

ANNE ARUNDEL COUNTY DEPARTMENT OF PUBLIC WORKS HANCOCK'S RESOLUTION SHORELINE STABILIZATION PROJECT NO. P468700 CONTRACT NO. P468714

INDEX OF DRAWINGS

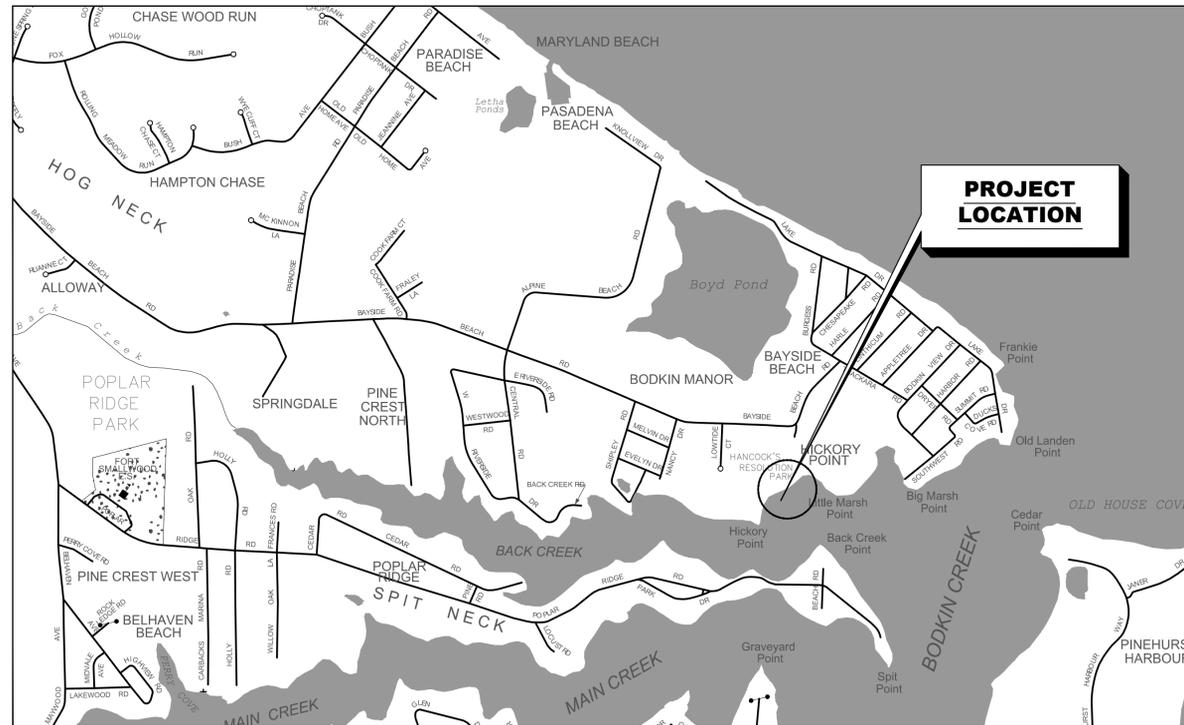
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STANDARD RESPONSIBILITY NOTES

- I (WE) CERTIFY THAT:
 - ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE IN ACCORDANCE WITH THIS SEDIMENT AND EROSION CONTROL PLAN, AND FURTHER, AUTHORIZE THE RIGHT OF ENTRY FOR PERIODIC ON-SITE EVALUATION BY THE ANNE ARUNDEL SOIL CONSERVATION DISTRICT (AASCD) BOARD OF SUPERVISORS OR THEIR AUTHORIZED AGENTS.
 - ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE FROM THE MARYLAND DEPARTMENT OF THE ENVIRONMENT'S APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.

RESPONSIBLE PERSONNEL ON SITE: _____
 - IF APPLICABLE, THE APPROPRIATE ENCLOSURE WILL BE CONSTRUCTED AND MAINTAINED ON SEDIMENT BASIN(S) INCLUDED IN THIS PLAN. SUCH STRUCTURE(S) WILL BE IN COMPLIANCE WITH THE ANNE ARUNDEL COUNTY CODE.
- THE DEVELOPER IS RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHT, AND/OR RIGHTS-OF-WAY THAT MAY BE REQUIRED FOR THE SEDIMENT AND EROSION CONTROL PRACTICES, STORM WATER MANAGEMENT PRACTICES AND THE DISCHARGE OF STORM WATER ONTO OR ACROSS ADJACENT OR DOWNSTREAM PROPERTIES INCLUDED IN THE PLAN.
- FOR INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT AND/OR TEMPORARY STABILIZATION PER THE AASCD VEGETATIVE ESTABLISHMENT SHALL BE COMPLETED WITHIN THREE CALENDAR DAYS FOR THE SURFACE OF ALL CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND SEVEN DAYS FOR ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- THE GRADING AND SEDIMENT CONTROL APPROVAL ON THIS PLAN EXTENDS ONLY TO THOSE AREAS WITHIN THE LIMITS OF DISTURBANCE.
- THE APPROVAL OF THIS PLAN FOR SEDIMENT AND EROSION CONTROL DOES NOT RELIEVE THE DEVELOPER/CONSULTANT FROM COMPLYING WITH FEDERAL, STATE OR COUNTY REQUIREMENTS PERTAINING TO ENVIRONMENTAL ISSUES.
- THE DEVELOPER MUST REQUEST THAT THE SEDIMENT AND EROSION CONTROL INSPECTOR APPROVE WORK COMPLETED IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN, THE GRADING OR BUILDING PERMIT, AND THE ORDINANCE.
- ALL MATERIAL SHALL BE TAKEN TO A SITE WITH AN APPROVED SEDIMENT AND EROSION CONTROL PLAN. FIRST PHASE INSPECTION AND APPROVAL OF THE SEDIMENT AND EROSION CONTROL INSPECTOR SHALL BE REQUIRED UPON COMPLETION OF THE INSTALLATION OF EROSION AND SEDIMENT CONTROLS PRIOR TO PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THE INITIAL APPROVAL BY THE SEDIMENT AND EROSION CONTROL INSPECTOR IS GIVEN. INSPECTION AND PERMITS MAY ALSO REQUIRE THAT AN INSPECTION AND CERTIFICATION OF THE INSTALLATION OF SEDIMENT CONTROL ALSO BE PERFORMED BY A DESIGN PROFESSIONAL PRIOR TO CONSTRUCTION COMMENCING.
- APPROVAL FROM THE INSPECTOR MUST BE REQUESTED ON FINAL STABILIZATION OF ALL SITES PRIOR TO REMOVAL OF SEDIMENT AND EROSION CONTROLS.
- EXISTING TOPOGRAPHY MUST BE FIELD VERIFIED BY RESPONSIBLE PERSONNEL TO THE SATISFACTION OF THE SEDIMENT CONTROL INSPECTOR PRIOR TO COMMENCING WORK.

SIGNATURE OF DEVELOPER / OWNER _____ DATE _____
 PRINT: NAME: _____
 TITLE: _____
 AFFILIATION: _____
 ADDRESS: _____
 TELEPHONE NUMBER: _____



GENERAL NOTES:

- CONDUCT A PRE-CONSTRUCTION MEETING. NOTIFY THE DEPARTMENT OF INSPECTIONS AND PERMITS AT LEAST 48 HOURS BEFORE COMMENCING WORK AT (410)-222-7780. WORK MAY NOT COMMENCE UNTIL THE PERMITTEE OR THE RESPONSIBLE PERSONNEL HAVE MET ON SITE WITH THE SEDIMENT AND EROSION CONTROL INSPECTOR TO REVIEW THE APPROVED PLANS, CONTAINED HEREIN.
- CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE MOST CURRENT VERSION OF THE ANNE ARUNDEL COUNTY DEPARTMENT OF PUBLIC WORKS STANDARD DETAILS FOR CONSTRUCTION OF STORM DRAINS, ROADS AND STORMWATER MANAGEMENT.
- NECESSARY PRECAUTIONS SHALL BE TAKEN BY THE CONTRACTOR TO PROTECT EXISTING SERVICES AND MAINS. ANY DAMAGE TO EXISTING SERVICES AND MAINS DUE TO THEIR NEGLIGENCE SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- THE EXISTING UTILITIES AND OBSTRUCTIONS SHOWN ARE FROM THE BEST AVAILABLE RECORDS AND SHALL BE VERIFIED BY THE CONTRACTOR TO HIS OWN SATISFACTION BEFORE STARTING CONSTRUCTION. NEITHER THE OWNER NOR ANNE ARUNDEL COUNTY DEPARTMENT OF PUBLIC WORKS WARRANT OR GUARANTEE THE COMPLETENESS OR THE CORRECTNESS OF THE INFORMATION GIVEN.
- IT SHALL BE DISTINCTLY UNDERSTOOD THAT FAILURE TO SPECIFICALLY MENTION ANY WORK WHICH WOULD NORMALLY BE REQUIRED TO COMPLETE THE PROJECT SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO PERFORM SUCH WORK.
- THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES AT LEAST 5 DAYS PRIOR TO STARTING CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL NOTIFY MISS UTILITY@ 1-800-257-7777 FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.
- ALL UTILITY POLES SHALL BE BRACED AS NECESSARY AT CONTRACTOR'S EXPENSE. UTILITY POLES SHALL BE RELOCATED AT THE OWNER'S EXPENSE IN CASES WHERE THEY WILL INTERFERE WITH CONSTRUCTION.
- GRID COORDINATES ARE BASED ON THE MARYLAND STATE PLANE COORDINATE SYSTEM NAD 83/91. VERTICAL ELEVATIONS ARE BASED UPON NAVD 88.

SITE INFORMATION:

	*(NOT FOR BIDDING PURPOSES)
TOTAL AREA OF SITE	7.32 AC
AREA DISTURBED	0.72 AC
AREA TO BE ROOFED OR PAVED	0 AC
TOTAL CUT	30 CY
TOTAL FILL	525 CY
OFFSITE WASTE/BORROW	
AREA LOCATION (IF KNOWN)	TBD

ENGINEER :
 AECOM
 4 NORTH PARK DRIVE
 HUNT VALLEY, MD 21030
 (410) 785-7220

OWNER:
 ANNE ARUNDEL COUNTY
 2662 RIVA ROAD
 RIGHT OF WAY DIVISION
 ANNAPOLIS, MD 21401

APPLICANT:
 BUREAU OF ENGINEERING
 DEPARTMENT OF PUBLIC WORKS
 ANNE ARUNDEL COUNTY
 2662 RIVA ROAD
 ANNAPOLIS, MD 21401

30% SCHEMATIC DESIGN NOT FOR CONSTRUCTION

	AECOM 4 NORTH PARK DRIVE SUITE 300 HUNT VALLEY, MARYLAND 21030 PHONE: 410-785-7220 FAX: 410-785-6818	PROFESSIONAL CERTIFICATION *I 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. MD LICENSE NUMBER: EXPIRATION DATE:	DATE	REVISIONS <table border="1" style="width: 100%; border-collapse: collapse; font-size: 8px;"> <thead> <tr> <th>NO.</th> <th>DESCRIPTION</th> <th>BY</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>01</td> <td>REVISED 30% DRAWINGS</td> <td>AJP</td> <td>3/3/2023</td> </tr> </tbody> </table>	NO.	DESCRIPTION	BY	DATE	01	REVISED 30% DRAWINGS	AJP	3/3/2023	ANNE ARUNDEL COUNTY DEPARTMENT OF PUBLIC WORKS
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01	REVISED 30% DRAWINGS	AJP	3/3/2023										
				APPROVED _____ DATE _____ CHIEF ENGINEER APPROVED _____ DATE _____ ASSISTANT CHIEF ENGINEER	APPROVED _____ DATE _____ PROJECT MANAGER APPROVED _____ DATE _____ CHIEF, RIGHT OF WAY	SCALE: AS NOTED DRAWN BY: TH CHECKED BY: AP SHEET NO. 1 OF 11 PROJECT NO. P468700 CONTRACT NO. P468714	HANCOCK'S RESOLUTION SHORELINE STABILIZATION TITLE SHEET DATE : MARCH 3, 2023						

PROJECT SUMMARY:

THE WORK WILL BE CONDUCTED AT HANCOCK'S RESOLUTION PARK LOCATED ON THE BACK CREEK BETWEEN HICKORY POINT TO THE WEST AND LITTLE MARSH POINT TO THE EAST IN THE CITY OF PASADENA, MARYLAND (SITE). THE SITE COORDINATES, IN LATITUDE AND LONGITUDE ARE: 39.133497, -76.449092. THE PROJECT INVOLVES SHORELINE STABILIZATION ACTIVITIES TO PROTECT THE SITE FROM FURTHER EROSION AND IMPROVE THE EXISTING SHORELINE HABITAT. WORK INCLUDES THE CONSTRUCTION OF THREE RIP RAP SILLS, WITH A LIVING SHORELINE MARSH CONSISTING OF SAND BACKFILL AND WETLAND PLANTINGS BETWEEN THE SILL AND THE EXISTING SHORELINE. A NON-WOVEN GEOTEXTILE WILL BE PLACED BELOW THE SILL, AND PLANTINGS WILL BE INSTALLED PER CONSTRUCTION DRAWINGS AND SPECIFICATIONS. THE UPLAND AREA ALONG THE EXISTING DIRT PATH WILL BE USED AS A MATERIAL STOCKPILE AND STAGING AREA. GOOSE FENCING AND NETTING WILL BE INSTALLED TO PROTECT PLANTS THROUGH FIRST GROWING SEASON.

