NOTES

The following note "STATEMENT OF DETERMINATION OF MD 378" is required on all projects with structures that impound water with a dam:

STATEMENT OF DETERMINATION OF MD 378

All stormwater management facilities are to be constructed in accordance with the 2000 Maryland Stormwater Design Manual, Volumes I & II, (Maryland Department of the Environment) and the USDA Natural Resources Conservation Service Maryland Conservation Practice Standard Pond Code 378 (January 2000). These construction drawings are intended to reflect the relevant requirements; however, any lack of specific details on these drawings shall not relieve any of the requirements of these and other relevant codes. The cut-off trench and impervious clay core are required where shown on the approved set of drawings.

If your small pond requires a filter diaphragm, provide this note at the end of the MD-378 Construciton Specifications on the plans:

FILTER-DRAINAGE DIAPHRAGMS AND BLANKET DRAINS:

THE FILTER-DRAINAGE DIAPHRAGM AND BLANKET DRAIN SHALL BE CONSTRUCTED IN ACCORDANCE WITH THIS SECTION AND AS SHOWN ON THESE PLANS. THE MATERIAL SHALL BE PLACED IN CONTINUOUS, APPROXIMATELY HORIZONTAL LAYERS, NOT MORE THAN 12 INCES IN LOOSE THICKNESS. THE WATER CENTENT OF THE DRAINGE MATERIAL BEFORE AND DURING COMPACTION SHALL BE UNIFORM THROUGHOUT EACH LAYER OF THE MATERAL. THE WATER CONTENT SHALL BE SUFFICIENT TO ATTAIN THE REQUIRED DENSITY OF THE MATERIAL IN PLACE WHEN COMPACTED. THE MATERIAL SHALL BE COMPACTED AS SPECIFIED IN "EARTH FILL".

CARE SHOULD BE TAKEN SO THAT THE DRAINAGE MATERIAL DOES NOT BECOME CONTAMINATED. CONTAMINATED DRAINAGE MATERIAL SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL AT THE CONTRACTORS EXPENSE. DURING PERIODS OF SHUTDOWN AND AT ALL EQUIPMENT CROSSING, THE DRAINAGE MATERIAL SHOULD BE PROTECTED BY A PROTECTIVE COVERING SUCH AS POLYETHYLENE SHEET , PVC SHEETING, OR EQUAL. AT EQUIPMENT CROSSINGS, THE SHEETING MATERIAL SHALL BE COVERED WITH A SUFFICIENT DEPTH OF EMBANKMENT MATERIAL TO PREVENT DAMAGE TO THE SHEETING BY THE EQUIPMENT, OR A MINIMUM OF 12 INCES, WHICHEVER PROVIDES GREATER PROTECTION. PRIOR TO PLACING ADDITIONAL DRAINAGE MATERIAL AFTER SHUTDOWN AND/OR AT EQUIPMENT CROSSINGS, THE CONTRACTOR SHALL REMOVE ANY PROTECTIVE COVERINGS AND REPLACE ANY MATERIALS THAT MAY HAVE BECOME CONTAMINATED.

AFTER THE LAST LIFT OF THE FILTER-DRAINAGE DIAPHRAGM HAS BEEN PLACED AND COMPACTED, THE DIAPHRAGM SHALL BE THOROUGHLY FLOODED TO ENSURE COMPLETE CONSOLIDATION OF THE DRAINAGE MATERIAL AND TO VERIFY PROPER FUNCTION OF THE DIAPHRAGHM OUTLET PIPES.

A GEOTECHNICAL ENGINEER SHALL SUPERVISE DESIGN AND CONSTRUCTION.

The following note is required to be placed next to an Anti-Seep Collar Detail if used in lieu of a Filter Diaphragm:

We have read and understand that the Maryland Department of the Environment (MDE) DAM SAFETY POLICY MEMORANDUM #21, titled Use of Anti-Seep Collars and Filter Diaphragms, latest version, and recognized that filter diaphragms are superior to anti-seep collars as a seepage control measure. However, based on the conditions as stated in the MDE Memo, anti-seep collar(s) may be used because the soil and site conditions will be monitored during construction and will meet the prescribed conditions for Anti-Seep Collars to be used.

In order to use Anti-Seep Collars as the seepage control for Ponds/ESDs in lieu of a filter diaphragm, the following soil and site conditions will be confirmed by a Geotechnical Engineer prior to installation of the principal spillway barrel pipe and embankment:

1. Embankment soils have been documented to be non-dispersive by crumb testing or evidence that the site is located in geologic formations that are known to be non-dispersive.
2. Soil tests show that embankment soils have a plasticity index (PI) equal to or greater than 15.
3. The water content of the soils at the time of construction is such that 1/8-inch diameter thread ½-inch long may be rolled out on a flat surface without breaking or falling apart.
4. Natural or excavated ground slopes transverse to the embankment centerline in the vicinity of the conduit are no steeper than two (2) horizontal to one (1) vertical.
5. Laboratory or field tests show that the foundation soils left in-place under the embankment and principal spillway are medium to very stiff in saturated consistency or medium dense to very dense depending on if these soils are cohesive or cohesionless, respectively.
6. Documentation confirming these soil and site conditions will be provided to CSCD and the local SWM Approving Authority, prior to installing the principal spillway barrel pipe and embankment.
7. If these soil and site conditions cannot be confirmed by the Geotechnical Engineer Inspector, the Contractor will contact the Engineer-in-Charge and request the design and replacement of a filter diaphragm in lieu of anti-seep collars for seepage control.

