



Maryland

Department of the Environment

Wes Moore, Governor
Aruna Miller, Lt. Governor

Serena McIlwain, Secretary
Suzanne E. Dorsey, Deputy Secretary

April 6, 2023

Mr. Raghavenderrao Badami, P.E.
Assistant Director, Inspections and Permits Department
Anne Arundel County
Heritage Office Complex
2664 Riva Road, MS6201
Annapolis, MD 21401

Dear Mr. Badami:

The Maryland Department of the Environment, Water and Science Administration (Department) has completed a review of Anne Arundel County's (County) application for continued delegation of erosion and sediment control enforcement authority in accordance with State law and regulation. As part of this evaluation, the Department conducted field inspections and a review of the County's erosion and sediment control ordinance and enforcement procedures to determine whether its program is in accordance with State law and regulations. I would like to thank you and your staff for your assistance during the review process.

On November 2, 2022, Department staff accompanied County personnel and the Anne Arundel Soil Conservation District (SCD) to inspect six active construction sites totaling 90 acres of earth disturbance. Results of this field audit, attached for your use, found the majority of sites to be in good condition and routine enforcement by the County inspection staff generally effective in gaining compliance. However, areas of improvement include ensuring sites are stabilized per the Standards and Specifications for Soil Erosion and Sediment Control (e.g., disturbed earth at four sites, stabilized construction entrances at three sites) and filtering practices are maintained (e.g., inlet protection or reinforced silt fence at four sites). Additionally, the Department found that inspection reports were inconsistently written and recommends that the County standardize how compliance is communicated in the reports.

On March 16, 2023, the County and the Department met to discuss this review and the programmatic improvements that the County plans to implement. Based on the findings of this evaluation and the understanding that the County will address these issues, the Department is granting Anne Arundel County's request for continued delegation of erosion and sediment control enforcement authority, effective through June 30, 2025. The Department also determined the County's program is in compliance with the erosion and sediment control program requirements of its municipal separate storm sewer system (MS4) permit (20-DP-3316, MD0068306).

Mr. Raghavenderrao Badami, P.E.
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Effective erosion and sediment control is fundamental in our effort to protect local streams and restore the Chesapeake Bay, and I thank you and your staff for your continued efforts. If you have any questions or comments regarding this evaluation, please call me at (410) 537-3545, or have a member of your staff contact Mr. Stewart Comstock, Sediment and Stormwater Program Review Division at (410) 537-3550.

Sincerely,

Raymond Bahr

Raymond P Bahr
Deputy Program Manager
Stormwater, Dam Safety, and Flood Management Program

Enclosures

cc: John Czajkowski, Anne Arundel Soil Conservation District

**MARYLAND DEPARTMENT OF THE ENVIRONMENT
WATER AND SCIENCE ADMINISTRATION
EROSION AND SEDIMENT CONTROL
PROGRAM EVALUATION**

Jurisdiction: Anne Arundel County

Review Dates: November 2, 2022

Ordinance

Reference Citation: Anne Arundel County Code, Article 16, Floodplain Management, Erosion and Sediment Control, and Stormwater Management

First Adopted by Jurisdiction: 1985

State Approval Issued: March 11, 1985

Most Recent Modification: October 5, 2020 - Article 16 amended to reflect three-year plan approval

Current Status: Acceptable

Procedures

Description: Currently, Anne Arundel County's inspection and enforcement procedures are consistent with the Code of Maryland Regulations (COMAR) 26.17.01.

Total Inspections Performed: 12,684 (annual average based on FY21 and FY22 data)

Violation Notices Issued: 1,104

Stop Work Orders Issued: 1,233

Amount of Fines or Bonds Collected: 18

Court Cases: 6

Comments: Procedurally, Anne Arundel County should be able to administer an effective erosion and sediment control program.

Workload

(annual average based on FY21 and FY22 data)

Permits Issued: Major: 411 (427 acres) Minor: 238 (22 acres)

Permits Active: Major: 1042 (929 acres) Minor: 176 (16 acres)

Staff Size: Supervisory Staff: 2

Inspection Staff: 12

Administrative Support: 3

Current Status: The County's Department of Inspections and Permits staff conduct erosion and sediment control inspections and enforcement. It is recommended that the County standardize how compliance is communicated in inspection reports.

