

CARRS WHARF ADA IMPROVEMENTS

ANNE ARUNDEL COUNTY, MARYLAND

PROJECT NO. P573300 CONTRACT NO. P573303

GENERAL SITE NOTES

- 1. TOPOGRAPHIC SURVEY PERFORMED BY BAYLAND CONSULTANTS & DESIGNERS, INC., DATED SEPTEMBER 2022.
- 2. HORIZONTAL AND VERTICAL CONTROL ESTABLISHED FROM REAL TIME KINEMATIC (RTK) GLOBAL POSITIONING SYSTEM (GPS) CONTROL POINTS. TRAVERSE POINTS ARE IRON REBAR UNLESS OTHERWISE SPECIFIED. COORDINATES AND BEARINGS SHOWN HEREON ARE REFERRED TO THE MARYLAND COORDINATE SYSTEM (NAD83/1991). ELEVATIONS SHOWN HEREON ARE REFERRED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD'88).

INT	NORTHING	EASTING	ELEVATION	DESCRIPTION
TPS1	445,289.67	1,448,033.36	3.12	PK NAIL
TPS2	445,526.91	1,448,178.72	6.72	MAG/DISK
TPS3	445,678.01	1,448,453.39	32.31	MAG/DISK
TPS4	445,766.39	1,448,647.00	31.47	YPC

- THE EXISTING UTILITIES, GRADES, AND OBSTRUCTIONS SHOWN ARE FROM THE BEST AVAILABLE RECORDS AND SHALL BE VERIFIED BY THE CONTRACTOR TO HIS SATISFACTION PRIOR TO CONSTRUCTION. NECESSARY PRECAUTIONS SHALL BE TAKEN BY THE CONTRACTOR TO PROTECT EXISTING SERVICES AND MAINS AND ANY DAMAGE TO THEM SHALL BE REPAIRED IMMEDIATELY AT HIS OWN EXPENSE.
- 4. CONTOURS SHOWN OUTSIDE OF LIMIT OF WORK ARE BASED ON ANNE ARUNDEL COUNTY 2020 GIS TOPOGRAPHY.
- 5. PROPERTY LINE SURVEY PERFORMED BY BAYLAND CONSULTANTS & DESIGNERS, INC., DATED JANUARY 2024.
- 6. ALL TREES WITHIN THE CRITICAL AREA WERE FIELD LOCATED. TREES WITH A 6" DIAMETER OR GREATER THAT ARE WITHIN THE LIMIT OF WORK WERE FIELD LOCATED.
- 7. WETLAND CONDITIONS AS SHOWN HEREON WERE DELINEATED BY BAYLAND CONSULTANTS AND DESIGNERS, INC IN SEPTEMBER 2022
- 8. FEMA 100-YEAR FLOODPLAIN ZONE AE EXISTS ONSITE AS SHOWN ON FEMA FIRM 24003C0244F, EFFECTIVE FEBRUARY 18, 2015.
- 9. RIPRAP SHOWN IN PLAN VIEW AND PROFILE ARE SYMBOLIC AND DO NOT REPRESENT INDIVIDUAL STONES.
- 10. RHODE RIVER (WEST RIVER WATERSHED MD BASIN CODE: 02131004) IS A USE II STREAM WITH A STREAM CLOSURE PERIOD FROM JUNE 1ST THROUGH SEPTEMBER 30TH AND DECEMBER 16TH THROUGH MARCH 14.
- 11. THE PROJECT SITE IS LOCATED WITHIN THE 100' CRITICAL AREA BUFFER.

GENERAL CONSTRUCTION NOTES

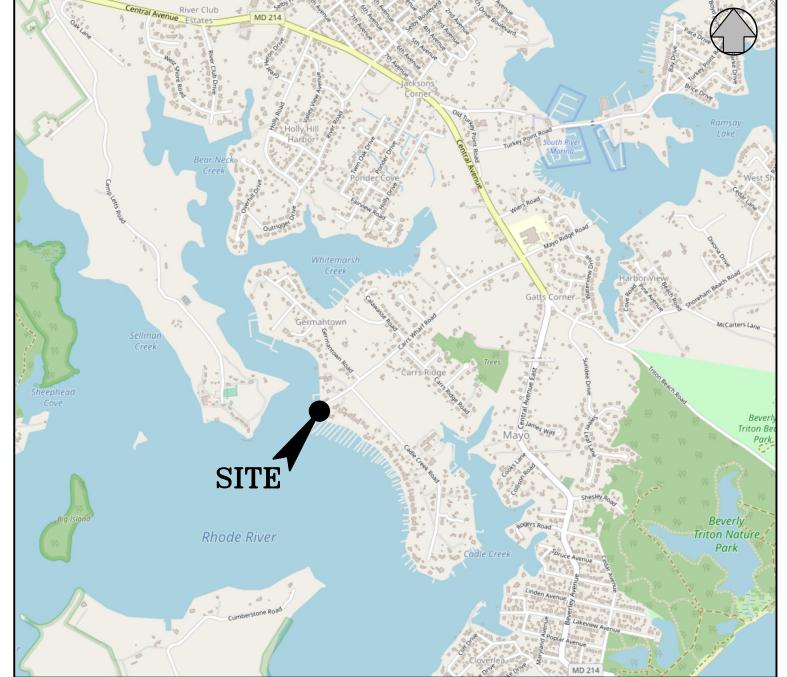
- 1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ANNE ARUNDEL COUNTY STANDARD SPECIFICATIONS AND/OR DETAILS FOR CONSTRUCTION AND THE STATE HIGHWAY ADMINISTRATION'S HIGHWAY DRAINAGE MANUAL STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION UNLESS OTHERWISE NOTED.
- 2. THE EXISTING UTILITIES AND OBSTRUCTIONS SHOWN ARE FROM THE BEST AVAILABLE RECORDS AND SHALL BE VERIFIED BY THE CONTRACTOR TO HIS SATISFACTION PRIOR TO CONSTRUCTION. NECESSARY PRECAUTIONS SHALL BE TAKEN BY THE CONTRACTOR TO PROTECT EXISTING SERVICES AND MAINS AND ANY DAMAGE TO THEM SHALL BE REPAIRED IMMEDIATELY AT HIS OWN EXPENSE.
- 3. THE CONTRACTOR SHALL CONTACT "MISS UTILITY" AT 1-800-257-7777 AND THE CITY UTILITIES MAINTENANCE DIVISION AT 240-314-8567 A MINIMUM OF 96 HOURS IN ADVANCE OF ANY EXCAVATION, BORING, PILE DRIVING AND/OR DIGGING FOR THE LOCATION OF GAS, ELECTRIC, TELEPHONE, WATER
- 4. MECHANICAL EXCAVATION SHALL NOT BE CONDUCTED WITHIN 3 FEET HORIZONTALLY OR WITHIN 2 FEET VERTICALLY OF KNOWN UTILITY LOCATIONS. HAND OR SOFT DIGGING SHALL BE DONE WITHIN THESE LIMITS. UNDERGROUND UTILITIES, ONCE UNCOVERED, SHALL BE PROTECTED FROM BEING STRUCK BY
- 5. IT SHALL BE DISTINCTLY UNDERSTOOD THAT FAILURE TO MENTION SPECIFICALLY ANY WORK WHICH WOULD NATURALLY BE REQUIRED TO COMPLETE THE PROJECT SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO COMPLETE SUCH WORK.
- 6. ALL FILL AREAS SHALL BE CLEANED OF ALL VEGETATION AND DEBRIS, SCARIFIED TO A MINIMUM DEPTH OF 12 INCHES PRIOR TO THE PLACEMENT OF FILL. FILL MATERIAL SHALL BE PLACED IN CONTROLLED LIFTS WITH A MAXIMUM THICKNESS OF 8" PRIOR TO COMPACTION THAT IS CONTINUOUS OVER
- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MATERIALS TESTING INCLUDING CONCRETE, FLOWABLE FILL, HOT MIX ASPHALT, FILL COMPACTION, AND TOPSOIL. ALL MATERIALS TESTING SHALL BE PERFORMED BY THE CONTRACTOR AND SHALL BE COMPENSATED FOR AS PART OF THE APPROPRIATE
- 8. ALL DISTURBED AREAS SHALL HAVE PERMANENT OR TEMPORARY STABILIZATION COMPLETED WITHIN:
- 8.A. END OF THE WORK DAY FOR AREAS WITHIN WATERWAYS.
- 8.B. THREE CALENDAR DAYS ON SLOPES GREATER THAN 3:1 AND TO THE SURFACE OF ALL PERIMETER SEDIMENT CONTROLS.
- 8.C. SEVEN CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS. 8.D. ALL STABILIZATION MUST BE IN ACCORDANCE WITH MARYLAND DEPARTMENT OF AGRICULTURE (MDA) FERTILIZER LAW.
- 9. ALL TREES WITH A DIAMETER GREATER THAN 6 INCHES WITHIN THE LIMIT OF DISTURBANCE SHALL NOT BE REMOVED UNLESS PRIOR APPROVAL IS OBTAINED OR EXPLICITLY SHOWN ON THE PLANS TO BE REMOVED. ALL TREES TO REMAIN WITHIN THE LIMIT OF DISTURBANCE THAT ARE NOT TO BE REMOVED SHALL BE PROTECTED WITH TREE PROTECTION FENCING.
- 10. ALL DISTURBED AREAS WITH SLOPES GREATER THAN 3:1 SHALL BE STABILIZED WITH BIODEGRADABLE SOIL STABILIZATION MATTING THAT HAS A SUFFICIENT DESIGN SHEAR STRESS FOR THE APPLICATION OR AS SHOWN ON THE APPROVED SEDIMENT AND EROSION CONTROL PLANS.
- 11. ALL PERMANENTLY STABILIZED AREAS SHALL INCLUDE A MINIMUM OF 4" OF TOPSOIL PER THE 2011 MDE SPECIFICATIONS.
- 12. ALL STAKING, RESTAKING, AND CUT SHEETS SHALL BE PERFORMED BY A REGISTERED LAND SURVEYOR OR PROFESSIONAL ENGINEER AT THE CONTRACTOR'S EXPENSE.
- 13. ALL CONSTRUCTION TO BE PERFORMED IN ACCORDANCE WITH STATE OF MARYLAND OCCUPATIONAL SAFETY LAWS.
- 14. CONTRACTOR MUST ENSURE THAT COPIES OF FEDERAL, STATE, AND LOCAL PERMITS ARE POSTED ON SITE PRIOR TO THE START OF ANY WORK.
- 15. ALL PAVED AREAS, INCLUDING ROADS AND PARKING LOTS, SHALL BE CLEANED AND CLEARED BY THE END OF EACH DAY. ANY MUD OR ROCKS TRACKED ON THE PAVED AREAS SHALL BE SWEPT BEFORE THE END OF SHIFT EACH DAY.
- 16. CONTRACTOR SHALL RESTORE ALL AREAS IMPACTED BY CONSTRUCTION ACTIVITY TO A CONDITION BETTER THAN OR EQUAL TO PRE-CONSTRUCTION CONDITION. THIS SHALL INCLUDE BUT NOT LIMITED TO GRASS AREAS, ROADS, PAVED AREAS, ETC..

SITE ANALYSIS

SHALL SERVE AS THE BASIS OF PAYMENT.

