

CITY OF ALBUQUERQUE  
MUNICIPAL DEVELOPMENT DEPARTMENT  
ENGINEERING DIVISION/DESIGN HYDROLOGY SECTION

PRE-DESIGN CONFERENCE RECAP

HYDROLOGY SECTION PROJECT NO.: L-9 DATE: 7/2/85

PLANNING DIVISION NOS. EPC: \_\_\_\_\_ DRB: \_\_\_\_\_

SUBJECT: Mountain View ~~Mount~~ Mobilehome Park

LEGAL DESCIP.: Replatting of area btwn 98th & 99th  
Sunset Gardens Rd. & Allen south of Centra

APPROVAL REQUESTED

☒ PRELIMINARY PLAT ☐ FINAL PLAT  
☒ SITE DEVELOPMENT PLAN ☒ BUILDING PERMIT  
\_\_\_\_\_ ROUGH GRADING

WHO:

REPRESENTING:

ATTENDANCE: Philip Clark  
Billy Goolsby  
\_\_\_\_\_  
\_\_\_\_\_

Espey, Huston & Assoc. Inc.  
City  
\_\_\_\_\_  
\_\_\_\_\_

- ☒ Conceptual Drainage Plan/Report required for Preliminary Plat and/or Site Development Plan sign-off.  
☒ Approved Drainage Plan/Report required for Final Plat and/or Building Permit sign-off.  
\_\_\_\_\_ Subdivision Improvements Agreement or Financial Security required.

FINDINGS: ① Discharge to be controlled due to  
flooding downstream & as interim until downstream  
improvements are made ② Discharge to be 0.5 cfs  
an acre or as determined by analysis. ③ Discharge  
across other than Public R/W will require appropriate  
basement. ④ Erosion protection will be required both onsite  
The undersigned agrees that the above findings are summarized accurately  
and are only subject to change if further investigation reveals that they  
are not reasonable or that they are based on inaccurate information.

SIGNED: Billy J. Goolsby SIGNED: Chew Calk  
TITLE: CE/Newton Hydrology TITLE: Design Engineer  
DATE: 7/2/85 DATE: 7/2/85

**\*\*NOTE\*\*** PLEASE PROVIDE A COPY OF THIS RECAP WITH THE DRAINAGE SUBMITTAL  
for the period of construction & off-site due to the  
outlet discharge.



## City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

March 28, 1980

Neal F. Godwin  
Godwin Engineering  
Corporation  
3820 Academy Parkway  
Albuquerque, NM 87109

Reference: West Mesa Mobile Home Park

Dear Mr. Godwin:

The attached are my comments concerning the above referenced Drainage Report submitted to this office on March 13, 1980:

1. Very comprehensive report, however, the following details have been left out:
  - a. Elevations for ponds;
  - b. Property and T.C. elevations;
  - c. Details for spillovers and positive drains;
  - d. Details for ponds, sizes, depths, sections;
  - e. Depth of flow in streets;
  - f. Additional details for paved drainageways, lengths, slopes, depths, velocity, entrance, outlet;
  - g. Rundown details.
2. Pond #2, indicates a paved rundown for inflow however, for Pond #1, none are indicated, how will it be protected from erosion?
3. Will the entrance street off Central Avenue intercept the flow from the alley from the west and route it through the park as it appears on the plan? If not, how will the flow get from one side of the street to the other?
4. Were the sidewalks considered in the computations for developed condition? It wasn't indicated in the report.
5. How will the Q5 be released? There are no computations or details.

### MUNICIPAL DEVELOPMENT DEPARTMENT

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

ENGINEERING DIVISION

Telephone (505) 766-7467

Neal F. Godwin  
3/28/80  
P. 2

6. Is there any danger of flooding by the Tierra Bayita Channel until relocation can take place? Exhibit K, indicate the possibility of a flow of 300 cfs or more through the channel and since the section through the park is a bend, the super-elevated flow could top the existing bank on the south.
7. Obtain proposed alley grades from City Engineer's Office.

If you have any questions concerning these comments, please feel free to call on me.

Sincerely,

*Fred J. Aguirre*  
Fred J. Aguirre  
Civil Engineer

FJA/lc



## ***City of Albuquerque***

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

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

July 26, 1985

Mr. Philip Clark  
Espey, Huston & Associates, Inc.  
4001 Indian School Road, NE, Suite 204  
Albuquerque, NM 87110

REF: DRAINAGE REPORT FOR MOUNTAIN VIEW MOBILE HOME PARK (L9-D2)  
RECEIVED JULY 22, 1985

Dear Mr. Clark:

A preliminary review of your submittal for Site Development Plan approval has shown that the following information is lacking for this section to begin the review process:

Information Needed

1. Completed Information Sheet.
2. Professional Engineer's Stamp with signature and date (Revision date).
3. City approved street grades are required for the adjacent unimproved streets.
4. Financial guarantees required for any private/public infrastructures needed for development.
5. Retention ponding on-site is acceptable if designed around a future outfall system downstream. The system downstream must be designed to point to determine capacity downstream. The retention pond must also accommodate runoff from required public street improvements. If public waters are to be accommodated in the pond, the pond must be dedicated to the City and the maintenance is the responsibility of the developer.

MUNICIPAL DEVELOPMENT DEPARTMENT

C. Douglas Sheppard, P.E., City Engineer

ENGINEERING DIVISION

Telephone (505) 766-7467

AN EQUAL OPPORTUNITY EMPLOYER

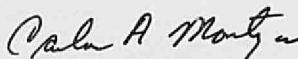


Mr. Philip Clar  
July 26, 1985  
Page -2-

6. Please submit more spot elevations to indicate how the lots will drain.
7. Need section for the 10' private drainage easement swale.
8. Please show top of curb and flow line elevations for the proposed streets.

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

Sincerely,



Carlos A. Montoya  
City/County Flood Plain Admin.

CAM:mrk

# DRAINAGE INFORMATION SHEET

PROJECT TITLE: Mountain View Mobile Home Park ZONE ATLAS/DWG. FILE #: 1-9-02  
 LEGAL DESCRIPTION: Between 98th & 94th Streets - South of Central Avenue  
 CITY ADDRESS: \_\_\_\_\_

ENGINEERING FIRM: Espey, Huston & Assoc., Inc. CO. CONTACT: Phil Clark  
4801 Indian School Road NE, Suite 204  
 ADDRESS: Albuquerque, NM 87110 PHONE: 255-1625

OWNER: West Mesa Development Group CONTACT: Curtis Brewer  
c/o Berger Briggs  
 ADDRESS: P. O. Drawer K PHONE: \_\_\_\_\_  
Albuquerque, NM 87103

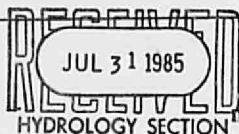
ARCHITECT: N/A CONTACT: \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

SURVEYOR: N/A CONTACT: \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

CONTRACTOR: N/A CONTACT: \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

## PRE-DESIGN MEETING:

☒ YES  
☐ NO  
☒ COPY OF CONFERENCE RECAP  
 SHEET PROVIDED



DRB NO. 85-298  
 EPC NO. \_\_\_\_\_  
 PROJ. NO. \_\_\_\_\_

## TYPE OF SUBMITTAL:

☒ DRAINAGE REPORT  
☐ DRAINAGE PLAN  
☐ CONCEPTUAL GRADING & DRAINAGE PLAN  
☐ GRADING PLAN  
☐ EROSION CONTROL PLAN  
☐ ENGINEER'S CERTIFICATION

## CHECK TYPE OF APPROVAL SOUGHT:

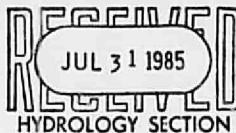
☐ SKETCH PLAT APPROVAL  
☐ PRELIMINARY PLAT APPROVAL  
☒ SITE DEVELOPMENT PLAN APPROVAL  
☐ FINAL PLAT APPROVAL  
☐ BUILDING PERMIT APPROVAL  
☐ FOUNDATION PERMIT APPROVAL  
☐ CERTIFICATE OF OCCUPANCY APPROVAL  
☐ ROUGH GRADING PERMIT APPROVAL  
☐ GRADING/PAVING PERMIT APPROVAL  
☐ OTHER \_\_\_\_\_ (SPECIFY)

DATE SUBMITTED: 7/18/85  
 BY: Philip W. Clark

**ESPEY, HUSTON & ASSOCIATES, INC.**

Engineering & Environmental Consultants  
4801 INDIAN SCHOOL ROAD, N.E., SUITE 204  
ALBUQUERQUE, N.M. 87110  
(505) 255-1625

July 30, 1985



CORPORATE OFFICE  
P.O. BOX 519  
AUSTIN, TEXAS 78767

Mr. Carlos Montoya  
City Hydrology  
City of Albuquerque  
P. O. Box 1293  
Albuquerque, New Mexico 87103

SUBJECT: Mt. View Mobile Home Park Drainage Report - Letter dated July 26, 1985 (L9-02)  
EH&A Job No. 6753

Dear Mr. Montoya:

I feel there is a need to reiterate the scope and the purpose of the above referenced project. A conceptual drainage report was prepared for City review in order to facilitate site development plan approval. The proposed mobile home park is planned for 186 rental spaces with associated amenities. A network of private streets are proposed to convey surface storm runoff and traffic egress and ingress, along with appurtenant infrastructure improvements.

