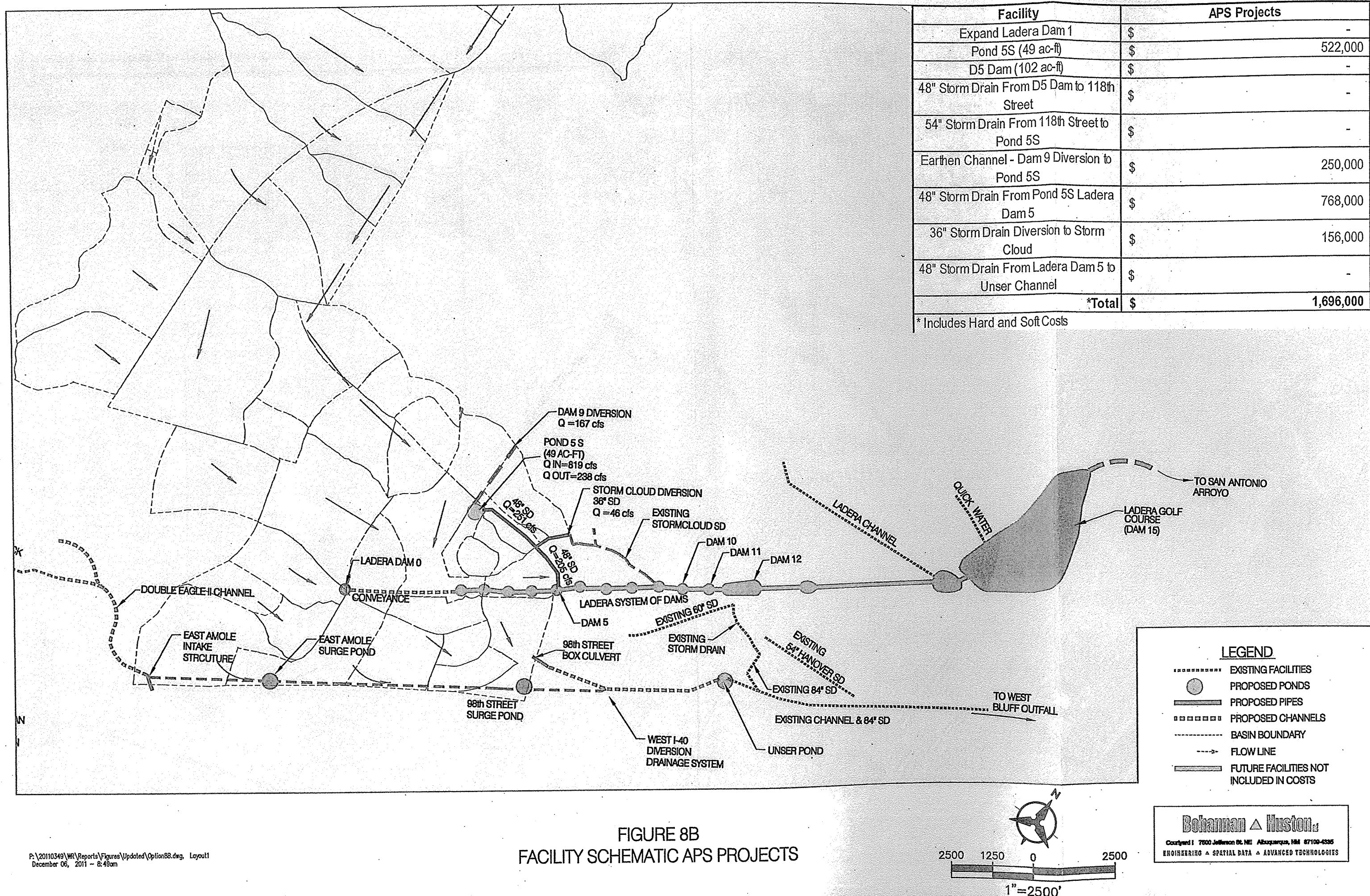
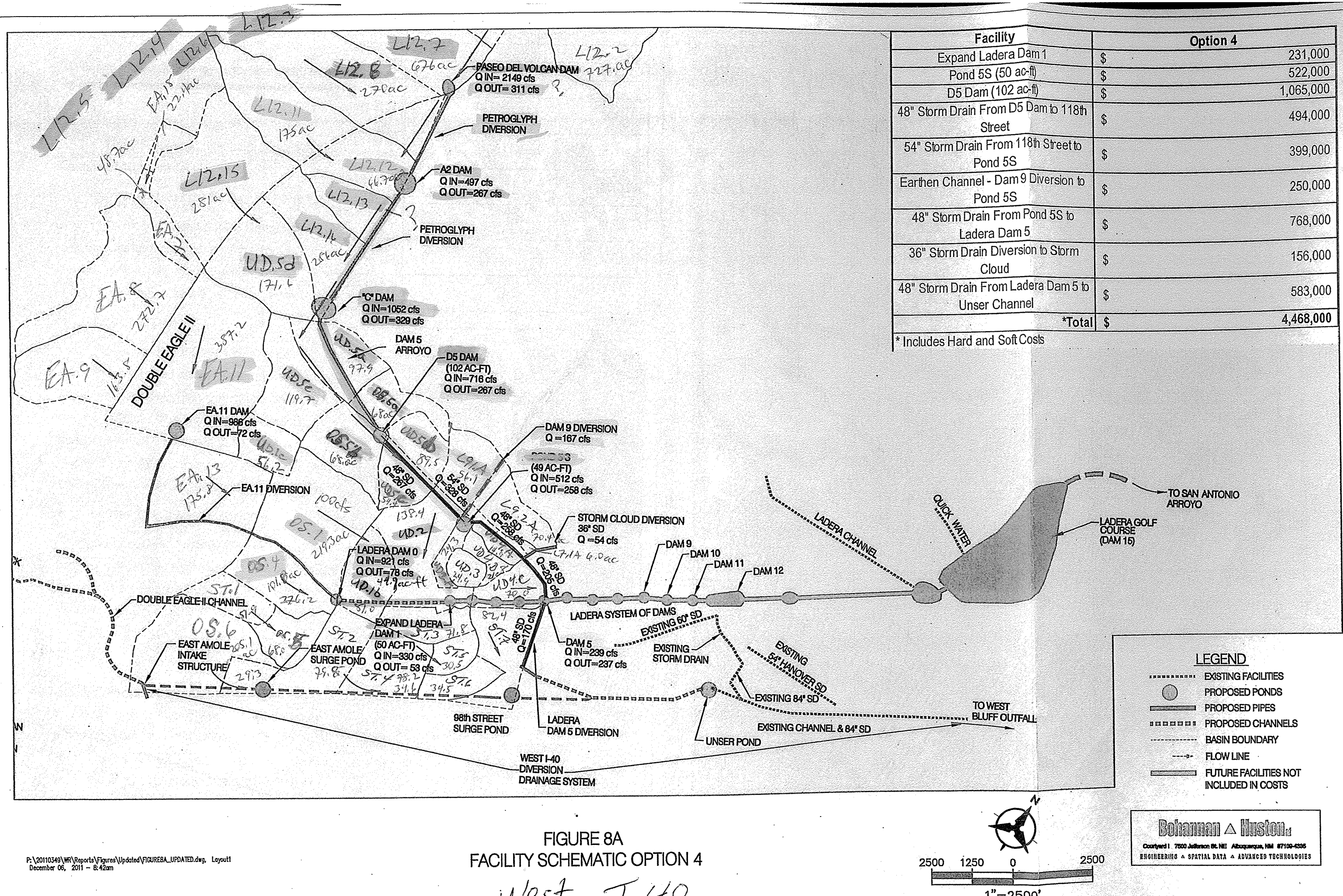