1. TOTAL SITE AREA: 1.1. PROPOSED DISTURBED AREA:	0.54 ACRE 0.17 ACRE
2. TOTAL AREA TO BE STABILIZED: 2.1. TOTAL EX. IMPERVIOUS AREA: 2.2. TOTAL EX. IMPERVIOUS AREA TO REMAIN: 2.3. TOTAL PR. IMPERVIOUS AREA: 2.4. TOTAL TO BE STABILIZED WITH VEGETATION:	0.05 ACRE
3. PROPOSED IMPERVIOUS AREA:	0.02 ACRE
4. ESTIMATED EARTH CUT:	5 CY
5. ESTIMATED MATERIAL UNDERCUT FOR SUBMERGED GRAVEL WETLAND:	25 CY
6. ESTIMATED EARTH FILL:	155 CY

THE EARTHWORK QUANTITIES SHOWN HEREON ARE FOR INFORMATION PURPOSES ONLY, BAYLAND MAKES NO GUARANTEES OF ACCURACY OF QUANTITIES OR BALANCE OF SITE. THE QUANTITY OF EXCAVATION HAS BEEN ESTIMATED BASED ON EXISTING CONDITIONS SURVEY SHOWN AND



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LEGEND

TRAVERSE POINT	TPS# I 🛆	EX. FOREST PRESERVATION AREA ——————————————————————————————————	
EX. PROPERTY LINE		EX. FIRE HYDRANT	
EX. MAJOR CONTOUR	— — -3 <i>0</i> — —	EX. MAILBOX	
EX. MINOR CONTOUR		EX. UTILITY POLE	
EX. ROAD		EX. GUY WIRE	
EX. OVERHEAD ELECTRIC LINE	——————————————————————————————————————	PR. 12" SD PR. STORM DRAIN, INLET	= 60)
EX. FEMA FLOODPLAIN	FEMA	a MANIOLE	
EX. TREELINE		PR. RIPRAP	30 5
EX. SOIL	AsE	PR. MAJOR CONTOUR ————————————————————————————————————	
EX. TREE		PR. MINOR CONTOUR ————II———	
	21.5	PR. ODD CONTOUR ————-26.65-—-	
EX. SIGN	EX. 12" SD	PR. CENTERLINE $O+OO \longrightarrow O+2!$	5
EX. STORM DRAIN, INLET & MANHOLE		PR. BORING	
EX. SEWER & MANHOLE	EX. 12" 55 EX. 12" 55	PR. TREE TO BE REMOVED	
EX. WOOD FENCE		PR. ROAD IMPROVEMENTS	
EX. GUARDRAIL		PR. SIGN	
EX. RIPRAP	05050505050505050505050505050505050505	PR. MAILBOX	
EX. WETLANDS	, silte	PR. WOOD FENCE	

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. b. 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.

a. ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE IN ACCORDANCE WITH THIS

STANDARD RESPONSIBILITY NOTES

- RESPONSIBLE PERSONNEL ON SITE: _ c. IF APPLICABLE, THE APPROPRIATE ENCLOSURE WILL BE CONSTRUCTED AND MAINTAINED ON SEDIMENT BASIN(S) INCLUDED IN THIS PLAN. SUCH STRUCTURE(S) WILL BE IN
- 2. 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.
- 3. 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

COMPLIANCE WITH THE ANNE ARUNDEL COUNTY CODE.

- 4. THE GRADING AND SEDIMENT CONTROL APPROVAL ON THIS PLAN EXTENDS ONLY TO THOSE AREAS WITHIN THE LIMITS OF DISTURBANCE.
- 5. 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.
- 6. 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.
- 7. ALL MATERIAL SHALL BE TAKEN TO A SITE WITH AN APPROVED SEDIMENT AND EROSION
- 8. 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.
- 9. APPROVAL FROM THE INSPECTOR MUST BE REQUESTED ON FINAL STABILIZATION OF ALL SITES PRIOR TO REMOVAL OF SEDIMENT AND EROSION CONTROLS.
- 10. EXISTING TOPOGRAPHY MUST BE FIELD VERIFIED BY RESPONSIBLE PERSONNEL TO THE SATISFACTION OF THE SEDIMENT CONTROL INSPECTOR PRIOR TO COMMENCING WORK.

PRINT:	NAME:	
	TITLE:	
	AFFILIATION:	
	ADDRESS:	
	TELEPHONE NUMBER:	
	EMAIL ADDRESS:	

DIAMETER OF BREAST HEIGHT ELEVATION **EXISITNG** LIMIT OF DISTURBANCE

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. 21194, EXPIRATION DATE: 04/20/2024.

SHEET LIST TABLE

SHEET	NO.	TITLE
1		COVER SHEET
2		KEY SHEET
3		EXISTING CONDITIONS & DEMOLITION PLAN
4		EXISTING CONDITIONS & DEMOLITION PLAN
5		SITE PLAN
6		SITE PLAN
7		DETAILS
8		PIER DETAILS
9		DRAINAGE AREA MAP
10		EROSION & SEDIMENT CONTROL PLAN
11		EROSION & SEDIMENT CONTROL PLAN
12		EROSION & SEDIMENT CONTROL PLAN

PROJECT INFORMATION

1.	OWNER INFORMATION:	ANNE ARUNDEL COUNTY ARUNDEL CENTER PO BOX 2700 ANNAPOLIS, MD 21404-2700
2.	DEVELOPER INFORMATION:	ANNE ARUNDEL DPW 2662 RIVA ROAD ANNAPOLIS, MD 21401 ATTN: ALEJANDRO ANVARI PH: (410) 222-7556
3.	ENGINEER:	BAYLAND CONSULTANTS AND DESIGNERS, INC.
4.	ENGINEER INFORMATION:	7455 NEW RIDGE ROAD, SUITH HANOVER, MARYLAND 21076 PH: 410-694-9401
6.	PREMISE ADDRESS:	CARRS WHARF ROAD, 1001 CARRS WHARF ROAD
7.	TAX MAP:	60, 60
5.	GRID:	22, 22
6.	PARCEL:	320, 180
7.	DEED REF:	21656/239, NA
8.	DISTRICT:	1, 1
9.	USE:	EXEMPT, EXEMPT
10.	PROPERTY AREA:	0.54 ACRES, 0.15 ACRES
11.	WATERSHED:	WEST RIVER
12.	A.A. CO. GRADING PERMIT NO:	G

CONSULTANT'S CERTIFICATION

THE DEVELOPER'S PLAN TO CONTROL SILT AND EROSION IS ADEQUATE TO CONTAIN THE SILT AND EROSION ON THE PROPERTY COVERED BY THE PLAN, I CERTIFY THAT THIS PLAN OF EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THIS SITE, AND WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AASCD PLAN SUBMITTAL GUIDELINES AND THE CURRENT MARYLAND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL. I HAVE REVIEWED THIS EROSION AND SEDIMENT CONTROL PLAN WITH THE OWNER /

	·
MD P.E. LICENSE # 21194	
NAME SEPEHR BAHARLOU	
FIRM NAME BAYLAND CONSULTANTS & DESIGNERS, INC.	
ADDRESS 7455 NEW RIDGE ROAD, SUITE T	
CITY HANOVER STATE MD ZIP CODE21076	
	SIGNATURE

AS-BUILT CERTIFICATION

PRINTED NAME

"ALL GRADING, DRAINAGE, STRUCTURES, AND EROSION AND SEDIMENT CONTROL PRACTICES INCLUDING FACILITIES AND VEGETATIVE MEASURES HAVE BEEN COMPLETED IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS AS REQUIRED BY COMAR 26.17.01.07B(3)(H).

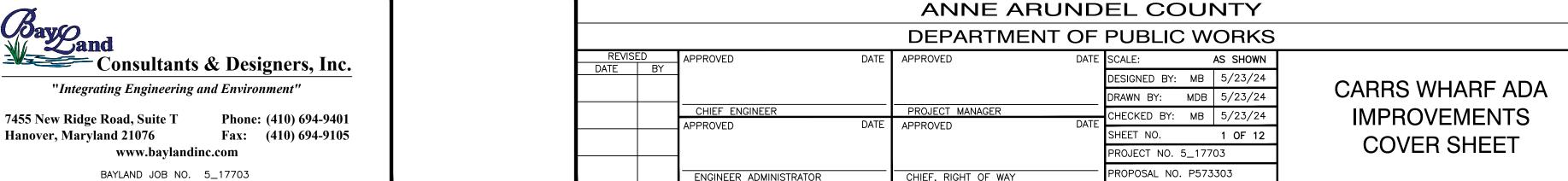
DEVIATIONS AND DIFFERENCES IN CONSTRUCTED FIELD CONDITIONS ARE SHOWN (REDLINED) ON THESE AS-BUILTS PRINTS.

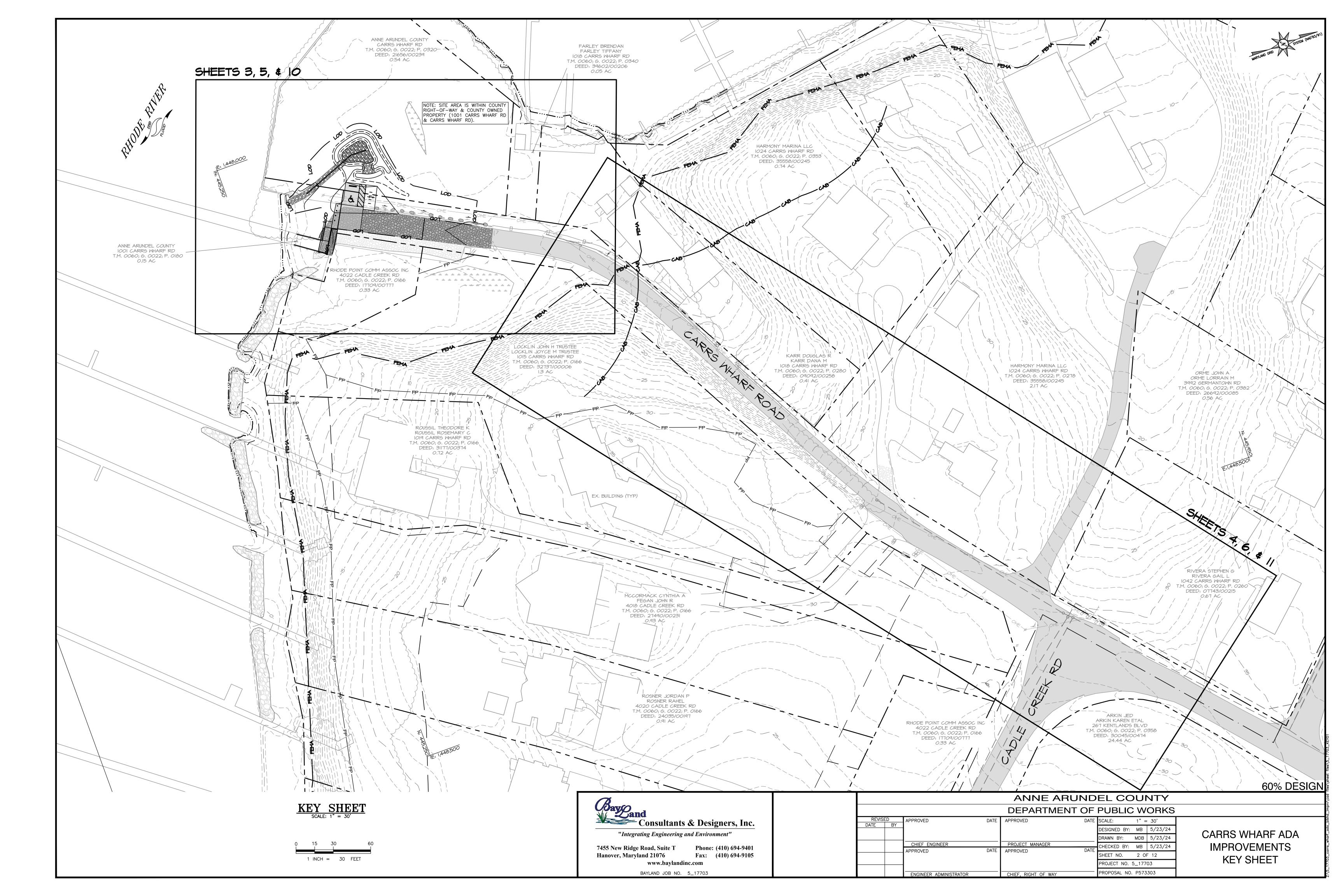
STORMWATER MANAGEMENT SYSTEMS INDICATED ON THESE DRAWINGS HAVE BEEN INSTALLED IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS

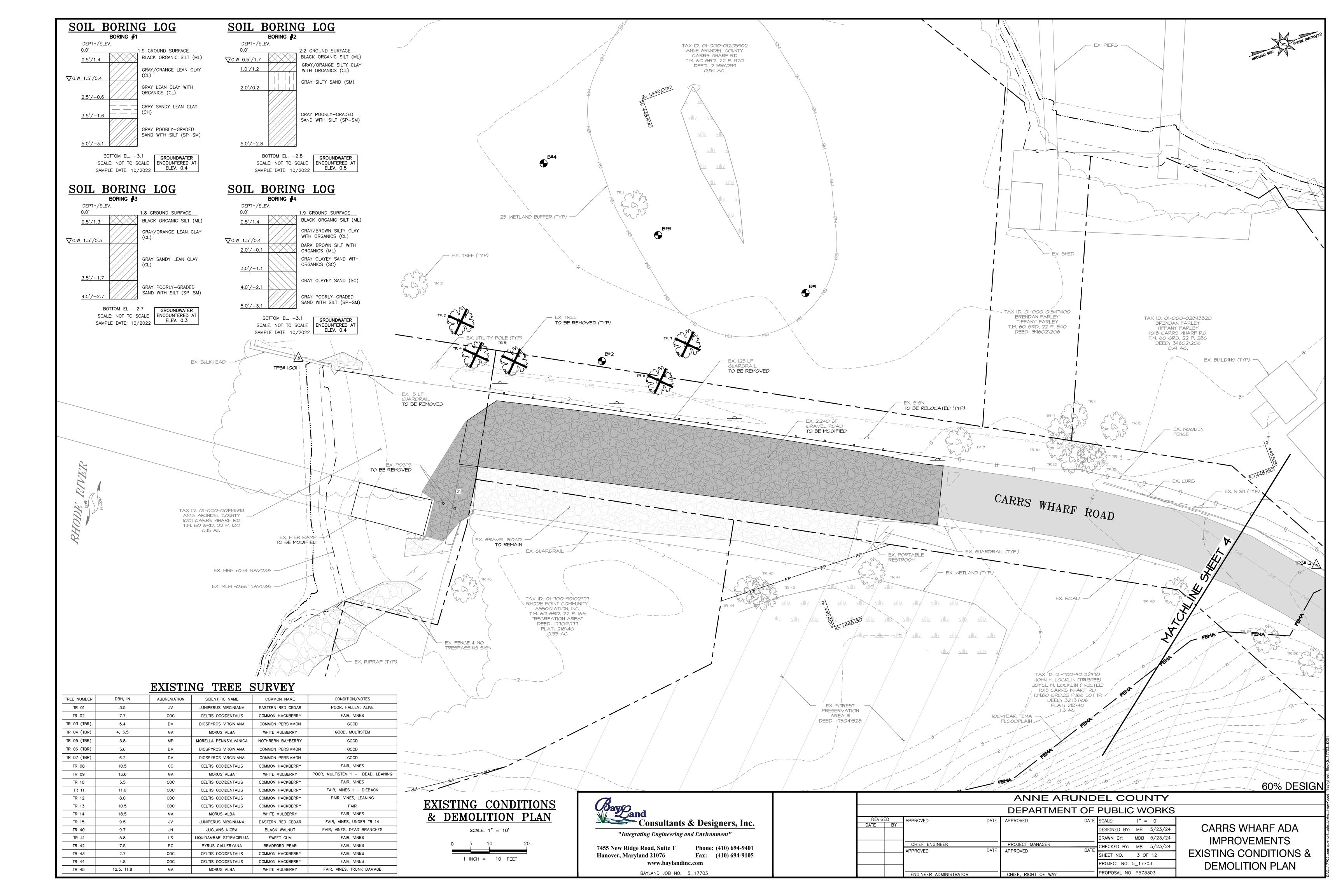
PROFESSIONAL	ENGINEER		DATE

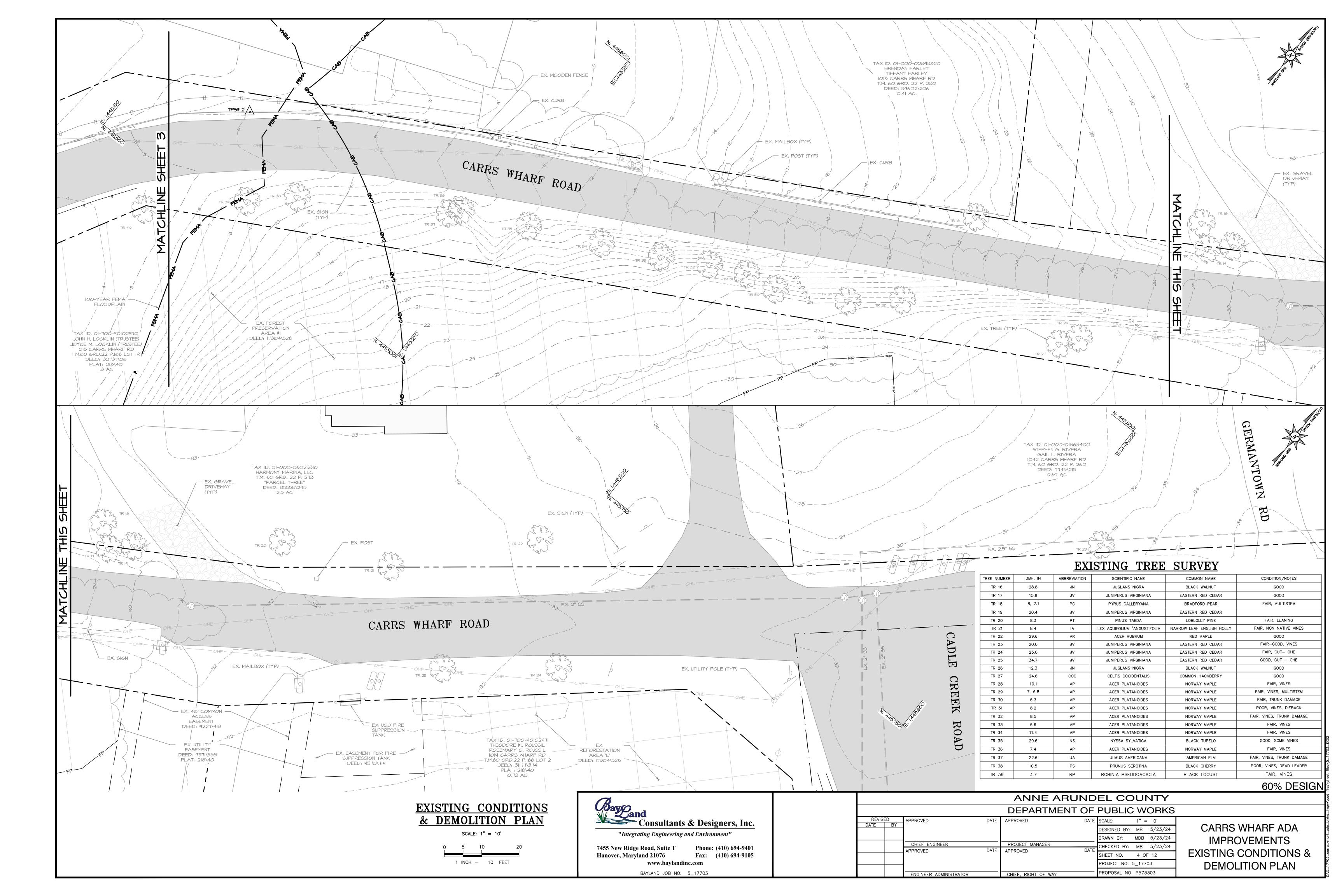
60% DESIGN

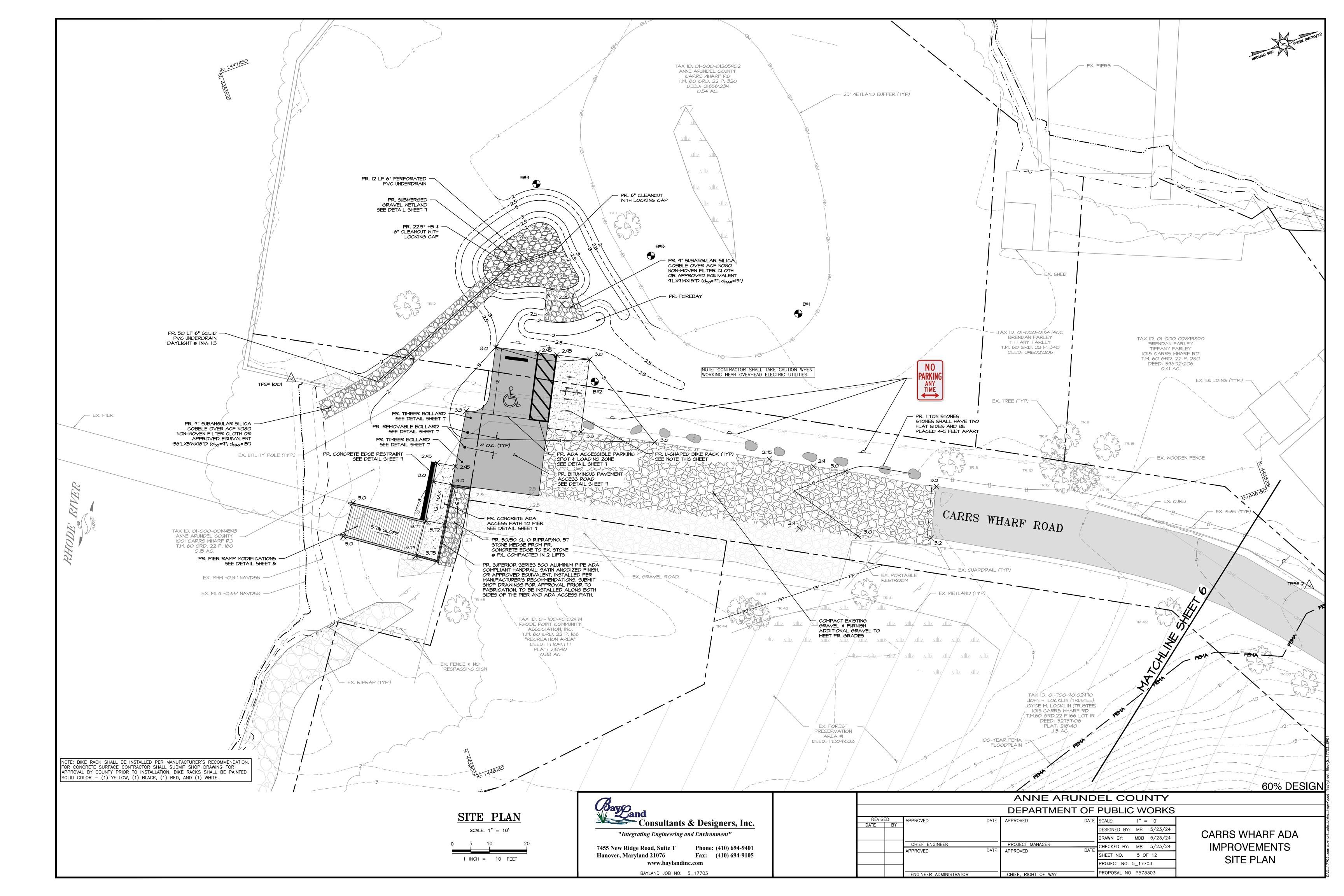
MD P.E. REGISTRATION NO.

