



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, PHILADELPHIA DISTRICT
1650 ARCH STREET
PHILADELPHIA, PENNSYLVANIA 19103-2004

OPR

February 28, 2025

MEMORANDUM FOR RECORD

SUBJECT: US Army Corps of Engineers (Corps) Approved Jurisdictional Determination in accordance with the "Revised Definition of 'Waters of the United States'"; (88 FR 3004 (January 18, 2023) as amended by the "Revised Definition of 'Waters of the United States'; Conforming" (8 September 2023) ,¹ NAP-2025-00040-103.

BACKGROUND. An Approved Jurisdictional Determination (AJD) is a Corps document stating the presence or absence of waters of the United States on a parcel or a written statement and map identifying the limits of waters of the United States on a parcel. AJDs are clearly designated appealable actions and will include a basis of JD with the document.² AJDs are case-specific and are typically made in response to a request. AJDs are valid for a period of five years unless new information warrants revision of the determination before the expiration date or a District Engineer has identified, after public notice and comment, that specific geographic areas with rapidly changing environmental conditions merit re-verification on a more frequent basis.³

On January 18, 2023, the Environmental Protection Agency (EPA) and the Department of the Army ("the agencies") published the "Revised Definition of 'Waters of the United States,'" 88 FR 3004 (January 18, 2023) ("2023 Rule"). On September 8, 2023, the agencies published the "Revised Definition of 'Waters of the United States'; Conforming", which amended the 2023 Rule to conform to the 2023 Supreme Court decision in *Sackett v. EPA*, 598 U.S., 143 S. Ct. 1322 (2023) ("*Sackett*").

This Memorandum for Record (MFR) constitutes the basis of jurisdiction for a Corps AJD as defined in 33 CFR §331.2. For the purposes of this AJD, we have relied on Section 10 of the Rivers and Harbors Act of 1899 (RHA),⁴ the 2023 Rule as amended, as well as other applicable guidance, relevant case law, and longstanding practice in evaluating jurisdiction.

¹ While the Revised Definition of "Waters of the United States"; Conforming had no effect on some categories of waters covered under the CWA, and no effect on any waters covered under RHA, all categories are included in this Memorandum for Record for efficiency.

² 33 CFR 331.2.

³ Regulatory Guidance Letter 05-02.

⁴ USACE has authority under both Section 9 and Section 10 of the Rivers and Harbors Act of 1899 but for convenience, in this MFR, jurisdiction under RHA will be referred to as Section 10.

NAP

SUBJECT: 2023 Rule, as amended, Approved Jurisdictional Determination in Light of *Sackett v. EPA*, 143 S. Ct. 1322 (2023), NAP-2025-00040-103

1. SUMMARY OF CONCLUSIONS.

- a. The review area is comprised entirely of dry land (i.e., there are no waters such as streams, rivers, wetlands, lakes, ponds, tidal waters, ditches, and the like in the entire review area and there are no areas that have previously been determined to be jurisdictional under the Rivers and Harbors Act of 1899 in the review area). A delineation of the property was completed by GZA GeoEnvironmental, Incorporated entitled: "Wetland Delineation Report Woodland Ferry Road Solar"; dated June 30, 2023. The delineation did not identify any aquatic resources within the parcel. Ample upland data points were provided in support that the parcel is comprised of uplands. I concur with the delineation, verified by online tools.

2. REFERENCES.

- a. "Revised Definition of 'Waters of the United States,'" 88 FR 3004 (January 18, 2023) ("2023 Rule")
- b. "Revised Definition of 'Waters of the United States'; Conforming" 88 FR 61964 (September 8, 2023)
- c. *Sackett v. EPA*, 598 U.S. 651, 143 S. Ct. 1322 (2023)

3. REVIEW AREA. The review area is located at 38.581167 °N, 75.608086 °W, on Woodland Ferry Road, Laurel, Sussex County, Delaware 19973. Tax Parcel: 232-5.00-11.03. The review area is the portion of the tax parcel identified as the limit of disturbance (LOD). The LOD is shown on the approved plans entitled "Woodland Ferry Road Solar Field Sussex County, Delaware Standard Plans"; prepared by George, Miles & Buhr, LLC; dated October 2024; unrevised; 9 sheets. This JD request was made in conjunction with a No Permit Required request for the purpose of installing a solar field within an upland area.
4. NEAREST TRADITIONAL NAVIGABLE WATER (TNW), THE TERRITORIAL SEAS, OR INTERSTATE WATER TO WHICH THE AQUATIC RESOURCE IS CONNECTED. The nearest TNW is the Nanticoke River. The Nanticoke River is affected by the ebb and flow of the tide. Broad Creek is the closest named tributary to the review area which flows into the Nanticoke River.

NAP

SUBJECT: 2023 Rule, as amended, Approved Jurisdictional Determination in Light of *Sackett v. EPA*, 143 S. Ct. 1322 (2023), NAP-2025-00040-103

5. FLOWPATH FROM THE SUBJECT AQUATIC RESOURCES TO A TNW, THE TERRITORIAL SEAS, OR INTERSTATE WATER. The nearest TNW is the Nanticoke River. The Nanticoke River is affected by the ebb and flow of the tide. Broad Creek is the closest named tributary to the review area which flows into the Nanticoke River.
6. SECTION 10 JURISDICTIONAL WATERS⁵: Describe aquatic resources or other features within the review area determined to be jurisdictional in accordance with Section 10 of the Rivers and Harbors Act of 1899. Include the size of each aquatic resource or other feature within the review area and how it was determined to be jurisdictional in accordance with Section 10.⁶ N/A
7. SECTION 404 JURISDICTIONAL WATERS: Describe the aquatic resources within the review area that were found to meet the definition of waters of the United States in accordance with the 2023 Rule as amended, consistent with the Supreme Court's decision in *Sackett*. List each aquatic resource separately, by name, consistent with the naming convention used in section 1, above. Include a rationale for each aquatic resource, supporting that the aquatic resource meets the relevant category of "waters of the United States" in the 2023 Rule as amended. The rationale should also include a written description of, or reference to a map in the administrative record that shows, the lateral limits of jurisdiction for each aquatic resource, including how that limit was determined, and incorporate relevant references used. Include the size of each aquatic resource in acres or linear feet and attach and reference related figures as needed.
 - a. Traditional Navigable Waters (TNWs) (a)(1)(i): N/A
 - b. The Territorial Seas (a)(1)(ii): N/A
 - c. Interstate Waters (a)(1)(iii): N/A
 - d. Impoundments (a)(2): N/A
 - e. Tributaries (a)(3): N/A

⁵ 33 CFR 329.9(a) A waterbody which was navigable in its natural or improved state, or which was susceptible of reasonable improvement (as discussed in § 329.8(b) of this part) retains its character as "navigable in law" even though it is not presently used for commerce, or is presently incapable of such use because of changed conditions or the presence of obstructions.

⁶ This MFR is not to be used to make a report of findings to support a determination that the water is a navigable water of the United States. The district must follow the procedures outlined in 33 CFR part 329.14 to make a determination that water is a navigable water of the United States subject to Section 10 of the RHA.

NAP

SUBJECT: 2023 Rule, as amended, Approved Jurisdictional Determination in Light of *Sackett v. EPA*, 143 S. Ct. 1322 (2023), NAP-2025-00040-103

f. Adjacent Wetlands (a)(4): N/A

g. Additional Waters (a)(5): N/A

8. NON-JURISDICTIONAL AQUATIC RESOURCES AND FEATURES

- a. Describe aquatic resources and other features within the review area identified in the 2023 Rule as amended as not “waters of the United States” even where they otherwise meet the terms of paragraphs (a)(2) through (5). Include the type of excluded aquatic resource or feature, the size of the aquatic resource or feature within the review area and describe how it was determined to meet one of the exclusions listed in 33 CFR 328.3(b).⁷ N/A
- b. Describe aquatic resources and features within the review area that were determined to be non-jurisdictional because they do not meet one or more categories of waters of the United States under the 2023 Rule as amended (e.g., tributaries that are non-relatively permanent waters; non-tidal wetlands that do not have a continuous surface connection to a jurisdictional water). N/A

9. DATA SOURCES. List sources of data/information used in making determination. Include titles and dates of sources used and ensure that information referenced is available in the administrative record.

- a. Desktop evaluation on February 20, 2025.
- b. Delineation Report completed by GZA GeoEnvironmental, Incorporated entitled: “Wetland Delineation Report Woodland Ferry Road Solar”; dated June 30, 2023.
- c. Approved Plan entitled “Woodland Ferry Road Solar Field Sussex County, Delaware Standard Plans”; prepared by George, Miles & Buhr, LLC; dated October 2024; unrevised; 9 sheets.

10. OTHER SUPPORTING INFORMATION. N/A

11. NOTE: The structure and format of this MFR were developed in coordination with the EPA and Department of the Army. The MFR’s structure and format may be subject to future modification or may be rescinded as needed to implement additional guidance from the agencies; however, the approved jurisdictional determination described herein is a final agency action.

⁷ 88 FR 3004 (January 18, 2023)

