EXISTING CONDITIONS:

The site is located at the intersection of Prospect Avenue, Chama Street and Prospect Place one block South of Menaul Boulevard. All three adjacent streets are paved with curb and gutter. Prospect Avenue is to the North, Chama Street is to the West and Prospect Place is on the South. There is a paved alley to the Southeast of the site. Directly East of the site is the asphalt parking lot for an apartment building. The existing facility is a church building with asphalt parking and grass. There is no file on record at City Hydrology for the site. All runoff from the site enters adjacent streets and the alley and flows West in Prospect Place to curb inlets East of Louisiana.

### PROPOSED CONDITIONS:

It is proposed to construct and addition to the existing building which will be an indoor playground. The area where the addition is proposed to be constructed is presently a grass landscaped area. All runoff will be directed to the ally or to Prospect Avenue. A slight amount of pavement removal and replacement is required

The site is between San Mateo Blvd. Eubank Blvd. and is, therefore, in Precipitation Zone 3.

### LAND TREATMENT AREAS, EXCESS PRECIPITATION AND UNIT PEAK DISCHARGE:

The peak discharge per acre and excess precipitation are shown for the four land treatments in Zone 2 in the table below, and the values shown are from the City of Albuquerque D. P. M. Also shown are the existing and proposed land treatment areas.

		_									
LAND TREATMENT	q(cfs 100-yr.	5/ac) 10-yr.	E (ii 100-yr.		Existin %	g Site Ar Sq. Ft.		Devel %	oped Site Sg. Ft.	Areas Acres	
Α	1. 87	0. 58	0. 66	0, 19	0. 0	0	0, 0000	0. 0	0	0. 0000	
В	2. 60	1. 19	0. 92	0. 36	21. 1	6, 650	0. 1527	10. 7	3, 350	0. 0769	
С	3. 45	2. 00	1. 29	0. 62	0. 0	0	0, 0000	0. 0	0	0. 0000	
D	5. 02	3. 39	2. 36	1. 50	78. 9	24, 890	0. 5714	89. 3	28, 190	0. 6472	
Totals					100. 0	31,540	0. 7241	100.0	31,540	0. 7241	

### PEAK DISCHARGE:

Q10 = 0.1527 \* 1.19 + 0.5714\* 3.39 = 2.12 cfs

Q100 = 0.0769 \* 2.60 + 0.6472 \* 5.02 = 3.45 cfs

Q10 = 0.0769 \* 1.19 + 0.6472 \* 3.39 = 2.29 cfs

## VOLUME, 100-YEAR, 6-HOUR

EXISTING CONDITIONS:

V100 = (6,650 \* 0.92 + 24,890 \* 2.36) / 12 = 5,405 cf

## DEVELOPED CONDITIONS:

	V100(CF)	V10(CF)	Q100(CFS)	Q10( CFS
DEVELOPED	5, 800	3, 624	3. 45	2. 29
EXISTING	5, 405	3, 310	3, 27	2. 12
INCREASE	395	314	0. 18	0. 17

## OFF-SITE FLOW:

There is essentially no offsite flow associated with this site.

# FLOOD INSURANCE RATE MAP:

The site is located on Flood Insurance Rate Map 3500100352 D. The site does not lie within, adjacent to, or upstream from any flood hazard area.

## DRAINAGE CALCULATIONS:

to achieve positive drainage and waterblock.

### DRAINAGE CRITERIA:

The calculations shown on this plan were prepared in accordance with Section 22.2, Hydrology, of the Development Process Manual, Volume 2, Design Criteria, for the City of Albuquerque in cooperation with Bernalillo County, New Mexico and the Metropolitan Arroyo Flood Control Authority, January, 1993.