Comments: Adequate

Field Enforcement

Total Number of Sites Visited: 6

E&SC Delegation		Plan Data				Adequate Implementation/Maintenance										Enforcement											
Anne Arundel County November 2, 2022		Disturbed Acres	3-Year Approval		Provides Adequate Control		Grading		Stabilization		Water Conveyance		Erosion Control		Filtering		Dewatering		Sediment Trapping		Off-Site/Potential Water Impacts		Documented Inspections		Adequate Enforcement		
			Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y
Site Name			Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	
1. Beacon Square		13.2	X		X				X		X		X		X				X		X	X			X		
2. Element at Mill Creek		6.2	X		X				X		X		X	X					X		X	X			X		
3. The Highlands		23.2	X		X				X		X		X		X		X		X		X	X			X		
4. Watershed 2 Apartments		33.4	X		X				X	X		X		X	X				X		X	X			X		
5. Watershed 3 Townhomes		--	X		X				X				X		X						X	X			X		
6. Parkside		14.0	X		X				X	X		X		X	X				X		X	X			X		
Totals		90	6	0	6	0	0	0	2	4	4	1	4	2	2	4	3	0	5	0	0	6	6	0	5	1	
Percent			100%	0%	100%	0%			33%	67%	80%	20%	67%	33%	33%	67%			100%	0%	0%	100%	100%	0%	83%	17%	
Site Comments:		<p>Site 1. Stabilized construction entrance (SCE) needed maintenance. Wash rack needed sediment cleanout. Disturbed areas needed stabilization. Rip rap inflow protection (RIP) needed correction per the Standards and Specifications for Soil Erosion and Sediment Control (Standards and Specifications). Standard inlet protection (SIP) was either missing or in need of repair. Follow up photographs and inspection reports documented the deficiencies were resolved. Site 2. SIP needed repair. RIP needed correction per the Standards and Specifications. An earth dike not on the approved plan was installed. Follow up photographs and inspection reports documented the deficiencies were resolved with the exception of the earth dike. Site 4. Disturbed areas needed stabilization. SIPs needed maintenance. Reinforced silt fence (RSF) needed repair. Follow up photographs and inspection reports documented the deficiencies were resolved. Site 5. SIPs needed maintenance. SCE to the stockpile needed maintenance. Areas adjacent to the stormwater management facility needed stabilization. Follow up photographs and inspection reports documented the deficiencies were resolved. Site 6. The SCE needed maintenance. RSF missing from headwall. Disturbed areas needed stabilization. RSF was not completely installed around the stockpile. Follow up photographs and inspection reports documented the deficiencies were resolved.</p>																									
MDE Reviewer: Christina Lyerly																											

Anne Arundel County (County) Delegation Review

November 2, 2022

Reviewer: Christina Lyerly, Maryland Department of the Environment (Department)

General Notes

- The County requires an erosion control monitoring device to be installed at each site outfall, and any erosion or sediment deposition measured at the monitoring device must be repaired. This requirement is a protective measure greater than what is required by the Code of Maryland Regulations (COMAR) 26.17.01.
- On October 16, 2020, the County Council of Anne Arundel County passed Bill No. 67-20 to revise Article 16 Title 3 § 16-3-212 to increase the plan renewal requirement from two to three years. The County submitted a signed copy to the Department. All sites were operating under a current approved grading and sediment control plan. The approved revision needs to be updated on the County's code available on the County website: <https://www.aacounty.org/our-county/county-code/forms-and-publications/Article16.pdf>.
- In addition to the observations in the field, the Department conducted a desktop review of inspection reports that were completed prior to, on the day of, and after the day of the Department's field inspection, November 2, 2022.
- The County's submission demonstrates inspections occurred at an appropriate frequency and were documented with a standard report form.
- There were inconsistencies and errors in the inspection reports the Department reviewed, as noted below.
 - The County's inspection report form includes multiple fields related to compliance status including the Y/N questions: "*Is the site stabilized*", "*Are the E&S [Erosion and Sediment] Controls in Compliance*", "*Is the site in compliance with the current approved grading plans, the permit and AACO Code Article 16*", and "*It is a violation of Article 16 § 16-5-101. Violations*". The form also includes an "*Enforcement Action Taken*" section. Some completed inspection reports indicated contrary compliance status or enforcement actions (e.g., "*None needed*" and "*Post Stop Work Order*", "*In-Compliance*" and "*Issue Non-Compliance Order*"). In some instances, inspection reports included corrections that needed to be made in the comments field, but the status was in-compliance.
 - Some completed inspection reports used "Status of Site" to indicate compliance, and other reports used it for construction phase. Some report dates were inaccurate.
 - The field "*VIOLATION MUST BE CORRECTED BY: (Reinspection Date)*" was not consistently used when violations were noted.
- The Department recommends that the County develop standardized criteria for checking Y/N for each compliance related field entry on inspection reports and develop standard Enforcement Action Taken terms that are consistently and accurately used. If a site has controls that are in need of corrective maintenance but not to the degree that the County would label it in non-compliance, the Department suggests considering a category of routine maintenance to make it clear that action is required on-site. The Department also recommends additional staff training to ensure reports are filled out accurately. Consistent and accurate documentation is critical when enforcement actions or legal proceedings are needed.