1. THE SUSSEX CONSERVATION DISTRICT SHALL BE NOTIFIED IN WRITING 5 DAYS PRIOR TO COMMENCING WORK WITH CONSTRUCTION. FAILURE TO DO SO CONSTITUTES A VIOLATION OF THE APPROVED SEDIMENT AND STORMWATER MANAGEMENT PLAN.
2. REVIEW AND OR APPROVAL OF THE SEDIMENT AND STORMWATER MANAGEMENT PLAN SHALL NOT RELIEVE THE CONTRACTOR FROM HIS OR HER RESPONSIBILITIES FOR COMPLIANCE WITH THE REQUIREMENTS OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS, NOR SHALL IT RELIEVE THE CONTRACTOR FROM ERRORS OR OMISSIONS IN THE APPROVED PLAN.
3. IF THE APPROVED PLAN NEEDS TO BE MODIFIED, ADDITIONAL SEDIMENT AND STORMWATER CONTROL MEASURES MAY BE REQUIRED AS DEEMED NECESSARY BY DNREC OR THE DELEGATED AGENCY.
4. FOLLOWING SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED PRIOR TO PERMITTING SEDIMENT CONTROLS, SOIL STOCKPILES, AND ALL OTHER DISTURBED NEARBY AREAS ON THE PROJECT SITE WITHIN 14 CALENDAR DAYS UNLESS MORE RESTRICTIVE FEDERAL REQUIREMENTS APPLY.
5. ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL COMPLY WITH THE DELAWARE EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.
6. AT ANY TIME A DETERAERING OPERATION IS USED, IT SHALL BE PREVIOUSLY APPROVED BY THE AGENCY CONSTRUCTION SITE REVIEWER FOR A NON-EROSIVE POINT OF DISCHARGE, AND A DETERAERING PERMIT SHALL BE APPROVED BY THE DNREC WELL PERMITTING BRANCH.
7. APPROVED PLANS REMAIN VALID FOR 5 YEARS FROM THE DATE OF APPROVAL.
8. POST CONSTRUCTION VERIFICATION DOCUMENTS RE TO BE SUBMITTED TO THE DEPARTMENT OR DELEGATED AGENCY WITHIN 60-DAYS OF STORMWATER MANAGEMENT FACILITY COMPLETION.
9. APPROVAL OF A SEDIMENT AND STORMWATER MANAGEMENT PLAN DOES NOT GRANT OR IMPLY A RIGHT TO DISCHARGE STORMWATER RUNOFF. THE OWNER/DEVELOPER IS RESPONSIBLE FOR ACQUIRING ANY AND ALL AGREEMENTS, EASEMENTS, ETC., NECESSARY TO COMPLY WITH STATE DRAINAGE AND OTHER APPLICABLE LAWS.
10. THE OWNER SHALL BE FAMILIAR WITH AND COMPLY WITH ALL ASPECTS OF THE NPDES CONSTRUCTION GENERAL PERMIT.
11. THE CONTRACTOR SHALL AT ALL TIMES PROTECT AGAINST SEDIMENT OR DEBRIS LADEN RUNOFF OR WIND FROM LEAVING THE SITE. PERIMETER CONTROLS SHALL BE CHECKED DAILY AND ADJUSTED OR REPAIRED TO FULLY CONTAIN AND CONTROL SEDIMENT FROM LEAVING THE SITE. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED 80% OF THE EFFECTIVE CAPACITY OF THE CONTROL. IN ADDITION, THE CONTRACTOR MAY NEED TO ADJUST OR ALTER MEASURES IN TIMES OF ADVERSE WEATHER CONDITIONS, OR AS DIRECTED BY THE AGENCY CONSTRUCTION SITE REVIEWER.
12. BEFORE ANY EARTHWORK OR EXCAVATION TAKES PLACE, THE CONTRACTOR SHOULD CALL MISS UTILITY AT 811 OR 1.800.282.8555 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION, TO HAVE ALL EXISTING UTILITIES MARKED ON SITE.
13. THE DEPARTMENT OR DELEGATED AGENCY MAY REQUIRE ADDITIONAL SOIL TESTING AND REAPPLICATION OF PERMANENT OR TEMPORARY STABILIZATION IN ACCORDANCE WITH THE SPECIFICATIONS IN THE DELAWARE EROSION AND SEDIMENT CONTROL HANDBOOK, OR ALTERNATIVE MEASURES THAT PROVIDE FUNCTIONAL EQUIVALENCY.
14. WHEN DIRECTED BY THE DEPARTMENT OR DELEGATED AGENCY, THE OWNER SHALL ACQUIRE THE SERVICE OF A THIRD PARTY CERTIFIED CONSTRUCTION REVIEWER (OCR) TO PERFORM WEEKLY CONSTRUCTION REVIEWS. SEDIMENT AND STORMWATER MANAGEMENT PLANS APPROVED BY THE DEPARTMENT SHALL HAVE A THIRD PARTY OCR.
15. BEST AVAILABLE TECHNOLOGY (BAT) SHALL BE EMPLOYED TO MANAGE TURBID DISCHARGES IN ACCORDANCE WITH REQUIREMENTS OF 7. DEL. C. 46, REGULATIONS GOVERNING THE CONTROL OF WATER POLLUTION, SECTION 8.1.02, AND THE DELAWARE DEPARTMENT OF ENVIRONMENTAL CONTROL'S (DDA) POLICIES AND GUIDANCE ASSOCIATED WITH CONSTRUCTION ACTIVITIES, AND DEPARTMENT POLICIES, PROCEDURES, AND GUIDANCE.

1. BOUNDARY SHOWN HEREIN PROVIDED BY BECKER MORGAN GROUP PER ALTA SURVEY DATED 2024/09/19.
2. TOPOGRAPHY SHOWN HEREIN PER SURVEY FROM BECKER MORGAN GROUP, DELAWARE STATE PLANE COORDINATION SYSTEM NAD 83/91 AND NAVD88 VERTICAL DATUM.
3. THE USE SHALL BE FOR A GROUND-MOUNTED SOLAR FARM. NO OTHER TYPES OF ELECTRIC GENERATION SHALL BE PERMITTED AT THE SITE.
4. ANY LIGHTING ON THE FACILITY SHALL ONLY CONSIST OF PERIMETER LIGHTING NEEDED FOR SECURITY PURPOSES. ALL LIGHTING SHALL BE DOWNWARD SCREENED SO THAT IT DOES NOT SHINE ON NEIGHBORING PROPERTIES OR ROADWAY.
5. ONE UNLIGHTED SIGN, NOT EXCEED 32 SQUARE FEET IN SIZE, SHALL BE INSTALLED. THE SIGN SHALL IDENTIFY THE OPERATOR OF THE SOLAR FARM AND SHALL PROVIDE CONTACT INFORMATION IN CASE OF EMERGENCY.
6. THE SITE SHALL BE SECURED BY FENCING WITH A GATE, WITH A "KNOX BOX" OR SIMILAR DEVICE TO ACCOMMODATE EMERGENCY ACCESS TO THE FACILITY. THE COMPANY OR OTHER EMERGENCY RESPONDERS, THE FENCE LINE SHALL BE SHOWN ON THE FINAL SITE PLAN.
7. ANY TRANSFORMERS OR SIMILAR EQUIPMENT SHALL BE CENTRALLY LOCATED ON THE SITE AWAY FROM ANY NEARBY RESIDENTIAL USES.
8. THE ENTIRE SITE, INCLUDING THE AREA THE OUTSIDE THE FENCE, SHALL BE MAINTAINED SO THAT IT DOES NOT BECOME OVERGROWN.
9. STORMWATER MANAGEMENT AND EROSION AND SEDIMENTATION CONTROL FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH ALL APPLICABLE STATE AND COUNTY REQUIREMENTS. THESE FACILITIES SHALL OPERATED USING BEST MANAGEMENT PRACTICES.
10. THERE SHALL BE A VEGETATED BUFFER THAT IS AT LEAST 15 FEET WIDE PLANTED WITH DECIDUOUS AND EVERGREEN TREES AND SHRUBS AROUND THE PERIMETER OF THE SOLAR ARRAYS WHEREVER THERE IS NOT AN EXISTING VEGETATED BUFFER. THESE BUFFERS SHALL SCREEN SOLAR ARRAYS WHILE ALLOWING THE SOLAR ARRAYS TO FUNCTION. THESE BUFFERS SHALL BE MAINTAINED TO INCLUDE A DOUBLE ROW OF SCREENING ALONG THE WESTERN BOUNDARY AND THE EXISTING SCREENING SHALL BE BOLSTERED ALONG THE SOUTHERN AND EASTERN BOUNDARIES.
11. THE FINAL SITE PLAN SHALL IDENTIFY A DECOMMISSIONING PLAN THAT INCLUDES FINANCIAL SECURITY TO ENSURE THAT FUNDS ARE AVAILABLE FOR DECOMMISSIONING AND REMOVAL OF THE SOLAR FARM IN ITS ENTIRETY THROUGHOUT THE LIFE OF THE CONDITIONAL USE.
12. THE FINAL SITE PLAN SHALL BE SUBJECT TO THE REVIEW AND APPROVAL OF THE SUSSEX COUNTY PLANNING AND ZONING COMMISSION.

"I BRENT R. JETT, P.E., HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED UNDER MY SUPERVISION AND TO THE BEST OF MY KNOWLEDGE COMPLIES WITH THE APPLICABLE STATE AND LOCAL REGULATIONS AND ORDINANCES."

"I, THE UNDERSIGNED, CERTIFY THAT ALL LAND CLEARING, CONSTRUCTION AND DEVELOPMENT SHALL BE DONE PURSUANT TO THE APPROVED STANDARD PLAN AND THAT RESPONSIBLE PERSONNEL (I.E. BLUE CARD HOLDER) INVOLVED IN THE LAND DISTURBANCE WILL HAVE A CERTIFICATION OF TRAINING PRIOR TO INITIATION OF THE PROJECT, AT A DNREC SPONSORED OR APPROVED TRAINING COURSE FOR THE CONTROL OF EROSION AND SEDIMENT DURING CONSTRUCTION. IN ADDITION, I GRANT THE DNREC SEDIMENT AND STORMWATER PROGRAM AND/OR THE RELEVANT DELEGATED AGENCY THE RIGHT TO CONDUCT ON-SITE REVIEWS"

COMMUNITY POWER GROUP RACHEL BOOTS, P.E.	DATE
---	------

BROAD CREEK HUNDRED,
NANTICOKE & BROAD CREEK WATERSHED
GMB FILE NO. 240189

SCALE: 1" = 1 MILE

APPLICANT: WOODLAND FERRY SOLAR 1 LLC
5636 CONNECTICUT AVE, #42729
WASHINGTON DC, 20015

OWNER: JADE RUN FARM, LLC C/O GLEN &
LAURIE JONES, 8268 SNAKE ROAD
BETHEL, DE 19931

CONTACT: MICHAEL BORKOWSKI,
(PHONE) 202.844.6423

CIVIL: GEORGE, MILES & BUHR, LLC
206 WEST MAIN STREET
SALISBURY, MARYLAND 21801

CONTACT: BRENT R. JETT, P.E.
(PHONE) 410.742.3115

[illegible]

SCALE: 1" = 20 MILES


GEORGE, MILES & BUHR, LLC
ARCHITECTS & ENGINEERS
SALISBURY • BALTIMORE • SEAFORD
206 WEST MAIN STREET
SALISBURY, MARYLAND 21801
410-742-3115, FAX 410-548-5790
www.gmbnet.com

OCTOBER 2024

G1.0	COVER SHEET
C1.0	OVERALL EXISTING CONDITIONS AND DEMOLITION PLAN
C2.0	OVERALL PROPOSED SITE PLAN
C2.0A	PROPOSED SITE PLAN
C2.0B	PROPOSED SITE PLAN
C3.0	CONSTRUCTION SITE NOTES
C3.1	CONSTRUCTION SITE DETAILS
C3.2	CONSTRUCTION SITE DETAILS
C4.0	SITE DETAILS