Table 4 – Facility and Flow Summary (Option 4)

Reservoirs	Flow		100-year	100-year			
Location	Source	Inflow Q	Stored Volume	Water Surface Elev.	Freeboard*	Peak Discharge	Time to Peak
		cfs	acre-feet	ft	ft	cfs	hours
Paseo del Volcan Dam	Basins L12.3 - L12.8	2149	199	5792.8	1	311	3.7
Mirehaven A2 Dam	PDV Outflow, Basins L12.9W, L12.11, & L12.12W	497	48	5729.9	1	267	7.4
Mirehaven C Dam	A2 Outflow, L12.14W, L12.15 & L12.16W	1052	44	5745.4	1	379	2.9
D5 Dam	Mirehaven C Dam Outflow, UD.5a, UD.5d, UD.5e, OS.5a, & OS.5b	716	102	5791.6	1	267	12.9
Pond 5S	Dam 5 Arroyo Dam Outflow, UD.5b, UD.5c, UD.2a, & L9.1a	512	31	--	1	258	16.3
Ladera Dam 5	198 cfs from Pond 5S plus UD.4a & Pond 4 Outflow	239	23	5335.8	1	237	22.6
Ladera Dam 0	EA.11, OS.1, OS.4, & UD.1C	921	35	5520.9	1	78	3.4
Ladera Dam 1	Dam 0 Outflow, UD.1B & UD.2	330	43	5425.9	1	53	16.9

* Freeboard calculated here based on spillway elevation in stage-storage-discharge curve used in AHYMO model
OPT4_FINAL_10_31_11.out.





Facility	Option 4
Expand Ladera Dam 1	\$ 231,000
Pond 5S (50 ac-ft)	\$ 522,000
D5 Dam (102 ac-ft)	\$ 1,065,000
48" Storm Drain From D5 Dam to 118th Street	\$ 494,000
54" Storm Drain From 118th Street to Pond 5S	\$ 399,000
Earthen Channel - Dam 9 Diversion to Pond 5S	\$ 250,000
48" Storm Drain From Pond 5S to Ladera Dam 5	\$ 768,000
36" Storm Drain Diversion to Storm Cloud	\$ 156,000
48" Storm Drain From Ladera Dam 5 to Unser Channel	\$ 583,000
*Total	\$ 4,468,000

* Includes Hard and Soft Costs

Comparison of Flows

Project #: 060232
Prepared by: Laura Marquis
Date: 2/6/06

Model	Flow (cfs)			Volume (ac-ft)			Area (sq mi)			TP (hours)		
	I-40 DMP	Current Westland	Difference	I-40 DMP	Current Westland	Difference	I-40 DMP	Current Westland	Difference	I-40 DMP	Current Westland	Difference
At West Bluff Outfall												
Full Model:	2483.74	2794.05	310.31	1555.65	1380.78	-174.87	28.43	25.03	-3.40	2.00	1.80	-0.20
Without WMDC	1729.43	2033.84	304.41	1463.60	1290.39	-173.21	27.52	24.12	-3.40	2.10	1.75	-0.35
Without E & W Amole	2524.27	2772.38	248.11	944.65	738.98	-205.67	14.92	10.32	-4.60	2.00	1.80	-0.20
East of 98th Street Only	2304.05	2681.46	377.41	285.34	276.59	-8.75	2.90	2.89	0.00	1.90	1.80	-0.10
At end of section												
East & West Amole Only	297.14	322.48	25.34	652.09	694.31	42.22	13.51	14.70	1.19	9.15	6.60	-2.55
WMDC Only	778.90	899.45	120.55	92.12	90.51	-1.61	0.91	0.91	0.00	1.95	1.90	-0.05

* change in flow and volume is due to the removal of the Unser detention area in the Unser-140 Intersection included in the W140 model

Westland N. DMP Preliminary Structure Analysis
Project #: 060232
Prepared By: Laura Marquis
Date: 2/7/2006

