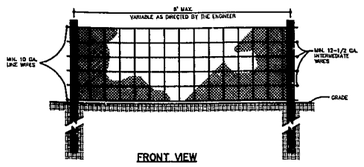


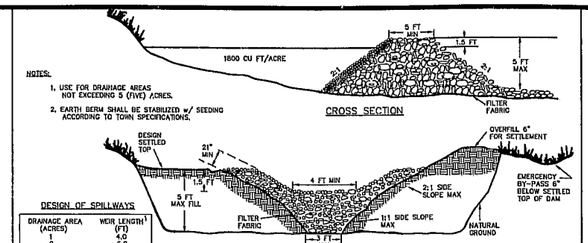
NOTE:
*USE SILT FENCE ONLY WHEN DRAINAGE AREA DOES NOT EXCEED 1/4 ACRE, AND NEVER IN AREAS OF CONCENTRATED FLOW

* FOR REPAIR OF SILT FENCE, USE 2" TO 3" DIA. STONE FOR ANCHOR WHEN SILT FENCE IS PROTECTING CATCH BASIN.

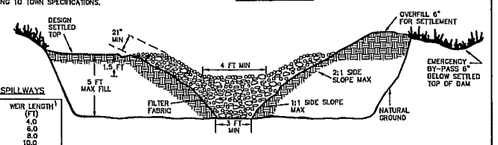
REVISIONS	
DATE	DESCRIPTION
10/88	NOTE ADDITION S.S.S.
10/88	SEL.PAV.VIEW NOTE S.VIEW M.M.S.
1/93	NOTE ADDITION G.M.S.

STANDARD TEMPORARY SILT FENCE

STD. No. 4.01



NOTES:
1. USE FOR DRAINAGE AREAS NOT EXCEEDING 5 (FIVE) ACRES.
2. EARTH BERM SHALL BE STABILIZED w/ SEEDING ACCORDING TO TOWN SPECIFICATIONS.



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

MAINTENANCE

INSPECT TEMPORARY SEDIMENT TRAPS AFTER EACH PERIOD OF SIGNIFICANT RAINFALL. REMOVE SEDIMENT AND RESTORE TRAP TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-HALF THE DESIGN DEPTH OF THE TRAP. PLACE THE SEDIMENT THAT IS REMOVED IN A DESIGNATED DISPOSAL AREA AND RESTABILIZE THE CONTAMINATED PART OF THE GRAVEL FACING.

CHECK THE STRUCTURE FOR DAMAGE FROM EROSION OR PIPING. PERIODICALLY CHECK THE DEPTH OF THE SPILLWAY TO ENSURE IT IS A MINIMUM OF 1.5 FT BELOW THE LOW POINT OF THE EMBANKMENT. IMMEDIATELY FILL ANY SETTLEMENT OF THE EMBANKMENT TO RAISE IT ABOVE DESIGN GRADE. ANY RIP RAP DISPLACED FROM THE SPILLWAY MUST BE REPLACED IMMEDIATELY.

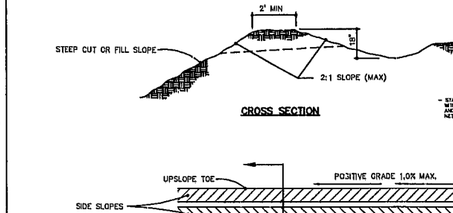
STABILIZE THE EMBANKMENT AND ALL DISTURBED AREAS ABOVE THE SEDIMENT POOL AND DOWNSTREAM FROM THE TRAP IMMEDIATELY AFTER CONSTRUCTION WITH SEEDING.

REVISIONS	
DATE	DESCRIPTION

SHEET 1 OF 2

GRAVEL & RIP RAP FILTER BASIN

STD. No. 4.03

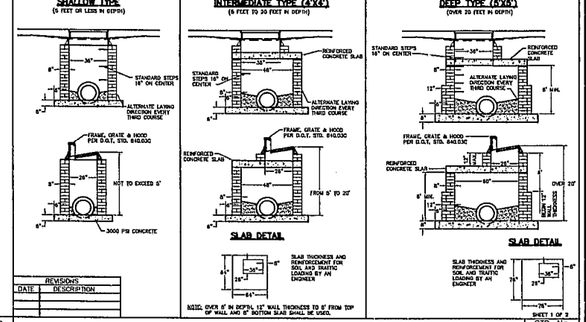


- STABILIZE DIVERSION DITCH WITH TEMPORARY SEEDING AND EROSION CONTROL MATTING

REVISIONS	
DATE	DESCRIPTION
7/93	NOTE ADDITION G.M.S.

