

"MISS UTILITY" NOTE

CALL "MISS UTILITY" AT 1-800-257-7777, 48 HOURS PRIOR TO THE START OF WORK. THE EXCAVATOR MUST NOTIFY ALL PUBLIC UTILITY COMPANIES WITH UNDERGROUND FACILITIES IN THE AREA OF PROPOSED EXCAVATION AND HAVE THOSE FACILITIES LOCATED BY THE UTILITY COMPANIES PRIOR TO COMMENCING EXCAVATION.

STABILIZATION NOTE

FOLLOWING INITIAL SOIL DISTURBANCE OR 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, 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.

PROJECT NARRATIVE

THIS SITE PLAN PROPOSES TO MILL AND OVERLAY A PORTION OF AN EXISTING ASPHALT PARKING LOT, RE-GRADE A PORTION OF THE PARKING LOT AND RE-PAVE, ADD PERMEABLE PAVEMENT SIDEWALK AND ADD MULTIPLE BIO-RETENTION AREAS. STORMWATER MANAGEMENT REQUIREMENTS WILL BE MET WITH BEST MANAGEMENT PRACTICES (BMPs) INCLUDING BIO-RETENTION BASINS AND SIDEWALK PERMEABLE PAVEMENT. THERE WILL BE NO PROPOSED INCREASE IN STORMWATER FLOWS. THE PROPOSED PROJECT WILL DISTURB APPROXIMATELY 37,574 SQUARE FEET. THE EXISTING PARKING LOT AREA WILL NOT BE INCREASED AND TOTAL IMPERVIOUS AREA WILL BE DECREASED. STEEP SLOPES EXIST ON THE SITE AND DISTURBANCE ON STEEP SLOPES WILL BE MITIGATED WITH SOIL STABILIZATION MATTING. NO PROPOSED SEDIMENT CONTROLS DISCHARGE ONTO STEEP SLOPES. THE SITE SOIL CONSISTS OF CHRISTIANA-DOWNER-URBAN LAND COMPLEX WHICH IS CLASSIFIED AS A HIGH ERODIBLE SOIL (HES).

THE SITE IS IN THE ANACOSTIA RIVER WATERSHED, WHICH HAS AN ESTABLISHED TMDL FOR SEDIMENT. AS SUCH, ENHANCED EROSION AND SEDIMENT MEASURES ARE REQUIRED. ENHANCED MEASURES INCLUDE SUPER SILT FENCE, TREE PROTECTION WILL ALSO BE UTILIZED FOR THIS PROJECT. THE SITE IS NOT LOCATED WITHIN A TIER II CATCHMENT.

SEQUENCE OF CONSTRUCTION

CONTRACTOR TO NOTIFY "MISS UTILITY" (800) 257-7777 AT LEAST 48 HOURS IN ADVANCE BEFORE BEGINNING CONSTRUCTION. THIS PLAN IS SPLIT INTO TWO PHASES TO ALLOW STAFF VEHICLES TO ACCESS THE SITE DURING NORMAL OPERATING HOURS. ONCE ITEMS #1-#5 ARE COMPLETED FOR PHASES 1 AND 2 THEN THE PROJECT SHALL BEGIN FINAL PAVING ITEM #6. ONCE THE ENTIRE SITE IS STABILIZED, CONTROLS MAY BE REMOVED PER ITEM #7.

PHASING

PHASE I - SEE SHEET CIVP-CDP2000 FOR HATCHED BOUNDARIES OF PHASE I. CONTRACTOR TO COMPLETE WORK ONLY WITHIN THE PHASE I BOUNDARY. VEHICLE TRAFFIC TO CONTINUE TO MOVE WITHIN THE BOUNDARY OF PHASE II FOR STAFF TO ACCESS PARK. CONTRACTOR SHALL COMPLETE CONSTRUCTION OF BIO-RETENTION AREAS 1-6, UNDERDRAINS AND GRADING WORK WITHIN THE PHASE I BOUNDARY ACCORDING TO THE SITE PLAN. PHASE I SHALL BEGIN ON ITEM #1 AND END ON ITEM #5 BELOW.

PHASE II - SEE SHEET CIVP-CDP2000 FOR HATCHED BOUNDARIES OF PHASE II. ONCE PHASE I IS COMPLETE, BEFORE FINAL PAVING, CONTRACTOR SHALL OPEN PHASE I FOR VEHICLE TRAFFIC PASSAGE AND BEGIN CONSTRUCTION OF PHASE II. CONTRACTOR SHALL CONSTRUCT REMAINDER OF SITE. ONCE PHASE II IMPROVEMENTS ARE COMPLETED THEN THE CONTRACTOR SHALL PAVE THE SITE (PHASES I AND II) AS PROPOSED ON THE SITE PLAN. PHASE II SHALL BEGIN ON ITEM #1 AND END ON #5 BELOW.

1. CLEARING AND GRUBBING REQUIRED FOR PERIMETER CONTROLS (ESTIMATED TIMEFRAME: 2 DAYS)

- A. PRE-CONSTRUCTION MEETING WITH INSPECTOR. CALL DEPARTMENT OF PERMITTING, INSPECTIONS AND ENFORCEMENT (DPE) OFFICE AT (301) 636-2080.
B. PLACE TEMPORARY DUMPSTER ON-SITE PER LOCATION SHOWN ON PLAN OR COORDINATE WITH SITE INSPECTOR. DUMPSTER SHALL BE PLACED ON EXISTING ASPHALT TO BE MILL AND OVERLAID.
C. PERFORM REQUIRED CLEARING AND GRUBBING ON SITE TO INSTALL PERIMETER CONTROLS.

2. CONSTRUCTION OF PERIMETER CONTROLS (ESTIMATED TIMEFRAME: 2 DAYS)

- (EROSION AND SEDIMENT CONTROLS SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBANCE.)
A. INSTALL SUPER SILT FENCE.
B. INSTALL CONSTRUCTION ENTRANCE.
C. INSTALL TREE PROTECTION.
D. PERIMETER CONTROLS SHALL BE INSPECTED DAILY. SHOULD ANY SEDIMENT OVERTOP OR INFILTRATE THE PERIMETER CONTROLS, SEDIMENT SHALL BE REMOVED AND PERIMETER CONTROLS SHALL BE REPAIRED TO ADEQUATELY CAPTURE ALL SEDIMENT LADEN RUNOFF.

