# DIRECT WATER AND POWER

## STORM DRAIN RELOCATION AND IMPROVEMENTS





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## VASSAR PLACE N.E. ALBUQUERQUE, NEW MEXICO

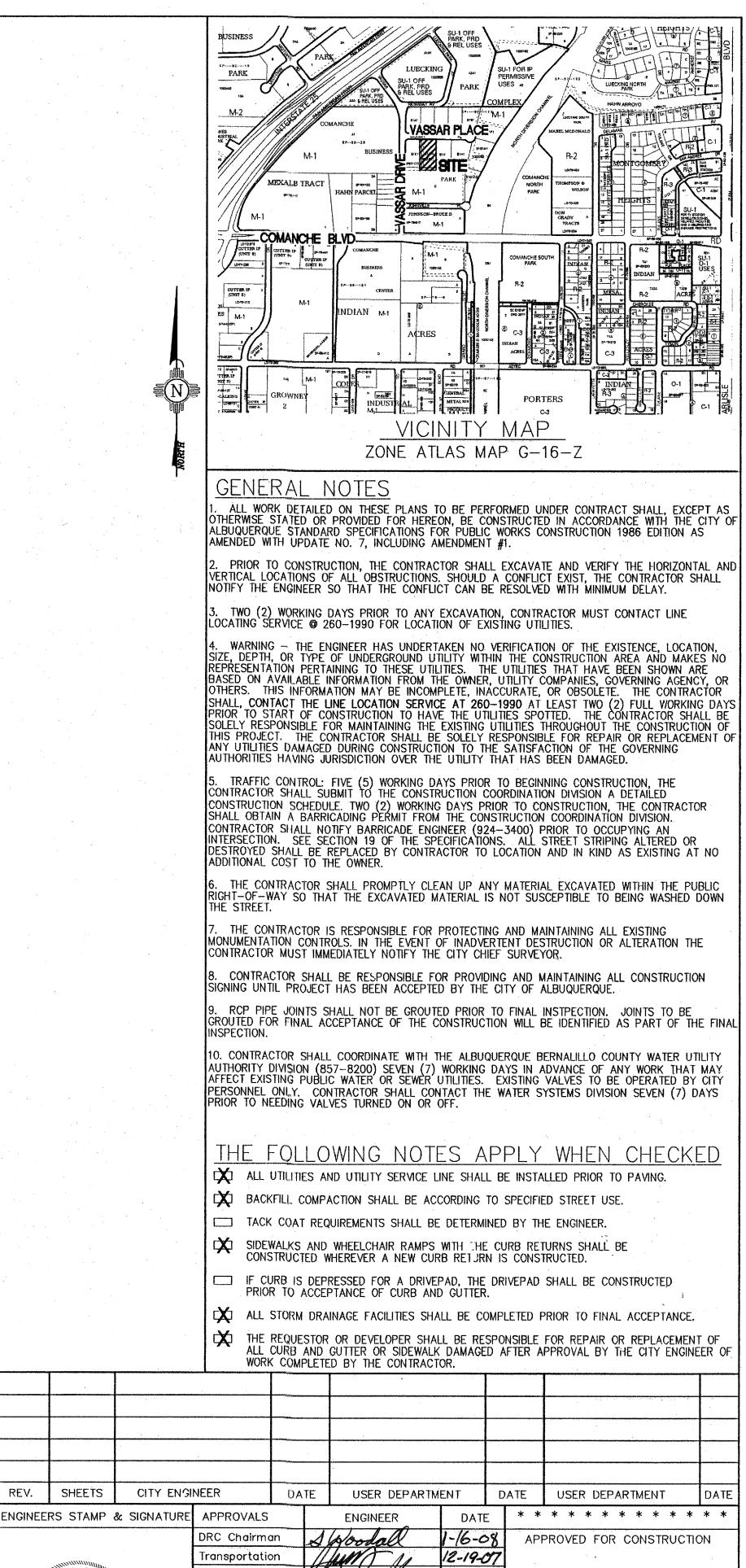
## INDEX OF DRAWINGS

## DESCRIPTION

COVER SHEET GRADING AND DRAINAGE PLAN - SHEET 1 GRADING AND DRAINAGE PLAN - SHEET 2 UTILITY PLAN AND PROFILE

> **RED PLANS CHECKING DEFICE** 924-3611 APPROVEDDISAPPROVED EXDRANT(S) ONLY FAUL RICHE SIGNATURE'S DATE

MILLER ENGINEERING CONSULTANTS Engineers · Planer. 3500 COMANCHE BLVD NE BUILDING F ALBUQUERQUE, NM 87107 (505) 888-7500, (505) 888-3800 (FAX)



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SHEETS

REV.

