DRAINAGE INFORMATION SHEET

PROJECT TITLE: Garage Addition for Chuck Lutheran ZONE ATLAS/DRAINAGE FILE # 621/D12E

LEGAL DESCRIPTION: Tract 17B, Block 17, Mesa Arriba Addition, Albuquerque, Bernalillo Cty

CITY ADDRESS: 10340 Comanche NE, Albuquerque, NM

ENGINEERING FIRM: Bovay Engineers, Inc. CONTACT: Rodney Burrows

ADDRESS: 3125 Carlisle NE, ABQ PHONE: 884-0700

OWNER: Chuck Lutheran CONTACT: Chuck Lutheran

ADDRESS: 10340 Comanche NE, Albuquerque, NM PHONE: 299-5011

ARCHITECT: Miller and Associates, Architects CONTACT: Jim Miller

ADDRESS: 2819 Richmond NE, ABQ PHONE: 884-1255

SURVEYOR: N/A. Was not re-surveyed for this addition projec CONTACT:

ADDRESS: PHONE:

CONTRACTOR: Hill Building Co CONTACT: Barry Hill

ADDRESS: 834 Griegos NW ABQ PHONE: 345-7808

PRE-DESIGN MEETING:

X YES with owner

____ NO

____ COPY OF CONFERENCE RECAP SHEET PROVIDED

RECEIVED
MAY 21 1986
HYDROLOGY SECTION

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:

____ SECTOR PLAN APPROVAL

____ 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

DATE SUBMITTED: 4-16-86 [illegible]

BY: R. Burrows, Bovay Engineers, Inc.

____ OTHER _____ (SPECIFY)

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

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

May 27, 1986

Robert Smith
Bovay Engineering
3125 Carlisle Blvd., NE
Albuquerque, New Mexico 87110

RE: REVISED DRAINAGE PLAN FOR GARAGE ADDITION FOR CHUCK LUTHERAN (G-21/D12E) REVISION DATE MAY 9, 1986

Dear Mr. Smith:

Based on the information provided on your May 21, 1986 resubmittal, the above referenced drainage plan is approved for Building Permit.

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

If I can be of further assistance, please feel free to contact me at 766-7644.

Sincerely,

Bernie J. Montoya

Bernie J. Montoya, C.E.
Engineering Assistant

cc: Chuck Lutheran
10340 Comanche Road, NE

BJM/bsj

BOVAY ENGINEERS, INC.
HOUSTON • SPOKANE • BATON ROUGE
AUSTIN • ALBUQUERQUE • WASHINGTON, D. C.

April 10, 1986

BEI# 6014-259
Proj. Ref.: Chuck Lutheran

Mr. Fred Aguirre
Design Hydrology Section
City of Albuquerque
Albuquerque, New Mexico 87110

Dear Mr. Aguirre,

Bovay Engineers Inc. was recently asked by Mr. Chuck Lutheran, owner of The Mechanic, to perform a hydrology study for an expansion of his business at 10340 Comanche Northeast in Albuquerque. The following is a written narrative describing his project, and our design analysis of the project. It is meant to accompany the Bovay drawing of Mr. Lutheran's project dated 4-1-86.

EXISTING SITE

The addition is located on Mr. Lutheran's property on the southwest corner of Commanche and Morris in Northeast Albuquerque. The existing site is developed on approximately 95 % of the available land area. The only undeveloped portion of the property is several small landscaped areas. The developed area consists of the building itself, and parking that is covered with concrete and asphalt. There is an existing garage structure on the lot that contains approximately 1800 square feet (about 9.7% of the available land area).

SCOPE OF PROJECT

The proposed project includes an addition of approximately 1752 square feet. This will increase the lot coverage to about 19% of available land. Since the new building will replace existing pavement, no new contribution to runoff will occur as a result of this project. Some minor reshaping of the parking area immediately in front of the doors to the new addition will be required in order to provide a smooth transition from the parking area to the garage. Each of these areas of new paving will be about 20' x 40' in area, and neither changes the characteristics of the runoff.

TOPOGRAPHIC CONTOURS

A topographic survey of the lot was completed, using a City of Albuquerque Bench Mark (#8-G-21-A 5597.68 feet) located at the intersection of Morris and Comanche. Approximately 75 data points calculated on the pavement, the building, and the surrounding right-of-ways were used to prepare the attached plan. To provide a more accurate picture of water flows on the lot, six-inch contours are plotted on the plan, as opposed to the more customary one-foot contours. To get the true elevation of any point on the map, add the contour elevation to the 5590.00 feet base elevation. For example, the elevation of the new floor slab is 5590.00 plus 5.39 or 5595.39 feet above mean sea level.