3. REMAINING CLEARING AND GRUBBING (ESTIMATED TIMEFRAME: 4 DAYS)

- A. FINISH SITE CLEARING AND GRUBBING AND MILLING OF ASPHALT.
B. IMMEDIATELY AFTER GRADING, INSTALL VEGETATIVE STABILIZATION IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION OF THE MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL TO PREVENT EROSION.
C. BEGIN STOCKPILING PROJECT COMPONENTS, AS NEEDED. SEE PLAN VIEW FOR STOCKPILE LOCATION.
D. PERFORM ROUTINE MAINTENANCE TO PREVENT ANY NEW DESTABILIZED AREAS FROM ERODING.

4. GRADING FOR THE REMAINDER OF THE SITE (ESTIMATED TIMEFRAME: 10 DAYS)

- A. GRADE REMAINING SITE AS NEEDED FOR CONSTRUCTION. INSTALL SOIL STABILIZATION MATTING ON STEEP SLOPES AS SHOWN ON PLAN. THE MATTING SHALL BE REMOVED ONCE THE VEGETATIVE STABILIZATION HAS BEEN MET IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION OF THE MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
B. INSTALL UNDERDRAINS AND STORM DRAIN LINES. UNDERDRAINS AND STORM DRAIN LINES WILL BE CAPPED AT THIS TIME, SO NO INLET PROTECTION WILL BE REQUIRED.
C. INSTALL CURBS, SIDEWALKS AND COMPLETE PARKING LOT GRADING.

5. FINAL GRADING, LANDSCAPING, AND STABILIZATION (ESTIMATED TIMEFRAME: 14 DAYS)

- A. COMPLETE FINAL GRADING.
B. INSTALL PROPOSED BEST MANAGEMENT PRACTICES. MAINTAIN SILT FENCE AROUND BMPs AT ALL TIMES AS SHOWN ON THIS PLAN AS NO SEDIMENT LADEN RUNOFF SHALL ENTER ANY BMP.
C. INSTALL LANDSCAPING PLANTS AND TREES.
D. PERMANENTLY STABILIZE ALL DISTURBED AREAS WITH PERMANENT SEEDING IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION OF THE MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
E. INSTALL ALL ADDITIONAL WALKWAYS, BIKE RACKS AND ELEMENTS AS SHOWN ON CIVIL AND LANDSCAPE ARCHITECTURAL PLANS.

6. SITE PAVING (ESTIMATED TIMEFRAME: 10 DAYS)

- A. ONCE FINAL GRADING IS COMPLETE, MILL EXISTING PAVEMENT ON SITE IN AREA SHOWN IN PLAN VIEW.
B. ONCE MILLING IS COMPLETE, PAVE PARKING LOT.

7. REMOVAL OF CONTROLS (ESTIMATED TIMEFRAME: 1 DAY)

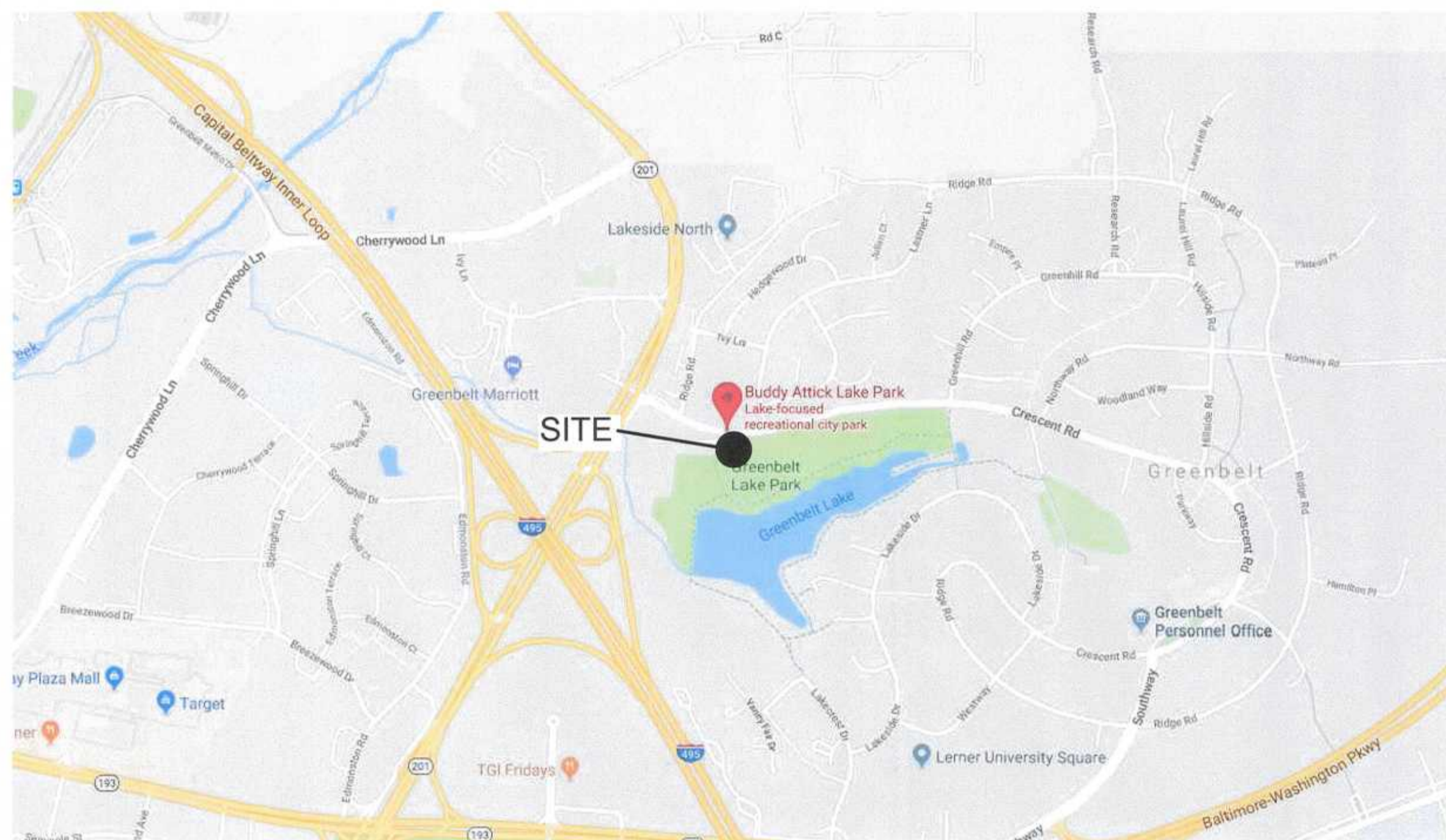
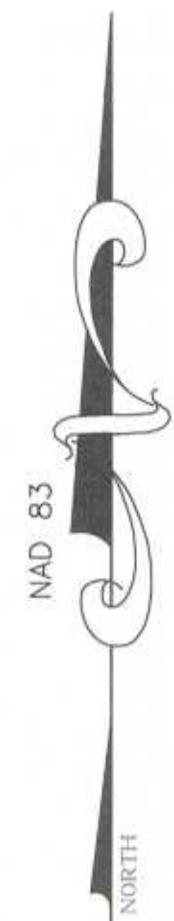
- A. AFTER FINAL SITE STABILIZATION IS MET IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION OF THE MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, CONTACT INSPECTORS OFFICE FOR FINAL WALK-THROUGH INSPECTION.
B. AFTER INSPECTOR APPROVAL, REMOVE ALL SEDIMENT CONTROL DEVICES.