SITE ADDRESS:	APPROXIMATELY 1,200LF EAST OF INTERSECTION WOODLAND FERRY ROAD (RD 78) AND BETHEL ROAD (RD 493)
TAX MAP & PARCEL	232-5.00-11.03
HUNDRED:	BROAD CREEK HUNDRED
LATITUDE:	38.580465
LONGITUDE:	-75.608626
TOTAL SITE AREA:	±39.45 ACRES
DISTURBED AREA:	±0.98 ACRES (42,739 SQ.FT.)
EXISTING ZONING:	AR-1 AGRICULTURAL
PROPOSED CONDITION:	UTILITY (SOLAR PANEL ARRAY)
EXISTING WETLAND AREA:	±0.00 ACRES
WATERSHED:	NANTICOKE RIVER AND BROAD CREEK WATERSHED
FLOOD PLAIN:	AREA OF MINIMAL FLOOD HAZARD ZONE X, PER FEMA MAP 10005C0403K DATED MARCH 10, 2015.
SOILS:	GLASSBORO SANDY LOAM; HENLOPEN-ROSEDALE COMPLEX; PEPPERBOX-ROSEDALE COMPLEX
WATER PROVIDER:	TIDEWATER UTILITIES
SEWER PROVIDER:	SUSSEX COUNTY PUBLIC WORKS
DATUM:	VERTICAL - NAVD88 HORIZONTAL - DELAWARE STATE PLANE COORDINATE SYSTEM NAD 83 /91
BENCHMARK FROM BMG ALTA SURVEY:	BM #1 (FCM) N: 211130.4600 E: 600709.3700 ELEV.=30.75' BM #2 (FCM) N: 210807.4900 E: 601370.1700 ELEV.=30.70'

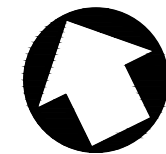
30
 EXISTING CONTOURS
 EXISTING NON-TIDAL FORESTED WETLANDS
 25-FOOT WETLAND BUFFER
 EXISTING FOREST CONSERVATION AREA
 25-FOOT DRAINAGE AND MAINTENANCE EASEMENT
 LIMITS OF WETLANDS
 EXISTING OVERHEAD ELECTRIC LINE
 EXISTING WOODS LINE
 EXISTING DRAINAGE DITCH
 PROPOSED LIMIT OF DISTURBANCE
 PROPOSED SILT FENCE
 PROPOSED FENCE LINE
 PROPOSED LANDSCAPING TREES
 PROPOSED GRAVEL ACCESS ROAD
 PROPOSED ELECTRICAL CONDUIT
 PROPOSED SOLAR PANELS
 PROPOSED CONCRETE PAD, PAD MOUNTED TRANSFORMERS & CONTROL PANELS
 PROPERTY MARKERS
 PROPOSED STABILIZED CONSTRUCTION ENTRANCE

 <p> GEORGE, MILES & BUHR, LLC ARCHITECTS & ENGINEERS SALISBURY • BALTIMORE • SEAFORD 206 WEST MAIN STREET SALISBURY, MARYLAND 21801 410-742-3115, FAX 410-548-5790 www.gmbnet.com </p>		NO.	REVISIONS	DATE
SCALE : AS NOTED		SHEET NO.		
DESIGN BY : JSL				
DRAWN BY : RFT				
CHECKED BY : TMG				
GMB FILE : 240189				
DATE : OCT 2024				



CONSTRUCTION NOTES

- | | |
|---|----------|
| 1 | EXISTING |
| 2 | EXISTIN |
| 3 | EXISTING |
| 4 | EXISTING |



0 50 100 200 300

SCALE: 1" = 100'

- A. NO STORAGE FACILITIES SHALL BE CONSTRUCTED ON THE SITE.
- B. LIGHTING ON THE FACILITY WILL ONLY CONSIST OF PERMITTER LIGHTING. IF NEEDED, THE PERMITTEE SHALL PROVIDE LIGHTING TO BE TURNED OFF WHEN THE FACILITY DOES NOT SHINE ON NEIGHBORING PROPERTIES OR ROADWAYS.
- C. ONE UNLIGHTED SIGN, NOT EXCEED 32 SQUARE FEET IN SIZE, SHALL BE PERMITTED.
- D. THE FACILITY SHALL BE CONFINED WITH A GATE WITH A "KNOCK BOX" TO ACCOMMODATE EMERGENCY ACCESS BY THE LOCAL FIRE COMPANY OR OTHER EMERGENCY RESPONDERS.
- E. THE FENCE GROUNDS INCLUDING THE AREA OUTSIDE OF THE FENCE SHALL BE MAINTAINED SO THAT IT DOES NOT BECOME OVERGROWN.
- F. ALL NATIONAL INDUSTRY STANDARDS SHALL BE FOLLOWED IN THE CONSTRUCTION OF THE PROJECT.
- G. THE FINAL SITE PLAN SHALL BE SUBJECT TO REVIEW AND APPROVAL OF THE PLANNING AND ZONING COMMISSION.

1. THE PROPOSED FACILITY IS A PUBLIC USE UNDER THE SUSSEX COUNTY ZONING
2. ORDINANCE, WHICH IS NOT IN CONFLICT WITH THE SUSSEX COUNTY ZONING
3. PUBLIC OR SEMI-PUBLIC CHARACTER THAT IS ESSENTIAL AND DESIRABLE FOR THE
4. GENERAL CONVENIENCE AND WELFARE OF SUSSEX COUNTY RESIDENTS.
5. THE PROPOSED FACILITY WILL PROVIDE A COMPREHENSIVE PLAN WHICH ENCOURAGES THE USE OF RENEWABLE ENERGY
6. OPTIONS, SUCH AS SOLAR FARMS.
7. THE PROPOSED FACILITY, IN ACCORDANCE WITH THIS RECOMMENDATION, THE PROPOSED USE
8. WILL NOT HAVE ANY ADVERSE IMPACT ON THE NEIGHBORING OR ADJACENT
9. PROPERTIES.
10. THE PROPOSED SOLAR GENERATION FACILITY WILL NOT RESULT IN ANY NOTICEABLE
11. INCREASE IN TRAFFIC ON ADJACENT AND NEIGHBORING ROADWAYS. THERE ARE NO
12. REGULAR EMPLOYEES AT THE SITE, ONLY PERIODIC VISITS FOR INSPECTIONS,
13. MAINTENANCE OR REPAIRS.
14. NO SIGNIFICANT NOISE, DUST OR ODOR WILL BE GENERATED BY THE FACILITY.

1	FURNISH AND INSTALL STABILIZED CONSTRUCTION ENTRANCE. SEE DETAIL ON SHEET C3.1.
2	FURNISH AND INSTALL SILT FENCE (TYPICAL). SEE DETAIL ON SHEET C3.1.
3	FURNISH AND INSTALL CONCRETE WASHOUT. SEE DETAIL ON SHEET C3.1.
4	FURNISH AND INSTALL AGRICULTURAL FENCE. SEE DETAIL ON SHEET C4.0.
5	FURNISH AND INSTALL GRAVEL ACCESS ROAD. MATCH EXISTING GRADE. SEE DETAIL ON SHEET C4.0.
6	FURNISH AND INSTALL OVERHEAD ELECTRICAL UTILITY POLES (TYPICAL).
7	FURNISH AND INSTALL ELECTRICAL TRANSFORMER (TYPICAL).
8	FURNISH AND INSTALL SOLAR ARRAY PANELS (TYPICAL). MATCH EXISTING GRADE.
9	FURNISH AND INSTALL PROPOSED LANDSCAPING TREES.

NOTE: PLANTING IS SHOWN IN ACCORDANCE WITH COUNTY COUNCIL SCREENING REQUIREMENTS OF PRELIMINARY SITE PLAN APPROVAL.

GMB

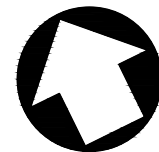
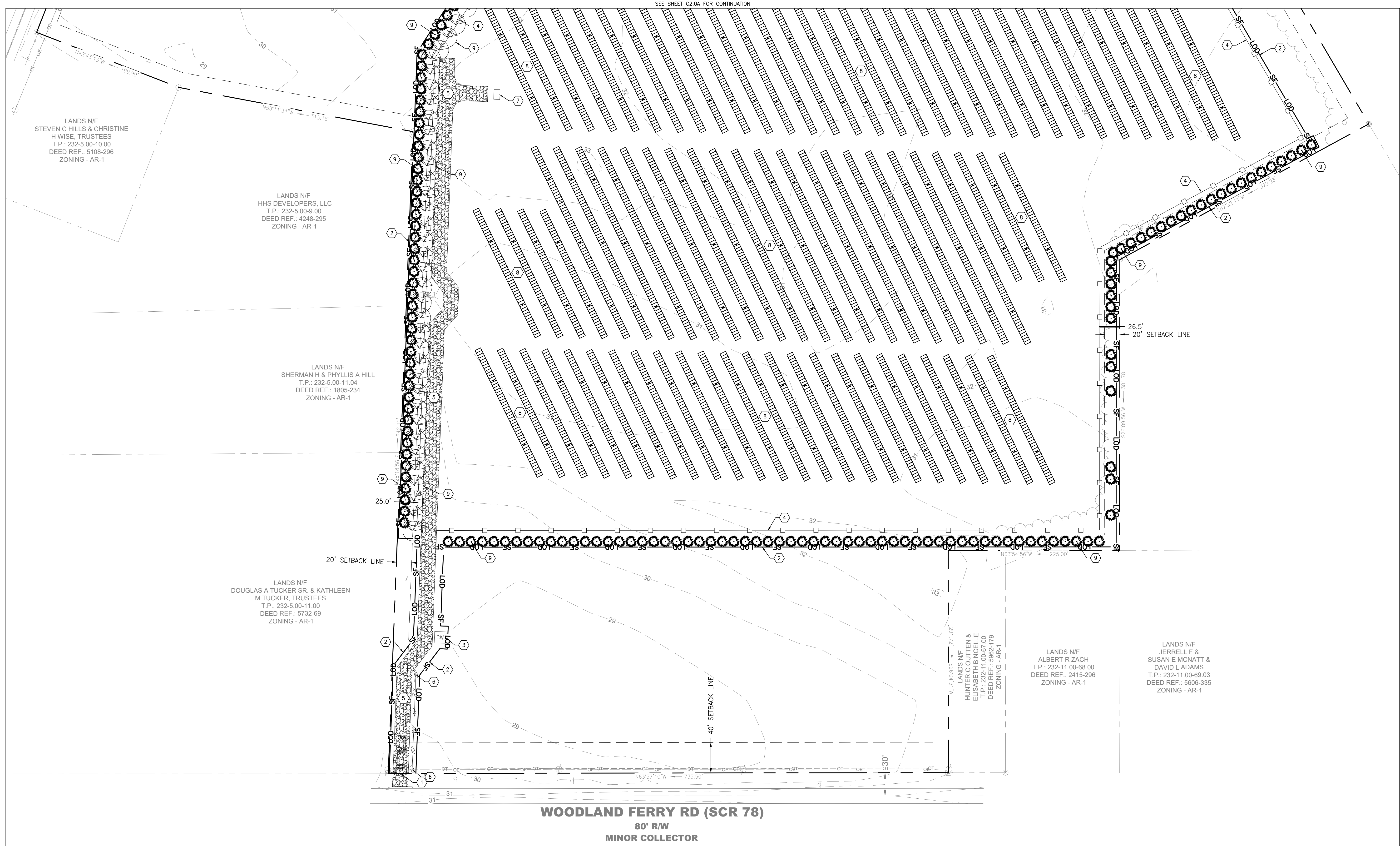
GEORGE, MILES & BUHR, LLC
ARCHITECTS & ENGINEERS
SALISBURY • BALTIMORE • SEAFORD
206 WEST MAIN STREET
SALISBURY, MARYLAND 21801
410-742-3115, FAX 410-548-5790
www.gmbnet.com

