HYDROLOGY K13/D15 2 PLANS

K13/D15

2 PLANS

City of Albuquerque
P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

DESIGN HYDROLOGY SECTION
123 Central NW, Albuquerque, NM 87102
(505) 766-7644

July 11, 1985

Frank Lovelady
Lovelady & Associates
7408 Morrow Road, NE
Albuquerque, New Mexico 87110

RE: REVISED DRAINAGE PLAN FOR 28-UNIT APARTMENT COMPLEX FOR DON KEITH & ASSOCIATES (K-13/D15) RECEIVED JUNE 18, 1985

Dear Mr. Lovelady:

The referenced plan dated June 18, 1985, is approved for building permit sign-off.

Please attach a copy of this approved plan along with the appropriately approved "Draiange Facilities Within City Right-of-Way" document to both sets of construction plans prior to Hydrology sign-off.

If you have any questions or comments regarding this project, please call me at 766-7644.

Cordially,

Carlos A. Montoya

Carlos A. Montoya, P.E.
City/County Floodplain Administrator

CAM/bsj

RECEIVED
JUN 26 1985
DH0192
HYDROLOGY SECTION

Lovelady & Associates
7408 Morrow Road, N.E.
Albuquerque, N.M. 87110
June 17, 1985

RECEIVED
JUN 19 1985
CITY ENGINEER

Mr. Dwayne Sheppard, P.E.
City Engineer
City of Albuquerque
P.O. Box 1293
Albuquerque, N.M. 87103

RE: Hydrology Project No. K13/D15 - Request for variance to Provide Alley Grades.

Dear Mr. Sheppard:

The purpose of this letter is to request a variance from the requirement of the DPM for providing alley grades for the alley north of Coal Ave. between 10th and 11th Streets. The reasons for this request for variance are listed below.

1. Attached City as-built drawing SS-3-76 shows the existing storm sewer, alley surface profile and finished floor elevations of buildings on either side of the alley.

2. The grade of the alley is essentially established by the elevation of the existing catch basin grate (45.00) at station 2+50 and the top of curb elevation at the east end of the alley (45.94 ave.) at station 0+30. The grade connecting these points is 0.0043 ft./ft. This grade has been used on the grading plan (copy attached) so that a) any flow from the east end of the alley will be accepted and conveyed to the catch basin; and, b) future paving of the east end of the alley will permit drainage of the entire alley to the catch basin as appears to have been the intent of the storm sewer design.

3. In the unlikely event that the east end of the alley should require more positive drainage when it is paved, another catch basin can be connected to the storm sewer at that time.

4. In view of the presence of the existing storm sewer in the alley, the cost of designing alley grades is believed to be an unnecessary expence to the owner.

If you require clarification of any of the above points, please do not hesitate to call me at 883-7973

Respectfully Submitted

Frank D. Lovelady

Frank D. Lovelady, P.E.

APPROVED:

C. D. Sheppard 6/26/85

City Engineer Date

DRAINAGE INFORMATION SHEET

PROJECT TITLE: 28-Unit Apartment Complex for Don Keith And Associates ZONE ATLAS/DRNG. FILE #: K-13/D15

LEGAL DESCRIPTION: Tract "A", Block 33, Reynolds Addition

CITY ADDRESS:

ENGINEERING FIRM: Lovelady & Associates CONTACT: Frank Lovelady

ADDRESS: 7408 Morrow Road, N.E. PHONE: 883-7973

OWNER: Don Keith And Associates CONTACT: Don Keith

ADDRESS: 7116 Edwina Court, N.E. PHONE: 884-4070

ARCHITECT: Jerry Torr & Associates CONTACT: Jerry Torr

ADDRESS: 5736 Osuna Road, N.E. PHONE: 884-7713

SURVEYOR: Hall Surveying CONTACT: Verlon Hall

ADDRESS: 2625 Pennsylvania N.E. PHONE: 884-6200

CONTRACTOR: N/A CONTACT:

ADDRESS: PHONE:

RECEIVED JUN 18 1985 HYDROLOGY SECTION

PRE-DESIGN MEETING:

