PLANS/PLATS ON FILE

FILE DESC: D-20 / D001

PLANS/PLATS 6

Kleston Lowe

DALE BELLAMAH CORPORATION

POST OFFICE BOX 3325
6400 UPTOWN BOULEVARD, N.E.
EAST TOWER, SUITE 600

ALBUQUERQUE, NEW MEXICO 87110
TELEPHONE (505) 299-7631

OCTOBER 6, 1976

MR. V.M. KIMMICK
CITY ENGINEER
CITY OF ALBUQUERQUE
P.O. BOX 1293
ALBUQUERQUE, NEW MEXICO 87103

RE: HERITAGE HILLS BOUNDARY PLAT

DEAR MR. KIMMICK,

PER OUR CONVERSATION OF OCTOBER 6, 1976 REFERENCE SECTION 10,A,2 OF THE SUBDIVISION ORDINANCE OF THE CITY OF ALBUQUERQUE, WE HEREBY ACKNOWLEDGE THAT THE SIGNATURE OF THIS BOUNDARY PLAT BY THE CITY ENGINEER DOES NOT CERTIFY THE AVAILABILITY OF UTILITIES NOR COMMIT THE CITY TO PROVIDE SAME.

IT IS AT THE REQUEST OF THE PLANNING DEPARTMENT THAT WE ARE PREPARING A BOUNDARY PLAT IN SUMMARY FORM FOR WHICH WE NEED YOUR SIGNATURE. WE ARE CURRENTLY COOPERATING WITH BOTH THE WATER AND LIQUID WASTE ENGINEERS TO PROJECT THE FUTURE DEMANDS OF THE HERITAGE HILLS AREA IN ORDER TO DETERMINE THE CAPITAL IMPROVEMENTS NECESSARY TO ADEQUATELY SERVE THE AREA.

WITH THIS UNDERSTANDING WE WOULD APPRECIATE YOUR SIGNING OUR SUMMARY PLAT IN ORDER THAT WE MAY PROCEED WITH THE ANNEXATION PROCESS. THANK YOU IN ADVANCE FOR YOUR TIME AND EFFORT.

SINCERELY,
DALE BELLAMAH LAND CO., INC.

Joseph E. Shipley

JOSEPH E. SHIPLEY, JR.
ENGINEER

JES:PJ

BUILDERS—DEVELOPERS—REALTORS

Builders Owners and Managers of Residential Homes Apartment Properties Shopping Centers Motels
Mobile Home Parks, Free-Standing Commercial Properties

MEMBERS

National Association of Home Builders, International Council of Shopping Centers, National Association of Realtors

PLAT NAME: NAT A UNIT A BLOCKS 32-40 and LOTS 1-11 14-32

DEVELOPMENT NAME: HERITAGE HILLS

OWNER: BELLAMAH N. BLANCO HOMES

MAP KEY: D-20

Z- S-

AX-

1. WATER: NO STUDY - SEE ENCLOSED LETTER

2. SANITARY SEWER:

3. DRAINAGE: DRAINAGE STUDY APPROVED None submitted

4. OTHER COMMENTS:

DATE PLAT SIGNED: 10-7-76

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

MAYOR
Harry E. Kinney

CHIEF
ADMINISTRATIVE OFFICER
Frank A. Kleinhenz

February 24, 1977

FK
Jerry D.
File.

Mr. Thomas O. Isaacson
Chambers,Campbell,Isaacson & Chaplin Inc.
3500 Indian School Road N.E.
Albuquerque, New Mexico 87106

SUBJECT: HERITAGE HILLS, UNIT 1 DRAINAGE REPORT
DATED JANUARY 1977

Dear Mr. Isaacson:

This drainage report is disapproved for the following reasons:

1. The flow of 207cfs on San Francisco is excessive. The drainage report for Lomita Acres indicates 70cfs on this street.

2. The drainage report for Loma Del Norte, Unit 8A shows a water block at Capulin Road.

3. The proposed diversion and temporary diversion channel south of Heritage Hills contains substantial flows and appear to be on others property. These flows, since they are a diversion, should be conveyed to the arroyo, and only flows indicated on the adjacent drainage plans may cross Barstow. In addition prior to approval of the plan,necessary easements or temporary easements must be dedicated.

Public Works Department

Director — Erwin F. Hensch, P. E. 766-7467
Engineering 766-7441 — V. M. Kimmick, P. E.
Street Maint. 766-7755 — G. E. Paul, P. E.
Ass't. Director — Harold R. Orr, Jr. P. E.
Liquid Waste 766-7535 — R. P. Lowe, P. E.
Water 766-7437 — W. H. Otto, P. E.

AN EQUAL OPPORTUNITY EMPLOYER

When the revised drainage plan is submitted, two copies are requested.

Sincerely,

V. M. Kimmick
City Engineer

VMK/fs

cc - Jim Smith, AMAFCA
Bob Kielich
Dwayne Sheppard
Drainage File

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

MAYOR
Harry E. Kinney

CHIEF
ADMINISTRATIVE OFFICER
Frank A. Kleinhenz

March 7, 1977

Mr. Christopher L. Weiss
Chambers,Campbell,Isaacson,Chaplin, Inc.
3500 Indian School Rd. N.E.
Albuquerque, N.M. 87106

SUBJECT: HERITAGE HILLS, UNIT 1, DRAINAGE REPORT

Dear Mr. Weiss:

Your letter of March 3, 1977 has been reviewed and the drainage report is approved.

Sincerely,

V. M. Kimmick
City Engineer

VMK/fs

cc: Jim Smith
Bob Kielich
Dwayne Sheppard
Drainage File

Public Works Department

Director — Erwin F. Hensch, P. E. 766-7467
Engineering 766-7441 — V. M. Kimmick, P. E.
Street Maint. 766-7755 — G. E. Paul, P. E.
Ass't. Director — Harold R. Orr, Jr. P. E.
Liquid Waste 766-7535 — R. P. Lowe, P. E.
Water 766-7437 — W. H. Otto, P. E.

AN EQUAL OPPORTUNITY EMPLOYER

March 3, 1977

RECEIVED
MAR 5 1977
CITY ENGINEERS

City Engineers Office
City of Albuquerque
P.O. Box 1293
Albuquerque, NM 87103

ATTN: Mr. V. M. Kimmick

RE: Heritage Hills, Unit I Drainage Report, January 1977

Dear Mr. Kimmick:

On March 2, 1977, you and I met in your office to discuss your letter of February 24, 1977 disapproving the Heritage Hills Unit I Drainage Report. Reference is made to Items 1 thru 3 of your letter.

Item 1. Reference is made to pages 5 and 6 of the Drainage Report, under Summary of Results, Area 1. "Previous drainage studies for the areas west of Barstow Road have taken the flows on San Francisco into account in their planning." In particular, the Drainage Study for Loma Del Norte, Unit 10, recognizes 168.8 cfs going down San Francisco (this Q arrived at with C=0.30, for the standard C=0.35, Q=197 cfs). A water block 900 feet west of Barstow on San Francisco will divert 100 cfs north to the Domingo Baca Arroyo. Additionally, ". . . future development to the east (of Heritage Hills Unit I) will reduce this flow rate by diverting much of the upstream basin . . ." In particular, the imminent development of Heritage Hills Unit 2 will divert 78 cfs at Ventura Road directly into the Arroyo del Pino. Furthermore, an additional 90 cfs will be diverted north to the Domingo Baca Arroyo when Heritage Hills Unit #4 is developed. This will reduce the 207 cfs flow rate to approximately 39 cfs at San Francisco and Barstow.

Items 2 and 3 were discussed and clarified.

This covers the points raised by your letter. We therefore respectfully request approval for the Heritage Hills Unit I Drainage Report. We are enclosing two copies of the report, as requested.

Thank you for your interest and participation.

Sincerely,

Christopher L. Weiss

Christopher L. Weiss, for
CHAMBERS, CAMPBELL, ISAACSON & CHAPLIN, INC.

CLW/ple
Enclosures

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

MAYOR
Harry E. Kinney

CHIEF
ADMINISTRATIVE OFFICER
Frank A. Kleinhenz

May 3, 1977

Mr. Chris Weiss
Chambers,Campbell,Isaacson & Chaplin
3500 Indian School Road N.E.
Albuquerque, New Mexico 87106

Dear Mr. Weiss:

In reply to your letter dated April 28, 1977 my comments are as follows: The main objection to the construction of a temporary interceptor channel within the right-of-way of Ventura Road resides in the observation that such construction would remove the developer's responsibility for the permanent on-site management of the upstream surface runoff and transfer this responsibility to the public authorities.

The AMAFCA Resolution clearly indicates that the developer is fully responsible for the management of the runoff waters crossing his property (Sect. 3, Par. A). In addition, Sect. 21B of the Subdivision Ordinance requires silt and erosion control where necessary. The sediment load carried by surface waters cannot be separated nor disregarded but is an essential constituent of the runoff. As such it cannot be claimed that the requirement detailed in Paragraph 2 of my letter dated April 19, 1977 is in any way a change in policy or an addition to the AMAFCA Resolution or the Subdivision Ordinance.

An acceptable drainage plan must fully comply with the concepts above and provide satisfactory engineering solutions which will not result in inconvenience to the public nor in the expenditure of public funds.

Because of the above considerations, I am not in favor of a diversion channel located within the R.O.W. of Eubank Road and the stilling basins proposed to be constructed within the R.O.W. of Ventura Road do not seem to have any relation to the flow quantities anticipated nor to the corresponding sediment loads.

If, as you indicate in your letter, the development of the upstream land is three to four years away, the sedimentation basins should be designed accordingly including the appropriate safety factors. By this I mean that the basins should have a life expectancy of at least six years. I would like to point out that the assumption that further development to the east will reduce the surface runoff to a total of 20 to 30% of the presently estimated values is highly speculative and not acceptable as a design criterion.

Since in your proposal you suggest the use of the roadways as runoff channels, I want to point out that the experience of the Street Maintenance Division indicates the following: The standard asphaltic concrete roadways deteriorate quickly and fail when the roadways must carry frequent and substantial flows (in excess of 50 c.f.s.) Therefore, for those streets which according to your calculations will have to convey flows in excess of 50 c.f.s., consideration should be given to a design with reinforced concrete movement, 5" thick if dedicated to local traffic or 8" thick if major collectors.

Those solutions to drainage problems which result in high maintenance costs,be it for silt removal or for frequent pavement resurfacing, are not in the best public interest and are therefore unacceptable.

I look forward to receiving a more comprehensive and satisfactory solution to the drainage problem in the Heritage Hills Subdivision.

Very truly yours,

Bruno Conegliano

Bruno Conegliano
Assist. City Engineer-Hydrology

BC/fs

cc - V. M. Kimmick
Jim Smith

FILE COPY
D26/D1

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

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

March 11, 1986

Lloyd W. Baird, Jr.
8405 Ironside, NE
Albuquerque, New Mexico 87109

RE: RELIEF REQUEST FOR DRAINAGE EASEMENT
(ZA-85-230)

Dear Mr. Baird:

Attached to this letter are portions of the Heritage Hills plat. The dedication of easements is for power and communication on the western portion of your lot. The plat does not consider this area as a drainage easement. I have reviewed the drainage report for this area, and determined that the area is not needed for drainage.

If you have any questions, call me at 766-7644.

Cordially,

Carlos A. Montoya

Carlos A. Montoya, P.E.
City/County Floodplain Administrator

CAM/bsj

D20/D1

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

HYDROLOGY SECTION
123 Central NW, Albuquerque, NM 87102
(505) 766-7844

October 17, 1986

Randy Kreinbrink
7300 Lew Wallace, NE
Albuquerque, New Mexico 87111

Dear Mr. Kreinbrink:

After inspecting your lot and researching the plans for Heritage East I Subdivision, it has been determined that the cause of your problem is not underground seepage from the adjacent lots, but rather improper grading, which prevents proper drainage from your lot. If you will note on the enclosed Grading Plan for the Heritage East I Subdivision, your lot was designed to drain around the house and out through the drivepad.