PENT-RED (.001 INCHES (1.0mm))	PENT-YELLOW (.007 INCHES (1.8mm))	PENT-GREEN (.010 INCHES (2.5mm))	PENT-BLUE (.007 INCHES (2.0mm))	PEN-MAGENTA (.007 INCHES (2.0mm))	PENT-WHITE (.009 INCHES (1.0mm))
-----------------------------------	--------------------------------------	-------------------------------------	------------------------------------	--------------------------------------	-------------------------------------

PLOT CODE
PEN-MAGENTA
(.014 INCHES (2.0mm))

- 1 FURNISH AND INSTALL STABILIZED CONSTRUCTION ENTRANCE. SEE DETAIL ON SHEET C3.1.
- 2 FURNISH AND INSTALL SILT FENCE (TYPICAL). SEE DETAIL ON SHEET C3.1.
- 3 FURNISH AND INSTALL CONCRETE WASHOUT. SEE DETAIL ON SHEET C3.1.
- 4 FURNISH AND INSTALL AGRICULTURAL FENCE. SEE DETAIL ON SHEET C4.0.
- 5 FURNISH AND INSTALL GRAVEL ACCESS ROAD. MATCH EXISTING GRADE. SEE DETAIL ON SHEET C4.0.
- 6 FURNISH AND INSTALL OVERHEAD ELECTRICAL UTILITY POLES (TYPICAL).
- 7 FURNISH AND INSTALL ELECTRICAL TRANSFORMER (TYPICAL).
- 8 FURNISH AND INSTALL SOLAR ARRAY PANELS (TYPICAL). MATCH EXISTING GRADE.
- 9 FURNISH AND INSTALL PROPOSED LANDSCAPING TREES.

CONSTRUCTION NOTES



SCALE	: 1" = 60'
DESIGN BY	: JSJ
DRAWN BY	: RFT
CHECKED BY	: TMG
GMB FILE	: 240189
DATE	: OCT 2024

SHEET NO.

DATE

REVISIONS

NO.

GMB

GEORGE, MILES & BUHR, LLC
ARCHITECTS & ENGINEERS
SALISBURY • BALTIMORE • SEAFORD
206 WEST MAIN STREET
SALISBURY, MARYLAND 21801
410-742-3115, FAX 410-548-5790
www.gmbnet.com

PEN1-RED .008 INCHES (1.0mm)	PEN2-YELLOW .007 INCHES (.18mm)	PEN1-GREEN .010 INCHES (.25mm)	PLOT CODE PEN1-ORANGE .014 INCHES (.36mm)	PEN3-BLUE .007 INCHES (.20mm)	PEN4-BROWN .007 INCHES (.17mm)	PEN5-WHITE .009 INCHES (1.0mm)
---------------------------------	------------------------------------	-----------------------------------	---	----------------------------------	-----------------------------------	-----------------------------------

SEDIMENT CONTROL NOTES

- THE SUSSEX CONSERVATION DISTRICT RESERVES THE RIGHT TO ENTER PRIVATE PROPERTY FOR THE PURPOSES OF PERIODIC SITE INSPECTION.
- FOLLOWING SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN 14 CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER SEDIMENT CONTROLS, TOPSOIL STOCKPILES, AND ALL OTHER DISTURBED OR GRADED AREAS ON THE PROPOSED SITE.
- ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL COMPLY WITH THE DELAWARE EROSION AND SEDIMENT CONTROL HANDBOOK LATEST EDITION.
- CONTRACTOR SHALL MAINTAIN AND REPAIR ALL EROSION AND SEDIMENT CONTROL AND STORMWATER MANAGEMENT PRACTICES DAMAGED DURING UTILITY INSTALLATION.
- "APPROVAL OF A SEDIMENT AND STORM WATER PLAN DOES NOT GRANT OR IMPLY A RIGHT TO DISCHARGE STORM WATER RUNOFF. THE OWNER/DEVELOPER IS RESPONSIBLE FOR ACQUIRING ANY AND ALL AGREEMENTS, EASEMENTS, ETC., NECESSARY TO COMPLY WITH STATE DRAINAGE AND OTHER APPLICABLE LAWS."
- EROSION CONTROL MATTING IS REQUIRED ON SLOPES OF 3:1 OR GREATER AND IN AREAS OF CONCENTRATED FLOW.
- TO PREVENT OR REDUCE MOVEMENT OF DUST FROM DISTURBED SOIL SURFACES, THE CONTRACTOR SHALL SPRINKLE THE SITE WITH WATER UNTIL THE SURFACE IS MOIST AND REPEAT AS NECESSARY.
- LOCATE STOCKPILES ON AREAS WITH LITTLE OR NO SLOPE. STOCKPILES MUST BE SURROUNDED WITH SILT FENCE OR A STABILIZED EARTHEN BERM.
- CONTACT THE SUSSEX CONSERVATION DISTRICT PRIOR TO COMMENCEMENT OF ANY WELL POINT OPERATIONS.
- STOCKPILING OR EXCAVATED MATERIAL OUTSIDE OF THE CONTRACT AREA SHALL REQUIRE AN ADDITIONAL EROSION AND SEDIMENT CONTROL PLAN FOR THAT LOCATION. PLAN MUST BE SUBMITTED AND APPROVED BY THE SUSSEX CONSERVATION DISTRICT.
- STREAMS, CHANNELS, OR WATERWAYS – NO SPOIL SHALL BE WASTED IN THE WATERWAY OR ADJACENT BANK AREAS. MEASURES SUCH AS SILT FENCE AND/OR BUFFER STRIPS SHALL BE USED TO PROTECT STREAMS, CHANNELS, PONDS OR WATERWAYS. LOCATION AND REQUESTS FOR SILT FENCE INSTALLATION WILL BE MADE BY THE DISTRICT INSPECTOR.
- MINOR FIELD ADJUSTMENTS MAY BE MADE TO INSURE THE CONTROL OF SEDIMENT, UPON APPROVAL OF THE SEDIMENT CONTROL REPRESENTATIVE.
- MAINTENANCE OF THE STORM WATER MANAGEMENT AREA IS TO BE THE RESPONSIBILITY OF THE PROPERTY OWNER. THE STATE AND COUNTY ASSUME NO RESPONSIBILITY FOR THE FUTURE MAINTENANCE OF THE AREA.
- ALL SEDIMENT CONTROL DEVICES ONCE INSTALLED SHALL BE APPROVED BY SEDIMENT CONTROL REPRESENTATIVES BEFORE PROCEEDING WITH ACTUAL CONSTRUCTION.
- NO SPOILS, STOCKPILED OR EXCAVATED MATERIAL MAY BE DISCHARGED INTO WETLANDS REGULATED BY THE STATE OF DELAWARE OR THE U.S. ARMY CORPS OF ENGINEERS.
- A THIRD PARTY CERTIFIED CONSTRUCTION REVIEWER REPRESENTATIVE IS REQUIRED ON-SITE UNLESS WAIVED BY THE SUSSEX CONSERVATION DISTRICT.
- ANY DEVIATION FROM THE "SEQUENCE OF OPERATIONS" INDICATED ON THIS DRAWING SHALL BE APPROVED BY THE SEDIMENT CONTROL REPRESENTATIVE.
- AT THE END OF EACH WORKING DAY ALL SEDIMENT CONTROL DEVICES SHALL BE INSPECTED AND LEFT IN FUNCTIONAL CONDITION.
- DNREC DEWATERING PERMITS ARE REQUIRED FOR ANY DEWATERING OPERATIONS.
- THE SCD INSPECTOR NEEDS TO VERIFY THAT THE DISCHARGE LOCATION FOR ANY DEWATERING OPERATIONS IS IN A NON-EROSIVE MANNER.

SEQUENCE OF OPERATIONS

GENERAL NOTES

- NOTIFY THE SUSSEX CONSERVATION DISTRICT IN WRITING AT LEAST FIVE (5) DAYS PRIOR TO THE START OF CONSTRUCTION. FAILURE TO DO SO CONSTITUTES A VIOLATION OF THE APPROVED SEDIMENT AND STORMWATER MANAGEMENT PLAN.
- LOG INTO "SCD'S CONTRACTOR PORTAL" AT [HTTPS://SUSSEX.ASSET-TRACKER.NET/HOME/WELCOME](https://sussex.asset-tracker.net/home/welcome) TO ACCESS THE BMP'S CONSTRUCTION CHECKLIST. PLEASE SCAN THE QR CODE THAT CAN BE FOUND ON THIS SHEET TO ACCESS SUSSEX CONSERVATION DISTRICTS 'HOW TO GUIDE' AND A LINK TO THE "CONTRACTOR'S PORTAL".
- PRIOR TO ANY CLEARING, INSTALLATION OF SEDIMENT CONTROL MEASURES OR GRADING, A PRE-CONSTRUCTION MEETING SHALL BE SCHEDULED AND CONDUCTED WITH THE AGENCY CONSTRUCTION SITE REVIEWER. THE LANDOWNER/DEVELOPER, CONTRACTOR, AND THIRD PARTY CERTIFIED CONSTRUCTION REVIEWER ARE REQUIRED TO BE IN ATTENDANCE AT THE PRE-CONSTRUCTION MEETING; THE DESIGNER IS RECOMMENDED TO ATTEND..
- SURVEY AND STAKE OUT PERIMETER CONTROLS, AS SHOWN ON APPROVED PLANS.
- INSTALL PERIMETER CONTROLS, AS SHOWN IN THE PLANS.
- ALL PERIMETER CONTROLS ARE TO BE REVIEWED BY THE AGENCY CONSTRUCTION SITE REVIEWER AND APPROVED PRIOR TO PROCEEDING WITH FURTHER SITE DISTURBANCE OR CONSTRUCTION.
- THE CONTRACTOR SHOULD AT ALL TIMES PROTECT AGAINST SEDIMENT OR DEBRIS LADEN RUNOFF OR WIND FROM LEAVING THE SITE. PERIMETER CONTROLS SHOULD BE CHECKED DAILY AND ADJUSTED AND/OR REPAIRED TO FULLY CONTAIN AND CONTROL SEDIMENTATION ON THE SITE. ACCUMULATED SEDIMENT SHOULD BE REMOVED WHEN IT HAS REACHED HALF OF THE EFFECTIVE CAPACITY OF THE CONTROL. IN ADDITION, THE CONTRACTOR MAY NEED TO ADJUST OR REPAIR MEASURES IN TIME OF ADVERSE WEATHER CONDITIONS, OR AS DIRECTED BY THE AGENCY CONSTRUCTION SITE REVIEWER.
- A CONSTRUCTION REVIEW IS REQUIRED DURING INITIAL SITE PREPARATION (INCLUDING INSTALLATION OF EROSION AND SEDIMENT CONTROL PRACTICES).
- INSTALL STABILIZED CONSTRUCTION ENTRANCE.
- INSTALL GRAVEL ACCESS ROAD, FENCING, AND SOLAR ARRAYS.
- RESTORE ALL DISTURBED GRASS AREAS AND VEGETATE ARE REQUIRED.
- REMOVE SEDIMENT CONTROL MEASURES AND STABILIZE AREA AFTER OBTAINING PERMISSION FROM SEDIMENT CONTROL INSPECTOR.

