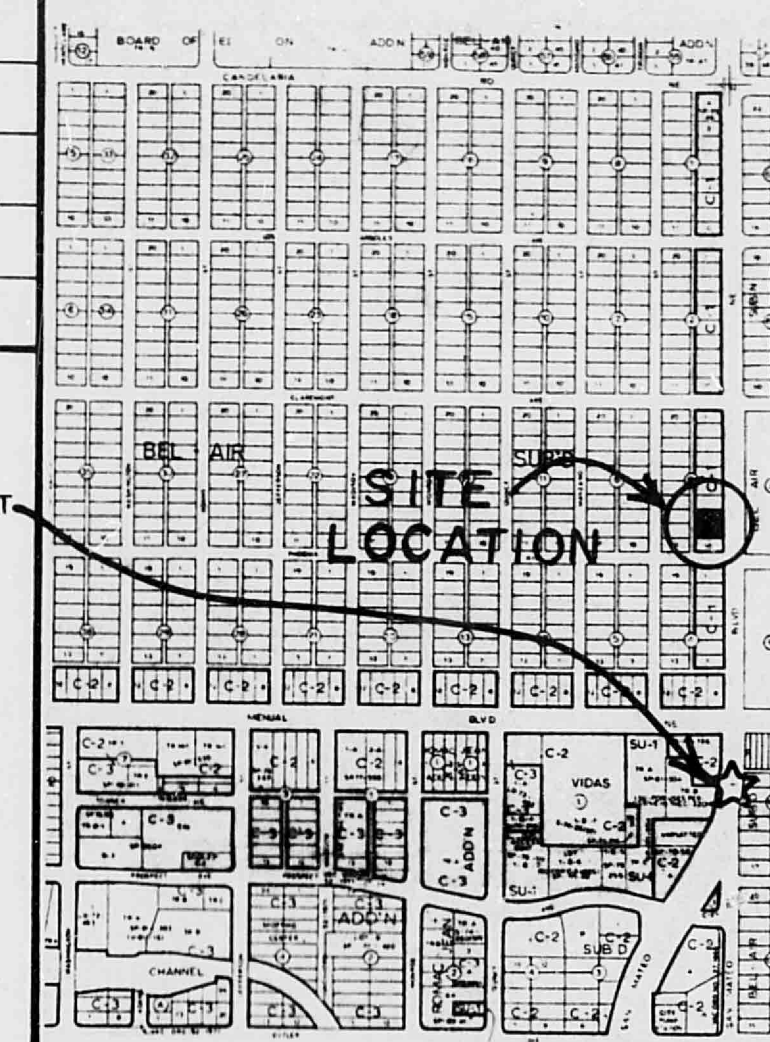






SCALE:  
1"=10'

LEGEND	
	TRANSITION AREA
	FLOW DIRECTION
	TC 11.11 TOP OF CURB ELEVATION
	EXISTING CONTOUR
	EXISTING SPOT ELEVATION



VICINITY MAP NO SCALE

**LEGAL DESCRIPTION**  
LOTS 8 & 9, BLOCK 3  
BEL-AIR SUBDIVISION  
ALBUQUERQUE, NEW MEXICO.

**GENERAL**  
Zone Atlas Page H-17, Flood Hazard Zone C  
**LAND USE**  
Proposed - 100,000 sq. ft. with frontage onto San Mateo Boulevard N.E. which is paved with concrete and gutters. The lot backs onto an unpaved alley. Developed commercial lots are on each of the other two sides.  
Proposed - development as a commercial building. Alley grades will be set on the south half of the alley will be paved.  
**SOIL TYPE** - Entisol - Gravelly fine sandy loam and gravelly sandy loam.  
**TOTAL LOT AREA** - 120 ft. X 132 ft. = 15,840 sq. ft. or 0.3636 ac.

