**TEMPORARY DITCH CHECKS**

**MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION**

**105 WEST CAPITOL**

**JEFFERSON CITY, MO 65102**

**1-888-ASK-MO DOT (1-888-275-6636)**

**DATE EFFECTIVE:** 04/01/2015

**DATE PREPARED:** 02/20/2015

**GENERAL NOTES:**

OTHER PROPRIETARY DITCH CHECKS MAY BE SUBSTITUTED IN ACCORDANCE WITH SEC 806 OR AS DIRECTED BY THE ENGINEER.

INSTALLATION OF PROPRIETARY DITCH CHECKS SHALL BE ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

**EXAMPLE DITCH CHECK SPACING FOR STANDARD HEIGHTS**

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<th>DITCH SLOPE %</th>
<th>MIN. SPACING</th>
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<td>8</td>
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<tr>
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**MINIMUM DITCH CHECK SPACING**

**MINOR SHEET NO.**

**SHEET NO.**

**1 OF 6**
Sediment Trap

Note:
Sediment trap in the clear zone shall be removed or leveled (if allowable) after the vegetation has sufficiently matured to protect the ditch or swale.

Elevation Detail

Notes:
Aggregate for drainage shall be in accordance with Sec 1009, Grade 4 or Grade 5.
Use hardware cloth 24 gauge wire mesh with 1 inch mesh openings.
Install 5 ft. T-post with a 2 foot embedment depth (min.).
Attach hardware cloth to post with wire staple or other acceptable methods.
Space post a maximum of 3 ft.
For installation between sections of silt fence, extend aggregate for drainage a minimum of 12 inches on each side of special sediment control fence section.
Installation shall be for area inlets and perimeter protection BMPs.

Section A-A

Drop Inlet Check

See Sheet 1 of 6 for details of rock ditch check.

Section B-B

General Notes:
Other proprietary inlet protection may be substituted in accordance with Sec 806 or as directed by the Engineer.
For sediment control spacing see Sheet 1 of 6.
EFFECTIVE DEPTH \( u_B \)\( u \) = MIN. 2', MAX. 6' DEPENDENT UPON CONFIGURATION REQUIRED BY LOCATION AND ESTIMATED VOLUME.

SECTION C-C
EFFECTIVE DEPTH "D" = MIN. 2', MAX. 6' DEPENDENT UPON CONFIGURATION REQUIRED BY LOCATION AND ESTIMATED VOLUME.

SECTION D-D

GENERAL NOTES:
SEDIMENT BASINS ARE TO BE INCLUDED IN THE BMP SYSTEM WHEN THE GEOMETRY OF RIGHT-OF-WAY ALLOWS. WHERE INCLUDED, SEDIMENT BASINS ARE TO BE DESIGNED AND CONSTRUCTED TO PROVIDE STORAGE VOLUME FOR THE LOCAL 2-YR, 24-HOUR STORM FOR DISTURBED ACREAGE DRAINING TO THEM. IF THE DESIGN STORM VOLUME HAS NOT BEEN CALCULATED, BASINS ARE TO BE DESIGNED AND CONSTRUCTED TO PROVIDE A STORAGE VOLUME OF AT LEAST 3,600 CUBIC FEET PER DISTURBED ACRE DRAINING TO THE BASIN(S).

IF SEDIMENT BASIN IS TO BE PERMANENT ITS SLOPES SHALL BE STABILIZED WITH ROCK RIPRAP OR EQUIVALENT.

THE MATERIALS FOR ROCK RIPRAP SHALL MEET THE REQUIREMENTS OF SEC 611.30 FOR TYPE 2 ROCK BLANKET.
SEE PLANS FOR LENGTH, DEPTH AND WIDTH OF BASIN.
SEE PLANS FOR ESTIMATED QUANTITIES OF ROCK RIPRAP - CUBIC YARDS.
Temporary Slope Drain Inlet Treatment

- Fill slope surface
- Temporary slope drain
- Temporary berm
- Ditch check
- FILE SLOPE SURFACE
- SHORT SECTION PIPE
- EMBLOW
- DOWNRAIN

**Temporary Slope Drain Inlet Treatment**

- Length as required to contain surface drainage and direct into temporary slope drain.

**Section A-A**

Temporary Berm

(Metal, flexible rubber or plastic pipe)

Maximum length between slope drains shall be approximately 500 feet.

Temporary berm (metal, flexible rubber or plastic pipe)

In some cases it may be necessary to embed metal or plastic pipe into the fill slope to secure proper anchorage.
TEMPORARY EROSION CONTROL MEASURES
SILT FENCE

**GENERAL NOTES:**

- Use silt fence for fill heights greater or equal to 10 feet. On all fills greater than 10 feet high, mid-slope runs of silt fence should be considered.

- For fabric silt fence:
  - Minimum longitudinal splice overlap shall be 2' with a post at each end.
  - Secure fabric to posts.

- Instead of silt fence across drainage ditches and drains, ditch checks shall be used as shown on plans or as directed by engineer.

- At culverts, place sediment barriers over the top of the culverts (not in the stream channel).

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**PERIMETER SILT FENCE FOR TRANSVERSE FLOW**

- Filter fabric shall line the downstream side and floor of the trench. The trench shall then be backfilled and compacted.

- Normal inslope.

**TITLE BLOCK:**

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DATE EFFECTIVE: 04/01/2015
DATE PREPARED: 02/20/2015
SHEET NO. 5 OF 6
SECTION A-A
TYPE C BERM

TYPE C BERM SHALL BE PLACED ABOVE THE ORANGE HIGH WATER MARK OR AT OR ELEVATION AS DIRECTED BY THE ENGINEER.

SLOPE LINE
ROCK COVER, ROCK BLANKET OR AN APPROVED ALTERNATE IF SEDIMENT BASIN NOT AN OPTION.

FLAT BOTTOM DITCH
WE TYPE B TEMPORARY BERM WITH TEMPORARY SLOPE GRADING FOR DRAINAGE CONDITIONS.

FLAT BOTTOM DITCH
+10\% OR WHERE THE DITCH SLOPE IS LESS THAN 3:1, AN IMPACT IS GREATER.

PLAN VIEW

GENERAL NOTES:
TYPE C BERM SHALL BE BUILT TO HANDLE SIGNIFICANT RinGROUT EVENTS AND SHALL BE INSTALLED PRIOR TO SOIL DISTURBANCE OR INSTALLATION OF FILL IN THE DRAINAGE AREA OF THE BERM.