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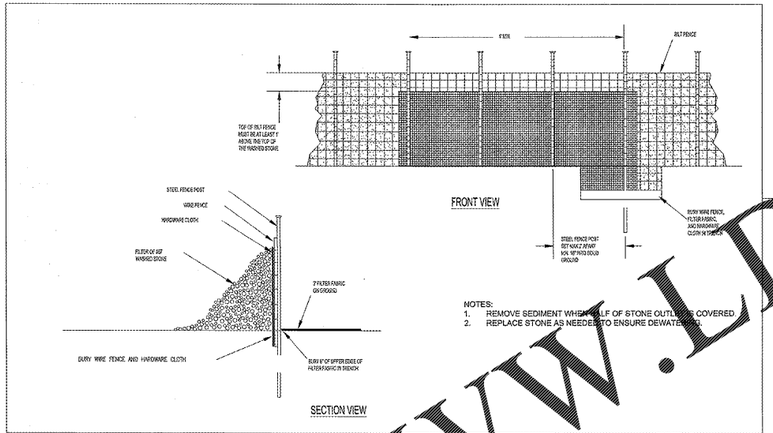
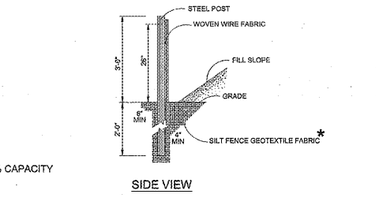
MAR 22 2019
1736 E SUNSHINE ST SUITE 417
SPRINGFIELD, MO



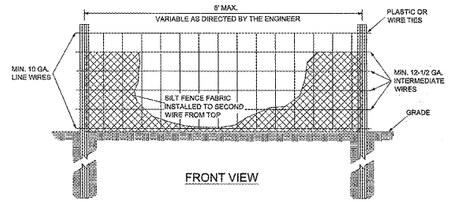
NOTES:
1. REMOVE SEDIMENT WHEN HALF OF STONE OUTLET IS COVERED.
2. REPLACE STONE AS NEEDED TO ENSURE DEWATERING.

SILT FENCE OUTLET

NOT TO SCALE



MAINTENANCE: CLEAN OUT AT 50% CAPACITY
LIFE OF FENCING: 6-9 MONTHS



NOTES:
1. FLOW SHALL NOT RUN PARALLEL WITH THE FENCE.
2. END OF SILT FENCE NEEDS TO BE TURNED UPHILL.
3. SEE N.C. STATE DENR PRACTICE STANDARDS & SPECIFICATIONS SEDIMENT FENCE SET FOR CONDITIONS WHERE PRACTICE APPLIES; PLANNING CONSIDERATIONS & DESIGN CRITERIA.

NCDENR MAINTENANCE NOTE:
SEDIMENT FENCE- INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY. SHOULD THE FABRIC OF THE SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUT. REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

TABLE 1 Temporary Silt Fence Material Property Requirements

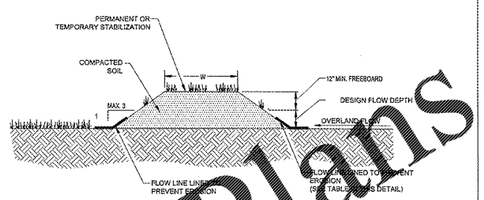
		Test Method	Units	Supported[A] Silt Fence	Unsupported[A] Silt Fence	Type of Value
Grab Strength		ASTM D 4632	N (lbs)			
	Machine Direction			400 (90)	550 (90)	MARV
	X-Machine Direction			400 (90)	450 (90)	MARV
Permittivity [B]		ASTM D 4491	sec-1	0.05	0.05	MARV
Apparent Opening Size [B]		ASTM D 4751	mm (US Sieve #)	0.60 (30)	0.60 (30)	Max. ARV [C]
Ultraviolet Stability		ASTM D 4355	% Retained Strength	70% after 500 h of exposure	70% after 500 h of exposure	Typical

A Silt fence support shall consist of 14 gage steel wire with a mesh spacing of 150 mm (6 in.) or prefabricated polymer mesh of equivalent strength.
B These default values are based on empirical evidence with a variety of sediments. For environmentally sensitive areas, a review of previous experience and/or site or regionally specific geotextile tests in accordance with Test Method D 5141 should be performed by the agency to confirm suitability of these requirements.
C As measured in accordance with Test Method D 4632.

