

## DRAINAGE INFORMATION SHEET

PROJECT TITLE: RETAIL SHOPPING CENTER ZONE ATLAS/DRNG. FILE #: K-11/D-45  
EXPANSION  
 LEGAL DESCRIPTION: LOT 7A, BLOCK 2 YUCCA ADDITION NO. 2, ALBUQ. NM.  
 CITY ADDRESS: 139 COORS BLVD SW.  
 ENGINEERING FIRM: Lovelady & Associates CONTACT: Frank Lovelady  
 ADDRESS: 7408 Morrow Ave. NE 87110 PHONE: 883-7973  
 OWNER: RUE'S PLUMBING & HEATING CONTACT: JOE RUE  
 ADDRESS: 143 COORS BLVD. SW PHONE: 836-1388  
 ARCHITECT: RICK BENNETT CONTACT: RICK BENNETT  
 ADDRESS: 1118 Park SW PHONE: 242-1859  
 SURVEYOR: Oliver Trujillo CONTACT: \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_  
 CONTRACTOR: \_\_\_\_\_ CONTACT: \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

## PRE-DESIGN MEETING:

\_\_\_\_ YES  
 \_\_\_\_ NO  
 \_\_\_\_ COPY OF CONFERENCE RECAP SHEET PROVIDED  
 DRB NO. \_\_\_\_\_  
 EPC NO. \_\_\_\_\_  
 PROJECT NO. \_\_\_\_\_

## TYPE OF SUBMITTAL:

\_\_\_\_ DRAINAGE REPORT  
X DRAINAGE PLAN  
 \_\_\_\_ CONCEPTUAL GRADING & DRAIN. PLAN  
 \_\_\_\_ GRADING PLAN  
 \_\_\_\_ EROSION CONTROL PLAN  
 \_\_\_\_ ENGINEER'S CERTIFICATION

## CHECK TYPE OF APPROVAL SOUGHT:

\_\_\_\_ SKETCH PLAT APPROVAL  
 \_\_\_\_ PRELIMINARY PLAT APPROVAL  
 \_\_\_\_ SITE DEVELOPMENT PLAN APPROVAL  
 \_\_\_\_ FINAL PLAT APPROVAL  
 \_\_\_\_ BUILDING PERMIT APPROVAL  
 \_\_\_\_ FOUNDATION PERMIT APPROVAL  
X CERTIFICATE OF OCCUPANCY APPROVAL  
 \_\_\_\_ ROUGH GRADING PERMIT APPROVAL  
 \_\_\_\_ GRADING/PAVING PERMIT APPROVAL

RESUBMITTAL PER BERNIE  
 MONTROYA'S LETTER OF OCT 7, 1987

DATE SUBMITTED: FEB. 24, 1988

BY: Frank D. Lovelady  
 Frank D. Lovelady, P.E.

OTHER \_\_\_\_\_ (SPECIFY)

FILE COPY



# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

MAYOR

KEN SCHULTZ

CHIEF  
ADMINISTRATIVE OFFICER

GENE ROMO

DEPUTY CAO  
PUBLIC SERVICES

FRANK MARTINEZ

DEPUTY CAO  
PLANNING/DEVELOPMENT

BILL MUELLER

March 7, 1988

Frank Lovelady, P.E.  
Lovelady & Associates  
7408 Morrow Avenue, NE  
Albuquerque, New Mexico 87110

RE: REVISED DRAINAGE PLAN FOR RETAIL SHOPPING CENTER  
(K-11/D45) REVISION DATED FEBRUARY 19, 1988

Dear Mr. Lovelady:

Based on the information provided on your resubmittal of February 25, 1988, the above referenced site is approved for Certificate of Occupancy.

If I can be of further assistance, please feel free to call me at 768-2650.

Cordially,

*Bernie J. Montoya*  
Bernie J. Montoya, C.E.  
Engineering Assistant

BJM/bsj

xc: Rick Duran



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00456

CITY OF ALBUQUERQUE

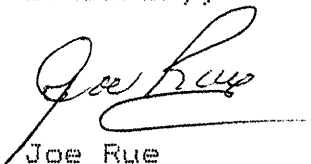
TO WHOM IT MAY CONCERN:

This letter is written to establish a reciprocal cross access agreement between lots 5A, 7A and 9A of the YUCCA addition #2.

As owner of all three properties I agree to this easement.

