HYDROLOGY

K13/D10

TOWNHOUSES ON

SILVER + 13TH

K13 / D10

02 PLANS

INFORMATION SHEET

PROJECT TITLE Townhouses on Silver and 13th

TYPE OF SUBMITTAL Grading Plan and Drainage Report

ZONE ATLAS PAGE NO. K-13 8-10 CITY ADDRESS 1301 Silver Ave. S W

LEGAL DESCRIPTION Lots 11 and 12, Raynolds Add'n

ENGINEERING FIRM Engineering Associates, Inc. CONTACT August F. Mosimann, P.E.

ADDRESS 1840 Lomas N. E. PHONE 242-7522

OWNER W. J. Brennan CONTACT W. J. Brennan

ADDRESS 1424 Silver S W PHONE 242-9125

ARCHITECT ~~[illegible]~~ CONTACT Tim A. Brennan

ADDRESS 1705 Camino Gusto S W PHONE 345-0030

SURVEYOR Rodriguez and Associates CONTACT George Rodriguez

ADDRESS 11035 Central Ave. N E Suite B PHONE 296-5978

CONTRACTOR Brennan Construction Co. Inc. CONTACT Tim Brennan

ADDRESS 1705 Camino Gusto N W PHONE 345-0030

PRE-DESIGN MEETING:

✓ YES (By Telephone w/ John Armstrong

___NO

___COPY OF CONFERENCE RECAP SHEET PROVIDED

RECEIVED JAN 25 1984 HYDROLOGY SECTION

PLEASE CHECK TYPE OF APPROVAL EXPECTED WITH THIS SUBMITTAL:

___SKETCH PLAT APPROVAL
___PRELIMINARY PLAT APPROVAL
___SITE DEVELOPMENT PLAN APPROVAL
___FINAL PLAT APPROVAL
✓ BUILDING PERMIT APPROVAL
___CERTIFICATE OF OCCUPANCY APPROVAL
___ROUGH GRADING PERMIT APPROVAL
___GRADING/PAVING PERMIT APPROVAL
___OTHER_____(SPECIFY)

AUGUST F. MOSIMANN STATE OF NEW MEXICO NO. 6148 REGISTERED PROFESSIONAL ENGINEER

DATE SUBMITTED Jan 18, 1984

BY August F. Mosimann, P. E.
for
Engineering Associates, Inc.

NEW REPORT

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

February 9, 1984

Mr. August F. Mosimann
Engineering Associates
1840 Lomas NE
Albuquerque, New Mexico 87106

REF: TOWNHOUSES ON SILVER AND 13th (K13-D10)

Dear Mr. Mosimann:

Based on the information provided on your January 25, 1984 submittal of the above referenced site, listed below you will find certain concerns that will need to be addressed before final approval is granted:

✓ 1. Professionals stamp with signature and date.

✓ 2. Please include existing grades on the grading plan. Also address how the proposed grades will interphase with the existing 16' paved alley.

✓ 3. The new 4' sidewalk will have to be changed to a 6' to match existing walk.

✓ 4. Designate the flowline grades on the alley as existing.

✓ 5. Finish floor at the far North building, I assume, is at 48.8 also. Please change on plan.

✓ 6. The portion between the west property line and the proposed building will need to be swaled to route runoff either North or South. Include grades and swale detail.

✓ 7. No roof runoff is allowed to drain over a public sidewalk. How do you propose to route the roof runoff being generated on the eastside of the building towards the alley.

✓ 8. In future submittals please include all required information in one plan to further increase process time.

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

Sincerely yours,

Bernie J. Montoya

Bernie J. Montoya
Hydrologic Engineering Technician, CE

BJM/ca

INFORMATION SHEET

PROJECT TITLE Townhouses on Silver and 13th

TYPE OF SUBMITTAL Grading Plan and Drainage Report

-D16

ZONE ATLAS PAGE NO. K-13 CITY ADDRESS 1301 Silver Ave. S W

LEGAL DESCRIPTION Lots 11 and 12, Raynolds Add'n

ENGINEERING FIRM Engineering Associates, Inc. CONTACT August F. Mosimann, P.E.

