NOTES

INSTALL RAILROAD EROSION CONTROL MEASURES PRIOR TO PERFORMING ANY WORK IN THE RAILROAD RIGHT-OF-WAY.

ADDITIONAL EROSION CONTROL MEASURES FOR PROTECTION OF RAILROAD DITCHES MAY BE REQUIRED AS DIRECTED.

MAKE NO SEPARATE PAYMENT FOR RAILROAD EROSION CONTROL MEASURES.

EXTEND LIMITS OF SILT FENCE AND FILTRATION GEOTEXTILE PARALLEL TO RAILROAD A MINIMUM OF 10'-0" OUTSIDE EDGE OF SUPERSTRUCTURE OR TOE OF SLOPE ON CONSTRUCTION. A GREATER LENGTH OF SILT FENCE OR FILTRATION GEOTEXTILE MAY BE REQUIRED AS DIRECTED.

NAIL FILTRATION GEOTEXTILE TO TIMBER RAIL TIES WITH PRIME SOURCE "GRIP CAP" OR EQUIVALENT. SECURE FILTRATION GEOTEXTILE ON SHOULDER AS DIRECTED BY THE RAILROAD AND NCDOT.
1. **Temporary Silt Fence**

   ENGLISH STANDARD DRAWING FOR

   TEMPORARY SILT FENCE

   SHEET 1 OF 1

   1-12

   STATE OF NORTH CAROLINA
   DEPT. OF TRANSPORTATION
   DIVISION OF HIGHWAYS
   RALEIGH, N.C.

   **NOTES**

   - **Top and Bottom Strand** shall be 10 gauge min.
   - **Middle and Vertical Wires** shall be 12½ gauge min.

   **Use Wire**

   - A minimum of 32" in width and a minimum of 6 line wires with 12" stay spacing.
   - Use Filtration Geotextile of 8' max. without wire.
   - Use Filtration Geotextile extension of 8' min. with wire.
   - Use Filtration Geotextile for mechanical slicing method type.

   **Steel Post - 2'-0", Depth**

   - Steel post shall be a maximum of 18" above ground surface.

   **Extension of Geotextile and Wire into Trench**

   Wire shall be 12½ gauge min. and 8' max. without wire.

   **Compacted Fill**

   - shall be 12½ gauge min.

   **WIRE INTO TRENCH**

   - Extension of Geotextile and Wire into Trench shall be a maximum of 18" above ground surface.

   **FILTRATION GEOTEXTILE**

   - Middle and Vertical Wires shall be 12½ gauge min.

   **STEEL POST - 2'-0", DEPTH**

   - shall be 10 gauge min.
NOTES

USE NO. 5 OR NO. 57 STONE FOR SEDIMENT CONTROL STONE.

USE HARDWARE CLOTH 24 GAUGE WIRE MESH WITH 1/4 INCH MESH OPENINGS.

INSTALL 5 FT. SELF FASTENER ANGLE STEEL POST 2 FT. DEEP MINIMUM.

SPACE POST A MAXIMUM OF 3 FT.

FOR INSTALLATION BETWEEN SECTIONS OF SILT FENCE, EXTEND SEDIMENT CONTROL STONE A MINIMUM OF 12" IN WIDTH ON EACH SIDE OF SPECIAL SEDIMENT CONTROL FENCE SECTION.
NOTE: PLACE FILTRATION GEOTEXTILE BENEATH STONE
NOTE:
ANCHOR STAKES 30" LONG AND SET MINIMUM 12" DEEP.

DESIGN SILT BASIN VOLUME FOR 3600 CUBIC FEET OF SEDIMENT STORAGE PER DISTURBED ACRE.