We will also share an existing 6 cu. yd. dumpster between lots 5A and 7A. The dumpster is located on lot 5A.

Sincerely,

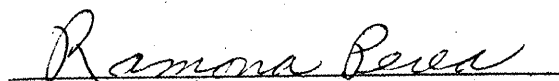


Joe Rue  
(Owner of lots 5A, 7A and 9A)

December 2, 1987

STATE OF NEW MEXICO  
COUNTY OF BERNALILLO . . . SS

SUBSCRIBED, SWORN TO AND ACKNOWLEDGED before me this 2nd day  
of December, 1987.

  
Notary Public

My Commission Expires:

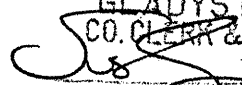
1-23-90

STATE OF NEW MEXICO  
COUNTY OF BERNALILLO  
FILED FOR RECORD

87 DEC -2 AM 9:02

BK M5563A PG 456

GLADYS M. DAVIS  
CO. CLERK & RECORDER

 DEPUTY



# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

Ken Schultz  
Mayor

UTILITY DEVELOPMENT DIVISION  
HYDROLOGY SECTION  
(505) 768-2650

October 21, 1987

Frank Lovelady, P.E.  
Lovelady & Associates  
7408 Morrow Avenue, NE  
Albuquerque, New Mexico 87110

RE: DRAINAGE PLAN FOR RETAIL SHOPPING CENTER  
(K-11/D45) ENGINEER'S STAMP DATED OCTOBER 7, 1987

Dear Mr. Lovelady:

Based on the information provided on your submittal of October 16, 1987, the above referenced plan is approved for foundation permit only.

Prior to Building Permit release, the listed items will need to be addressed:

1. Drainage comments found within plan drawing do not reflect true conditions, please remove.
2. Easement will be needed for cross-lot-line drainage.

If I can be of further assistance, please feel free to call me at 768-2650.