Below, in itemized form, I would like to respond to your comments:

- next submitted*
1. As standard practice, Espey, Huston & Assoc. includes completed information sheets within drainage reports. If this was an oversight, see attached.
  2. ✓ At the conceptual stage (Site Development Plan submittal), we have not in the past included P.E. stamp. In this case and the future, we shall.
  3. Street grades for City review shall be deferred until which time construction drawings are submitted for final City approval. Since the concept proposed in the report "matches" existing grades at the perimeter of the project, adjacent City approved street grades do not appear to be a problem.
  4. When will financial guarantees be required? Platting? S.D.P. sign-off?
  5. The developer cannot be required to solve the downstream Amole Basin problem. The solution of 100% retention is an interim answer.

No public water is anticipated to be conveyed to the pond. All on-site streets are private. Since paving of 94th and Sunset Gardens will be deferred until actual development, no ponding of public water should be required.

*Final plat unless already platting - then at SDP sign off.*

eh

ESPEY, HUSTON & ASSOCIATES, INC.  
Montoya  
7/30/85  
Page 2

6. The conceptual plan has sufficient information; i.e. spots, match existing, flow directional arrows.
7. See section attached.
8. Superfluous information for conceptual drainage plan.

As usual, if there are questions, or problems that I can assist in identifying, please feel free to call.

Sincerely,



Philip W. Clark  
Staff Engineer

/kh

Attachment

**TRANSMITTAL  
LETTER**



**ESPEY, HUSTON & ASSOCIATES, INC.**  
Engineering & Environmental Consultants  
4801 INDIAN SCHOOL ROAD N.E. SUITE 204  
ALBUQUERQUE, NEW MEXICO 87110 PH. (505) 285-1825

PROJECT: *Nat. view Mobile Home Park*  
(name, address) *98th/Central S.W.*

PROJECT NO: 6753

DATE: *10/1/85*

TO: *City Hydrology*

If enclosures are not as noted, please inform us immediately.

If checked below, please:

- ( ) Acknowledge receipt of enclosures.  
( ) Return enclosures to us.

ATTN: *MR. CARLOS MONTAÑA*

WE TRANSMIT:

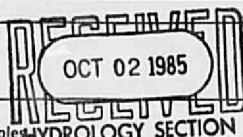
- ( ) herewith ( ) under separate cover via  
( ) in accordance with your request

FOR YOUR:

- (☒) approval ( ) distribution to parties ( ) information  
( ) review & comment ( ) record  
( ) use ( )

THE FOLLOWING:

- (☒) Drawings ( ) Shop Drawing Prints ( ) Samples  
( ) Specifications ( ) Shop Drawing Reproduces ( ) Product Literature  
( ) Change Order ( )



COPIES	DATE	REV. NO.	DESCRIPTION	ACTION CODE
1	<i>10/1/85</i>	—	<i>blue line of conceptual grading &amp; drainage plan</i>	<i>E</i>

ACTION A. Action indicated on item transmitted  
CODE B. No action required  
C. For signature and return to this office

D. For signature and forwarding as noted below under REMARKS  
E. See REMARKS below

REMARKS *Carlos - Thanks for "holding" the file out. Here is the revised plan with: (1) preliminary street grades on S. Gardens/94th St. (2) temporary pond for developed flows on S. Gardens (barricaded) (3) Revised entrance off S. Gardens (4) Project address (5) P.E. Stamp, date, signature as requested on original - P.S. info. Sheet completed w/in Drainage Report*

COPIES TO:

(with enclosures)

*file*



BY: *Philip W. Gark*

P.S. - Zone change & vacation of alley was approved last week. Will be proceeding with Construction Plans shortly. ROC

ONE PAGE

## DRAINAGE INFORMATION SHEET

Additional  
info. to  
be submitted  
to 731

PROJECT TITLE: Mountain View Mobile Home Park ZONE ATLAS/DRNG. FILE #: L-9-02  
LEGAL DESCRIPTION: Between 98<sup>th</sup> & 94<sup>th</sup> Streets - South of Central Ave  
CITY ADDRESS: \_\_\_\_\_

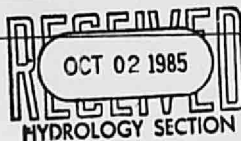
ENGINEERING FIRM: ESPEY HUSTON & ASSOC. CONTACT: Phil Clark  
4801 INDIAN School Rd Suite 204  
ADDRESS: ALBUQ, N.M. 87110 PHONE: 255-1625

OWNER: \_\_\_\_\_ CONTACT: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

ARCHITECT: \_\_\_\_\_ CONTACT: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

SURVEYOR: \_\_\_\_\_ CONTACT: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_ CONTACT: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_



## PRE-DESIGN MEETING:

- ☒ YES  
☐ NO  
☒ COPY OF CONFERENCE RECAP  
SHEET PROVIDED

DRB NO. \_\_\_\_\_

EPC NO. \_\_\_\_\_

PROJ. NO. \_\_\_\_\_

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☐ DRAINAGE PLAN  
☐ CONCEPTUAL GRADING & DRAINAGE PLAN  
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☐ CERTIFICATE OF OCCUPANCY APPROVAL  
☐ ROUGH GRADING PERMIT APPROVAL  
☐ GRADING/PAVING PERMIT APPROVAL  
☐ OTHER \_\_\_\_\_ (SPECIFY)

DATE SUBMITTED: 10-2-85BY: Phillip Clark



## City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

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

October 17, 1985

Mr. Phil Clark  
Espey, Huston & Assoc.  
4801 Indian School Road, Suite 204  
Albuquerque, NM 87110

REF: CONCEPTUAL DRAINAGE PLAN FOR MOUNTAIN VIEW MOBILE HOME PARK  
(L9-D2) RECEIVED OCTOBER 2, 1985

Dear Mr. Clark:

I have reviewed the referenced plan and forward the following comments:

1. The referenced plan is a conceptual drainage plan and not a drainage report as shown on the information sheet. Your conceptual plan does have sufficient information for review to obtain Site Development Plan approval. However, for Building Permit we will require more detailed information.
2. The ponding of public waters on Sunset Gardens does not appear appropriate. The streets function is for traffic and not for ponding areas. We believe that the pond should be placed in private property. Also, easements and covenants will be required.
3. If traffic is requesting construction of curb and gutter for 94th Street, then the historic flows will be disrupted. The flow patterns will be different and therefore the flows will need to be ponded in the retention pond. Again, we will require drainage covenants and easements.

If you have any questions, please contact this office at 766-7644.

Sincerely,

Carlos A. Montoya  
City/County Flood Plain Admin.

