

# SECTION 3-F HEADWALL DETAILS

CITY OF SACHSE, TEXAS  
DEPARTMENT OF ENGINEERING

STANDARD CONSTRUCTION DETAILS  
MISCELLANEOUS DETAILS

HEADWALL DETAILS

APPROVED:

DATE: SEPTEMBER 2013 | REVISED:

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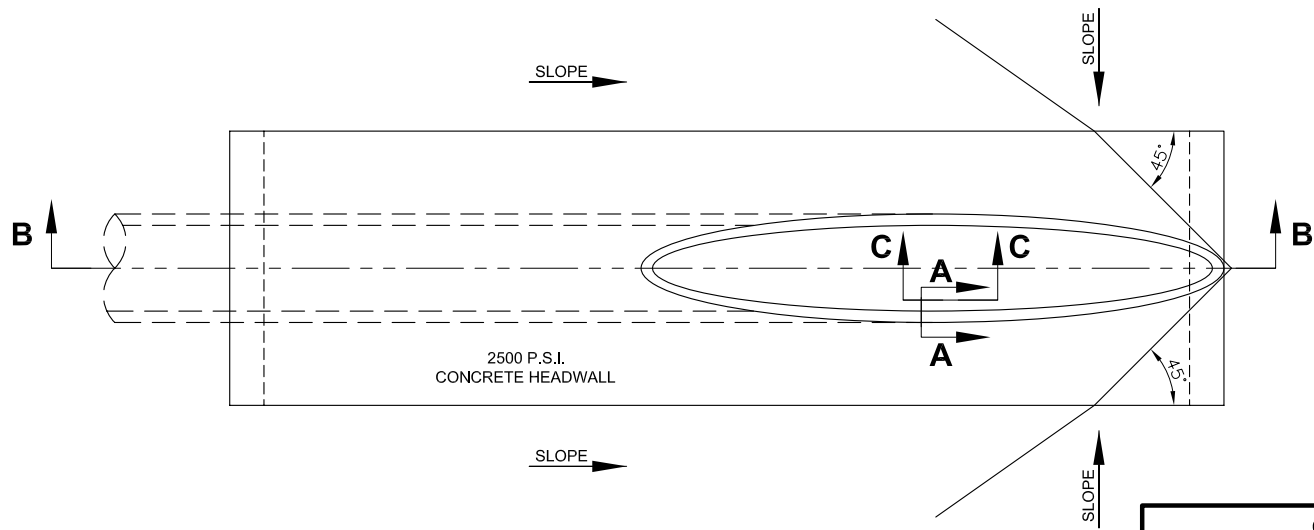
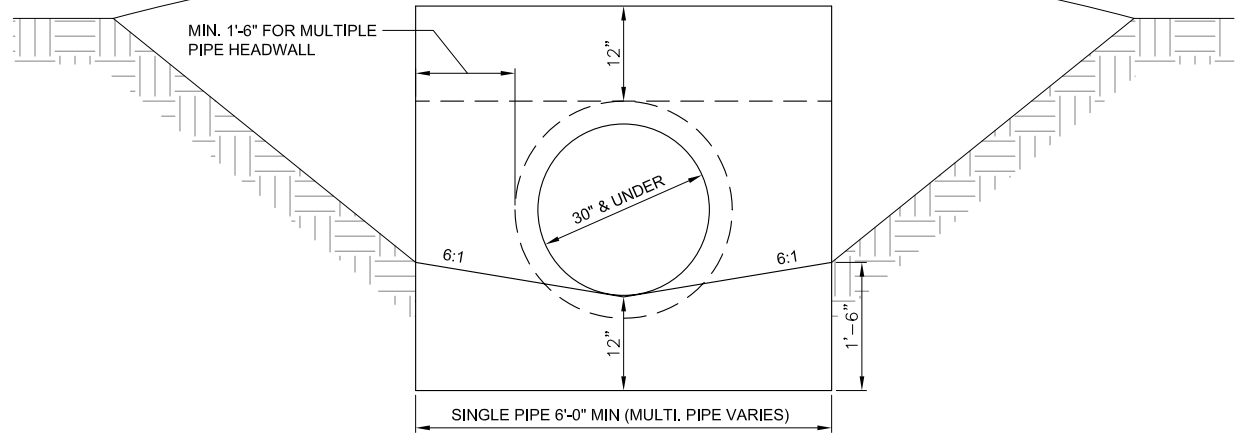
ROADWAY DESIGNATION	SPEED LIMIT	PIPE MATERIAL	ALTERNATE PIPE MATERIAL	MINIMUM PIPE SIZE	SAFETY END TREATMENT REQUIRED	ALTERNATE END TREATMENT REQUIRED
PRINCIPAL ARTERIAL	45	RCP	-	18"	YES	NO
MINOR ARTERIAL	45	RCP	-	18"	YES	NO
MINOR ARTERIAL	40	RCP	-	18"	YES	NO
MINOR ARTERIAL	35	RCP	-	18"	YES	NO
COLLECTOR	35	RCP	-	18" **	YES	NO
COLLECTOR	30	RCP	CMP	18" **	YES	NO
LOCAL STREET	30	RCP	CMP	18" **	NO	YES *

