SEPARATOR ROW™ SPECIFICATIONS

GENERAL

1. CULTEC'S SEPARATOR ROW IS USED AS AN INEXPENSIVE MEANS OF REMOVING TOTAL SUSPENDED SOLIDS FROM THE CHAMBER SYSTEM, AS WELL AS PROVIDING EASIER ACCESS FOR INSPECTION AND MAINTENANCE.

2. THE SEPARATOR ROW PERFORMANCE SHALL BE TESTED AND VERIFIED TO THE PROTOCOLS AND PROCEDURES AS DEFINED BY ENVIRONMENTAL TECHNOLOGY VERIFICATION (ETV) CANADA TO ACHIEVE 80% TSS REMOVAL.

INSTALLATION INSTRUCTIONS

A SEPARATOR ROW IS INSTALLED ON A 1-2 INCH [25-51 mm] WASHED, CRUSHED STONE BASE. TYPICALLY, THE CULTEC CHAMBER MODEL USED FOR THE SEPARATOR ROW IS THE SAME CHAMBER USED THROUGHOUT THE ENTIRE CHAMBER BED.

STORMWATER IS DISTRIBUTED TO THE SEPARATOR ROW BY A PRIMARY FEED SYSTEM THAT DIVERTS FLOW TO THE SEPARATOR ROW AND A SECONDARY BYPASS FEED SYSTEM THAT DIVERTS THE FLOW OF CLEAN WATER TO THE OTHER PARTS OF THE UNDERGROUND STORMWATER MANAGEMENT SYSTEM. THE DISTRIBUTION SYSTEM MAY BE BY PIPES SET AT A LOWER ELEVATION THAT PERMIT THE FIRST FLUSH TO THE SEPARATOR ROW VERSUS OTHER PARTS OF THE UNDERGROUND STORMWATER SYSTEM. THIS INITIAL FLOW MAY BE MANAGED BY A BAFFLE OR WEIR. THE SIZING OF THE PIPE(S) THAT PROVIDE STORM WATER TO THE SEPARATOR ROW IS TO BE DETERMINED BY THE DESIGN ENGINEER AND IS BASED UPON THE REQUIREMENT TO ACCOMMODATE THE DESIGN FLOW AND SERVICE CONVENIENCE.

THE CHAMBERS UTILIZED IN THE SEPARATOR ROW ARE TO BE COMPLETELY WRAPPED WITH CULTEC NO. 410 NON-WOVEN GEOTEXTILE. THIS CREATES A PASS-THROUGH FILTER ARRANGEMENT TO SEPARATE TOTAL SUSPENDED SOLIDS IN THE TRANSFER OF STORM WATER TO OTHER CHAMBERS THROUGHOUT THE UNDERGROUND STORMWATER MANAGEMENT SYSTEM.

ONCE WRAPPED, THE SEPARATOR ROW IS TO THEN PLACED ENTIRELY OVER 1 LAYER OF CULTEC No. 4800 WOVEN GEOTEXTILE. THIS WOVEN GEOTEXTILE PROVIDES A DURABLE SURFACE WITHIN THE ROW FOR MAINTENANCE PROCEDURES AS WELL AS TO PREVENT ANY SCOURING OF THE STONE BASE DURING HIGH PRESSURE JETTING.

THE RECOMMENDED INSTALLATION OF SEPARATOR ROW CHAMBERS, IN REGARD TO STONE SEPARATION AND STONE ABOVE THE UNIT, ALONG WITH OTHER MINIMUM BURIAL, MATERIALS AND METHOD SPECIFICATIONS DETAILED FOR THE PROPER INSTALLATION, IS THE SAME AS CULTEC'S REQUIREMENT DETAILED IN THE COMPANY'S INSTALLATION GUIDELINES WITH THE EXCEPTION OF THE PLACEMENT OF THE REQUIRED FILTERING FABRICS. PLEASE REFER TO CULTEC'S CURRENT INSTALLATION INSTRUCTIONS FOR STORMWATER CHAMBERS AS A GUIDE.

MAINTENANCE PROCEDURES

CULTEC RECOMMENDS INSPECTIONS OF THE SEPARATOR ROW TO BE PERFORMED EVERY SIX MONTHS FOR THE FIRST YEAR. THE FREQUENCY OF INSPECTION CAN THEN BE ADJUSTED BASED UPON PREVIOUS OBSERVATION OF SEDIMENT DEPOSITION.