1. OPEN END PIPE WITH MINIMUM SETBACK AND PROPER COMPACTION IS AN ACCEPTABLE INLET TREATMENT FOR STAGED CONSTRUCTION WHEN NOT LEFT IN PLACE FOR MORE THAN 30 DAYS.
2. DESIGN INLET PROTECTION OPTION #1 FOR 3600 CUBIC FOOT OF SEDIMENT STORAGE PER DISTURBED ACRE AND PROVIDE NON-VERTICAL SIDESLOPES WITH NOT GREATER THAN 1.5:1 SLOPE.
3. DESIGN SILT BASINS WITH A 2:1 LENGTH TO WIDTH RATIO MINIMUM.
4. USE CLASS B STONE FOR EROSION CONTROL AT OUTLET LOCATIONS SUBJECT TO SCOURING. SILT BASINS AND/OR OTHER EROSION CONTROL DEVICES MAY ALSO BE UTILIZED TO PREVENT SCOUR AT OUTLET LOCATIONS.
5. USE MAXIMUM SLOPE DRAIN SPACING OF 200 FT.

EARTH BERM DITCH BLOCK
COMPACTED EARTH
PIPE "T" SECTION
TEMP. SLOPE DRAIN
TEMP. EARTH SHOULDER BERM
FUTURE PAVEMENT
SHOULDER
TOE OF FILL
NOTE: ANCHOR STAKES 30" LONG AND SET MINIMUM 12" DEEP.

FUTURE PAVEMENT
SHOULDER
TOE OF FILL
NOTE: ANCHOR STAKES 30" LONG AND SET MINIMUM 12" DEEP.

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5. USE MAXIMUM SLOPE DRAIN SPACING OF 200 FT.
1. Clean out basin when sediment volume reaches 50% of storage volume.
2. Minimum surface area and minimum volume are measured below the top of principal spillway (top of riser).
3. Minimum surface area shall be 435 ft² per cfs of Qₙ, peak inflow, and minimum sediment storage volume shall be 1800 ft³ per acre of disturbed area.
4. The earth dike may be constructed along one or more sides. Excavation may be required to provide minimum surface area and/or minimum storage volume.
5. Construct the dike of material suitable for and meeting roadway embankment specifications.
6. To facilitate determination of maintenance cleanout requirement, place a marker in the basin indicating the 50% volume level.
7. The minimum riser pipe diameter is 1.2 times the barrel pipe diameter.
8. Attach skimmer to riser pipe a minimum of 1 foot from bottom of basin.
9. Provide a stone energy dissipator pad at the outlet of the riser barrel in accordance with roadway standard drawing No. 876.02 for pipe outlet without ditch.
10. Seed and place matting for erosion control on all interior and exterior slopes of basin.

Notes:
- Shall not exceed 12'
- See roadway standard drawing No. 1640.01

### Standard Basin Dimensions

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<th>P</th>
<th>H (MIN)</th>
<th>T (MIN)</th>
<th>D*</th>
<th>E</th>
<th>F</th>
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ALTERNATE ANTI-FLOTATION METHOD

SECTIONAL VIEW

OVERFLOW SPILLWAY

TRASH RACK DETAIL

PROFILE VIEW

TRASH RACK

OUTLET PIPE

ANTI-FLOTATION (CLASS 'B' STONE)

1 1/4" THICK SQUARE STEEL PLATE

(WELDED TO TEE SECTION)

F

H

G

X

Y

SECTIONAL VIEW

OVERFLOW SPILLWAY

(5' MIN.)

CLASS B STONE PAD

(4' x 4' x 1' MIN.)

TOP OF EMBANKMENT

TRASH RACK

1 1/2" MIN.

OUTLET PIPE

SQUARE STEEL PLATE

1 1/4" THICK (WELDED TO TEE SECTION)

REMOVE ORGANIC MATERIAL & ROOT MAT

FROM BENEATH EMBANKMENT

ALTERNATE ANTI-FLOTATION METHOD

CONCRETE GROUT

Y1

X1

(SQUARE DIM.)

1 1/4" MIN.

1 1/2" MIN.

1 1/2" MIN.

(2"

(WELDED TO TEE SECTION)

TEE-RISER SECTION

SKIMMER

CLASS B STONE PAD

(4' x 4' x 1' MIN.)

ANTIFLOTATION (CLASS 'B' STONE)

(SQUARE DIM.)

1 1/4" MIN.

1 1/2" MIN.

6' MIN.

