

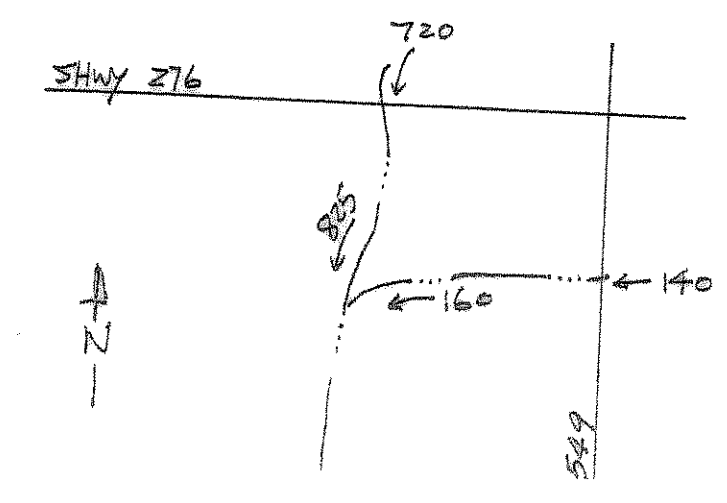
INLET DESIGN CALCULATIONS			PROJECT NAME		LOFLAND FARMS, PHASE 5-B													BY		N.K.	
			LINE NAME		N/A													DATE		8/8/03	
No.	Inlet Location	Design Storm Frequency (yrs.)	AREA RUNOFF Q = CIA					Carry-Over From Upstream Inlet (c.f.s.)	Total Gutter Flow (c.f.s.)	Gutter Capacity (c.f.s.)	Gutter Slope (ft./100ft.)	Crown Type	SELECTED INLET			Carry-Over To Downstream Inlet (c.f.s.)					
			Time of Conc. (min.)	Intensity I (in./hr.)	Runoff Coeff. "C"	Area (ac.)	"Q" (c.f.s.)						Length "L" (Feet)	Inlet Capacity (c.f.s.)	Type						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17					
1A	STA. 10+66.14 AVERY DRIVE (14.50' RT)	100	10	9.8	0.50	1.00	4.90	0	4.90	-	SAG	6" PARABOLIC	5	10.70	C.I.	0					
1B	STA. 10+66.14 AVERY DRIVE (14.50' LT)	100	10	9.8	0.50	1.62	7.94	0.96	8.90	-	SAG	6" PARABOLIC	5	10.70	C.I.	0					
2A	STA. 12+82.00 AVERY DRIVE (14.5' LT.)	100	10	9.8	0.50	1.43	7.01	0	7.01	12.50	1.06	6" PARABOLIC	10	6.90	C.I.	0.11					
2B	STA. 6+89.23 ALLEY "10" (6.50' RT.)	100	10	9.8	0.50	0.19	0.93	0	0.93	-	SAG	6" PARABOLIC	5	10.70	C.I.	0					
2C	STA. 6+65.54 ALLEY "10" (24.28' LT.)	100	10	9.8	0.50	1.17	5.73	0	5.73	-	SAG	-	3-GRATE INLET	6.30	-	0					
3A	STA. 7+31.26 AVERY DRIVE (14.5' RT.)	100	10	9.8	0.50	1.19	5.83	0	5.83	16.20	1.78	6" PARABOLIC	10	6.60	C.I.	0					
3B	STA. 7+17.88 AVERY DRIVE (14.5 LT.)	100	10	9.8	0.50	1.52	7.45	0	7.45	16.20	1.78	6" PARABOLIC	10	6.60	C.I.	0.85					
4A	STA. 29+73.31 GLEANER DRIVE (14.5' LT.)	100	10	9.8	0.50	0.82	4.02	0	4.02	9.41	0.60	6" PARABOLIC	5	3.10	C.I.	0.92					
4B	STA. 28+35.74 GLEANER DRIVE (14.5 LT.)	100	10	9.8	0.50	0.80	3.92	1.53	5.45	9.41	0.60	6" PARABOLIC	10	7.50	C.I.	0					
4C	STA. 2+10.43 ALLIS CHALMERS COURT (14.5' LT)	100	10	9.8	0.50	1.17	5.73	0	5.73	19.95	2.70	6" PARABOLIC	10	6.10	C.I.	0					
4D	STA. 2+41.49 ALLIS CHALMERS COURT (14.5' RT)	100	10	9.8	0.50	1.37	6.71	0	6.71	19.95	2.70	6" PARABOLIC	10	6.10	C.I.	0.61					
5A	STA. 1+86.62 ALLEY "8" (6.5' RT)	100	10	9.8	0.50	1.75	8.58	0	8.58	9.33	1.57	5" INVERT	15	9.20	C.I.	0					
6A	STA. 2+60.00 TRACTOR TRAIL (40.0' LT)	100	10	9.8	0.50	1.29	6.32	0	6.32	-	SAG	6" PARABOLIC	5	10.70	C.I.	0					
7A	STA. 5+40.21 HAYMAKER DRIVE (39.96' LT)	100	10	9.8	0.50	1.78	8.72	0	8.72	-	SAG	6" PARABOLIC	5	10.70	C.I.	0					
7B	STA. 18+97.11 NEW HOLLAND DRIVE (14.5' RT.)	100	10	9.8	0.50	0.39	1.91	0	1.91	12.38	1.04	6" PARABOLIC	5	2.90	C.I.	0					
7C	STA. 18+97.11 NEW HOLLAND DRIVE (14.5' LT.)	100	10	9.8	0.50	1.06	5.19	0	5.19	12.38	1.04	6" PARABOLIC	10	7.00	C.I.	0					
7D	STA. 12+85.54 ALLEY "10" (6.0' RT.)	100	10	9.8	0.50	0.36	1.76	0	1.76	12.55	2.84	5" INVERT	5	2.30	C.I.	0					
8A	STA. 25+02.91 DEUTZ COURT (3.29' LT)	100	10	9.8	0.50	1.99	9.75	0	9.75	-	SAG	6" PARABOLIC	5	10.70	C.I.	0					
8B	STA. 7+31.81 ALLEY "13" (6.5' RT)	100	10	9.8	0.50	0.50	2.45	0	2.45	6.58	0.78	5" INVERT	5	2.60	C.I.	0					
8C	STA. 21+57.11 NEW HOLLAND DRIVE (14.5' LT.)	100	10	9.8	0.50	1.04	5.10	0	5.10	12.38	1.04	6" PARABOLIC	10	7.00	C.I.	0					
9A	STA. 1+65.29 ALLEY "9" (6.5' RT.)	100	10	9.8	0.50	0.68	3.33	0	3.33	10.19	1.87	5" INVERT	10	5.50	C.I.	0					
10A	-	100	10	9.8	0.50	0.67	3.28	0	3.28	-	SAG	-	2-GRATE INLET	4.30	-	-					
11A	-	100	10	9.8	0.50	0.46	2.25	0	2.25	-	-	-	TO CULVERT "1"	-	-	-					

