##### Possible MDCs for Dry Ponds

Blue font = from Wet Pond MDC the team agreed on.

Black font = from the current version of the BMP Manual

Red font = suggestions from Larry Ragland and Annette Lucas

|  |  |
| --- | --- |
| 1. | SITING. The SHWT shall be at least two feet below the bottom of the pond. |
| 2. | MAXIMUM TEMPORARY POOL DEPTH. The maximum depth of the temporary pool shall be ten feet. |
| 3. | SEDIMENT STORAGE. The dry pond shall be sized to hold 25 percent more than the design volume to allow for sediment storage. |
| 4. | LOCATION OF INLET AND OUTLET STRUCTURES. The inlet and outlet structures shall be located in a manner that avoids short circuiting in the wetland. |
| 5. | PRETREATMENT. If the design volume of the pond exceeds ten acre-inches, then a forebay shall be provided. |
| 6. | CONVEYANCE OF STORMS EXCEEDING THE DESIGN STORM. The pond shall include a method for safely conveying storm events exceeding the design storm in a manner that prevents catastrophic failure of the dry pond. |
| 7. | LENGTH TO WIDTH RATIO. A minimum length to width ratio of 1.5 shall be provided. |
| 8. | DRAWDOWN TIME. The drawdown time from the pond following the design storm shall be between two and five days. |
| 9. | OUTLET. The basin shall include a small permanent pool near the outlet orifice to reduce clogging and keep floating debris away from the orifice. |
| 10. | TEMPORARY INUNDATION ZONES. Temporary inundation zones shall comprise ~~30-40~~60-70% of the surface area of the stormwater wetland. They shall be 0-~~12~~ 18” above the permanent pool elevation. |
| 11. | DISCHARGE RATE. The wetland shall discharge the storage volume at a rate equal to or less than the predevelopment discharge rate for the one-year, 24-hour storm. Bill Hunt will propose an alternative by December 1, 2014 and present it to the MDC Team. |
| 12. | VEGETATION 1. Trees and woody shrubs with root depths exceeding 12 inches shall not be planted on the dam structure. |
| 13. | VEGETATION 2. Turf grass or ground cover type shrubs with less than 12 inch rooting depths shall be provided on the tops of berms and on the exterior slopes of containment berms. ~~Centipede grass is recommended.~~ |
| 14. | VEGETATION 3. Weeping love grass on the vegetated side slopes because it does not provide long-term slope stabilization. |
| 15. | TRASH RACK. A trash rack or other device shall be provided to prevent large debris from entering the outlet system. |
| REC | OUTLET 1. Durable materials, such as reinforced concrete, are preferable to corrugated metal in most instances. The riser should be placed in or at the face of the embankment such that maintenance access is facilitated and flotation forces are reduced. |
| REC | OUTLET 2. The design engineer should calculate flotation force for any outlet design subject to flotation forces. |
| REC | OUTLET 3. Measures should be provided along the barrel of the principal spillway to prevent piping. |