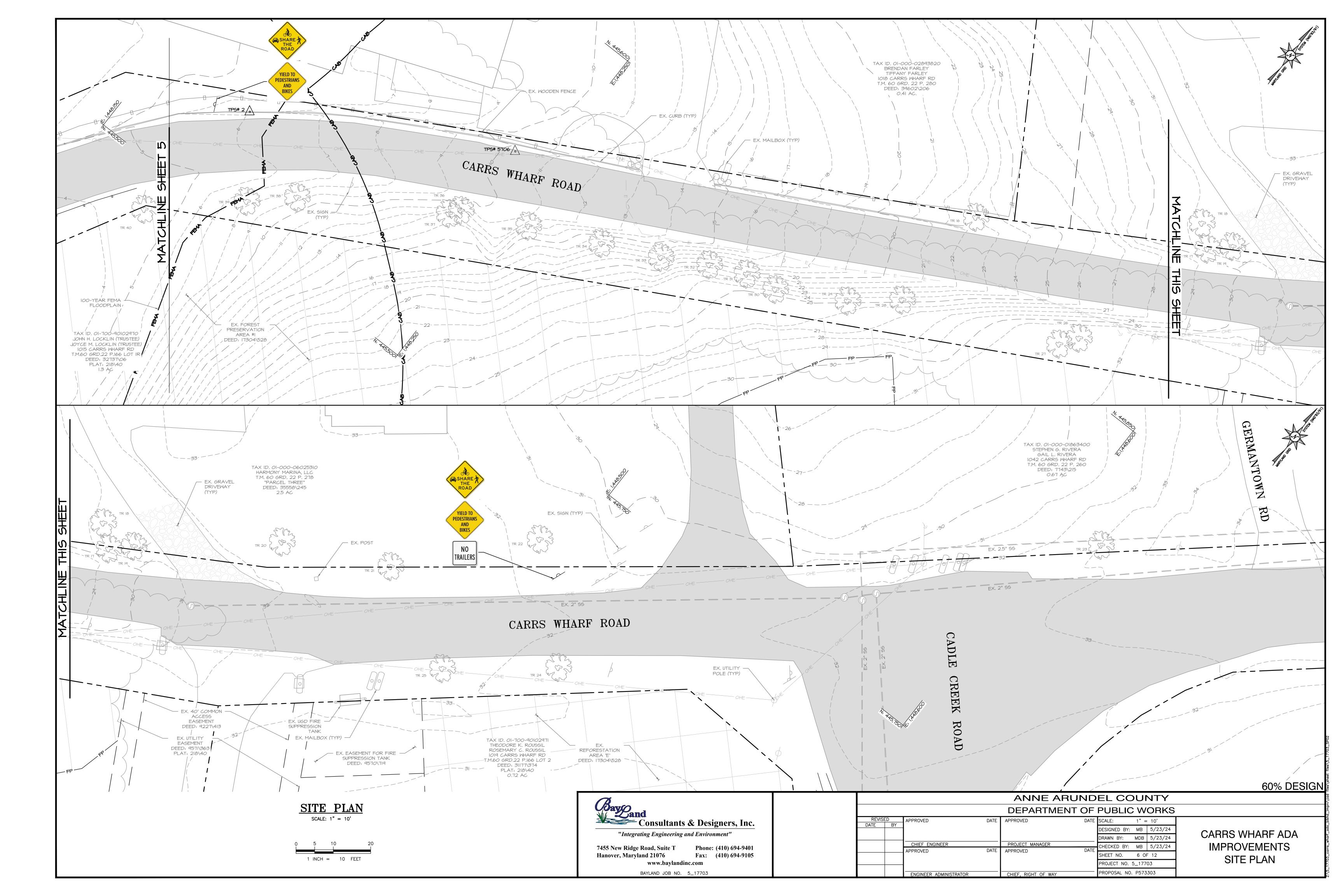


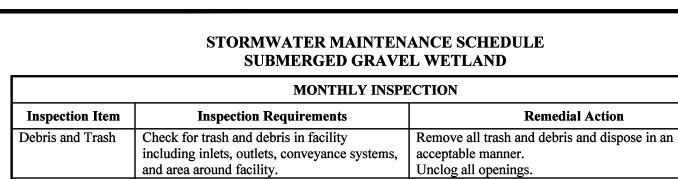












Compare plant composition with approved

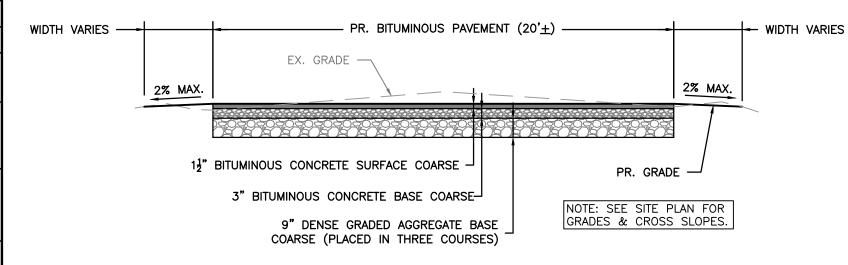
Plant Composition

and Health Replace dead plants in accordance with approved Check for invasive species or weeds. landscaping plan. Check for dead or dying vegetation. Check for channelizing, erosion, and bare Remove or cut back vegetation around inlet and outlet Vegetative Cover structures. Mow side slopes when grass exceeds 12 Check for vegetation blocking inlets and inches in height. Remove grass clippings. Re-seed or re-plant in accordance with approved landscaping plans. Check pea gravel for sediment accumulation Stabilize or replace pea gravel according to plan Pea Gravel specifications. Chimney and evidence of erosion.

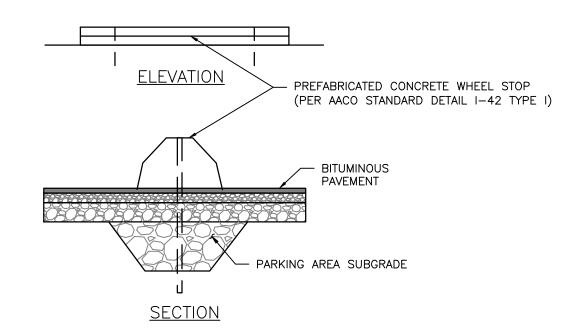
Remove invasive species and weeds.

SEASONAL INSPECTION AND AFTER A MAJOR STORM					
Inspection Item	Inspection Requirements	Remedial Action			
Dewatering	Check ponding level. Surface storage must dewater within 48 hours of rainfall. Noticeable odors, stained water on the filter surface or at the outlet, or the presence of algae or aquatic vegetation are indicators of anaerobic conditions and inadequate dewatering of the facility.	Remove and replace top six inches of pea gravel in pea gravel chimney. Confirm adequate dewatering with follow up inspections. If the facility does not function as intended after the above action, the entire system including underdrain may need refurbishing.			
Erosion	Check inlets, wetland, outlets, and side slopes for erosion, rills, gullies, and runoff channelization.	Re-grading may be required when concentrated flow causes rills or gullying through the facility. Grade, vegetate, and/or armor to provide stable conveyance in accordance with approved plans.			
Sediment Accumulation	Check for accumulated sediment in forebay. Check for accumulated sediment in gravel chimneys and wetland area. Check for clogged openings	When sediment in forebay accumulates to 6 inches in depth, clean out sediment. When sediment in gravel chimney or wetland area accumulates to 1 inch in depth, remove sediment. Remove sediment from clogged openings. Discharge any sediment-laden water through a filter bag or other dewatering device. Dispose of all sediment in an acceptable location.			
Blockages	Check overflow inlet (riser), piping, and underdrain for blockages. Check observation wells for water level.	Clear out any blockages.			

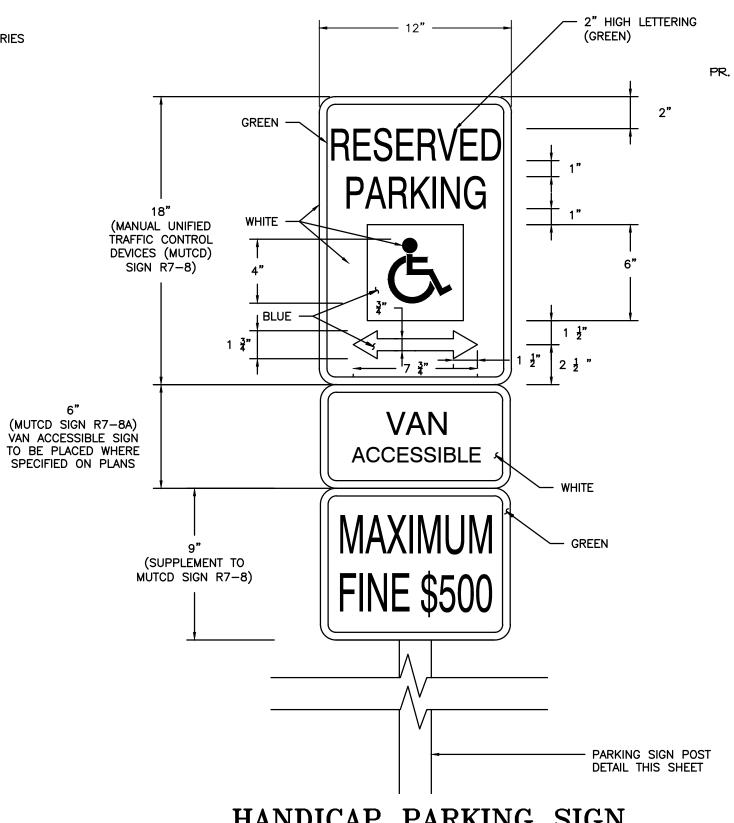
	Check observation wens for water level.	
	ANNUAL INSPE	CTION
Inspection Item	Inspection Requirements	Remedial Action
Maintenance Access	Check for accessibility to facility.	Prevent excessive vegetative growth, erosion, and obstructions on access way.
Flow Conveyance System	Check overflow inlet, piping, and bypass for misalignments, breakage, and blockage.	Repair any broken or faulty piping. Clear out any blockages.
Structural Components	Check for evidence of structural deterioration, spalling, or cracking. Inlet and outlet structures as well as riprap outfalls must be in good condition.	Repair to good condition according to specifications of the approved plans.
Overall Function of Facility	Check that practice is functioning as designed.	Repair to good condition according to specifications of the approved plans.



