FINAL ENVIRONMENTAL SITE DESIGN PLAN
FOR
MRTH REAL ESTATE, LLC
TRIUMPH INDUSTRIAL PARK
THIRD ELECTION DISTRICT, CECIL COUNTY, MARYLAND

BEFORE YOU DIG CALL 1-800-257-7777

RECEIVED
APR 25 2024
Cecil Soil Conservation District
Elkton, Maryland 21921

FINAL

STATE OF MARYLAND — DAVID STROUSS — No. 18293 — REGISTERED PROFESSIONAL ENGINEER
SEAL
DATE 4/24/24

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. 18293, Expiration Date: 6-8-2025

LEGEND

	EXISTING	PROPOSED
PROPERTY LINE		
BUILDING SETBACK	BRL	
CONTOUR	30	30
SPOT ELEVATION	28x6	x28.6
FLOW ARROW		
BUILDING		
DOOR		
DOWNSPOUT		
CURB		
SOIL BOUNDARY	MpB MkC	
WELL	W	W
STORM DRAIN	SD	SD
CATCH BASIN		
ROOF DRAIN	RD	RD
SANITARY SEWER	SS	SS
CONCRETE SIDEWALK		
PAVEMENT		
H/C PARKING SPACE		
EDGE OF PAVE		
UNDERGROUND UTILITY		
FENCELINE	X	
TRAFFIC ARROW		
TREELINE		
TREE		
SIGN		
UTILITY POLE		

E&S LEGEND

LIMIT OF DISTURBANCE	LOD
SILT FENCE	SF
SILT FENCE ON PAVEMENT	SFOP
SUPER SILT FENCE	SSF
CULVERT INLET PROTECTION	CVIP
STANDARD / AT-GRADE INLET PROTECTION	SIP/AGIP
CONSTRUCTION FENCING	X
STABILIZED CONSTRUCTION ENTRANCE	SCE

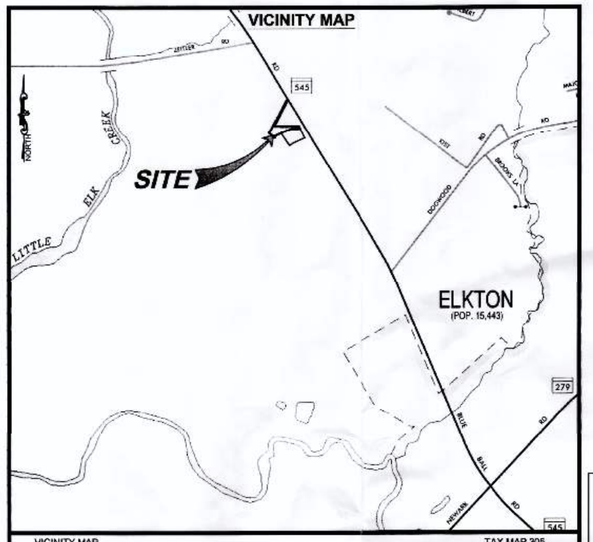
ESD PRACTICE LEGEND

SUBMERGED GRAVEL WETLANDS MEDIA	
FULL DEPTH GRAVEL	
UNDER DRAIN	UD
CLEAN OUT	C/O

SEDIMENT CONTROL BMP QUANTITIES

CONTROLS	QUANTITY
STABILIZED CONSTRUCTION ENTRANCE	2 EA.
SILT FENCE	1,947 L.F.
SUPER SILT FENCE	261 L.F.
CONSTRUCTION FENCING	654 L.F.
AT GRADE INLET PROTECTION	6 EA.
CULVERT INLET PROTECTION	1 EA.

