

DRAINAGE INFORMATION SHEET

PROJECT TITLE: TRIPLEX APARTMENTS ZONE ATLAS/DRNG. FILE #: K-16/D27

LEGAL DESCRIPTION: LOT NO. 24 BLOCK NO. 21 UNIVERSITY HEIGHTS ADDITION

CITY ADDRESS: 401 VAGGAR SE

ENGINEERING FIRM: BURTON ENGINEERING CONTACT: DICK BURTON

ADDRESS: P.O. BOX 7530 STATION 14 PHONE: 834-6540

OWNER: GEORGE PROVOST 57194 CONTACT: _____

ADDRESS: 505 DAKOTA SE PHONE: _____

ARCHITECT: MAHLMAN & MILES CONTACT: DAVID MAHLMAN

ADDRESS: 414 1/2 CENTRAL SE - HD PHONE: 243-0101

SURVEYOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

CONTRACTOR: SWING CONTACT: _____

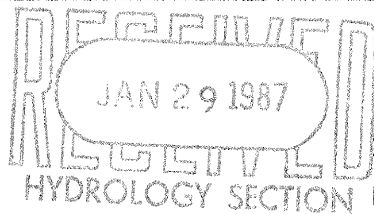
ADDRESS: _____ PHONE: _____

PRE-DESIGN MEETING:

☐ YES

☐ NO

☐ COPY OF CONFERENCE RECAP
SHEET PROVIDED



DRB NO. _____

EPC NO. _____

PROJ. NO. _____

TYPE OF SUBMITTAL:

☐ DRAINAGE REPORT

☒ DRAINAGE PLAN W/ CONCEPTUAL PLAN

☐ CONCEPTUAL GRADING & DRAINAGE 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

☐ CERTIFICATE OF OCCUPANCY APPROVAL

☐ ROUGH GRADING PERMIT APPROVAL

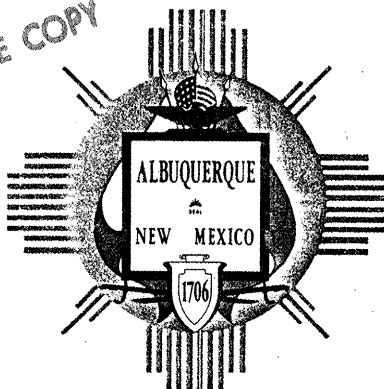
☐ GRADING/PAVING PERMIT APPROVAL

☐ OTHER _____ (SPECIFY)

DATE SUBMITTED: David Mahlman

BY: Jan 27 1987

FILE COPY



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

Ken Schultz
Mayor

UTILITY DEVELOPMENT DIVISION
HYDROLOGY SECTION
(505) 768-2650

February 3, 1987

Dick Burton
Burton Engineering, Inc.
Post Office Box 75310
Albuquerque, New Mexico 87194

RE: REVISED DRAINAGE PLAN FOR TRI-PLEX APARTMENTS
(K-16/D27) ENGINEER'S STAMP DATE JANUARY 27, 1987

Dear Mr. Burton:

Based on the information provided on your submittal of January 29, 1987, the above referenced drainage plan is approved for Building Permit. Please be advised that on future submittals you will need to include:

1. Finish floor elevation to full mean sea level designation (for example, 5182.29).
2. Both top of curb and flow line elevations on the street.
3. Volume computations using the SCS curve number.
4. Complete calculations for the undeveloped, developed and volume rates.

Also, prior to Certificate of Occupancy release, we will need concurrence of all work done within the public right-of-way.

Please attach a copy of this approved plan to the construction sets prior to Hydrology sign-off.

