

ROAD IMPROVEMENTS PLAN FOR BEACH ROAD IN KENT ISLAND ESTATES

DEVELOPER:

QUEEN ANNE'S COUNTY
DEPARTMENT OF PUBLIC WORKS
c/o LEE E. EDGAR, P.E.
312 SAFETY DRIVE
CENTREVILLE, MARYLAND 21617
PHONE No. 1-410-758-0925

SURVEYOR:

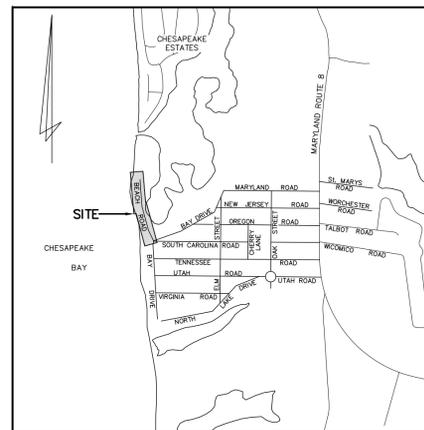
FINK, WHITTEN & ASSOCIATES, LLC
c/o ELIZABETH FINK
113 E. DOVER ROAD, UNIT C
EASTON, MARYLAND 21601
PHONE No. 1-410-822-8484

ENGINEER:

DMS & ASSOCIATES, LLC
c/o KEVIN J. SHEARON, P.E. LEED AP
P.O. BOX 80
CENTREVILLE, MARYLAND 21617
PHONE No. 1-443-262-9130

LEGEND

	DEED POINT
	EXISTING SPOT ELEVATION
	EXISTING CONTOUR
	PROPOSED CONTOUR
	EXISTING TREE
	EXISTING DITCH
	NONTIDAL WETLANDS
	EXISTING SIGN
	EXISTING MAILBOX
	EXISTING FENCE
	EXISTING UTILITY POLE WITH OVERHEAD UTILITY LINE
	EXISTING UNDERGROUND ELECTRIC LINE
	EXISTING ELECTRIC TRANSFORMER
	EXISTING UNDERGROUND FIBER OPTICS LINE
	EXISTING TELEPHONE PEDESTAL
	EXISTING UNDERGROUND GAS LINE
	EXISTING SEPTIC LID
	EXISTING SEWER CLEANOUT
	PERIMETER SILT FENCE
	LIMITS OF DISTURBANCE



VICINITY MAP
1" = 2000'

TABLE OF CONTENTS

SHEET	C-1	TITLE SHEET
SHEET	C-2	ROAD IMPROVEMENTS PLAN AND PROFILE
SHEET	C-3	ROAD IMPROVEMENTS PLAN
SHEET	C-4	SEDIMENT AND EROSION CONTROL DETAILS AND SPECIFICATIONS

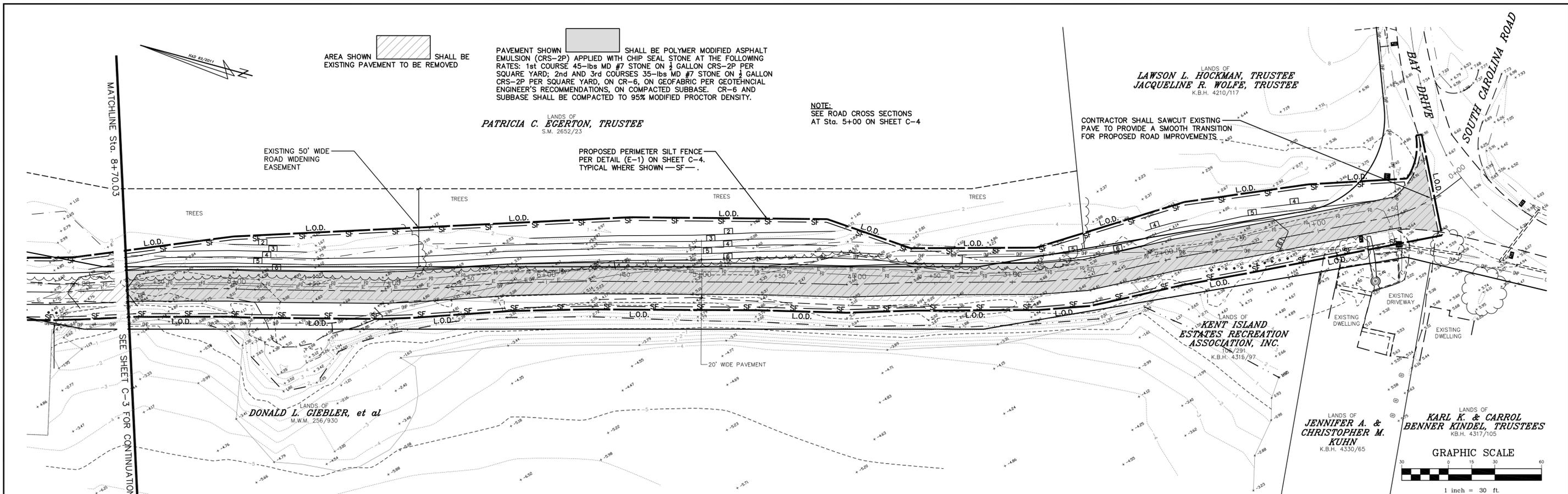
GENERAL NOTES

- THE EXISTING UTILITIES SHOWN WERE TAKEN FROM THE BEST AVAILABLE RECORDS. THE CONTRACTOR SHALL VERIFY THEIR EXACT LOCATION PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE INCURRED TO SUCH UTILITIES SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL TEST PIT AS TO VERIFY THE LOCATION AND INVERT OF EXISTING UTILITIES.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING TWO (2) WEEKS PRIOR TO THE START OF CONSTRUCTION. FOLLOWING NOTIFICATION, THE QUEEN ANNE'S COUNTY DEPARTMENT OF PUBLIC WORKS WILL SCHEDULE A PRECONSTRUCTION MEETING. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION WITH THE UTILITY COMPANIES INVOLVED:

DELMARVA POWER & LIGHT COMPANY	1-800-375-7117
MISS UTILITY	1-800-441-8355
DMS & ASSOCIATES, LLC	1-443-262-9130
DEPARTMENT OF ENVIRONMENT	1-410-901-4020
Q.A. COUNTY DEPT. OF PUBLIC WORKS	1-410-758-0925
Q.A. COUNTY SANITARY DISTRICT	1-410-643-3535
- THE CONTRACTOR SHALL PROVIDE ALL EQUIPMENT, LABOR, AND MATERIALS FOR ANY MISCELLANEOUS OR TEST PIT EXCAVATIONS REQUIRED BY THE ENGINEER.
- ALL CONSTRUCTION SHALL BE MARKED FOR TRAFFIC AND PEDESTRIAN SAFETY. ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH SECTION VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE QUEEN ANNE'S COUNTY STANDARDS AND SPECIFICATIONS.
- THE CONTRACTOR ASSUMES ALL RESPONSIBILITIES FOR ANY DEVIATIONS FROM THESE PLANS, UNLESS SAID DEVIATION IS APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL RECEIVE WRITTEN PERMISSION FROM THE ENGINEER IF A DEVIATION OF THE PLAN IS NECESSARY.
- ALL DISTURBED AREAS SHALL BE SMOOTHLY GRADED TO PROVIDE POSITIVE DRAINAGE AND STABILIZED WITH TOPSOIL, SEED, AND MULCH. IF SETTLEMENT OCCURS, TOPSOIL, SEEDING AND MULCHING SHALL BE REPEATED UNTIL SETTLEMENT SUBSIDES (SEE EROSION AND SEDIMENT CONTROL SPECIFICATIONS).
- ALL TRASH, TREES, AND UNDERBRUSH ARE TO BE CLEARED AND REMOVED OFF SITE TO AN APPROVED DUMP SITE BY THE CONTRACTOR.
- ANY EXCESS EXCAVATED MATERIAL SHALL BE REMOVED OFF SITE BY THE CONTRACTOR OR MATERIAL SHALL BE PLACED ON SITE AS DIRECTED BY THE ENGINEER AND/OR OWNER.
- ANY EXISTING SURVEY MONUMENTATION THAT IS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED BY A REGISTERED SURVEYOR AT THE CONTRACTOR'S EXPENSE.
- ALL FILL AREAS WITHIN LIMITS OF ROADWAY CONSTRUCTION AND OTHER AREAS AS DESIGNATED ON THESE PLANS SHALL BE COMPACTED TO 95% MODIFIED PROCTOR DENSITY AND LAID AND COMPACTED IN 8" LIFTS MAXIMUM.
- TRENCHES SHALL NOT REMAIN OPEN OVERNIGHT. IF IT IS NECESSARY FOR TRENCHES TO REMAIN OPEN, STEEL PLATES, CAPABLE OF TRAFFIC BEARING, SHALL BE USED TO COMPLETELY COVER THE TRENCH.
- SEE ADDITIONAL SPECIFICATIONS PREPARED JANUARY, 1998, EDITION OF "SPECIFICATIONS FOR CONSTRUCTION OF SEWER COLLECTION, SEWER TRANSMISSION AND WATER DISTRIBUTION LINES", ON FILE WITH THE QUEEN ANNE'S COUNTY SANITARY DISTRICT. IN ADDITION, ALL HARDWARE (I.E., NUTS, BOLTS, WASHERS, RESTRAINING RODS, ETC.) SHALL BE 304 STAINLESS STEEL. CONTRACTOR IS TO REPLACE ANY PLAIN OR GALVANIZED STEEL HARDWARE SUPPLIED BY THE MANUFACTURE, INCLUDING BONNET BOLTS ON DIVISION VALVE, WITH STAINLESS STEEL.
- ALL DUCTILE IRON FITTINGS ARE TO BE MECHANICALLY RESTRAINED AND EPOXY COATED WITH STAINLESS STEEL HARDWARE.
- ALL SEWER VALVES, BOXES AND FRAMES & COVERS SHALL BE SET AND ADJUSTED TO FINISHED GRADE.
- CONTRACTOR MUST PROVIDE MONUMENTED SURVEY MARKERS PER PUBLIC WORKS AGREEMENT.
- THE DEVELOPER SHALL COORDINATE WITH THE COUNTY TO SCHEDULE INSTALLATION OF ALL NECESSARY ROADWAY SAFETY SIGNAGE AND ROAD NAME BLADES. SIGNAGE SHALL BE INSTALLED AT THE START OF CONSTRUCTION AND MAINTAINED BY THE COUNTY THROUGHOUT THE COMPLETION OF THE WORK AT THE EXPENSE OF THE DEVELOPER. THE DEVELOPER SHALL PAY INVOICES UPON RECEIPT FROM THE COUNTY.
- ALL PVC, PE, AND HDPE PIPE, OTHER THAN PIPE RUNS BETWEEN GRAVITY SEWER MANHOLES, SHALL HAVE A CONTINUOUS, SINGLE STRAND, 8-GAUGE UNCOATED COPPER TRACER WIRE LOCATED ABOVE THE PIPE. THE WIRE SHALL BE STUBBED INTO ALL METER PITS, VACUUM VALVE PITS, CLEANOUTS, AND DIVISION VALVE BOXES. A BACKFLOW PREVENTER IS REQUIRED ON SEWER LATERAL AT EVERY HOME.
- ONCE CONSTRUCTION IS COMPLETE, AS-BUILT PLAN CERTIFICATION SHALL BE SUBMITTED BY EITHER A PROFESSIONAL ENGINEER OR PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF MARYLAND TO ENSURE ALL CONSTRUCTION IS IN COMPLIANCE WITH THE SPECIFICATIONS AND APPROVED PLANS. ASBUILT PLANS MUST BE RECEIVED AND APPROVED PRIOR TO OR APPROVED AS-BUILTS MUST BE RECEIVED PRIOR TO BOND RELEASE.