VICINITY MAP



VICINITY MAP — TAX MAP 305
ADC MAP 12, GRID J-6 — PARCEL 561

OVERALL SITE ANALYSIS

1. TOTAL SITE AREA = 6.946 AC ±
2. DISTURBED AREA = 3.328 AC ±
3. VEGETATED AREA = 1.003 AC ±
4. IMPERVIOUS AREA = 2.325 AC ±
5. EARTHWORK ESTIMATE: CUT = 5,603 C.Y.± TOPSOIL = 3,730 C.Y.± FILL = 3,237 C.Y.±
6. CUT & FILL VOLUMES ARE ESTIMATES FOR REVIEW AGENCY ONLY AND ARE NOT INTENDED FOR BID PURPOSES.
7. ALL FLOWLINES TO BE STABILIZED WITH DITCH MATTING UNLESS NOTED OTHERWISE.
8. ALL DISTURBED AREAS TO BE STABILIZED WITH 4" 6" TOPSOIL, SEED, AND MULCH.

SEQUENCE OF CONSTRUCTION

1) Obtain all required permits.
2) Stake out limit of disturbance. (1 day)
3) A pre-construction meeting is required. Contact the M.D.E. sediment control inspector (410) 901-4020, the Cecil County DPW Inspector (410) 996-5267, and Miss Utility (811) at least 48 hours prior to the initiation of construction activities. A pre-construction meeting will be arranged at the project site. Failure to notify the agencies may expose the Owner/Developer to additional work
4) Install the two (2) stabilized construction entrances starting with the one at the by the proposed entrance from Blueball Road. (1 day)
5) Clear and grub for installation of sediment control measures. Install culvert inlet protection at the existing 42" culvert at the outfall for the side. Install silt fence and super silt fence as shown on plan. (2 days)
6) Clear and grub site after sediment controls have been installed. (5 days)
7) Brush out the existing ditches on-site. (2 days)
8) Install silt fence around soil stockpiles. (1 day)
9) Remove existing buildings. (4 weeks)
10) Remove existing pavement, utilities, fenceline, curb, gravel, and concrete as shown on plan view. (10 days)
11) Strip topsoil and place into temporary stockpile areas. Provide temporary stabilization as required. (4 days)
12) Rough grade site. Use temporary erosion control matting with the swales/ditches. (2 weeks)
13) Existing downstream drainage ditch, outfall from SGW-2 at south / southwestern side of the site, shall be cleared of sediment and debris and re-graded up to the existing point of discharge at the existing 42" CMP. This disturbance is to be stabilized at the end of each working day. (3 days)
14) Install storm drain pipes and roof drains within areas to receive stone base. Install standard inlet protection in graded areas during mass grading. Once base for the paving is installed, switch to at-grade inlet protection. (2 weeks)
15) Install remaining underground facilities. All disturbance must be stabilized at the end of each working day. (3 days)
16) Fine grade site and place stone base in the impervious parking lot and loading area which will be used as a construction staging area for the building construction. Stable stone base is required prior to vertical building construction and must be maintained throughout construction. (1 week)
17) Begin building construction.
18) Install sidewalks. (2 days)
19) Pave site. (1 week)
20) Stabilize all disturbed areas with 4"-6" topsoil, seed and mulch. Use temporary erosion control matting with the swales/ditches. (4 days)
21) Acquire approval from the CCDPW SWM inspector, that the entire drainage area is stabilized and vegetated. (2 weeks)
22) After approval from the CCDPW SWM inspector, and the entire drainage area is stabilized and vegetated, construct submerged gravel wetlands #1 and #2. See sequence of construction on sheet F-ESD-8. (2 weeks)
23) After approval from the MDE sediment control inspector, and the entire drainage area is stabilized and vegetated, remove perimter controls from the site. Stabilize any re-disturbed areas. (4 days)
24) Install landscaping. (1 week)
25) Provide an as-built survey, geotechnical engineer's report, and professional engineer's or surveyors certification within 30 days following construction.

GENERAL NOTES:
- Each phase must be constructed, and permanent vegetative stabilization must be provided prior to moving on to the next phase.
- Times shown are for sediment control review purposes only.

Stormwater Management Notes

The requirements for stormwater management found in the Cecil County Stormwater Management Ordinance and the Code of Maryland Regulations will be satisfied if environmental site design practices are used to the maximum extent practicable to treat runoff according to Chapter 5 of the 2000 Maryland Stormwater Design Manual.