X YES

__ NO

X 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

X Resubmittal (Second) per letter May 29, 1985 BJG/BJM/cl

CHECK TYPE OF APPROVAL SOUGHT:

__ SKETCH PLAT APPROVAL

__ PRELIMINARY PLAT APPROVAL

__ SITE DEVELOPMENT PLAN APPROVAL

__ FINAL PLAT APPROVAL

X BUILDING PERMIT APPROVAL

__ FOUNDATION PERMIT APPROVAL

__ CERTIFICATE OF OCCUPANCY APPROVAL

__ ROUGH GRADING PERMIT APPROVAL

__ GRADING/PAVING PERMIT APPROVAL

__ OTHER _____ (SPECIFY)

DATE SUBMITTED: June 18, 1985

BY: Frank D. Lovelady, P.E.

Lovelady & Associates
7408 Morrow Road, N.E.
Albuquerque, N.M. 87110
June 17, 1985

RECEIVED
JUN 18 1985
HYDROLOGY SECTION

Billy J. Goolsby, P.E.
Design Engineer/Hydrology
123 Central,N.W.
Albuquerque, New Mexico 87102

RE: K13/D15 -Revisions per letter of May 29, 1985 (BJG/BJM/cl)

Dear Mr. Goolsby:

In response to your letter of May 29, 1985, the following revisions have been made.

1. A new information sheet accompanies this revised plan.

2. A revision date is shown adjacent to the Engineer's stamp.

3. An erosion control note has been added to this plan.

4. Off-site flows are accepted as shown on the plan.

5. Downstream capacity is justified as shown in the revised calculations.

6. A request for variance from the requirement to provide alley grades is hereby submitted for review by the City Engineer.

7. The elevations at property line have been raised to be a minimum of 0.33 feet above top of curb.

8. The 100-year flood hazard encroachment can only be estimated since it is an A.O. zone and no base flood elevation is shown, only a depth of 1 foot. It is assumed this is the depth above the lowest point on the flow line (45.10 + 1.0 = 46.10). This approximate limit has been shown.

9. A swale and sidewalk culvert have been added to the plan so that roof drainage does not cross the sidewalk.

10. The amount of developed flows in the court yard area are 0.3 cfs. However, spot elevations have been added to show that this flow will drain to the alley by means of the sidewalk . Low flows that would occur in winter when icy conditions occur

will be retained in the grass court yard.

11. The T.B.M. is located at the N.W. Corner of the Site, top of curb elevation 4746.25.

A copy of the revised drainage plan is attached.

If you have any questions, please do not hesitate to contact me at 883-7973.

Sincerely,

Frank D. Lovelady

Frank D. Lovelady, P.E.

CITY OF ALBUQUERQUE

DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY

RECEIVED
JUN 18 1985
HYDROLOGY SECTION

NORTH

K-13

VICINITY MAP

LEGAL DESCRIPTION:

TRACT LETTERED "A" IN BLOCK NUMBERED THIRTY-THREE (33) OF THE RAYNOLDS ADDITION, ALBUQUERQUE, NEW MEXICO, AS THE SAME IS SHOWN AND DESIGNATED ON THE PLAT OF TRACT "A", BLOCK 33 OF SAID ADDITION, FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO.

BENCH MARK:

ELEVATIONS ARE REFERENCED TO ALBUQUERQUE CITY SURVEY MONUMENT 3-K13, LOCATED AT THE EAST-SOUTHEAST CURB RETURN OF THE INTERSECTION OF ATLANTIC AVENUE AND BARELAS STREET, ELEV. = 4945.006

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 Public Works Contract No. 85-1.
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 with a minimum amount of delay.
5. Backfill compaction shall be according to ARTERIAL street use.