\* DEPENDING UPON THE ROADWAY CONDITIONS AND TRAFFIC VOLUME, A TYPE "B" CONCRETE HEADWALL MAY BE ALLOWED WITH SPECIAL APPROVAL OF THE CITY ENGINEER

\*\* IF THE EXISTING BAR DITCH DEPTH AND SLOPE DOES NOT ALLOW FOR AN 18" PIPE, 2-12" CULVERT PIPES MAY BE USED IN LEIU OF 1-18" CULVERT PIPE WITH SPECIAL APPROVAL FROM THE CITY ENGINEER

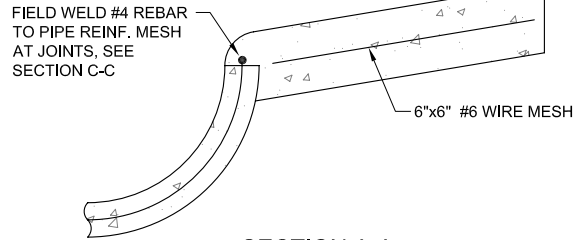
**CULVERT REQUIREMENTS TABLE**

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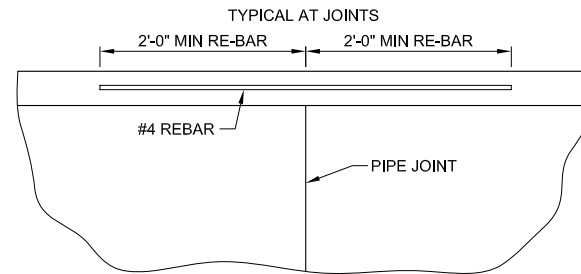


