

CHECK DAMS

APPLICATION NOTES:

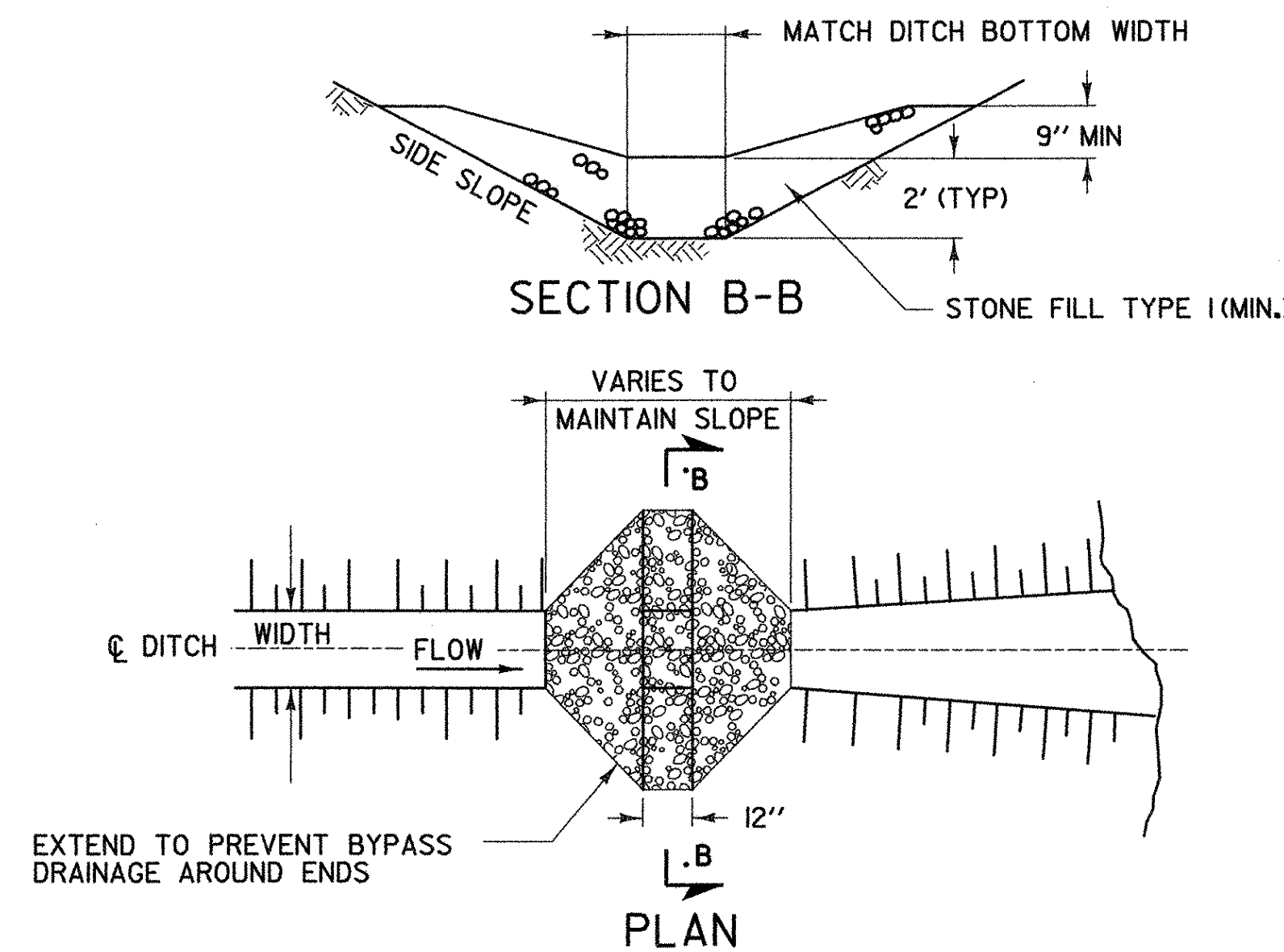
- THE PRIMARY PURPOSE OF A CHECK DAM IS TO REDUCE EROSION IN A CHANNEL BY REDUCING FLOW VELOCITY.
- CHECK DAMS WILL CAPTURE SEDIMENT THAT FALLS OUT OF SUSPENSION BEHIND THE CHECK DAM DUE TO DECREASED VELOCITY.
- CHECK DAMS ARE NOT INTENDED TO FILTER SEDIMENT FROM TURBID WATER.
- DETAILS SHOWN SHALL BE USED FOR TEMPORARY INSTALLATION ONLY.
- PREFABRICATED DAMS ARE NOT TO BE USED ON SLOPES GREATER THAN 5% OR PER MANUFACTURER'S SPECIFICATIONS.
- PREFABRICATED DAM SPECIFICATIONS SHALL BE PROVIDED TO THE ENGINEER FOR APPROVAL PRIOR TO USE.