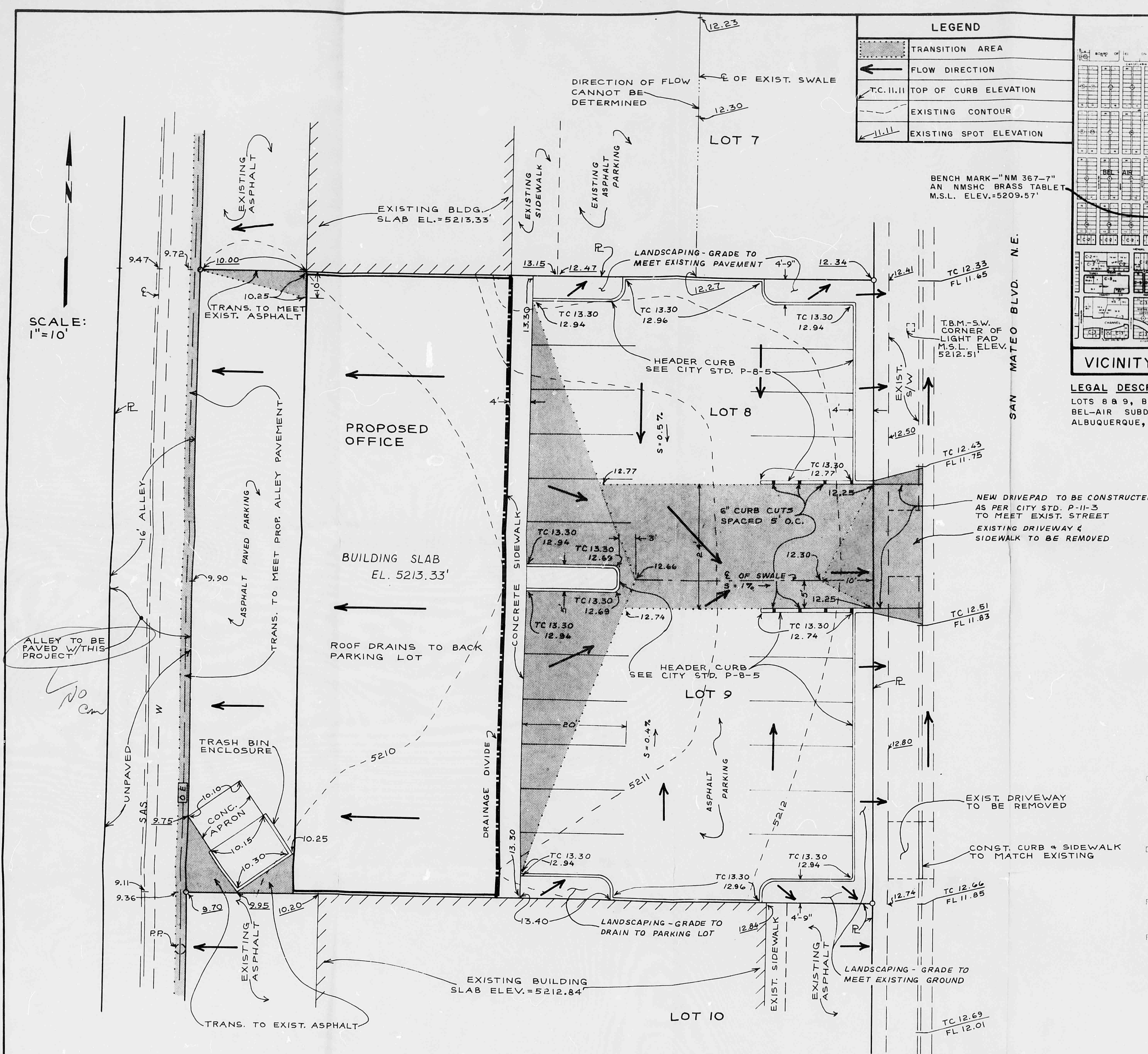
**HYDROLOGY**  
**TIME OF CONCENTRATION**  
Flow length 182 ft.  
Slope 1.5%  
TC 4.2 minutes; Assume 10 minutes  
**6-HOUR RAINFALL DEPTH**  
10-yr. = 1.49 in.  
100-yr. = 2.27 in.  
**RAINFALL INTENSITY**  
10-yr. = 3.28 in./hr.  
100-yr. = 4.99 in./hr.  
**RUNOFF COEFFICIENTS**  
Existing Conditions C = 0.34  
Developed - draining to street C = 0.69  
Developed - draining to alley C = 0.98  
**RUNOFF RATES**  
Existing Conditions - lot drains to alley and Phoenix Avenue N.E.  
10-yr. = 0.40 cfs  
100-yr. = 0.62 cfs  
Developed Condition - draining to San Mateo Boulevard N.E.  
10-yr. = 0.58 cfs  
100-yr. = 0.88 cfs  
Developed Condition - draining to alley and Phoenix Avenue N.E.  
10-yr. = 0.53 cfs  
100-yr. = 0.81 cfs  
**RUNOFF VOLUMES**  
Existing Condition  
10-yr. = 667 cu. ft.  
100-yr. = 1,116 cu. ft.  
Developed Condition - draining to San Mateo Boulevard N.E.  
10-yr. = 1,126 cu. ft.  
100-yr. = 1,457 cu. ft.  
Developed Condition - draining to alley and Phoenix Avenue N.E.  
10-yr. = 875 cu. ft.  
100-yr. = 1,332 cu. ft.  
**OFF-SITE FLOW**  
The two abutting lots are both developed as commercial lots with drainage primarily to San Mateo Boulevard N.E. Each has a small back parking lot which drains to the alley west of the property. The south half of this alley will be graded and paved to drain to Phoenix Avenue N.E.  
**HYDRAULICS**  
V-shaped channel in center of front parking lot.  
Maximum Top Width 18.32 ft.  
Maximum Depth 0.18 ft.  
Slope 1%  
Required G 1 cfs  
Design G 3.6 cfs

