

Notes



8 - RFI #40	RAH	CMG	2020.05.13
7 - RFI #79 - FC 20 - REV	RAH	CMG	2020.03.13
6 - RFI #116 AND #117	RAH	CMG	2020.01.13
5 - RFI #20 AND #21	RAH	CMG	2019.07.23
4 - RFI #16	RAH	CMG	2019.07.12
3 - CITY COMMENTS	RAH	CMG	2019.04.30
2 - ASI #1 - CITY COMMENTS	RAH	CMG	2019.04.02

Revision By Appd YYYY.MM.DD

100%CD - For Bidding and Construction RAH CMG 2019.03.01

Issued By Appd YYYY.MM.DD

Permit-Seal



The seal appearing on this document was authorized by Mike Glenn, P.E. 35059, on May 13, 2020.

Client/Project

Rockwall ISD

Elementary School #15

2911 Greenway Drive
Rockwall, TX 75087

Title

EXISTING DRAINAGE AREA MAP

Project No.

214000654

Scale AS SHOWN

Revision Drawing No.

C04.08

INLET CALCULATIONS

Inlet #	Location	Design Storm	Time of Conc.	Intensity	Runoff Coeff.	Area (Acres)	Q (cfs)	Carry-Over from Upstream (cfs)	Gutter Flow (cfs)	Gutter Capacity (cfs)	Gutter Slope	Selected Inlet	Carry-Over to Downstream (cfs)	Inlet Capacity (cfs)
1	Wales/Knox	100	10	9.8	0.50	1.49	7.3	0.0	7.3	15.0	Low PI	0.0	7.3	
2	Wales	2+44.50	100	10	9.8	0.50	1.29	6.3	0.0	6.3	12.3	Low PI	0.0	6.3
3	Mountcastle	6+24.10	100	10	9.8	0.50	1.87	8.2	0.0	8.2	17.7	Low PI	0.0	8.2
4	Mountcastle	8+24.10	100	10	9.8	0.50	2.59	12.7	0.0	12.7	27.0	Low PI	0.0	12.7
5	Mountcastle	18+21.45	100	10	9.8	0.50	1.45	7.1	0.0	7.1	16.5	1.65% 6" ppi	0.0	7.1
6	Mountcastle	18+36.60	100	10	9.8	0.50	1.33	7.0	0.0	7.0	21.7	2.36% 6" ppi	0.0	7.0
7	Mountcastle	18+37.44	100	10	9.8	0.50	1.41	6.9	0.0	6.9	19.3	2.09% 6" ppi	0.0	6.9
8	Mountcastle	18+38.02	100	10	9.8	0.70	1.37	9.4	0.0	9.4	21.7	2.07% 6" ppi	0.0	2.9
9	Greenway	18+15.00	100	10	9.8	0.50	1.08	5.3	3.0	8.3	N/A	Low PI	15.0	0.0
10	Greenway	18+47.73	100	10	9.8	0.10	2.14	14.7	0.0	14.7	N/A	Wye	0.0	20.5
11	Greenway	21+00.00	100	10	9.8	0.50	1.19	5.8	0.0	5.8	10.6	1.63% 6" ppi	0.0	5.8
12	Greenway	20+30.00	100	10	9.8	0.50	0.32	1.6	0.0	1.6	10.6	0.88% 6" ppi	0.0	6.3
13	Stone Creek	4+82.55	100	10	9.8	0.50	0.83	4.6	0.0	4.6	27.0	1.69% 1/4" x 1/8"	0.0	4.6
14	Featherstone	36+47.87	100	10	9.8	0.50	0.85	3.7	0.0	3.7	21.9	2.10% 6" ppi	0.0	6.2
15	Stone Creek	4+82.55	100	10	9.8	0.50	0.47	4.2	0.0	4.2	27.0	1.69% 1/4" x 1/8"	0.0	5.6