CONSTRUCTION NOTES:

- THE OWNER OR OWNER'S REPRESENTATIVE SHALL BE NOTIFIED IN WRITING OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE DRAWINGS. THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE DRAWINGS WITHOUT EXPRESSED APPROVAL OF THE OWNER OF OWNER'S REPRESENTATIVE.
- THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. IN ADDITION TO COMPLYING WITH ALL PERTINENT CODES AND REGULATIONS, IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE AND COMPLY WITH ALL OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), LOCAL, STATE, AND FEDERAL REGULATIONS.
- THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS, DIMENSIONS, AND DETAILS SHOWN ON THE DRAWINGS BEFORE LAYING OUT OR PROCEEDING WITH WORK AND SHALL BE HELD ACCOUNTABLE FOR ANY ERROR RESULTING FROM FAILURE TO EXERCISE SUCH VERIFICATION.
- ANY MODIFICATIONS TO THE DRAWINGS OR CHANGES TO THE CONSTRUCTION SITE SHALL BE CHECKED FOR EFFECTS TO OTHER AREAS AND VERIFIED WITH THE OWNER BEFORE PROCEEDING WITH THE WORK.
- ANY WORK NOT DIRECTLY SHOWN ON THE DRAWINGS OR LISTED IN THE SPECIFICATIONS, BUT IMPLIED OR OTHERWISE NORMALLY CONSIDERED PART OF A SUCCESSFUL INSTALLATION, SHALL BE REQUIRED AND CONSIDERED AN INTEGRAL PART OF THIS WORK.
- THE CONTRACTOR AND EACH SUBCONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, EQUIPMENT, AND SERVICES NECESSARY FOR PROPER INSTALLATION. ALL WORK SHALL BE DONE BY SKILLED LABORERS IN ACCORDANCE WITH THE BEST PRACTICE FOR A SUBSTANTIAL AND COMPLETE JOB.
- CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL LOCAL, STATE, AND/OR FEDERAL PERMITS ASSOCIATED WITH THIS PROJECT.
- THE CONTRACTOR SHALL PROVIDE WRITTEN NOTIFICATION TO THE OWNER 30 DAYS PRIOR TO THE COMMENCEMENT OF WORK UNLESS OTHERWISE DIRECTED BY THE OWNER.
- THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING A NEAT AND ORDERLY SITE, YARD, AND GROUNDS. REMOVE AND DISPOSE OFF SITE ALL RUBBISH, WASTE MATERIALS, LITTER, AND ALL FOREIGN SUBSTANCES. REMOVE PETRO-CHEMICAL SPILLS, STAINS, AND OTHER FOREIGN DEPOSITS IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS. RAKE GROUNDS TO A SMOOTH EVEN-TEXTURED SURFACE.
- PROTECT EXISTING CONSTRUCTION FROM DAMAGE RESULTING FROM ANY WORK DONE BY CONTRACTOR OR ANY SUBCONTRACTOR. THE CONTRACTOR SHALL RESTORE ALL PUBLIC OR PRIVATE PROPERTY DAMAGED OR REMOVED TO AT LEAST AS GOOD OF CONDITION AS BEFORE DISTURBED AS DETERMINED BY THE OWNER OR OWNER'S REPRESENTATIVE.
- EXISTING OVERHEAD ELECTRICAL LINE SHALL BE IDENTIFIED, AND PROTECTED IN THE FIELD.
- NON-CONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE OWNER PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH ACTION SHALL REQUIRE APPROVAL.
- NO MATERIAL EXCAVATED DURING THE COURSE OF THIS CONSTRUCTION PROJECT MAY BE USED OR SOLD OFF-SITE.
- ALL REFERENCES TO CODES, SPECIFICATIONS, AND STANDARDS INCLUDED HEREIN SHALL MEAN, AND ARE INTENDED TO BE, THE LATEST ADDITION, AMENDMENT, AND/OR REVISION IN EFFECT AS OF THE DATE OF THESE DRAWINGS.
- THE CONTRACTOR SHALL OBEY AND COMPLY WITH THE PROVISIONS OF WORKER'S COMPENSATION LAWS AND ALL LAWFUL REQUIREMENTS, REGULATIONS, LAWS, AND ORDINANCES OF ALL LEGALLY CONSTITUTED AUTHORITIES, IN ANY WAY AFFECTING THE PERFORMANCE OF THE WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER PROTECTION OF HIS OR HER WORK, PROPERTY, EQUIPMENT, WORKMEN, AND OTHER PERSONS. HE OR SHE WILL CONSTRUCT, PLACE, AND MAINTAIN ALL NECESSARY SAFEGUARDS FOR THE PREVENTION OF ACCIDENTS AND INJURIES TO PERSONS AND OTHER PROPERTY. HE OR SHE SHALL SECURE HIS OR HER WORK FROM INJURY AND/OR DAMAGE BY STORM, WIND, FREEZING WATER, FIRE, AND BY ANY OTHER CAUSE WHICH MAY BE OCCASIONED BY OR IN CONNECTION WITH THE DOING OF SAID WORK UNTIL COMPLETION AND ACCEPTANCE THEREOF.
- THE CONTRACTOR SHALL FURNISH AND MAINTAIN, AT HIS OR HER EXPENSE, PROPER FIRST-AID FACILITIES DURING THE WORK.
- THE CONTRACTOR SHALL HAVE A SUFFICIENT NUMBER OF FIRE EXTINGUISHERS ON-HAND DURING THE PROGRESS OF THE WORK TO EXTINGUISH FIRES CAUSED BY ANY OPERATION IN THE CARRYING OUT OF THE WORK.

SITE/WORK RESTRICTIONS, PERMITS, AND STORMWATER POLLUTION PREVENTION:

- CONTRACTOR DAILY PERSONNEL TO BE ESCORTED TO AND FROM SITES BY ANNE ARUNDEL COUNTY PARKS DEPARTMENT PERSONNEL.
- NORMAL WORKING HOURS 7:00 AM TO 5:00 PM. WORK SHALL ONLY TAKE PLACE IN SUFFICIENT DAYLIGHT OR SUPPLIED LIGHT.
- POINT LOOKOUT COVE IS A PRIVATE ROAD AND ALL TRUCK ACCESS SHALL BE LIMITED TO THE AREAS IDENTIFIED ON THE CONSTRUCTION DRAWINGS. CONTRACTOR SHALL COORDINATE ALL MATERIAL AND EQUIPMENT DELIVERIES WITH THE ANNE ARUNDEL COUNTY PARKS DEPARTMENT.
- SITE ACCESS VIA BEACH LOCATIONS SHALL BE COORDINATED WITH THE ANNE ARUNDEL COUNTY DEPARTMENT OF PUBLIC WORKS.
- HAULING AND EQUIPMENT DELIVERY MUST BE COORDINATED AND APPROVED BY ALL PARTIES 24-HOURS PRIOR TO ANY SUCH ACTIVITY COMMENCING.
- CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY PERMITS AND PAYING ANY FEES NECESSARY FOR THE CONTRACTOR'S USE OF PUBLIC STREETS OF ROADS.
- SPEED LIMIT ON ALL ACCESS ROADS SHALL BE LIMITED TO 5 MPH.
- VISIBLE DUST MUST BE CONTROLLED TO PREVENT AIRBORNE PARTICULATE FROM MIGRATING OFF-SITE. NO FOREIGN AGENTS SUCH AS TACKIFIERS SHALL BE USED.
- MATERIALS SHALL ONLY BE STOCKPILED IN APPROVED AREAS SHOWN ON CONSTRUCTION DRAWINGS.
- WORK IS SHALL BE COMPLETED WITHIN THE DEFINED LIMITS OF DISTURBANCE (LOD) ONLY. WETLANDS WILL BE CLEARLY MARKED IN THE FIELD PRIOR TO CONSTRUCTION. DAMAGE TO FLAGGING, FENCING, OR TAPE DEFINING THE LOD WILL BE REPAIRED IMMEDIATELY.
- FUELING OPERATIONS SHALL ONLY OCCUR IN FLAT UPLAND AREAS, AND SPILLS SHALL BE CLEANED UP AND REPORTED IMMEDIATELY.
- CONTRACTOR SHALL PROTECT TO THE MAXIMUM EXTENT POSSIBLE. ALL EXISTING INFRASTRUCTURE AND UTILITIES ON AND OFF-SITE. IF DAMAGE IS INCURRED, IT SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. UTILITY CONFLICTS IDENTIFIED DURING THE PROJECT SHALL BE COMMUNICATED TO THE OWNER FOR RESOLUTION PRIOR TO CONTINUATION OF WORK.
- CONTRACTOR SHALL LIMIT DISTURBANCE TO SUBMERGED AQUATIC VEGETATION (SAV) AND EXISTING WETLAND MARSHES TO THE MAXIMUM EXTENT POSSIBLE.
- CONTRACTOR SHALL BE AWARE OF BIOLOGICAL HAZARDS ASSOCIATED WITH WORK IN BACK CREEK. THIS INCLUDES, BUT IS NOT LIMITED TO, INTERACTION WITH INSECTS, AMPHIBIANS, WATERFOWL, REPTILES AND SMALL MAMMALS.

SEQUENCE OF CONSTRUCTION:

THIS SEQUENCE OF CONSTRUCTION IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR IS RESPONSIBLE FOR DEVELOPING A SEQUENCE IN HIS/HER WORK PLAN IN ACCORDANCE WITH THE PROJECT DOCUMENTS AND AT THE DIRECTION OF THE OWNER.

PRE-CONSTRUCTION

- SUBMIT REQUIRED PRE-CONSTRUCTION SUBMITTALS AND OBTAIN APPROVAL OF ALL LOCAL, STATE, AND FEDERAL PERMITS PRIOR TO MOBILIZATION.
- SUBMIT MISS-UTILITY TICKET WITH MARYLAND 811.
- COORDINATE MATERIAL HAUL ROUTES WITH ANNE ARUNDEL COUNTY PARKS DEPARTMENT PERSONNEL.
- INSTALL WETLAND DELINEATION MARKERS (E.G., FLAGS, TAPE, FENCING) AND EXCLUSION ZONES TO ENSURE EQUIPMENT AND MATERIALS DO NOT ENTER ESTABLISHED ENVIRONMENTALLY SENSITIVE AREAS.
- ESTABLISH APPROVED STOCKPILE AREAS PRIOR TO MOBILIZATION OF EQUIPMENT AND MATERIALS.
- MOBILIZE.
- INSTALL EROSION AND SEDIMENT CONTROL MEASURES INCLUDING FILTER LOGS AND WOOD CHIPS WITH GEOTEXTILE.