CAM:mrk

MUNICIPAL DEVELOPMENT DEPARTMENT

C. Dwayne Sheppard, P.E., City Engineer

ENGINEERING DIVISION

Telephone (505) 766-7467

AN EQUAL OPPORTUNITY EMPLOYER

## DRAINAGE INFORMATION SHEET

PROJECT TITLE: MOUNTAIN VIEW MOBILE HOME PARK ZONE ATLAS/DRNG. FILE #: L-9-D-2  
LEGAL DESCRIPTION: BETWEEN 98th & 94th STREETS - SOUTH OF CENTRAL AVENUE  
CITY ADDRESS: \_\_\_\_\_

ENGINEERING FIRM: ESPEY, HUSTON & ASSOC., INC. CONTACT: PHIL CLARK

ADDRESS: 4801 INDIAN SCHOOL ROAD, N.E. PHONE: 255-1625  
ALBUQ., N.M. 87110

OWNER: \_\_\_\_\_ CONTACT: CURTIS BROWNE

ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

ARCHITECT: \_\_\_\_\_ CONTACT: \_\_\_\_\_

ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

SURVEYOR: \_\_\_\_\_ CONTACT: \_\_\_\_\_

ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_ CONTACT: \_\_\_\_\_

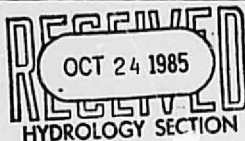
ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

## PRE-DESIGN MEETING:

☒ YES

☐ NO

☒ COPY OF CONFERENCE RECAP  
SHEET PROVIDED



DRB NO. 85-298

EPC NO. \_\_\_\_\_

PROJ. NO. \_\_\_\_\_

## TYPE OF SUBMITTAL:

☒ DRAINAGE REPORT

☐ DRAINAGE PLAN

☐ CONCEPTUAL GRADING & DRAINAGE PLAN

☐ GRADING PLAN

☐ EROSION CONTROL PLAN

☐ ENGINEER'S CERTIFICATION

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☐ PRELIMINARY PLAT APPROVAL

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☐ BUILDING PERMIT APPROVAL

☐ FOUNDATION PERMIT APPROVAL

☐ CERTIFICATE OF OCCUPANCY APPROVAL

☐ ROUGH GRADING PERMIT APPROVAL

☐ GRADING/PAVING PERMIT APPROVAL

☐ OTHER \_\_\_\_\_ (SPECIFY)

DATE SUBMITTED: 10-24-85

BY: [Signature]

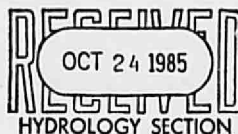


**ESPEY, HUSTON & ASSOCIATES, INC.**

Engineering & Environmental Consultants  
4801 INDIAN SCHOOL ROAD, N.E., SUITE 204  
ALBUQUERQUE, N.M. 87110  
(505) 255-1625

CORPORATE OFFICE  
P.O. BOX 519  
AUSTIN, TEXAS 78767

October 24, 1985



Mr. Carlos Montoya  
City Hydrology  
P. O. Box 1293  
Albuquerque, New Mexico 87103

SUBJECT: Conceptual Drainage Plan - Mt. View Mobile Home Park (L9-D2)  
EH&A Job No. 6753

Dear Carlos:

I received your letter dated October 17th regarding the above plan submittal and forward these responses. In itemized form:

1. The plan submitted was indeed intended for conceptual review. A more detailed plan will be submitted shortly for inclusion into construction drawings, and thusly for issuance of Building Permit.
2. Two responses....a) The amount of water to be ponded in Sunset Gardens is so minimal that it is of no consequence ( $Q_{100} < 1$  cfs, VOL 100 = 1000 cf, both developed parameters); b) The developer should not be required to pond public water on private property. This constraint would be an undue onus placed on the developer by the City of Albuquerque.
3. Traffic is not requesting construction of curb/gutter on 94th Street. EPC approved the Site Development Plan and deferral of street improvements on September 19, 1985. (See enclosed "Notification of Decision".) Therefore, historic flows will not be disrupted.

A short turnaround to these comments would be greatly appreciated, as we at EH&A are ready to proceed on a final construction set.

Sincerely,

Philip W. Clark  
Staff Engineer

/kh

57 234



## City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

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

November 15, 1985

Phil Clark  
Espey, Huston & Associates, Inc.  
4801 Indian School Road, NE Suite 204  
Albuquerque, New Mexico 87110

RE: CONCEPTUAL DRAINAGE PLAN FOR MOUNTAIN VIEW MOBILE HOME PARK  
RECEIVED OCTOBER 24, 1985 (L-9/D2)

Dear Mr. Clark: ———

I have reviewed your letter dated October 24, 1985, and forward the following response. Referring to Section 7.A. of the Drainage Ordinance, the surface of streets may be used for drainage and flood control purposes, to the extent such use does not interfere with the safe transportation of people and vehicles. We therefore believe that the pond should be placed in private property. Also, easements and covenants will be required.

Cordially,

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

CAM/bsj

MUNICIPAL DEVELOPMENT DEPARTMENT

C. Dwayne Sheppard, P.E., City Engineer

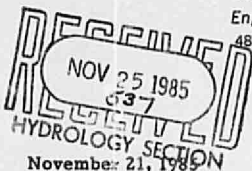
ENGINEERING DIVISION

Telephone (505) 766-7467

AN EQUAL OPPORTUNITY EMPLOYER

**ESPEY, HUSTON & ASSOCIATES, INC.**

Engineering & Environmental Consultants  
4801 INDIAN SCHOOL ROAD, N.E., SUITE 204  
ALBUQUERQUE, N.M. 87110  
(505) 255-1625



November 21, 1985

CORPORATE OFFICE  
P.O. BOX 519  
AUSTIN, TEXAS 78767

Mr. Carlos Montoya  
City Hydrology  
City of Albuquerque  
P. O. Box 1293  
Albuquerque, New Mexico 87103

SUBJECT: Conceptual Drainage Plan for Mountain View Mobile Home Park,  
(L 9/D2)  
EH&A Job No. 6753

Dear Carlos:

In response to your letter dated November 15, 1985 regarding ponding within the street ROW on Sunset Gardens, Espey, Huston and Associates maintains that accepting and impounding public water on the subject private property would be an undue burden placed upon the owner.

Attached is a copy of 7.A of the Drainage Ordinance. Additionally, since the pond is proposed to be barricaded, it is safe for pedestrian and vehicular traffic. I also want to reiterate that the street in its present state is impassible. In order to comply with the "maximum depth of 0.87 ft.", the pond depth will be resized to a depth of 0.87 ft., approximately doubling the square footage area, with the submittal of the final grading plan. I hope this will lay your concerns, which are appreciated, to rest.

As usual, if there are any questions, please feel free to give me a call.

Sincerely,

Philip W. Clark  
Staff Engineer II

/kh

Attachment

trol official for the City in accordance with the requirements of the Federal Insurance Administration.

SECTION 7. Surface Use of Streets for Drainage and Flood Control Purposes.

A. The surface of streets may be used for drainage and flood control purposes, to the extent such use does not interfere with the safe transportation of people and vehicles.

B. The 100-year design storm runoff shall not exceed a depth of 0.87 feet at any point within the street right-of-way, or 0.2 feet above top of curb, in any street nor enter private property from a street, except in recorded drainage or flood control easements or rights-of-way (or historic channels and watercourses where easements or rights-of-way cannot be obtained).

C. The 10-year design storm runoff shall not exceed a depth of 0.5 feet in any arterial street and shall flow such that one twelve (12.0) foot driving lane in each direction is free of flowing or standing water. The 10-year design storm runoff shall not exceed a depth of 0.5 feet in any collector street. Arterial and collector streets that are in the State Highway system may require more stringent drainage criteria.

D. The product of depth times velocity shall not exceed 6.5 at any location in any street in the event of a 10-year design storm (with velocity calculated as the average velocity measured in feet per second and depth measured at the gutter flowline in feet).

E. The discharge of nuisance waters to public streets shall be discouraged. Arterial and collector streets shall be protected from damages to the pavement surface and from the safety hazards created by surface flow of nuisance waters across them.