**SPECIAL HEADWALL**  
 (FOR HIGHWAY CULVERTS)  
 OR AS DIRECTED BY THE CITY

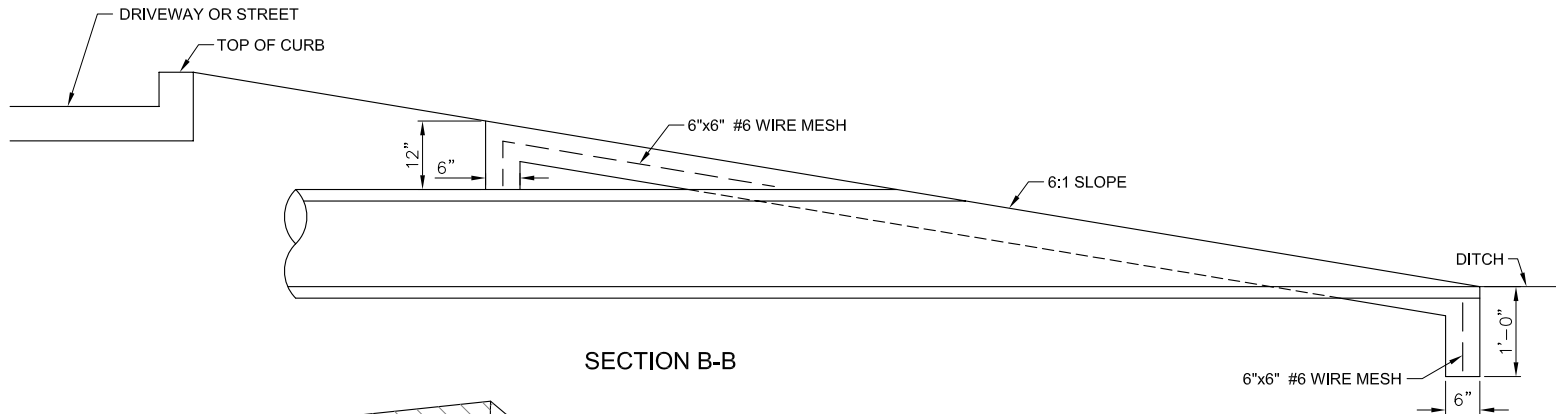
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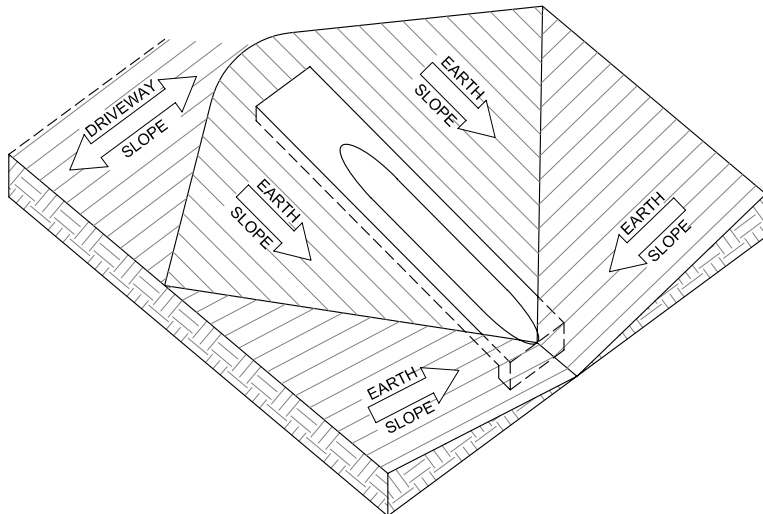
SECTION A-A