HANCOCK'S RESOLUTION LIVING SHORELINE CONSTRUCTION

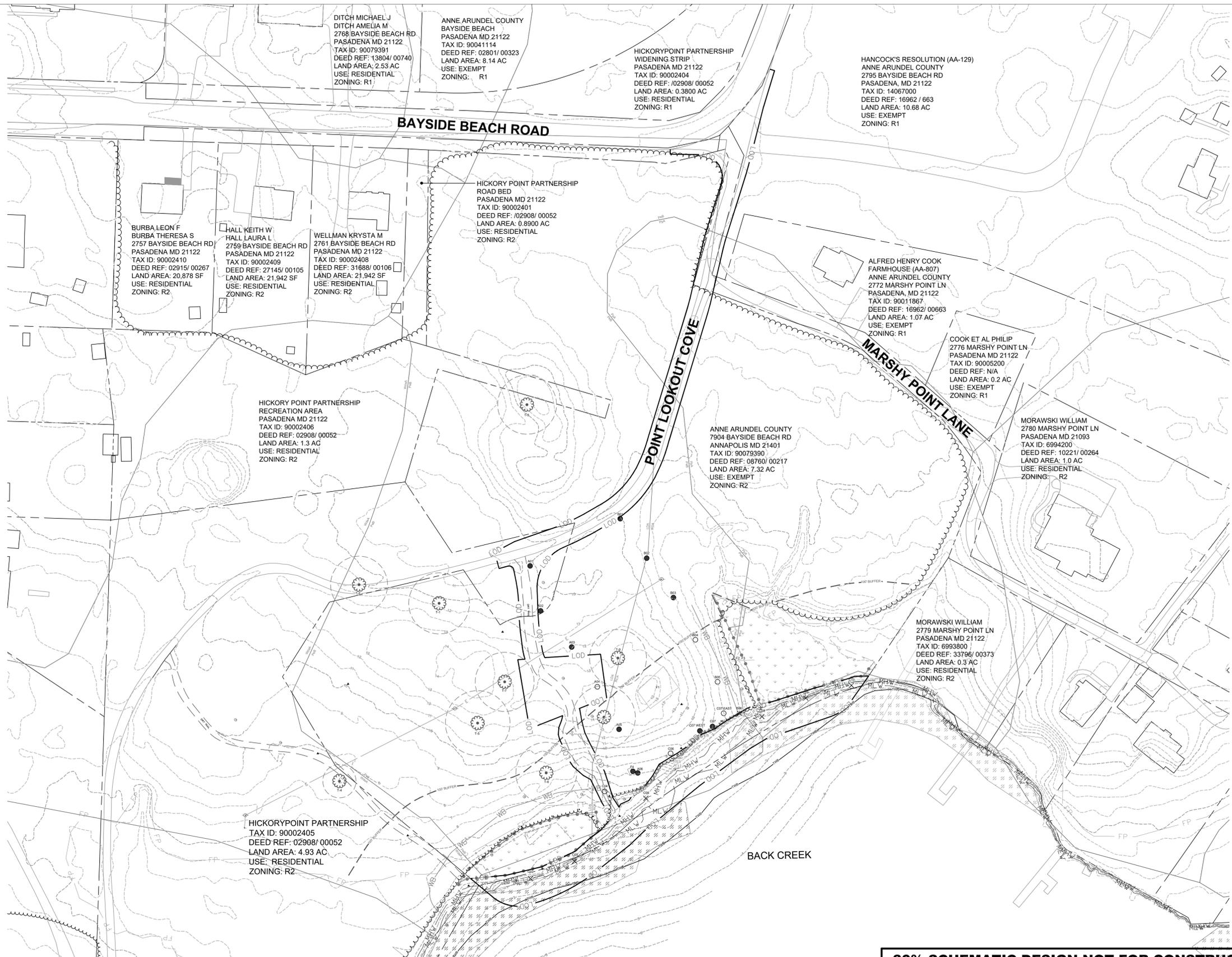
- PERFORM CONSTRUCTION SURVEY TO ESTABLISH LOCATION AND DIMENSIONS OF SILLS, AND PROPOSED GRADES OF SAND BACKFILL.
- CREATE TEMPORARY ACCESS TO BACK CREEK BY USE OF TIMBER MATS, TEMPORARY ROAD, OR OTHER METHOD APPROVED BY THE OWNER OR ENGINEER.
- INSTALL NON-WOVEN GEOTEXTILE FABRIC PER CONSTRUCTION SPECIFICATIONS.
- CONSTRUCT RIPRAP SILLS PER DETAILS ON SHEETS CP-01 AND CP-02.
- BACKFILL BEHIND SILL WITH COARSE SAND AS SHOWN ON SHEET CP-02.
- ALLOW SAND TO SETTLE FOR APPROXIMATELY TWO WEEKS BEFORE PLANTINGS OR AS DIRECTED BY THE ENGINEER.
- REPLENISH SAND AS NECESSARY TO MEET FINAL GRADE.
- INSTALL LIVING SHORELINE PLANTINGS AT APPROPRIATE ELEVATIONS PER PLANTING SCHEDULE AND NOTES ON SHEET PP-01.
- INSTALL GOOSE FENCING AFTER PLANTING. GOOSE FENCING SHALL BE REMOVED AT THE END OF THE FIRST GROWING SEASON.
- RESTORE DENUDED AREAS WITH APPROVED SEED MIX SPECIFIED ON SHEET PP-01.
- REMOVE E&S CONTROLS AND WETLANDS DELINEATION MARKERS UPON SEED ESTABLISHMENT OR WITHIN 30 DAYS OF PROJECT COMPLETION.
- COMPLETE AS-BUILT SURVEY OF FINAL MARSH LIMITS CERTIFIED BY AN INDEPENDENT SURVEYOR, LICENSED OR REGISTERED IN THE STATE OF MARYLAND, WITHIN 30 DAYS OF INITIAL PLANTING.

MATERIAL	APPROX. QUANTITY	UNIT
BORROW SAND/FILL	550	CY
MDOT NO. 3 STONE	20	CY
MDOT CLASS 0 RIPRAP (GABION)	175	CY
CLASS I RIPRAP	525	CY
6 OZ. NON-WOVEN GEOTEXTILE	1,250	SY
GOOSE NETTING	1,500	SY
FILTER LOG	205	LF
STABILIZATION MATTING	1,600	SF
TEMPORARY TIMBER MATS	225	LF

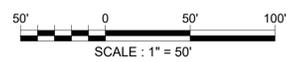
MATERIAL QUANTITIES

30% SCHEMATIC DESIGN NOT FOR CONSTRUCTION

 <p>AECOM 4 NORTH PARK DRIVE SUITE 300 HUNT VALLEY, MARYLAND 21030 PHONE: 410-785-7220 FAX: 410-785-6818</p>		<p>PROFESSIONAL CERTIFICATION</p> <p>*I 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.*</p> <p>MD LICENSE NUMBER:</p> <p>EXPIRATION DATE:</p>		<p>DATE</p>		<p>ANNE ARUNDEL COUNTY DEPARTMENT OF PUBLIC WORKS</p>				<p>GP#</p>		<p>DWG. NO.: GN-01</p>					
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NO.	DESCRIPTION	BY	DATE														
01	REVISED 30% DRAWINGS	AJP	3/3/2023														



LEGEND	
	LIMITS OF DISTURBANCE (LOD)
	PROPERTY LINE
	1' CONTOUR
	100-YEAR FLOODPLAIN
	MEAN HIGH WATER LINE
	MD/DNR 1972 TIDAL BOUNDARY
	100' CRITICAL AREA BUFFER
	WETLAND BOUNDARY
	25' WETLAND BUFFER
	FOREST
	SOIL BOUNDARY
	SPECIMEN TREE + CRITICAL ROOT ZONE (CRZ = 1.5' RADIUS TO 1" DBH)
	UTILITY POLE WITH OVERHEAD WIRE
	SUBMERGED AQUATIC VEGETATION (2020)
	ARCHEOLOGICAL POINT STP NEGATIVE
	ARCHEOLOGICAL POINT STP POSITIVE
	ARCHEOLOGICAL POINT STP NOT EXCAVATED



30% SCHEMATIC DESIGN NOT FOR CONSTRUCTION



AECOM
4 NORTH PARK DRIVE
SUITE 300
HUNT VALLEY, MARYLAND 21030
PHONE: 410-785-7220
FAX: 410-785-6818

PROFESSIONAL CERTIFICATION
"I 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."
MD LICENSE NUMBER:
EXPIRATION DATE:

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01	REVISED 30% DRAWINGS	AJP	3/3/2023

APPROVED			
DATE	DATE	DATE	DATE
CHIEF ENGINEER	PROJECT MANAGER	APPROVED	APPROVED
APPROVED	APPROVED	APPROVED	APPROVED
ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY		

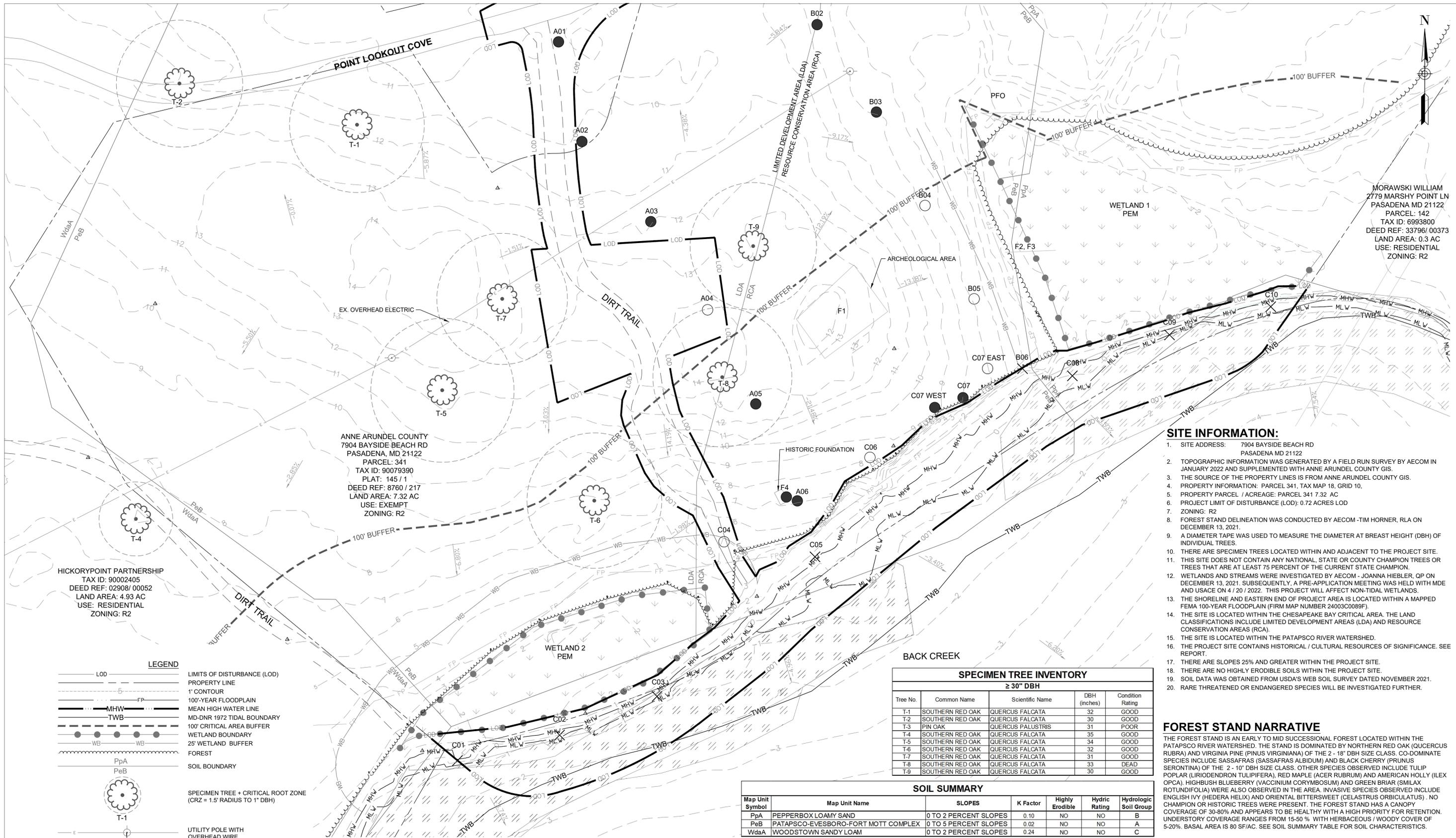
ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS
SCALE: AS NOTED
DRAWN BY: TH
CHECKED BY: AP
SHEET NO. 3 OF 11
PROJECT NO. P468700
CONTRACT NO. P468714

GP# _____ DWG. NO.: AM-01

HANCOCK'S RESOLUTION SHORELINE STABILIZATION

AREA MAP

DATE : MARCH 3, 2023



MORAWSKI WILLIAM
 2779 MARSHY POINT LN
 PASADENA MD 21122
 PARCEL: 142
 TAX ID: 6993800
 DEED REF: 33796/00373
 LAND AREA: 0.3 AC
 USE: RESIDENTIAL
 ZONING: R2

ANNE ARUNDEL COUNTY
 7904 BAYSIDE BEACH RD
 PASADENA, MD 21122
 PARCEL: 341
 TAX ID: 90079390
 PLAT: 145 / 1
 DEED REF: 8760 / 217
 LAND AREA: 7.32 AC
 USE: EXEMPT
 ZONING: R2

HICKORYPOINT PARTNERSHIP
 TAX ID: 90002405
 DEED REF: 02908/00052
 LAND AREA: 4.93 AC
 USE: RESIDENTIAL
 ZONING: R2

- ### SITE INFORMATION:
- SITE ADDRESS: 7904 BAYSIDE BEACH RD PASADENA MD 21122
 - TOPOGRAPHIC INFORMATION WAS GENERATED BY A FIELD RUN SURVEY BY AECOM IN JANUARY 2022 AND SUPPLEMENTED WITH ANNE ARUNDEL COUNTY GIS
 - THE SOURCE OF THE PROPERTY LINES IS FROM ANNE ARUNDEL COUNTY GIS.
 - PROPERTY INFORMATION: PARCEL 341, TAX MAP 18, GRID 10,
 - PROPERTY PARCEL / ACREAGE: PARCEL 341 7.32 AC
 - PROJECT LIMIT OF DISTURBANCE (LOD): 0.72 ACRES LOD
 - ZONING: R2
 - FOREST STAND DELINEATION WAS CONDUCTED BY AECOM -TIM HORNER, RLA ON DECEMBER 13, 2021.
 - A DIAMETER TAPE WAS USED TO MEASURE THE DIAMETER AT BREAST HEIGHT (DBH) OF INDIVIDUAL TREES.
 - THERE ARE SPECIMEN TREES LOCATED WITHIN AND ADJACENT TO THE PROJECT SITE.
 - THIS SITE DOES NOT CONTAIN ANY NATIONAL, STATE OR COUNTY CHAMPION TREES OR TREES THAT ARE AT LEAST 75 PERCENT OF THE CURRENT STATE CHAMPION.
 - WETLANDS AND STREAMS WERE INVESTIGATED BY AECOM - JOANNA HIEBLER, QP ON DECEMBER 13, 2021. SUBSEQUENTLY, A PRE-APPLICATION MEETING WAS HELD WITH MDE AND USACE ON 4 / 20 / 2022. THIS PROJECT WILL AFFECT NON-TIDAL WETLANDS.
 - THE SHORELINE AND EASTERN END OF PROJECT AREA IS LOCATED WITHIN A MAPPED FEMA 100-YEAR FLOODPLAIN (FIRM MAP NUMBER 24003C0089F).
 - THE SITE IS LOCATED WITHIN THE CHESAPEAKE BAY CRITICAL AREA. THE LAND CLASSIFICATIONS INCLUDE LIMITED DEVELOPMENT AREAS (LDA) AND RESOURCE CONSERVATION AREAS (RCA).
 - THE SITE IS LOCATED WITHIN THE PATAPSCO RIVER WATERSHED.
 - THE PROJECT SITE CONTAINS HISTORICAL / CULTURAL RESOURCES OF SIGNIFICANCE. SEE REPORT.
 - THERE ARE SLOPES 25% AND GREATER WITHIN THE PROJECT SITE.
 - THERE ARE NO HIGHLY ERODIBLE SOILS WITHIN THE PROJECT SITE.
 - SOIL DATA WAS OBTAINED FROM USDA'S WEB SOIL SURVEY DATED NOVEMBER 2021.
 - RARE THREATENED OR ENDANGERED SPECIES WILL BE INVESTIGATED FURTHER.

