SPACING CHART FOR ESC DEVICES

Maximum Spacing (ft) vs Ground Slope

Labels: SILT FENCE, TERRACE SPACING, STRAW BALES, CHECK DAM W / SED. TRAP, CHECK DAM

Ground Slope axis: 3:1 MAX, 4:1, 5:1, 15%, 10%, 5%, 0%

DESIGN CRITERIA
1. SILT FENCE FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
2. STRAW BALE BARRIERS FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
3. REFER TO INDIVIDUAL ESC FIGURE FOR INSTALLATION.
4. TERRACING INCLUDES LOGS, WATTLES & FILTER SOCKS.

STONE CONSTRUCTION ENTRANCE

SIDE ELEVATION — 50' MIN., EXISTING PAVEMENT, FILTER CLOTH, 6" MIN., MOUNTABLE BERM (OPTIONAL), 5:1, EXISTING GROUND

PLAN VIEW — 50' MIN., 10' MIN., WASHRACK (OPTIONAL), 12' MIN., CRUSH AGGREGATE, POSITIVE DRAINAGE TO SEDIMENT TRAPPING DEVICE, EXISTING PAVEMENT

* MUST EXTEND FULL WIDTH OF INGRESS AND EGRESS OPERATION

SECTION A-A — 12' MIN., 3" MIN., 3" MIN., FILTER CLOTH

SECTION B-B — 6'-7", REINFORCED CONCRETE, DRAIN SPACE

SILT FENCE

WOVEN FABRIC (MIRAFI 100X OR EQUAL) OVER WIRE MESH (12½ GA, 6X6 MESH)
10' MAX, 5' MAX W/O REINFORCED BACKING
2X2 CONSTRUCTION GRADE LUMBER, 4' LONG
FASTEN WITH 3-50 LB, DIAGONAL CABLE TIES WITHIN TOP 8" OF FABRIC OR 4'-1" LONG STAPLES
INSTALL ALONG CONTOUR NO SLOPE
6" MIN TRENCH

ELEVATION

CRITERIA
1. SILT FENCE SHALL BE 24 INCHES HIGH.
2. SILT FENCE SHALL NOT BE USED FOR CONCENTRATED FLOWS.
3. GEOSYNTHETIC REINFORCED SILT FENCE BACKING MAY BE USED IN LIEU OF WIRE MESH.
4. WIRE MESH WILL BE USED AT LOCATIONS SHOWN ON THE APPROVED SWPPP.

SECTION

< 1% SLOPE IN FRONT OF BARRIER, 5' MIN
WIRE MESH, FABRIC, TRENCH TO BE BACK FILLED AND COMPACTED, FLOW, 6" MIN DEPTH, 24" MIN, 24", BURY 1' OF FABRIC ALONG BOTTOM AND EDGE OF TRENCH

JOINING SECTIONS OF SILT FENCE

WRAP GEOTEXTILE AROUND STAKES BEFORE DRIVING

NOTE: IF FABRIC IS INSTALLED BY EQUIPMENT DESIGNED TO SLICE INTO THE GROUND, THE TRENCH IS NOT REQ'D.

STRAW BALE CHECK DAM

12" MIN. BETWEEN FLOW LINE AND END POINTS "A"

CRITERIA FOR LOW CONCENTRATED FLOWS
1. DRAINAGE AREAS SHALL BE LESS THAN 1 ACRE.
2. INSTALL TWO STAKES PER BALE.
3. BALES WILL BE TRENCHED 4" DEEP INTO EARTH.
4. MAXIMUM CHANNEL SLOPE OF 3%.
5. SEDIMENTATION TRAPS TO BE USED IN HIGHLY EROSIVE AREAS.