### PRECIPITATION ZONE:

LAND TREATMENT		5/ac) 10-yr.	E (; 100-yr.		Existir %	ng Site Ar Sq. Ft.		Devel %	oped Site Sg. Ft.	Areas Acres	
Α	1. 87	0. 58	0. 66	0. 19	0. 0	0	0, 0000	0. 0	0	0. 0000	
В	2. 60	1. 19	0, 92	0. 36	21. 1	6, 650	0. 1527	10. 7	3, 350	0. 0769	
С	3, 45	2. 00	1. 29	0. 62	0. 0	0	0. 0000	0.0	0	0. 0000	
D	5. 02	3. 39	2. 36	1. 50	78. 9	24, 890	0. 5714	89. 3	28, 190	0. 6472	
Totals					100.0	21 540	0.7241	100.0	21 540	0.7044	

EXISTING CONDITIONS:

Q100 = 0.1527 \* 2.60 + 0.5714\* 5.02 = 3.27 cfs

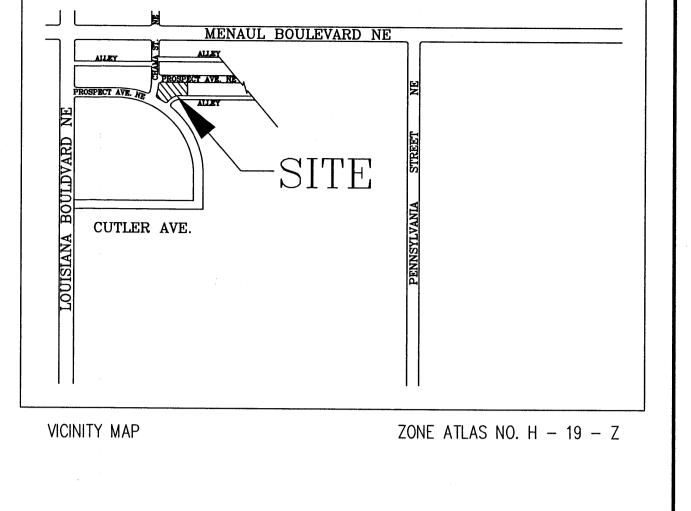
## DEVELOPED CONDITIONS:

V10 = (6,650 \* 0.36 + 24,890 \* 1.50) / 12 = 3,310 cf

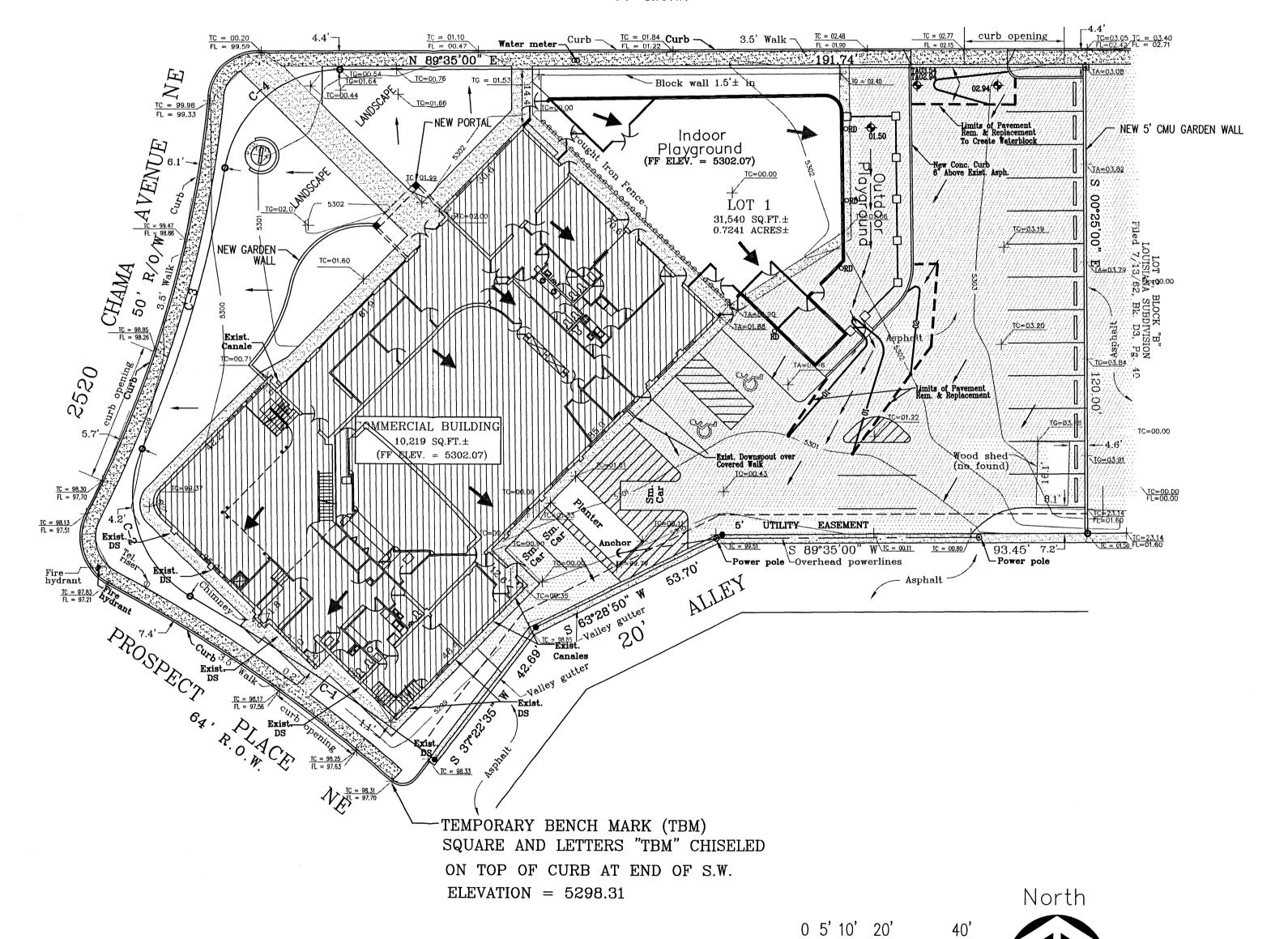
V100 = (3,350 \* 0.92 + 28,190 \* 2.36) / 12 = 5,800 cfV10 = (3,350 \* 0.36 + 28,190 \* 1.50) / 12 = 3,624 cf