LEGEND

- LOD: LIMITS OF DISTURBANCE (LOD)
- Property Line: PROPERTY LINE
- 1' CONTOUR: 1' CONTOUR
- FP: 100'-YEAR FLOODPLAIN
- MHW: MEAN HIGH WATER LINE
- TWB: MD-DNR 1972 TIDAL BOUNDARY
- WB: 100' CRITICAL AREA BUFFER
- Forest: WETLAND BOUNDARY
- Soil Boundary: 25' WETLAND BUFFER
- Soil Boundary: FOREST
- Soil Boundary: SOIL BOUNDARY
- Specimen Tree + Critical Root Zone (CRZ = 1.5' RADIUS TO 1" DBH)
- Utility Pole with Overhead Wire
- Submerged Aquatic Vegetation (2020)
- Archaeological Point STP Negative
- Archaeological Point STP Positive
- Archaeological Point STP Not Excavated

SPECIMEN TREE INVENTORY

≥ 30" DBH

Tree No.	Common Name	Scientific Name	DBH (inches)	Condition Rating
T-1	SOUTHERN RED OAK	QUERCUS FALCATA	32	GOOD
T-2	SOUTHERN RED OAK	QUERCUS FALCATA	30	GOOD
T-3	PIN OAK	QUERCUS PALUSTRIS	31	POOR
T-4	SOUTHERN RED OAK	QUERCUS FALCATA	35	GOOD
T-5	SOUTHERN RED OAK	QUERCUS FALCATA	34	GOOD
T-6	SOUTHERN RED OAK	QUERCUS FALCATA	32	GOOD
T-7	SOUTHERN RED OAK	QUERCUS FALCATA	31	GOOD
T-8	SOUTHERN RED OAK	QUERCUS FALCATA	33	DEAD
T-9	SOUTHERN RED OAK	QUERCUS FALCATA	30	GOOD

SOIL SUMMARY

Map Unit Symbol	Map Unit Name	SLOPES	K Factor	Highly Erodible	Hydr Rating	Hydrologic Soil Group
PpA	PEPPERBOX LOAMY SAND	0 TO 2 PERCENT SLOPES	0.10	NO	NO	B
PeB	PATAPSCO-EVESBORO-FORT MOTT COMPLEX	0 TO 5 PERCENT SLOPES	0.02	NO	NO	A
WdaA	WOODSTOWN SANDY LOAM	0 TO 2 PERCENT SLOPES	0.24	NO	NO	C

FOREST STAND NARRATIVE

THE FOREST STAND IS AN EARLY TO MID SUCCESSIONAL FOREST LOCATED WITHIN THE PATAPSCO RIVER WATERSHED. THE STAND IS DOMINATED BY NORTHERN RED OAK (QUERCUS RUBRA) AND VIRGINIA PINE (PINUS VIRGINIANA) OF THE 2 - 18" DBH SIZE CLASS. CO-DOMINATE SPECIES INCLUDE SASSAFRAS (SASSAFRAS ALBIDUM) AND BLACK CHERRY (PRUNUS SEROTINA) OF THE 2 - 10" DBH SIZE CLASS. OTHER SPECIES OBSERVED INCLUDE TULIP POPLAR (LIRIODENDRON TULIPIFERA), RED MAPLE (ACER RUBRUM) AND AMERICAN HOLLY (ILEX OPACA). HIGHBUSH BLUEBERRY (VACCINIUM CORYMBOSUM) AND GREEN BRIAR (SMILAX ROTUNDIFOLIA) WERE ALSO OBSERVED IN THE AREA. INVASIVE SPECIES OBSERVED INCLUDE ENGLISH IVY (HEDERA HELIX) AND ORIENTAL BITTERSWEET (CELASTRUS ORBICULATUS). NO CHAMPION OR HISTORIC TREES WERE PRESENT. THE FOREST STAND HAS A CANOPY COVERAGE OF 30-80% AND APPEARS TO BE HEALTHY WITH A HIGH PRIORITY FOR RETENTION. UNDERSTORY COVERAGE RANGES FROM 15-50% WITH HERBACEOUS / WOODY COVER OF 5-20%. BASAL AREA IS 80 SF/AC. SEE SOIL SUMMARY TABLE FOR SOIL CHARACTERISTICS.

30% SCHEMATIC DESIGN NOT FOR CONSTRUCTION

ENGINEER:
 AECOM
 4 NORTH PARK DRIVE
 HUNT VALLEY, MD 21030
 (410) 785-7220

OWNER:
 ANNE ARUNDEL COUNTY
 2662 RIVA ROAD
 RIGHT OF WAY DIVISION
 ANNAPOLIS, MD 21401

APPLICANT:
 BUREAU OF ENGINEERING
 DEPARTMENT OF PUBLIC WORKS
 ANNE ARUNDEL COUNTY
 2662 RIVA ROAD
 ANNAPOLIS, MD 21401

PROFESSIONAL CERTIFICATION

I 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.

MD LICENSE NUMBER:
 EXPIRATION DATE:

DATE

AECOM
 AECOM
 4 NORTH PARK DRIVE
 SUITE 300
 HUNT VALLEY, MARYLAND 21030
 PHONE: 410-785-7220
 FAX: 410-785-6818

REVISIONS

NO.	DESCRIPTION	BY	DATE
01	REVISED 30% DRAWINGS	AJP	3/3/2023

ANNE ARUNDEL COUNTY
 DEPARTMENT OF PUBLIC WORKS

APPROVED: _____ DATE: _____

CHIEF ENGINEER: _____ PROJECT MANAGER: _____

APPROVED: _____ DATE: _____

ASSISTANT CHIEF ENGINEER: _____ CHIEF, RIGHT OF WAY: _____

SCALE: AS NOTED

DRAWN BY: TH

CHECKED BY: AP

SHEET NO. 4 OF 11

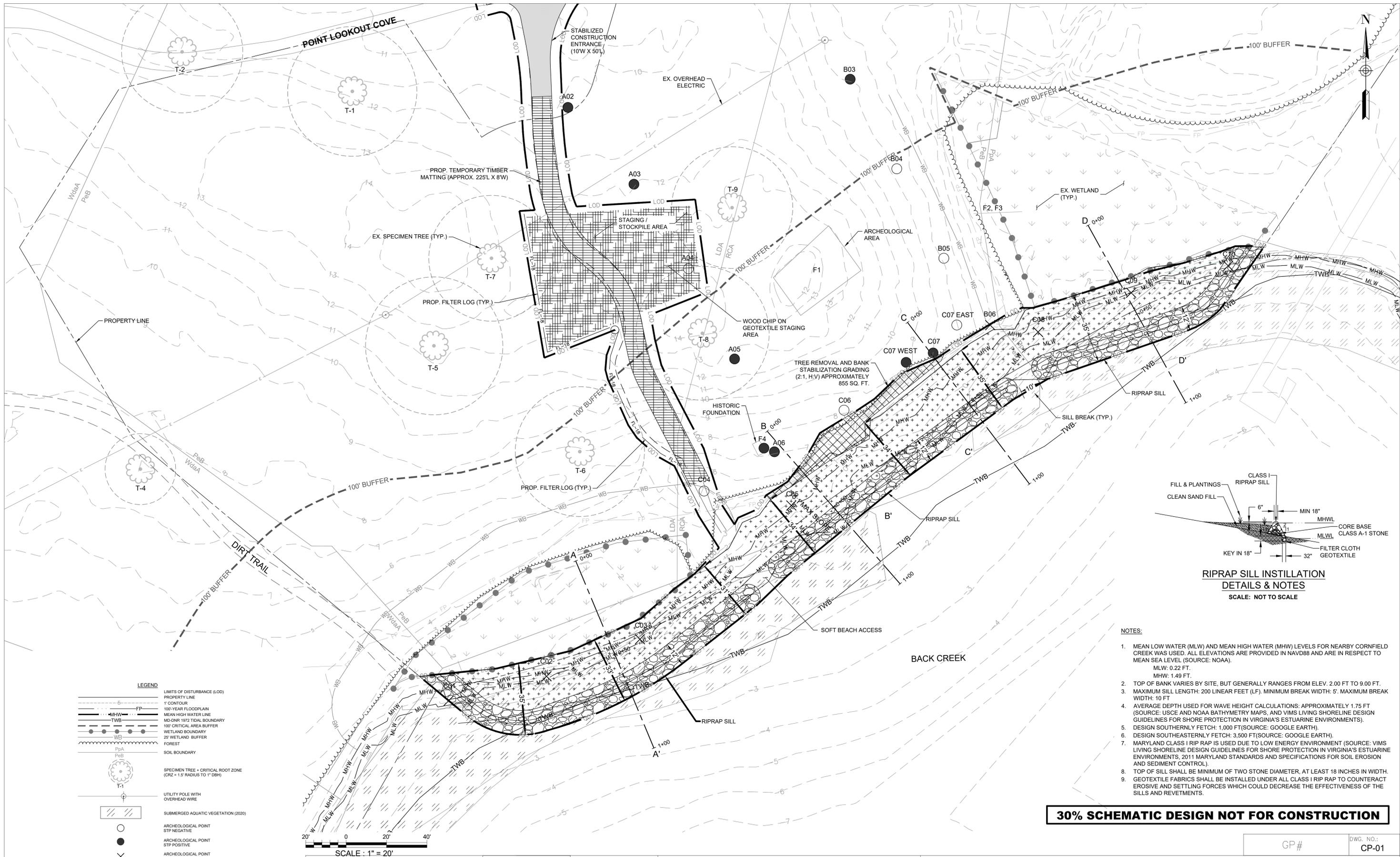
PROJECT NO. P468700

CONTRACT NO. P468714

HANCOCK'S RESOLUTION
 SHORELINE STABILIZATION

EXISTING CONDITIONS
 PLAN

DATE: MARCH 3, 2023



**RIPRAP SILL INSTALLATION
DETAILS & NOTES**
SCALE: NOT TO SCALE

- NOTES:**
- MEAN LOW WATER (MLW) AND MEAN HIGH WATER (MHW) LEVELS FOR NEARBY CORNFIELD CREEK WAS USED. ALL ELEVATIONS ARE PROVIDED IN NAVD88 AND ARE IN RESPECT TO MEAN SEA LEVEL (SOURCE: NOAA).
MLW: 0.22 FT.
MHW: 1.49 FT.
 - TOP OF BANK VARIES BY SITE, BUT GENERALLY RANGES FROM ELEV. 2.00 FT TO 9.00 FT.
 - MAXIMUM SILL LENGTH: 200 LINEAR FEET (LF). MINIMUM BREAK WIDTH: 5'. MAXIMUM BREAK WIDTH: 10 FT.
 - AVERAGE DEPTH USED FOR WAVE HEIGHT CALCULATIONS: APPROXIMATELY 1.75 FT (SOURCE: USCE AND NOAA BATHYMETRY MAPS, AND VIMS LIVING SHORELINE DESIGN GUIDELINES FOR SHORE PROTECTION IN VIRGINIA'S ESTUARINE ENVIRONMENTS).
 - DESIGN SOUTHERNLY FETCH: 1,000 FT (SOURCE: GOOGLE EARTH).
 - DESIGN SOUTHEASTERNLY FETCH: 3,500 FT (SOURCE: GOOGLE EARTH).
 - MARYLAND CLASS I RIP RAP IS USED DUE TO LOW ENERGY ENVIRONMENT (SOURCE: VIMS LIVING SHORELINE DESIGN GUIDELINES FOR SHORE PROTECTION IN VIRGINIA'S ESTUARINE ENVIRONMENTS, 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL).
 - TOP OF SILL SHALL BE MINIMUM OF TWO STONE DIAMETER, AT LEAST 18 INCHES IN WIDTH.
 - GEOTEXTILE FABRICS SHALL BE INSTALLED UNDER ALL CLASS I RIP RAP TO COUNTERACT EROSION AND SETTLING FORCES WHICH COULD DECREASE THE EFFECTIVENESS OF THE SILLS AND REVETMENTS.

