

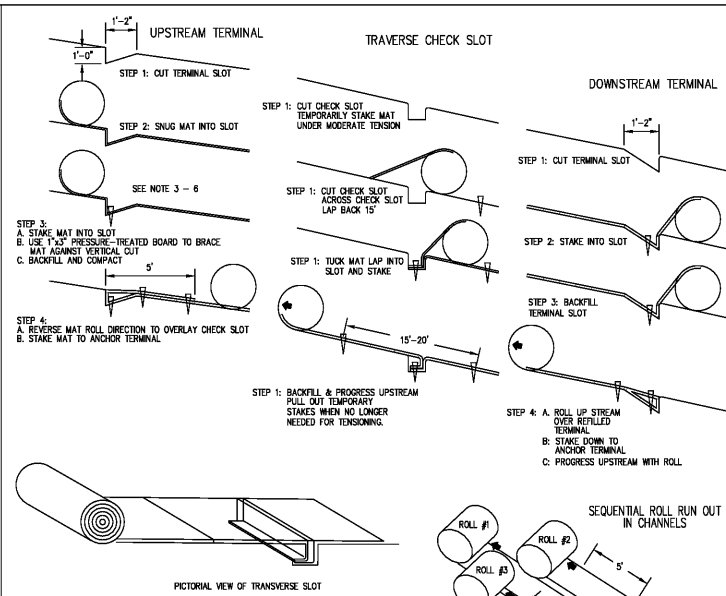
CONSTRUCTION SPECIFICATIONS

For inlets receiving runoff with a higher volume or velocity, a baffle box inlet sediment trap should be used. The baffle box shall be constructed of 2"x4" boards spaced a maximum of 1 inch apart or of plywood with weep holes 2 inches in diameter. The weep holes shall be placed approximately 6 inches on center vertically and horizontally. Gravel shall be placed outside the box, all around the inlet, to a depth of 2 to 4 inches. The entire box is wrapped in Type C filter fabric that shall be entrenched 12 inches and backfilled.

MAINTENANCE

The trap shall be inspected daily and after each rain and repairs made as needed. Sediment shall be removed when the sediment has accumulated to one-half the height of the trap. Sediment shall be removed from curb inlet protection immediately. For excavated inlet sediment traps, sediment shall be removed when one-half of the sediment storage capacity has been lost to sediment accumulation. Sod inlet protection shall be maintained as specified in D44-Disturbed Area Stabilization (with sodding). Sediment shall not be washed into the inlet. It shall be removed from the sediment trap and disposed of and stabilized so that it will not enter the inlet, again. When the contributing drainage area has been permanently stabilized, all materials and any sediment shall be removed, and either salvaged or disposed of properly. The disturbed area shall be brought to proper grade, then smoothed and compacted. Appropriately stabilize all disturbed areas around the inlet.

3d2-B INLET SEDIMENT TRAP - BAFFLE BOX



START AT DOWNSTREAM TERMINAL AND PROGRESS UPSTREAM.
FIRST ROLL IS CENTERED LONGITUDINALLY IN MID CHANNEL, AND PINNED WITH TEMPORARY STAKES TO MAINTAIN ALIGNMENT.
SUBSEQUENT ROLLS FOLLOW IN STAGGERED SEQUENCE BEHIND FIRST ROLL. USE CENTER ROLL FOR ALIGNMENT TO CHANNEL CENTER.
WORK OUTWARDS FROM CHANNEL CENTER TO EDGE.
USE 3" OVERLAP AND STAKE AT 5' INTERVAL ALONG SEAMS.
USE 3" OVERLAPS AND SHINGLE DOWNSTREAM TO CONNECT LINING AT ROLL ENDS.

