

# EROSION CONTROL NOTES

EROSION CONTROL MEASURES SHOWN ON THE DRAWINGS ARE MINIMUM REQUIREMENTS. ADDITIONAL EROSION CONTROL MEASURES SHALL BE EMPLOYED BY THE CONTRACTOR WHERE DETERMINED NECESSARY BY LOCAL AUTHORITIES OR THE ENGINEER BASED UPON ACTUAL SITE CONDITIONS.

EROSION CONTROL MEASURES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE DRAINAGE PATTERNS SHOWN ON THE PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION.

IF FINES OR PENALTIES ARE LEVIED AGAINST THE PROPERTY OR THE PROPERTY OWNER BECAUSE OF A LACK OF EROSION OR SEDIMENTATION CONTROL, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYMENT OF SUCH FINES OR PENALTIES, OR THE COST OF SUCH FINES OR PENALTIES SHALL BE DEDUCTED FROM THE CONTRACT AMOUNT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EROSION CONTROL MEASURES AT ALL TIMES DURING CONSTRUCTION. STORM DRAINAGE SYSTEMS SHALL BE KEPT CLEAN AND FREE OF SILT AND DEBRIS.

PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, THE LIMITS OF LAND DISTURBANCE SHALL BE CLEARLY AND ACCURATELY MARKED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE MEANS. THE LOCATION AND EXTENT OF ALL AUTHORIZED LAND DISTURBANCE ACTIVITY SHALL BE MARKED FOR THE DURATION OF THE CONSTRUCTION ACTIVITY. NO DISTURBANCE ACTIVITY SHALL OCCUR OUTSIDE THE LIMITS INDICATED ON THE PLANS.

THE CONSTRUCTION OF THE SITE WILL INITIATE WITH INSTALLATION OF EROSION CONTROL MEASURES SUFFICIENT TO CONTROL SEDIMENT DEPOSITS AND EROSION. ALL EROSION AND SEDIMENTATION CONTROL MEASURES WILL BE MAINTAINED UNTIL ALL UPSTREAM GROUND WITHIN THE CONSTRUCTION AREA HAS BEEN COMPLETELY STABILIZED WITH PERMANENT VEGETATION AND ALL ROADS AND/OR PARKING AREAS HAVE BEEN PAVED.

THE CONTRACTOR SHALL INSPECT AND REPAIR EROSION CONTROL MEASURES AT LEAST DAILY AND FOLLOWING EACH RAINFALL.

THE CONTRACTOR SHALL NOT ALLOW SILT TO ACCUMULATE IN SILT FENCE ABOVE ONE-HALF OF THE ORIGINAL HEIGHT OF THE SILT FENCE. THE CONTRACTOR SHALL REMOVE SILT AS NEEDED TO PREVENT EXCESS ACCUMULATION.

ALL AREAS TO BE PAVED SHALL BE STABILIZED WITH BASE MATERIAL AS SOON AS PRACTICAL. TEMPORARY VEGETATIVE STABILIZATION, OUTSIDE OF PAVED AREAS, SHALL BE PROVIDED IMMEDIATELY AFTER REACHING FINAL GRADE.

PERMANENT VEGETATION SHALL BE PROVIDED AT THE EARLIEST SUITABLE GROWING SEASON.

TEMPORARY MULCHING SHALL BE EMPLOYED TO PROTECT CRITICAL AREAS DURING CONSTRUCTION.

ALL TEMPORARY AND PERMANENT VEGETATION SPECIES TO BE APPROVED BY LOWNDEN COUNTY ENGINEERING DEPARTMENT PRIOR TO APPLICATION.

# Ch CHANNEL STABILIZATION

## DEFINITION

IMPROVING, CONSTRUCTING OR STABILIZING AN OPEN CHANNEL FOR WATER CONVEYANCE.

## PURPOSE

OPEN CHANNELS ARE CONSTRUCTED OR STABILIZED TO BE NON-EROSIVE, WITH NO SEDIMENT DEPOSITION AND TO PROVIDE ADEQUATE CAPACITY FOR FLOOD WATER, DRAINAGE, OTHER WATER MANAGEMENT PRACTICES, OR ANY COMBINATION THEREOF.