SOIL INFORMATION

SYMBOL	NAME	HYDROLOGIC SOIL GROUP
GoA	GLASSBORO SANDY LOAM	A/D
H1A	HENLOPEN-ROSEDALE COMPLEX	A
P1a	PEPPERBOX-ROSEDALE COMPLEX	A

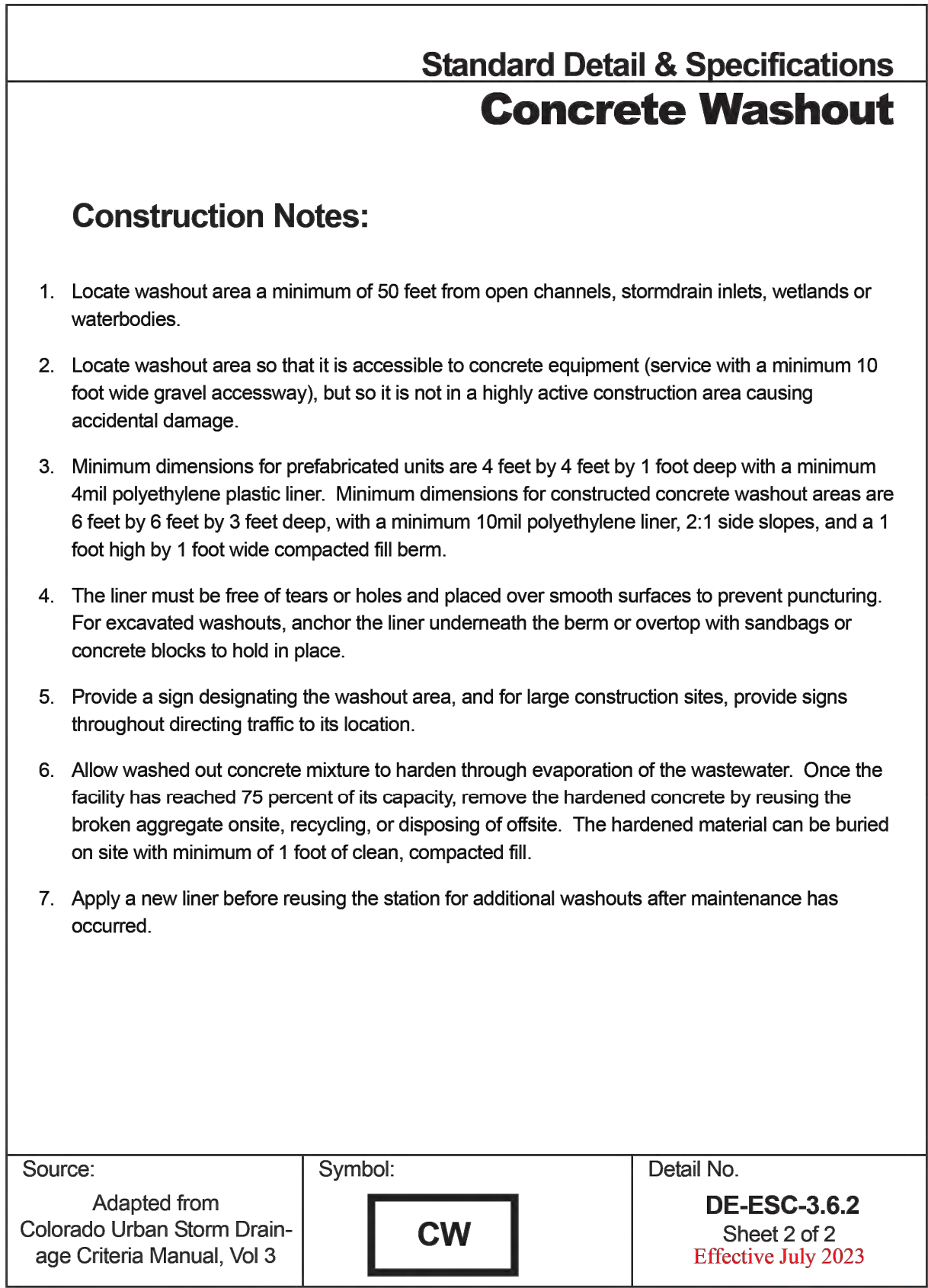
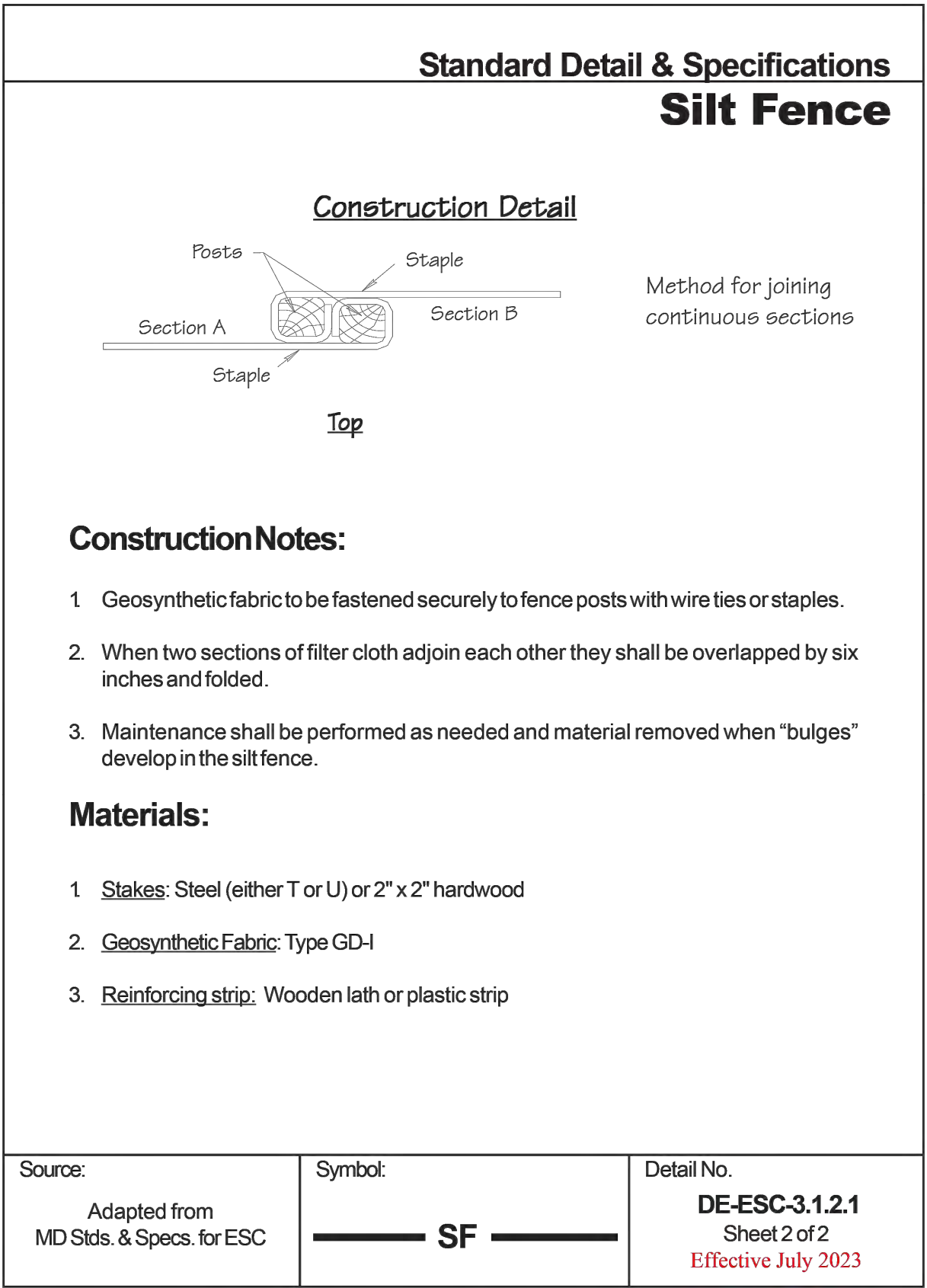
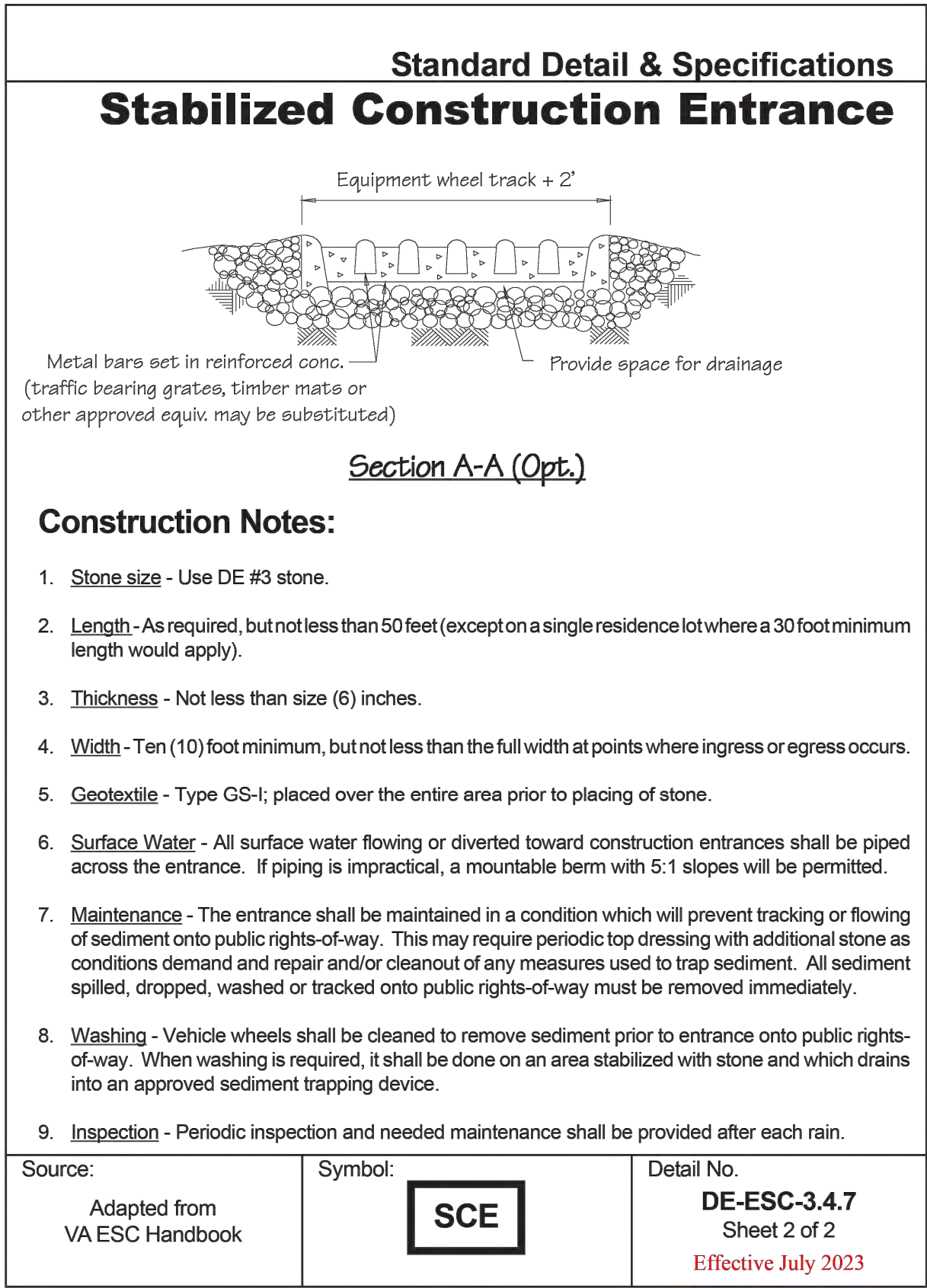
