



City of Albuquerque

May 3, 1983

CCIC Design Group
Ray Chambers
3500 Indian School Road, NE
Albuquerque, NM 87106

REF: Blake's Lota Burger

Dear Ray Chambers:

The referenced drainage plan has been reviewed and the following are my comments:

- ✓ 1. Provide a description of the temporary bench mark on-site.
- ✓ 2. Include flow^{LINE}ing elevations with your city top-of-curb elevations.
- ✓ 3. Discuss off-site flows affecting the site and the proposed routing of these flows.
4. Provide the required drivepad elevations on the plan.
- ✓ 5. Grading outside the site's property limits is not allowed without permission from the adjacent property owner.
- ✓ 6. Identify the owner of the drain on-site and the type of drain, z.e., storm drain or sanitary drain.
- ✓ 7. Attach a copy of the latest plat for the referenced site.

If you have any questions regarding the above, please feel free to call me at 766-7644.

MUNICIPAL DEVELOPMENT DEPARTMENT

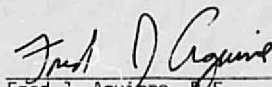
Richard S. Heller, P.E., City Engineer
LaMonte J. Urban, P.L.S., Chief City Surveyor

ENGINEERING DIVISION

123 Central Avenue N.W.
Albuquerque, New Mexico 87102
Telephone (505) 766-5040

CCIC Design Group
May 3, 1983
page -2-

Sincerely,

A handwritten signature in dark ink, appearing to read "Fred J. Aquino", is written over a horizontal line.

Fred J. Aquino, C.E.
City Engineer/Hydrology

mrk

letter of transmittal

TO:

City of Albuquerque
Hydrology

DATE: 5-6-83

JOB NO: 582-4

TRANSMITTAL NO: _____

PROJECT: Blakes Lotbunger
Eubank's & Snowheights

ATTENTION:

Fred Ogden

Gentlemen:

We are sending you ☒ attached ☐ under separate cover via _____

2 copies/sets of the following:

☐ Shop Drawings

☐ Certifications

☐ Descriptive Literature

☐ Samples

☐ Copy of Letter

☒ prints of shut CIDCE

☐ _____

☐ _____

PREPARED BY: CCIC

COVERING: Site Amendments

SPEC. SEC. _____

These are transmitted as checked below:

☐ Approved as Submitted

☐ For Approval

☐ Approved as Noted

☐ For Information and File

☐ Disapproved as Noted

☒ For Review and Comment

☐ Returned for Corrections

☐ For Your Use

☐ Resubmit _____ Copies for Approval

☐ _____

☐ Resubmit _____ Corrected Copies for Record

☐ _____

REMARKS:

The changes you requested for the above
referenced job have been completed, please call
Ray Chambers @ 266-5521 with any additional
comments or problems. Thank you

COPY TO: _____

BY: Alvin

CCIC Design Group

architects engineers planners 3500 nelson school road ne albuquerque new mexico 87106 505/266-5521

May 6, 1983

Mr. Fred Aguirre, P.E.
Hydrology Department
Engineering Division
City of Albuquerque
Albuquerque, NM 87102

ANNEXE

REF: Blake's LotaBurger
Eubank & Snow Heights

Dear Fred:

I am enclosing a revised print of the referenced drainage plan which has been changed to reflect your comments of May 3, 1983. I also enclose a copy of the latest plat showing Tract 2A-4 of Block 129, Snow Heights Addition.

The final comment you wished to have clarified concerned the "off-site" flows affecting the site:

OFF-SITE FLOWS: As the general area in which the site is located slopes to the west, the primary off-site flow would be coming from the east. There is an intercepting concrete-lined arroyo approximately one block east crossing Snow Heights Blvd. which has the capacity to carry off almost all off-site drainage water before it reaches the Menaul junction. A new storm drain system is to be constructed north to south in front of the site along Menaul which will collect the remaining off-site flow.

The lot adjacent to the site to the east drains to the south and onto Snow Heights - thence east for a half block to the arroyo. The lot immediately north of the site drains west to Menaul where the new storm drain will collect all of the runoff.

The effect of off-site drainage will have no effect on the proposed site.

If you have any other questions, please call me as we hope to complete the plan review next week.

Very truly yours,

Ray H. Chambers
Ray H. Chambers
Partner

CCIC Design Group

RHC:dd
Encls.



City of Albuquerque

May 16, 1983

Ray H. Chambers
3500 Indian School Road NE
Albuquerque, NM 87106

REF: Blake's LotaBurger - Dated 1983


Dear Mr. Chambers:

The referenced drainage plan is approved.

