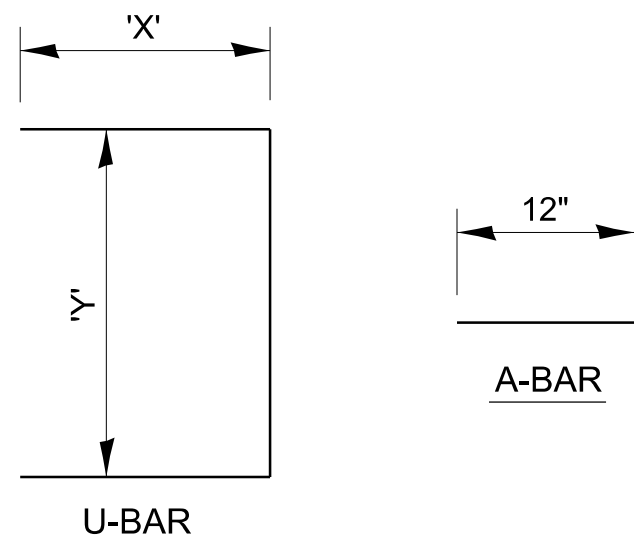


3/4" EXPANSION BOLTS  
EQUALLY SPACED  
2-#4 BARS  
EACH LOCATION

EXPANSION BOLTS SHALL CONSIST OF SELF DRILLING EXPANSION SHIELDS AND 3/4" DIA HOOKED BOLTS. HOOKED BOLTS SHALL EXTEND A MINIMUM OF 9" INTO NEW CONCRETE. BOLTS SHALL BE DRILLED IN THE CENTER OF THE EXISTING BOX CULVERT BARREL WALLS.  
MINIMUM CERTIFIED PROOF LOAD = 4,080 LBS.



LOCATION	EXISTING CULVERT SIZE FT x FT	PIPE DIMENSION (ELLIPTICAL) IN	EXTENSION COLLAR		A-BAR 305 IN	U-BAR		CONC COLLAR CU YD	REINFORCEMENT BARS POUND	3/4" DIA EXPANSION BOLTS EACH
			WIDTH IN	HEIGHT IN		'X' IN	'Y' IN			

# COLLAR DETAIL (ELLIP. CONC. EXTENSION OF BOX CULVERT)