Modeled Structures					Previous Structures		
Location	Flow Source	Influent Q (cfs)	Volume* (ac-ft)	Peak Discharge* (cfs)	Previous Influent Q (cfs)	Previous Volume (ac-ft)	Previous Peak Discharge (cfs)
Reservoir							
Playa btwn WA.2 and WA.3	WA.1 & WA.2	974.0	37.7764	310.471	2062.54	bypassed	2062.54
Playa btwn WA.6 & WA.8	WA.6	209.3	10.84	1.54	275.8	bypassed	275.8
Playa btwn WA.8 & WA.9	WA.6 & WA.8	121.9	6.71	6.9	386.43	bypassed	386.43
Playa btwn WA.10 & WA.11	WA.10	402.9	15.8883	63.355	475.09	bypassed	475.09
Playa btwn WA.16 & WA.18	WA.16, WA.13, WA.14, WA.11, & WA.10	4,881.6	32.9771	4836.662	3648.75	bypassed	3648.75
West Amole Dam	All of West Amole Watershed	5,924.7	475.3934	227.29	3670.44	599.2939	249.733
Playa btwn EA.1 & EA.2	EA.1	89.4	1.7114	52.789	109.16	bypassed	109.16
Southern Side of E.11	EA.7, EA.8, EA.9, EA.11	1,244.1	61.6189	224.882	N/A	N/A	N/A
East Amole Dam	All of East Amole Watershed	3,580.0	246.7762	282.815	2562.21	265.531	297.142
118th Street Pond	OS.5, ST.1, ST.2, I40	676.3	16.4239	327.057	N/A	N/A	N/A
Pond #0	OS.1, UD.1a, UD.1b, OS.4	744.0	69.2919	44.71	458.51	2.5445	380.523
Pond #1	pond 0, UD.2	432.1	9.6234	76.703	1017.38	40.9398	263.813
Pond #2	pond 1, UD.2, UD.3	188.3	9.1505	46.488	272.35	30.0179	114.916
Pond #3	Pond 2, UD.2, UD.3, UD.4	344.5	17.8301	25.492	180.54	45.4348	43.053
Pond #4	pond 3, UD.2, UD.3, UD.4	341.3	10.3101	28.793	172.61	15.466	38.929
Dam 5 Arroyo Pond	OS.5ab, UD.5ae	773.3	91.8272	283.268	338.2	84.8664	268.193
Pond #5	dam 5 arroyo, pond #4 UD.4	510.4	32.7682	309.858	1144.63	33.193	321.099
Pond #6	dam 5 arroyo, pond #4 UD.5	65.6	7.5198	65.077			
Pond #7	dam 5 arroyo, pond #4 UD.6	65.2	5.6622	65.153			
Pond #8	dam 5 arroyo, pond #4 UD.7	65.2	19.2238	64.586			
Pond #9	dam 5 arroyo, pond #4 UD.8	1,354.8	30.8582	953.358			
Pond #10	dam 5 arroyo, pond #4 UD.9	967.8	59.7569	64.449			
Pond #11	dam 5 arroyo, pond #4 UD.10	605.6	29.8305	64.441			
Pond #12	dam 5 arroyo, pond #4 UD.11	1,973.9	59.9615	1713.523			
98th Pond	all basins west of 98th	950.3	134.4649	542.955	2047.18	43.2407	774.011
Unser Pond	all basins west of Unser Blvd.	1,040.6	59.4248	544.757	1440.28	41.9077	1157.833

<- pond
overflows

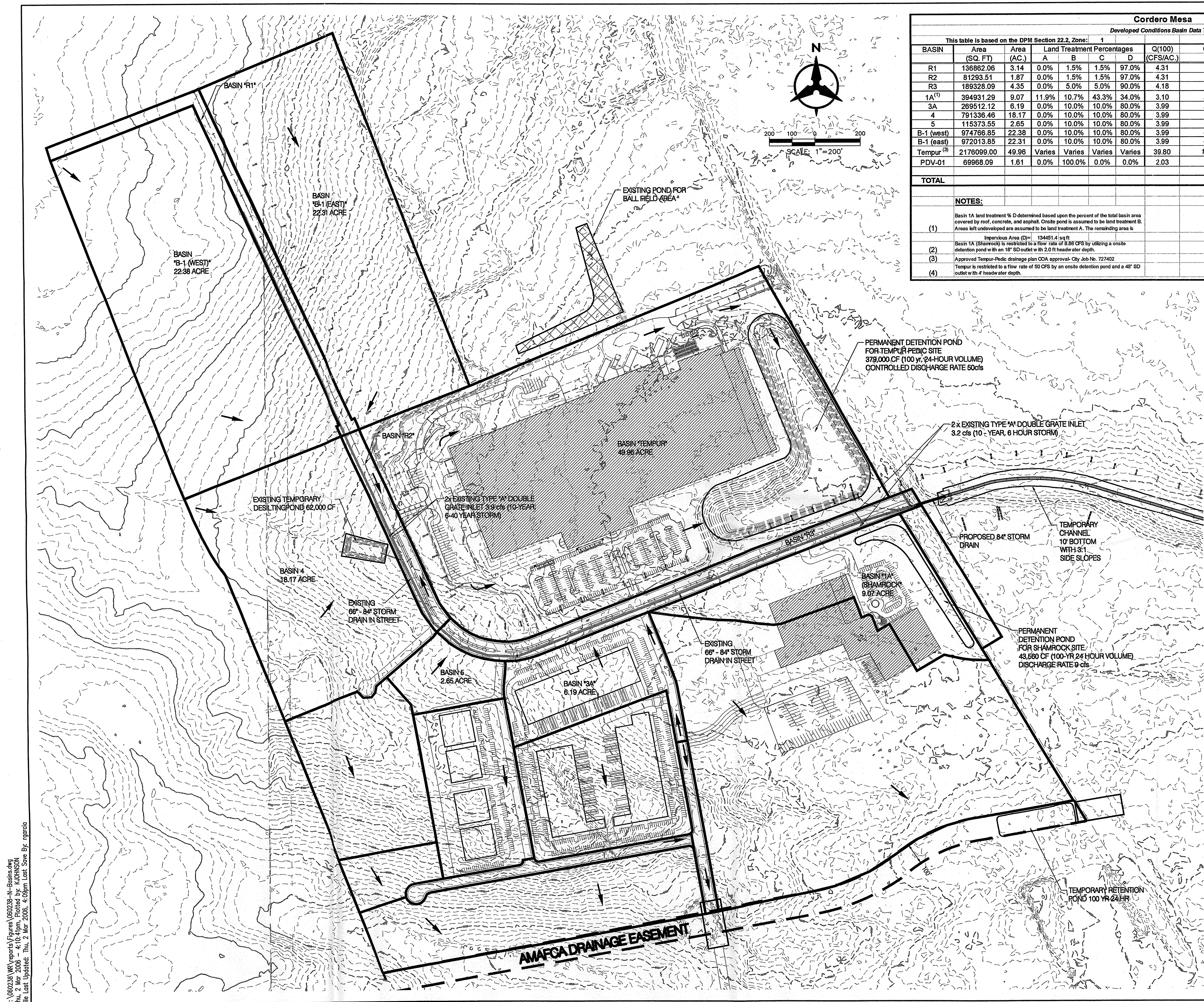
* Values are based off of outlet structure currently in model