Beacon Square

Staff: Scott Schneck, Raghavenderrao Badami, Geoffery Bobersky, John Igminovia, and Ed McNabb, Anne Arundel County; John Czajkowski and Gary Armstrong, Anne Arundel Soil Conservation District (SCD)

Plan Approval Date: 4/26/2022

Disturbed Area: 13.2 acres

Type of Project: Mixed Use

Stage: Utility Installation

- 8/12/2022: Disturbed areas, the stockpile, and the staging area needed stabilization, super silt fence (SSF) needed installation around stockpile, rill erosion and unstabilized slopes on basin required stabilization, inlet protection and stabilized construction entrance (SCE) needed installation, asphalt needed removal, SSF needed installation along entrance, and the parking lot needed daily sweeping. The Enforcement Action Taken section listed contradictory statements: two “Issue Non-Compliance Notice” and two “In-Compliance”. The inspection report was dated 8/15/2022. The violation correction date was left blank but the comments provided the due date of 8/17/2022 with the next step being a stop work order.
- 8/31/2022: Although the due date of previous deficiencies was 8/17/2022 or a stop work order would be issued, documentation of an inspection between 8/12/2022 and 8/31/2022 was not provided. Corrections that were still needed included unstabilized disturbed areas and staging area, SSF around stockpile, inlet protection installation, and parking lot sweeping. Additional corrections needed were SSF to be installed across the parking lot, stabilization adjacent to the entrance, and installation of the access road. The list of enforcement actions taken were the same as 8/12/2022. The violation correction date was left blank but the comments provided the due date of 9/6/2022 or a stop work order would be issued.
- 9/7/2022: The deficiencies had not been corrected. In addition, a wash rack required installation. The list of enforcement actions taken were the same as the previous two reports. The violation correction date was left blank but the comments provided the due date of 9/13/2022 or a stop work order would be issued. The date of the report was not updated.
- 9/21/2022: Stockpile needed stabilization and SSF protection, and disturbed areas needed stabilization. The list of enforcement actions was the same as prior inspection reports. The violation correction date provided was 9/28/2022.
- 9/28/2022: The inspection report directed the contractor to make sure all controls were installed per plan with additional controls if needed to prepare for expected precipitation. The list of enforcement actions taken had not been updated, nor the Y/N compliance questions regarding stabilization and erosion and sediment control (ESC). The report still noted it is in violation of Article 16.
- 10/6/2022: Disturbed areas, the stockpile, and the staging area needed stabilization, SSF needed installation around stockpile, rill erosion and unstabilized slopes on basin required stabilization, standard inlet protection (SIP) needed installation per specifications, stone access road needed reinstallation, and SSF needed installation. The list of enforcement actions taken was the same as previous reports. A violation correction date was not included.