TABLE 1 TAKEN FROM ASTM D 6461-99 (2007)

SILT FENCE DETAIL

NOT TO SCALE



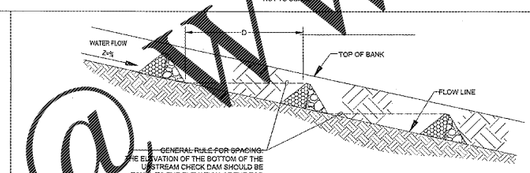
NOTES:
1. REMOVE ANY EXISTING VEGETATION AND SCARIFY OR BENCH ADJACENT SOILS PRIOR TO PLACING BERM.
2. BERM MATERIALS MUST BE ADEQUATELY COMPACTED AND IMMEDIATELY STABILIZED.
3. DIVERSION DITCHES AND BERMS MUST BE IMMEDIATELY STABILIZED TO PREVENT EROSION AND TRANSPORT OF SEDIMENT.

DIVERSION DIKES AND BERMS				
DIVERSION NAME AND SIGMA	LENGTH (FT.)	LONGITUDINAL SLOPE	DESIGN FLOW DEPTH (IN.)	EROSION PROTECTION TYPE (I.E., MATTING, BLANKET, ETC.)
DD 1	100	1.2 %	≥ 6.0"	JUTE NET

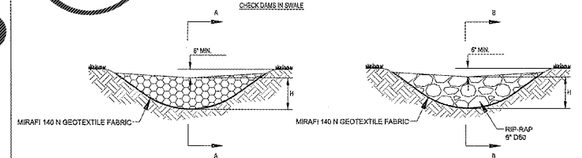
MAINTENANCE NOTES:
1. INSPECT DIVERSION DIKES ONCE A WEEK AND AFTER EVERY RAINFALL. IMMEDIATELY REMOVE SEDIMENT FROM THE FLOW AREA AND REPAIR THE DIKE.
2. CHECK OUTLETS, AND MAKE TIMELY REPAIRS AS NEEDED TO AVOID GULLY FORMATION. WHEN THE AREA ABOVE THE TEMPORARY DIVERSION DIKE IS PERMANENTLY STABILIZED, REMOVE THE DIKE. AND FILL AND STABILIZE THE CHANNEL TO BLEND WITH THE NATURAL SURFACE.

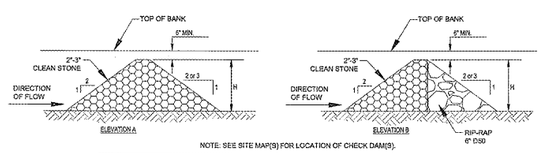
DIVERSION DIKE

NOT TO SCALE



CHECK DAMS IN SWALE





NOTE: SEE SITE MAP(S) FOR LOCATION OF CHECK DAM(S).

CHECK DAMS				
CHECK DAM NAME (REFERENCE DIVERSION NAME)	CHECK DAM HEIGHT (IN.)	CHECK DAM SPACING (FT.)	AVERAGE CHANNEL SLOPE	MAXIMUM CHANNEL SLOPE
CHECK DAMS IN CHANNEL1	6"	70'	1.2 %	2.0 %

MAINTENANCE NOTES:
1. INSPECT CHECK DAMS AND CHANNELS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. CLEAN OUT SEDIMENT, STRAW, LIMBS, OR OTHER DEBRIS THAT COULD CLOG THE CHANNEL WHEN NEEDED.
2. ANTICIPATE SUBMERGENCE AND DEPOSITION ABOVE THE CHECK DAM AND EROSION FROM HIGH FLOWS AROUND THE EDGES OF THE DAM. CORRECT DAMAGE IMMEDIATELY. IF SIGNIFICANT EROSION OCCURS BETWEEN DAMS, ADDITIONAL MEASURES CAN BE TAKEN SUCH AS, INSTALLING A PROTECTIVE RIPRAP LINER IN THAT PORTION OF THE CHANNEL (PRACTICE 8.31, RIPRAP-LINE AND PAVED CHANNELS)
3. REMOVE SEDIMENT ACCUMULATED BEHIND THE DAMS AS NEEDED TO PREVENT DAMAGE TO CHANNEL VEGETATION. ALLOW THE CHANNEL TO DRAIN THROUGH THE STONE CHECK DAM, AND PREVENT LARGE FLOWS FROM CARRYING SEDIMENT OVER THE DA. ADD STONES TO DAMS AS NEEDED TO MAINTAIN DESIGN HEIGHT AND CROSS SECTION.

ROCK CHECK DAM

NOT TO SCALE

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PROJECT No.: NCR182158 | SCALE:
DRAWN BY / CHECKED BY: CB/WLB | CAD I.D.: NCR182158-SDP-0

C3.4

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