APPROVALS	NAME	DATE
A.C.E./DESIGN		
INSPECTOR		
A.C.E./FIELD		

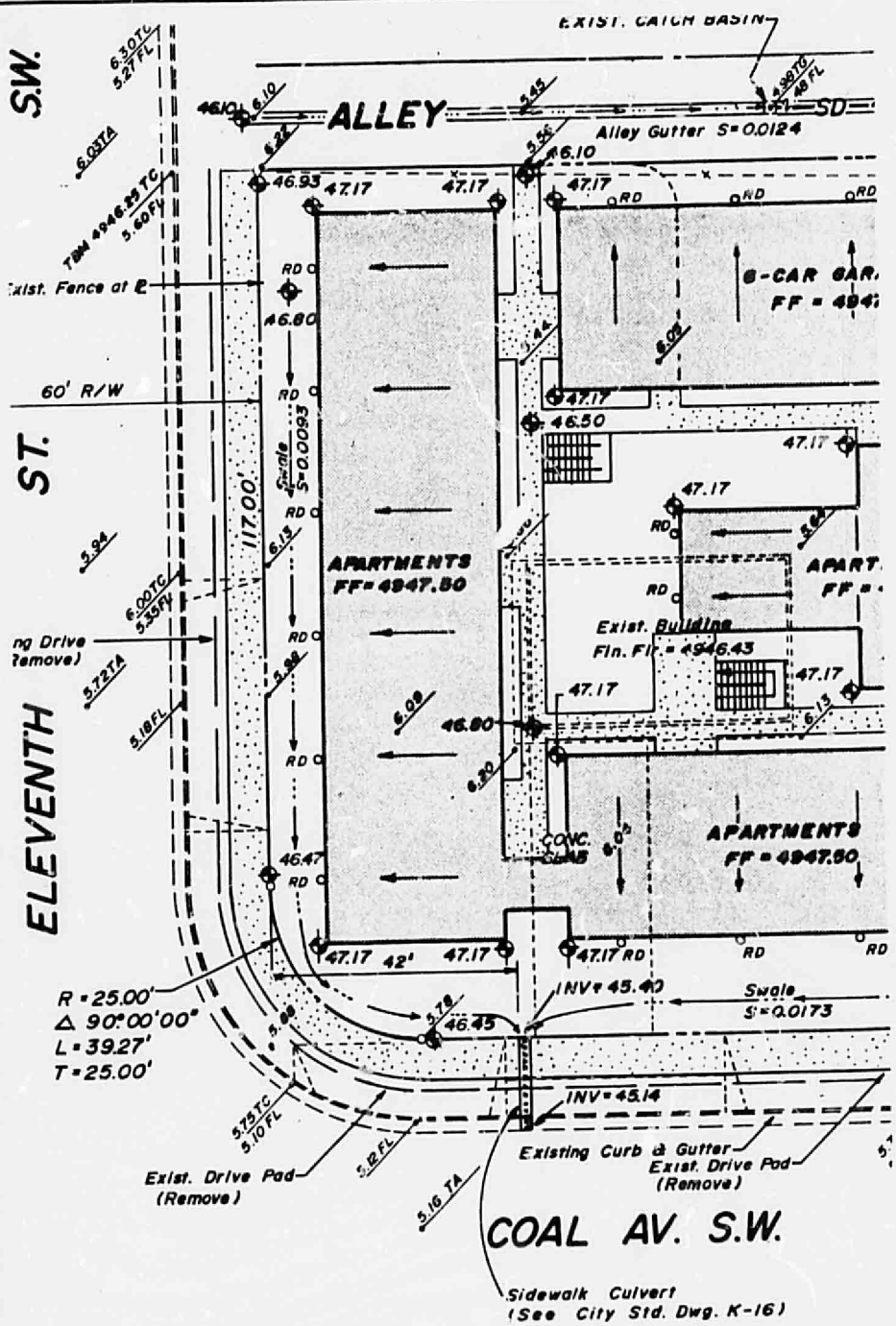
TITLE: *SIDEWALK CULVERT DETAIL*
DON KEITH APARTMENTS
1021 COAL AVE. S.W.

PERMIT NO.
SHEET *1* OF *2*

MAP NO. *K-13*

CITY OF ALBUQUERQUE

DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY



APPROVALS	NAME	DATE
A.C.E./DESIGN		
INSPECTOR		
A.C.E./FIELD		

TITLE: SIDEWALK CULVERT DETAIL
DON KEITH APARTMENTS
1021 COAL AVE. S.W.