DIVERSION DITCH

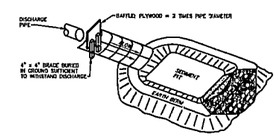
STD. No. 4.09



REVISIONS	
DATE	DESCRIPTION

CONCRETE BLOCK OR BRICK CATCH BASIN

STD. No. 8.03



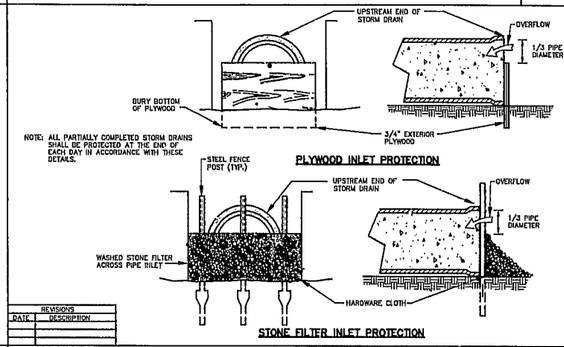
NOTE:
BAFFLE MAY BE PLYWOOD, RIP RAP DISSIPATOR OR OTHER APPROVED METHOD.

REVISIONS	
DATE	DESCRIPTION

SHEET 2 OF 2

GRAVEL & RIP RAP FILTER BASIN

STD. No. 4.03

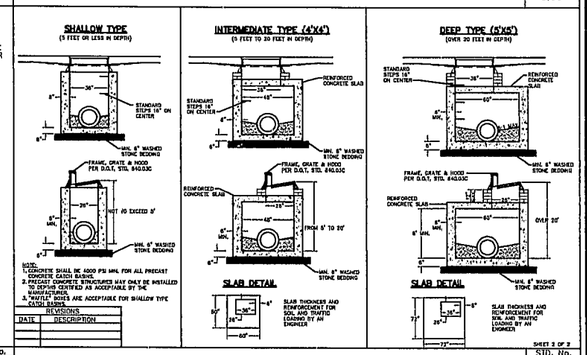


NOTE: ALL PARTIALLY COMPLETED STORM DRAINS SHALL BE PROTECTED AT THE END OF EACH DAY IN ACCORDANCE WITH THESE DETAILS.

REVISIONS	
DATE	DESCRIPTION

PIPE INLET PROTECTION (PLYWOOD AND STONE)

STD. No. 4.12

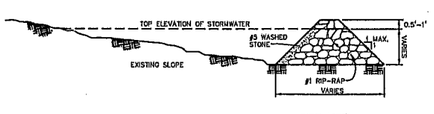


NOTES:
1. CONCRETE SHALL BE 4000 PSI MIN. FOR ALL PRECAST CONCRETE CATCH BASINS.
2. PRECAST CONCRETE STRUCTURES MAY ONLY BE INSTALLED TO DEPTHS CENTERED AS ACCEPTABLE BY THE MANUFACTURERS.
3. ALL DEPTHS ARE ACCEPTABLE FOR SHALLOW TYPE CATCH BASINS.

REVISIONS	
DATE	DESCRIPTION

PRECAST CONCRETE CATCH BASIN

STD. No. 8.03



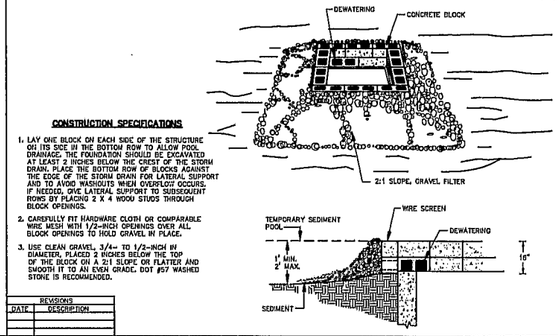
NOTE:
HEIGHT & WIDTH DETERMINED BY EXISTING TOPOGRAPHY AND SEDIMENT STORAGE REQUIRED.