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. 05-47020, EXPIRATION DATE: 7-9-2021.

[Signature]

4/13/20
DATE:



VICINITY MAP
SCALE: 1"=1000'

COVER SHEET
FINAL GRADING AND EROSION & SEDIMENT CONTROL PLANS FOR
BUDDY ATTICK LAKE PARK
PARKING LOT
555 CRESCENT ROAD
GREENBELT, PRINCE GEORGE'S CO., MARYLAND

SHEET INDEX:

- CIVP-CDP0000 COVER SHEET
CIVP-CDP1000 EXISTING CONDITIONS PLAN
CIVP-CDP2000 FINAL GRADING, EROSION & SEDIMENT CONTROL PLAN
CIVP-CDP2100 EROSION CONTROL DETAILS
CIVP-CDP2200 EROSION & SEDIMENT CONTROL CHECKLIST

CIVIL ENGINEER

Greening Urban, LLC
1500 Massachusetts Ave. NW
Suite 523
Washington DC, 20005
(804) 217-7436
greeningurban.com

CONSULTANT'S CERTIFICATION

"I certify that this plan of erosion and sediment control represents a practicable and workable plan based on my personal knowledge of the site, and that this plan was designed and prepared in accordance with the requirements of the Prince George's Soil Conservation District and "Standards and Specifications for Soil Erosion and Sediment Control". I have reviewed this erosion and sediment control plan with the owner/developer".
Signature: [Signature] MD License# 05-47020 Date 4/13/20
Name: Nicholas J. Fudala (printed)
(Include seal, company name, address and phone number if not included elsewhere on plan).



PRINCE GEORGE'S SOIL CONSERVATION DISTRICT
FINAL APPROVAL
GRADING, EROSION AND SEDIMENT CONTROL
FSC# 149-18
EXPIRATION DATE 5/11/2023
POND (P) X
District Signature: [Signature] APPROVAL DATE 5/11/2020

OWNER'S/DEVELOPER'S CERTIFICATION

"I/We hereby certify that I/we have reviewed this erosion and sediment control plan and that any clearing, grading, drainage, construction and/or development will be done pursuant to this approved plan, including inspecting and maintaining controls and that any responsible personnel involved in the construction project will have a Certificate of Training at a Maryland Department of the Environment approved training program for the control of erosion and sediment before beginning the project. Prince George's Soil Conservation District and the enforcement authority shall have the right of entry for periodic on-site evaluations."
Signature: [Signature] Date: 2/13/20
Name (printed): Tom Hruby Title: Director of Planning & Community Development
Ph#: 202-345-5417 Firm: County of Greenbelt, Maryland
Complete address: 15 Crescent Rd, Greenbelt, MD 20770

DRAINAGE AND GRADING CERTIFICATE

I HEREBY CERTIFY THAT I HAVE INSPECTED THIS SITE AND THAT DRAINAGE ONTO THIS SITE FROM OTHER UPGRADE PROPERTIES, AND FROM THIS SITE ONTO OTHER DOWNGRADE PROPERTIES HAS BEEN ADDRESSED IN SUBSTANTIAL ACCORDANCE WITH APPLICABLE CODES. I HEREBY CERTIFY THAT THE GRADING SHOWN ON THIS PLAN CONFORMS WITH SUBTITLE FOUR DIVISION OF THE PRINCE GEORGE'S

[Signature]

4/13/20
DATE:

SOILS TABLE
Table with 3 columns: SOIL, HYDROLOGIC GROUP, DESCRIPTION. Row 1: CdD, D, Christiana-Downer-Urban land complex, 5 to 15 percent slopes



Civil Engineer:
Greening Urban, LLC
1500 Massachusetts Ave. NW
Suite 523
Washington DC, 20005
(804) 217-7436
greeningurban.com



Table with 3 columns: #, Date, Revisions. Multiple empty rows for tracking changes.

Buddy Attick Lake Park
Parking Lot
555 CRESCENT ROAD
PRINCE GEORGE'S COUNTY
GREENBELT, MD

Project information table including Date (07.19.2017), Drawn By (G.W.), Scale, Checked By (C.E., N.F.), Sheet Title (COVER SHEET), and Sheet # (CIVP-CDP0000).

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DETAIL E-1 SILT FENCE STANDARD SYMBOL SF

ELEVATION
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

CROSS SECTION
36 IN MIN. FENCE POST LENGTH
FENCE POST 18 IN MIN. ABOVE GROUND
UNDISTURBED GROUND
FENCE POST DRIVEN A MIN. OF 16 IN INTO THE GROUND

JOINING TWO ADJACENT SILT FENCE SECTIONS (TOP VIEW)

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

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 3/8 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.