GENERAL NOTES:

- GEOTEXTILE SHALL BE INSTALLED UNDER STONE FILL. IT SHALL BE KEYED IN ON THE UP HILL END AND SHALL EXTEND 2 FEET BEYOND THE STONE ON THE DOWN HILL END.
- CORE MATERIAL FOR THE STONE CHECK DAM SHALL MEET THE GRADATION REQUIREMENTS OF STONE FILL TYPE I (MIN.). STONE SIZE SHOULD BE INCREASED WITH INCREASED SLOPE AND VELOCITY.
- THE UPHILL END OF THE APRON FOR THE PREFABRICATED CHECK DAM SHALL BE STAPLED AND BURIED AS SHOWN IN DETAIL "A" OR AS RECOMMENDED BY THE MANUFACTURER'S LITERATURE.
- MEASURES SHALL BE INSPECTED EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF A STORM EVENT GREAT ENOUGH TO CAUSE WATER TO LEAVE THE CONSTRUCTION SITE.
- MEASURES SHALL BE CLEANED AND REPAIRED AS NEEDED. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATION REACHES ONE-HALF OF THE MEASURE HEIGHT. SEDIMENT SHALL BE DISPOSED OF AS UNSUITABLE MATERIAL.
- AT TIME OF REMOVAL OF THE CHECK DAMS, THE DISTURBED AREA SHALL BE REPAIRED AND STABILIZED.
- PAYMENT FOR INSTALLATION AND REMOVAL OF CHECK DAMS SHALL BE MADE UNDER STONE FILL, TYPE I (MOD. - CHECK DAM).
- PAYMENT FOR MONITORING CHECK DAMS SHALL BE MADE UNDER THE MONITORING EROSION & SEDIMENT CONTROL PLAN ITEM.
- PAYMENT FOR MAINTAINING CHECK DAMS SHALL BE MADE UNDER THE FIELD MAINTENANCE OF EROSION & SEDIMENT CONTROL PLAN ITEM, UNLESS MAINTENANCE IS REQUIRED DUE TO POOR INSTALLATION PRACTICES.

