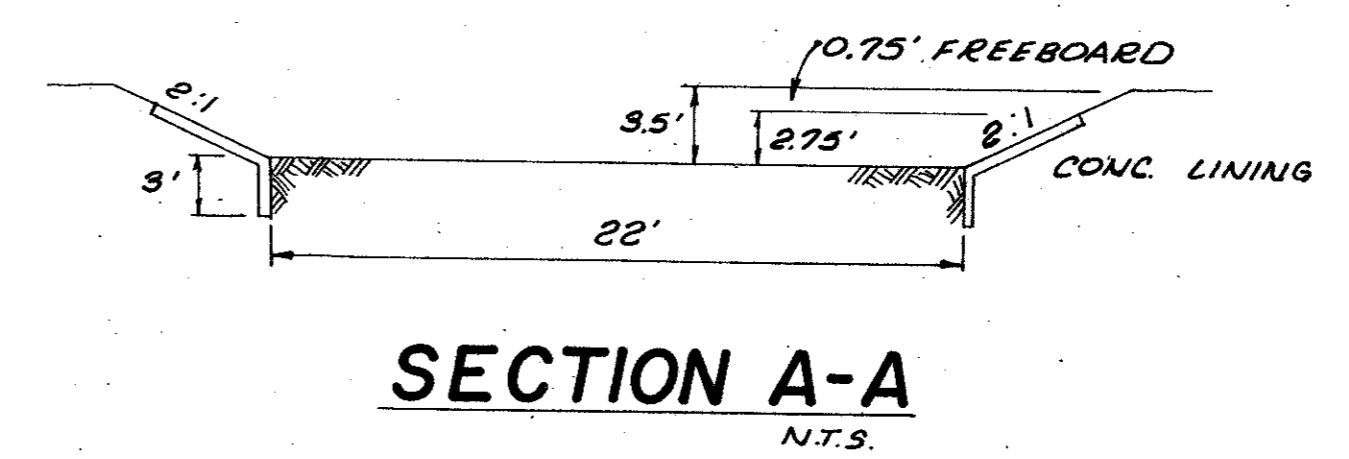


CHANNEL
 A = 382 AC.
 $I_{25} = 2.8$ $I_{100} = 3.5$
 $C_{AVG} = 0.7$
 $Q_{25} = 750$ C.F.S. $Q_{100} = 936$ C.F.S.
 LINE WITH CONC. FOR 25 YRS.
 $S = 0.005$ $N = 0.0175$
 $Q = 1.486 / 0.0175 (75.625)(1.694)(0.0707)$
 $= 770$ C.F.S.
 T.O.C.: 2700' GUTTER FLOW AT 1.0% = 18 MIN.
 $N = 0.0175$
 1000' OVERLAND FLOW AT 0.8% = 35 MIN.
 3500' IMPROVED CHAN. AT 0.8% = 30 MIN.
 $N = 0.04$ 83 MIN.

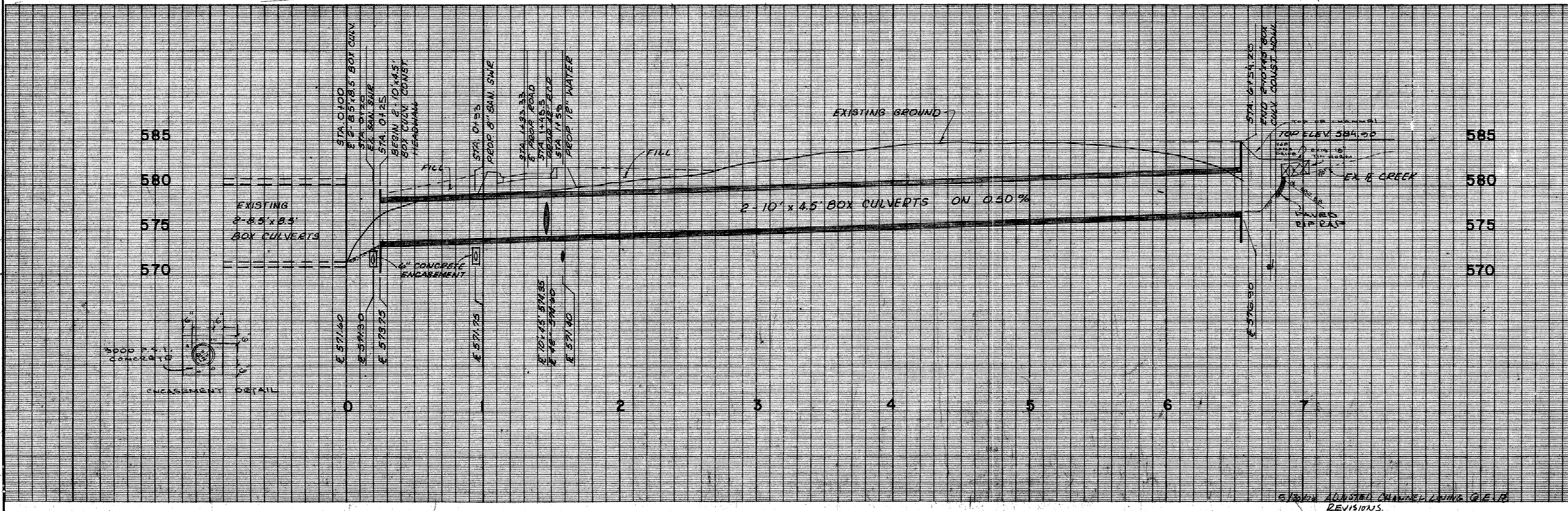
CULVERT
 A = 382 AC.
 $I_{100} = 3.5$
 $Q_{100} = 936 + 52$ (ON SITE) = 988
 $Q = 1.486 / 0.015 (45)(1.7769)(0.0707)$
 $= 560$ C.F.S.
 USE 2-10' x 4.5' BOXES
 $V = 988 / 90$
 $= 11$ F.P.S.
 HW/D = 1.8
 HEADWALL = 8.0 FT



1. BENCH MARK: "M" on conc. East end of headwall North side Beltline Rd. and 500' west of Southeast corner of Addition. Elev. 581.51 (set)
2. BENCH MARK: "R.R. Spike" in P.P. North side Beltline Rd. and 500' East of existing Marsh Lane. Elev. 579.27 (set)

NOTE: PROVIDE A 3-FOOT OPENING IN WALL TOP FOR ENCASED CAST IRON PIPE PASSAGE. LEAVE A 6" MINIMUM SEPARATION BETWEEN ENCASEMENT AND CULVERT STRUCTURE.

VERIFY SANIT. SEWER LOCATION PRIOR TO CONSTRUCTION OF BOX IN THIS AREA



BOX CULVERT DETAIL							
DAL-MAC DEVELOPMENT CORPORATION							
MAYES & BROCKETTE, INC.				CONSULTING ENGINEERS			
CITY OF ADDISON, TEXAS							
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.	
M.G.	C.Z.	4/17/78	H: 1"=40' V: 1"=5'				

6/15/78 ADJUSTED CHANNEL LINING Q.P.E.P.
 REVISIONS.
 6/25/78 REVISED BEARINGS.
 6/25/78 " RIPRAP AT TPL EASEMENT.