Anne Arundel County Erosion and Sediment Control Delegation Field Review
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- 10/10/2022: The deficiencies from the previous inspection report were not corrected. In addition, SSF needed to be corrected, and the A-2 earth dike and a building pad needed to be stabilized. The list of enforcement actions taken were the same as previous reports. A violation correction date was not included.
- 10/21/2022: Stabilization needed around and behind buildings and an inlet needed protection. Corrections required by the same day.
- 10/31/2022: Earth dike needed installation and stabilization, access road needed new stone, SIP needed installation per plan, and areas near building needed stabilization.
- 11/2/2022: The SCE and heavy use and laydown area needed new stone, sediment basin embankment and slopes required stabilization, rip rap inflow protection (RIP) needed installation per specifications, wash rack needed cleanout, SSF around stockpile needed correct installation, SIP needed to be installed per specifications, and parking area needed sediment removed.
- 11/15/2022: The inspection report noted that all corrections had been made. Photographs were provided for some corrective actions as noted below. However, the site status and enforcement actions taken had not been updated.
- 11/22/2022: The previously unstabilized area around the building had active disturbance due to water line installation, inlet protections had been removed to install curb, gutter, and base pavement, and RIP was installed per specification. The site was in compliance. The Enforcement Action Taken section noted four compliance statuses: one “Issue Non-Compliance Notice” and three “In-Compliance”.
- Multiple inspection reports had incorrect inspection and violation correction dates (3/23/2022 and 1/3/2022, respectively), or no violation correction dates.
- Inspection reports were written and dated the next business day after the inspection had taken place. In some cases, this was multiple days because of the weekend. When significant violations are noted and/or a stop work order threat included, the County should provide the site operator this report on the same day so that corrections can begin immediately (e.g., inspections on 8/12 and 10/6).
- While the inspection reports included warnings of stop work orders, that enforcement action was not taken despite deficiencies remaining uncorrected. Progressive enforcement was not documented.

Anne Arundel County Erosion and Sediment Control Delegation Field Review
November 2, 2022

Photographs



SCE in need of maintenance



Improved stone on SCE (County submitted 11/15/2022)



Wash rack in need of sediment cleanout



Cleaned out wash rack (County submitted 11/15/2022)

Anne Arundel County Erosion and Sediment Control Delegation Field Review
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Disturbed earth above sediment trap required stabilization



Restabilized area (County submitted 11/15/2022)



Sediment trap slopes in need of stabilization



Restabilized slopes (County submitted 11/15/2022)

Anne Arundel County Erosion and Sediment Control Delegation Field Review
November 2, 2022



RIP not installed per specification (11/15/2022 follow-up inspection report noted site was in compliance)



Disturbed earth requiring stabilization around building (11/15/2022 follow-up inspection report noted site was in compliance and the 11/22/2022 inspection report noted area disturbed due to active water line installation)



Missing SIP (11/15/2022 follow-up inspection report noted site was in compliance and 11/22/2022 inspection report noted SIP no longer required due to curb and gutter installation)



SIP in need of maintenance (11/15/2022 follow-up inspection report noted site was in compliance and 11/22/2022 inspection report noted SIP no longer required due to curb and gutter installation)

Element at Mill Creek

Staff: Ashley Weaver, Raghavenderrao Badami, Geoffery Bobersky, John Igminovia, and Ed McNabb, Anne Arundel County; John Czajkowski and Gary Armstrong, SCD

Plan Approval Date: 11/9/2021

Disturbed Area: 6.2 acres

Type of Project: Commercial

Stage: Finished Grading

- 8/12/2022: A stop work order was placed for deficiencies that included stabilization, SCE maintenance with mountable berm, SIP, tree fence, baffle board tie-in, sediment accumulation in the trap and riprap, sediment buildup in check dams, and installation of stabilization matting. The violation correction date was 8/22/2022. The Enforcement Action Taken section included “NONE”, “None Needed”, and “Post Stop Work Order”. The inspection report was dated 8/16/2022.
- 9/9/2022: All deficiencies were corrected, the County received engineer’s certification for controls, and permission to proceed was granted. Progressive enforcement actions were documented.
- 9/30/2022: The file name provided is 7/21/2022 but the inspection is dated 9/30/2022. The report noted the site was in compliance.
- 10/7/2022: The file name is 9/22/2022, but the inspection report is dated 10/7/2022. It noted the site was in compliance.
- 10/7/2022: The report noted it was a reinspection after a correction notice was given on the same date and the site was in compliance. There is a status discrepancy between the two inspection reports dated 10/7/2022.
- 10/10/2022 and 10/24/2022: The site was in compliance.
- 11/2/2022: SIP needed minor repair, RIP needed to be extended, and an earth dike not on the approved plan was installed. The violation correction date was 11/9/2022. In the Enforcement Actions Taken section, the report noted both “None Needed” and “Issue Non-Compliance Notice”. The status of site was noted as “Compliance”.
- 11/14/2022: SIP had been repaired, sediment was removed from the curb, and corrections to the earth dike and RIP were in progress.
- 11/28/2022: RIP was corrected. Installation of the earth dike to the sediment trap was not noted.