PERMIT NO.
SHEET 2 OF 2

MAP NO. K-13

City of Albuquerque
P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

DESIGN HYDROLOGY SECTION
123 Central NW, Albuquerque, NM 87102
(505) 766-7644

May 29, 1985

Mr. Frank Lovelady
Lovelady & Associates
7408 Morrow Rd. NE
Albuquerque, N.M. 87110

REF: DRAINAGE PLAN FOR THE 28-UNIT APARTMENT COMPLEX FOR DON KEITH AND ASSOCIATES (K13/D15) RECEIVED MAY 9, 1985

Dear Mr. Lovelady:

Based on the information provided on your May 9, 1985 submittal, listed you will find certain items that will need to be addressed before final approval is granted:

1. New information sheet with resubmittal designation.
2. Engineer stamp with signature and revision date.
3. Erosion control plan for duration of construction.
4. Please address any off-site flows if any.
5. Downstream capacity must be justified with calculations and by means of existing storm line capacities. what is the catch basin capacity and how much is contributing?
6. City Engineer approved alley grades are required.
7. Elevation of property line at least .33' above adjacent top of curb.
8. Please indicate the 100-year flood hazard encroachment on your plan.

9. All your roof drains that are located adjacent to the public sidewalks will not be allowed to sheet flow across the sidewalks (Provisions must be made to route the developed run-off onto the paved areas from the majority of the roof drains).

10. What amount of developed flows will be contained in the interior court yard?

11. Location of T.B.M. within site area.

If you have any questions or comment, please feel free to contact me at 766-7644.

Sincerely,

Calvin A Martyn

for Billy J. Goolsby PE
Design Engineer/Hydrology

BJG/BJM/cl

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION/DESIGN HYDROLOGY SECTION

PRE-DESIGN CONFERENCE RECAP

HYDROLOGY SECTION PROJECT NO.: K-13 DATE: 4/3/85 Replat

PLANNING DIVISION NOS. EPC: _____ DRB: _____

SUBJECT: Don Keith - 28 Unit Apart. Complex

LEGAL DESCRIP.: Lots 20-28 Blk 33 Reynolds Addn.

APPROVAL REQUESTED

___ PRELIMINARY PLAT
___ SITE DEVELOPMENT PLAN
___ ROUGH GRADING
X FINAL PLAT
X BUILDING PERMIT

ATTENDANCE:	WHO:	REPRESENTING:
	Frank Lovelady	Self
	Billy Goolsby	City

___ Conceptual Drainage Plan/Report required for Preliminary Plat and/or Site Development Plan sign-off.

X Approved Drainage Plan/~~Report~~ required for Final Plat and/or Building Permit sign-off.

___ Subdivision Improvements Agreement or Financial Security required.

FINDINGS: ① Replat required to remove lot lines or appropriate documents for drainage across lot lines. ② Site is adjacent to a flood hazard zone. Floodproofing required 2' above st. flowline. ③ Discharge to be determined by analysis of downstream capacity. ④ Alley grades required.

The undersigned agrees that the above findings are summarized accurately and are only subject to change if further investigation reveals that they are not reasonable or that they are based on inaccurate information.

SIGNED: Billy J. Goolsby SIGNED: Frank O. Lovelady
TITLE: CE/Design Hydrologist TITLE: _____
DATE: 4/3/85 DATE: 4/3/85

NOTE PLEASE PROVIDE A COPY OF THIS RECAP WITH THE DRAINAGE SUBMITTAL

GRADING AND DRAINAGE PLAN

AND

SUPPORTING INFORMATION

FOR

28-UNIT APARTMENT COMPLEX FOR DON KEITH AND ASSOCIATES

Northeast Corner of 11th Street and Coal Avenue, S.W.

