		0.89	0.00	0.00	0.01	0.00	0.00
Uniform Delay (d_1), s/veh		40.5	17.0		40.2		38.4	18.0	17.6	40.5	22.0	22.4
Incremental Delay (d_2), s/veh		0.0	0.0		0.0		0.1	1.0	1.9	0.0	1.0	2.1
Initial Queue Delay (d_3), s/veh		0.0	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh		40.5	17.0		40.2		38.4	18.9	19.5	40.5	23.0	24.5
Level of Service (LOS)		D	B		D		D	B	B	D	C	C
Approach Delay, s/veh / LOS	31.0	C		40.2	D		20.8	C		23.5	C	
Intersection Delay, s/veh / LOS	22.2						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS								
Bicycle LOS Score / LOS								

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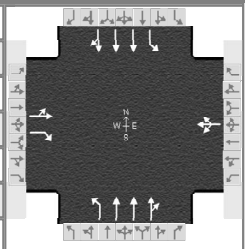
HCS Signalized Intersection Input Data

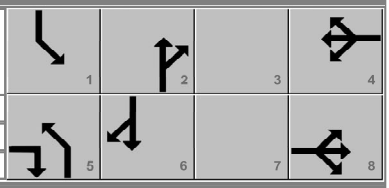
General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	J. Carey	Analysis Date	Oct 19, 2025	Area Type	Other
Jurisdiction	Easton, MD	Time Period	PM Peak	PHF	0.97
Urban Street		Analysis Year	Existing	Analysis Period	1> 4:00
Intersection	US 50 @ Norris Taylor…	File Name	US 50 at Norris Taylor - Ex PM - SHA timing - 180…		
Project Description	4286				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	20	0	18	5	0	0	56	1045	7	7	1040	62

Signal Information			
Cycle, s	180.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	34.5	92.5	35.0	0.0	0.0	0.0
Yellow	4.0	5.0	4.0	0.0	0.0	0.0
Red	1.5	1.5	2.0	0.0	0.0	0.0



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	20	0	18	5	0	0	56	1045	7	7	1040	62
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %		2	2		2		2	6		2	6	
Ped / Bike / RTOR, /h	0	0	0	0	0		0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	4	3	3	4	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft		11.0	11.0		12.0		11.0	12.0		10.0	11.0	
Turn Bay Length, ft		0	0		0		150	0		475	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	25	25	25	25	25	25	35	35	35	35	35	35

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		41.0		41.0	40.0	99.0	40.0	99.0
Yellow Change Interval (*Y*), s		4.0		4.0	4.0	5.0	4.0	5.0
Red Clearance Interval (R_c), s		2.0		2.0	1.5	1.5	1.5	1.5
Minimum Green (G_{min}), s		5		5	5	25	5	25
Start-Up Lost Time (*l*t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Passage (*PT*), s		2.0		2.0	2.0	2.0	2.0	2.0
Recall Mode		Off		Off	Off	Min	Off	Min
Dual Entry		Yes		Yes	No	Yes	No	Yes
Walk (*Walk*), s		5.0		0.0		0.0		5.0
Pedestrian Clearance Time (*PC*), s		27.0		0.0		0.0		17.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No		0.50	No		0.50	No		0.50	No		0.50

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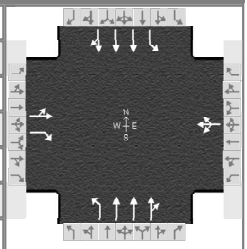
HCS Signalized Intersection Results Summary

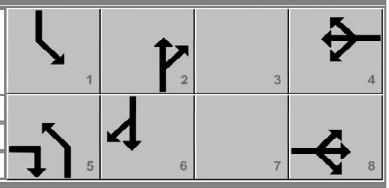
General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	J. Carey	Analysis Date	Oct 19, 2025	Area Type	Other
Jurisdiction	Easton, MD	Time Period	PM Peak	PHF	0.97
Urban Street		Analysis Year	Existing	Analysis Period	1> 4:00
Intersection	US 50 @ Norris Taylor…	File Name	US 50 at Norris Taylor - Ex PM - SHA timing - 180…		
Project Description	4286				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	20	0	18	5	0	0	56	1045	7	7	1040	62

Signal Information			
Cycle, s	180.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	34.5	92.5	35.0	0.0	0.0	0.0
Yellow	4.0	5.0	4.0	0.0	0.0	0.0
Red	1.5	1.5	2.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8		4	5	2	1	6
Case Number		7.0		8.0	2.0	4.0	2.0	4.0
Phase Duration, s		41.0		41.0	40.0	99.0	40.0	99.0
Change Period, (*Y+R c*), s		6.0		6.0	5.5	6.5	5.5	6.5
Max Allow Headway (*MAH*), s		3.3		3.3	3.1	0.0	3.1	0.0
Queue Clearance Time (*g s*), s		4.1		2.5	6.8		2.6	
Green Extension Time (*g e*), s		0.1		0.1	0.1	0.0	0.0	0.0
Phase Call Probability		1.00		1.00	1.00		1.00	
Max Out Probability		0.00		0.00	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h		21	19		5		58	724	361	7	765	371
Adjusted Saturation Flow Rate (*s*), veh/h/ln		1418	1585		1418		1781	1811	1805	1781	1811	1757
Queue Service Time (*g s*), s		1.6	1.3		0.0		4.8	14.7	14.9	0.6	15.9	17.2
Cycle Queue Clearance Time (*g c*), s		2.1	1.3		0.5		4.8	14.7	14.9	0.6	15.9	17.2
Green Ratio (*g/C*)		0.21	0.41		0.21		0.20	0.52	0.52	0.20	0.52	0.52
Capacity (*c*), veh/h		331	647		331		361	1902	947	361	1902	922
Volume-to-Capacity Ratio (*X*)		0.062	0.029		0.016		0.160	0.381	0.381	0.020	0.402	0.403
Back of Queue (*Q*), ft/ln (95 th percentile)		36	23		9		101	247	246	12	260	274
Back of Queue (*Q*), veh/ln (95 th percentile)		1.4	0.9		0.3		4.0	9.4	9.7	0.5	9.9	10.9
Queue Storage Ratio (*RQ*) (95 th percentile)		0.00	0.00		0.00		0.67	0.00	0.00	0.03	0.00	0.00
Uniform Delay (*d 1*), s/veh		57.6	31.9		57.0		59.1	15.3	15.2	57.4	15.5	17.0
Incremental Delay (*d 2*), s/veh		0.0	0.0		0.0		0.1	0.6	1.2	0.0	0.6	1.3
Initial Queue Delay (*d 3*), s/veh		0.0	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh		57.7	31.9		57.0		59.2	15.9	16.4	57.4	16.2	18.3
Level of Service (LOS)		E	C		E		E	B	B	E	B	B
Approach Delay, s/veh / LOS	45.5	D		57.0	E		18.3	B		17.1	B	
Intersection Delay, s/veh / LOS	18.2						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS								
Bicycle LOS Score / LOS								

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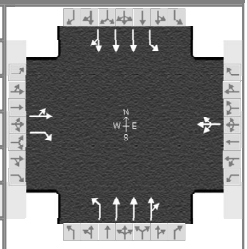
HCS Signalized Intersection Input Data

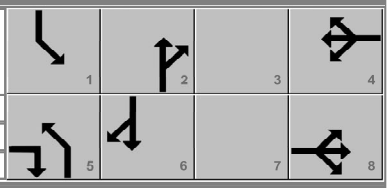
General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	J. Carey	Analysis Date	Oct 19, 2025	Area Type	Other
Jurisdiction	Easton, MD	Time Period	AM Peak	PHF	0.97
Urban Street		Analysis Year	Background	Analysis Period	1> 4:00
Intersection	US 50 @ Norris Taylor…	File Name	US 50 at Norris Taylor - Back AM - SHA timing - 1…		
Project Description	4286				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	17	0	11	4	0	0	113	1165	2	2	995	43

Signal Information			
Cycle, s	135.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	28.5	0.5	53.5	29.0	0.0	0.0					
Yellow	4.0	4.0	5.0	4.0	0.0	0.0					
Red	1.5	1.5	1.5	2.0	0.0	0.0					



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	17	0	11	4	0	0	113	1165	2	2	995	43
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %		2	2		2		2	6		2	6	
Ped / Bike / RTOR, /h	0	0	0	0	0		0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	4	3	3	4	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft		11.0	11.0		12.0		11.0	12.0		10.0	11.0	
Turn Bay Length, ft		0	0		0		150	0		475	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	25	25	25	25	25	25	35	35	35	35	35	35

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		35.0		35.0	40.0	66.0	34.0	60.0
Yellow Change Interval (*Y*), s		4.0		4.0	4.0	5.0	4.0	5.0
Red Clearance Interval (R_c), s		2.0		2.0	1.5	1.5	1.5	1.5
Minimum Green (G_{min}), s		5		5	5	25	5	25
Start-Up Lost Time (*l*t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Passage (*PT*), s		2.0		2.0	2.0	2.0	2.0	2.0
Recall Mode		Off		Off	Off	Min	Off	Min
Dual Entry		Yes		Yes	No	Yes	No	Yes
Walk (*Walk*), s		5.0		0.0		0.0		5.0
Pedestrian Clearance Time (*PC*), s		27.0		0.0		0.0		17.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No		0.50	No		0.50	No		0.50	No		0.50

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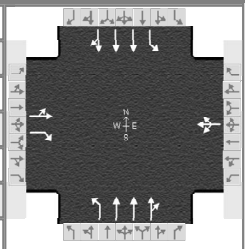
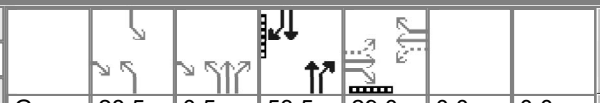
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	J. Carey	Analysis Date	Oct 19, 2025	Area Type	Other
Jurisdiction	Easton, MD	Time Period	AM Peak	PHF	0.97
Urban Street		Analysis Year	Background	Analysis Period	1> 4:00
Intersection	US 50 @ Norris Taylor…	File Name	US 50 at Norris Taylor - Back AM - SHA timing - 1…		
Project Description	4286				

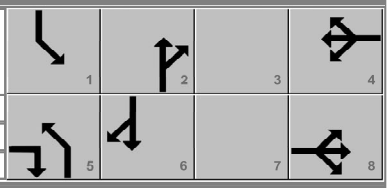


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	17	0	11	4	0	0	113	1165	2	2	995	43

Signal Information			
Cycle, s	135.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	28.5	0.5	53.5	29.0	0.0	0.0
Yellow	4.0	4.0	5.0	4.0	0.0	0.0
Red	1.5	1.5	1.5	2.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8		4	5	2	1	6
Case Number		7.0		8.0	2.0	4.0	2.0	4.0
Phase Duration, s		35.0		35.0	40.0	66.0	34.0	60.0
Change Period, (*Y+R c*), s		6.0		6.0	5.5	6.5	5.5	6.5
Max Allow Headway (*MAH*), s		3.3		3.3	3.1	0.0	3.1	0.0
Queue Clearance Time (*g s*), s		3.3		2.3	8.9		2.1	
Green Extension Time (*g e*), s		0.0		0.0	0.2	0.0	0.0	0.0
Phase Call Probability		1.00		1.00	1.00		1.00	
Max Out Probability		0.00		0.00	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h		18	11		4		116	802	401	2	718	352
Adjusted Saturation Flow Rate (*s*), veh/h/ln		1418	1585		1418		1781	1811	1809	1781	1811	1771
Queue Service Time (*g s*), s		1.0	0.5		0.0		6.9	16.7	16.7	0.1	16.4	16.9
Cycle Queue Clearance Time (*g c*), s		1.3	0.5		0.3		6.9	16.7	16.7	0.1	16.4	16.9
Green Ratio (*g/C*)		0.23	0.50		0.23		0.27	0.46	0.46	0.23	0.41	0.41
Capacity (*c*), veh/h		379	793		379		482	1650	824	402	1489	728
Volume-to-Capacity Ratio (*X*)		0.046	0.014		0.011		0.242	0.486	0.486	0.005	0.482	0.483
Back of Queue (*Q*), ft/ln (95 th percentile)		21	8		5		139	271	271	2	279	280
Back of Queue (*Q*), veh/ln (95 th percentile)		0.8	0.3		0.2		5.5	10.3	10.7	0.1	10.7	11.2
Queue Storage Ratio (*RQ*) (95 th percentile)		0.00	0.00		0.00		0.93	0.00	0.00	0.01	0.00	0.00
Uniform Delay (*d 1*), s/veh		40.6	17.0		40.2		38.4	18.1	17.7	40.5	22.2	22.6
Incremental Delay (*d 2*), s/veh		0.0	0.0		0.0		0.1	1.0	2.0	0.0	1.1	2.3
Initial Queue Delay (*d 3*), s/veh		0.0	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh		40.6	17.0		40.2		38.5	19.2	19.8	40.5	23.3	24.9
Level of Service (LOS)		D	B		D		D	B	B	D	C	C
Approach Delay, s/veh / LOS	31.3	C		40.2	D		21.1	C		23.9	C	
Intersection Delay, s/veh / LOS	22.5						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS								
Bicycle LOS Score / LOS								

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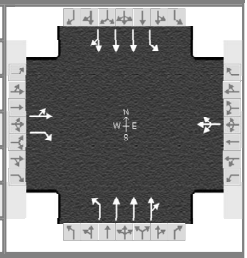
HCS Signalized Intersection Input Data

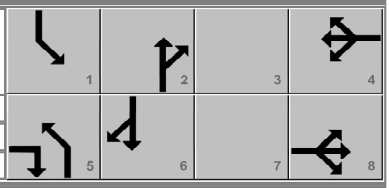
General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	J. Carey	Analysis Date	Oct 19, 2025	Area Type	Other
Jurisdiction	Easton, MD	Time Period	PM Peak	PHF	0.97
Urban Street		Analysis Year	Background	Analysis Period	1> 4:00
Intersection	US 50 @ Norris Taylor…	File Name	US 50 at Norris Taylor - Back PM - SHA timing - 1…		
Project Description	4286				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	21	0	19	5	0	0	58	1087	7	7	1082	65

Signal Information			
Cycle, s	180.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	34.5	92.5	35.0	0.0	0.0	0.0
Yellow	4.0	5.0	4.0	0.0	0.0	0.0
Red	1.5	1.5	2.0	0.0	0.0	0.0



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	21	0	19	5	0	0	58	1087	7	7	1082	65
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %		2	2		2		2	6		2	6	
Ped / Bike / RTOR, /h	0	0	0	0	0		0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	4	3	3	4	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft		11.0	11.0		12.0		11.0	12.0		10.0	11.0	
Turn Bay Length, ft		0	0		0		150	0		475	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	25	25	25	25	25	25	35	35	35	35	35	35

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		41.0		41.0	40.0	99.0	40.0	99.0
Yellow Change Interval (*Y*), s		4.0		4.0	4.0	5.0	4.0	5.0
Red Clearance Interval (R_c), s		2.0		2.0	1.5	1.5	1.5	1.5
Minimum Green (G_{min}), s		5		5	5	25	5	25
Start-Up Lost Time (*l*t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Passage (*PT*), s		2.0		2.0	2.0	2.0	2.0	2.0
Recall Mode		Off		Off	Off	Min	Off	Min
Dual Entry		Yes		Yes	No	Yes	No	Yes
Walk (*Walk*), s		5.0		0.0		0.0		5.0
Pedestrian Clearance Time (*PC*), s		27.0		0.0		0.0		17.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

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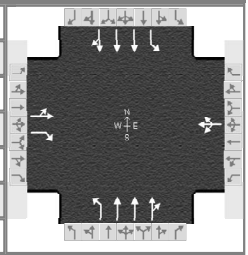
HCS Signalized Intersection Results Summary

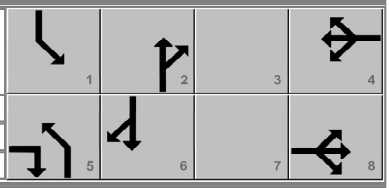
General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	J. Carey	Analysis Date	Oct 19, 2025	Area Type	Other
Jurisdiction	Easton, MD	Time Period	PM Peak	PHF	0.97
Urban Street		Analysis Year	Background	Analysis Period	1> 4:00
Intersection	US 50 @ Norris Taylor…	File Name	US 50 at Norris Taylor - Back PM - SHA timing - 1…		
Project Description	4286				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	21	0	19	5	0	0	58	1087	7	7	1082	65

Signal Information			
Cycle, s	180.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	34.5	92.5	35.0	0.0	0.0	0.0
Yellow	4.0	5.0	4.0	0.0	0.0	0.0
Red	1.5	1.5	2.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8		4	5	2	1	6
Case Number		7.0		8.0	2.0	4.0	2.0	4.0
Phase Duration, s		41.0		41.0	40.0	99.0	40.0	99.0
Change Period, (*Y+R c*), s		6.0		6.0	5.5	6.5	5.5	6.5
Max Allow Headway (*MAH*), s		3.3		3.3	3.1	0.0	3.1	0.0
Queue Clearance Time (*g s*), s		4.2		2.5	7.0		2.6	
Green Extension Time (*g e*), s		0.1		0.1	0.1	0.0	0.0	0.0
Phase Call Probability		1.00		1.00	1.00		1.00	
Max Out Probability		0.00		0.00	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h		22	20		5		60	753	375	7	796	386
Adjusted Saturation Flow Rate (*s*), veh/h/ln		1418	1585		1418		1781	1811	1805	1781	1811	1756
Queue Service Time (*g s*), s		1.7	1.3		0.0		5.0	15.5	15.7	0.6	16.8	18.2
Cycle Queue Clearance Time (*g c*), s		2.2	1.3		0.5		5.0	15.5	15.7	0.6	16.8	18.2
Green Ratio (*g/C*)		0.21	0.41		0.21		0.20	0.52	0.52	0.20	0.52	0.52
Capacity (*c*), veh/h		331	647		331		361	1902	948	361	1902	922
Volume-to-Capacity Ratio (*X*)		0.065	0.030		0.016		0.166	0.396	0.396	0.020	0.419	0.419
Back of Queue (*Q*), ft/ln (95 th percentile)		37	24		9		104	256	256	12	272	287
Back of Queue (*Q*), veh/ln (95 th percentile)		1.5	1.0		0.3		4.1	9.8	10.1	0.5	10.4	11.5
Queue Storage Ratio (*RQ*) (95 th percentile)		0.00	0.00		0.00		0.69	0.00	0.00	0.03	0.00	0.00
Uniform Delay (*d 1*), s/veh		57.7	31.9		57.0		59.2	15.5	15.3	57.4	15.7	17.1
Incremental Delay (*d 2*), s/veh		0.0	0.0		0.0		0.1	0.6	1.2	0.0	0.7	1.4
Initial Queue Delay (*d 3*), s/veh		0.0	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh		57.7	31.9		57.0		59.3	16.1	16.6	57.4	16.3	18.5
Level of Service (LOS)		E	C		E		E	B	B	E	B	B
Approach Delay, s/veh / LOS	45.5	D		57.0	E		18.4	B		17.3	B	
Intersection Delay, s/veh / LOS	18.4						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS								
Bicycle LOS Score / LOS								

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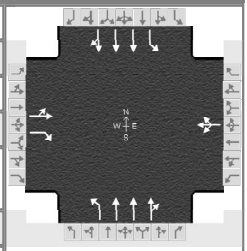
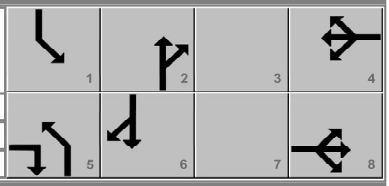
HCS Signalized Intersection Input Data

General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	J. Carey	Analysis Date	Oct 19, 2025	Area Type	Other
Jurisdiction	Easton, MD	Time Period	AM Peak	PHF	0.92
Urban Street		Analysis Year	Future (NO Connection)	Analysis Period	1> 7:15
Intersection	US 50 @ Norris Taylor…	File Name	US 50 at Norris Taylor - Future AM - SHA timing -…		
Project Description	4286				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	17	0	11	4	0	0	113	1169	2	2	997	43

Signal Information													
Cycle, s	135.0	Reference Phase	2										
Offset, s	0	Reference Point	End										
Uncoordinated	No	Simult. Gap E/W	On										
Force Mode	Fixed	Simult. Gap N/S	On										
				Green	28.5	0.5	53.5	29.0	0.0	0.0			
				Yellow	4.0	4.0	5.0	4.0	0.0	0.0			
				Red	1.5	1.5	1.5	2.0	0.0	0.0			



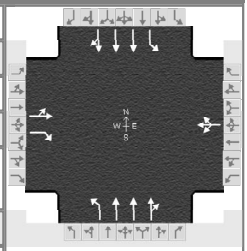
Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	17	0	11	4	0	0	113	1169	2	2	997	43
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %		2	2		2		2	6		2	6	
Ped / Bike / RTOR, /h	0	0	0	0	0		0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	4	3	3	4	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft		11.0	11.0		12.0		11.0	12.0		10.0	11.0	
Turn Bay Length, ft		0	0		0		150	0		475	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	25	25	25	25	25	25	35	35	35	35	35	35

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		35.0		35.0	40.0	66.0	34.0	60.0
Yellow Change Interval (*Y*), s		4.0		4.0	4.0	5.0	4.0	5.0
Red Clearance Interval (R_c), s		2.0		2.0	1.5	1.5	1.5	1.5
Minimum Green (G_{min}), s		5		5	5	25	5	25
Start-Up Lost Time (*l*t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Passage (*PT*), s		2.0		2.0	2.0	2.0	2.0	2.0
Recall Mode		Off		Off	Off	Min	Off	Min
Dual Entry		Yes		Yes	No	Yes	No	Yes
Walk (*Walk*), s		5.0		0.0		0.0		5.0
Pedestrian Clearance Time (*PC*), s		27.0		0.0		0.0		17.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No		0.50	No		0.50	No		0.50	No		0.50

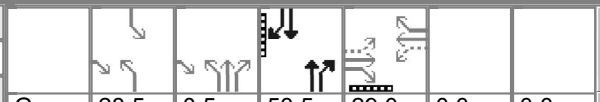
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	J. Carey	Analysis Date	Oct 19, 2025	Area Type	Other
Jurisdiction	Easton, MD	Time Period	AM Peak	PHF	0.92
Urban Street		Analysis Year	Future (NO Connection)	Analysis Period	1> 7:15
Intersection	US 50 @ Norris Taylor…	File Name	US 50 at Norris Taylor - Future AM - SHA timing -…		
Project Description	4286				

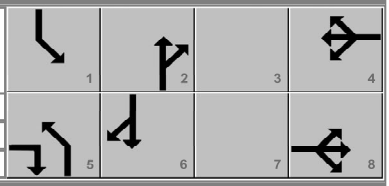


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	17	0	11	4	0	0	113	1169	2	2	997	43

Signal Information			
Cycle, s	135.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	28.5	0.5	53.5	29.0	0.0	0.0
Yellow	4.0	4.0	5.0	4.0	0.0	0.0
Red	1.5	1.5	1.5	2.0	0.0	0.0



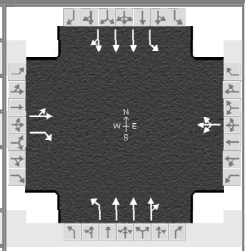
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8		4	5	2	1	6
Case Number		7.0		8.0	2.0	4.0	2.0	4.0
Phase Duration, s		35.0		35.0	40.0	66.0	34.0	60.0
Change Period, ($Y+R_c$), s		6.0		6.0	5.5	6.5	5.5	6.5
Max Allow Headway (*MAH*), s		3.3		3.3	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s		3.4		2.3	9.3		2.1	
Green Extension Time (g_e), s		0.0		0.0	0.2	0.0	0.0	0.0
Phase Call Probability		1.00		1.00	1.00		1.00	
Max Out Probability		0.00		0.00	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h		18	12		4		123	849	424	2	759	371
Adjusted Saturation Flow Rate (*s*), veh/h/ln		1418	1585		1418		1781	1811	1809	1781	1811	1771
Queue Service Time (g_s), s		1.1	0.5		0.0		7.3	18.1	18.1	0.1	17.7	18.2
Cycle Queue Clearance Time (g_c), s		1.4	0.5		0.3		7.3	18.1	18.1	0.1	17.7	18.2
Green Ratio (*g/C*)		0.23	0.50		0.23		0.27	0.46	0.46	0.23	0.41	0.41
Capacity (*c*), veh/h		379	793		379		482	1650	824	402	1489	728
Volume-to-Capacity Ratio (*X*)		0.049	0.015		0.011		0.255	0.514	0.514	0.005	0.510	0.510
Back of Queue (*Q*), ft/ln (95 th percentile)		22	9		5		147	290	290	3	296	297
Back of Queue (*Q*), veh/ln (95 th percentile)		0.9	0.3		0.2		5.8	11.0	11.4	0.1	11.3	11.9
Queue Storage Ratio (*RQ*) (95 th percentile)		0.00	0.00		0.00		0.98	0.00	0.00	0.01	0.00	0.00
Uniform Delay (d_1), s/veh		40.6	17.0		40.2		38.6	18.4	18.0	40.5	22.5	22.9
Incremental Delay (d_2), s/veh		0.0	0.0		0.0		0.1	1.1	2.3	0.0	1.2	2.5
Initial Queue Delay (d_3), s/veh		0.0	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh		40.6	17.0		40.2		38.7	19.6	20.3	40.5	23.7	25.5
Level of Service (LOS)		D	B		D		D	B	C	D	C	C
Approach Delay, s/veh / LOS	31.3	C		40.2	D		21.5	C		24.3	C	
Intersection Delay, s/veh / LOS	22.9						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS								
Bicycle LOS Score / LOS								

HCS Signalized Intersection Input Data

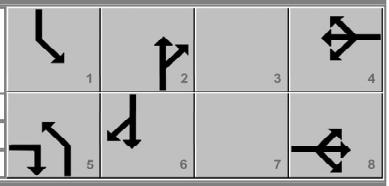
General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	J. Carey	Analysis Date	Oct 19, 2025	Area Type	Other
Jurisdiction	Easton, MD	Time Period	PM Peak	PHF	0.97
Urban Street		Analysis Year	Future (NO Connection)	Analysis Period	1> 4:00
Intersection	US 50 @ Norris Taylor…	File Name	US 50 at Norris Taylor - Future PM - SHA timing -…		
Project Description	4286				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	21	0	19	5	0	0	58	1090	7	7	1085	65

Signal Information			
Cycle, s	180.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	34.5	92.5	35.0	0.0	0.0	0.0
Yellow	4.0	5.0	4.0	0.0	0.0	0.0
Red	1.5	1.5	2.0	0.0	0.0	0.0



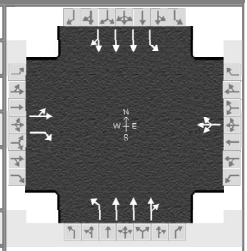
Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	21	0	19	5	0	0	58	1090	7	7	1085	65
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %		2	2		2		2	6		2	6	
Ped / Bike / RTOR, /h	0	0	0	0	0		0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	4	3	3	4	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft		11.0	11.0		12.0		11.0	12.0		10.0	11.0	
Turn Bay Length, ft		0	0		0		150	0		475	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	25	25	25	25	25	25	35	35	35	35	35	35

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		41.0		41.0	40.0	99.0	40.0	99.0
Yellow Change Interval (*Y*), s		4.0		4.0	4.0	5.0	4.0	5.0
Red Clearance Interval (R_c), s		2.0		2.0	1.5	1.5	1.5	1.5
Minimum Green (G_{min}), s		5		5	5	25	5	25
Start-Up Lost Time (*l*t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Passage (*PT*), s		2.0		2.0	2.0	2.0	2.0	2.0
Recall Mode		Off		Off	Off	Min	Off	Min
Dual Entry		Yes		Yes	No	Yes	No	Yes
Walk (*Walk*), s		5.0		0.0		0.0		5.0
Pedestrian Clearance Time (*PC*), s		27.0		0.0		0.0		17.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

HCS Signalized Intersection Results Summary

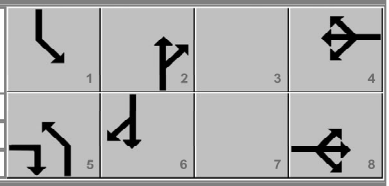
General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	J. Carey	Analysis Date	Oct 19, 2025	Area Type	Other
Jurisdiction	Easton, MD	Time Period	PM Peak	PHF	0.97
Urban Street		Analysis Year	Future (NO Connection)	Analysis Period	1> 4:00
Intersection	US 50 @ Norris Taylor…	File Name	US 50 at Norris Taylor - Future PM - SHA timing -…		
Project Description	4286				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	21	0	19	5	0	0	58	1090	7	7	1085	65

Signal Information			
Cycle, s	180.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	34.5	92.5	35.0	0.0	0.0	0.0
Yellow	4.0	5.0	4.0	0.0	0.0	0.0
Red	1.5	1.5	2.0	0.0	0.0	0.0



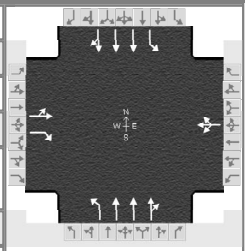
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8		4	5	2	1	6
Case Number		7.0		8.0	2.0	4.0	2.0	4.0
Phase Duration, s		41.0		41.0	40.0	99.0	40.0	99.0
Change Period, ($Y+R_c$), s		6.0		6.0	5.5	6.5	5.5	6.5
Max Allow Headway (*MAH*), s		3.3		3.3	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s		4.2		2.5	7.0		2.6	
Green Extension Time (g_e), s		0.1		0.1	0.1	0.0	0.0	0.0
Phase Call Probability		1.00		1.00	1.00		1.00	
Max Out Probability		0.00		0.00	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h		22	20		5		60	755	376	7	798	387
Adjusted Saturation Flow Rate (*s*), veh/h/ln		1418	1585		1418		1781	1811	1805	1781	1811	1756
Queue Service Time (g_s), s		1.7	1.3		0.0		5.0	15.6	15.7	0.6	16.8	18.2
Cycle Queue Clearance Time (g_c), s		2.2	1.3		0.5		5.0	15.6	15.7	0.6	16.8	18.2
Green Ratio (*g/C*)		0.21	0.41		0.21		0.20	0.52	0.52	0.20	0.52	0.52
Capacity (*c*), veh/h		331	647		331		361	1902	948	361	1902	922
Volume-to-Capacity Ratio (*X*)		0.065	0.030		0.016		0.166	0.397	0.397	0.020	0.420	0.420
Back of Queue (*Q*), ft/ln (95 th percentile)		37	24		9		104	256	256	12	273	287
Back of Queue (*Q*), veh/ln (95 th percentile)		1.5	1.0		0.3		4.1	9.8	10.1	0.5	10.4	11.5
Queue Storage Ratio (*RQ*) (95 th percentile)		0.00	0.00		0.00		0.69	0.00	0.00	0.03	0.00	0.00
Uniform Delay (d_1), s/veh		57.7	31.9		57.0		59.2	15.5	15.4	57.4	15.7	17.1
Incremental Delay (d_2), s/veh		0.0	0.0		0.0		0.1	0.6	1.2	0.0	0.7	1.4
Initial Queue Delay (d_3), s/veh		0.0	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh		57.7	31.9		57.0		59.3	16.1	16.6	57.4	16.4	18.5
Level of Service (LOS)		E	C		E		E	B	B	E	B	B
Approach Delay, s/veh / LOS	45.5	D		57.0	E		18.4	B		17.3	B	
Intersection Delay, s/veh / LOS	18.4						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS								
Bicycle LOS Score / LOS								

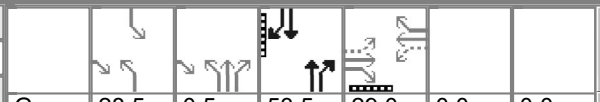
HCS Signalized Intersection Input Data

General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	J. Carey	Analysis Date	Oct 19, 2025	Area Type	Other
Jurisdiction	Easton, MD	Time Period	AM Peak	PHF	0.92
Urban Street		Analysis Year	Future (WITH Connection)	Analysis Period	1> 7:15
Intersection	US 50 @ Norris Taylor…	File Name	US 50 at Norris Taylor - Future AM + CONNECTI…		
Project Description	4286				

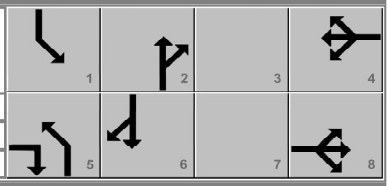


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	35	0	11	4	0	0	113	1151	2	2	991	49

Signal Information			
Cycle, s	135.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	28.5	0.5	53.5	29.0	0.0	0.0
Yellow	4.0	4.0	5.0	4.0	0.0	0.0
Red	1.5	1.5	1.5	2.0	0.0	0.0



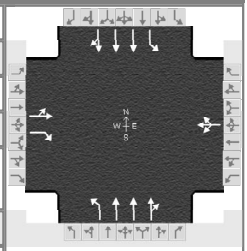
Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	35	0	11	4	0	0	113	1151	2	2	991	49
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %		2	2		2		2	6		2	6	
Ped / Bike / RTOR, /h	0	0	0	0	0		0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	4	3	3	4	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft		11.0	11.0		12.0		11.0	12.0		10.0	11.0	
Turn Bay Length, ft		0	0		0		150	0		475	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	25	25	25	25	25	25	35	35	35	35	35	35

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		35.0		35.0	40.0	66.0	34.0	60.0
Yellow Change Interval (*Y*), s		4.0		4.0	4.0	5.0	4.0	5.0
Red Clearance Interval (R_c), s		2.0		2.0	1.5	1.5	1.5	1.5
Minimum Green (G_{min}), s		5		5	5	25	5	25
Start-Up Lost Time (*l*t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Passage (*PT*), s		2.0		2.0	2.0	2.0	2.0	2.0
Recall Mode		Off		Off	Off	Min	Off	Min
Dual Entry		Yes		Yes	No	Yes	No	Yes
Walk (*Walk*), s		5.0		0.0		0.0		5.0
Pedestrian Clearance Time (*PC*), s		27.0		0.0		0.0		17.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

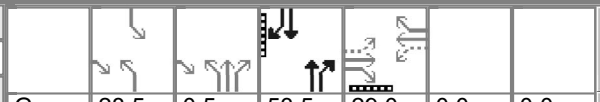
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	J. Carey	Analysis Date	Oct 19, 2025	Area Type	Other
Jurisdiction	Easton, MD	Time Period	AM Peak	PHF	0.92
Urban Street		Analysis Year	Future (WITH Connection)	Analysis Period	1> 7:15
Intersection	US 50 @ Norris Taylor…	File Name	US 50 at Norris Taylor - Future AM + CONNECTI…		
Project Description	4286				

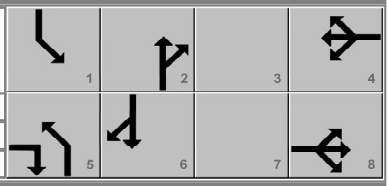


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	35	0	11	4	0	0	113	1151	2	2	991	49

Signal Information			
Cycle, s	135.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	28.5	0.5	53.5	29.0	0.0	0.0
Yellow	4.0	4.0	5.0	4.0	0.0	0.0
Red	1.5	1.5	1.5	2.0	0.0	0.0



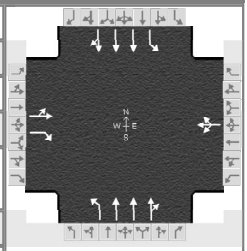
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8		4	5	2	1	6
Case Number		7.0		8.0	2.0	4.0	2.0	4.0
Phase Duration, s		35.0		35.0	40.0	66.0	34.0	60.0
Change Period, ($Y+R_c$), s		6.0		6.0	5.5	6.5	5.5	6.5
Max Allow Headway (*MAH*), s		3.2		3.2	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s		4.9		2.3	9.3		2.1	
Green Extension Time (g_e), s		0.1		0.1	0.2	0.0	0.0	0.0
Phase Call Probability		1.00		1.00	1.00		1.00	
Max Out Probability		0.00		0.00	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h		38	12		4		123	836	417	2	760	371
Adjusted Saturation Flow Rate (*s*), veh/h/ln		1418	1585		1418		1781	1811	1809	1781	1811	1765
Queue Service Time (g_s), s		2.5	0.5		0.0		7.3	17.7	17.7	0.1	17.8	18.3
Cycle Queue Clearance Time (g_c), s		2.9	0.5		0.3		7.3	17.7	17.7	0.1	17.8	18.3
Green Ratio (*g/C*)		0.23	0.50		0.23		0.27	0.46	0.46	0.23	0.41	0.41
Capacity (*c*), veh/h		379	793		379		482	1650	824	402	1489	726
Volume-to-Capacity Ratio (*X*)		0.100	0.015		0.011		0.255	0.506	0.506	0.005	0.510	0.511
Back of Queue (*Q*), ft/ln (95 th percentile)		47	9		5		147	284	285	3	297	298
Back of Queue (*Q*), veh/ln (95 th percentile)		1.9	0.3		0.2		5.8	10.8	11.2	0.1	11.3	11.9
Queue Storage Ratio (*RQ*) (95 th percentile)		0.00	0.00		0.00		0.98	0.00	0.00	0.01	0.00	0.00
Uniform Delay (d_1), s/veh		41.2	17.0		40.2		38.6	18.3	17.9	40.5	22.5	23.1
Incremental Delay (d_2), s/veh		0.0	0.0		0.0		0.1	1.1	2.2	0.0	1.3	2.6
Initial Queue Delay (d_3), s/veh		0.0	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh		41.2	17.0		40.2		38.7	19.5	20.2	40.5	23.7	25.6
Level of Service (LOS)		D	B		D		D	B	C	D	C	C
Approach Delay, s/veh / LOS	35.4	D		40.2	D		21.4	C		24.4	C	
Intersection Delay, s/veh / LOS	23.0						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS								
Bicycle LOS Score / LOS								

HCS Signalized Intersection Input Data

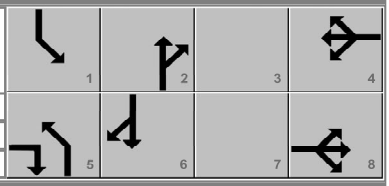
General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	J. Carey	Analysis Date	Oct 19, 2025	Area Type	Other
Jurisdiction	Easton, MD	Time Period	PM Peak	PHF	0.97
Urban Street		Analysis Year	Future (WITH Connection)	Analysis Period	1> 4:00
Intersection	US 50 @ Norris Taylor…	File Name	US 50 at Norris Taylor - Future PM + CONNECTI…		
Project Description	4286				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	43	0	19	5	0	0	58	1068	7	7	1076	74