For your information, the sanitary easement shown on your drainage plan was researched by the City Survey Section and was found to be a private easement for the benefit of the apartment complex immediately North of this site.

If you have any question, please contact this office.

Sincerely,


Fred Aguirre
City Engineer/Hydrology

FA:mrk

MUNICIPAL DEVELOPMENT DEPARTMENT

Richard S. Heller, P.E., City Engineer
LaMonte J. Urban, P.L.S., Chief City Surveyor

ENGINEERING DIVISION

123 Central Avenue N.W.
Albuquerque, New Mexico 87102
Telephone (505) 766-5040

DRAINAGE STUDY

FOR

BLAKE'S LOTA BURGER

Lot 2A-4, Block 129, Snow Heights Addition



Prepared By:
CCIC DESIGN GROUP
3500 Indian School Road, N.E.
Albuquerque, New Mexico 87106

April 13, 1983

INFORMATION SHEET

PROJECT TITLE: Blake's Lota Burger TYPE OF SUBMITTAL: Drainage Plan

ZONE ATLAS PAGE NO.: H-21-Z CITY ADDRESS: Snow Heights Blvd., N.E.

LEGAL DESCRIPTION: Lot 2A-4, Block 129, Snow Heights Addition

ENGINEERING FIRM: CCIC Design Group CONTACT: Ray Chambers

ADDRESS: 3500 Indian School Road, N.E. PHONE: 266-5521

OWNER: Blake Chanslor

CONTACT: Blake Chanslor

ADDRESS: 3205 Richmond, N.E.

PHONE: 884-2160

ARCHITECT: CCIC Design Group

CONTACT: Annelle M. Darby

ADDRESS 3500 Indian School Road, N.E. PHONE: 266-5521

SURVEYOR: Enchantment Engineering CONTACT: John Bettis

ADDRESS: 9910 Indian School Road, N.E. PHONE: 294-8859

CONTRACTOR: Licensed

CONTACT: --

ADDRESS: Not Selected

PHONE: --

DATE SUBMITTED: April 13, 1983

BY: Ray Chambers

INTRODUCTION

The investigation of the site for a proposed Blake's Lota Burger, Lot 2A-4, Block 129, Snow Heights Addition to the City of Albuquerque, has been made to analyze the undeveloped drainage contribution as well as the projected storm water flow when the site is developed in accordance with the drawings.

Site Information: The selected site contains 0.477 acres, all of which will be developed. The topography is sloping from east to west with a difference in elevation of approximately 4 feet in 215 feet. (Slope = 1.9% overall.) Existing ground cover is very sparse native grasses.

Snow Heights Boulevard and Eubank Boulevard are both paved and improved with existing curbs and gutters.

Adjacent Embudo Arroyo: The Embudo Arroyo Drainageway is less than 300' south of the site. The City of Albuquerque is in the process of planning a new storm sewer from the arroyo north along Eubank that will collect the storm water. It is anticipated that a drop inlet will be located at the southwest corner of the site.

On-Site Drainage: All improved areas of the site are sloped to drain through a new driveway opening at the south center of the site and onto Snow Heights Boulevard. (See Copy of the Site Plan Exhibit.)

Hydrological storm flow calculations are based on the national runoff formulae; and estimates were made in percentage of areas to determine a composite "C" value for runoff coefficients using the following acceptable numbers:

- a. Asphalt paving, sidewalks and roofs = 0.90
- b. Landscaped and grassed areas = 0.20
- c. Natural ground = 0.40

The runoff volumes are based on a 100 year, 6 hour rainfall of 2.8 inches. (See attached isopluvial map.)

PRE-DEVELOPED STORM FLOW

$$\text{Area} = 0.477 \text{ acres} = 20,780 \text{ sq. ft.}$$

$$C = 0.40$$

$$t_c = 13 \text{ min.}$$

$$i = 189/(t+25) = 5.0$$

$$Q = CIA = (0.40) (5.0) (0.477) = 0.95 \text{ cfs}$$

$$\text{Vol} = CDA, \text{ where } D = 2.8" = 0.23'$$

$$= (0.40) (0.23) (30580) = 1911 \text{ cu. ft.}$$

There are no apparent drainage channels on the existing site and it is assumed the present flow is to the southwest corner of the site where the flow then goes east into the intersection of Eubank and Snow Heights.

DEVELOPED STORM FLOW

Area = 0.477 acres = 20,780 sq. ft.