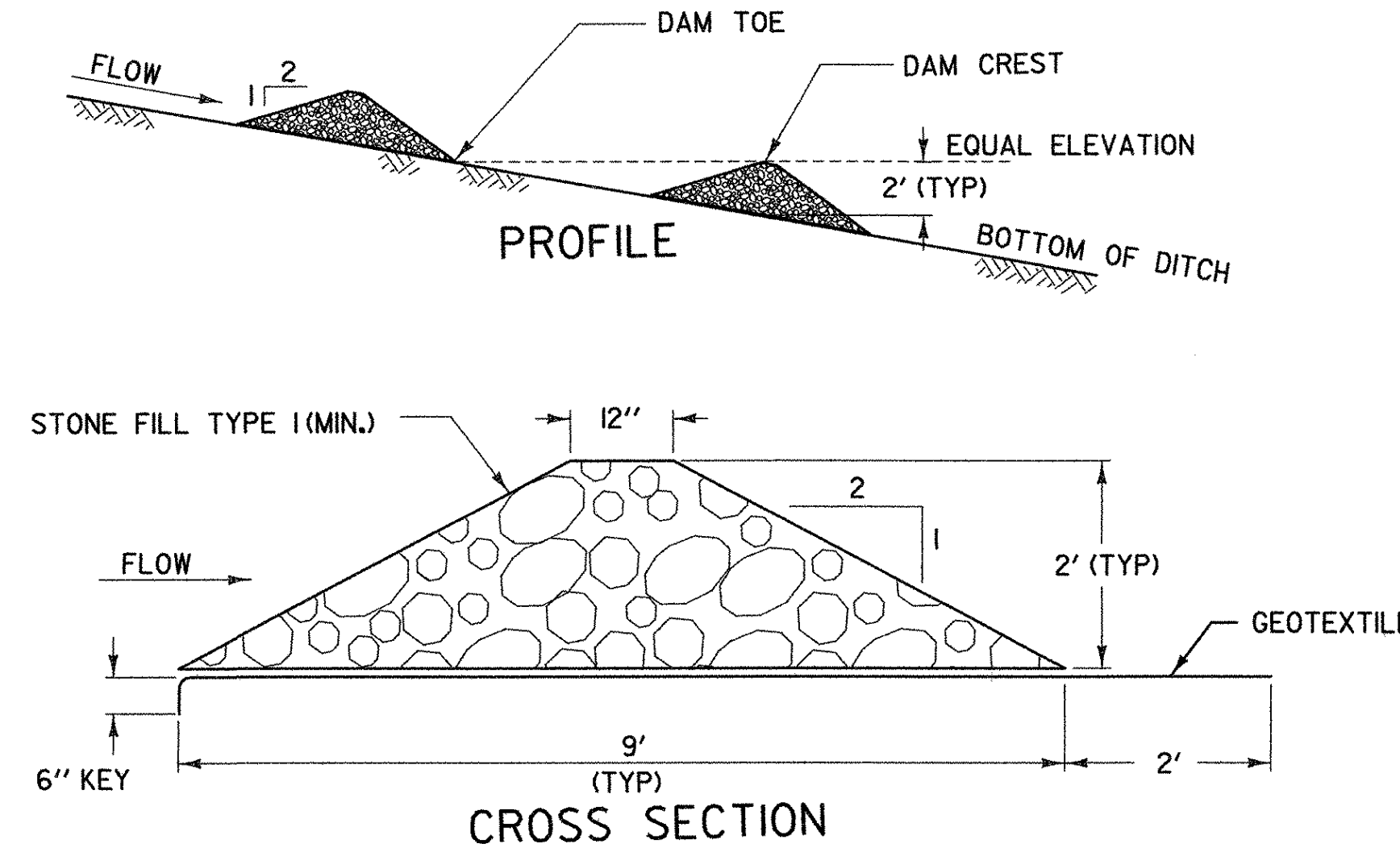
| STONE CHECK DAM PLACEMENT INTERVAL | |
|---------------------------------------|-----------------------|
| DITCH SLOPE | PLACEMENT INTERVAL ** |
| 1 % | 200 FT |
| 2 % | 100 FT |
| 3 % | 65 FT |
| 4 % | 50 FT |
| 5 % | 40 FT |
| 6 % | 30 FT |
| 8 % | 25 FT |
| 10 % | 20 FT |