**ALLEY HYDROLOGY**  
**RUNOFF VOLUME**  
Existing Condition  
10-yr. = 1,648 cu. ft.  
100-yr. = 2,511 cu. ft.  
Developed Condition  
10-yr. = 1,815 cu. ft.  
100-yr. = 2,765 cu. ft.  
**ALLEY HYDRAULICS**  
V-shaped channel in center of front parking lot.  
Top Width 16 ft.  
Depth 0.25 ft.  
Slope 0.5 % minimum  
Design G 3.1 cfs  
Required G 1.7 cfs

**GENERAL**  
The alley, to the west of the site is presently unpaved. Grades are designed for the length of alley between Phoenix Avenue N.E. and Tenth Avenue N.E.; however, only the southern half of it will be paved at this time. There is a high point in the approximate center of the alley where part of the runoff drains north and part drains south. Pavement will be placed from this high point south to Phoenix Avenue N.E.  
**DRAINAGE AREA** (includes alley itself, back parking of commercial buildings to the east and building to be constructed in this project) = 14,915 sq. ft. or 0.3424 ac.  
Hydrology has been computed from the same data that was used on the project site except as shown.  
**RUNOFF COEFFICIENTS**  
Existing Conditions C = .89  
Developed Conditions C = .98  
**RUNOFF RATES**  
Existing Condition  
10-yr. = 1.0 cfs  
100-yr. = 1.5 cfs  
Developed Condition  
10-yr. = 1.1 cfs  
100-yr. = 1.7 cfs

