CITY OF
Albuquerque

April 23, 1996

Martin J. Chávez, Mayor

Chris Weiss, P.E.
C.L. Weiss Engineering
P.O. Box 97
Sandia Park, NM 87047

RE: GRADING AND DRAINAGE PLAN FOR LOT 15 AND NORTH ½ OF LOT 16, YUCCA ADDITION (K11/D55), SUBMITTED FOR BUILDING PERMIT APPROVAL, ENGINEER'S STAMP DATED 3/27/96.

Dear Mr. Weiss:

Based on the information provided in the submittal of April 1, 1996, the above referenced plan is approved for Building Permit release.

Please be advised that prior to Certificate of Occupancy release, the Engineer's Certification per the D.P.M. will be required.

If you should have any questions, please feel free to call me at 768-2666.

Sincerely,

Susan Calongne

Susan M. Calongne, P.E.
City/County Floodplain Administrator

c: Andrew Garcia, City Hydrology
File

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Lot 15 and North 1/2 of Lot 16, Yucca Add'n ZONE ATLAS / DRNG. FILE #: K-11/D55

LEGAL DESCRIPTION: Lot 15 and North 1/2 of Lot 16, Yucca Add'n, Albuquerque NM

CITY ADDRESS: N/A

ENGINEERING FIRM: C.L. Weiss Engineering CONTACT: Chris Weiss

ADDRESS: P.O. Box 97, Sandia Park NM, 87047 PHONE: 281-1800

OWNER: Mr. Dennis Romero CONTACT:

ADDRESS: 418 Coors Rd. SW, 87121 PHONE:

ARCHITECT: BDA Architecture CONTACT: Chris Rasmussen

ADDRESS: 6000 Uptown Blvd. NE 87110 PHONE: 266-0593

SURVEYOR: Southwest Surveying Co., Inc. CONTACT:

ADDRESS: PHONE: 247-4444

CONTRACTOR FIRM: N/A CONTACT:

ADDRESS: PHONE:

PRE-DESIGN MEETING:

_____ YES
__X__ NO
_____ COPY OF CONFERENCE RECAP SHEET PROVIDED

DRB NO._____
EPC NO._____
PROJ. NO._____

TYPE OF SUBMITTAL:

_____ DRAINAGE REPORT
__X__ DRAINAGE PLAN
_____ CONCEPTUAL GRADING & DRAINAGE PLAN
__X__ GRADING PLAN
_____ EROSION CONTROL PLAN
_____ ENGINEER'S CERTIFICATION

CHECK TYPE OF APPROVAL SOUGHT:

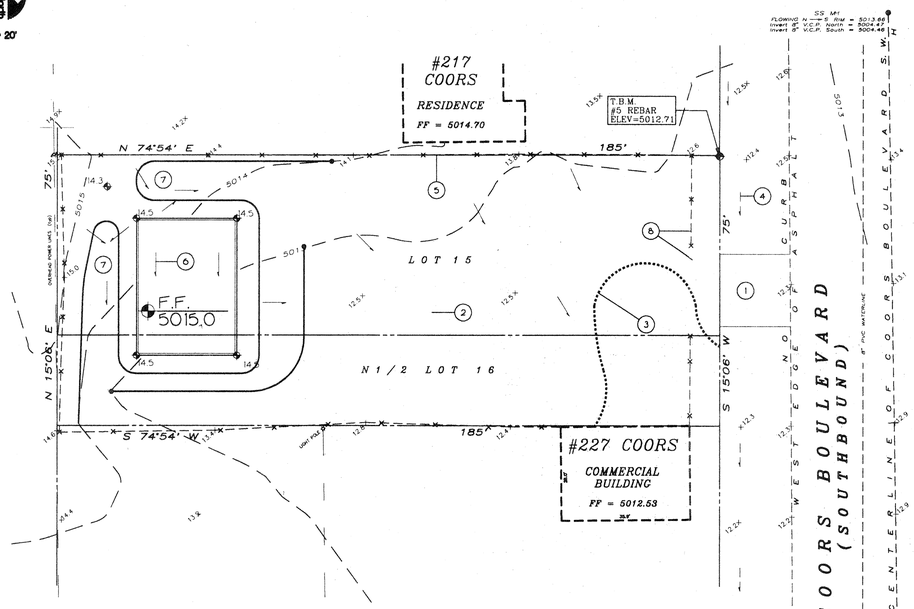
_____ SKETCH PLAT
_____ PRELIMINARY PLAT
_____ SITE DEVELOPMENT PLAN
_____ FINAL PLAT
__X__ BUILDING PERMIT
_____ FOUNDATION PERMIT
_____ CERT. OF OCCUPANCY
_____ ROUGH GRADING PERMIT
_____ GRADING / PAVING PERMIT
_____ OTHER

DATE SUBMITTED: March 27, 1996

BY: C.L. Weiss Engineering, Inc.

