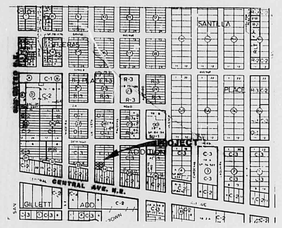
Hydrology File No. K-18/D046 1 of 1



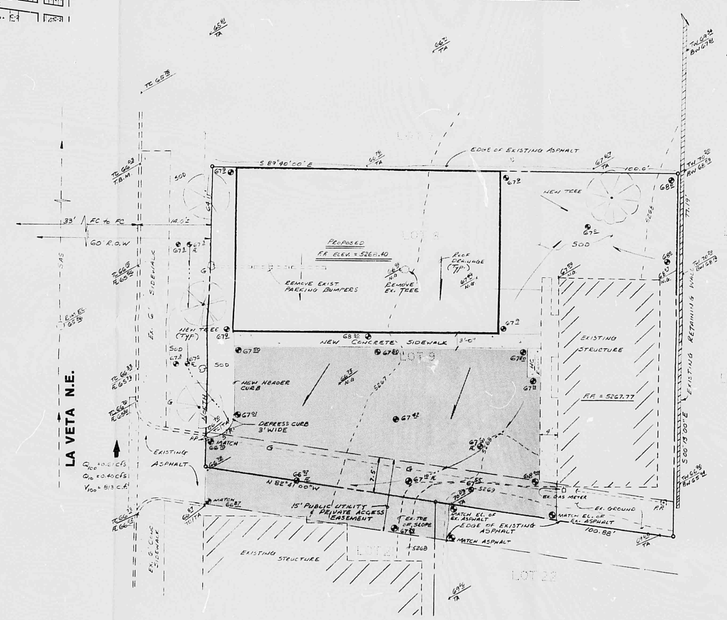
VICINITY MAP K - 18
SCALE: 1"=500'

GRADING & DRAINAGE PLAN

THE PURPOSE OF THIS PLAN/REPORT IS TO ESTABLISH THE CRITERIA FOR CONTROLLING SURFACE STORM RUN-OFF AND TO STUDY THE HYDROLOGIC AFFECTS OF THE PROPOSED DRAINAGE/GRADING AND INFRASTRUCTURE IMPROVEMENTS TO THE PROJECT. ADDITIONALLY, THIS PLAN IS PREPARED TO FACILITATE BUILDING PERMIT APPROVAL. THE SITE IS PRESENTLY DESCRIBED AS LOTS 8 & 9, BL. 34 TIJERAS PLACE AUDITION, ALBUQUERQUE, NEW MEXICO.

NO SUBSTANTIAL OFF-SITE FLOWS IMPACT THE SITE, WITH AN EXISTING RETAINING WALL PROTECTING THE EAST BOUNDARY. ALL OTHER EXISTING OFF-SITE FLOWS ARE CONSIDERED MINIMAL AND ARE REROUTED BY PROPOSED SWALES.

THE SITE IS WITHIN AN ESTABLISHED URBAN AREA, AN "INFILL" SITE. A RESTUDY OF THE ALBUQUERQUE METROPOLITAN DRAINAGE STUDY, 1987, VOL. II. HAS REMOVED THE HISTORICAL 100-YR. FLOODPLAINS THAT EXISTED DOWNSTREAM. AS A RESULT, THIS SITE HAS BEEN GRANTED "FREE DISCHARGE" OF STORM RUN-OFF, BY THE CITY OF ALBUQUERQUE, UTILITY DEVELOPMENT-HYDROLOGY SECTION. THIS PLAN IS PRESENTED USING HYDROLOGIC PROCEDURES AS OUTLINED IN CHAPTER 22, VOL. II, OF THE DEVELOPMENT PROCESS MANUAL.



