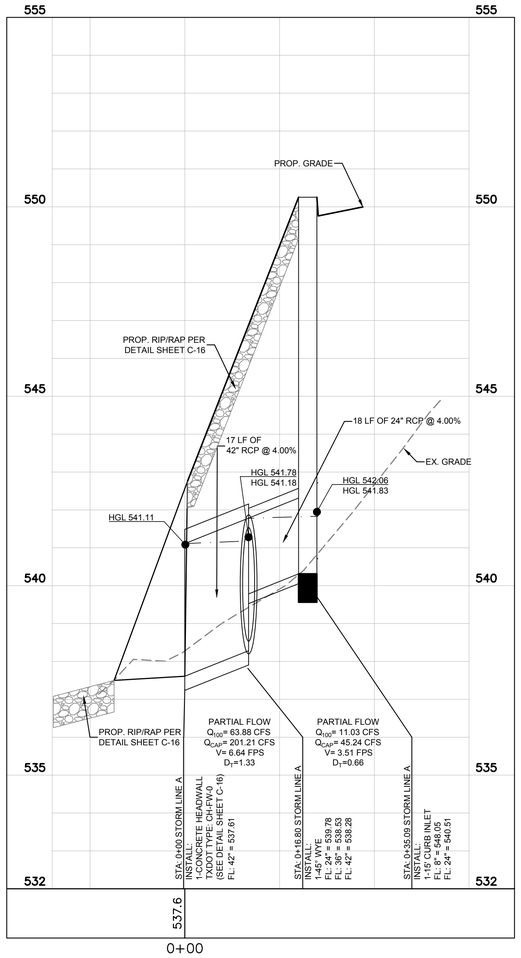
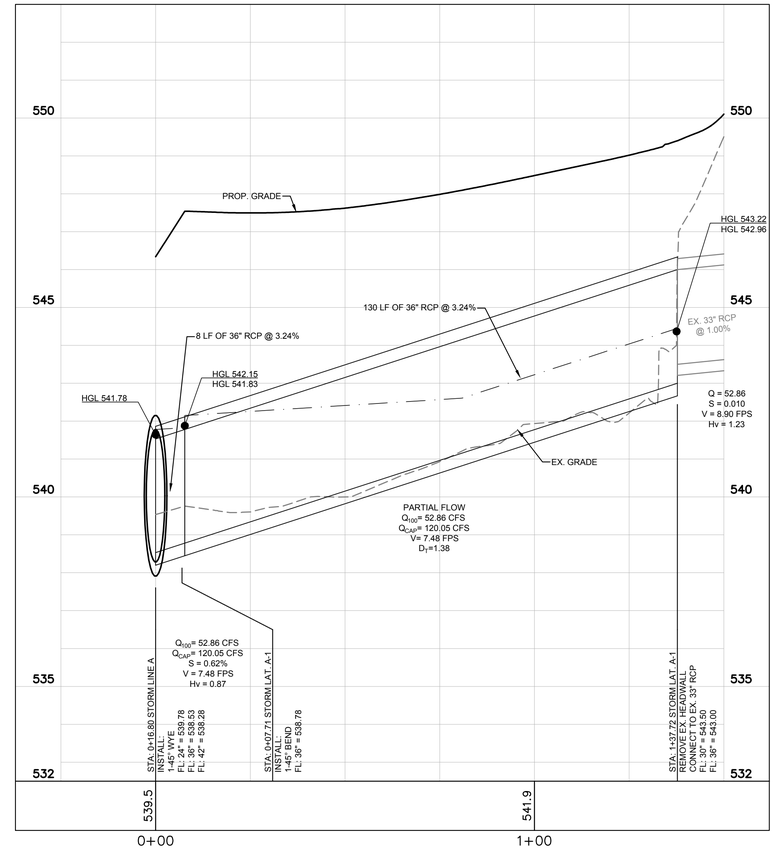


STORM LINE A

HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=2'



STORM LAT. A-1

HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=2'