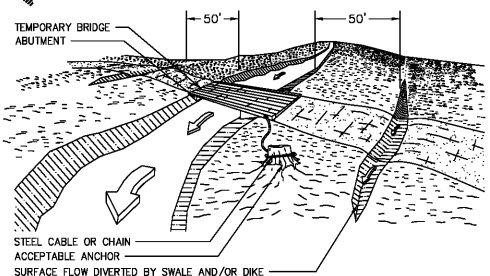
6s SLOPE STABILIZATION

FORD CROSSING

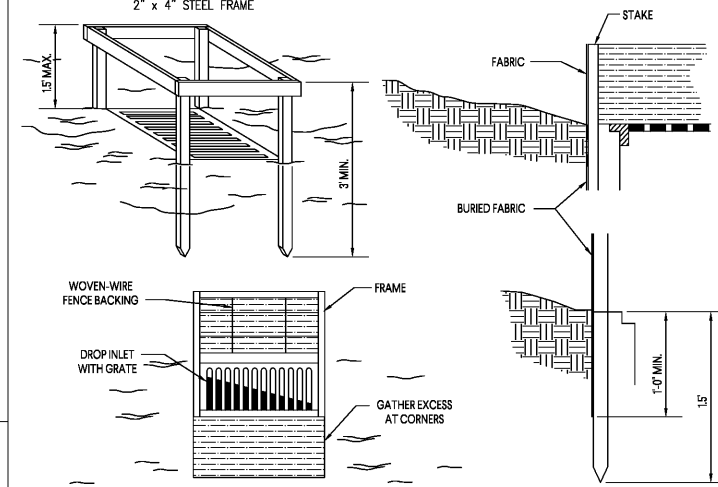
DESIGN CRITERIA

1. THE CROSSING SHALL BE CONSTRUCTED OF NATURAL ROCK EXCAVATED DURING CONSTRUCTION NO LARGER THAN 6" IN DIAMETER, OR OTHER DURABLE NATURAL MATERIAL APPROVED BY ENGINEER. RECYCLED ASPHALT GRADINGS OR RUBBLE IS NOT ALLOWED.
2. THE APPROACH SHALL BE GRADED TO A FINISHED SLOPE NOT STEEPER THAN 3:1 HORIZONTAL TO VERTICAL, AND ALL GRADED BANKS ARE TO BE SEEDED AND MULCHED TO PREVENT EROSION AND SEDIMENTATION.
3. GRADE REVERSAL SHALL BE A MINIMUM OF 12" ABOVE HIGH WATER LINE ON BOTH EMBANKMENTS.

Ford FORD CROSSING



9r-B TEMPORARY BRIDGE CULVERT CROSSING



CONSTRUCTION SPECIFICATIONS

This method of inlet protection is applicable where the inlet drains a relatively flat area (slope no greater than 3%) and shall not apply to inlets receiving concentrated flows, such as in street or highway medians. Type C silt fence supported by steel posts shall be used. The stakes shall be spaced evenly around the perimeter of the inlet a maximum of 3 feet apart, and securely driven into the ground, approximately 18 inches deep. The fabric shall be entrenched 12 inches and backfilled with crushed stone or compacted soil. Fabric and wire shall be securely fastened to the posts, and fabric ends must be overlapped a minimum of 18 inches or wrapped together around a post to provide a continuous fabric barrier around the inlet.

MAINTENANCE

The trap shall be inspected daily and after each rain and repairs made as needed. Sediment shall be removed when the sediment has accumulated to one-half the height of the trap. Sediment shall be removed from curb inlet protection immediately. For excavated inlet sediment traps, sediment shall be removed when one-half of the sediment storage capacity has been lost to sediment accumulation. Sod inlet protection shall be maintained as specified in D44-Disturbed Area Stabilization (with sodding). Sediment shall not be washed into the inlet. It shall be removed from the sediment trap and disposed of and stabilized so that it will not enter the inlet, again. When the contributing drainage area has been permanently stabilized, all materials and any sediment shall be removed, and either salvaged or disposed of properly. The disturbed area shall be brought to proper grade, then smoothed and compacted. Appropriately stabilize all disturbed areas around the inlet.