KEY RIP RAP INTO THE DAM FOR STABILIZATION.

REVISIONS		
DATE	DESCRIPTION	
10/88	NOTE ADDITION	M.N.D.

CHECK DAM

STD. No. 4.06



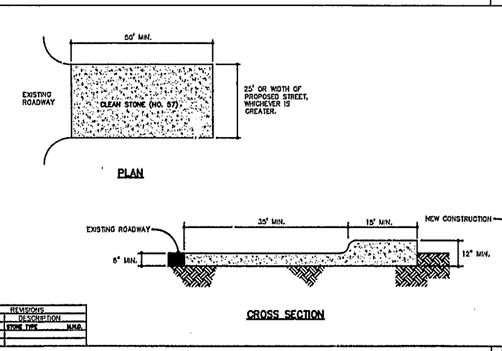
CONSTRUCTION SPECIFICATIONS

1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE IN THE BOTTOM ROW TO ALLOW POOL DRAINAGE. THE FOUNDATION SHOULD BE EXCAVATED AT LEAST 2 INCHES BELOW THE CREST OF THE STORM DRAIN. PLACE THE BOTTOM ROW OF BLOCKS AGAINST THE EDGE OF THE STORM DRAIN FOR LATERAL SUPPORT AND TO AVOID WASHOUTS WHEN OVERFLOW OCCURS. IF NEEDED, GIVE LATERAL SUPPORT TO SUBSEQUENT ROWS BY PLACING 2 X 4 WOOD STUDS THROUGH BLOCK OPENINGS.
2. CAREFULLY FIT HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2-INCH OPENINGS OVER ALL BLOCK OPENINGS TO HOLD GRAVEL IN PLACE.
3. USE CLEAN GRAVEL, 3/4- TO 1/2-INCH IN DIAMETER, PLACED 2 INCHES BELOW THE TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER AND SMOOTH IT TO AN EVEN GRADE. DOT #57 WASHED STONE IS RECOMMENDED.

REVISIONS	
DATE	DESCRIPTION

BLOCK AND GRAVEL DROP INLET PROTECTION

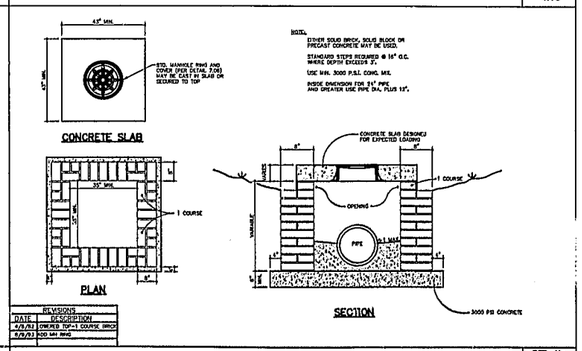
STD. No. 4.13



REVISIONS		
DATE	DESCRIPTION	
10/88	STONE TYPE	M.N.D.

CONSTRUCTION ENTRANCE

STD. No. 4.07



NOTE:
EITHER SOLID BRICK, SOLID BLOCK OR PRECAST CONCRETE MAY BE USED.

STANDARD STEPS REQUIRED @ 16" O.C. WHERE DEPTH EXCEEDS 3'.

USE MIN. 3000 P.S.I. CONC. MIX.

RISER DIAMETER FOR 24" PIPE AND GREATER USE PIPE DIA. PLUS 12".

REVISIONS	
DATE	DESCRIPTION
4/5/93	DRAWING TOP=1 COURSE BRICK
4/5/93	ADD MH RING

STANDARD YARD INLET WITH CONCRETE SLAB

STD. No. 8.01

SEEDBED PREPARATION

1) Chisel compacted areas and spread topsoil 3 inches deep over adverse soil conditions, if available.
2) Rip the entire area to 6 inches depth.
3) Remove all loose rock, roots and other obstructions leaving surfaces reasonably smooth and uniform.
4) Apply agricultural lime, fertilizer, and superphosphate uniformly and mix with soil (see below).
5) Continue tillage until a well-pulverized, firm, reasonably uniform seedbed is prepared 4 to 6 inches deep.
6) Seed a freshly prepared seedbed and cover seed lightly with seeding equipment or cultipack after seeding.
7) Mulch immediately after seeding and anchor mulch.
8) Inspect all seeded areas and make necessary repairs or reseedings within the planting season, if possible. If stand should be over 60% damaged, reestablish following original lime, fertilizer and seeding rates.
9) Consult Conservation Inspector on maintenance treatment and fertilization after permanent cover is established.

