HYDROLOGY

K11/D42
TWO PLANS

K11-D42

2 PLANS

GRADING AND DRAINAGE PLAN

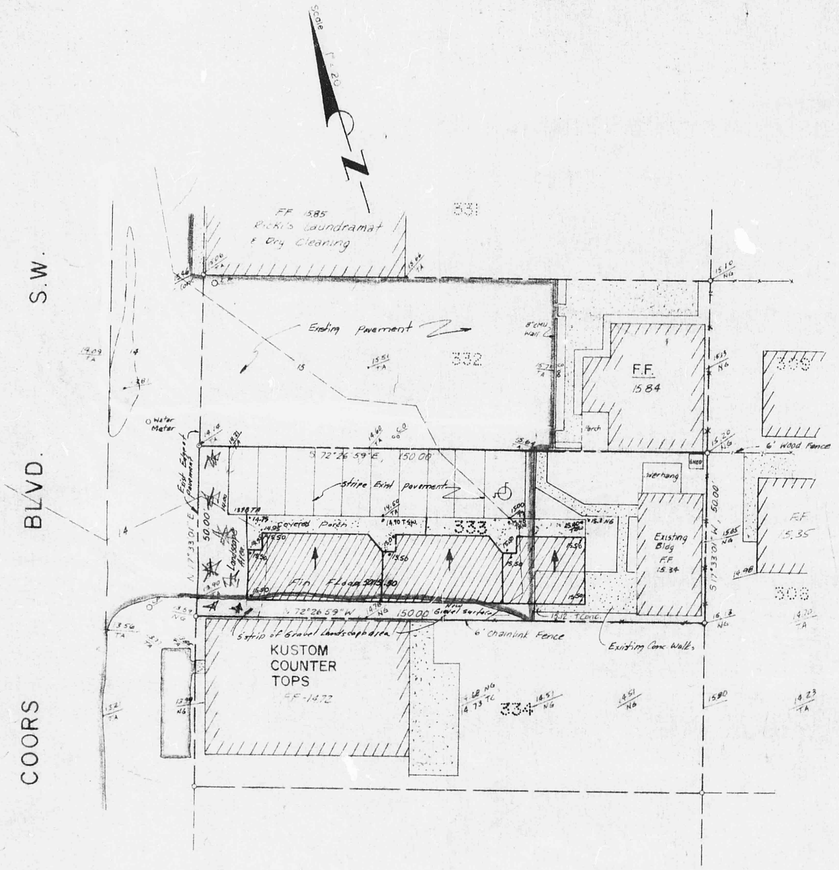
FOR

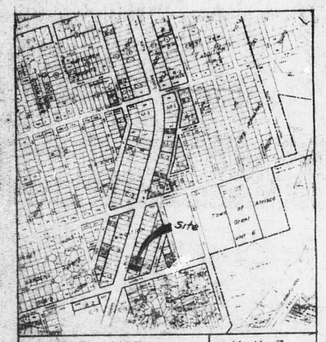
LOT 333

RIO GRANDE HEIGHTS

ALBUQUERQUE, NEW MEXICO

LEGEND	
	Asphalt Paving
	Property Line
T.C.	Top of Curb
15.46	Spot Elevation
N.G.	Natural Ground
T.A.	Top of Asphalt
	Building Structure





VICINITY MAP | K-11-Z

BENCH MARK DATA

Located on the intersection of Gonzales Rd. and 53rd St.
Bench Mark No. 9-K-11
Elevation 5070.279

EROSION CONTROL

THE CONTRACTOR SHALL BE RESPONSIBLE FOR RETAINING AND MAINTAINING ALL SEDIMENT DEPOSITS WITHIN THE LIMITS OF THE PROPERTY THROUGHOUT THE DURATION OF CONSTRUCTION.