Cordially,

*G.S. Reeder, P.E.*  
for Bernie J. Montoya, C.E.  
Engineering Assistant

BJM/bsj

PUBLIC WORKS DEPARTMENT

Walter Nickerson, P.E., City Engineer

ENGINEERING GROUP

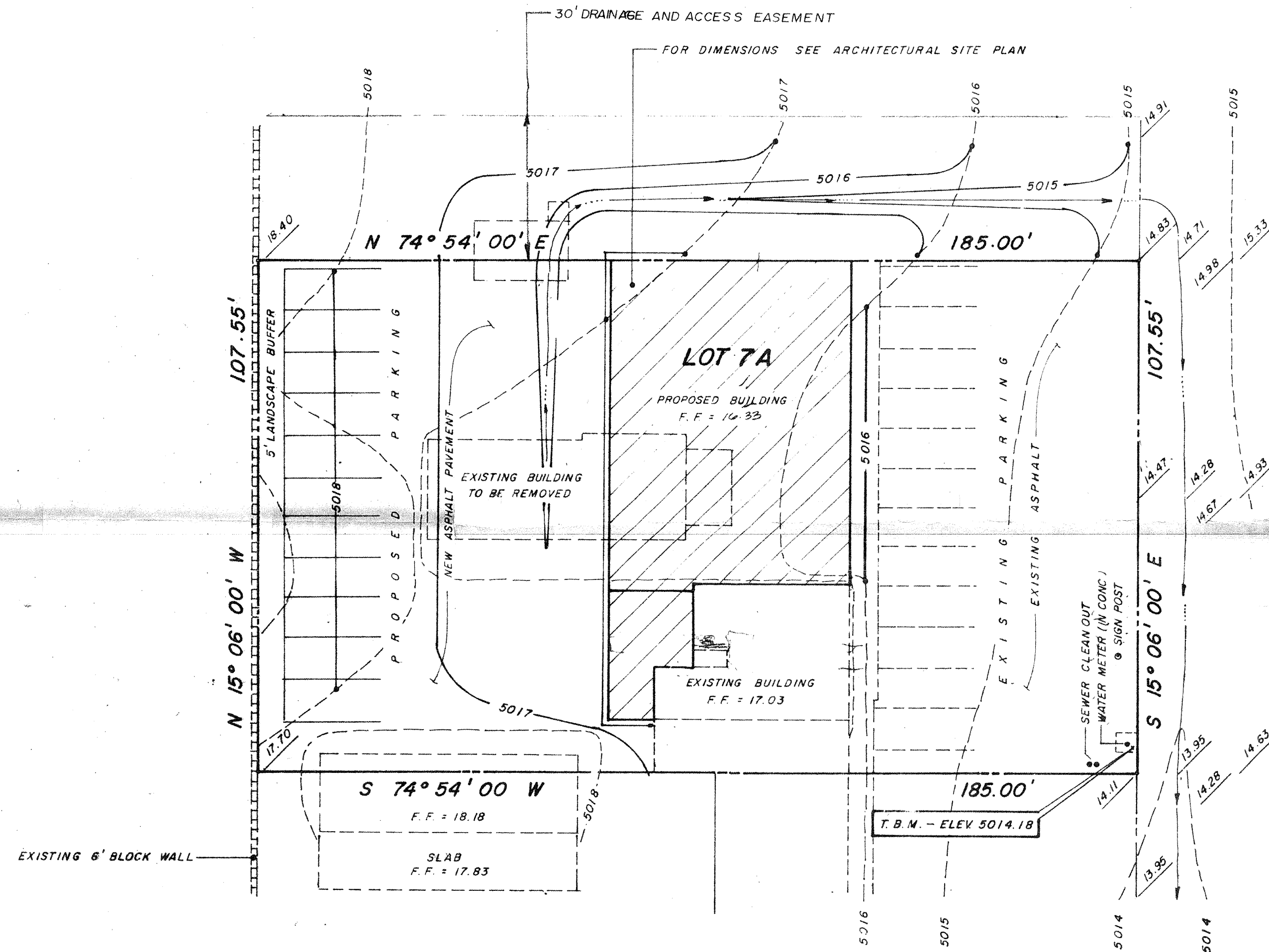
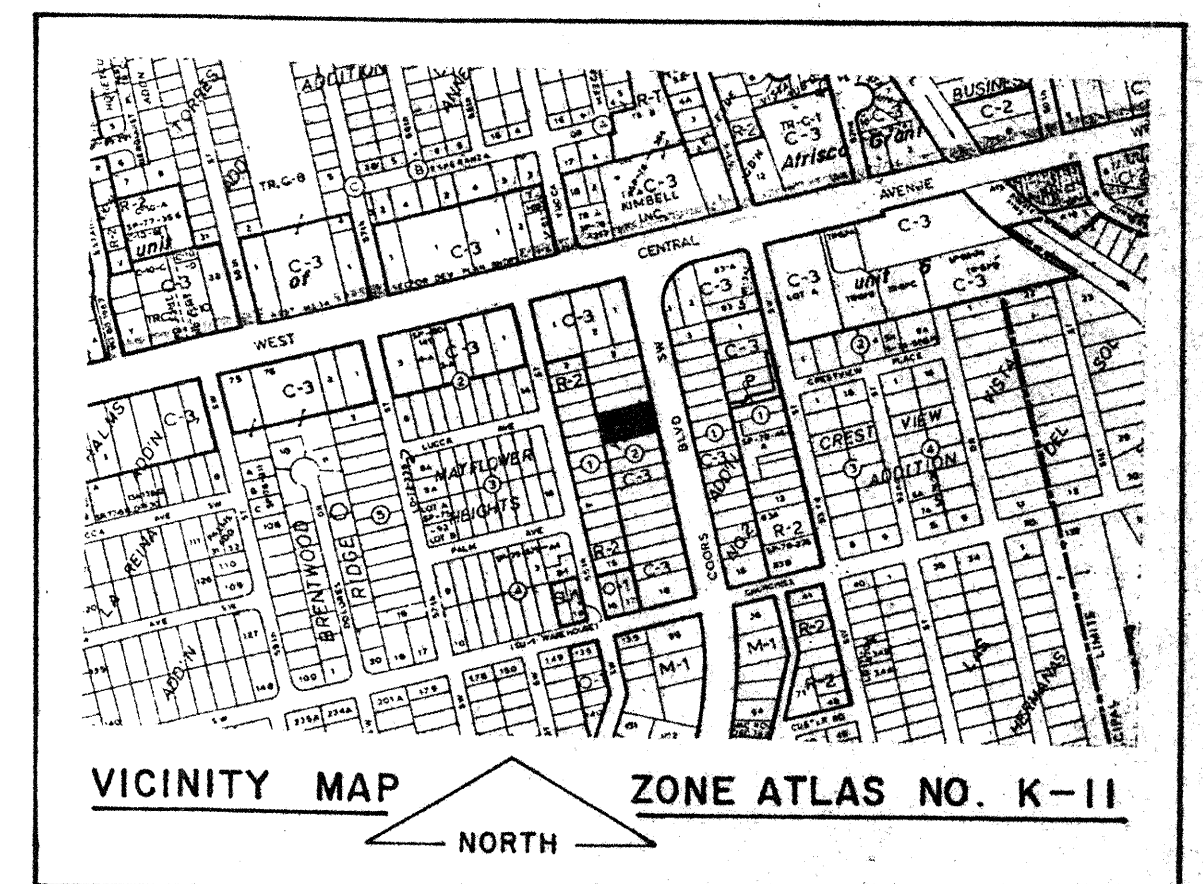
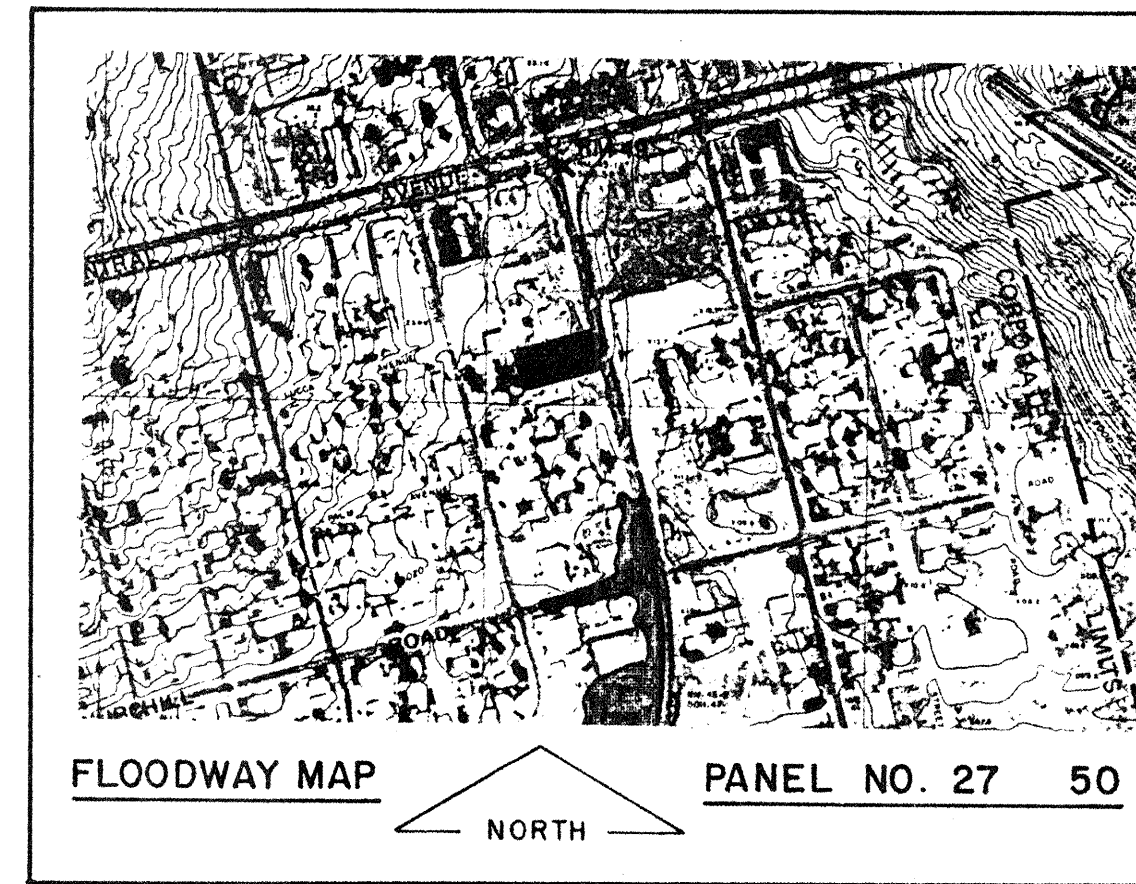
Telephone (505) 768-2500