RECEIVED
APR - 1 1996
HYDROLOGY DIVISION

1" = 20'



EXISTING 'OLD COORS ROAD' CONDITIONS

NOTICE TO CONTRACTOR

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR THIS PERMIT.
2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, FOR LOCATION OF EXISTING UTILITIES.
4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITHIN A MINIMUM AMOUNT OF DELAY.
5. BACKFILL COMPACTION SHALL BE ACCORDING TO COLLECTOR STREET USE.
6. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
7. CONTRACTOR IS RESPONSIBLE FOR OBTAINING EXCAVATION PERMIT FOR SIDEWALK CULVERT/DRAIN.
8. PROOF OF ACCEPTANCE WILL BE REQUIRED PRIOR TO SIGN OFF FOR CERTIFICATE OF OCCUPANCY (C.O.).

DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY

DESIGN APPROVAL: HYDROLOGY SECTION — DATE

INSPECTION APPROVAL: CONSTRUCTION SECTION — DATE

ACCEPTANCE: CONSTRUCTION SECTION/PERMITS — DATE

LEGEND

- SIDEWALK, CURB AND GUTTER (EXISTING, PROPOSED)
- PROPOSED PAVED DRIVE
- BUILDING (EXISTING, PROPOSED)
- PROPERTY LINE
- x 65.7 — EXISTING SPOT ELEVATION
- 20 — EXISTING CONTOUR
- 75.2 — PROPOSED SPOT ELEVATION
- 30 — PROPOSED CONTOUR
- SURFACE FLOW DIRECTION (EXISTING, PROPOSED)
- LA — LANDSCAPED AREA
- TA — TOP OF ASPHALT
- TW — TOP OF WALK
- FL — FLOW LINE
- FF — FINISHED FLOOR
- R/W — RIGHT OF WAY
- PL — PROPERTY LINE
- PP — POWER POLE
- ▲ — ENTRY / EXIT LOCATION

SCOPE

The proposed improvements include an approximately 1,200 SF (footprint) commercial building with minimal site improvements.

The present site is an undeveloped property which slopes at 1% - 2% to the southeast. Coors Blvd. S.W. abuts the site to the east. The property to the south is developed commercial, the properties to the north and west are developed residential.

The intent of this plan is to show:

- Grading relationships between the existing ground elevations and proposed finished elevations in order to facilitate positive drainage to designated discharge points.
- The extent of proposed site improvements, including buildings, walks and pavement.
- The flow rate/volume of rainfall runoff across or around these improvements and methods of handling these flows to meet City of Albuquerque requirements for drainage management.
- The relationship of on-site improvements with existing neighboring property to insure an orderly transition between proposed and surrounding grades.

DRAINAGE PLAN CONCEPT: Drainage swales located on the north and west side of the building divert historical off-site flows around the proposed building where they continue along historical paths to the west. The developed flows totaling 1.0 cfs, which represents an increase from historical of 0.1 cfs represent an insignificant increase in the floodplain elevation. When Old Coors Drive Improvements (C.O.A. Project No. 4750.90 - street and storm drain improvements - planned for late 1998) are constructed, Owner shall install a 1.0' wide sidewalk culvert to pass a portion equal to or greater than the on-site flows to the street. The bulk of the off-site flows will continue to follow the historic flowpath to the south.

GENERAL NOTES

LEGAL: Lot 15 and North 1/2 of Lot 16, Block 2, Yucca Addition, Albuquerque, New Mexico.

SURVEYOR: Southwest Surveying Co., Inc. 247-4444

B.M.: The relative elevations shown hereon are derived from a spirit level loop beginning at A.C.S.NM 45-1A, an aluminum cap, - elevation = 5016.74'

T.B.M.: Top of #5 rebar located at the northeast property corner - elevation = 5012.71

SOILS: SCS Soil Survey of Bernalillo County (sheet 30) indicates that the soil is Madurez-Wink association, undulating (MWA), a gravelly fine sandy loam classified in Hydrologic Soil Group 'B'. Permeability is 0.6" to 2" per hour

FLOOD HAZARD: Per FEMA Boundary Map #27, the site is located in a flood zone designated 'AH' with a Base Flood Elevation = 5013.00 (see FEMA Map insert this page). Note: F.F. elevation = 5013 = 2' above the Base Flood Elevation.