ACCESS ROAD DETAIL SCALE: NOT TO SCALE



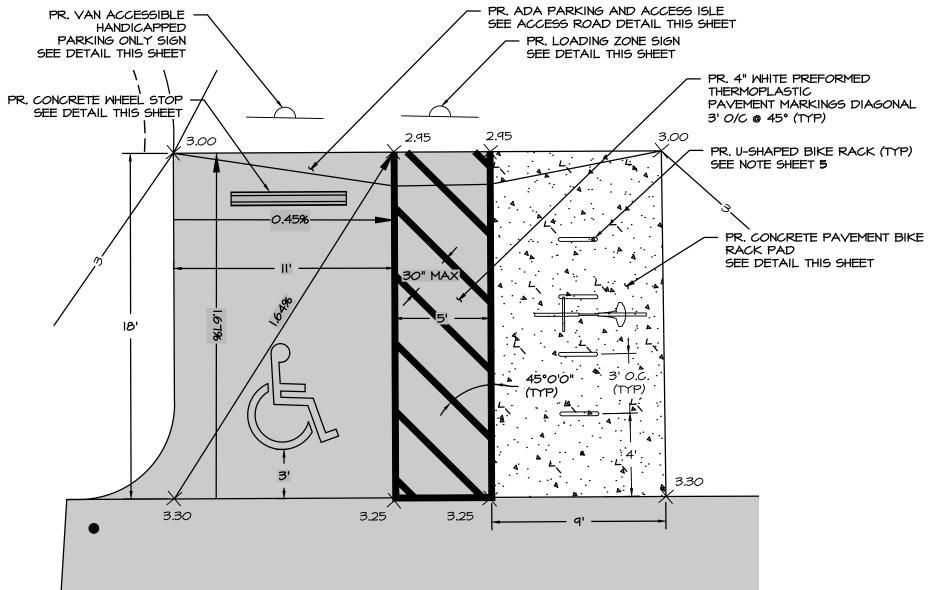
CONCRETE WHEEL STOP SCALE: NOT TO SCALE



HANDICAP PARKING SIGN

NOTES:

- BOTTOM EDGE OF SIGN SHALL BE A MINIMUM OF 6' ABOVE FINISHED GRADE. CONTRACTOR SHALL INSTALL ONE SIGN PER HANDICAP PARKING SPACE.
- SIGN ARE TO BE CENTERED ON STALL WIDTH, FACING PARKING. 4. ALL SIGNS SHALL HAVE A WHITE BACKGROUND WITH GREEN LETTERING IN ACCORDANCE WITH THE MUTCD AND MARYLAND SHA STANDARDS, LATEST EDITION THEREOF.



HANDICAP PARKING INSET

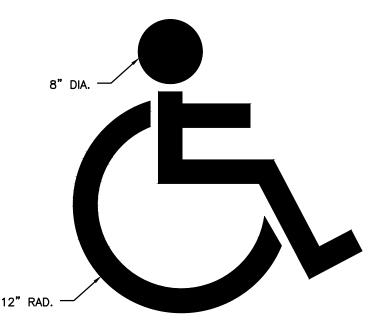
SCALE: 1" = 5

STRIPING SPECIFICATIONS

- 1. WHITE THERMOPLASTIC STRIPING (4" WIDE) AT ALL PARKING
- SPACES. 2. WHITE (4" WIDE) THERMOPLASTIC DIAGONAL STRIPING AT NO PARKING AREAS AND ACCESS AISLES SHALL BE A MINIMUM FIVE FEET (5') WIDE FOR PEDESTRIAN ACCESS IN ACCORDANCE WITH APPLICABLE ACCESSIBILITY REQUIREMENTS. THE DIAGONAL STRIPES
- SHALL BE SPACED 3 FEET ON CENTER @ 45°. 3. APPLY PAVEMENT MARKINGS TO CLEAN DRY PAVEMENT WHEN PAINT, AMBIENT AND SURFACE TEMPERATURE, AND RELATIVE HUMIDITY CONFORM TO THE MANUFACTURER'S RECOMMENDATIONS.

HANDICAP PARKING NOTES

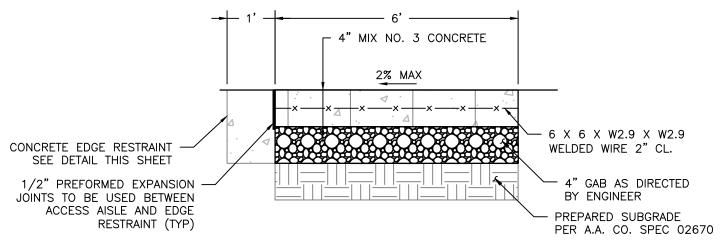
- 1. PARKING SPACE SHALL BE 132 INCHES WIDE MINIMUM, MARKED TO DEFINE THE WIDTH, AND MAXIMUM SLOPE IN ALL DIRECTIONS
- 2. BOUNDARY OF THE UNLOADING/LOADING AREAS & NO PARKING ZONE MUST BE CLEARLY MARKED SO AS TO DISCOURAGE



HANDICAP SYMBOL DETAIL

SCALE: NOT TO SCALE

1. SYMBOL LINES SHALL BE 3" WIDE (MIN.) AND PAINTED ON THE HANDICAPPED SPACE.



ADA ACCESS PATH DETAIL

1. PANELS SHALL BE 5' IN LENGTH. 2. PREFORMED 1/2" EXPANSION JOINTS SHALL BE USED EVERY 15'. 1" DEEP, 3/8" RADIUS CONTROL JOINTS SHALL BE USED EVERY 5'. 1/2" EXPANSION JOINTS SHALL BE USED WHERE EDGE RESTRAINT MEETS ADA ACCESS PATH.

EX. GRADE —

18" BANK

RUN GRAVEI

6" WETLAND

GRAVEL MEDIA

SOIL MEDIA

PR. NON-WOVEN GEOTEXTILE BOTTOM AND SIDES OF

ELEV. 3.0

ELEV. 2.5

ELEV. 2.0

ELEV. 1.5

ELEV. 0.0

SUBMERGED GRAVEL WETLAND

SUBMERGED GRAVEL WETLAND TYPICAL SECTION

TESD PONDING

PR. 6" CLEANOUT

6" MAX.

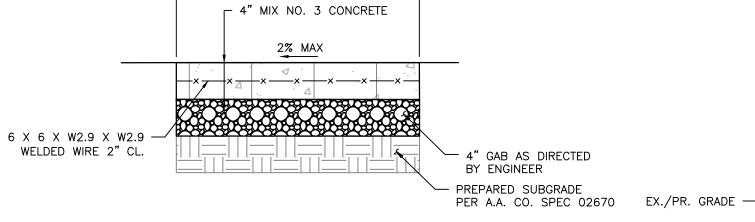
PONDING -

WITH LOCKING CAP

- PR. 6" PERFORATED PVC @ 0%

PR. 3" MIN. CLEAN WASHED

3/4" CRUSHED STONE BENEATH



BIKE RACK PAD DETAIL

- PR. 6" PVC @ 0%

PR. 9" SUBANGULAR SILICA

NON-WOVEN FILTER CLOTH OR

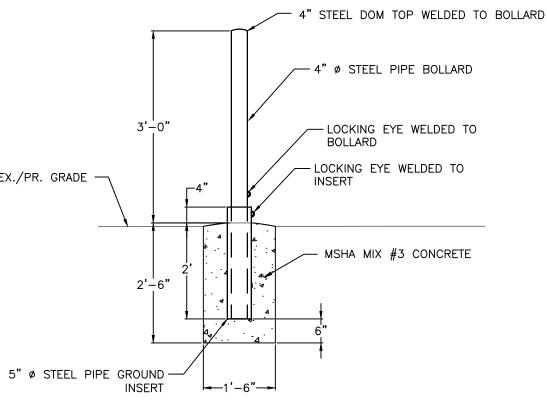
56'LX5'WX18"D (d₅₀=9"; d_{MAX}=15")

COBBLE OVER ACF NO80

APPROVED EQUIVALENT

INV: 1.5

1. PANELS SHALL BE 5' IN LENGTH. 2. PREFORMED 3/8" EXPANSION JOINTS SHALL BE USED EVERY 15'. 1" DEEP, 3/8" RADIUS CONTROL JOINTS SHALL BE USED EVERY 5'.

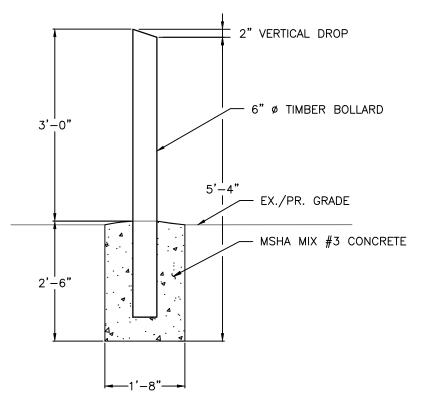


REMOVABLE BOLLARD DETAIL

SCALE: NOT TO SCALE

NOTES:

- 1. ALL BOLLARDS SHALL HAVE A MINIMUM OF 32" CLEARANCE BETWEEN ADJACENT BOARDS.
- ALL PIPE TO BE STANDARD WEIGHT AS PER AISC MANUAL. . ALL EXPOSED METAL SURFACES SHALL BE PAINTED WITH GALVANIZED PAINT - ONE COAT METAL PRIMER AND TWO COATS GLIDDEN GLID-GUARD ALKYD INDUSTRIAL ENAMEL "SAFETY YELLOW" NO. 4540.



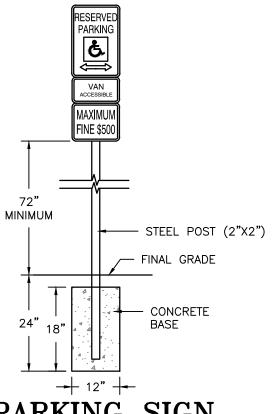
TIMBER BOLLARD DETAIL

SCALE: NOT TO SCALE

NOTES:

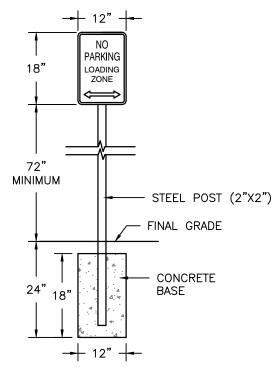
- 1. ALL BOLLARDS SHALL HAVE A MINIMUM OF 32" CLEARANCE BETWEEN ADJACENT BOARDS.
- 2. TIMBER BOLLARDS SHALL BE PRESSURE TREATED FOR GROUND CONTACT.
- 3. TREAT CUT ENDS ON SITE WITH CLEAR PRESERVATIVE SUITABLE FOR PRESSURE TREATED WOOD AND OUTDOOR

ENGINEER ADMINISTRATOR



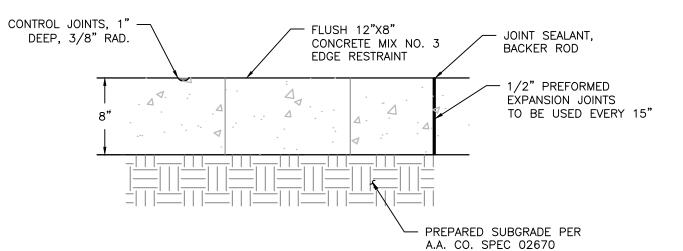
PARKING SIGN POST DETAIL

SCALE: NOT TO SCALE



LOADING ZONE SIGN POST DETAIL

SCALE: NOT TO SCALE NOTE: SIGN TO BE IN ACCORDANCE WITH MUTCD R7-6



CONCRETE EDGE RESTRAINT DETAIL

SCALE: NOT TO SCALE

1. NO SECTION SHALL BE SHORTER THAN 4' IN LENGTH. 2. PREFORMED 1/2" EXPANSION JOINTS SHALL BE USED EVERY 15', CONTROL JOINTS SHALL BE USED EVERY 5', AND 1/2" EXPANSION JOINTS SHALL BE USED WHERE EDGE RESTRAINT MEETS ADA ACCESS PATH.