Westland N. DMP Preliminary Structure Analysis

Project #: 060232
Prepared By: Laura Marquis
Date: 2/7/2006

Location	Flow Source	Influent Q (cfs)	Slope (ft/ft)
<i>Pipes</i>			
84" from W.A to E.A Dam to Double Eagle	West Amole Dam	227.29	0.0167
54" Pipe under PDV from EA.7	EA.7	71	0.005
66" Pipe under PDV from EA.8	EA.8	413.36	0.0531
54" Pipe under PDV from EA.9	EA.9	256.28	0.0531
60" Pipe under PD from EA.10	EA.10	300.65	0.0531
54" Pipe from East Amole Dam to OS.6	East Amole Dam	282.815	0.0281
54" Pipe from OS.6 118th street	East Amole Dam, OS.6	431.84	0.015
78" I-40 pipe from 118th to end of St.4	I40 SD and 118th Street	327.06	0.016
84" I-40 pipe from ST.4 to 98th Street	I40 SD and ST.4	465.47	0.016
48" Pipe along street south of ST.3	ST.3	201.37	0.018
66" Dam 5 Arroyo to Dam 5	Dam 5 arroyo	437.19	0.02
66" pipe from Dam 0 channel to Dam 1	UD.1b	276.83	0.053
66" SD down 98th st. to pond	Dam 5 Div, St.3	246.24	0.005
42" SD along top of ST.6	ST.5	127.86	0.043
2-10x8 CBC under 98th	98th pond	542.955	0.022
60" SD along Ladera to ST.12	ST.9	230.46	0.015
84" Pipe from Unser to I40	Parkway Channel	452.83	0.0135
2-6x4 CBC Under Unser	Unser Pond	544.76	0.017

<-- pipe not large
enough for flow

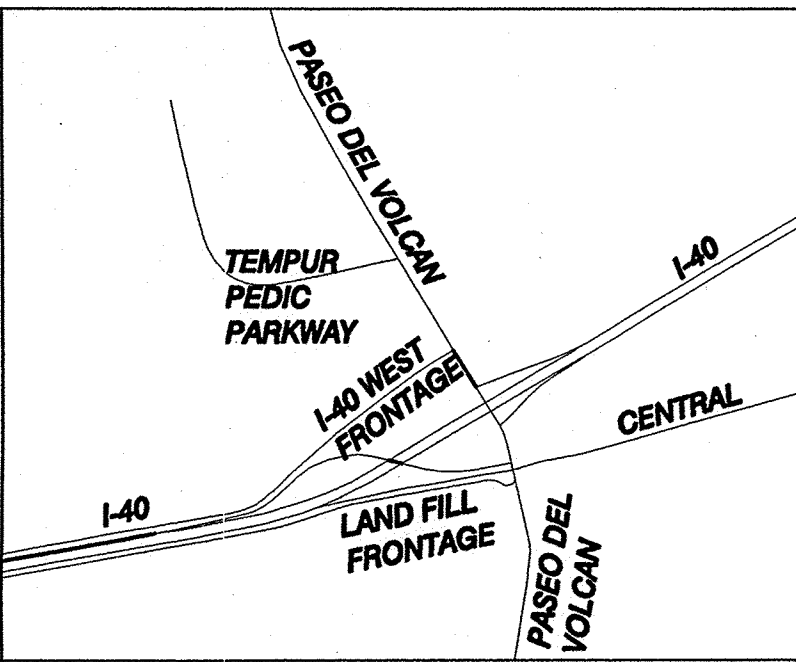
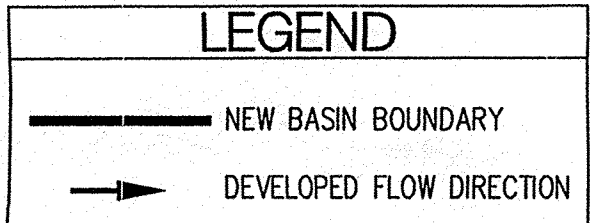


Cordero Mesa											
Developed Conditions Basin Data Table											
This table is based on the DPM Section 22.2, Zone: 1											
BASIN	Area (SQ. FT)	Area (AC.)	Land A	Treatment B	Percentages C	D	Q(100) (CFS/AC.)	Q(100) (CFS)	Q (CONTROLLED) (CFS)	V(100) (IN)	V(100) (CF)
R1	136862.06	3.14	0.0%	1.5%	1.5%	97.0%	4.31	13.55		1.94	22,078
R2	81293.51	1.87	0.0%	1.5%	1.5%	97.0%	4.31	8.05		1.94	13,114
R3	189328.09	4.35	0.0%	5.0%	5.0%	90.0%	4.18	18.16		1.86	29,283
1A ⁽¹⁾	394931.29	9.07	11.9%	10.7%	43.3%	34.0%	3.10	28.13	8.86	1.22	40,277
3A	26952.12	6.19	0.0%	10.0%	10.0%	80.0%	3.99	24.66		1.74	39,124
4	791336.46	18.17	0.0%	10.0%	10.0%	80.0%	3.99	72.41		1.74	114,876
5	115373.55	2.65	0.0%	10.0%	10.0%	80.0%	3.99	10.56		1.74	16,748
B-1 (west)	974766.85	22.38	0.0%	10.0%	10.0%	80.0%	3.99	89.20		1.74	141,504
B-1 (east)	972013.85	22.31	0.0%	10.0%	10.0%	80.0%	3.99	88.95		1.74	141,104
Tempur ⁽³⁾	2176099.00	49.96	Varies	Varies	Varies	Varies	39.80	165.33	49.58	16.94	3,071,564
PDV-01	69968.09	1.61	0.0%	100.0%	0.0%	0.0%	2.03	3.26			
TOTAL									387.23	CFS	
NOTES:											
(1)	Basin 1A land treatment % D determined based upon the percent of the total basin area covered by roof, concrete, and asphalt. Onsite pond is assumed to be land treatment B. Areas left undeveloped are assumed to be land treatment A. The remaining area is										
	Imperious Area (D)= 134451.4 sq ft										
(2)	Basin 1A (Sharmock) is restricted to a flow rate of 8.88 CFS by utilizing a onsite detention pond with an 18" SD outlet with 2.0 ft headwater depth.										
(3)	Approved Tempur-Pedic drainage plan COA approval- City Job No. 727402										
(4)	Tempur is restricted to a flow rate of 50 CFS by an onsite detention pond and a 48" SD outlet with 4' headwater depth.										

