

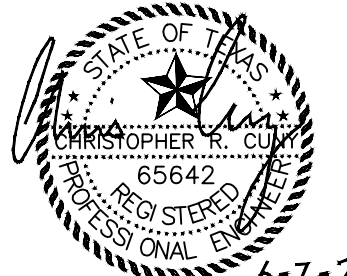
Revision	Date	Description

FONTANNA RANCH, LTD.  
6750 HILLCREST PLAZA DR., S. 325 • DALLAS, TX 75230 • 972-386-3333

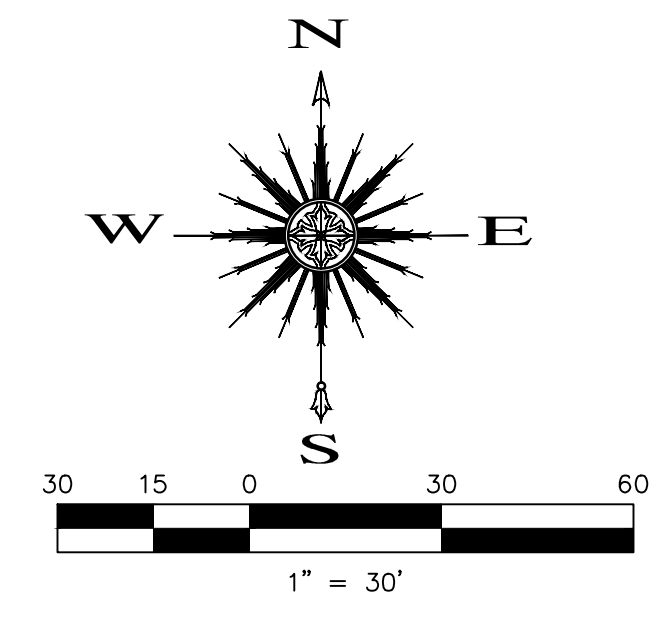
Fontanna Ranch Ph. 2

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**F.C. CUNY CORPORATION**  
#2 Horizon Court • Ste. 500 • Heath, Texas 75032  
Phone: 469-402-7700  
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Texas Registered Engineering Firm F-7449

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY CHRISTOPHER R. CUNY, P.E. 65642  
  
6-7-2017  
F.C. CUNY CORPORATION  
F-7449

Drawn By: FC CUNY	Checked By: FC CUNY
Date: 4-16	Project No.:
Sheet Title: <b>Detention Pond #2 Calculations</b>	
Scale: 1" = 30'	Sheet No.:
	<b>10B of 17</b>



**CAUTION EXISTING UTILITIES !!!**  
EXISTING UTILITIES AND UNDERGROUND FACILITIES INDICATED ON THESE PLANS HAVE BEEN LOCATED FROM REFERENCE INFORMATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY BOTH HORIZONTALLY AND VERTICALLY THE LOCATION OF ALL EXISTING UTILITIES AND UNDERGROUND FACILITIES PRIOR TO CONSTRUCTION. TO TAKE THE NECESSARY PRECAUTIONS IN ORDER TO PROTECT ALL FACILITIES ENCOUNTERED. THE CONTRACTOR SHALL PRESERVE AND PROTECT ALL EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION.

**BENCHMARK:**  
"X" ON TOP OF CURB WEST NOSE OF MEDIAN AT ENTRANCE TO FONTANNA RANCH WIMBERLEY LN. ELEV. 570.06

PLEASE SEE ATTACHED HYDROLOGY STUDIO REPORTS FOR FURTHER INFORMATION REGARDING POND #2 AND ITS OUTLET STRUCTURE.