** BASED ON 2' TYPICAL HEIGHT

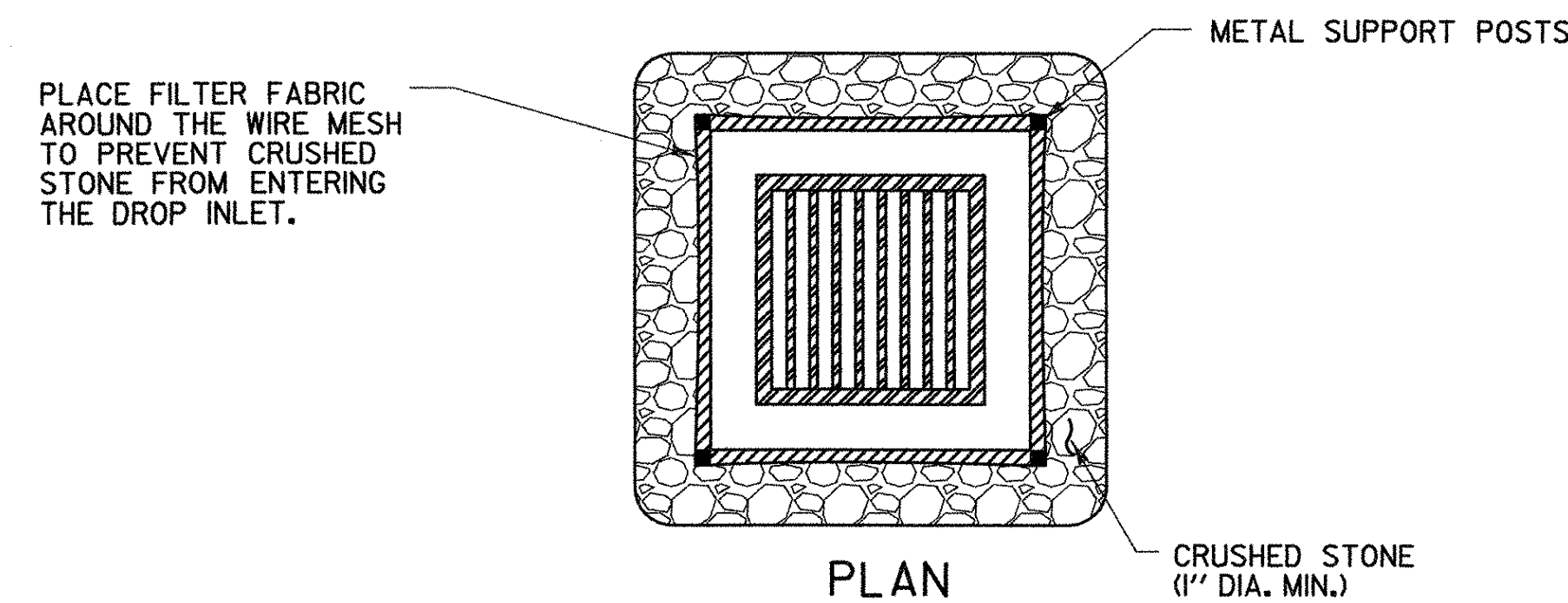


TEMPORARY STONE CHECK DAM

NOT TO SCALE

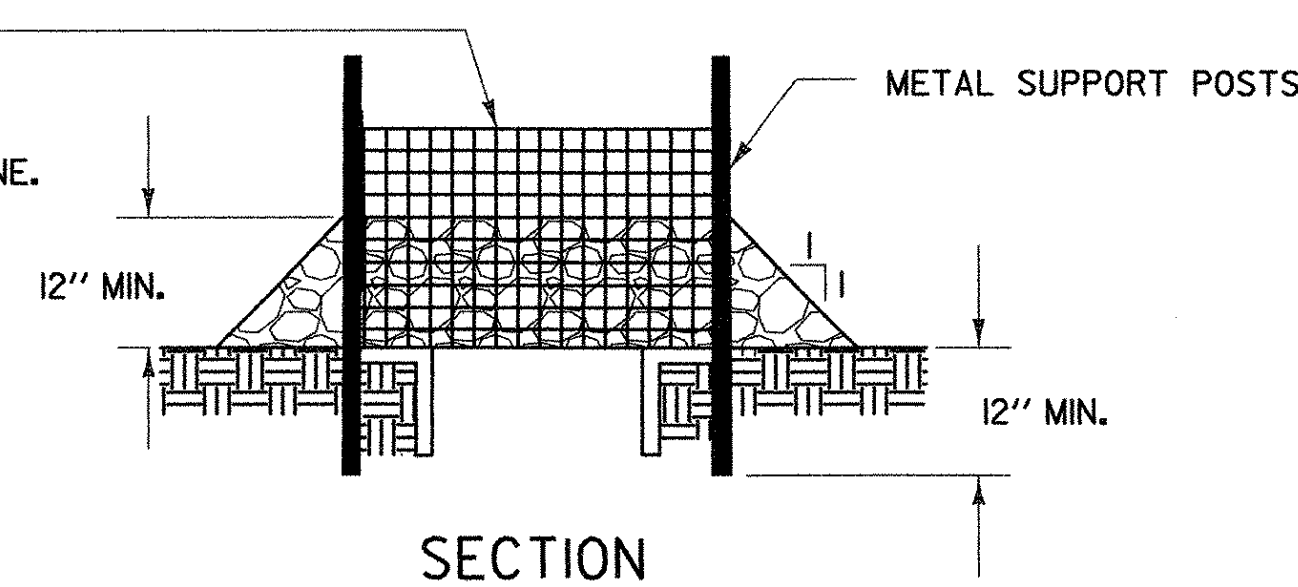


CROSS SECTION



PLAN

WIRE MESH FENCE WITH 0.5" MAX. OPENINGS. FENCE WILL BE WRAPPED WITH FILTER FABRIC. SECURE TIGHTLY TO METAL SUPPORT POSTS BEFORE PLACEMENT OF CRUSHED STONE.



