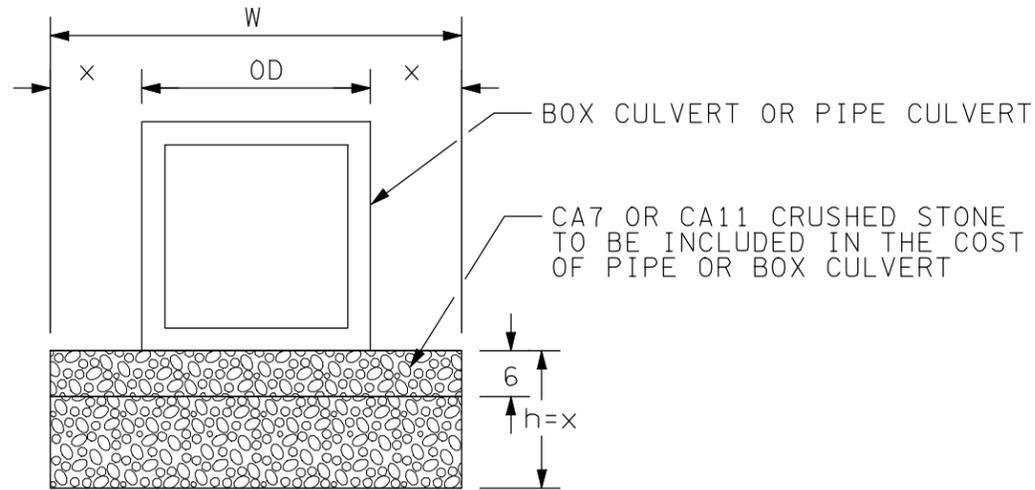
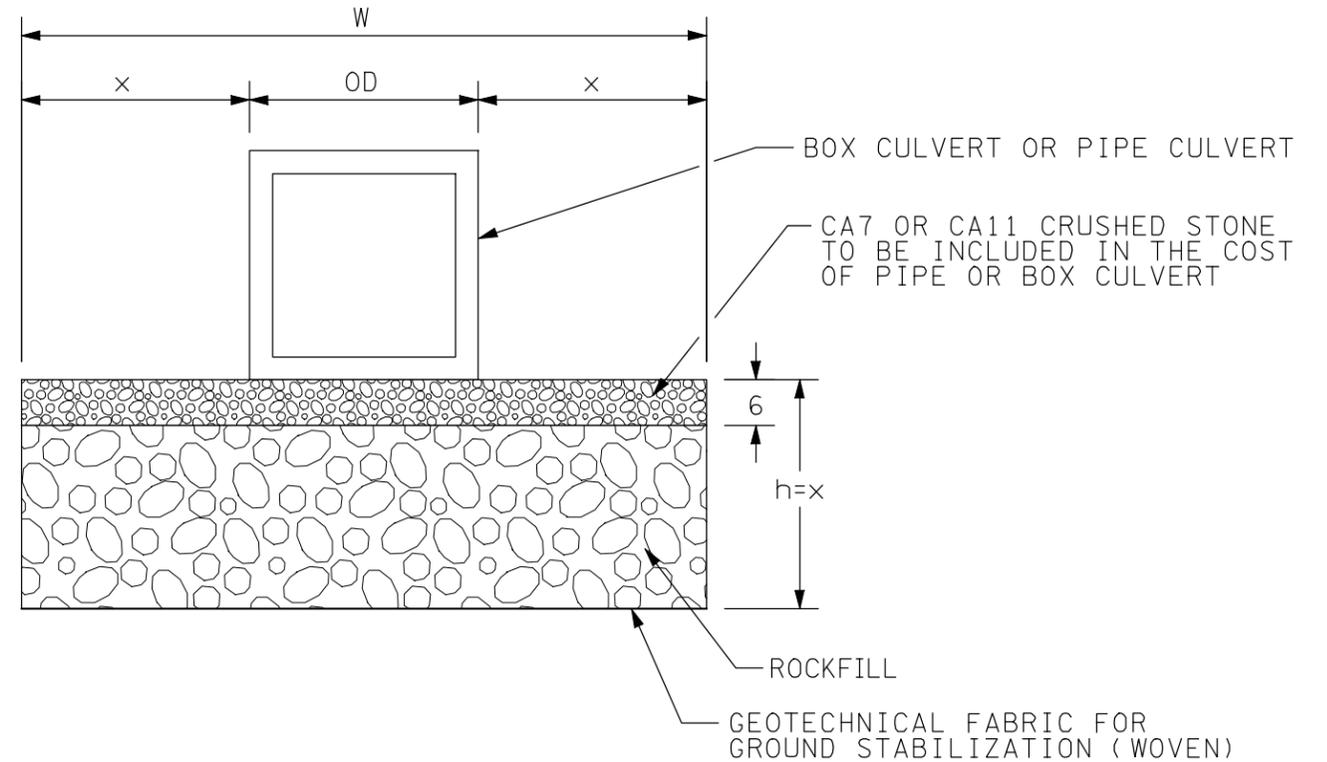


DESIGNER NOTES: 1. CHECK WITH THE DISTRICT GEOTECHNICAL ENGINEER FOR USE OF THIS DRAWING AND FOR UNDERCUT DEPTHS IF NOT PROVIDED OR SHOWN IN PROJECT SOILS REPORT.
 2. ASSURE TREATMENT AREAS ARE SHOWN IN PLANS AND ON CROSS SECTIONS.
 3. INCLUDE SOIL BORINGS FOR TREATED AREAS.



ALTERNATE I: FOR 12" TO 18" UNDERCUT



ALTERNATE II: FOR 18" TO 36" UNDERCUT

CULVERT LOCATION	UNDERCUT			
	DEPTH	WIDTH		
	h	x	OD	W
FAP 407 (IL 336)				
608+00	2'	2'	6'	10'
659+10	4'	4'	11'	18'-6"
665+90	5'	3'	6'	12'
679+00	8'	7'-11"	9'-2"	25'
827+60	3'	3'	9'	15'
CH 14 (1350N)				
2019+75	8'	1'-11 1/2"	6'-7"	10'-6"

GENERAL NOTES:

- Undercut if the Dynamic Cone Penetrometer tests indicate soil strength is less than 1 ton/sq ft.
- DEFINITIONS:
 OD = Outside Diameter or outside width of box culvert
 h = Depth of undercut (for precast box culverts, the upper 6" is included in the cost of culvert).
 x = h or min. width specified in Sec. 542.04, which ever is greater for pipe culverts.
 x = h or minimum 2 feet, which ever is greater for box culverts.
 W = Width of undercut = 2x + OD
- For undercuts greater than 36", use Alternate II with undercut treatments as directed by the District Geotechnical Engineer.

All dimensions are in inches (millimeters) unless otherwise noted.

FILE NAME =	USER NAME = jdeen	DESIGNED - JRB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FAP 407 (IL RTE 336) UNSATURABLE EXCAVATION TREATMENT FOR CULVERTS			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
W:\Transportation\2891\Grading Plans\2891d001.dgn		DRAWN - JMO	REVISED -		407	(55-3)A	McDONOUGH	671	304			
PLOT SCALE = 100.0000' / IN.		CHECKED - AWM	REVISED -		CONTRACT NO. 68A42							
PLOT DATE = 12/12/2012		DATE - 12-12-12	REVISED -		SCALE: N/A	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT				