

INFORMATION SHEET

PROJECT TITLE Harrington Four Plex

TYPE OF SUBMITTAL Grading Plan
(revised)

ZONE ATLAS PAGE NO. J-22 CITY ADDRESS 1721 Paisano St. N.E.

LEGAL DESCRIPTION Lot 28,Block 1, Juan Tabo Addition

ENGINEERING FIRM Engineering Associates, Inc.

CONTACT August F. Mosimann,P.E.

ADDRESS 1840 Lomas N. E.

PHONE 242-7522

OWNER Jim Harrington

CONTACT Jim Harrington

ADDRESS

PHONE 299-0226

ARCHITECT Del Jack Architect

CONTACT Del Jack

ADDRESS 400 San Felipe, N.W.

PHONE 242-4591

SURVEYOR

CONTACT

ADDRESS

PHONE

CONTRACTOR Jim Harrington

CONTACT Jim Harrington

ADDRESS

PHONE 299-0226

DATE SUBMITTED Feb 9,1983

BY August F. Mosimann,P. E.

522-0226

Drainage Report

for

Harrington Four Plex

Jan 11, 1983

EXISTING SITE DESCRIPTION

The site is located at 1721 Paisano St. N. E. approximately 400 ft. Southeast of the intersection of Indian School Blvd. and Juan Tabo Blvd. The area is 8340 sq. ft. and it is currently undeveloped.

UNDEVELOPED SITE FLOWS

Runoff from the site flows in a westerly direction across an unpaved alley and across vacant land to the west of the alley. After crossing the vacant land it enters Indian School at the east curb. From here it is conveyed north to Embudo Arroyo.

The area is 8340 Sq. Ft. (0.192 Acres)

The impervious portion is 40%

The soil classification is "B", TgS

(Soil Survey Sheet 32)

The "C" factor is .52

(Plate 22.2 C-1)

The runoff length is 139 ft.

The slope is 2.0%

The Concentration time is $.0078 \times (139^{.77}) / (.02^{.385}) = 1.57$ min
(10 min minimum)

The average velocity is $139 / (10 \times 60) = .2$ ft/sec

The 100 year-6 hour precipitation amount is 2.5 in.

(Plate 22.2 D-1)

The 10 year-6 hour precipitation amount is $2.5 \times 0.657 = 1.64$ in.

(Plate 22.2 D-1)

The 100 year intensity is $2.15 \times 2.5 = 5.38$ in/hr.

The 10 year intensity is $2.15 \times 1.64 = 3.53$ in/hr.

The 100 year flow rate is $Q = C \times I \times A = .52 \times 5.38 \times 0.192 = 0.54$ cfs

The 10 year flow rate is $Q = C \times I \times A = .52 \times 3.53 \times 0.192 = 0.35$ cfs.

The 100 year volume is $V = C \times P \times A = .52 \times 2.5 \times 8340 / 12 = 904$ cu. ft.

The 10 year volume is $V = C \times P \times A = .52 \times 1.64 \times 8340 / 12 = 593$ cu. ft.

OFFSITE FLOWS

There are no offsite flows affecting the site. Flows from upstream areas are intercepted by the west curb in Paisano Street.

RECEIVED

JAN 14 1983

ENGINEERING

PROJECT DESCRIPTION

The new construction will consist of a 3846 sq. ft. building, 3640 sq. ft. of paving, and 1034 sq. ft. of landscaping. Flow will be directed east into Paisano St. in which it will be conveyed north to Indian School Blvd.

ON-SITE FLOWS

The project includes a 7306 sq. ft. of impervious area and 1034 sq. ft. of landscaping.

The area is 8340 Sq. Ft. (0.192 Acres)

The impervious portion is 88%

The soil classification is "B", TqB

(Soil Survey Sheet 32)

The "C" factor is .84

(Plate 22.2 C-1)

The runoff length is 139 ft.

The slope is 1.0%

The Concentration time is $0.078 \times (139^{.77}) / (.01^{.385}) = 2.05$ min
(10 min minimum)

The average velocity is $139 / (10 \times 60) = .2$ ft/sec

The 100 year-6 hour precipitation amount is 2.5 in.

(Plate 22.2 D-1)

The 10 year-6 hour precipitation amount is $2.5 \times 0.657 = 1.64$ in.

(Plate 22.2 D-1)

The 100 year intensity is $2.15 \times 2.5 = 5.38$ in/hr.

The 10 year intensity is $2.15 \times 1.64 = 3.53$ in/hr.

The 100 year flow rate is $Q = C \times I \times A = .84 \times 5.38 \times 0.192 = 0.87$ cfs

The 10 year flow rate is $Q = C \times I \times A = .84 \times 3.53 \times 0.192 = 0.57$ cfs.

The 100 year volume is $V = Q \times P \times A = .84 \times 2.5 \times 8340 / 12 = 1460$ cu. ft.