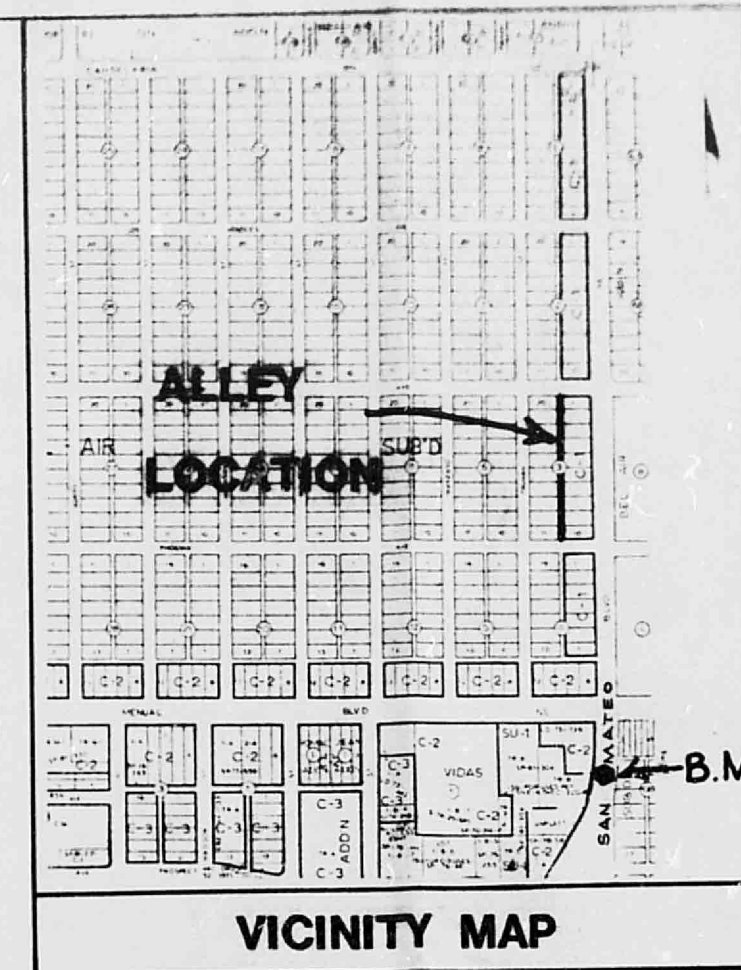
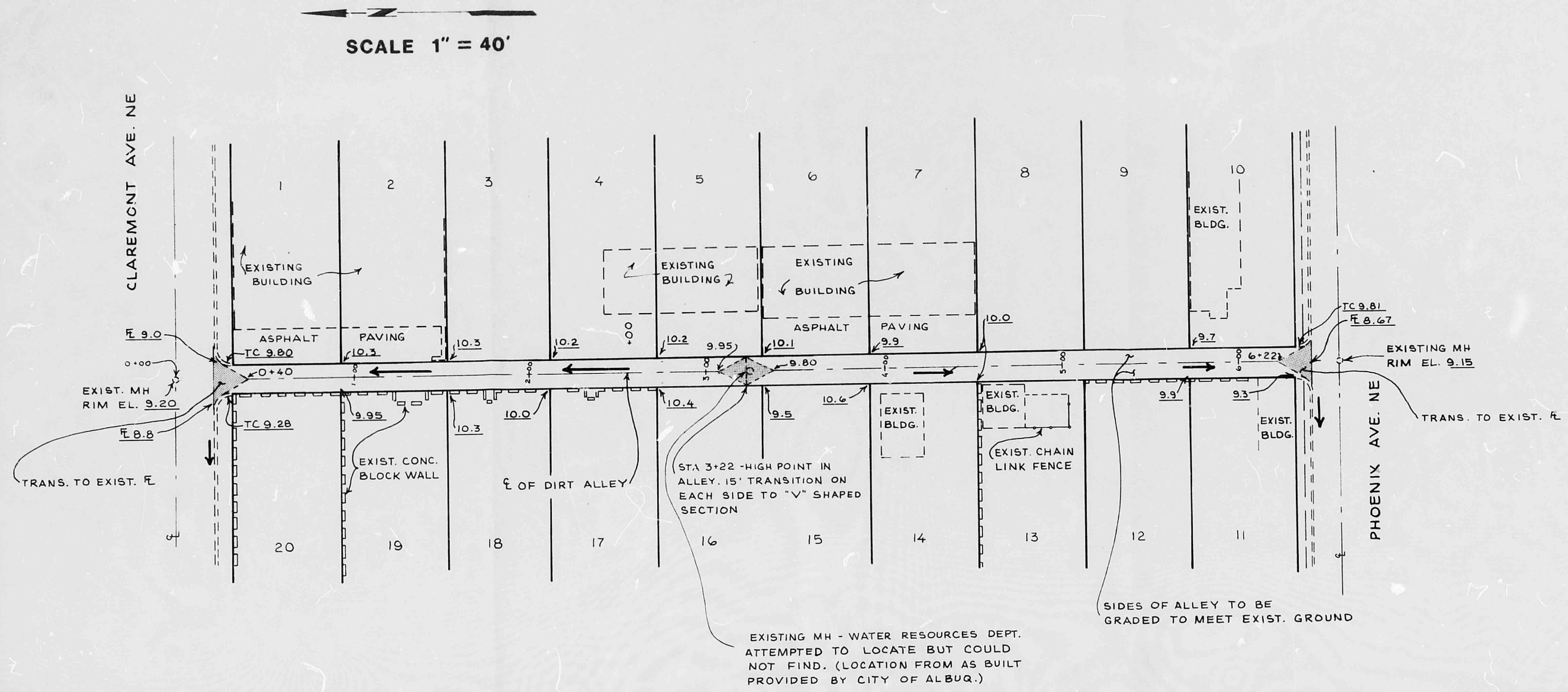
DESIGNED BY: S.D. E.D.	<b>GRADING &amp; DRAINAGE PLAN</b> <b>OFFICE BUILDING</b> <b>FOR</b> <b>HAROLD TIDENBURG</b> FEB 11 1985 HYDROLOGY SECTION
DRAWN BY: S.D.	
CHECKED BY: E.D.	
PREPARED BY: FEB. 1985	
RESOURCE TECHNOLOGY, INCORPORATED	