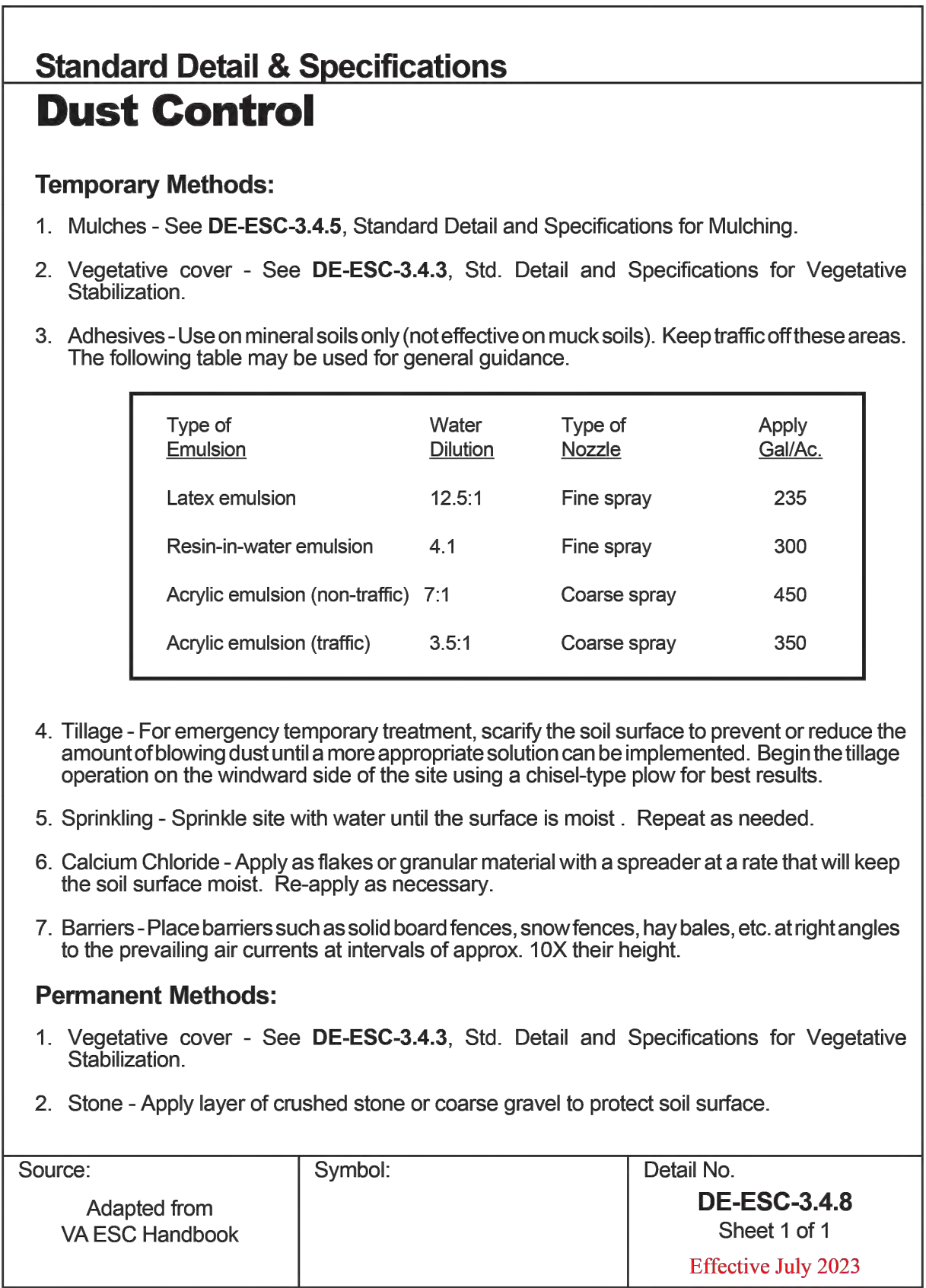
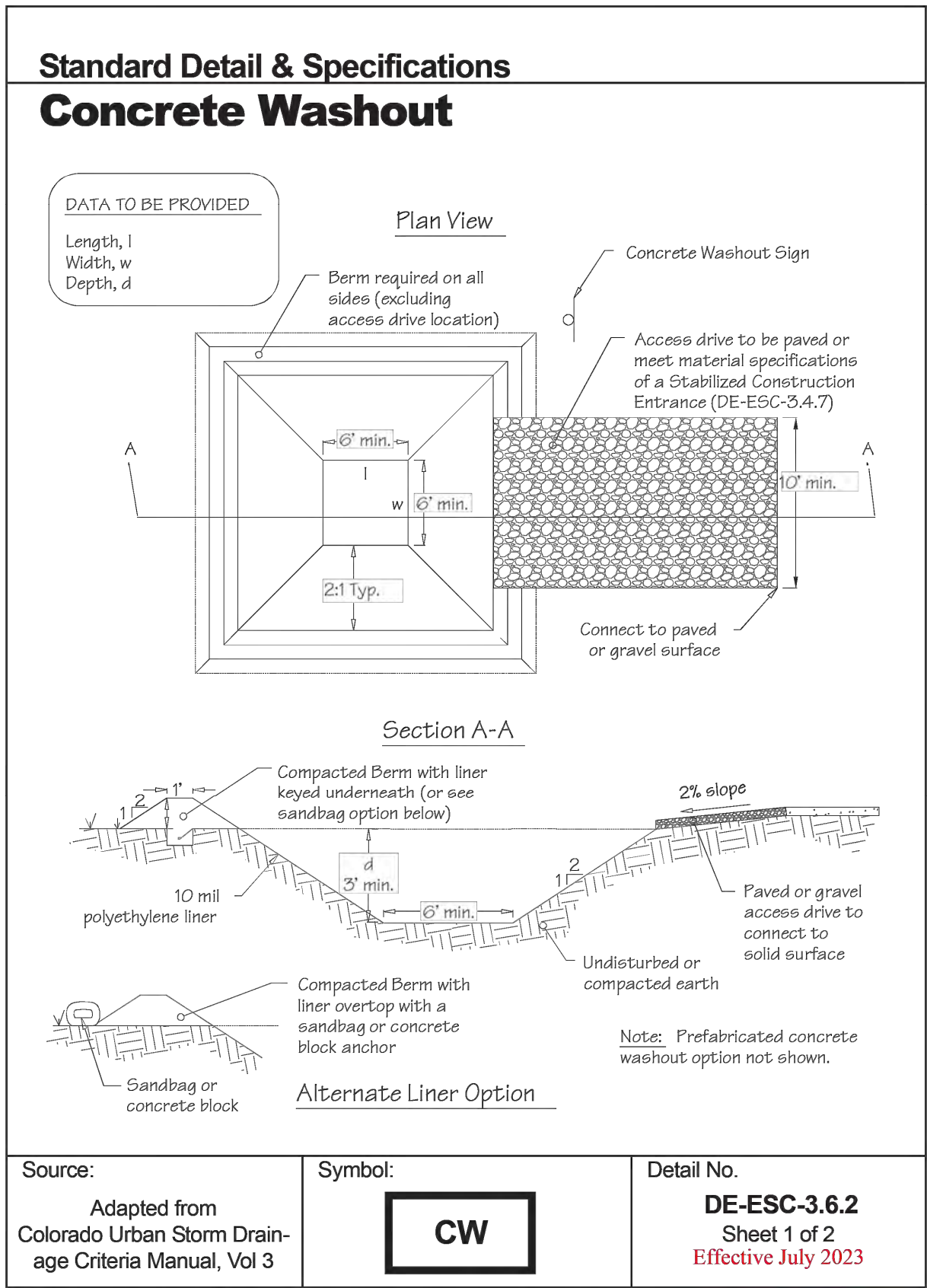
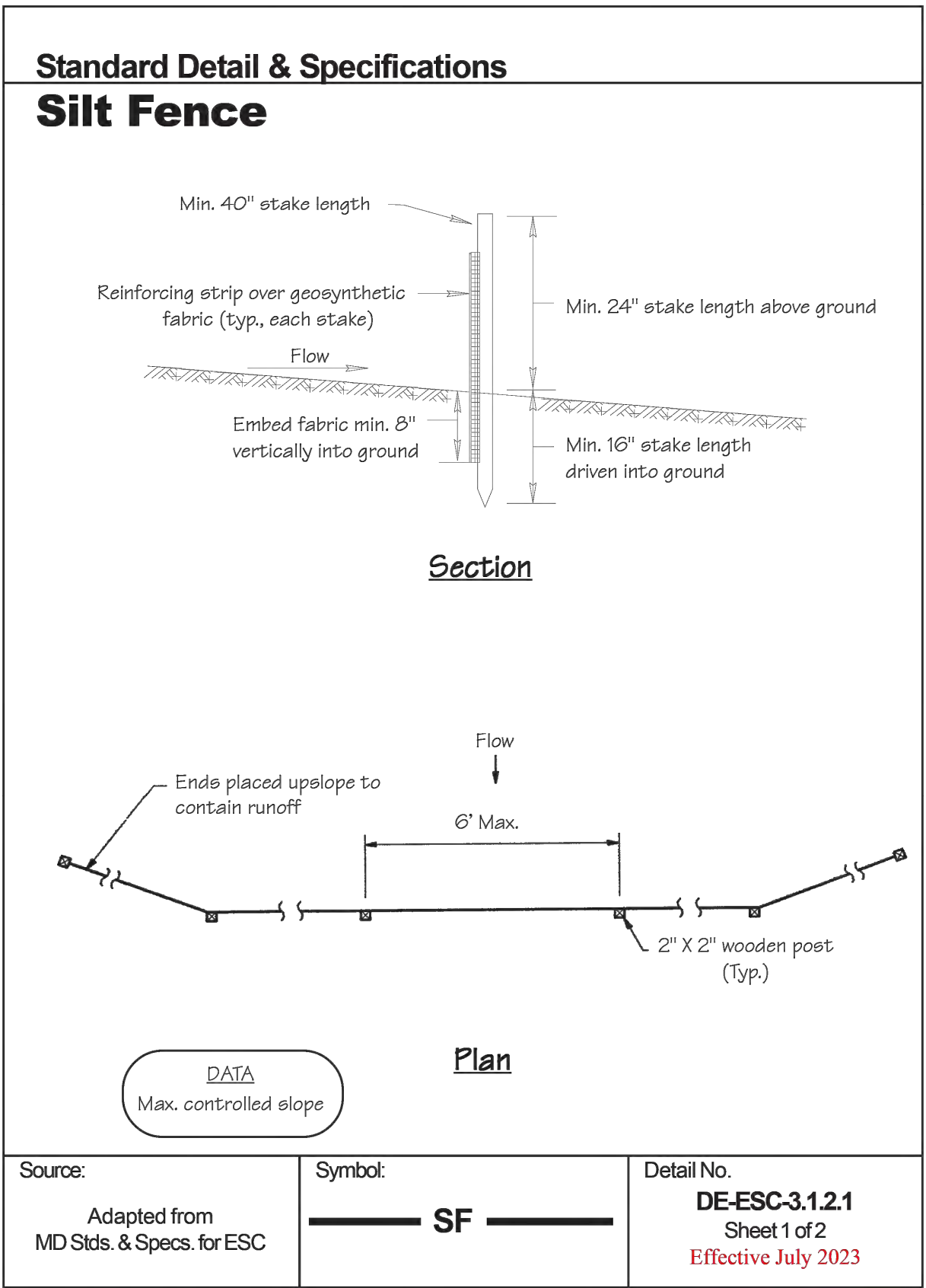
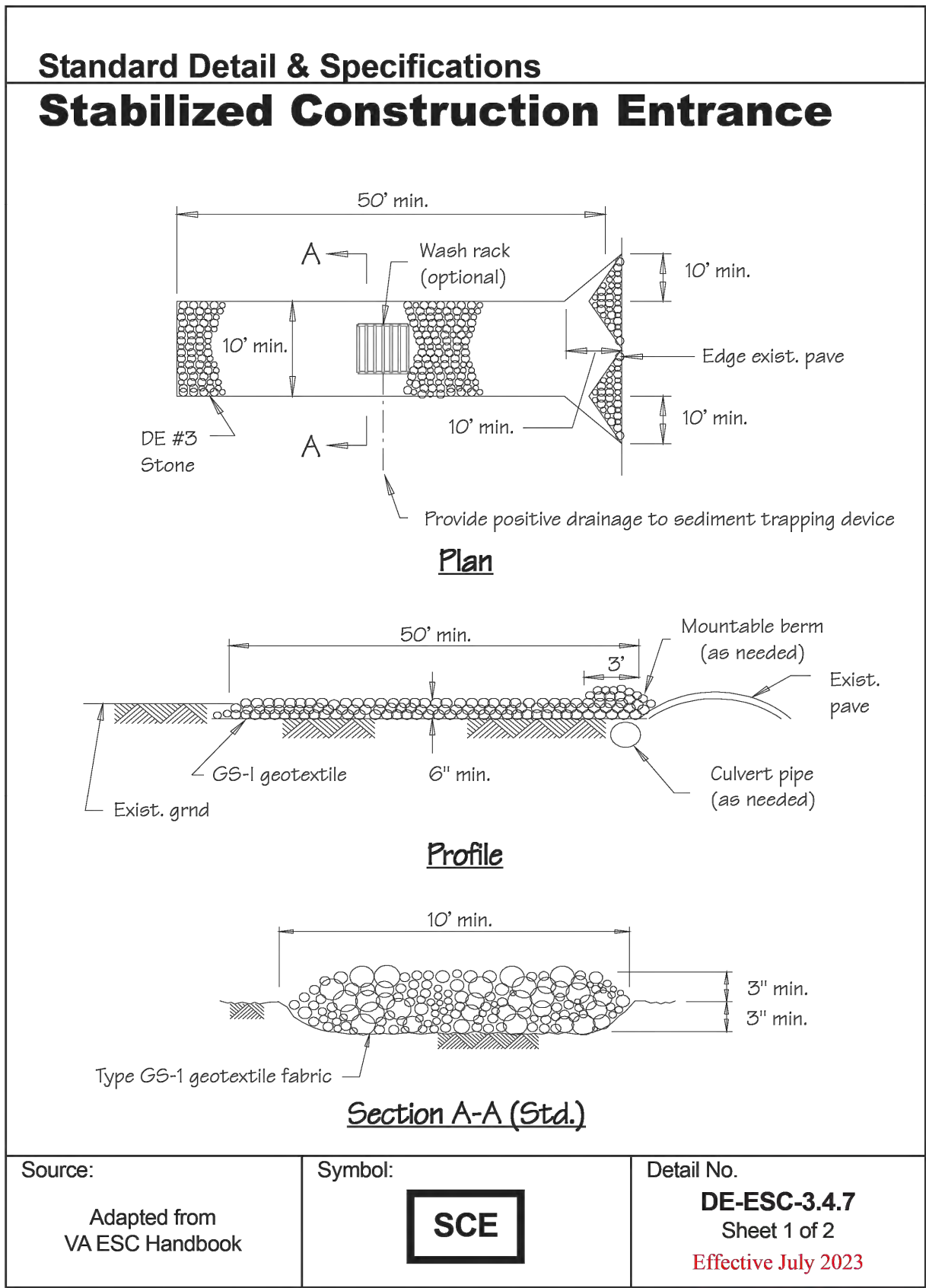
SOIL CLASSIFICATION OBTAINED FROM NRCS-WEB SOIL SURVEY OF SUSSEX COUNTY



