

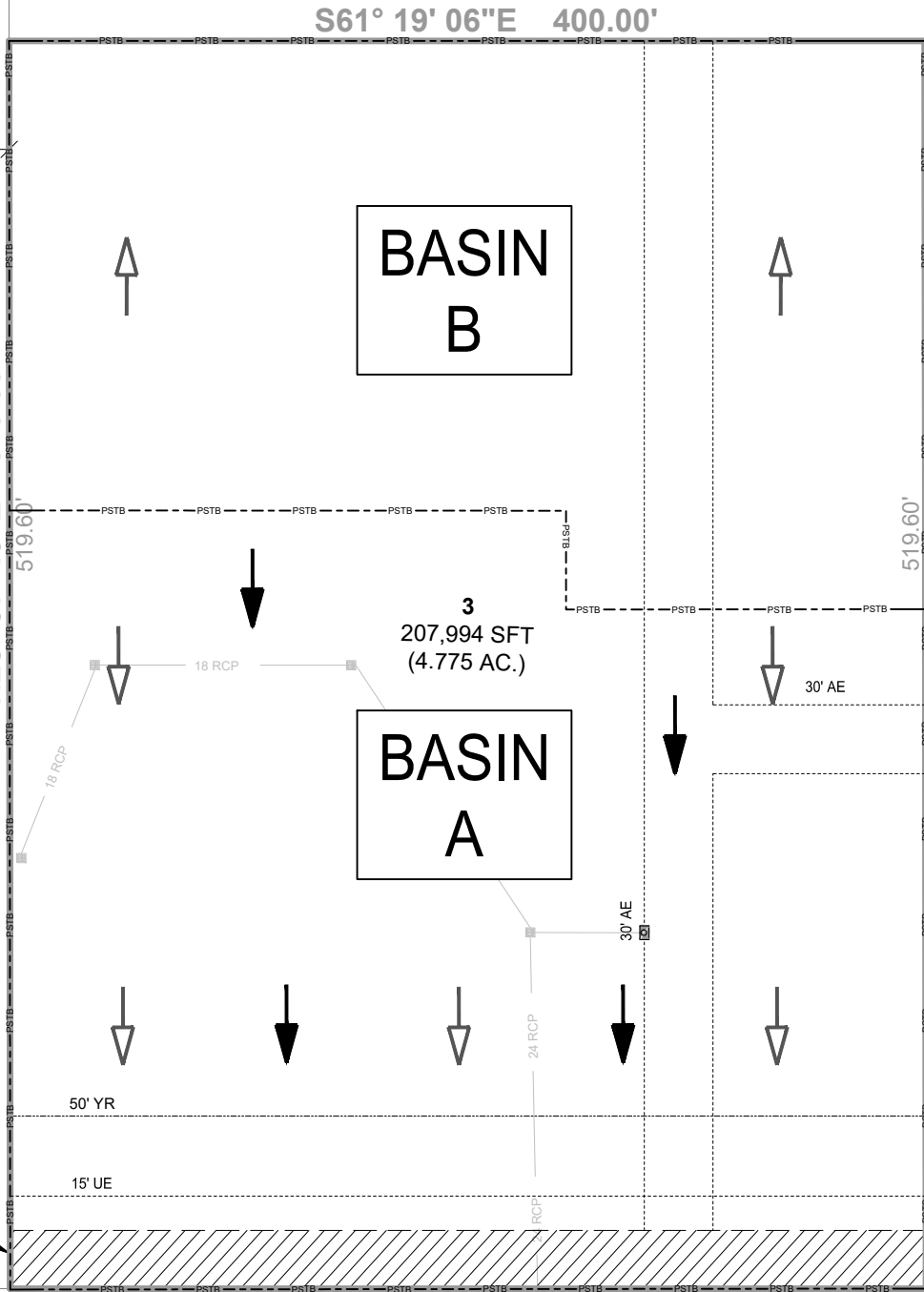
REMAINDER OF 38.94 ACRES OUT OF LOT 13 SECTION 21
 FLOUR BLUFF & ENCINAL FARM AND GARDENS TRACT
 VOLUME A, PAGES 41-43, M.R.N.C.T.
 (DOC. NO. 2013046270, O.P.R.N.C.T.)