1. All rooftop downspouts shall discharge to drain away from the proposed house.
2. To the extent practical, all other site impervious areas shall drain and discharge continuously through vegetation in a non erosive manner.
3. Design constraints as specified in the Manual have been addressed.
4. The permeable pavement conforms to the specifications listed in the Manual.

The design conditions stated above have been met and all stormwater management obligations have been satisfied. Environmental site design practices have been used to the maximum extent practicable to treat runoff from the proposed site.

STANDARD NOTES FOR UTILITY INSTALLATION

1. CALL 'MISS UTILITY' AT 1-800-257-7777 48 HOURS PRIOR TO THE START OF WORK.
2. ONLY ENOUGH TRENCH WILL BE EXCAVATED THAT CAN BE BACKFILLED DAILY.
3. EXCAVATED TRENCH MATERIAL SHOULD BE PLACED ON THE HIGH SIDE OF THE TRENCH.
4. IMMEDIATELY FOLLOWING UTILITY INSTALLATION, THE TRENCH SHALL BE BACKFILLED, COMPACTED AND STABILIZED AT THE END OF EACH WORKING DAY. NO MORE TRENCH SHALL BE OPENED THAN CAN BE COMPLETED IN THE SAME DAY.
5. FULL TRENCH COMPACTION IS REQUIRED.
6. MULCHING TO CECIL SCD SPECIFICATIONS OF ALL DISTURBED AREAS AND DAILY BACKFILL WILL BE REQUIRED.
7. ANY SEDIMENT CONTROL PRACTICES WHICH ARE DISTURBED DURING UTILITY CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT THE END OF EACH WORKING DAY.
8. ANY DITCHES OR DRAINAGE WAYS DISTURBED DURING CONSTRUCTION WILL BE RESTORED TO ORIGINAL CONDITION.

SHEET INDEX

THIS SITE DOES NOT LIE WITHIN THE CHESAPEAKE BAY CRITICAL AREA.

FLOOD CERTIFICATION

THE PROPERTY SHOWN HEREON APPEARS TO BE LOCATED IN ZONE 'X' (AREAS TO BE OUTSIDE THE 0.2% ANNUAL CHANCE), AS SHOWN ON F.I.R.M. COMMUNITY PANEL NO. 24015C0176E DATED MAY 4, 2015.

NOTES: 1. ALL BORROW AND SPOIL SITES MUST HAVE AN APPROVED EROSION AND SEDIMENT CONTROL PLAN.
2. STOCKPILES MAY NOT EXCEED FIFTEEN (15) FEET IN HEIGHT.

UNIFIED SIZING CRITERIA CHART

UNIFIED SIZING CRITERIA	REQUIRED	PROVIDED
ENVIRONMENTAL SITE DESIGN VOLUME	15,990 CU.FT.	16,430 CU.FT. - M-2 SUBMERGED GRAVEL WETLANDS & FOREBAY (2)
RECHARGE VOLUME	0.022 AC-FT. OR 0.274 AC.	0.029 AC-FT. OF IMPERVIOUS AREA BEING TREATED BY THE SUBMERGED GRAVEL WETLANDS FACILITIES
CHANNEL PROTECTION STORAGE VOLUME	NONE	CPv NOT REQUIRED IF ESDv IS MET
OVERBANK FLOOD PROTECTION VOLUME	NONE	NONE

Plan Certification

I certify that I am qualified to design stormwater management and grading plans and that the site grading as shown hereon does not involve the redirection of stormwater runoff off of the site or concentrate the release of stormwater runoff in an off-site area that previously received non-concentrated flow. The grading and stormwater management strategies shown hereon meet or exceed the requirements contained within the Cecil County Stormwater Management and Soil Erosion and Sediment Control Ordinances. If the project site is included in a currently approved and valid stormwater management and/or erosion and sediment control plan, the best management practices and strategies utilized on this lot grading plan are consistant with, and meet the intent of those plans.

David Strouss, PE — Print Name | Signature | 18293 License No. | 4/24/24 Date

Stormwater Management - As Built Certification:

I hereby certify that the work shown on these stormwater management plans has been constructed as shown in red hereon. I also certify that the structural and non-structural "Best Management Practices" as constructed, are in compliance with the approved plans and computations and if applicable meet the requirements of the USDA Natural Resources Conservation Service Maryland Conservation Practice Standard Pond Code 378. I cannot certify to the materials used or the construction methods and specifications utilized during construction which were inspected by the "Geotechnical Engineer".