PROPOSAL NO. P573303

60% DESIGN

CARRS WHARF ADA

IMPROVEMENTS

DETAILS



1 INCH = 10 FEET1 INCH = 5 FEET



7455 New Ridge Road, Suite T Phone: (410) 694-9401 Hanover, Maryland 21076 Fax: (410) 694-9105 www.baylandinc.com

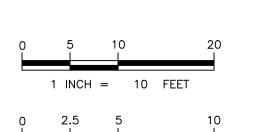
BAYLAND JOB NO. 5_17703

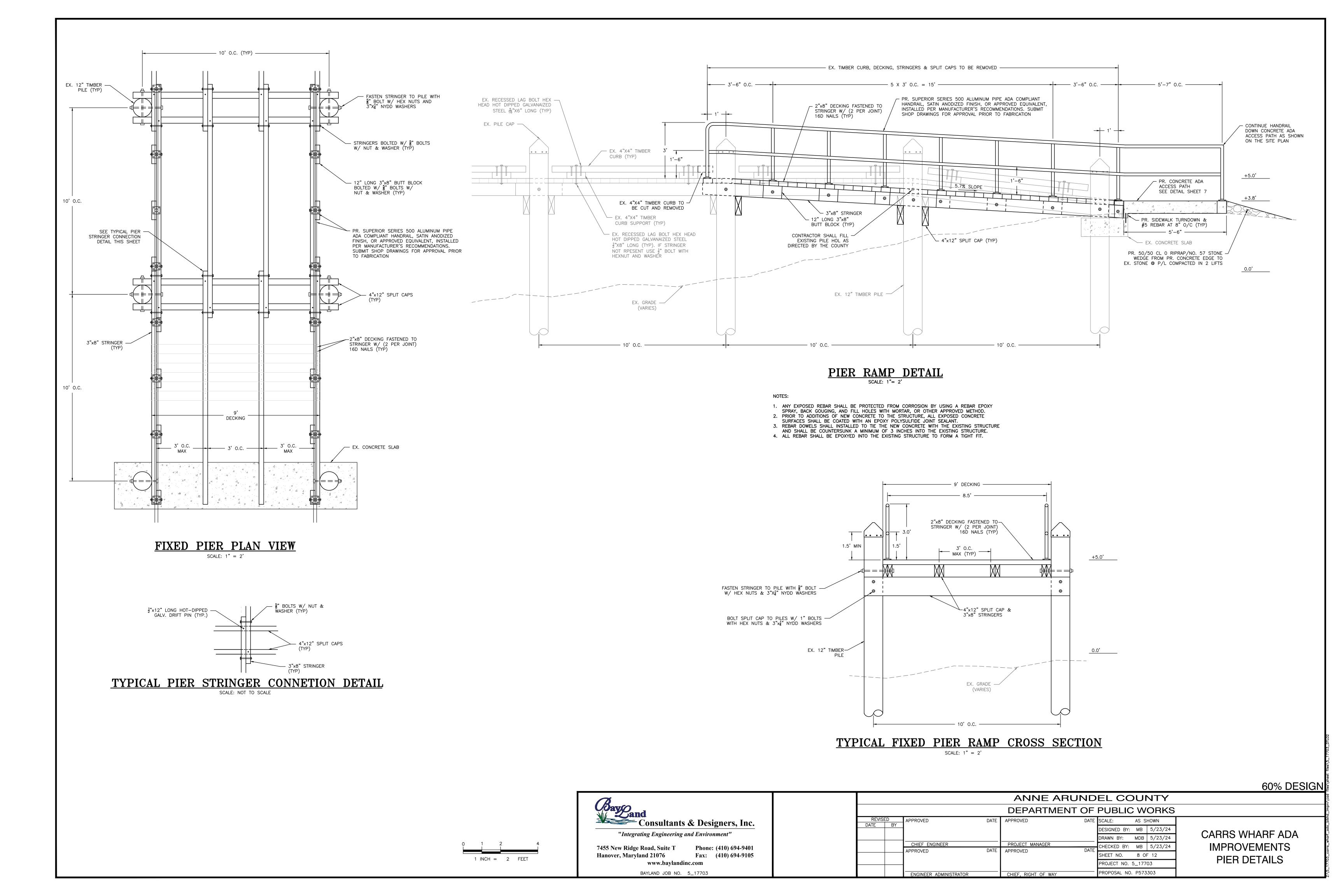
		ANNE ARUNDEL COUNTY						
				DEPARTMENT	OF	PUBLIC	W	ORKS
REVISE	ΞD	APPROVED	DATE	APPROVED	DATE	SCALE:	AS SI	HOWN
DATE	BY						1	5 (07 (0 t
						DESIGNED BY:	МВ	5/23/24
						DRAWN BY:	MDB	5/23/24
		CHIEF ENGINEER		PROJECT MANAGER		CHECKED BY:	мв	5/23/24
		APPROVED	DATE	APPROVED	DATE	OHLONED DI.	ואוט	0/20/21
						SHEET NO.	7 OF	12
						PROJECT NO. 5	5_1770	03

