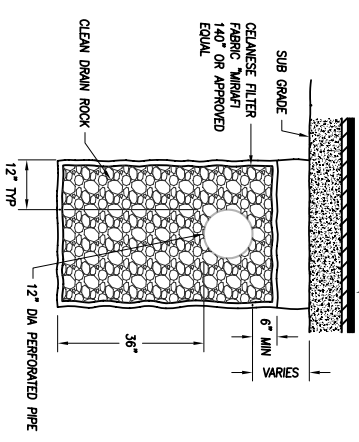


STANDARD ROOF INFILTRATION SYSTEM

SOIL TYPE	LENGTH "L" OF INFILTRATION TRENCH
COURSE SAND AND COBBLES	20 LF
MEDIUM SAND	30 LF
FINE OR LOAMY SAND	75 LF
SANDY LOAM	125 LF
LOAM	190 LF

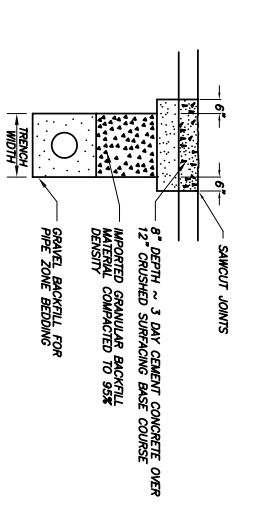
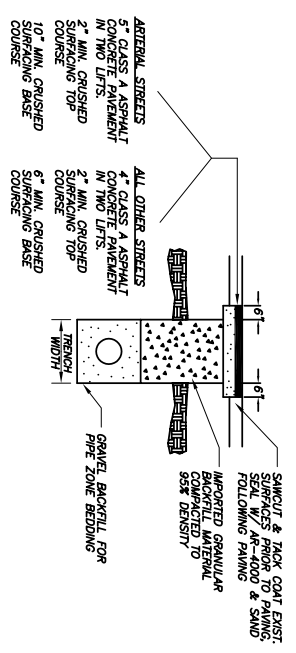
- NOTES:
1. MAXIMUM LENGTH OF TRENCH MUST NOT EXCEED 100 FEET FROM THE INLET SUMP.
  2. MINIMUM SPACING BETWEEN TRENCH CENTERLINES IS 6 FEET.
  3. INFILTRATION MAY NOT BE PLACED IN FILL AREAS UNLESS APPROVED BY A GEOTECHNICAL ENGINEER.
  4. INFILTRATION TRENCHES CONSTRUCTED ON SLOPE STEEPER THAN 1:3X OR WITHIN 200 FEET OF THE TOP OF A STEP SLOPE OR LANDSLIDE HAZARD MUST BE APPROVED BY A GEOTECHNICAL ENGINEER.
  5. PERFORATED PIPE SHALL BE 6" DIAMETER AOS N-12 OR AN APPROVED EQUAL.

STANDARD ROOF INFILTRATION SYSTEM NOTES



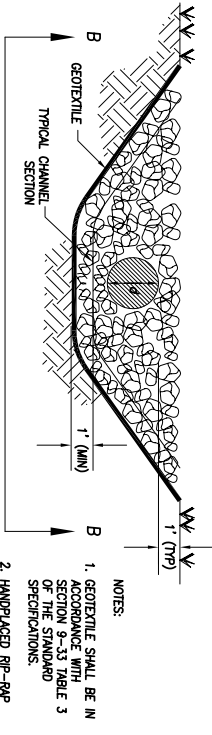
- NOTES:
1. PIPE TO BE 12" DIA PERFORATED AOS N-12 OR APPROVED EQUAL.
  2. DRAIN ROCK SHALL BE IN ACCORDANCE WITH MSOT STANDARD SPECIFICATION 9-03.12(5) GRAVEL BACKFILL FOR DRAINELLS.
  3. INFILTRATION TRENCH SHALL BE PERMITTED WHEN CONNECTED TO A DRAINWELL STRUCTURE.

STANDARD INFILTRATION TRENCH



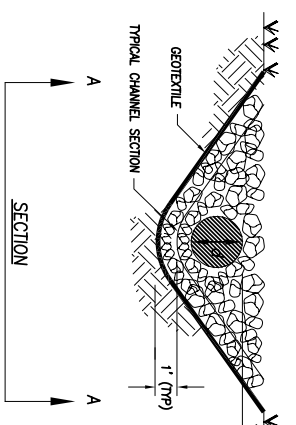
- TRENCHING NOTES:
1. ALL BACKFILL SHALL BE MECHANICALLY MIXED PORTLAND CEMENT CONCRETE OR MECHANICALLY MIXED BITUMINOUS MIXTURE IN ACCORDANCE WITH MSOT STANDARD SPECIFICATIONS BUT IN NO CASE EXCEED 12" LOOSE.
  2. WARE MATERIAL MAY BE SUBMITTED FOR LABORATORY TESTING TO VERIFY THAT IT MEETS THE REQUIREMENTS OF SECTION 9-03.12(3) OF THE STANDARD SPECIFICATIONS AND THE CITY OF WASHOUGAL.