Provide this "OPERATION AND MAINTENANCE" note at the end of the MD-378 Construction Specifications on the plans after the "EROSION AND SEDIMENT CONTROL" note:

OPERATION AND MAINTENANCE:

AN OPERATION AND MAINTENANCE PLAN HAS BEEN PREPARED FOR THIS PROJECT. A DAM INSPECTION SHOULD BE PERFORMED AT LEAST ONCE A YEAR AND MORE IF THERE ARE LARGE STORM EVENTS THAT MAY IMPACT THE POND/STRUCTURE. A DAM INSPECTION CHECKLIST IS INCLUDED IN THE OPERATION AND MAINTENANCE PLAN. ANY REPAIR/MODIFICATION OF THE DAM OR SPILLWAY REQUIRES NOTIFICATION OF THE CECIL SOIL CONSERVATION DISTRICT, AND THE [**LOCAL SWM APPROVING AUTHORITY**]. A PERMIT MAY BE REQUIRED FOR ANY REPAIRS OR RECONSTRUCTION THAT INVOLVES ANY DISTURBANCE OF ANY PART OF THE POND STRUCTURE. THE OWNER(S) OF THE SMALL POND(S), HIS SUCCESSORS AND ASSIGNS, AND ANY OF THEIR REPRESENTATIVES ARE REQUIRED TO OBTAIN A COPY OF THE COMPLETED AND EXECUTED OPERATION AND MAINTENANCE PLAN, SMALL POND APPROVAL LETTER, FORM 1 - PROJECT COMPLETION REPORT, AND FORM 2 – DAM INSPECTION CHECKLIST FROM THE CECIL SOIL CONSERVATION DISTRICT. THESE DOCUMENTS, PLANS, AND RECORDS OF MAINTENANCE AND REPAIRS NEED TO BE RETAINED AND STORED IN A PLACE THAT CAN BE EASILY RETRIEVED AND PRESENTED TO LOCAL, STATE AND FEDERAL AUTHORITIES IF REQUESTED FOR THE LIFE OF THE POND/STRUCTURE.

Provide a "SITE DATA" table/note on Title Sheet of every project that contains the following information, and any additional information that may be pertinent:

SITE DATA

OWNER:	[OWNER ENTITY]
OWNER ADDRESS:	[OWNER ADDRESS]
PREMISE ADDRESS:	[PREMISE ADDRESS]
TAX MAP(S):	###
PARCEL(S):	###, ###
LOT AREA:	###.## ACRES
ZONING:	LDR (LOW DENSITY RESIDENTIAL DISTRICT)
COUNCIL DISTRICT:	#
LEGISLATIVE DISTRICT:	#-#
ADC MAP NO.:	##
ADC GRID:	E-# TO G-#

At a minimum, provide on the title sheet, the note below that requires Cecil Soil Conservation District to review and approve a Small Pond:

REQUIRED NOTE:

[Structure Label(s)] #[Number(s)] qualifies as a MD-378 Small Pond and may be reviewed and approved by the Cecil Soil Conservation District in lieu of MDE Dam Safety Division.

REQUIRED NOTES IF APPLICABLE:

[Structure Label(s)] #[Number(s)] are exempt from MD-378 Small Pond Approval and qualify to be reviewed and approved solely by [local SWM approving authority].

[Structure Label(s)] #[Number(s)] qualifies as a MD-378 Small Pond and is required to be reviewed and approved by MDE Dam Safety Division.

*All structures that impound water on your project for stormwater management fall into one of the categories shown above. Provide each note on the plan that accurately describes the SWM structures on your project and provide the structure label(s) and number(s) that fit into that category.

Provide "STREAM CLOSURE DATES" on the plans that correspond to the outfall conveyance stream designated use I, II, III, etc.:

STREAM CLOSURE DATES

THE [NAME OF TRIBUTARY STREAM] IS DESIGNATED AS A USE [I, II, III, ETC.] STREAM PER CODE OF MARYLAND REGULATIONS 26.08.02.11. IN-STREAM WORK ON ANY STREAMS OR TRIBUTARIES OF [WATERSHED] IS PROBITED DURING THE PERIOD OF [DATE THROUGH DATE] INCLUSIVE, DURING ANY YEAR.

Use I and I-P:	March 1 – June 15
Use II:	June 1 – September 30 & December 16 – March 14
Use III and III-P:	October 1 – April 30
Use IV:	March 1 – May 31
SAV*:	April 1 – October 15

*Submerged Aquatic Vegetation (SAV)

For more information about the closures based on stream uses and SAVs, contact MDE Wetlands and Waterways Program.