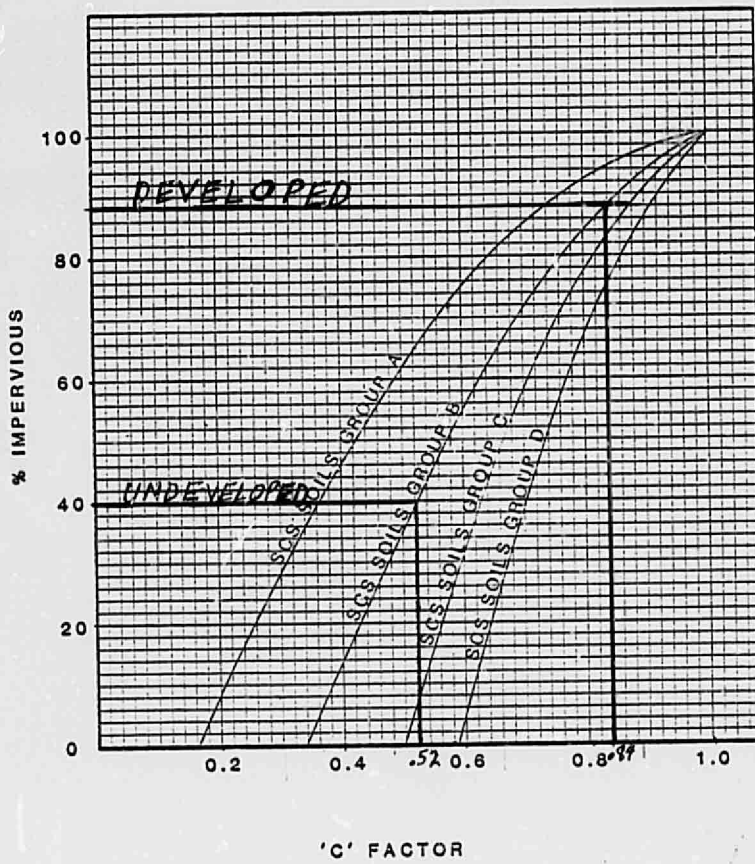
The 10 year volume is $V = Q \times P \times A = .84 \times 1.64 \times 8340 / 12 = 957$ cu. ft.

FLOOD CONTROL

No downstream flooding is indicated on the city Master Drainage Study Sheet H-21. Flows leaving the site are conveyed approximately 650 ft. in Paisano St. and Indian School Blvd. to the intersection of Indian School and Juan Tabo. All runoff entering this intersection is intercepted and routed into Embudo Arroyo.

DRAINAGE CRITERIA

DETERMINATION OF RATIONAL FORMULA 'C' FACTOR





City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

February 1, 1983

Mr. August F. Mosimann
1801 Lomas Blvd. NW
Albuquerque, New Mexico 87104

Re: Narrington Fourplex - 1721 Paisano
✓ (J22-D26)

Dear Mr. Mosimann:

The drainage plan referenced above cannot be reviewed without the inclusion of the information below with your drainage plan. Provide this information with your resubmittal so that we can continue the review of the drainage plan.

1. City approved alley grades.
2. Sufficient grades supporting the proposed scheme to discharge the developed runoff to the City's right-of-way.
3. More flowline elevations within Paisano to determine the direction of flow.
4. Driveway elevations.
5. A comprehensive grading plan with the existing grades superimposed with the proposed elevations.

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

Sincerely,

Fred J. Aguirre
Fred J. Aguirre, PE
Civil Engineer/Hydrology

FJA/el

cc: Drainage File
Reading File

MUNICIPAL DEVELOPMENT DEPARTMENT

Richard S. Heller, P.E., City Engineer

ENGINEERING DIVISION

Telephone (505) 766-7467

AN EQUAL OPPORTUNITY EMPLOYER

James Innis
August F. Mosimann

engineering associates, inc.

February 9, 1983

Mr. Fred J. Aguirre, PE
Civil Engineer/Hydrology
City of Albuquerque
P O Box 1293
Albuquerque, New Mexico 87103

18 40
Lomas Boulevard, N E
Albuquerque, N. M.
87106
(505) 242-7522

Re: Harrington Four Plex

Dear Fred,

This letter and its enclosures are a response to the concerns you expressed regarding drainage for the above referenced project in our meeting on Feb. 1, 1983.

To the site plan we have incorporated the following changes

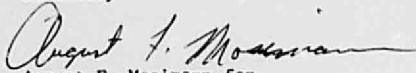
1. The finished floor elevation of the existing building to the south has been added.
2. The retaining wall section at the back property line has been revised to show that no new grading is taking place in the alley.
3. The property lines have been designated.
4. The developed site plan has been re-drawn to the proper scale.
5. A temporary bench mark has been indicated.

Three copies of the grading plan are enclosed with this letter. (One for each of the two building department sets and one for your file).

Also enclosed is a copy of the plan and profile sheet for Paisano Street. It indicates that flow past the site is northerly toward Indian School Rd. This development therefore will not worsen the flood hazard area at Lomas and Juan Tabo, which is south of the site.

If any further questions arise, please call.

Sincerely



August F. Mosimann for
Engineering Associates, Inc.

cc: Del Jack, Architect

AFM/js

Architectural Structural
Civil Structural
Site Analysis
Drainage Studies
Computer Applications



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

February 16, 1983

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

Re: 1721 Paisano St. NE
(J22-D26)

Dear Mr. Mosimann:

The referenced drainage plan dated February 9, 1983 is approved.

Sincerely,

Fred J. Aguirre, PE
Civil Engineer/Hydrology

FJA/el

cc: / Drainage File
Reading File

MUNICIPAL DEVELOPMENT DEPARTMENT

Richard S. Heller, P.E., City Engineer

ENGINEERING DIVISION

Telephone (505) 766-7467

AN EQUAL OPPORTUNITY EMPLOYER