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

PUBLIC WORKS DEPARTMENT

BJM/sj
Walter Nickerson, P.E., City Engineer

ENGINEERING GROUP

Telephone (505) 768-2500

**MAHLMAN &
MILES
ARCHITECTS**

29 January 1987

Mr. Bernie Montoya, Engineering Assistant
Hydrology Section of Public Works Department
City of Albuquerque
P.O. Box 1293
Albuquerque, New Mexico 87103

RE: Tri-Plex Apartments - 401 Vassar SE

Dear Mr. Montoya,

As you requested this letter is being sent to document our conversation of today regarding the above referenced project. As you know the Owner of the above reference property and project, Mr. George Provoost, intends to utilize the City alley which is to the west of his property to access five (5) parking spaces for the new tri-plex apartment development. Mr. Provoost is aware that the portion of the alley which he will utilize, as well as a new concrete drivepad at Coal, are required to be paved at his expense per City approved alley grades.

Mr. Provoost, a licensed general contractor, desires to construct the alley paving and drivepad per City Standards. He has decided to meet City Standards for this construction to assure a quality installation and so that the City can assume maintenance responsibilities once the construction has been completed.

To this end, Mr. Provoost has requested that City Engineering prepare alley grades for this construction; he has also arranged with City Engineering to prepare construction documents for these alley and drivepad improvements to assure compliance with City Standards and to expedite the process (attached is a copy of the design fee deposit which represents approximately 25% of the total estimated design fee).

City Engineering has indicated to me that the alley paving and drive pad construction documents will be ready in approximately two months for Mr. Provoost to begin the construction of these alley improvements. If Mr. Provoost

begins construction on the new apartment building in early February, he anticipates that he would not be ready to begin work on the alley improvements until some time in April. This schedule will coincide well with the preparation of the alley design by City Engineering. (Please note that the site drainage report, prepared by Mr. Dick Burton of Burton Engineering, Inc. included a conceptual study of the interface of this site with the alley. Since the site is the end lot on the north and low end of the alley at Coal, this interface is to a great degree dictated by the existing elevations of Coal).

Mr. Provoost understands that the alley paving and drivepad improvements must be constructed in accordance with the approved alley grades and the paving design which is being prepared by City Engineering prior to his project receiving a certificate of occupancy from the City.

I have reviewed this letter with both Mr. Provoost and with Mr. Greg Olson of City Engineering, who have affixed their signatures below.

Should you have any additional questions please call me.

Sincerely,

Christina M. Miles



David S. Mahlman



George Provoost

Date: 2-2-87



Mr. Greg Olson

Date: 2-2-87

Plaza Escalante
414-1/2 Central SE - Number 4
Albuquerque, New Mexico
87102

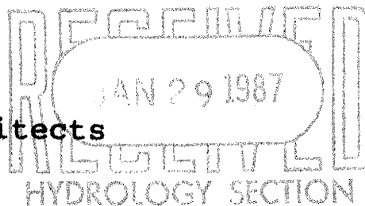
505-243-0101

BURTON ENGINEERS, INC.

P. O. BOX 75310 STATION 14 ALBUQUERQUE, NM 87194
(505) 836-6540

January 26, 1987

Mahlman and Miles Architects
414 1/2 Central SE
Albuquerque, NM 87102



Re: Triplex Apartments at Vassar and Coal SE., 1/13/87 K-16/D27
Letters from Bernie Montayo

Dear David;

Attached is the revised Drainage Plan for the referenced project.
We have answered the comments in the letter as follows:

- 1) We revised our calculations to use the SCS curve number method with the following results:

Hydrologic Soil Group B - Wink-Embudo Complex
Percent Impervisions - 66%
Composite $C_n = 94$
Existing Runoff - 1.7"
Final Runoff - 2.1"
Volume -
 Existing = 0.42 cfs
 Final = 0.53 cfs
- 2) We discussed the alley grades and understand the City is to do this work.
- 3) The condition to allowing free discharge was that we perform the calculations for inlet capacity. These calculations are as follows:

We used the Albuquerque Master Drainage Plan by Bohanan and Houston Sheet K-16, Volume 1 for the contours in areas that we have not surveyed and the Albuquerque storm sewer plans for catch basin locations. The catch basins that will service the proposed project are located at the NE and SE corners of Coal and Princeton. The contour map shows that no flows west of Princeton will be tributary to these inlets.