554482

Sheet

Of

Bradley J. Binghan 12/10/07

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Water/Wastewale

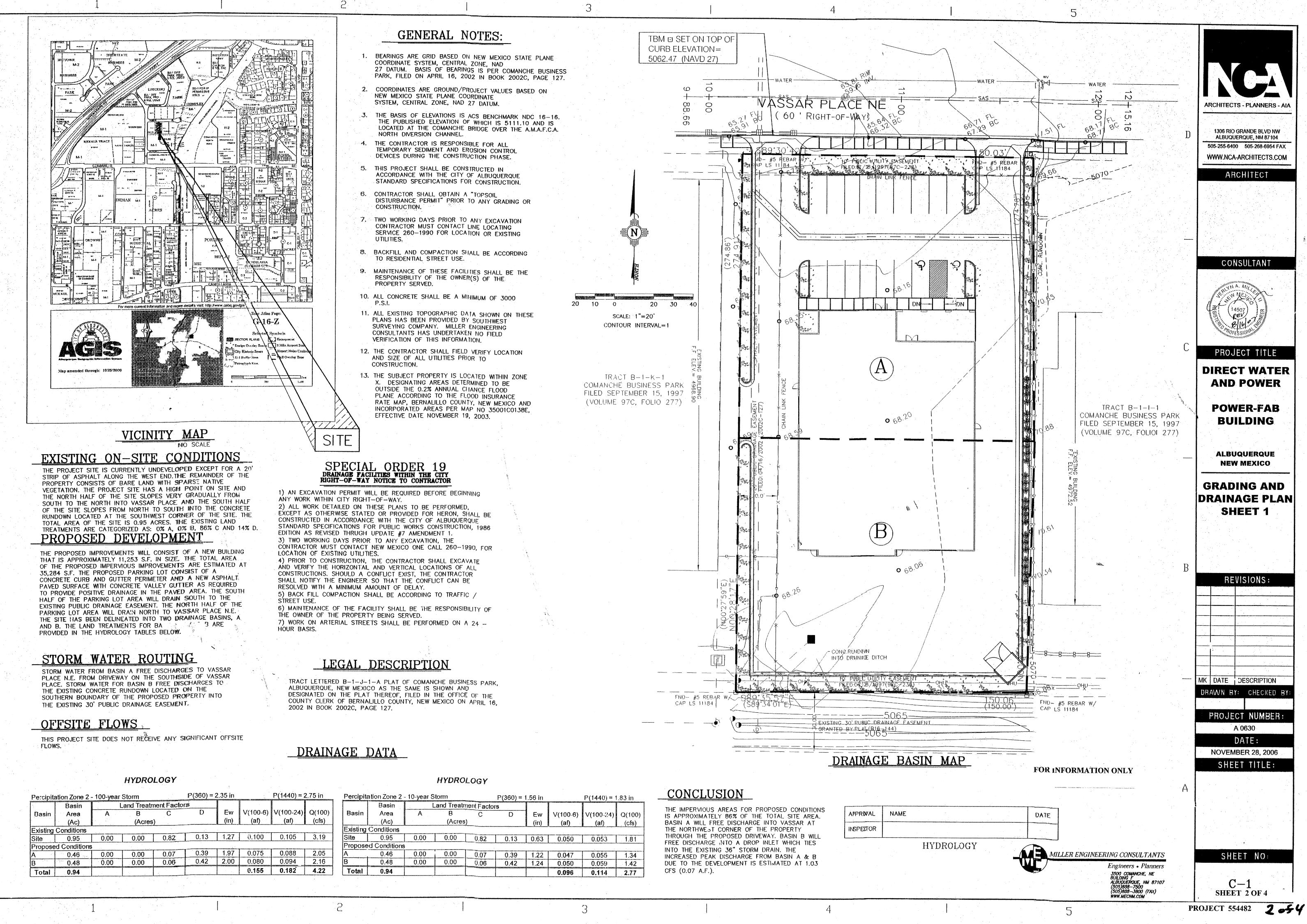
Constr. Mngmt,

Constr. Coord.