Signal Information			
Cycle, s	180.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	34.5	92.5	35.0	0.0	0.0	0.0
Yellow	4.0	5.0	4.0	0.0	0.0	0.0
Red	1.5	1.5	2.0	0.0	0.0	0.0



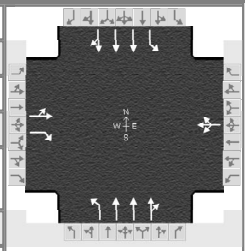
Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	43	0	19	5	0	0	58	1068	7	7	1076	74
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %		2	2		2		2	6		2	6	
Ped / Bike / RTOR, /h	0	0	0	0	0		0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	4	3	3	4	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft		11.0	11.0		12.0		11.0	12.0		10.0	11.0	
Turn Bay Length, ft		0	0		0		150	0		475	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	25	25	25	25	25	25	35	35	35	35	35	35

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		41.0		41.0	40.0	99.0	40.0	99.0
Yellow Change Interval (*Y*), s		4.0		4.0	4.0	5.0	4.0	5.0
Red Clearance Interval (R_c), s		2.0		2.0	1.5	1.5	1.5	1.5
Minimum Green (G_{min}), s		5		5	5	25	5	25
Start-Up Lost Time (*l*t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Passage (*PT*), s		2.0		2.0	2.0	2.0	2.0	2.0
Recall Mode		Off		Off	Off	Min	Off	Min
Dual Entry		Yes		Yes	No	Yes	No	Yes
Walk (*Walk*), s		5.0		0.0		0.0		5.0
Pedestrian Clearance Time (*PC*), s		27.0		0.0		0.0		17.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

HCS Signalized Intersection Results Summary

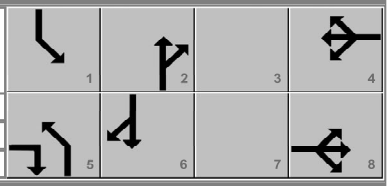
General Information				Intersection Information	
Agency	Traffic Concepts, Inc.			Duration, h	0.250
Analyst	J. Carey	Analysis Date	Oct 19, 2025	Area Type	Other
Jurisdiction	Easton, MD	Time Period	PM Peak	PHF	0.97
Urban Street		Analysis Year	Future (WITH Connection)	Analysis Period	1> 4:00
Intersection	US 50 @ Norris Taylor…	File Name	US 50 at Norris Taylor - Future PM + CONNECTI…		
Project Description	4286				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	43	0	19	5	0	0	58	1068	7	7	1076	74

Signal Information			
Cycle, s	180.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	34.5	92.5	35.0	0.0	0.0	0.0
Yellow	4.0	5.0	4.0	0.0	0.0	0.0
Red	1.5	1.5	2.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8		4	5	2	1	6
Case Number		7.0		8.0	2.0	4.0	2.0	4.0
Phase Duration, s		41.0		41.0	40.0	99.0	40.0	99.0
Change Period, ($Y+R_c$), s		6.0		6.0	5.5	6.5	5.5	6.5
Max Allow Headway (*MAH*), s		3.3		3.3	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s		6.6		2.5	7.0		2.6	
Green Extension Time (g_e), s		0.1		0.1	0.1	0.0	0.0	0.0
Phase Call Probability		1.00		1.00	1.00		1.00	
Max Out Probability		0.00		0.00	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h		44	20		5		60	740	369	7	799	386
Adjusted Saturation Flow Rate (*s*), veh/h/ln		1418	1585		1418		1781	1811	1805	1781	1811	1749
Queue Service Time (g_s), s		4.1	1.3		0.0		5.0	15.2	15.3	0.6	16.9	18.5
Cycle Queue Clearance Time (g_c), s		4.6	1.3		0.5		5.0	15.2	15.3	0.6	16.9	18.5
Green Ratio (*g/C*)		0.21	0.41		0.21		0.20	0.52	0.52	0.20	0.52	0.52
Capacity (*c*), veh/h		331	647		331		361	1902	947	361	1902	918
Volume-to-Capacity Ratio (*X*)		0.134	0.030		0.016		0.166	0.389	0.389	0.020	0.420	0.421
Back of Queue (*Q*), ft/ln (95 th percentile)		78	24		9		104	252	251	12	274	291
Back of Queue (*Q*), veh/ln (95 th percentile)		3.1	1.0		0.3		4.1	9.6	9.9	0.5	10.4	11.6
Queue Storage Ratio (*RQ*) (95 th percentile)		0.00	0.00		0.00		0.69	0.00	0.00	0.03	0.00	0.00
Uniform Delay (d_1), s/veh		58.6	31.9		57.0		59.2	15.4	15.3	57.4	15.7	17.4
Incremental Delay (d_2), s/veh		0.1	0.0		0.0		0.1	0.6	1.2	0.0	0.7	1.4
Initial Queue Delay (d_3), s/veh		0.0	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh		58.7	31.9		57.0		59.3	16.0	16.5	57.4	16.4	18.8
Level of Service (LOS)		E	C		E		E	B	B	E	B	B
Approach Delay, s/veh / LOS	50.5	D		57.0	E		18.4	B		17.4	B	
Intersection Delay, s/veh / LOS	18.8						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS								
Bicycle LOS Score / LOS								



APPENDIX I-C

HCS Two-Way Stop-Control Report

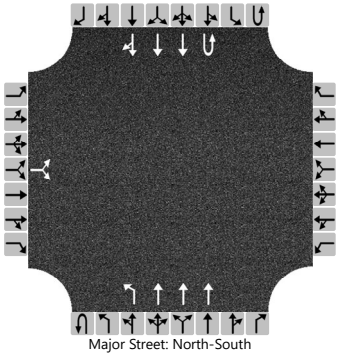
General Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/19/2025
Analysis Year	2025
Time Analyzed	Existing AM
Intersection Orientation	North-South
Project Description	4286

Site Information

Intersection	US 50 at Lomax St
Jurisdiction	Easton, MD
East/West Street	Lomax St
North/South Street	US 50 (Ocean Gateway)
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	3	0	1	0	3	0
Configuration			LR							L	T		U		T	TR
Volume (veh/h)		6		18					38	21	1238		29		1068	7
Percent Heavy Vehicles (%)		2		2					2	2			2			
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Left + Thru								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4		7.1					5.6	5.3			5.6			
Critical Headway (sec)		5.74		7.14					5.64	5.34			5.64			
Base Follow-Up Headway (sec)		3.8		3.9					2.3	3.1			2.3			
Follow-Up Headway (sec)		3.82		3.92					2.32	3.12			2.32			

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			26							65			32			
Capacity, c (veh/h)			256							414			443			
v/c Ratio			0.10							0.16			0.07			
95% Queue Length, Q_{95} (veh)			0.3							0.5			0.2			
95% Queue Length, Q_{95} (ft)			7.6							12.7			5.1			
Control Delay (s/veh)			20.7							15.3			13.7			
Level of Service (LOS)			C							C			B			
Approach Delay (s/veh)		20.7								0.7				0.4		
Approach LOS		C								A				A		

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HCS Two-Way Stop-Control Report

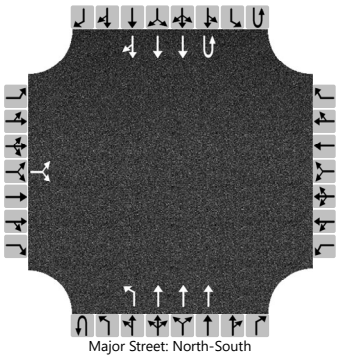
General Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/19/2025
Analysis Year	2025
Time Analyzed	Existing PM
Intersection Orientation	North-South
Project Description	4286

Site Information

Intersection	US 50 at Lomax St
Jurisdiction	Easton, MD
East/West Street	Lomax St
North/South Street	US 50 (Ocean Gateway)
Peak Hour Factor	0.98
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	3	0	1	0	3	0
Configuration			LR							L	T		U		T	TR
Volume (veh/h)		4		23					20	28	1109		7		1161	11
Percent Heavy Vehicles (%)		2		2					2	2			2			
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Left + Thru								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4		7.1					5.6	5.3			5.6			
Critical Headway (sec)		5.74		7.14					5.64	5.34			5.64			
Base Follow-Up Headway (sec)		3.8		3.9					2.3	3.1			2.3			
Follow-Up Headway (sec)		3.82		3.92					2.32	3.12			2.32			

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			28							49			7			
Capacity, c (veh/h)			311							368			549			
v/c Ratio			0.09							0.13			0.01			
95% Queue Length, Q_{95} (veh)			0.3							0.5			0.0			
95% Queue Length, Q_{95} (ft)			7.6							12.7			0.0			
Control Delay (s/veh)			17.7							16.3			11.6			
Level of Service (LOS)			C							C			B			
Approach Delay (s/veh)		17.7								0.7				0.1		
Approach LOS		C								A				A		

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HCS Two-Way Stop-Control Report

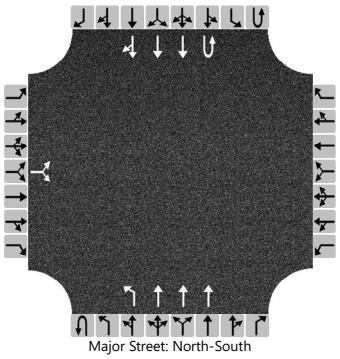
General Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/19/2025
Analysis Year	2027
Time Analyzed	Background AM
Intersection Orientation	North-South
Project Description	4286

Site Information

Intersection	US 50 at Lomax St
Jurisdiction	Easton, MD
East/West Street	Lomax St
North/South Street	US 50 (Ocean Gateway)
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	3	0	1	0	3	0
Configuration			LR							L	T		U		T	TR
Volume (veh/h)		6		19					40	22	1288		29		1111	7
Percent Heavy Vehicles (%)		2		2					2	2			2			
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Left + Thru								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4		7.1					5.6	5.3			5.6			
Critical Headway (sec)		5.74		7.14					5.64	5.34			5.64			
Base Follow-Up Headway (sec)		3.8		3.9					2.3	3.1			2.3			
Follow-Up Headway (sec)		3.82		3.92					2.32	3.12			2.32			

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			27							68			32			
Capacity, c (veh/h)			245							394			421			
v/c Ratio			0.11							0.17			0.08			
95% Queue Length, Q_{95} (veh)			0.4							0.6			0.2			
95% Queue Length, Q_{95} (ft)			10.2							15.2			5.1			
Control Delay (s/veh)			21.5							16.0			14.2			
Level of Service (LOS)			C							C			B			
Approach Delay (s/veh)		21.5								0.7				0.4		
Approach LOS		C								A				A		

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HCS Two-Way Stop-Control Report

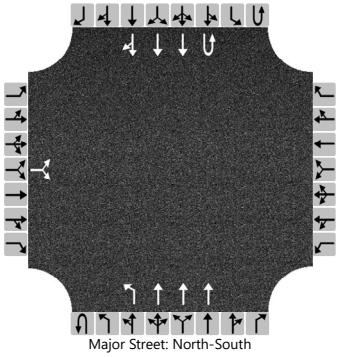
General Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/19/2025
Analysis Year	2028
Time Analyzed	Background PM
Intersection Orientation	North-South
Project Description	4286

Site Information

Intersection	US 50 at Lomax St
Jurisdiction	Easton, MD
East/West Street	Lomax St
North/South Street	US 50 (Ocean Gateway)
Peak Hour Factor	0.98
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	3	0	1	0	3	0
Configuration			LR							L	T		U		T	TR
Volume (veh/h)		4		24					21	29	1154		7		1208	11
Percent Heavy Vehicles (%)		2		2					2	2			2			
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Left + Thru								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4		7.1					5.6	5.3			5.6			
Critical Headway (sec)		5.74		7.14					5.64	5.34			5.64			
Base Follow-Up Headway (sec)		3.8		3.9					2.3	3.1			2.3			
Follow-Up Headway (sec)		3.82		3.92					2.32	3.12			2.32			

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			29							51			7			
Capacity, c (veh/h)			299							350			526			
v/c Ratio			0.10							0.15			0.01			
95% Queue Length, Q_{95} (veh)			0.3							0.5			0.0			
95% Queue Length, Q_{95} (ft)			7.6							12.7			0.0			
Control Delay (s/veh)			18.3							17.0			11.9			
Level of Service (LOS)			C							C			B			
Approach Delay (s/veh)		18.3								0.7				0.1		
Approach LOS		C								A				A		

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HCS Two-Way Stop-Control Report

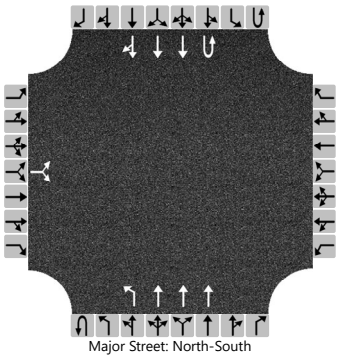
General Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/19/2025
Analysis Year	2027
Time Analyzed	Future AM
Intersection Orientation	North-South
Project Description	4286

Site Information

Intersection	US 50 at Lomax St
Jurisdiction	Easton, MD
East/West Street	Lomax St
North/South Street	US 50 (Ocean Gateway)
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	3	0	1	0	3	0
Configuration			LR							L	T		U		T	TR
Volume (veh/h)		10		28					40	27	1288		29		1111	9
Percent Heavy Vehicles (%)		2		2					2	2			2			
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Left + Thru								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4		7.1					5.6	5.3			5.6			
Critical Headway (sec)		5.74		7.14					5.64	5.34			5.64			
Base Follow-Up Headway (sec)		3.8		3.9					2.3	3.1			2.3			
Follow-Up Headway (sec)		3.82		3.92					2.32	3.12			2.32			

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			42							74			32			
Capacity, c (veh/h)			235							379			421			
v/c Ratio			0.18							0.19			0.08			
95% Queue Length, Q_{95} (veh)			0.6							0.7			0.2			
95% Queue Length, Q_{95} (ft)			15.2							17.8			5.1			
Control Delay (s/veh)			23.6							16.8			14.2			
Level of Service (LOS)			C							C			B			
Approach Delay (s/veh)		23.6								0.8				0.4		
Approach LOS		C								A				A		

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HCS Two-Way Stop-Control Report

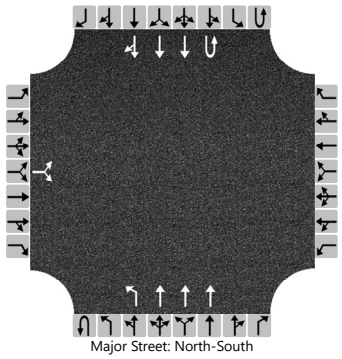
General Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/19/2025
Analysis Year	2028
Time Analyzed	Future PM
Intersection Orientation	North-South
Project Description	4286

Site Information

Intersection	US 50 at Lomax St
Jurisdiction	Easton, MD
East/West Street	Lomax St
North/South Street	US 50 (Ocean Gateway)
Peak Hour Factor	0.98
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	3	0	1	0	3	0
Configuration			LR							L	T		U		T	TR
Volume (veh/h)		7		31					21	38	1154		7		1208	14
Percent Heavy Vehicles (%)		2		2					2	2			2			
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Left + Thru								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4		7.1					5.6	5.3			5.6			
Critical Headway (sec)		5.74		7.14					5.64	5.34			5.64			
Base Follow-Up Headway (sec)		3.8		3.9					2.3	3.1			2.3			
Follow-Up Headway (sec)		3.82		3.92					2.32	3.12			2.32			

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			39							60			7			
Capacity, c (veh/h)			281							338			526			
v/c Ratio			0.14							0.18			0.01			
95% Queue Length, Q_{95} (veh)			0.5							0.6			0.0			
95% Queue Length, Q_{95} (ft)			12.7							15.2			0.0			
Control Delay (s/veh)			19.8							18.0			11.9			
Level of Service (LOS)			C							C			B			
Approach Delay (s/veh)	19.8								0.9				0.1			
Approach LOS	C								A				A			

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HCS Two-Way Stop-Control Report

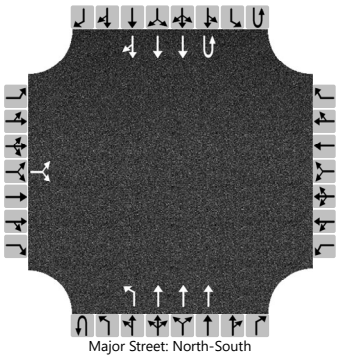
General Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/19/2025
Analysis Year	2027
Time Analyzed	Future AM + Connection
Intersection Orientation	North-South
Project Description	4286

Site Information

Intersection	US 50 at Lomax St
Jurisdiction	Easton, MD
East/West Street	Lomax St
North/South Street	US 50 (Ocean Gateway)
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	3	0	1	0	3	0
Configuration			LR							L	T		U		T	TR
Volume (veh/h)		3		28					40	27	1277		29		1111	3
Percent Heavy Vehicles (%)		2		2					2	2			2			
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Left + Thru								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4		7.1					5.6	5.3			5.6			
Critical Headway (sec)		5.74		7.14					5.64	5.34			5.64			
Base Follow-Up Headway (sec)		3.8		3.9					2.3	3.1			2.3			
Follow-Up Headway (sec)		3.82		3.92					2.32	3.12			2.32			

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			34							74			32			
Capacity, c (veh/h)			307							381			426			
v/c Ratio			0.11							0.19			0.07			
95% Queue Length, Q_{95} (veh)			0.4							0.7			0.2			
95% Queue Length, Q_{95} (ft)			10.2							17.8			5.1			
Control Delay (s/veh)			18.2							16.7			14.1			
Level of Service (LOS)			C							C			B			
Approach Delay (s/veh)		18.2								0.8				0.4		
Approach LOS		C								A				A		

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HCS Two-Way Stop-Control Report

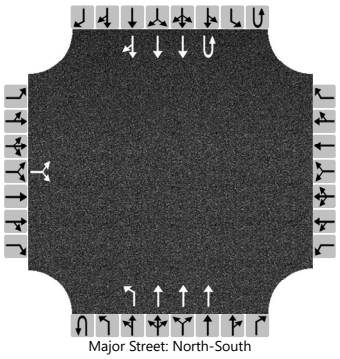
General Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/19/2025
Analysis Year	2028
Time Analyzed	Future PM+Connection
Intersection Orientation	North-South
Project Description	4286

Site Information

Intersection	US 50 at Lomax St
Jurisdiction	Easton, MD
East/West Street	Lomax St
North/South Street	US 50 (Ocean Gateway)
Peak Hour Factor	0.98
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	3	0	1	0	3	0
Configuration			LR							L	T		U		T	TR
Volume (veh/h)		2		31					21	38	1137		7		1208	5
Percent Heavy Vehicles (%)		2		2					2	2			2			
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Left + Thru								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4		7.1					5.6	5.3			5.6			
Critical Headway (sec)		5.74		7.14					5.64	5.34			5.64			
Base Follow-Up Headway (sec)		3.8		3.9					2.3	3.1			2.3			
Follow-Up Headway (sec)		3.82		3.92					2.32	3.12			2.32			

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			34							60			7			
Capacity, c (veh/h)			336							341			534			
v/c Ratio			0.10							0.18			0.01			
95% Queue Length, Q_{95} (veh)			0.3							0.6			0.0			
95% Queue Length, Q_{95} (ft)			7.6							15.2			0.0			
Control Delay (s/veh)			16.9							17.8			11.8			
Level of Service (LOS)			C							C			B			
Approach Delay (s/veh)		16.9								0.9				0.1		
Approach LOS		C								A				A		

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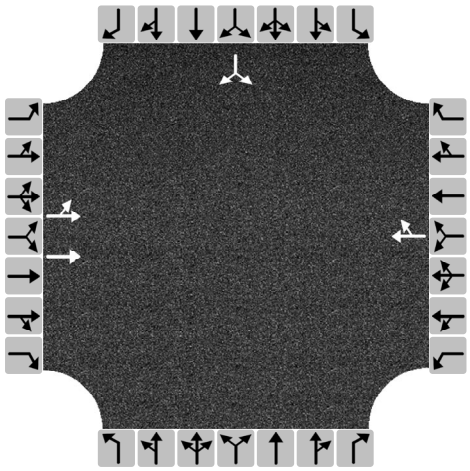
HCS All-Way Stop Control Report

General and Site Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/31/2025
Analysis Year	2025
Analysis Time Period (hrs)	0.25
Time Analyzed	Existing AM
Project Description	4286
Intersection	Goldsborough St at Calvert St
Jurisdiction	Town of Easton, MD
East/West Street	Goldsborough St
North/South Street	Calvert St
Peak Hour Factor	0.69

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	18	284			384	28				13		20
% Thrus in Shared Lane	45											

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LT	T		TR						LR		
Flow Rate, v (veh/h)	211	226		597						48		
Percent Heavy Vehicles	2	2		2						2		
Initial Departure Headway, h_d (s)	3.20	3.20		3.20						3.20		
Initial Degree of Utilization, x	0.188	0.201		0.531						0.043		
Final Departure Headway, h_d (s)	5.19	5.13		4.58						5.83		
Final Degree of Utilization, x	0.305	0.322		0.760						0.077		
Move-Up Time, m (s)	2.3	2.3		2.0						2.0		
Service Time, t_s (s)	2.89	2.83		2.58						3.83		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LT	T		TR						LR		
Flow Rate, v (veh/h)	211	226		597						48		
Capacity (veh/h)	694	702		786						618		
95% Queue Length, Q_{95} (veh)	1.3	1.4		7.3						0.3		
95% Queue Length, Q_{95} (ft)	33.0	35.6		185.4						7.6		
Control Delay (s/veh)	10.1	10.2		20.5						9.3		
Level of Service, LOS	B	B		C						A		
Approach Delay (s/veh) | LOS	10.2	B		20.5	C					9.3	A	
Intersection Delay (s/veh) | LOS	15.9						C					

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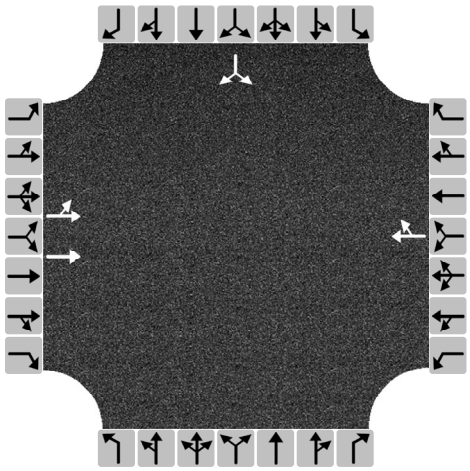
HCS All-Way Stop Control Report

General and Site Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/31/2025
Analysis Year	2025
Analysis Time Period (hrs)	0.25
Time Analyzed	Existing PM
Project Description	4286
Intersection	Goldsborough St at Calvert St
Jurisdiction	Town of Easton, MD
East/West Street	Goldsborough St
North/South Street	Calvert St
Peak Hour Factor	0.97

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	35	490			275	17				17		15
% Thrus in Shared Lane	45											

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LT	T		TR						LR		
Flow Rate, v (veh/h)	263	278		301						33		
Percent Heavy Vehicles	2	2		2						2		
Initial Departure Headway, h_d (s)	3.20	3.20		3.20						3.20		
Initial Degree of Utilization, x	0.234	0.247		0.268						0.029		
Final Departure Headway, h_d (s)	4.92	4.85		4.58						5.45		
Final Degree of Utilization, x	0.360	0.374		0.383						0.050		
Move-Up Time, m (s)	2.3	2.3		2.0						2.0		
Service Time, t_s (s)	2.62	2.55		2.58						3.45		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LT	T		TR						LR		
Flow Rate, v (veh/h)	263	278		301						33		
Capacity (veh/h)	732	742		786						661		
95% Queue Length, Q_{95} (veh)	1.6	1.7		1.8						0.2		
95% Queue Length, Q_{95} (ft)	40.6	43.2		45.7						5.1		
Control Delay (s/veh)	10.4	10.4		10.4						8.7		
Level of Service, LOS	B	B		B						A		
Approach Delay (s/veh) | LOS	10.4	B		10.4	B					8.7	A	
Intersection Delay (s/veh) | LOS	10.3						B					

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HCS All-Way Stop Control Report

General and Site Information

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Date Performed	10/31/2025
Analysis Year	2027
Analysis Time Period (hrs)	0.25
Time Analyzed	Background AM
Project Description	4286
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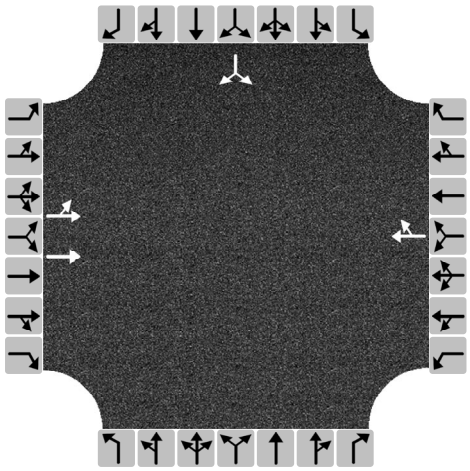
Jurisdiction	Town of Easton, MD
East/West Street	Goldsborough St
North/South Street	Calvert St
Peak Hour Factor	0.69

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	19	295			400	29				14		21
% Thrus in Shared Lane	45											

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LT	T		TR						LR		
Flow Rate, v (veh/h)	220	235		622						51		
Percent Heavy Vehicles	2	2		2						2		
Initial Departure Headway, h_d (s)	3.20	3.20		3.20						3.20		
Initial Degree of Utilization, x	0.195	0.209		0.553						0.045		
Final Departure Headway, h_d (s)	5.23	5.16		4.61						5.92		
Final Degree of Utilization, x	0.319	0.337		0.796						0.083		
Move-Up Time, m (s)	2.3	2.3		2.0						2.0		
Service Time, t_s (s)	2.93	2.86		2.61						3.92		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LT	T		TR						LR		
Flow Rate, v (veh/h)	220	235		622						51		
Capacity (veh/h)	689	697		781						608		
95% Queue Length, Q_{95} (veh)	1.4	1.5		8.3						0.3		
95% Queue Length, Q_{95} (ft)	35.6	38.1		210.8						7.6		
Control Delay (s/veh)	10.4	10.5		23.1						9.5		
Level of Service, LOS	B	B		C						A		
Approach Delay (s/veh) | LOS	10.4	B		23.1	C					9.5	A	
Intersection Delay (s/veh) | LOS	17.3						C					

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HCS All-Way Stop Control Report

General and Site Information

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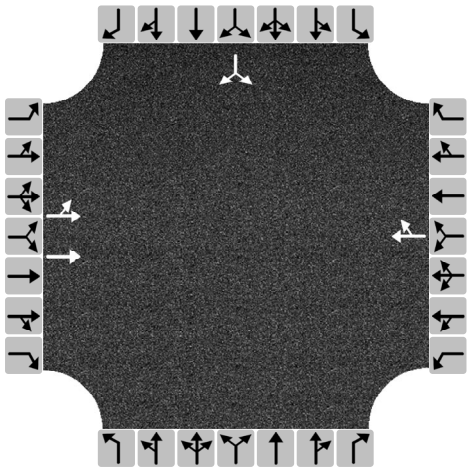
Analysis Year	2027
Analysis Time Period (hrs)	0.25
Time Analyzed	Background PM
Project Description	4286
Intersection	Goldsborough St at Calvert St
Jurisdiction	Town of Easton, MD
East/West Street	Goldsborough St
North/South Street	Calvert St
Peak Hour Factor	0.97

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	36	510			286	18				18		16
% Thrus in Shared Lane	45											

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LT	T		TR						LR		
Flow Rate, v (veh/h)	274	289		313						35		
Percent Heavy Vehicles	2	2		2						2		
Initial Departure Headway, h_d (s)	3.20	3.20		3.20						3.20		
Initial Degree of Utilization, x	0.243	0.257		0.279						0.031		
Final Departure Headway, h_d (s)	4.94	4.87		4.61						5.53		
Final Degree of Utilization, x	0.375	0.391		0.401						0.054		
Move-Up Time, m (s)	2.3	2.3		2.0						2.0		
Service Time, t_s (s)	2.64	2.57		2.61						3.53		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LT	T		TR						LR		
Flow Rate, v (veh/h)	274	289		313						35		
Capacity (veh/h)	729	740		781						651		
95% Queue Length, Q_{95} (veh)	1.7	1.9		1.9						0.2		
95% Queue Length, Q_{95} (ft)	43.2	48.3		48.3						5.1		
Control Delay (s/veh)	10.6	10.7		10.7						8.8		
Level of Service, LOS	B	B		B						A		
Approach Delay (s/veh) | LOS	10.6	B		10.7	B					8.8	A	
Intersection Delay (s/veh) | LOS	10.6						B					

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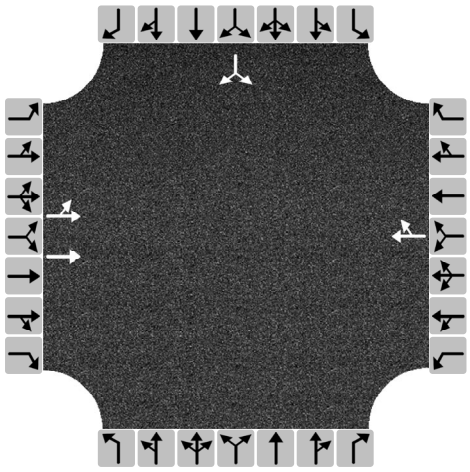
HCS All-Way Stop Control Report

General and Site Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/31/2025
Analysis Year	2027
Analysis Time Period (hrs)	0.25
Time Analyzed	Future AM
Project Description	4286
Intersection	Goldsborough St at Calvert St
Jurisdiction	Town of Easton, MD
East/West Street	Goldsborough St
North/South Street	Calvert St
Peak Hour Factor	0.69

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	19	295			400	30				17		21
% Thrus in Shared Lane	45											

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LT	T		TR						LR		
Flow Rate, v (veh/h)	220	235		623						55		
Percent Heavy Vehicles	2	2		2						2		
Initial Departure Headway, h_d (s)	3.20	3.20		3.20						3.20		
Initial Degree of Utilization, x	0.195	0.209		0.554						0.049		
Final Departure Headway, h_d (s)	5.25	5.19		4.63						5.96		
Final Degree of Utilization, x	0.321	0.339		0.801						0.091		
Move-Up Time, m (s)	2.3	2.3		2.0						2.0		
Service Time, t_s (s)	2.95	2.89		2.63						3.96		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LT	T		TR						LR		
Flow Rate, v (veh/h)	220	235		623						55		
Capacity (veh/h)	686	694		778						604		
95% Queue Length, Q_{95} (veh)	1.4	1.5		8.4						0.3		
95% Queue Length, Q_{95} (ft)	35.6	38.1		213.4						7.6		
Control Delay (s/veh)	10.4	10.5		23.5						9.6		
Level of Service, LOS	B	B		C						A		
Approach Delay (s/veh) | LOS	10.5	B		23.5	C					9.6	A	
Intersection Delay (s/veh) | LOS	17.6						C					

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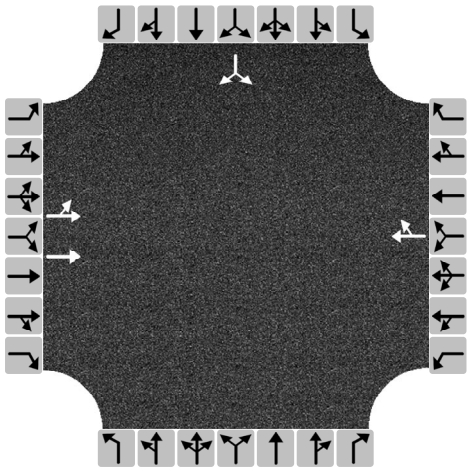
HCS All-Way Stop Control Report

General and Site Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/31/2025
Analysis Year	2027
Analysis Time Period (hrs)	0.25
Time Analyzed	Future PM
Project Description	4286
Intersection	Goldsborough St at Calvert St
Jurisdiction	Town of Easton, MD
East/West Street	Goldsborough St
North/South Street	Calvert St
Peak Hour Factor	0.97

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	36	510			286	21				20		16
% Thrus in Shared Lane	45											

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LT	T		TR						LR		
Flow Rate, v (veh/h)	274	289		316						37		
Percent Heavy Vehicles	2	2		2						2		
Initial Departure Headway, h_d (s)	3.20	3.20		3.20						3.20		
Initial Degree of Utilization, x	0.243	0.257		0.281						0.033		
Final Departure Headway, h_d (s)	4.95	4.88		4.62						5.56		
Final Degree of Utilization, x	0.376	0.392		0.406						0.057		
Move-Up Time, m (s)	2.3	2.3		2.0						2.0		
Service Time, t_s (s)	2.65	2.58		2.62						3.56		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LT	T		TR						LR		
Flow Rate, v (veh/h)	274	289		316						37		
Capacity (veh/h)	728	738		780						648		
95% Queue Length, Q_{95} (veh)	1.8	1.9		2.0						0.2		
95% Queue Length, Q_{95} (ft)	45.7	48.3		50.8						5.1		
Control Delay (s/veh)	10.6	10.7		10.7						8.9		
Level of Service, LOS	B	B		B						A		
Approach Delay (s/veh) | LOS	10.6	B		10.7	B					8.9	A	
Intersection Delay (s/veh) | LOS	10.6						B					

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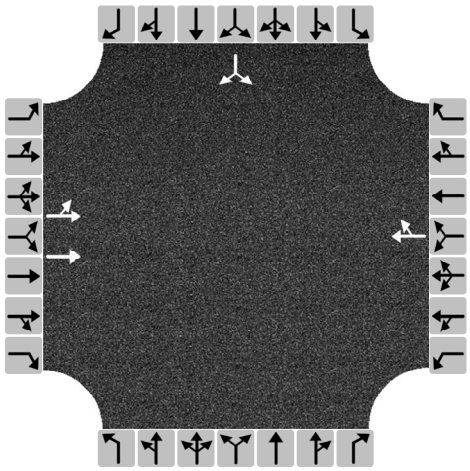
HCS All-Way Stop Control Report

General and Site Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/31/2025
Analysis Year	2027
Analysis Time Period (hrs)	0.25
Time Analyzed	Future AM+Connection
Project Description	4286
Intersection	Goldsborough St at Calvert St
Jurisdiction	Town of Easton, MD
East/West Street	Goldsborough St
North/South Street	Calvert St
Peak Hour Factor	0.69

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	19	291			400	30				10		21
% Thrus in Shared Lane	45											

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LT	T		TR						LR		
Flow Rate, v (veh/h)	217	232		623						45		
Percent Heavy Vehicles	2	2		2						2		
Initial Departure Headway, h_d (s)	3.20	3.20		3.20						3.20		
Initial Degree of Utilization, x	0.193	0.206		0.554						0.040		
Final Departure Headway, h_d (s)	5.20	5.14		4.58						5.84		
Final Degree of Utilization, x	0.314	0.331		0.793						0.073		
Move-Up Time, m (s)	2.3	2.3		2.0						2.0		
Service Time, t_s (s)	2.90	2.84		2.58						3.84		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LT	T		TR						LR		
Flow Rate, v (veh/h)	217	232		623						45		
Capacity (veh/h)	692	701		786						617		
95% Queue Length, Q_{95} (veh)	1.3	1.4		8.2						0.2		
95% Queue Length, Q_{95} (ft)	33.0	35.6		208.3						5.1		
Control Delay (s/veh)	10.3	10.4		22.7						9.3		
Level of Service, LOS	B	B		C						A		
Approach Delay (s/veh) | LOS	10.3	B		22.7	C					9.3	A	
Intersection Delay (s/veh) | LOS	17.2						C					

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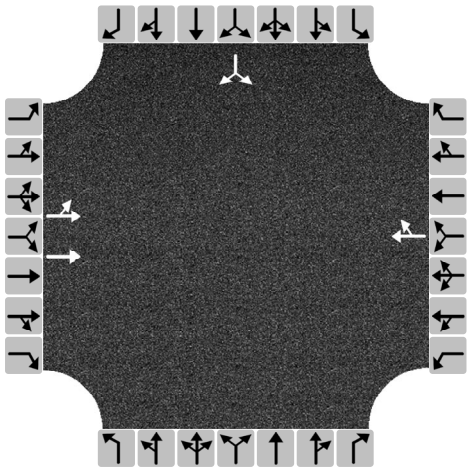
HCS All-Way Stop Control Report

General and Site Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/31/2025
Analysis Year	2027
Analysis Time Period (hrs)	0.25
Time Analyzed	Future PM+Connection
Project Description	4286
Intersection	Goldsborough St at Calvert St
Jurisdiction	Town of Easton, MD
East/West Street	Goldsborough St
North/South Street	Calvert St
Peak Hour Factor	0.97

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	36	502			286	21				11		16
% Thrus in Shared Lane	45											

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LT	T		TR						LR		
Flow Rate, v (veh/h)	270	285		316						28		
Percent Heavy Vehicles	2	2		2						2		
Initial Departure Headway, h_d (s)	3.20	3.20		3.20						3.20		
Initial Degree of Utilization, x	0.240	0.253		0.281						0.025		
Final Departure Headway, h_d (s)	4.91	4.84		4.56						5.40		
Final Degree of Utilization, x	0.368	0.383		0.401						0.042		
Move-Up Time, m (s)	2.3	2.3		2.0						2.0		
Service Time, t_s (s)	2.61	2.54		2.56						3.40		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LT	T		TR						LR		
Flow Rate, v (veh/h)	270	285		316						28		
Capacity (veh/h)	733	744		789						667		
95% Queue Length, Q_{95} (veh)	1.7	1.8		1.9						0.1		
95% Queue Length, Q_{95} (ft)	43.2	45.7		48.3						2.5		
Control Delay (s/veh)	10.4	10.5		10.6						8.6		
Level of Service, LOS	B	B		B						A		
Approach Delay (s/veh) | LOS	10.5	B		10.6	B					8.6	A	
Intersection Delay (s/veh) | LOS	10.5						B					

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HCS Two-Way Stop-Control Report