## CONDITIONS

THIS STANDARD APPLIES TO THE IMPROVEMENT, CONSTRUCTION OR STABILIZATION OF OPEN CHANNELS AND EXISTING DITCHES WITH DRAINAGE AREAS LESS THAN ONE SQUARE MILE. **THIS STANDARD APPLIES ONLY TO CHANNELS CONVEYING INTERMITTENT FLOW, NOT TO CHANNELS CONVEYING A CONTINUOUS, LIVE STREAM.**

## DESIGN CRITERIA

### VEGETATED LINING - CH-V

VEGETATED LINING SHALL BE DESIGNED TO RESIST EROSION WHEN THE CHANNEL IS FLOWING AT THE BANKFULL DISCHARGE OR 25-YEAR FREQUENCY DISCHARGE, WHICHEVER IS THE LESSER. TEMPORARY EROSION CONTROL BLANKETS OR SOD SHALL BE USED ON ALL CHANNELS AND CONCENTRATED FLOW AREAS TO AID IN THE ESTABLISHMENT OF THE VEGETATED LINING. IF A VEGETATED LINING IS DESIRED IN A CHANNEL WITH VELOCITIES BETWEEN 5-10 FT/SEC, PERMANENT SOIL REINFORCEMENT SHALL BE USED.

## SPECIFICATIONS

- WHERE NEEDED, ALL TREES, BRUSH, STUMPS AND OTHER OBJECTIONABLE MATERIALS SHALL BE REMOVED SO THEY WILL NOT INTERFERE WITH THE CONSTRUCTION OR PROPER FUNCTIONING OF THE CHANNEL.
- WHERE POSSIBLE, TREES WILL BE LEFT STANDING, AND STUMPS WILL NOT BE REMOVED.
- EXCAVATION SHALL BE AT THE LOCATIONS AND GRADES SHOWN ON THE DRAWINGS.
- THE GEOTEXTILE SHALL BE PLACED ON A SMOOTH GRADED SURFACE. THE GEOTEXTILE SHALL BE PLACED IN SUCH A MANNER THAT IT WILL NOT EXCESSIVELY STRETCH OR TEAR UPON PLACEMENT OF THE OVERLYING MATERIALS. CARE SHOULD BE TAKEN TO PLACE THE GEOTEXTILE IN INTIMATE CONTACT WITH THE SOIL SUCH THAT NO VOID SPACES EXIST BETWEEN THE UNDERLYING SOIL AND THE GEOTEXTILE.