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

DETAIL B-1 STABILIZED CONSTRUCTION ENTRANCE STANDARD SYMBOL SCE

PROFILE
50 FT MIN. LENGTH *
MOUNTABLE BERM (6 IN MIN.)
8 FT MIN. 3 FT
EXISTING PAVEMENT
EXISTING GROUND
NONWOVEN GEOTEXTILE
MIN. 6 IN OF 2 TO 3 IN AGGREGATE OVER LENGTH AND WIDTH OF ENTRANCE
EARTH FILL
PIPE (SEE NOTE 6)
50 FT MIN. LENGTH *
10 FT MIN. WIDTH
EDGE OF EXISTING PAVEMENT
10 FT MIN.

CONSTRUCTION SPECIFICATIONS

- PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (*30 FEET FOR SINGLE RESIDENCE LOT) USE MINIMUM WIDTH OF 10 FEET. FLARE SCE TO 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
- PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT.
- PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.
- PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.
- MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

B.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-3 SUPER SILT FENCE STANDARD SYMBOL SSF

ELEVATION
10 FT MAX.
34 IN MIN.
5 IN MIN.
36 IN MIN.
2 IN DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND.
GALVANIZED CHAIN LINK FENCE WITH WOVEN SLIT FILM GEOTEXTILE
ELEVATION
CHAIN LINK FENCING
WOVEN SLIT FILM GEOTEXTILE
FLOW
EMBED GEOTEXTILE AND CHAIN LINK FENCE 8 IN MIN. INTO GROUND
CROSS SECTION

CONSTRUCTION SPECIFICATIONS

- INSTALL 2 1/2 INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND.
- FASTEN 9 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2 1/2 INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HUG RINGS.
- FASTEN WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THE UPSLOPE SIDE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8 INCHES INTO THE GROUND.
- WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BY PASS.
- EXTEND BOTH ENDS OF THE SUPER 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 SUPER SILT FENCE.
- PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
- REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN, IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.

B.7

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-2 SILT FENCE ON PAVEMENT STANDARD SYMBOL SFOP

ISOMETRIC VIEW
10 FT MAX.
4 FT
12 IN MAX. BETWEEN NAILS
2 IN X 4 IN ACROSS TOP OF STONE
1/2 FT X 1/2 INCH STONE
1/2 FT
16 IN MIN.
MASTIC SEAL

SECTION A-A
POST
STAPLE
LATHES
WOVEN SLIT FILM GEOTEXTILE SILT FENCE
SUPPORT FRAME
WOVEN SLIT FILM GEOTEXTILE
MASTIC SEAL
2 IN X 4 IN

CONSTRUCTION SPECIFICATIONS

- USE NOMINAL 2 INCH X 4 INCH LUMBER.
- USE WOVEN SLIT FILM GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.
- 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.
- SPACE UPRIGHT SUPPORTS NO MORE THAN 10 FEET APART.
- PROVIDE A TWO FOOT OPENING BETWEEN EVERY SET OF SUPPORTS AND PLACE STONE IN THE OPENING OVER GEOTEXTILE.
- KEEP SILT FENCE TAUT AND SECURELY STAPLE TO THE UPSLOPE SIDE OF UPRIGHT SUPPORTS. EXTEND GEOTEXTILE UNDER 2x4.
- WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, FOLD, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL. ATTACH LATHES.
- PROVIDE A MASTIC SEAL BETWEEN PAVEMENT, GEOTEXTILE, AND 2x4 TO PREVENT SEDIMENT-LADEN WATER FROM ESCAPING BENEATH SILT FENCE INSTALLATION.
- SECURE BOARDS TO PAVEMENT WITH 40D 5 INCH MINIMUM LENGTH NAILS.
- REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN, MAINTAIN WATER TIGHT SEAL ALONG BOTTOM. REPLACE STONE IF DISPLACED.

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

TREE PROTECTION AREA STANDARD SYMBOL X

NO DISTURBANCE PERMITTED BEYOND THIS POINT

AREA DE PROTECCION DE ARBOLES

NO SE PERMITE TRABAJAR NI DEJAR MATERIALES EN EL AREA ATRAS DE ESTE ROLLO

ELEVATION
10' X 12' WEATHERPROOF SIGNS SECURED TO FENCE @30' O.C. (MAX)
8' MIN. METAL "T" FENCE POSTS DRIVEN 2' INTO THE GROUND
FLAGGING
WELDED WIRE FENCE 14/14 GA. GALVANIZED WIRE 2'X4' OPENING
SECURE FENCING TO METAL POSTS

NOTES:

- PRACTICE MAY BE COMBINED WITH SEDIMENT CONTROL FENCING.
- LOCATION AND LIMITS OF FENCING SHALL BE COORDINATED IN FIELD WITH ARBORIST.
- BOUNDARIES OF PROTECTION AREA SHOULD BE STAKED PRIOR TO INSTALLING PROTECTIVE DEVICE.
- ROOT DAMAGE SHOULD BE AVOIDED.
- PROTECTIVE SIGNAGE IS REQUIRED.
- FENCING SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.

TREE PROTECTION FENCE Detail No. JUNE 2007

The Maryland-National Capital Park and Planning Commission

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 B-4-6-B TEMPORARY SOIL STABILIZATION MATTING SLOPE APPLICATION STANDARD SYMBOL TSSMS

TSSMS - * lb/ft² (* INCLUDE SHEAR STRESS)

ISOMETRIC VIEW
OVERLAP OR ABUT ROLL EDGES (TYP.)
6 IN DEEP (MIN.) KEY IN TRENCH
PREPARED SLOPE (SEED) WITH SEED IN PLACE
8 IN MIN. OVERLAP AT ROLL END (TYP.)

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 TEMPORARY SOIL STABILIZATION MATTING MADE OF DEGRADABLE (LASTS 6 MONTHS MINIMUM) NATURAL OR MAN-MADE FIBERS (MOSTLY ORGANIC). MAT MUST HAVE UNIFORM THICKNESS AND DISTRIBUTION OF FIBERS THROUGHOUT AND BE SMOLDER RESISTANT. 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, WOOD STAKES, OR BIODEGRADABLE EQUIVALENT. 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 A MINIMUM 1 INCH HEAD. WOOD STAKES MUST BE ROUGH-SAWN HARDWOOD, 12 TO 24 INCHES IN LENGTH, 1x3 INCH IN CROSS SECTION, AND WEDGE SHAPED AT THE BOTTOM.
- PERFORM FINAL GRADING, TOPSOIL APPLICATION, SEEDING 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 & SEDIMENT CONTROL PLAN.
- UNROLL MATTING DOWNSLOPE. LAY MAT SMOOTHLY AND FIRMLY UPON THE SEEDING SURFACE. AVOID STRETCHING THE MATTING.
- OVERLAP OR ABUT ROLL EDGES PER MANUFACTURER RECOMMENDATIONS. OVERLAP ROLL ENDS BY 6 INCHES (MINIMUM), WITH THE UPSLOPE MAT OVERLAPPING ON TOP OF THE DOWNSLOPE MAT.
- KEY IN THE UPSLOPE END OF MAT 8 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.
- ESTABLISH AND MAINTAIN VEGETATION SO THAT REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT ARE CONTINUOUSLY MET IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.