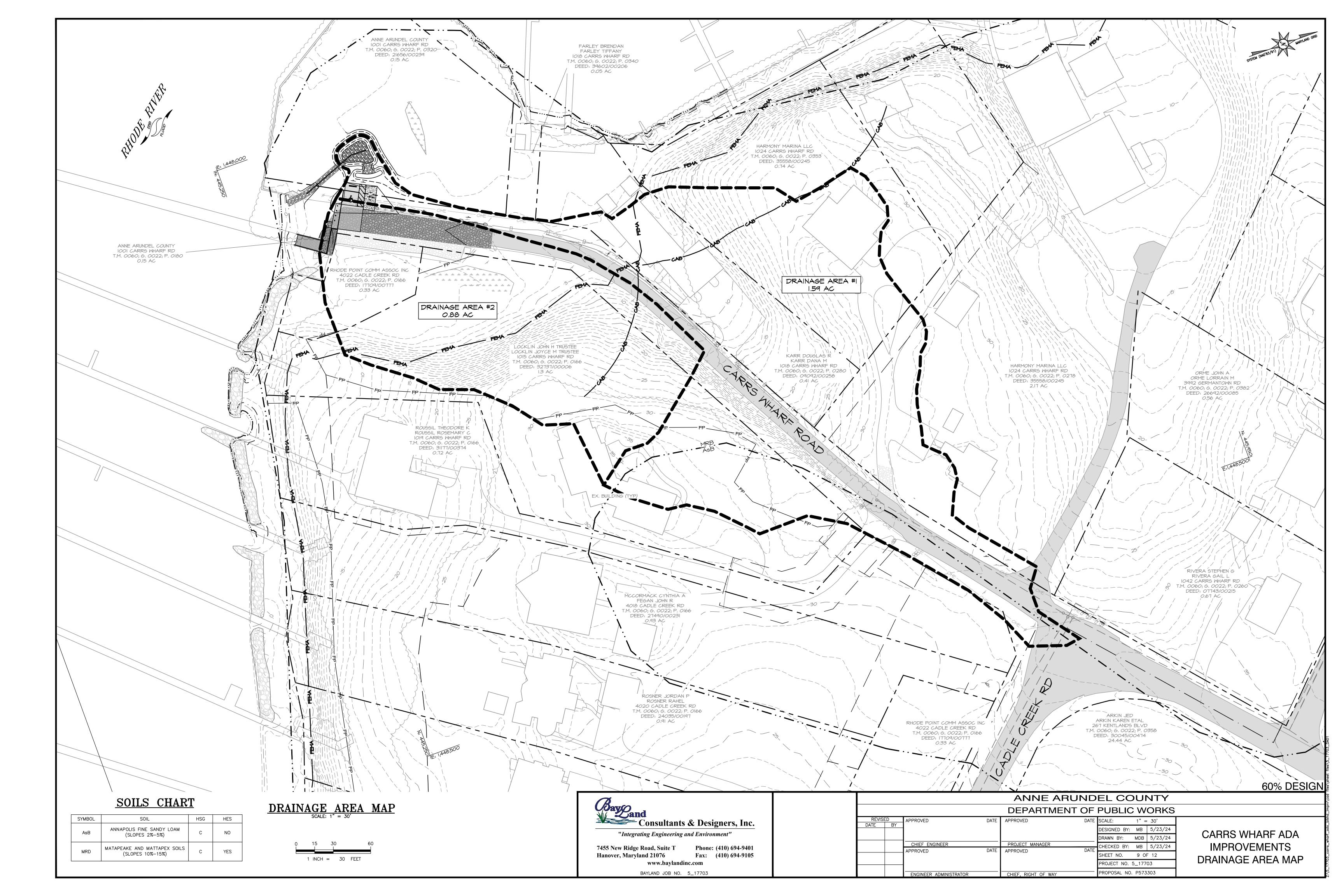
CHIFE RIGHT OF WAY

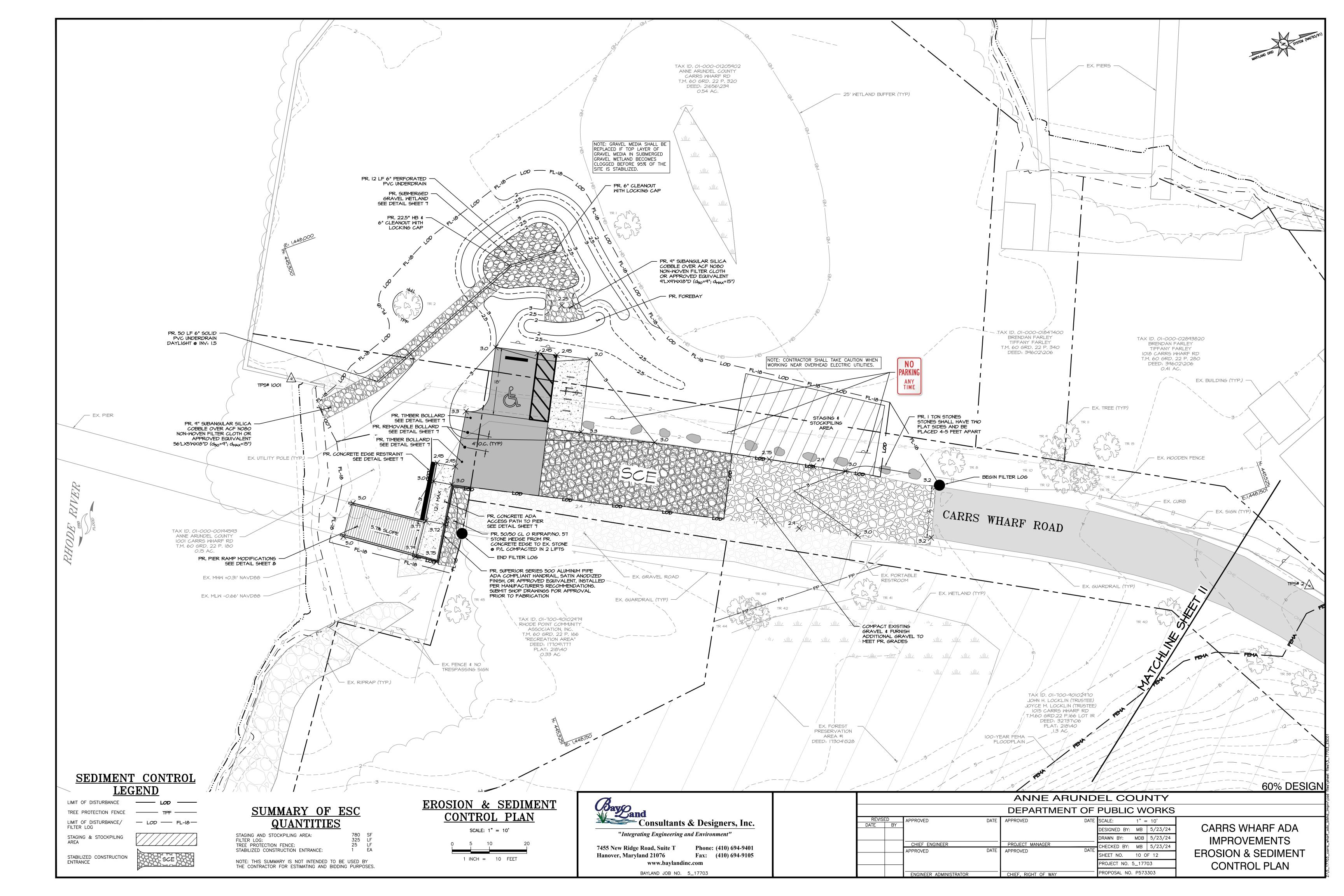
SCALE: NOT TO SCALE MATERIAL SPECIFICATIONS

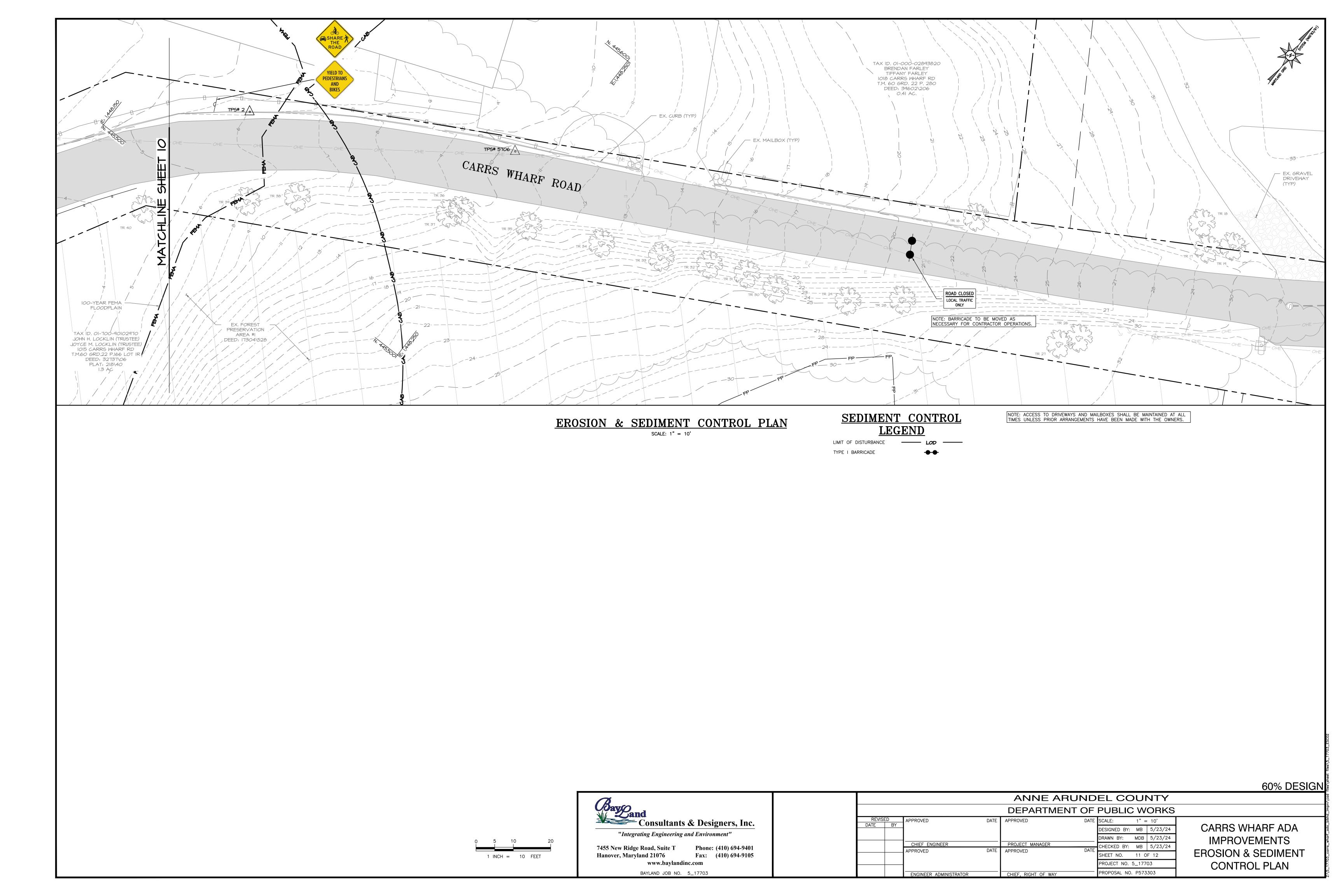
MATERIAL **SPECIFICATION** LOAMY SAND (60-65%) & WETLAND USDA SOIL TYPE LOAMY SAND OR SANDY LOAM; CLAY CONTENT <5% COMPOST (35-40%) SOIL MEDIA AGGREGATE MEETING ASTM BANK RUN WASHED D448, NO. 4, 5, OR 6 STONE GRAVEL ACF NO80 NON-WOVEN GEOTEXTILE OR APPROVED EQUIVALENT











STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION TOPSOILING, AND SOIL AMENDMENTS

2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL (B-4-2)

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
- 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.

OR OTHER SUITABLE MEANS

- 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
- 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.

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
- 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
- g. 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 NO 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
- 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
- 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
- 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.

EXCAVATION AND STOCKPILING NOTES

- 1. AT A MINIMUM, WET SEDIMENT SHALL BE PARTIALLY DEWATERED ON-SITE BEFORE TRANSPORT TO THE AN APPROVED DISPOSAL SITE.
- 2. STOCKPILING OF EXCAVATED MATERIAL SHALL OCCUR WITHIN THE LIMIT OF DISTURBANCE. SEDIMENT CONTROL WILL BE INSTALLED AS NEEDED AND REQUIRED BY COUNTY INSPECTOR.
- 3. MAXIMUM STOCKPILE HEIGHT SHALL NOT EXCEED 15 FEET AND MAXIMUM SLOPE SHALL NOT EXCEED 2:1
- 4. WET MATERIAL SHALL BE TRANSPORTED IN LINED OR WATER TIGHT TRUCKS, ADEQUATELY COVERED/TARPED OVER THE TOP. SUFFICIENT FREEBOARD MUST BE MAINTAINED TO PREVENT SPILLING OVER THE SIDES.
- 5. CONTRACTOR SHALL KEEP STREET FREE OF ANY MATERIAL. IF NECESSARY, CONTRACTOR MAY BE REQUIRED TO PERFORM ROUTINE STREET SWEEPING AND/OR STREET CLEANING.
- 6. NON-ERODABLE MATERIALS MAY BE STOCKPILED ANYWHERE WITHIN THE LIMIT OF DISTURBANCE THAT DOES NOT IMPACT COUNTY ACCESS.

STANDARDS AND SPECIFICATIONS FOR SEEDING AND MULCHING

- A. SEEDING 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
- 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.
- d. 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
- 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
- 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; P205 (PHOSPHOROUS), 200 POUNDS PER ACRE; K20 (POTASSIUM), 200 POUNDS
- ii. 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
- 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
- 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.
- 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.

iii. WCFM MATERIALS ARE TO BE MANUFACTURED AND PROCESSED IN SUCH A MANNER THAT THE

- iv. WCFM MATERIAL MUST NOT CONTAIN ELEMENTS OR COMPOUNDS AT CONCENTRATION LEVELS
- 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
- 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.
- 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

- iii. SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRO-TACK), DCA-70, PETROSET, TERRA TAX II, TERRATACK 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.

STABILIZATION NOTES

- 1. DISTURBED AREAS WITHIN THE LIMITS OF DISTURBANCE SHALL BE STABILIZED PER THE DETAILS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS.
- 2. TEMPORARY STABILIZATION FOR ANY AREA OF EARTH DISTURBANCE AROUND THE SUBMERGED GRAVEL WETLAND SHALL BE CONSIDERED ACHIEVED WHEN COVERING AREA WITH 4 TO 8 NCHES OF TOPSOIL. ANNUAL RYE MAY BE UTILIZED FOR TEMPORARY SEEDING DURING SEEDING APPLICATION PERIOD FOUND UNDER THE STANDARDS AND SPECIFICATIONS FOR SEEDING AND MULCHING
- 3. PERMANENT STABILIZATION FOR ANY AREA OF EARTH DISTURBANCE AROUND THE SUBMERGED GRAVEL WETLAND SHALL BE CONSIDERED ACHIEVED WHEN COVERING THE AREA WITH 4 TO 8 INCHES OF TOPSOIL AND THE PLANTING PLAN HAS BEEN IMPLEMENTED. SHEEP FESCUE AND DEERTONGUE MAY BE UTILIZED FOR PERMANENT SEEDING DURING SEEDING APPLICATION PERIOD FOUND UNDER THE STANDARDS AND SPECIFICATIONS FOR SEEDING AND MULCHING.

	PERMANENT SEEDING SUMMARY							
HARDINESS ZONE (FROM FIGURE B.3): 7a FERTILIZER RATE (10-20-20)								
NO.	SPECIES	APPLICATION RATE (lb/ac)	SEEDING DATES	SEEDING DEPTHS	N	P ₂ O ₅	K₂O	LIME RATE
3	DEER TONGUE SHEEP FESCUE REDTOP COMMON LESPEDEZA	20 20 1 10	2/15 - 4/30 8/1 - 10/31	1" - 1"	45 LB/AC	90 LB/AC	90 LB/AC	2 TONS/AC

TEMPORARY SEEDING SUMMARY						
HARDINESS ZONE (FROM FIGURE B.3): 7a SEED MIXTURE (FROM TABLE B.1)					FERTILIZER RATE	
NO.	SPECIES	APPLICATION RATE (lb/ac)	SEEDING DATES	SEEDING DEPTHS	(10-20-20)	LIME RATE
TEMPORARY	ANNUAL RYEGRASS	40	2/15 - 4/30 8/15 - 11/30	0.5"	436 LB/AC	2 TONS/AC
TEMPORARY	WHEAT	120	2/15 - 4/30 8/15 - 11/30	1.0"	436 LB/AC	2 TONS/AC

SEQUENCE OF CONSTRUCTION

DURATION OF THE PROJECT.