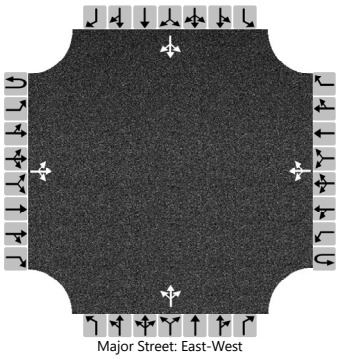
General Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/19/2025
Analysis Year	2025
Time Analyzed	Existing AM
Intersection Orientation	East-West
Project Description	4286

Site Information

Intersection	Goldsborough St at Merrick Lane
Jurisdiction	Easton, MD
East/West Street	Goldsborough St
North/South Street	Merrick Lane
Peak Hour Factor	0.71
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		5	187	118		93	308	3		59	0	52		8	1	11
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		7				131					156				28	
Capacity, c (veh/h)		1122				1130					305				252	
v/c Ratio		0.01				0.12					0.51				0.11	
95% Queue Length, Q_{95} (veh)		0.0				0.4					2.8				0.4	
95% Queue Length, Q_{95} (ft)		0.0				10.0					71.1				10.2	
Control Delay (s/veh)		8.2	0.1	0.1		8.6	1.3	1.3			28.6				21.1	
Level of Service (LOS)		A	A	A		A	A	A			D				C	
Approach Delay (s/veh)	0.2				3.0				28.6				21.1			
Approach LOS	A				A				D				C			

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HCS Two-Way Stop-Control Report

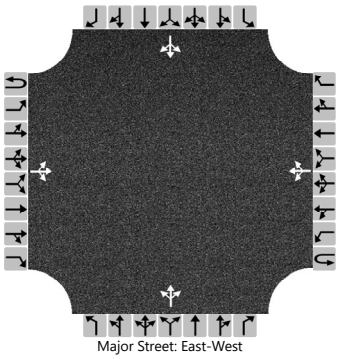
General Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/19/2025
Analysis Year	2025
Time Analyzed	Existing PM
Intersection Orientation	East-West
Project Description	4286

Site Information

Intersection	Goldsborough St at Merrick Lane
Jurisdiction	Easton, MD
East/West Street	Goldsborough St
North/South Street	Merrick Lane
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		22	476	20		19	254	16		19	0	22		14	0	13
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		23				20					43				28	
Capacity, c (veh/h)		1278				1044					517				361	
v/c Ratio		0.02				0.02					0.08				0.08	
95% Queue Length, Q_{95} (veh)		0.1				0.1					0.3				0.3	
95% Queue Length, Q_{95} (ft)		2.5				2.5					7.6				7.6	
Control Delay (s/veh)		7.9	0.2	0.2		8.5	0.2	0.2			12.6				15.8	
Level of Service (LOS)		A	A	A		A	A	A			B				C	
Approach Delay (s/veh)	0.5				0.7				12.6				15.8			
Approach LOS	A				A				B				C			

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HCS Two-Way Stop-Control Report

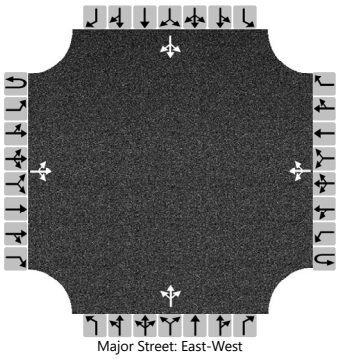
General Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/19/2025
Analysis Year	2025
Time Analyzed	Background AM
Intersection Orientation	East-West
Project Description	4286

Site Information

Intersection	Goldsborough St at Merrick Lane
Jurisdiction	Easton, MD
East/West Street	Goldsborough St
North/South Street	Merrick Lane
Peak Hour Factor	0.71
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		5	195	118		93	320	3		59	0	52		8	1	11
Percent Heavy Vehicles (%)		0				0				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.10				4.10				7.10	6.50	6.20		7.10	6.50	6.20
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.20				2.20				3.50	4.00	3.30		3.50	4.00	3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		7				131					156				28	
Capacity, c (veh/h)		1116				1130					293				244	
v/c Ratio		0.01				0.12					0.53				0.12	
95% Queue Length, Q_{95} (veh)		0.0				0.4					2.9				0.4	
95% Queue Length, Q_{95} (ft)		0.0				10.0					72.5				10.0	
Control Delay (s/veh)		8.2	0.1	0.1		8.6	1.3	1.3			30.5				21.7	
Level of Service (LOS)		A	A	A		A	A	A			D				C	
Approach Delay (s/veh)	0.2				3.0				30.5				21.7			
Approach LOS	A				A				D				C			

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HCS Two-Way Stop-Control Report

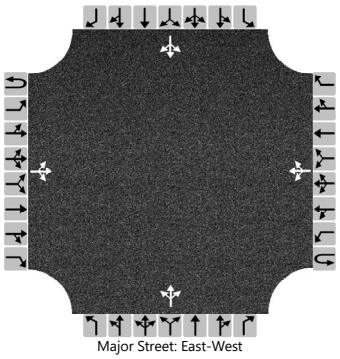
General Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/19/2025
Analysis Year	2027
Time Analyzed	Background PM
Intersection Orientation	East-West
Project Description	4286

Site Information

Intersection	Goldsborough St at Merrick Lane
Jurisdiction	Easton, MD
East/West Street	Goldsborough St
North/South Street	Merrick Lane
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		23	495	20		19	264	17		19	0	22		15	0	14
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		24				20					43				31	
Capacity, c (veh/h)		1266				1027					490				345	
v/c Ratio		0.02				0.02					0.09				0.09	
95% Queue Length, Q_{95} (veh)		0.1				0.1					0.3				0.3	
95% Queue Length, Q_{95} (ft)		2.5				2.5					7.6				7.6	
Control Delay (s/veh)		7.9	0.2	0.2		8.6	0.2	0.2			13.0				16.4	
Level of Service (LOS)		A	A	A		A	A	A			B				C	
Approach Delay (s/veh)	0.5				0.7				13.0				16.4			
Approach LOS	A				A				B				C			

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HCS Two-Way Stop-Control Report

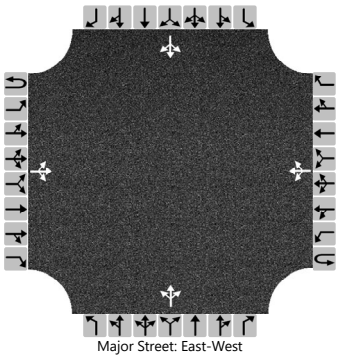
General Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/19/2025
Analysis Year	2027
Time Analyzed	Future AM
Intersection Orientation	East-West
Project Description	4286

Site Information

Intersection	Goldsborough St at Merrick Lane
Jurisdiction	Easton, MD
East/West Street	Goldsborough St
North/South Street	Merrick Lane
Peak Hour Factor	0.71
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		7	195	118		93	320	3		59	0	52		8	1	14
Percent Heavy Vehicles (%)		0				0				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.10				4.10				7.10	6.50	6.20		7.10	6.50	6.20
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.20				2.20				3.50	4.00	3.30		3.50	4.00	3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		10				131					156				32	
Capacity, c (veh/h)		1116				1130					287				262	
v/c Ratio		0.01				0.12					0.55				0.12	
95% Queue Length, Q_{95} (veh)		0.0				0.4					3.0				0.4	
95% Queue Length, Q_{95} (ft)		0.0				10.0					75.0				10.0	
Control Delay (s/veh)		8.3	0.1	0.1		8.6	1.3	1.3			31.7				20.7	
Level of Service (LOS)		A	A	A		A	A	A			D				C	
Approach Delay (s/veh)	0.3				3.0				31.7				20.7			
Approach LOS	A				A				D				C			

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HCS Two-Way Stop-Control Report

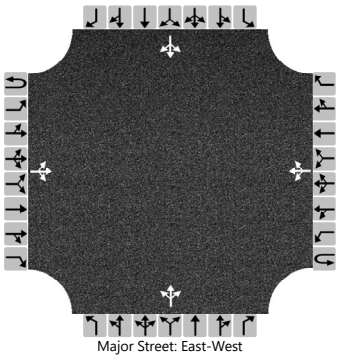
General Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/19/2025
Analysis Year	2027
Time Analyzed	Future PM
Intersection Orientation	East-West
Project Description	4286

Site Information

Intersection	Goldsborough St at Merrick Lane
Jurisdiction	Easton, MD
East/West Street	Goldsborough St
North/South Street	Merrick Lane
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		26	495	20		19	264	17		19	0	22		15	0	16
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		27				20					43				33	
Capacity, c (veh/h)		1259				1025					482				352	
v/c Ratio		0.02				0.02					0.09				0.09	
95% Queue Length, Q_{95} (veh)		0.1				0.1					0.3				0.3	
95% Queue Length, Q_{95} (ft)		2.5				2.5					7.6				7.6	
Control Delay (s/veh)		7.9	0.2	0.2		8.6	0.2	0.2			13.2				16.3	
Level of Service (LOS)		A	A	A		A	A	A			B				C	
Approach Delay (s/veh)	0.6				0.7				13.2				16.3			
Approach LOS	A				A				B				C			

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HCS Two-Way Stop-Control Report

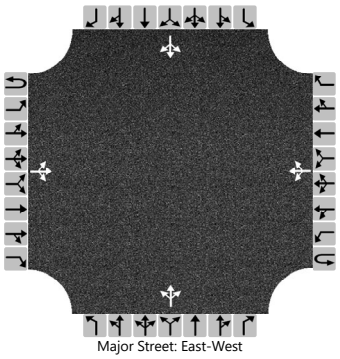
General Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/19/2025
Analysis Year	2027
Time Analyzed	Future AM+Connection
Intersection Orientation	East-West
Project Description	4286

Site Information

Intersection	Goldsborough St at Merrick Lane
Jurisdiction	Easton, MD
East/West Street	Goldsborough St
North/South Street	Merrick Lane
Peak Hour Factor	0.71
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		7	195	118		93	320	3		59	0	52		4	1	14
Percent Heavy Vehicles (%)		0				0				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.10				4.10				7.10	6.50	6.20		7.10	6.50	6.20
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.20				2.20				3.50	4.00	3.30		3.50	4.00	3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		10				131					156				27	
Capacity, c (veh/h)		1116				1130					287				325	
v/c Ratio		0.01				0.12					0.55				0.08	
95% Queue Length, Q_{95} (veh)		0.0				0.4					3.0				0.3	
95% Queue Length, Q_{95} (ft)		0.0				10.0					75.0				7.5	
Control Delay (s/veh)		8.3	0.1	0.1		8.6	1.3	1.3			31.7				17.1	
Level of Service (LOS)		A	A	A		A	A	A			D				C	
Approach Delay (s/veh)	0.3				3.0				31.7				17.1			
Approach LOS	A				A				D				C			

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HCS Two-Way Stop-Control Report

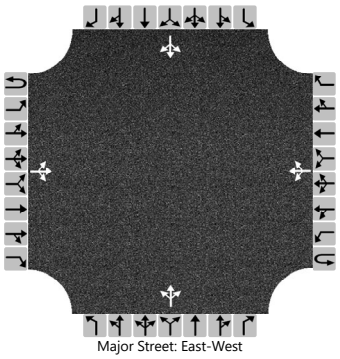
General Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/19/2025
Analysis Year	2027
Time Analyzed	Future PM+Connection
Intersection Orientation	East-West
Project Description	4286

Site Information

Intersection	Goldsborough St at Merrick Lane
Jurisdiction	Easton, MD
East/West Street	Goldsborough St
North/South Street	Merrick Lane
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		26	495	20		19	264	17		19	0	22		7	0	16
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		27				20					43				24	
Capacity, c (veh/h)		1259				1025					482				438	
v/c Ratio		0.02				0.02					0.09				0.06	
95% Queue Length, Q_{95} (veh)		0.1				0.1					0.3				0.2	
95% Queue Length, Q_{95} (ft)		2.5				2.5					7.6				5.1	
Control Delay (s/veh)		7.9	0.2	0.2		8.6	0.2	0.2			13.2				13.7	
Level of Service (LOS)		A	A	A		A	A	A			B				B	
Approach Delay (s/veh)	0.6				0.7				13.2				13.7			
Approach LOS	A				A				B				B			

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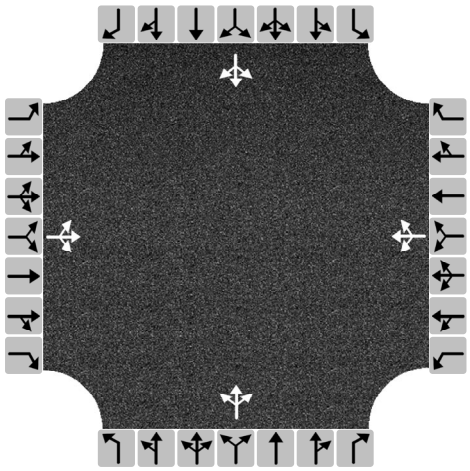
HCS All-Way Stop Control Report

General and Site Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/19/2025
Analysis Year	2025
Analysis Time Period (hrs)	0.25
Time Analyzed	Existing AM
Project Description	4286
Intersection	Calvert St at Lomax St
Jurisdiction	Easton, MD
East/West Street	Lomax St
North/South Street	Calvert St
Peak Hour Factor	0.91

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	4	12	2	6	6	4	1	14	12	7	8	4
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	20			18			30			21		
Percent Heavy Vehicles	2			0			0			2		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.018			0.016			0.026			0.019		
Final Departure Headway, h_d (s)	4.03			3.95			3.74			3.99		
Final Degree of Utilization, x	0.022			0.019			0.031			0.023		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	2.03			1.95			1.74			1.99		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	20			18			30			21		
Capacity (veh/h)	893			912			963			903		
95% Queue Length, Q_{95} (veh)	0.1			0.1			0.1			0.1		
95% Queue Length, Q_{95} (ft)	2.5			2.5			2.5			2.5		
Control Delay (s/veh)	7.1			7.0			6.9			7.1		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	7.1	A		7.0	A		6.9	A		7.1	A	
Intersection Delay (s/veh) | LOS	7.0						A					

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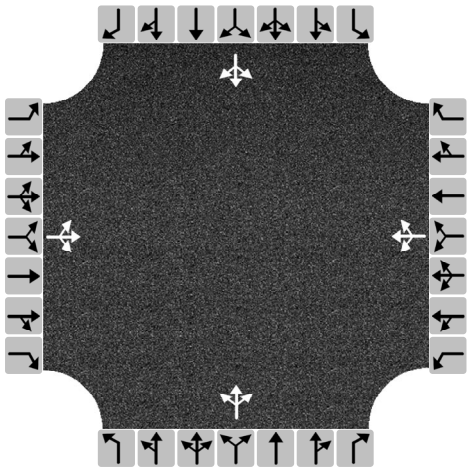
HCS All-Way Stop Control Report

General and Site Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/19/2025
Analysis Year	2025
Analysis Time Period (hrs)	0.25
Time Analyzed	Existing PM
Project Description	4286
Intersection	Calvert St at Lomax St
Jurisdiction	Easton, MD
East/West Street	Lomax St
North/South Street	Calvert St
Peak Hour Factor	0.80

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	6	8	3	10	9	9	1	13	20	4	6	4
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	21			35			43			18		
Percent Heavy Vehicles	2			0			0			2		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.019			0.031			0.038			0.016		
Final Departure Headway, h_d (s)	4.05			3.92			3.69			3.98		
Final Degree of Utilization, x	0.024			0.038			0.044			0.019		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	2.05			1.92			1.69			1.98		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	21			35			43			18		
Capacity (veh/h)	889			919			976			906		
95% Queue Length, Q_{95} (veh)	0.1			0.1			0.1			0.1		
95% Queue Length, Q_{95} (ft)	2.5			2.5			2.5			2.5		
Control Delay (s/veh)	7.2			7.1			6.9			7.1		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	7.2	A		7.1	A		6.9	A		7.1	A	
Intersection Delay (s/veh) | LOS	7.0						A					

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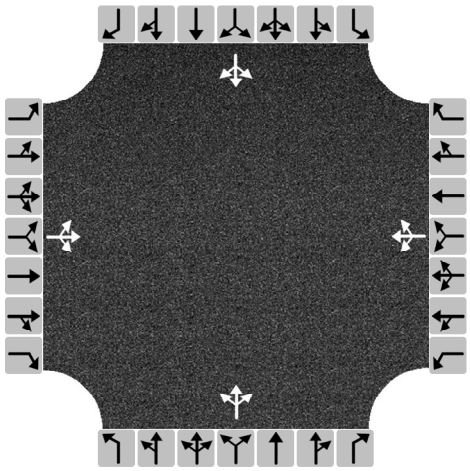
HCS All-Way Stop Control Report

General and Site Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/19/2025
Analysis Year	2027
Analysis Time Period (hrs)	0.25
Time Analyzed	Background AM
Project Description	4286
Intersection	Calvert St at Lomax St
Jurisdiction	Easton, MD
East/West Street	Lomax St
North/South Street	Calvert St
Peak Hour Factor	0.91

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	4	12	2	6	6	4	1	15	12	7	8	4
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	20			18			31			21		
Percent Heavy Vehicles	2			0			0			2		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.018			0.016			0.027			0.019		
Final Departure Headway, h_d (s)	4.03			3.95			3.75			3.99		
Final Degree of Utilization, x	0.022			0.019			0.032			0.023		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	2.03			1.95			1.75			1.99		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	20			18			31			21		
Capacity (veh/h)	892			912			960			903		
95% Queue Length, Q_{95} (veh)	0.1			0.1			0.1			0.1		
95% Queue Length, Q_{95} (ft)	2.5			2.5			2.5			2.5		
Control Delay (s/veh)	7.1			7.0			6.9			7.1		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	7.1	A		7.0	A		6.9	A		7.1	A	
Intersection Delay (s/veh) | LOS	7.0						A					

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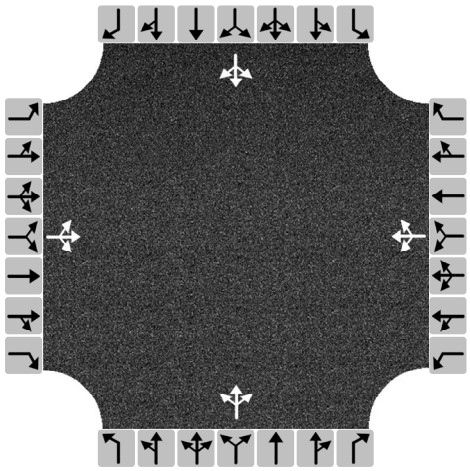
HCS All-Way Stop Control Report

General and Site Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/19/2025
Analysis Year	2027
Analysis Time Period (hrs)	0.25
Time Analyzed	Background PM
Project Description	4286
Intersection	Calvert St at Lomax St
Jurisdiction	Easton, MD
East/West Street	Lomax St
North/South Street	Calvert St
Peak Hour Factor	0.80

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	6	8	3	10	9	9	1	14	21	4	6	4
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	21			35			45			18		
Percent Heavy Vehicles	2			0			0			2		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.019			0.031			0.040			0.016		
Final Departure Headway, h_d (s)	4.06			3.92			3.69			3.98		
Final Degree of Utilization, x	0.024			0.038			0.046			0.019		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	2.06			1.92			1.69			1.98		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	21			35			45			18		
Capacity (veh/h)	887			917			975			905		
95% Queue Length, Q_{95} (veh)	0.1			0.1			0.1			0.1		
95% Queue Length, Q_{95} (ft)	2.5			2.5			2.5			2.5		
Control Delay (s/veh)	7.2			7.1			6.9			7.1		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	7.2	A		7.1	A		6.9	A		7.1	A	
Intersection Delay (s/veh) | LOS	7.0						A					

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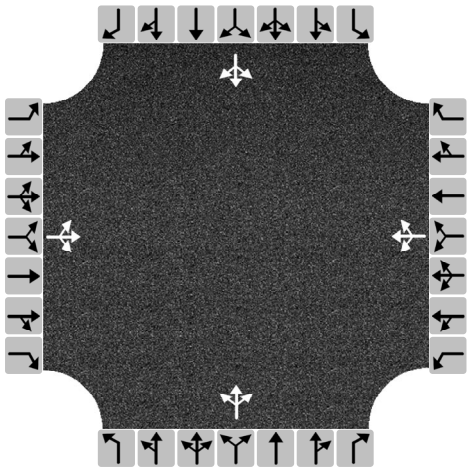
HCS All-Way Stop Control Report

General and Site Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/19/2025
Analysis Year	2027
Analysis Time Period (hrs)	0.25
Time Analyzed	Future AM
Project Description	4286
Intersection	Calvert St at Lomax St
Jurisdiction	Easton, MD
East/West Street	Lomax St
North/South Street	Calvert St
Peak Hour Factor	0.91

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	4	16	2	6	8	9	1	16	12	16	11	4
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	24			25			32			34		
Percent Heavy Vehicles	2			0			0			2		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.021			0.022			0.028			0.030		
Final Departure Headway, h_d (s)	4.08			3.88			3.80			4.09		
Final Degree of Utilization, x	0.027			0.027			0.034			0.039		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	2.08			1.88			1.80			2.09		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	24			25			32			34		
Capacity (veh/h)	883			928			948			880		
95% Queue Length, Q_{95} (veh)	0.1			0.1			0.1			0.1		
95% Queue Length, Q_{95} (ft)	2.5			2.5			2.5			2.5		
Control Delay (s/veh)	7.2			7.0			6.9			7.3		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	7.2	A		7.0	A		6.9	A		7.3	A	
Intersection Delay (s/veh) | LOS	7.1						A					

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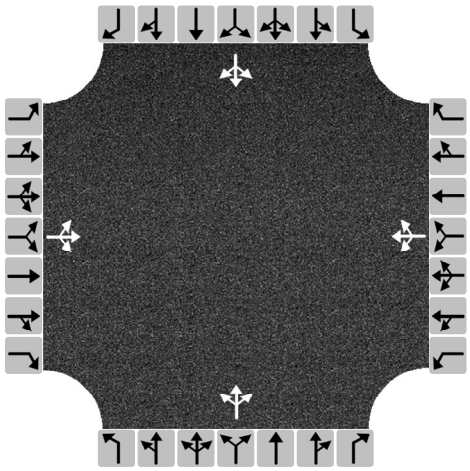
HCS All-Way Stop Control Report

General and Site Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/19/2025
Analysis Year	2027
Analysis Time Period (hrs)	0.25
Time Analyzed	Future PM
Project Description	4286
Intersection	Calvert St at Lomax St
Jurisdiction	Easton, MD
East/West Street	Lomax St
North/South Street	Calvert St
Peak Hour Factor	0.80

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	6	11	3	10	12	18	1	17	21	11	8	4
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	25			50			49			29		
Percent Heavy Vehicles	2			0			0			2		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.022			0.044			0.043			0.026		
Final Departure Headway, h_d (s)	4.11			3.86			3.77			4.13		
Final Degree of Utilization, x	0.029			0.054			0.051			0.033		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	2.11			1.86			1.77			2.13		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	25			50			49			29		
Capacity (veh/h)	876			932			956			873		
95% Queue Length, Q_{95} (veh)	0.1			0.2			0.2			0.1		
95% Queue Length, Q_{95} (ft)	2.5			5.0			5.0			2.5		
Control Delay (s/veh)	7.2			7.1			7.0			7.3		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	7.2	A		7.1	A		7.0	A		7.3	A	
Intersection Delay (s/veh) | LOS	7.1						A					

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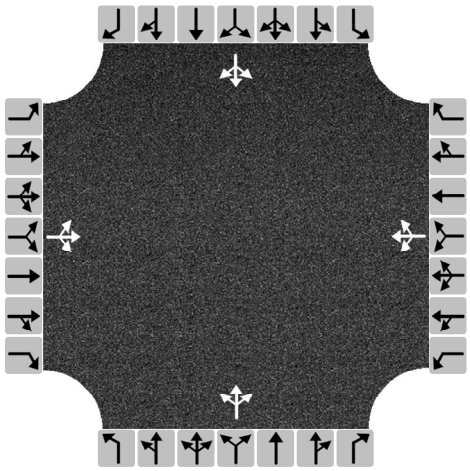
HCS All-Way Stop Control Report

General and Site Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/19/2025
Analysis Year	2027
Analysis Time Period (hrs)	0.25
Time Analyzed	Future AM+Connection
Project Description	4286
Intersection	Calvert St at Lomax St
Jurisdiction	Easton, MD
East/West Street	Lomax St
North/South Street	Calvert St
Peak Hour Factor	0.91

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	11	12	2	6	3	8	1	23	12	13	11	8
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	27			19			40			35		
Percent Heavy Vehicles	2			0			0			2		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.024			0.017			0.035			0.031		
Final Departure Headway, h_d (s)	4.15			3.87			3.84			4.00		
Final Degree of Utilization, x	0.032			0.020			0.042			0.039		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	2.15			1.87			1.84			2.00		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	27			19			40			35		
Capacity (veh/h)	868			930			938			900		
95% Queue Length, Q_{95} (veh)	0.1			0.1			0.1			0.1		
95% Queue Length, Q_{95} (ft)	2.5			2.5			2.5			2.5		
Control Delay (s/veh)	7.3			6.9			7.0			7.2		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	7.3	A		6.9	A		7.0	A		7.2	A	
Intersection Delay (s/veh) | LOS	7.1						A					

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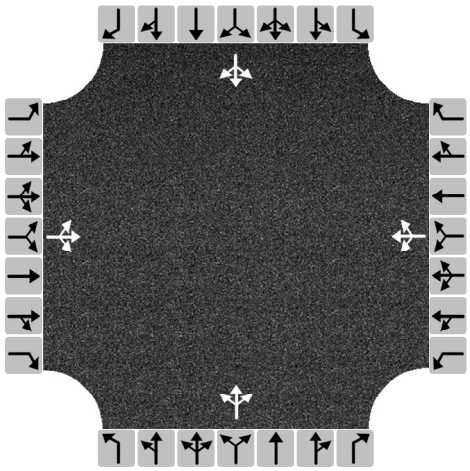
HCS All-Way Stop Control Report

General and Site Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/19/2025
Analysis Year	2027
Analysis Time Period (hrs)	0.25
Time Analyzed	Future PM+Connection
Project Description	4286
Intersection	Calvert St at Lomax St
Jurisdiction	Easton, MD
East/West Street	Lomax St
North/South Street	Calvert St
Peak Hour Factor	0.80

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	16	8	3	10	5	16	1	26	21	9	8	10
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	34			39			60			34		
Percent Heavy Vehicles	2			0			0			2		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.030			0.034			0.053			0.030		
Final Departure Headway, h_d (s)	4.21			3.88			3.83			3.99		
Final Degree of Utilization, x	0.040			0.042			0.064			0.037		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	2.21			1.88			1.83			1.99		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	34			39			60			34		
Capacity (veh/h)	854			928			940			903		
95% Queue Length, Q_{95} (veh)	0.1			0.1			0.2			0.1		
95% Queue Length, Q_{95} (ft)	2.5			2.5			5.0			2.5		
Control Delay (s/veh)	7.4			7.1			7.1			7.1		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	7.4	A		7.1	A		7.1	A		7.1	A	
Intersection Delay (s/veh) | LOS	7.2						A					

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HCS Two-Way Stop-Control Report

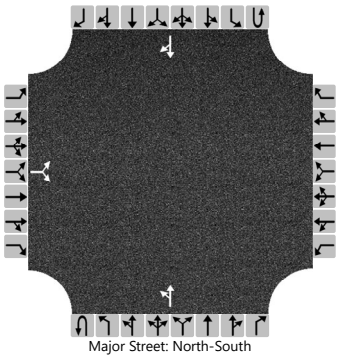
General Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/19/2025
Analysis Year	2025
Time Analyzed	Existing AM
Intersection Orientation	North-South
Project Description	4286

Site Information

Intersection	Calvert St at Dove Lane
Jurisdiction	Easton, MD
East/West Street	Dove Lane
North/South Street	Calvert St
Peak Hour Factor	0.77
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		0		0						1	19				17	0
Percent Heavy Vehicles (%)		0		0						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			0							1						
Capacity, c (veh/h)			0							1607						
v/c Ratio										0.00						
95% Queue Length, Q_{95} (veh)										0.0						
95% Queue Length, Q_{95} (ft)										0.0						
Control Delay (s/veh)										7.2	0.0					
Level of Service (LOS)										A	A					
Approach Delay (s/veh)									0.4							
Approach LOS									A							

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HCS Two-Way Stop-Control Report

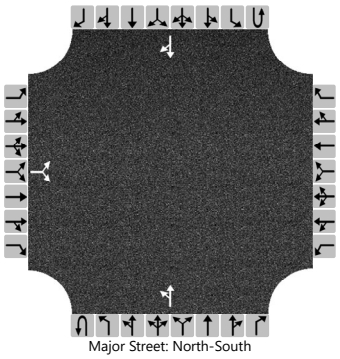
General Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/19/2025
Analysis Year	2025
Time Analyzed	Existing PM
Intersection Orientation	North-South
Project Description	4286

Site Information

Intersection	Calvert St at Dove Lane
Jurisdiction	Easton, MD
East/West Street	Dove Lane
North/South Street	Calvert St
Peak Hour Factor	0.83
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		0		3						3	26				11	0
Percent Heavy Vehicles (%)		0		0						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			4							4						
Capacity, c (veh/h)			1073							1618						
v/c Ratio			0.00							0.00						
95% Queue Length, Q_{95} (veh)			0.0							0.0						
95% Queue Length, Q_{95} (ft)			0.0							0.0						
Control Delay (s/veh)			8.4							7.2	0.0					
Level of Service (LOS)			A							A	A					
Approach Delay (s/veh)		8.4								0.8						
Approach LOS		A								A						

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HCS Two-Way Stop-Control Report

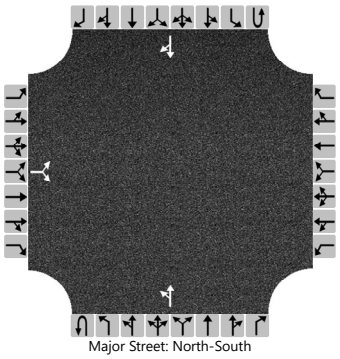
General Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/19/2025
Analysis Year	2027
Time Analyzed	Background AM
Intersection Orientation	North-South
Project Description	4286

Site Information

Intersection	Calvert St at Dove Lane
Jurisdiction	Easton, MD
East/West Street	Dove Lane
North/South Street	Calvert St
Peak Hour Factor	0.77
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		0		0						1	20				18	0
Percent Heavy Vehicles (%)		0		0						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			0							1						
Capacity, c (veh/h)			0							1605						
v/c Ratio										0.00						
95% Queue Length, Q_{95} (veh)										0.0						
95% Queue Length, Q_{95} (ft)										0.0						
Control Delay (s/veh)										7.2	0.0					
Level of Service (LOS)										A	A					
Approach Delay (s/veh)									0.4							
Approach LOS									A							

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HCS Two-Way Stop-Control Report

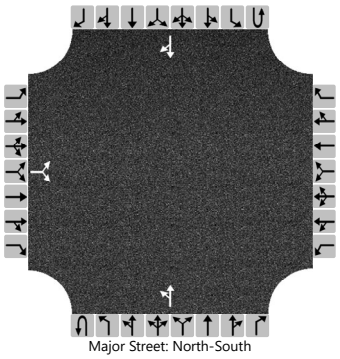
General Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/19/2025
Analysis Year	2027
Time Analyzed	Background PM
Intersection Orientation	North-South
Project Description	4286

Site Information

Intersection	Calvert St at Dove Lane
Jurisdiction	Easton, MD
East/West Street	Dove Lane
North/South Street	Calvert St
Peak Hour Factor	0.83
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		0		3						3	27				11	0
Percent Heavy Vehicles (%)		0		0						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			4							4						
Capacity, c (veh/h)			1073							1618						
v/c Ratio			0.00							0.00						
95% Queue Length, Q_{95} (veh)			0.0							0.0						
95% Queue Length, Q_{95} (ft)			0.0							0.0						
Control Delay (s/veh)			8.4							7.2	0.0					
Level of Service (LOS)			A							A	A					
Approach Delay (s/veh)		8.4								0.7						
Approach LOS		A								A						

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HCS Two-Way Stop-Control Report

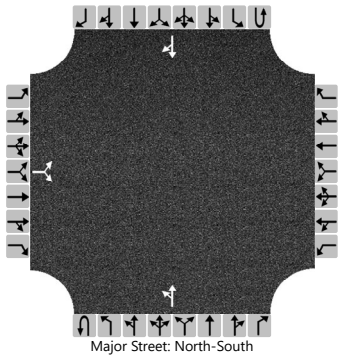
General Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/19/2025
Analysis Year	2027
Time Analyzed	Future AM
Intersection Orientation	North-South
Project Description	4286

Site Information

Intersection	Calvert St at Dove Lane
Jurisdiction	Easton, MD
East/West Street	Dove Lane
North/South Street	Calvert St
Peak Hour Factor	0.77
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		0		12						7	20				18	0
Percent Heavy Vehicles (%)		0		0						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			16							9						
Capacity, c (veh/h)			1059							1605						
v/c Ratio			0.01							0.01						
95% Queue Length, Q_{95} (veh)			0.0							0.0						
95% Queue Length, Q_{95} (ft)			0.0							0.0						
Control Delay (s/veh)			8.4							7.3	0.0					
Level of Service (LOS)			A							A	A					
Approach Delay (s/veh)		8.4								1.9						
Approach LOS		A								A						

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HCS Two-Way Stop-Control Report

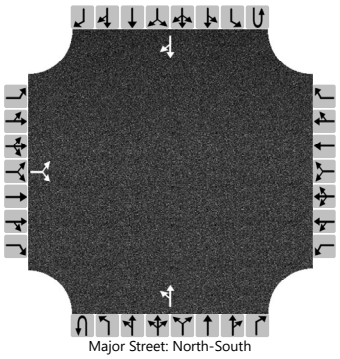
General Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/19/2025
Analysis Year	2027
Time Analyzed	Future PM
Intersection Orientation	North-South
Project Description	4286

Site Information

Intersection	Calvert St at Dove Lane
Jurisdiction	Easton, MD
East/West Street	Dove Lane
North/South Street	Calvert St
Peak Hour Factor	0.83
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		0		12						15	27				11	0
Percent Heavy Vehicles (%)		0		0						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			14							18						
Capacity, c (veh/h)			1073							1618						
v/c Ratio			0.01							0.01						
95% Queue Length, Q_{95} (veh)			0.0							0.0						
95% Queue Length, Q_{95} (ft)			0.0							0.0						
Control Delay (s/veh)			8.4							7.2	0.1					
Level of Service (LOS)			A							A	A					
Approach Delay (s/veh)		8.4								2.6						
Approach LOS		A								A						

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HCS Two-Way Stop-Control Report

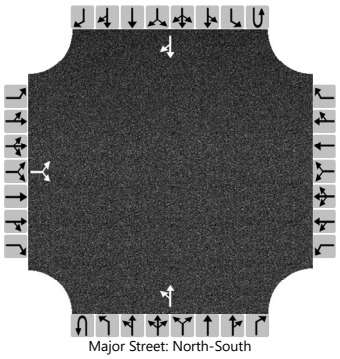
General Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/19/2025
Analysis Year	2027
Time Analyzed	Future AM+Connection
Intersection Orientation	North-South
Project Description	4286

Site Information

Intersection	Calvert St at Dove Lane
Jurisdiction	Easton, MD
East/West Street	Dove Lane
North/South Street	Calvert St
Peak Hour Factor	0.77
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		4		9						6	34				22	2
Percent Heavy Vehicles (%)		0		0						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			17							8						
Capacity, c (veh/h)			1003							1594						
v/c Ratio			0.02							0.00						
95% Queue Length, Q_{95} (veh)			0.1							0.0						
95% Queue Length, Q_{95} (ft)			2.5							0.0						
Control Delay (s/veh)			8.6							7.3	0.0					
Level of Service (LOS)			A							A	A					
Approach Delay (s/veh)		8.6								1.1						
Approach LOS		A								A						

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HCS Two-Way Stop-Control Report

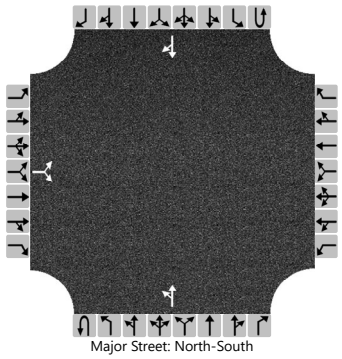
General Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc.
Date Performed	10/19/2025
Analysis Year	2027
Time Analyzed	Future PM+Connection
Intersection Orientation	North-South
Project Description	4286

Site Information

Intersection	Calvert St at Dove Lane
Jurisdiction	Easton, MD
East/West Street	Dove Lane
North/South Street	Calvert St
Peak Hour Factor	0.83
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		3		10						13	46				17	3
Percent Heavy Vehicles (%)		0		0						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			16							16						
Capacity, c (veh/h)			1014							1604						
v/c Ratio			0.02							0.01						
95% Queue Length, Q_{95} (veh)			0.0							0.0						
95% Queue Length, Q_{95} (ft)			0.0							0.0						
Control Delay (s/veh)			8.6							7.3	0.1					
Level of Service (LOS)			A							A	A					
Approach Delay (s/veh)		8.6								1.7						
Approach LOS		A								A						

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HCS Two-Way Stop-Control Report

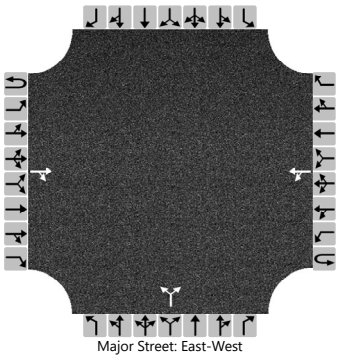
General Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc
Date Performed	11/3/2025
Analysis Year	2027
Time Analyzed	Future AM + Connection
Intersection Orientation	East-West
Project Description	4286

Site Information

Intersection	Calvert St Ext at Norris Taylor Dr
Jurisdiction	Town of Easton, BD
East/West Street	Norris Taylor Dr
North/South Street	Calvert St Extended
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			0	0		24	0			0		38				
Percent Heavy Vehicles (%)						2				2		2				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.12				6.42		6.22				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.22				3.52		3.32				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						27					42					
Capacity, c (veh/h)						1623					1085					
v/c Ratio						0.02					0.04					
95% Queue Length, Q_{95} (veh)						0.1					0.1					
95% Queue Length, Q_{95} (ft)						2.5					2.5					
Control Delay (s/veh)						7.3	0.1				8.5					
Level of Service (LOS)						A	A				A					
Approach Delay (s/veh)					7.3				8.5							
Approach LOS					A				A							

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HCS Two-Way Stop-Control Report

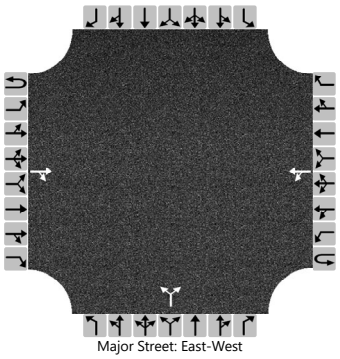
General Information

Analyst	J. Carey
Agency/Co.	Traffic Concepts, Inc
Date Performed	11/3/2025
Analysis Year	2027
Time Analyzed	Future PM + Connection
Intersection Orientation	East-West
Project Description	4286

Site Information

Intersection	Calvert St Ext at Norris Taylor Dr
Jurisdiction	Town of Easton, BD
East/West Street	Norris Taylor Dr
North/South Street	Calvert St Extended
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			0	0		20	0			0		49				
Percent Heavy Vehicles (%)						2				2		2				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.12				6.42		6.22				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.22				3.52		3.32				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						22					54					
Capacity, c (veh/h)						1623					1085					
v/c Ratio						0.01					0.05					
95% Queue Length, Q_{95} (veh)						0.0					0.2					
95% Queue Length, Q_{95} (ft)						0.0					5.1					
Control Delay (s/veh)						7.2	0.1				8.5					
Level of Service (LOS)						A	A				A					
Approach Delay (s/veh)					7.2				8.5							
Approach LOS					A				A							

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APPENDIX II

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

County:	TALBOT		Municipality:	NONE	
Prefix:	US	Route NO: 50	Suffix:		Mile Point: 12
Location:	US50-.50 MI E OF MD331				
Begin Sect:	8.72		End Sect:	14.65	
Station Desc:	MD 309 to MD 565/Landing Neck Rd				
Func Class:	14-URBAN OTHER PRINCIPAL ARTERIAL		Location ID:	B3812	

Year	AADT	AAWDT	Single Unit	Combination Unit	K Factor	D Factor	North East Split	South West Split	Dir In Peak Hour
2024	31,920	32,560	5	3	7.72	50.27	50.23	49.77	WEST
2023	34,272	34,962	5	4	7.2	54.01	49.8	50.2	WEST
2022	33,141	34,141	5	4	7.2	54.01	49.8	50.2	WEST
2021	33,990	35,010	5	4	7.2	54.01	49.8	50.2	WEST
2020	31,763	33,033	8	5	7.31	52.5	53.07	46.93	WEST
2019	38,362	39,902	7	4	7.31	52.5	53.07	46.93	WEST
2018	37,901	39,801	7	4	7.31	52.5	53.07	46.93	WEST
2017	38,130	40,040	5	3	7.31	52.5	53.07	46.93	WEST
2016	35,812	38,322	7	5	7.38	51.28	50.34	49.66	WEST
2015	35,071	37,531	7	5	7.38	51.28	50.34	49.66	WEST

Note

AADT: Annual Average Daily Traffic is the number of vehicles expected to pass a given location on an average day of the year.