PROFESSIONAL ENGINEERS AND PLANNERS
~~P. O. BOX 30068~~ • 3125 CARLISLE BOULEVARD, N.E. • ALBUQUERQUE, NEW MEXICO 87110 • TEL. 505/~~344-3577~~ 884-0700 • CABLE BOVENG

AREA OF SITE

The area of the site is approximately 18,614 square feet or about 0.43 acres.

HYDROLOGY COMPUTATIONS

For our calculations, we are using the City of Albuquerque's recommended procedure as described in the City's Development Process Manual.

TIME OF CONCENTRATION

Though the computed time of concentration is below 10 minutes, we used 10 minutes as the Tc as the recommended minimum Tc in the DPM.

INTENSITY OF RAINFALL

Intensity for a 100 year storm is 2.35 inches per hour.

PERCENT DEVELOPED

Approximately 95% (unchanged by this project).

MAXIMUM RUNOFF

Q100 = 0.96 cubic feet per second (also unchanged by this project).

UPSTREAM OFFSITE CONTRIBUTION

The site is located on a locally elevated parcel, and is surrounded on the south and west by a six-inch high concrete curb. Therefore, no water from off-site can enter the property. The portions of the property at the curb cuts are also locally higher than the streets and gutters, so no water flowing in the street will enter the property.

DOWNSTREAM OFFSITE CONTRIBUTION

All water that falls on the property drains in sheet flow across the property to the northwest corner of the site, and enters Comanche Road via an existing curb cut. No change in the amount or location of this contribution will occur as a result of this project. Once the water enters Commanche, it continues flowing west, in the existing street gutter.

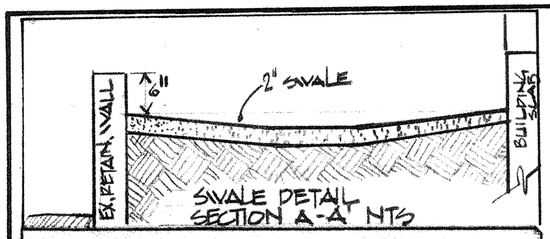
CONCLUSION

The layout of the existing property, as well as the layout of the new addition is in conformance with standard engineering practice for this area of the country, and is a sensible solution to storm runoff problems at the site. Bovay Engineers, Inc.,therefore, recommends that the City of Albuquerque accept Mr. Lutheran's expansion project at 10340 Comanche Northeast.

Sincerely,

Rodney D. Burrows, Project Engineer

Robert A. Simth, PE



EXISTING SITE

The existing site is developed on approximately 95% of the available land area. There is an existing garage structure containing about 1800 square feet. The building is surrounded by parking and drive areas which are paved with asphalt and concrete.

SCOPE OF PROJECT

The proposed project includes an addition of approximately 1752 square feet for additional garage space. The new building area will replace existing paved area, so no new contribution to surface runoff will occur. Some minor reshaping of the parking area immediately in front of the door to the new addition will be required to make a smooth transition from the parking area to the garage.

AREA OF SITE

18,614 square feet or approximately .43 acres.

PERCENT DEVELOPED

95% Developed (unchanged by this project)

TIME OF CONCENTRATION

10 minutes.

INTENSITY OF RAINFALL

~~2.35~~ Inches per hour.
4.97 INCHES PER HOUR (1)

MAXIMUM RUNOFF

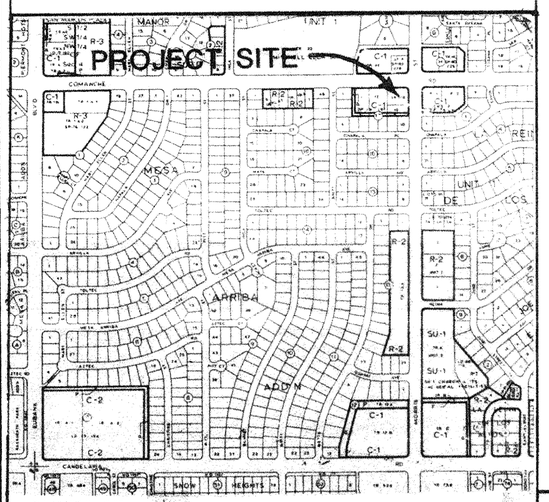
Q100 = ~~0.96~~ cubic feet per second
= 2.03 CUBIC FEET PER SECOND (1)