30% SCHEMATIC DESIGN NOT FOR CONSTRUCTION

LEGEND

---	LIMITS OF DISTURBANCE (LOD)
---	PROPERTY LINE
---	1' CONTOUR
---	100-YEAR FLOODPLAIN
---	MEAN HIGH WATER LINE
---	MD-DNR 1972 TIDAL BOUNDARY
---	100' CRITICAL AREA BUFFER
---	WETLAND BOUNDARY
---	25' WETLAND BUFFER
---	FOREST
---	SOIL BOUNDARY
---	SPECIMEN TREE - CRITICAL ROOT ZONE (CRZ = 1.5' RADIUS TO 1" DBH)
---	UTILITY POLE WITH OVERHEAD WIRE
---	SUBMERGED AQUATIC VEGETATION (2020)
○	ARCHAEOLOGICAL POINT STP NEGATIVE
●	ARCHAEOLOGICAL POINT STP POSITIVE
×	ARCHAEOLOGICAL POINT STP NOT EXCAVATED
+	PROP. SAND FILL & PLANTINGS

AECOM
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4 NORTH PARK DRIVE
SUITE 300
HUNT VALLEY, MARYLAND 21030
PHONE: 410-785-7220
FAX: 410-785-6818

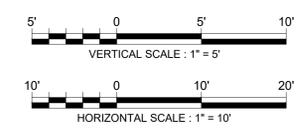
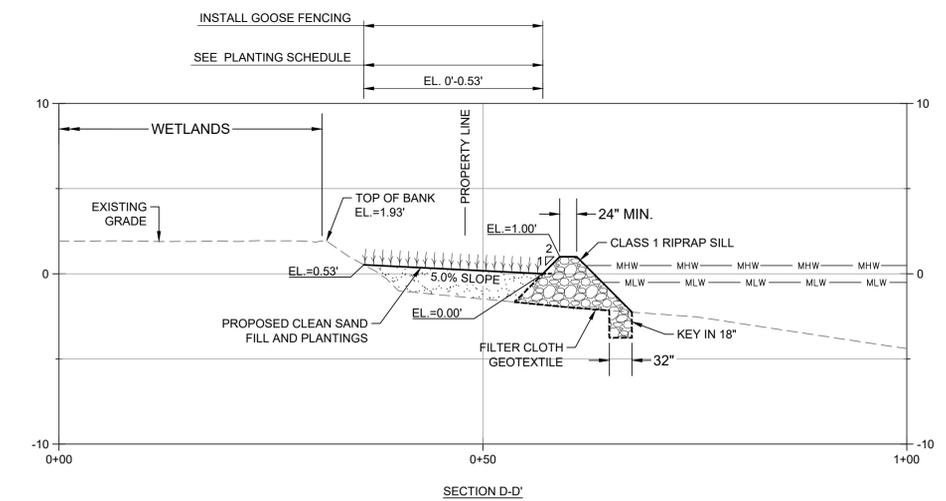
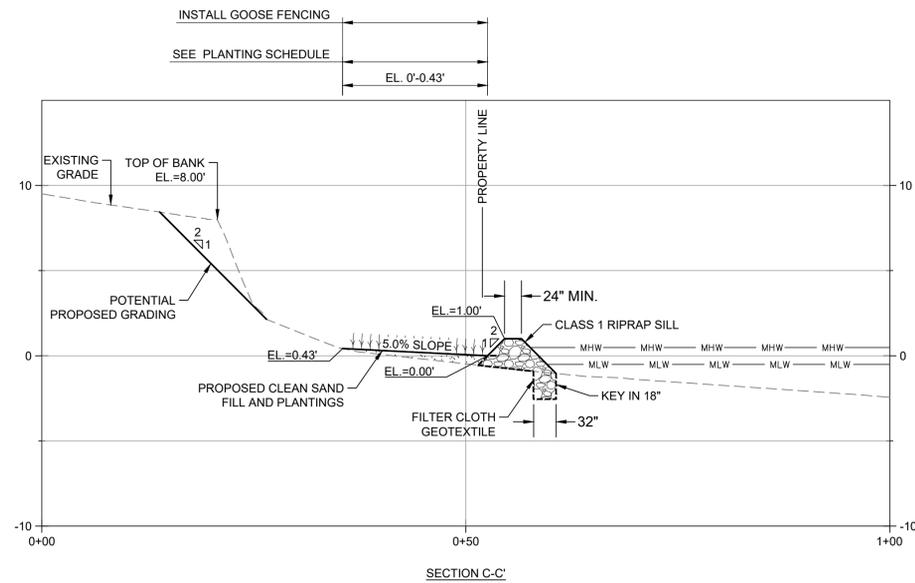
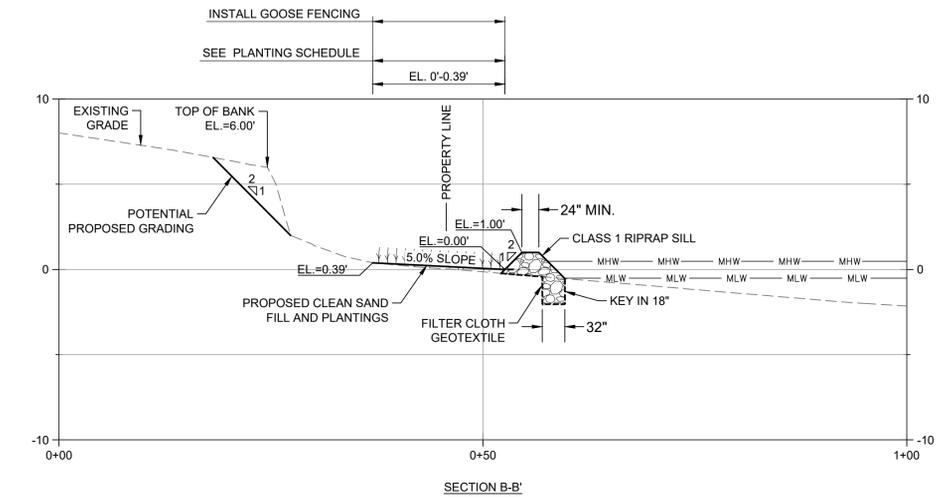
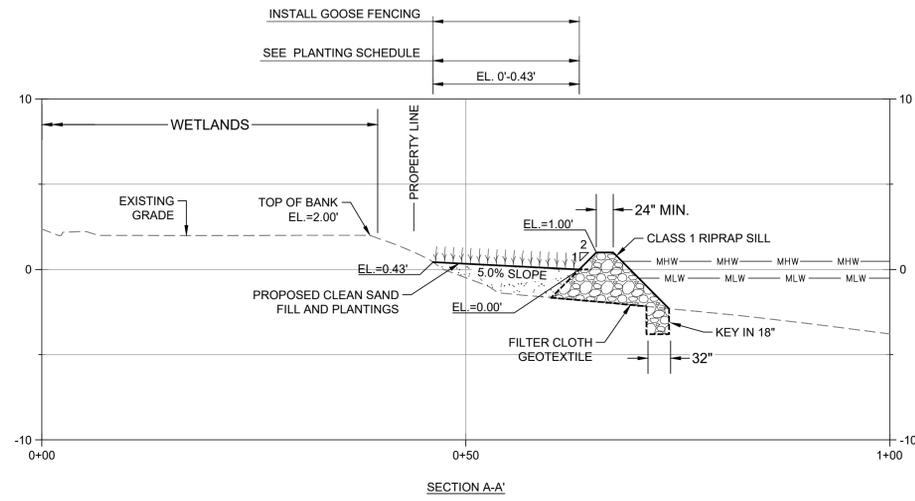
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MD LICENSE NUMBER:
EXPIRATION DATE:

REVISIONS			
NO.	DESCRIPTION	BY	DATE
01	REVISED 30% DRAWINGS	AJP	3/3/2023

APPROVED				APPROVED				SCALE: AS NOTED	
DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	CHECKED BY:	DATE
								TH	
								AP	
								SHEET NO. 5 OF 11	
								PROJECT NO. P468700	
								CONTRACT NO. P468714	

GP# _____ DWG. NO.: CP-01

**HANCOCK'S RESOLUTION
SHORELINE STABILIZATION**
CONCEPT PLAN
DATE : MARCH 3, 2023



PLANT NAME	BIOLOGICAL BENCHMARK	SPACING	NO. OF PLANTINGS
SPARTINA ALTERNIFLORA (SMOOTH CORDGRASS)	0.0' - 0.5'	1.5' OC	1,515
SPARTINA PATENS	0.5' - 1.75'	1.5' OC	4,540

PLANTING SCHEDULE

30% SCHEMATIC DESIGN NOT FOR CONSTRUCTION

AECOM
 AECOM
 4 NORTH PARK DRIVE
 SUITE 300
 HUNT VALLEY, MARYLAND 21030
 PHONE: 410-785-7220
 FAX: 410-785-6818

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 MD LICENSE NUMBER:
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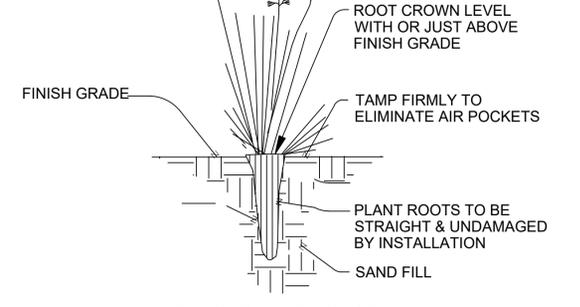
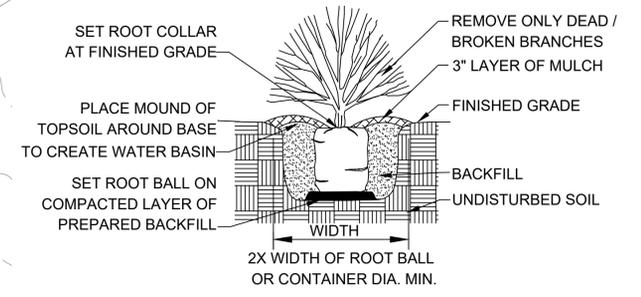
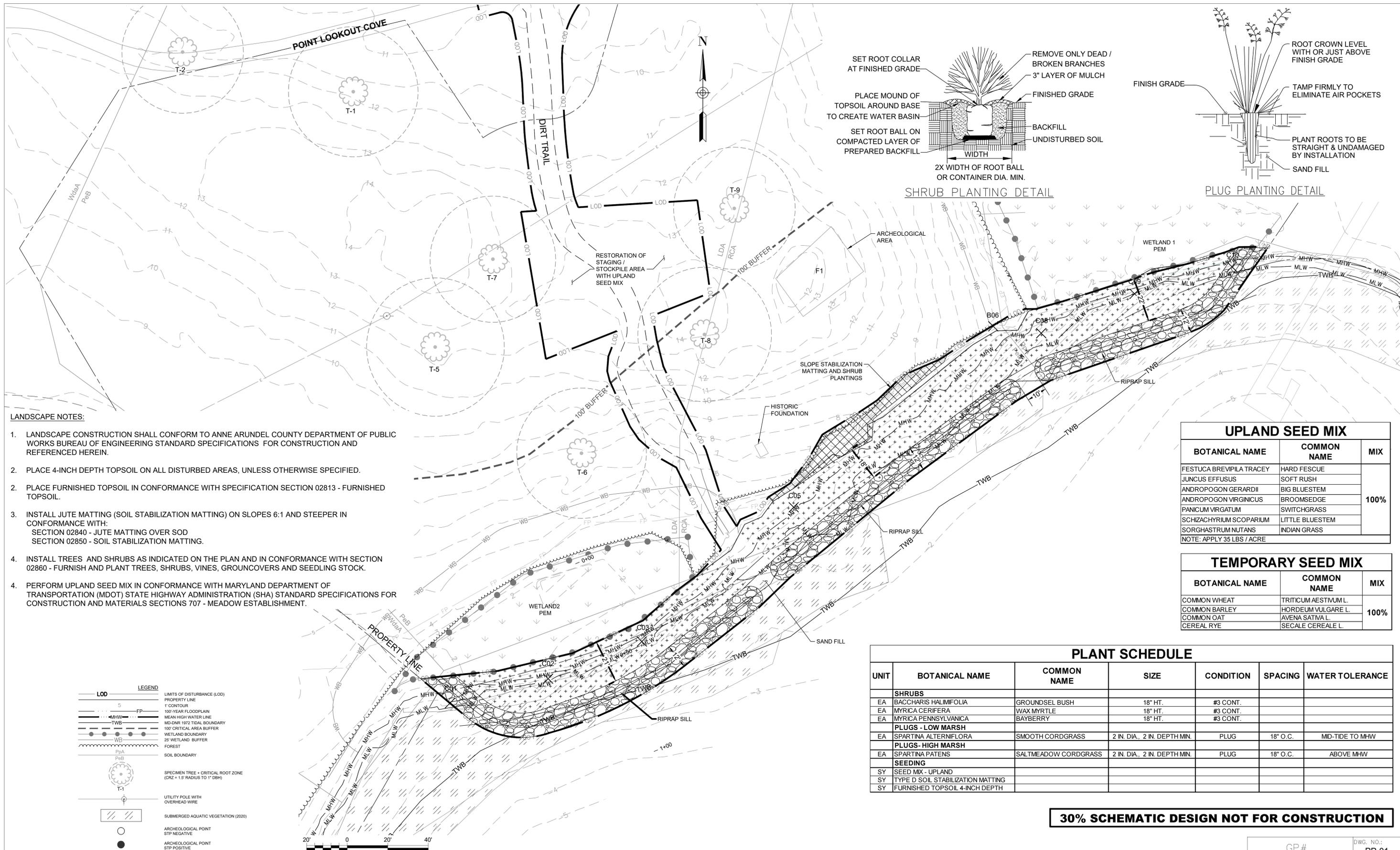
ANNE ARUNDEL COUNTY
 DEPARTMENT OF PUBLIC WORKS