The area that is served by these catch basins is shown on the attached map. The total is 5.55 acres with the south basin having a tributary area of 4.25 acres.

The C_n for this area is 75 based on a survey of the area. These are 2 apartment buildings and the remainder are single family residents of approximately 900 ft² on 50'x 40'+ lots.

$$Q_p = (1.7)(4.25) = 7.2 \text{ cfs}$$

The street slope on Coal Avenue is 1% to the west. Depth of flow above the gutter grade will be approximately 0.6'. The capacity of the double C inlet would be 9 cfs +. The increased flow from the project is about 0.1 cfs and is not a significant change in the inlet capacity.

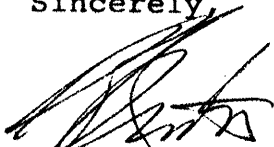
- 4) We have corrected all the elevations to City of Albuquerque bench marks and set a TBM at the curb return on the SW corner of Coal.

Plan Drawings

- 1) Elevations corrected to MSL.
- ✓ 2) We have added elevations 25' from the property on all sides.
- 3) T/C and the elevations are shown to MSL. *Flowline is future street*
- 4) Elevations *not to complete*
- ✓ 5) Elevations
- 6) Elevations
- 7) We have added a legend.
- 8) We have added flow arrows.

If you have any questions, please call.

Sincerely,



Richard L. Burton, P.E.

/jb

enclosures



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

January 13, 1987

Dick Burton
Burton Engineering, Inc.
Post Office Box 75310 Station 14
Albuquerque, New Mexico 87194

RE: DRAINAGE PLAN FOR TRI-PLEX APARTMENTS
(K-16/D27) RECEIVED JANUARY 9, 1987

Dear Mr. Burton:

A preliminary review of your submittal for building permit approval has shown that the following information is lacking for this section to begin the review process:

INFORMATION NEEDED:

1. Use the S.C.S. curve number method for volume calculations per D.P.M.
2. Building Permit will not be issued until approved City alley grades along with a copy of the application for license agreement is submitted to our office for our records.
3. Downstream facility capacity must be analyzed before free discharge may be granted.
4. Benchmark - location, description, and elevation of the:
 - a. Albuquerque Control Survey Vertical Datum
 - b. Temporary benchmark on-site.

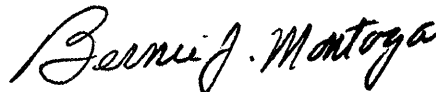
Dick Burton
January 13, 1987
Page 2

PLAN DRAWINGS:

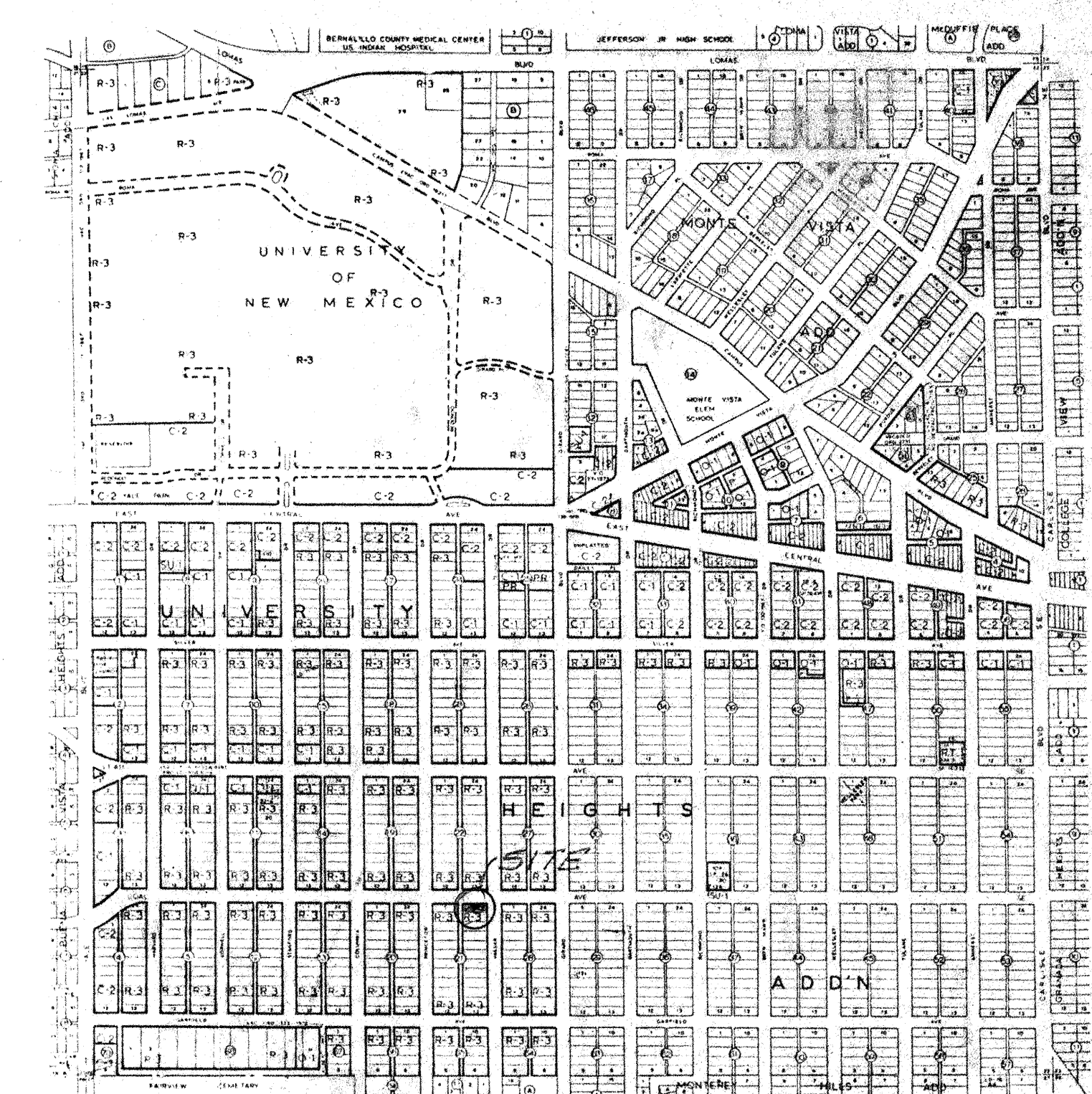
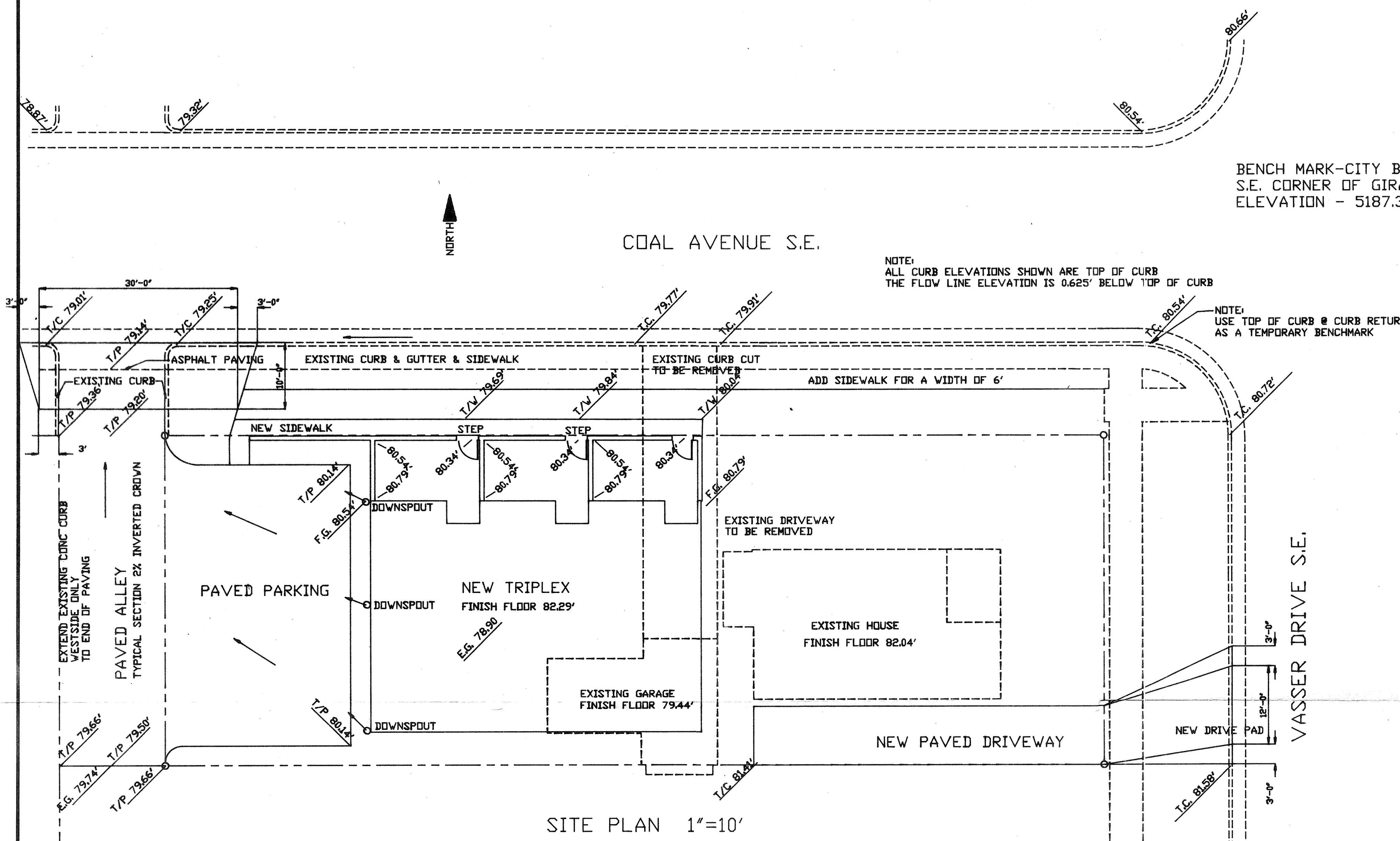
1. Spot elevations adequately showing conditions on-site (to mean sea level).
2. Contours and spot elevation extending a minimum of 25' beyond property line.
3. Existing City top of curb and flow line elevations with mean-sea-level designation.
4. Finish building floor elevation with complete mean-sea-level designation.
5. Location and direction of roof drains.
6. Required spot elevations for the standard City drivepad.
7. Legend - See D.P.M. Manual Vol. 2 tables 27.3a - 27.3d for recommended standard symbols.
8. Flow pattern defined by arrows and spot elevations with mean-sea-level designation.