B.39

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-6 FILTER LOG STANDARD SYMBOL FL-10

SECTION
3 IN. FILTER LOG
AREA TO BE PROTECTED
TRENCH INTO GROUND 4 IN MIN.
2 IN X 2 IN STAKES
12 IN MIN.

ISOMETRIC VIEW
4 FT MAX.
8 FT MAX.
WOOD MULCH OR COMPOST TO 1/2 HEIGHT OF LOG
UNTRENCHED INSTALLATION OR ENTRENCHED INSTALLATION * THIS APPLICATION MAY NOT BE USED WITH LOGS SMALLER THAN 12 IN.

PLAN
MULCH OR COMPOST FOR UNTRENCHED LOGS
SHEET FLOW
WORK AREA
AREA TO BE PROTECTED
FILTER LOG

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-6 FILTER LOG STANDARD SYMBOL FL-10

CONSTRUCTION SPECIFICATIONS

- PRIOR TO INSTALLATION, CLEAR ALL OBSTRUCTIONS INCLUDING ROCKS, CLOGS, AND DEBRIS GREATER THAN ONE INCH THAT MAY INTERFERE WITH PROPER FUNCTION OF FILTER LOG.
- FILL LOG NETTING UNIFORM WITH COMPOST (IN ACCORDANCE WITH SECTION H-1 MATERIALS), OR OTHER APPROVED BIODEGRADABLE MATERIAL TO DESIRED LENGTH SUCH THAT LOGS DO NOT DEFORM.
- INSTALL FILTER LOGS PERPENDICULAR TO THE FLOW DIRECTION AND PARALLEL TO THE SLOPE WITH THE BEGINNING AND END OF THE INSTALLATION POINTING SLIGHTLY UP THE SLOPE CREATING A "J" SHAPE AT EACH END TO PREVENT BYPASS.
- FOR UNTRENCHED INSTALLATION BLOW OR HAND PLACE MULCH OR COMPOST ON UPHILL SIDE OF THE SLOPE ALONG LOG.
- STAKE FILTER LOG EVERY 4 FEET OR CLOSER ALONG ENTIRE LENGTH OF LOG OR TRENCH LOG INTO GROUND A MINIMUM OF 4 INCHES AND STAKE LOG EVERY 8 FEET OR CLOSER.
- USE STAKES WITH A MINIMUM NOMINAL CROSS SECTION OF 2x2 INCH AND OF SUFFICIENT LENGTH TO ATTAIN A MINIMUM OF 12 INCHES INTO THE GROUND AND 3 INCHES PROTRUDING ABOVE LOG.
- WHEN MORE THAN ONE LOG IS NEEDED, OVERLAP ENDS 12 INCHES MINIMUM AND STAKE.
- REMOVE SEDIMENT WHEN IT HAS ACCUMULATED TO A DEPTH OF 1/2 THE EXPOSED HEIGHT OF LOG AND REPLACE MULCH. REPLACE FILTER LOG IF TORN, REINSTALL FILTER LOG IF UNDERMINING OR DISLODGING OCCURS. REPLACE CLOGGED FILTER LOGS FOR PERMANENT APPLICATIONS. ESTABLISH AND CONTINUOUSLY MEET REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.

2 OF 2

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

greening urban
SUSTAINABLE SOLUTIONS

Civil Engineer:
Greening Urban, LLC
1500 Massachusetts Ave. NW
Suite 523
Washington DC, 20005
(804) 217-7436
greeningurban.com

STATE OF MARYLAND
PROFESSIONAL ENGINEER
4/13/20

Buddy Attick Lake Park
Parking Lot
555 CRESCENT ROAD
PRINCE GEORGE'S COUNTY
GREENBELT, MD

North Arrow

Date: 07.19.2017
Scale:
Drawn By: G.W.
Checked By: C.E., N.F.

Sheet Title: EROSION & SEDIMENT CONTROL PLAN
Sheet #: CVP-CDP2100

"MISS UTILITY" NOTE

CALL "MISS UTILITY" AT 1-800-257-7777, 48 HOURS PRIOR TO THE START OF WORK. THE EXCAVATOR MUST NOTIFY ALL PUBLIC UTILITY COMPANIES WITH UNDERGROUND FACILITIES IN THE AREA OF PROPOSED EXCAVATION AND HAVE THOSE FACILITIES LOCATED BY THE UTILITY COMPANIES PRIOR TO COMMENCING EXCAVATION.

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. 05-47020, EXPIRATION DATE: 7-9-2021.

[Signature]

4/13/20

DATE:

STABILIZATION CHECKLIST

F. B-4 VEGETATIVE STABILIZATION

- 1. Sediment control practices must remain in place during grading, seedbed preparation, seeding, mulching, and vegetative establishment.
2. Inspect seeded areas for vegetative establishment and make necessary repairs, replacements and reseeding within the planting season.
a. Adequate vegetative stabilization requires 95 percent groundcover.
b. If an area has less than 40 percent groundcover, restabilize following the original recommendations for lime, fertilizer, seedbed preparation and seeding.
c. If an area has between 40 and 94 percent groundcover, over-seed and fertilize using half of the rates originally specified.
d. Maintenance fertilizer rates for permanent seeding are shown below in Table B.6.

Table B.6: Maintenance Fertilization for Permanent Seeding. Columns: Seeding Mixture, Type, Rate (lb/1000 sq ft), Time, and Notes.