GMB

GEORGE, MILES & BUHR, LLC
ARCHITECTS & ENGINEERS
SALISBURY • BALTIMORE • SEAFORD
206 WEST MAIN STREET
SALISBURY, MARYLAND 21801
410-742-3315, FAX 410-548-5790
www.gmbnet.com

SCALE : NO SCALE	SHEET NO.
DESIGN BY : JSL	
DRAWN BY : RFT	
CHECKED BY : TMG	
GMB FILE : 240189	
DATE : OCT 2024	



Standard Detail & Specifications
Construction Site Pollution Prevention

Delaware NPDES Discharge Permit

General Permit for Discharge of Stormwater from Construction Activities

((Project Name))

((NOI Permit Number))

((Agency Plan Approval ID))

((Contact Name & Number for Additional Site Information))

((Contact Name & Number to Obtain Copy of Approved Plan))

If you observe indicators of stormwater pollutants in the discharge or in the receiving waterbody, call the DNREC Spill Notification 24 HR Hotline at

1-800-662-8802

Example Construction General Permit (CGP) Signature

NOTES:
1. Minimum sign size 2' x 2'
2. Minimum text size 1"
3. Sign must be posted at a safe, publicly accessible location close to construction site
4. Sign must be visible from the public road nearest the active construction site
5. Signs posted within a DelDOT or other public road right-of-way (ROW) must be in accordance with all local and/or State requirements in regards to safety, location, orientation, etc.

Source:	Symbol:	Detail No.
Delaware ESC Handbook		DE-ESC-3.6.1 Sheet 1 of 4 Effective July 2023

Standard Detail & Specifications
Construction Site Pollution Prevention

Notes (cont.)

- d. Dispose of all trash in accordance with all applicable Delaware laws.
- e. Littering is strictly prohibited. Trash cans should be placed at all lunch spots and recycle bins should be placed near the construction trailer.
- f. If fertilizer bags can not be stored in a weather-proof location, they should be kept on a pallet and covered with plastic sheeting which is overlapped and anchored.
4. Equipment maintenance practices
- a. If possible, equipment should be taken to off-site commercial facilities for washing and maintenance.
- b. If performed on-site, wash vehicles with high-pressure water spray without detergents in an area contained by an impervious berm.
- c. Use drip pans for all equipment maintenance.
- d. Inspect equipment for leaks on a daily basis.
- e. Direct washout from concrete trucks into a temporary pit for hardening and proper disposal.
- f. Equip fuel nozzles with automatic shut-off valves.
- g. Dispose of all used products such as oil, antifreeze, solvents and tires in accordance with manufacturers' recommendations and local, state and federal laws and regulations.
5. Spill prevention practices
- a. Identify potential spill areas and contain them in covered areas with no connection to the storm drain system.
- b. Post warning signs in hazardous material storage areas.
- c. Perform preventive maintenance on all tanks, valves, pumps, pipes and other equipment as necessary.
- d. Prioritize low or non-toxic substances for use.

Source:	Symbol:	Detail No.
Adapted from USEPA Pub. 840-B-92-002		DE-ESC-3.6.1 Sheet 3 of 4 Effective July 2023

Standard Detail & Specifications
Vegetative Stabilization

TEMPORARY SEEDING BY RATES, DEPTHS AND DATES												
Mix #	Species ²	Seeding Rate		Optimum Seeding Dates ¹							Planting Depth ³	
				O = Optimum Planting Period; A = Acceptable Planting Period								
				Coastal Plain			Piedmont		All			
	Certified Seed	lb/Ac ⁴	lb/1000 sq.ft.	2/1-4/30	2/1-8/14	8/15-10/31	3/1-4/30	2/1-7/31	8/1-10/31	10/31-2/1		
1	Barley	125	4	O	A	O	O	A	O		1-2 inches	2-3" sandy soils
2	Oats	125	4	O	A	O	O	A	A		1-2 inches	2-3" sandy soils
3	Rye	125	4	O	A	O	O	A	O	A	1-2 inches	2-3" sandy soils
4	Perennial Ryegrass	125	4	O	A	O	O	A	O		0.5 inches	1-2" sandy soils
5	Annual Ryegrass	125	4	O	A	O	O	A	O	A	0.5 inches	1-2" sandy soils
6	Winter Wheat	125	4	O	A	O	O	A	O	A	1-2 inches	2-3" sandy soils
7	Foxtail Millet	30 PLS	0.7		O			O			0.5 inches	1-2" sandy soils
8	Pearl Millet	20 PLS	0.5		O			O			0.5 inches	1-2" sandy soils

1. Winter seeding requires 3 tons per acre of straw mulch for proper stabilization.
2. May be planted throughout summer if soil moisture is adequate or seeded area can be irrigated.
3. Applicable on slopes 3:1 or less.
4. Use varieties currently recommended for Delaware. Contact a County Extension Office for information.
5. Warm season grasses such as Millet may be used between 5/1 and 9/1 if desired. Seed at 3-5 lbs. per acre. Good on low fertility and acid areas. Seed after frost through summer at a depth of 0.5".