AAWDT: Annual Average Weekday Traffic is the number of vehicles expected to pass a given location on an average Weekday (Monday – Friday).

Single Unit: Percentage of Trucks (FHWA Classes 4 -7).

Combination Unit: Percentage of Trucks (FHWA Classes 8-13).

K Factor: Proportion of Annual Average Daily Traffic occurring in the 30th highest hour volume for Continuous count station and Peak hour volume for Short duration count stations.

D Factor: Percentage of traffic moving in the peak direction during the 30th highest hour volume for Continuous count station and Peak hour volume for Short duration count stations.

North East Split: Percentage of traffic in the North or East Direction.

South West Split: Percentage of traffic in the South or West Direction.

Peak Hour Direction: The direction with largest volume in the peak hour.

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

County:	TALBOT	Municipality:	EASTON		
Prefix:	MU	Route NO:	430	Suffix:		Mile Point:	0.69
Location:	GOLDSBOROUGH ST-.20 MI W OF US50				
Begin Sect:	0	End Sect:	0.89		
Station Desc:	WASHINGTON ST TO US 50				
Func Class:	17-URBAN COLLECTOR	Location ID:	B200004		

Year	AADT	AAWDT	Single Unit	Combination Unit	K Factor	D Factor	North East Split	South West Split	Dir In Peak Hour
2024	7,891	8,521	2		9.22	67.01	56.94	43.06	EAST
2023	7,910	8,390	2		9.22	67.01	56.94	43.06	EAST
2022	8,613	9,303	2		8.4	67.08	58.81	41.19	EAST
2021	8,562	9,162	4		8.4	67.08	58.81	41.19	EAST
2020	7,481	8,081	4		8.4	67.08	58.81	41.19	EAST
2019	8,960	9,500	4		8.4	67.08	58.81	41.19	EAST
2018	8,312	8,892	4		8.39	70.19	60.42	39.58	EAST
2017	8,381	8,971	4		8.39	70.19	60.42	39.58	EAST
2016	8,180	8,750	4		8.39	70.19	60.42	39.58	EAST
2015	8,682	9,292	3		9.09	67.53	57.65	42.35	EAST

Note

AADT: Annual Average Daily Traffic is the number of vehicles expected to pass a given location on an average day of the year.

AAWDT: Annual Average Weekday Traffic is the number of vehicles expected to pass a given location on an average Weekday (Monday – Friday).

Single Unit: Percentage of Trucks (FHWA Classes 4 -7).

Combination Unit: Percentage of Trucks (FHWA Classes 8-13).

K Factor: Proportion of Annual Average Daily Traffic occurring in the 30th highest hour volume for Continuous count station and Peak hour volume for Short duration count stations.

D Factor: Percentage of traffic moving in the peak direction during the 30th highest hour volume for Continuous count station and Peak hour volume for Short duration count stations.

North East Split: Percentage of traffic in the North or East Direction.

South West Split: Percentage of traffic in the South or West Direction.

Peak Hour Direction: The direction with largest volume in the peak hour.



APPENDIX III

PEAK HOUR TURNING MOVEMENT COUNT

INTERSECTION: US 50 @ MD 328 **COUNTY:** TALBOT

COUNT BY: CAMERA **DATE:** OCTOBER 14, 2025

WEATHER: RAIN / OVERCAST **DAY:** TUESDAY

CAM

	US 50 NORTHBOUND				US 50 SOUTHBOUND				MD 328 EASTBOUND				MD 328 WESTBOUND				
TIME	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	TOTAL
AM																	AM
7:00-7:15	0	7	207	28	1	16	198	6		6	19	9		77	29	26	629
7:15-7:30	0	18	267	33	3	17	239	14		11	21	7		95	28	36	789
7:30-7:45	0	29	237	39	3	24	222	19		7	22	12		112	52	42	820
7:45-8:00	0	46	261	47	6	27	219	31		17	43	63		111	68	59	998
8:00-8:15	1	26	279	35	3	41	221	21		16	28	36		75	52	43	877
8:15-8:30	2	13	270	33	5	21	172	8		12	28	10		72	47	33	726
8:30-8:45	3	15	224	19	1	28	180	4		3	27	8		56	36	28	632
8:45-9:00	3	15	211	25	4	43	198	11		9	22	5		65	33	35	679
AM PEAK HR 7:15-8:15 TOTALS	1	119	1044	154	15	109	901	85	0	51	114	118	0	393	200	180	PHF 0.87
PM																	PM
4:00-4:15	4	22	215	82	3	49	239	11		10	76	33		48	42	49	883
4:15-4:30	2	23	212	65	4	55	240	10		14	84	38		52	42	46	887
4:30-4:45	3	13	218	76	1	65	266	13		10	88	37		42	37	56	925
4:45-5:00	3	16	253	78	4	39	224	16		9	64	39		47	47	49	888
5:00-5:15	0	10	217	63	6	50	255	12		18	78	36		54	38	51	888
5:15-5:30	2	22	245	58	1	54	200	11		14	80	32		38	40	42	839
5:30-5:45	2	8	223	64	5	39	188	6		9	58	17		32	43	47	741
5:45-6:00	3	11	155	33	2	41	220	9		10	59	13		26	30	29	641
PM PEAK HR 4:15-5:15 TOTALS	8	62	900	282	15	209	985	51	0	51	314	150	0	195	164	202	PHF 0.97

TRAFFIC CONCEPTS, INC.
7525 CONNELLEY DRIVE, SUITE B
HANOVER, MARYLAND 21076
410-760-2911
TRAFFIC@TRAFFIC-CONCEPTS.COM

M:\4286

PEAK HOUR TURNING MOVEMENT COUNT (BIKES)

INTERSECTION: US 50 @ MD 328 **COUNTY:** TALBOT

COUNT BY: CAMERA **DATE:** OCTOBER 14, 2025

WEATHER: RAIN / OVERCAST **DAY:** TUESDAY

CAM

	US 50 NORTHBOUND				US 50 SOUTHBOUND				MD 328 EASTBOUND				MD 328 WESTBOUND				
TIME	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	TOTAL
AM																	AM
7:00-7:15	0	0	0	0	0	0	0	0		0	0	0		0	0	0	0
7:15-7:30	0	0	0	0	0	0	0	0		0	0	0		0	0	0	0
7:30-7:45	0	0	0	0	0	0	0	0		0	0	0		0	0	0	0
7:45-8:00	0	0	0	0	0	0	0	0		0	0	0		0	0	0	0
8:00-8:15	0	0	0	0	0	0	0	0		0	0	0		0	1	0	1
8:15-8:30	0	0	0	0	0	0	0	0		0	0	0		0	0	0	0
8:30-8:45	0	0	0	0	0	0	0	0		0	0	0		0	0	0	0
8:45-9:00	0	0	0	0	0	0	0	0		0	0	0		0	0	0	0
AM PEAK HR 7:15-8:15 TOTALS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	TOTAL 1
PM																	PM
4:00-4:15	0	0	0	0	0	0	0	0		0	0	0		0	0	0	0
4:15-4:30	0	0	0	0	0	0	0	0		0	0	0		0	0	0	0
4:30-4:45	0	0	0	0	0	0	0	0		0	0	0		0	0	0	0
4:45-5:00	0	0	0	0	0	0	0	0		0	0	0		0	0	0	0
5:00-5:15	0	0	0	0	0	0	0	0		0	1	0		0	0	0	1
5:15-5:30	0	0	0	0	0	0	0	0		0	0	0		0	1	0	1
5:30-5:45	0	0	0	0	0	0	0	0		0	0	0		0	0	0	0
5:45-6:00	0	0	0	0	0	0	0	0		0	0	0		0	0	0	0
PM PEAK HR 4:15-5:15 TOTALS	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	TOTAL 1

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PEAK HOUR PEDESTRIAN MOVEMENT COUNT

INTERSECTION: US 50 @ MD 328 **COUNTY:** TALBOT

COUNT BY: CAMERA **DATE:** OCTOBER 14, 2025

WEATHER: RAIN / OVERCAST **DAY:** TUESDAY

	US 50 NORTHBOUND			US 50 SOUTHBOUND			MD 328 EASTBOUND			MD 328 WESTBOUND			
TIME		EB	WB		EB	WB		NB	SB		NB	SB	TOTAL
AM													AM
7:00-7:15		0	0		0	0		0	0		0	0	0
7:15-7:30		0	0		0	0		0	0		0	0	0
7:30-7:45		0	0		0	0		0	0		0	0	0
7:45-8:00		0	1		0	0		0	0		0	0	1
8:00-8:15		0	0		0	0		0	0		0	0	0
8:15-8:30		1	0		0	0		0	0		0	0	1
8:30-8:45		0	0		0	0		0	0		0	0	0
8:45-9:00		0	0		0	0		0	0		0	0	0
AM PEAK HR 7:15-8:15 TOTALS		0	1		0	0		0	0		0	0	TOTAL 1
PM													PM
4:00-4:15		0	0		0	0		0	0		0	0	0
4:15-4:30		0	0		0	1		0	0		0	0	1
4:30-4:45		0	0		0	0		0	0		0	0	0
4:45-5:00		0	0		0	0		0	0		0	0	0
5:00-5:15		0	0		0	0		0	0		0	0	0
5:15-5:30		0	1		0	0		0	0		0	0	1
5:30-5:45		0	0		0	0		0	0		0	0	0
5:45-6:00		0	0		0	0		0	0		0	0	0
PM PEAK HR 4:15-5:15 TOTALS		0	0		0	1		0	0		0	0	TOTAL 1

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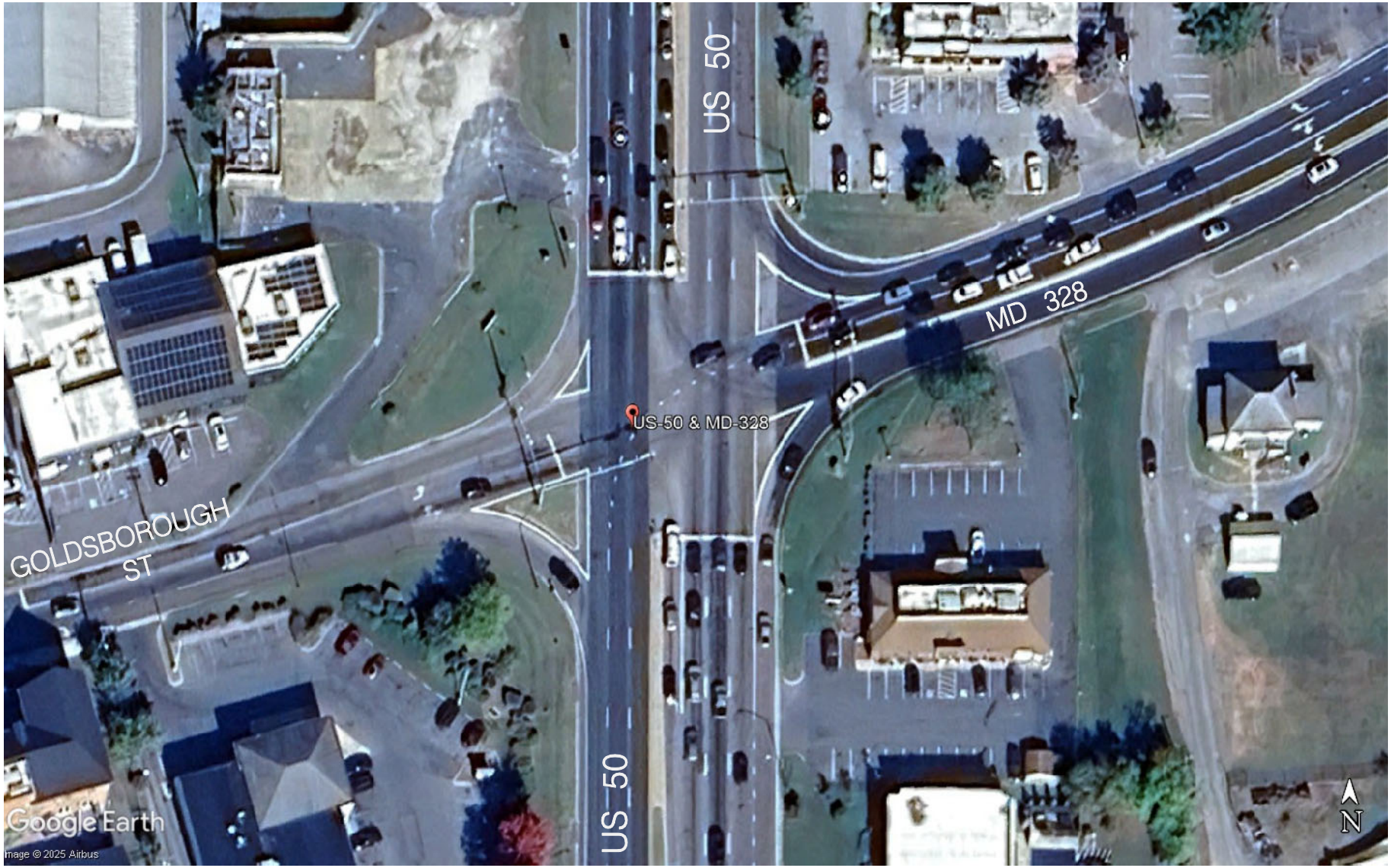
US 50 AT GOLDSBOROUGH ST /MD 328 (MATTHEWSTOWN RD)
TOWN OF EASTON, TALBOT COUNTY, MARYLAND



US 50 (OCEAN GATEWAY) IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION

EXISTING SIGNS TO REMAIN

28 27 26 29 25

EAST 50 | EAST 50 | WEST 50 | WEST 50 | EAST MARYLAND 328

15 20

Goldsborough ST | Goldsborough ST

17 18

Matthewstown RD | Matthewstown RD

21,23 22,24

ONLY

PROPOSED SIGNS

16,19

YIELD ON FLASHING RED ARROW AFTER STOP

R10-12(2) (48"x36")

EXISTING SIGNALS TO REMAIN

4,8, 11,14 — 12"

9,10, 12,13 — 12"

EXISTING SIGNALS TO BE REMOVED

EXISTING VIDEO DETECTION CAMERAS TO REMAIN

a,b,c,d,e

EXISTING VIDEO DETECTION ZONES

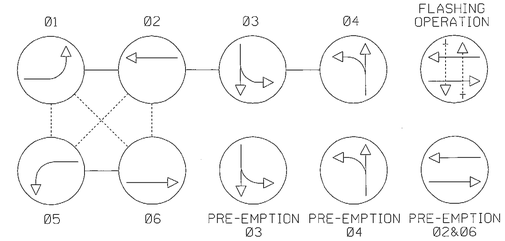
a,b,c,d,e

PROPOSED LED SIGNALS

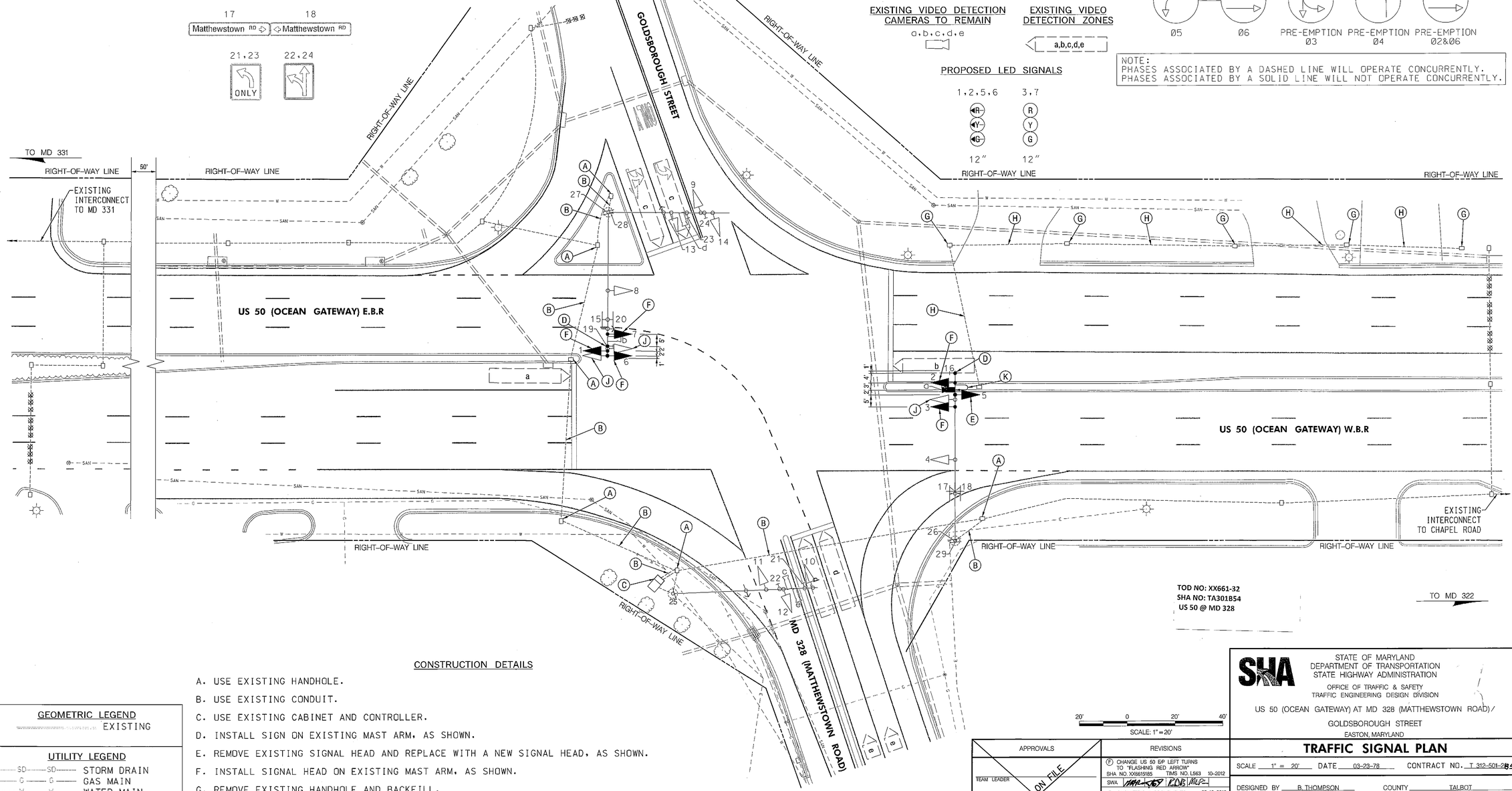
1,2,5,6 — 12"

3,7 — 12"

NEMA PHASING



NOTE:
PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.
PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.



CONSTRUCTION DETAILS

A. USE EXISTING HANDHOLE.
B. USE EXISTING CONDUIT.
C. USE EXISTING CABINET AND CONTROLLER.
D. INSTALL SIGN ON EXISTING MAST ARM, AS SHOWN.
E. REMOVE EXISTING SIGNAL HEAD AND REPLACE WITH A NEW SIGNAL HEAD, AS SHOWN.
F. INSTALL SIGNAL HEAD ON EXISTING MAST ARM, AS SHOWN.
G. REMOVE EXISTING HANDHOLE AND BACKFILL.
H. CAP AND ABANDON EXISTING CONDUIT.
J. REMOVE EXISTING SIGNAL HEAD.
K. RELOCATE EXISTING VIDEO DETECTION CAMERA, AS SHOWN.

GEOMETRIC LEGEND

EXISTING

UTILITY LEGEND

SD — STORM DRAIN
G — GAS MAIN
W — WATER MAIN
S — SEWER MAIN
E — ELECTRIC CABLES
A — AERIAL CABLES
T — TELEPHONE CABLES
F — FIBER-OPTIC

SABRA, WANG & ASSOCIATES, INC.
7056 SAMUEL MORSE DRIVE
SUITE 100
COLUMBIA, MD 21046
(443) 741-3500
WWW.SABRA-WANG.COM

SCALE: 1" = 20'

APPROVALS	
TEAM LEADER	ORIGINAL ON FILE
ASST. DIV. CHIEF	
DIVISION CHIEF	
OFFICE DIRECTOR	

REVISIONS
(F) CHANGE US 50 E/P LEFT TURNS TO "FLASHING RED ARROW" SHA NO. XX6615185 TIMS NO. L563 10-2012
SWA
E GEOMETRIC IMPROVEMENTS ON THE EAST LEG SHA NO. TA3225176 TIMS NO. K308 02-10-2010
KCI
D INSTALL VIDEO DETECTION, INSTALL MICROLOOP PROBES ON US 50 SHA NO. TA4265187 TIMS NO. G370 11-16-2005
JWA JH WH TH

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

US 50 (OCEAN GATEWAY) AT MD 328 (MATTHEWSTOWN ROAD) / GOLDSBOROUGH STREET
EASTON, MARYLAND

TRAFFIC SIGNAL PLAN

SCALE 1" = 20' DATE 03-23-78 CONTRACT NO. T 312-501-285

DESIGNED BY B. THOMPSON COUNTY TALBOT
DRAWN BY B. THOMPSON LOGMILE 2000/5011.15
CHECKED BY W. RICHARDSON T.I.M.S. NO.
F.A.P. NO. TOD NO.

TS NO. 532 (F) | DRAWING SG - 01 OF 02 | SHEET NO. 1 OF 2

PLOTTED: Tuesday, October 16, 2012 AT 03:25 PM
FILE: R:\2008\73 SHA BCS 2008-05A_TEDD DESIGN_STV_JV_ $5M\Task 220 US 50 at MD 328\DWG\pSG-P001_I.563.dgn

BY: agriffin

PEAK HOUR TURNING MOVEMENT COUNT

INTERSECTION: US 50 @ NORRIS TAYLOR DR
COUNTY: TALBOT

COUNT BY: CAMERA
DATE: OCTOBER 14, 2025

WEATHER: RAIN / OVERCAST
DAY: TUESDAY

	US 50 NORTHBOUND				US 50 SOUTHBOUND				NORRIS TAYLOR DR EASTBOUND				NORRIS TAYLOR DR WESTBOUND				
TIME	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	TOTAL
AM																	AM
7:00-7:15	14	7	210	0	0	0	193	11		6	0	2		0	0	0	443
7:15-7:30	29	6	245	0	0	0	239	13		1	0	4		1	0	0	538
7:30-7:45	18	9	269	0	0	0	230	6		6	0	3		0	0	0	541
7:45-8:00	20	1	306	2	0	0	264	12		4	0	3		2	0	0	614
8:00-8:15	16	10	300	0	2	0	223	10		5	0	1		1	0	0	568
8:15-8:30	15	5	297	0	1	1	192	14		2	0	2		5	0	0	534
8:30-8:45	19	7	256	0	2	0	174	13		9	0	2		0	0	0	482
8:45-9:00	12	5	220	2	2	0	212	16		2	0	2		1	0	0	474
AM PEAK HR 7:15-8:15 TOTALS	83	26	1120	2	2	0	956	41	0	16	0	11	0	4	0	0	PHF 0.92
PM																	PM
4:00-4:15	14	8	259	1	1	0	267	19		7	0	5		0	0	0	581
4:15-4:30	7	4	243	1	2	1	251	15		6	0	5		2	0	0	537
4:30-4:45	6	6	251	4	1	0	271	16		2	0	7		1	0	0	565
4:45-5:00	9	2	292	1	0	2	251	12		5	0	1		2	0	0	577
5:00-5:15	9	7	255	3	2	3	261	25		3	0	4		3	0	0	575
5:15-5:30	2	6	280	1	2	5	227	12		3	0	3		1	0	0	542
5:30-5:45	3	5	262	2	1	1	207	18		11	0	2		0	0	0	512
5:45-6:00	8	4	177	1	2	1	247	15		5	0	4		1	0	0	465
PM PEAK HR 4:00-5:00 TOTALS	36	20	1045	7	4	3	1040	62	0	20	0	18	0	5	0	0	PHF 0.97

TRAFFIC CONCEPTS, INC.
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HANOVER, MARYLAND 21076
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PEAK HOUR TURNING MOVEMENT COUNT (BIKES)

INTERSECTION: US 50 @ NORRIS TAYLOR DR
COUNTY: TALBOT

COUNT BY: CAMERA
DATE: OCTOBER 14, 2025

WEATHER: RAIN / OVERCAST
DAY: TUESDAY

	US 50 NORTHBOUND				US 50 SOUTHBOUND				NORRIS TAYLOR DR EASTBOUND				NORRIS TAYLOR DR WESTBOUND				
TIME	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	TOTAL
AM																	AM
7:00-7:15	0	0	0	0	0	0	0	0		0	0	0		0	0	0	0
7:15-7:30	0	0	0	0	0	0	0	0		0	0	0		0	0	0	0
7:30-7:45	0	0	0	0	0	0	0	0		0	0	0		0	0	0	0
7:45-8:00	0	0	0	0	0	0	0	0		0	0	0		0	0	0	0
8:00-8:15	0	0	0	0	0	0	0	0		0	0	0		0	0	0	0
8:15-8:30	0	0	0	0	0	0	0	0		0	0	0		0	0	0	0
8:30-8:45	0	0	0	0	0	0	0	0		0	0	0		0	0	0	0
8:45-9:00	0	0	0	0	0	0	0	0		0	0	0		0	0	0	0
AM PEAK HR 7:15-8:15 TOTALS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TOTAL 0
PM																	PM
4:00-4:15	0	0	0	0	0	0	0	0		0	0	0		0	0	0	0
4:15-4:30	0	0	0	0	0	0	0	0		0	0	0		0	0	0	0
4:30-4:45	0	0	0	0	0	0	0	0		0	0	0		0	0	0	0
4:45-5:00	0	0	0	0	0	0	0	0		0	0	0		0	0	0	0
5:00-5:15	0	0	0	0	0	0	0	0		0	0	0		0	0	0	0
5:15-5:30	0	0	0	0	0	0	0	0		0	0	0		0	0	0	0
5:30-5:45	0	0	0	0	0	0	0	0		0	0	0		0	0	0	0
5:45-6:00	0	0	0	0	0	0	0	0		1	0	0		0	0	0	1
PM PEAK HR 4:00-5:00 TOTALS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TOTAL 0

TRAFFIC CONCEPTS, INC.
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M:\4286

PEAK HOUR PEDESTRIAN MOVEMENT COUNT

INTERSECTION: US 50 @ NORRIS TAYLOR DR
COUNTY: TALBOT

COUNT BY: CAMERA
DATE: OCTOBER 14, 2025

WEATHER: RAIN / OVERCAST
DAY: TUESDAY

	US 50 NORTHBOUND			US 50 SOUTHBOUND			NORRIS TAYLOR DR EASTBOUND			NORRIS TAYLOR DR WESTBOUND			
TIME	EB	WB		EB	WB		NB	SB		NB	SB		TOTAL
AM													AM
7:00-7:15	0	0		0	0		0	0		0	0		0
7:15-7:30	0	0		0	0		0	0		0	0		0
7:30-7:45	0	0		0	0		0	0		0	0		0
7:45-8:00	0	0		0	0		0	0		0	0		0
8:00-8:15	0	0		0	0		0	0		0	0		0
8:15-8:30	0	0		0	0		0	0		0	0		0
8:30-8:45	0	0		0	0		0	0		0	0		0
8:45-9:00	0	0		0	0		0	0		0	0		0
AM PEAK HR 7:15-8:15 TOTALS	0	0		0	0		0	0		0	0		TOTAL 0
PM													PM
4:00-4:15	0	0		0	0		0	0		0	0		0
4:15-4:30	0	0		0	0		0	0		0	0		0
4:30-4:45	0	0		0	0		0	0		0	0		0
4:45-5:00	0	0		0	0		0	0		0	0		0
5:00-5:15	0	0		0	0		0	0		0	0		0
5:15-5:30	0	0		0	0		0	0		0	0		0
5:30-5:45	0	1		0	0		0	0		0	0		1
5:45-6:00	1	0		0	0		0	0		0	0		1
PM PEAK HR 4:00-5:00 TOTALS	0	0		0	0		0	0		0	0		TOTAL 0

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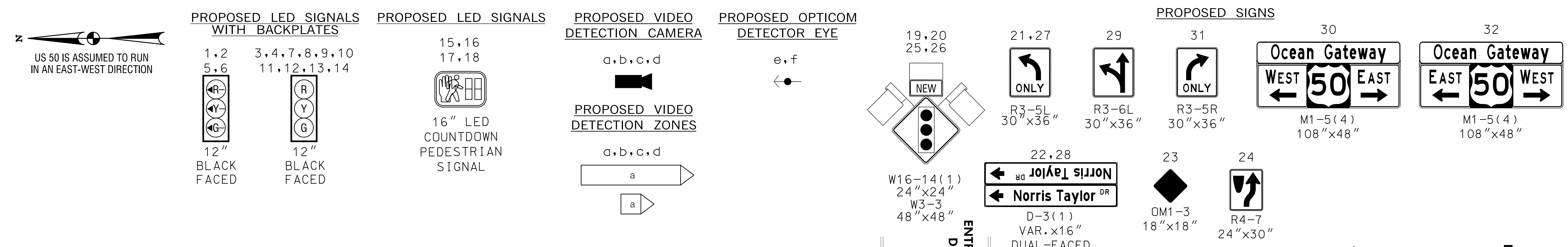
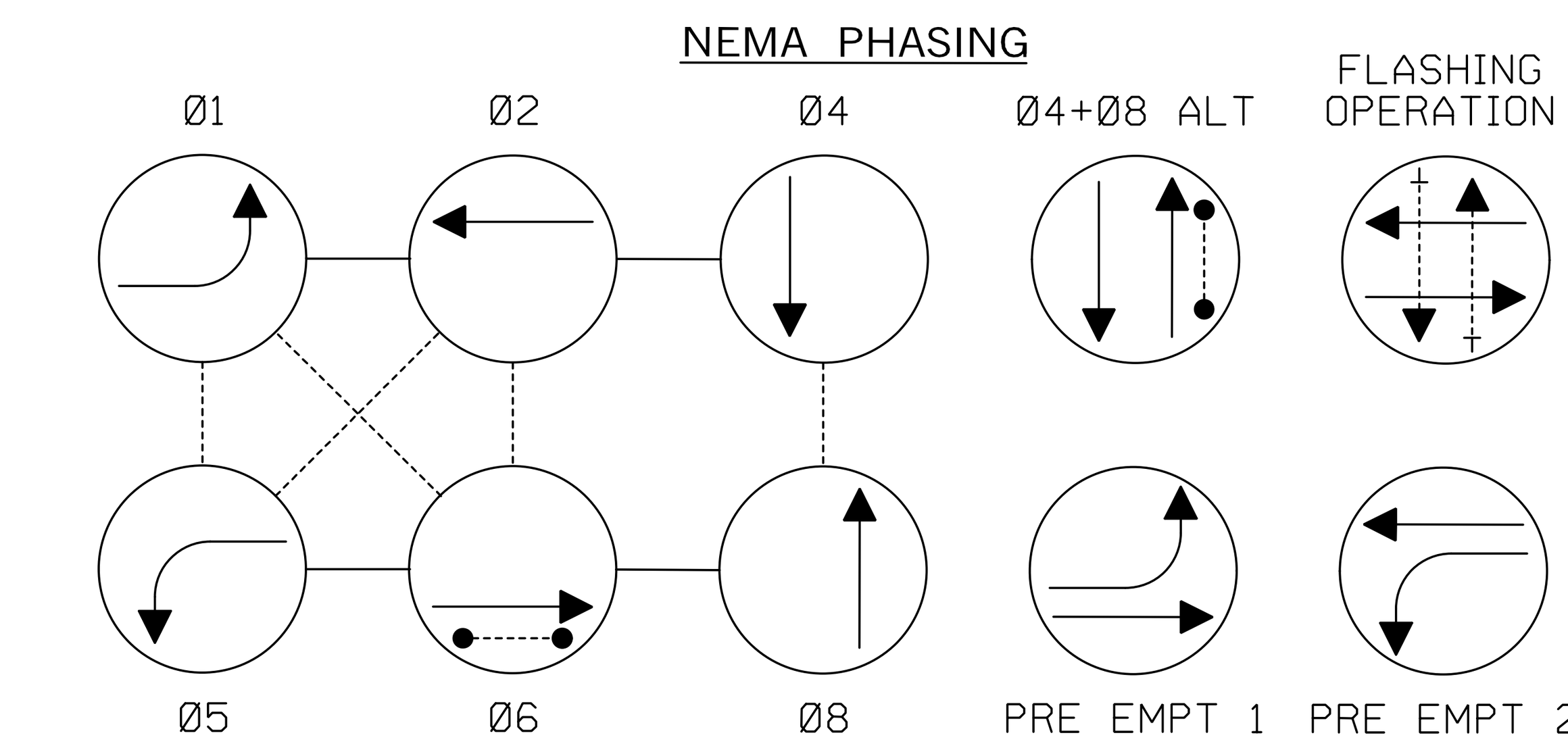
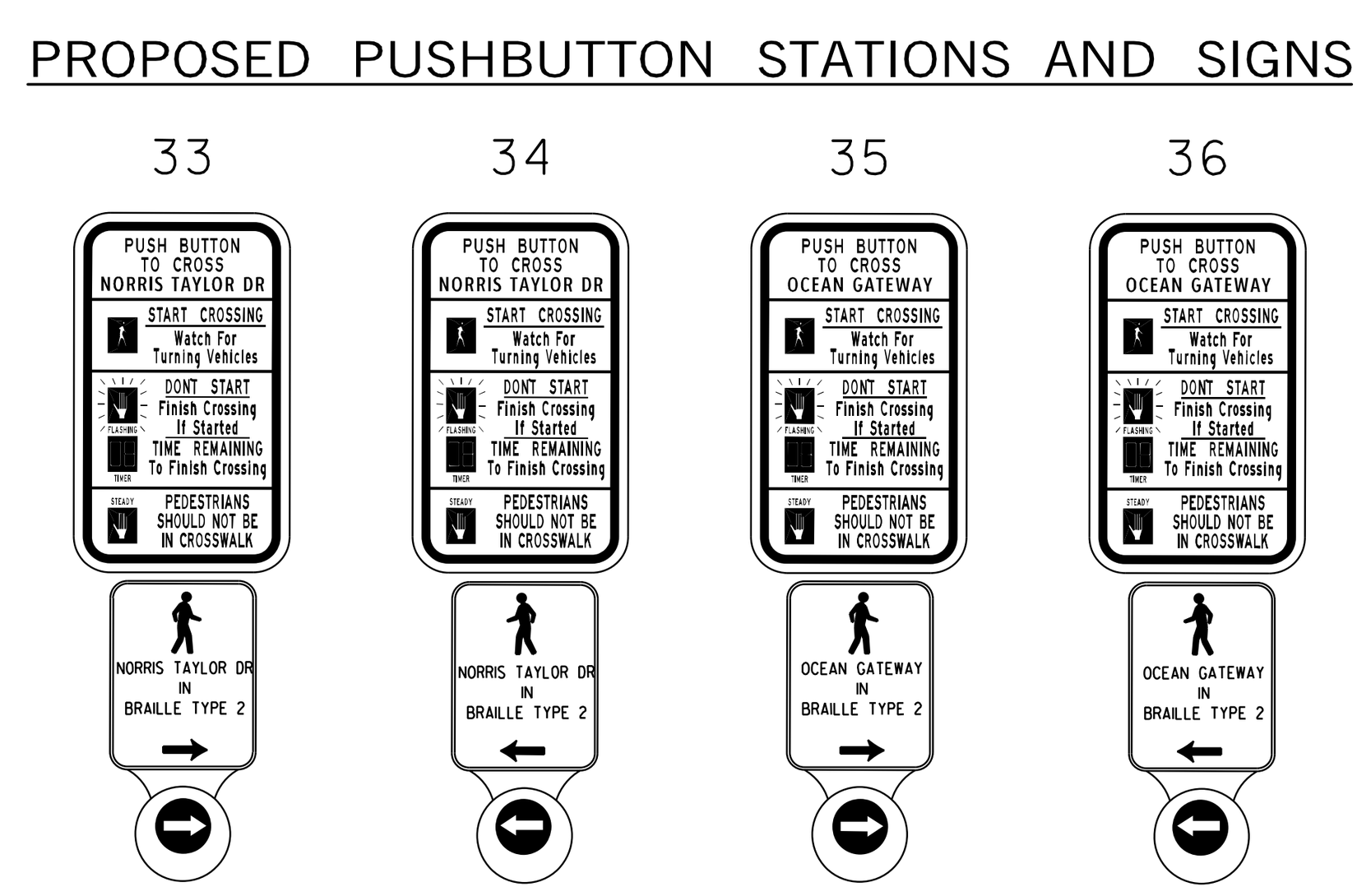
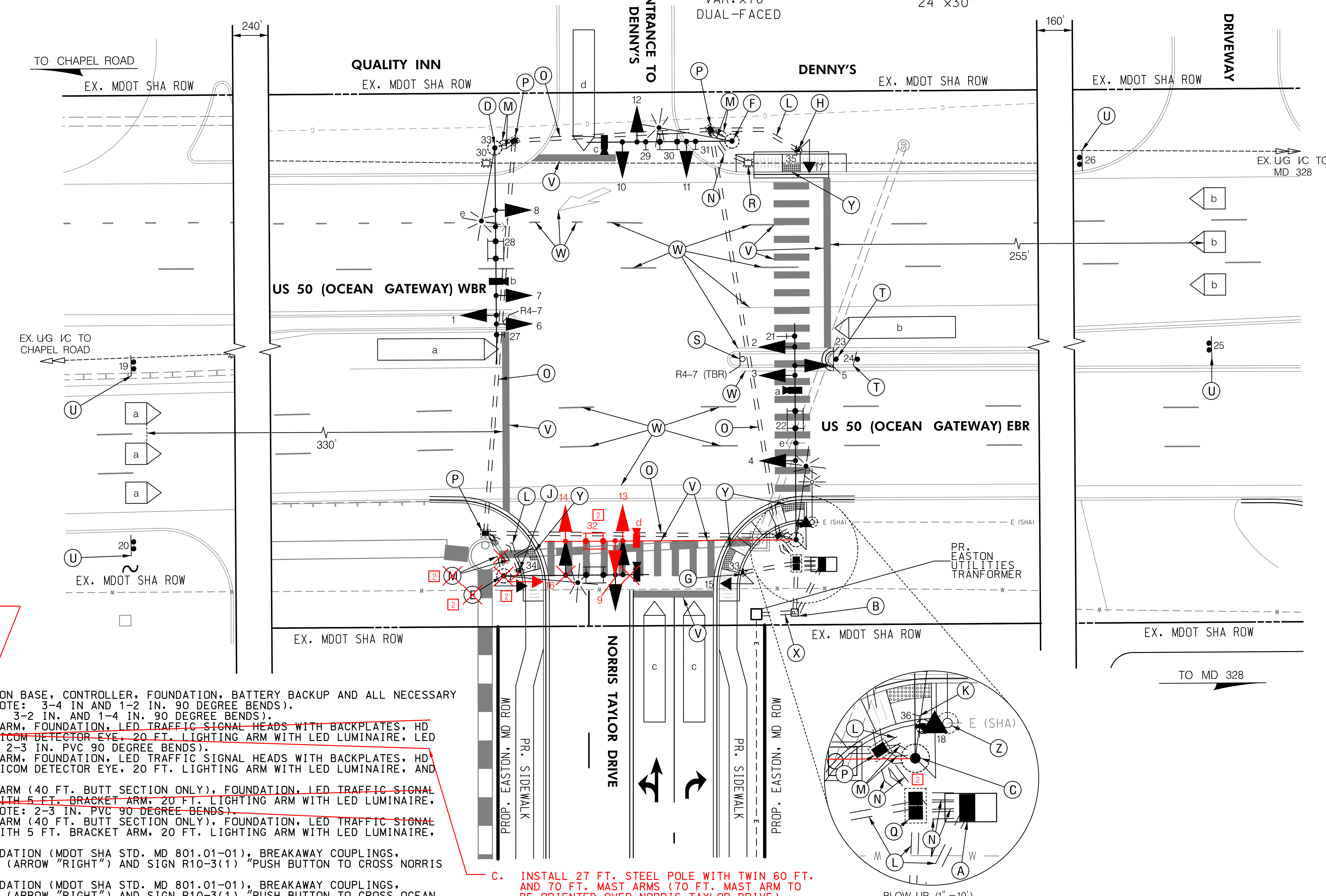




NOTE:
PHASES ASSOCIATED BY A DASHED LINE MAY/WILL OPERATE CONCURRENTLY.
PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.