City Project No.

Hydrology

C.I.P.

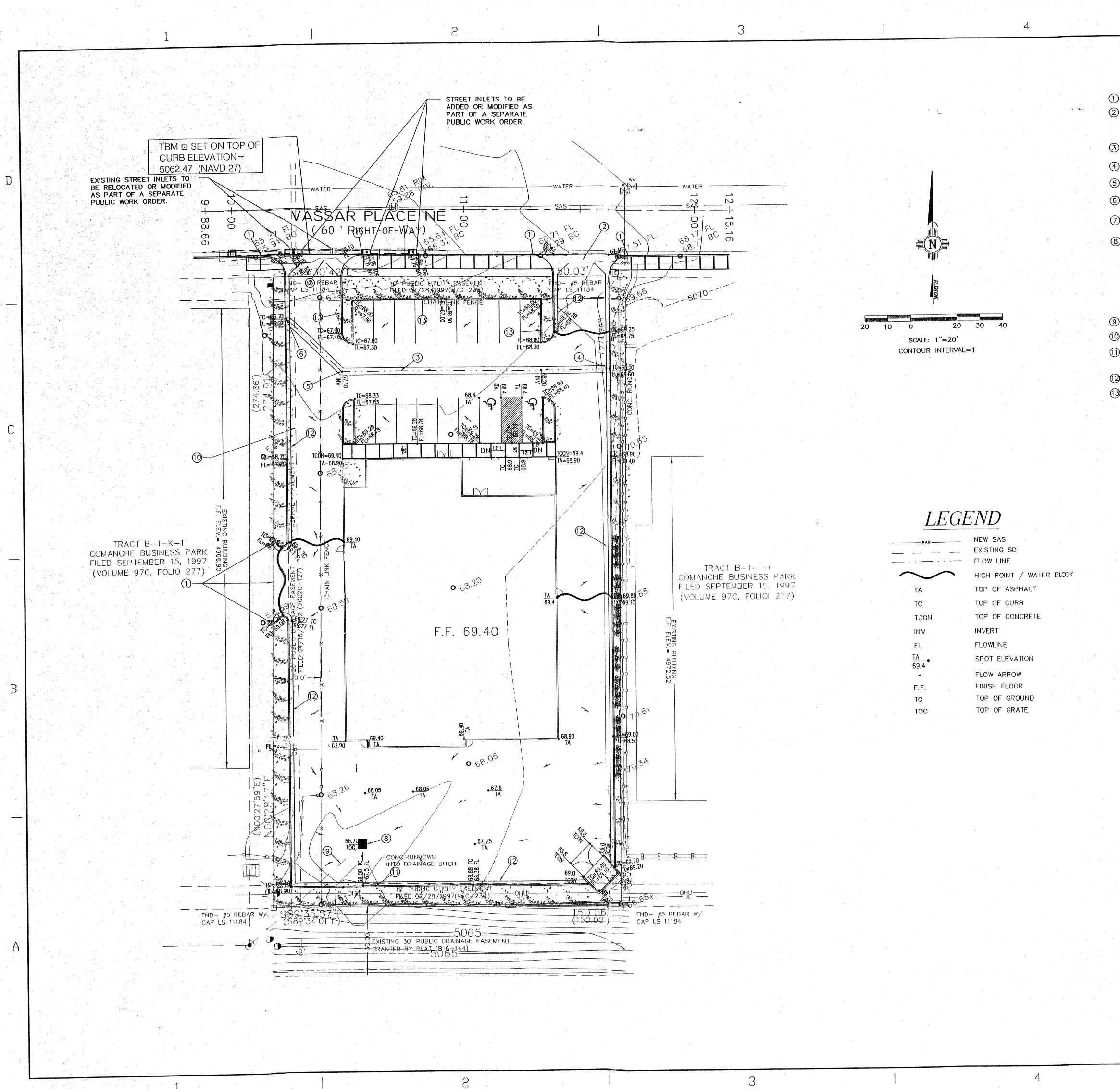


HY	'DR	OL.	0	G	Y
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	Basin	L	and Treatr	nent Facto	rs				
Basin	Area	A	В	C	D	Ew	V(100-6)	V(100-24)	Q(100)
· · · ·	(Ac)		(Acres	;)		<u>(in)</u>	(af)	(af)	(cfs)
Existing	Conditions			5	······				
Site	0.95	0.00	0.00	0.82	0.13	1.27	0.100	0.105	3.19
ropose	d Conditions			,	·				
<u>م</u>	0.46	0.00	0.00	0.07	0.39	1.97	0.075	0.088	2.05
B	0.48	0.00	0.00	0.06	0.42	2.00	0.080	0.094	2.16
Total	0.94						0.155	0.182	4.22

10-year S	torm		P(360) =	1.56 in		P(1440) = 1	.83 in
L	and Treat	nent Factor	S.	1			
A	В	С	D	Ew	V(100-6)	V(100-24)	Q(100)
	(Acres	)		(in)	(af)	<b>`(af)</b>	(cfs)
					- -		
0.00	0.00	0.82	0.13	0.63	0.050	0.053	1.81
			· · · · · · · · · · · · · · · · · · ·				
0.00	0.00	0.07	0.39	1.22	0.047	0.055	1.34
0.00	0.00	0.06	0.42	1.24	0.050	0.059	1.42
					0.096	0.114	2.77
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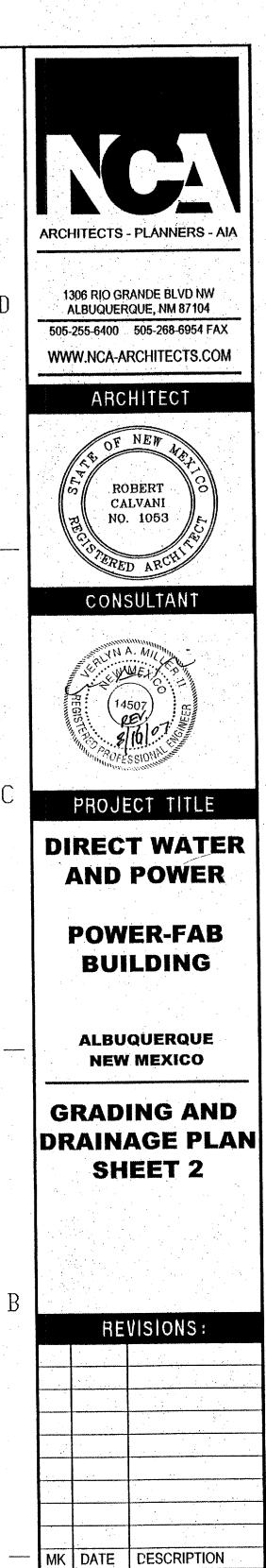