TYPICAL UTILITY TRENCH SECTIONS



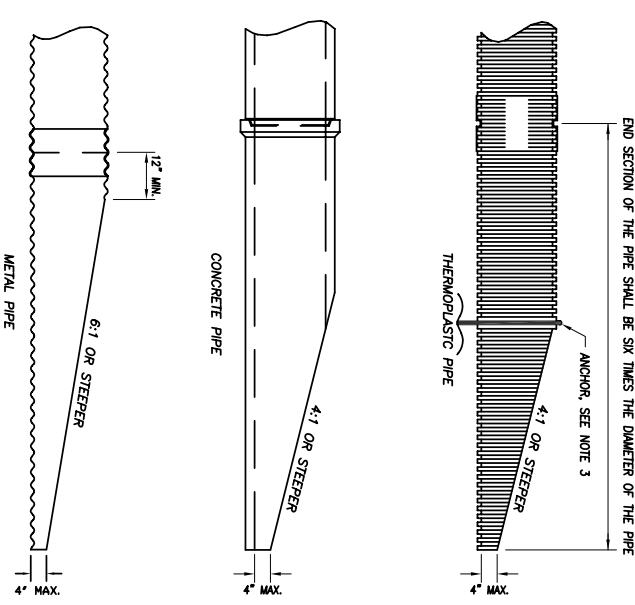
- NOTES:
1. GEOTEXTILE SHALL BE IN ACCORDANCE WITH SECTION 9-33 TABLE 3 OF THE STANDARD SPECIFICATIONS.
  2. HANDPLACED RIP-RAP SHALL BE IN ACCORDANCE WITH SECTION 8-15 OF THE STANDARD SPECIFICATIONS.
  3. "X" SHALL BE 8" OR 4 TIMES THE DIAMETER (D), WHICHEVER IS GREATER.

FLAT-BOTTOM DITCH RIP-RAP PLACEMENT DETAIL



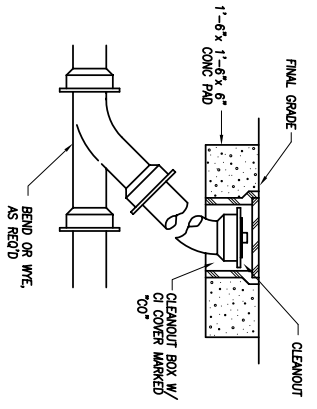
- NOTES:
1. GEOTEXTILE SHALL BE IN ACCORDANCE WITH SECTION 9-33 TABLE 3 OF THE STANDARD SPECIFICATIONS.
  2. HANDPLACED RIP-RAP SHALL BE IN ACCORDANCE WITH SECTION 8-15 OF THE STANDARD SPECIFICATIONS.
  3. "X" SHALL BE 8" OR 4 TIMES THE DIAMETER (D), WHICHEVER IS GREATER.

V-DITCH RIP-RAP PLACEMENT DETAIL



- NOTES:
1. THE CULVERT ENDS SHALL BE BEVELED TO MATCH THE EMBANKMENT OR DITCH SLOPE, WITHOUT EXCEEDING THE LIMITS SHOWN ON THE PLAN.
  2. FIELD CUT OF CULVERT ENDS IS PERMITTED, WHEN APPROVED BY THE CITY, ALL STANDARD SPECIFICATION OR GENERAL SPECIAL PROVISIONS.
  3. THE END OF THERMOPLASTIC PIPE SHALL BE ANCHORED.
  4. FOR PIPES 18" OR LARGER, TRASH SCREEN REQUIRED.

BEVELED END CULVERT SECTION



CLEANOUT

REVISIONS	DATE	BY	APPR.	NO.
APPROVED (CD) VERSION 1.1	6/03	ABC		
APPROVED (CD) VERSION 1.2	10/03	ABC		

DESIGNED	SCALE	JOB NUMBER
EA/LF		CITY OF WASHOUGAL
DRAWN		STANDARD STORM DRAINAGE
CHECKED		DETAILS - SHEET 3
APPROVED		

DATE	DRAWING NUMBER