SECTION

ROCK BARRIER INLET PROTECTION
FOR AREAS NOT SUBJECT
TO VEHICULAR TRAFFIC

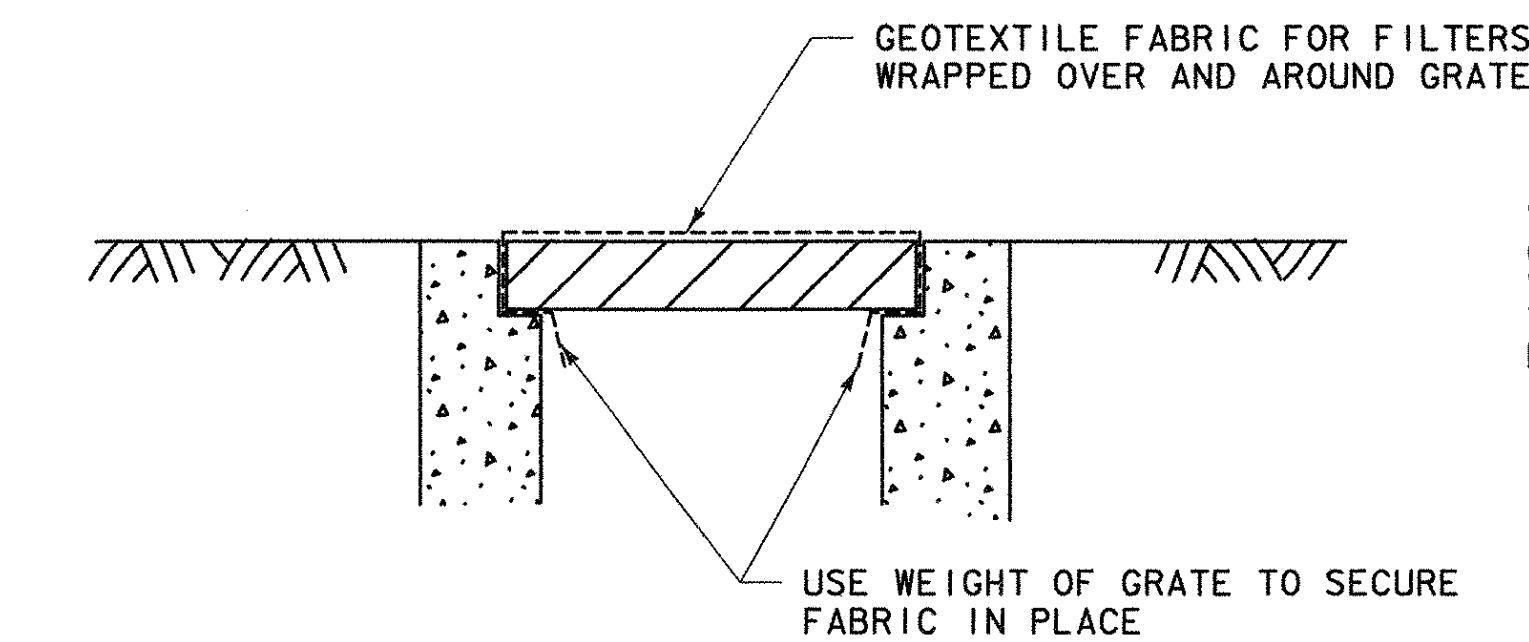
DROP INLET PROTECTION

APPLICATION NOTES:

- THE PRIMARY PURPOSE OF DRAINAGE STRUCTURE INLET PROTECTION IS TO PREVENT SEDIMENT FROM ENTERING A DRAINAGE SYSTEM BY PONDING WATER WHICH ALLOWS SEDIMENT TO FALL OUT OF SUSPENSION.
- THESE EXAMPLES OF DROP INLET PROTECTION ARE NOT INTENDED FOR USE ON GRADES. ON GRADE THEY MAY CAUSE WATER TO BYPASS THE STRUCTURE, CREATING ADDITIONAL EROSION OR FLOODING.
- POSSIBLE MODIFICATIONS FOR USE ON GRADE INCLUDE ADDING A BERM DOWNSTREAM OF THE INLET TO CREATE PONDING. CHECK DAMS MAY ALSO BE USED UPSTREAM OF THE INLET TO SLOW VELOCITIES.
- PREFABRICATED DROP INLET PROTECTION MAY BE ALLOWED AT THE DISCRETION OF THE RESIDENT ENGINEER. SPECIFICATIONS SHALL BE PROVIDED TO THE ENGINEER FOR APPROVAL PRIOR TO USE.

GENERAL NOTES:

- THE TOP OF THE INLET PROTECTION SHALL BE SET AT THE MAXIMUM DESIRED WATER LEVEL, BASED ON FIELD LOCATION AND CONDITIONS.
- SILT FENCE GEOTEXTILE SHALL BE A SINGLE CONTINUOUS PIECE TO ELIMINATE JOINTS.
- SPACE SILT FENCE POSTS EVENLY AROUND INLET WITH A MAXIMUM SPACING OF 3 FEET. DRIVE POSTS A MINIMUM OF 18 INCHES INTO GROUND. WIRE MESH MAY BE REQUIRED BEHIND GEOTEXTILE TO PROVIDE SUPPORT.
- SILT FENCE GEOTEXTILE SHALL BE EMBEDDED A MINIMUM OF 6 INCHES AND BACKFILLED. GEOTEXTILE SHALL BE SECURELY FASTENED TO POSTS AND FRAME.