My recommendation would be to contact the builder and advise him that your lot does not drain as designed.

In any case, this is a civil matter between yourself, the builder, and the developer. Please be advised that the City cannot become involved due to the civil nature of this problem.

If I can be of further assistance, please feel free to call me at 764-1699.

Cordially,

Richard L. Duran

Richard L. Duran
Drainage Inspector

RLD/bsj

'77 63184

RESTRICTIVE COVENANTS
IMPOSED UPON
HERITAGE HILLS UNIT ONE

The undersigned, being all owners of a tract of land located in the City of Albuquerque, New Mexico, and more particularly described as follows:

Lots 1 through 12, Block 1
Lots 1 through 13, Block 2
Lots 1 through 21, Block 3
Lots 1 through 23, Block 4
Lots 1 through 8, Block 5
Lots 1 through 9, Block 6
Lots 1 through 30, Block 7
Lots 1 through 35, Block 8
Lots 1 through 23, Block 9

all in HERITAGE HILLS UNIT ONE, an addition to the City of Albuquerque, New Mexico, as appears on the plat of said addition, filed and recorded in the office of the County Clerk of Bernalillo County, New Mexico on April 13, 1977,

hereby make the following declarations as to limitations, restrictions and uses to which the above-described lots may be put, hereby specifying that said declarations shall constitute covenants to run with the said land, and shall be binding on all parties and all persons claiming under them, and for the benefit of and limitations upon all future owners of said lots; nothing herein contained shall limit the right of the undersigned to use other portions of this subdivision or other lands contiguous to or near the above-described land for purposes other than residences or to impose restrictive covenants thereon which are less stringent than those stated herein.

1. LOT WIDTH AND AREA: No lot may have a width of less than 60 feet at the minimum building setback line (except cul-de-sac lots where the width may be no less than 50 feet at the minimum building setback line) or an area of less than 6000 square feet.

2. LAND USE AND BUILDING TYPE: No lot or portion thereof shall be used except for residential purposes. No building shall be erected, altered, placed or permitted to remain on any lot other than one detached, single-family dwelling with an attached private garage for not more than two cars. Said dwelling shall not exceed two stories in height above street level.

3. ARCHITECTURAL CONTROL: No building shall be erected, placed or altered on any lot until construction plans and specifications, and a plan showing the location of the structure have been approved by the Architectural Control Committee as to quality of workmanship and materials, harmony of external design with existing structures and as to location with respect to topography and finish grade elevation. All construction shall be completed within six months from date of commencement. Furthermore, no existing building shall be altered, remodeled or changed until the plans for such change, alteration or remodeling have been approved by the Architectural Control Committee. Approval shall be as provided in Paragraph 13 hereof.

4. ANTENNAE: No antennae, (amateur radio, citizen's band radio or others), except television antennae of reasonable size, shall be erected upon any lot or dwelling without the prior approval of the Architectural Control Committee. Approval shall be as provided in Paragraph 13 hereof.

5. DWELLING SIZE: The total area of the main structure of any dwelling, exclusive of open porches, garages or other appurtenant structures, shall not be less than 1,000 square feet, and in the case of dwellings of more than one story, the ground floor area shall be not less than 750 square feet. In cases of split-level dwellings, it shall be the duty of the Architectural Control Committee to determine what constitutes ground floor area as distinguished from basements.

6. BUILDING LOCATION: No building shall be located on any lot in such manner as to violate the Albuquerque zoning Ordinance or any other public ordinance which might pertain to building, construction and/or location. Minimum front building setback shall be 25 feet from the front property line.

For the purpose of this covenant, eaves, steps and open porches shall not be considered as part of a building, provided however, that eaves, steps or open porches may not be constructed nearer than four feet to a side lot line, nor shall this be construed to permit any porch or part of a building to encroach upon another lot.

7. UTILITY EASEMENTS: Easements for installation and maintenance of utilities and drainage facilities are reserved as indicated on the plat of said addition, or as subsequently granted and recorded by document.

8. NUISANCES: No noxious or offensive activity shall be carried on upon any lot, nor shall anything be done thereon which may be or may become an annoyance or nuisance to the neighborhood.

9. LIVESTOCK AND POULTRY: No animals, livestock or poultry of any kind shall be raised, bred or kept on any lot. Dogs, cats or other household pets may be kept provided that they are kept, bred nor maintained for commercial purposes.

10. SIGNS: No sign of any kind shall be displayed to the public view on any lot, except one professional sign of not more than one square foot, one sign of not more than five square feet advertising the property for sale or rent, or signs used by a builder to advertise the property during the construction and sales period.

11. TEMPORARY STRUCTURES: No structure of a temporary character: trailer, tent, shack, garage, barn or other outbuilding shall be used, erected or constructed on any lot without the approval of the Architectural Control Committee. In no case, shall any of the above mentioned structures be used as a residence either temporarily or permanently.

12. MAINTENANCE OF LOTS: Owners of vacant lots and owners or residences will be responsible for keeping their lots cleared of all weeds, trash and other detracting impedima.

13. ARCHITECTURAL CONTROL COMMITTEE: The Architectural Control Committee is composed of D. E. Boyle, L. N. Strosnider, L. D. Stroup, W. D. Buchly and J. E. Shipley, all of Albuquerque, New Mexico. Upon the death, resignation or removal of any member of the Committee, the remaining members shall have full authority to designate a successor. Neither the members of the Committee nor its designated representative shall be entitled to any compensation for services rendered pursuant to this covenant. Any member of the Committee may be removed by a majority of the Committee with or without cause.

The Committee's approval or disapproval, as required in these covenants shall be in writing. In the event that the Committee or its designated representative fails to approve or disapprove within thirty (30) days after plans and specifications have been submitted to it, approval will not be required and the related covenants shall be deemed to have been fully complied with.

Each individual member of the Architectural Control Committee who is employed by or an associate of Dale Bellamah Land Co., Inc. shall become disqualified to serve on the Architectural Control Committee, shall thereafter have no further rights or obligations thereto, and each such person shall conclusively be deemed to have resigned from the Committee one hundred eighty (180) days after the date Dale Bellamah Land Co., Inc. conveys title (legal or equitable) to its last remaining residential lot affected by these restrictions. Dale Bellamah Land Co., Inc. shall endeavor to give notice of such resignations by recording in the County records in which these restrictions are filed, a notice of such resignation and shall cause the same to be published as a legal notice in a newspaper of general circulation in the county in which the subdivision is located. Such notice shall be given as soon as practicable one hundred eighty (180) days after conveyance of the last parcel as specified above; however, failure to give such notice shall not extend the term of any member of the Committee nor shall Dale Bellamah Land Co., Inc. be liable therefor.

In the event that no members remain on the Architectural Control Committee, new members to the Committee can be chosen in the following manner: Upon the written request of ten percent (10%) of the owners of lots within the addition, a meeting shall be held for the purpose of selecting one or more members for the Committee. Reasonable diligence shall be used to notify the persons owning lots within said addition of the time and place of the meeting and the purpose thereof. At such meeting, up to five persons may be selected as members of the Committee. Each lot owner shall have one vote and the five persons receiving the most votes shall be selected as members of the Committee.

14. DURATION OF COVENANTS: These covenants are to run with the land and shall be binding on all parties and all persons claiming under them for a period of thirty (30) years from the date these covenants are recorded; after which time said covenants shall be automatically extended for successive periods of ten (10) years unless an instrument signed by a majority of the then owners of the lots has been recorded agreeing to change said covenants in whole or in part.

15. ENFORCEMENT: Enforcement to restrain violation or to recover damages shall be by proceedings at law or in equity against any person or persons violating or attempting to violate any covenant herein.

16. SEVERABILITY: Invalidation of any one of these covenants by judgment or court order shall in no way affect any of the other provisions which shall remain in full force and effect.

17. FENCES AND WALLS: Fences and walls shall be in conformance with all applicable zoning ordinances and any other public ordinance pertaining thereto and in addition, all fences or walls erected closer to the front property line than the front of the building, except necessary retaining walls of minimum height, shall be equal to or less than three (3) feet in height and approved by the Architectural Control Committee.

18. SIGHT TRIANGLE AT INTERSECTIONS: No fence, wall, hedge or shrub planting which obstructs sight lines at elevations between three (3) and eight (8) feet above the roadways shall be placed or permitted to remain on any corner lot within the triangular area formed by the street property lines and a line connecting them at points twenty-five (25) feet from the intersection of the street lines, or as in the case of rounded property corners, from the intersection of the street property lines extended. No tree shall be permitted to remain within such distances of such intersections unless the foliage line is maintained at sufficient height to prevent obstruction of such sight lines.

19. MECHANICAL VARIANCE: A two-inch (2") tolerance variation is allowable to accommodate mechanical variances of construction from the minimum distance requirements from interior lot lines.

20. GRADING: No lot may be landscaped or regraded in such a manner as to cause the drainage characteristics of the lot to differ significantly from the approved grading plan, or in no case, shall the drainage from one lot be caused to enter or cross upon another lot.

21. AMENDMENTS AND EXCEPTIONS: So long as Dale Bellamah Land Co., Inc. owns one or more lots in the Subdivision, it may unilaterally make amendments and/or exceptions to the restrictions imposed with regard to lot sizes, building setbacks and/or location.

In addition, amendments and/or exceptions to these restrictions, covenants and reservations shall be made upon the written approval of eighty percent (80%) of the lot owners in this addition.

22. EFFECTIVE DATE: These restrictions, covenants and reservations and any amendments or exceptions thereto shall be effective as of the date of their filing with the County Clerk of Bernalillo County, New Mexico.

THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT.

IN WITNESS WHEREOF, THE UNDERSIGNED HAS SET ITS HAND AND SEAL THIS _____

DAY OF _____, 1977.

ATTEST:

DALE BELLAMAH LAND CO., INC.

_____
Secretary

_____
D. E. Boyle, President

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) ss.

The foregoing instrument was acknowledged before me this 11th day October, 1977, by D. E. Boyle, President of Dale Bellamah Land Co., Inc., a New Mexico corporation, on behalf of said corporation.

My commission expires:
9/6/78

Karen L. Brack
Notary Public

THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT.

IN WITNESS WHEREOF, THE UNDERSIGNED HAS SET ITS HAND AND SEAL THIS _____ DAY OF _____, 1977.

ATTEST:

_____ _____

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) ss.

The foregoing instrument was acknowledged before me this _____ day of _____, 1977, by

My commission expires:

Oct. 4, 1977 _____
Notary Public

THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT.

IN WITNESS WHEREOF, THE UNDERSIGNED HAS SET ITS HAND AND SEAL THIS _____ DAY OF _____, 1977.

ATTEST:

JIM HARDIN CONSTRUCTION, INC.

_____

James W Hardin

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) ss.

The foregoing instrument was acknowledged before me this _____ day of _____, 1977, by

My commission expires:

My Commission Expires June 14, 1978

_____
Notary Public

THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT.

IN WITNESS WHEREOF, THE UNDERSIGNED HAS SET ITS HAND AND SEAL THIS 29th DAY OF June, 1977.

ATTEST:

H. G. P. DEVELOPMENT

Bruce A. Molde, Vice-President

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) ss.

The foregoing instrument was acknowledged before me this 29th day of June, 1977, by

My commission expires:

6-29-80

Elizabeth A Watkins
Notary Public

THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION OF THE POOR QUALITY OF THE ORIGINAL DOCUMENT.

IN WITNESS WHEREOF, THE UNDERSIGNED HAS SET ITS HAND AND SEAL THIS _____ DAY OF _____, 1977.

ATTEST:

_____ _____

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) ss.

The foregoing instrument was acknowledged before me this _____ day of _____, 1977, by

My commission expires:

Oct. 4, 1981

_____
Notary Public

THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT.

IN WITNESS WHEREOF, THE UNDERSIGNED HAS SET ITS HAND AND SEAL THIS 11th DAY OF October, 1977.