APPRWAL	NAM
INSPECTOR	
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## KEYED NOTES

- (1) MATCH EXISTING GRADE 2 NEW CONCRETE VALLEY GUTTER SEE COA DRAWING 2420 MATCH EXISTING CURB AND GUTTER FLOWLINE ON BOTH SIDES. (3) NEW 36" CONCRETE VALLEY GUTTER (145 L.F.) SEE DETAIL SHEET C-3. (4) N; 4894.20 E: 5027.27 (5) N; 4894.19 E: 4911.28
- 6 N: 4918.15 E: 4887.33 DELETED (8) NEW STORM INLET SINGLE "D", WITH STANDARD GRATE AS PER COA DETAIL 2206. CONNECT TO 18 EXISTING 36" SD LINE. TOG=66.70 N=4689.49
- E = 4918.25INV=56.59 CONTRACTOR TO FIELD VERIFY ELEVATION OF THE 36" STORM DRAIN PIPE. SEE DETAILS ON SHEET C-3
- (9) EXISTING 36" SD LINE.
- () EXISTING STORM DRAIN PIPE 1) SAWCUT EXISTING CONCRETE SPILLWAY TO A CLEAN STRAIGHT EDGE, REMOVE & DISPOSE OF TO FACILITATE NEW CURB AND GUTTER.
- (12) 675' OF CURB AND GUTTER. SEE DETAIL ON SHEET C-3. (13) 300' OF HEADER CURB. SEE DETAIL ON SHEET C-3.