NOTES

1. THE GRADING AND DRAINAGE PLAN WAS PREPARED FROM A TOPOGRAPHIC SURVEY COMPILED BY A & E ENGINEERING, INC., JUNE 1987.

RECEIVED JUN 2 4 1987 HYDROLOGY SECTION

CALCULATIONS

I. DESIGN CRITERIA

Discharge Rational Method - Q = CIA

Volume - SCS Method - Vol. = R x A

'C'(L.S.) = 0.25, 'C'(Imperv.) = 0.95, 'C'(Undev.) 0 40

Soil Type - 'B' per Soil Conservations Service

$i = P6.84tc^{-0.51}$, $Tc = 0.0078L^{0.77} \div S^{0.385}$

$P_{100} = 2.3$ in., $P_{10} = 1.51$ in.

Site Area = 0.16 Acres

II. EXISTING CONDITIONS

Imperv. Area = 0.023 Ac., Dirt Area = 0.137 Ac.

TC = 10 min. 'CC' = 0.48 CN = 65

$I_{100} = 4.86$ in./hr. $I_{10} = 3.19$ in./hr.

$Q_{100} = 0.4$ c.f.s. $Q_{10} = 0.25$ c.f.s.

$Vol._{100} = 0.28(0.16)\frac{43560}{12} = 162$ c.f.

III. PROPOSED CONDITIONS

Landscape Area = 0.04 Ac. Imper.. Area = 0.12 Ac.

'CC' = .78, TC = 10 min., CN = 90

$Q_{100} = 0.61$ c.f.s. $Q_{10} = 0.40$ c.f.s

$Vol._{100} = 1.4(0.16)\frac{43560}{12} = 813$ c.f.

LEGEND

EXISTING SPOT ELEV.	5267
EXISTING CONTOUR	5267
EXISTING CONCRETE	
EXISTING CURB	
TOP OF CURB	TC
FLOWLINE	FL
TOP OF ASPHALT	TA
TOP OF WALL	TW
BOTTOM OF WALL	BW
PROPERTY LINE	
EXISTING FINISH FLOOR ELEV.	F.F. = 5267.77
POWER POLE	P.P.
NEW SPOT ELEV.	5272
NEW SWALE	
DIRECTION OF FLOW	
NEW PAVEMENT	

LEGAL DESCRIPTION: BLOCK 34, LOTS 8 & 9 OF THE TIJERAS PLACE ADDITION, BERNALILLO COUNTY, ALBUQUERQUE, NEW MEXICO.

PROPERTY ADDRESS: 112 LA VETA N.E.

BENCHMARK: THE BENCHMARK IS LOCATED 41.4 FEET NORTH FROM CENTERLINE OF CENTRAL, 130.7 FEET EAST FROM CENTERLINE OF ALVARADO NE AND 132.0 FEET WEST FROM CENTERLINE OF VALENCIA NE. THE STATION MARK IS A 2" BRASS TABLET SET IN A DRILLED HOLE ON THE SIDEWALK. STATION IS STAMPED "5-K18A ACS". THE ELEVATION OF SAID BENCHMARK IS 5277.510 FEET.

DAVID L. KALLEMEYN NEW MEXICO 6857 REGISTERED PROFESSIONAL ENGINEER

Bell Galyardt Associates
architects engineers surveyors

ARENCON WELDING SHOP

GRADING AND DRAINAGE PLAN

DATE 23 June 87
DESIGNED RLC
DRAWN RLC
CHECKED
COMM. NO. 87146

SHEET 1 OF 1
REVISIONS

REF. 22 DATE 6-25-93 OP

CITY OF ALBUQUERQUE

This microimage is certified to be a complete and accurate copy of the original as it appears in the files of the PUBLIC WORKS DEPARTMENT - HYDROLOGY DIVISION and was filmed in the normal course of business. The photographic processes used meet the Basic Microfilm Standards of the National Micrographics Association (AIIM-1977).

CITY CLERK RECORDER

OFFICIAL SEAL NORMITA SANCHEZ NOTARY PUBLIC STATE OF NEW MEXICO My Commission Expires May 8 1996

THIS PLAN SHOT TWICE ONCE ON LIGHT AND ONCE ON DARK.

CITY OF ALBUQUERQUE THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT.