TRAPEZOIDAL DITCH — 1/3 BALE OVERLAP
V-DITCH — 1/3 BALE OVERLAP

CHECK DAM SPACING

Ditch Maximum Slope	Spacing
3%	50%
2%	75%

DITCH PROFILE — DOWNSTREAM BALE TOP SHALL BE LEVEL WITH THE LOWEST GROUND ELEVATION OF THE UPSTREAM BALE. 4" BURIAL

CURB INLET PROTECTION

TRAP PLACEMENT AT LOW POINT
15', 15', CURB INLET, PLACE OUTSIDE OF SUMP, 4', FLOW, 6' MIN, SINGLE GRAVEL BAG FOR DRAINAGE, SINGLE ROW OF GRAVEL BAGS

SILT SOCK (ALTERNATIVE)
CURB INLET, PLACE OUTSIDE OF SUMP, 4', SILT SOCK OR EQUAL

TRAP PLACEMENT AT INTERMEDIATE INLET
S, S, CURB INLET, FLOW, 5' MIN, FLOW

SPACING OF TRAPS

GUTTER SLOPE	S
LOW PT	15'
1%	20'
2%	15'
3% MAX.	10'

DESIGN CRITERIA
1. MAXIMUM DRAINAGE AREA - 1 ACRE.
2. PEAK RUNOFF SHALL BE ≤2 CFS BASED ON THE 6-MONTH STORM.
3. STACK GRAVEL BAGS DOUBLE HIGH. PROVIDE GAP FOR DRAINAGE.

AREA INLET PROTECTION FABRIC DROP

PERSPECTIVE
1' MIN, 2:1 MAX, TEMPORARY BERM - 1' HIGHER THAN SILT FENCE TO PREVENT BYPASS, 1% MAX SLOPE WITHIN 3' OF INLET, STEEL FENCE POSTS OR 2x4 WOOD FRAME MIN LENGTH 3' MAX LENGTH 3½', 1.0' MIN 1.5' MAX, FLOW

FABRIC, STAKE/POST, AREA INLET, FRAME, WOVEN FABRIC

ELEVATION
TRENCH TO BE BACKFILLED AND COMPACTED, BURY 1' OF FABRIC, 6" MIN DEPTH, 18", 6", GATHER EXCESS FABRIC AT CORNERS, OVERLAP TO THE NEXT STAKE FOR JOINTS

DESIGN CRITERIA
1. MAXIMUM DRAINAGE AREA - 1 ACRE.
2. PEAK RUNOFF SHALL NOT EXCEED 2 CFS BASED ON A 6-MONTH STORM EVENT.
3. OTHER SEDIMENT PROTECTION PRODUCTS MAY BE USED, SUCH AS FiltR FENCE™.

St. Charles County Erosion & Sediment Controls Standard Drawings
AREA INLET PROTECTION FABRIC DROP
DATE: MARCH 2008
DRAWING: ESC-14

CHECK DAMS

SAND BAG OR GRAVEL BAG CHECK DAM
CROSS SECTION — 12" MINIMUM, SAND BAG OR GRAVEL BAG
PROFILE — 60" MAX., NUMBER OF BAGS AND ARRANGEMENT MAY VARY., FLOW, 18" TO 20" MAX, 3'0" WOVEN FABRIC, 18"

ROCK CHECK DAM
CROSS SECTION — LEVEL CENTER SECTION, WITH 12" RISE ON BOTH SIDES TO CAUSE FLOW OVER, NOT AROUND, CHECK DAM, 12" MINIMUM, WOVEN FABRIC, 18"-20"
PROFILE — 6"-8" COARSE AGGREGATE, 2:1 SLOPE (TYP), FLOW, 6", 4'-6" WOVEN FABRIC, 3'0" APRON, 18"

GRAVEL BAG
7 OZ. BURLAP OR POLYPROPYLENE BAG WITH TIES, 1"-2" AGGREGATE, FILL BAGS 2/3 FULL, 60 LBS. MAX. WEIGHT, 26"-27", 14"-17"

NOTE:
1. CHECK DAMS MAY BE CONSTRUCTED OF SEVERAL ESC CHECK DAM PRODUCTS.

REVISIONS

NO.	DESCRIPTION	DATE
	CONSTRUCTION DOCUMENTS	11/29/22

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SCALE:	NTS
DRAWN BY:	RM
DESIGNER:	TJL,RM
CHECKED BY:	TJL
ENGINEER:	Michael E. Neikirk
ARCHITECT:	IDesign
OWNER:	Bluegrass Hospitality Group

STATE OF MISSOURI — MICHAEL E. NEIKIRK — NUMBER PE-2005010806 — PROFESSIONAL ENGINEER

CERTIFIED BY _____

JOB TITLE
DRAKE'S RESTAURANT
900 HIGHWAY K
O'FALLON, MO

DRAWING TITLE
EROSION CONTROL DETAILS

DRAWING NUMBER: **C6.1** REV #