- 100-YR DESIGN FREQUENCY SHALL NOT EXCEED A DEPTH OF 1 1/2" OVER TOP OF CURB IN STREET.
- 100-YR DESIGN FREQUENCY SHALL NOT EXCEED THE CAPACITY OF ALLEY PAVEMENT.
- PONDING DEPTH OF GRATE INLET AT LOW POINT IS 0.50'

Winkelmann & Associates, Inc. SUBJECT: Hydrology Calculation SHEET NO. OF _____
 CONSULTING CIVIL ENGINEERS & SURVEYORS DATE _____ CHECK _____ DATE _____ JOB NO. _____
 (972) 490-7550 FAX (972) 490-7559

Area No.	Area (ft ²)	A (ac.)	Land Use	C	I ₁₀₀ *	Q ₁₀₀
1	3872,924	88.89	LI	0.9	9.00	720
2	557,565	12.80	C	0.9	9.00	105
3A	145,013	3.30	SF	0.5	9.00	20
3B	1,418,034	32.60	SF	0.5	9.00	140
4	2,442,253	56.10	SF	0.5	9.00	250
5A	297,961	6.80	SF	0.5	9.00	30
5B	1,618,591	37.20	SF	0.5	9.00	170
6	912,308	20.90	SF	0.5	9.00	100
7	286,275	6.60	SF	0.5	9.00	30

* USING 15 min as Time Concentration.



THESE CONSTRUCTION PLANS WERE PREPARED UNDER THE RESPONSIBLE SUPERVISION OF MD. NAIM UDDIN KHAN, REGISTERED PROFESSIONAL ENGINEER NO. 87776

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MD. NAIM UDDIN KHAN, # 87776

W.H. BAIRD SURVEY, ABSTRACT NO. 25
 CITY OF ROCKWALL, TEXAS
 D.R. HORTON
 4306 MILLER ROAD, SUITE-A
 ROWLETT, TEXAS 75088

DRAINAGE CALCULATIONS
 LOFLAND FARMS, PHASE 5-B

Scale: 1"=100' Date: 6-30-04
 Designed By: RB
 Drawn By: MS
 Checked By: NK
 File: 320043BDAM.DWG
 Project No.: 32004.01

ASSAULT
 Winkelmann & Associates, Inc. hereby states that this plan, to the best of our knowledge is "As Built" modifications from the originally approved construction documents have been made as per information provided by the contractor. Winkelmann & Associates, Inc. does not certify as to the correctness or quality of construction as no field inspection was performed.
 W. Winkelmann 6/20/05

BENCHMARK: ELEV. = 600.69
 CITY OF ROCKWALL R-19
 BRASS MONUMENT AT THE N/W CORNER OF
 SILVERVIEW & DIAMOND WAY, 500' ± SOUTH OF
 S.H. 276.
 BENCHMARK: ELEV. = 583.56
 R.R. SPIKE SET IN THE CENTERLINE OF S.H. 276
 3600± WEST OF F.M. 549

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 28

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