ATTEST:

A-WARD HOMES OF NEW MEXICO

H. Harper Simmons, Vice-President

STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

The foregoing instrument was acknowledged before me this 11th day of October, 1977, by H. Harper Simmons, Vice-President of A-WARD HOMES OF NEW MEXICO, a New Mexico corporation, on behalf of said corporation.

MY COMMISSION EXPIRES:

February 7, 1981

Notary

THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT.

IN WITNESS WHEREOF, THE UNDERSIGNED HAS SET ITS HAND AND SEAL THIS 12th DAY OF October, 1977.

ATTEST:

DALE BELLAMAH CORPORATION.

W. D. BUCHLY

STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

The foregoing instrument was acknowledged before me this 12 day of October, 1977, by W. D. Buchly.

MY COMMISSION EXPIRES:

December 30, 1980

Notary

Oct 19 3 10 PM 1977

Mis 564 233-365

Lac Burial

'77 63183

RESTRICTIVE COVENANTS
IMPOSED UPON
HERITAGE HILLS UNIT TWO

343

The undersigned, being all owners of a tract of land located in the City of Albuquerque, New Mexico, and more particularly described as follows:

Lots 1 through 11, Block 1
Lots 1 through 27, Block 2
Lots 1 through 29, Block 3
Lots 1 through 19, Block 4
Lots 1 through 16, Block 5
Lots 1 through 9, Block 6
Lots 1 through 8, Block 7
Lots 1 through 10, Block 8
Lots 1 through 26, Block 9
Lots 1 through 30, Block 10
Lots 1 through 30, Block 11
Lots 1 through 41, Block 12

all in HERITAGE HILLS UNIT TWO, an addition to the City of Albuquerque, New Mexico, as appears on the plat of said addition, filed and recorded in the office of the County Clerk of Bernalillo County, New Mexico on August 10, 1977.

hereby make the following declarations as to limitations, restrictions and uses to which the above-described lots may be put, hereby specifying that said declarations shall constitute covenants to run with the said land, and shall be binding on all parties and all persons claiming under them, and for the benefit of and limitations upon all future owners of said lots; nothing herein contained shall limit the right of the undersigned to use other portions of this subdivision or other lands contiguous to or near the above-described land for purposes other than residences or to impose restrictive covenants thereon which are less stringent than those stated herein.

1. LOT WIDTH AND AREA: No lot may have a width of less than 60 feet at the minimum building setback line (except cul-de-sac lots where the width may be no less than 50 feet at the minimum building setback line) or an area of less than 6000 square feet.

2. LAND USE AND BUILDING TYPE: No lot or portion thereof shall be used except for residential purposes. No building shall be erected, altered, placed or permitted to remain on any lot other than one detached, single-family dwelling with an attached private garage for not more than two cars. Said dwelling shall not exceed two stories in height above street level.

3. ARCHITECTURAL CONTROL: No building shall be erected, placed or altered on any lot until construction plans and specifications, and a plan showing the location of the structure have been approved by the Architectural Control Committee as to quality of workmanship and materials, harmony of external design with existing structures and as to location with respect to topography and finish grade elevation. All construction shall be completed within six months from date of commencement. Furthermore, no existing building shall be altered, remodeled or changed until the plans for such change, alteration or remodeling have been approved by the Architectural Control Committee. Approval shall be as provided in Paragraph 13 hereof.

4. ANTENNAE: No antennae, (amateur radio, citizen's band radio or others), except television antennae of reasonable size, shall be erected upon any lot or dwelling without the prior approval of the Architectural Control Committee. Approval shall be as provided in Paragraph 13 hereof.

5. DWELLING SIZE: The total area of the main structure of any dwelling, exclusive of open porches, garages or other appurtenant structures, shall not be less than 1,000 square feet, and in the case of dwellings of more than one story, the ground floor area shall be not less than 750 square feet. In cases of split-level dwellings, it shall be the duty of the Architectural Control Committee to determine what constitutes ground floor area as distinguished from basements.

6. BUILDING LOCATION: No building shall be located on any lot in such manner as to violate the Albuquerque zoning Ordinance or any other public ordinance which might pertain to building, construction and/or location. Minimum front building setback shall be 25 feet from the front property line.

For the purpose of this covenant, eaves, steps and open porches shall not be considered as part of a building, provided however, that eaves, steps or open porches may not be constructed nearer than four feet to a side lot line, nor shall this be construed to permit any porch or part of a building to encroach upon another lot.

7. UTILITY EASEMENTS: Easements for installation and maintenance of utilities and drainage facilities are reserved as indicated on the plat of said addition, or as subsequently granted and recorded by document.

8. NUISANCES: No noxious or offensive activity shall be carried on upon any lot, nor shall anything be done thereon which may be or may become an annoyance or nuisance to the neighborhood.

9. LIVESTOCK AND POULTRY: No animals, livestock or poultry of any kind shall be raised, bred or kept on any lot. Dogs, cats or other household pets may be kept provided that they are kept, bred nor maintained for commercial purposes.

10. SIGNS: No sign of any kind shall be displayed to the public view on any lot, except one professional sign of not more than one square foot, one sign of not more than five square feet advertising the property for sale or rent, or signs used by a builder to advertise the property during the construction and sales period.

11. TEMPORARY STRUCTURES: No structure of a temporary character: trailer, tent, shack, garage, barn or other outbuilding shall be used, erected or constructed on any lot without the approval of the Architectural Control Committee. In no case, shall any of the above mentioned structures be used as a residence either temporarily or permanently.

12. MAINTENANCE OF LOTS: Owners of vacant lots and owners or residences will be responsible for keeping their lots cleared of all weeds, trash and other detracting impedima.

13. ARCHITECTURAL CONTROL COMMITTEE: The Architectural Control Committee is composed of D. E. Boyle, L. N. Strosnider, L. D. Stroup, W. D. Buchly and J. E. Shipley, all of Albuquerque, New Mexico. Upon the death, resignation or removal of any member of the Committee, the remaining members shall have full authority to designate a successor. Neither the members of the Committee nor its designated representative shall be entitled to any compensation for services rendered pursuant to this covenant. Any member of the Committee may be removed by a majority of the Committee with or without cause.

The Committee's approval or disapproval, as required in these covenants shall be in writing. In the event that the Committee or its designated representative fails to approve or disapprove within thirty (30) days after plans and specifications have been submitted to it, approval will not be required and the related covenants shall be deemed to have been fully complied with.

Each individual member of the Architectural Control Committee who is employed by or an associate of Dale Bellamah Land Co., Inc. shall become disqualified to serve on the Architectural Control Committee, shall thereafter have no further rights or obligations thereto, and each such person shall conclusively be deemed to have resigned from the Committee one hundred eighty (180) days after the date Dale Bellamah Land Co., Inc. conveys title (legal or equitable) to its last remaining residential lot affected by these restrictions. Dale Bellamah Land Co., Inc. shall endeavor to give notice of such resignations by recording in the County records in which these restrictions are filed, a notice of such resignation and shall cause the same to be published as a legal notice in a newspaper of general circulation in the county in which the subdivision is located. Such notice shall be given as soon as practicable one hundred eighty (180) days after conveyance of the last parcel as specified above; however, failure to give such notice shall not extend the term of any member of the Committee nor shall Dale Bellamah Land Co., Inc. be liable therefor.

In the event that no members remain on the Architectural Control Committee, new members to the Committee can be chosen in the following manner: Upon the written request of ten percent (10%) of the owners of lots within the addition, a meeting shall be held for the purpose of selecting one or more members for the Committee. Reasonable diligence shall be used to notify the persons owning lots within said addition of the time and place of the meeting and the purpose thereof. At such meeting, up to five persons may be selected as members of the Committee. Each lot owner shall have one vote and the five persons receiving the most votes shall be selected as members of the Committee.

14. DURATION OF COVENANTS: These covenants are to run with the land and shall be binding on all parties and all persons claiming under them for a period of thirty (30) years from the date these covenants are recorded; after which time said covenants shall be automatically extended for successive periods of ten (10) years unless an instrument signed by a majority of the then owners of the lots has been recorded agreeing to change said covenants in whole or in part.

15. ENFORCEMENT: Enforcement to restrain violation or to recover damages shall be by proceedings at law or in equity against any person or persons violating or attempting to violate any covenant herein.

16. SEVERABILITY: Invalidation of any one of these covenants by judgment or court order shall in no way affect any of the other provisions which shall remain in full force and effect.

17. FENCES AND WALLS: Fences and walls shall be in conformance with all applicable zoning ordinances and any other public ordinance pertaining thereto and in addition, all fences or walls erected closer to the front property line than the front of the building, except necessary retaining walls of minimum height, shall be equal to or less than three (3) feet in height and approved by the Architectural Control Committee.

18. SIGHT TRIANGLE AT INTERSECTIONS: No fence, wall, hedge or shrub planting which obstructs sight lines at elevations between three (3) and eight (8) feet above the roadways shall be placed or permitted to remain on any corner lot within the triangular area formed by the street property lines and a line connecting them at points twenty-five (25) feet from the intersection of the street lines, or as in the case of rounded property corners, from the intersection of the street property lines extended. No tree shall be permitted to remain within such distances of such intersections unless the foliage line is maintained at sufficient height to prevent obstruction of such sight lines.

19. MECHANICAL VARIANCE: A two-inch (2") tolerance variation is allowable to accommodate mechanical variances of construction from the minimum distance requirements from interior lot lines.

20. GRADING: No lot may be landscaped or regraded in such a manner as to cause the drainage characteristics of the lot to differ significantly from the approved grading plan, or in no case shall the drainage from one lot be caused to enter or cross upon another lot.

21. AMENDMENTS AND EXCEPTIONS: So long as Dale Bellamah Land Co., Inc. owns one or more lots in the Subdivision, it may unilaterally make amendments and/or exceptions to the restrictions imposed with regard to lot sizes, building setbacks and/or location.

In addition, amendments and/or exceptions to these restrictions, covenants and reservations shall be made upon the written approval of eighty percent (80%) of the lot owners in this addition.

22. EFFECTIVE DATE: These restrictions, covenants and reservations and any amendments or exceptions thereto shall be effective as of the date of their filing with the County Clerk of Bernalillo County, New Mexico.

THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT.

IN WITNESS WHEREOF, THE UNDERSIGNED HAS SET ITS HAND AND SEAL THIS _____ DAY OF _____, 1977.

ATTEST:

DALE BELLAMAH LAND CO., INC.

_____
Secretary

_____
D. E. Boyle, President

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) ss.

The foregoing instrument was acknowledged before me this 11th day of October, 1977, by D. E. Boyle, President of Dale Bellamah Land Co., Inc., a New Mexico corporation, on behalf of said corporation.

My commission expires:
9/6/78

Karen L. Brock
Notary Public

THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT.

IN WITNESS WHEREOF, THE UNDERSIGNED HAS SET ITS HAND AND SEAL THIS 5th DAY OF [illegible], 1977.

ATTEST:

H.G.P. AND ASSOCIATES

_____

Robert J Schaefer Vice Pres.

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) ss.

The foregoing instrument was acknowledged before me this [illegible] day of [illegible], 1977, by Robert J. Schaefer.

My commission expires:

[illegible]

[illegible]
Notary Public

THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT.

IN WITNESS WHEREOF, THE UNDERSIGNED HAS SET ITS HAND AND SEAL THIS 3rd DAY OF October, 1977.

ATTEST:

MESA CONSTRUCTION

Joseph R. Aldighieri

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) ss.

The foregoing instrument was acknowledged before me this 3rd day of October, 1977, by Joseph R. Aldighieri

My commission expires:

January 7, 1981

Notary Public

IN WITNESS WHEREOF, THE UNDERSIGNED HAS SET ITS HAND AND SEAL THIS 22nd DAY OF September, 1977.

ATTEST:

LA SIERRA CONSTRUCTION

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) ss.