F. All developed land within the City of Albuquerque shall be served by at least one paved access that shall be an all-weather facility during a



## City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

DESIGN HYDROLOGY SECTION  
123 Central NW, Albuquerque, NM 87102  
(505) 766-7644  
December 19, 1985

Philip Clark  
Espey, Huston & Associates, Inc.  
4801 Indian School Road, NE Suite 204  
Albuquerque, New Mexico 87110

RE: CONCEPTUAL DRAINAGE PLAN FOR MOUNTAIN VIEW MOBILE HOME PARK  
RECEIVED NOVEMBER 25, 1985 (L-9/D2)

Dear Mr. Clark:

This letter is to reconfirm the telephone conversation and meetings in reference to ponding in public right-of-way. Our policy is not to allow ponding in the public right-of-way. The precedent set by this pond would cause a difficult situation for others asking for the same approval.

The following are a list of alternatives which may provide the solution to this ponding problem.

1. Provide temporary drainage easements and covenants on private property till the outfall becomes available.
2. Defer the paving to a future date when the downstream outfall becomes available.
3. Temporary paving would be constructed with bar ditches. These ditches would be in the City Right-of-Way and would be constructed to retain the 100 year runoff from the paving. This paving would not satisfy the permanent solution and would be an additional cost to the owner.

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

Cordially,

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

CAM/bsj

### MUNICIPAL DEVELOPMENT DEPARTMENT

C. Dwayne Sheppard, P.E., City Engineer

ENGINEERING DIVISION

Telephone (505) 766-7467

AN EQUAL OPPORTUNITY EMPLOYER

# DRAINAGE INFORMATION SHEET

PROJECT TITLE: Mountain View Mobile Home Park ZONE ATLAS/DRNG. FILE #: L-9  
 LEGAL DESCRIPTION: Between 98th & 94th Streets - South of Central Avenue  
 CITY ADDRESS: \_\_\_\_\_

ENGINEERING FIRM: Espey, Huston & Assoc., Inc. CONTACT: Phil Clark  
4801 Indian School Road NE, Suite 204  
 ADDRESS: Albuquerque, NM 87110 PHONE: 255-1625

OWNER: West Mesa Development Group CONTACT: Curtis Brewer  
c/o Berger Briggs  
 ADDRESS: P. O. Drawer K PHONE: \_\_\_\_\_  
Albuquerque, NM 87103

ARCHITECT: N/A CONTACT: \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

SURVEYOR: N/A CONTACT: \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

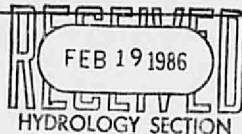
CONTRACTOR: N/A CONTACT: \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

PRE-DESIGN MEETING:

☒ YES

☐ NO

*PC* ☒ COPY OF CONFERENCE RECAP  
 SHEET PROVIDED



DRB NO. 85-298

EPC NO. 2-85-93

PROJ. NO. \_\_\_\_\_

TYPE OF SUBMITTAL:

- PC* ☒ DRAINAGE REPORT  
☐ DRAINAGE PLAN  
*PC* ☒ CONCEPTUAL GRADING & DRAINAGE PLAN  
☐ GRADING PLAN  
☐ EROSION CONTROL PLAN  
☐ ENGINEER'S CERTIFICATION

CHECK TYPE OF APPROVAL SOUGHT:

- ☐ SKETCH PLAT APPROVAL  
☐ PRELIMINARY PLAT APPROVAL  
☒ SITE DEVELOPMENT PLAN APPROVAL  
☐ FINAL PLAT APPROVAL  
☐ BUILDING PERMIT APPROVAL  
☐ FOUNDATION PERMIT APPROVAL  
☐ CERTIFICATE OF OCCUPANCY APPROVAL  
☐ ROUGH GRADING PERMIT APPROVAL  
☐ GRADING/PAVING PERMIT APPROVAL

*PC* ☒ OTHER in order for engineer's (SPECIFY)  
to accept Submittal for DEC Review

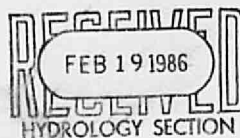
DATE SUBMITTED:

BY: Philip W. Clark

*Philip W. Clark* 2/17/86



ESPEY,  
HUSTON &  
ASSOCIATES, INC.  
Engineering & Environmental Consultants



February 19, 1986

*ple*

Mr. Carlos Montoya  
City Hydrology  
City of Albuquerque  
P. O. Box 1293  
Albuquerque, New Mexico 87103

SUBJECT: Mt. View Mobile Home Park  
Conceptual Grading and Drainage Plan Approval  
EH&A Job No. 6753

Dear Carlos:

Enclosed please find copies of correspondence letters between City Hydrology and our office regarding the above. ~~Additionally, please find the final construction set, grading and drainage plan.~~ Your time permitting, I would like conceptual approval in order to submit to engineering for review of the construction set. Pursuant to your last letter dated December 19th, we will follow your suggestion of Alternate #2 (defer paving on Sunset Gardens).

If we could secure conceptual approval from you in writing by Thursday, February 20th, we could submit the plan set for DRC review. Please indicate in the approval letter that we have satisfied your requirements to allow the design review process to begin.

Your attention to this matter, as usual, is greatly appreciated.

Sincerely,

Philip W. Clark  
Staff Engineer II

/kh

Enclosure





## City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

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

February 20, 1986

Philip Clark  
Espey, Huston & Associates, Inc.  
4801 Indian School Road, NE Suite 204  
Albuquerque, New Mexico 87110

RE: CONCEPTUAL DRAINAGE PLAN FOR MOUNTAIN VIEW MOBILE HOME PARK  
RECEIVED FEBRUARY 19, 1986 (L-9/D2)

Dear Mr. Clark:

The above referenced plan, dated October 1, 1985, is conceptually approved. However, prior to site plan approval, the following item is required.

Street improvements, which are to be built now or deferred to the future, need an outfall. We need public easements on private property and a maintenance agreement. If the street improvements are not needed, then we will not require the easement or covenants.

It is strongly recommended that an infrastructure list be approved by DRB prior to submittal of the work order drawings to DRC. DRB may require added or different infrastructures than are submitted to the DRC.

The following items are needed prior to Building Permit release:

1. Require a drainage plan for review and approval by this office.
2. City approved street grades or adjacent unimproved streets.

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

Cordially,

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

CAM/bsj

MUNICIPAL DEVELOPMENT DEPARTMENT

C. Dwayne Sheppard, P.E., City Engineer

ENGINEERING DIVISION

Telephone (505) 766-7467

AN EQUAL OPPORTUNITY EMPLOYER



# DRAINAGE INFORMATION SHEET

PROJECT TITLE: Mt. View M.H. Park ZONE ATLAS/DRNG. FILE #: C-9/102

LEGAL DESCRIPTION: between 93<sup>rd</sup> / 94<sup>th</sup> - South of Central

CITY ADDRESS: \_\_\_\_\_

ENGINEERING FIRM: Espey, Huston & Assoc. CONTACT: Phil Clark

ADDRESS: 1801 Indian School PHONE: 255-1625  
Suite 204 - B7110

OWNER: West Mesa Parcel Group CONTACT: Curtis Brewer

ADDRESS: C/O Berger Briggs PHONE: \_\_\_\_\_  
P.O. Drawer K1 87103

ARCHITECT: N/A CONTACT: \_\_\_\_\_

ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

SURVEYOR: Espey, Huston & Assoc. CONTACT: Tim Aldrich

ADDRESS: same as above PHONE: same as above

CONTRACTOR: C.C.M. CONTACT: Jerry Krapbill

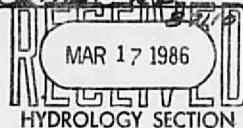
ADDRESS: 1423 Co. J Ave. N.E. PHONE: 255-2255

PRE-DESIGN MEETING:

☒ YES

☐ NO

☐ COPY OF CONFERENCE RECAP  
☐ SHEET PROVIDED



DRB NO. 85-298

EPC NO. 2-85-93

PROJ. NO. \_\_\_\_\_

TYPE OF SUBMITTAL:

☒ DRAINAGE REPORT

☒ DRAINAGE PLAN

☐ CONCEPTUAL GRADING & DRAINAGE PLAN

☐ GRADING PLAN

☐ EROSION CONTROL PLAN

☐ ENGINEER'S CERTIFICATION

CHECK TYPE OF APPROVAL SOUGHT:

☐ SKETCH PLAT APPROVAL

☐ PRELIMINARY PLAT APPROVAL

☐ SITE DEVELOPMENT PLAN APPROVAL

☒ FINAL PLAT APPROVAL

☒ BUILDING PERMIT APPROVAL

☐ FOUNDATION PERMIT APPROVAL

☐ CERTIFICATE OF OCCUPANCY APPROVAL

☐ ROUGH GRADING PERMIT APPROVAL

☐ GRADING/PAVING PERMIT APPROVAL

☐ OTHER \_\_\_\_\_ (SPECIFY)

DATE SUBMITTED: 3-17-86

BY: Philip W. Galt

FILE COPY



## City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

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

April 2, 1986

Philip Clark  
Espey, Huston & Associates, Inc.  
4601 Indian School Road, NE Suite 204  
Albuquerque, New Mexico 87110

RE: DRAINAGE REPORT SUBMITTAL OF MOUNTAIN VIEW MOBILE HOME PARK  
RECEIVED MARCH 17, 1986 FOR FINAL PLAT AND BUILDING PERMIT  
APPROVAL (L-9/D2)

Dear Philip:

The above referenced submittal, dated March 17, 1986, is approved for Platting purposes and Building Permit of the Clubhouse, contingent on the following items:

1. City approved street grades consistent with those shown on grading plan for 94<sup>th</sup> Street and Sunset Gardens Avenue. Provide this office copies of approved plans.
2. Construction of permanent Sunset Gardens Avenue is deferred until drainage outfall system for site is in place.
3. Grading & Drainage Plan submitted with construction drawings should show an emergency spillway for retention ponds, and the 10' wide private drainage easement along East side of site. These were omitted on the drawing submitted to this office but are identified in Drainage Report.

MUNICIPAL DEVELOPMENT DEPARTMENT

C. Dwayne Sheppard, P.E., City Engineer

ENGINEERING DIVISION

Telephone (505) 766-7467

AN EQUAL OPPORTUNITY EMPLOYER

Philip Clark  
April 2, 1986  
Page Two of Two

After DRB has approved the Preliminary Plat, this office can grant  
Rough Grading Permit approval.

~~Final Plat~~ <sup>SNE PLAN</sup> approval by City Engineer will require an executed  
Subdivision Improvements Agreement.

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

Cordially,

*Roger A. Green, P.E.*

Roger A. Green, P.E.  
C.E./Hydrology Section

cc: West Mesa Development Group  
Berger Briggs  
P.O. Box "K" 87103

RAG/bsj

FILE COPY



## City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

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

April 29, 1986

Jay T. Olson  
Espey, Huston & Associates, Inc.  
4801 Indian School Road, NE Suite 204  
Albuquerque, New Mexico 87110

RE: GRADING PLAN SUBMITTAL OF MOUNTAIN VIEW MOBILE HOME PARK  
RECEIVED APRIL 29, 1986 FOR ROUGH GRADING PERMIT APPROVAL  
(L-9/D2)

Dear Jay:

The above referenced submittal revised April 29, 1986, is approved for Rough Grading Permit. My signature on the drawings serve as the contractor's permit to do grading on site.

A Topsoil Disturbance Permit will also be required by Environmental Health Department.

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

Cordially,

*Roger A. Green, P.E.*

Roger A. Green, P.E.  
C.E./Hydrology

cc: West Mesa Development  
Julio Vincioni

RAG/bsj

## DRAINAGE INFORMATION SHEET

PROJECT TITLE: MOUNTAIN VIEW MAP ZONE ATLAS/DRAINAGE FILE # L-9/D2LEGAL DESCRIPTION: LOTS 14 & 15, BLOCK 10, ORIGINAL TOWNSHIP OF WESTLAND  
TOGETHER WITH DOUBLET'S RESERVATION OF LOT 28, BLOCK 10, ORIGINAL TOWNSHIP OF WESTLANDCITY ADDRESS: 9606 CENTRAL AVE. SWENGINEERING FIRM: ESPEL, HUSTON & ASSOCIATES CONTACT: JAY T. OLSONADDRESS: 4801 INDIAN SCHOOL RD., SUITE 204, 87110 PHONE: 855-1625OWNER: WEST MEDIA DEVELOPMENT GROUP CONTACT: JULIO VINCIGUORIADDRESS: \_\_\_\_\_ PHONE: 847-0444ARCHITECT: KEVIN GEORGES & ASSOCIATES CONTACT: PETER WOLFEADDRESS: \_\_\_\_\_ PHONE: 855-4975SURVEYOR: ESPEL, HUSTON & ASSOCIATES CONTACT: TIM AUSTICHADDRESS: 4801 INDIAN SCHOOL RD., SUITE 204, 87110 PHONE: 855-1625CONTRACTOR: CONSTRUCTION CONTRACTING & MANAGEMENT CONTACT: JOHN KENTHILLADDRESS: 8819 EDNA NE, AVE., NM 87113 PHONE: 898-7777

## PRE-DESIGN MEETING:

<input checked="" type="checkbox"/> YES	DRB NO. <u>85-298</u>
<input type="checkbox"/> NO	EPC NO. <u>2-85-95</u>
<input type="checkbox"/> COPY OF CONFERENCE RECAP SHEET PROVIDED	PROJECT NO. <u>L-9/D2</u>

## TYPE OF SUBMITTAL:

☐ DRAINAGE REPORT  
☐ DRAINAGE PLAN  
☐ CONCEPTUAL GRADING & DRAIN PLAN  
☒ GRADING PLAN  
☐ EROSION CONTROL PLAN  
☐ ENGINEER'S CERTIFICATION

## CHECK TYPE OF APPROVAL SOUGHT:

☐ SECTOR PLAN APPROVAL  
☐ SKETCH PLAT APPROVAL  
☐ PRELIMINARY PLAT APPROVAL  
☐ SITE DEVELOPMENT PLAN APPROVAL  
☐ FINAL PLAT APPROVAL  
☐ BUILDING PERMIT APPROVAL  
☐ FOUNDATION PERMIT APPROVAL  
☐ CERTIFICATE OF OCCUPANCY APPROVAL  
☒ ROUGH GRADING PERMIT APPROVAL

DATE SUBMITTED: APRIL 29, 1986BY: Jay T. Olson

REV. 10/85

JAY T. OLSON

10

☐ GRADING/PAVING PERMIT APPROVAL

OTHER \_\_\_\_\_ (SPECIFY)

5/2/86

Verbal approval only given  
for this submittal because it  
is not a final product.

The submittal is a red lined  
print. The approval cannot  
be an official plan date identify-  
ing reponse.



# DRAINAGE INFORMATION SHEET

PROJECT TITLE: West Mesa M.H. Pond ZONE ATLAS/DRNG. FILE #: L-9/D2

LEGAL DESCRIPTION: 98th/94th Street — on Central

CITY ADDRESS: \_\_\_\_\_

ENGINEERING FIRM: Espen Hueston & Assoc. CONTACT: Paul Clark

ADDRESS: 4801 Indian School - Suite 200 PHONE: 255-1625  
Albuquerque, N.M.

OWNER: \_\_\_\_\_ CONTACT: \_\_\_\_\_

ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

ARCHITECT: \_\_\_\_\_ CONTACT: \_\_\_\_\_

ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

SURVEYOR: Same as above CONTACT: Tim Aldrich

ADDRESS: \_\_\_\_\_ PHONE: 255-1625

CONTRACTOR: \_\_\_\_\_ CONTACT: \_\_\_\_\_

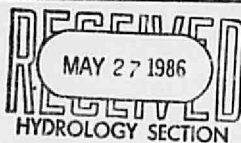
ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

PRE-DESIGN MEETING:

☒ YES

☐ NO

☐ COPY OF CONFERENCE RECAP  
SHEET PROVIDED



DRB NO. \_\_\_\_\_

EPC NO. \_\_\_\_\_

PROJ. NO. \_\_\_\_\_

TYPE OF SUBMITTAL:

☐ DRAINAGE REPORT

☐ DRAINAGE PLAN

☐ CONCEPTUAL GRADING & DRAINAGE PLAN

☐ GRADING PLAN

☐ EROSION CONTROL PLAN

☐ ENGINEER'S CERTIFICATION

CHECK TYPE OF APPROVAL SOUGHT:

☐ SKETCH PLAT APPROVAL

☐ PRELIMINARY PLAT APPROVAL

☐ SITE DEVELOPMENT PLAN APPROVAL

☐ FINAL PLAT APPROVAL

☐ BUILDING PERMIT APPROVAL

☐ FOUNDATION PERMIT APPROVAL

☐ CERTIFICATE OF OCCUPANCY APPROVAL

☐ ROUGH GRADING PERMIT APPROVAL

☐ GRADING/PAVING PERMIT APPROVAL

☒ OTHER Supplement (SPECIFY)

DATE SUBMITTED: 5/27/86

BY: Philip W. C. /

to Approved grading  
plan - public storm  
Drain improvements

FILE COPY



## City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

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

June 2, 1986

Philip Clark  
Espey, Huston & Associates, Inc.  
4801 Indian School Road, NE Suite 204  
Albuquerque, New Mexico 87110

RE: 94TH STREET STORM DRAIN DESIGN SUBMITTAL RECEIVED APRIL 30,  
1986 AND APPROVED STREET GRADES OF 94TH STREET RECEIVED MAY  
27, 1986 (L-9/D2)

Dear Philip:

The above referenced submittals are approved allowing Building Permit  
sign-off by Hydrology.

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

Cordially,

Roger A. Green, P.E.  
C.E./Hydrology Section

cc: Julio Vincioni,  
West Mesa Development

RAG/bsj

MUNICIPAL DEVELOPMENT DEPARTMENT

C. Dwayne Sheppard, P.E., City Engineer

ENGINEERING DIVISION

Telephone (505) 766-7467

AN EQUAL OPPORTUNITY EMPLOYER



EH&A Job #6753

**ESPEY, HUSTON & ASSOCIATES, INC.**  
*Engineering & Environmental Consultants*  
4801 INDIAN SCHOOL ROAD, N.E., SUITE 204  
ALBUQUERQUE, N.M. 87110  
(505) 255-1625

CORPORATE OFFICE  
P.O. BOX 519  
AUSTIN, TEXAS 78767

**DRAINAGE REPORT FOR  
MOUNTAIN VIEW MOBILE HOME  
PARK**

Prepared for:

WEST MESA DEVELOPMENT GROUP  
c/o BERGER BRIGGS  
P. O. DRAWER K  
ALBUQUERQUE, NEW MEXICO 87102

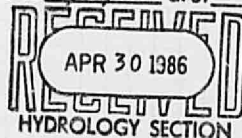
JULY, 1985



eh

ESPEY, HUSTON & ASSOCIATES INC.  
Engineering & Environmental ConsultantsSUBJECT Storm Drain

M.H. View M.H. Park

SHEET OF BY PC  
DATE 4/29/86 CK BY

Bury,

Per Conversation & meeting w/ Steve Boberg on April 28<sup>th</sup> he said to project the HGL of EL. 64.12 as analysed by Boyle's 54" proposed in 1980 design (prelim.) This was done in the following analysis for the 42" & the design of <sup>the</sup> road. In fact, this controlled the low point of the road @ min. elevation of Road @ Top of Curb 64.12 - 0.20 (above top of curb) = 63.92 TC. I would prefer to have the road a foot to 2 feet lower in order to avoid side slope easements on the east side of 94<sup>th</sup>, although this is not possible. With this criteria in mind plus avoiding the 8" proposed SAS the design is as follows ....

A handwritten signature in cursive script, appearing to read "Philip W. Ofek".

PROJECT NAME Mt. View L.A.H. Park JOB NO. 6753  
 SUBJECT 94th Street - Storm Drain Cales.  
 BY RWC CK. BY D.L. APPROVED BY RWC DATE 4/24/86 PAGE 1 OF 4

### DESIGN STORM DRAIN

→ Cop. of Type 'C' grate

$H = 0.87'$  (flowline to 0.2' above top of curb)  
 NASHD nomograph - Sump condition

$A_{net} = 4.36 \text{ SF} = (\text{opening area, Type 'C'})$

$Q_{cap} = 5.37 A_{net} H^{1/2}$

$= 5.37 (4.36) (0.87)^{1/2} = 21 \text{ cfs}$

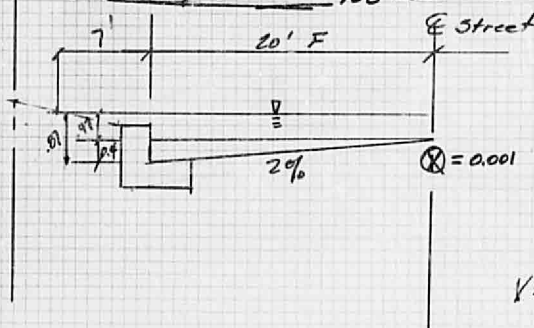
$Q = CA \sqrt{2gh}$

✓ by orifice  
 $Q = \frac{2}{3} (4.36) \sqrt{29} (0.87)$

$C = \frac{2}{3} = .66$  (discharge factor)

$Q_{cap} = 21 \text{ cfs} \checkmark$

→ Verify  $H$  in  $d_{100}$  - street



$A = 4 + 12.7 = 16.7$

$P = 7 + 6.7 + 20 = 27.7$

$A/P = 0.60$

$V = \frac{1.49}{.017} R^{2/3} S^{1/2} = 1.97 \text{ fps}$

$Q = VA = 33 \text{ cfs}$  ( $\frac{1}{2}$  street flow)

$d \approx 0.87$  ok  $\swarrow$  6 cfs  $\searrow$  6 cfs

→  $Q_{100}$  (from Site + street flows) = 70 cfs

ok

NOTES:

$e_h$

PROJECT NAME Mt. View H.H. Park JOB NO. \_\_\_\_\_  
 SUBJECT SD Calculations  
 BY RAC CK. BY \_\_\_\_\_ APPROVED BY RAC DATE 4-24-86 PAGE 2 OF 4

∴ therefore  $Q_{design} = 70 \text{ cfs}$

$\frac{1}{2} Q_{design} = 35 \text{ cfs}$  from sheet 1

1st type 'C' cap.  $= 21 + \text{curb opening of } 2 \text{ cfs}$   
 residual  $= 12 \text{ cfs}$

→ det. 'h' or 'd' in street

if  $d = 0.40$   $A = 4 \text{ SF}$   $\& P = .4 + 20 = 20.4$   
 $A/P = 0.20 = R_h$   
 $S = 0.001$

$V = 0.94 \text{ fps} \Rightarrow Q = 4 \text{ cfs}, 11.4 < 12$

if  $d = 0.50' \Rightarrow A = 4 + 2 = 6 \text{ SF}$   $\left. \begin{array}{l} P = .5 + 20 = 20.5 \end{array} \right\} \frac{A}{P} = 0.29$

$V = 1.21 \Rightarrow Q = 7.26 < 12$   
Street

if  $d = 0.55$  ok  $Q_{street} = 12 = 12 \text{ residual}$

$\Rightarrow Q = CA\sqrt{2gh}$   $h = 0.55$   
 $\text{Cap. Sump 'C'}$   $A = 4.36 \text{ SF}$   
 $= 0.67(4.36)\sqrt{2(9)(.55)}$   
 $= 17 > 12 \text{ cfs.}$

$\begin{array}{r} 12 \\ -17 \\ \hline -5 \end{array}$   $\therefore \text{all in system - pipe}$   
 $\& \text{inlets}$   
(additional cap. of 5 cfs  
 remaining in grate)

NOTES:

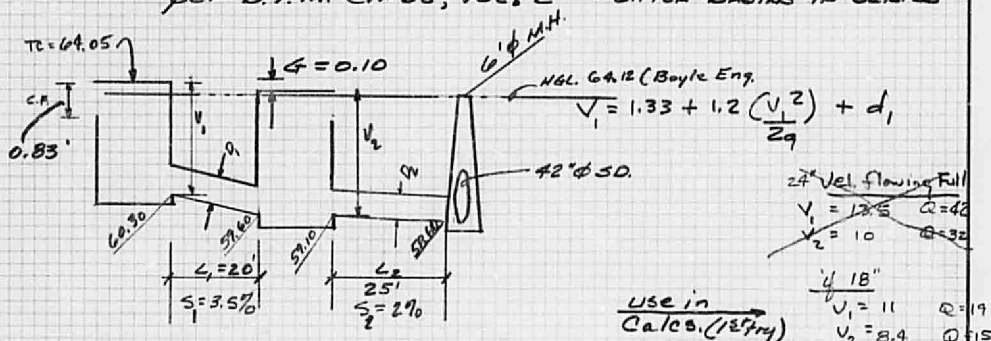
PROJECT NAME MT. VIEW M.H. Park JOB NO. #6753  
 SUBJECT Storm Drain Calculations  
 BY RAC CK. BY \_\_\_\_\_ APPROVED BY RAC DATE 4/29/86 PAGE 3 OF 4