SECTION C-C



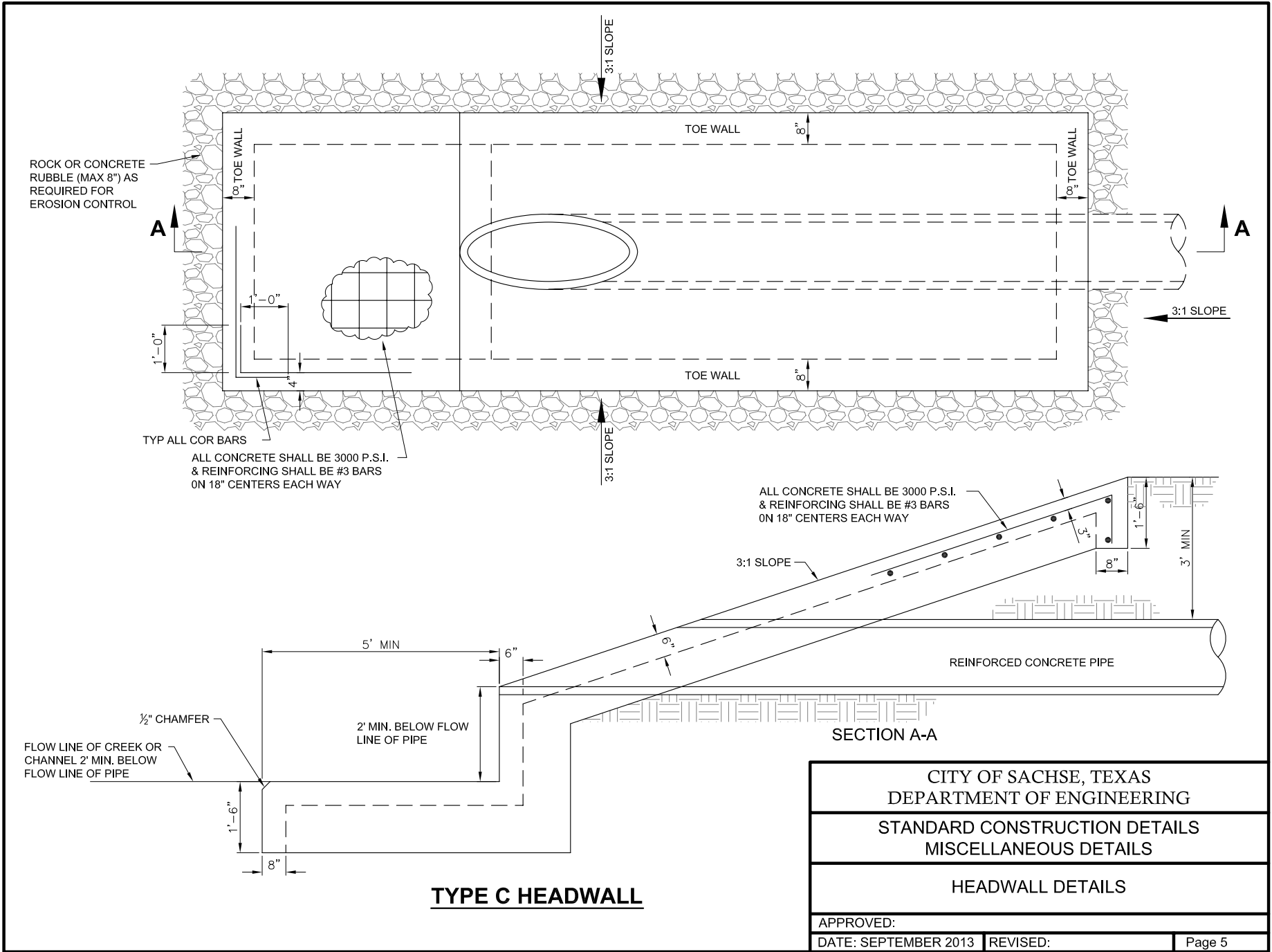
SECTION B-B



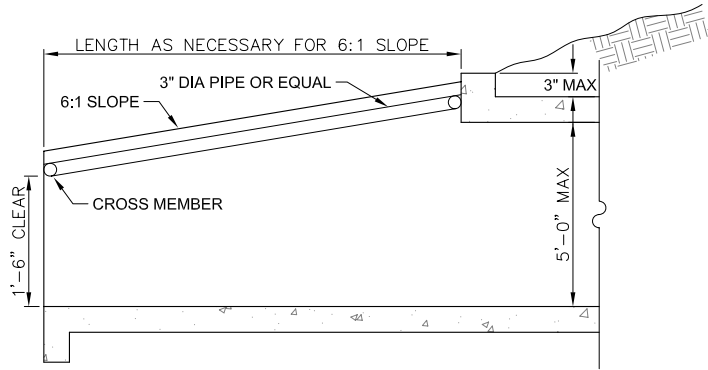
**CULVERT SAFETY END TREATMENT**

FOR ROADWAY CULVERTS AT DRIVE ENTRANCES OR AS DIRECTED BY THE CITY

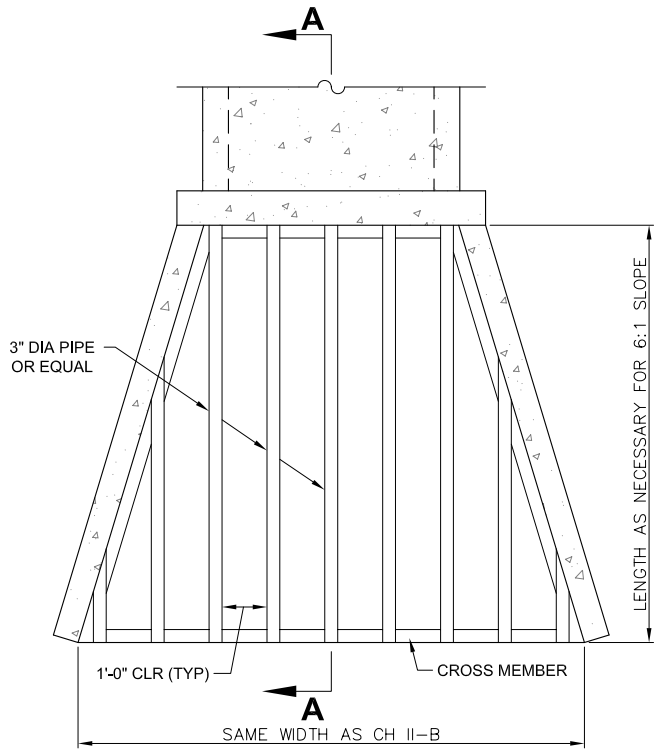
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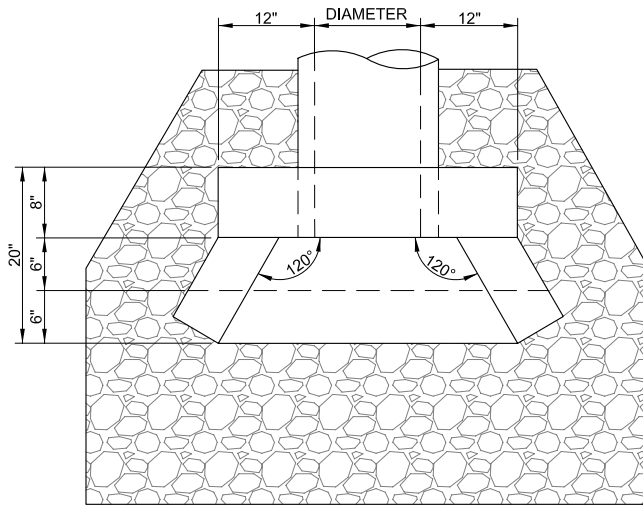
SECTION A-A



NOTICE:  
 NOTIFY SACHSE CITY ENGINEERING AT LEAST 48 HOURS  
 PRIOR TO ANY CONSTRUCTION ON THIS PROJECT.

**SAFETY GRATES FOR PIPE AND BOX CULVERTS**

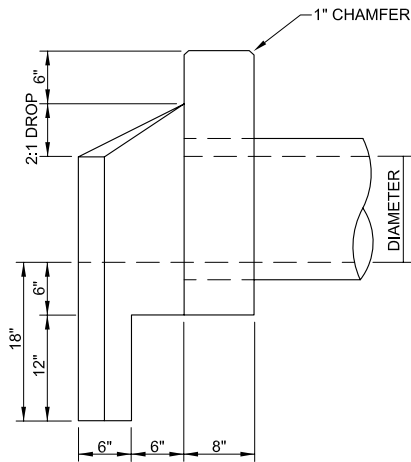
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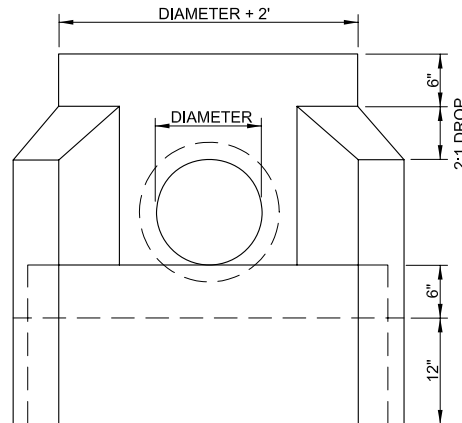
**TYPE "B" HEADWALL**

**NOTES:**

1. ALL CONCRETE TO BE 3600 PSI CONCRETE
2. ALL STEEL REINFORCEMENT TO BE GRADE 60 STEEL.
3. REFER TO TXDOT STANDARD DETAIL SETP-FW-0 FOR REINFORCEMENT SIZE AND SPACING FOR TYPE "B" HEADWALLS.
4. STORM OUTLET POINTS NEED TO HAVE ADEQUATE EROSION PROTECTION. THE LEVEL OF PROTECTION REQUIRED WILL BE DETERMINED BY THE CITY ENGINEER BASED UPON THE ANTICIPATED VELOCITY AND QUANTITY OF STORM WATER RUNOFF AT THE OUTLET.



**SIDE VIEW**



**FRONT VIEW**

**TYPE "B" HEADWALL**

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