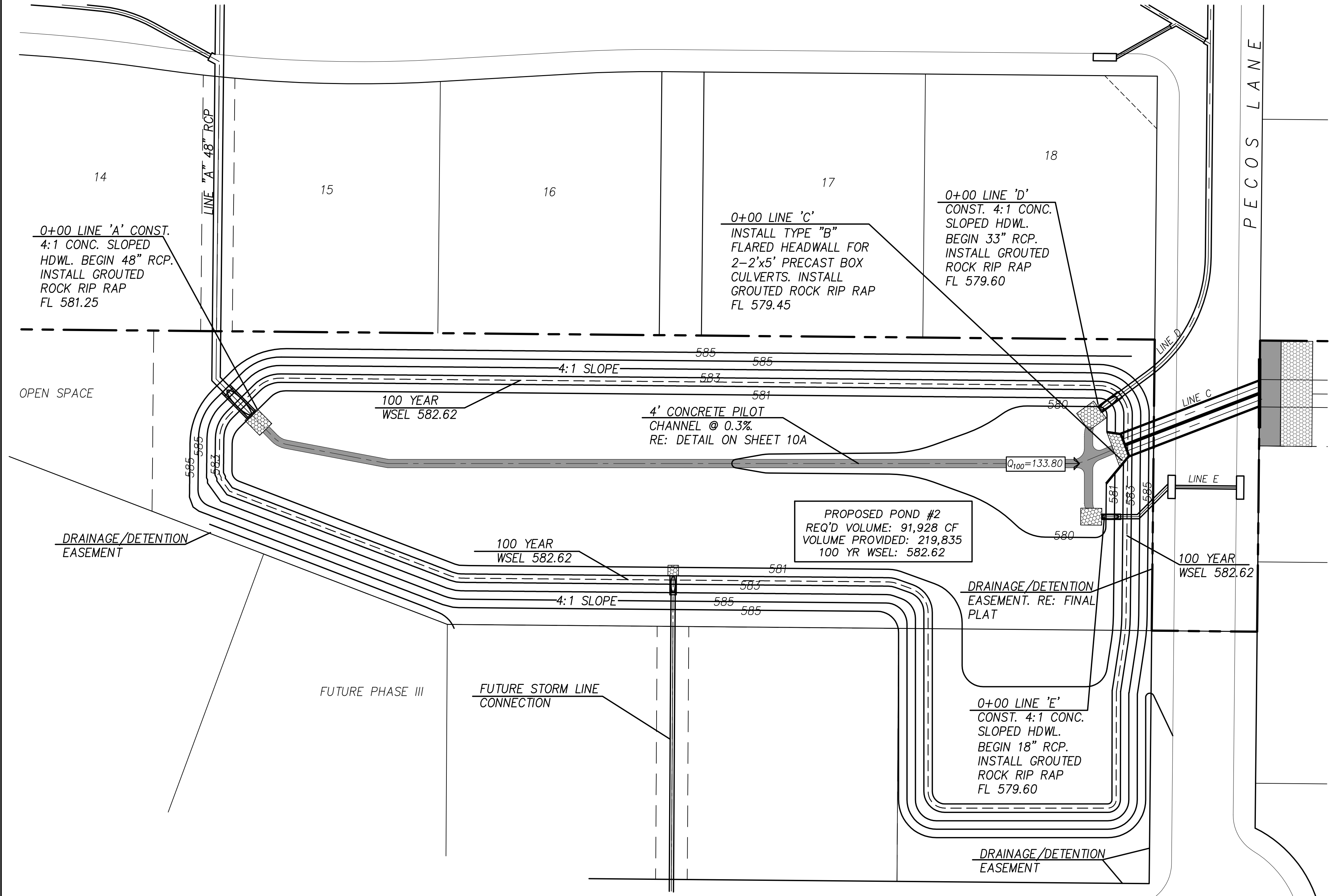
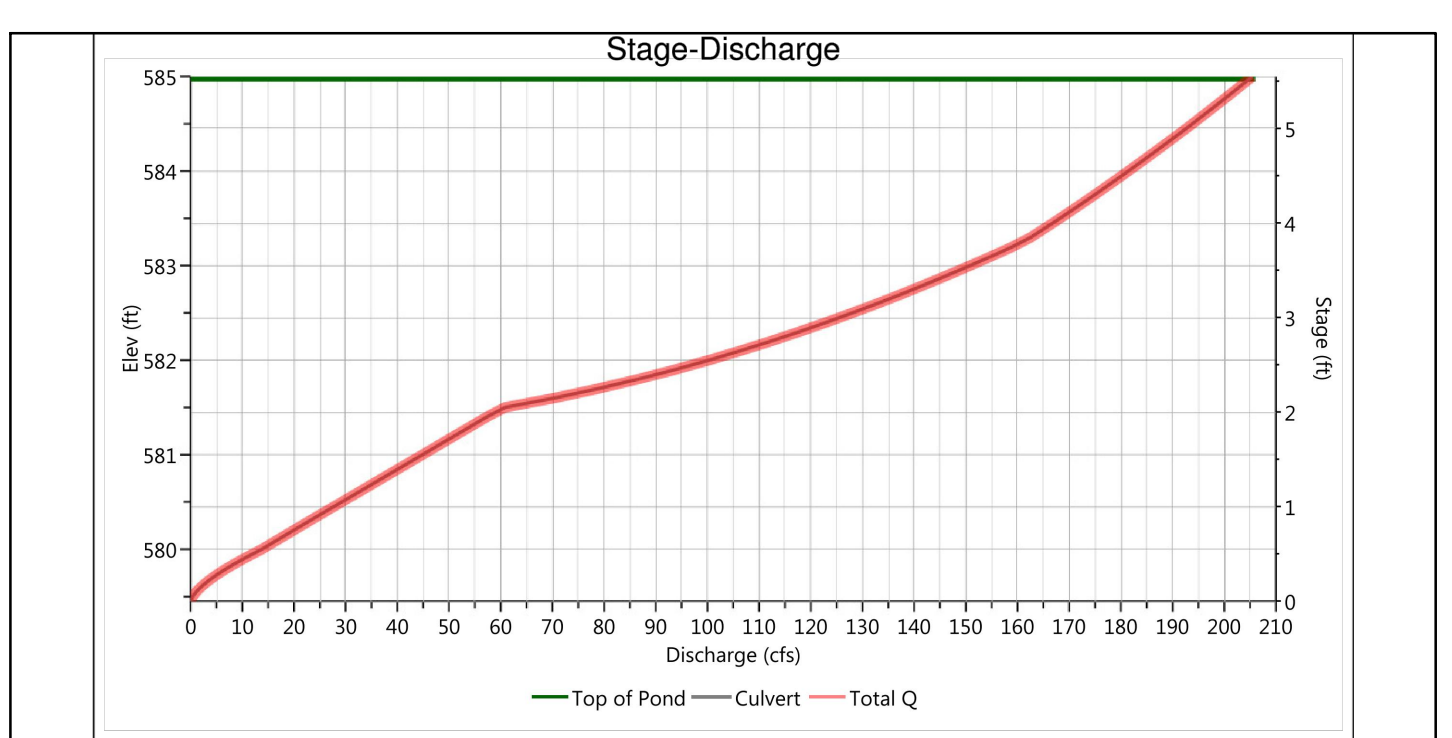