→ Cap. of 42"  $\phi$  RCP, Prop. STORM DRAIN -

$S = 0.5\%$   $n = 0.013$

by manning's .....  $Q_{cap} = 71 \text{ cfs} > 70 \text{ design}$   
 $\therefore \underline{OK}$  Vel. = 7 fps

→ Check V depths of drop Inlet System - 94<sup>th</sup> Street  
per D.P.M. Ch. 22, Vol. 2 - "CATCH BASINS IN SERIES"



$V_1 = 1.33 + 1.2 \left( \frac{V_2^2}{2g} \right) + d_1 = 1.33 + 1.2 \left( \frac{11^2}{2g} \right) + 1.5$

$V_1 (\text{min}) = 5'$

$V_2 = 1.33 + \frac{H_1}{4} + 1.2 \frac{V_2^2}{2g} + d_2 - \phi$

$= 1.33 + 1.2 \left( \frac{8.4^2}{2g} \right) + 1.5 - 0.10$

$V_2 (\text{min}) = 4.05'$

$\therefore V_2 < V_1 \dots \text{N.G.}$

$H_1 = 0$   
 head losses  
 considered  
 minimal, not  
 included in  
 calcs. Con-  
 currence per  
 Steve Boberg  
 C.O.A. Hydrology

NOTES:

e<sub>h</sub>

PROJECT NAME Millman M.H. Park JOB NO. 46253  
 SUBJECT Sewer Drain Calculations  
 BY PWC CK. BY \_\_\_\_\_ APPROVED BY PWC DATE 4/29/86 PAGE 4 OF 4

try  $L_1 = 20'$  (vel. 8.7)  $S_1 = .02$ , inv. @ 1<sup>st</sup> inlet = 60.0  
 $L_2 = 25'$   $S_2 = 0.03$  (vel. 10, Q = 18)

$$V_1 = 1.33 + 1.2 \left( \frac{8.7^2}{2g} \right) + 1.5 = 4.14'$$

$$V_2 = 1.33 + 1.2 \left( \frac{10^2}{2g} \right) + 1.5 - 0.10 = 4.6'$$

$$\underline{V_2} > \underline{V_1} \text{ ok}$$

1<sup>st</sup> inlet - out = 59.91 (based on min.)  $S_1 = 2\% - 20' \text{ Lx.}$

2<sup>nd</sup> inlet - in = 59.51  
 - out = 59.01

$S_2 = 3\% - 25' \text{ Lx.}$

.... 1/2 ft. drop cross inlet

Manhole - in = 58.26  
 out = 58.10 (max. el.)

NOTES:

# DRAINAGE INFORMATION SHEET

PROJECT TITLE: Mountain View Mobile Home Park ZONE ATLAS/DWG. FILE #: L-9 / D2

LEGAL DESCRIPTION: Between 98th & 94th Streets - South of Central Avenue

CITY ADDRESS: \_\_\_\_\_

ENGINEERING FIRM: Espey, Huston & Assoc., Inc.

CONTACT: Phil Clark

4801 Indian School Road NE, Suite 204

ADDRESS: Albuquerque, NM 87110

PHONE: 255-1625

OWNER: West Mesa Development Group

CONTACT: Curtis Brewer

c/o Berger Briggs

ADDRESS: P. O. Drawer K

PHONE: \_\_\_\_\_

Albuquerque, NM 87103

ARCHITECT: N/A

CONTACT: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

PHONE: \_\_\_\_\_

SURVEYOR: N/A

CONTACT: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

PHONE: \_\_\_\_\_

CONTRACTOR: N/A

CONTACT: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

PHONE: \_\_\_\_\_

## PRE-DESIGN MEETING:

☒ YES

DRB NO. 85-298

☐ NO

EPC NO. 2-85-93

☒ COPY OF CONFERENCE RECAP SHEET PROVIDED

PROJ. NO. \_\_\_\_\_

## TYPE OF SUBMITTAL:

☒ DRAINAGE REPORT

☐ DRAINAGE PLAN

☒ CONCEPTUAL GRADING & DRAINAGE PLAN

☐ GRADING PLAN

☐ EROSION CONTROL PLAN

☐ ENGINEER'S CERTIFICATION

## CHECK TYPE OF APPROVAL SOUGHT:

☐ SKETCH PLAT APPROVAL

☐ PRELIMINARY PLAT APPROVAL

☒ SITE DEVELOPMENT PLAN APPROVAL

☐ FINAL PLAT APPROVAL

☐ BUILDING PERMIT APPROVAL

☐ FOUNDATION PERMIT APPROVAL

☐ CERTIFICATE OF OCCUPANCY APPROVAL

☐ ROUGH GRADING PERMIT APPROVAL

☐ GRADING/PAVING PERMIT APPROVAL

☐ OTHER \_\_\_\_\_ (SPECIFY)

DATE SUBMITTED: 7/18/85

BY: Philip W. Clark



6751

CITY OF ALBUQUERQUE  
MUNICIPAL DEVELOPMENT DEPARTMENT  
ENGINEERING DIVISION/DESIGN HYDROLOGY SECTION

## PRE-DESIGN CONFERENCE RECAP

HYDROLOGY SECTION PROJECT NO.: L-9 DATE: 7/2/85  
PLANNING DIVISION NOS. EPC: \_\_\_\_\_ DRB: \_\_\_\_\_

SUBJECT: Mountain View ~~Mount~~ Mobilehome Pr.  
LEGAL DESCRIP.: Replatting of area btwn 98th & 94th  
Sunset Gardens Rd. & Alley south of Cen  
APPROVAL REQUESTED

☒ PRELIMINARY PLAT ☒ FINAL PLAT  
☒ SITE DEVELOPMENT PLAN ☒ BUILDING PERMIT  
\_\_\_\_\_ ROUGH GRADING

WHO: REPRESENTING:  
ATTENDANCE: Philip Clark Espen, Huston & Assoc. Inc.  
Billy Goolsby City

- ☒ Conceptual Drainage Plan/Report required for Preliminary Plat and/or Site Development Plan sign-off.  
☒ Approved Drainage Plan/Report required for Final Plat and/or Building Permit sign-off.  
\_\_\_\_\_ Subdivision Improvements Agreement or Financial Security required.

FINDINGS: ① Discharge to be controlled due to  
flooding downstream & as interim until downstream  
improvements are made. ② Discharge to be 0.5 cfs  
per acre or as determined by analysis. ③ Discharge  
across other than Public R/W will require appropriate  
the undersigned agrees that the above findings are summarized accurately  
and are only subject to change if further investigation reveals that they  
are not reasonable or that they are based on inaccurate information.

SIGNED: Billy G. Goolsby SIGNED: Philip W. Clark  
TITLE: CE/Assistant Engineer TITLE: Design Engineer  
DATE: 7/2/85 DATE: 7/2/85

\*\*NOTE\*\* PLEASE PROVIDE A COPY OF THIS RECAP WITH THE DRAINAGE SUBMITTAL  
for the period of construction & off-site due to the





ESPEY, HUSTON & ASSOCIATES, INC.

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### LIST OF FIGURES AND EXHIBITS

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FLOOD HAZARD MAP/VICINITY MAP - FIGURE 1	3
SOILS MAP - FIGURE 2	4
DRAINAGE PLAN - SHEET 2	Pocket



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### **PURPOSE AND SCOPE**

The purpose of this report is to establish the criteria for controlling surface storm run-off and to study the hydrologic affects of the proposed drainage/-grading and infrastructure improvements to the project presently described as Lots 28-91, Doughty's Replat of Lot 28, Block 10; and Lots 14-15, Block 10, within the Original Townsite of Westland. This plan determines the excess run-off resulting from the 100-year/6-hour and 10-year/6-hour frequency storms falling within the site, historic and developed conditions. This report is prepared to facilitate site development plan approval by the City of Albuquerque.