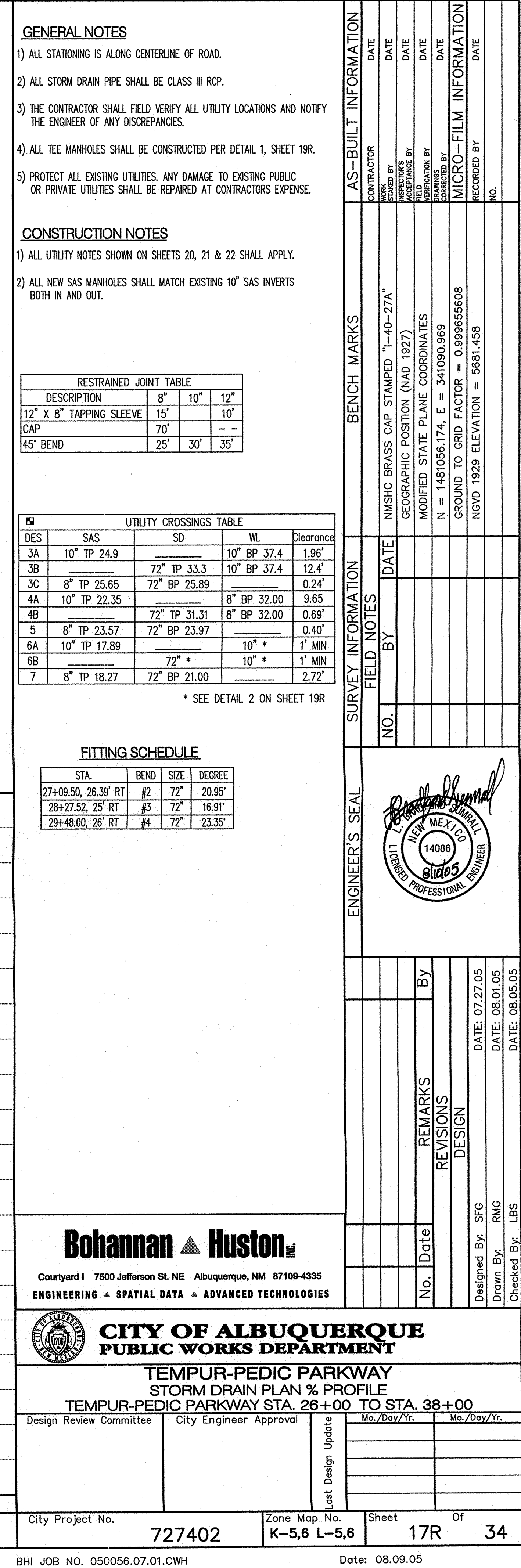
DEVELOPED CONDITIONS

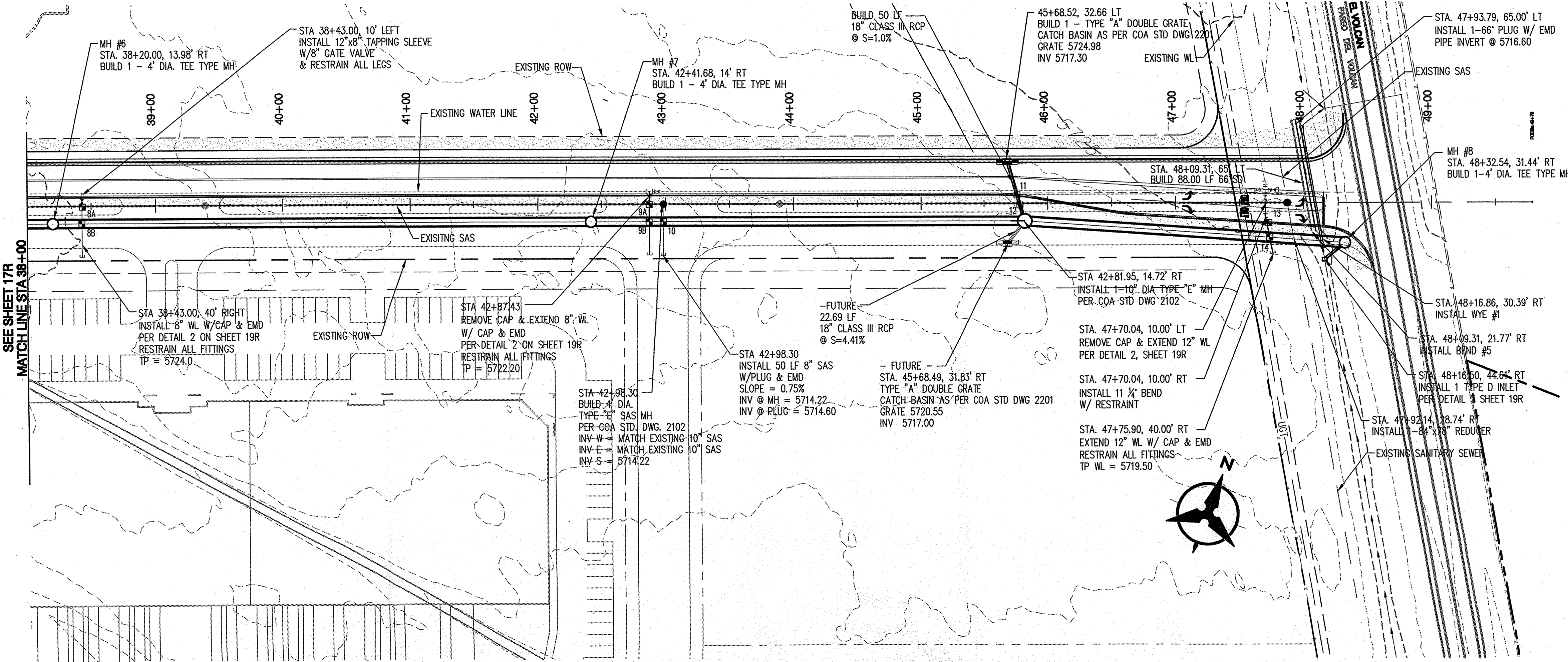
UNDER FULLY DEVELOPED CONDITIONS, BASINS B1 (EAST AND WEST), BASIN 3A, BASIN 4, BASIN 1A (SHAMROCK), AND BASIN TEMPUR (TEMPUR-PEDIC) DISCHARGE RUNOFF INTO THE STORM DRAIN COLLECTION SYSTEM. THESE BASINS ARE EXPECTED TO DEVELOP AS LIGHT INDUSTRIAL USES WITH 80% IMPERVIOUS SURFACES AND ALL BUT SHAMROCK AND TEMPUR-PEDIC ALLOWED FREE DISCHARGE. BASINS TEMPUR AND 1A (SHAMROCK) WILL BE CONSTRAINED TO 50 CFS AND 9 CFS RESPECTIVELY THROUGH ON-SITE DETENTION POND.

