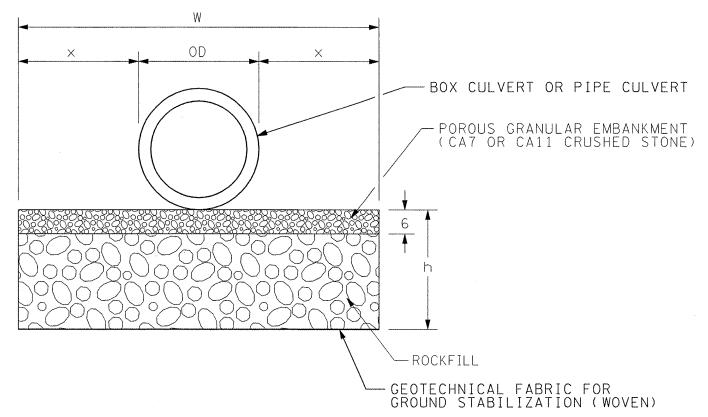


ALTERNATE I: FOR 12" TO 18" UNDERCUT

	UNDERCUT			
CULVERT LOCATION	DEPTH	WIDTH		
	h	×	OD	W
577+96.14	30''	30"	51′′	111''



## ALTERNATE II: FOR 18" TO 36" UNDERCUT

## GENERAL NOTES:

- 1. Undercut if the Dynamic Cone Penetrometer tests indicate soil strength is less than 1 ton/sq ft.
- 2. 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 + 0D

3. 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 = jd	DESIGNED -	REVISED -			F.A.P. SECTION COUNTY TOTAL SHEET
Z:\08056_Shaw_Creek\dgn\Design\Final\Plo	tsheets\46-D468352-culvert_detail_sheet.dgn	DRAWN ~ LE	REVISED -	STATE OF ILLINOIS	UNSUITABLE EXCAVATION TREATMENT FOR CULVERTS	685 37BR-1 MCDONOUGH/ 138 46
	PLOT SCALE = 2.0000 '/ IN.	CHECKED - SD	REVISED -	DEPARTMENT OF TRANSPORTATION		CONTRACT NO. 68352
	PLOT DATE = 10/16/2009	DATE - 10/15/09	REVISED -		SCALE: NTS SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO.   ILLINOIS FED. AID PROJECT