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 The DEPARTMENT of PUBLIC WORKS of QUEEN ANNE'S COUNTY MARYLAND	APPROVED BY: DATE: _____ REVISION: _____ REVIEWED BY: DATE: _____ O.A. SOIL CONSERVATION DISTRICT DATE: _____	PROJECT NUMBER: 2021134 DESIGNED BY: KJS DRAWN BY: WJM APPROVED BY: KJS SCALE: _____ AS SHOWN ISSUE DATE: OCTOBER '24	PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 200499 OCTOBER 25, 2024 DATE SEAL	 DAVIS, MOORE, SHEARON & ASSOCIATES, LLC ENGINEERING, DRAFTING/DESIGN, ENVIRONMENTAL SERVICES & SURVEYING P.O. BOX 80 CENTREVILLE, MARYLAND 21617 PHONE: 1-443-262-9130 FAX: 1-443-262-9148	TITLE SHEET FOR BEACH ROAD IN KENT ISLAND ESTATES FOURTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND	SHEET NO. C-1 OF C-4 SHEETS
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PAVEMENT SHOWN [Hatched Box] SHALL BE POLYMER MODIFIED ASPHALT EMULSION (CRS-2P) APPLIED WITH CHIP SEAL STONE AT THE FOLLOWING RATES: 1st COURSE 45-lbs MD #7 STONE ON 1/2 GALLON CRS-2P PER SQUARE YARD; 2nd AND 3rd COURSES 35-lbs MD #7 STONE ON 1/2 GALLON CRS-2P PER SQUARE YARD, ON CR-6, ON GEOFABRIC PER GEOTECHNICAL ENGINEER'S RECOMMENDATIONS, ON COMPACTED SUBBASE. CR-6 AND SUBBASE SHALL BE COMPACTED TO 95% MODIFIED PROCTOR DENSITY.