The foregoing instrument was acknowledged before me this 22nd day of September, 1977, by Pete Daskalos.

My commission expires:

July 9, 1978

Gertrude M. Michalak
Notary Public
Gertrude M. Michalak

THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT.

IN WITNESS WHEREOF, THE UNDERSIGNED HAS SET ITS HAND AND SEAL THIS 20 DAY OF September 1977.

ATTEST:

A. WARD HOMES OF NEW MEXICO

H. Harper Simmons

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) ss.

The foregoing instrument was acknowledged before me this 20 day of September, 1977, by H. Harper Simmons.

My commission expires:

Notary Public

THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT.

IN WITNESS WHEREOF, THE UNDERSIGNED HAS SET ITS HAND AND SEAL THIS 19th DAY OF September, 1977.

ATTEST:

DALE BELLAMAH CORPORATION

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) ss.

The foregoing instrument was acknowledged before me this 19th day of Sept., 1977, by W. D. Buchly.

My commission expires:

6-29-80

Elizabeth A. Watkins
Notary Public

IN WITNESS WHEREOF, THE UNDERSIGNED HAS SET ITS HAND AND SEAL THIS 19

DAY OF September, 1977.

ATTEST:

JIM BELL & ASSOCIATES

James E Bell

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) ss.

The foregoing instrument was acknowledged before me this 19 day of September, 1977, by James E. Bell.

My commission expires:

6-29-80

Elizabeth A Watkins
Notary Public

THIS MICROFILM IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT.

IN WITNESS WHEREOF, THE UNDERSIGNED HAS SET ITS HAND AND SEAL THIS 19 DAY OF Sept., 1977.

ATTEST:

WOOD BROTHERS HOMES, INC.

Donald D. Martin

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) ss.

The foregoing instrument was acknowledged before me this 19 day of Sept., 1977, by Donald D. Martin.

My commission expires:

Jan. 29, 1978

Mary L Ellen Frantz
Notary Public

STATE OF NEW MEXICO
COUNTY OF BERNALILLO

Oct 13 3 19 PM 1977

Mis 364 342-354

Lois Lucero
COUNTY CLERK

'77 49958

RESTRICTIVE COVENANTS
IMPOSED UPON
HERITAGE HILLS UNIT THREE

726

The undersigned, being all owners of a tract of land located in the City of Albuquerque, New Mexico, and more particularly described as follows:

Lots 1 through 123

all in HERITAGE HILLS UNIT THREE, an addition to the City of Albuquerque, New Mexico, as appears on the plat of said addition, filed and recorded in the office of the County Clerk of Bernalillo County, New Mexico on August 16, 1977.

hereby make the following declarations as to limitations, restrictions and uses to which the above-described lots may be put, hereby specifying that said declarations shall constitute covenants to run with the said land, and shall be binding on all parties and all persons claiming under them, and for the benefit of and limitations upon all future owners of said lots; nothing herein contained shall limit the right of the undersigned to use other portions of this subdivision or other lands contiguous to or near the above-described land for purposes other than residences or to impose restrictive covenants thereon which are less stringent than those stated herein.

1. LOT WIDTH AND AREA: No lot may have a width of less than 60 feet at the minimum building setback line (except cul-de-sac lots where the width may be no less than 50 feet at the minimum building setback line) or an area of less than 6000 square feet.

2. LAND USE AND BUILDING TYPE: No lot or portion thereof shall be used except for residential purposes. No building shall be erected, altered, placed or permitted to remain on any lot other than one detached, single-family dwelling with an attached private garage for not more than two cars. Said dwelling shall not exceed two stories in height above street level.

3. ARCHITECTURAL CONTROL: No building shall be erected, placed or altered on any lot until construction plans and specifications, and a plan showing the location of the structure have been approved by the Architectural Control Committee as to quality of workmanship and materials, harmony of external design with existing structures and as to locations with respect to topography and finish grade elevations. All construction shall be completed within six months from date of commencement. Furthermore, no existing building shall be altered, remodeled or changed until the plans for such change, alteration or remodeling have been approved by the Architectural Control Committee. Approval shall be as provided in Paragraph 13 hereof.

4. ANTENNAE: No antennae, (amateur radio, citizen's band radio or others), except television antennae of reasonable size, shall be erected upon any lot or dwelling without the prior approval of the Architectural Control Committee. Approval shall be as provided in Paragraph 13 hereof.

5. DWELLING SIZE: The total area of the main structure of any dwelling, exclusive of open porches, garages or other appurtenant structures, shall not be less than 1000 square feet, and in the case of dwellings of more than one story, the ground floor area shall be not less than 750 square feet. In cases of split-level dwellings, it shall be the duty of the Architectural Control Committee to determine what constitutes ground floor area as distinguished from basements.

6. BUILDING LOCATION: No building shall be located on any lot in such manner as to violate the Albuquerque Zoning Ordinance or any other public ordinance which might pertain to building construction and/or location. Minimum building set back shall be no less than 25 feet from the front property line.

For the purpose of this covenant, eaves, steps and open porches shall not be considered as part of a building, provided however, that eaves, steps or open porches may not be constructed nearer than four feet to a side lot line, nor shall this be construed to permit any porch or part of a building to encroach upon another lot.

7. UTILITY EASEMENTS: Easements for installation and maintenance of utilities and drainage facilities are reserved as indicated on the plat of said addition, or as subsequently granted and recorded by document.

8. NUISANCES: No noxious or offensive activity shall be carried on upon any lot, nor shall anything be done thereon which may be or may become an annoyance or nuisance to the neighborhood.

9. LIVESTOCK AND POULTRY: No animals, livestock or poultry of any kind shall be raised, bred or kept on any lot. Dogs, cats or other household pets may be kept provided that they are not kept, bred nor maintained for commercial purposes.

10. SIGNS: No sign of any kind shall be displayed to the public view on any lot, except one professional sign of not more than one square foot, one sign of not more than five square feet advertising the property for sale or rent, or signs used by a builder to advertise the property during the construction and sales period.

11. TEMPORARY STRUCTURES: No structure of a temporary character: trailer, tent, shack, garage, barn or other outbuilding shall be used, erected or constructed on any lot without the approval of the Architectural Control Committee. In no case, shall any of the above mentioned structures be used as a residence either temporarily or permanently.

12. MAINTENANCE OF LOTS: Owners of vacant lots and owners of residences will be responsible for keeping their lots cleared of all weeds, trash and other detracting impedima.

13. ARCHITECTURAL CONTROL COMMITTEE: The Architectural Control Committee is composed of D. E. Boyle, L. N. Strosnider, L. D. Stroup, W. D. Buchly and J. E. Shipley, all of Albuquerque, New Mexico. Upon the death, resignation or removal of any member of the Committee, the remaining members shall have

full authority to designate a successor. Neither the members of the Committee nor its designated representative shall be entitled to any compensation for services rendered pursuant to this covenant. Any member of the Committee may be removed by a majority of the Committee with or without cause.

The Committee's approval or disapproval, as required in these covenants shall be in writing. In the event that the Committee or its designated resprsentative fails to approve or disapprove within thirty (30) days after plans and specifications have been submitted to it, approval will not be required and the related covenants shall be deemed to have been fully complied with.

Each individual member of the Architectural Control Committee who is employed by or an associate of Dale Bellamah Land Co., Inc. shall become disqualified to serve on the Architectural Control Committee, shall thereafter have no further rights or obligations thereto, and each such person shall conclusively be deemed to have resigned from the Committee one hundred eighty (180) days after the date Dale Bellamah Land Co., Inc. conveys title (legal or equitable) to its last remaining residential lot affected by these restrictions. Dale Bellamah Land Co., Inc. shall endeavor to give notice of such resignations by recording in the County records in which these restrictions are filed, a notice of such resignation and shall cause the same to be published as a legal notice in a newspaper of general circulation in the county in which the subdivision is located. Such notice shall be given as soon as practicable one hundred eighty (180) days after conveyance of the last parcel as specified above; however, failure to give such notice shall not extend the term of any member of the Committee nor shall Dale Bellamah Land Co., Inc. be liable therefore.

In the event that no members remain on the Architectural Control Committee, new members to the Committee can be chosen in the following manner: Upon the written request of ten percent (10%) of the owners of lots within the addition, a meeting shall be held for the purpose of selecting one or more members for the Committee. Reasonable diligence shall be used to notify the persons owning lots within said addition of the time and place of the meeting and the purpose thereof. At such meeting, up to five persons may be selected as members of the Committee. Each lot owner shall have one vote and the five persons receiving the most votes shall be selected as members of the committee.

14. DURATION OF COVENANTS: These covenants are to run with the land and shall be binding on all parties and all persons claiming under them for a period of thirty (30) year from the date these covenants are recorded; after which time said covenants shall be automatically extended for successive periods of ten (10) years unless an instrument signed by a majority of the then owners of the lots has been recorded agreeing to change said covenants in whole or in part.

15. ENFORCEMENT: Enforcement to restrain violation or to recover damages shall be by proceedings at law or in equity against any person or persons violating or attempting to violate any covenant herein.

16. SEVERABILITY: Invalidation of any one of these covenants by judgment or court order shall in no way affect any of the other provisions which shall remain in full force and effect.

17. FENCES AND WALLS: Fences and walls shall be in conformance with all applicable zoning ordinances and any other public ordinance pertaining thereto and in addition, all fences or walls erected closer to the front property line than the front of the building, except necessary retaining walls of minimum height, shall be equal to or less than three (3) feet in height and approved by the Architectural Control Committee.

18. SIGHT TRIANGLE AT INTERSECTIONS: No fence, wall, hedge or shrub planting which obstructs sight lines at elevations between three (3) and eight (8) feet above the roadways shall be placed or permitted to remain on any corner lot within the triangular area formed by the street property lines and a line connecting them at points twenty-five (25) feet from the intersection of the street lines, or as in the case of rounded property corners, from the intersection of the street property lines extended. No tree shall be permitted to remain within such distances of such intersections unless the foliage line is maintained at sufficient height to prevent obstruction of such sight lines.

19. MECHANICAL VARIANCE: A two-inch (2") tolerance variation is allowable to accommodate mechanical variances of construction from the minimum distance requirements from interior lot lines.

20. GRADING: No lot may be landscaped or regraded in such a manner as to cause the drainage characteristics of the lot to differ significantly from the approved grading plan, or in no case, shall the drainage from one lot be caused to enter or cross upon another lot.

21. AMENDMENTS AND EXCEPTIONS: So long as Dale Bellamah Land Co., Inc. owns one or more lots in the Subdivision, it may unilaterally make amendments and/or exceptions to the restrictions imposed with regard to lot sizes, building setbacks and/or location.

In addition, amendments and/or exceptions to these restrictions, covenants and reservations shall be made upon the written approval of eighty percent (80%) of the lot owners in this addition.

22. EFFECTIVE DATE: These restrictions, covenants and reservations and any amendments or exceptions thereto shall be effective as of the date of their filing with the County Clerk of Bernalillo County, New Mexico.

IN WITNESS WHEREOF, THE UNDERSIGNED HAS SET ITS HAND AND SEAL THIS 15th DAY OF August, 1977.

ATTEST:

DALE BELLAMAH LAND CO., INC.

Secretary

D. E. Boyle, President

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) ss.

The foregoing instrument was acknowledged before me this 15th day of August, 1977, by D. E. Boyle, President of Dale Bellamah Land Co., Inc, a New Mexico corporation, on behalf of said corporation.

My commission expires:

2/4/81

Notary Public

Mins 726-730

RESTRICTIVE COVENANTS
IMPOSED UPON
Y 77 49957 HERITAGE HILLS UNIT FOUR

721

The undersigned, being all owners of a tract of land located in the City of Albuquerque, New Mexico, and more particularly described as follows:

Lots 1 through 258

all in HERITAGE HILLS UNIT FOUR , an addition to the City of Albuquerque, New Mexico, as appears on the plat of said addition, filed and recorded in the office of the County Clerk of Bernalillo County, New Mexico on August 16, 1977

hereby make the following declarations as to limitations, restrictions and uses to which the above-described lots may be put, hereby specifying that said declarations shall constitute covenants to run with the said land, and shall be binding on all parties and all persons claiming under them, and for the benefit of and limitations upon all future owners of said lots; nothing herein contained shall limit the right of the undersigned to use other portions of this subdivision or other lands contiguous to or near the above-described land for purposes other than residences or to impose restrictive covenants thereon which are less stringent than those stated herein.

1. LOT WIDTH AND AREA: No lot may have a width of less than 60 feet at the minimum building setback line (except cul-de-sac lots where the width may be no less than 50 feet at the minimum building setback line) or an area of less than 6000 square feet.

2. LAND USE AND BUILDING TYPE: No lot or portion thereof shall be used except for residential purposes. No building shall be erected, altered, placed or permitted to remain on any lot other than one detached, single-family dwelling with an attached private garage for not more than two cars. Said dwelling shall not exceed two stories in height above street level.

3. ARCHITECTURAL CONTROL: No building shall be erected, placed or altered on any lot until construction plans and specifications, and a plan showing the location of the structure have been approved by the Architectural Control Committee as to quality of workmanship and materials, harmony of external design with existing structures and as to locations with respect to topography and finish grade elevations. All construction shall be completed within six months from date of commencement. Furthermore, no existing building shall be altered, remodeled or changed until the plans for such change, alteration or remodeling have been approved by the Architectural Control Committee. Approval shall be as provided in Paragraph 13 hereof.

4. ANTENNAE: No antennae, (amateur radio, citizen's band radio or others), except television antennae of reasonable size, shall be erected upon any lot or dwelling without the prior approval of the Architectural Control Committee. Approval shall be as provided in Paragraph 13 hereof.

5. DWELLING SIZE: The total area of the main structure of any dwelling, exclusive of open porches, garages or other appurtenant structures, shall not be less than 1000 square feet, and in the case of dwellings of more than one story, the ground floor area shall be not less than 750 square feet. In cases of split-level dwellings, it shall be the duty of the Architectural Control Committee to determine what constitutes ground floor area as distinguished from basements.

6. BUILDING LOCATION: No building shall be located on any lot in such manner as to violate the Albuquerque Zoning Ordinance or any other public ordinance which might pertain to building construction and/or location. Minimum building set back shall be no less than 25 feet from the front property line.

For the purpose of this covenant, eaves, steps and open porches shall not be considered as part of a building, provided however, that eaves, steps or open porches may not be constructed nearer than four feet to a side lot line, nor shall this be construed to permit any porch or part of a building to encroach upon another lot.

7. UTILITY EASEMENTS: Easements for installation and maintenance of utilities and drainage facilities are reserved as indicated on the plat of said addition, or as subsequently granted and recorded by document.

8. NUISANCES: No noxious or offensive activity shall be carried on upon any lot, nor shall anything be done thereon which may be or may become an annoyance or nuisance to the neighborhood.

9. LIVESTOCK AND POULTRY: No animals, livestock or poultry of any kind shall be raised, bred or kept on any lot. Dogs, cats or other household pets may be kept provided that they are not kept, bred nor maintained for commercial purposes.

10. SIGNS: No sign of any kind shall be displayed to the public view on any lot, except one professional sign of not more than one square foot, one sign of not more than five square feet advertising the property for sale or rent, or signs used by a builder to advertise the property during the construction and sales period.

11. TEMPORARY STRUCTURES: No structure of a temporary character: trailer, tent, shack, garage, barn or other outbuilding shall be used, erected or constructed on any lot without the approval of the Architectural Control Committee. In no case, shall any of the above mentioned structures be used as a residence either temporarily or permanently.

12. MAINTENANCE OF LOTS: Owners of vacant lots and owners of residences will be responsible for keeping their lots cleared of all weeds, trash and other detracting impedima.

13. ARCHITECTURAL CONTROL COMMITTEE: The Architectural Control Committee is composed of D. E. Boyle, L. N. Strosnider, L. D. Stroup, W. D. Buchly and J. E. Shipley, all of Albuquerque, New Mexico. Upon the death, resignation or removal of any member of the Committee, the remaining members shall have

full authority to designate a successor. Neither the members of the Committee nor its designated representative shall be entitled to any compensation for services rendered pursuant to this covenant. Any member of the Committee may be removed by a majority of the Committee with or without cause.

The Committee's approval or disapproval, as required in these covenants shall be in writing. In the event that the Committee or its designated resprsentative fails to approve or disapprove within thirty (30) days after plans and specifications have been submitted to it, approval will not be required and the related covenants shall be deemed to have been fully complied with.

Each individual member of the Architectural Control Committee who is employed by or an associate of Dale Bellamah Land Co., Inc. shall become disqualified to serve on the Architectural Control Committee, shall thereafter have no further rights or obligations thereto, and each such person shall conclusively be deemed to have resigned from the Committee one hundred eighty (180) days after the date Dale Bellamah Land Co., Inc. conveys title (legal or equitable) to its last remaining residential lot affected by these restrictions. Dale Bellamah Land Co., Inc. shall endeavor to give notice of such resignations by recording in the County records in which these restrictions are filed, a notice of such resignation and shall cause the same to be published as a legal notice in a newspaper of general circulation in the county in which the subdivision is located. Such notice shall be given as soon as practicable one hundred eighty (180) days after conveyance of the last parcel as specified above; however, failure to give such notice shall not extend the term of any member of the Committee nor shall Dale Bellamah Land Co., Inc. be liable therefore.

In the event that no members remain on the Architectural Control Committee, new members to the Committee can be chosen in the following manner: Upon the written request of ten percent (10%) of the owners of lots within the addition, a meeting shall be held for the purpose of selecting one or more members for the Committee. Reasonable diligence shall be used to notify the persons owning lots within said addition of the time and place of the meeting and the purpose thereof. At such meeting, up to five persons may be selected as members of the Committee. Each lot owner shall have one vote and the five persons receiving the most votes shall be selected as members of the committee.

14. DURATION OF COVENANTS: These covenants are to run with the land and shall be binding on all parties and all persons claiming under them for a period of thirty (30) year from the date these covenants are recorded; after which time said covenants shall be automatically extended for successive periods of ten (10) years unless an instrument signed by a majority of the then owners of the lots has been recorded agreeing to change said covenants in whole or in part.

15. ENFORCEMENT: Enforcement to restrain violation or to recover damages shall be by proceedings at law or in equity against any person or persons violating or attempting to violate any covenant herein.

16. SEVERABILITY: Invalidation of any one of these covenants by judgment or court order shall in no way affect any of the other provisions which shall remain in full force and effect.

17. FENCES AND WALLS: Fences and walls shall be in conformance with all applicable zoning ordinances and any other public ordinance pertaining thereto and in addition, all fences or walls erected closer to the front property line than the front of the building, except necessary retaining walls of minimum height, shall be equal to or less than three (3) feet in height and approved by the Architectural Control Committee.

18. SIGHT TRIANGLE AT INTERSECTIONS: No fence, wall, hedge or shrub planting which obstructs sight lines at elevations between three (3) and eight (8) feet above the roadways shall be placed or permitted to remain on any corner lot within the triangular area formed by the street property lines and a line connecting them at points twenty-five (25) feet from the intersection of the street lines, or as in the case of rounded property corners, from the intersection of the street property lines extended. No tree shall be permitted to remain within such distances of such intersections unless the foliage line is maintained at sufficient height to prevent obstruction of such sight lines.

19. MECHANICAL VARIANCE: A two-inch (2") tolerance variation is allowable to accommodate mechanical variances of construction from the minimum distance requirements from interior lot lines.

20. GRADING: No lot may be landscaped or regraded in such a manner as to cause the drainage characteristics of the lot to differ significantly from the approved grading plan, or in no case, shall the drainage from one lot be caused to enter or cross upon another lot.

21. AMENDMENTS AND EXCEPTIONS: So long as Dale Bellamah Land Co., Inc. owns one or more lots in the Subdivision, it may unilaterally make amendments and/or exceptions to the restrictions imposed with regard to lot sizes, building setbacks and/or location.

In addition, amendments and/or exceptions to these restrictions, covenants and reservations shall be made upon the written approval of eighty percent (80%) of the lot owners in this addition.

22. EFFECTIVE DATE: These restrictions, covenants and reservations and any amendments or exceptions thereto shall be effective as of the date of their filing with the County Clerk of Bernalillo County, New Mexico.

IN WITNESS WHEREOF, THE UNDERSIGNED HAS SET ITS HAND AND SEAL THIS 15th DAY OF August, 1977.

ATTEST:

DALE BELLAMAH LAND CO., INC.

Secretary

D. E. Boyle, President

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) ss.

The foregoing instrument was acknowledged before me this 15th day of August, 1977, by D. E. Boyle, President of Dale Bellamah Land Co., Inc., a New Mexico corporation, on behalf of said corporation.

My commission expires:

4/1/81

Notary Public

Mis 332 721-725

L Gurule

CHAMBERS – CAMPBELL – ISAACSON – CHAPLIN, INC.
3500 INDIAN SCHOOL RD. NE • ALBUQUERQUE, NEW MEXICO 87106 • TELEPHONE (AREA 505) 266-5521

DRAINAGE REPORT

FOR

HERITAGE HILLS, UNIT I

JANUARY 1977

March 3, 1977

City Engineers Office
City of Albuquerque
P.O. Box 1293
Albuquerque, NM 87103

ATTN: Mr. V. M. Kimmick

RE: Heritage Hills, Unit I Drainage Report, January 1977

Dear Mr. Kimmick:

On March 2, 1977, you and I met in your office to discuss your letter of February 24, 1977 disapproving the Heritage Hills Unit I Drainage Report. Reference is made to Items 1 thru 3 of your letter.

Item 1. Reference is made to pages 5 and 6 of the Drainage Report, under Summary of Results, Area 1. "Previous drainage studies for the areas west of Barstow Road have taken the flows on San Francisco into account in their planning." In particular, the Drainage Study for Loma Del Norte, Unit 10, recognizes 168.8 cfs going down San Francisco (this Q arrived at with C=0.30, for the standard C=0.35, Q=197 cfs). A water block 900 feet west of Barstow on San Francisco will divert 100 cfs north to the Domingo Baca Arroyo. Additionally, ". . . future development to the east (of Heritage Hills Unit I) will reduce this flow rate by diverting much of the upstream basin . . ." In particular, the imminent development of Heritage Hills Unit 2 will divert 78 cfs at Ventura Road directly into the Arroyo del Pino. Furthermore, an additional 90 cfs will be diverted north to the Domingo Baca Arroyo when Heritage Hills Unit #4 is developed. This will reduce the 207 cfs flow rate to approximately 39 cfs at San Francisco and Barstow.

Items 2 and 3 were discussed and clarified.

This covers the points raised by your letter. We therefore respectfully request approval for the Heritage Hills Unit I Drainage Report. We are enclosing two copies of the report, as requested.

Thank you for your interest and participation.

Sincerely,

Christopher L. Weiss

Christopher L. Weiss, for
CHAMBERS, CAMPBELL, ISAACSON & CHAPLIN, INC.

CLW/ple
Enclosures

Chambers, Campbell, Isaacson, Chaplin, Inc.
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City of Albuquerque
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MAYOR
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Frank A. Kleinhenz

RECEIVED
FEB 28 1977
C.C.I.C.

February 24, 1977

Mr. Thomas O. Isaacson
Chambers,Campbell,Isaacson & Chaplin Inc.
3500 Indian School Road N.E.
Albuquerque, New Mexico 87106

SUBJECT: HERITAGE HILLS, UNIT 1 DRAINAGE REPORT
DATED JANUARY 1977

Dear Mr. Isaacson:

This drainage report is disapproved for the following reasons:

1. The flow of 207cfs on San Francisco is excessive. The drainage report for Lomita Acres indicates 70cfs on this street.