WHILE CLEANING IS POSSIBLE FROM A SINGLE MANHOLE IN SHORTER LINES, A CLEAN-OUT OPTION FROM EITHER END OF A LINE IS PREFERABLE, PARTICULARLY FOR LONGER RUNS. CLEANING INVOLVES FLUSHING SEDIMENT FROM THE BASE FABRIC OF THE SEPARATOR ROW.

ACCESS WILL BE PROVIDED VIA A MANHOLE(S) LOCATED AT THE END(S) OF THE ROW FOR CLEAN OUT.

MAINTENANCE OF THE SEPARATOR ROW IS TO BE ACCOMPLISHED WITH A JETVAC PROCESS.

THE JETVAC IS TO BE SENT DOWN THE ENTIRE LENGTH OF THE SEPARATOR ROW. AS THE HIGH PRESSURE WATER NOZZLE IS RETRIEVED, THE CAPTURED SEDIMENTS ARE PUSHED BACK INTO THE MANHOLE FOR VACUUMING.

| ← 15.0" - ► |

GENERAL NOTES

FIELD PLACED CLASS "C" CONCRETE

PAVEMENT OR FINISHED GRADE

AASHTO HS-25 RATED CAST IRON

12" X 6" CULTEC INLINE DRAIN / CLEAN-OUT BASIN w/ GASKETED SDR-35 CONNECTION

- 6" SDR-35 RISER (LENGTH VARIES)

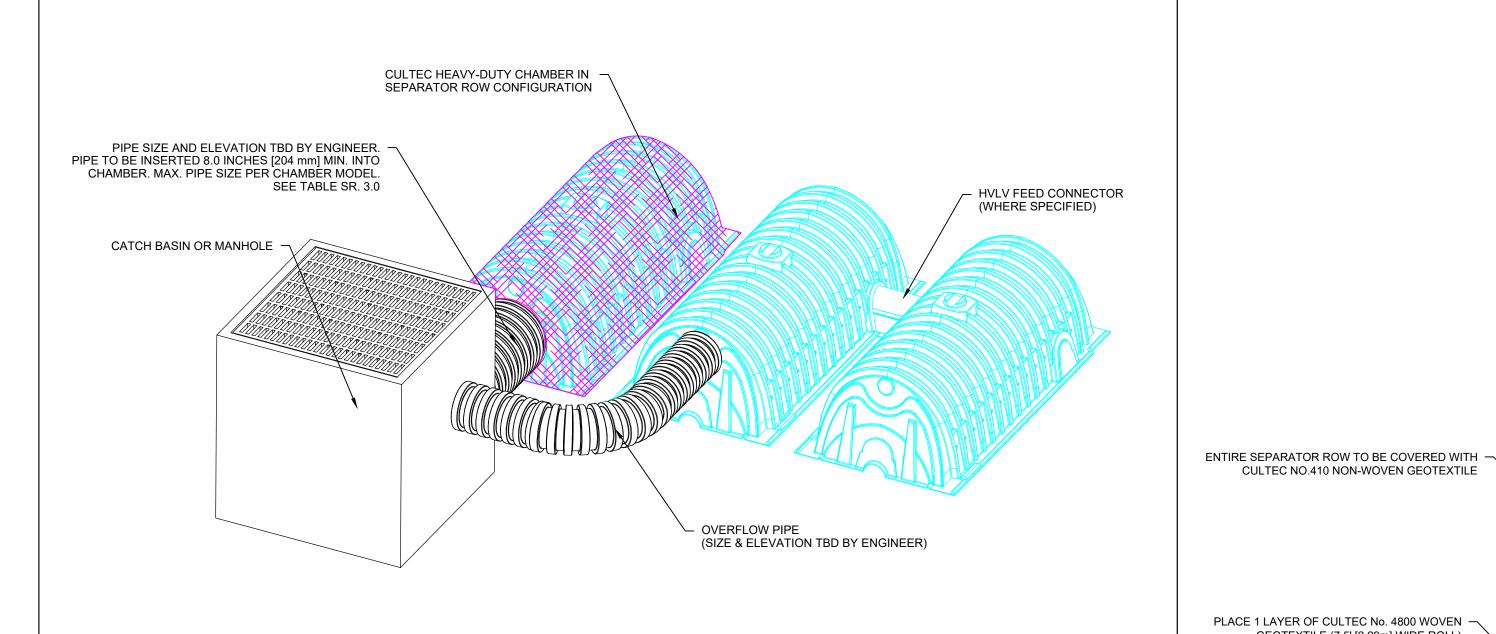
6.25" HOLE TO BE CUT w/ HOLE SAW CENTERED ON CORRUGATION CREST