OFF-SITE DRAINAGE: Based on FEMA Analysis and site visits, approximately 6.0 acres drain across this property.

EROSION CONTROL: The contractor is responsible for retaining on-site all sediment generated during construction by means of temporary earth berms or silt fences at the low points on the west property line.

CALCULATIONS:

Calculations are based on the Drainage Design Criteria for City of Albuquerque Section 22.2, DPM, Vol 2, dated Jan., 1993

ON-SITE

AREA OF SITE: 13875 SF = 0.32 Ac.

HISTORIC FLOWS:

On-Site Historic Land Condition		
Area a =	0	SF
Area b =	0	SF
Area c =	13875	SF
Area d =	0	SF
Total Area =	13875	SF

DEVELOPED FLOWS:

On-Site Developed Land Condition		
Area a =	0	SF
Area b =	0	SF
Area c =	12675	SF
Area d =	1200	SF
Total Area =	13875	SF

EXCESS PRECIPITATION: Precip. Zone 1

Ea = 0.44
Eb = 0.67
Ec = 0.99
Ed = 1.97

On-Site Weighted Excess Precipitation (100-Year, 6-Hour Storm)

Weighted E = (Ea·Aa + Eb·Ab + Ec·Ac + Ed·Ad) / (Aa + Ab + Ac + Ad)

Historic E =	0.99	in.	Developed E =	1.07	in.
On-Site Volume of Runoff: V360 =	E*A / 12				
Historic V360 =	1145	CF	Developed V360 =	1243	CF

On-Site Peak Discharge Rate: Qp = (Qpa·Aa + Qpb·Ab + Qpc·Ac + Qpd·Ad) / 43,560

For Precipitation Zone 1

Qpa =	1.29		Qpc =	2.87	
Qpb =	2.03		Qpd =	4.37	
Historic Qp =	0.9	CFS	Developed Qp =	1.0	CFS

A portion of the flows greater than the total on-site flows will pass to Old Coors Drive via the sidewalk culvert. (see calcs. below)
The remainder of the off-site flows will continue to follow the historic flowpath to the south.

OFF-SITE BASIN NORTH

From field inspection and FEMA contour map analysis:

Area of off-site flows = 138750 SF = 3.2 Ac. Precip. Zone 1

The unconcentrated flows enter the site along the north property line.

The following calculations are based on maximum Treatment areas as shown in table to the right.

Off-Site Weighted Excess Precipitation (see formula above)

Weighted E =	1.87 in.

Off-Site Volume of Runoff (see formula above)

V360 =	21645 CF

Off-Site Peak Discharge Rate: (see formula above)

Qp =	13.4 cfs

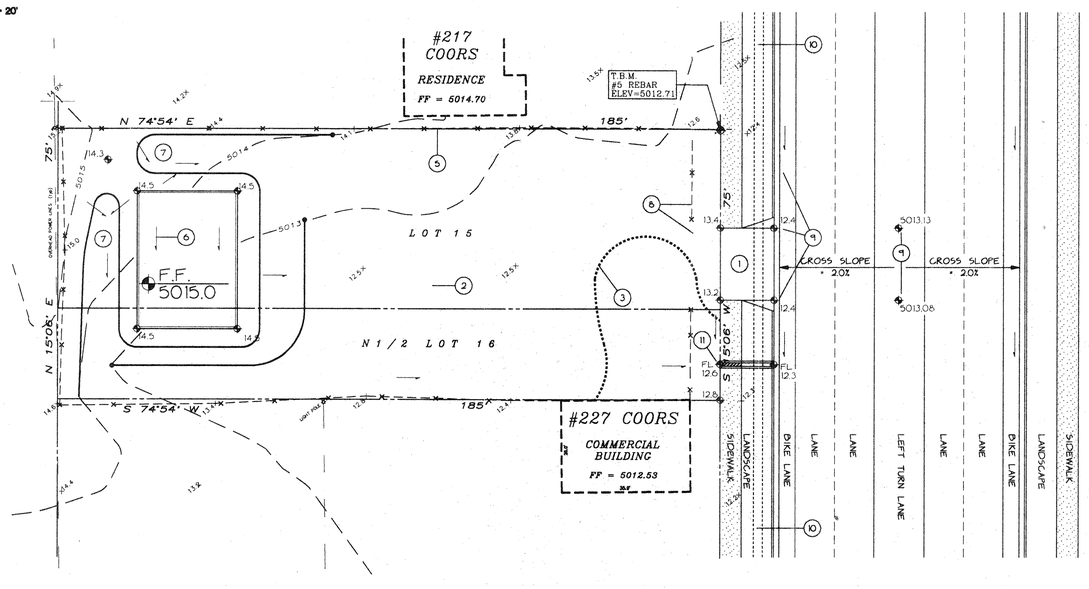
TREATMENT	
A =	0%
B =	0%
C =	10%
D =	90%

All historic flows will continue to the south.

