

Enhanced Best Management Practices

1. At a minimum, the contractor must inspect all sediment control measures and devices one every seven (7) calendar days, and within 24 hours of the occurrence of a storm event of 0.25 inches or greater, the contractor shall prepare a written inspection report for each inspection and maintain a log book for all reports. All corrective action should be initiated within 24 hours and completed within 72 hours of being noted.
2. The contractor must inspect all sediment control measures and devices prior to a NOAA forecasted event of 0.25 inches or greater. The contractor shall perform repairs and maintenance to the maximum extent practical to assure all devices are in good working order prior to the event.
3. All points of ingress and egress to the Line MB Extension Project will be clearly marked as such.
4. All wetlands, waterways and 100-yr floodplains shall be clearly marked as such. Vehicles operating within 100 ft of these areas shall carry emergency spill kits.
5. All forest buffer and forest conservation areas shall be clearly marked as such.
6. Within the expanded riparian buffer (XB), cut vegetation off just above ground level, leaving the existing root systems in place and remove vegetation from the XB for disposal. Minimize grading within the XB to only what is required to safely and efficiently operate equipment. Limit pulling of tree stumps and grading activities to directly over the trenchline except where the chief inspector and environmental inspector determine that safety related construction constraints require removal of tree stumps from under the working side of the construction work area.
7. Mulch depth application shall not exceed 6 inches.
8. Stockpiles will be located within the LOD and shall drain to an appropriate erosion and sediment control device (i.e., silt fence), stockpiles that are located within 100 ft of stream resources and are inactive (those untouched for seven (7) days or longer) will be seeded or covered with an impermeable cover while inactive.
9. Redundant controls shall be used for dewatering discharges within the XB (e.g., filter bag surrounded with straw bales and super silt fence).
10. Hydroseeding shall be conducted with flexterra high performance-flexible growth medium, or approved equivalent, used in conjunction with fiber rolls in areas of 15% slope or greater within 100 feet of wetlands or waterbodies. The medium must be certified environmentally non-toxic by the appropriate state or federal agency. The fiber rolls will be located in the field by the contractor and in accordance with the detail "Fiber Roll" on the Erosion and Sediment Control / Grading plan and subject to the approval by the sediment control inspector.
11. Temporary soil stabilization matting slope application (TSSMS 2.5 lb/SF), in accordance with Maryland Standards and Specifications for Soil Erosion and Sediment Control detail B-4-6-B, shall be utilized in areas with highly erodible soils and less than 15% slope.
12. Stream diversion shall be established prior to the start of work for all stream crossings. Work shall commence once the designated work area within the stream channel has been properly dewatered and the work area is dry. For intermittent and ephemeral stream crossings, work shall be done during periods of no flow, whenever possible. For perennial stream crossings, work shall be done during periods of no flow or low flow, whenever possible. Weather forecasting shall be conducted for several days in advance of starting any stream crossing work so that in-stream work is scheduled around any forecasted storm events.

13. Limit disturbed area/maximize preservation of existing vegetation. This was accomplished through the agencies avoidance and minimization process and development of the project plans.
14. Limited extent and duration of disturbance: phasing and/or sequencing is included. The project has been divided into three phases. The project also will be constructed in a linear fashion as to limit the amount and duration of open trench sections and disturbed area.
15. Accelerated stabilization:
 - a. Work done in a given day should disturb no more area than can be stabilized by the end of that workday, and
 - b. Initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within 3 calendar days for all perimeter sediment control structures, dikes, perimeter slopes, and all slopes greater than 3:1; stabilization shall be completed within 7 days for all other disturbed or graded areas on the project site.
16. In-stream construction shall take place during stream low flows, with the length of time limited to a maximum of 5 consecutive days.
17. Near stream and wetland resources upgrade silt fencing to super silt fencing or an equivalent measure (i.e., large compostable filter logs).
18. Incorporate compostable practices (filter blankets, filter berms, filter logs, etc.).
19. Subterranean utility instillation methods shall be evaluated and utilized first (i.e., horizontal directional drilling, etc.) for all major and sensitive stream crossings with flow
20. Sandbag alternatives, such as jersey barriers, coffer dams, etc., shall be evaluated first at all major crossings.
21. If utilized, sandbags must be constructed of heavy duty polypropylene or polyethylene material, or stronger, and with enhanced UV protection, with solid cover wrap.
22. Temporary access bridges shall be utilized over fords.
23. Pumps should be appropriately screened and checked regularly for fish or other wildlife
24. For utility projects with streamside management zones: restorative planting for all clearing activities disturbing > 1 acre.
25. Develop an HDD contingency plan.
26. Maryland Biological Stream Survey (MBSS) Monitoring consisting of one benthic and one fish sample shall be conducted after pipe installation across Little Gunpowder Falls, known as Crossing #9. Monitoring shall be conducted at the following location: 39.523918 X, -76.498322 Y. Monitoring results shall be submitted to the Department by populating an excel spreadsheet that was provided to the applicant via email attachment on August 13, 2013. To submit the data, the Permittee shall contact MDE Science Services Administration (SSA) at 410-537-3818, in order to be directed to the appropriate party responsible for MBSS data submissions to SSA. A narrative report shall accompany the monitoring results. The Permittee shall also submit this data in hardcopy to the Administration's Compliance Program at: Maryland Department of the Environment, Compliance Program, 1800 Washington Boulevard, Suite 420, Baltimore, Maryland 21230.
27. Incorporate an expanded buffer (XB)/streamside management zone (SMZ) (100-ft minimum). ESCPs and MOSFs include additional BMPs for the XB/SMZ.
28. Incorporate biotechnical sediment and erosion controls, such as live stakes.
29. Denote all stream closure periods on plans.

30. A large sediment trap will be used at the Project's central staging area (staging area #12), including baffle boards. Sediment traps are a temporary ponding area constructed to capture the flow of sediment-laden runoff. These traps provide detention time for runoff to allow settling of soil particles. The addition of baffle boards further increases the detention time of the water, allowing for increased sediment settlement.
31. Prior to construction at streams with an ordinary high water mark greater than 10 feet, habitat structures within the construction workspace that require removal, such as logs and debris jams, will be photographed for reference. During construction, these structures will be segregated along with the native stream-bottom material and stored. Stream beds will be restored with the salvaged stream material and using the pre-construction photographs as reference, logs and debris jams will be returned to the stream channel during restoration.