OVERFLOW SPILLWAY

(8' MIN.)

CLASS B STONE PAD

(4' x 4' x 1' MIN.)

OVERFLOW SPILLWAY

(MUST BE CONSTRUCTED IN NATURAL GROUND)

OVERFLOW SPILLWAY

(4' MIN.)

TOP OF EMBANKMENT

#4 BAR LAYOUT SHOWN IS SUGGESTED; HOWEVER, OTHER LAYOUTS MAY BE USED PROVIDED OPENINGS ARE 64"² SQ. IN AREA

NOTE: THIS IS A SHEET OF ENGLISH STANDARD DRAWING FOR TRASH RACK.
NOTES

EXCAVATE TEMPORARY SILT DITCH WITH NON-VERTICAL SIDE SLOPES AND NOT GREATER THAN 1.5:1 SLOPE.
SEED BERM CREATED BY EXCAVATED MATERIAL AS DIRECTED.

CROSS SECTIONAL VIEW
NOTES

INSTALL COIR FIBER BAFFLES IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1640.01.

INSTALL THE TOP OF THE COIR FIBER BAFFLE A MINIMUM OF 6" LOWER THAN THE TOP OF THE STILLING BASIN BERMS.

USE THE TYPICAL SECTION SHOWN FOR THE STILLING BASIN AS A GUIDE. THE BASIN MAY HAVE ANY TYPE CONFIGURATION AS LONG AS SUFFICIENT VOLUME IS PROVIDED AND PROVISIONS ARE MADE FOR A PERMEABLE STONE DRAIN.

DO NOT EXCEED 5 FT. IN HEIGHT FOR THE EARTH DIKES REQUIRED FOR STILLING BASINS. ADDITIONAL DEPTHS MAY BE ATTAINED BY EXCAVATING BELOW THE NATURAL GROUND LEVEL.

THE STILLING BASIN SIZE IS VARIABLE AND DEPENDENT ON SPECIFIC SITE REQUIREMENTS AS WELL AS PROPOSED CONSTRUCTION OPERATIONS.

SUBMIT THE SIZE, LOCATION AND PERMEABLE STONE DRAIN MATERIAL FOR APPROVAL PRIOR TO CONSTRUCTION.

PUMP THE EFFLUENT INTO THE STILLING BASIN TO A MAXIMUM DEPTH OF 3 FEET.
EXCAVATE TEMPORARY DIVERSION WITH NON-VERTICAL SIDE SLOPES AND NOT GREATER THAN 1.5:1 SLOPE.
SEED BERM CREATED BY COMPACTED SOIL AS DIRECTED.
NOTES

USE NO. 5 OR NO. 57 STONE FOR SEDIMENT CONTROL STONE.

PROVIDE STABILIZED OUTLET TO STREAM BANK.

WOOD PALLETS MAY BE USED IN LIEU OF STONE AND GEOTEXTILE AS DIRECTED. A SUFFICIENT NUMBER OF PALLETS MUST BE PROVIDED TO ELEVATE THE ENTIRE SPECIAL STILLING BASIN ABOVE NATURAL GROUND.
MATTING IN DITCHES

MATTING ON SLOPES

BACKFILL AND BACKFILLED PLACED IN TRENCH

MATTING SHALL BE (MIN.)

18"

6" MIN IN TRENCH

1' CENTERS

STAPLES ON GROUND

EXISTING

STAPLES ON 1' CENTERS IN TRENCH

STAPLES ON 1' CENTERS IN TRENCH

NOTE:

THIS DETAIL APPLIES TO STRAW, EXCELSIOR, AND PERMANENT SOIL REINFORCEMENT MAT (PSRM) INSTALLATION.

STAPLES SHALL BE NO. 11 GAUGE STEEL WIRE FORMED INTO A "U" SHAPE WITH A MINIMUM THROAT WIDTH OF 1 INCH AND NOT LESS THAN 6 INCHES IN LENGTH.
ROCK INLET SEDIMENT TRAP TYPE A

NOTES

CLEAN SEDIMENT WHEN ½ FULL AND AS DIRECTED.