Photographs



SIP in need of repair



Repaired SIP (County submitted 11/30/2022)



RIP not installed per specification



Corrected RIP (County submitted 11/30/2022)



Earth dike not on the approved plan installed

The Highlands

Staff: Mark Wells, Raghavenderrao Badami, Geoffery Bobersky, John Igminovia, and Ed McNabb, Anne Arundel County; John Czajkowski and Gary Armstrong, SCD

Plan Approval Date: 10/6/2022

Disturbed Area: 23.2 acres

Type of Project: Residential

Stage: Rough Grading

- 9/16/2022: Additional stone was needed in staging area. The site was in compliance.
- 9/21/2022: Water truck must be on-site due to dust problems. The site was in compliance.
- 10/11/2022: Part of the site was graded and stabilized and other areas were currently being graded, straw and sediment needed removal from rip rap channel, check dam needed to be corrected, RIP to sediment basin needed regrading, overseeding needed along berm, and sediment required removal from end section of sediment basin. The enforcement action taken was issuance of a non-compliance notice and the site was noted to be in violation of Article 16 § 16-5-101. A violation correction date was not provided.
- 10/18/2022: None of the previous violations were corrected. The Enforcement Action Taken section noted four statuses: two were “In-Compliance” and two were “Issue Non-Compliance Notice”. Although the comments noted the violations, the report Y/N questions indicated that E&S controls were in compliance, the site was stabilized, and the site was in compliance with the current approved grading plans, the permit, and County Code Article 16. There was no violation correction date.
- 11/2/2022: The inspection report noted the site was in compliance, but additional stone was needed. All corrective items from the previous inspection reports were addressed. The enforcement actions taken included “Issue Non-Compliance Notice” and “In-Compliance”.
- 11/3/2022: Corrections were made and the site was in compliance. The inspection report still noted “Issue Non-Compliance Notice” in the Enforcement Actions Taken section.

Watershed 2 Apartments

Staff: Shenna Conner, Raghavenderrao Badami, Geoffery Bobersky, John Igminovia, and Ed McNabb, Anne Arundel County; Justin Valkos, SCD

Plan Approval Date: 12/16/2021

Disturbed Area: 33.4 acres

Type of Project: Residential

Stage: Utility Installation/Building Construction

- 10/3/2022: Site was in compliance after heavy rains. Sediment trap required pump down.
- 10/13/2022: Two inlets were missing protection, there were sediment plumes and buildup at sediment trap inflows, and trap pump down would be needed after rain ceased. Corrections were required to be made by 10/20/2022. The inspection report noted that the E&S controls were in compliance, enforcement actions taken were “none needed” and “in-compliance”.
- 10/18/2022: Corrections from 10/13/2022 were still needed.
- 10/20/2022: All previous items were corrected.
- 10/28/2022: The site was noted to be in compliance. However, individual lots and new stockpiles needed to be stabilized and SIP needed to be installed and maintained. Corrections were required to be made by 11/2/2022.

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- 11/2/2022: The inspection report noted inadequate stabilization on individual lots, missing reinforced silt fence (RSF), street sweeping, removal of stone pile, and SIP maintenance. Corrections were required to be made by 11/7/2022.
- 11/9/2022: The site was in compliance.
- The violation correction dates were left blank, but the comments provided the due dates for corrections to be made.