CELLULAR ANTENNA AND MODEM WILL BE INSTALLED BY THE MDOT SHA SIGNAL SHOP WITHIN THE CABINET.

CONSTRUCTION DETAILS

A. INSTALL SIZE "S" BASE MOUNTED CABINET WITH EXTENSION BASE, CONTROLLER, FOUNDATION, BATTERY BACKUP AND ALL NECESSARY EQUIPMENT INCLUDING VIDEO DETECTION INTERFACE. (NOTE: 3-4 IN AND 1-2 IN. 90 DEGREE BENDS).
B. INSTALL EMBEDDED METERED SERVICE PEDESTAL. (NOTE: 3-2 IN. AND 1-4 IN. 90 DEGREE BENDS).
~~C. INSTALL 27 FT. STEEL POLE WITH SINGLE 60 FT. MAST ARM, FOUNDATION, LED TRAFFIC SIGNAL HEADS WITH BACKPLATES, HD VIDEO DETECTION CAMERA WITH 5 FT. BRACKET ARM, OPTICOM DETECTOR EYE, 20 FT. LIGHTING ARM WITH LED LUMINAIRE, LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, AND SIGNS (NOTE: 2-3 IN. PVC 90 DEGREE BENDS).~~ 2
D. INSTALL 27 FT. STEEL POLE WITH SINGLE 60 FT. MAST ARM, FOUNDATION, LED TRAFFIC SIGNAL HEADS WITH BACKPLATES, HD VIDEO DETECTION CAMERA WITH 5 FT. BRACKET ARM, OPTICOM DETECTOR EYE, 20 FT. LIGHTING ARM WITH LED LUMINAIRE, AND SIGNS (NOTE: 2-3 IN. PVC 90 DEGREE BENDS).
~~E. INSTALL 27 FT. STEEL POLE WITH SINGLE 50 FT. MAST ARM (40 FT. BUTT SECTION ONLY), FOUNDATION, LED TRAFFIC SIGNAL HEADS WITH BACKPLATES, HD VIDEO DETECTION CAMERA WITH 5 FT. BRACKET ARM, 20 FT. LIGHTING ARM WITH LED LUMINAIRE, LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, AND SIGNS (NOTE: 2-3 IN. PVC 90 DEGREE BENDS).~~ 2
F. INSTALL 27 FT. STEEL POLE WITH SINGLE 50 FT. MAST ARM (40 FT. BUTT SECTION ONLY), FOUNDATION, LED TRAFFIC SIGNAL HEADS WITH BACKPLATES, HD VIDEO DETECTION CAMERA WITH 5 FT. BRACKET ARM, 20 FT. LIGHTING ARM WITH LED LUMINAIRE, AND SIGNS (NOTE: 2-3 IN. PVC 90 DEGREE BENDS).
G. INSTALL A 10 FT. BREAKAWAY PEDESTAL POLE WITH FOUNDATION (MDOT SHA STD. MD 801.01-01), BREAKAWAY COUPLINGS, COUNTDOWN PEDESTRIAN SIGNAL, ACCESSIBLE PUSHBUTTON (ARROW "RIGHT") AND SIGN R10-3(1) "PUSH BUTTON TO CROSS NORRIS TAYLOR DRIVE" (NOTE: 1-2 IN. 90 DEGREE PVC BEND).
H. INSTALL A 10 FT. BREAKAWAY PEDESTAL POLE WITH FOUNDATION (MDOT SHA STD. MD 801.01-01), BREAKAWAY COUPLINGS, COUNTDOWN PEDESTRIAN SIGNAL, ACCESSIBLE PUSHBUTTON (ARROW "RIGHT") AND SIGN R10-3(1) "PUSH BUTTON TO CROSS OCEAN GATEWAY" (NOTE: 1-2 IN. 90 DEGREE PVC BEND).
~~J. INSTALL A 6 FT. BREAKAWAY PEDESTAL POLE WITH FOUNDATION (MDOT SHA STD. MD 801.01-01), BREAKAWAY COUPLINGS, ACCESSIBLE PUSHBUTTON (ARROW "LEFT") AND SIGN R10-3(1) "PUSH BUTTON TO CROSS NORRIS TAYLOR DRIVE" (NOTE: 1-2 IN. 90 DEGREE PVC BEND).~~ 2
K. INSTALL A 6 FT. BREAKAWAY PEDESTAL POLE WITH FOUNDATION (MDOT SHA STD. MD 801.01-01), BREAKAWAY COUPLINGS, ACCESSIBLE PUSHBUTTON (ARROW "LEFT") AND SIGN R10-3(1) "PUSH BUTTON TO CROSS OCEAN GATEWAY" (NOTE: 1-2 IN. 90 DEGREE PVC BEND).
L. INSTALL 2 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.
M. INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.
N. INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.
O. INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT - BORED.
P. INSTALL ELECTRICAL HANDHOLE.
Q. INSTALL OVERSIZED ELECTRICAL HANDHOLE.
R. ADJUST EXISTING HANDHOLE TO PROPOSED SIDEWALK GRADE. REPLACE FRAME AND COVER.
S. REMOVE EXISTING GROUND-MOUNTED SIGN.

2 C. INSTALL 27 FT. STEEL POLE WITH TWIN 60 FT. AND 70 FT. MAST ARMS (70 FT. MAST ARM TO BE ORIENTED OVER NORRIS TAYLOR DRIVE), FOUNDATION, LED TRAFFIC SIGNAL HEADS WITH BACKPLATES, HD VIDEO DETECTION CAMERA WITH 5 FT. BRACKET ARM, OPTICOM DETECTOR EYE, 20 FT. LIGHTING ARM WITH LED LUMINAIRE, LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, AND SIGNS (NOTE: 2-3 IN. PVC 90 DEGREE BENDS).

2 J. INSTALL A 10 FT. BREAKAWAY PEDESTAL POLE WITH FOUNDATION (MDOT SHA STD. MD 801.01-01), BREAKAWAY COUPLINGS, COUNTDOWN PEDESTRIAN SIGNAL, ACCESSIBLE PUSHBUTTON (ARROW "LEFT") AND SIGN R10-3(1) "PUSH BUTTON TO CROSS NORRIS TAYLOR DRIVE" (NOTE: 1-2 IN. 90 DEGREE PVC BEND).

CONSTRUCTION DETAILS (CONT.)

T. INSTALL GROUND-MOUNTED SIGN ON ONE 4 IN. X 4 IN. WOOD POST. (MUTCD FIGURE 2B-10)
U. INSTALL GROUND MOUNTED SIGN ON TWO 4 IN. X 6 IN. WOOD POSTS - DRILLED.
V. INSTALL 24 IN. WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINE.
W. ERADICATE EXISTING PAVEMENT MARKING LINE OR SYMBOL (ANY WIDTH/TYPE).
X. INSTALL 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED) - FOR PROPOSED UNDERGROUND POWER SERVICE FROM THE PROPOSED EASTON UTILITIES TRANSFORMER. CAP AND MARK CONDUIT.
Y. INSTALL SIDEWALK RAMP PER MDOT SHA STANDARD 655.12.
Z. EXISTING LIGHTING STRUCTURE AND LUMINAIRE TO BE REMOVED BY OTHERS (EASTON UTILITY COMMISSION). REMOVE FOUNDATION TO 12 IN. BELOW GRADE AND BACKFILL WITH APPROVED MATERIAL. CAP AND ABANDON EXISTING CONDUIT.

UTILITY LEGEND

Symbol	Description
—SD—SD—	STORM DRAIN
— G — G —	GAS MAIN
— W — W —	WATER MAIN
— S — S —	SEWER MAIN
— E — E —	ELECTRIC CABLES
— A — A —	AERIAL CABLES
— T — T —	TELEPHONE CABLES
— F — F —	FIBER-OPTIC

GEOMETRIC LEGEND

EXISTING
PROPOSED

GENERAL NOTES

1. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING MDOT SHA STANDARD TYPICALS FOR TRAFFIC CONTROL. THE CONTRACTOR SHALL REFER TO THE MOT TYPICALS NOTED AS WELL AS THE OVERALL PROJECT TRAFFIC CONTROL PLAN TO UNDERSTAND PHASING REQUIREMENTS OF TRAFFIC SIGNAL EQUIPMENT.
2. THE CONTRACTOR SHALL CONTACT MISS UTILITY TO VERIFY ALL UNDERGROUND UTILITIES PRIOR TO THE INSTALLATION OF PROPOSED SIGNAL EQUIPMENT. IF ANY UTILITY CONFLICTS ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
3. WITHIN 36 IN. OF UNDERGROUND UTILITY LOCATIONS, THE CONTRACTOR SHALL BE REQUIRED TO EXCAVATE FOR FOUNDATION AND CONDUIT BY HAND.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES TO THE APPROPRIATE TERMINALS AND PROPERLY LABELING EACH CABLE. CONTACT MR. MICHAEL BASSO AT 410-787-7650 72 HOURS IN ADVANCE OF INTENDED WORK.
5. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL ABANDONED ELECTRICAL CABLES.
6. THE CONTRACTOR SHALL VERIFY PROPOSED POLE AND CABINET LOCATIONS PRIOR TO INSTALLATION.
7. ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH MDOT SHA STANDARDS.
8. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS. HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS. TO MEET CLEARANCES AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.02, MD 818.04.
9. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
10. FOR PROPOSED HANDHOLE INSTALLATION, THE CONCRETE COLLAR SHALL BE INCLUDED PER MD. STD. 811.01-03 FOR FIELD CONDITIONS.
11. NO. 6 AWG STRANDED BARE COPPER WIRE INSTALLED IN EACH HANDHOLE SHALL CONNECT THE GROUNDING LUG ON THE LID/COLLAR TO THE GROUND ROD IN THE BASE OF THE HANDHOLE TO PROPERLY GROUND THE STRUCTURE.
12. REFER TO SG-03 FOR ADDITIONAL EQUIPMENT DETAILS AND DIMENSIONS.
14. VIDEO CAMERA LOCATION / ALIGNING SHALL BE COORDINATED WITH THE MDOT SHA ENGINEER.
15. SIGN POSTS INSTALLED IN CONCRETE SHALL BE INSTALLED WITH A SLEEVE PER MDOT SHA STANDARD 812.05-01.
16. ALL PROPOSED LUMINAIRES SHALL BE SUPPLIED WITH A PHOTOCELL.
17. VERIFY PROPOSED GEOMETRICS PRIOR TO INSTALLING SIGNAL EQUIPMENT.
18. ALL HANDHOLES SHALL BE INSTALLED AT FINAL GRADE.
19. THE CONTRACTOR MUST COORDINATE THE INSTALLATION OF PROPOSED SIGNAL EQUIPMENT WITH THE CONSTRUCTION OF THE PROPOSED SIDEWALK AND SIDEWALK RAMP CONSTRUCTION.
20. LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MD-MUTCD SEC. 4E.08 AND 4E.10 AND FIG. 4E-3 AND 4E-4; AND THE NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE." IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL THE CONFLICT HAS BEEN RESOLVED. IF NEEDED, A DESIGN WAIVER SHALL BE OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
21. PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR FROM A 60 IN. x 60 IN. LEVEL LANDING AREA SUCH THAT THEY DO NOT HAVE TO REACH MORE THAN 18 IN. A LEVEL LANDING AREA IS AN AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
22. PUSHBUTTON ARROWS ARE TO BE TURNED PARALLEL TO THE CROSSWALK FOR WHICH THEY ARE INTENDED.
23. WHERE POSSIBLE, THE CONTRACTOR SHALL INTEGRATE THE PEDESTAL POLE FOUNDATIONS WITHIN THE PROPOSED BACKER CURB.
24. ALL TRAFFIC SIGNAL MODIFICATIONS SHALL BE CONSTRUCTED PRIOR TO SIDEWALK CONSTRUCTION.
25. THE CONTRACTOR SHALL CONTACT THE DISTRICT 2 MAINTENANCE OFFICE ONCE THE SIGNAL IS TURNED ON. THE 'NEW' PLAQUE AND FLAGS SHALL BE REMOVED BY DISTRICT MAINTENANCE WITHIN 90 TO 120 DAYS OF SIGNAL TURN ON.
26. THE CONTRACTOR SHALL CENTER THE PROPOSED CROSSWALKS ON NEWLY CONSTRUCTED RAMPS.
27. REFER TO MDOT SHA SHELF TYPICAL 550.02 FOR ADDITIONAL DETAIL ON THE PROPOSED CONTINENTAL CROSSWALKS.

2 REDLINE NO. 2
DATE: 2/26/2024
SHEETS AFFECTED: SG-01, SG-02, SG-03 IC-01, IC-02
Justin Humenny 2/26/2024
TEDD TEAM LEADER

1 REDLINE NO. 1
DATE: 06/20/2023
SHEETS AFFECTED: SG-02
JH - 6/20/2023
TEDD TEAM LEADER

NOTE:
THESE PLANS ARE APPROVED FOR CONSTRUCTION FOR A PERIOD OF ONE (1) YEAR. SHOULD CONSTRUCTION NOT BEGIN WITHIN THIS TIME FRAME, THESE PLANS SHALL BE NULL AND VOID WITH A RE-REVIEW REQUIRED FROM THE TRAFFIC ENGINEERING DESIGN DIVISION.
AMD PERMIT NO. 21APTA002XX

STATE OF MARYLAND BRIAN ANTHONY BIDDLE — "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. 20035[4], EXPIRATION DATE: 03/19/2025." 4/17/23

LENHART TRAFFIC CONSULTING, INC.
645 BALTIMORE ANNAPOLIS BOULEVARD, SUITE 214
SEVERNA PARK, MD 21146
TEL: (410) 216-3333
FAX: (443) 782-2288
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MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

US 50 (OCEAN GATEWAY)
AT NORRIS TAYLOR DRIVE
(EASTON, MARYLAND)

SIGNALIZATION PLAN SHEET

APPROVALS		REVISIONS
Justin Humenny, TEAM LEADER	3/27/2023	
Dean Randolph, ASST. DIV. CHIEF	3/28/2023	
Lili Liang, DIVISION CHIEF	3/31/2023	
Cedric Ward, OFFICE DIRECTOR	4/2/2023	

SCALE 1" = 20' ADVERTISED DATE MAR. 2023 CONTRACT NO. BW996M82

DESIGNED BY	LTC/BCS	COUNTY	TALBOT
DRAWN BY	LTC/BCS	LOGMILE	20005010.79
CHECKED BY	LTC/BAB	TIMS NO.	P648
MDE/PRD		TOD NO.	

TS NO. 5245 DRAWING SG-01 OF 4 SHEET NO. 1 OF 6

BY: bswick -
PLOTTED: Monday, February 26, 2024 AT 08:58 AM

PROJECT DESCRIPTION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE CONSTRUCTION OF A NEW TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF US 50 (OCEAN GATEWAY) AT PROPOSED CITY ROAD NORRIS TAYLOR DRIVE IN TALBOT COUNTY. US 50 (OCEAN GATEWAY) IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA SIX-PHASE, SEMI-ACTUATED MODE. EXCLUSIVE LEFT TURN PHASING WILL BE PROVIDED ALONG THE MAINLINE AND PERMISSIVE PHASING WILL BE PROVIDED ALONG THE SIDE STREETS. AN ALTERNATE PEDESTRIAN PHASE WILL BE PROVIDED TO CROSS THE EAST LEG OF THE INTERSECTION.

CONTROLLER REQUIREMENTS

INSTALL A NEW SIZE 'S' BASE MOUNTED CABINET WITH EXTENSION BASE AND UPS BATTERY BACKUP. THE MDOT SHA SIGNAL SHOP WILL INSTALL ONE (1) VIDEO DETECTION INTERFACE, AN APS CENTRAL CONTROL UNIT AND A NEW EIGHT-PHASE FULLY-ACTUATED TRAFFIC SIGNAL ASC III CONTROLLER WITH ALL NECESSARY EQUIPMENT AND HARNESSES WITHIN THE CABINET.

APS WILL FUNCTION AS FOLLOWS:

TO CROSS OCEAN GATEWAY:
A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT MESSAGE WILL BE "WAIT TO CROSS OCEAN GATEWAY AT NORRIS TAYLOR. WAIT."
B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

TO CROSS NORRIS TAYLOR DRIVE:
A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT MESSAGE WILL BE "WAIT TO CROSS NORRIS TAYLOR AT OCEAN GATEWAY. WAIT."
B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

EQUIPMENT LIST 'A'

EQUIPMENT TO BE FURNISHED BY MDOT SHA.

CATEGORY CODE	QUANTITY		DESCRIPTION
[2] 974100 ~~NONE~~	1	EA	CELLULAR MODEM, ANTENNA, AND LEAD-IN CABLE

EQUIPMENT LIST 'B'

APPROVED MDOT SHA EQUIPMENT TO BE PURCHASED BY THE DEVELOPER AND INSTALLED BY THE CONTRACTOR. ALL EQUIPMENT IN THIS LIST SHALL HAVE CATALOG CUTS SUBMITTED FOR APPROVAL PRIOR TO INSTALLATION.

CATEGORY CODE	QUANTITY		DESCRIPTION
120500	1	LS	MAINTENANCE OF TRAFFIC
130875	1	LS	MOBILIZATION AND DEMOBILIZATION
203030	6	CY	TEST PIT EXCAVATION
549617	400	LF	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
549800	300	LF	REMOVAL OF EXISTING PAVEMENT MARKING LINES, ANY WIDTH
634312	25	LF	TYPE A COMBINATION CURB AND GUTTER ANY HEIGHT OR DEPTH
655105	525	SF	5 INCH CONCRETE SIDEWALK
655120	40	SF	DETECTABLE WARNING SURFACE FOR CURB RAMPS
800000	1	EA	SIZE 'S' CABINET WITH EXTENSION BASE, COBALT CONTROLLER, AND ALL NECESSARY EQUIPMENT
800000	215	SF	FURNISH AND INSTALL SHEET ALUMINUM SIGNS - MAST ARM / GROUND MOUNT
801004	22	CY	CONCRETE FOR SIGNAL FOUNDATION
801104	30	LF	WOOD SIGN SUPPORTS 4 INCH X 4 INCH
801106	150	LF	WOOD SIGN SUPPORTS 4 INCH X 6 INCH
802146	1	EA	ADJUST HANDHOLE TO GRADE AND REPLACE FRAME AND COVER
802501	650	LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
805120	550	LF	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
805130	150	LF	2 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
805135	120	LF	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
805140	500	LF	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
807500	1	EA	EMBEDDED METERED SERVICE PEDESTAL
810022	60	LF	ELECTRICAL CABLE 1-CONDUCTOR NO. 8 AWG-THHN/THWN
810019	1,200	LF	ELECTRICAL CABLE 3-CONDUCTOR NO. 12 AWG COPPER TYPE T/C
811000	1	EA	OVERSIZED ELECTRICAL HANDHOLE
811001	4	EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
816003	6	EA	HD IP-BASED VIDEO DETECTION CAMERA AND ANY LENGTH LEAD-IN CABLE
818003	1 ~~2~~ [2]	EA	6 FOOT BREAKAWAY PEDESTAL POLE
818004	3 ~~2~~	EA	10 FOOT BREAKAWAY PEDESTAL POLE
818036	2	EA	STEEL POLE WITH A SINGLE 50 FOOT MAST ARM
818041	1 ~~2~~ [2]	EA	STEEL POLE WITH A SINGLE 60 FOOT MAST ARM
822500	1	EA	AS-BUILT FOR TRAFFIC SIGNAL
837001	8	EA	GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH
860284	42	EA	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
860285	4	EA	16 INCH LED COUNTDOWN PEDESTRIAN SIGNAL HEAD
860289	14	EA	SIGNAL HEAD BACK PLATE, ANY SIZE
861105	600	LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
861107	700	LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
861108	2,600	LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
865210	4	EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS
865300	1	EA	2-WIRE APS CENTRAL CONTROL UNIT
866110	3 ~~4~~ [2]	EA	ANY SIZE LIGHTING ARM ON SIGNAL POLE WITH LED ROADWAY LUMINAIRE
816201	1	EA	DISCRIMINATOR MODULE, 4 CHANNEL, NO. 764
[1] 816215	2	EA	OPTICOM NO. 721 DETECTOR EYE
860288	400	LF	FURNISH AND INSTALL 4 CONDUCTOR OPTICOM CABLE

EQUIPMENT LIST 'B' (CONT.)

CATEGORY CODE	QUANTITY		DESCRIPTION
[2] 818068	1	EA	STEEL POLE WITH TWIN 60 FOOT AND 70 FOOT MAST ARMS

THE CONTACT PERSONS FOR DISTRICT #2/OOTS ARE AS FOLLOWS:

DISTRICT #2

MR. KEN FENDER
DISTRICT ENGINEER
PHONE: 410-810-3210

MR. RICH BAKER
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: 410-810-3241

MR. JOHN ANDERSON
DISTRICT UTILITY ENGINEER
PHONE: 410-810-3275

MR. JOHN LANCASTER
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: 410-810-3250

MR. ROBERT TUCKER
ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
PHONE: 410-810-3270

OFFICE OF TRAFFIC & SAFETY

REBECCA LICHTENSTEIN, P.E.
DIVISION CHIEF,
TRAFFIC OPERATIONS DIVISION
PHONE: 410-787-7630

MR. ANTOINE YATES
ASSISTANT DIVISION CHIEF,
TRAFFIC OPERATIONS DIVISION
PHONE: 410-787-7645

MR. MICHAEL BASSO
SECTION CHIEF, SHA TRAFFIC SIGNAL SHOP
PHONE: 410-787-7650

MR. DAVID (TODD) JONES
MANAGER, SHA SIGN OPERATIONS DIVISION
PHONE: 410-787-7676

MR. MICHAEL BOYLE
OOTS, SIGNAL WAREHOUSE
PHONE: 410-787-7673

THE POWER COMPANY REPRESENTATIVE IS:
EASTON UTILITIES
201 N. WASHINGTON STREET
EASTON, MD 21601
PHONE: 410-822-6110

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	←R ←Y ←G	←R ←Y ←G	R Y G	R Y G	←R ←Y ←G	←R ←Y ←G	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G	PED	PED	PED	PED
PHASE 1 + 5	←G	←G	R	R	←G	←G	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 1 + 5 CHANGE	THE CONTROLLER MAY SKIP TO PHASE 1+6, PHASE 2+5 OR PHASE 2+6														DW	DW	DW	DW
PHASE 1 + 6	←G	←G	G	G	←R	←R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 1 CHANGE	←Y	←Y	G	G	←R	←R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 2 + 5	←R	←R	R	R	←G	←G	G	G	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 5 CHANGE	←R	←R	R	R	←Y	←Y	G	G	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 2 + 6	←R	←R	G	G	←R	←R	G	G	R	R	R	R	R	R	W	W	DW	DW
PEDESTRIAN CLEARANCE	←R	←R	G	G	←R	←R	G	G	R	R	R	R	R	R	FL/DW	FL/DW	DW	DW
PHASE 2 + 6 CHANGE	←R	←R	Y	Y	←R	←R	Y	Y	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 4 + 8	←R	←R	R	R	←R	←R	R	R	G	G	G	G	G	G	DW	DW	DW	DW
PHASE 4 + 8 CHANGE	←R	←R	R	R	←R	←R	R	R	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW
PHASE 4 + 8 ALT	←R	←R	R	R	←R	←R	R	R	G	G	G	G	G	G	DW	DW	W	W
PEDESTRIAN CLEARANCE	←R	←R	R	R	←R	←R	R	R	G	G	G	G	G	G	DW	DW	FL/DW	FL/DW
PHASE 4 + 8 ALT CHANGE	←R	←R	R	R	←R	←R	R	R	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW
FLASHING OPERATION	FL/RA	FL/RA	FL/Y	FL/Y	FL/RA	FL/RA	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK

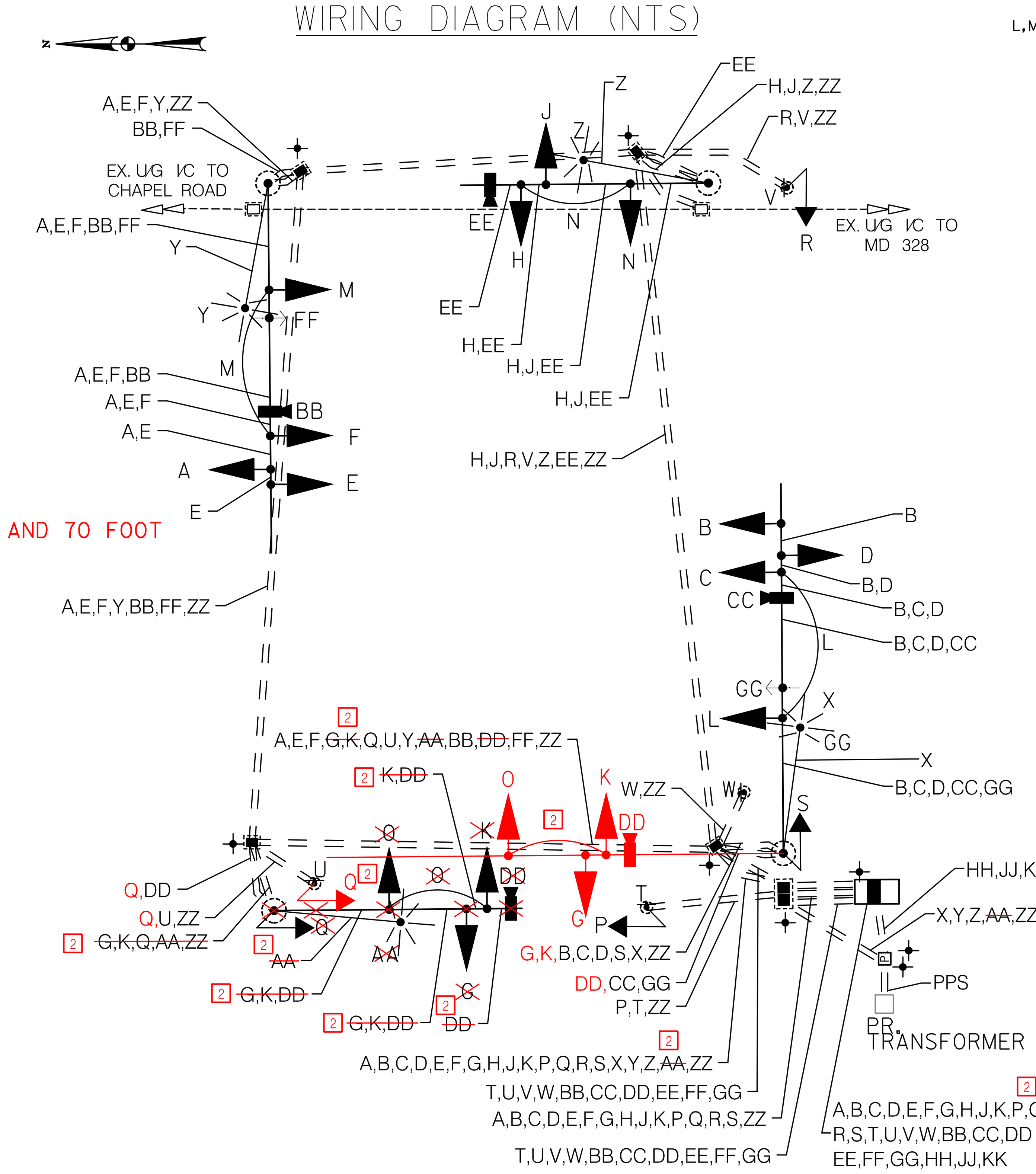
EMERGENCY PRE-EMPTION

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
EMERGENCY PRE-EMPTION 1	←G	←G	G	G	←R	←R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
EMERGENCY PRE-EMPTION 1 CHANGE	←Y	←Y	G	G	←R	←R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
EMERGENCY PRE-EMPTION 2	←R	←R	R	R	←G	←G	G	G	R	R	R	R	R	R	DW	DW	DW	DW
EMERGENCY PRE-EMPTION 2 CHANGE	←R	←R	R	R	←Y	←Y	←Y	Y	R	R	R	R	R	R	DW	DW	DW	DW

WIRING LEGEND

- A,B,C,D,E,F,G,H,J,K — ELECTRICAL CABLE - 7 CONDUCTOR NO. 14 AWG
- L,M,N,O,P,Q,R,S — ELECTRICAL CABLE - 5 CONDUCTOR NO. 14 AWG
- T,U,V,W — ELECTRICAL CABLE - 2 CONDUCTOR NO. 14 AWG
- X,Y,Z,AA — ELECTRICAL CABLE 3-CONDUCTOR NO. 12AWG COPPER TYPE T/C
- BB,CC,DD,EE — CONTROL CABLE, VIDEO DETECTION CAMERA TO CONTROLLER
- FF,GG — 4 CONDUCTOR, OPTICOM DETECTOR EYE LEAD-IN CABLE
- HH,JJ,KK — ELECTRICAL CABLE - 1 CONDUCTOR, NO. 8 AWG THHN,THWN
- ZZ — NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
- PROPOSED VIDEO DETECTION CAMERA
- PPS — PROPOSED UNDERGROUND POWER FEED - BY OTHERS
- PROPOSED GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH
- P — PROPOSED SERVICE PEDESTAL

WIRING DIAGRAM (NTS)



MAINTENANCE OF TRAFFIC

THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT. ADDITIONAL TRAFFIC CONTROL STANDARDS MAY BE USED AS DIRECTED BY THE ENGINEER.

FOR US 50 (OCEAN GATEWAY):
* STANDARD NO. MD-104.04-01 (SHOULDER WORK)
* STANDARD NO. MD-104.04-03 (LEFT LANE CLOSURE)
* STANDARD NO. MD-104.04-05 (RIGHT LANE CLOSURE)
* STANDARD NO. MD-104.06-11 (SIGNAL WORK)

UTILITY LEGEND

- SD — STORM DRAIN
- G — GAS MAIN
- W — WATER MAIN
- S — SEWER MAIN
- E — ELECTRIC CABLES
- A — AERIAL CABLES
- T — TELEPHONE CABLES
- F — FIBER-OPTIC

NOTE:

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AMD PERMIT NO. 21APTA002XX



LENHART TRAFFIC CONSULTING, INC.
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SEVERNA PARK, MD 21146
TEL: (410) 216-3333
FAX: (443) 782-2288
www.lenharttraffic.com

BY: bswick -

REVISIONS

[1] REDLINE NO. 1	(6/20/2023)
[2] REDLINE NO. 2	(2/26/2024)

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

US 50 (OCEAN GATEWAY)
AT NORRIS TAYLOR DRIVE

(EASTON, MARYLAND)

GENERAL INFORMATION SHEET

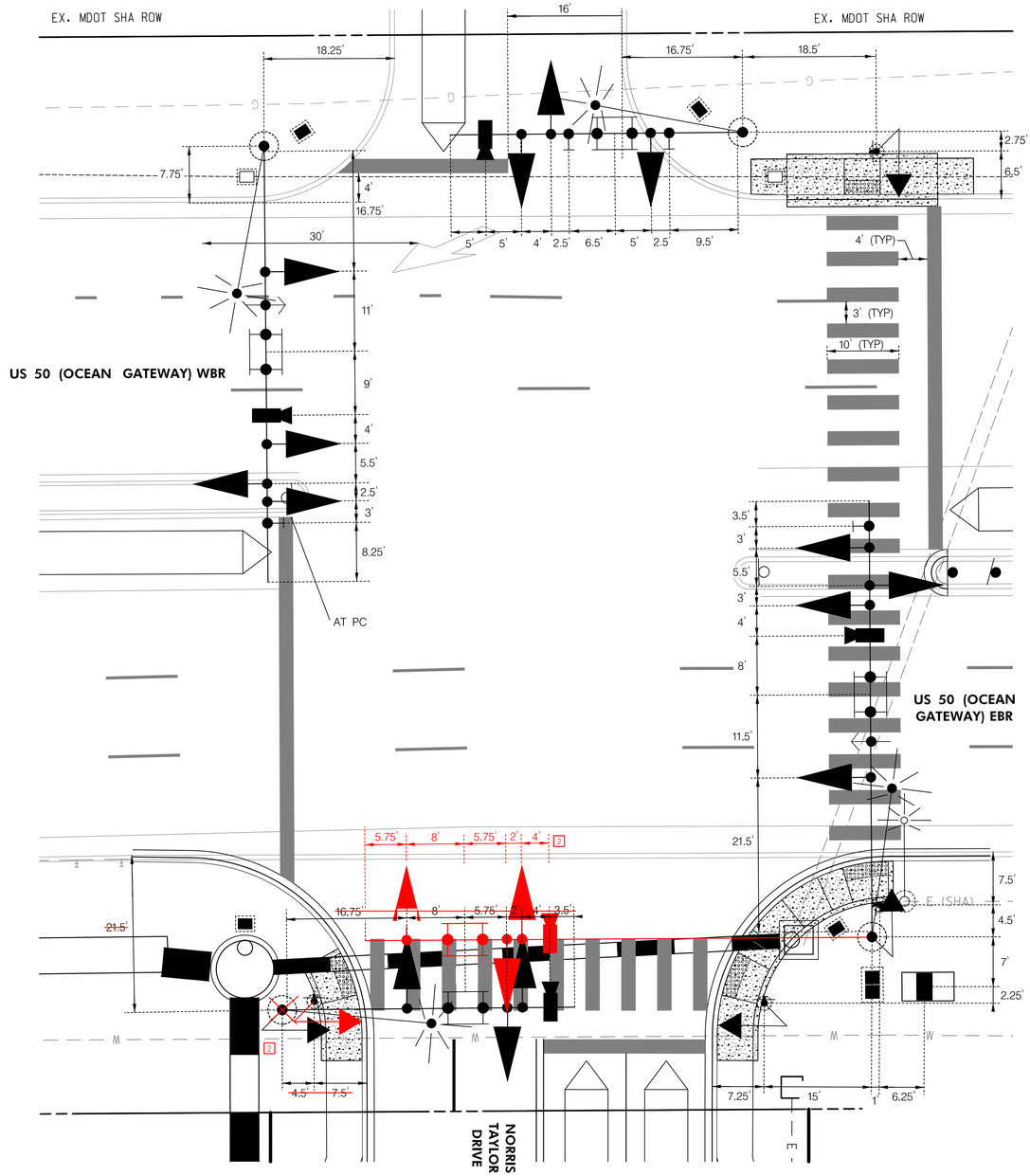
SCALE 1" = 20' ADVERTISED DATE MAR. 2023 CONTRACT NO. BW996M82

DESIGNED BY	LTC/BCS	COUNTY	TALBOT
DRAWN BY	LTC/BCS	LOGMILE	20005010.79
CHECKED BY	LTC/BAB	TIMS NO.	P648
MDE/PRD		TOD NO.	

