

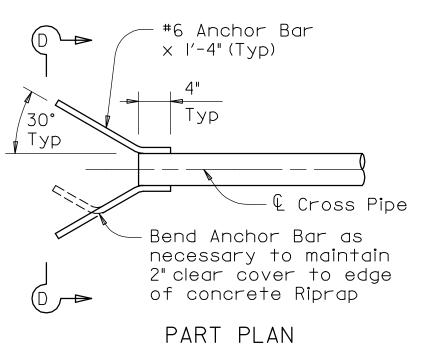
Size and Lengths of Cross Pipes shallbe as shown in the tables, except the first Cross Pipe from the bottom and the associated Saddle Pipe shallbe 3 1/2". All other values shown are minimum requirements.

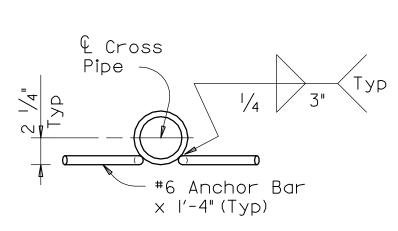
Reinforce upper edge of Prefabricated End Section with minimum  $\frac{3}{8}$  diameter smooth or deformed bar (pre-gal vanized).

(8) Riprap placed beyond the limits shown will be paid as Concrete Riprap in accordance with Item 432. "Riprap".

9 The proper installation of the first Cross Pipe is critical for vehicle safety. The top of the first Cross Pipe must be placed at no more than 6" above the flow line.

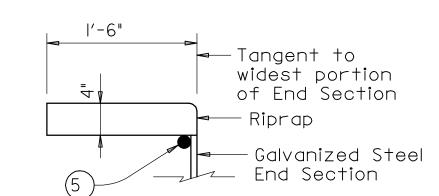
The third Cross Pipe from the bottom of the Culvert shall always be installed using a bolted connection. Care shall be taken to ensure that concrete does not flow into this Cross Pipe so as to permit disassembly of the bolted connection to allow cleanout access.



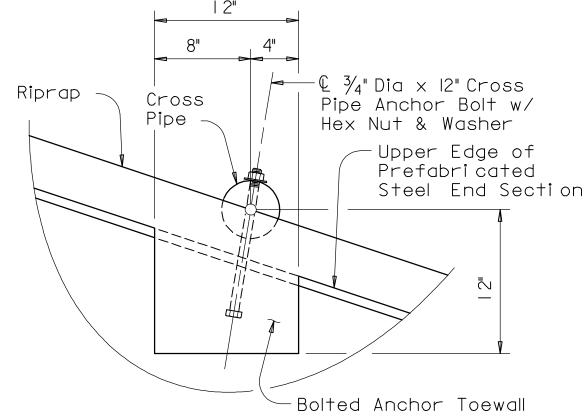


SECTION D-D

## ANCHOR BAR DETAILS



## CROSS SECTION OF TYPICAL RIPRAP



SECTION C-C

(Showing Bolted Anchor details)

SHEET 2 OF 2



FOR 12" TO 60" DIA C.M.P. CULVERTS TYPE II ~ PARALLEL DRAINAGE

GS-ES-PD

gsespdse.dgn		DN:	TxDOT	CK:	T×DOT	DW: JF	RP	CK:	GAF
<d0t< td=""><td>December 2003</td><td colspan="2">DISTRICT</td><td colspan="4">FEDERAL AID PROJECT</td><td>SHEET</td></d0t<>	December 2003	DISTRICT		FEDERAL AID PROJECT				SHEET	
REVISIONS									26 OF 28
		COUNTY				CONTROL	SECT	JOB	HIGHWAY