0.59 ACRE 20.0' WIDTH
 PUBLIC ACCESS
 EASEMENT
 CITY OF CORPUS
 CHRISTI (DOC. NO.
 2019028902,
 O.P.R.N.C.T.)

1.35 ACRES
 OUT OF LOT 1M AND GARDENS TRACT
 VOLUME A, PAGES 41-43, M.R.N.C.T.
 FLOUR BLUFF & ENCINAL F.A.R.C.T.
 (DOC. NO. 2013003832, O.P.R.N.C.T.)

0.66 ACRES
 OUT OF LOT 14 SECTION 21
 FLOUR BLUFF & ENCINAL
 FARM AND GARDENS TRACT
 VOLUME A, PAGES 41-43,
 M.R.N.C.T.
 (DOC. NO. 2013041601,
 O.P.R.N.C.T.)

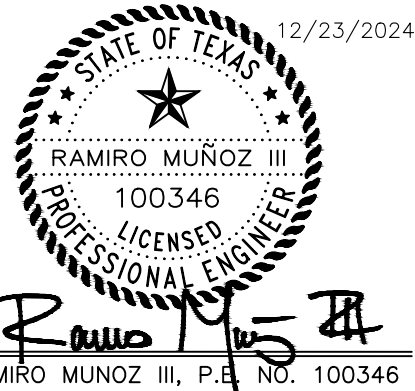
0.84 ACRES
 BUS STOP EASEMENT
 CORPUS CHRISTI REGIONAL
 TRANSPORTATION
 AUTHORITY (CC RTA)
 (DOC. NO. 2022048582, O.P.R.N.C.T.)



STORM WATER UTILITY
 STANDARD CURB INLET (TYP)

BILL WITT PARK
 126.97 ACRES
 OUT OF LOTS 18 THRU 22, 26 THRU 29, & 31 OF SECTION 21
 LOTS 5 THRU 7 OF SECTION 22
 FLOUR BLUFF & ENCINAL FARM AND GARDENS TRACT
 VOLUME A, PAGES 41-43, M.R.N.C.T.
 (QUIT CLAIM DEED - VOL. 1709, PGS. 95-107, D.R.N.C.T.)

STORM WATER UTILITY
 STANDARD JUNCTION BOX (TYP)



RAMIRO MUNOZ III, P.E. NO. 100346

BASIN CALCULATIONS BASIN ID: **A**

PROJECT NAME:	POLICE SUBSTATION - FAR SOUTH		BASIN INFORMATION	
PROJECT ID:	240012	CALCULATED BY:	RR	EXISTING BASIN SIZE
COUNTY:	NUECES	DATE:	6/3/2024	129,162.00 SQFT
				2.97 ACRES
				PROPOSED BASIN SIZE
				129,162.00 SQFT
				2.97 ACRES

RUNOFF COEFFICIENT (C)		COEFFICIENT (SLOPE BASED) *		EXISTING		PROPOSED	
USE AND RELATED INFORMATION *		<1%	1-3.5%	>3.5%	C	AREA	%
B. CULTIVATED FIELDS		0.30	0.60	0.70	0.60	129,162	100.0%
G. BUSINESS DISTRICTS		0.75	0.80	0.85			0.0%
*IN ACCORDANCE WITH THE CITY OF CORPUS CHRISTI ENGINEERING SERVICES INFRASTRUCTURE DESIGN MANUAL				Acres: 2.97		100.0%	100.0%
				Acres: 2.97		100.0%	100.0%
				Weighted C (C _{wp}):		0.60	0.80

HYDRAULICS		RATIONAL METHOD CALCULATIONS								
DESIGN YEAR: 5		INTENSITY - DURATION - FREQUENCY (IDF) COEFFICIENT **			DESIGN YEAR	EXISTING INTENSITY (in/hr)	EXISTING Q (CFS)	PROPOSED INTENSITY (in/hr)	PROPOSED Q (CFS)	DELTA Q (CFS)
TIME OF CONCENTRATION (TOC)		e (in)	b	d (mins)						
EXISTING TOC CALCULATIONS		0.8320	69.9997	13.9783	2-yr	3.01	5.35	4.25	10.09	4.74
PROPOSED TOC CALCULATIONS		0.7990	79.2371	12.9804	5-yr	3.93	6.98	5.53	13.12	6.14
USE	TIME	% OF AREA	USE	TIME	% OF AREA					
A - F T _{cp}	30.00	100.0%	A - F T _{cp}	30.00	0.0%					
G - H T _{cp}	15.00	0.0%	G - H T _{cp}	15.00	100.0%					
I T _{cp}	30.00	0.0%	I T _{cp}	30.00	0.0%					
AVG T _{cp}	30.00	100.0%	AVG T _{cp}	15.00	100.0%					
						100-yr	7.20	12.82	9.98	23.68

** BASED ON "NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION'S (NOAA) ATLAS 14 PRECIPITATION-FREQUENCY ATLAS OF THE UNITED STATES, VOLUME 11 VERSION 2.0: TEXAS" (PERCIA ET AL. 2018) FOR THE INDICATED COUNTY.