- 3. B-4-1 Incremental Stabilization
a. Cut Slopes
(1) Excavate and stabilize cut slopes in increments not to exceed 15 feet in height. Prepare seedbed and apply seed and mulch on all cut slopes as the work progresses.
(2) Once excavation has begun the operation shall be continuous from grubbing through completion of grading and placement of topsoil (if required) and permanent seed and mulch. Any interruptions in the operation or completing the operation out of the seeding season will necessitate the application of temporary stabilization.
b. Fill Slopes
(1) Construct and stabilize fill slopes in increments not to exceed 15 feet in height. Prepare seedbed and apply seed and mulch on all slopes as the work progresses.
(2) Stabilize slopes immediately when the vertical height of a lift reaches 15 feet, or when the grading operation ceases as prescribed in the plans.
(3) At the end of each day, install temporary water conveyance practices, as necessary, to intercept surface runoff and convey it down the slope in a non-erosive manner.
(4) Note: Once the placement of fill has begun the operation shall be continuous from grubbing through the completion of grading and placement of topsoil (if required) and permanent seed and mulch. Any interruptions in the operation or completing the operation out of the seeding season will necessitate the application of temporary stabilization.

- 4. B-4-2 Soil Preparation, Topsoiling and Soil Amendments
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 these plans.
(c) Incorporate lime and fertilizer into the top 3 to 5 inches of soil by discing or other suitable means.
(2) Permanent Stabilization
(a) A soil test is required for any earth disturbance of 5 acres or more. The minimum soil conditions required for permanent vegetative establishment are:
(i) Soil pH between 6.0 and 7.0.
(ii) Soluble salts less than 500 parts per million (ppm).
(iii) Soil contains less than 40 percent clay but enough fine grained material (greater than 30 percent silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception: if lowgrass will be planted, then a sandy soil (less than 30 percent silt plus clay) would be acceptable.
(iv) Soil contains 1.5 percent minimum organic matter by weight.
(v) Soil contains sufficient pore space to permit adequate root penetration.
(b) Application of amendments or topsoil is required if on-site soils do not meet the above conditions.
(c) Graded areas must be maintained in a true and even grade as specified on the approved plan, then scarified or otherwise loosened to a depth of 3 to 5 inches.
(d) Apply soil amendments as specified on the approved plan or as indicated by the results of a soil test.
(e) Mix soil amendments into the top 3 to 5 inches of soil by discing or other suitable means. Make lawn areas to smooth the surface, remove large objects like stones and branches, and ready the area for seed application. Loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface where site conditions will not permit normal seedbed preparation. Track slopes 3:1 or flatter with tracked equipment leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. Leave the top 1 to 3 inches of soil loose and friable. Seedbed loosening may be unnecessary on newly disturbed areas.
b. Topsoiling
(1) Topsoil is placed over prepared subsoil prior to establishment of permanent vegetation. The purpose is to provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants and/or unacceptable soil gradation.
(2) Topsoil salvaged from an existing site may be used provided it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-NRCS.
(3) Topsoiling is limited to areas having 2:1 for flatter slopes where:
(a) The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
(b) The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
(c) The original soil to be vegetated contains material toxic to plants growth.
(d) The soil is so acidic that treatment with limestone is not feasible.
(4) Areas having slopes steeper than 2:1 require special consideration and design.
(5) Topsoil Specifications: Soil to be used as topsoil must meet the following criteria:
(a) Topsoil must be a loam, sandy loam, clay loam, silt loam, sandy clay loam, or loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Topsoil must not be a mixture of contrasting textured subsoils and must contain less than 5 percent by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1 1/2 inches in diameter.
(b) Topsoil must be free of noxious plants or plant parts such as Bermuda grass, quack grass, Johnson grass, nut sedge, poison ivy, thistle, or others as specified.
(c) Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.
(6) Topsoil Application
(a) Erosion and sediment control practices must be maintained when applying topsoil.

