

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY CARLOS GUEVARA, P.E. NO. 00102 EXP. DATE: JULY 20, 2015

**DOUPHRAITE & ASSOCIATES, INC.**  
 ENGINEERING • PROJECT MANAGEMENT • SURVEYING  
 2235 RIDGE RD., # 200 ROCKWALL, TEXAS 75087  
 PHONE: (972)771-9004 FAX: (972)771-9005

**DRAINAGE AREA MAP**  
**OUR HOUSE**  
**803 N. GOLIAD**  
**CITY OF ROCKWALL**  
**ROCKWALL COUNTY, TEXAS**

10-13-15 REV. ACCESS  
 ESMT., EX. RAMP &  
 PARKING  
 REVISION

WLD.  
 CHECKED  
 GCW.  
 DRAWN

SCALE  
 1"=10' H  
 1"=5' V

JULY 20, 2015  
 DATE  
 15016 DRN 2  
 PROJECT

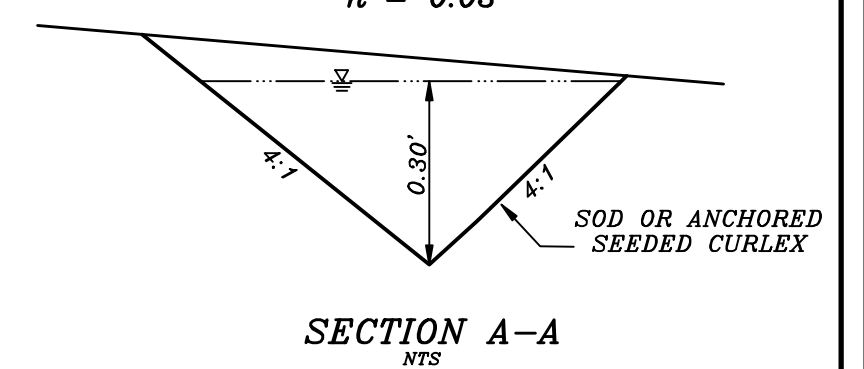
6/14

REVISED TO CONFORM TO CONSTRUCTION RECORDS.  
 DATE: 12-30-15

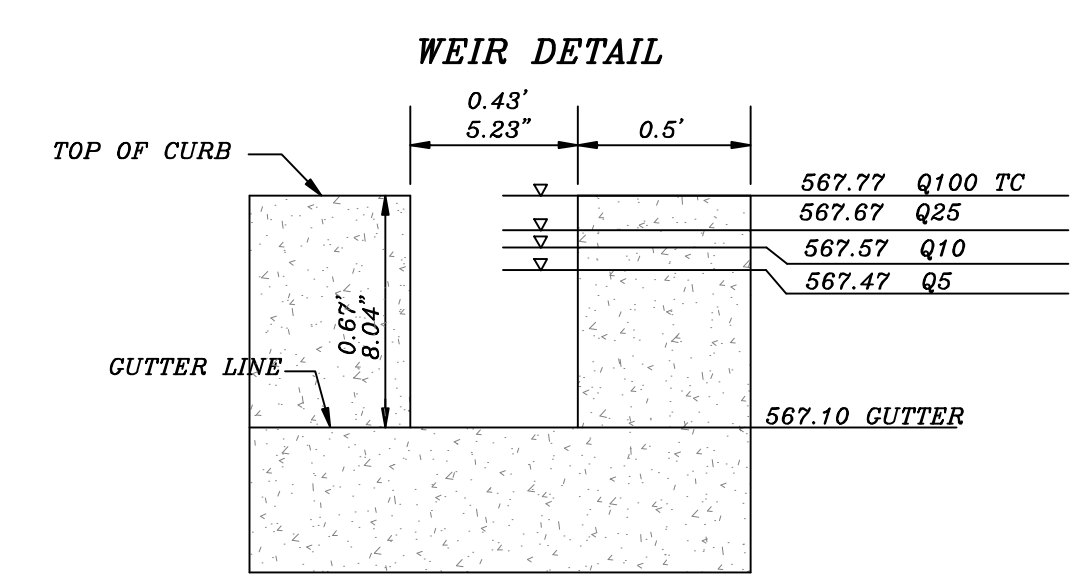
**LEGEND**

DA 1  
 0.07 AC. DRAINAGE AREA NO.  
 DRAINAGE AREA  
 FLOW ARROWS

Q = 0.69 cfs  
 S = .0194  
 V = 1.91 FPS  
 d = 0.30 FT  
 C = 0.69 CFS  
 n = 0.03



STORAGE VOLUME STAGE					
STORM	d	ELEVATION	VOLUME	Allowable	Actual
5 YR	0.455'	567.555	366.6	0.34	0.34
10 YR	0.52'	567.62	428.2	0.40	0.40
25 YR	0.57'	567.67	520.26	0.46	0.46
100 YR	0.67'	567.77	688.74	0.55	0.55



**WEIR CALCULATIONS**

Rectangular Suppressed Weir  
 $Q = 3.33 h^{1.5} (L - 2h)$   
 $Q = \text{Erist. Conditions Flowrate} = 0.64 \text{ cfs}$   
 $h = \text{Height of Weir} = 8.04 \text{ in.} = 0.67 \text{ ft.}$   
 $L = \text{Length of Weir}$   
 $0.64 = 3.33 (.67)^{1.5} (L - .2(.67))$   
 $L = 0.48 \text{ ft.} = 5.8 \text{ in.}$

**PRE-PAVING DRAINAGE TABLE**

DRAINAGE AREA NO.	ACRES	T.C. (MIN.)	C	I 100 YR.	Q 100 YR.	SUM Q 100 YR.	COMMENTS
1	0.01	10	0.5	9.8	0.05	0.05	TO 205
2	0.12	"	"	"	0.59	0.64	TO 205
3	0.01	"	"	"	0.05	0.69	TO 205

**POST-PAVING DRAINAGE TABLE**

DRAINAGE AREA NO.	ACRES	T.C. (MIN.)	C	I 100 YR.	Q 100 YR.	SUM Q 100 YR.	COMMENTS
1	0.01	10	0.9	9.8	0.09	0.09	TO 205-BYPS
2	0.12	"	0.9	"	1.06	1.15	TO DETNTN
3	0.01	"	0.9	"	0.09	1.24	TO 205