USE NO. 5 OR NO. 57 STONE FOR SEDIMENT CONTROL STONE.

USE CLASS B STONE FOR STRUCTURAL STONE.

CONSTRUCT TOP OF BERM A MINIMUM OF ONE FOOT BELOW THE SHOULDER OR ANY DIVERSION POINT.

ENGLISH STANDARD DRAWING FOR WATER TREATED ANY DIVERSION POINT.
NOTES

CLEAN SEDIMENT WHEN 1#2 FULL AND AS DIRECTED.

USE NO. 5 OR NO. 57 STONE FOR SEDIMENT CONTROL STONE.

USE CLASS A STONE FOR STRUCTURAL STONE.

CONSTRUCT TOP OF BERM A MINIMUM OF ONE FOOT BELOW THE SHOULDER OR ANY DIVERSION POINT.
**SECTION A-A**

- **MULTI-DIRECTIONAL FLOW**

- **1/4" WIRE MESH**

- **MAXIMUM POST SPACING 4 FT.**

- **SEDIMENT CONTROL STONE**

- **FLOW**

- **TREATED WATER**

- **DIMENSION VARIABLE**

- **1-6" WIRE MESH**

- **1-6" WIRE MESH**

- **6" WIRE MESH**

- **2'**

- **12"**

- **1'-6"**

- **ENGLISH STANDARD DRAWING FOR SHEET OF ENGLISH STANDARD DRAWING FOR SHEET**

- **NOTE**

  - USE NO. 5 OR NO. 57 STONE FOR SEDIMENT CONTROL STONE.
  - USE 24 GAUGE MINIMUM WIRE MESH HARDWARE CLOTH WITH 1/4 INCH MESH OPENINGS.
  - PLACE TOP OF WIRE MESH A MINIMUM OF ONE FOOT BELOW THE SHOULDER OR ANY DIVERSION POINT.
  - INSTALL WIRE MESH UNDER SEDIMENT CONTROL STONE.
  - USE 5' STEEL POST, INSTALLED 1.5' DEEP MINIMUM, AND OF THE SELF-FASTENER ANGLE STEEL TYPE.
  - SPACE POST A MAXIMUM OF 4'.

**SECTION Y-Y**

- **SINGLE-DIRECTIONAL FLOW**

- **1/4" WIRE MESH**

- **FLOW**

- **TREATED WATER**

- **DIMENSION VARIABLE**

- **1-6" WIRE MESH**

- **6" WIRE MESH**

- **2'**

- **1'-6"**

- **SEE NOTE FOR POST DESCRIPTION**

- **FLOW**

- **TREATED WATER**

- **DIMENSION VARIABLE**

- **1-6" WIRE MESH**

- **6" WIRE MESH**

- **2'**

- **1'-6"**

- **SEE NOTE FOR POST DESCRIPTION**

**NOTE**

- **WATER TREATED**
NOTE

USE CLASS B EROSION CONTROL STONE FOR STRUCTURAL STONE.

USE NO. 5 OR NO. 57 STONE FOR SEDIMENT CONTROL.
NOTES:

USE CLASS B EROSION CONTROL STONE FOR STRUCTURAL STONE.

THE ENGINEER MAY DIRECT THE OPTION OF CLASS A STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.

USE NO. 5 OR NO. 57 STONE FOR SEDIMENT CONTROL. PLACE SEDIMENT CONTROL STONE AS DIRECTED.
NOTES

USE CLASS I RIP RAP FOR STRUCTURAL STONE.

USE NO. 5 OR NO. 57 STONE FOR SEDIMENT CONTROL.

DO NOT PLACE SEDIMENT DAM IN A LIVE STREAM.

INSTALL 3 COIR FIBER BAFFLES ON UPSTREAM SIDE OF SEDIMENT DAM WITH A SPACING OF 15 FEET IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO 1640.
ENGLISH STANDARD DRAWING FOR Temporary Rock Sediment Dam Type B

NOTES

USE CLASS B EROSION CONTROL STONE FOR STRUCTURAL STONE.