NOTE:
SEE ROAD CROSS SECTIONS
AT Sta. 5+00 ON SHEET C-4

CONTRACTOR SHALL SAWCUT EXISTING PAVE TO PROVIDE A SMOOTH TRANSITION FOR PROPOSED ROAD IMPROVEMENTS.

NOTE:
SEDIMENT AND EROSION CONTROL
WILL BE STRICTLY ENFORCED

NOTE:
FOLLOWING INITIAL DISTURBANCE, PERMANENT OR TEMPORARY, STABILIZATION SHALL BE COMPLETED WITHIN 3 CALENDAR DAYS ON ALL PERIMETER CONTROLS AND SLOPES GREATER THAN 3:1 AND 7 DAYS ON ALL OTHER DISTURBED AREAS ON THE SITE.

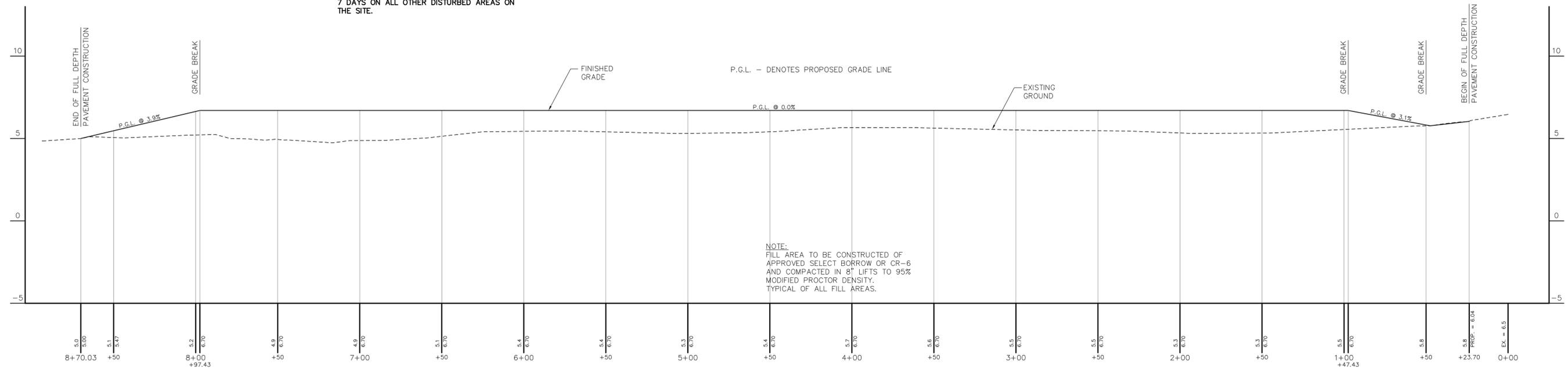
PLAN SCALE 1" = 30'

L.O.D. - DENOTES LIMITS OF DISTURBANCE

P.G.L. - DENOTES PROPOSED GRADE LINE

P.G.L. @ 0.0%

NOTE:
FILL AREA TO BE CONSTRUCTED OF APPROVED SELECT BORROW OR CR-6 AND COMPACTED IN 8" LIFTS TO 95% MODIFIED PROCTOR DENSITY. TYPICAL OF ALL FILL AREAS.



BEACH ROAD PROFILE

SCALE 1" = 30' HORIZONTAL
1" = 3' VERTICAL

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The DEPARTMENT of PUBLIC WORKS
of
QUEEN ANNE'S COUNTY
MARYLAND

APPROVED BY:	DATE	REVISION	PROJECT NUMBER
DESIGNED BY:			2021134
DRAWN BY:			KJS
APPROVED BY:			WJM
REVIEWED BY:			KJS
SCALE			AS SHOWN
ISSUE DATE			AUGUST '24
Q.A. SOIL CONSERVATION DISTRICT	DATE		21134-C2

PROFESSIONAL CERTIFICATION:
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 200499
AUGUST 1, 2024
DATE SEAL

DAVIS, MOORE, SHEARON & ASSOCIATES, LLC
ENGINEERING, DRAFTING/DESIGN, ENVIRONMENTAL SERVICES & SURVEYING
P.O. BOX 80
CENTREVILLE, MARYLAND 21617
PHONE: 1-443-262-9130
FAX: 1-443-262-9148

ROAD IMPROVEMENTS PLAN AND PROFILE
Sta. 0+00.00 to Sta. 8+70.03
BEACH ROAD
IN
KENT ISLAND ESTATES
FOURTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND

SHEET NO.
C-2
OF C-4 SHEETS



PAVEMENT SHOWN [Hatched Pattern] SHALL BE POLYMER MODIFIED ASPHALT EMULSION (CRS-2P) APPLIED WITH CHIP SEAL STONE AT THE FOLLOWING RATES: 1st COURSE 45-lbs MD #7 STONE ON 1/2 GALLON CRS-2P PER SQUARE YARD; 2nd AND 3rd COURSES 35-lbs MD #7 STONE ON 1/2 GALLON CRS-2P PER SQUARE YARD, ON CR-6, ON GEOFABRIC PER GEOTECHNICAL ENGINEER'S RECOMMENDATIONS, ON COMPACTED SUBBASE. CR-6 AND SUBBASE SHALL BE COMPACTED TO 95% MODIFIED PROCTOR DENSITY.

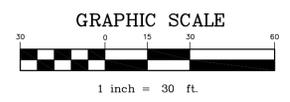
PAVEMENT SHOWN [Dotted Pattern] IS EXISTING ROADWAY THAT SHALL BE FINE GRADED AND THEN TOPPED WITH POLYMER MODIFIED ASPHALT EMULSION (CRS-2P) APPLIED WITH CHIP SEAL STONE AT THE FOLLOWING RATES: 1st COURSE 45-lbs MD #7 STONE ON 1/2 GALLON CRS-2P PER SQUARE YARD; 2nd AND 3rd COURSES 35-lbs MD #7 STONE ON 1/2 GALLON CRS-2P PER SQUARE YARD.

CONTRACTOR SHALL SAWCUT EXISTING PAVE TO PROVIDE A SMOOTH TRANSITION FOR PROPOSED ROAD IMPROVEMENTS

L.O.D. - DENOTES LIMITS OF DISTURBANCE

NOTE: SEDIMENT AND EROSION CONTROL WILL BE STRICTLY ENFORCED

NOTE: FOLLOWING INITIAL DISTURBANCE, PERMANENT OR TEMPORARY, STABILIZATION SHALL BE COMPLETED WITHIN 3 CALENDAR DAYS ON ALL PERIMETER CONTROLS AND SLOPES GREATER THAN 3:1 AND 7 DAYS ON ALL OTHER DISTURBED AREAS ON THE SITE.



PLAN SCALE 1" = 30'

LANDS OF
JOEL T. RUTZEN
S.M. 773/488

LANDS OF
JOEL T. RUTZEN
S.M. 773/488

LANDS OF
PATRICIA C. EGERTON, TRUSTEE
S.M. 2652/23

LANDS OF
143 BEACH ROAD, LLC
S.M. 3200/44

LANDS OF
NORMAN C. MATTHEWS & KIM P. TWIGG, TRUSTEES
S.M. 2682/166

LANDS OF
ANITA SAMARTH & ROBERT FILLEY
S.M. 2527/315

LANDS OF
KAREN E. FOREMAN
S.M. 2760/28

LANDS OF
JORDAN D. & HEATHER M. PRICE, TRUSTEES
K.B.H. 4055/261

LANDS OF
CLARENCE L. & MARY W. RAKOW, TRUSTEES
S.M. 1840/367

LANDS OF
JORDAN D. & HEATHER M. PRICE
K.B.H. 4182/82

LANDS OF
DONALD L. GIEBLER, et al
M.W.M. 256/930

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The DEPARTMENT of PUBLIC WORKS
of
QUEEN ANNE'S COUNTY
MARYLAND

APPROVED BY:	DATE	REVISION	PROJECT NUMBER 2021134
DESIGNED BY KJS			DRAWN BY WJM
Q.A. Co., DEPARTMENT OF PUBLIC WORKS			APPROVED BY KJS
REVIEWED BY:			SCALE
AS SHOWN			ISSUE DATE AUGUST '24
Q.A. SOIL CONSERVATION DISTRICT	DATE	21134-C3	

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. 200499, EXPIRES 09/30/2025

OCTOBER 25, 2024
DATE SEAL

DAVIS, MOORE, SHEARON & ASSOCIATES, LLC
ENGINEERING, DRAFTING/DESIGN,
ENVIRONMENTAL SERVICES & SURVEYING
P.O. BOX 80
CENTREVILLE, MARYLAND 21617
PHONE: 1-443-262-9130
FAX: 1-443-262-9148

ROAD IMPROVEMENTS PLAN
Sta. 8+70.03 to Sta. 14+43.41
BEACH ROAD
IN
KENT ISLAND ESTATES
FOURTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND

SHEET NO.
C-3
OF C-4 SHEETS

DETAIL B-4-6-D PERMANENT SOIL STABILIZATION MATTING SLOPE APPLICATION

STANDARD SYMBOL
PSSMS - * lb/ft²
(* INCLUDE SHEAR STRESS)

OVERLAP OR ABUT ROLL EDGES (TYP.)
6 IN DEEP (MIN.) KEY IN TRENCH
6 IN MIN. OVERLAP AT ROLL END (TYP.)
FILL MAT VOIDS IF SPECIFIED (SEE NOTE 9)
PREPARED SLOPE WITH SEED IN PLACE

ISOMETRIC VIEW

CONSTRUCTION SPECIFICATIONS

- USE MATTING THAT HAS A DESIGN VALUE FOR SHEAR STRESS EQUAL TO OR HIGHER THAN THE SHEAR STRESS DESIGNATED ON APPROVED PLANS.
- USE PERMANENT SOIL STABILIZATION MATTING MADE OF OPEN WEAVE SYNTHETIC, NON-DEGRADABLE FIBERS OR ELEMENTS OF UNIFORM THICKNESS AND DISTRIBUTION THROUGHOUT. CHEMICALS USED IN THE MAT MUST BE NON-LEACHING AND NON-TOXIC TO VEGETATION AND SEED GERMINATION AND NON-INJURIOUS TO THE SKIN. IF PRESENT, NETTING MUST BE EXTRUDED PLASTIC WITH A MAXIMUM MESH OPENING OF 2x2 INCHES AND SUFFICIENTLY BONDED OR SEWN ON 2 INCH CENTERS ALONG LONGITUDINAL AXIS OF THE MATERIAL TO PREVENT SEPARATION OF THE NET FROM THE PARENT MATERIAL.
- SECURE MATTING USING STEEL STAPLES OR WOOD STAKES. STAPLES MUST BE "U" OR "T" SHAPED STEEL WIRE HAVING A MINIMUM GAUGE OF NO. 11 AND NO. 8 RESPECTIVELY. "U" SHAPED STAPLES MUST AVERAGE 1 TO 1 1/2 INCHES WIDE AND BE A MINIMUM OF 6 INCHES LONG. "T" SHAPED STAPLES MUST HAVE A MINIMUM 8 INCH MAIN LEG, A MINIMUM 1 INCH SECONDARY LEG, AND MINIMUM 4 INCH HEAD. WOOD STAKES MUST BE ROUGH-SAWN HARDWOOD, 12 TO 24 INCHES IN LENGTH, 1x3 INCH IN CROSS SECTION, AND WEDGE SHAPE AT THE BOTTOM.
- PERFORM FINAL GRADING, TOPSOIL APPLICATION, SEEDBED PREPARATION, AND PERMANENT SEEDING IN ACCORDANCE WITH SPECIFICATIONS. PLACE MATTING WITHIN 48 HOURS OF COMPLETING SEEDING OPERATIONS, UNLESS END OF WORKDAY STABILIZATION IS SPECIFIED ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
- UNROLL MATTING DOWN SLOPE. LAY MATTING SMOOTHLY AND FIRMLY UPON THE SEEDBED SURFACE. AVOID STRETCHING THE MATTING.
- OVERLAP OR ABUT EDGES OF MATTING ROLLS PER MANUFACTURER RECOMMENDATIONS. OVERLAP ROLL ENDS BY 6 INCHES (MINIMUM), WITH THE UPSTREAM MAT OVERLAPPING ON TOP OF THE DOWNSLOPE MAT.
- KEY IN THE TOP OF SLOPE END OF MAT 6 INCHES (MINIMUM) BY DIGGING A TRENCH, PLACING THE MATTING ROLL END IN THE TRENCH, STAPLING THE MAT IN PLACE, REPLACING THE EXCAVATED MATERIAL, AND TAMPING TO SECURE THE MAT END IN THE KEY.
- STAPLE/STAKE MAT IN A STAGGERED PATTERN ON 4 FOOT (MAXIMUM) CENTERS THROUGHOUT AND 2 FOOT (MAXIMUM) CENTERS ALONG SEAMS, JOINTS, AND ROLL ENDS.
- IF SPECIFIED BY THE DESIGNER OR MANUFACTURER AND DEPENDING ON THE TYPE OF MAT BEING INSTALLED, ONCE THE MATTING IS KEVED AND STAPLED IN PLACE, FILL THE MAT VOIDS WITH TOP SOIL OR GRANULAR MATERIAL AND LIGHTLY COMPACT OR ROLL TO MAXIMIZE SOIL/MAT CONTACT WITHOUT CRUSHING MAT.
- ESTABLISH AND MAINTAIN VEGETATION SO THAT REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT ARE CONTINUOUSLY MET IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.