DRAWN BY: CHECKED BY: PROJECT NUMBER A 0630 DATE:

NOVEMBER 28, 2006 SHEET TITLE:

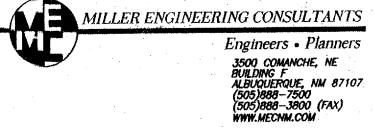
SHEET NO:

C-2SHEET 3 OF 4

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### FOR INFORMATION ONLY

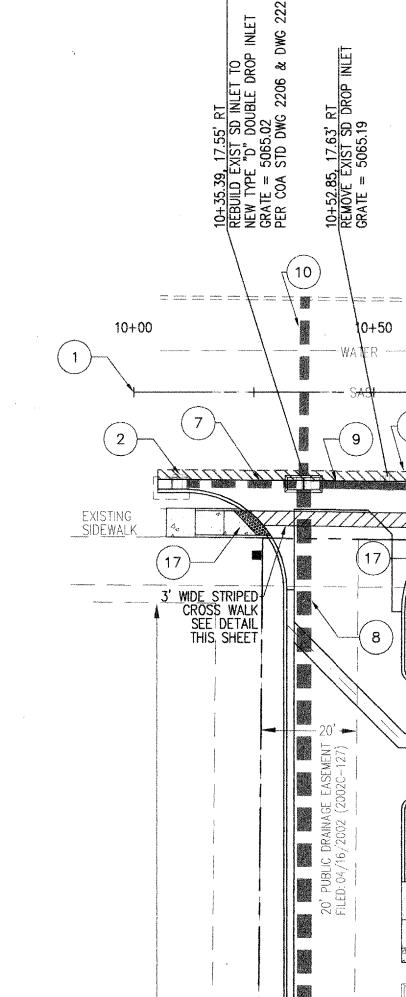
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**PROJECT 554482** 

	JOINT LENGTHS, EDUCERS, (FT.) E TEE MUST BE	÷
SIZE	RUN	BRANCH
12x12x8	6 🖤	19
12x12x6	3	19
12x12x4	1	19
10x10x10	12	18
10x10x8	8	15
10x10x6	4	16
10x10x4	2	4
8x8x8	9	20
8x8x6	5	17
8x8x4	2	15
6x6x6	6	20
6x6x4	2	20