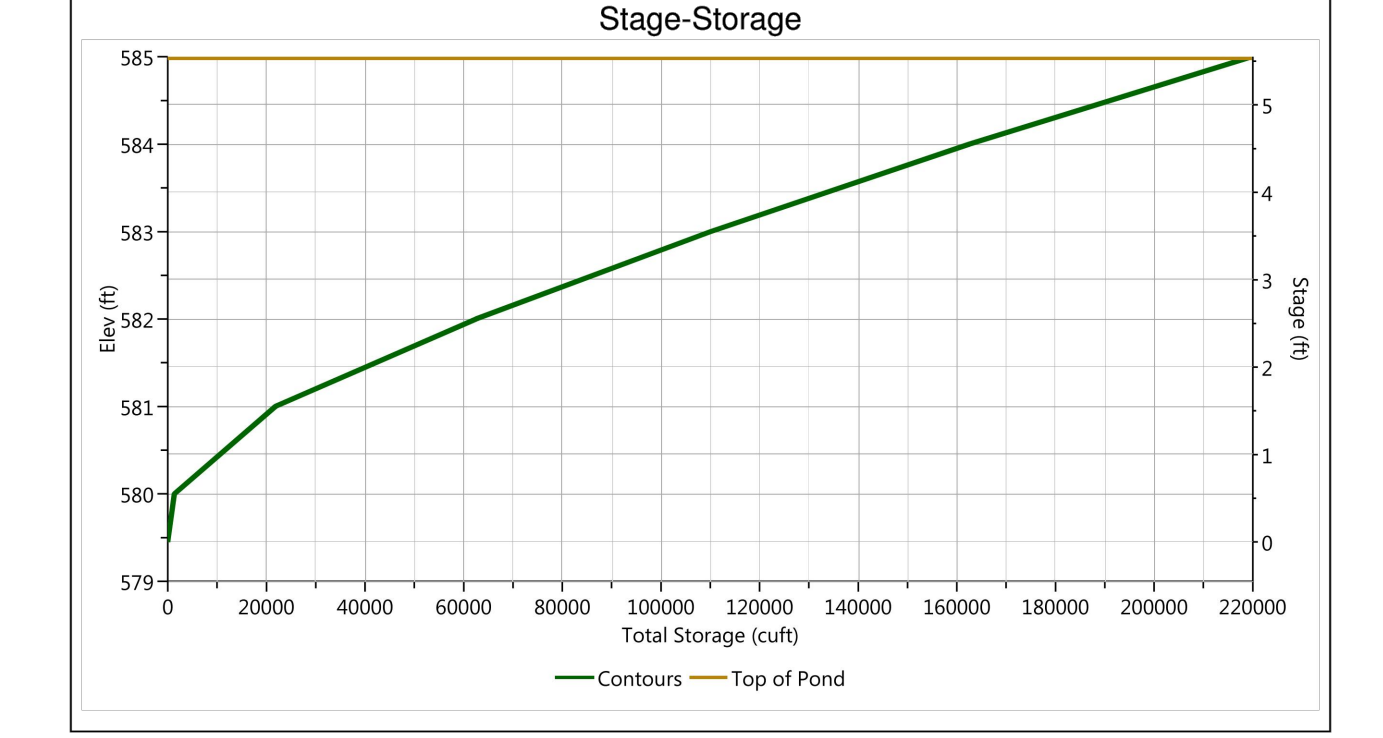
### Hydrograph by Return Period

Hyd. No.	Hydrograph Type	Hydrograph Name	Peak Outflow (cfs)							
			1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr
1	Rational	PREDEV 1				53.11	65.08	72.62	79.96	88.77
2	Mod Rational	POST DEV 1				54.55	66.91	73.66	80.27	88.04
3	Pond Route	POND 1				45.62	53.88	58.59	62.16	63.37
4	Rational	PREDEV 2				48.29	59.18	66.04	72.71	80.73
5	Mod Rational	POST DEV 2				54.12	68.54	74.41	81.36	88.38
6	Junction	PRE-JUNCTION				87.84	105.8	116.2	126.2	137.9
7	Junction	POST-JUNCTION 2				99.74	122.4	133.0	143.5	151.7
8	Pond Route	POND 2				87.39	104.7	114.6	123.7	133.8

— POND #2 ALLOWABLE RELEASE  
— POND #2 ACTUAL RELEASE

### Pond Report

User Defined Contours		Stage / Storage Table				
Description	Input	Stage (ft)	Elevation (ft)	Contour Area (sqft)	Incr. Storage (cuft)	Total Storage (cuft)
Bottom Elevation, ft	579.45	0.00	579.45	10	0.000	0.000
Voids (%)	100.00	0.55	580.00	4,876	1,344	1,344
Volume Calc	Ave End Area	1.55	581.00	38,078	20,476	21,820
		2.55	582.00	45,215	49,846	82,465
		3.55	583.00	49,973	47,594	110,059
		4.55	584.00	54,859	52,416	162,475
		5.55	585.00	59,860	57,360	219,835



POND #2 DRAINAGE AREAS			
Drainage Area No.	Total Area (Ac.)	Pre-Developed Q	Post Developed Q
POND #1 AREA	51.33	91.01	128.75
PH1-17	0.68	1.98	3.33
PH1-19	0.78	2.27	3.62
PH1-20	0.64	1.86	3.14
PH1-23	1.20	3.49	5.88
PH1-37	1.57	4.56	7.69
PH1-39	1.18	3.43	5.78
PH2-3	0.80	2.32	3.92
PH2-4	0.29	0.84	1.42
PH2-5	1.78	5.17	8.72
PH2-6	2.28	6.62	11.17
PH2-7	0.79	2.29	3.87
PH2-8	1.87	5.43	9.16
PH2-13	1.93	5.61	9.46
PH3-1	6.30	18.30	30.87
PH3-2	1.63	4.74	7.99
PH3-3	4.77	13.86	23.37
<b>TOTAL</b>	<b>59.82</b>	<b>173.78</b>	<b>268.35</b>

RECORD DRAWING