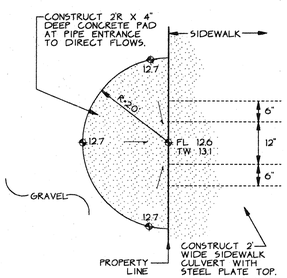
1' WIDE SIDEWALK CULVERT

Slope	=	0.0200 ft/ft	Discharge	=	1.0 cfs
N	=	0.013	Depth Req'd	=	0.22'
Bottom Width	=	1.0'	Depth Provided	=	0.50' OK

1" = 20'



FUTURE 'OLD COORS ROAD' CONDITIONS



SIDEWALK CULVERT ENTRANCE

N.T.S.

KEYNOTES

1. EXISTING SITE: GRAVEL ENTRANCE DRIVE. MATCH EXISTING ELEVATIONS FOR SMOOTH TRANSITION AND TO PREVENT BLOCKING OF FLOWS. FUTURE SITE: CONCRETE DRIVE PAD TO BE CONSTRUCTED CONCURRENTLY WITH OLD COORS ROAD STREET IMPROVMENTS.
2. GRAVEL PAVING THROUGHOUT. OWNERS OPTION TO PLACE DIRECTLY ON GRADE OR OVER POROUS LANDSCAPING FABRIC FOR WEED CONTROL.
3. EXTENTS OF 100 YEAR FLOODPLAIN BOUNDARY PER FEMA MAP. FLOOD ZONE 'AH', BASE FLOOD ELEVATION = 5013.00
4. EXISTING SHALLOW SWALE CARRIES OFF-SITE FLOWS SOUTH. MAINTAIN FLOW PATH UNTIL OLD COORS DRIVE IMPROVEMENTS ARE CONSTRUCTED.
5. EXISTING CHAIN-LINK FENCE SURROUNDING PROPERTY TO REMAIN.
6. ROOF FLOWS TO DRAIN TO DOWNSPOUTS ALONG SOUTH ELEVATION. PROVIDE EROSION PROTECTION AT OUTLETS.
7. CONSTUCT MINOR SWALES ON THE NORTH AND WEST SIDE OF THE PROPOSED BUILDING TO DIVERT FLOWS EAST AND SOUTH.
8. EXISTING CHAIN-LINK FENCE / GATE TO REMAIN.
9. STREET GRADES SHOWN ARE FUTURE GRADES TAKEN FROM COA PROJECT NO 4750.90, PRELIMINARY DOCUMENTS BY GANNETT FLEMING WEST, INC. (SHEETS 2-1 : STREET SECTION AND 3-10 : PLAN AND PROFILE)
10. 30" DIA. STORM DRAIN SHOWN ARE FUTURE IMPROVEMENTS AS SHOWN IN PROJECT NO. 4750.90, PRELIMINARY DOCUMENTS BY GANNETT FLEMING WEST, INC. (SHEETS 2-1 : STREET SECTION AND 3-10 : PLAN AND PROFILE)
11. 1' WIDE CONCRETE SIDEWALK CULVERT WITH STEEL PLATE TOP TO BE CONSTRUCTED CONCURRENTLY WITH OLD COORS DRIVE IMPROVEMENTS PER COA STD. DWG. 2236. SEE DETAIL THIS SHEET.

GENERAL NOTES

1. APPARENT PROPERTY CORNERS AND PROPERTY BOUNDARY LINES SHOWN FOR ORIENTATION ONLY.

VICINITY MAP #K-11-Z

1" = 500'

FEMA MAP #27

1" = 500'

C.L. WEISS ENGINEERING, INC.

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SANDIA PARK, NM. 87047
(505) 281-1800

ALVARADO OFFICE
100 ALVARADO DR. NE
ALBUQUERQUE, NM 87110
(505) 266-3444

CHRISTOPHER L. WEISS — NEW MEXICO — 6653 — REGISTERED PROFESSIONAL ENGINEER

Revisions

RECEIVED — APR 1996 — HYDROLOGY DIVISION

LOT 15 AND NORTH 1/2 OF LOT 16 YUCCA ADDITION - ROMERO

Scale:	Drawn By:	Checked By:	Job Number:	Date:
1" = 20'	BJB	CLW		MAR. 26, 1996

Drainage and Grading Plan

C-1
SH. 1 OF 1

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