AN EQUAL OPPORTUNITY EMPLOYER

SCALE: 1" = 20'

# LEGEND

| EXISTING | NEW | DESCRIPTION    |
|----------|-----|----------------|
|          |     | SPOT ELEVATION |
|          |     | PROPERTY LINE  |
|          |     | CONTOUR        |
|          |     | SWALE          |

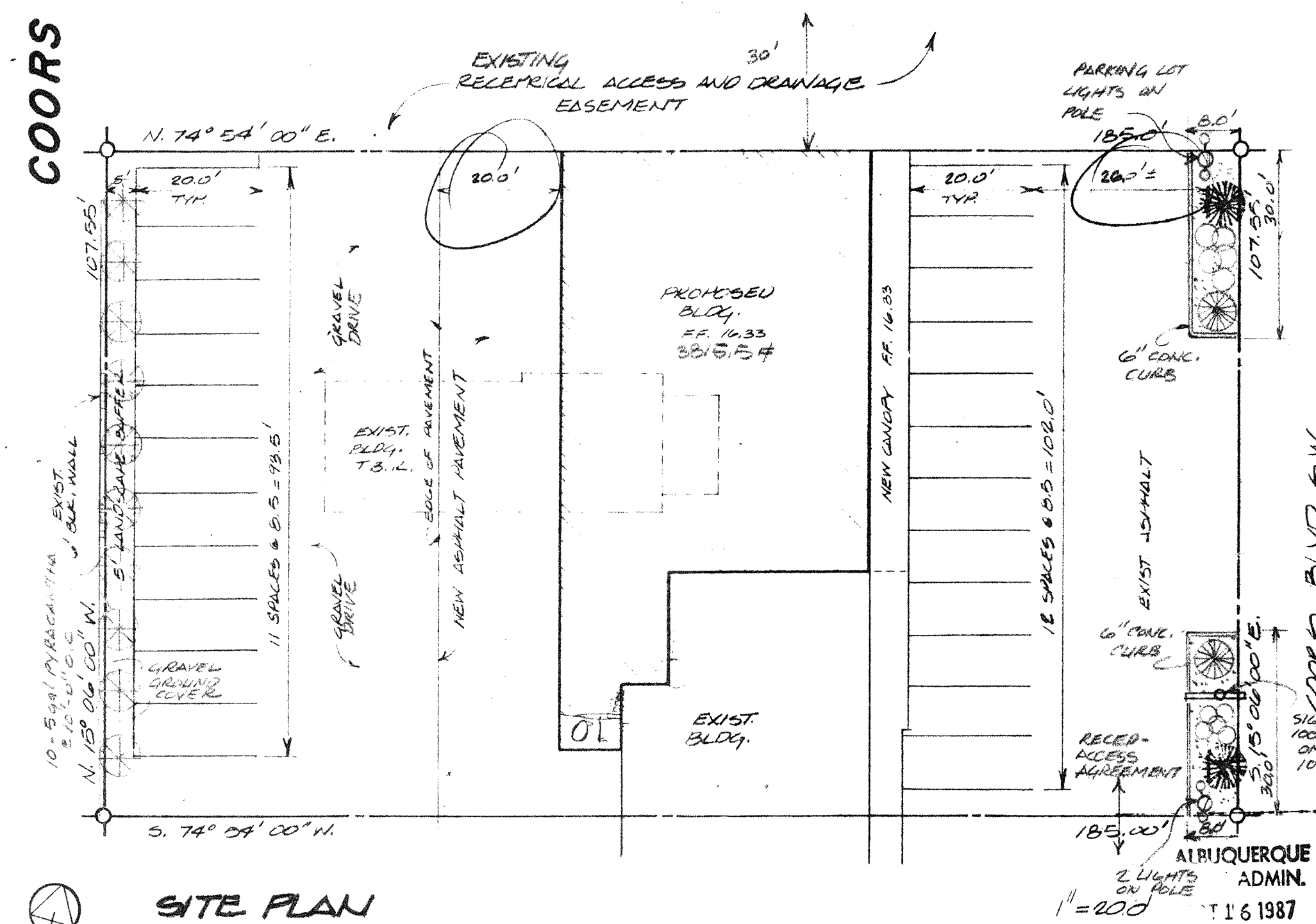


## GRADING AND DRAINAGE PLAN

| LANDSCAPE LEGEND |                       |
|------------------|-----------------------|
|                  | 2nd CAL. MOUNTAIN ASH |
|                  | 5 gal. PYRACANTHA     |
|                  | 5-5 gal. JUNIPERS     |
|                  | BARK GROUND COVER     |