## SUMMARY OF ON-SITE VOLUMES AND PEAK DISCHARGE RATES!

	V100(CF)	V10(CF)	Q100(CFS)	Q10(CFS)
DEVELOPED	5, 800	3, 624	3. 45	2. 29
EXISTING	5, 405	3, 310	3, 27	2. 12
INCREASE	395	314	0. 18	0. 17



AVENUE PROSPECT 50' R.O.W.



GRADING & DRAINAGE PLAN SCALE: 1"=20'

CURVE DATA 
 NO.
 DELTA
 RADIUS
 LENGTH
 CHORD

 C-1
 06°19'38"
 683.89'
 75.53'
 N56°38'18"W, 75.48'

 C-2
 82°57'51"
 30.00'
 43.44'
 N18°19'12"W, 39.74'

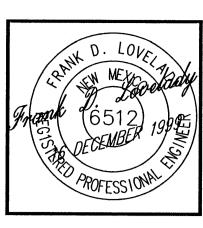
 C-3
 14°10'29"
 306.31'
 75.78'
 N16°04'28"E, 75.59'

 C-4
 80°35'46"
 30.00'
 42.20'
 N49°17'07"E, 38.81'

Legal Description LOT 1, BLOCK "B" LOUISIANA SUBDIVISION, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

Bench Mark City Bench Mark 1—H19.

Topographic Survey Prepared by Doug Smith Surveying, Inc.



 $\bigcirc$  $\approx$ 

JOB N	0:	9924	
DATE:	20	OCTOBER	1999
		REVISIONS	5

New Spot Elevation TC = Top of Curb (Concrete) Elevation. TA = Top of Asphalt Elevation

FL = Flowline Elevation

O = Set capped rebar "7002"
● = Set cross in concrete
回 = Set nail in asphalt

ORD = New Roof Drain

 $\frac{10 = 98.17}{11 = 97.56}$  = Existing Spot Elevation

--- 5301 - = Existing Contour

--01 = New Contour

= Flow Direction - Surface Runoff

Flow Direction - Roof Runoff

LEGEND