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

DETAIL E-1 SILT FENCE

STANDARD SYMBOL
—SF—

6 FT MAX. CENTER TO CENTER
36 IN MIN. FENCE POST LENGTH DRIVEN MIN. 16 IN INTO GROUND
16 IN MIN. HEIGHT OF WOVEN SLIT FILM GEOTEXTILE
8 IN MIN. DEPTH INTO GROUND

ELEVATION

36 IN MIN. FENCE POST LENGTH
WOVEN SLIT FILM GEOTEXTILE
FLOW
UNDISTURBED GROUND
FENCE POST 18 IN MIN. ABOVE GROUND
FENCE POST DRIVEN A MIN. OF 16 IN INTO THE GROUND

CROSS SECTION

EMBED GEOTEXTILE MIN. OF 8 IN VERTICALLY INTO THE GROUND, BACKFILL AND COMPACT THE SOIL ON BOTH SIDES OF GEOTEXTILE.

STEP 1: POSTS, STAPLE, STAPLE
STEP 2: TWIST POSTS TOGETHER, STAPLE, STAPLE
STEP 3: STAPLE, STAPLE
FINAL CONFIGURATION: STAPLE, STAPLE, STAPLE, STAPLE

JOINING TWO ADJACENT SILT FENCE SECTIONS (TOP VIEW) 1 OF 2

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

DETAIL E-1 SILT FENCE

STANDARD SYMBOL
—SF—

CONSTRUCTION SPECIFICATIONS

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

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

EROSION & SEDIMENT CONTROL STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

- Contractor shall install soil erosion and sediment control devices prior to any grading. Following initial disturbance or re-disturbance, permanent or temporary stabilization shall be completed within three (3) calendar days as to the surface of all perimeter controls, dikes, swales, ditches, perimeter slopes greater than three (3) horizontal to one (1) vertical (3:1) and seven days (7) as to all other disturbed or graded areas on the project site.
- All temporary erosion and sediment control devices are to be provided as indicated on this plan, with location adjustments to be made in the field as necessary, and to be maintained at the end of each working day until project completion. The minimum area practical shall be disturbed for the minimal amount of time possible.
- Clearing and grubbing shall include all trees, brush, debris, root mat and organic materials to be removed.
- Temporary seeding shall be accomplished between February 15th through April 30th, or August 15th through November 30th. During other times, temporary mulching shall be provided.
- Temporary seeding shall conform to the following applications: 436 lbs. per acre of 10-20-20; 4,000 lbs. per acre of ground limestone, to be incorporated into the soil by disking or other suitable means. Annual rye grass shall be applied at a rate of 50 lbs. per acre using suitable equipment. Mulching shall be accomplished immediately after seeding.

Seed Mixture (For Hazard Zone 7a) (From Table B-1)					Fertilizer Rate (10-20-20)	Lime Rate
No.	Species	Appl. Rate (lb./ac.)	Seeding Dates	Seeding Depth		
	ANNUAL RYE GRASS	50 lbs.	2/15-4/30 8/15-11/30	1/2"		
	BARLEY	96 lbs.	2/15-4/30, 8/15-11/30	1"	436 lb/acre 90 lb/1000 sf	2 tons/acre 80 lb/1000 sf
	OATS	72 lbs.	2/15-4/30, 8/15-11/30	1"		
	WHEAT	120 lbs.	2/15-4/30, 8/15-11/30	1"		
	CEREAL RYE	112 lbs.	2/15-4/30, 8/15-12/15	1"		
	FOXTAIL MILLET	30 lbs.	5/1-8/14	1/2"		
	PEARL MILLET	20 lbs.	5/1-8/14	1/2"		