ZONE ATLAS PAGE NO. ~~K-16~~ K-13

Prepared By

Loveladv & Associates

RECEIVED
MAY 09 1985
HYDROLOGY SECTION

MAY 9, 1985

DRAINAGE INFORMATION SHEET

PROJECT TITLE: 28-Unit Apartment Complex for Don Keith And Associates ZONE ATLAS/DRNG. FILE #: K-13/15

LEGAL DESCRIPTION: Tract "A", Block 33, Reynolds Addition

CITY ADDRESS:

ENGINEERING FIRM: Lovelady & Associates CONTACT: Frank Lovelady

ADDRESS: 7408 Morrow Road, N.E. PHONE: 883-7973

OWNER: Don Keith And Associates CONTACT: Don Keith

ADDRESS: 7116 Edwina Court, N.E. PHONE: 884-4070

ARCHITECT: Jerry Torr & Associates CONTACT: Jerry Torr

ADDRESS: 5736 Osuna Road, N.E. PHONE: 884-7713

SURVEYOR: Hall Surveying CONTACT: Verlon Hall

ADDRESS: 2625 Pennsylvania N.E. PHONE: 884-6200

CONTRACTOR: N/A CONTACT:

ADDRESS: PHONE:

PRE-DESIGN MEETING:

X YES

___ NO

X COPY OF CONFERENCE RECAP SHEET PROVIDED

DRB NO. 85-177 3/12/85

EPC NO.

PROJ. NO.

RECEIVED MAY 09 1985 HYDROLOGY SECTION

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 APPROVAL

___ PRELIMINARY PLAT APPROVAL

___ SITE DEVELOPMENT PLAN APPROVAL

___ FINAL PLAT APPROVAL

X BUILDING PERMIT APPROVAL

___ FOUNDATION PERMIT APPROVAL

___ CERTIFICATE OF OCCUPANCY APPROVAL

___ ROUGH GRADING PERMIT APPROVAL

___ GRADING/PAVING PERMIT APPROVAL

___ OTHER _____ (SPECIFY)

DATE SUBMITTED: May 9, 1985

BY: Frank D. Lovelady, P.E.

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION/DESIGN HYDROLOGY SECTION

PRE-DESIGN CONFERENCE RECAP

HYDROLOGY SECTION PROJECT NO.: K-13 DATE: 4/3/85

PLANNING DIVISION NOS. EPC: _____ DRB: Replat

SUBJECT: Don Kaith - 28 Unit Apart. Complex

LEGAL DESCRIP.: Lots 20-24, Blk 33 Raynolds Add'n.

APPROVAL REQUESTED

___ PRELIMINARY PLAT
___ SITE DEVELOPMENT PLAN
X FINAL PLAT
X BUILDING PERMIT
___ ROUGH GRADING

ATTENDANCE:	WHO:	REPRESENTING:
	Frank Lovelady	Self
	Billy Goolsby	City

___ Conceptual Drainage Plan/Report required for Preliminary Plat and/or Site Development Plan sign-off.

X Approved Drainage Plan/~~Report~~ required for Final Plat and/or Building Permit sign-off.

___ Subdivision Improvements Agreement or Financial Security required.

FINDINGS: ① Replat required to remove lotlines or appropriate documents for drainage across lotlines. ② Site is adjacent to a flood hazard zone. Floodproofing required 2' above st flowline. ③ Discharge to be determined by analysis of downstream capacity. ④ Alley grades required.

The undersigned agrees that the above findings are summarized accurately and are only subject to change if further investigation reveals that they are not reasonable or that they are based on inaccurate information.

SIGNED: Billy J. Goolsby
TITLE: CE/Design Hydrology
DATE: 4/3/85

SIGNED: Frank D. Lovelady
TITLE: _____
DATE: 4/3/85

NOTE PLEASE PROVIDE A COPY OF THIS RECAP WITH THE DRAINAGE SUBMITTAL

FLOODWAY MAP

PANEL NO. 28

ALBUQUERQUE
RIO
GRANDE
ATRISCO
GRANT
OF
BERNALILLO CO. SOILS MAP

RAYNOLDS
ADDITION
RIO
GRANDE
PARK
RIO GRANDE
ZOO
RIO GRANDE PARK
RIVERSIDE
DRAIN
ALBUQUERQUE
TINGLEY
ATLANTIC
SANTA
STORM SEWER MAP
MAP NO. K-13

Lovelady & Associates
7408 Morrow Road, N.E.
Albuquerque, N.M. 87110
June 17, 1985

RECEIVED
JUN 19 1985
CITY ENGINEER

Mr. Dwayne Sheppard, P.E.
City Engineer
City of Albuquerque
P.O. Box 1293
Albuquerque, N.M. 87103

RE: Hydrology Project No. K13/D15 - Request for variance to Provide Alley Grades.