- SECURE THE ENDS OF THE APRON FOR THE PREFABRICATED DRAINAGE STRUCTURE INLET PROTECTION WITH STAPLES AS DETAILED IN THE PLAN VIEW OR AS RECOMMENDED BY THE MANUFACTURER'S LITERATURE.
- INLET PROTECTION MEASURES FOR AREAS SUBJECT TO VEHICULAR TRAFFIC SHALL BE INSPECTED DAILY. INLET PROTECTION MEASURES FOR AREAS NOT SUBJECT TO VEHICULAR TRAFFIC SHALL BE INSPECTED EVERY SEVEN (7) CALENDAR DAYS. BOTH MEASURES SHALL BE INSPECTED WITHIN 24 HOURS OF A STORM EVENT GREAT ENOUGH TO CAUSE WATER TO LEAVE THE CONSTRUCTION SITE.
- MEASURES SHALL BE CLEANED AND REPAIRED AS NEEDED. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATION REACHES ONE-HALF OF THE MEASURE HEIGHT. SEDIMENT SHALL BE CONSIDERED AS UNSUITABLE MATERIAL AND SHALL BE DISPOSED ACCORDING TO THE SPECIFICATIONS. NO MATERIAL SHALL BE DISPOSED INTO INLETS.
- PAYMENT FOR INSTALLATION AND REMOVAL OF INLET PROTECTION IN AREAS SUBJECT TO VEHICULAR TRAFFIC SHALL BE MADE UNDER THE GEOTEXTILE FABRIC FOR FILTERS ITEM; INLET PROTECTION FOR AREAS NOT SUBJECT TO VEHICULAR TRAFFIC SHALL BE PAID UNDER THE STONE FILL, TYPE I (MOD. - INLET PROTECTION) ITEM.
- PAYMENT FOR MONITORING INLET PROTECTION SHALL BE MADE UNDER THE MONITORING EROSION & SEDIMENT CONTROL PLAN ITEM.
- PAYMENT FOR MAINTAINING INLET PROTECTION SHALL BE MADE UNDER THE FIELD MAINTENANCE OF EROSION & SEDIMENT CONTROL PLAN ITEM, UNLESS MAINTENANCE IS REQUIRED DUE TO POOR INSTALLATION PRACTICES.
- DROP INLET PROTECTION WITH AN ELEVATED BERM NOT TO BE USED IN AREAS WHERE VEHICULAR TRAFFIC IS EXPECTED.