APPROVED	DATE	APPROVED	DATE	SCALE: AS NOTED
CHIEF ENGINEER		PROJECT MANAGER		DRAWN BY: LD
APPROVED	DATE	APPROVED	DATE	CHECKED BY: AP
				SHEET NO. 6 OF 11
ASSISTANT CHIEF ENGINEER		CHIEF, RIGHT OF WAY		PROJECT NO. P468700
				CONTRACT NO. P468714

HANCOCK'S RESOLUTION SHORELINE STABILIZATION

CROSS SECTIONS

DATE : MARCH 3, 2023



- LANDSCAPE NOTES:**
- LANDSCAPE CONSTRUCTION SHALL CONFORM TO ANNE ARUNDEL COUNTY DEPARTMENT OF PUBLIC WORKS BUREAU OF ENGINEERING STANDARD SPECIFICATIONS FOR CONSTRUCTION AND REFERENCED HEREIN.
 - PLACE 4-INCH DEPTH TOPSOIL ON ALL DISTURBED AREAS, UNLESS OTHERWISE SPECIFIED.
 - PLACE FURNISHED TOPSOIL IN CONFORMANCE WITH SPECIFICATION SECTION 02813 - FURNISHED TOPSOIL.
 - INSTALL JUTE MATTING (SOIL STABILIZATION MATTING) ON SLOPES 6:1 AND STEEPER IN CONFORMANCE WITH:
SECTION 02840 - JUTE MATTING OVER SOD
SECTION 02850 - SOIL STABILIZATION MATTING.
 - INSTALL TREES AND SHRUBS AS INDICATED ON THE PLAN AND IN CONFORMANCE WITH SECTION 02860 - FURNISH AND PLANT TREES, SHRUBS, VINES, GROUNDCOVERS AND SEEDLING STOCK.
 - PERFORM UPLAND SEED MIX IN CONFORMANCE WITH MARYLAND DEPARTMENT OF TRANSPORTATION (MDOT) STATE HIGHWAY ADMINISTRATION (SHA) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS SECTIONS 707 - MEADOW ESTABLISHMENT.

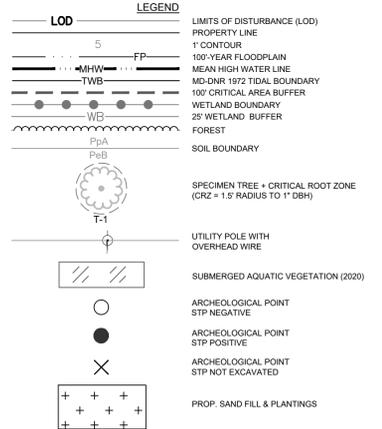
UPLAND SEED MIX		
BOTANICAL NAME	COMMON NAME	MIX
FESTUCA BREVIPILA TRACEY	HARD FESCUE	100%
JUNCUS EFFUSUS	SOFT RUSH	
ANDROPOGON GERARDII	BIG BLUESTEM	
ANDROPOGON VIRGINICUS	BROOMSEDGE	
PANICUM VIRGATUM	SWITCHGRASS	
SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	
SORGHASTRUM NUTANS	INDIAN GRASS	

NOTE: APPLY 35 LBS / ACRE

TEMPORARY SEED MIX		
BOTANICAL NAME	COMMON NAME	MIX
COMMON WHEAT	TRITICUM AESTIVUM L.	100%
COMMON BARLEY	HORDEUM VULGARE L.	
COMMON OAT	AVENA SATIVA L.	
CEREAL RYE	SECALE CEREALE L.	

PLANT SCHEDULE						
UNIT	BOTANICAL NAME	COMMON NAME	SIZE	CONDITION	SPACING	WATER TOLERANCE
SHRUBS						
EA	BACCHARIS HALIMIFOLIA	GROUNDSEL BUSH	18" HT.	#3 CONT.		
EA	MYRICA CERIFERA	WAX MYRTLE	18" HT.	#3 CONT.		
EA	MYRICA PENNSYLVANICA	BAYBERRY	18" HT.	#3 CONT.		
PLUGS - LOW MARSH						
EA	SPARTINA ALTERNIFLORA	SMOOTH CORDGRASS	2 IN. DIA., 2 IN. DEPTH MIN.	PLUG	18" O.C.	MID-TIDE TO MHW
PLUGS - HIGH MARSH						
EA	SPARTINA PATENS	SALTMEADOW CORDGRASS	2 IN. DIA., 2 IN. DEPTH MIN.	PLUG	18" O.C.	ABOVE MHW
SEEDING						
SY	SEED MIX - UPLAND					
SY	TYPE D SOIL STABILIZATION MATTING					
SY	FURNISHED TOPSOIL 4-INCH DEPTH					

30% SCHEMATIC DESIGN NOT FOR CONSTRUCTION



AECOM
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 4 NORTH PARK DRIVE
 SUITE 300
 HUNT VALLEY, MARYLAND 21030
 PHONE: 410-785-7220
 FAX: 410-785-6818

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 MD LICENSE NUMBER:
 EXPIRATION DATE:

REVISIONS			
NO.	DESCRIPTION	BY	DATE
01	REVISED 30% DRAWINGS	AJP	3/3/2023

ANNE ARUNDEL COUNTY
 DEPARTMENT OF PUBLIC WORKS

APPROVED _____ DATE _____ APPROVED _____ DATE _____
 CHIEF ENGINEER PROJECT MANAGER
 APPROVED _____ DATE _____ APPROVED _____ DATE _____
 ASSISTANT CHIEF ENGINEER CHIEF, RIGHT OF WAY

SCALE: AS NOTED
 DRAWN BY: TH
 CHECKED BY: RK
 SHEET NO. 7 OF 11
 PROJECT NO. P468700
 CONTRACT NO. P468714

HANCOCK'S RESOLUTION
 SHORELINE STABILIZATION

PLANTING PLAN
 DATE: MARCH 3, 2023

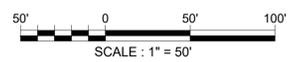


NOTES:

1. THE CONTRACTOR SHALL ASSESS THE PRE-CONSTRUCTION CONDITION OF THE PORTIONS OF MARSHY HOPE ROAD AND POINT LOOKOUT COVE ROAD THAT WILL BE USED FOR CONSTRUCTION ACCESS. THE CONTRACTOR SHALL PROTECT AND MAINTAIN THE PRE-CONSTRUCTION CONDITION OF THE ROADS DURING CONSTRUCTION. THE CONTRACTOR SHALL ENSURE THAT THE POST-CONSTRUCTION CONDITION OF MARSHY HOPE ROAD AND POINT LOOKOUT COVE ROAD IS EQUAL TO OR BETTER THAN THE PRE-CONSTRUCTION CONDITION AFTER COMPLETING CONSTRUCTION.

LEGEND

- PROPERTY LINE
- 1' CONTOUR
- 100-YEAR FLOODPLAIN
- MEAN HIGH WATER LINE
- MD-DNR 1972 TIDAL BOUNDARY
- 100' CRITICAL AREA BUFFER
- WETLAND BOUNDARY
- 25' WETLAND BUFFER
- FOREST
- SOIL BOUNDARY
- SPECIMEN TREE + CRITICAL ROOT ZONE (CRZ = 1.5' RADIUS TO 1" DBH)
- UTILITY POLE WITH OVERHEAD WIRE
- SUBMERGED AQUATIC VEGETATION (2020)
- ARCHEOLOGICAL POINT STP NEGATIVE
- ARCHEOLOGICAL POINT STP POSITIVE
- ARCHEOLOGICAL POINT STP NOT EXCAVATED



30% SCHEMATIC DESIGN NOT FOR CONSTRUCTION



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FAX: 410-785-6818

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ANNE ARUNDEL COUNTY DEPARTMENT OF PUBLIC WORKS			
APPROVED	DATE	APPROVED	DATE
CHIEF ENGINEER		PROJECT MANAGER	
APPROVED	DATE	APPROVED	DATE
ASSISTANT CHIEF ENGINEER		CHIEF, RIGHT OF WAY	

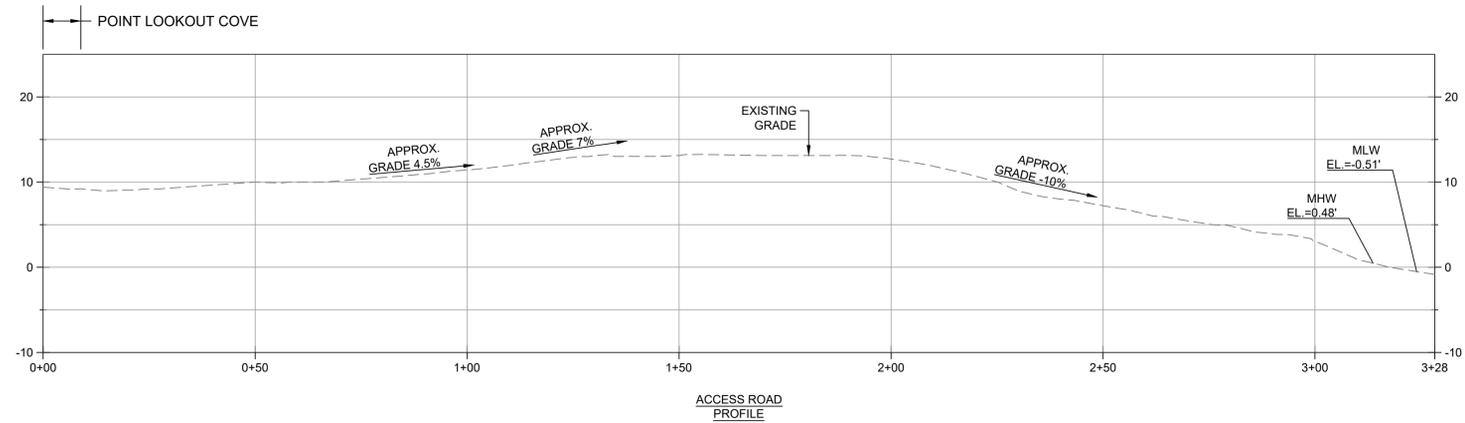
SCALE: AS NOTED
DRAWN BY: LD
CHECKED BY: AP
SHEET NO. 8 OF 11
PROJECT NO. P468700
CONTRACT NO. P468714

HANCOCK'S RESOLUTION SHORELINE STABILIZATION

ACCESS ROAD

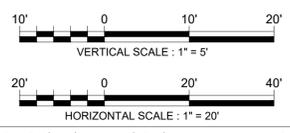
DATE : MARCH 3, 2023

GP# _____ DWG. NO.: RP-01



30% SCHEMATIC DESIGN NOT FOR CONSTRUCTION

GP# _____ DWG. NO.: RP-02



AECOM
 AECOM
 4 NORTH PARK DRIVE
 SUITE 300
 HUNT VALLEY, MARYLAND 21030
 PHONE: 410-785-7220
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 MD LICENSE NUMBER:
 EXPIRATION DATE:

DATE

REVISIONS			
NO.	DESCRIPTION	BY	DATE
01	REVISED 30% DRAWINGS	AJP	3/3/2023

ANNE ARUNDEL COUNTY			
DEPARTMENT OF PUBLIC WORKS			
APPROVED	DATE	APPROVED	DATE
CHIEF ENGINEER		PROJECT MANAGER	
APPROVED	DATE	APPROVED	DATE
ASSISTANT CHIEF ENGINEER		CHIEF, RIGHT OF WAY	
SCALE: AS NOTED	DRAWN BY: LD		HANCOCK'S RESOLUTION SHORELINE STABILIZATION
CHECKED BY: AP	SHEET NO. 9 OF 11		
PROJECT NO. P468700	CONTRACT NO. P468714		
ACCESS ROAD PROFILE			DATE : MARCH 3, 2023

