



DESIGN OF SPILLWAYS	
DRAINAGE AREA (ACRES)	WEIR LENGTH ¹ (FT)
1	4.0
2	6.0
3	8.0
4	10.0
5	12.0

¹ DIMENSIONS SHOWN ARE MINIMUM

SECTION VIEW

CONSTRUCTION NOTES:

- CLEAR, GRUB AND STRIP THE AREA UNDER THE EMBANKMENT OF ALL VEGETATION AND ROOT MAT. REMOVE ALL SURFACE SOIL CONTAINING HIGH AMOUNTS OF ORGANIC MATTER AND STOCKPILE OR DISPOSE OF IT PROPERLY. HAUL ALL OBJECTIONABLE MATERIAL TO THE DESIGNATED DISPOSAL AREA. PLACE TEMPORARY SEDIMENT CONTROL MEASURES BELOW BASIN AS NEEDED.
- PLACE THE FILL IN LIFTS NOT TO EXCEED 9 INCHES, AND MACHINE COMPACT IT. OVER FILL THE EMBANKMENT 6 INCHES TO ALLOW FOR SETTLEMENT.
- PLACE THE BARREL ON A FIRM, SMOOTH FOUNDATION OF IMPERVIOUS SOIL. DO NOT USE PERVIOUS MATERIAL SUCH AS SAND, GRAVEL, OR CRUSHED STONE AS BACKFILL AROUND THE PIPE. PLACE THE FILL AROUND THE PIPE SPILLWAY IN 4-INCH LAYERS AND COMPACT IT UNDER AND AROUND THE PIPE TO AT LEAST THE SAME DENSITY AS THE ADJACENT EMBANKMENT.
- PLACE A MINIMUM DEPTH OF 2 FEET COMPACTED BACKFILL OVER THE PIPE SPILLWAY BEFORE CROSSING WITH CONSTRUCTION EQUIPMENT.
- ENSURE THAT THE FLOW LENGTH TO BASIN WIDTH RATIO IS AT LEAST 2:1 TO IMPROVE TRAPPING EFFICIENCY. LENGTH IS MEASURED AT THE ELEVATION OF THE PRINCIPAL SPILLWAY.
- ASSEMBLE THE SKIMMER FOLLOWING MANUFACTURERS INSTRUCTIONS OR AS DESIGNED AND LAY ON THE BOTTOM OF THE BASIN WITH THE FLEXIBLE JOINT AT THE INLET OF THE BARREL PIPE. ATTACH THE FLEXIBLE JOINT TO THE BARREL PIPE AND POSITION THE SKIMMER OVER THE EXCAVATED PIT OR SUPPORT. BE SURE TO ATTACH A ROPE AND ANCHOR IT TO THE SIDE OF THE BASIN. THIS WILL BE USED TO PULL THE SKIMMER TO THE SIDE FOR MAINTENANCE.
- INSTALL THE SPILLWAY IN UNDISTURBED SOIL TO THE GREATEST EXTENT POSSIBLE. THE SPILLWAY SHOULD BE LINED WITH LAMINATED PLASTIC OR IMPERMEABLE GEOTEXTILE FABRIC. THE FABRIC MUST BE WIDE AND LONG ENOUGH TO COVER THE BOTTOM AND SIDES AND EXTEND ONTO THE TOP OF THE DAM FOR ANCHORING IN A TRENCH. THE EDGES MAY BE SECURED WITH 8-INCH STAPLES OR PINS.
- FILTER FABRIC MUST BE LONG ENOUGH TO EXTEND DOWN THE SLOPE AND EXIT ONTO STABLE GROUND. THE WIDTH OF THE FABRIC MUST BE ONE PIECE, NOT JOINED OR SPLICED; OTHERWISE WATER CAN GET UNDER THE FABRIC.
- THE UPPER SECTION(S) SHOULD OVERLAP THE LOWER SECTION(S) SO THAT WATER CANNOT FLOW UNDER THE FABRIC. SECURE THE UPPER EDGE AND SIDES OF THE FABRIC IN A TRENCH WITH STAPLES OR PINS.
- DISCHARGE WATER INTO THE BASIN IN A MANNER TO PREVENT EROSION. USE TEMPORARY SLOPE DRAINS OR DIVERSIONS WITH OUTLET PROTECTION TO DIVERT SEDIMENT-LADEN WATER TO THE UPPER END OF THE POOL AREA TO IMPROVE BASIN TRAP EFFICIENCY.
- STABILIZE THE EMERGENCY SPILLWAY EMBANKMENT AND ALL OTHER DISTURBED AREAS ABOVE THE CREST OF THE PRINCIPAL SPILLWAY IMMEDIATELY AFTER CONSTRUCTION.

GENERAL NOTES:

- USE FOR DRAINAGE AREAS NOT EXCEEDING 5 ACRES
- EARTH BERM SHALL BE STABILIZED WITH SEEDING ACCORDING TO TOWN SPECIFICATIONS

" NOT TO SCALE "

MAINTENANCE:

- INSPECT ALL MEASURES AT LEAST WEEKLY AND AFTER EACH RAINFALL OF 1.0 INCH OR GREATER. MAKE NECESSARY REPAIRS IMMEDIATELY.
- REMOVE SEDIMENT AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT ACCUMULATES TO ONE-HALF THE HEIGHT OF THE FIRST BAFFLE. PULL THE SKIMMER TO ONE SIDE SO THAT THE SEDIMENT UNDERNEATH CAN BE EXCAVATED. EXCAVATE THE SEDIMENT FROM THE ENTIRE BASIN, NOT JUST AROUND THE SKIMMER OR WITHIN THE FIRST CELL.
- MAKE SURE ANY VEGETATION GROWING IN THE BOTTOM OF THE BASIN DOES NOT HOLD DOWN THE SKIMMER.
- REPAIR BAFFLES IF THEY ARE DAMAGED. RE-ANCHOR THE BAFFLES IF WATER IS FLOWING UNDERNEATH OR AROUND THEM.
- ENSURE THE SKIMMER IS NOT CLOGGED WITH TRASH OR DEBRIS.
- IF THE SKIMMER ARM OR BARREL PIPE IS CLOGGED, REMOVE ORIFICE AND CLEAR DEBRIS WITH A PLUMBER'S SNAKE OR BY FLUSHING WITH CLEAN WATER. BE SURE TO REPLACE THE ORIFICE BEFORE REPOSITIONING THE SKIMMER.
- CHECK FABRIC LINED SPILLWAY FOR DAMAGE AND MAKE ANY REQUIRED REPAIRS WITH FABRIC THAT SPANS THE FULL WIDTH OF THE SPILLWAY. CHECK THE EMBANKMENT, SPILLWAYS, AND OUTLET FOR EROSION DAMAGE, AND INSPECT THE EMBANKMENT FOR PIPING AND SETTLEMENT.



TOWN OF CHAPEL HILL
STANDARD DETAIL

REVISIONS

05/2024

TEMPORARY
SKIMMER BASIN

DATE: 02/2017

EC-14.02

\\chfs\Engineering\Design Manual\Standard Details for 2023 Revision\CAD\CAD details\EC-1402.dwg