Dear Mr. Sheppard:

The purpose of this letter is to request a variance from the requirement of the DPM for providing alley grades for the alley north of Coal Ave. between 10th and 11th Streets. The reasons for this request for variance are listed below.

1. Attached City as-built drawing SS-3-76 shows the existing storm sewer, alley surface profile and finished floor elevations of buildings on either side of the alley.

2. The grade of the alley is essentially established by the elevation of the existing catch basin grate (45.00) at station 2+50 and the top of curb elevation at the east end of the alley (45.94 ave.) at station 0+30. The grade connecting these points is 0.0043 ft./ft. This grade has been used on the grading plan (copy attached) so that a) any flow from the east end of the alley will be accepted and conveyed to the catch basin; and, b) future paving of the east end of the alley will permit drainage of the entire alley to the catch basin as appears to have been the intent of the storm sewer design.

3. In the unlikely event that the east end of the alley should require more positive drainage when it is paved, another catch basin can be connected to the storm sewer at that time.

4. In view of the presence of the existing storm sewer in the alley, the cost of designing alley grades is believed to be an unnecessary expence to the owner.

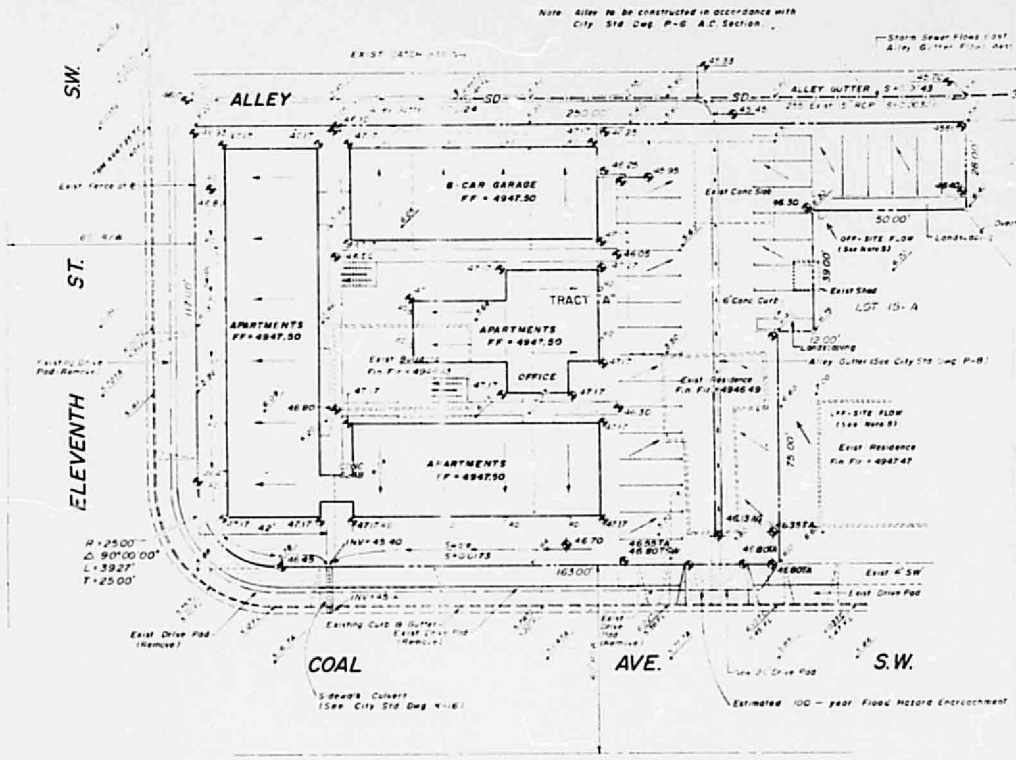
If you require clarification of any of the above points, please do not hesitate to call me at 883-7973

Respectfully Submitted

Frank D. Lovelady, P.E.