PLANS/PLATS ON FILE

FILE DESC: K-18/D046

PLANS/PLATS 1

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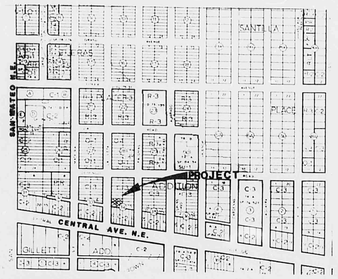
CITY OF ALBUQUERQUE

C D F



VICINITY MAP K - 18
SCALE: 1"=500'

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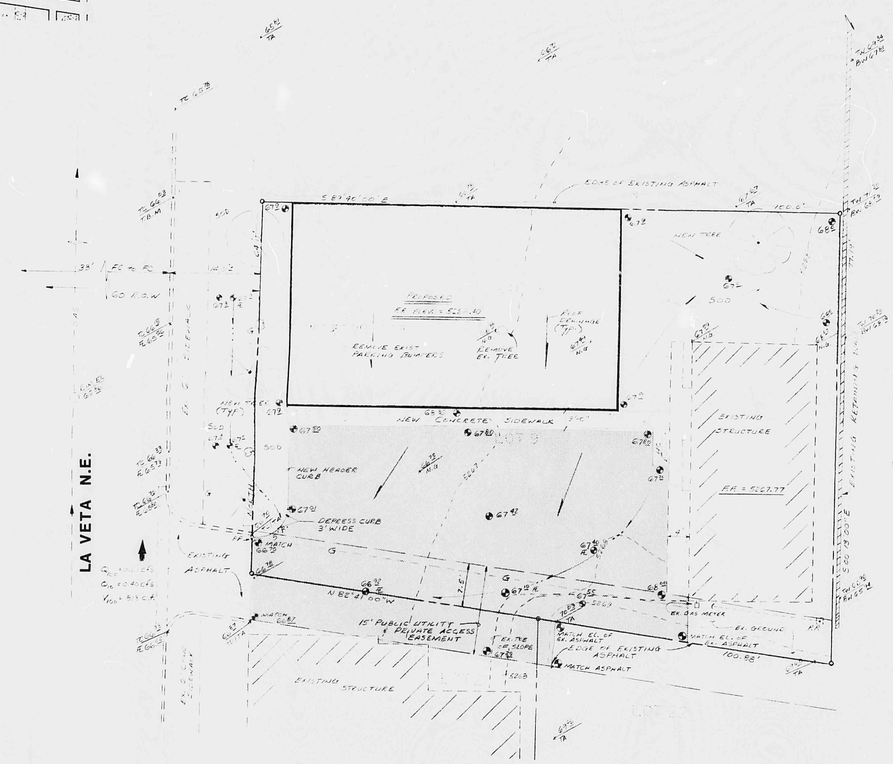

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HYDROLOGY SECTION
JUN 2 3 1987

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EXISTING CONTOUR	5267
EXISTING CONCRETE	
EXISTING CURB	
TOP OF CURB	TC
FLOWLINE	FL
TOP OF ASPHALT	TA
TOP OF WALL	TW
BOTTOM OF WALL	BW
PROPERTY LINE	
EXISTING FINISH FLOOR ELEV.	FF = 5267.77
POWER POLE	PP
NEW SPOT ELEV.	672
NEW SWALE	
DIRECTION OF FLOW	
NEW PAVEMENT	

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DAVID L. KALLEMEYN
NEW MEXICO
8882
REGISTERED PROFESSIONAL ENGINEER

Bell Galyardt Associates
architects engineers surveyors

ARENCON WELDING SHOP

GRADING AND DRAINAGE PLAN

DATE 23 JUNE 1987
DESIGNED PBC
DRAWN PBC
CHECKED
COMM. NO. 87-118

SHEET 1 OF 1
REVISIONS

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Karen Aiken
CITY CLERK RECORDER

OFFICIAL SEAL
NORBERTA SANCHEZ
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires MAY 8 1995
Norberta Sanchez

D 24 C 20 B 16 A 12

CITY OF ALBUQUERQUE

C D