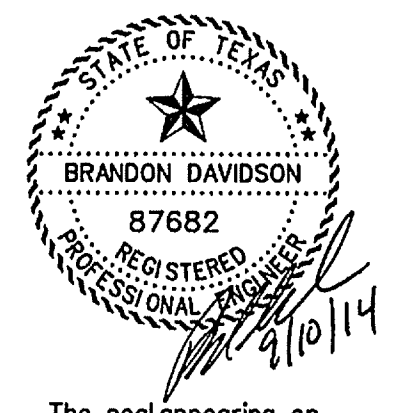


ROCKWALL MIDDLE SCHOOL #A
(WILLIAMS MIDDLE SCHOOL)

LEGEND

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

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



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

CORWIN ENGINEERING, INC.			
200 W. BELMONT, SUITE E ALLEN, TEXAS 75013 (972)396-1200 TBPE FIRM #5951			
DEVELOPMENT PLANS FOR STONE CREEK PHASE VI ROCKWALL, TEXAS			
DETENTION POND DRAINAGE AREA MAP			
DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER	DATE	SCALE	
13068	MAY 2014	HOR: 1"=100'	6 OF 26

REVISED DRAINAGE AREAS TO POND
RUNOFF CALCULATIONS - DEVELOPED CONDITIONS

Area ID	Area (sq)	Area (acres)	Proposed Use	Runoff Coefficient	CA	Tc (min)	Rainfall Intensity (in/hr)	Q (cfs)	Comment
A	941951	21.82	Commercial	0.90	19.45	10	9.8	190.6	To Detention Pond
B	601715	13.81	Single-Family	0.50	6.91	10	9.8	67.7	To Detention Pond
C	207002	4.75	Park	0.35	1.88	20	8.3	13.8	To Detention Pond
D	165026	3.79	Park	0.35	1.33	20	8.3	11.0	Bypass
E	103946	2.39	Single-Family	0.50	1.19	10	9.8	11.7	Bypass
F	65768	1.51	Single-Family	0.50	0.76	10	9.8	7.4	Bypass
G	149475	3.43	School	0.70	2.40	10	9.8	23.5	To Detention Pond
H	255440	5.86	Single-Family	0.50	2.93	10	9.8	28.7	To Detention Pond
Area to Detention Pond				49.48	CA to Detention Pond	33.36			
				Weighted C=		0.67			

100 Year Downstream Culvert Capacity=	149.0 cfs	Area D
Bypass flow=	11.0 cfs	Area D
	11.7 cfs	Area E
	7.4 cfs	Area F
100-Year Pond Release Rate	118.9 cfs	
50 Year Downstream Culvert Capacity=	134.6 cfs	Area D
Bypass flow=	9.9 cfs	Area D
	10.7 cfs	Area E
	6.8 cfs	Area F
50-Year Pond Release Rate	107.1 cfs	
25 Year Downstream Culvert Capacity=	118.4 cfs	Area D
Bypass flow=	8.8 cfs	Area D
	9.9 cfs	Area E
	6.3 cfs	Area F
25-Year Pond Release Rate	93.5 cfs	
10 Year Downstream Culvert Capacity=	105.9 cfs	Area D
Bypass flow=	7.8 cfs	Area D
	8.5 cfs	Area E
	6.4 cfs	Area F
10-Year Pond Release Rate	84.2 cfs	

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