

*: NOTE 2
RATIONAL METHOD:

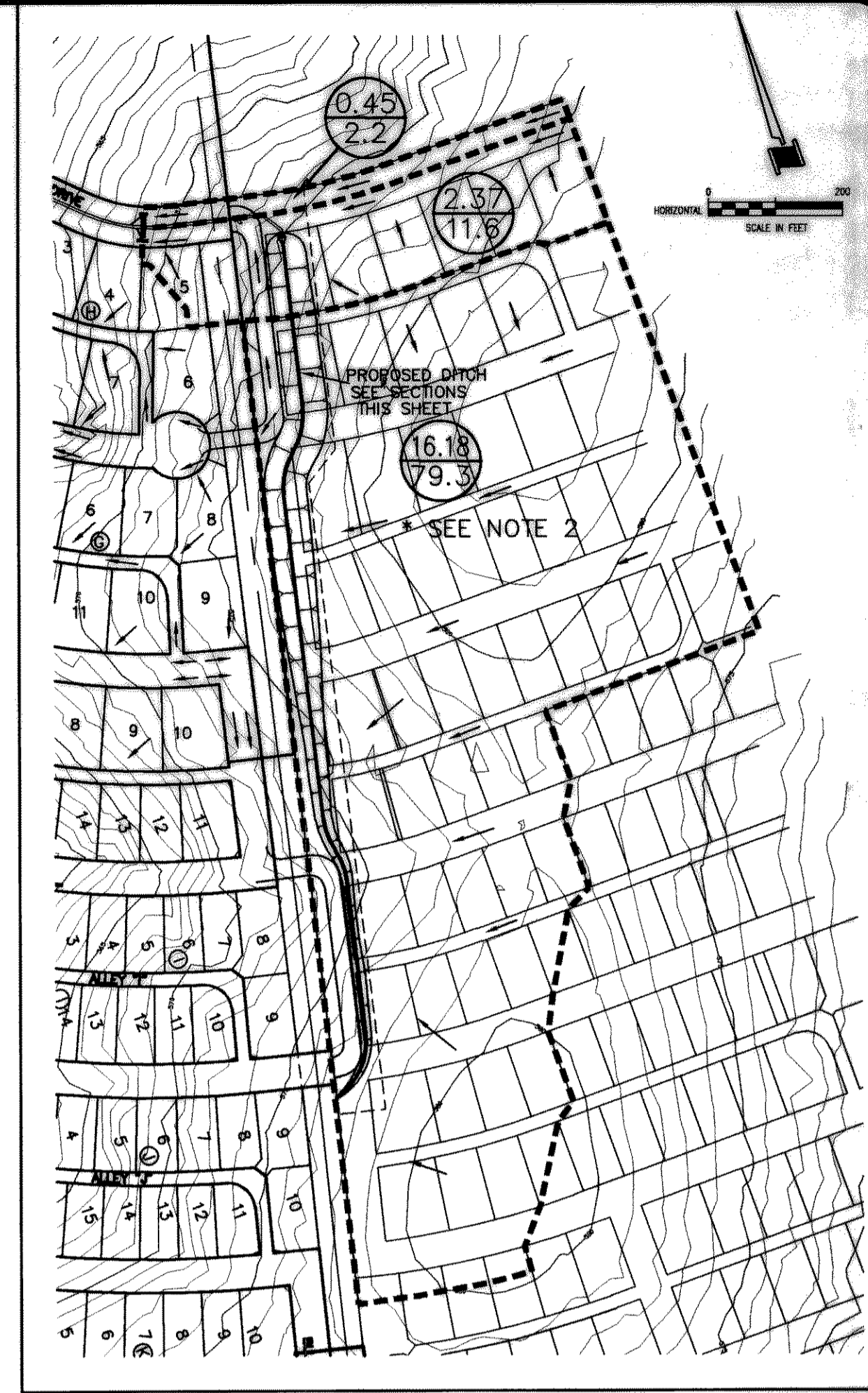
Q = CIA
 WHERE: FUTURE DEVELOPMENT
 Q = DISCHARGE IN cfs
 C = RUN-OFF COEFFICIENT = 0.5
 I = RAINFALL INTENSITY IN in/hr = 9.8
 A = AREA IN ACRES
 Q100 = (0.5)(9.8)A = 4.9A

*: NOTE 1
RATIONAL METHOD:

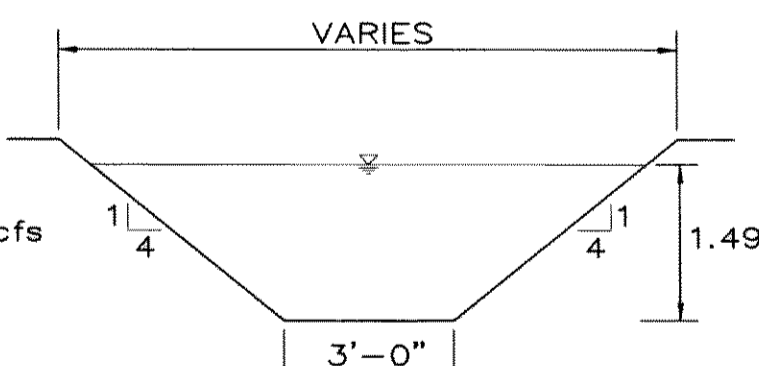
Q = CIA
 WHERE: OFF-SITE (UNDEVELOPED AREA)
 Q = DISCHARGE IN cfs
 C = RUN-OFF COEFFICIENT = 0.35
 I = RAINFALL INTENSITY IN in/hr = 9.8
 A = AREA IN ACRES
 Q100 = (0.35)(9.8)A = 3.43A

RATIONAL METHOD:

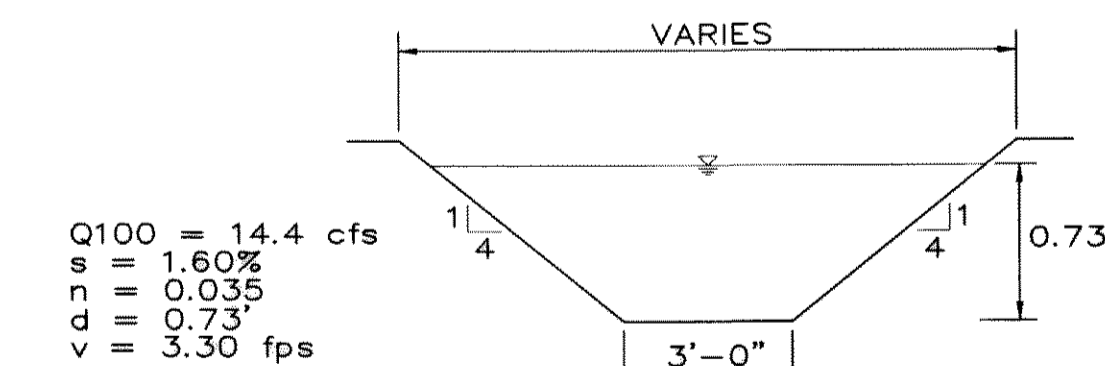
Q = CIA
 WHERE: ON-SITE
 Q = DISCHARGE IN cfs
 C = RUN-OFF COEFFICIENT = 0.5
 I = RAINFALL INTENSITY IN in/hr = 9.8
 A = AREA IN ACRES
 Q100 = (0.5)(9.8)A = 4.9A



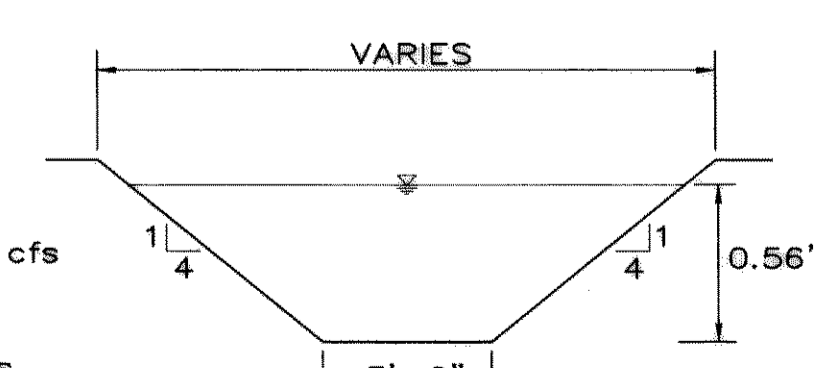
FUTURE DRAINAGE AREAS
1"=200'



DITCH SECTION A-A
NTS



DITCH SECTION B-B
NTS



DITCH SECTION C-C
NTS

Q100 = 36.4 cfs
 s = 1.60%
 n = 0.035
 d = 1.49'
 v = 2.74 fps

Q100 = 14.4 cfs
 s = 1.60%
 n = 0.035
 d = 0.73'
 v = 3.30 fps

Q100 = 7.2 cfs
 s = 1.20%
 n = 0.035
 d = 0.56'
 v = 2.46 fps

CAUTION!
 EXISTING GAS LINE IN THIS AREA.
 CONTRACTOR TO CALL 1-800-DIG-TESS (344-8377)
 AT LEAST 72 HOURS PRIOR TO CONSTRUCTION
 TO VERIFY LOCATION & ELEVATION.