NOTE: Alternative seed mixes may be used with prior approval from the Department or Delegated Agency.

Source:	Symbol:	Detail No.
Delaware ESC Handbook		DE-ESC-3.4.3 Sheet 1 of 4 Effective July 2023

Standard Detail & Specifications
Vegetative Stabilization

PERMANENT SEEDING AND SEEDING DATES (cont.)												
Seeding Mixtures		Seeding Rate ¹		Optimum Seeding Dates ² O = Optimum Planting Period; A = Acceptable Planting Period							Remarks	
Mix No.	Certified Seed ³	lb/Ac	lb/1000 sq.ft.	2/1-4/30	5/1-8/14	8/15-10/31	3/1-4/30	5/1-7/31	8/1-10/31	10/31-2/1		
9	Redtop Creeping Bentgrass Sheep Fescue Rough Bluegrass	75 35 30 45	1.72 0.8 0.69 1	O	A ⁴	O	O	O	A ⁴	O	Add 100 lbs./ac. Winter Rye	Quick stabilization of disturbed sites and waterways
10	Switchgrass ⁵	10	0.23	A			O	A		O		Good erosion control, wildlife cover and wetland revegetation
Residential Lawns												
11	Tall Fescue Perennial Ryegrass Kentucky Bluegrass Blend	100 25 25	2.3 0.57 0.69	O	A ⁴	O	O	A ⁴	O			High value, high maintenance, light traffic, irrigation necessary. Well drained soils, full sun.
12	Tall Fescue Perennial Ryegrass Sheep Fescue	100 25 25	2.3 0.57 0.57	O	A ⁴	O	O	A ⁴	O			Moderate value, low maintenance, traffic tolerant
13	Creeping Red Fescue Chewings Fescue Rough Bluegrass Kentucky Bluegrass	50 50 20 20	1.15 1.15 0.4 0.4	O	A ⁴	O	O	A ⁴	O			Shade tolerant, moderate traffic tolerance, moderate maintenance.
14	Creeping Red Fescue Rough Bluegrass or Chewings Fescue	50 90	1.15 2.1	O	A ⁴	O	O	A ⁴	O			Shade tolerant, moisture tolerant.
15	K-31 Tall Fescue	150	3.5	O	A ⁴	O	O	A ⁴	O			Monoculture, but performs well alone in lawns. Discouraged.

1. When hydroseeding is the chosen method of application, the total rate of seed should be increased by 25%.
2. Winter seeding requires 3 tons per acre of straw mulch. Planting dates listed above are average for Delaware. These dates may require adjustment to reflect local conditions.
3. All seed shall meet the minimum purity and minimum germination percentages recommended by the Delaware Department of Agriculture. The maximum % of weed seeds shall be in accordance with Chapter 15, Title 3 of the Delaware Code.
4. Turf-type species may be planted throughout summer if soil moisture is adequate or seeded area can be irrigated.
5. It is recommended that all leguminous seed be inoculated.
6. Warm season grass mix and Switchgrass cannot be mowed more than 4 times per year.
7. Warm season grasses require a soil temperature of at least 50 degrees in order to germinate and will remain dormant until then.

NOTE: Alternative seed mixes may be used with prior approval from the Department or Delegated Agency.

Source:	Symbol:	Detail No.
Delaware ESC Handbook		DE-ESC-3.4.3 Sheet 3 of 4 Effective July 2023

Standard Detail & Specifications
Construction Site Pollution Prevention

Notes:

The Construction Site Pollution Prevention Plan includes the following elements:

1. Material Inventory

Document the storage and use of the following materials:

- a. Concrete
- b. Detergents
- c. Paints (enamel and latex)
- d. Cleaning solvents
- e. Pesticides
- f. Wood scraps
- g. Fertilizers
- h. Petroleum based products

2. Good housekeeping practices

- a. Store only enough product required to do the job.
- b. Store all materials in a neat, orderly manner in their original labeled containers and covered.
- c. Do not mix different substances.
- d. When possible, use all of a product prior to disposal of the container.
- e. Manufacturers' instructions for disposal should be strictly adhered to.
- f. Designate someone to inspect all BMPs daily.

3. Waste management practices

- a. Collect and store all waste materials in securely lidded dumpsters in a location that does not drain to a waterbody.
- b. Salvage and/or recycle waste materials whenever possible.
- c. The dumpsters shall be emptied a minimum of twice per week, or more if necessary. The licensed trash hauler is responsible for cleaning out dumpsters.

Source:	Symbol:	Detail No.
Adapted from USEPA Pub. 840-B-92-002		DE-ESC-3.6.1 Sheet 2 of 4 Effective July 2023

Standard Detail & Specifications
Construction Site Pollution Prevention

Notes (cont.)

- e. Prominently post contact information for reporting spills through the DNREC 24-Hour Toll Free Number.
6. Education
- a. Include Best Management Practices (BMPs) for construction site pollution control as part of regular progress meetings.
- b. Information regarding waste management, equipment maintenance and spill prevention should be prominently posted in the construction trailer.

CONTACT INFORMATION

DNREC 24-Hour Toll Free Number 800-662-8802

DNREC Solid & Hazardous Waste Management Section 302-739-9403

Source:	Symbol:	Detail No.
Adapted from USEPA Pub. 840-B-92-002		DE-ESC-3.6.1 Sheet 4 of 4 Effective July 2023

Standard Detail & Specifications
Vegetative Stabilization

PERMANENT SEEDING AND SEEDING DATES												
Seeding Mixtures		Seeding Rate ¹		Optimum Seeding Dates ² O = Optimum Planting Period A = Acceptable Planting Period							Remarks	
Mix No.	Certified Seed ³	lb/Ac	lb/1000 sq.ft.	Coastal Plain	Piedmont	Alt ⁴						
Well Drained Soils												
1	Tall Fescue Canada Wild Rye	140 10	3.2 0.23	A	O	A	O	A	O	A	Add 100 lbs./ac. Winter Rye	Good erosion control mix. Tolerant of low fertility soils. Good for droughty sites.
2	Deertongue Sheep Fescue White Clover	30 30 10	0.69 0.69 0.35	O	A	O	A	O	A	O	Add 100 lbs./ac. Winter Rye	Good erosion control mix. Tolerant of low fertility soils. Legume that fixes atmospheric N into soil.
3	Tall Fescue (Turf-type) or Strong Creeping Red Fescue or Perennial Ryegrass	50 50 50	1.15 1.15 1.15	O	A ⁴	O	O	A ⁴	O	O	lbs./ac. Winter Rye	Good erosion control mix. Tall Fescue for droughty conditions. Creeping Red Fescue for heavy shade. Flatpea to suppress woody vegetation.
4	Strong Creeping Red Fescue Kentucky Bluegrass Perennial Ryegrass or Redtop	100 70 15 5	2.3 1.61 0.35 0.11	O	A ⁴	O	O	A ⁴	O	O	Add 100 lbs./ac. Winter Rye	Suitable waterway mix. Canada Bluegrass more drought tolerant. Use Redtop for increased drought tolerance.
5	Switchgrass ^{5,7} or Coastal Panicgrass Big Bluestem Little Bluestem Indian Oats	10 10 5 5 5	0.23 0.23 0.11 0.11 0.1	O				O				Native warm-season mixture. Tolerant of low fertility soils. Drought tolerant. Poor shade tolerance. N fertilizer discouraged - weeds.
6	Tall Fescue (Turf-type) (Blend of 3 cultivars)	150	3.5	O	A ⁴	O	O	A ⁴	O			Managed filter strip for nutrient uptake.
7	Tall Fescue Ry. Bluegrass (Blend) Perennial Ryegrass	100 20 20	3.5 0.48 0.48	O	A ⁴	O	O	A ⁴	O			Three cultivars of Kentucky Bluegrass. Traffic tolerant.
8	Big Bluestem ⁷ Indian Grass ⁷ Little Bluestem ⁷ Creeping Red Fescue plus one of: Partridge Pea Bush Clover Wild Indigo Showy Tick-Trefoil	10 10 10 30 5 3 3 2	0.23 0.23 0.18 0.69 0.11 0.07 0.07 0.05	O	A ⁴		O	A ⁴				All species are native. Indian Grass and Bluestem have fluffy seeds. Plant with a specialized native seed drill. Creeping Red Fescue will provide erosion protection while the warm season grasses get established.

NOTE: Alternative seed mixes may be used with prior approval from the Department or Delegated Agency.

Source:	Symbol:	Detail No.
Delaware ESC Handbook		DE-ESC-3.4.3 Sheet 2 of 4 Effective July 2023

Standard Detail & Specifications
Vegetative Stabilization

Construction Notes:

1. Site Preparation
- a. Prior to seeding, install needed erosion and sediment control practices such as diversions, grade stabilization structures, berms, dikes, grassed waterways, and sediment basins.
- b. Final grading and shaping is not necessary for temporary seedings.

2. Seedbed Preparation

It is important to prepare a good seedbed to ensure the success of establishing vegetation. The seedbed should be well prepared, loose, uniform, and free of large clods, rocks, and other objectionable material. The soil surface should not be compacted or crusted.

3. Soil Amendments

- a. Lime - Apply liming materials based on the recommendations of a soil test in accordance with the approved nutrient management plan. If a nutrient management plan is not required, apply dolomitic limestone at the rate of 1 to 2 tons per acre. Apply limestone uniformly and incorporate into the top 4 to 6 inches of soil.
- b. Fertilizer - Apply fertilizer based on the recommendations of a soil test in accordance with the approved nutrient management plan. If a nutrient management plan is not required, apply a formulation of 10-10-10 at the rate of 600 pounds per acre. Apply fertilizer uniformly and incorporate into the top 4 to 6 inches of soils.

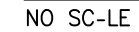
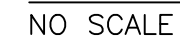
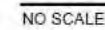
4. Seeding

- a. For temporary stabilization, select a mixture from Sheet 1. For a permanent stabilization, select a mixture from Sheet 2 or Sheet 3 depending on the conditions. Alternative seed mixes may be used with prior approval from the Department or Delegated Agency.
- b. Apply seed uniformly with a broadcast seeder, drill, cultipacker seeder or hydroseeder. All seed will be applied at the recommended rate and planting depth.
- c. Seed that has been broadcast should be covered by raking or dragging and then lightly tamped into place using a roller or cultipacker. If hydroseeding is used and the seed and fertilizer is mixed, they will be mixed on site and the seeding shall be done immediately and without interruption.

5. Mulching

All mulching shall be done in accordance with detail DE-ESC-3.4.5.

Source:	Symbol:	Detail No.
Delaware ESC Handbook		DE-ESC-3.4.3 Sheet 4 of 4 Effective July 2023



1601 W. DEER VALLEY RD., PHOENIX, AZ 85027 | T. 800-552-5669 | F. 625-487-2290 | INFO@KNOXBOX.COM | KNOXBOX.COM
 ©2004 Phoenix Knott Box Company

departments, law enforcement agencies, and governmental entities.