



Q<sub>100</sub> for Grade to Drain Ditch  
 Q<sub>100</sub> = 381.75 cfs  
 S = 0.0050  
 n = 0.035  
 d = 4.5' avg. depth  
 V = 5.75 fps  
 C = 556.75 cfs

8'x5' Box Culv.  
 Q<sub>100</sub> = 381.75 cfs  
 S = 0.0050  
 V<sub>p</sub> = 10.4 fps  
 C = 469.75 cfs  
 Partial Flow

27" RCP  
 Q<sub>100</sub> = 31.26 cfs  
 S = 0.0102  
 V = 7.9 fps  
 hv = 0.97

18" RCP  
 Q<sub>100</sub> = 7.40 cfs  
 S = 0.0050  
 V = 4.2 fps  
 hv = 0.27

21" RCP  
 Q<sub>100</sub> = 14.80 cfs  
 S = 0.0087  
 V = 6.1 fps  
 hv = 0.58

**BENCHMARK NO. 1**  
 R.R. SPIKE SET IN POWER POLE AT SOUTH SIDE OF I.H. 30 SERVICE ROAD, 180' EAST OF ROCKWALL CLASSIC CARS & BODY SHOP, ACROSS FROM I.H. 30 ENTRANCE RAMP.  
 ELEV. 546.80

**BENCHMARK NO. 2**  
 R.R. SPIKE SET IN TELE. POLE ON NORTH R.O.W. OF UNION PACIFIC RAILROAD, 50' EAST OF S.W. CHAINLINK FENCE CORNER OF LEON TUTTLE BALLFIELD COMPLEX  
 ELEV. 571.24

**STORM SEWER PROFILES**  
**INDUSTRIAL BOULEVARD**  
 FROM EXIST. EDGE OF PVMT. TO U.P. R.R.

**CITY OF ROCKWALL**  
 "THE NEW HORIZON"

REVISION NO.	REMARKS	DATE

DESIGNED: B.W.H.	SCALE: 1" = 20' HOR. 1" = 5' VERT.
DRAWN: B.W.H.	APPROVED: <i>[Signature]</i>
JOB NO:	DATE: 10/89 SHEET NO: 12 OF 19