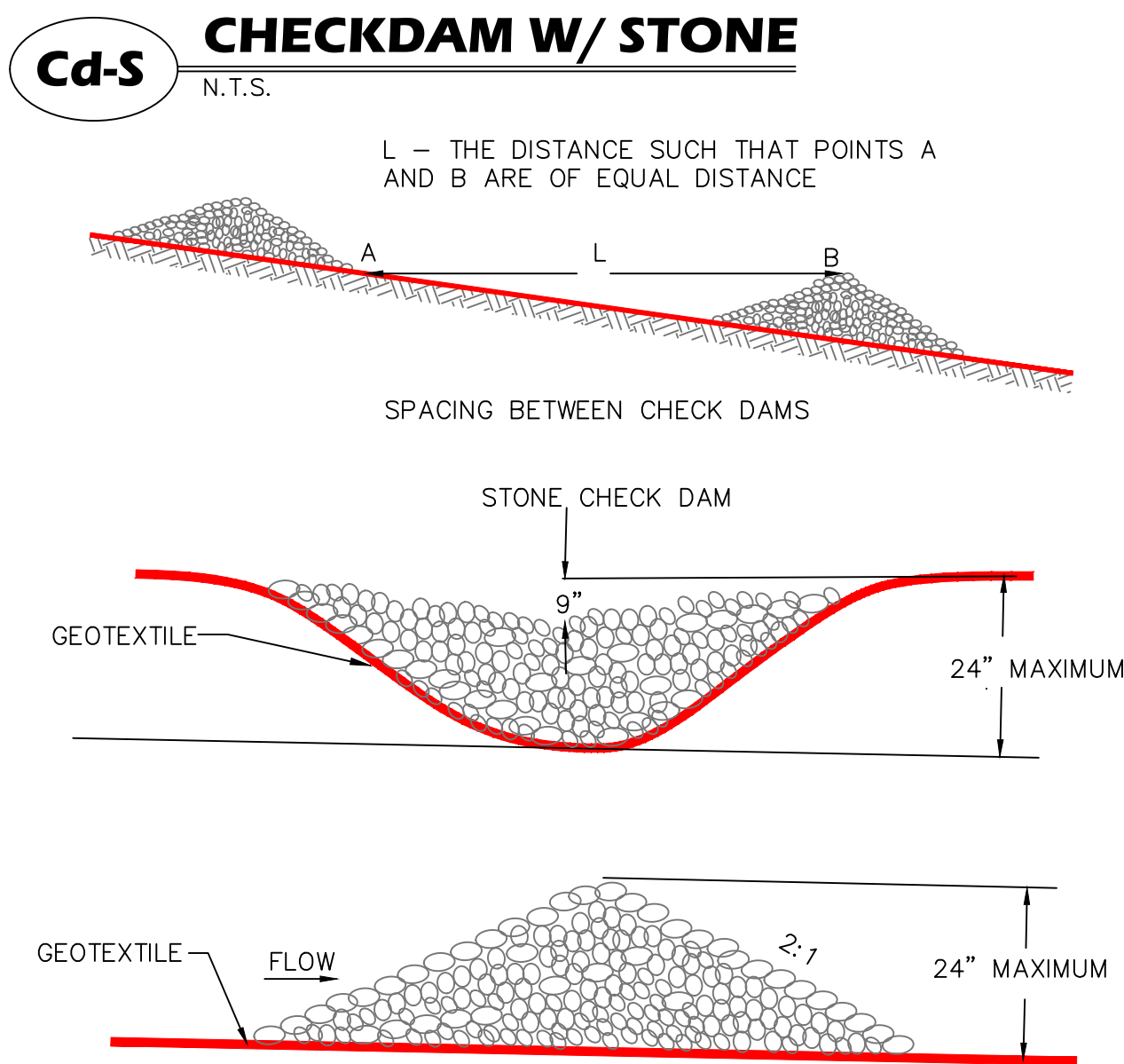
- CONSTRUCTION PLANS WILL SPECIFICALLY DETAIL LOCATION AND HANDLING OF SPOILS. SPOIL MATERIAL RESULTING FROM CLEARING, GRUBBING AND CHANNEL EXCAVATION SHALL BE DISPOSED OF IN A MANNER WHICH WILL:
  - NOT CAUSE AN INCREASE IN FLOOD STAGE,
  - MINIMIZE OVERBANK WASH,
  - NOT CAUSE AN ADVERSE EFFECT ON THE ENVIRONMENTAL INTEGRITY OF THE AREA,
- PROVIDE FOR THE FREE FLOW OF WATER BETWEEN THE CHANNEL AND FLOOD PLAIN UNLESS THE VALLEY ROUTING AND WATER SURFACE PROFILE ARE BASED ON CONTINUOUS DIKES BEING INSTALLED,
- LEAVE THE RIGHT-OF-WAY IN THE BEST CONDITIONS FEASIBLE, AND
- IMPROVE THE AESTHETIC APPEARANCE OF THE SITE TO THE EXTENT FEASIBLE.
- CHANNEL LININGS SHALL BE ESTABLISHED OR INSTALLED IMMEDIATELY AFTER CONSTRUCTION OR AS SOON AS WEATHER CONDITIONS PERMIT. STRUCTURES SHALL BE INSTALLED ACCORDING TO LINES AND GRADES SHOWN ON THE PLAN. THE FOUNDATION FOR STRUCTURES SHALL BE CLEARED OF ALL UNDESIRABLE MATERIALS PRIOR TO THE INSTALLATION OF THE STRUCTURES.
- MATERIALS USED IN CONSTRUCTION SHALL BE OF PERMANENCY COMMENSURATE WITH THE DESIGN FREQUENCY AND LIFE EXPECTANCY OF THE FACILITY.
- EARTHFILL, WHEN USED AS A PART OF THE STRUCTURES, SHALL BE PLACED ACCORDING TO THE INSTALLATION REQUIREMENTS FOR SEDIMENT BASIN EMBANKMENTS.
- CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND AIR AND WATER POLLUTION WILL BE MINIMIZED. STATE AND LOCAL LAWS CONCERNING POLLUTION ABATEMENT SHALL BE COMPLIED WITH.
- VEGETATION SHALL BE ESTABLISHED ON ALL DISTURBED AREAS IMMEDIATELY AFTER CONSTRUCTION. IF WEATHER CONDITIONS CAUSE A DELAY IN ESTABLISHING VEGETATION, THE AREA SHALL BE MULCHED IN ACCORDANCE WITH THE STANDARD FOR MULCHING. SEEDING, FERTILIZING AND MULCHING SHALL CONFORM TO THE STANDARDS FOR PERMANENT VEGETATIVE COVER.
- ALL TEMPORARY ACCESS ROADS OR TRAVELWAYS SHALL BE APPROPRIATELY CLOSED TO EXCLUDE TRAFFIC.
- TREES AND OTHER FALLEN NATURAL VEGETATION NOT CAUSING A DETERRENT TO STREAM FLOW SHOULD BE LEFT FOR THE PURPOSE OF HABITAT.