APPROVED:

C. H. Sheppard 6/20/85
City Engineer Date



GRADING AND DRAINAGE PLAN

NORTH

SCALE 1" = 20'

LEGEND:

K-13

VICINITY MAP

DRAINAGE COMMENTS:

DRAINAGE CALCULATIONS

I. ASSUMPTIONS:

II. GENERAL INFORMATION:

CONSTRUCTION NOTES:

SOIL TEST NOTE:

GENERAL NOTES:

LEGAL DESCRIPTION:

BENCH MARK:

ELEVATIONS ARE REFERENCED TO ALBUQUERQUE CITY SURVEY MONUMENT [illegible] LOCATED AT THE EAST SOUTHEAST CORNER OF THE INTERSECTION OF ATLANTIC AVENUE AND MARIAN STREET. ELEV. = [illegible]

REVISED DRAINAGE CALCULATIONS

1. OFF-SITE FLOW:

   Only an estimate is possible. The area is very flat and City topo map does not have sufficient elevations to verify flow directions. Therefore, it is estimated as follows:

   A. Area east of site, 120' x 60' = 7200 sf = 0.17 acre
   Q = 0.75 x 4.65 x 0.17 = 0.58 cfs

   B. Area north of alley, 160 x 60 = 9600 sf = 0.22 acre
   Q = 0.75 x 4.65 x 0.22 = 0.76 cfs
   Total off-site flow = 1.32 cfs (Conservative)

2. Calculation of Downstream Capacity:

   A. Existing drop inlet grate. Use Orifice Equation. Assume depth of water standing above grate is 1" (0.25')
   Each slot is 7/8" x 5.5" Ave. = 5.08 sq.in. = 0.035 Sq.Ft. (This was determined from field measurements. There are a total of 96 openings.
   $Q_{opening} = CA(2gh)^{1/2} = 0.6 \times 0.03562 \times (2 \times 32.2 \times .25)^{1/2}$
   $Q_{opening} = 0.08$ cfs
   $Q_{total} = 0.08 \times 96 = 7.68 > (2.26 + 1.32)$
   Even if half the grate is clogged it still will have adequate capacity for all on-site and off-site flow.

   B. Capacity of 15-inch RCP Storm Sewer. Assume = Use Sewer Pipe Calculator for all on-site and off-site
   S = 0.[illegible] ft/ft n = 0.013 Parts full = 1.0
   Q = 3.[illegible] cfs > 1.58 cfs. Therefore, the storm sewer has adequate capacity.

EROSION CONTROL MEASURES:

THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR MANAGEMENT OF STORM RUNOFF DURING CONSTRUCTION. HE SHALL INSURE THAT THE FOLLOWING MEASURES ARE TAKEN:

1. ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY THE CONSTRUCTION OF BERMS, DIKES, SWALES, PONDS AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUNOFF FROM LEAVING THE SITE AND ENTERING SAID PROPERTY.

2. ADJACENT PUBLIC RIGHTS-OF-WAY SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUNOFF FROM THE SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER PUBLIC STREETS OR STORM SEWERS.

3. THE CONTRACTOR SHALL IMMEDIATELY AND THOROUGHLY REMOVE ANY AND ALL SEDIMENT WITHIN PUBLIC STREETS THAT HAS BEEN ERODED FROM THE SITE.