LANDSCAPING  
PARKING AREA = 13,573.95 #  
LANDSCAPING REQ'D @ 107% = 971.15 #  
LANDSCAPING PROVIDED: 420 # FRUIT W/4 STR. TREES  
537.75 REAR BUFFER  
1017.75 #

S.W.  
BLVD  
COORS



## SITE PLAN

DESIGN CRITERIA:  
REFERENCE: 1985 EDITION UBC - COMPREHENSIVE CITY ZONING AND ATLAS  
ZONING: C-3  
OCCUP. GROUP: B-2  
CONST. TYPE: 2A  
SEISMIC: 12-12  
SOIL BEARING CAP: 2000 PSF  
SEUL. & COLL: 30 PSF  
WINDS: HEATED 35.5 # (PROPOSED WIND)

- DRAINAGE COMMENTS:
1. THE SITE IS NOT WITHIN OR ADJACENT TO A DESIGNATED 100-YEAR FLOOD HAZARD AREA.
  2. RUNOFF FROM THE SITE FLOWS SOUTH IN COORS BLVD. THE INCREASE IN VOLUME AND RUNOFF RATE IS MINIMAL.
  3. DRAINAGE FROM REAR PARKING LOT WILL FLOW TO COORS BLVD. VIA 30' DRAINAGE AND ACCESS EASEMENT.
  4. THE DIFFERENCE BETWEEN EXISTING AND PROPOSED RUNOFF IS MINIMAL, ONLY APPROXIMATELY 0.6 CFS.
  5. THERE IS NOT OFF-SITE FLOW.

- PRE-DESIGN CONFERENCE FINDINGS:
1. DRAINAGE PLAN PER D.P.M. GUIDELINES REQUIRED PRIOR TO BUILDING PERMIT RELEASE.
  2. SITE NOT WITHIN A DESIGNATED 100-YEAR FLOOD ZONE.
  3. IF SITE CAN NOT DRAIN TO ANY EXISTING FACILITY, THEN RETENTION POND REQUIRED WITH PROVISION FOR FUTURE CONNECTION TO CONSTRUCTED SYSTEM (FUTURE).
  4. IF BUILDING STRADDLES LOT LINE, THEN NO EASEMENTS OR REPLAT REQUIRED FOR "CROSS-LOT-LINE" DRAINAGE.
  5. COMPARE THE DIFFERENCE BETWEEN THE EXISTING AND PROPOSED RUN-OFF; IF MINIMAL, SMALL RETENTION.