Please provide this information so that we may process your request as expediently as possible.

Cordially,



Bernie J. Montoya, C.E.
Engineering Assistant



LEGEND

- EXISTING CURB & GUTTER
- EXISTING STRUCTURE
- NEW CONSTRUCTION
- TOP OF CURB T/C
- TOP OF PAVING T/P
- FINISH GRADE F.G.
- EXISTING GRADE E.G.
- TOP OF WALK (WALL) T/W
- PROPERTY LINE
- FLOW ARROW

SITE PLAN 1"=10'

SITE DRAINAGE CRITERIA & DRAINAGE REPORT

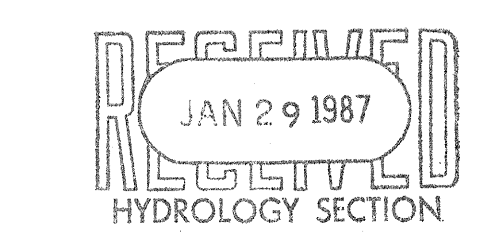
- PURPOSE: THE PURPOSE OF THIS REPORT IS TO FORMULATE A COMPREHENSIVE STUDY OF DRAINAGE AFFECTING THE SITE DEVELOPMENT AND TO SHOW THAT THE DEVELOPMENT DOES NOT INCREASE DRAINAGE IN A MANNER TO CONTRIBUTE TO EXISTING DOWNSTREAM DRAINAGE PROBLEMS OR TO ADJACENT LAND OWNERS.
- SCOPE: THIS REPORT IS LIMITED TO RUNOFF ORIGINATING WITHIN THE SITE AND INCLUDES REVIEW OF ADJACENT LANDS WHICH EFFECT RUNOFF OF THIS SITE. GENERAL ENGINEERING PROCEDURES ARE PRESENTED FOR THE CALCULATION OF STORM RUNOFF, STORAGE AND DISPERSMENT.
- LOCATION: THE SITE IS LOCATED ON THE CORNER OF COAL AVE. AND VASSAR DR. SE SEE VICINITY MAP AND LEGAL DISCRPTION ON THIS SHEET FOR ADDRESS.
- EXISTING DRAINAGE: THE SITE IS NEARLY LEVEL WITH A SLOPE AWAY FROM THE EXISTING HOUSE IN ALL DIRECTIONS THERE IS A EXISTING HOUSE AND GARAGE ON THE SITE. THE GARAGE WILL BE REMOVED TO CONSTRUCT THE TRIPLEX.
- ADJACENT LAND DRAINAGE: THE SITE IS BORDERED ON ALL SIDES BY RESIDENTIAL DEVELOPMENT. VIRTUALLY NO STORM RUNOFF IS DIRECTED TO OR ACROSS THIS SITE.
- DOWNSTREAM FLOOD HAZARD: THIS SITE DOES NOT LIE WITHIN A DESIGNATED FLOOD HAZARD ZONE AS IS INDICATED ON FLOOD HAZARD MAP 350002 0029.

- PROPOSED DEVELOPMENT: THE PROPOSED DEVELOPMENT WILL CONSIST OF A RESIDENTIAL TRIPLEX OF 1750 sq ft WITH REQUIRED PARKING AND ACCESS. (GARAGE)
- PROPOSED DRAINAGE PLAN: THE PROPOSED DRAINAGE PLAN IS FREE DISCHARGE TO THE EXISTING STORM SEWER SYSTEM.
- SITE CRITERIA & CALCULATIONS

EXISTING AREA (sq. ft.)	
LOT	(50 X 142) = 7100
R/W ALLEY	13.5 X (142 + 50) + (3.14 X 13.5) / 4 = 2735
TOTAL AREA	1028
TOTAL AREA	10863
EXISTING DEVELOPMENT AREA (sq. ft.)	
ROOF AREA (HOUSE)	689
SIDEWALK, PAVING	325
TOTAL IMPERVIOUS SURFACE	1423
LANDSCAPING	2437
TOTAL IMPERVIOUS SURFACE	8426
PROPOSED DEVELOPMENT AREA (sq. ft.)	
ROOF AND PORCHES	2539
SIDEWALK	1123
DRIVEWAYS AND PATIO	3488
TOTAL IMPERVIOUS SURFACE	7150
LANDSCAPING	3713

DESIGN CRITERIA

STORM (6 hr. - 100 yr.)	2.45"
HYDROLOGIC SOIL GROUP	B
PERCENT IMPERVIOUS - EXISTING	22
PERCENT IMPERVIOUS - FINAL	66
RUNOFF VOLUME	
DIRECT RUNOFF - EXISTING	1.7"
DIRECT RUNOFF - FINAL	2.1"
RUNOFF RATE	
EXISTING	0.43 CFS
NEW	0.52 CFS



	REVISIONS	SCALE: 1" = 10'	LOT 24 BLOCK 21 UNIVERSITY HEIGHTS DRAINAGE PLAN BURTON ENGINEERS, INC. ALBUQUERQUE CONSULTING CIVIL ENGINEERS Los Cruces
	DATE: 1-87	PROJECT NO. 266	
	DRAWN: RB	CHECKED: RB	
	SHEET NO. 1	of 1	