Apply: Agricultural Limestone - 2 Tons/Acre (3 Ton per Acre on clay soils)
Fertilizer - 1,000 lbs./acre - 10-10-10
Superphosphate - 500 lbs./acre - 20%
Mulch - 2 Tons/Acre - small grain straw
Anchor - Asphalt Emulsion @ 300 gal./ acre

SEEDING SCHEDULE

SHOULDERS, SIDE DITCHES, SLOPES (max. 3:1)

DATE	TYPE	PLANTING RATE
Aug 15 - Nov 1	Tall Fescue	300 lbs/acre
Nov 1 - Mar 1	Tall Fescue & Abruzzi Rye	300 lbs/acre
Mar 1 - Apr 15	Tall Fescue	300 lbs/acre
Apr 15 - June 30	Hulled Common Bermudagrass	25 lbs/acre
July 15 - Aug 15	Tall Fescue and ### Bromtop Millet ### or Sorghum-Sudan Hybrids	35 lbs/acre
	SLOPES (3:1 to 2:1)	
Mar 1 - June 1	Sericea Lespedeza (scarified) and	50 lbs/acre
Mar 1 - Apr 15	ADD Tall Fescue and	120 lbs/acre
Mar 1 - June 30	ADD Weeping Lovegrass or	10 lbs/acre
Mar 1 - June 30	ADD Hulled Common Bermudagrass	25 lbs/acre
June 1 - Sep 1	### Tall Fescue and ### Bromtop Millet ### or Sorghum-Sudan Hybrids	120 lbs/acre 25 lbs/acre 30 lbs/acre
Sep 1 - Mar 1	Sericea Lespedeza (unhulled-unscarified) and Tall Fescue	70 lbs/acre 120 lbs/acre
Nov 1 - Mar 1	ADD Abruzzi Rye	25 lbs/acre

Consult Erosion Control Engineer or Soil Conservation Service for additional information concerning other alternatives for vegetation of denuded areas. The above vegetation rates are those which do well under local conditions; other seeding rate combinations are possible.

Temporary - Reseed according to optimum season for desired permanent vegetation. Do not allow temporary cover to grow over 12 inches in height before mowing, otherwise fescue may be shaded out.

CONSTRUCTION SEQUENCE

1) Obtain Grading Permit.
2) Install all erosion control measures as shown.
3) Obtain Certificate of Compliance through on-site inspection by Town Erosion Control Engineer.
4) Proceed with grading.
5) Clean sediment basins when half full.
6) Seed and mulch denuded areas within 30 days after final shaped grades are established.
7) Maintain soil erosion control measures until permanent ground cover is established.
8) Request final approval by Town Erosion Control Engineer.
9) Remove soil erosion control measures and stabilize these areas.

98-SB-001
APPROVED
BE 4-19-98
TM 4-14-98

WITHERS & RAVENEL Engineering & Surveying, Inc.
111 MacKenan Drive • Cary, N.C. 27511
919-469-3340 FAX 919-467-6008

Revisions			
No.	Description	Date	By
A	TOC 1st REVIEW COMMENTS	1/22/98	GAS

CARY GLEN P.U.D.
PARCELS SF-1A AND SF-1B

EROSION CONTROL AND STORM DRAINAGE DETAILS

Designer W&R	Scale NTS
Drawn By GAS	Date 10/30/97
Checked By JEC	Job No. 97077

CAD File SHT10.DWG
Sheet No. 10 of .

K:\CADD\P\97077\SHT10 Fri Jan 23 10:54:35 1998 WITHERS & RAVENEL , ENGINEERING & SURVEYING, INC.