TS NO. 5245 DRAWING SG-02 OF 4 SHEET NO. 2 OF 6

PLOTTED: Wednesday, February 28, 2024 AT 07:40 AM

SIGNAL EQUIPMENT LAYOUT (1"=10')



NOTE:

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AMD PERMIT NO. 2IAPTA002XX

STATE OF MARYLAND — BRIAN ANTHONY LENHART — REG. NO. 21601 — PROFESSIONAL ENGINEER — 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. 21601, EXPIRATION DATE: 09/09/2025

UTILITY LEGEND

SD SD	STORM DRAIN
G G	GAS MAIN
W W	WATER MAIN
S S	SEWER MAIN
E E	ELECTRIC CABLES
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T T	TELEPHONE CABLES
F F	FIBER-OPTIC

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www.lenharttraffic.com

BY: bswick –

PLOTTED: Monday, February 26, 2024 AT 09:06 AM

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

US 50 (OCEAN GATEWAY)
AT NORRIS TAYLOR DRIVE

(EASTON, MARYLAND)

REVISIONS	
2 REDLINE NO. 2	(2/26/2024)

DETAILS AND DIMENSIONS SHEET

SCALE AS-NOTED ADVERTISED DATE MAR. 2023 CONTRACT NO. BW996M82

DESIGNED BY LTC/BCS
DRAWN BY LTC/BCS
CHECKED BY LTC/BAB
MDE/PRD

COUNTY TALBOT
LOGMILE 20005010.79
TIMS NO. P648
TOD NO.

TS NO. 5245 | DRAWING SG- 03 OF 4 | SHEET NO. 3 OF 6

PEAK HOUR TURNING MOVEMENT COUNT

INTERSECTION: US 50 @ LOMAX ST
COUNTY: TALBOT

COUNT BY: CAMERA
DATE: OCTOBER 14, 2025

WEATHER: RAIN / OVERCAST
DAY: TUESDAY

CAM

	US 50 NORTHBOUND				US 50 SOUTHBOUND				LOMAX ST EASTBOUND				ACCESS WESTBOUND				
TIME	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	TOTAL
AM																	AM
7:00-7:15	3	6	236		6		228	1		2		4					486
7:15-7:30	9	3	283		5		283	0		2		3					588
7:30-7:45	9	7	278		10		253	1		3		5					566
7:45-8:00	12	6	342		9		287	5		0		8					669
8:00-8:15	8	5	335		5		245	1		1		2					602
8:15-8:30	2	5	292		11		213	3		2		3					531
8:30-8:45	8	5	262		4		198	4		2		3					486
8:45-9:00	9	3	246		9		240	1		0		10					518
AM PEAK HR 7:15-8:15 TOTALS	38	21	1238	0	29	0	1068	7	0	6	0	18	0	0	0	0	PHF 0.91
PM																	PM
4:00-4:15	8	8	272		7		295	2		0		8					600
4:15-4:30	3	6	260		1		273	3		2		10					558
4:30-4:45	5	7	264		2		312	4		2		5					601
4:45-5:00	7	6	303		3		274	3		0		4					600
5:00-5:15	5	9	282		1		302	1		0		4					604
5:15-5:30	2	5	294		6		246	1		0		4					558
5:30-5:45	6	4	265		7		213	3		2		3					503
5:45-6:00	5	8	188		5		254	5		1		5					471
PM PEAK HR 4:15-5:15 TOTALS	20	28	1109	0	7	0	1161	11	0	4	0	23	0	0	0	0	PHF 0.98

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PEAK HOUR TURNING MOVEMENT COUNT (BIKES)

INTERSECTION: US 50 @ LOMAX ST

COUNTY: TALBOT

COUNT BY: CAMERA

DATE: OCTOBER 14, 2025

WEATHER: RAIN / OVERCAST

DAY: TUESDAY

CAM

	US 50 NORTHBOUND				US 50 SOUTHBOUND				LOMAX ST EASTBOUND				ACCESS WESTBOUND				
TIME	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	TOTAL
AM																	AM
7:00-7:15	0	0	0		0		0	0		0		0					0
7:15-7:30	0	0	0		0		0	0		0		0					0
7:30-7:45	0	0	0		0		0	0		0		0					0
7:45-8:00	0	0	0		0		0	0		0		0					0
8:00-8:15	0	0	0		0		0	0		0		0					0
8:15-8:30	0	0	0		0		0	0		0		0					0
8:30-8:45	0	0	0		0		0	0		0		0					0
8:45-9:00	0	0	0		0		0	0		0		0					0
AM PEAK HR 7:15-8:15 TOTALS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TOTAL 0
PM																	PM
4:00-4:15	0	0	0		0		0	0		0		0					0
4:15-4:30	0	0	0		0		0	0		0		0					0
4:30-4:45	0	0	0		0		0	0		0		0					0
4:45-5:00	0	0	0		0		0	0		0		0					0
5:00-5:15	0	0	0		0		0	0		0		0					0
5:15-5:30	0	0	0		0		0	0		0		0					0
5:30-5:45	0	0	0		0		0	0		0		0					0
5:45-6:00	0	0	0		0		0	0		0		0					0
PM PEAK HR 4:15-5:15 TOTALS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TOTAL 0

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PEAK HOUR PEDESTRIAN MOVEMENT COUNT

INTERSECTION: US 50 @ LOMAX ST

COUNTY: TALBOT

COUNT BY: CAMERA

DATE: OCTOBER 14, 2025

WEATHER: RAIN / OVERCAST

DAY: TUESDAY

	US 50 NORTHBOUND			US 50 SOUTHBOUND			LOMAX ST EASTBOUND			ACCESS WESTBOUND			
TIME		EB	WB		EB	WB		NB	SB		NB	SB	TOTAL
AM													AM
7:00-7:15		0	0		0	0		0	0		0	0	0
7:15-7:30		0	0		0	0		0	0		0	0	0
7:30-7:45		0	0		0	0		1	1		0	0	2
7:45-8:00		0	0		0	0		0	0		0	0	0
8:00-8:15		0	0		0	0		0	0		0	0	0
8:15-8:30		0	0		0	0		0	0		0	0	0
8:30-8:45		0	0		0	0		0	0		0	0	0
8:45-9:00		0	0		0	0		0	0		0	0	0
AM PEAK HR 7:15-8:15 TOTALS		0	0		0	0		1	1		0	0	TOTAL 2
PM													PM
4:00-4:15		0	0		0	0		0	0		0	0	0
4:15-4:30		0	0		0	0		0	0		0	0	0
4:30-4:45		0	0		0	0		0	0		0	0	0
4:45-5:00		0	0		0	0		0	0		0	0	0
5:00-5:15		0	0		0	0		0	0		0	0	0
5:15-5:30		0	0		0	0		0	0		0	0	0
5:30-5:45		0	0		0	0		0	0		0	0	0
5:45-6:00		0	0		0	0		0	0		0	0	0
PM PEAK HR 4:15-5:15 TOTALS		0	0		0	0		0	0		0	0	TOTAL 0

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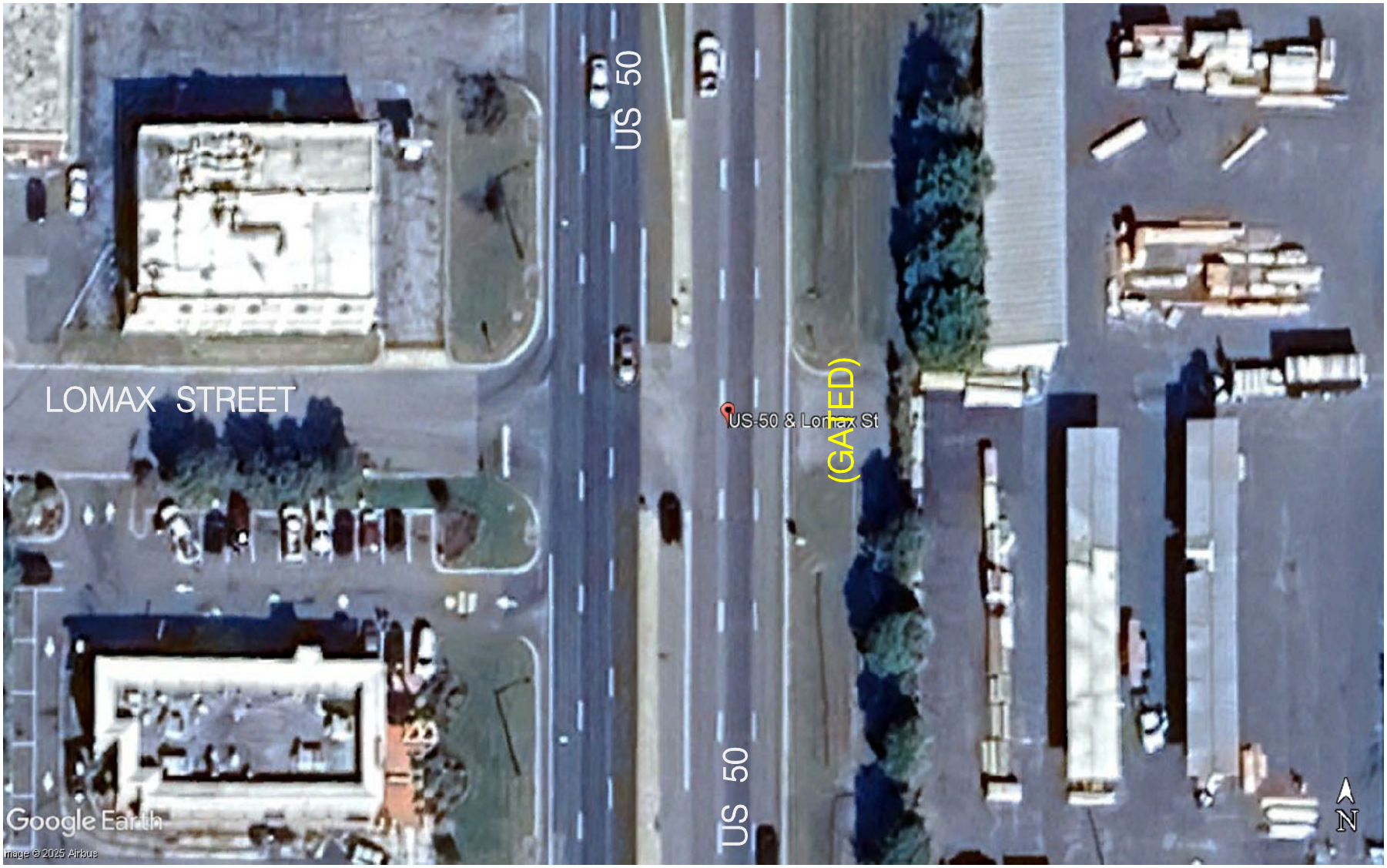
US 50 AT LOMAX STREET

TOWN OF EASTON, TALBOT COUNTY, MARYLAND



PEAK HOUR TURNING MOVEMENT COUNT

INTERSECTION: CALVERT ST @ LOMAX ST

COUNTY: TALBOT

COUNT BY: CAMERA

DATE: OCTOBER 14, 2025

WEATHER: RAIN / OVERCAST

DAY: TUESDAY

CAM

	CALVERT ST NORTHBOUND				CALVERT ST SOUTHBOUND				LOMAX ST EASTBOUND				LOMAX ST WESTBOUND				
TIME	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	TOTAL
AM																	AM
7:00-7:15		1	3	1		2	0	0		0	1	0		2	0	1	11
7:15-7:30		0	3	1		2	3	0		2	3	2		1	0	0	17
7:30-7:45		1	7	3		2	1	1		0	4	0		0	1	2	22
7:45-8:00		0	2	4		1	1	1		0	3	0		3	3	1	19
8:00-8:15		0	2	4		2	3	2		2	2	0		2	2	1	22
8:15-8:30		1	2	2		0	1	0		0	2	0		2	1	1	12
8:30-8:45		0	3	2		1	0	0		0	2	0		3	1	1	13
8:45-9:00		2	2	4		1	2	1		1	4	0		1	1	1	20
AM PEAK HR 7:15-8:15 TOTALS	0	1	14	12	0	7	8	4	0	4	12	2	0	6	6	4	PHF 0.91
PM																	PM
4:00-4:15		0	5	10		0	1	1		1	1	1		3	3	3	29
4:15-4:30		1	3	2		2	1	1		0	4	1		2	2	3	22
4:30-4:45		0	4	4		1	1	1		3	1	1		2	1	2	21
4:45-5:00		0	1	4		1	3	1		2	2	0		3	3	1	21
5:00-5:15		1	2	2		0	2	1		0	1	1		3	5	1	19
5:15-5:30		0	1	3		0	0	0		2	3	0		0	3	2	14
5:30-5:45		0	5	6		1	1	3		1	2	0		2	5	3	29
5:45-6:00		0	3	1		0	2	1		4	5	0		1	6	0	23
PM PEAK HR 4:00-5:00 TOTALS	0	1	13	20	0	4	6	4	0	6	8	3	0	10	9	9	PHF 0.80

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PEAK HOUR TURNING MOVEMENT COUNT (BIKES)

INTERSECTION: CALVERT ST @ LOMAX ST

COUNTY: TALBOT

COUNT BY: CAMERA

DATE: OCTOBER 14, 2025

WEATHER: RAIN / OVERCAST

DAY: TUESDAY

CAM

	CALVERT ST NORTHBOUND				CALVERT ST SOUTHBOUND				LOMAX ST EASTBOUND				LOMAX ST WESTBOUND				
TIME	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	TOTAL
AM																	AM
7:00-7:15		0	0	0		0	0	0	0	0	0	0	0	0	0	0	0
7:15-7:30		0	0	0		0	0	0	0	0	0	0	0	0	0	0	0
7:30-7:45		0	0	0		0	0	0	0	0	0	0	0	0	0	0	0
7:45-8:00		0	0	0		0	0	0	0	0	0	0	0	0	0	0	0
8:00-8:15		0	0	0		0	0	0	0	0	0	0	0	0	0	0	0
8:15-8:30		0	0	0		0	0	0	0	0	0	0	0	0	0	0	0
8:30-8:45		0	0	0		0	0	0	0	0	0	0	0	0	0	0	0
8:45-9:00		0	0	0		0	0	0	0	0	0	0	0	0	0	0	0
AM PEAK HR 7:15-8:15 TOTALS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TOTAL 0
PM																	PM
4:00-4:15		0	0	0		0	0	0		0	0	0	0	0	0	0	0
4:15-4:30		0	1	0		0	1	0		0	0	0	0	0	0	0	2
4:30-4:45		0	0	0		0	0	0		0	0	0	0	0	0	0	0
4:45-5:00		0	0	0		0	0	0		0	0	0	0	0	0	0	0
5:00-5:15		0	0	0		0	0	0		0	0	0	0	0	0	0	0
5:15-5:30		0	0	0		0	0	0		0	0	0	0	0	0	0	0
5:30-5:45		0	0	0		0	0	0		0	0	0	0	0	0	0	0
5:45-6:00		0	1	0		0	0	0		0	0	0	0	0	0	0	1
PM PEAK HR 4:00-5:00 TOTALS	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	TOTAL 2

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PEAK HOUR PEDESTRIAN MOVEMENT COUNT

INTERSECTION: CALVERT ST @ LOMAX ST

COUNTY: TALBOT

COUNT BY: CAMERA

DATE: OCTOBER 14, 2025

WEATHER: RAIN / OVERCAST

DAY: TUESDAY

CAM

	CALVERT ST NORTHBOUND			CALVERT ST SOUTHBOUND			LOMAX ST EASTBOUND			LOMAX ST WESTBOUND			
TIME		EB	WB		EB	WB		NB	SB		NB	SB	TOTAL
AM													AM
7:00-7:15		0	0		0	0		0	0		0	0	0
7:15-7:30		0	0		0	0		0	0		0	0	0
7:30-7:45		0	0		0	0		0	0		0	0	0
7:45-8:00		0	0		0	0		0	0		0	0	0
8:00-8:15		0	0		0	0		0	0		0	0	0
8:15-8:30		0	0		0	0		0	0		0	0	0
8:30-8:45		0	0		0	0		0	0		2	0	2
8:45-9:00		0	0		0	0		0	0		0	0	0
AM PEAK HR 7:15-8:15 TOTALS		0	0		0	0		0	0		0	0	TOTAL 0
PM													PM
4:00-4:15		0	0		0	0		0	0		0	0	0
4:15-4:30		0	0		0	0		0	0		0	0	0
4:30-4:45		0	0		0	0		0	0		0	0	0
4:45-5:00		0	0		0	0		0	0		0	0	0
5:00-5:15		0	0		0	0		0	0		0	0	0
5:15-5:30		0	0		0	0		0	0		0	0	0
5:30-5:45		0	0		0	0		0	0		0	0	0
5:45-6:00		0	0		0	0		0	0		0	0	0
PM PEAK HR 4:00-5:00 TOTALS		0	0		0	0		0	0		0	0	TOTAL 0

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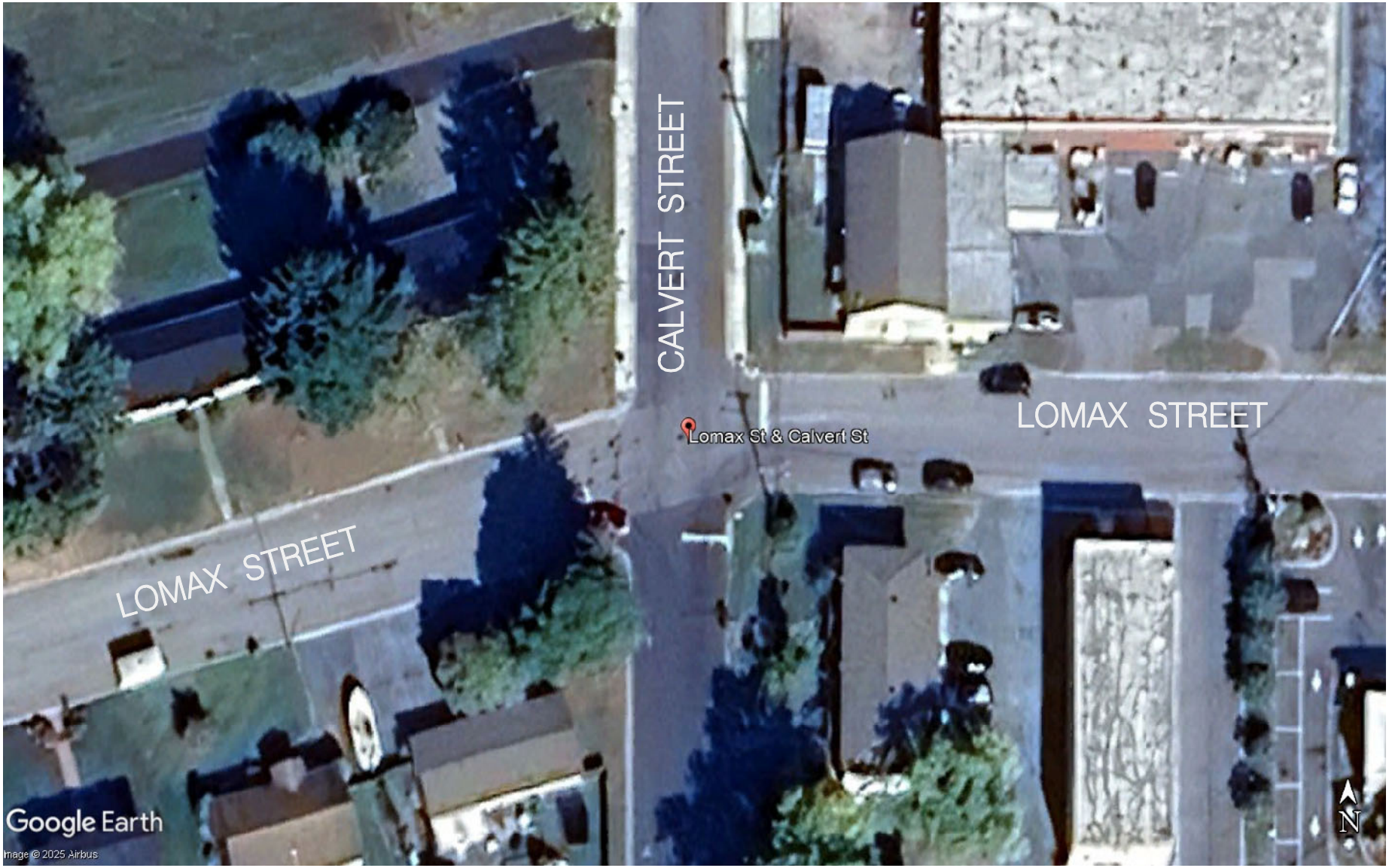
CALVERT STREET AT LOMAX STREET
TOWN OF EASTON, TALBOT COUNTY, MARYLAND



PEAK HOUR TURNING MOVEMENT COUNT

INTERSECTION: CALVERT ST @ GOLDSBOROUGH ST
COUNTY: TALBOT

COUNT BY: CAMERA
DATE: OCTOBER 14, 2025

WEATHER: RAIN / OVERCAST
DAY: TUESDAY

CAM

	CALVERT ST NORTHBOUND				CALVERT ST SOUTHBOUND				GOLDSBOROUGH ST EASTBOUND				GOLDSBOROUGH ST WESTBOUND				
TIME	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	TOTAL
AM																	AM
7:00-7:15						1		10		2	32				38	3	86
7:15-7:30						3		4		2	35				55	5	104
7:30-7:45						1		2		5	48				92	5	153
7:45-8:00						3		9		6	105				137	11	271
8:00-8:15						6		2		4	83				92	8	195
8:15-8:30						3		7		3	48				63	4	128
8:30-8:45						2		2		4	38				44	3	93
8:45-9:00						1		5		5	46				60	4	121
AM PEAK HR 7:30-8:30 TOTALS	0	0	0	0	0	13	0	20	0	18	284	0	0	0	384	28	PHF 0.69
PM																	PM
4:00-4:15						2		5		12	122				71	6	218
4:15-4:30						3		5		4	125				70	4	211
4:30-4:45						5		2		8	138				61	3	217
4:45-5:00						7		3		11	105				73	4	203
5:00-5:15						6		10		4	129				59	3	211
5:15-5:30						4		1		3	109				73	0	190
5:30-5:45						3		2		9	85				55	2	156
5:45-6:00						2		2		5	92				48	1	150
PM PEAK HR 4:00-5:00 TOTALS	0	0	0	0	0	17	0	15	0	35	490	0	0	0	275	17	PHF 0.97

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PEAK HOUR TURNING MOVEMENT COUNT (BIKES)

INTERSECTION: CALVERT ST @ GOLDSBOROUGH ST

COUNTY: TALBOT

COUNT BY: CAMERA

DATE: OCTOBER 14, 2025

WEATHER: RAIN / OVERCAST

DAY: TUESDAY

CAM

	CALVERT ST NORTHBOUND				CALVERT ST SOUTHBOUND				GOLDSBOROUGH ST EASTBOUND				GOLDSBOROUGH ST WESTBOUND				
TIME	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	TOTAL
AM																	AM
7:00-7:15						0		0		0	0				0	0	0
7:15-7:30						0		0		0	0				1	0	1
7:30-7:45						0		0		0	0				0	0	0
7:45-8:00						0		0		0	0				0	0	0
8:00-8:15						0		0		0	0				0	0	0
8:15-8:30						0		0		0	0				0	0	0
8:30-8:45						0		0		0	0				0	0	0
8:45-9:00						0		0		0	0				0	0	0
AM PEAK HR 7:30-8:30 TOTALS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TOTAL 0
PM																	PM
4:00-4:15						0		0		0	0				0	0	0
4:15-4:30						0		0		0	0				1	0	1
4:30-4:45						0		0		0	0				0	0	0
4:45-5:00						0		0		0	0				0	0	0
5:00-5:15						0		0		0	0				0	0	0
5:15-5:30						0		0		0	0				0	0	0
5:30-5:45						0		0		0	0				0	0	0
5:45-6:00						0		0		0	0				0	0	0
PM PEAK HR 4:00-5:00 TOTALS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	TOTAL 1

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PEAK HOUR PEDESTRIAN MOVEMENT COUNT

INTERSECTION: CALVERT ST @ GOLDSBOROUGH ST

COUNTY: TALBOT

COUNT BY: CAMERA

DATE: OCTOBER 14, 2025

WEATHER: RAIN / OVERCAST

DAY: TUESDAY

CAM

	CALVERT ST NORTHBOUND			CALVERT ST SOUTHBOUND			GOLDSBOROUGH ST EASTBOUND			GOLDSBOROUGH ST WESTBOUND			
TIME		EB	WB		EB	WB		NB	SB		NB	SB	TOTAL
AM													AM
7:00-7:15		0	0		1	0		0	0		0	0	1
7:15-7:30		0	0		0	0		0	0		0	0	0
7:30-7:45		0	0		1	0		0	0		0	0	1
7:45-8:00		0	0		0	0		0	0		0	0	0
8:00-8:15		0	0		0	0		0	0		0	0	0
8:15-8:30		0	0		0	0		0	0		0	0	0
8:30-8:45		0	0		0	0		0	0		0	0	0
8:45-9:00		0	0		0	0		0	0		0	0	0
AM PEAK HR 7:30-8:30 TOTALS		0	0		1	0		0	0		0	0	TOTAL 1
PM													PM
4:00-4:15		0	0		0	0		0	0		0	0	0
4:15-4:30		0	0		0	0		0	0		0	0	0
4:30-4:45		0	0		0	0		0	0		0	1	1
4:45-5:00		0	0		0	0		0	0		0	0	0
5:00-5:15		0	0		0	0		0	0		0	0	0
5:15-5:30		0	0		0	0		0	0		0	0	0
5:30-5:45		0	0		0	0		0	0		0	0	0
5:45-6:00		0	0		0	0		0	0		0	0	0
PM PEAK HR 4:00-5:00 TOTALS		0	0		0	0		0	0		0	1	TOTAL 1

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GOLDSBOROUGH ST AT CALVERT STREET
TOWN OF EASTON, TALBOT COUNTY, MARYLAND



PEAK HOUR TURNING MOVEMENT COUNT

INTERSECTION: GOLDSBOROUGH ST @ MERRICK LN

COUNTY: TALBOT

COUNT BY: CAMERA

DATE: OCTOBER 14, 2025

WEATHER: RAIN / OVERCAST

DAY: TUESDAY

CAM

	ACCESS NORTHBOUND				MERRICK LN SOUTHBOUND				GOLDSBOROUGH ST EASTBOUND				GOLDSBOROUGH ST WESTBOUND				
TIME	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	TOTAL
AM																	AM
7:00-7:15		0	0	0		2	0	2		0	31	2		1	48	0	86
7:15-7:30		0	0	0		6	0	3		2	33	3		5	52	2	106
7:30-7:45		0	0	3		3	1	4		2	49	20		19	68	1	170
7:45-8:00		22	0	20		3	0	2		0	49	60		53	88	1	298
8:00-8:15		34	0	21		0	0	1		3	50	35		20	84	0	248
8:15-8:30		3	0	8		2	0	4		0	39	3		1	68	1	129
8:30-8:45		1	0	1		2	0	0		2	40	2		0	46	1	95
8:45-9:00		0	1	1		0	0	2		2	53	0		2	64	0	125
AM PEAK HR 7:30-8:30 TOTALS	0	59	0	52	0	8	1	11	0	5	187	118	0	93	308	3	PHF 0.71
PM																	PM
4:00-4:15		4	0	10		0	0	3		10	123	3		3	70	4	230
4:15-4:30		6	0	5		5	0	4		5	123	5		4	67	3	227
4:30-4:45		5	0	5		4	0	5		5	133	8		2	55	6	228
4:45-5:00		4	0	2		5	0	1		2	97	4		10	62	3	190
5:00-5:15		3	0	3		2	0	4		5	132	4		4	63	2	222
5:15-5:30		6	0	4		3	0	0		6	104	5		5	69	1	203
5:30-5:45		5	0	4		3	0	3		9	82	0		1	54	1	162
5:45-6:00		4	2	19		2	0	2		5	78	1		0	49	3	165
PM PEAK HR 4:00-5:00 TOTALS	0	19	0	22	0	14	0	13	0	22	476	20	0	19	254	16	PHF 0.95

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M:\4286

PEAK HOUR TURNING MOVEMENT COUNT (BIKES)

INTERSECTION: GOLDSBOROUGH ST @ MERRICK LN
COUNTY: TALBOT

COUNT BY: CAMERA
DATE: OCTOBER 14, 2025

WEATHER: RAIN / OVERCAST
DAY: TUESDAY

CAM

	ACCESS NORTHBOUND				MERRICK LN SOUTHBOUND				GOLDSBOROUGH ST EASTBOUND				GOLDSBOROUGH ST WESTBOUND				
TIME	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	TOTAL
AM																	AM
7:00-7:15		0	0	0		0	0	0		0	0	0		0	0	0	0
7:15-7:30		0	0	0		0	0	0		0	0	0		0	1	0	1
7:30-7:45		0	0	0		0	0	0		0	0	0		0	0	0	0
7:45-8:00		0	0	0		0	0	0		0	0	0		0	0	0	0
8:00-8:15		0	0	0		0	0	0		0	0	0		0	0	0	0
8:15-8:30		0	0	0		0	0	0		0	0	0		0	0	0	0
8:30-8:45		0	0	0		0	0	0		0	0	0		0	0	0	0
8:45-9:00		0	0	0		0	0	0		0	0	0		0	0	0	0
AM PEAK HR 7:30-8:30 TOTALS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TOTAL 0
PM																	PM
4:00-4:15		0	0	0		0	0	0		0	0	0		0	0	0	0
4:15-4:30		0	0	0		0	0	0		0	0	0		0	0	0	0
4:30-4:45		0	0	0		0	0	0		0	0	0		0	0	0	0
4:45-5:00		0	0	0		0	0	0		0	0	0		0	0	0	0
5:00-5:15		0	0	0		0	0	0		0	1	0		0	0	0	1
5:15-5:30		0	0	0		0	0	0		0	0	0		0	1	0	1
5:30-5:45		0	0	0		0	0	0		0	0	0		0	0	0	0
5:45-6:00		0	0	0		0	0	0		0	0	0		0	0	0	0
PM PEAK HR 4:00-5:00 TOTALS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TOTAL 0

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PEAK HOUR PEDESTRIAN MOVEMENT COUNT

INTERSECTION: GOLDSBOROUGH ST @ MERRICK LN

COUNTY: TALBOT

COUNT BY: CAMERA

DATE: OCTOBER 14, 2025

WEATHER: RAIN / OVERCAST

DAY: TUESDAY

CAM

	ACCESS NORTHBOUND			MERRICK LN SOUTHBOUND			GOLDSBOROUGH ST EASTBOUND			GOLDSBOROUGH ST WESTBOUND			
TIME	EB	WB		EB	WB		NB	SB		NB	SB		TOTAL
AM													AM
7:00-7:15	0	0		1	0		0	0		0	0		1
7:15-7:30	0	0		1	0		0	0		0	0		1
7:30-7:45	0	0		0	0		0	0		0	0		0
7:45-8:00	7	1		0	0		0	0		0	0		8
8:00-8:15	1	3		0	0		3	0		0	0		7
8:15-8:30	1	0		0	0		0	0		0	0		1
8:30-8:45	0	0		0	0		0	0		0	0		0
8:45-9:00	0	0		0	0		0	0		0	0		0
AM PEAK HR 7:30-8:30 TOTALS	9	4		0	0		3	0		0	0		TOTAL 16
PM													PM
4:00-4:15	0	0		0	0		0	0		0	0		0
4:15-4:30	0	0		0	0		0	0		0	0		0
4:30-4:45	1	0		2	0		0	0		0	0		3
4:45-5:00	0	0		1	0		0	0		0	0		1
5:00-5:15	0	0		1	0		0	0		0	0		1
5:15-5:30	1	2		0	0		0	p		0	0		3
5:30-5:45	2	0		0	0		0	0		0	0		2
5:45-6:00	0	0		0	0		0	0		0	0		0
PM PEAK HR 4:00-5:00 TOTALS	1	0		3	0		0	0		0	0		TOTAL 4

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M:\

GOLDSBOROUGH ST AT MERRICK LN /THE COUNTRY SCHOOL ACCESS
TOWN OF EASTON, TALBOT COUNTY, MARYLAND



PEAK HOUR TURNING MOVEMENT COUNT

INTERSECTION: CALVERT ST @ DOVE LN
COUNTY: TALBOT

COUNT BY: CAMERA
DATE: OCTOBER 14, 2025

WEATHER: RAIN / OVERCAST
DAY: TUESDAY

	CALVERT ST NORTHBOUND				CALVERT ST SOUTHBOUND				DOVE LN EASTBOUND				WESTBOUND				
TIME	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	TOTAL
AM																	AM
7:00-7:15		0	3				1	0		0		1					5
7:15-7:30		0	6				5	0		0		0					11
7:30-7:45		1	8				3	0		0		0					12
7:45-8:00		0	4				3	0		0		0					7
8:00-8:15		0	1				6	0		0		0					7
8:15-8:30		0	1				0	0		0		0					1
8:30-8:45		0	1				0	0		0		0					1
8:45-9:00		0	4				4	0		0		0					8
AM PEAK HR 7:15-8:15 TOTALS	0	1	19	0	0	0	17	0	0	0	0	0	0	0	0	0	PHF 0.77
PM																	PM
4:00-4:15		1	8				2	0		0		0					11
4:15-4:30		1	5				3	0		0		1					10
4:30-4:45		1	9				2	0		0		1					13
4:45-5:00		0	4				4	0		0		1					9
5:00-5:15		0	3				3	0		0		0					6
5:15-5:30		0	5				0	0		0		0					5
5:30-5:45		1	9				3	0		0		0					13
5:45-6:00		0	7				3	1		0		0					11
PM PEAK HR 4:00-5:00 TOTALS	0	3	26	0	0	0	11	0	0	0	0	3	0	0	0	0	PHF 0.83

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PEAK HOUR TURNING MOVEMENT COUNT (BIKES)

INTERSECTION: CALVERT ST @ DOVE LN
COUNTY: TALBOT
COUNT BY: CAMERA
DATE: OCTOBER 14, 2025
WEATHER: RAIN / OVERCAST
DAY: TUESDAY

	CALVERT ST NORTHBOUND				CALVERT ST SOUTHBOUND				DOVE LN EASTBOUND				WESTBOUND				
TIME	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	UTRN	LEFT	THRU	RIGHT	TOTAL
AM																	AM
7:00-7:15		0	0				0	0		0		0					0
7:15-7:30		0	0				0	0		0		0					0
7:30-7:45		0	0				0	0		0		0					0
7:45-8:00		0	0				0	0		0		0					0
8:00-8:15		0	0				0	0		0		0					0
8:15-8:30		0	0				0	0		0		0					0
8:30-8:45		0	0				0	0		0		0					0
8:45-9:00		0	0				0	0		0		0					0
AM PEAK HR 7:15-8:15 TOTALS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TOTAL 0
PM																	PM
4:00-4:15		0	0				0	0		0		0					0
4:15-4:30		0	0				0	0		0		0					0
4:30-4:45		0	0				0	0		0		0					0
4:45-5:00		0	0				0	0		0		0					0
5:00-5:15		0	0				0	0		0		0					0
5:15-5:30		0	0				0	0		0		0					0
5:30-5:45		0	0				0	0		0		0					0
5:45-6:00		0	0				0	0		0		0					0
PM PEAK HR 4:00-5:00 TOTALS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TOTAL 0

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PEAK HOUR PEDESTRIAN MOVEMENT COUNT

INTERSECTION: CALVERT ST @ DOVE LN
COUNTY: TALBOT

COUNT BY: CAMERA
DATE: OCTOBER 14, 2025

WEATHER: RAIN / OVERCAST
DAY: TUESDAY

	CALVERT ST NORTHBOUND			CALVERT ST SOUTHBOUND			DOVE LN EASTBOUND			WESTBOUND			
TIME		EB	WB		EB	WB		NB	SB		NB	SB	TOTAL
AM													AM
7:00-7:15		0	0		0	0		0	0				0
7:15-7:30		0	0		0	0		0	0				0
7:30-7:45		0	0		0	0		0	0				0
7:45-8:00		0	0		0	0		0	0				0
8:00-8:15		0	0		0	0		0	0				0
8:15-8:30		0	0		0	0		0	0				0
8:30-8:45		0	0		0	0		0	0				0
8:45-9:00		0	0		0	0		0	0				0
AM PEAK HR 7:15-8:15 TOTALS		0	0		0	0		0	0		0	0	TOTAL 0
PM													PM
4:00-4:15		0	0		0	0		0	0				0
4:15-4:30		0	0		0	0		0	0				0
4:30-4:45		0	0		0	0		0	0				0
4:45-5:00		0	0		0	0		0	0				0
5:00-5:15		0	0		0	0		0	0				0
5:15-5:30		0	0		0	0		0	0				0
5:30-5:45		0	0		0	0		0	0				0
5:45-6:00		0	0		0	0		0	0				0
PM PEAK HR 4:00-5:00 TOTALS		0	0		0	0		0	0		0	0	TOTAL 0

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CALVERT STREET AT DOVE LANE
TOWN OF EASTON, TALBOT COUNTY, MARYLAND





APPENDIX IV

TRAFFIC CONCEPTS, INC.
7525 Connelley Drive • Suite B • Hanover, MD 21076 • 410-760-2911

October 3, 2025

Meeting Date: October 1, 2025

Attendees: Casey Rauch
Brian Lopez
Joe Clark
Weishi Zhang
Rick Van Emburgh, Town of Easton
Mark Keeley, Traffic Concepts Inc

RE: Calvert Terrace – Town of Easton Traffic Impact Study

SCOPE of SERVICES (TRAFFIC STUDY)

Project Description: The purpose of this memorandum is to describe the proposed project and the traffic impact study limits that were discussed at the October 1, 2025 meeting. The proposed project consists of 60 Senior Adult Housing Units – Multifamily and 30 Single Family units.