2. The drainage report for Loma Del Norte, Unit 8A shows a water block at Capulin Road.

3. The proposed diversion and temporary diversion channel south of Heritage Hills contains substantial flows and appear to be on others property. These flows, since they are a diversion, should be conveyed to the arroyo, and only flows indicated on the adjacent drainage plans may cross Barstow. In addition prior to approval of the plan,necessary easements or temporary easements must be dedicated.

Public Works Department

Director – Erwin F. Hensch, P. E. 766-7467
Engineering 766-7441 – V. M. Kimmick, P. E.
Street Maint. 766-7755 – G. E. Paul, P. E.
Ass't. Director – Harold R. Orr, Jr. P. E.
Liquid Waste 766-7535 – R. P. Lowe, P. E.
Water 766-7437 – W. H. Otto, P. E.

AN EQUAL OPPORTUNITY EMPLOYER

When the revised drainage plan is submitted, two copies are requested.

Sincerely,

V. M. Kimmick
City Engineer

VMK/fs

cc - Jim Smith, AMAFCA
Bob Kielich
Dwayne Sheppard
Drainage File

DRAINAGE REPORT

FOR

HERITAGE HILLS, UNIT I

prepared by:

CHAMBERS, CAMPBELL, ISAACSON & CHAPLIN, INC.
3500 INDIAN SCHOOL ROAD, NE
ALBUQUERQUE, NEW MEXICO 87106

JANUARY 1977

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INTRODUCTION

This report will analyze the drainage characteristics of the site in its proposed developed state. Recommendations for controlling this runoff will be presented in the following text.

The subject property, an R-1 development, is located in the Northeast Heights of Albuquerque, east of Barstow Road and north of the North Arroyo del Pino. More particularly, it is located in, and slightly overlaps, the NW 1/4 of the SW 1/4 of Section 20, T11N, R4E, N.M.P.M. (Zone Atlas D-20) (Fig. I)

The site is bordered by Barstow Road, N.E. on the west side, San Francisco Drive, N.E. forms the north boundary, and undeveloped land surrounds the east and south sides. The slope of the land is from east to west, with a 3 to 5% average fall.

The site is affected by two large arroyos, which pass through the site in its southern and northern areas. The south arroyo is presently intercepted by a man-made channel paralleling Barstow Road. Its flows are drained into the North Arroyo del Pino. The north arroyo's flows collect at the intersection of Barstow Road and San Francisco before proceeding down San Francisco Drive to the west. (Fig. V)

Precipitation falling directly on the site, for the most part, collects into either one of these two large arroyos before discharging at the aforementioned points.

DESIGN CRITERIA

In analyzing the storm runoff to determine the runoff basis of the undeveloped site, the Rational Formula, Q - CIA, was used.

Where:

Q = Runoff quantity in cubic feet/second

A = Contributing area in acres.

I = Intensity in inches/hour for a duration equal to the time of accumulation (duration) measured in minutes and obtained from Figure IV - Intensity Duration Frequency Curves (Albuquerque Area - 1961). (Note: where a Time of Concentration [Tc] is less than 10 minutes, the intensity value equal to 10 minutes was used as shown on the curve for a 100 year storm in Figure IV).

C = Runoff coefficient (no unit). This coefficient represents the integrated effects of infiltration, detention storage, evaporation, retention, flow routing, and interception which all affect the time distribution and peak rate of runoff.

For the proposed developed areas, it was desirable to develop a composite runoff coefficient based on the percentage of different types of surface in each sub drainage area. Different coefficients with respect to surface type are given below.[1]

Streets, walls and drives	C = 0.90
Roofs	C = 0.90
Lawns, Sandy Soils, Avg. 2 to 7% Slope	C = 0.20

The following table is a summary of these values - refer to the appendix for an example of the calculations.

Sub-Drainage Section	Area	By Area C = 0.20	By Area C - 0.90	Composite "C" Factor
1	3.54 Ac.	1.44 Ac.	2.10 Ac.	0.62
2	3.88 Ac.	1.73 Ac.	2.15 Ac.	0.59
3	0.80 Ac.	0.32 Ac.	0.48 Ac.	0.62
4	5.17 Ac.	2.66 Ac.	2.51 Ac.	0.54
5	1.40 Ac.	0.71 Ac.	0.69 Ac.	0.54
6	2.46 Ac.	1.05 Ac.	1.41 Ac.	0.61
7	2.94 Ac.	1.43 Ac.	1.50 Ac.	0.56
8	6.75 Ac.	3.05 Ac.	3.70 Ac.	0.58

1. Table 3-2, Urban Storm Drainage Criteria Manual Vol. I, Denver Regional Council of Governments.

Quantities of runoff were computed on a 100 year storm frequency for both the undeveloped and the proposed final developed state.

PHASE I

Phase I consists of analyzing the site in the undeveloped state. Runoff was based on general accumulation of flows into the two natural arroyos traversing the northern and southern areas of the site. The site was divided into two sub-drainage areas to determine the total undeveloped runoff (Fig. VI). The runoff coefficient used for undeveloped areas = 0.35.[2]

TABULATION OF RESULTS - PHASE I
ESTIMATED FLOWS - UNDEVELOPED STATE

Drainage Sub-Area	Elev. Diff. (feet)	Length of Flow (feet)	Tc (Min.)	I ("/hr)	C	Area (Ac)	Q (cfs)
A	36	1150	10	5.4	0.35	17.17	33
B	52	1400	10	5.4	0.35	31.42	59
		Total Undeveloped Flow Rate =					92

PHASE II

Phase II consists of analyzing the site in its developed state. The flow rates discharging onto Barstow Road reflect flows originating within the site proper. Offsite flows will be handled at their respective points of contact with the site as follows: Offsite Areas 1 and 2 (O.S.A. 1 and 2) have substantial drainage basins which combine their respective flows just prior to intersecting the north boundary of the site. Originally, these flows meandered through the site before being channeled onto San Francisco Drive west of Barstow Road. After development of the site, the flows from O.S.A.-1 and 2 will intercept an extension of San Francisco Drive, which borders the north side of the site, and continue to the west within this R/W. Recommendations for intercepting these flows

2. Table XII, Master Plan of Drainage, City of Albuquerque, New Mexico & Environs, 1963, G. Herkenhoff & Associates.

will be covered in the following text.

The flows from offsite Area 3 (O.S.A.-3), which is also a substantial drainage basin, will be diverted from its original path into a secondary arroyo which passes to the south of the site. The remaining O.S.A.-3 basin flows intercepting the site, herein referred to as O.S.A-3A, will be picked up by a side street and be transferred to Barstow Road via the internal street system of the site.

All other flows which exit on Barstow Road originate within the site (Fig. VI).

Development of an R-1 area increases runoff rates by approximately 1.33 times the undeveloped flow rate. In order to keep from overloading downstream drainage facilities, it will be necessary to reduce the developed runoff rate to equal the undeveloped flow rate. The most practical reduction method for this type of development is to use backyard ponding of as many lots as grading design will allow. Therefore, the only area within each lot, with back yard ponding, to contribute flow to the streets would be the front yard, one-half of the roof (assuming a pitched roof), and one-half of of the side yards.

The area required for back yard ponds, 0.5' deep, averages around 15% of the total area draining to the pond. This area includes the rear one-half of the roof, one-half of the side yards, and all of the rear yard. (See Appendix for calculations.)

The following table is a summary of the drainage sub-basins of the developed site, plus offsite drainage basins (see Appendix for calculations).

TABULATION OF RESULTS - PHASE II
ESTIMATED FLOWS - DEVELOPED STATE

ONSITE FLOWS

Drainage Sub-Area	Tc (min)	I ("/hr)	C	Area (Ac)	Q cfs
1	10	5.4	0.62	3.54	12
2	10	5.4	0.59	3.88	12
3	10	5.4	0.62	0.80	3
4	10	5.4	0.54	5.17	15
5	10	5.4	0.54	1.40	4
6	10	5.4	0.61	2.46	8
7	10	5.4	0.56	2.94	9
8	15.3	4.69	0.58	6.75	18
				TOTAL DEVELOPED FLOWS	= 81

OFFSITE FLOWS

Drainage Basin	Length of Flow (feet)	Elev. Diff. (feet)	Tc (min)	I ("/hr)	C	Area (Ac)	Q (cfs)
O.S.A.-1	4400	150	18	4.40	0.35	57.3	88
O.S.A.-2	5700	178	24	3.86	0.35	80.1	108
Combined Flows O.S.A.-1 & O.S.A.-2			21.3	4.08	0.35	137.4	196
O.S.A.-3	7950	254	29	3.50	0.35	111.9	137
O.S.A.-3A	800	30	10	5.40	0.35	9.5	18
O.S.A.-4	4000	122	18	4.40	0.35	46.8	72

SUMMARY OF RESULTS (REFER TO FIGURE VI)

Area 1 - Area 1 drains onto San Francisco Drive for departure at the intersection of Barstow Road and San Francisco. The offsite flows from O.S.A.-1 and O.S.A.-2 enter San Francisco approximately 1000' east of the Barstow intersection. These flows combine with those from Area 1 for a total flow rate of 207 cfs. The proposed 48' BB street section adjacent to the site will accomodate these flows at a minimum of a 3% grade. The flows will continue west on San Francisco Drive

after crossing Barstow Road. Previous drainage studies for the areas west of Barstow Road have taken the flows on San Francisco into account in their planning. It should be pointed out that while this flow rate pushes the San Francisco Drive capacity to the maximum, future development to the east will reduce this flow rate by diverting much of the upstream basin either north into the Domingo Baca arroyo, or south into the North Arroyo del Pino.

Areas 2, 3, and 4 - Areas 2, 3, and 4 all combine at a common release point at the intersection of Barstow Road and Enterprise Ave. with a flow rate of 30 cfs. The flows continue west on Capulin Road for direct release into the North Arroyo del Pino.

Areas 5, 6, 7, and 8 - These areas all combine at a common release point at the intersection of Barstow Road and Plymouth Road with a flow rate of 39 cfs.* The flows travel a short distance to the southwest on Barstow before discharging into the North Arroyo del Pino.

The only offsite drainage which passes through the site is from O.S.A.-3A. The 18 cfs will be picked up by Freedom Way and travel through Area 8 for discharge on Barstow Road.

The flows from O.S.A.-3 will be diverted around the site by the construction of a temporary channel approximately 550' east of the site. The flows will follow natural drainage arroyos around the south of the site before being picked up by Barstow Road.

Therefore, summing total runoff rates under developed conditions vs undeveloped conditions:

Developed State		Undeveloped State
81 cfs	vs	92 cfs

The net result is a reduction of the runoff rate by 11 cfs.

*From internal flows, 57 cfs including offsite flows.

Additionally, only one offsite area will pass flows through the interior street system of the site. This will be temporary in that the almost imminent development of the area to the east of the site will divert these flows south to the North Arroyo del Pino.

RECOMMENDATIONS

The following recommendations are made to enable the developer of the R-1 area to complete this project within the design framework stated above:

1. The full width of San Francisco Drive should be constructed at a minimum slope of 3%. Openings in the curb should be coordinated with the natural flow line of the arroyo from O.S.A.-1 and O.S.A.-2 to intercept the flows onto San Francisco Drive. The edge of pavement in this area should be protected with a concrete cut-off wall to minimize damage to the pavement from erosion.

2. Achieving positive slopes for the interior streets should not be difficult, considering the slope of the land and the layout of the streets. However, a minimum slope of 0.5% should be maintained for all streets to assure adequate drainage capacity.

3. Water blocks should be constructed as shown to facilitate the movement of runoff as shown.

4. Rear yard ponding will require a minimum of 15% of the area drained to the pond. This will allow a maximum depth of 0.5'. The limits of the ponded waters should be kept a minimum distance of 5' away from any walls and 15' away from any house foundations. (Note: These general recommendations are only intended to call the developer's attention to potential settlement problems in the area. A qualified soils engineer should prepare specific guidelines for ponding waters around structures.)