USE NO. 5 OR NO. 57 STONE FOR SEDIMENT CONTROL STONE.

DIKE MAY EXTEND ALONG MORE THAN ONE SIDE OF THE TRAP AREA. PROVIDE A TOTAL SEDIMENT STORAGE VOLUME OF 3600± CUBIC FEET PER ACRE OF DISTURBED AREA. SOME OF THE REQUIRED VOLUME MAY BE PROVIDED BY OTHER UP OR DOWNSTREAM CONTROLS.

AN UNDERLAY OF STRUCTURAL STONE WITH FILTRATION GEOTEXTILE MAY BE REQUIRED AS DIRECTED.

INSTALL COIR FIBER BAFFLES ON THE UPSTREAM SIDE OF THE DAM IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1640.

SEED AND PLACE MATTING FOR EROSION CONTROL ON ALL INTERIOR AND EXTERIOR SLOPES OF SEDIMENT BASIN AS DIRECTED.
NOTES

USE CLASS B EROSION CONTROL STONE FOR STRUCTURAL STONE.
USE NO. 5 OR NO. 57 STONE FOR SEDIMENT CONTROL STONE.

CONSTRUCT TOP OF BERM A MINIMUM OF ONE FOOT BELOW THE SHOULDER OR DIVERSION POINT.

PROVIDE A TOTAL SEDIMENT TRAP VOLUME OF 3600± CUBIC FEET PER ACRE OF DISTURBED AREA. SOME OF THE REQUIRED VOLUME MAY BE PROVIDED BY UP OR DOWNSTREAM CONTROLS.

DO NOT INSTALL WHEN DEVICE WILL BE WITHIN 30 FEET OF VEHICULAR TRAVEL LANE.
ENGLISH STANDARD DRAWING FOR ROCK PIPE INLET SEDIMENT TRAP TYPE B

NOTES

USE CLASS A EROSION CONTROL STONE FOR STRUCTURAL STONE.
USE NO. 5 OR NO. 57 STONE FOR SEDIMENT CONTROL STONE.

CONSTRUCT TOP OF BERM A MINIMUM OF ONE FOOT BELOW THE SHOULDER OR DIVERSION POINT.

PROVIDE A TOTAL SEDIMENT TRAP VOLUME OF 3600± CUBIC FEET PER ACRE OF DISTURBED AREA. SOME OF THE REQUIRED VOLUME MAY BE PROVIDED BY UP OR DOWNSTREAM CONTROLS.
NOTES:

1. INSTALL THREE (3) COIR FIBER BAFFLES IN SILT BASINS AND SEDIMENT DAMS AT DRAINAGE OUTLETS WITH A SPACING OF 1/4 THE BASIN LENGTH.

2. TWO (2) COIR FIBER BAFFLES CAN BE INSTALLED IN SILT BASINS AND DAMS LESS THAN 20 FT. IN LENGTH WITH A SPACING OF 1/3 THE BASIN LENGTH.

3. TOP HEIGHT OF COIR FIBER BAFFLES SHALL NOT BE BELOW BASE OF EMERGENCY SPILLWAY ELEVATION.

4. DRAPE BAFFLE MATERIAL OVER WIRE STRAND AND SECURE WITH PLASTIC TIES AT POSTS AND ON WIRE EVERY 12".

5. INSTALL T-POST TO ANCHOR BAFFLE TO SIDE OF BASIN AND SECURE TO VERTICAL POST.

6. SECURE BOTTOM OF BAFFLE TO GROUND WITH 12" STAPLES AT 12" MAXIMUM SPACING.

7. BAFFLE MATERIAL SHALL BE SECURED TO THE BOTTOM AND SIDES OF BASIN USING 12" LANDSCAPE STAPLES.

8. VARIABLE DEPTH.
NOTE: PIPE(S) FOR TEMPORARY STREAM CROSSING SHALL BE DESIGNED TO PASS THE PEAK OR BANKFULL FLOW, WHICHEVER IS LESS, FROM A 2-YEAR PEAK STORM, WITHOUT OVER TOPPING.