EROSION AND SEDIMENT CONTROL GENERAL NOTES

1. THE CONTRACTOR SHALL NOTIFY ANNE ARUNDEL SOIL CONSERVATION DISTRICT (AASCD) AT (410) 222-7780 SEVEN (7) DAYS BEFORE COMMENCING ANY LAND DISTURBING ACTIVITY AND, SHALL BE REQUIRED TO HOLD A PRE-CONSTRUCTION MEETING BETWEEN PROJECT REPRESENTATIVES AND A REPRESENTATIVE OF AASCD.
2. THE CONTRACTOR SHALL NOTIFY AASCD IN WRITING AND BY TELEPHONE AT THE FOLLOWING POINTS:
 - A. THE REQUIRED PRE-CONSTRUCTION MEETING.
 - B. FOLLOWING INSTALLATION OF SEDIMENT CONTROL MEASURES.
 - C. PRIOR TO REMOVAL OR MODIFICATION OF ANY SEDIMENT CONTROL STRUCTURE(S).
 - D. PRIOR TO REMOVAL OF ALL SEDIMENT CONTROL DEVICES.
 - E. PRIOR TO FINAL ACCEPTANCE.
3. THE PLAN APPROVAL LETTER, APPROVED EROSION AND SEDIMENT CONTROL PLANS, DAILY LOG BOOKS, AND TEST REPORTS SHALL BE AVAILABLE AT THE SITE FOR INSPECTION BY DULY AUTHORIZED OFFICIALS OF AASCD AND THE AGENCY RESPONSIBLE FOR THE PROJECT.
4. THE CONTRACTOR SHALL CONSTRUCT ALL EROSION AND SEDIMENT CONTROL MEASURES PER THE APPROVED PLAN AND CONSTRUCTION SEQUENCE AND SHALL HAVE THEM INSPECTED AND APPROVED BY THE AASCD INSPECTOR PRIOR TO BEGINNING ANY OTHER LAND DISTURBANCES. MINOR SEDIMENT CONTROL DEVICE LOCATION ADJUSTMENTS MAY BE MADE IN THE FIELD WITH THE APPROVAL OF THE AASCD INSPECTOR. THE CONTRACTOR SHALL ENSURE THAT ALL RUNOFF FROM DISTURBED AREAS IS DIRECTED TO THE SEDIMENT CONTROL DEVICES AND SHALL NOT REMOVE ANY EROSION OR SEDIMENT CONTROL MEASURE WITHOUT PRIOR PERMISSION FROM AASCD INSPECTOR. THE CONTRACTOR SHALL OBTAIN PRIOR COUNTY APPROVAL FOR MODIFICATIONS TO THE EROSION AND SEDIMENT CONTROL PLAN AND/OR SEQUENCE OF CONSTRUCTION.
5. THE AASCD INSPECTOR HAS THE OPTION OF REQUIRING ADDITIONAL SAFETY OR SEDIMENT CONTROL MEASURES, IF DEEMED NECESSARY.
6. THE CONTRACTOR SHALL PROTECT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS TO PREVENT THE DEPOSITION OF MATERIALS ONTO PUBLIC ROADS. ALL MATERIALS DEPOSITED ONTO PUBLIC ROADS SHALL BE REMOVED IMMEDIATELY.
7. THE CONTRACTOR SHALL INSPECT DAILY AND MAINTAIN CONTINUOUSLY IN AN EFFECTIVE OPERATING CONDITION ALL EROSION AND SEDIMENT CONTROL MEASURES UNTIL SUCH TIME AS THEY ARE REMOVED WITH PRIOR PERMISSION FROM THE MDE INSPECTOR.
8. EROSION AND SEDIMENT CONTROL FOR UTILITY CONSTRUCTION SHALL BE PROVIDED IN ACCORDANCE WITH APPROVED PLANS. UTILITY CONSTRUCTION SHALL ONLY BE FOR AREAS WITHIN THE DELINEATED LIMIT OF DISTURBANCE. CALL "MISS UTILITY" AT 1-800-257-7777 48 HOURS PRIOR TO THE START OF WORK.
9. CONSTRUCTION ACTIVITIES PRODUCING DUST SHALL IMPLEMENT CONTROL MEASURES TO AVOID THE SUSPENSION OF DUST PARTICLES AND/OR PREVENT DUST FROM BLOWING OFF-SITE OR TO AREAS WITHOUT TREATMENT.
10. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
 - A. THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, 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 DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.
11. VEGETATIVE STABILIZATION SHALL BE PERFORMED IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND 2001 ANNE ARUNDEL COUNTY DPW STANDARDS AND SPECIFICATIONS FOR CONSTRUCTION. REFER TO APPROPRIATE SPECIFICATIONS FOR TEMPORARY SEEDING, PERMANENT SEEDING, MULCHING, SODDING, AND GROUND COVERS.
12. WHEN SEEDING, ALL DISTURBED AREAS WITH SLOPES FLATTER THAN 2:1 SHALL BE STABILIZED WITH 4 INCHES OF TOPSOIL, SEED, AND MULCH. ALL DISTURBED AREAS WITH SLOPES 2:1 OR STEEPER SHALL BE STABILIZED WITH MATTING OVER 2 INCHES OF TOPSOIL AND SEED.
13. PERMANENT SWALES OR OTHER POINTS OF CONCENTRATED WATER FLOW SHALL BE STABILIZED WITH SEED AND AN APPROVED EROSION CONTROL MATTING, SOD, RIP-RAP, OR OTHER APPROVED STABILIZATION MEASURES.
14. FOR STOCKPILE SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1), THE CONTRACTOR SHALL APPLY SEED AND ANCHORED STRAW MULCH, SOD, OR OTHER APPROVED STABILIZATION MEASURES TO THE FACE OF THE STOCKPILE WITHIN THREE (3) CALENDAR DAYS OF ACTIVITY HAVING CEASED ON THE RESPECTIVE FACE. FOR

SLOPES 3:1 OR FLATTER, THE CONTRACTOR SHALL APPLY STABILIZATION MEASURES TO THE FACE OF THE STOCKPILE WITHIN SEVEN (7) CALENDAR DAYS OF ACTIVITY HAVING CEASED ON THE RESPECTIVE FACE. MAINTENANCE SHALL BE PERFORMED AS NECESSARY TO ENSURE CONTINUED STABILIZATION.

15. FOR FINISHED GRADING, THE CONTRACTOR SHALL PROVIDE ADEQUATE GRADIENTS TO PREVENT WATER FROM PONDING FOR MORE THAN TWENTY-FOUR (24) HOURS AFTER THE END OF A RAINFALL EVENT. DRAINAGE COURSES AND SWALE FLOW AREAS MAY TAKE AS LONG AS FORTY-EIGHT (48) HOURS AFTER THE END OF A RAINFALL EVENT TO DRAIN. AREAS DESIGNED TO HAVE STANDING WATER SHALL NOT BE REQUIRED TO MEET THIS REQUIREMENT.
16. PRIOR TO REMOVAL OF SEDIMENT CONTROL MEASURES, THE CONTRACTOR SHALL STABILIZE AND HAVE ESTABLISHED PERMANENT STABILIZATION FOR ALL CONTRIBUTORY DISTURBED AREAS USING SOD OR AN APPROVED PERMANENT SEED MIXTURE WITH REQUIRED SOIL AMENDMENTS AND AN APPROVED ANCHORED MULCH. WOOD FIBER MULCH MAY ONLY BE USED IN SEEDING SEASON WHERE THE SLOPE DOES NOT EXCEED 10% AND GRADING HAS BEEN DONE TO PROMOTE SHEET FLOW DRAINAGE. AREAS BROUGHT TO FINISHED GRADE DURING THE SEEDING SEASON SHALL BE PERMANENTLY STABILIZED AS SOON AS POSSIBLE, BUT NOT LATER THAN THREE (3) CALENDAR DAYS AFTER ESTABLISHMENT FOR SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) AND SEVEN (7) CALENDAR DAYS FOR FLATTER SLOPES. WHEN PROPERTY IS BROUGHT TO FINISHED GRADE DURING THE MONTHS OF NOVEMBER THROUGH FEBRUARY, AND PERMANENT STABILIZATION IS FOUND TO BE IMPRACTICAL, TEMPORARY SEED AND ANCHORED STRAW MULCH SHALL BE APPLIED TO DISTURBED AREAS. THE FINAL PERMANENT STABILIZATION OF SUCH PROPERTY SHALL BE APPLIED BY MARCH 15 OR EARLIER IF GROUND AND WEATHER CONDITIONS ALLOW.
17. TEMPORARY SEDIMENT CONTROL DEVICES SHALL BE REMOVED WITH PERMISSION OF THE AASCD INSPECTOR WITHIN THIRTY (30) CALENDAR DAYS FOLLOWING ESTABLISHMENT OF PERMANENT STABILIZATION IN ALL CONTRIBUTORY DRAINAGE AREAS. UPON REMOVAL OF SEDIMENT CONTROL DEVICES, THE AREA DISTURBED BY REMOVAL SHALL BE STABILIZED WITH TOPSOIL, SEED, AND MULCH, OR AS SPECIFIED, WITHIN 24 HOURS OF SAID REMOVAL.
18. OFF-SITE SPOIL OR BORROW AREAS SHALL HAVE PRIOR APPROVAL BY THE AASCD AND OTHER APPLICABLE STATE, FEDERAL, AND LOCAL AGENCIES. ALL WASTE AND BORROW AREAS OFF-SITE SHALL BE PROTECTED BY SEDIMENT CONTROL MEASURES AND STABILIZED.

STANDARD STABILIZATION NOTE

FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, 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, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND SEVEN (7) DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.

BEST MANAGEMENT PRACTICES FOR WORKING IN NONTIDAL WETLANDS, WETLAND BUFFERS, WATERWAYS, AND 100-YEAR FLOODPLAINS

1. NO EXCESS FILL, CONSTRUCTION MATERIAL, OR DEBRIS SHALL BE STOCKPILED OR STORED IN NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS, OR THE 100-YEAR FLOODPLAIN.
2. PLACE MATERIALS IN A LOCATION AND MANNER WHICH DOES NOT ADVERSELY IMPACT SURFACE OR SUBSURFACE WATER FLOW INTO OR OUT OF NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS, OR THE 100-YEAR FLOODPLAIN.
3. DO NOT USE THE EXCAVATED MATERIAL AS BACKFILL IF IT CONTAINS WASTE METAL PRODUCTS, UNSIGHTLY DEBRIS, TOXIC MATERIAL, OR ANY OTHER DELETERIOUS SUBSTANCE. IF ADDITIONAL BACKFILL IS REQUIRED, USE CLEAN MATERIAL FREE OF WASTE METAL PRODUCTS, UNSIGHTLY DEBRIS, TOXIC MATERIAL, OR ANY OTHER DELETERIOUS SUBSTANCE.
4. PLACE HEAVY EQUIPMENT ON MATS OR SUITABLY OPERATE THE EQUIPMENT TO PREVENT DAMAGE TO NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS, OR THE 100-YEAR FLOODPLAIN.
5. REPAIR AND MAINTAIN ANY SERVICEABLE STRUCTURE OR FILL SO THERE IS NO PERMANENT LOSS OF NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, OR WATERWAYS, OR PERMANENT MODIFICATION OF THE 100-YEAR FLOODPLAIN IN EXCESS OF THAT LOST UNDER THE ORIGINALLY AUTHORIZED STRUCTURE OR FILL.
6. RECTIFY ANY NONTIDAL WETLANDS, WETLAND BUFFERS, WATERWAYS, OR 100-YEAR FLOODPLAIN TEMPORARILY IMPACTED BY ANY CONSTRUCTION.
7. ALL STABILIZATION IN THE NONTIDAL WETLAND AND NONTIDAL WETLAND BUFFER SHALL CONSIST OF THE FOLLOWING SPECIES: ANNUAL RYEGRASS (LOLIUM MULTIFLORUM), MILLET (SETARIA ITALICA), BARLEY (HORDEUM SP.), OATS (UNIOLA SP.), AND/OR RYE (SECALE CEREALE). THESE SPECIES WILL ALLOW FOR THE STABILIZATION OF THE SITE WHILE ALSO ALLOWING FOR THE VOLUNTARY REVEGETATION OF NATURAL WETLAND SPECIES. OTHER NON-PERSISTENT VEGETATION MAY BE ACCEPTABLE, BUT MUST BE APPROVED BY THE NONTIDAL WETLANDS AND WATERWAYS DIVISION, KENTUCKY 31 FESCUE SHALL NOT BE UTILIZED IN WETLAND OR BUFFER AREAS. THE AREA SHOULD BE SEEDED AND MULCHED TO REDUCE EROSION AFTER CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED.
8. AFTER INSTALLATION HAS BEEN COMPLETED, MAKE POST-CONSTRUCTION GRADES AND ELEVATIONS THE SAME AS THE ORIGINAL GRADES AND ELEVATIONS IN TEMPORARILY IMPACTED AREAS.
9. TO PROTECT AQUATIC SPECIES, IN-STREAM WORK IS PROHIBITED AS DETERMINED BY THE CLASSIFICATION OF THE STREAM:
 - USE I WATERS: IN-STREAM WORK SHALL NOT BE CONDUCTED DURING THE PERIOD MARCH 1 THROUGH JUNE 15, INCLUSIVE, DURING ANY YEAR.
 - USE III WATERS: IN-STREAM WORK SHALL NOT BE CONDUCTED DURING THE PERIOD OCTOBER 1 THROUGH APRIL 30, INCLUSIVE, DURING ANY YEAR.
 - USE IV WATERS: IN-STREAM WORK SHALL NOT BE CONDUCTED DURING THE PERIOD MARCH 1 THROUGH MAY 31, INCLUSIVE, DURING ANY YEAR.
10. STORMWATER RUNOFF FROM IMPERVIOUS SURFACES SHALL BE CONTROLLED TO PREVENT THE WASHING OF DEBRIS INTO THE WATERWAY.