LINE.	STA.		INCREMENTAL AREA	CUMULATIVE AREA	RUNOFF COEFFICIENT	INCREMENTAL CA	CUMULATIVE CA	INLET TIME	FLOW TIME IN PIPE	TIME OF CONCENTRATION	INTENSITY I_{100}	DIST	TOTAL FLOW Q_{100}	DIA.	SPAN	RISE	NUMBER	A	R	ROUGH-NESS n	PIPE SLOPE So	PIPE CAPACITY Q_{cap}	V_{design}	V_{full}	Q/Qfull	V/Vfull	d/D	Flow Depth	Vpartial	FRICTION SLOPE Sf	Hv	K_j	H_j (MIN 0.1)	HGL INCOMING PIPE	HGL OUTGOING PIPE	INVERT INCOMING PIPE	INVERT OUTGOING PIPE
													100 YR STORM DRAIN CALCULATIONS																							
			ACRES	ACRES						MIN	IN/HR	FT	CFS	IN	FT	FT		Sq FT				Qdesign/A	FPS					FT	FPS	FT/FT	Vdesign^2/2g		FT.	FT	FT	FT	FT
LINE A-1	0+00.00	HEADWALL								10.05																								541.11		537.61	
				1.25			1.13		0.02			16.80	63.88	42		3.5		9.62	0.875	0.013	4.00%	201.21	6.64	20.91	0.317	0.88	0.38	1.33	18.39	0.40%	0.68					
	0+16.80	45° WYE				0.00				10.03	9.80																					0.50	0.34	541.78	541.18	539.78	538.28
				1.25			1.13		0.03			18.29	11.03	24		2		3.14	0.500	0.013	4.00%	45.24	3.51	14.40	0.244	0.82	0.33	0.66	11.77	0.24%	0.19					
	0+35.09	CURB INLET	1.25		0.90	1.13		10.00		10.00	9.80																					1.25	0.24	542.06	541.83		540.51
LINE A-1	0+00.00	45° WYE								10.15			**																					541.78		538.53	
				4.37			3.93		0.02			7.71	52.86	36		3		7.07	0.750	0.013	3.24%	120.05	7.48	16.98	0.440	0.96	0.46	3.00	16.37	0.62%	0.87					
	0+07.71	45° BEND				0.00				10.13	9.80																					0.37	0.32	542.15	541.83	538.78	538.78
				4.37			3.93		0.13			130.01	52.86	36		3		7.07	0.750	0.013	3.24%	120.05	7.48	16.98	0.440	0.96	0.46	1.38	16.37	0.62%	0.87					
	1+37.72	EX. 33" RCP	4.37		0.90	3.93		10.00		10.00	9.80																					0.30	0.26	543.22	542.96		543.00

**TOTAL FLOWS FOR LAT. A-1 ARE FROM ASBUILT PLAN BY CITY OF ROCKWALL DATED 6-9-95

Curb Inlet Capacity for Recessed Curbs in Sump Condition

Per Figure 3.7 of City of Rockwall Standard Design and Construction Manual

INLET No.	INLET Location	Design Storm Freq. (years)	AREA RUNNOFF: Q=CIA Tc (min.)	Intensity i (in/hr)	Runoff Coef. "c"	Area "A" (acres)	Q (cfs)	Area ID	y_o	Min curb Inlet Length	Proposed Inlet Length	Inlet Capacity (cfs)
A	0+58.86	100	10	9.80	0.9	1.25	11.03	A-2 & OS-3	0.5	5.6'	15'	15.13

Curb Inlet Capacity for Recessed Curbs on Grade

Per Figure 3.5a of City of Rockwall Standard Design and Construction Manual

INLET No.	INLET Location	Design Storm Freq. (years)	AREA RUNNOFF: Q=CIA Tc (min.)	Intensity i (in/hr)	Runoff Coef. "c"	Area "A" (acres)	Q (cfs)	Area ID	Gutter Slope	Min curb Inlet Length	Ex. Curb Inlet Length	Inlet Capacity (cfs)
EX-1	OFF SITE	100	10	9.80	0.9	0.29	2.56	OS-4	7%	5.20	10'	2.6

Additional flow to existing 10' curb inlet will not have negative impact on existing storm line. 10' curb inlets have capacity for 5.40 cfs

This drawing has been revised to show those changes during the construction process reported by the contractor to ClayMoore Engineering, Inc. and considered to be significant. This drawing is not guaranteed to be "As Built" but is based on the information made available.

By: _____ Date: 11/16/2017

PLOTTED BY: JVALDEZ
PLOT DATE: 11/16/2017 1:51 PM
LOCATION: C:\ENGYTE\SHARED\PROJECTS\2016-029 CRESTVIEW ROCKWALL\CADD\SHEETS\C-10 STORM DRAIN PROFILE AND DRAINAGE CALCS.DWG
LAST SAVED: 11/16/2017 1:51 PM

TEXAS REGISTRATION #14199
CLAYMOORE ENGINEERING
1903 CENTRAL DR. SUITE #406
BEDFORD, TX 76021
PHONE: 817.281.0572
WWW.CLAYMOOREENG.COM

STATE OF TEXAS
CLAY CRISTY
109800
LICENSED
PROFESSIONAL ENGINEER
04/03/2017

CARENOW
LOT 1 & 2, BLOCK A
BRISCOE/HILCREST ADDITION
ROCKWALL, TX

No.	DATE	REVISION	BY

STORM DRAIN PROFILES

DESIGN: JEV
DRAWN: JEV
CHECKED: CLC
DATE: 04/03/2017

SHEET
C-12

File No. 2016-029