5. The sheet flows from O.S.A.-3A can be intercepted by a drainage swale

cut into the undeveloped land to the east of the site. A typical section would have a base of 10', 2:1 side slopes, depth of flow of 0.75' at a minimum slope of 0.5%. This section will carry 23 cfs. The end of the pavement of the side street receiving the flows from O.S.A.-3A should be protected with a concrete cut-off wall.

It should be noted that any offsite construction to the east of the site recommended by this report will occur on lands owned by the developer of the proposed site. Additionally, the status of such drainage swales or diversion ditches are of a temporary status because of the impending development of the area to the east of the present site.

6. The flows from O.S.A.-3 should be diverted by a channel-dike combination as shown on Figure III. This diversion will divert 137 cfs into a natural arroyo which traverses the site to the south. A typical section of the channel would have a 10' base, 3:1 side slopes, with an average slope of 2%. This section will carry in excess of the estimated 100 year flows from O.S.A.-3. The dike should be constructed with 3:1 side slopes and should have a minimum height of 3'. All fill material should be compacted.

SUMMARY

The subject property, by utilizing back yard ponding, will contribute less internal runoff to surrounding areas than that which existed before development. All proposed streets have adequate capacity to carry the predicted storm runoff flows.

In conclusion, the development of Heritage Hills, Unit I, should have a beneficial effect on the drainage characteristics of this area.

Respectfully submitted,

Thomas O. Isaacson
Reg. N.M. L.S. & P.E. #3895

APPENDIX

RUNOFF COMPUTATIONS

Heritage Hills ~ Unit I
PROJECT

Sheet No. A-1

Drainage Area No. 1

Area = 3.54 acres

Maximum Overland Flow: L = 45' H = 1' S = 2.2%

Maximum Channel Flow:

Channel No. 1 L = 1700' H = 51.7 S = 3.0%

Channel No. 2 L = ____ H = ____ S = ____

Channel No. 3 L = ____ H = ____ S = ____

Accumulation Time

Overland Flow: 6 min.

Channel No. 1 Flow:

Velocity = 8.1 ft/sec; Time = $\frac{1700}{8.1 \times 60}$ = 3.5 min.

Channel No. 2 Flow:

Velocity = ____ ft/sec; Time = ____ = ____ min.

Channel No. 3 Flow:

Velocity = ____ ft/sec; Time = ____ = ____ min.

Total Accumulation Time: T = 9.5 min.
use 10

$I = \frac{189}{t+25} = \frac{189}{35} = 5.4$

Q = CIA = (0.61) (5.4) (3.54) = 12 c.f.s.

Date: 1-20-77

Comp. by: CLW

Checked by: ____

RUNOFF COMPUTATIONS

Heritage Hills ~ Unit I
PROJECT

Sheet No. A-2

Drainage Area No. 2

Area = 3.88 acres

Maximum Overland Flow: L = 45 H = 0.9 S = 2%

Maximum Channel Flow:

Channel No. 1 L = 1350 H = 33 S = 2.4%

Channel No. 2 L = H = S =

Channel No. 3 L = H = S =

Accumulation Time

Overland Flow: 6 min.

Channel No. 1 Flow:

Velocity = 8.9 ft/sec; Time = $\frac{1360}{8.9 \times 60}$ = 2.5 min.

Channel No. 2 Flow:

Velocity = ____ ft/sec; Time = ____ = ____ min.

Channel No. 3 Flow:

Velocity = ____ ft/sec; Time = ____ = ____ min.

Total Accumulation Time: T = 8.5 min.
use 10

$I = \frac{189}{t+25} = \frac{189}{35} = 5.4$

Q = CIA = (0.59) (5.4) (3.88) = 12 c.f.s.

Date: 1-20-77

Comp. by: CLW

Checked by:

RUNOFF COMPUTATIONS

Heritage Hills ~ Unit I
PROJECT

Sheet No. A-3

Drainage Area No. 3

Area = 0.80 acres

Maximum Overland Flow: L = 45' H = 1' S = 2.2%

Maximum Channel Flow:

Channel No. 1 L = 400' H = 3' S = 0.75%

Channel No. 2 L = _____ H = _____ S = _____

Channel No. 3 L = _____ H = _____ S = _____

Accumulation Time

Overland Flow: 6 min.

Channel No. 1 Flow:

Velocity = 4.5 ft/sec; Time = $\frac{400}{4.5 \times 60}$ = 1.5 min.

Channel No. 2 Flow:

Velocity = _____ ft/sec; Time = _____ = _____ min.

Channel No. 3 Flow:

Velocity = _____ ft/sec; Time = _____ = _____ min.

Total Accumulation Time: T = 7.5 min.
use 10

$I = \frac{189}{t+25} = \frac{189}{35} = 5.4$

Q = CIA = (0.62) (5.4) (0.80) = 3 c.f.s.

Date: 1-20-77

Comp. by: CLW

Checked by: _____

RUNOFF COMPUTATIONS

Heritage Hills ~ Unit I
PROJECT

Sheet No. A-4

Drainage Area No. 4

Area = 5.17 acres

Maximum Overland Flow: L = 60, H = 2, S = 4%

Maximum Channel Flow:

Channel No. 1: L = 1550, H = 50, S = 3.3%

Channel No. 2: L = ____, H = ____, S = ____

Channel No. 3: L = ____, H = ____, S = ____

Accumulation Time

Overland Flow: 6 min.

Channel No. 1 Flow:

Velocity = 10.1 ft/sec; Time = $\frac{1550}{10.1 \times 60}$ = 2.6 min.

Channel No. 2 Flow:

Velocity = ____ ft/sec; Time = ____ = ____ min.

Channel No. 3 Flow:

Velocity = ____ ft/sec; Time = ____ = ____ min.

Total Accumulation Time: T = 8.6 min.
Use 10

$I = \frac{189}{t+25} = \frac{189}{35} = 5.4$

Q = CIA = (0.54) (5.4) (5.17) = 15 c.f.s.

Date: 1-20-77

Comp. by: CLW

Checked by: ____

RUNOFF COMPUTATIONS

Heritage Hills - Unit I
PROJECT

Sheet No. A-5

Drainage Area No. 5

Area = 1.40 acres

Maximum Overland Flow: L = 45, H = 2, S = 4.4%

Maximum Channel Flow:

Channel No. 1: L = 350, H = 14, S = 4%

Channel No. 2: L = ____, H = ____, S = ____

Channel No. 3: L = ____, H = ____, S = ____

Accumulation Time

Overland Flow: 6 min.

Channel No. 1 Flow:

Velocity = 11.2 ft/sec; Time = $\frac{350}{11.2 \times 60}$ = 0.5 min.

Channel No. 2 Flow:

Velocity = ____ ft/sec; Time = ____ = ____ min.

Channel No. 3 Flow:

Velocity = ____ ft/sec; Time = ____ = ____ min.

Total Accumulation Time: T = 6.5 min.
use 10

$I = \frac{189}{t+25} = \frac{189}{35} = 5.4$

Q = CIA = (0.54) (5.4) (1.40) = 4 c.f.s.

Date: 1-20-77

Comp. by: CLW

Checked by: ____

RUNOFF COMPUTATIONS

Heritage Hills ~ Unit I
PROJECT

Sheet No. A-6

Drainage Area No. 6

Area = 2.46 acres

Maximum Overland Flow: L = 45 H = 1 S = 2.2%

Maximum Channel Flow:

Channel No. 1 L = 770 H = 28 S = 4%

Channel No. 2 L = _____ H = _____ S = _____

Channel No. 3 L = _____ H = _____ S = _____

Accumulation Time

Overland Flow: 6 min.

Channel No. 1 Flow:

Velocity = 11.2 ft/sec; Time = $\frac{770}{11.2 \times 60}$ = 1.1 min.

Channel No. 2 Flow:

Velocity = _____ ft/sec; Time = _____ = _____ min.

Channel No. 3 Flow:

Velocity = _____ ft/sec; Time = _____ = _____ min.

Total Accumulation Time: T = 7.1 min.
use 10

$I = \frac{189}{t+25} = \frac{189}{35} = 5.4$

Q = CIA = (0.61) (5.4) (2.46) = 8 c.f.s.

Date: 1-20-77

Comp. by: CLW

Checked by: _____

RUNOFF COMPUTATIONS

Heritage Hills - Unit I
PROJECT

Sheet No. A-7

Drainage Area No. 7

Area = 2.94 acres

Maximum Overland Flow: L = 45, H = 0.9, S = 2%

Maximum Channel Flow:

Channel No. 1: L = 760, H = 6, S = 0.79%

Channel No. 2: L = , H = , S =

Channel No. 3: L = , H = , S =

Accumulation Time

Overland Flow: 6 min.

Channel No. 1 Flow:

Velocity = 4.2 ft/sec; Time = $\frac{760}{4.2 \times 60}$ = 3 min.

Channel No. 2 Flow:

Velocity = ____ ft/sec; Time = ____ = ____ min.

Channel No. 3 Flow:

Velocity = ____ ft/sec; Time = ____ = ____ min.

Total Accumulation Time: T = 9 min.
use 10

$I = \frac{189}{t+25} = \frac{189}{35} = 5.4$

Q = CIA = (0.56) (5.4) (2.94) = 9 c.f.s.

Date: 1-20-77

Comp. by: CLW

Checked by:

RUNOFF COMPUTATIONS

Heritage Hills ~ Unit I
PROJECT

Sheet No. A-8

Drainage Area No. 8

Area = 6.75 acres

Maximum Overland Flow: L = 100, H = 2, S = 2%

Maximum Channel Flow:

Channel No. 1: L = 1800, H = 48.5, S = 2.7%

Channel No. 2: L = ____, H = ____, S = ____

Channel No. 3: L = ____, H = ____, S = ____

Accumulation Time

Overland Flow: 12 min.

Channel No. 1 Flow:

Velocity = 9.1 ft/sec; Time = $\frac{1800}{9.1 \times 60}$ = 3.3 min.

Channel No. 2 Flow:

Velocity = ____ ft/sec; Time = ____ = ____ min.

Channel No. 3 Flow:

Velocity = ____ ft/sec; Time = ____ = ____ min.

Total Accumulation Time: T = 15.3 min.

$I = \frac{189}{t+25} = \frac{189}{40.3} = 4.69$

Q = CIA = (0.58) (4.69) (6.75) = 18 c.f.s.

Date: 1-20-77

Comp. by: CLW

Checked by: ____

COMPOSITE "C" CALCULATIONS

Use Area 2 As An Example

1. Determine Area subject to Runoff A = 3.88 Ac.

2. Determine Hardsurfaced Area

Streets & Walks ~ (32' B-B + 4' Sidewalks) = 1280' x 40' =	1.18 Ac.
Driveways ~ 29 (18' Wide) (25' Long) =	0.30 Ac.
Roofs ~ 1/2 Area = 29 (20' Wide)(50' Long) =	0.67 Ac.
	2.15 Ac.