ADDRESS 1840 Lomas N. E. PHONE 242-7522

OWNER W. J. Brennan CONTACT W. J. Brennan

ADDRESS 1424 Silver S W PHONE 242-9125

ARCHITECT Tim A. Brennan CONTACT Tim A. Brennan

ADDRESS 1705 Camino Gusto S W PHONE 345-0030

SURVEYOR Rodriguez and Associates CONTACT George Rodriguez

ADDRESS 11035 Central Ave. N E Suite B PHONE 296-5978

CONTRACTOR Brennan Construction Co. Inc. CONTACT Tim Brennan

ADDRESS 1705 Camino Gusto N W PHONE 345-0030

PRE-DESIGN MEETING:

___YES
___NO
___COPY OF CONFERENCE RECAP SHEET PROVIDED

PLEASE CHECK TYPE OF APPROVAL EXPECTED WITH THIS SUBMITTAL:

___SKETCH PLAT APPROVAL
___PRELIMINARY PLAT APPROVAL
___SITE DEVELOPMENT PLAN APPROVAL
___FINAL PLAT APPROVAL
___BUILDING PERMIT APPROVAL
___CERTIFICATE OF OCCUPANCY APPROVAL
___ROUGH GRADING PERMIT APPROVAL
___GRADING/PAVING PERMIT APPROVAL
✓ OTHER Required By Bernie Montoya (SPECIFY)

DATE SUBMITTED ~~Jan 18,~~ Feb 16 1984

BY August F. Mosimann, P. E.
for
Engineering Associates, Inc.

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DRAINAGE REPORT

FOR

TOWNHOUSES ON SILVER AND THIRTEENTH

Tim Brennan, Contractor

AUGUST F. MOSIMANN
STATE OF NEW MEXICO
NO. 6148
REGISTERED PROFESSIONAL ENGINEER

PROJECT DISCRIPTION

New construction will include a 3027.5 Sq. Ft. tri-plex, 1950 Sq. Ft. of paved parking, 420 Sq. Ft. of sidewalks, and 1961 Sq. Ft. of landscaping. Flood runoff will be into Thirteenth St. which is along the east side of the property. In Thirteenth it is conveyed north to a drop inlet located at the intersection of thirteenth St. and Gold Ave.

LEGAL DESCRIPTION

Lots 11 and 12, Raynolds Addition

EXISTING SITE STUDY

The existing site is undeveloped.

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The area is 7088 Sq. Ft.(0.163 Acres)
The impervious portion is 0%
The soil classification is "A", Bs
(Soil Survey Sheet 30)
The "C" factor is 0.16
(Plate 22.2 C-1)
The runoff length is 50 ft.
The slope is 0.2%
The Concentration time is .0078x(50^.77)/(.002^.385)=1.74 min
(10 min minimum)
The average velocity is 50/(10x60)=.1 ft/sec
The 100 year-6 hour precipitation amount is 2.2 in.
(Plate 22.2 D-1)
The 10 year-6 hour precipitation amount is 2.2x0.657=1.45 in.
(Plate 22.2 D-1)
The 100 year intensity is 2.15x2.2=4.73 in/hr.
The 10 year intensity is 2.15x1.45=3.12 in/hr.
The 100 year flow rate is Q=CxIxA=0.16x4.73x0.163=0.12 cfs
The 10 year flow rate is Q=CxIxA=0.16x3.12x0.163=0.08 cfs.
The 100 year volume is V=CxPxA=0.16x2.2x7088/12=208 cu. ft.
The 10 year volume is V=CxPxA=0.16x1.45x7088/12=137 cu ft.

Runoff is easterly into Thirteenth St. After entering Thirteenth St. it is conveyed north to a storm drain at the intersection of Thirteenth St. and Gold Ave.

OFF-SITE FLOWS

There are no off-site flows affecting the site. Runoff from the house to the west is intercepted by an existing block wall at the property line.