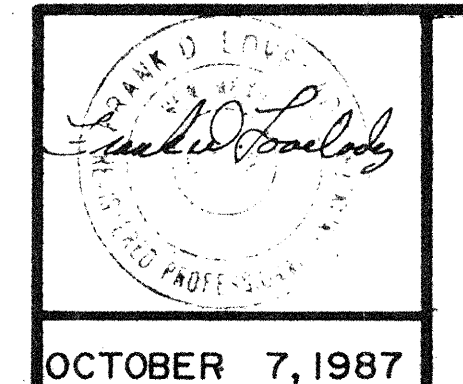
## DRAINAGE CALCULATIONS

- I. REFERENCES:
- A. CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL (DPM) VOLUME 2, DESIGN CRITERIA, CHAPTER 22.
  - B. FLOODWAY MAP, PANEL 27 OF 50, (FEMA), OCTOBER 14, 1983.
  - C. SOIL SURVEY OF BERNALILLO COUNTY, NEW MEXICO, U.S. SOIL CONSERVATION SERVICE, JUNE, 1977.
- II. ON-SITE RUNOFF CHARACTERISTICS:
- A. UNDEVELOPED RUNOFF COEFFICIENT:
- | TYPE OF SURFACE        | AREA                 | "C" VALUE | AREA("C") |
|------------------------|----------------------|-----------|-----------|
| STREETS, DRIVES, WALKS | 6050                 | 0.95      | 5748      |
| ROOFS                  | 2719                 | 0.90      | 2447      |
| LANDS & LANDSCAPING    | 11128                | 0.40      | 4451      |
| TOTAL AREA             | 19897 SF = 0.46 AC.  |           | 12646     |
| WEIGHTED "C" VALUE     | 12646 / 19897 = 0.64 |           |           |
| PERCENT IMPERVIOUS     | 44%                  |           |           |
- B. DEVELOPED RUNOFF COEFFICIENT:
- | TYPE OF SURFACE        | AREA                 | "C" VALUE | AREA("C") |
|------------------------|----------------------|-----------|-----------|
| STREETS, DRIVES, WALKS | 14081                | 0.95      | 13377     |
| ROOFS                  | 5278                 | 0.90      | 4750      |
| LANDS & LANDSCAPING    | 538                  | 0.25      | 135       |
| TOTAL AREA             | 19897                |           | 18262     |
| WEIGHTED "C" VALUE     | 18262 / 19897 = 0.92 |           |           |
| PERCENT IMPERVIOUS     | 97%                  |           |           |
- C. RAINFALL, 100-YR., 6-HR.: (REF. I.A., PLATE 22.2 D-1)  
R<sub>6</sub> = 2.2 INCHES
- D. TIME OF CONCENTRATION: TEN MINUTES
- E. RAINFALL INTENSITY, I (REF. I.A., PLATE 22.2 D-2)  
I = R<sub>6</sub> X 16.84 X (T<sub>c</sub>)<sup>-0.51</sup> = (2.2) X 16.84 X (10)<sup>-0.51</sup> = 4.65 IN/HR
- F. SOIL TYPE (REF. I.C., SHEET NO. 30) MVA, MADUREZ-WINK ASSOCIATION, HYDROLOGIC SOIL GROUP "B".
- G. RUNOFF CURVE NUMBER (CN) (REF. I.A., PLATE 22.2 C-2)  
UNDEVELOPED CN: ROOFS, PAVING, 98; DIRT, 82.  
WEIGHTED CN = (8769 X 98 + 11128 X 82) / 19897 = 89  
DEVELOPED CN: LANDSCAPING, 61.  
WEIGHTED CN = (19296 X 98 + 538 X 61) / 19897 = 97
- H. DIRECT RUNOFF, Q<sub>d</sub>, INCHES (REF. I.A., PL. 22.2 C-4)  
UNDEVELOPED Q<sub>d</sub> = 1.2 IN. DEVELOPED Q<sub>d</sub> = 1.9 IN.
- III. ON-SITE PEAK DISCHARGE BY RATIONAL EQUATION:
- A. EXISTING CONDITIONS:  
Q<sub>100</sub> = 0.64 X 4.65 X 0.46 = 1.37 CFS  
Q<sub>10</sub> = 0.657 X 1.37 = 0.90 CFS
- B. DEVELOPED CONDITIONS:  
Q<sub>100</sub> = 0.92 X 4.65 X 0.46 = 1.97 CFS  
Q<sub>10</sub> = 0.657 X 1.97 = 1.28 CFS
- IV. ON-SITE VOLUME BY S.C.S. METHOD:
- A. EXISTING CONDITIONS:  
V<sub>100</sub> = AREA (Q<sub>d</sub>/12) = 19897 (1.2/12) = 1990 CF  
V<sub>10</sub> = 0.657 X 1990 = 1307 CF
- B. DEVELOPED CONDITIONS:  
V<sub>100</sub> = AREA (Q<sub>d</sub>/12) = 19897 (1.9/12) = 3150 CF  
V<sub>10</sub> = 0.657 X 3150 = 2070 CF

BENCH MARK:  
STATION NM 45-1A LOCATED 2.7 MILES WEST OF DOWNTOWN ALBUQUERQUE. THE STATION IS LOCATED IN THE ISLAND AT THE INTERSECTION OF CENTRAL AVENUE AND COORS BOULEVARD IN THE S.E. QUADRANT OF THE INTERSECTION. THE STATION IS A 3-1/4" ALUMINUM CAP SET IN CONCRETE 0.5' ABOVE THE GROUND. STATION IS STAMPED "A.S. NM 45-1A, 1984" ELEVATION 5016.739 FEET.  
TEMPORARY BENCH MARK IS AS SHOWN ON THE PLAN.

LEGAL DESCRIPTION:  
LOT 7A, BLOCK 2, YUCCA ADDITION NO. 2, ALBUQUERQUE, NEW MEXICO.

REVISED 2/19/88



GRADING AND DRAINAGE PLAN  
RETAIL SHOPPING CENTER EXPANSION  
139 COORS BOULEVARD, S.W.  
ALBUQUERQUE, NEW MEXICO