3d2-F INLET SEDIMENT TRAP FILTER FABRIC WITH SUPPORTING FRAME

Order Plans @

Temporary Erosion Control Blankets
This includes temporary "combination" blankets (rolled erosion control blankets-RECB) consisting of a plastic netting which covers and is intertwined with a natural organic or manmade mulch, or a jute mesh which is typically homogeneous in design and can act alone as a soil stabilization blanket.
Temporary blankets as a minimum shall be used to stabilize concentrated flow areas with a velocity less than 5 ft/sec and slopes 2.5:1 or steeper with a height of 10 feet or greater. Because temporary blankets will deteriorate in a short period of time, they provide no enduring erosion protection.
Benefits of using erosion control blankets include the following:
1. Protection of the seed and soil from raindrop impact and subsequent displacement.
2. Thermal consistency and moisture retention for seedbed area.
3. Stronger and faster germination of grasses and legumes.
4. Flaring off excess stormwater runoff.
5. Prevention of sloughing of topsoil added to steeper slopes.
Permanent Erosion Control Matting
Consists of a permanent non-degradable, three-dimensional plastic structure which can be filled with soil prior to planting. These mats are also known as permanent soil reinforcing mats (soil reinforcement matting). Roots penetrate and become entangled in the matrix, forming a continuous anchorage for surface growth and promoting enhanced energy dissipation. Matting shall be used when a permanent lining desired in stormwater conveyance channels where the velocity is between five and ten per second.
Benefits of using erosion control matting include the following:
1. All benefits gained from using erosion control blankets.
2. Causes soil to drop out of stormwater and fill matrix with fine soils which become the growth medium for development of roots.
3. Acts with the vegetative root system to form an erosion resistant cover which resists hydraulic and shear forces when embedded in the soil within stormwater channels.
Materials
All blanket and matting materials shall be on the Georgia Department of Transportation's Qualified Products List (QPL #52 for blankets, QPL #49 for matting).
All blankets shall be nontoxic to vegetation and to the germination of seed and shall not be injurious to the unprotected skin of humans. At a minimum, the plastic netting shall be intertwined with the matting material/fiber to maximize strength and provide for ease of handling.
Temporary Blankets
Machine produced temporary combination blankets shall have a minimum thickness with the organic material evenly distributed over the entire blanket area. All combination blankets shall have a minimum length of 48 inches. Machine produced combination blankets include the following:
1. Straw blankets are combination blankets that consist of 50% fine straw from agricultural crops formed into a blanket. Blankets with a top side of photodegradable plastic mesh with a maximum mesh size of 5/16 x 5/16 inch and sewn to the straw with biodegradable thread are appropriate for slopes. The blanket shall have a minimum thickness of 3/8 inch and minimum dry weight of 0.5 pounds per square yard.
2. Jute fiber blankets are combination blankets that consist of curled wood excelsior (80% of fibers are six inches or longer) formed into a blanket. The blanket shall have clear markings indicating the top side of the blanket and be smolder resistant. Blankets shall be photodegradable plastic mesh having a maximum mesh size of 1/2 x 3/8 inches. The blanket shall have a minimum thickness of 1/4 inch and a minimum dry weight of 0.8 pounds per square yard. Slopes require excelsior matting with the top side of the blanket covered by the plastic mesh. For waterways, both sides of the blanket require plastic mesh.
3. Coconut fiber blankets are combination blankets that consist of 100% coconut fiber formed into a blanket. The minimum thickness of blankets shall be 1/4 of an inch with a minimum dry weight of 0.5 pounds per square yard. Blankets shall have photodegradable plastic mesh with a maximum mesh size of 5/8 x 5/8 inch and sewn to the fiber with a breakdown resistant synthetic yarn. Plastic mesh is required on both sides of the blanket. A maximum of two inches is allowable for the stitch pattern and row spacing.
4. Wood fiber blankets are combination blankets that consist of reprocessed wood fibers that do not possess or contain any growth or germination-inhibiting factors. The blanket shall have a photodegradable plastic mesh, with a maximum mesh size of 5/8 x 3/4 inch, securely bonded to the top of the mat. The blanket shall have a minimum dry weight of 0.35 pounds per square yard. A maximum of two inches is allowable for the stitch pattern and row spacing. This practice shall be applied only to slopes.
5. Jute Mesh can be applied to slopes. Jute mesh with a 48 inch width shall show between 76 and 80 wrappings and a one yard length shall show between 38 to 43 wrappings. The woven mesh shall be at least 45 inches wide. Turn shall have a unit weight of at least 0.9 pounds per square yard, but not more than 1.5 pounds per square yard.
Permanent Matting
Permanent matting shall consist of a lefty web of mechanically or melt bonded polymer nettings, monofilaments or fibers which are entangled to form a strong and dimensionally stable matrix. Polymer welding, thermal of polymer fusion, or the placement of fibers between two high strength, biaxially oriented nets bound securely together by parallel lock stitching with polyolefin, nylon or polyester threads are all appropriate bonding methods. Mats shall maintain their shape before, during, and after installation, under dry or water saturated conditions. Mats must be stabilized against ultraviolet degradation and shall be inert to chemicals normally encountered in a natural soil environment.
The mat shall conform to the following physical properties:

Property	Minimum Value
Thickness	0.5 inch
Weight	0.6 PSY
Roll Width	36 inches
Tensile Strength	
Length (50% elongation)	15 lbs./in.
Length (ultimate)	20 lbs./in.

GMC

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ISSUE DATE	PRELIMINARY 08.15.2019
	75% SUBMITTAL 10.01.2019
	BID READY 10.18.2019

DRAWN BY: _____
CHECKED BY: _____

NORTHGATE HIGH SCHOOL
SANITARY SEWER
COWETA COUNTY WATER AND SEWERAGE AUTHORITY

CATL190025

EROSION AND SEDIMENTATION CONTROL DETAILS

C.39
sheet of

No. 24141
PROFESSIONAL ENGINEER
10-18-19
TIMOTHY G. BLAYDES

DRAWING FILE: C:\Projects\Coweta\CA TL 190025 - Northgate High School Sanitary Sewer\DWG\CA TL 190025-EROSION.rvt
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