BASIN CALCULATIONS BASIN ID: **B**

PROJECT NAME:	POLICE SUBSTATION - FAR SOUTH		BASIN INFORMATION	
PROJECT ID:	240012	CALCULATED BY:	RR	EXISTING BASIN SIZE
COUNTY:	NUECES	DATE:	6/3/2024	88,625.00 SQFT
				2.03 ACRES
				PROPOSED BASIN SIZE
				88,625.00 SQFT
				2.03 ACRES

RUNOFF COEFFICIENT (C)		COEFFICIENT (SLOPE BASED) *		EXISTING		PROPOSED	
USE AND RELATED INFORMATION *		<1%	1-3.5%	>3.5%	C	AREA	%
B. CULTIVATED FIELDS		0.30	0.60	0.70	0.60	88,625	100.0%
*IN ACCORDANCE WITH THE CITY OF CORPUS CHRISTI ENGINEERING SERVICES INFRASTRUCTURE DESIGN MANUAL				Acres: 2.03		100.0%	100.0%
				Acres: 2.03		100.0%	100.0%
				Weighted C (C _{wp}):		0.60	0.60

HYDRAULICS		RATIONAL METHOD CALCULATIONS								
DESIGN YEAR: 5		INTENSITY - DURATION - FREQUENCY (IDF) COEFFICIENT **			DESIGN YEAR	EXISTING INTENSITY (in/hr)	EXISTING Q (CFS)	PROPOSED INTENSITY (in/hr)	PROPOSED Q (CFS)	DELTA Q (CFS)
TIME OF CONCENTRATION (TOC)		e (in)	b	d (mins)						
EXISTING TOC CALCULATIONS		0.8320	69.9997	13.9783	2-yr	3.01	3.67	3.01	3.67	0.00
PROPOSED TOC CALCULATIONS		0.7990	79.2371	12.9804	5-yr	3.93	4.79	3.93	4.79	0.00
USE	TIME	% OF AREA	USE	TIME	% OF AREA					
A - F T _{cp}	30.00	100.0%	A - F T _{cp}	30.00	100.0%					
G - H T _{cp}	15.00	0.0%	G - H T _{cp}	15.00	0.0%					
I T _{cp}	30.00	0.0%	I T _{cp}	30.00	0.0%					
AVG T _{cp}	30.00	100.0%	AVG T _{cp}	30.00	100.0%					
						100-yr	7.20	8.79	7.20	8.79

** BASED ON "NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION'S (NOAA) ATLAS 14 PRECIPITATION-FREQUENCY ATLAS OF THE UNITED STATES, VOLUME 11 VERSION 2.0: TEXAS" (PERCIA ET AL. 2018) FOR THE INDICATED COUNTY.

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 OWNER: DEL MAR COLLEGE DISTRICT
 BRANCH: LAND SURVEYING
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 OFFICE: 6557 S. STAPLES STREET, SUITE 125-1057, TIBBOLS FIRM F-12240, TIBBOLS FIRM F-12240, TIBBOLS FIRM F-12240
 PHONE: 817-248-1850
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 EMAIL: info@cartiansurveying.com
 LICENSE NO. 020294530, Corr. Land Surveying 03/27/2024

MUNOZ ENGINEERING
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 CORPUS CHRISTI, TX 78404
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 TIBBOLS FIRM F-12240
CIVIL | STRUCTURAL | MARINE | LAND DEVELOPMENT

ME
 MUNOZ ENGINEERING
 CIVIL | STRUCTURAL | MARINE | LAND DEVELOPMENT

STORM WATER QUALITY MANAGEMENT PLAN FOR THE FINAL PLAT OF
DEL MAR SOUTH CAMPUS
BLOCK 1, LOT 3
 6702 YORKTOWN BOULEVARD, CORPUS CHRISTI, NUECES COUNTY, TEXAS

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