PEAK HOUR TRIP GENRATION

NEW SITE TRIPS: PEAK HOUR TRIP GENERATION						
	AM			PM		
	IN	OUT	TOTAL	IN	OUT	TOTAL
Senior Adult Housing—Multifamily (252) 60 UNITS	4	8	12	8	7	15
Senior Adult Housing—Single-Family (251) 30 UNITS	6	11	17	10	7	17
TOTAL PEAK HOUR TRIPS			**29**			**32**

Source: ITE, Trip Generation Manual, 12th Edition (ITE)

Land Use: Senior Adult Housing—Multifamily (252)
Independent Variable: 60 Dwelling Units

Time Period: Weekday AM - One Hour Between 7 and 9 a.m.
Average Rate: 0.19 / Fitted Curve Equation: T = 0.19(X) + 0.17
Directional Distribution: 34% entering, 66% exiting
Calculated Trip Ends: Average Rate: 11 (Total), 4 (Entry), 7 (Exit)
Fitted Curve: 12 (Total), 4 (Entry), 8 (Exit)

Time Period: Weekday PM - One Hour Between 4 and 6 p.m.
Average Rate: 0.25 / Fitted Curve Equation: T = 0.25(X) + 0.03
Directional Distribution: 56% entering, 44% exiting
Calculated Trip Ends: Average Rate: 15 (Total), 8 (Entry), 7 (Exit)
Fitted Curve: 15 (Total), 8 (Entry), 7 (Exit)

Land Use: Senior Adult Housing—Single-Family (251)
Independent Variable: 30 Dwelling Units

Time Period: Weekday AM - One Hour Between 7 and 9 a.m.
Average Rate: 0.24 / Fitted Curve Equation: Ln(T) = 0.71 Ln(X) + 0.40
Directional Distribution: 34% entering, 66% exiting
Calculated Trip Ends: Average Rate: 7 (Total), 2 (Entry), 5 (Exit)
Fitted Curve: 17 (Total), 6 (Entry), 11 (Exit)

Time Period: Weekday PM - One Hour Between 4 and 6 p.m.
Average Rate: 0.29 / Fitted Curve Equation: Ln(T) = 0.79 Ln(X) + 0.15
Directional Distribution: 61% entering, 39% exiting
Calculated Trip Ends: Average Rate: 9 (Total), 5 (Entry), 4 (Exit)
Fitted Curve: 17 (Total), 10 (Entry), 7 (Exit)

Intersection Study Periods:

- Weekday AM: 7:00 AM to 9:00 AM
- Weekday PM: 4:00 PM to 6:00 PM

Key Intersections:

- US 50 (Ocean Gateway) @ Norris Taylor Dr (Signal)
- US 50 (Ocean Gateway) @ Lomax St (Unsignalized)
- US 50 (Ocean Gateway) @ MD 328 (Mattewstown RD)/Goldsborough St (Signal)
- Calvert St @ Dove Ln (Unsignalized)
- Calvert St @ Lomax St (Unsignalized)
- Calvert St @ Goldsborough St (Unsignalized)
- Goldsborough St @ Merrick Ln/ The Country School entrance (Unsignalized)

Methodology:

- All intersections will be analyzed using the Critical Lane Volume Analysis (CLV) and the Highway Capacity Manual (HCM) methodologies.

Background Development Projects:

- Growth Rate to be determined by SHA

Design Year: Two Years

Future Traffic Scenario: Conduct future site build-out traffic scenario with the Calvert St connection to US 50 and a future traffic scenario without the US 50/Calert St connection.

SAFETY STUDY

Crash Data: Collect reported crash data from MDOT SHA at the key intersections. Typically, the crash data is provided for the last three (3) years.

Non-Motorized Inventory: Conduct an inventory of bicycle/pedestrian and transit amenities within the study area.

STUDIO K ARCHITECTURE

Calvert Street Senior
Site Study

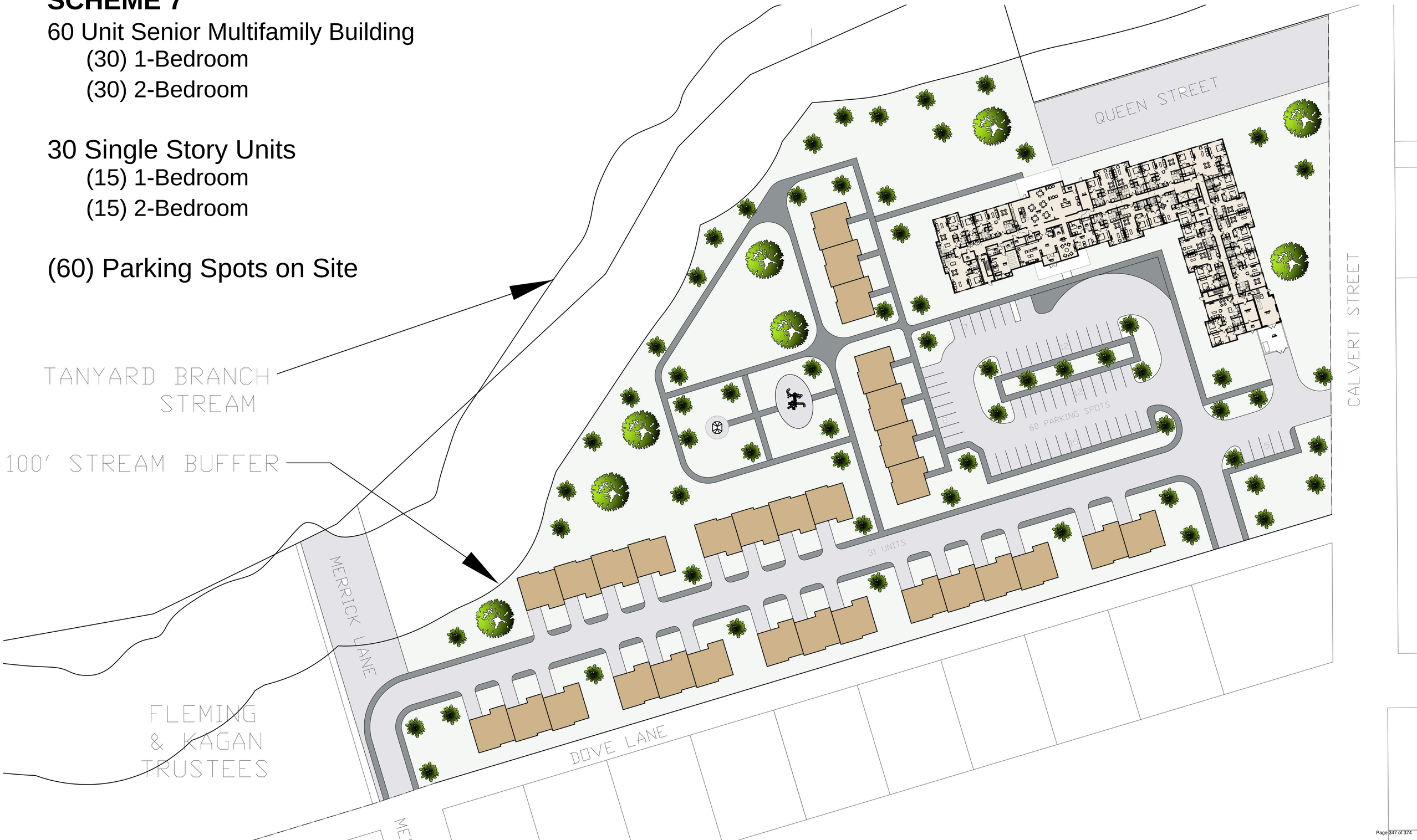
Dove Lane, Easton, MD 21602
6/11/25

SCHEME 7

60 Unit Senior Multifamily Building
- (30) 1-Bedroom
- (30) 2-Bedroom

30 Single Story Units
- (15) 1-Bedroom
- (15) 2-Bedroom

(60) Parking Spots on Site





APPENDIX V

Route C Ruta C Easton

Fixed Route with Specialized Services. Call 410-822-4155 for eligibility requirements and more information.

		AM	AM	AM	AM	AM	PM	PM	PM	PM	PM	PM
Walmart	Easton	7:15	8:15	9:15	10:15	11:15	12:15	1:15	2:15	3:15	4:15	5;15
Giant	Easton	**	**	**	**	**	**	**	**	**	**	**
Comfort Inn	Easton	**	**	**	**	**	**	**	**	**	**	**
Panera Bread	Easton	**	**	**	**	**	**	**	**	**	**	**
6/12-Greyhound/MVA	Easton	**	**	**	**	**	**	**	**	**	**	**
Mulberry Hill	Easton	7:25	8:25	9:25	10:25	11:25	12:25	1:25	2:25	3:25	4:25	5:25
Pippin Farm	Easton	**	**	**	**	**	**	**	**	**	**	**
Corner Carryout	Easton	**	**	**	**	**	**	**	**	**	**	**
Rite-Aid (Easton Plaza)	Easton	7:30	8:30	9:30	10:30	11:30	12:30	1:30	2:30	3:30	4:30	5:30
Kohl's	Easton	**	**	**	**	**	**	**	**	**	**	**
Food Lion	Easton	7:35	8:35	9:35	10:35	11:35	12:35	1:35	2:35	3:35	4:35	5:35
Commerce Dr	Easton	**	**	**	**	**	**	**	**	**	**	**
Target	Easton	7:45	8:45	9:45	10:45	11:45	12:45	1:45	2:45	3:45	4:45	5:45
Acme	Easton	7:48	8:48	9:48	10:48	11:48	12:48	1:48	2:48	3:48	4:48	5:48
301 Bay St (Social Services)	Easton	7:50	8:50	9:50	10:50	11:50	12:50	1:50	2:50	3:50	4:50	5:50
St. Marks Village	Easton	**	**	**	**	**	**	**	**	**	**	**
Safeway	Easton	7:52	8:52	9:52	10:52	11:52	12:52	1:52	2:52	3:52	4:52	5:52
Library	Easton	**	**	**	**	**	**	**	**	**	**	**
Neighborhood Service Center	Easton	8:00	9:00	10:00	11:00	12:00	1:00	2:00	3:00	4:00	5:00	6:00
Post Office	Easton	8:05	9:05	10:05	11:05	12:05	1:05	2:05	3:05	4:05	5:05	6:05
East Ave at Goldsborough	Easton	**	**	**	**	**	**	**	**	**	**	**
Walmart	Easton	8:15	9:15	10:15	11:15	12:15	1:15	2:15	3:15	4:15	5:15	6:15

Walmart Transfer to Routes 4,5,7,9,11,C & D
Target Transfer to Routes C & D

** Call-in at least two hours prior to pick up time, no later than 3 PM. 410-822-4155

Route in service M-F, 7:15 AM-4:16 PM

Fridays ONLY

SPECIALIZED SERVICES: Operates Monday through Friday, 7:15 AM to 4:15 PM. Eligibility required. Please call ahead to schedule trip. Curb-to-curb demand response service is available for general public, seniors, persons with disabilities, Medicare clients and those unable to access this route. Call for Special Service fees.

DELMARVA COMMUNITY SERVICES, INC.
DELMARVA COMMUNITY TRANSIT

Route 4 Ruta 4

Rock Hall - Chestertown - Centreville - Easton

4 **DEVIATED ROUTE**

		AM	AM	AM	PM	PM	PM
Bayside Foods	Rock Hall	5:05	–	–	–	–	–
Baywood Court	Fairlee	5:20	–	–	–	–	–
Rose's Store	Chestertown	5:45	–	8:55	11:55	–	2:55
Dollar General	Chestertown	6:00	7:00	9:00	12:00	–	3:00
Southern States	Kingstown	6:03	7:03	9:03	12:03	–	3:03
Rhode's Store	Church Hill	6:10	7:10	9:10	12:10	–	3:10
Kramer Center	Centreville	6:25	7:25	**	**	–	**
Shopping Center	Centreville	6:30	7:30	9:30	12:30	–	3:30
Chesapeake College	Wye Mills	–	7:40	9:55	12:55	–	4:00
Goldsborough & Calvert	Easton	–	8:00	–	–	3:20	–
High & Choptank	Easton	–	8:10	–	–	3:00	–
Walmart	Easton	7:15	8:15	10:15	1:15	3:30	4:30
612/Greyhound	Easton	**	–	**	**	**	**
Chesapeake College	Wye Mills	7:45	–	10:55	1:55	4:00	4:50
Shopping Center	Centreville	8:00	–	11:00	2:00	4:10	5:00
Kramer Center	Centreville	8:05	–	**	**	**	**
Rhode's Store	Church Hill	8:20	–	11:20	2:20	4:30	5:20
Kingstown Apts	Kingstown	**	–	**	**	**	**
Dollar General	Chestertown	8:30	–	11:30	2:30	4:40	5:30
Baywood	Fairlee	–	–	–	–	–	**
Bayside Foods	Rock Hall	–	–	–	–	–	**

Walmart Transfer to Routes 4,5,7,9,11,C & D

** Call-in at least two hours prior to pick up time, no later than 3 PM. 410-778-5187

Route in service M-F, 5:05 AM-5:30 PM

– No bus service at this time

Rt. 4 stops at 5:30 PM at Dollar Store in Chestertown. Passengers needing to travel to Fairlee or Rock Hall should contact the Kent County Dispatcher 24 hours in advance. 410-778-5187

DEVIATED ROUTE: Buses deviate ¾ mile around route corridor for anyone calling in. Must provide 2 hour advance notice. Call for rate information.

Kent County Community Center

Operates only June 15-August 31

Shuttle DEVIATED ROUTE

Chestertown/Worton		AM	PM	PM
Kent County Library	Chestertown	11:30		4:00
Kent County Community Center	Worton	noon	2:00	4:30
Kent County Library	Chestertown		2:30	

Rock Hall/Worton		AM	PM
Baysude Foods	Rock Hall	10:30	
Kent County Community Center	Worton	11:00	3:00
Baysude Foods	Rock Hall		3:30

Route in service M-F, 11:30 AM-4:30 PM ***June 15-August 31 only***

DEVIATED ROUTE: Buses deviate ¾ mile around route corridor for anyone calling in. Must provide 2 hour advance notice. Call for rate information.

DELMARVA COMMUNITY SERVICES, INC. DELMARVA COMMUNITY TRANSIT

Route 5 Ruta 5

Denton-Easton

5 DEVIATED ROUTE

		AM	AM	AM	PM	PM	PM	PM	PM
Walmart	Denton	7:20	–	**	–	**	–	–	–
Village Circle	Denton	7:30	–	10:15	–	12:35	–	–	–
HAPS Bldg	Denton	7:35	9:40	10:20	12:00	12:40	1:40	2:00	3:00
Town Parking Lot	Denton	7:45	9:45	10:25	12:05	12:45	1:45	2:05	3:05
Walmart	Easton	8:10	10:15	11:00	12:25	1:15	2:15	2:35	4:30
High & Choptank	Easton	8:15	**	–	–	–	–	3:00	–
Goldsborough & Calvert	Easton	8:20	**	–	–	–	–	3:10	–
Memorial Hospital	Easton	8:35	10:25	**	**	–	–	–	–
Walmart	Easton	8:45	–	–	12:45	1:15	2:15	3:30	–
Walmart	Denton	**	–	–	**	**	2:55	**	–
HAPS Bldg	Denton	9:10	–	–	1:10	1:40	3:00	3:55	–
Town Parking Lot	Denton	9:15	–	–	1:15	1:45	–	–	5:15
Walmart	Easton	–	–	11:35	–	–	–	–	–
Bethlehem Store	Bethlehem	–	–	**	–	–	–	–	–
Preston Store	Preston	–	–	11:50	–	–	–	–	–
Town Parking Lot	Federalsburg	–	–	12:00	–	–	–	–	–
HAPS Bldg	Denton	–	–	12:25	–	–	–	–	–
Town Parking Lot	Denton	–	–	12:30	–	–	–	–	–

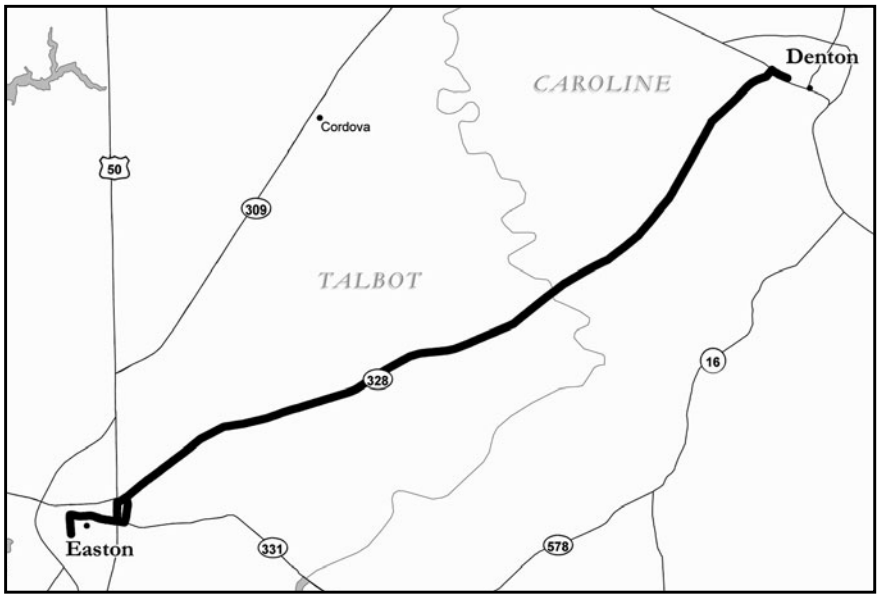
Walmart Transfer to Route 4,5,7,9,11,C & D

** Call-in at least two hours prior to pick up time, no later than 3 PM. 410-479-3867

– No bus service at this time

Route in service M-F, 7:35 AM-5:15 PM

DEVIATED ROUTE: Buses deviate ¾ mile around route corridor for anyone calling in. Must provide 2 hour advance notice. Call for rate information.



DELMARVA COMMUNITY SERVICES, INC.
DELMARVA COMMUNITY TRANSIT

Route 9 Ruta 9
Cambridge - Trappe - Easton

9 DEVIATED ROUTE

		AM	AM	AM	PM	PM	PM
Walmart	Cambridge	6:00	7:45	9:35	11:35	3:20	5:30
Shore Stop	Trappe	**	**	**	**	**	**
Post Office	Trappe	6:15	8:00	9:50	11:50	3:30	5:45
Lover's Lane	Trappe	6:15	8:00	9:50	11:50	3:30	5:45
Walmart	Easton	6:30	8:15	10:05	12:05	3:45	6:00
Memorial Hospital	Easton	6:40	8:25	10:15	12:15	3:55	**
Walmart	Easton	7:10	8:45	10:35	1:15	4:30	–
Lover's Lane	Trappe	7:30	9:00	10:50	1:30	4:45	6:15
Post Office	Trappe	7:30	9:00	10:50	1:30	4:45	6:15
Shore Stop	Trappe	**	**	**	**	**	**
Walmart	Cambridge	7:40	9:15	11:05	1:45	5:00	6:30

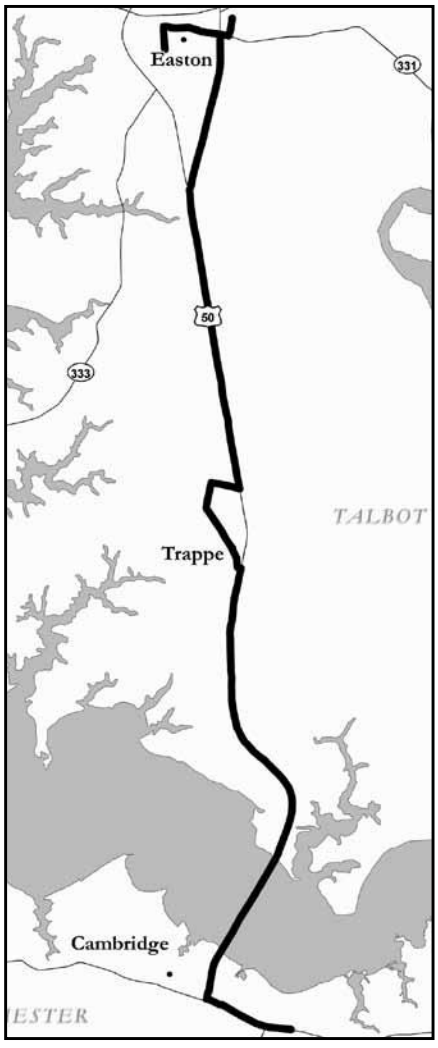
** Call-in at least two hours prior to pick up time, no later than 3 PM. 410-221-1910
– No bus service at this time
Route in service M-F, 6:00 AM-6:15 PM
DEVIATED ROUTE: Buses deviate ¾ mile around route corridor for anyone calling in. Must provide 2 hour advance notice. Call for rate information.

Route 9A Ruta 9A
Operates only August 20 - June 15
Cambridge - Trappe - Easton

9A DEVIATED ROUTE

		AM	PM
DCT Depot	Cambridge	7:20	2:20
American Legion	Cambridge	7:30	-
Shore Stop	Trappe	**	**
Goldsborough & Calvert	Easton	8:00	-
High & Choptank	Easton	8:10	-
Walmart	Easton	**	**
High & Choptank	Easton	-	3:10
Goldsborough & Calvert	Easton	-	3:20
High's-Citgo	Trappe	-	**
Visitor's Center	Cambridge	-	3:50
Walmart	Cambridge	**	**

** Call-in at least two hours prior to pick up time, no later than 3 PM. 410-221-1910
– No bus service at this time
Route in service M-F, 7:20 AM-3:50 PM ***August-June 15 only***
DEVIATED ROUTE: Buses deviate ¾ mile around route corridor for anyone calling in. Must provide 2 hour advance notice. Call for rate information.



DELMARVA COMMUNITY SERVICES, INC.
DELMARVA COMMUNITY TRANSIT

Route 12 Ruta 12
Chesapeake College Shuttle
Ruta directo al Chesapeake College

12 **DEVIATED ROUTE**

Monday – Thursday ONLY

		PM
Walmart	Easton	4:15
Chesapeake College	Wye Mills	4:45
Walmart	Easton	5:00

Monday – Friday

		PM
From Walmart		6:15
Shore Stop	Preston	
Shore Stop	Hurlock	
Town Parking Lot	Federalsburg	
Town Parking Lot	Denton	
Transfer		

** Call-in at least two hours prior to pick up time, no later than 3 PM. 410-822-4155 or 410-479-3867
Route in service M-F, 4:15 PM-6:15 PM
DEVIATED ROUTE: Buses deviate ¾ mile around route corridor for anyone calling in. Must provide 2 hour advance notice. Call for rate information.

St. Michaels Shuttle
Ruta Directa St. Michaels
Easton - St. Michaels

DEVIATED ROUTE		AM	AM	AM	AM/PM	PM	PM
Walmart	Easton	5:40	6:50	8:25	11:30	3:30	4:30
Post Office	Easton	5:50	7:00	8:30	–	3:40	4:40
Goldsborough & Calvert	Easton	**	**	8:05	–	3:15	**
High & Choptank	Easton	**	**	8:15	–	3:00	**
301 Bay St (Social Services)	Easton	**	**	**	–	**	**
Target	Easton	**	**	**	–	**	**
St Michaels Village	St. Michaels	6:10	7:20	8:50	**	3:50	5:00
Choptank Community	St Michaels	**	**	**	**	**	**
Inn at Perry Cabin	St Michaels	**	**	**	**	**	**
113 Mitchell St	St Michaels	**	**	**	**	**	**
Library	St. Michaels	6:20	7:30	9:05	**	4:00	5:10
Grauls Market	St. Michaels	6:25	7:40	9:10	12:00	4:05	5:15
Target	Easton	**	**	**	–	**	**
301 Bay St (Social Services)	Easton	**	**	**	–	**	**
Post Office	Easton	–	–	9:35	–	–	5:30
Walmart	Easton	6:50	8:25	9:40	1:00	4:30	5:35
Transfer to Routes 4,5,7,9,11,C & D							

** Call-in at least two hours prior to pick up time, no later than 3 PM. 410-822-4155
– No bus service at this time
Route in service M-F, 5:40 AM-5:35 PM
DEVIATED ROUTE: Buses deviate ¾ mile around route corridor for anyone calling in. Must provide 2 hour advance notice. Call for rate information.
Monday - Thursday ONLY.
Call 410-822-4155 for service availability

DELMARVA COMMUNITY SERVICES, INC.
DELMARVA COMMUNITY TRANSIT



APPENDIX VI

Gmail Jama Carey <jcarey@traffic-concepts.com>

crash data - Town of Easton, Talbot Co, MD

Matthew Jagg <MJagg@mdot.maryland.gov> Fri, Nov 14, 2025 at 10:22 AM
To: "jcarey@traffic-concepts.com" <jcarey@traffic-concepts.com>
Cc: William Macleod <WMacleod@mdot.maryland.gov>

Jama,

LOG#47859: US 50, Ocean Gateway (Log Mile 10.79) at MU1261, Norris E. Taylor Dr (Log Mile 0); 01/01/2022 through 12/31/2024.

LOG#47860: US 50, Ocean Gateway (Log Mile 10.98) at MU625, Lomax St (Log Mile 0); 01/01/2022 through 12/31/2024.

LOG#47861: US 50, Ocean Gateway (Log Mile 11.15) at MD 328, Matthewstown Rd (Log Mile 0) & MU430, Goldsborough St (Log Mile 0.89); 01/01/2022 through 12/31/2024.

No Crash Report on the these request

LOG#47862: MU190, Calvert St (Log Mile 0.23) at MU275, Dove Ln (Log Mile 0); 01/01/2022 through 12/31/2024.

LOG#47863: MU190, Calvert St (Log Mile 0.2) at MU625, Lomax St (Log Mile 0.09); 01/01/2022 through 12/31/2024.

LOG#47864: MU190, Calvert St (Log Mile 0) at MU430, Goldsborough St (Log Mile 0.82); 01/01/2022 through 12/31/2024.

LOG#47865: MU430, Goldsborough St (Log Mile 0.69) at MU710, Merrick Ln (Log Mile 0); 01/01/2022 through 12/31/2024.

Request, Map, Crash Study Worksheet, Combined Crash Summary, Crash History and Diagram.

In order to comply with SHA's environmental friendly policy the attached documents that make up the study package are sent to you in .PDF format. Should you have any questions or require additional information, please feel free to send me an email.

Link to the MDOT Mile Point Locator. https://maryland.maps.arcgis.com/apps/webappviewer/index.html?id=e4de42998bf74c7bb97a81d5659c7f55

MARYLAND DEPARTMENT OF TRANSPORTATION
Taking you places!
STATE HIGHWAY ADMINISTRATION

roads.maryland.gov

Matthew Jagg
Transportation Engineer IV
Office of Traffic and Safety

410.787.7665 **office**
mjagg@mdot.maryland.gov

Maryland State Highway Administration
7491 Connelley Drive, Hanover, MD 21076

From: William Macleod <WMacleod@mdot.maryland.gov>
Sent: Saturday, November 1, 2025 2:31 PM
To: Matthew Jagg <MJagg@mdot.maryland.gov>
Subject: FW: crash data - Town of Easton, Talbot Co, MD

Matt – 1/1/22 – 12/31/24. US 50 at Norris is an update

From: Jama Carey <jcarey@traffic-concepts.com>
Sent: Saturday, October 18, 2025 1:45 PM
To: William Macleod <WMacleod@mdot.maryland.gov>
Subject: crash data - Town of Easton, Talbot Co, MD

Caution: CAUTION: Suspicious? Double-check! This email is from an external source. If something seems unusual, even from someone you know, verify directly. Forward suspicious emails directly to Email Abuse (abuse@mdot.maryland.gov) or call the MDOT Service Desk at 410-768-7181 for assistance.

Hi William,

[Quoted text hidden]

3 attachments

1_LOG#47859_US50@NorrisE.TaylorDr_SendOut.pdf
1209K

2_LOG#47860_US50@LomaxSt_SendOut.pdf
1173K

3_LOG#47861_US50@MD328&GoldsboroughSt_SendOut.pdf
1324K

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

Office of Traffic and Safety
Traffic Development & Support Division

Consultant Crash Data/Analysis Request Form

Request Date: November 1, 2025 Note: date set automatically

Location: US 50 (Ocean Gateway) @ Norris Taylor Dr (SHA Location ID: S2025200128)

County: Talbot Town/Place: Easton
Route: US 50 (Ocean Gateway) Log Mile:
☒ at Norris Taylor Dr
☐ from to

Purpose Needed:

☐ Signal Study ☐ Surface Evaluation ☐ Pavement Marking Study
☐ Sign Study ☐ Lighting Study ☒ General Traffic Study
☐ Other (Explain)

Originally Requested By: Town of Easton
When Needed: As soon as possible

Work Requested:

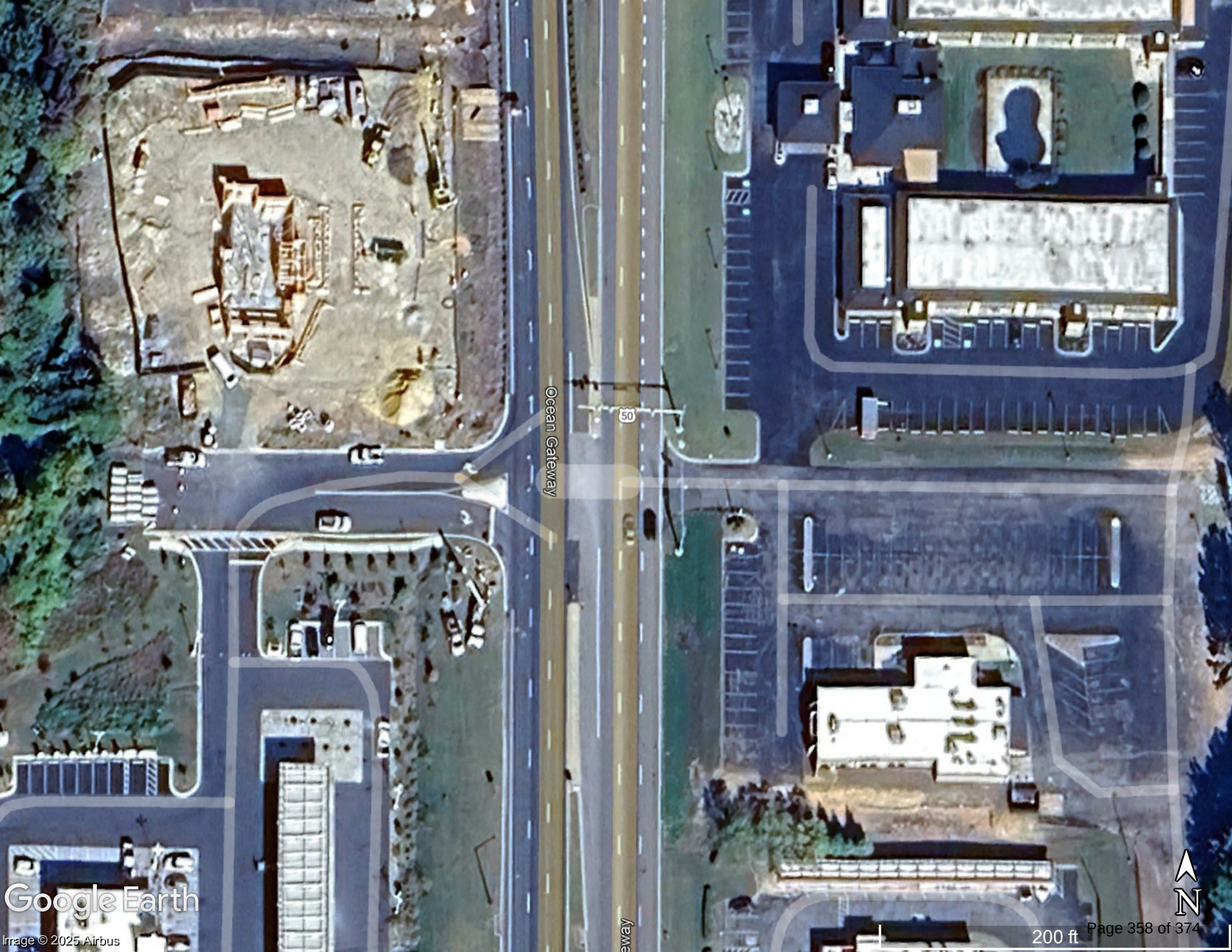
☒ Crash Summary ☒ Crash History ☐ Crash Rates
☐ Study Worksheet ☐ Intersection/Line Diagram ☐ Other (Explain in Remarks)

☐ One Year ☐ Two Years
☒ Three Years ☐ Combined Years
☐ Specific Date(s) to

Additional Instructions or Remarks:
Requested by: Jama Carey Title: Traffic Analyst
Consultant Firm:Traffic Concepts, Inc. Phone: 410-450-3179
Street Address: 7525 Connelley Drive Cell Phone:
City: Hanover State: MD Zip: 21076 Email: jcarey@traffic-concepts.com
Consultant Subcontractor: Phone:

Please indicate map coordinates of location to be studied.
GIS
Purpose/Need:

Send to: Traffic Development & Support Division,
7491 Connelley Drive Hanover, Maryland 21076
Phone: (410) 787-5844 Fax: (410) 582-9469 Email: wmacleod@sha.state.md.us


Ocean Gateway
50
Google Earth
Image © 2025 Airbus
N
200 ft

Maryland State Highway Administration
Office of Traffic and Safety - Traffic Development and Support
SHA ADC Study Worksheet Output rev. 10/2017-1

Name: Matthew Jagg
Date: 11/14/2025

Location: US 50 (Ocean Gateway) @ Norris E. Taylor Dr
Logmiles: 10.79 At 0 Radius: 250 ft.
County: Talbot, D2
Period: January 01, 2022 To December 31, 2024
Note:

YEAR >>	2022	2023	2024	Total
Fatal	0	0	0	0
No. Killed	0	0	0	0
Injury	0	0	1	1
No. Injured	0	0	3	3
Prop. Damage	2	1	3	6
Total Crashes	2	1	4	7
Severity Index	2	1	10	Avg 4
Opposite Dir.	0	0	0	0
Rear End	0	0	0	0
Sideswipe	0	1	1	2
Left Turn	1	0	0	1
Angle	0	0	2	2
Pedestrian	0	0	0	0
Parked Veh.	0	0	0	0
Fixed Object	0	0	1	1
Other	1	0	0	1
U-Turn	1	0	0	1
Backing	0	0	0	0
Animal	0	0	0	0
Railroad	0	0	0	0
Fire / Expl.	0	0	0	0
Overturn	0	0	0	0
Truck Related	0	0	0	0
Night Time	0	0	1	1
Wet Surface	0	0	0	0
Alcohol	0	0	0	0
Intersection	2	1	4	7
Total Vehicles	4	2	7	13
Total Trucks	0	0	0	0
Truck %	0.0	0.0	0.0	0.0

Comments:

Maryland State Highway Administration
Office of Traffic and Safety - Traffic Development and Support
SHA ADC Summary Output rev. 01/2025-1

Name: Matthew Jagg
Date: 11/14/2025

Location: US 50 (Ocean Gateway) @ Norris E. Taylor Dr
Logmiles: 10.79 At 0 Radius: 250 ft.
County: Talbot, D2
Period: January 1, 2022 To December 31, 2024
Note:

SEVERITY	FATAL	INJURY	P-DAMAGE	TOTAL
Crashes		1	6	7
Veh Occ		3		
Pedestrian				

AVG Severity Index: 4

DAY OF THE WEEK

SUN	MON	TUE	WED	THU	FRI	SAT	UNK
1	2	1	1		1	1	

MONTH OF THE YEAR

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK
	1	1	1	1			1	1			1	

CONDITION	DRIVER	PED
Normal:	11	
Alcohol:		
Other:	2	

TIME	12	01	02	03	04	05	06	07	08	09	10	11	UNK
AM:	1									2		1	
PM:	1				1	1							

VEHICLES INVOLVED PER CRASH

1	2	3	4	5	6+	UNK	TOTAL
1	6						13

VEHICLE TYPE

	Motorcycle/Moped		Tractor Trailer
5	Passenger Vehicle		Passenger Bus
4	Sport Utility Veh		School Bus
4	Pick-Up Truck		Emergency Veh
	Trucks (2+3 axles)	1	Other Types

SURFACE

	Wet
7	Dry
	Sno/Ice
	Mud
	Other

MOVEMENTS

NORTH			SOUTH			EAST			WEST		
LF	ST	RT	LF	ST	RT	LF	ST	RT	LF	ST	RT
	2		2	5	1	2					

OTHER MOVEMENTS 1

PROBABLE CAUSES

	Influence of Drugs	1	Improper Lane Change
	Influence of Alcohol		Improper Backing
	Influence of Medication		Improper Passing
	Influence of Combined Subst.		Improper Signal
	Physical/Mental Difficulty		Improper Parking
	Fell Asleep/Fainted, etc.		Passenger Interfere/Obstruct.
	Fail to give full Attention		Illegally in Roadway
	Lic. Restr. Non-compliance		Bicycle Violation
	Fail to Drive in Single Lane		Clothing Not Visible
	Improper Right Turn on Red		Sleet, Hail, Freezing Rain
2	Fail to Yield Right-of-way		Severe Crosswinds
	Fail to Obey Stop Sign		Rain, Snow
	Fail to Obey Traffic Signal		Animal
	Fail to Obey Other Control		Vision Obstruction
	Fail to Keep Right of Center		Vehicle Defect
	Fail to Stop for School Bus		Wet
	Wrong Way on One Way		Icy or Snow Covered
	Exceeded Speed Limit		Debris or Obstruction
	Operator Using Cell Phone		Ruts, Holes or Bumps
	Stopping in Lane Roadway		Road Under Construction
	Too Fast for Conditions		Traffic Control Device Inop.
	Followed too Closely		Shoulders Low, Soft or High
1	Improper Turn	3	Other or Unknown