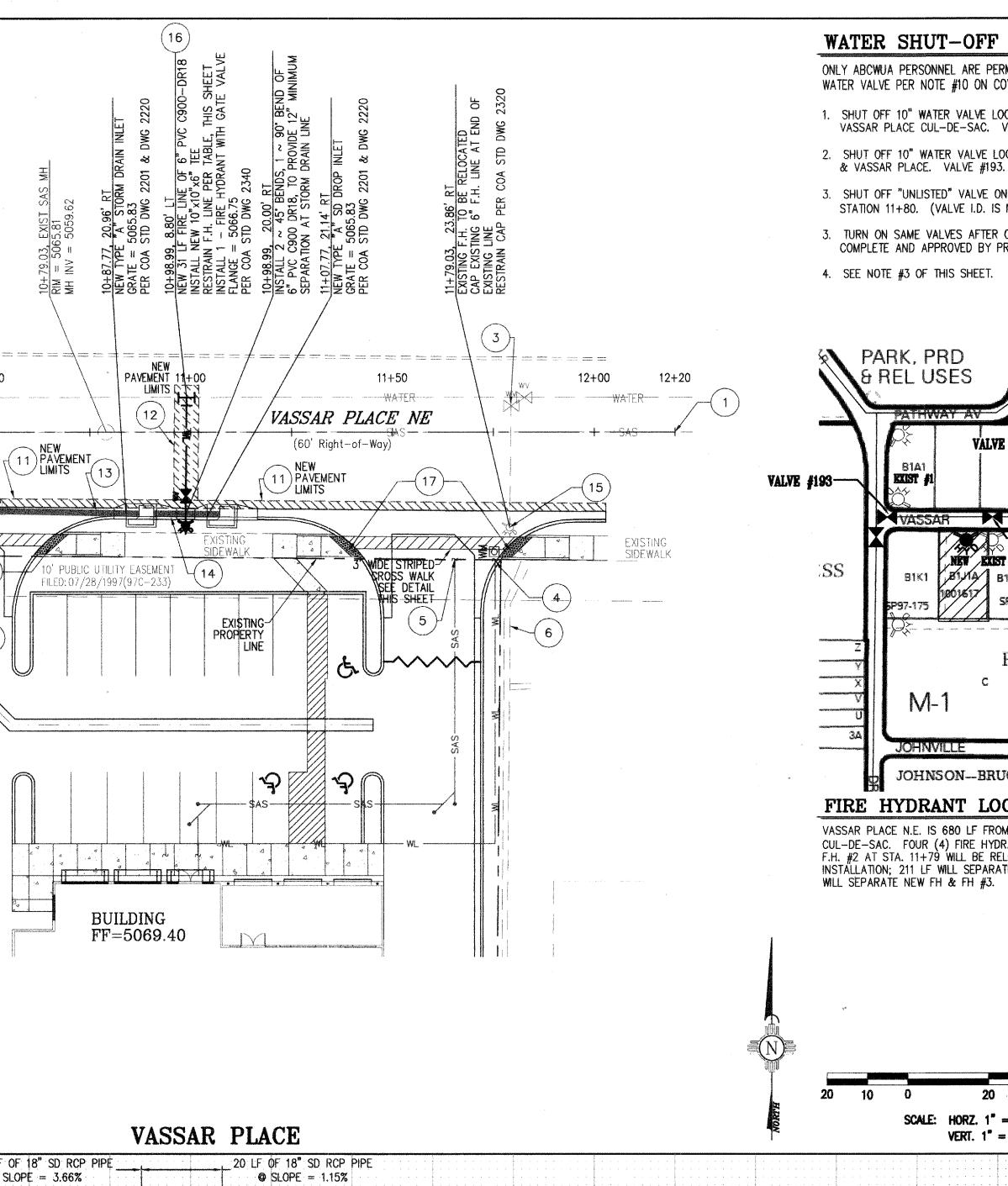
RESTRAINED JOINT LENGTHS, L <sub>T</sub> , FOR HORIZONTAL BENDS, VALVES AND DEAD END, (FT.)						
0.75	VALVES &					
SIZE	90°	45°	22 1/2	11 1/4°	DEAD ENDS	
12	10	18	18	18	18	
10	6	19	19	19	19	
8	3	19	19	19	19	
6	1	19	19	19	19	
4	12	18	18	18	18	



10+40

15

58.32 LF ( @ Si 17,46 LF OF EXIST 18" SD PIPE \_\_\_\_\_ TO BE REMOVED AND DISPOSED 5070 EXIST 18" SD. RCP 5065 and the second and a second se 5060 5055  $\frac{10+35.39}{7}, \text{REBUILD SD INLET} \\ \text{TYPE DOUBLE "D" SD INLET} \\ \text{GRATE = 5065.02} \\ \text{EXIST INV (S-36") = 5059.65} \\ \text{EXIST INV (W-18") = 5061.95} \\ \text{EXIST INV (W-18") = 5062.45} \\ \text{NEW INV (E-18") = 5060.29} \\ \text{NEW INV (E-18") = 5060.29} \\ \end{array}$ 5059.65 5061.95 5062.45 5060.29  $\odot$ 