The scope of the proposed plan will not increase the flooding potential to adjacent properties or downstream area. The plan is presented in a manner which is acceptable to the City of Albuquerque, using hydrologic procedures as outlined in Chapter 22 of the Development Process Manual.



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#### **LOCATION AND DESCRIPTION**

The proposed Mountain View Mobile Home Park is located in southwest Albuquerque approximately 1.5 miles west of Coors Blvd. immediately south of Central Avenue. (See Figure 1, Vicinity Map, following page.) The Park is proposed for 186 rental spaces with associated amenities and private streets.

The site is approximately 24 acres in size and is presently undeveloped. The site itself is characterized by gentle slopes of about 2%, falling generally from west to east. The major soil present on the site is the Pajarito Complex, PAC; classified as a type "B" soil by the USDA Soil Conservation Service. (See Soils Map, Figure 2, page 4.)



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#### EXISTING DRAINAGE CONDITIONS

As previously mentioned, the site is presently undeveloped. The project is bounded on the north by improved Central Avenue. 94th Street and Sunset Gardens Road, both unimproved, are adjacent to the east and south respectively. 98th Street that abuts the site to the west is paved. A 10' alley which runs along the north boundary is approved for vacation subject to platting of the property.

Sheet 1 (see pocket) illustrates the existing topography of the site. Minimal off-site flows enter from the west. No off-site flows enter the project from either the north, south or east. Historically, the 24-acre site discharges an approximate Q100 of 38 cfs.



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### PROPOSED DRAINAGE CONDITIONS

The drainage plan sheet 1, (see pocket) shows: 1.) proposed spot elevations and existing contours at 2'-0" intervals. 2.) proposed rental spaces and private street plan to be platted. 3.) proposed drainage and grading improvements with continuity with existing grades.

Proposed private infrastructure improvements include water and sewer utilities in the private street scheme connecting to main lines in 98th Street and Central Avenue. Presently, the site discharges ultimately to an existing flood plain in Bridge Street SW; therefore, the scope of the plan is to retain 100% of the 100-year/6-hour storm run-off volume on site in the northeast portion of the project. This retention facility will have two separate levels of pond bottom. The playground area will be depressed a minimum of 2.0 feet and sized to retain a 1.5 foot depth of water. A deeper pond of approximately 5 feet will be necessary to retain the remainder of the V100 storm volume. The deeper pond will encumber 6 rental spaces and will require fencing. The proposed ponding scheme of total retention should remain in place until such time that sufficient downstream facilities are in place. The required total run-off volume (V100) shall be 121,200 cubic feet. Therefore, the scope of the proposed plan will in essence mitigate the existing downstream capacity problem.

The ponds shall be designed with an emergency spillway (0.5 ft. deep x 60 ft. long) in order to control possible run-off in excess of the 100-yr./6-hr. storm.



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#### RECOMMENDATIONS

1. With the implementation of an approved erosion control plan, erosion will not result due to the proposed improvements of this plan. Said plan should be a part of the approved construction plans for grading.
2. Construction plans in compliance with this report shall be required for the implementation of this report/plan recommendations.
3. The proposed drainage improvements will not increase the flooding potential to downstream or adjacent properties. In fact, the downstream floodplain will be mitigated due to this plan.
4. Retention ponding should be implemented as an interim measure. A soils report should be requested in order to fully investigate the soils for total storm run-off retention.
5. Maintenance of the 10' private drainage easement and retention facilities shall be the responsibility of the owner.



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CALCULATIONS





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SUBJECT DRAINAGE

MT. VIEW MOBILE HOME PARK

SHEET 1 OF 2 BY RLC

DATE 7/15/85 CK BY JL

### I. Hydrologic Criteria

$$Q = CiA$$

$$Vol = PCA$$

$$i = P(0.84 TC)^{-0.51}$$

$$TC = 0.0078 \frac{L^{0.77}}{50.385}$$

$$P_{100} = 2.2 \text{ in. } \& P_{10} = 1.45 \text{ in.}$$

$$\text{Area} = 23 \text{ ac. } \approx$$

Soil - Type 'B', PAC, Fajardo f. 30 Bernalillo Cty. SOIL SURVEY

$$\% \text{ impervious} = 65\%$$

### II. EXISTING CONDITIONS

$$C = 0.34$$

$$TC = 10 \text{ min. } \therefore i = 4.65 \text{ in./hr.}$$

$$L_{10} = 3.06 \text{ in./hr.}$$

$$Q = CiA$$

$$Q_{100} = (0.34)(4.65)(23)$$

$$\underline{Q_{100} = 36 \text{ cfs}}$$

$$\underline{Q_{10} = 24 \text{ cfs}}$$

$$Vol = PCA$$

$$Vol_{100} = 2.2(34)(23) \underline{\underline{43560}} \\ 12$$

$$\underline{\underline{Vol_{100} = 62,450 \text{ C.F.}}}$$

$$\underline{\underline{Vol_{10} = 41,030 \text{ CF}}}$$



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SUBJECT DRAINAGE

Mt. View Mobile Home Park

SHEET 2 OF 2 BY AVC

DATE 7/15/85 CK BY JL

III. DEVELOPED CONDITIONS

SIZE POND FOR MOUNTAIN VIEW MOBILE HOME PARK

LENGTH = 1900 Ft.  
EL. DIFF. = 36 Ft.  
SLOPE = .018547 ft/ft  
TIME OF CONCENTRATION = 12.019 Min.  
RUNOFF COEFF. = .66  
AREA = 23 Acres

P100 = 2.2 Inches.  
P10 = 1.4454 Inches.

I100 = 4.234 Inches/Hr.  
I10 = 2.7817 Inches/Hr.

Q100 = 64.272 c.f.s.  
Q10 = 42.227 c.f.s.

VOL100 = 121230 c.f.  
VOL10 = 79648 c.f.

ALLOWABLE DISCHARGE = 0 c.f.s.

POND VOLUME = 121230 c.f.

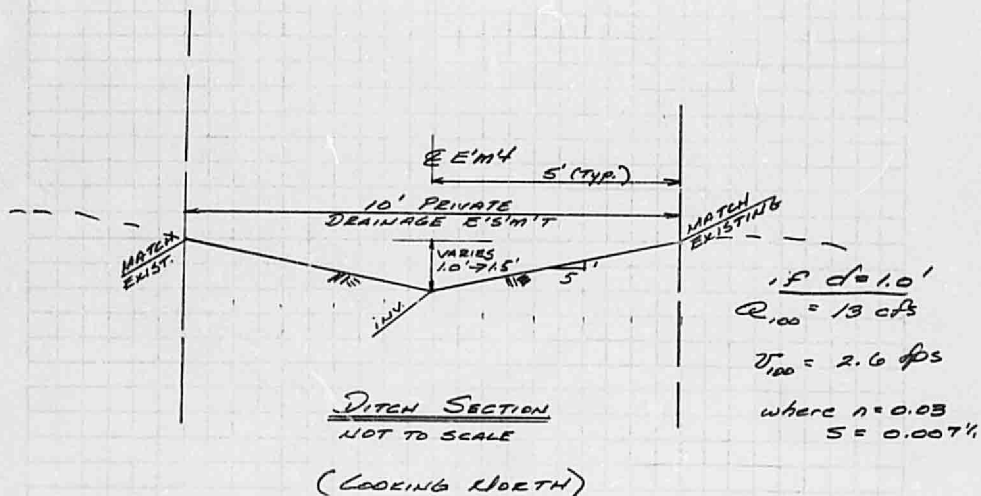
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**ESPEY, HUSTON & ASSOCIATES INC.**  
Engineering & Environmental Consultants

SUBJECT N.H. View N.H. Park

(DRAINAGE)

SHEET 1 OF 1 BY PEC  
DATE 7/30/85 CK BY \_\_\_\_\_



RECEIVED  
JUL 31 1985  
HYDROLOGY SECTION