Signature — Date
Name (Printed) — Professional License Number
Address: — License Type:
Professional Seal:

Reviewed for Cecil S.C.D. and meets Technical Requirements for Final Plan Approval
Signature — Date
Plan is valid for 2 years from date of approval

***Cecil Soil Conservation District** Erosion and Sediment Control Plan for Final Plan Approval*
Approved — Date
Plan is valid for 2 years from date of approval

FINAL

DEVELOPMENT PLANS REVIEW DIVISION
REVIEWED AND APPROVAL RECOMMENDED:
PLAN REVIEWER — Date 6/20/2024
APPROVED:
CHIEF — Date 6/21/24

FINAL

Department of Land Use & Development Services
This Environmental Site Design Plan has been reviewed and approved by the Department of Land Use and Development Services.
Signature — Date 6/20/24

FINAL

APPROVED: CECIL COUNTY LAND USE AND DEVELOPMENT SERVICES DIVISION OF WATER AND SEWER PLANNING
APPROVING AUTHORITY — DATE 5/29/24

FINAL

Owner's/Developer's Certification:

I/we hereby certify that all clearing, grading, construction and/or development will be done pursuant to this plan and that any responsible personnel involved in the construction project will have a certification of training at a Maryland Department of the Environment approved training program for the control of sediment and erosion before beginning the project. I hereby authorize the right of entry for periodic on-site evaluation by the Cecil Soil Conservation District or their representatives and the State of Maryland, Department of the Environment, Compliance Inspectors.

I hereby certify that development and/or construction will be done according to this plan of development and plan of erosion and sediment control.

Owner/Developer Signature — Date 4/25/24
Laki Pallouras
Printed Name and Title

FINAL

Engineer's Certification:

I hereby certify that all sediment and erosion control and stormwater management measures shown on this plan have been designed in accordance with both the "2011 MD Standards and Specifications for Soil Erosion and Sediment Control" and the "Cecil County Department of Public Works 2010 Stormwater Management Ordinance" or current revisions thereof.

Signature — Date 4/24/24
David Strouss
Printed Name — MD Registration No. 18293 (P.E., R.L.S., or R.L.A. (circle one))

Owner:	MRTH Real Estate, LLC 19 Wood Chip Road, Elkton, MD 21921	Developer:	MRTH Real Estate, LLC 19 Wood Chip Road, Elkton, MD 21921
Primary Contact:	Laki Pallouras (302) 562-7655 laki@symmetricllc.com	Primary Contact:	Laki Pallouras (302) 562-7655 laki@symmetricllc.com

Engineer: McCrone
David Strouss, P.E.
107 Chesapeake Blvd, Suite 104
Upper Chesapeake Corporate Center
Elkton, MD 21921
(410) 398-1550

REVISIONS

REV. #	DATE	DESCRIPTION

McCRONE — ENGINEERS ■ SURVEYORS ■ PLANNERS
ANNAPOLIS ■ CENTREVILLE ■ ELKTON ■ SALISBURY ■ DELAWARE
107 CHESAPEAKE BOULEVARD, SUITE 104, ELKTON, MARYLAND 21921, (410) 398-1550
www.mccronegroup.com

DATE: NOV. 2024
JOB NUMBER: D3180373
SCALE: AS SHOWN
DRAWN BY: MEL
DESIGNED BY: MEL
APPROVED BY: DCS
FOLDER/REFERENCE: 2339

FINAL PLAN TITLE SHEET
TAX MAP 305, PARCEL 561 ; ADC MAP 12, GRID H-7
BLUE BALL ROAD, ELKTON, MD 21921
MRTH REAL ESTATE, LLC
TRIUMPH INDUSTRIAL PARK
THIRD ELECTION DISTRICT, CECIL COUNTY, MARYLAND
PREPARED FOR: MRTH REAL ESTATE, LLC

SHEET NO.: F-ESD-1