	WATER SHUT-OFF PLAN	× <u>KEYED NOTES</u>
T 2220 2220 2220 C900-DR18 GATE VALVE CATE VALVE 12" MINIMUM IE 2220 2220 5 2320 5 2320	ONLY ABCWUA PERSONNEL ARE PERMITTED TO OPERATE ANY WATER VALVE PER NOTE #10 ON COVER SHEET.	1. STATIONING AND ALIGNMENT ARE BASED ON CENTERLINE OF VASSAR PLACE. BEGIN - STA. 10+00.00 N=4968.06 E=4955.45
INLET DWG 2220 PVC C900- PVC C900- TED DWG 2220 DWG 2220 DWG 2320	1. SHUT OFF 10" WATER VALVE LOCATED AT END OF VASSAR PLACE CUL-DE-SAC. VALVE #451.	EL4033.45 $P_{\text{END}} = 12+20.00$ N=4968.06 $P_{\text{END}} = 1200$
IST SAS MH IST SAS MH 59.62 59.62 50.62 5.83 DWG 2201 & DWG 222 DWG 2201 & DWG 222 DWG 2240 0.00' RT 66.75 DWG 2201 & DWG 22 0.00' RT 5.83 DWG 2201 & DWG 22 14' RT 5.83 DWG 2201 & DWG 22 14' RT 5.83 DWG 2201 & DWG 22 5.83 DWG 2201 & DWG 22 5.83 DWG 2201 & DWG 22 14' RT 5.83 DWG 2201 & DWG 22 5.83 DWG 22 DWG 22 D	2. SHUT OFF 10" WATER VALVE LOCATED AT VASSAR DRIVE & VASSAR PLACE. VALVE #193.	E=5075.45 2. EXISTING STORM DRAIN DROP INLET TO REMAIN.
81       81         81       81         81       81         81       81         82       82         83       82         84       86         85       80         86       80         86       80         86       80         86       80         86       80         86       80         86       80         86       80         86       80         86       80         80       80         80       10         80       11         11       14         11       14         11       14         11       14         11       14         11       14         11       14         11       14         11       14         11       14         12       14         14       14         15       14         16       14         17       14      14         14	3. SHUT OFF "UNLISTED" VALVE ON VASSAR PLACE AT STATION 11+80. (VALVE I.D. IS NOT AVAILABLE)	3. EXISTING 6" GATE VALVE SUPPLYING FIRE HYDRANT TO BE RELOCATED, IS TO BE SHUT OFF PERMANENTLY. EXISTING GATE VALVE BOX COVER TO BE REMOVED AND ASPHALT OVER HOLE.
$\frac{10+79.03}{R!M} = 5065.81$ $\frac{10+79.03}{R!M} = 5065.81$ $\frac{10+87.77}{R!M} = 5065.81$ $\frac{10+87.77}{R!M} = 5059.62$ $\frac{10+87.77}{R!M} = 50565.83$ $\frac{10+98.99}{R!M} = 5005.83$ $\frac{10+98.99}{R!M} = 5005.83$ $\frac{10+98.99}{R!M} = 5000$ $\frac{10+98.99}{R!M} = 5000$ $\frac{10+98.99}{R!M} = 5000$ $\frac{11+79.03}{R!M} = 5065.83$ $\frac{11+07.77}{R!M} = 5065.83$	<ol> <li>TURN ON SAME VALVES AFTER CONSTRUCTION IS COMPLETE AND APPROVED BY PROPER PERSONNEL.</li> <li>SEE NOTE #3 OF THIS SHEET.</li> </ol>	4. INSTALL NEW WATER METER BOX IN DRIVE PAD FOR EXISTING 3/4" DOMESTIC WATER LINE STUBBED AT PROPERTY LINE
RESIST RESIST RESTS REST	T. SEL NOTE #0 OF THIS SHEET.	Mater     Meter     BOX     PER     COA     STD     DWG     2361, CASE     CASE     STD
	PARK, PRD	PROPERTY LINE.     INSTALL NEW E.M.D. AT END OF STUB.     0     0     0     0       6.     EXISTING WALL.     VI     VI     VI     VI     VI
+50 R	& REL USES	7. EXISTING 18" RCP STORM PIPE TO REMAIN.         8. EXISTING 36" STORM PIPE TO REMAIN.
NEW (12) VASSAR PLACE NE (60' Right-of-Way) +	VALVE #451 P 97	9. EXISTING 18" RCP STORM PIPE TO BE REMOVED AND DISPOSED.