- (b) Uniformly distribute topsoil in a 5 to 8 inch layer and lightly compacted 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. 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 analysis. 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.
(2) Lime materials must be ground limestone (hydrated or burnt lime may be substituted except when hydrosceding) 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.
(3) Lime and fertilizer are to be evenly distributed and incorporated into the top 3 to 5 inches of soil by discing or other suitable means.
(4) 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.
5. B-4-3 Seeding and Mulching
Seeding Specifications
(1) 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. Mulch alone may be applied between the fall and spring dates only if the ground is frozen. The appropriate seeding mixture must be applied when the ground thaws.
(2) Inoculants: The inoculants 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 as shown on the package. Note: It is very important to keep inoculants as cool as possible until used. Temperatures above 75 to 90 degrees Fahrenheit can weaken bacteria and make the inoculants less effective.
(3) 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 phytotoxic materials.
b. Seeding Application
(1) Dry Seeding: This includes use of conventional drop or broadcast spreader.
(a) 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.
(b) 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.
(2) Drill or Cultipacker Seeding: Mechanized seeders that apply and cover seed with soil.
(a) Cultipacker 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.
(b) Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction.
(3) Hydrosceding: Apply seed uniformly with hydrosceding (slurry includes seed fertilizer).
(a) If fertilizer is being applied at the time of seeding, the application rates should not exceed the following: nitrogen, 100 pounds per acre total of soluble nitrogen; P2O5 (phosphorus), 200 pounds per acre; K2O (potassium), 200 pounds per acre.
(b) Lime: Use only ground agricultural limestone (up to 3 tons per acre may be applied by hydrosceding). Normally, not more than 2 tons are applied by hydrosceding at any one time. Do not use burnt or hydrated lime when hydrosceding.
(c) Mix seed and fertilizer on site and seed immediately and without interruption.
(d) When hydrosceding do not incorporate seed into the soil.
c. Mulch Materials (in order of preference)
(1) Straw consisting of thoroughly threshed wheat, eye, oat, or barley and reasonably bright in color. Straw is to be free of noxious weed seeds as specified in the Maryland Seed Law and not musty, moldy, caked, decayed, or excessively dusty. Note: Use only sterile straw mulch in areas where one species of grass is desired.
(2) Wood Cellulose Fiber Mulch (WCFM) consisting of specially prepared wood cellulose processed into a uniform fibrous physical state.
(a) 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.
(b) WCFM, including dye, must contain no germination or growth inhibiting factors.
(c) WCFM materials are to be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer and other additives to form a homogeneous slurry. The mulch material must form a blotter-like ground cover, on application, having moisture absorption and percolation properties and must cover and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings.
(d) WCFM material must not contain elements or compounds at concentration levels that will be phytotoxic.
(e) WCFM must conform to the following physical requirements: fiber length of approximately 10 millimeters, diameter approximately 1 millimeter, pH range of 4.0 to 8.5, ash content of 1.6 percent maximum and water holding capacity of 90 percent minimum.
d. Mulch Application
(1) Apply mulch to all seeded areas immediately after seeding.
(2) 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.
(3) Wood cellulose fiber used as mulch must be applied at a net dry weight of 1,500 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.
e. Mulch Anchoring
(1) 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 size of the area and erosion hazard:
(a) 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.
(b) Wood cellulose fiber may be used for anchoring straw. Apply the fiber binder at a net dry weight of 750 pounds per acre. Mix the wood cellulose fiber with water at a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water. Synthetic binders such as Acrylic DLR (Agro-Tack), DCA-70, Petros, Terra Tack II, Terra Tack AR or other approved equal may be used. Follow application rates as specified by the manufacturer. Application of liquid binders needs to be heavier at the edges where wind catches mulch, such as in valleys and on crests of banks. Use of asphalt binders is strictly prohibited.
(d) 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.
6. B-4-4 Temporary Stabilization
a. Exposed soils where ground cover is needed for a period of 6 months or less. For longer duration of time, permanent stabilization practices are required.
(1) Select one or more of the species or seed mixtures listed in Table B.1 for the appropriate Plant Hardiness Zone (from Figure B.3), and enter them in the Temporary Seeding Summary below along with application rates, seeding dates and seeding depths. If this Summary is not put on the plans and completed, then Table B.1 plus fertilizer and lime rates must be put on the plans.
(2) For sites having soil tests performed, use and show the recommended rates by the testing agency. Soil tests are not required for Temporary Seeding.
(3) When stabilization is required outside of a seeding season, apply seed and mulch or straw mulch alone and maintain until the next seeding season.
7. B-4-5 Permanent Stabilization
a. Exposed soils where ground cover is needed for 6 months or more.
b. Seed Mixtures
(1) General Use
(a) Select one or more of the species or mixtures listed in Table B.3 for the appropriate Plant Hardiness Zone (from Figure B.3) and based on site conditions or purpose found on Table B.2. Enter selected mixture(s), application rates and seeding dates in the Permanent Seeding Summary. The summary is to be placed on the plan.
(b) Additional planting specifications for exceptional sites such as shorelines, stream banks, or dunes or for special purposes such as wildlife or aesthetic treatment may be found in USDA-NRCS Technical Field Office Guide, Section 342-Critical Area Planting. For sites having disturbed area over 5 acres, use and show the rates recommended by the soil testing agency.
(c) For areas receiving low maintenance, apply urea form fertilizer (46-0-0) 3/5 pounds per 1,000 square feet (150 pounds per acre) at the time of seeding in addition to the soil amendments shown in the Permanent Seeding Summary.
(2) Turfgrass Mixtures
(a) Areas where turfgrass may be desired include lawns, parks, playgrounds and commercial sites which will receive a medium to high level of maintenance.
(b) Select one or more of the species or mixtures listed below based on the site conditions or purpose. Enter selected mixture(s), application rates and seeding dates in the Permanent Seeding Summary. The summary is to be placed on the plan.
(i) Kentucky Bluegrass: Full Sun Mixture: For use in areas that receive intensive management. Irrigation required in the areas of central Maryland and Eastern Shore. Recommended Certified Kentucky Bluegrass Cultivars Seeding Rate: 1.5 to 2.0 pounds per 1,000 square feet. Choose a minimum of three Kentucky bluegrass cultivars with each ranging from 10 to 25 percent of the total mixture by weight.
(ii) Kentucky Bluegrass/Perennial Rye: Full Sun Mixture: For use in full sun areas where rapid establishment is necessary and when turf will receive medium to intensive management. Certified Perennial Ryegrass Cultivars/Certified Kentucky Bluegrass Seeding Rate: 2 pounds mixture per 1,000 square feet. Choose a minimum of three Kentucky bluegrass cultivars with each ranging from 10 to 35 percent of the total mixture by weight.
(iii) Tall Fescue/Kentucky Bluegrass: Full Sun Mixture: For use in drought prone areas and/or for areas receiving low to medium management in full sun to medium shade. Recommended mixture includes: Certified Tall Fescue Cultivars 95 to 100 percent, Certified Kentucky Bluegrass Cultivars 0 to 5 percent. Seeding Rate: 5 to 8 pounds per 1,000 square feet. One or more cultivars may be blended.
(iv) Kentucky Bluegrass/Fine Fescue: Shade Mixture: For use in areas with shade in Bluegrass lawns. For establishment in high quality, intensively managed turf areas. Mixture includes: Certified Kentucky Bluegrass Cultivars 30 to 40 percent and Certified Fine Fescue and 60 to 70 percent. Seeding Rate: 1 1/2 to 3 pounds per 1,000 square feet. Note: Select turfgrass varieties from those listed in the most current University of Maryland Publication, Agronomy Memo #77, "Turfgrass Cultivar Recommendation for Maryland". Choose certified material. Certified material is the best guarantee of cultivar purity. The certification program of the Maryland Department of Agriculture, Turf and Seed Section, provides a reliable means of consumer protection and assures a pure genetic line.
(c) Ideal Times of Seeding for Turf Grass Mixtures
Central MD: March 1 to May 15, August 15 to October 15 (Hardiness Zone: 6b)
Southern MD, Eastern Shore: March 1 to May 15, August 15 to October 15 (Hardiness Zone: 7a)
Till areas to receive seed by discing or other approved methods to a depth of 2 to 4 inches, level and rake the areas to prepare a proper seedbed. Remove stones and debris over 1/2 inches in diameter. The resulting seedbed must be in such condition that future mowing of grasses will pose no difficulty.
(e) If soil moisture is deficient, supply new seedlings with adequate water for plant growth (1/2 to 1 inch every 3 to 4 days depending on soil texture) until they are firmly established. This is especially true when seedlings are made late in the planting season, in abnormally dry or hot seasons, or on adverse sites.

Permanent Seeding Summary. Columns: No., Species, Application Rate (lb/ae), Seeding Dates, Seeding Depths, Fertilizer Rate (lb/20-20), Lime Rate.