CUT FOR 6" OF INSERTED PIPE

6" SDR-35 BELL END

MIN. 95% COMPACTED

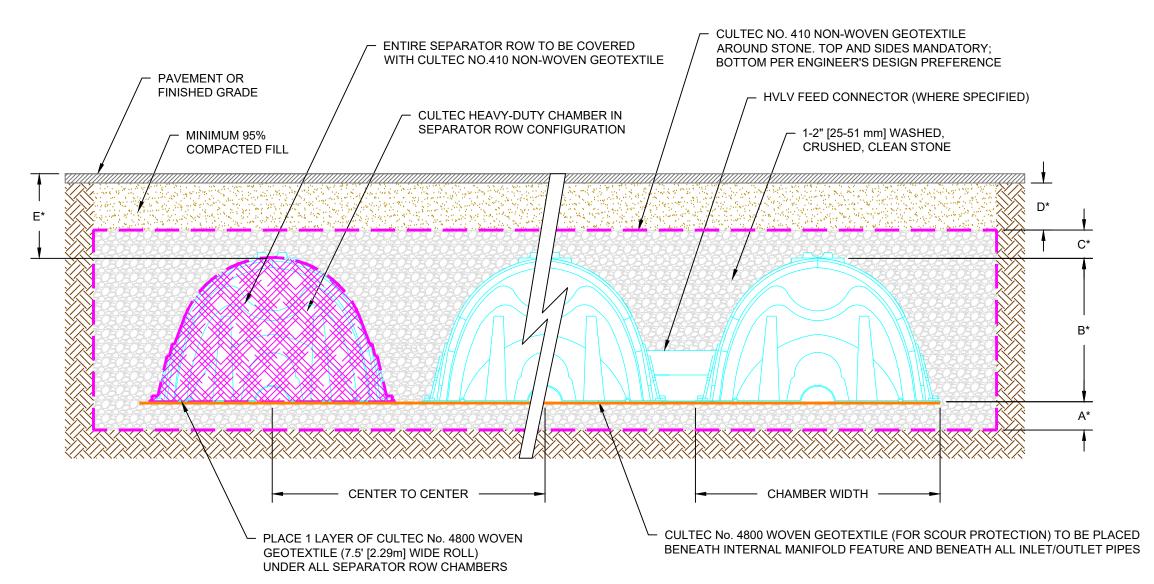
COLLAR (OPTION 1) 1.50" BELOW PAVEMENT



TYPICAL SEPARATOR ROW CONFIGURATION INLET CONNECTION

CULTEC CHAMBER MODEL								
	DESCRIPTION	CONTACTOR 100HD	RECHARGER 150XLHD	RECHARGER 280HD	RECHARGER 330XLHD	RECHARGER 902HD		
A¹	MIN. DEPTH OF STONE BASE	6" 152 mm	6" 152 mm	6" 152 mm	6" 152 mm	9" 229 mm		
В	CHAMBER HEIGHT	12.5" 318 mm	18.5" 470 mm	26.5" 673 mm	30.5" 775 mm	48" 1219 mm		
C¹	MIN. DEPTH OF STONE REQUIRED ABOVE UNITS FOR TRAFFIC APPLICATIONS	6" 152 mm	6" 152 mm	6" 152 mm	6" 152 mm	12" 305 mm		
D	MIN. DEPTH REQUIRED OF 95% COMPACTED FILL FOR PAVED TRAFFIC	8" 203 mm	8" 203 mm	8" 203 mm	10" 254 mm	12" 305 mm		
E	MAX. DEPTH OF COVER ALLOWED ABOVE CROWN OF CHAMBER	12' 3.65 m	12' 3.65 m	12' 3.65 m	12' 3.65 m	8.3' 2.53 m		
	MAX. PIPE SIZE TO CHAMBER ENDWALL/ENDCAP	10" 250 mm	12" 300 mm	18" 450 mm	24" 600 mm	24" 600 mm		

NOTE1: STONE ABOVE AND BELOW UNITS MAY VARY PER SYSTEM.



* SEE SR 3.0 - CROSS SECTION TABLE REFERENCE

TYPICAL SEPARATOR ROW CONFIGURATION CROSS SECTION

TYPICAL SEPARATOR ROW CONFIGURATION CROSS SECTION WITH INSPECTION PORT DETAIL

TYPICAL INSPECTION PORT - ZOOM DETAIL www.cultec.com

FIELD PLACED CLASS "C" CONCRETE COLLAR

(OPTION 2) FLUSH WITH PAVEMENT

PAVEMENT OR FINISHED GRADE -

8.0" MIN.