NOTE:

- GEOTEXTILE FABRIC FOR FILTERS SHALL HAVE THE FOLLOWING MINIMUM AVERAGE ROLL VALUES:
 - GRAB TENSILE STRENGTH PER ASTM D 4632 SHALL BE 90 LBS.
 - BURST STRENGTH PER ASTM D 3786 SHALL BE 175 PSI.
 - PUNCTURE PER ASTM D 4833 SHALL BE 55 LBS.
 - TRAPEZOIDAL TEAR STRENGTH PER ASTM D 4533 SHALL BE 40 LBS.
 - APPARENT OPENING SIZE PER ASTM D 4751 SHALL BE 0.25 mm.
 - PERMITTIVITY PER ASTM D 4491 SHALL BE ≥ 2.0 L/SEC.
 - PERMEABILITY PER ASTM D 4491 SHALL BE ≥ 0.20 CM/SEC.
 - FLOW RATE PER ASTM D 4491 SHALL BE ≥ 145 GAL/MIN./SQFT.
 - UV RESISTANCE PER ASTM D 4355 SHALL BE 70 @ 500 HOURS (% STRENGTH RETAINED).
- ELONGATION CORRESPONDS TO MAXIMUM GRAB TENSILE STRENGTH AS MEASURED IN ACCORDANCE WITH ASTM D 4632. GEOTEXTILE FABRIC FOR FILTERS SHALL BE INERT TO BIOLOGICAL DEGRADATION AND RESIST NORMALLY ENCOUNTERED PETROLEUM MATERIAL, CHEMICALS, ALKALIS, AND ACIDS.

TYPICAL FILTER FABRIC INSTALLATION
FOR INLET PROTECTION IN AREAS
SUBJECT TO VEHICULAR TRAFFIC

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|------------|-----------|
| DATUM | |
| VERTICAL | NGVD 1929 |
| HORIZONTAL | N/A |

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|--------------------------------------|-----------------------------|
| PROJECT: HARTFORD | PROJECT NO.: RS 0113(40) |
| DESIGN FILE NAME: z86c027@rosdot.DGN | PLOT DATE: 2/28/2007 |
| IPARM FILE NAME: | SURVEY DATE: 1/87 |
| SURVEYED BY: FANTONI | DRAWN BY: E. ATKINS |
| SQUAD LEADER: KEN UPMAL | SHEET: 121 OF 239 |