COLLISION TYPES

		FATAL	INJURY	PROP	TOTAL
Opposite Dir	Related:				
	UnRelated:				
Rear End	Related:				
	UnRelated:				
Sideswipe	Related:			2	2
	UnRelated:				
Left Turn	Related:			1	1
	UnRelated:				
Angle	Related:		1	1	2
	UnRelated:				
Pedestrian	Related:				
	UnRelated:				
Parked Vehicle	Related:				
	UnRelated:				
Other Collision	Related:			1	1
	UnRelated:				

F	Bridge	01			
I	Building	02			
X	Culvert/Ditch	03			
E	Curb	04		1	1
D	Guardrail/Barrier	05			
	Embankment	06			
O	Fence	07			
B	Light Pole	08			
J	Sign Pole	09			
E	Other Pole	10			
C	Tree/Shrubbery	11			
T	Contr. Barrier	12			
S	Crash Attenuator	13			
	Other Fixed Object				

WEATHER

7	Clear / Cloudy
	Foggy
	Raining
	Snow / Sleet
	Other

ILLUMINATION

6	Day
	Dawn/Dusk
1	Dark - Lights On
	Dark - No Lights
	Other

TOTALS

22-24	7

Maryland State Highway Administration
Office of Traffic and Safety - Traffic Development and Support
SHA ADC History Output rev. 10/2023-1 - Combined Year Listing

Name: Matthew Jagg
Date: 11/14/2025

Location: US 50 (Ocean Gateway) @ Norris E. Taylor Dr
Logmiles: 10.79 At 0 Radius: 250 ft.
County: Talbot, D2
Period: January 01, 2022 To December 31, 2024
Note:

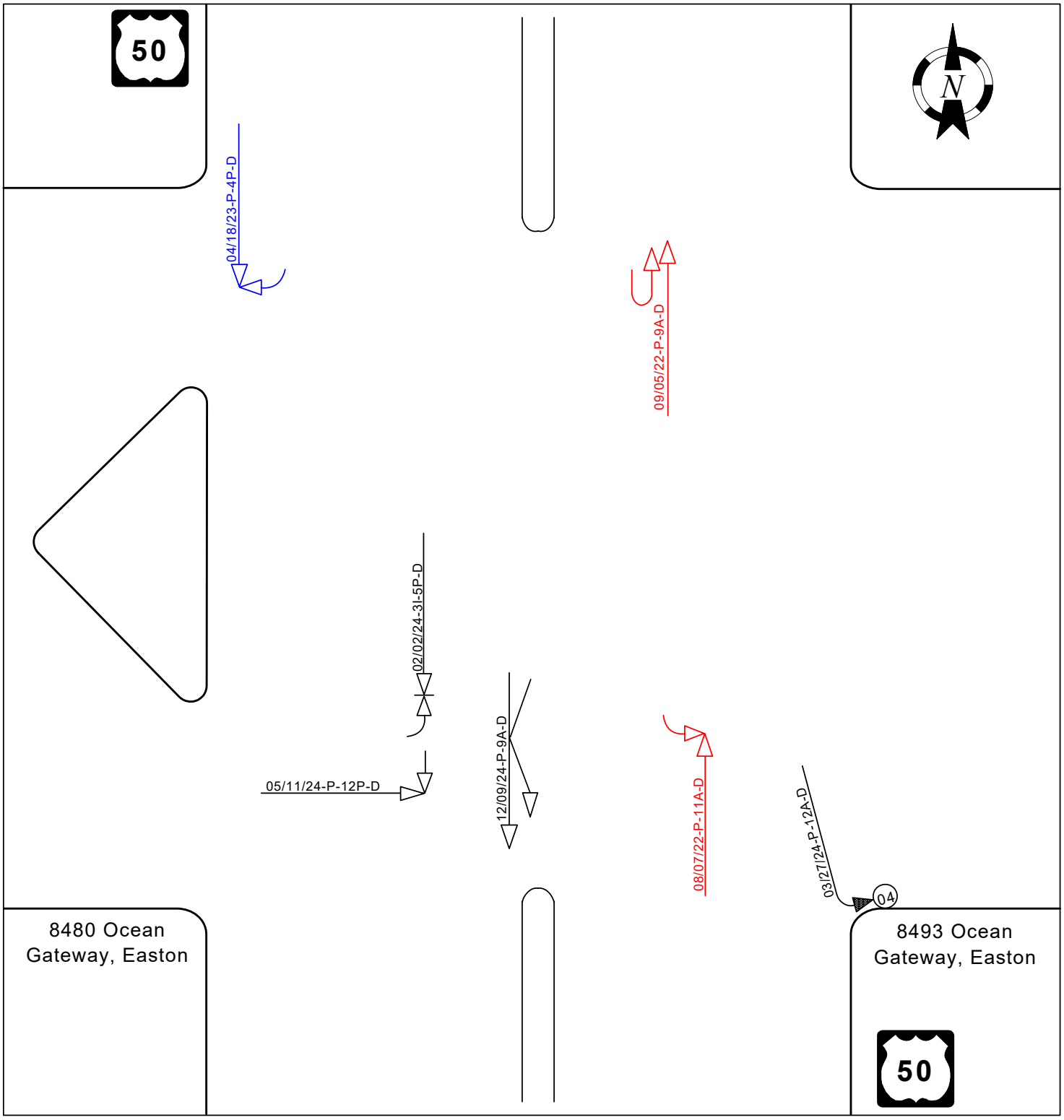
MilePt	Int Rel	Date	Severity	Time	Light	Surface	Alc Rel	FixObj	Collision	Movement V1	Movement V2	Probable Cause
US50												
10.790	☐	08072022	Property	11A	Day	Dry			LFTRN	SL	NS	Other or Unknown
10.790	☐	09052022	Property	09A	Day	Dry			OTHER	Su	NS	Other or Unknown
10.790	☐	04182023	Property	04P	Day	Dry			SDSWP	SR	SS	Improper lane change
10.790	☐	02022024	3 Injured	05P	Day	Dry			ANGLE	EL	SS	Fail to yield right-of-way
10.790	☐	05112024	Property	12P	Day	Dry			ANGLE	EL	SS	Fail to yield right-of-way
10.790	☐	12092024	Property	09A	Day	Dry			SDSWP	SS	SS	Other or Unknown
11.790	☐	03272024	Property	12A	Night	Dry		04	FXOBJ	SL	--	Improper turn

Fixed Object: 01 = Bridge 02 = Building 03 = Culvert/Ditch 04 = Curb 05 = Guardrail/Barrier 06 = Embankment 07 = Fence
08 = Light Pole 09 = Sign Post 10 = Other Pole 11 = Tree/Shrubbery 12 = Construction Barrier 13 = Crash Attenuator

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

Office of Traffic & Safety
Traffic Development & Support Division
Crash Analysis Safety Team

Location: US 50 (Ocean Gateway) @ Norris E Taylor Dr
County: TALBOT
Study Period: 01/01/2022 to 12/31/2024
Analyst: Matthew Jagg Date: 11/14/2025



DATE-SEVERITY-TIME-SURFECE
NIGHT
ALCOHOL
DRUGS

SEVERITY
F - Fatalities
I - Injured
P - Property Damage Only

SURFACE
D - Dry Surface
W - Wet Surface
I - Icy Surface
S - Snowy Surface

00 - Not Applicable
01 - Bridge or Overpass
02 - Building
03 - Culvert or Ditch
04 - Curb
05 - Guardrail or Barrier
06 - Embankment
07 – Fence

08 - Light Support Pole
09 - Sign Support Pole
10 - Other Pole
11 - Tree Shrubbery
12 - Construction Barrier
13 - Crash Attenuator
88 - Other
99 - Unknown

B - Bicycle
P - Other Pedalcycle
C - Other Conveyance
T - Railway Train
A - Animal
O - Other Object
S - Spilled Cargo
J - Jackknife

U - Units Separated
N - Other Non collision
D - Off Road
R - Downhill Runaway
F - Explosion or Fire
? - Unknown

template 12-14-23

U - TURN
BACKING
OVERTURN
Parked Vehicle
P Pedestrian

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

Office of Traffic and Safety
Traffic Development & Support Division

Consultant Crash Data/Analysis Request Form

Request Date: November 1, 2025 Note: date set automatically

Location: US 50 (Ocean Gateway) @ Lomax St

County: Talbot Town/Place: Easton
Route: US 50 (Ocean Gateway) Log Mile: 10.98
☒ at Lomax St
☐ from to

Purpose Needed:

☐ Signal Study ☐ Surface Evaluation ☐ Pavement Marking Study
☐ Sign Study ☐ Lighting Study ☒ General Traffic Study
☐ Other (Explain)

Originally Requested By: Town of Easton
When Needed: As soon as possible

Work Requested:

☒ Crash Summary ☒ Crash History ☐ Crash Rates
☐ Study Worksheet ☐ Intersection/Line Diagram ☐ Other (Explain in Remarks)

☐ One Year ☐ Two Years
☒ Three Years ☐ Combined Years
☐ Specific Date(s) to

Additional Instructions or Remarks:
Requested by: Jama Carey Title: Traffic Analyst
Consultant Firm:Traffic Concepts, Inc. Phone: 410-450-3179
Street Address: 7525 Connelley Drive Cell Phone:
City: Hanover State: MD Zip: 21076 Email: jcarey@traffic-concepts.com
Consultant Subcontractor: Phone:

Please indicate map coordinates of location to be studied.
GIS
Purpose/Need:

Send to: Traffic Development & Support Division,
7491 Connelley Drive Hanover, Maryland 21076
Phone: (410) 787-5844 Fax: (410) 582-9469 Email: wmacleod@sha.state.md.us


Ocean Gateway
50
Lomax St
Max Ln
Google Earth
Image © 2025 Airbus
N
200 ft

Maryland State Highway Administration
Office of Traffic and Safety - Traffic Development and Support
SHA ADC Study Worksheet Output rev. 10/2017-1

Name: Matthew Jagg
Date: 11/14/2025

Location: US 50 (Ocean Gateway) @ Lomax St
Logmiles: 10.98 At 0 Radius: 200 ft.
County: Talbot, D2
Period: January 01, 2022 To December 31, 2024
Note:

YEAR >>	2022	2023	2024	Total
Fatal	0	0	0	0
No. Killed	0	0	0	0
Injury	0	2	1	3
No. Injured	0	3	1	4
Prop. Damage	1	1	0	2
Total Crashes	1	3	1	5
Severity Index	1	7	4	Avg 4
Opposite Dir.	0	0	0	0
Rear End	1	0	0	1
Sideswipe	0	0	0	0
Left Turn	0	2	1	3
Angle	0	1	0	1
Pedestrian	0	0	0	0
Parked Veh.	0	0	0	0
Fixed Object	0	0	0	0
Other	0	0	0	0
U-Turn	0	0	0	0
Backing	0	0	0	0
Animal	0	0	0	0
Railroad	0	0	0	0
Fire / Expl.	0	0	0	0
Overturn	0	0	0	0
Truck Related	0	0	0	0
Night Time	0	0	0	0
Wet Surface	0	0	0	0
Alcohol	0	0	0	0
Intersection	1	3	1	5
Total Vehicles	3	7	2	12
Total Trucks	0	0	0	0
Truck %	0.0	0.0	0.0	0.0

Comments:

Maryland State Highway Administration
Office of Traffic and Safety - Traffic Development and Support
SHA ADC Summary Output rev. 01/2025-1

Name: Matthew Jagg
Date: 11/14/2025

Location: US 50 (Ocean Gateway) @ Lomax St
Logmiles: 10.98 At 0 Radius: 200 ft.
County: Talbot, D2
Period: January 1, 2022 To December 31, 2024
Note:

SEVERITY	FATAL	INJURY	P-DAMAGE	TOTAL
Crashes		3	2	5
Veh Occ		4		
Pedestrian				

AVG Severity Index: 4

DAY OF THE WEEK

SUN	MON	TUE	WED	THU	FRI	SAT	UNK
				1	3	1	

MONTH OF THE YEAR

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK
				1		2		1		1		

CONDITION	DRIVER	PED
Normal:	9	
Alcohol:		
Other:	2	

TIME

	12	01	02	03	04	05	06	07	08	09	10	11	UNK
AM:										1		2	
PM:						1			1				

VEHICLES INVOLVED PER CRASH

1	2	3	4	5	6+	UNK	TOTAL
	3	2					12

VEHICLE TYPE

	Motorcycle/Moped		Tractor Trailer
7	Passenger Vehicle		Passenger Bus
	Sport Utility Veh		School Bus
2	Pick-Up Truck	1	Emergency Veh
	Trucks (2+3 axles)	2	Other Types

SURFACE

	Wet
4	Dry
	Sno/Ice
	Mud
1	Other

MOVEMENTS

NORTH			SOUTH			EAST			WEST		
LF	ST	RT	LF	ST	RT	LF	ST	RT	LF	ST	RT
3				6				1			

OTHER MOVEMENTS 2

PROBABLE CAUSES

	Influence of Drugs		Improper Lane Change
	Influence of Alcohol		Improper Backing
	Influence of Medication		Improper Passing
	Influence of Combined Subst.		Improper Signal
	Physical/Mental Difficulty		Improper Parking
	Fell Asleep/Fainted, etc.		Passenger Interfere/Obstruct.
1	Fail to give full Attention		Illegally in Roadway
	Lic. Restr. Non-compliance		Bicycle Violation
	Fail to Drive in Single Lane		Clothing Not Visible
	Improper Right Turn on Red		Sleet, Hail, Freezing Rain
	Fail to Yield Right-of-way		Severe Crosswinds
	Fail to Obey Stop Sign		Rain, Snow
	Fail to Obey Traffic Signal		Animal
	Fail to Obey Other Control		Vision Obstruction
	Fail to Keep Right of Center		Vehicle Defect
	Fail to Stop for School Bus		Wet
	Wrong Way on One Way		Icy or Snow Covered
	Exceeded Speed Limit		Debris or Obstruction
	Operator Using Cell Phone		Ruts, Holes or Bumps
	Stopping in Lane Roadway		Road Under Construction
	Too Fast for Conditions		Traffic Control Device Inop.
	Followed too Closely		Shoulders Low, Soft or High
	Improper Turn	4	Other or Unknown

COLLISION TYPES

		FATAL	INJURY	PROP	TOTAL
Opposite Dir	Related:				
	UnRelated:				
Rear End	Related:			1	1
	UnRelated:				
Sideswipe	Related:				
	UnRelated:				
Left Turn	Related:		2	1	3
	UnRelated:				
Angle	Related:		1		1
	UnRelated:				
Pedestrian	Related:				
	UnRelated:				
Parked Vehicle	Related:				
	UnRelated:				
Other Collision	Related:				
	UnRelated:				

F	Bridge	01
I	Building	02
X	Culvert/Ditch	03
E	Curb	04
D	Guardrail/Barrier	05
	Embankment	06
O	Fence	07
B	Light Pole	08
J	Sign Pole	09
E	Other Pole	10
C	Tree/Shrubbery	11
T	Contr. Barrier	12
S	Crash Attenuator	13
	Other Fixed Object	

WEATHER

5	Clear / Cloudy
	Foggy
	Raining
	Snow / Sleet
	Other

ILLUMINATION

5	Day
	Dawn/Dusk
	Dark - Lights On
	Dark - No Lights
	Other

TOTALS

22-24	5

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC History Output rev. 10/2023-1 - Combined Year Listing

Name: Matthew Jagg

Date: 11/14/2025

Location: US 50 (Ocean Gateway) @ Lomax St

Logmiles: 10.98 At 0 Radius: 200 ft.

County: Talbot, D2

Period: January 01, 2022 To December 31, 2024

Note:

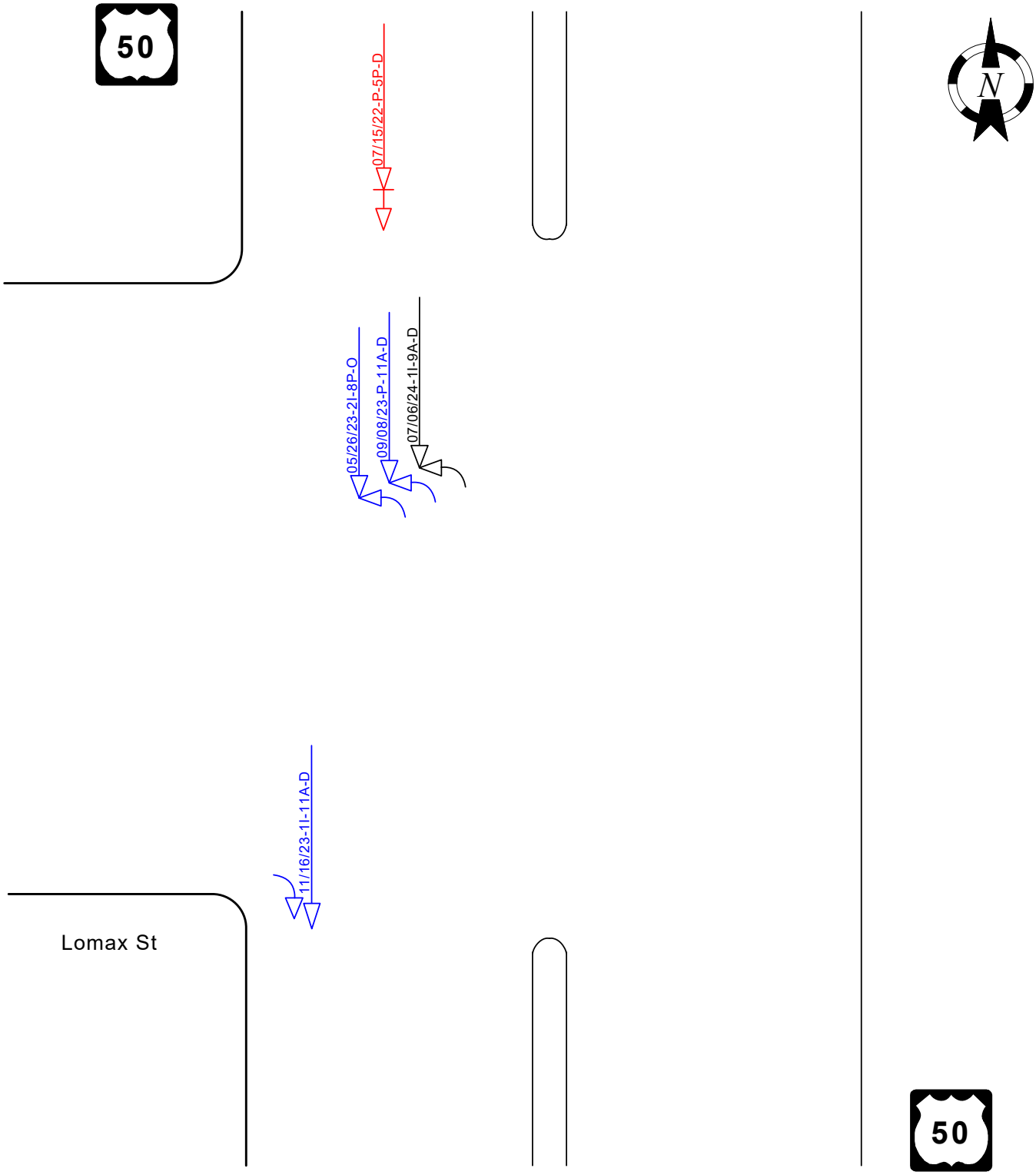
MilePt	Int Rel	Date	Severity	Time	Light	Surface	Alc Rel	FixObj	Collision	Movement V1	Movement V2	Probable Cause
US50												
10.980	☐	07152022	Property	05P	Day	Dry			RREND	SS	SS	Other or Unknown
10.980	☐	05262023	2 Injured	08P	Day				LFTRN	NL	SS	Other or Unknown
10.980	☐	09082023	Property	11A	Day	Dry			LFTRN	NL	SS	Other or Unknown
10.980	☐	11162023	1 Injured	11A	Day	Dry			ANGLE	ER	SS	Other or Unknown
10.980	☐	07062024	1 Injured	09A	Day	Dry			LFTRN	NL	SS	Fail to give full attention

Fixed Object: 01 = Bridge 02 = Building 03 = Culvert/Ditch 04 = Curb 05 = Guardrail/Barrier 06 = Embankment 07 = Fence
08 = Light Pole 09 = Sign Post 10 = Other Pole 11 = Tree/Shrubbery 12 = Construction Barrier 13 = Crash Attenuator

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

Office of Traffic & Safety
Traffic Development & Support Division
Crash Analysis Safety Team

Location: US 50 (Ocean Gateway) @ Lomax St
County: TALBOT
Study Period: 01/01/2022 to 12/31/2024
Analyst: Matthew Jagg Date: 11/14/2025



DATE-SEVERITY-TIME-SURFECE
NIGHT
ALCOHOL
DRUGS

SEVERITY
F - Fatalities
I - Injured
P - Property Damage Only

SURFACE
D - Dry Surface
W - Wet Surface
I - Icy Surface
S - Snowy Surface

00 - Not Applicable
01 - Bridge or Overpass
02 - Building
03 - Culvert or Ditch
04 - Curb
05 - Guardrail or Barrier
06 - Embankment
07 – Fence

08 - Light Support Pole
09 - Sign Support Pole
10 - Other Pole
11 - Tree Shrubbery
12 - Construction Barrier
13 - Crash Attenuator
88 - Other
99 - Unknown

B - Bicycle
P - Other Pedalcycle
C - Other Conveyance
T - Railway Train
A - Animal
O - Other Object
S - Spilled Cargo
J - Jackknife

U - Units Separated
N - Other Non collision
D - Off Road
R - Downhill Runaway
F - Explosion or Fire
? - Unknown

template 12-14-23

U - TURN
BACKING
OVERTURN
Parked Vehicle
P Pedestrian

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

Office of Traffic and Safety
Traffic Development & Support Division

Consultant Crash Data/Analysis Request Form

Request Date: November 1, 2025 Note: date set automatically

Location: US 50 (Ocean Gateway) @ MD 328 (Matthewstown RD)/Goldsborough

County: Talbot Town/Place: Easton
Route: US 50 (Ocean Gateway) Log Mile: 11.15
☒ at MD 328
☐ from to

Purpose Needed:

☐ Signal Study ☐ Surface Evaluation ☐ Pavement Marking Study
☐ Sign Study ☐ Lighting Study ☒ General Traffic Study
☐ Other (Explain)

Originally Requested By: Town of Easton
When Needed: As soon as possible

Work Requested:

☒ Crash Summary ☒ Crash History ☐ Crash Rates
☐ Study Worksheet ☐ Intersection/Line Diagram ☐ Other (Explain in Remarks)

☐ One Year ☐ Two Years
☒ Three Years ☐ Combined Years
☐ Specific Date(s) to

Additional Instructions or Remarks:
Requested by: Jama Carey Title: Traffic Analyst
Consultant Firm:Traffic Concepts, Inc. Phone: 410-450-3179
Street Address: 7525 Connelley Drive Cell Phone:
City: Hanover State: MD Zip: 21076 Email: jcarey@traffic-concepts.com
Consultant Subcontractor: Phone:

Please indicate map coordinates of location to be studied.
GIS
Purpose/Need:

Send to: Traffic Development & Support Division,
7491 Connelley Drive Hanover, Maryland 21076
Phone: (410) 787-5844 Fax: (410) 582-9469 Email: wmacleod@sha.state.md.us


Ocean Gateway
50
Calvert St
Max Ln
Max Ln
Calvert St
Matthewstown Rd
Goldsborough St
Ocean Gateway
50
Google Earth
Image © 2025 Airbus
N
300 ft

Maryland State Highway Administration
Office of Traffic and Safety - Traffic Development and Support
SHA ADC Study Worksheet Output rev. 10/2017-1

Name: Matthew Jagg
Date: 11/14/2025

Location: US 50 (Ocean Gateway) @ MD 328 (Matthewstown Rd) & Goldsborough St
Logmiles: 11.15 At 0 Radius: 250 ft.
County: Talbot, D2
Period: January 01, 2022 To December 31, 2024
Note:

YEAR >>	2022	2023	2024	Total
Fatal	0	0	0	0
No. Killed	0	0	0	0
Injury	3	2	4	9
No. Injured	4	2	4	10
Prop. Damage	6	4	6	16
Total Crashes	9	6	10	25
Severity Index	19	10	16	Avg 15
Opposite Dir.	0	0	0	0
Rear End	2	2	8	12
Sideswipe	1	1	1	3
Left Turn	4	2	1	7
Angle	2	0	0	2
Pedestrian	0	0	0	0
Parked Veh.	0	0	0	0
Fixed Object	0	0	0	0
Other	0	1	0	1
U-Turn	0	1	0	1
Backing	0	0	0	0
Animal	0	0	0	0
Railroad	0	0	0	0
Fire / Expl.	0	0	0	0
Overturn	0	0	0	0
Truck Related	2	2	0	4
Night Time	3	1	1	5
Wet Surface	1	0	4	5
Alcohol	0	1	0	1
Intersection	9	6	10	25
Total Vehicles	21	12	23	56
Total Trucks	3	3	0	6
Truck %	14.3	25.0	0.0	10.7

Comments:

Maryland State Highway Administration
Office of Traffic and Safety - Traffic Development and Support
SHA ADC Summary Output rev. 01/2025-1

Name: Matthew Jagg
Date: 11/14/2025

Location: US 50 (Ocean Gateway) @ MD 328 (Matthewstown Rd) & Goldsborough St
Logmiles: 11.15 At 0 Radius: 250 ft.
County: Talbot, D2
Period: January 1, 2022 To December 31, 2024
Note:

SEVERITY	FATAL	INJURY	P-DAMAGE	TOTAL
Crashes		9	16	25
Veh Occ		10		
Pedestrian				

AVG Severity Index: 15

DAY OF THE WEEK

SUN	MON	TUE	WED	THU	FRI	SAT	UNK
2	1	4	3	5	7	3	

MONTH OF THE YEAR

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK
	3	2	1	2	2	1	4	2	5	1	2	

CONDITION	DRIVER	PED
Normal:	43	
Alcohol:	1	
Other:	12	

TIME	12	01	02	03	04	05	06	07	08	09	10	11	UNK
AM:										3		2	
PM:		3	2	2	3	4	3	2				1	

VEHICLES INVOLVED PER CRASH

1	2	3	4	5	6+	UNK	TOTAL
	20	4	1				56

VEHICLE TYPE

	Motorcycle/Moped	3	Tractor Trailer
24	Passenger Vehicle		Passenger Bus
12	Sport Utility Veh	1	School Bus
5	Pick-Up Truck		Emergency Veh
3	Trucks (2+3 axles)	8	Other Types

SURFACE

5	Wet
20	Dry
	Sno/Ice
	Mud
	Other

MOVEMENTS

NORTH			SOUTH			EAST			WEST		
LF	ST	RT	LF	ST	RT	LF	ST	RT	LF	ST	RT
2	18		6	9		2	4		1	6	1

OTHER MOVEMENTS 7

PROBABLE CAUSES

	Influence of Drugs		Improper Lane Change
1	Influence of Alcohol		Improper Backing
	Influence of Medication		Improper Passing
	Influence of Combined Subst.		Improper Signal
	Physical/Mental Difficulty		Improper Parking
	Fell Asleep/Fainted, etc.		Passenger Interfere/Obstruct.
	Fail to give full Attention		Illegally in Roadway
	Lic. Restr. Non-compliance		Bicycle Violation
	Fail to Drive in Single Lane		Clothing Not Visible
	Improper Right Turn on Red		Sleet, Hail, Freezing Rain
9	Fail to Yield Right-of-way		Severe Crosswinds
	Fail to Obey Stop Sign		Rain, Snow
	Fail to Obey Traffic Signal		Animal
	Fail to Obey Other Control		Vision Obstruction
1	Fail to Keep Right of Center		Vehicle Defect
	Fail to Stop for School Bus		Wet
	Wrong Way on One Way		Icy or Snow Covered
	Exceeded Speed Limit		Debris or Obstruction
	Operator Using Cell Phone		Ruts, Holes or Bumps
	Stopping in Lane Roadway		Road Under Construction
	Too Fast for Conditions		Traffic Control Device Inop.
2	Followed too Closely		Shoulders Low, Soft or High
1	Improper Turn	11	Other or Unknown

COLLISION TYPES		FATAL	INJURY	PROP	TOTAL
Opposite Dir	Related:				
	UnRelated:				
Rear End	Related:		4	8	12
	UnRelated:				
Sideswipe	Related:			3	3
	UnRelated:				
Left Turn	Related:		3	4	7
	UnRelated:				
Angle	Related:		1	1	2
	UnRelated:				
Pedestrian	Related:				
	UnRelated:				
Parked Vehicle	Related:				
	UnRelated:				
Other Collision	Related:		1		1
	UnRelated:				

F	Bridge	01
I	Building	02
X	Culvert/Ditch	03
E	Curb	04
D	Guardrail/Barrier	05
	Embankment	06
O	Fence	07
B	Light Pole	08
J	Sign Pole	09
E	Other Pole	10
C	Tree/Shrubbery	11
T	Contr. Barrier	12
S	Crash Attenuator	13
	Other Fixed Object	

WEATHER

19	Clear / Cloudy
	Foggy
4	Raining
	Snow / Sleet
2	Other

ILLUMINATION

20	Day
	Dawn/Dusk
3	Dark - Lights On
2	Dark - No Lights
	Other

TOTALS

22-24	25

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC History Output rev. 10/2023-1 - Combined Year Listing

Name: Matthew Jagg

Date: 11/14/2025

Location: US 50 (Ocean Gateway) @ MD 328 (Matthewstown Rd) & Goldsborough St Logmiles: 11.15 At 0 Radius: 250 ft.

County: Talbot, D2 Period: January 01, 2022 To December 31, 2024 Note:

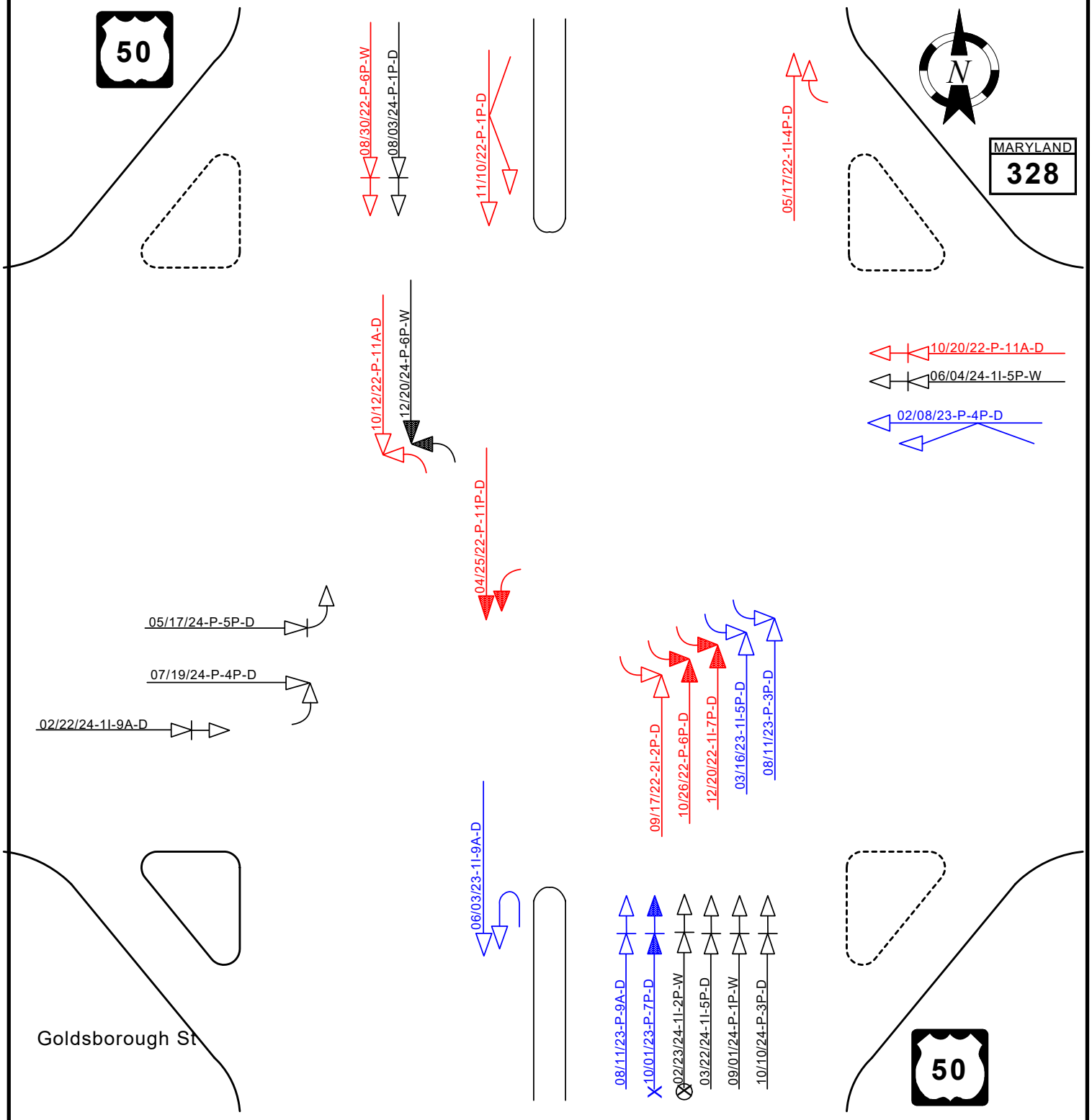
MilePt	Int Rel	Date	Severity	Time	Light	Surface	Alc Rel	FixObj	Collision	Movement V1	Movement V2	Probable Cause
US50												
11.150	☐	04252022	Property	11P	Night	Dry			ANGLE	SS	WL	Other or Unknown
11.150	☐	05172022	1 Injured	04P	Day	Dry			ANGLE	WR	NS	Fail to yield right-of-way
11.150	☐	08302022	Property	06P	Day	Wet			RREND	SS	SS	Followed too closely
11.150	☐	09172022	2 Injured	02P	Day	Dry			LFTRN	SL	NS	Fail to yield right-of-way
11.150	☐	10122022	Property	11A	Day	Dry			LFTRN	NL	SS	Fail to yield right-of-way
11.150	☐	10262022	Property	06P	Night	Dry			LFTRN	SL	NS	Fail to yield right-of-way
11.150	☐	11102022	Property	01P	Day	Dry			SDSWP	SL	SS	Other or Unknown
11.150	☐	12202022	1 Injured	07P	Night	Dry			LFTRN	SL	NS	Fail to yield right-of-way
11.150	☐	03162023	1 Injured	05P	Day	Dry			LFTRN	SL	NS	Fail to yield right-of-way
11.150	☐	06032023	1 Injured	09A	Day	Dry			OTHER	Nu	SS	Fail to yield right-of-way
11.150	☐	08112023	Property	09A	Day	Dry			RREND	NS	NS	Other or Unknown
11.150	☐	08112023	Property	03P	Day	Dry			LFTRN	SL	NS	Fail to yield right-of-way
11.150	☐	10012023	Property	07P	Night	Dry	☐		RREND	NS	NS	Under influence of alcohol
11.150	☐	02222024	1 Injured	09A	Day	Dry			RREND	ES	ES	Other or Unknown
11.150	☐	02232024	1 Injured	02P	Day	Wet			RREND	NS	NS	Other or Unknown
11.150	☐	03222024	1 Injured	05P	Day	Dry			RREND	NS	NS	Other or Unknown
11.150	☐	06042024	1 Injured	05P	Day	Wet			RREND	WS	WS	Followed too closely
11.150	☐	08032024	Property	01P	Day	Dry			RREND	SS	SS	Other or Unknown
11.150	☐	09012024	Property	01P	Day	Wet			RREND	NS	NS	Other or Unknown
11.150	☐	10102024	Property	03P	Day	Dry			RREND	NS	NS	Improper turn
11.150	☐	12202024	Property	06P	Night	Wet			LFTRN	SS	NL	Fail to yield right-of-way
MD328												
0.000	☐	10202022	Property	11A	Day	Dry			RREND	WS	WS	Other or Unknown
0.000	☐	02082023	Property	04P	Day	Dry			SDSWP	WS	WS	Other or Unknown
MU430												
0.890	☐	05172024	Property	05P	Day	Dry			RREND	ES	EL	Fail to keep right of center
0.890	☐	07192024	Property	04P	Day	Dry			SDSWP	ES	EL	Other or Unknown

Fixed Object: 01 = Bridge 02 = Building 03 = Culvert/Ditch 04 = Curb 05 = Guardrail/Barrier 06 = Embankment 07 = Fence
08 = Light Pole 09 = Sign Post 10 = Other Pole 11 = Tree/Shrubbery 12 = Construction Barrier 13 = Crash Attenuator

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

Office of Traffic & Safety
Traffic Development & Support Division
Crash Analysis Safety Team

Location: US 50 (Ocean Gateway) @ MD 328 (Matthewstown Rd) & Goldsborough St
County: TALBOT
Study Period: 01/01/2022 to 12/31/2024
Analyst: Matthew Jagg Date: 11/14/2025



DATE-SEVERITY-TIME-SURFACE
NIGHT
ALCOHOL
DRUGS

SEVERITY
F - Fatalities
I - Injured
P - Property Damage Only

SURFACE
D - Dry Surface
W - Wet Surface
I - Icy Surface
S - Snowy Surface

00 - Not Applicable
01 - Bridge or Overpass
02 - Building
03 - Culvert or Ditch
04 - Curb
05 - Guardrail or Barrier
06 - Embankment
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12 - Construction Barrier
13 - Crash Attenuator
88 - Other
99 - Unknown

B - Bicycle
P - Other Pedalcycle
C - Other Conveyance
T - Railway Train
A - Animal
O - Other Object
S - Spilled Cargo
J - Jackknife

U - Units Separated
N - Other Non collision
D - Off Road
R - Downhill Runaway
F - Explosion or Fire
? - Unknown

template 12-14-23

U - TURN
BACKING
OVERTURN
Parked Vehicle
P Pedestrian