REVISED JUNE 18, 1985

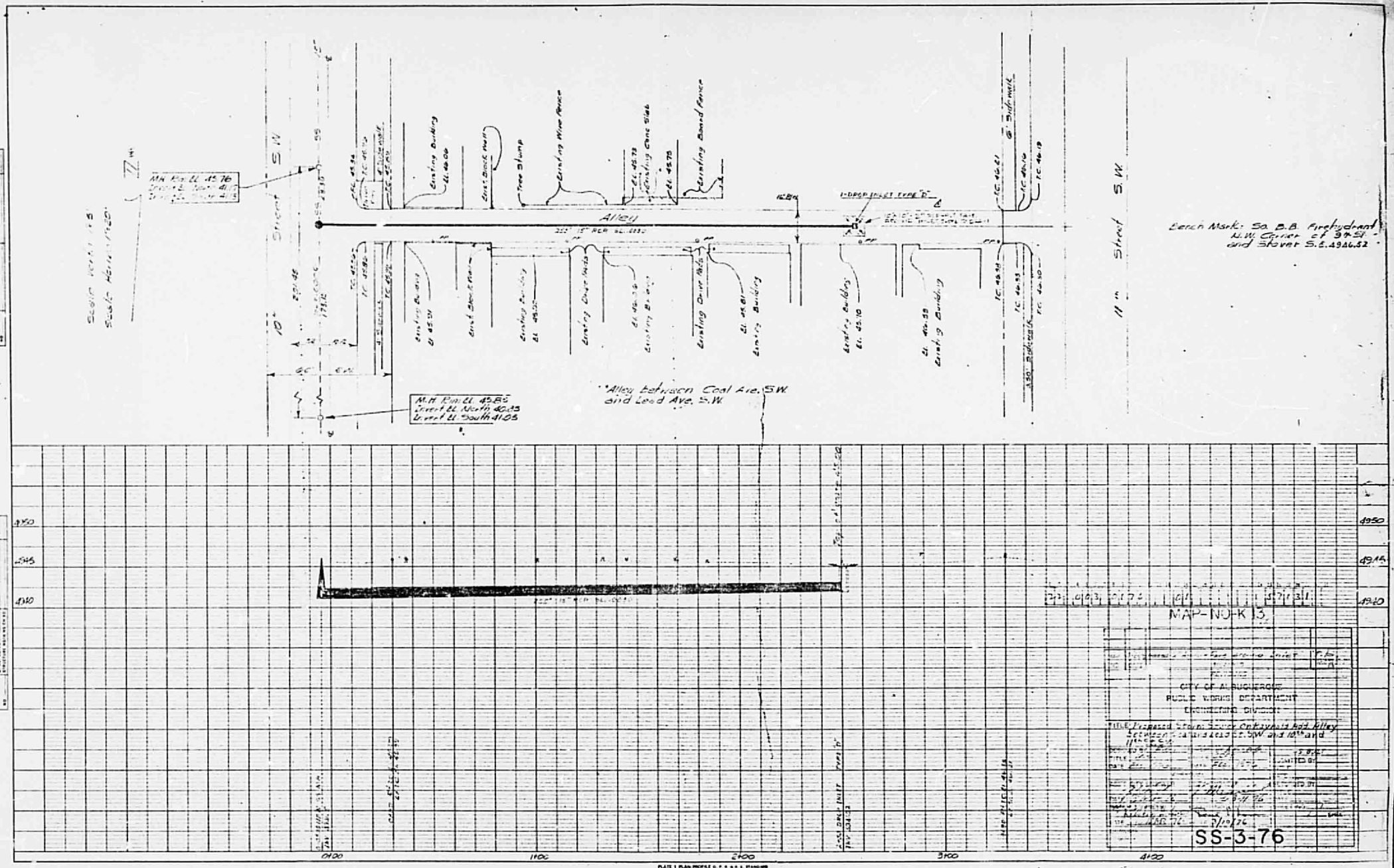
Lee & Lindsey
5-9-1985
ENGINEER'S SEAL

GRADING & DRAINAGE PLAN

28-UNIT APARTMENT COMPLEX FOR DON KEITH & ASSOCIATES

N.E. CORNER OF ELEVENTH STREET & COAL AVENUE, S.E.

ALBUQUERQUE, NEW MEXICO


Alley
Existing Building
Existing Wire Fence
Tree Stump
Existing Board Fence
Existing Chain Link Fence
Existing Concrete Walk
Existing Building
Existing Building
Existing Building