VALV	E #193 B1A1	10. EXISTING 24" RCP STORM PIPE TO REMAIN. 11. 2' WIDE x 198' LONG ASPHALT PAVEMENT CUT PER COA STD DWG 24GE (MA IOD LOCAL) DAVEMENT TO DE CILT IN A CLEAN
	VASSAR PL BIF1	DWG 2465, (MAJOR LOCAL). PAVEMENT TO BE CUT IN A CLEAN MANNER, SUCH AS THE CUT TO BE PERPENDICULAR TO THE SURFACE OF THE ASPHALT. MATCH EXISTING.
A     Existing SIDEWALK       A     A       B     B       B       B       B	SS BIKI BILLA BILL BILL	12. 6' WIDE x 20' LONG ASPHALT PAVEMENT. UTILITY TRENCHING PER COA STD DWG 2465, (MAJOR LOCAL).
	5P97-175 1201617 SP-97-175	13. NEW 48.45 LF OF 18" RCP SD PIPE.     Image: New 16.33 LF OF 18" RCP SD PIPE.       14. NEW 16.33 LF OF 18" RCP SD PIPE.
B B B B B B B B B B B B B B B B B B B	PARK BIGIAZ	15. REMOVE AND RELOCATE FIRE HYDRANT, CAP EXISTING FIRE LINE AND PLACE CONCRETE BLOCKING PER COA 2320.
	× ▼ M-1	16. INSTALL 10"x10"x6" TEE ON EXISTING 10" WATER MAIN, RESTRAIN JOINT PER TABLE, THIS SHEET.
SAS SAS	3A JOHNVILLE PL 5A	17. ALL HANDICAP RAMPS, 6' VALLEY GUTTERS AND SIDEWALKS TO BE BUILT WITH BUILDING PERMIT. ≥
	JOHNSON-BRUCE D	MA TIO
	FIRE HYDRANT LOCATIONS	BY NC R
	CUL-DE-SAC. FOUR (4) FIRE HYDRANTS EXIST ON VASSAR PLACE. F.H. #2 AT STA. 11+79 WILL BE RELOCATED TO STA. 10+98. AFTER INSTALLATION; 211 LF WILL SEPARATE FH #1 & NEW FH, AND 353 LF WILL SEPARATE NEW FH & FH #3.	
BUILDING		S NO.
FF=5069.40		
	9 <sup>4</sup>	THE SECONDENSION A. MILLING
		LEGEND NEW CURB & GUTTER
	20 10 0 20 30 40	EXIST WATER LINE
VASSAR PLACE	SCALE: HORZ. 1" = 20' VERT. 1" = 5'	WL
LF OF 18" SD RCP PIPE         20 LF OF 18" SD RCP PIPE           @ SLOPE = 3.66%         @ SLOPE = 1.15%		
		HIGH POINT / WATER BLOCK
		TA     TOP OF ASPHALT       TC     TOP OF CURB       TCON     TOP OF CONCRETE
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	5070	INV     INVERT       FL     FLOWLINE
	1       1	ELEV SPOT ELEVATION
T EXIST 10" WL	5065	FLOW ARROW F.F. FINISH FLOOR TG TOP OF GROUND
		TOG TOP OF GRATE
EXIST 8" SAS	5060	MILLER ENGINEERING CONSULTANTS       Engineers • Planners
	5055	3500 COMANCHE BLVD NE     0 <td< th=""></td<>
		CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT
OVE         SD. INLET		ENGINEERING DEVELOPMENT GROUP
$\frac{10+52.85}{GRATE} = 5065.48$ $\frac{10+87.77}{NW} = 5065.48$ $\frac{10+87.77}{NW} = 5065.43$ $\frac{10+87.77}{NW} = 5065.83$ $\frac{10+87.77}{NW} = 5065.83$ $\frac{10+93.99}{NW} = 5065.83$ $\frac{10+93.99}{NW} = 5065.89$ $\frac{10+93.99}{NW} = 5062.69$ $\frac{11+07.77}{NW} = 5066.17$ $\frac{11+07.77}{NW} = 5062.76$ $\frac{11+07.77}{NW} = 5062.76$ $\frac{11+07.77}{NW} = 5062.76$		DIRECT WATER & POWER UTILITY PLAN & PROFILE
		DESIGN REVIEW COMMUTEE CITY ENGINEER APPROVAL H MO./DAY/YR. MO./DAY/YR.
No     No     No     No     No     No       No     No <t< th=""><th></th><th>JAN 1 6 2008</th></t<>		JAN 1 6 2008
5065.0       5066.0       5066.0       5066.0       5066.0       5066.0       5066.0       5066.0		JAN 1 6 2008     MAR 0 7 2008       DESIGN REVIEW COMMITTEE     CITY ENGINEER       CITY PROJECT NO.     ZONE MAP NO.       State     SHEET       State     G-16-Z       4     4