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

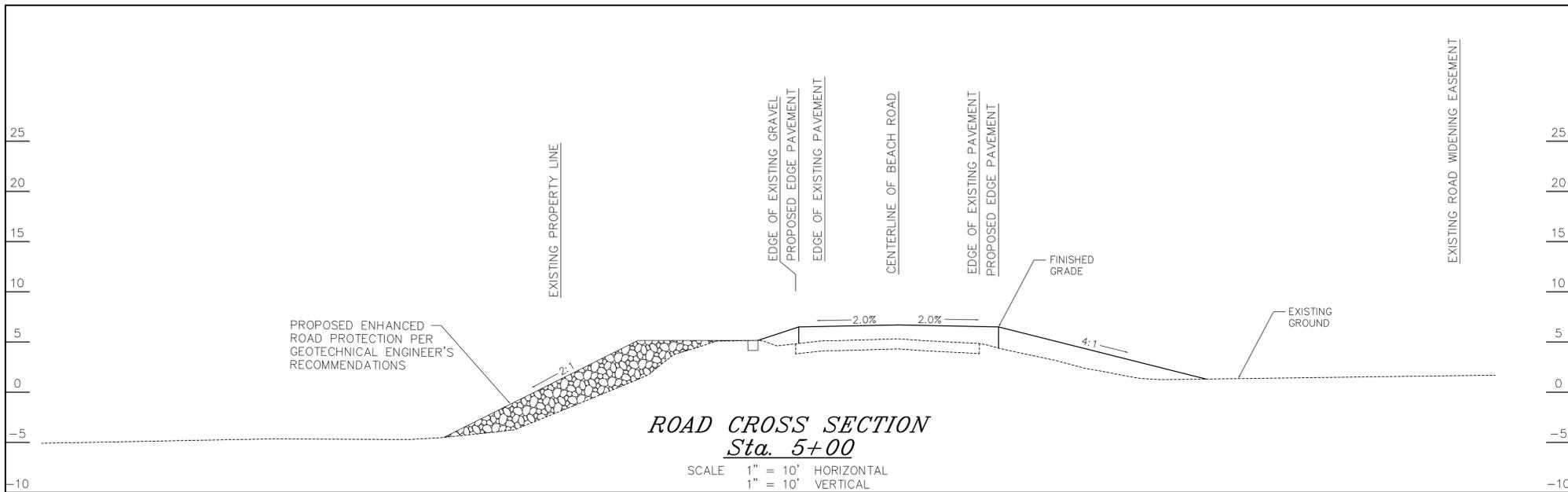
Seed Mixture (For Hazard Zone 7a) (From Table B-3)					Fertilizer Rate (10-20-20)			Lime Rate
No.	Species	Appl. Rate (lb./ac.)	Seeding Dates	Seeding Depth	N	P205	K2O	
7	CREeping RED FESCUE KENTUCKY BLUEGRASS	60 lbs. 15 lbs.	3/1-5/15 8/15-10/15	1/4" to 1/2"	45 lb/acre 1 lb/1000 sf	80 lb/acre 2 lb/1000 sf	90 lb/acre 2 lb/1000 sf	2 tons/acre 80 lb/1000 sf
8	TALL FESCUE	100 lbs.	3/1-5/15 8/15-10/15	1/4" to 1/2"				
9	TALL FESCUE KENTUCKY BLUEGRASS PERENNIAL RYEGRASS	60 lbs. 40 lbs. 20 lbs.	3/1-5/15 8/15-10/15	1/4" to 1/2"				

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

DEVELOPERS CERTIFICATE

I HEREBY CERTIFY THAT: 1. ANY CLEARING, GRADING, CONSTRUCTION OR DEVELOPMENT, OR ALL OF THESE, WILL BE DONE PURSUANT TO THIS PLAN AND; 2. THAT RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION WILL HAVE A CERTIFICATE OF TRAINING AT A DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT; AND 3. THE DEVELOPER WILL PROVIDE THE DISTRICT ONE COPY OF A RED LINE ASBUILT DRAWING OF EACH FACILITY REQUIRING A STATE POND PERMIT.

SIGNATURE _____ DATE _____
Q.A. Co. Dept. OF PUBLIC WORKS c/o LEE E. EDGAR, P.E.
312 SAFETY DRIVE
CENTREVILLE, MARYLAND 21617
PHONE No. 1-410-758-0925



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The DEPARTMENT of PUBLIC WORKS
of
QUEEN ANNE'S COUNTY
MARYLAND

APPROVED BY:	DATE	REVISION
Q.A. Co. DEPARTMENT OF PUBLIC WORKS		
REVIEWED BY:		
Q.A. SOIL CONSERVATION DISTRICT	DATE	21134-C1

PROFESSIONAL CERTIFICATION:
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 200499

OCTOBER 25, 2024
DATE SEAL

DAVIS, MOORE, SHEARON & ASSOCIATES, LLC
ENGINEERING, DRAFTING/DESIGN,
ENVIRONMENTAL SERVICES & SURVEYING
P.O. BOX 80
CENTREVILLE, MARYLAND 21617
PHONE: 1-443-262-9130
FAX: 1-443-262-9148

SEDIMENT & EROSION CONTROL DETAILS AND SPECIFICATIONS
FOR
BEACH ROAD
IN
KENT ISLAND ESTATES
FOURTH ELECTION DISTRICT, QUEEN ANNE'S COUNTY, MARYLAND

SHEET NO.
C-4
OF C-4 SHEETS