Composite "C" = 0.72

tc (215) = 12 min.

I = 5.1

$Q = CIA = (0.72) (5.1) (.477) = 1.75 \text{ cfs}$

Vol = CDA, where D = 2.8" = 0.23'

$= (0.72) (0.23) (20,780) = 3441 \text{ cu. ft.}$

The additional flow generated when the site is developed amounts to 0.80 cfs or 1530 cu. ft.

DOWNSTREAM OFFSITE DRAINAGE

The additional storm drainage will flow down Snow Heights Boulevard approximately 100 feet to the junction with Eubank Blvd. The storm water will then be collected by the new storm drain and drop inlet.

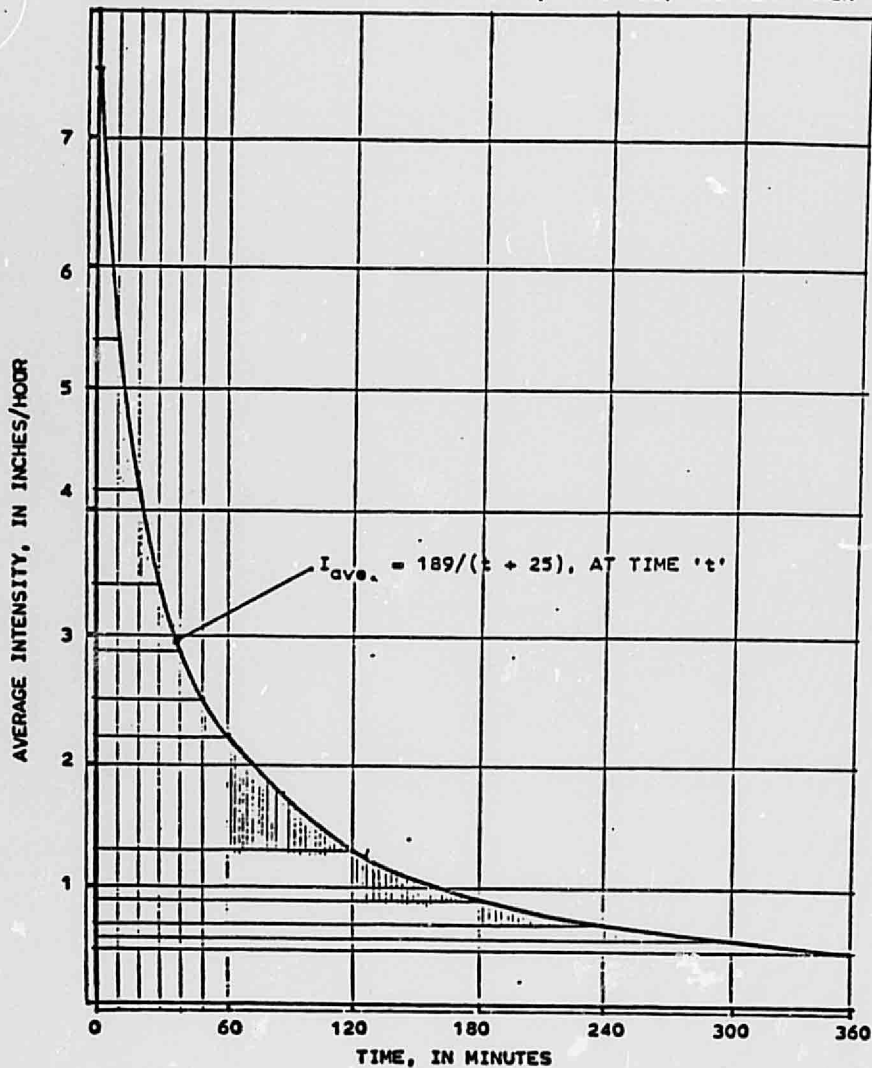
RECOMMENDATION

As the new storm drain will be sized to carry 119 cfs of storm water, it is proposed to use no on-site ponding except to control landscape runoff and to release the storm flow as it accumulates into Snow Heights Boulevard.

INTENSITY

ALBUQUERQUE

INTENSITY, FROM TIME '0' TO TIME 't,' AVERAGE; 100 YEAR RAIN



PREPARED BY SPECIAL STUDIES BRANCH, OFFICE OF HYDROLOGY,
WEATHER BUREAU, ENVIRONMENTAL SCIENCE SERVICES
ADMINISTRATION, U.S. DEPARTMENT OF COMMERCE
JUNE 1967