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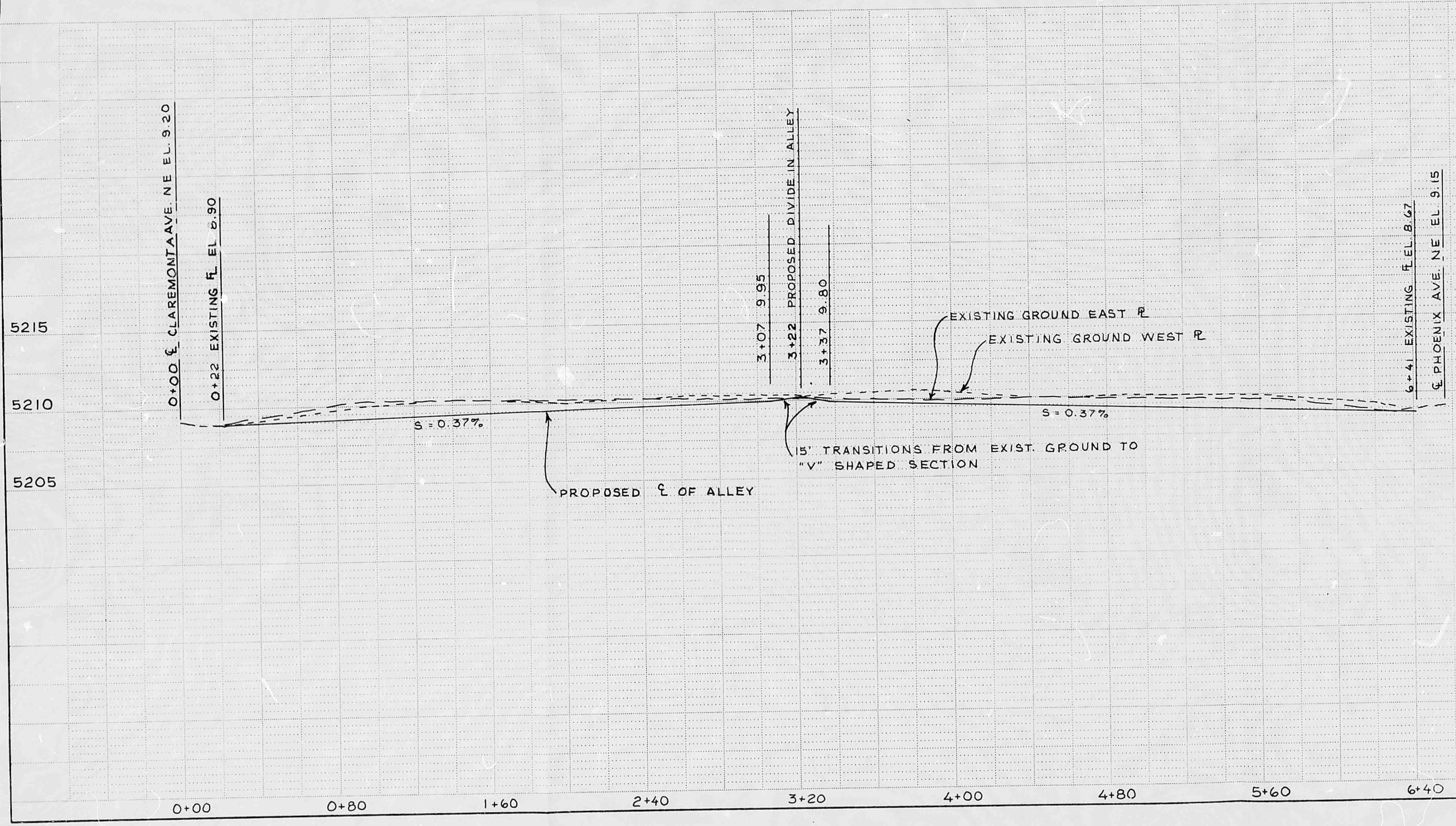