DEVELOPED SITE STUDY

Specific areas are described under PROJECT DESCRIPTION

The area is 7088 Sq. Ft.(0.163 Acres)
The impervious portion is 76%
The soil classification is "A", Bs
(Soil Survey Sheet 30)
The "C" factor is 0.61
(Plate 22.2 C-1)
The runoff length is 50 ft.
The slope is 0.2%
The Concentration time is .0078x(50^.77)/(.002^.385)=1.74 min
(10 min minimum)
The average velocity is 50/(10x60)=.1 ft/sec
The 100 year-6 hour precipitation amount is 2.2 in.
(Plate 22.2 D-1)
The 10 year-6 hour precipitation amount is 2.2x0.657=1.45 in.
(Plate 22.2 D-1)
The 100 year intensity is 2.15x2.2=4.73 in/hr.
The 10 year intensity is 2.15x1.45=3.12 in/hr.
The 100 year flow rate is Q=CxIxA=0.61x4.73x0.163=0.47 cfs
The 10 year flow rate is Q=CxIxA=0.61x3.12x0.163=0.31 cfs.
The 100 year volume is V=CxPxA=0.61x2.2x7088/12=793 cu. ft.
The 10 year volume is V=CxPxA=0.61x1.45x7088/12=522 cu ft.

This runoff is being allowed to discharge freely into Thirteenth St. Since Thirteenth slopes dirtctly to a storm sewer and there are no downstream flooding conditions no other flood control measures will be taken.

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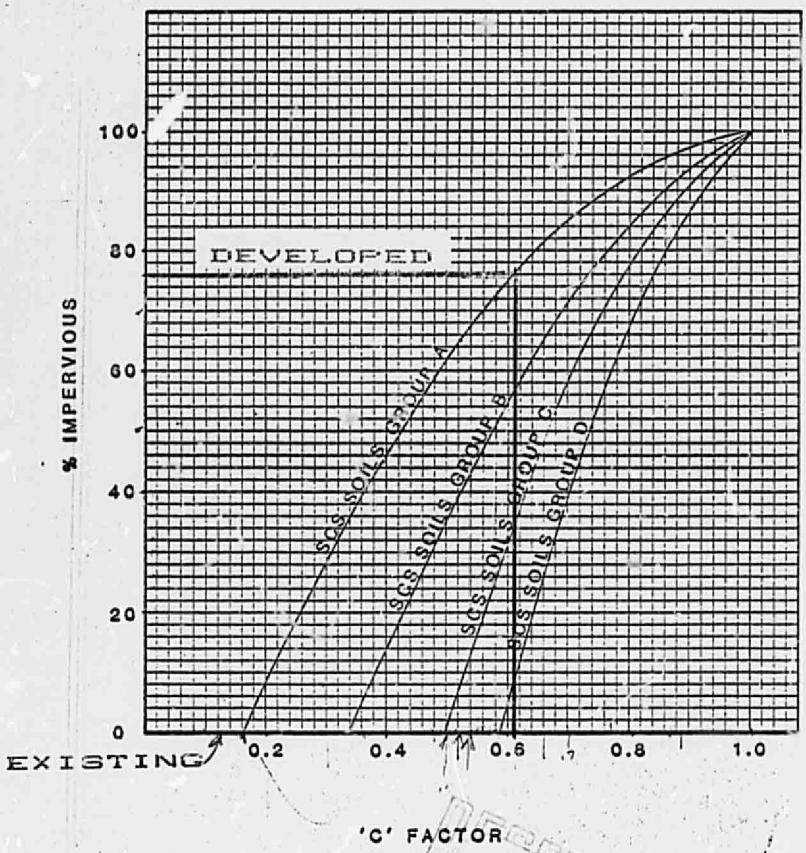
DRAINAGE CRITERIA

DETERMINATION OF RATIONAL FORMULA 'C' FACTOR



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HYDROLOGY SECTION

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

February 24, 1984

Mr. August F. Mosimann
Engineering Associates
1840 Lomas NE
Albuquerque, NM 87106

REF: TOWNHOUSES ON SILVER AND 13TH STREET (K13-D10)

Dear Mr. Mosimann:

Based on the information provided on your February 16, 1984 resubmittal, the above referenced drainage plan is approved.

One suggestion on the roof drains located on the east side of the building, it might be beneficial to locate roof drains on the far north side of the building to outlet onto the parking area, or if roof is pitched, run a gutter system and outlet at the northeast corner of the building. These might save the contractor the time of having to swale and route the water along east of the building.

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

Sincerely,

Bernie J. Montoya

Bernie J. Montoya
Hydrologic Engineering Tech.
C.E.

BJM:mrk