30% SCHEMATIC DESIGN NOT FOR CONSTRUCTION

AECOM
4 NORTH PARK DRIVE
SUITE 300
HUNT VALLEY, MARYLAND 21030
PHONE: 410-785-7220
FAX: 410-785-6818

PROFESSIONAL CERTIFICATION
*I 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.
MD LICENSE NUMBER:
EXPIRATION DATE:

DATE

REVISIONS			
NO.	DESCRIPTION	BY	DATE
01	REVISED 30% DRAWINGS	AJP	3/3/2023

ANNE ARUNDEL COUNTY			
DEPARTMENT OF PUBLIC WORKS			
APPROVED	DATE	APPROVED	DATE
CHIEF ENGINEER		PROJECT MANAGER	
APPROVED	DATE	APPROVED	DATE
ASSISTANT CHIEF ENGINEER		CHIEF, RIGHT OF WAY	

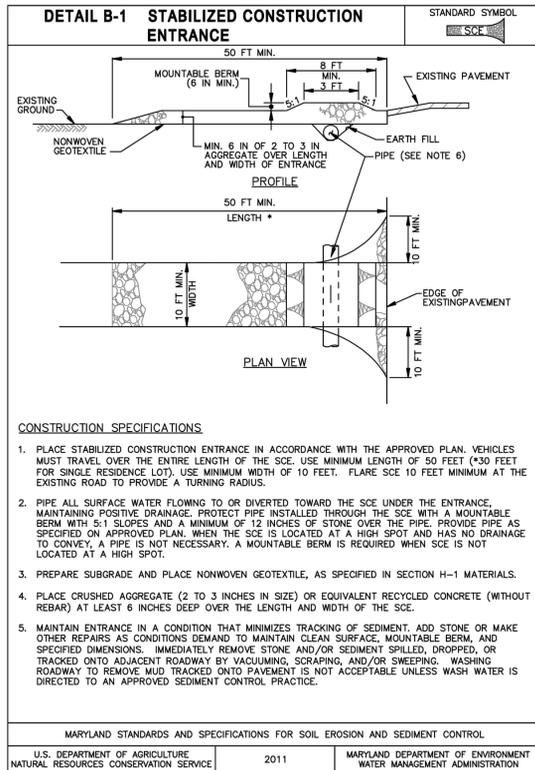
SCALE: AS NOTED
DRAWN BY: **AP**
CHECKED BY: **-**
SHEET NO. **10** OF **11**
PROJECT NO. P468700
CONTRACT NO. P468714

**HANCOCK'S RESOLUTION
SHORELINE STABILIZATION**

**EROSION AND
SEDIMENT CONTROL
NOTES**

DATE : MARCH 3, 2023

GP# _____ DWG. NO.: **ESC-01**



B-1 STANDARDS AND SPECIFICATIONS FOR STABILIZED CONSTRUCTION ENTRANCE

Definition
A layer of aggregate that is underlain with nonwoven geotextile at points of ingress and egress of the construction site.

Purpose
To reduce tracking of sediment onto roadways and provide a stable area for entrance to or exit from the construction site.

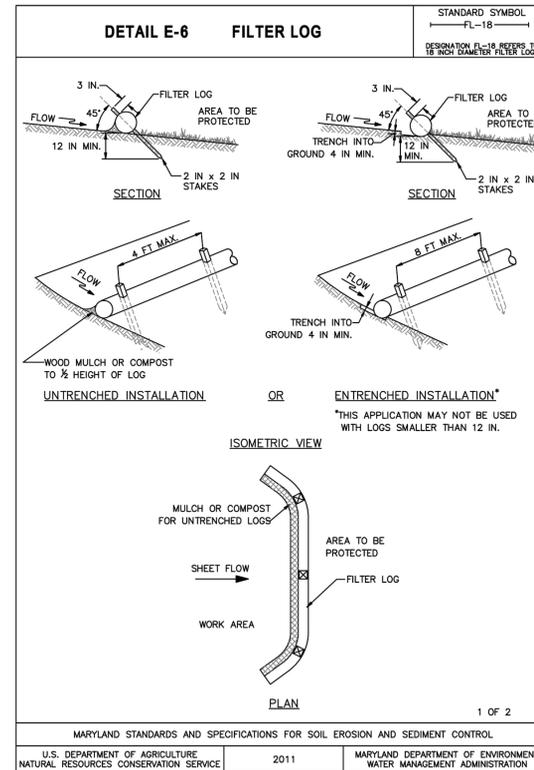
Conditions Where Practice Applies
Stabilized construction entrances must be located at all points of construction ingress and egress.

Design Criteria

- Where possible, locate the stabilized construction entrances at the high side of the project area.
- For single family residential lots, locate the entrance at the permanent driveway.
- Stabilized construction entrances cannot be installed over pavement.
- Minimum length is 50 feet (30 feet for single family residential lots).
- Minimum width is 10 feet. Flare entrance 10 feet minimum at the existing road to provide a turning radius.
- The orientation of the stabilized construction entrance may vary from a straight line to a curve or "T" shape depending on the topography and right-of-way.
- All surface water flowing to or diverted toward the stabilized construction entrance (SCE) must be piped under the entrance. Size the pipe to convey the runoff generated by the 2-year, 24-hour frequency storm at minimum. The minimum permissible pipe size is 6 inches. When the entrance is located at a high spot and has no drainage to convey, a pipe is not necessary.

Maintenance

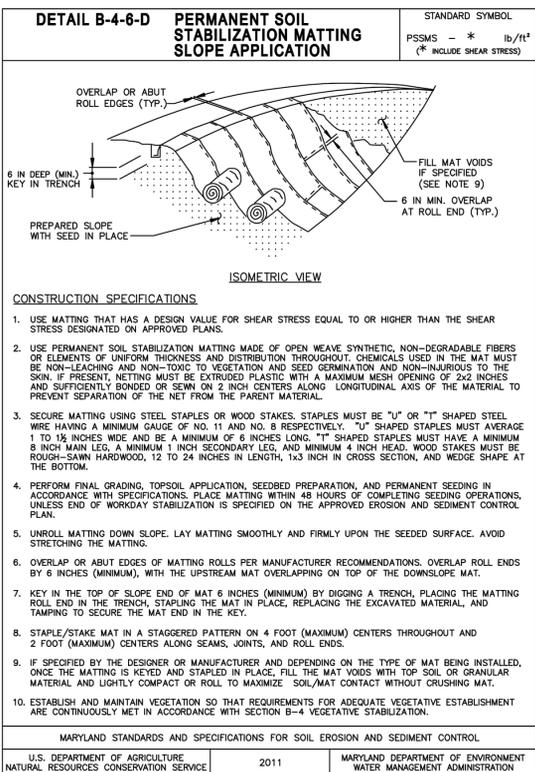
The SCE must be maintained in a condition that minimizes tracking of sediment. This may require adding stone or making other repairs as conditions demand to maintain a clean surface, the mountable berm, and the specified dimensions. All stone or sediment spilled, dropped, or tracked onto the adjacent roadway must be removed immediately by vacuuming, scraping, and/or sweeping. Washing the roadway to remove mud tracked onto pavement is not acceptable unless the wash water is directed to an approved sediment control practice.



B-1 STANDARDS AND SPECIFICATIONS FOR STABILIZED CONSTRUCTION ENTRANCE

FILTER LOG DETAIL

STABILIZED CONSTRUCTION ENTRANCE DETAIL



H-1 STANDARDS AND SPECIFICATIONS FOR MATTERIALS

Table H.1: Geotextile Fabrics

PROPERTY	TEST METHOD	MINIMUM AVERAGE ROLL VALUE ¹					
		WOVEN SLIT FILM GEOTEXTILE		WOVEN MONOFILAMENT GEOTEXTILE		NONWOVEN GEOTEXTILE	
		MD	CD	MD	CD	MD	CD
Grab Tensile Strength	ASTM D-4632	200 lb	200 lb	370 lb	250 lb	200 lb	200 lb
Grab Tensile Elongation	ASTM D-4632	15%	10%	15%	15%	50%	50%
Trapezoidal Tear Strength	ASTM D-4533	75 lb	75 lb	100 lb	60 lb	80 lb	80 lb
Puncture Strength	ASTM D-6241	450 lb		900 lb		450 lb	
Apparent Opening Size ²	ASTM D-4751	U.S. Sieve 30 (0.59 mm)		U.S. Sieve 70 (0.21 mm)		U.S. Sieve 70 (0.21 mm)	
Permittivity	ASTM D-4491	0.05 sec ⁻¹		0.28 sec ⁻¹		1.1 sec ⁻¹	
Ultraviolet Resistance Retained at 500 hours	ASTM D-4355	70% strength		70% strength		70% strength	

¹ All numeric values except apparent opening size (AOS) represent minimum average roll values (MARV). MARV is calculated as the typical minus two standard deviations. MD is machine direction; CD is cross direction.

² Values for AOS represent the average maximum opening.

Geotextiles must be evaluated by the National Transportation Product Evaluation Program (NTPPE) and conform to the values in Table H.1.

The geotextile must be inert to commonly encountered chemicals and hydrocarbons and must be rot and mildew resistant. The geotextile must be manufactured from fibers consisting of long chain synthetic polymers and composed of a minimum of 95 percent by weight of polyolefins or polyesters, and formed into a stable network so the filaments or yarns retain their dimensional stability relative to each other, including selvages.

When more than one section of geotextile is necessary, overlap the sections by at least one foot. The geotextile must be pulled taut over the prepared surface. Equipment must not run over exposed fabric. When placing riprap on geotextile, do not exceed a one foot drop height.

GEOTEXTILE SPECIFICATIONS

Table H.2: Stone Size

TYPE	SIZE RANGE	d ₅₀	d ₁₀₀	AASHTO	MIDSIZE WEIGHT ³
NUMBER 57 ¹	3/8 to 1 1/2 inch	1/2 in	1 1/2 in	M-43	N/A
NUMBER 1	2 to 3 inch	2 1/2 in	3 in	M-43	N/A
RIPRAP ² (CLASS 0)	4 to 7 inch	5 1/2 in	7 in	N/A	N/A
CLASS I	N/A	9 1/2 in	15 in	N/A	40 lb
CLASS II	N/A	16 in	24 in	N/A	200 lb
CLASS III	N/A	23 in	34 in	N/A	600 lb

¹ This classification is to be used on the upstream face of stone outlets and check dams.

² This classification is to be used for gabions.

³ Optimum gradation is 50 percent of the stone being above and 50 percent below the midsize.

Stone must be composed of a well graded mixture of stone sized so that fifty (50) percent of the pieces by weight are larger than the size determined by using the charts. A well graded mixture, as used herein, is defined as a mixture composed primarily of larger stone sizes but with a sufficient mixture of other sizes to fill the smaller voids between the stones. The diameter of the largest stone in such a mixture must not exceed the respective d₁₀₀ selected from Table H.2. The d₅₀ refers to the median diameter of the stone. This is the size for which 50 percent, by weight, will be smaller and 50 percent will be larger.

Note: Recycled concrete equivalent may be substituted for all stone classifications for temporary control measures only. Concrete broken into the sizes meeting the appropriate classification, containing no steel reinforcement, and having a minimum density of 150 pounds per cubic foot may be used as an equivalent.

STONE SIZING

30% SCHEMATIC DESIGN NOT FOR CONSTRUCTION

SOURCE: 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

AECOM
4 NORTH PARK DRIVE
SUITE 300
HUNT VALLEY, MARYLAND 21030
PHONE: 410-785-7220
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PROFESSIONAL CERTIFICATION

"I 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."

MD LICENSE NUMBER: _____

EXPIRATION DATE: _____

DATE

REVISIONS				ANNE ARUNDEL COUNTY DEPARTMENT OF PUBLIC WORKS			
NO.	DESCRIPTION	BY	DATE	DATE	DATE	DATE	DATE
01	REVISED 30% DRAWINGS	AJP	3/3/2023	APPROVED	DATE	APPROVED	DATE
				CHIEF ENGINEER	PROJECT MANAGER	CHECKED BY: AP	
				APPROVED	DATE	APPROVED	DATE
				ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY	SHEET NO. 11 OF 11	

GP# _____

DWG. NO.: ESC-02

SCALE: AS NOTED

HANCOCK'S RESOLUTION SHORELINE STABILIZATION

EROSION AND SEDIMENT CONTROL NOTES

DATE: MARCH 3, 2023