Photographs



Unstabilized disturbed earth near sediment trap



Follow-up documentation depicts active grading of site to remove trap. (County submitted 11/19/2022)



Unstabilized disturbed earth

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SIP in need of maintenance



Corrected SIP (County submitted 11/15/2022)



One of multiple SIPs in need of maintenance on site



Example correction (County submitted 11/15/2022)



RSF in need of maintenance



Repaired RSF (County submitted 11/19/2022)

Watershed 2 Townhomes

Staff: Sheena Conner, Raghavenderrao Badami, Geoffery Bobersky, John Igminovia, and Ed McNabb, Anne Arundel County; Justin Valkos, SCD

Plan Approval Date: 12/16/2021

Disturbed Area: 33.4 acres

Type of Project: Residential

Stage: Utility Installation/Building Construction

- 10/3/2022: The site was in compliance.
- 10/12/2022: Lot 110 needed RSF repairs.
- 10/28/2022: Lot 110 still needed RSF repairs. Corrections required to be made by 11/2/2022 included SIP maintenance and curblines stabilization. However, the inspection report stated that E&S controls were in compliance and enforcement actions taken were “None Needed” and “In-Compliance”.
- 11/2/2022: The inspection report noted SIP maintenance needed to be corrected by the end of the day. By 11/7/2022, individual lots needed to be stabilized, SCE to stockpile needed stone, and single lot controls needed maintenance.
- 11/9/2022: The inspection report noted the site was in compliance and all corrections from 11/2/2022 had been made.
- The violation correction dates were left blank, but the comments provided the due dates for corrections to be made.

Photographs



SIP not imbedded into ground



Corrected SIP (County submitted 11/17/2022)

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SCE to stockpile required maintenance



Maintained entrance (County submitted 11/17/2022)



Unstabilized area above micro-bioretention



Stabilized area (County submitted 11/15/2022)

Parkside

Staff: Roseann Zimmerman, Raghavenderrao Badami, Geoffery Bobersky, John Igminovia, and Ed McNabb, Anne Arundel County; Justin Valkos, SCD

Plan Approval Date: 5/3/2022

Disturbed Area: 14.0 acres

Type of Project: Residential

Stage: Rough Grading

- 10/3/2022: The site was in compliance.
- 10/11/2022: Stabilization and E&S controls compliance status are listed as “NO” but there are no notes indicating deficiencies.
- 10/17/2022: Deficiencies included installation of RSF, berm to sediment trap repair, SCE, and mountable berm. Violation correction date was 10/21/2022.

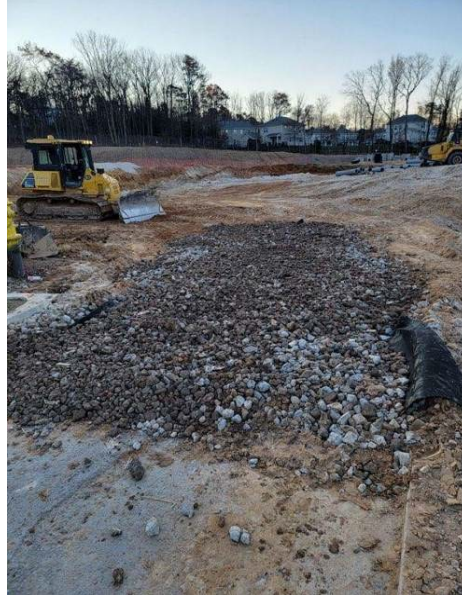
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- 10/24/2022: All items were corrected.
- 11/2/2022: The inspection report noted the site needed perimeter, temporary bypass swale, and haul road stabilization; RSF installation and stabilization around headwall; and repair of temporary berms.
- 11/4/2022: The inspection report noted that all corrections had been made.

Photographs



SCE in need of maintenance



Post-inspection, the SCE was removed to subgrade the proposed road and then reinstalled. Maintenance still needed (County submitted 11/19/2022)



RSF missing from headwall and adjacent disturbed area unstabilized



RSF installed to protect headwall from sediment contamination (County submitted 11/15/2022)

Anne Arundel County Erosion and Sediment Control Delegation Field Review
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Unstabilized earth disturbance at the high side of the temporary bypass swale



The temporary bypass swale was removed for mass grading and the perimeter stabilized near the headwall (County submitted 11/19/2022)



Stockpile missing RSF



Installed RSF (County submitted 11/15/2022)

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Perimeter in need of stabilization



Stabilized perimeter (County submitted
11/15/2022)