NOTE: ADD 5200' TO ALL ELEVATIONS





LEGEND	
	FLOW DIRECTION
	TRANSITION AREA
10.0	EXISTING SPOT ELEVATION
10.00	PROPOSED ELEVATION



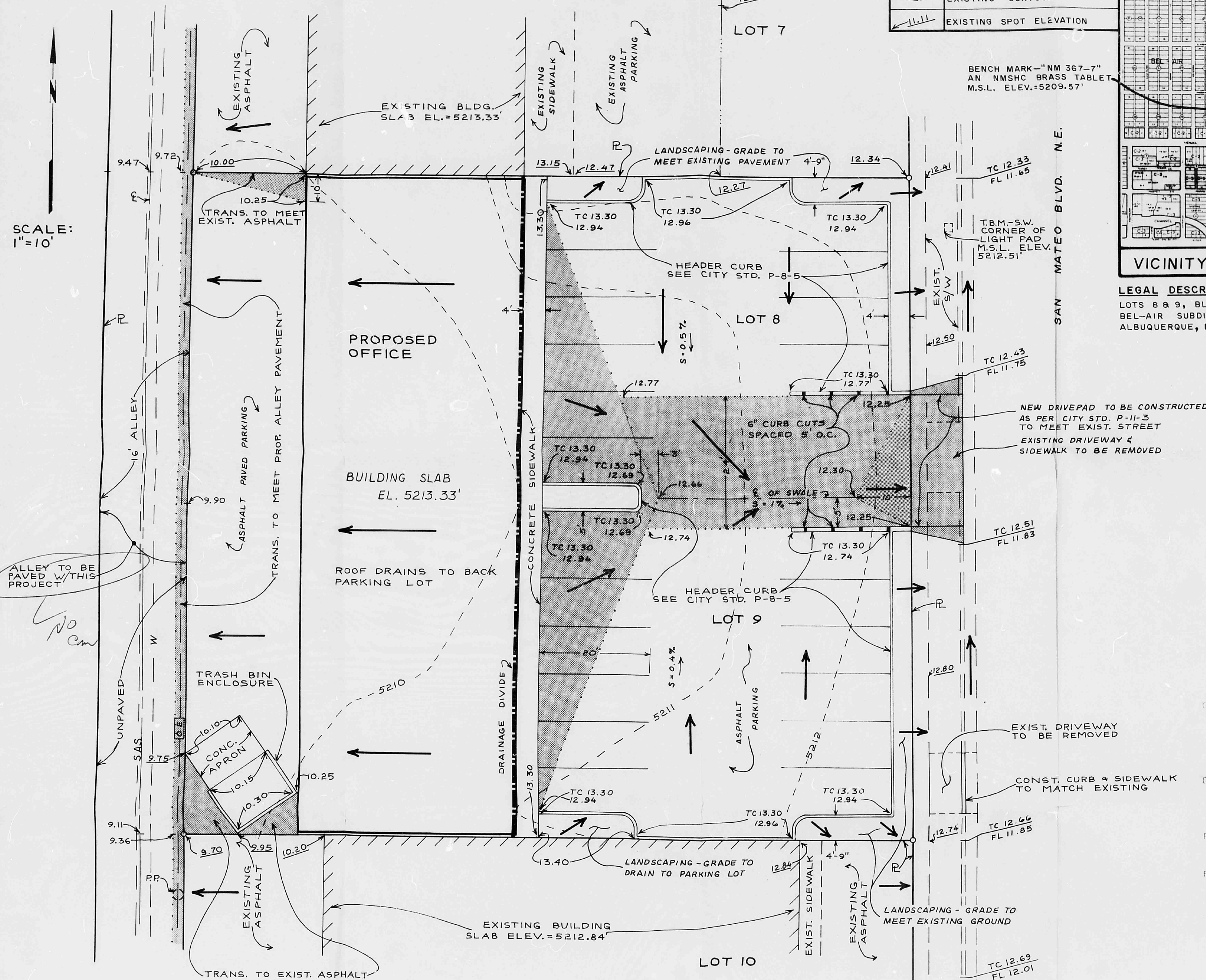
ENGINEER'S SEAL		SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
		FIELD NOTES	DATE	BENCH MARK - NM-367-7 - A NASHC BRASS	CONSTRUCTION	DATE	DATE
REMARKS		NO.	BY	BENCH MARK - 225 SOUTH OF INTERSECTION OF		DATE	
REVISIONS				HEMUL BLVD & SAN MATEO BLVD. IN		DATE	
DESIGNED BY				MIDDLE OF MEDIAN		DATE	
DRAWN BY				MSL ELEV 5209.57		DATE	
CHECKED BY						DATE	