RUNOFF COMPUTATIONS

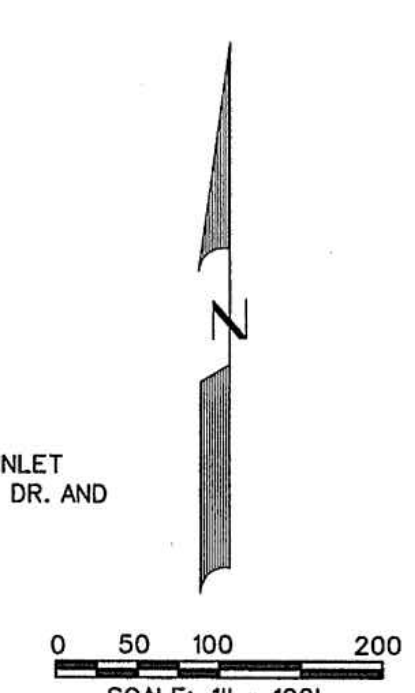
#	Area (Ac)	Area (Sq Ft)	Runoff Coefficient	Tc (min)	Qc (cfs)	Q(100) (cfs)
1	0.4913	1.49	0.50	10	9.8	7.3
2	0.8144	1.29	0.50	10	9.8	6.3
3	0.7281	1.67	0.50	10	9.8	8.2
4	1.12693	2.59	0.50	10	9.8	12.7
5	0.2619	1.45	0.50	10	9.8	7.1
6	0.3707	0.85	0.50	10	9.8	4.2
6A	20770	0.48	0.70	10	9.8	3.3
9	0.1388	1.41	0.50	10	9.8	6.9
8	0.5950	1.37	0.70	10	9.8	9.4
9	0.4785	1.08	0.50	10	9.8	5.3
10	0.3188	2.14	0.70	10	9.8	14.7
11	0.1869	1.19	0.50	10	9.8	5.8
12	0.1919	0.32	0.50	10	9.8	1.6
12A	0.9094	2.18	0.50	10	9.8	10.7
13	0.2297	0.83	0.50	10	9.8	4.6
14	0.2815	0.65	0.50	10	9.8	3.7
15	0.2663	0.47	0.50	10	9.8	4.2
16	0.1340	2.10	0.50	10	9.8	10.3
17	0.2329	0.53	0.50	10	9.8	2.6
18	0.20702	4.75	0.50	15	6.3	13.8
19	0.7620	1.75	0.50	10	9.8	6.6
20	0.9802	4.56	0.50	10	9.8	22.4
21	0.27869	6.38	0.50	10	9.8	31.3
22	0.6207	1.98	0.50	10	9.8	9.7
23	0.3913	0.50	0.50	10	9.8	4.4
24	0.11651	21.02	0.50	10	9.8	100.0
25	0.65099	3.79	0.35	10	9.8	16.1
26	0.20245	4.65	0.50	10	9.8	22.8
27	1.43285	3.29	0.50	10	9.8	16.1
28	0.8428	2.03	0.50	10	9.8	10.0

LEGEND

- PROP. STORM SEWER
- PROP. CURB INLETS
- PROP. CONC. HEADWALL
- EXIST. STORM SEWER
- DRAINAGE AREA DIVIDE
- FLOW ARROW
- DRAINAGE AREA NO.

BENCHMARK:

CITY OF ROCKWALL SURVEY MONUMENT ON AN INLET AT THE NORTHWEST CORNER OF FEATHERSTONE DR. AND HARVARD DR.
ELEV. = 525.31



CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBP E FIRM #5951

**DEVELOPMENT PLANS FOR
STONE CREEK
PHASE VI
ROCKWALL, TEXAS**

**DRAINAGE AREA MAP
SHEET 2 OF 2**



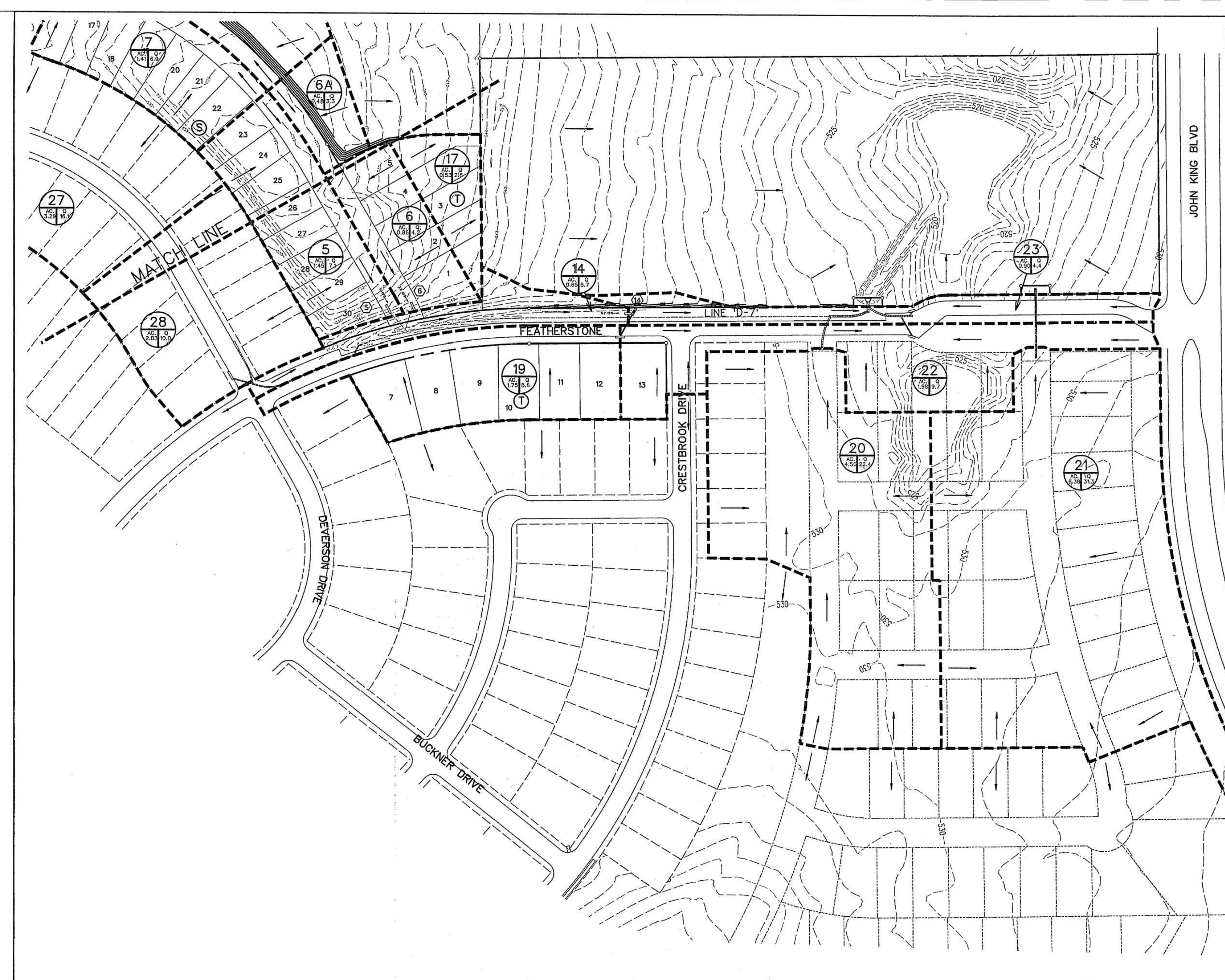
The seal appearing on this document was authorized by Brandon Davidson P.E. 87682, on September 10, 2014

AS-BUILT SEPTEMBER 2015
INFORMATION PROVIDED BY CONTRACTORS (NOT FIELD VERIFIED)

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
13068	MAY 2014	SCALE: 1"=100'	5 of 26

RECORD DRAWING
THIS IS TO CERTIFY THAT CHANGES AND CORRECTIONS HAVE BEEN MADE TO CONFORM TO THE CONTRACTOR'S RECORD OF THIS PROJECT.