THE COLLECTION SYSTEM CONVEYS FLOWS EASTWARD UNDER PASE DEL VOLCAN (DOUBLE EAGLE II) IN AN 84-INCH PIPE WHICH DAYLIGHTS INTO A TEMPORARY EARTHEN CHANNEL. THIS CHANNEL CROSSES PRIVATELY OWNED LAND AND DISCHARGES INTO THE FUTURE LOCATION OF THE EAST AMOLE DAM, PART OF THE WEST 1-40 STORM DRAIN SYSTEM. THE REMAINING BASINS, WITHIN CORDERO MESA BUSINESS PARK DISCHARGE SOUTHWARD INTO A DEDICATED AMAFCA EASEMENT WHICH WILL ULTIMATELY INCLUDE A 84-INCH STORM DRAIN THAT WILL DRAIN EASTWARD AND DISCHARGE INTO THE EAST AMOLE DAM.

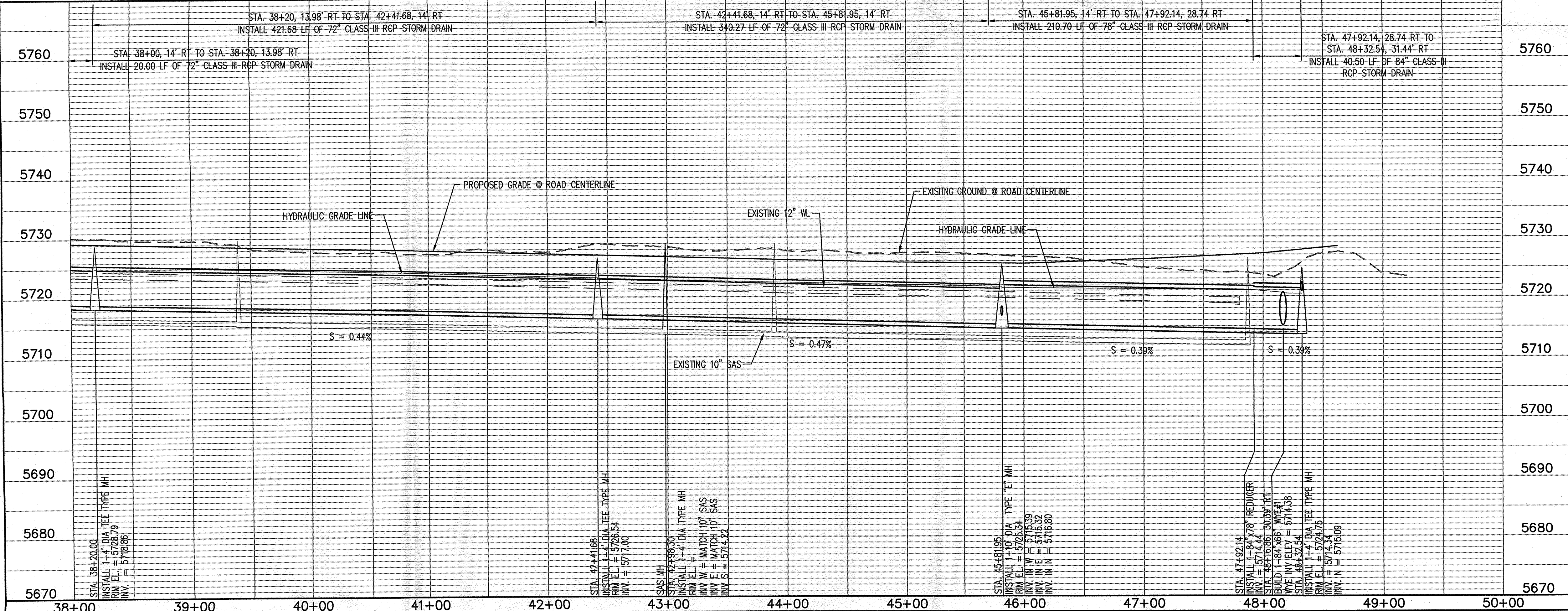


Bohannon						Huston^{INC.}																Designed By: K. R.		Drawn By: R. L.		Checked By: L.T.																					
County 7600 Jefferson St NE Albuquerque, NM 87109-4386 ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES																	No.	Date																													
 County of Bernalillo Public Works Division State of New Mexico TEMPUR PEDIC STORM DRAIN DRAINED CONDITION DRAINAGE PLAN																										Design Review Committee		City Engineer Approval										Last Design Update		Mo./Day/Yr.				Mo./Day/Yr.			
Project No. 060238						Zone Map No. K-5,K-6, L-6,L-7						Drawing No. 060238						Sheet 2				Of 2																									





TEMPUR-PEDIC PARKWAY



- GENERAL NOTES**
- 1) ALL STATIONING IS ALONG CENTERLINE OF ROAD.
 - 2) ALL STORM DRAIN PIPE SHALL BE CLASS III RCP.
 - 3) THE CONTRACTOR SHALL FIELD VERIFY ALL UTILITY LOCATIONS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
 - 4) ALL TEE MANHOLES SHALL BE CONSTRUCTED PER DETAIL 1, SHEET 19R.
 - 5) PROTECT ALL EXISTING UTILITIES. ANY DAMAGE TO EXISTING PUBLIC OR PRIVATE UTILITIES SHALL BE REPAIRED AT CONTRACTORS EXPENSE.