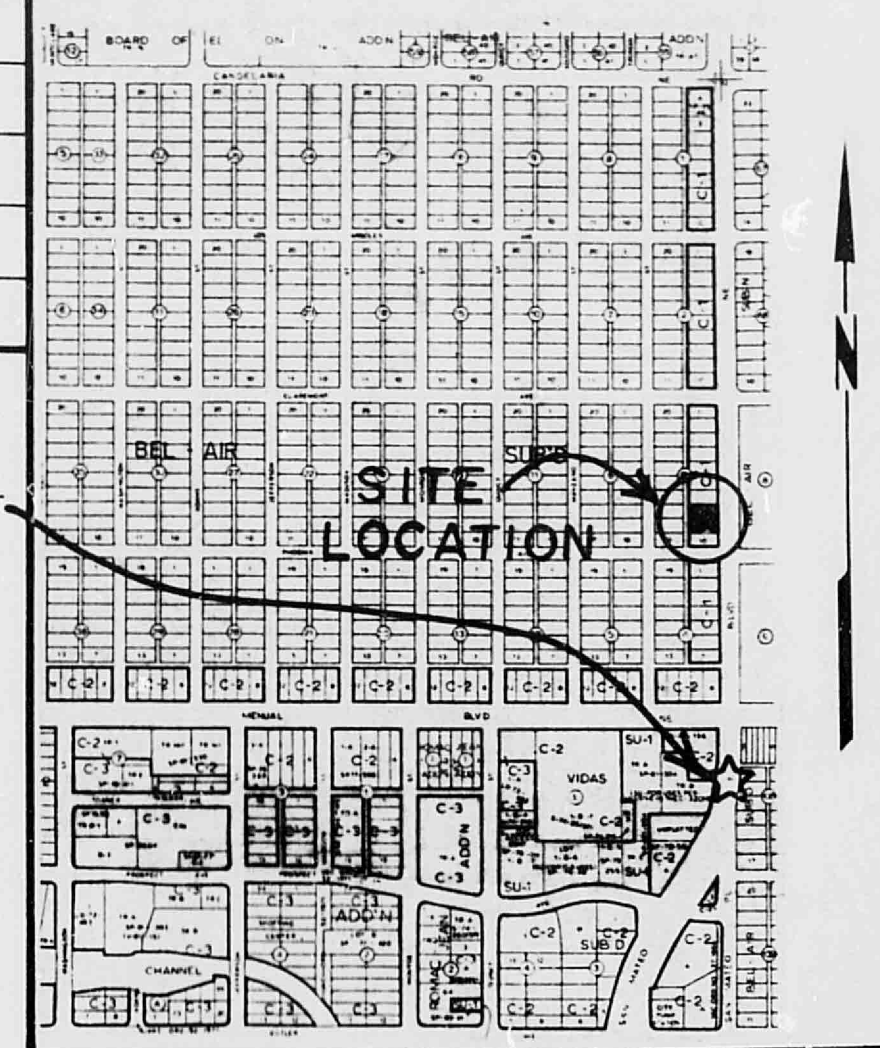
CITY OF ALBUQUERQUE MUNICIPAL DEVELOPMENT DEPARTMENT ENGINEERING DIVISION					
TITLE: ALLEY GRADING BLOCK 3 OF BEL-AIR SUBDIVISION					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste		
A.C.E. - Design			Traffic		
A.C.E. - Hydrology			Water		
DRAWING NO. 2498		MAP NO. H-17		SHEET 1 OF 1	

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LEGEND	
[Symbol]	TRANSITION AREA
[Symbol]	FLOW DIRECTION
[Symbol]	TOP OF CURB ELEVATION
[Symbol]	EXISTING CONTOUR
[Symbol]	EXISTING SPOT ELEVATION



**LEGAL DESCRIPTION**  
 LOTS 8 & 9, BLOCK 3  
 BEL-AIR SUBDIVISION  
 ALBUQUERQUE, NEW MEXICO.

**ZONE ATLAS**  
 PAGE NO. H-17

**GENERAL**  
 Zone Atlas Page H-17, Flood Hazard Zone C  
 LAND USE:  
 Present - vacant lot with frontage onto San Mateo Boulevard N.E. which is paved with curb and gutters. The lot backs onto an unpaved alley. Developed commercial lots are on each of the other two sides.  
 Proposed - mostly vacant is a commercial building. Alley grades will be set to the south half of the site, will be paved.  
 SOIL TYPE - Entisol - Gravelly fine sandy loam and gravelly sandy loam.  
 TOTAL LOT AREA - 120 ft. X 132 ft. = 15,840 sq. ft. or 0.3636 ac.