SITE DRAINAGE CRITERIA

This is a grading and drainage plan for Lot 333, Rio Grande Heights, Albuquerque, New Mexico. The report consists of a hydrolic study of the probable 100-year storm affecting the site. The purpose of this plan is to detain the generated runoff developed by this project and allow a controlled release.
The following are required by the City of Albuquerque Drainage Section concerning this drainage plan:

A. Vicinity Map
B. Bench Mark Data
C. Grading and Drainage plan per the D.P.M.
D. Site Drainage Criteria

The plan show:

A. Existing contours at one-foot intervals.
B. Proposed grades indicated by contours and spot elevations.
C. Swales and ponds as indicated by the legend shown.
D. Grading and drainage plan.

This site does not lie within a designated flood hazard zone (map 35002-0027)

DRAINAGE NOTES AND CALCULATIONS

1. Legal description: Lot 333, Rio Grande Heights Subdivision, Albuquerque, New Mexico, filed in the office of the County Clerk of Bernalillo County on October27, 1947, Book C, Page 75.

2. Zoning: C-3, Zone Atlas No. K-11-Z

3. Soil Type: As per the U.S.D.A. Soil Conservation Report on soils of Bernalillo County this is defined as a sandy loam of the hydrolic group B. Hence, the C value as per the C.P.M. for use in the rational equation = 0.34.

4. Offsite Flows: There are no offsite flows affecting this site.

5. Developed Conditions: This site is a paved developed lot. The terrain sloped from North East to South West and its generated flow is in sheet flow mode. This total area of this lot is 7,500 sq. ft. or 0.172 acres contributing runoff. This total flow under an undeveloped condition for a 100-year rain is shown hereon:
   Using P = 2.2"
   $i = P(6.84)t_c^{-0.51} = 4.66$ in./ hr., $t_c = 10$ min.
   A = 0.172 Ac Contributing runoff
   $Q_{undevelop} = CIA = 0.95\ (4.66)\ )0.472) = 0.762$ cfs. (100 year rein)

6. Developed Drainage Plan: According to the predesign meeting with the Hydrologist at the City Engineer's office (3-11-86) the site can have free discharge because the discharge is not greater than existing. This small amount of discharge is 0.762 cfs. This runoff will drain into Coors Boulevard North West as it has in the past.

7. The owner of this Lot also owns Lot 332, and therefore,a drainage covenant will be required for the purpose of accepting drainage from Lot 332. Said covenant shall be recorded before the drainage plan is approved.

RECEIVED
APR 04 1986
HYDROLOGY SECTION

I, JOHN F. ESQUIBEL, NEW MEXICO REGISTERED LAND SURVEYOR NO. 5949, DO HEREBY CERTIFY THAT THE SURVEY AND MAP SHOWN HEREON WAS PREPARED BY ME OR UNDER MY SUPERVISION AND DIRECTIONS, AND THAT THE SAME IS TRUE AND CORRECT TO THE BEST OF MY BELIEF AND KNOWLEDGE.

John F. Esquibel
JOHN F. ESQUIBEL, N.M.L.S. NO. 5949

E. E. LEE JR. NEW MEXICO 1978 REGISTERED PROFESSIONAL ENGINEER
4/2/86

A & E ENGINEERING INC.
CIVIL ENGINEERING, LAND PLANNING, AND SURVEYING
1330 SAN PEDRO N.E. — SUITE 101
ALBUQUERQUE, NEW MEXICO 87110 (505) 255-5781

