



DETENTION POND NO. 1

Elevation (ft msl)	Detention Storage (cu. ft)	Discharge (cfs)
481.5	0	0.00
481.8	8772	5.13
482.1	17790	14.50
482.5	30231	28.38
483.00	46517	37.88
483.50	63720	45.43
484.00	81849	51.90
484.50	100772	57.64
485.00	120530	62.86
485.50	141195	67.68
486.00	162768	72.18
486.50	185348	75.48
487.00	208972	78.60
487.50	234192	81.50
488.00	260129	84.20
488.50	283680	86.70
489.00	316486	89.00
489.50	376743	91.00

Pond No. 1:
 Allowed Release Rate = 70.26 cfs (occurs at Elev 485.79 ft msl)
 Required Detention Storage = 142,863 cu. ft.
 Storage Provided at 70.26 cfs = 153,564 cu. ft. (= 10,701 cu. ft. extra)

Wye Inlet:
 Inlet Control
 Openings = 4
 Opening height = 8.5 inches = 0.7083 ft
 Opening width = 2.6 feet
 Opening Area = 1.842 sq. ft.
 High water elevation = 485.79 ft
 Elevation of center of opening = 481.86 ft
 H = 3.93 ft

Discharge allowed per opening = 70.26 / 4 = 17.57 cfs
 Discharge = $CA(2gH)^{1/2}$
 = $(0.6)(1.842)(2g)(3.93)^{1/2} = 17.57$ cfs

BENCH MARK
 SQUARE CUT IN CONCRETE AT BASE OF CONCRETE WALL AT S W CORNER OF SOUTH APPROACH TO BRIDGE OVER SQUABLE CREEK ON HWY. 205
 ELEV. 472.41

BENCH MARK
 60D NAIL IN 34" PECAN TREE (TREE NO. 2314)
 PAV. STA. 1+83, 138' RT. AUDOBON LANE
 ELEV. 480.88

BENCH MARK
 60D NAIL IN 36" PECAN TREE (TREE NO. 2302)
 PAV. STA. 8+30, 71' RT. MEMORIAL DRIVE
 ELEV. 466.79

BENCH MARK
 60D NAIL IN 18" PECAN TREE (TREE NO. 2114)
 PAV. STA. 10+97 63.5' RT. AUDOBON LANE
 ELEV. 501.54

As-built

When used to reproduce the sheets shown on this plan, the user assumes the responsibility for the accuracy of the information shown. The engineer's responsibility is limited to the information shown on this plan and does not extend to the construction or quality of construction as no field inspection was performed.

[Signature] 4/10/02
 WILKELMANN & ASSOCIATES, INC. DATE

[Signature]
 5/01

HAROLD L. EVANS CONSULTING ENGINEER P.O. BOX 28355 2331 CUS THOMASSON ROAD, SUITE 102 DALLAS, TEXAS 75228. (214) 328-8133		PROPOSED DETENTION POND		SHEET NO. 13
QUAIL RUN VALLEY NO. 1 CITY OF ROCKWALL		JOB NO. 0020		21
REVISION DESCRIPTION 0020DEF1	DATE 1/18/01	SCALE 1" = 20'	DESIGN H.L.E.	DRAWN