# STRUCTURAL PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Co	CONSTRUCTION EXIT			A CRUSHED STONE PAD LOCATED AT THE CONSTRUCTION SITE EXIT TO PROVIDE A PLACE FOR REMOVING MUD FROM TIRES, THEREBY PROTECTING PUBLIC STREETS.
Cd	CHECK DAM			A SMALL TEMPORARY BARRIER OR DAM CONSTRUCTED ACROSS A SWALE, DRAINAGE DITCH OR AREA OF CONCENTRATED FLOW.
Rt	RETROFITTING			A DEVICE OR STRUCTURE PLACED IN FRONT OF A PERMANENT STORMWATER DETENTION POND OUTLET STRUCTURE TO SERVE AS A TEMPORARY SEDIMENT FILTER.
Sd1	SEDIMENT BARRIER			A BARRIER TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. IT MAY BE SANDBAGS, BALES OF STRAW OR HAY, BRUSH, LOGS AND POLES, GRAVEL, OR A SEDIMENT FENCE. THE BARRIERS ARE USUALLY TEMPORARY AND INEXPENSIVE.
Sd2	SEDIMENT TRAP, TEMPORARY			AN IMPOUNDING AREA CREATED BY EXCAVATING AROUND A STORM DRAIN DROP INLET. THE EXCAVATED AREA WILL BE FILLED AND STABILIZED ON COMPLETION OF CONSTRUCTION ACTIVITIES.
Sd3	SEDIMENT BASIN, TEMPORARY			A BASIN CREATED BY EXCAVATION OR A DAM ACROSS A WATERWAY. THE SURFACE WATER RUN-OFF IS TEMPORARILY STORED ALLOWING THE BULK OF THE SEDIMENT TO DROP OUT. THE BASIN IS USUALLY TEMPORARY BUT MAY BE DESIGNED AS A PERMANENT POND OR STORMWATER RETENTION DEVICE.
St	STORM DRAIN INLET/OUTLET PROTECTION			A PAVED OR SHORT SECTION OF RIPRAP CHANNEL AT THE OUTLET OF A STORM DRAIN SYSTEM PREVENTING EROSION FROM THE CONCENTRATED RUNOFF.
Tp	TOPSOILING			THE PRACTICE OF STRIPPING OFF THE MORE FERTILE TOP SOIL, STORING IT, THEN SPREADING IT OVER THE DISTURBED AREA AFTER THE COMPLETION OF CONSTRUCTION ACTIVITIES.
Di	DIVERSION			TO INTERCEPT STORMWATER RUNOFF AND DIVERT IT TO A STABLE OUTLET
Fr	FILTER RING			A TEMPORARY STONE BARRIER CONSTRUCTED AT STORM DRAIN INLETS AND POND OUTLETS
Sk	FLOATING SURFACE SKIMMER			A BUOYANT DEVICE THAT RELEASES/DRAINS WATER FROM THE SURFACE OF SEDIMENT PONDS, TRAPS, OR BASINS AT A CONTROLLED RATE OF FLOW.