GRADING AND DRAINAGE PLAN

FOR

LOT 333

RIO GRANDE HEIGHTS

ALBUQUERQUE, NEW MEXICO

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

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T.C.	Top of Curb
15.46	Spot Elevation
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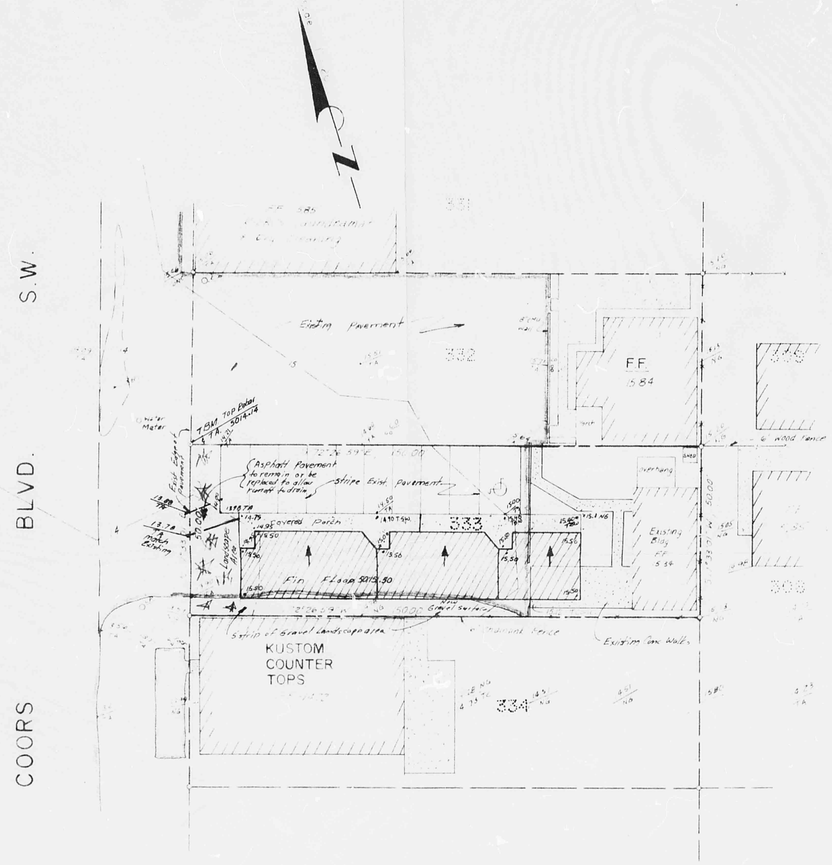

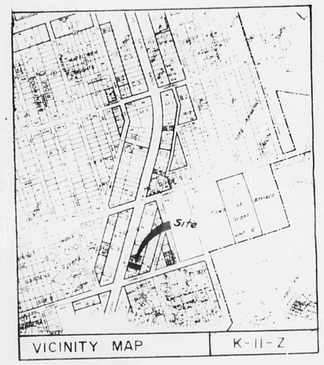

VICINITY MAP | K-11-Z

BENCH MARK DATA

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Elevation 5010.279

EROSION CONTROL

THE CONTRACTOR SHALL BE RESPONSIBLE FOR RETAINING AND MAINTAINING ALL SEDIMENT DEPOSITS WITHIN THE LIMITS OF THE PROPERTY THROUGHOUT THE DURATION OF CONSTRUCTION.

The Contractor shall construct an earth dike around the Western portion of the area where the old pavement is to be removed and the new building is to be constructed. The dike shall at all times be 15 to 20" min in height.

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4. Offsite Flows: There are no offsite flows affecting this site.

5. Developed Conditions: This site is a paved developed lot. The terrain sloped from North East to South West and its generated flow is in sheet flow mode. This total area of this lot is15,000 sq. ft. or 0.344 acres contributing runoff. This total flow under an undeveloped condition for a 100-year rain is shown hereon:
   Using P = 2.2" $\quad I = P(6.84)^{-0.51} = 4.66$ in./ hr., t_c = 10 min.
   A = 0.172 Ac. Contributing runoff FROM LOTS 332 & 333
   $Q_{undevelop} = CIA = 0.55\ (4.66)\ (0.344) = 1.52$ cfs. (100 year rein)

6. Developed Drainage Plan: According to the predesign meeting with the Hydrologist at the City Engineer's office (3-11-86) the site can have free discharge because the discharge is not greater than existing. This small amount of discharge is 0.762 cfs. This runoff will drain into Coors Boulevard North West as it has in the past.

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