- CONSTRUCTION NOTES**
- 1) ALL UTILITY NOTES SHOWN ON SHEETS 20, 21 & 22 SHALL APPLY.
 - 2) ALL NEW SAS MANHOLES SHALL MATCH EXISTING 10" SAS INVERTS BOTH IN AND OUT.

RESTRAINED JOINT TABLE			
DESCRIPTION	8"	10"	12"
12" X 8" TAPPING SLEEVE	15'	10'	10'
CAP	70'	-	-
45' BEND	25'	30'	35'

UTILITY CROSSINGS TABLE				
DES	SAS	SD	WL	Clearance
8A	10" TP 15.71		8" *	1' MIN
8B		72" *	8" *	1' MIN
9A	10" TP 13.81		8" *	1' MIN
9B		72" *	8" *	1' MIN
10	8" TP 14.99	72" BP 16.07		1.08'
11		18" TP 18.85	12" BP 20.0	1.1'
12		18" BP 16.75	12" TP 13.5	3.2'
13	10" *		12" *	1' MIN
14		72" *	12" *	1' MIN

* SEE DETAIL 2 ON SHEET 19R

FITTING SCHEDULE			
STA.	BEND	SIZE	DEGREE
48+09.31, 21.77 RT	#5	66"	31.02'
STA.	WYE	SIZE	DEGREE
48+09.31, 21.77 RT	#1	84"x66"	45.00'

Bohannon & Huston
Engineering & Spatial Data & Advanced Technologies
Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TEMPUR-PEDIC PARKWAY
STORM DRAIN PLAN & PROFILE
TEMPUR-PEDIC PARKWAY STA. 38+00 TO EOP

Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.

City Project No. **727402** Zone Map No. **K-5,6 L-5,6** Sheet **18R** Of **34**

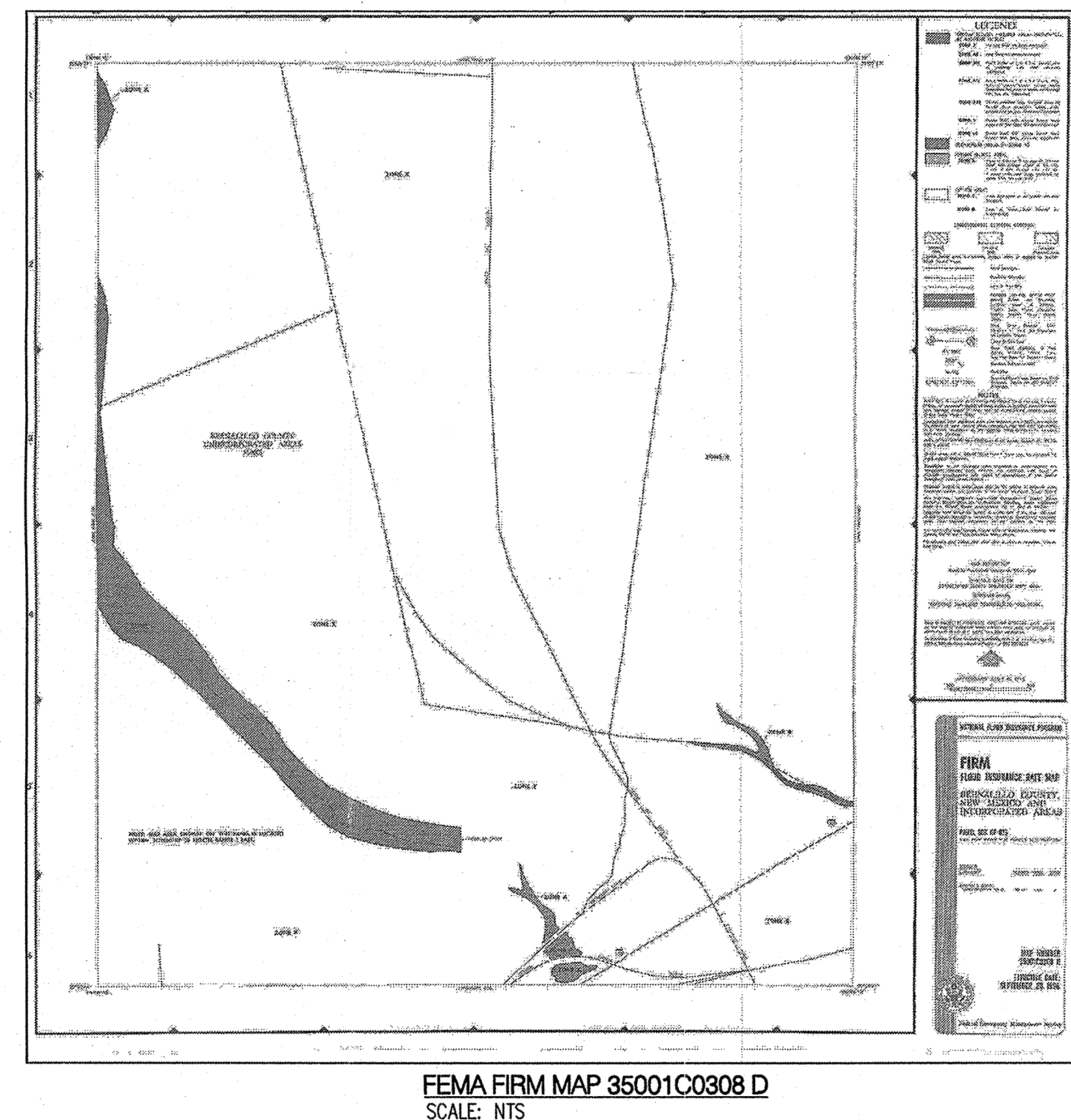
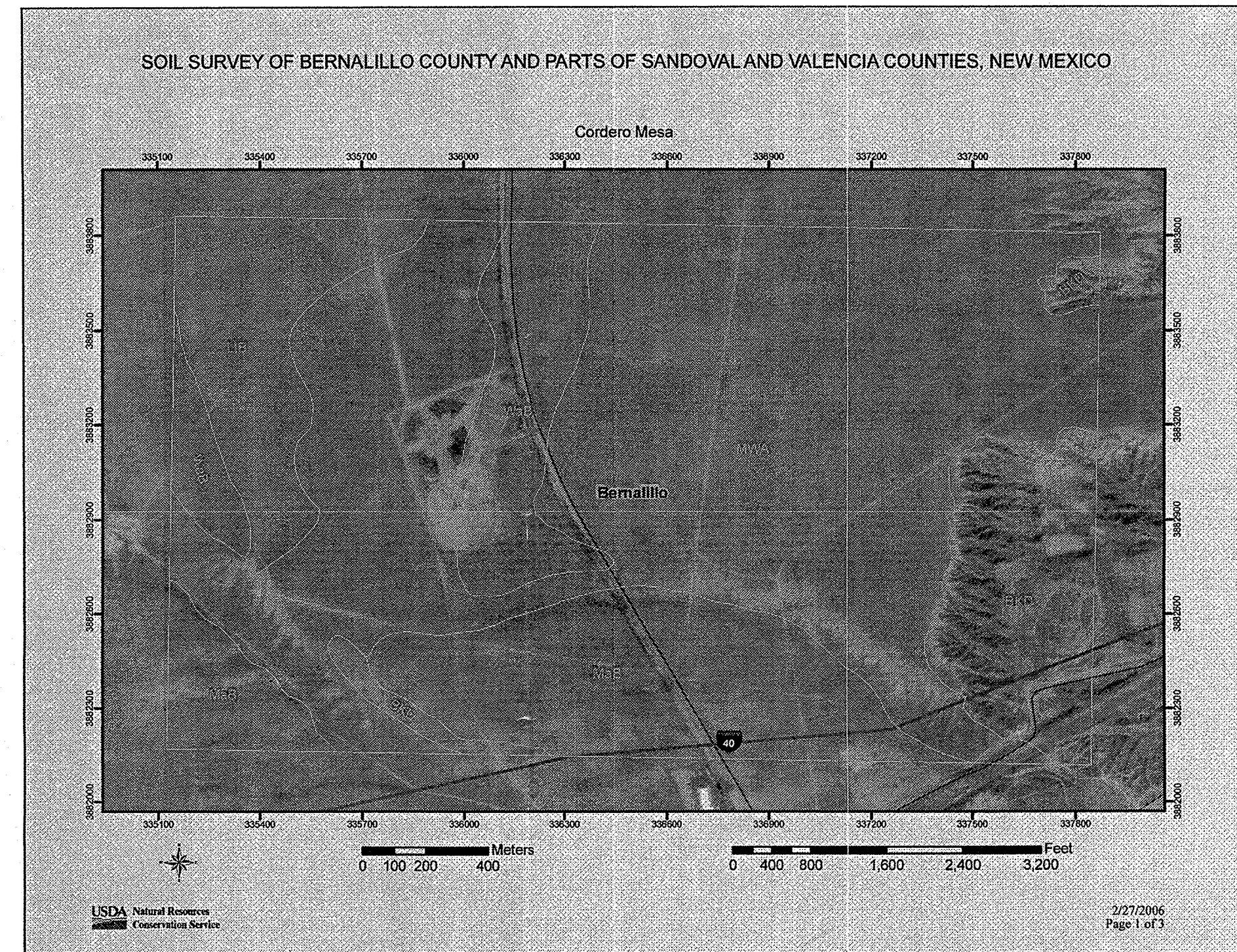
AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	DATE	NMHC BRASS CAP STAMPED "1-40-27A"	DATE	NO.	BY	REMARKS	By
INSPECTOR	DATE	GEOGRAPHIC POSITION (NAD 1927)	DATE			REVISIONS	
FIELD	DATE	MODIFIED STATE PLANE COORDINATES	DATE			DESIGN	
REVISION	DATE	N = 1481056.174, E = 341090.969	DATE				
CORRECTED BY	DATE	GROUND TO GRID FACTOR = 0.999655608	DATE				
RECORDED BY	DATE	NGVD 1929 ELEVATION = 5681.458	DATE				
NO.							