# VEGETATIVE PRACTICES

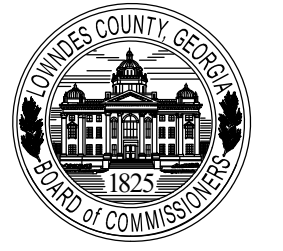
CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)			ESTABLISHING TEMPORARY PROTECTION FOR DISTURBED AREAS WHERE SEEDLINGS MAY NOT HAVE A SUITABLE GROWING SEASON TO PRODUCE AN EROSION RETARDING COVER.
Ds2	DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)			ESTABLISHING A TEMPORARY VEGETATIVE COVER WITH FAST GROWING SEEDLINGS ON DISTURBED AREAS.
Ds3	DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)			ESTABLISHING PERMANENT VEGETATIVE COVER SUCH AS TREES, SHRUBS, VINES, GRASSES, SOD OR LEGUMES ON DISTURBED AREAS.
Ds4	DISTURBED AREA STABILIZATION (WITH SODDING)			A PERMANENT VEGETATIVE COVER USING SODS ON HIGHLY ERODIBLE OR VERTICALLY ERODED LANDS.
Du	DUST CONTROL ON DISTURBED AREAS			CONTROLLING SURFACE AND AIR MOVEMENTS OF DUST ON CONSTRUCTION SITES, ROADWAYS AND SIMILAR SITES.
Pm	POLYACRYLAMIDE	TO BE USED ONLY WHERE STORM WATER RUNOFF IS DIRECTED TO A DETENTION POND.		THE LAND APPLICATION OF PRODUCT CONTAINING ANIONIC POLYACRYLAMIDE (PAM) AS TEMPORARY SOIL BINDING AGENTS TO REDUCE SOIL EROSION.
Mb	DISTURBED AREA STABILIZATION (WITH MATTING)			A PROTECTIVE COVERING (BLANKET) OR SOIL STABILIZATION MAT USED TO ESTABLISH PERMANENT VEGETATION ON STEEP SLOPES, CHANNELS, OR SHORELINES.



- NOTES:
- CHECK DAMS ARE TO BE USED ONLY IN SMALL OPEN CHANNELS (THEY ARE NOT TO BE USED IN LIVE STREAMS).
  - THE DRAINAGE AREA FOR STONE CHECK DAMS SHALL NOT EXCEED TWO ACRES.
  - THE CENTER OF THE CHECK DAM MUST BE AT LEAST 9 INCHES LOWER THAN THE OUTER EDGES.
  - THE DAM HEIGHT SHOULD BE A MAXIMUM OF 2 FEET FROM CENTER TO RIM EDGE.
  - THE SIDE SLOPES OF THE CHECK DAM SHALL NOT EXCEED A 2:1 SLOPE.
  - GEOTEXTILE SHALL BE USED TO PREVENT THE MITIGATION OF SUBGRADE SOIL PARTICLES INTO THE STONES (REFER TO AASHTO M288-96, SECTION 7.3, TABLE 3).



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ROCKY HILL  
 CHURCH ROAD  
 LAND LOT 38 OF THE 12TH LAND DISTRICT  
 LOWNDEN COUNTY - STATE OF GEORGIA

## REVISIONS

DATE	DESCRIPTION

SCALE: N.T.S.

DESIGNED BY: TJH

CHECKED BY: MCM

SUBMITTAL DATE: 4-11-2023

JOB NO. 0010-131

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GSWCC LEVEL II CERT. #49262

ESPC DETAILS  
 (1 OF 3)

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