CULTEC, Inc.

Subsurface Stormwater Management Systems

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THIS DRAWING WAS PREPARED TO SUPPORT THE PROJECT ENGINEER OF RECORD FOR THE PROPOSED SYSTEM. IT IS THE ULTIMATE RESPONSIBILITY OF THE PROJECT ENGINEER OF RECORD TO ENSURE THAT THE CULTEC SYSTEM'S DESIGN IS IN FULL COMPLIANCE WITH ALL APPLICABLE LAWS AND REGULATIONS. IT IS THE PROJECT ENGINEER OF RECORD'S RESPONSIBILITY TO ENSURE THAT THE CULTEC PRODUCTS ARE DESIGNED IN ACCORDANCE WITH CULTEC'S MINIMUM REQUIREMENTS. CULTEC DOES NOT APPROVE PLANS, SIZING, OR SYSTEM DESIGNS.

SEPARATOR ROW **DETAIL SHEET** TRAFFIC APPLICATION

SEPARATOR ROW DETAIL SHEET								
PROJECT NO: -	DA	ATE:	08/2018					
DESIGNED BY: CULT	EC, INC CH	HECKED BY:	TECH					
SCALE: N.T.S.	SH	HEET NO:	-					

→ PAVEMENT OR FINISHED GRADE

- MIN. 95% COMPACTED FILL

PAVEMENT SUB-BASE (WHEN APPLICABLE)

- CULTEC NO. 410 NON-WOVEN GEOTEXTILE

AROUND STONE. TOP AND SIDES

ENGINEER'S DESIGN PREFERENCE

- CULTEC HVLV FEED CONNECTOR

CULTEC HEAVY-DUTY CHAMBER

- 1-2 INCH [25-51 mm] WASHED, CRUSHED STONE

MINIMUM 95% COMPACTED FILL

DESIGN PREFERENCE

CULTEC NO.410 NON-WOVEN GEOTEXTILE AROUND STONE.

- CULTEC HEAVY-DUTY CHAMBER IN

SEPARATOR ROW CONFIGURATION

TOP AND SIDES MANDATORY; BOTTOM PER ENGINEER'S

- 1-2 INCH [25-51 mm] WASHED, CRUSHED STONE TO SURROUND SYSTEM PERIMETER

- 1-2 INCH [25-51 mm] WASHED, CRUSHED STONE BENEATH AND ABOVE CHAMBERS

CULTEC No. 4800 WOVEN GEOTEXTILE (FOR SCOUR

FEATURE AND BENEATH ALL INLET/OUTLET PIPES

PROTECTION) TO BE PLACED BENEATH INTERNAL MANIFOLD

MANDATORY; BOTTOM PER

(WHERE SPECIFIED)

CROSS SECTION TABLE REFERENCE

24.0" [609 mm] MIN. SUMP

- INLET STRUCTURE

CULTEC NO.410 NON-WOVEN GEOTEXTILE

PLACE 1 LAYER OF CULTEC No. 4800 WOVEN -

UNDER ALL SEPARATOR ROW CHAMBERS

GEOTEXTILE (7.5' [2.29m] WIDE ROLL)

4 4 4 4 4 4 4

ENTIRE SEPARATOR ROW TO BE COVERED WITH - PLACE 1 LAYER OF CULTEC No. 4800 WOVEN CULTEC NO.410 NON-WOVEN GEOTEXTILE GEOTEXTILE (7.5' [2.29m] WIDE ROLL) UNDER ALL SEPARATOR ROW CHAMBERS

* SEE SR 3.0 - CROSS SECTION TABLE REFERENCE

CATCH BASIN OR MANHOLE

TYPICAL SEPARATOR ROW CONFIGURATION PLAN VIEW

OPTIONAL INSPECTION PORT

(SEE ZOOM DETAIL SR 50)

PIPE SIZE AND ELEVATION AS SPECIFIED.

RECOMMENDED. SEE TABLE SR. 3.0

- PAVEMENT OR FINISHED GRADE

THE USE OF THE MAX. PIPE SIZE PER CHAMBER MODEL IS

HIGH-FLOW BYPASS PIPE

MAX. PIPE SIZE PER CHAMBER MODEL. SEE TABLE SR. 3.0

(AS SPECIFIED)

PIPE SIZE AND ELEVATION AS SPECIFIED.