DATE: 06/01/2020
SIGN: *Charlynn Armijo*
Glenn Engineering Corporation



STORM SEWER CALCULATIONS

Upstream Station	Downstream Station	Distance (ft)	AREA NO.	Total Area (Acres)	Picked Up (Acres)	C	CA	CA	Accumulated CA (Mdn)	Tc (Years)	Design Storm (in/hr)	I	Q (CFS)	S (ft/ft)	Pipe Size (in)	Velocity (fps)	Head Loss (ft)	Flow Time (Min)	Time at DS (Min)	Δ Velocity Head (ft)	Hydraulic Grade Upstream	Hydraulic Grade Downstream	Proposed Grade
Line D1																							
2+36.27	2+13.67	22.60	12A	2.18	2.18	0.50	1.09	1.09	10.00	100	9.80	10.7	0.0022	24	3.4	0.18	0.11	10.11	0.18		528.21	530.00	530.00
2+13.67	1+73.67	48.00	12	0.32	0.32	0.50	0.16	1.25	10.00	100	9.80	12.2	0.0029	24	3.9	0.24	0.17	10.17	0.05		528.16	528.11	530.48
1+73.67	1+56.59	17.17	11	1.19	1.19	0.50	0.60	1.84	10.00	100	9.80	18.1	0.0064	24	5.8	0.51	0.05	10.05	0.28		527.09	527.71	530.48
Line D2																							
1+56.59	0+58.72	81.19	2	1.29	1.29	0.50	0.64	0.64	10.00	100	9.80	6.3	0.0008	24	2.6	0.06	0.67	10.67	0.06		533.43	533.37	541.03
0+58.72	0+00.00	58.72	1	1.49	1.49	0.50	0.75	1.39	10.00	100	9.80	13.6	0.0036	24	4.3	0.29	0.23	10.23	0.23		533.30	533.07	540.53
Line D3																							
2+10.43	1+76.19	34.24	13	0.53	0.53	0.50	0.47	0.47	10.00	100	9.80	4.6	0.0004	24	1.5	0.03	0.39	10.39	0.03		547.89	547.86	550.99
1+76.19	1+66.52	9.67	Broad	0.09	0.09	0.50	0.00	0.47	10.00	100	9.80	4.6	0.0004	24	1.5	0.03	0.11	10.11	0.09		547.85	547.85	550.60
1+66.52	0+00.00	166.52	15	0.47	0.47	0.50	0.43	0.90	10.00	100	9.80	8.5	0.0015	24	2.8	0.12	0.59	10.59	0.09		547.84	547.75	550.99
Line D4																							
0+00.00	8+81.68	141.80	26J7	7.84	7.84	0.50	3.97	3.97	10.00	100	9.80	28.9	0.0034	36	5.3	0.47	0.43	10.43	0.47		538.25	537.77	544.76
8+81.68	2+23.12	68.56	D6	2.78	2.72	0.50	1.36	5.33	10.00	100	9.80	52.2	0.0061	36	7.4	0.83	1.49	11.49	0.38		537.29	536.92	542.50
2+23.12	1+34.81	88.31	9,10	3.22	3.71	0.63	2.35	7.68	10.00	100	9.80	75.2	0.0056	42	7.8	0.95	0.19	10.19	0.10		532.88	532.77	536.81
Line D5																							
1+34.81	1+37.64	41.92	4	2.59	2.59	0.50	1.29	1.29	10.00	100	9.80	12.7	0.0031	24	4.0	0.23	0.17	10.17	0.25	2.12	537.77	537.52	540.69
1+37.64	0+04.00	133.64	3	1.67	1.67	0.50	0.83	2.13	10.00	100	9.80	20.8	0.0063	24	6.6	0.68	0.39	10.39	0.43	1.78	537.51	537.08	540.69
Line D6																							
0+04.00	0+36.55	46.50	7	1.41	1.39	0.50	0.70	0.70	10.00	100	9.80	6.8	0.0021	18	3.0	0.23	0.20	10.20	0.23		538.09	537.86	544.06
0+36.55	0+00.00	36.55	8	1.37	1.33	0.50	0.67	1.36	10.00	100	9.80	13.3	0.0035	24	4.2	0.28	0.14	10.14	0.05		537.66	537.61	543.52
Line D7																							
8+79.17	7+97.99	81.18	28	2.03	2.03	0.50	1.02	1.02	10.00	100	9.80	10.0	0.0090	18	5.6	0.49	0.24	10.24	0.49		535.12	534.62	542.25
7+97.99	4+12.32	385.67	5,6,6A	2.78	2.78	0.53	1.49	2.50	10.00	100	9.80	24.											