NECESSARY WHERE GROUNDWATER IS PRESENT.

- 1. ESTABLISH ALL PERMITS HAVE BEEN OBTAINED. PERMITS SHALL BE DISPLAYED ON SITE AT ALL TIMES THROUGHOUT THE
- 2. THE CONTRACTOR SHALL CALL "MISS UTILITY" (1-800-257-7777) A MINIMUM OF TWO WEEKS IN ADVANCE OF ANY EXCAVATION AND/OR DIGGING. THE CONTRACTOR SHALL NOTIFY THE ANNE ARUNDEL COUNTY DEPARTMENT OF INSPECTIONS AND PERMITS (410-222-7780) AT LEAST 48 HOURS BEFORE COMMENCING WORK TO SCHEDULE A PRE-CONSTRUCTION MEETING. 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.
- 3. HOLD A PRE-CONSTRUCTION MEETING BETWEEN PROJECT REPRESENTATIVES INCLUDING BUT NOT LIMITED TO THE OWNER, ENGINEER, CONTRACTORS, UTILITY REPRESENTATIVES, INSPECTOR, ETC. ALL EROSION AND SEDIMENT CONTROL ACTIVITIES SHALL BE APPROVED BY THE COUNTY
- 4. CLEAR AND GRUB THE SITES FOR INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES ONLY. INSTALL ANY REQUIRED SEDIMENT CONTROL MEASURES. THIS SHALL INCLUDE BUT NOT BE LIMITED TO STABILIZED CONSTRUCTION ENTRANCE. FILTER LOGS, STOCKPILE AREAS, TREE PROTECTION FENCE, AND CONSTRUCTION BARRICADES & SIGNAGE.
- DEMOLITION PLAN. 6. BEGIN ROUGH GRADING. CONTRACTOR SHALL ONLY DISTURB AN AREA THAT CAN BE COMPLETED AND STABILIZED AT THE END OF EACH WORK DAY. WITH SEDIMENT CONTROL INSPECTOR'S APPROVAL, SUMP PITS, PIPES, AND FILTRATION DEVICES MAY BE
- 7. BEGIN INSTALLATION OF PIER MODIFICATIONS AND ADA ACCESSIBLE PATH, BEGIN INSTALLATION OF ACCESS ROAD, ADA ACCESSIBLE PARKING, CONCRETE PAVEMENT, BOLLARDS, STONES, BIKE RACKS, WOODEN FENCES, PERMANENT SIGNAGE, SUBMERGED GRAVEL WETLAND, UNDERDRAIN, FOREBAY, COBBLE SWALE, AND COBBLE OVERFLOW.

5. BEGIN REMOVAL AND DISPOSAL OF EXISTING STRUCTURES AND TREES AS SHOWN ON THE EXISTING CONDITIONS AND

- 8. UPON COMPLETION OF PROPOSED FEATURES, FINE GRADE THE WORK AREAS, REINSTALL ANY EXISTING STRUCTURES, REMOVE STOCKPILE AREAS, AND RESTORE ANY DAMAGES CAUSED TO EXISTING STRUCTURES DURING CONSTRUCTION.
- 9. ONCE THE AREA HAS BEEN 95% STABILIZED AND WITH PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, REMOVE ALL REMAINING SEDIMENT CONTROL DEVICES. IMMEDIATELY STABILIZE ANY DISTURBED AREAS THAT RESULT FROM THE SEDIMENT
- 10. INSTALL ANY PLANTINGS AS SHOWN ON THE PLANS DURING THE APPROPRIATE CALENDAR PERIOD.
 - 3 DAYS TOTAL 50 DAYS

__DAYS__

1 DAY

2 DAYS

1 DAY

1 DAY

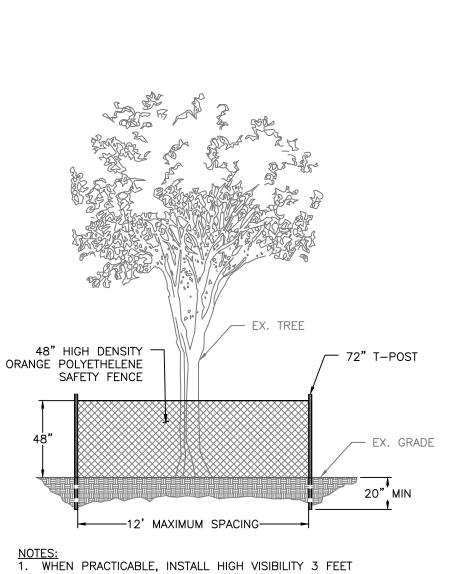
2 DAYS

15 DAYS

20 DAYS

4 DAYS

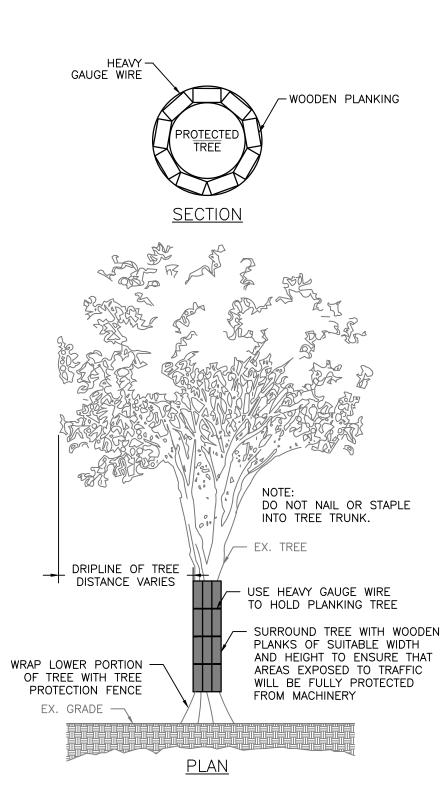
1 DAY



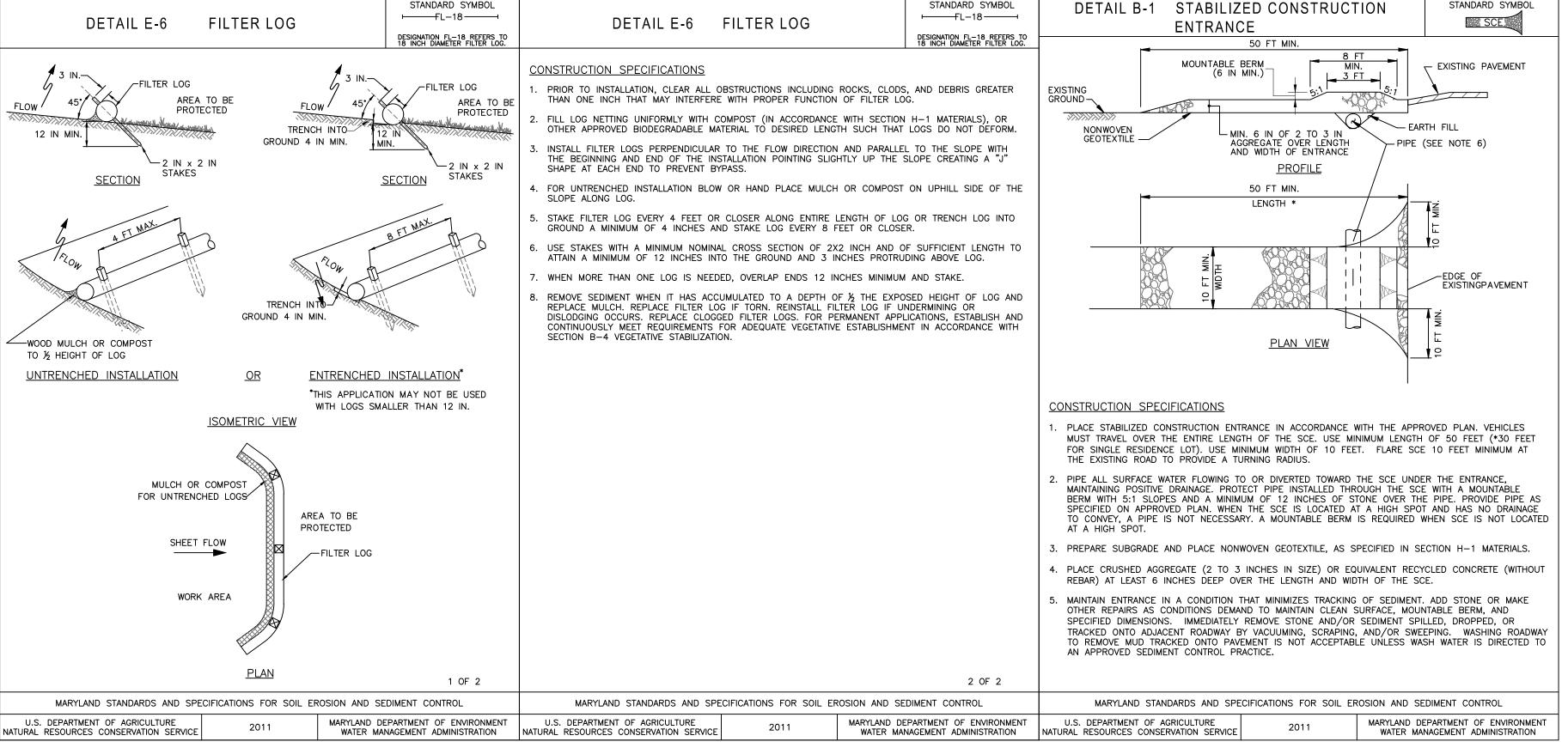
- OUTSIDE OF THE DRIP LINE OF THE TREE. 2. T-POST SHALL BE SPACED A MAXIMUM OF 12' O/C.
- AVOID ROOT DAMAGE WHEN PLACING THE T-POSTS. THE HIGH VISIBILITY FENCE SHOULD BE FASTENED SECURELY TO THE T-POSTS WITH WIRE OR ZIP TIES. 4. THE FENCING MUST REMAIN IN PLACE DURING ALL
- PHASES OF CONSTRUCTION; ANY CHANGE OF THE PROTECTIVE FENCING MUST BE APPROVED.

TREE PROTECTION DETAIL

NOT TO SCALE



TREE PLANKING DETAII



60% DESIGN

ANNE ARUNDEL COUNTY **Cay Sand** DEPARTMENT OF PUBLIC WORKS Consultants & Designers, Inc. PPROVED **APPROVED** DATE SCALE: CARRS WHARF ADA DESIGNED BY: MB | 5/23/24 "Integrating Engineering and Environment" **IMPROVEMENTS** DRAWN BY: MDB | 5/23/24 CHIFE ENGINEER PROJECT MANAGER CHECKED BY: MB 5/23/24 7455 New Ridge Road, Suite T Phone: (410) 694-9401 **EROSION & SEDIMENT** PPROVED APPROVED Fax: (410) 694-9105 SHEET NO. 12 OF 12 www.baylandinc.com PROJECT NO. 5_17703 **CONTROL PLAN** PROPOSAL NO. P573303 BAYLAND JOB NO. 5 17703 CHIFF RIGHT OF WAY