UPSTREAM OFFSITE CONTRIBUTION

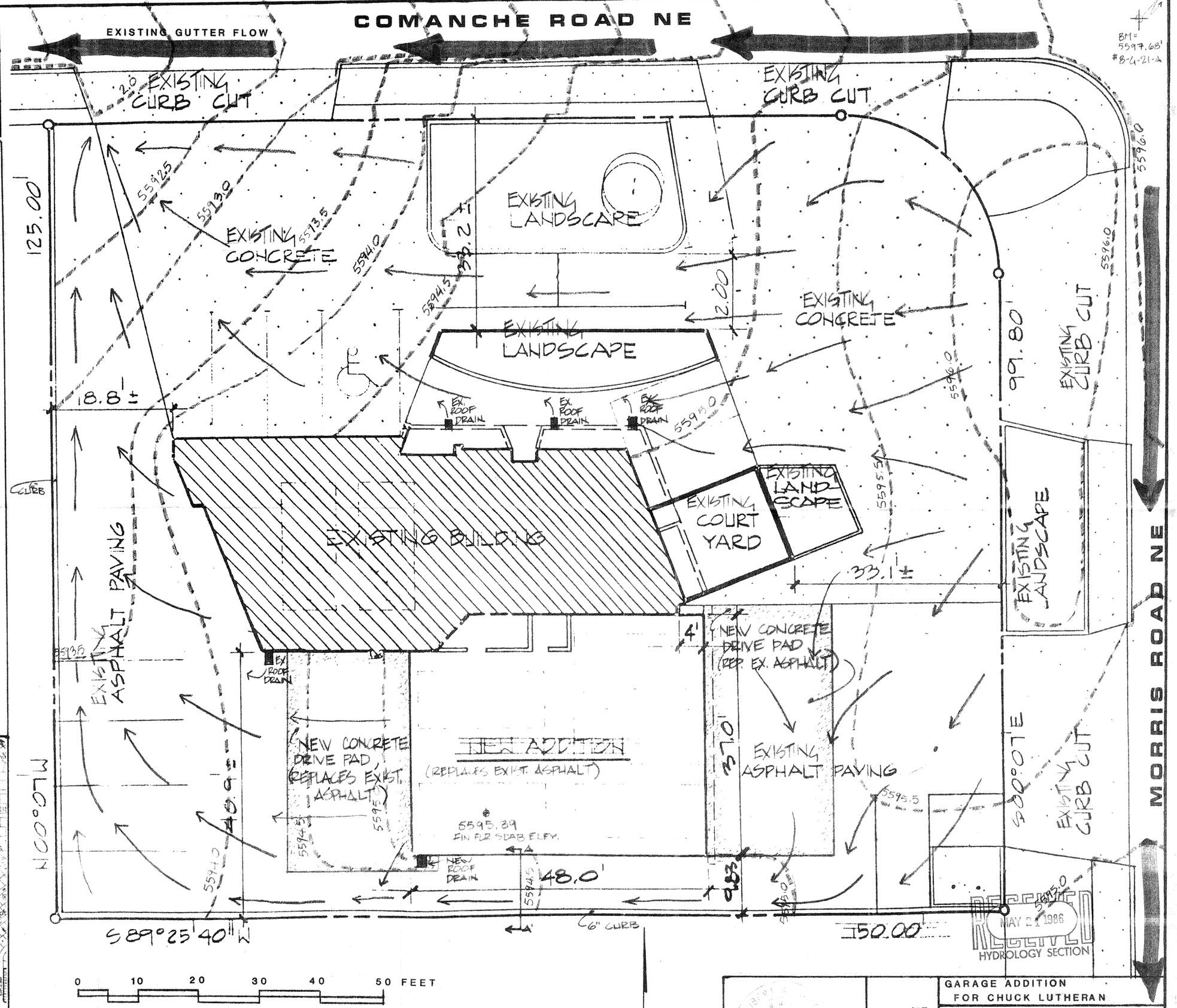
The site is located on an elevated parcel, and is surrounded on the south and west by a six inch concrete curb. Therefore, no water from off the site can enter the property.

DOWNSTREAM OFFSITE CONTRIBUTION

All water that falls on the property drains to the northwest corner of the site and enters Comanche Road via an existing curb cut. No change in the amount or location of this contribution will occur as a result of this project.



VICINITY MAP



HYDROLOGY PLAN

LEGAL DESCRIPTION

TRACT 17B, BLOCK 17, MESA ARRIBA ADDITION, ALBUQUERQUE, NM

RECEIVED
MAY 21 1986
HYDROLOGY SECTION

Robert A. Smith 4/8/86

drawn RDB
eng RDB
date 4-1-86
rev. RDB 5-19-86

GARAGE ADDITION
FOR CHUCK LUTHERAN

BOVAY ENGINEERS, INC.
ALBUQUERQUE
HOUSTON • SPOKANE • AUSTIN • BATON ROUGE