- Soil: To provide quick cover on disturbed areas (2:1 grade or flatter).
(1) General Specifications
(a) Class of turfgrass sod must be Maryland Certified. Sod labels must be made available to the job foreman and inspector.
(b) Sod must be machine cut at a uniform soil thickness of 1/4 inch, plus or minus 1/8 inch, at the time of cutting. Measurement for thickness must exclude top growth and thatch. Broken pads and torn or uneven ends will not be acceptable.
(c) Standard size sections of sod must be strong enough to support their own weight and retain their size and shape when suspended vertically with a firm grasp on the upper 10 percent of the section. Sod must not be harvested or transplanted when moisture content (excessively dry or wet) may adversely affect its survival.
(d) Sod must be harvested, delivered, and installed within a period of 36 hours. Sod not transplanted within this period must be approved by an agronomist or soil scientist prior to its installation.
(2) Sod Installation
(a) During periods of excessively high temperature or in areas having dry subsoil, lightly irrigate the subsoil immediately prior to laying the sod.
(b) Lay the first row of sod in a straight line with subsequent rows placed parallel to it and tightly wedged against each other. Stagger lateral joints to promote more uniform growth and strength. Ensure that sod is not stretched or overlapped and that all joints are butted tight in order to prevent voids which would cause air drying of the roots.
(c) Wherever possible, lay sod with the long edges parallel to the contour and with staggering joints. Roll and tamp, peg or otherwise secure the sod to prevent slippage on slopes. Ensure solid contact exists between sod root and the underlying soil surface.
(d) Water the sod immediately following rolling and tamping until the underside of the new sod pad and soil surface below the sod are thoroughly wet. Complete the operations of laying, tamping and irrigating for any piece of sod within eight hours.
(3) Sod Maintenance
(a) In the absence of adequate rainfall, water daily during the first week or so often and sufficiently as necessary to maintain moist soil to a depth of 4 inches. Water sod during the heat of the day to prevent wilting.
(b) After the first week, sod watering is required as necessary to maintain adequate moisture content.
(c) Do not mow until the sod is firmly rooted. No more than 1/3 of the grass leaf must be removed by the initial cutting or subsequent cuttings. Maintain a grass height of at least 3 inches unless otherwise specified.
d. Note: Use of this information does not preclude meeting all of the requirements of the 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control - B-4 Vegetative Stabilization.

Temporary Seeding Summary. Columns: No., Species, Application Rate (lb/ae), Seeding Dates, Seeding Depths, Fertilizer Rate (lb/20-20), Lime Rate.

- Soil: To provide quick cover on disturbed areas (2:1 grade or flatter).
(1) General Specifications
(a) Class of turfgrass sod must be Maryland Certified. Sod labels must be made available to the job foreman and inspector.
(b) Sod must be machine cut at a uniform soil thickness of 1/4 inch, plus or minus 1/8 inch, at the time of cutting. Measurement for thickness must exclude top growth and thatch. Broken pads and torn or uneven ends will not be acceptable.
(c) Standard size sections of sod must be strong enough to support their own weight and retain their size and shape when suspended vertically with a firm grasp on the upper 10 percent of the section. Sod must not be harvested or transplanted when moisture content (excessively dry or wet) may adversely affect its survival.
(d) Sod must be harvested, delivered, and installed within a period of 36 hours. Sod not transplanted within this period must be approved by an agronomist or soil scientist prior to its installation.
(2) Sod Installation
(a) During periods of excessively high temperature or in areas having dry subsoil, lightly irrigate the subsoil immediately prior to laying the sod.
(b) Lay the first row of sod in a straight line with subsequent rows placed parallel to it and tightly wedged against each other. Stagger lateral joints to promote more uniform growth and strength. Ensure that sod is not stretched or overlapped and that all joints are butted tight in order to prevent voids which would cause air drying of the roots.
(c) Wherever possible, lay sod with the long edges parallel to the contour and with staggering joints. Roll and tamp, peg or otherwise secure the sod to prevent slippage on slopes. Ensure solid contact exists between sod root and the underlying soil surface.
(d) Water the sod immediately following rolling and tamping until the underside of the new sod pad and soil surface below the sod are thoroughly wet. Complete the operations of laying, tamping and irrigating for any piece of sod within eight hours.
(3) Sod Maintenance
(a) In the absence of adequate rainfall, water daily during the first week or so often and sufficiently as necessary to maintain moist soil to a depth of 4 inches. Water sod during the heat of the day to prevent wilting.
(b) After the first week, sod watering is required as necessary to maintain adequate moisture content.
(c) Do not mow until the sod is firmly rooted. No more than 1/3 of the grass leaf must be removed by the initial cutting or subsequent cuttings. Maintain a grass height of at least 3 inches unless otherwise specified.
d. Note: Use of this information does not preclude meeting all of the requirements of the 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control - B-4 Vegetative Stabilization.



Civil Engineer: Greening Urban, LLC
1500 Massachusetts Ave. NW
Suite 523
Washington DC, 20005
(804) 217-7436
greeningurban.com

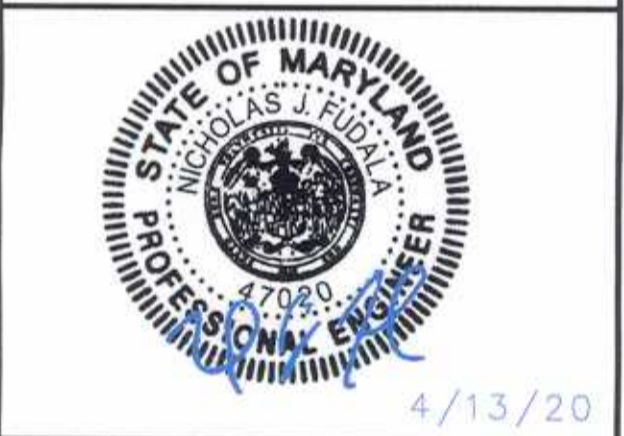


Table with columns: #, Date, Revisions

Buddy Attick Lake Park
Parking Lot
555 CRESCENT ROAD
PRINCE GEORGE'S COUNTY
GREENBELT, MD

Table with columns: Date, Drawn By, Checked By, Sheet Title, Sheet #



CIVP-CDP2200