**HYDROLOGY**  
 TIME OF CONCENTRATION  
 Flow length 182 ft.  
 Slope 1.5%  
 Tc 4.2 minutes; Assume 10 minutes  
 6-HOUR RAINFALL DEPTH  
 10-yr. = 1.49 in.  
 100-yr. = 2.27 in.  
 RAINFALL INTENSITY  
 10-yr. = 3.28 in./hr.  
 100-yr. = 4.99 in./hr.

**RUNOFF COEFFICIENTS**  
 Existing Conditions C = 0.34  
 Developed - draining to street C = 0.89  
 Developed - draining to alley, C = 0.98

**RUNOFF RATES**  
 Existing Conditions - lot drains to alley and Phoenix Avenue N.E.  
 10-yr. = 0.40 cfs  
 100-yr. = 0.62 cfs  
 Developed Condition - draining to San Mateo Boulevard N.E.  
 10-yr. = 0.28 cfs  
 100-yr. = 0.88 cfs  
 Developed Condition - draining to alley and Phoenix Avenue N.E.  
 10-yr. = 0.53 cfs  
 100-yr. = 0.81 cfs

**RUNOFF VOLUMES**  
 Existing Condition  
 10-yr. = 667 cu. ft.  
 100-yr. = 1,016 cu. ft.  
 Developed Condition - draining to San Mateo Boulevard N.E.  
 10-yr. = 456 cu. ft.  
 100-yr. = 1,457 cu. ft.  
 Developed Condition - draining to alley and Phoenix Avenue N.E.  
 10-yr. = 875 cu. ft.  
 100-yr. = 1,332 cu. ft.

**OFF-SITE FLOW**  
 The two abutting lots are both developed as commercial lots with drainage primarily to San Mateo Boulevard N.E. Each has a small back parking lot which drains to the alley west of the property. The south half of this alley will be graded and paved to drain to Phoenix Avenue N.E.

**HYDRAULICS**  
 V-shaped channel in center of front parking lot.  
 Maximum Top Width 18.32 ft.  
 Maximum Depth 0.16 ft.  
 Slope 1%  
 Required Q 1 cfs  
 Design Q 3.8 cfs

**ALLEY HYDROLOGY**

**GENERAL**  
 The alley to the west of the site is presently unpaved. Grades are designed for the length of alley between Phoenix Avenue N.E. and Claremont Avenue N.E.; however, only the southern half of the alley will be paved at this time. There is a high point in the approximate center of the alley where part of the runoff drains north and part drains south. Pavement will be placed from this high point south to Phoenix Avenue N.E.

**DRAINAGE AREA** (includes alley itself, back parking of commercial buildings to the east and building to be constructed in this project) = 14,915 sq. ft. or 0.3424 ac.  
 Hydrology has been computed from the same data that was used on the project site except as shown.

**RUNOFF COEFFICIENTS**  
 Existing Conditions C = .69  
 Developed Conditions C = .98

**RUNOFF RATES**  
 Existing Condition  
 10-yr. = 1.0 cfs  
 100-yr. = 1.5 cfs  
 Developed Condition  
 10-yr. = 1.1 cfs  
 100-yr. = 1.7 cfs

**RUNOFF VOLUME**  
 Existing Condition  
 10-yr. = 1,668 cu. ft.  
 100-yr. = 2,511 cu. ft.  
 Developed Condition  
 10-yr. = 1,815 cu. ft.  
 100-yr. = 2,765 cu. ft.

**ALLEY HYDRAULICS**  
 V-shaped channel in center of alley as shown in Albuquerque City Standard Grading P-544  
 Top Width 16 ft.  
 Depth 0.23 ft.  
 Slope 0.2 % minimum  
 Design Q 3.1 cfs  
 Required Q 1.7 cfs

DESIGNED BY: S.D. E.D.	<b>GRADING &amp; DRAINAGE PLAN</b> <b>OFFICE BUILDING</b> <b>FOR</b> <b>HAROLD TIDENBURG</b> <b>FEB 21 1985</b> <b>HYDROLOGY SECTION</b>
DRAWN BY: S.D.	
CHECKED BY: E.D.	
PREPARED BY: FEB. 1985	
<b>RESOURCE TECHNOLOGY, INCORPORATED</b>	

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