CITY OF ROCKWALL, TEXAS
 HICKORY RIDGE - PHASE THREE
 JOB #99066

NO.	LOCATION	DESIGN STORM FREQ. (MOS.)	TIME OF CONC. (MIN.)	AREA RUNOFF Q = CIA			BY-PASS FROM UPSTREAM INLET (C.F.S.)	TOTAL GUTTER OR INVERT FLOW (C.F.S.)	STREET OR ALLEY CAPACITY (C.F.S.)	GUTTER OR INVERT SLOPE (%)	CROWN OR INVERT SIZE	SELECTED INLET LENGTH (FEET)	INLET TYPE	INTERCEPTED FLOW BY INLET (C.F.S.)	BY-PASS TO DOWNSTREAM INLET (C.F.S.)	
				INTENSITY (IN./HR.)	RUNOFF COEFF.	AREA (AC.)										"Q" (C.F.S.)
1	STA 0+44 BENT RIDGE DRIVE	100	10	9.80	0.50	0.44	2.2	0.0	8.6	10.1	3.00	6' CROWN	1-15'	STD	2.9	2.2
2	STA 1+43 BENT RIDGE DRIVE	100	10	9.80	0.50	1.76	8.6	0.0	8.6	10.1	3.00	6' CROWN	1-15'	STD	8.6	0.0
3	STA 0+48 ALLEY G	100	10	9.80	0.50	2.06	10.1	0.0	10.1	12.0	2.60	5' INVERT	1-15'	STD	9.3	0.8
4	STA 0+53 LOST CREEK COURT	100	10	9.80	0.50	1.22	6.0	0.0	6.0	8.1	1.90	6' CROWN	1-15'	STD	10.1	6.0
5	STA 0+53 LOST CREEK COURT	100	10	9.80	0.50	1.44	7.1	0.0	7.1	8.1	1.90	6' CROWN	1-15'	STD	10.1	7.1
6	STA 0+48 ALLEY H	100	10	9.80	0.50	1.59	7.8	0.0	7.8	11.8	2.50	5' INVERT	1-15'	STD	9.4	7.8
7	STA 28+70 TRAILVIEW DRIVE	100	10	9.80	0.50	0.45	2.2	0.0	2.2	11.7	3.60	6' CROWN	1-10'	STD	5.9	2.2
8	STA 28+70 TRAILVIEW DRIVE	100	10	9.80	0.50	2.37	11.6	0.0	11.6	12.7	3.60	6' CROWN	1-15'	STD	9.9	1.7
9	STUR-O-UT FOR FUTURE	100	10	9.80	0.50	16.18	79.3	79.3	79.3	---	---	---	---	---	---	---
10	STA 2+85 FAIRCREEK DRIVE	100	10	9.80	0.50	1.19	5.8	0.0	5.8	---	---	---	---	---	---	---
11	STA 2+85 FAIRCREEK DRIVE	100	10	9.80	0.50	0.47	2.3	0.0	2.3	---	---	---	---	---	---	---

*: DESIGNED FOR FUTURE DEVELOPMENT

RECORD DRAWINGS August 19, 2002

NOTE: THE INTENT OF THE OWNER AND ENGINEER WAS TO CONSTRUCT THE IMPROVEMENTS ACCORDING TO THESE PLANS AS APPROVED BY THE CITY OF ROCKWALL. THE LINES AND GRADES WERE SET ON THE GROUND FOR CONSTRUCTION ACCORDING TO SAID PLANS. WE ARE NOT AWARE OF ANY CHANGES OR REVISIONS TO THESE PLANS DURING CONSTRUCTION EXCEPT AS NOTED ON THE PLANS.

- 1.15 / 5.6 — ACRES
- Q (C.F.S.) OR RUN-OFF
- 7 — INLET #
- DRAINAGE AREA DIVIDE
- FUTURE & OFFSITE DRAINAGE AREA DIVIDE

DRAINAGE AREA MAP
HICKORY RIDGE - PHASE THREE

CITY OF ROCKWALL
 ROCKWALL COUNTY, TEXAS

DOWDEY, ANDERSON & ASSOCIATES, INC.
 5225 VILLAGE CREEK DR., STE. 200 (972) 931-0694 PLANO, TEXAS

DESIGN	DRAWN	CHECKED	DATE	SCALE	JOB	SHEET
JDS	RR	DD	MAR 2001	1"=100'	99066	1

THESE CONSTRUCTION PLANS WERE PREPARED UNDER THE RESPONSIBLE SUPERVISION OF DAN M. DOWDEY REGISTERED PROFESSIONAL ENGINEER No. 21433

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY DAN M. DOWDEY P.E.#21433



BENCHMARK: SQUARE CUT ON TOP OF HEADWALL AT THE MOST NORTHERLY CORNER OF BRIDGE, NORTHEASTERLY SIDE OF FM 205. 1680± NORTHWEST OF CL OF MIMS ROAD. ELEV = 529.11

BENCHMARK: CITY OF ROCKWALL, TEXAS CONTROL MONUMENT #929. TOP OF HEADWALL IN NORTHWEST CORNER OF BRIDGE OVER SQUABBLE CREEK, SOUTHWESTERLY SIDE OF FM 205. ELEV = 524.55

NO.	DATE	BY	REVISION