Remaining area of 1.73 Ac. is unsurfaced

$$0.90 \frac{(2.15)}{(3.88)} = 0.50$$

$$0.20 \frac{(1.73)}{(3.88)} = 0.09$$

0.59 = Composite "C" Factor

Calculations for combining two flows of unequal times of concentration:

O.S.A.-1 & O.S.A.-2 - Outflow at Common Point.

$$Tc = \frac{Q(O.S.A.-1) \times Tc(O.S.A.-1) + Q\ (O.S.A.-2) \times Tc(O.S.A.-2)}{Q(O.S.A.-1) + Q(O.S.A.-2)}$$

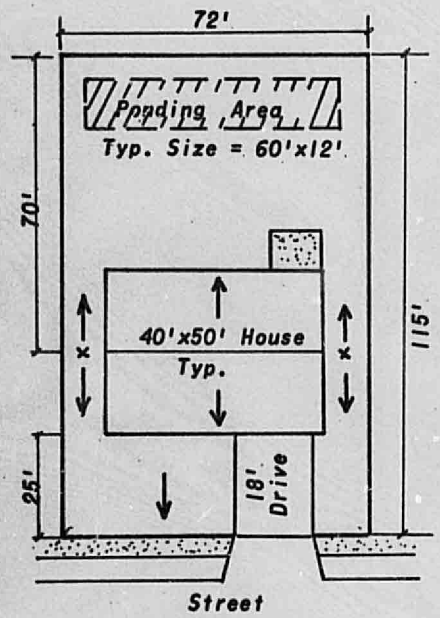
$$Tc = \frac{(88)(18) + (108)(24)}{88 + 108} = 21.31 \text{ min.}$$

QT = CIA O.S.A.-1 + O.S.A.-2 for I at Tc

QT = (0.35) (4.08) (137.40) = 196 cfs

REAR YARD POND CALCULATIONS

Typical Lot Size = 72' x 115'



Area Draining to Rear Pond
= 72'x70' = 5040 ft.^{2}

Roof Area = 20x50 = 1000 ft.^{2}

Patio (Typical) 10x10 = 100

Composite "C"

$0.90 \frac{(1100)}{(5040)} = 0.20$

$0.20 \frac{(3940)}{(5040)} = \underline{0.16}$

0.36

Volume of Runoff* =

(Area) $\frac{(2.5)}{12}$ (C) =

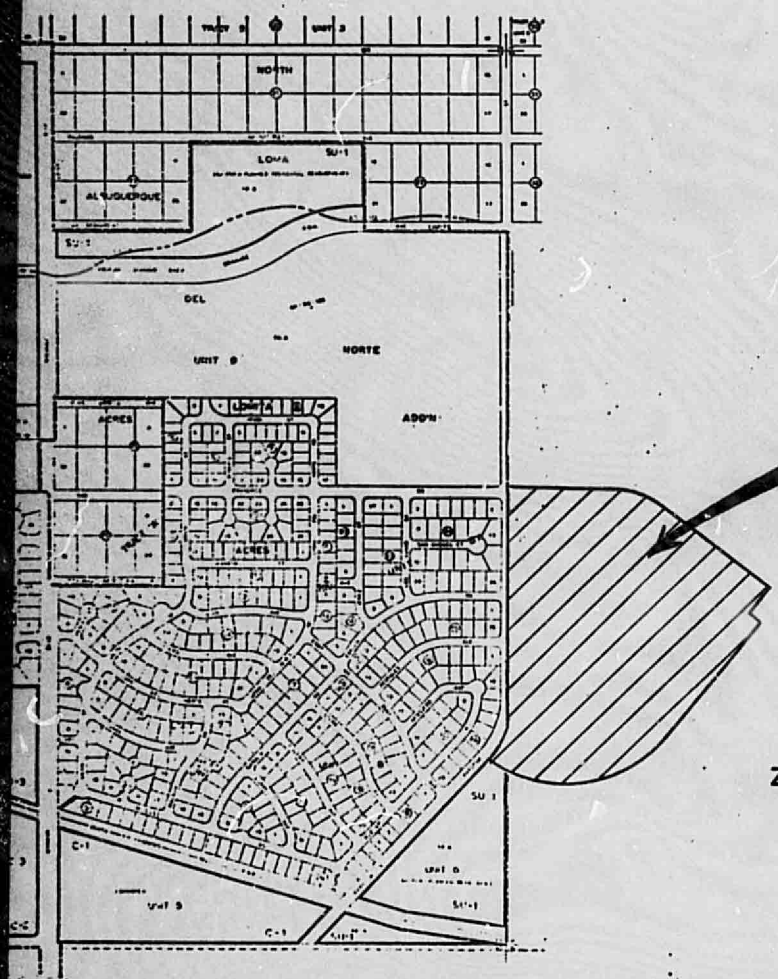
(5040)(0.21)(0.35) = 367 ft.^{3}

At 0.5' Depth in Pond Surface
Area = 735 ft.^{2}

Typical Pond Size = 60' x 12'

% of Area = $\frac{735}{5040}$ = 15%

*Precipation for 100 Year - 6 Hr. Storm = 2.5"



N

T 11 N, R 4 E
SECTION
20

SITE

HERITAGE HILLS
UNIT I

ZONE MAPS D-19 & D-20

FIGURE I

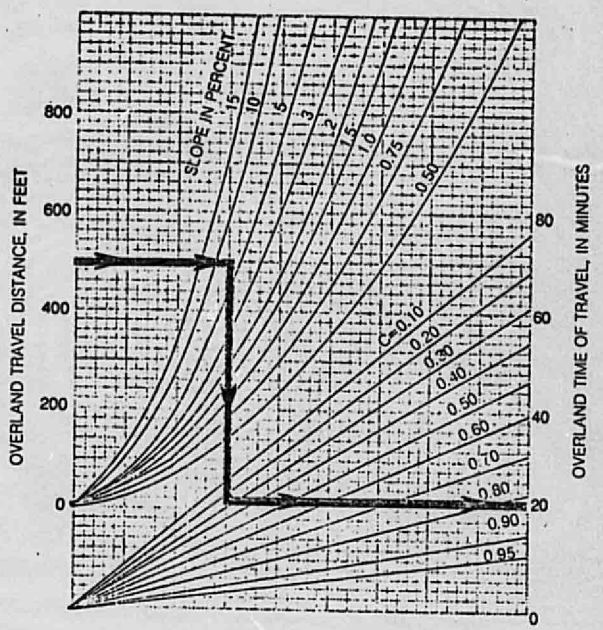
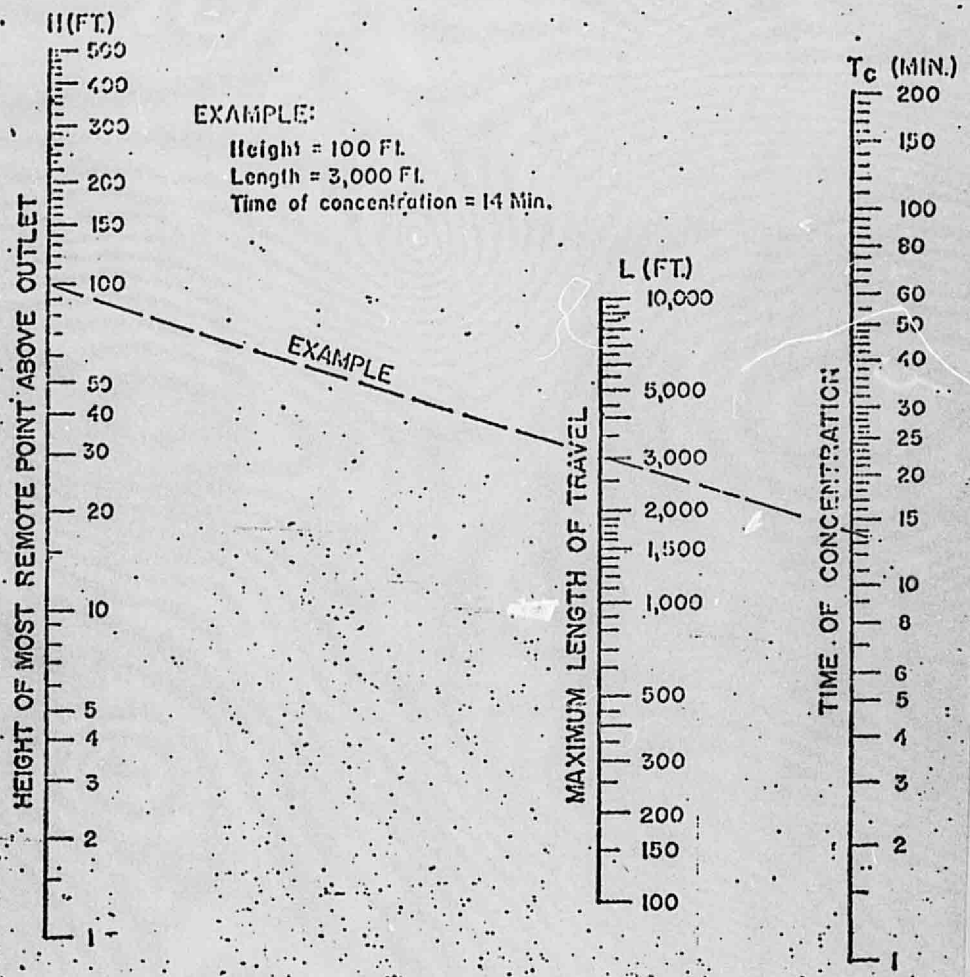


Figure 2
Relation of overland time of travel to overland travel distance, average overland slope, and coefficient C —for use in Rational Method

Source:
Wright-McLaughlin Engineers/
"Airport Drainage."
Federal Aviation Administration
Washington, DC 1965.

FIGURE II

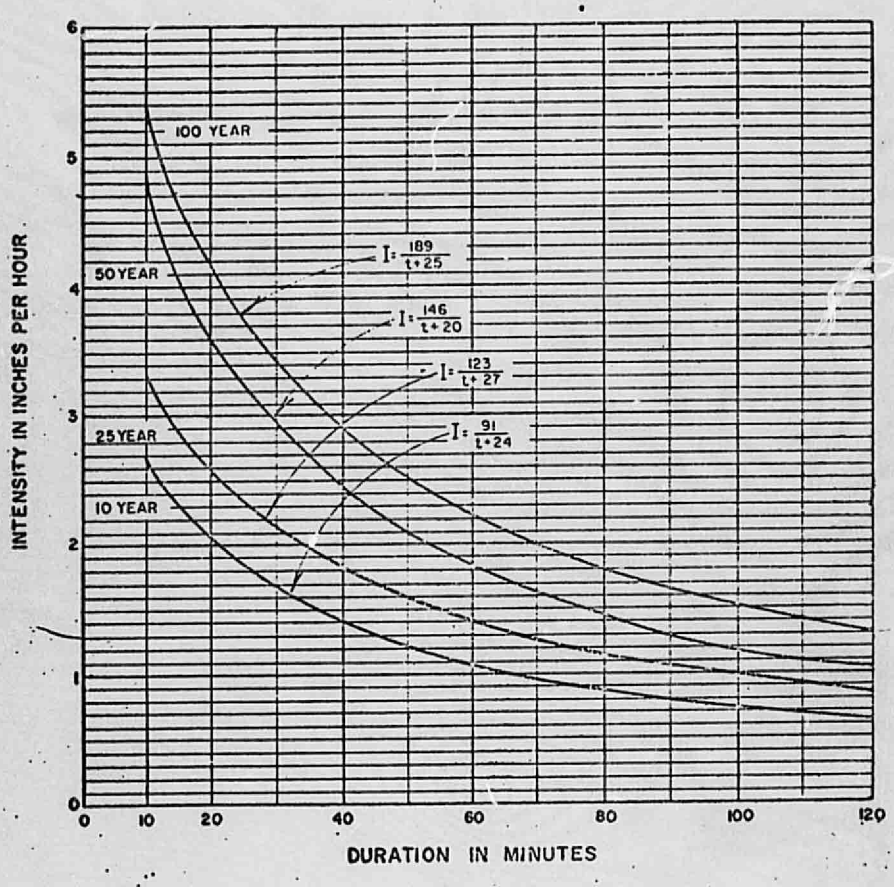


Based on study by P. Z. Kirpich,
Civil Engineering, Vol. 10, No. 6, June 1940, p. 332

TIME OF CONCENTRATION OF SMALL DRAINAGE BASINS

Reprinted from "Design of Roadside Drainage Channels - Hydraulic Engineering Circular No. 6", April 1962, U. S. Dept.

FIGURE III



MASTER PLAN OF DRAINAGE
CITY OF ALBUQUERQUE - NEW MEXICO
AND ENVIRONS

INTENSITY DURATION
FREQUENCY CURVES

(ALBUQUERQUE AREA - 1961)

FIGURE IV

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PLAN/PLATS

ON

FILE