ENGINEER'S SEAL: [Signature] NEW MEXICO 14086 PROFESSIONAL ENGINEER

DESIGNED BY: SFG DATE: 07.27.05
DRAWN BY: RMG DATE: 08.01.05
CHECKED BY: LBS DATE: 08.05.05

EXISTING CONDITIONS

THE AREA CURRENTLY DISCHARGING INTO THE TEMPUR PEDIC PARKWAY STORM DRAIN INCLUDES 35 ACRES OF UNDEVELOPED OFFSITE AREA (Y1) AND THE STREET SURFACE ITSELF (R2, R3). THE TEMPUR PEDIC MANUFACTURING FACILITY HAS NO DIRECT CONNECTION TO THE STORM DRAIN AND RETAINS ALL DEVELOPED CONDITION FLOW ON-SITE AT THE PRESENT TIME. THE OVERALL AREA CONSISTS OF GENTLY ROLLING RANGELAND THAT STILL SUPPORTS CATTLE GRAZING WITH A FAIR COVER OF NATIVE VEGETATION INCLUDING GRASSES, SCATTERED SHRUBS AND OCCASIONAL CACTUS. FLOW FROM THE OFFSITE BASIN, X1 IS INTERCEPTED IN A TEMPORARY DESILTING POND TO PREVENT SEDIMENT PLUGGING OF THE RECENTLY CONSTRUCTED STORM DRAIN.



						ENGINEER'S SEAL		SURVEY INFORMATION				BENCH MARKS		AS-BUILT INFORMATION	
								FIELD NOTES				NMSSIC BRASS CAP STAMPED "140-27A"		CONTRACTOR	
								NO.	BY	DATE			WORK STAMPED BY		DATE
													INSPECTOR'S DATE		DATE
No.	Date	REMARKS		By									MODIFIED STATE PLANE COORDINATES		DATE
													N = 1481058.174, E = 341090.969		DATE
													GROUND TO GRID FACTOR = 0.999655608		DATE
													NOVD 1923 ELEVATION = 5681.458		DATE
													MICRO-FILM INFORMATION		DATE
													RECORDED BY		DATE
													NO.		DATE

14086

31526

REGISTERED PROFESSIONAL ENGINEER

NEW MEXICO

BOB L. BARNHART

Designed By: K.W.J.

Drawn By: R.M.G.

Checked By: L.B.S.

DATE: 03.02.06

DATE: 03.02.06

DATE: 03.02.06

Sheet 1 Of 2