DRAINAGE INFORMATION SHEET

PROJECT TITLE: Pinnacle View Subdivision ZONE ATLAS/DRNG. FILE #: J-23/D9C1

LEGAL DESCRIPTION: Tract F, Embudo Hills

CITY ADDRESS:

ENGINEERING FIRM: FRED DENNEY & ASSOCIATES, INC. CONTACT: Joe Jones

ADDRESS: 2400 Comanche NE, Albuquerque, NM 87107 PHONE: 884-0696

OWNER: Pinnacle Partnership CONTACT: Rich Gantner

ADDRESS: 11501 Montgomery Blvd., NE Albq., NM 87111 PHONE: 293-3000

ARCHITECT: N/A CONTACT: N/A

ADDRESS: PHONE:

SURVEYOR: FRED DENNEY & ASSOCIATES, INC. CONTACT: Kevin Daly

ADDRESS: 2400 Comanche NE, Albuquerque, NM 87107 PHONE: 884-0696

CONTRACTOR: CONTACT:

ADDRESS: PHONE:

RECEIVED
SEP 21 1987
HYDROLOGY SECTION

PRE-DESIGN MEETING:

__X__ YES
_____ NO
_____ COPY OF CONFERENCE RECAP SHEET PROVIDED

DRB No. 87-398
EPC No.
PROJ. No. 3333

TYPE OF SUBMITTAL:

_____ DRAINAGE REPORT
__X__ DRAINAGE PLAN
_____ CONCEPTUAL GRADING & DRAINAGE 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
__X__ 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: September 21, 1987

BY: Joe Jones
JOE JONES

REV. 10/85

FILE COPY

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

Ken Schultz
Mayor

UTILITY DEVELOPMENT DIVISION
HYDROLOGY SECTION
(505) 768-2650

September 24, 1987

Joe Jones
Fred Denney & Associates, Inc.
2400 Comanche Road, NE
Albuquerque, New Mexico 87107

RE: GRADING & DRAINAGE REPORT FOR PINNACLE VIEW SUBDIVISION SUBMITTED FOR FINAL PLAT APPROVAL (J-23/D9C1)

Dear Joe:

Your submittal, referred to above, with an engineer's stamp date of September 17, 1987, is approved for final plat sign-off by Hydrology.

If you have any questions, please call me at 768-2650.

Cordially,

Stuart Reeder

G. Stuart Reeder, P.E.
C.E./Hydrology Section

GSR/bsj

xc: Owner

GRADING & DRAINAGE PLAN
PINNACLE VIEW SUBDIVISION

LEGAL DESCRIPTION
TRACT F-1 EMBUDO HILLS SUBDIVISION.

DRAINAGE

The proposed development site consists of 5.73 acres and is located on Pinnacle View Drive between Monte Largo Drive and Lomas Boulevard. The soils onsite are of the Tesajo Series type "A", and the site slopes from northeast to southwest at approximately 6%. The site is not located within a flood plain.

The development site lies within the boundary of the Embudo Hills Master Drainage Plan. This proposed plan meets the requirements set forth in the Master Plan.

The Embudo Hills Master Drainage Plan indicates a Q of 135 cfs just east of the intersection of Pinnacle View and Narcisco. Since approximately 11 cfs is generated onsite, 124 cfs is offsite runoff. A type "A" catch basin will be constructed 10' east of the return on Pinnacle View to comply with the Master Plan.

As shown on Plate 3 of the Embudo Hills Master Plan, a desilting basin has been constructed at the west end of Pinnacle View Drive. Dumped riprap will be placed at the end of Pinnacle View in order to minimize erosion and dissipate the energy of the runoff.

BASIN	AREA (Ac)
1	2.8 ±
2	2.0 ±
3	0.95 ±

ONSITE RUNOFF

BASIN (2) Calculations

LOCATION Narcisco & Pinnacle
ANALYSIS POINT # K-5
(DR. AREA) A = 2.0 ACRES
T_c 10 MIN
POINT RAINFALL 2.55 IN. FROM PLATE 22.2 D-1
CN = 80 FROM PLATES 22.2 C-2, 22.2 C-3
RUNOFF VOLUME R = 0.9 IN. FROM PLATE 22.2 C-4
COMPUTED T_p = 10 MIN. ($T_p = T_c$ (Rounded to even minute))
$q_p = \frac{45.4A}{T_p}$ = 9.1 CFS./INCH OF RUNOFF
(R X q_p) = Q_{peak} = 8.2 CFS
t(COLUMN)=(t/T_p) $t=T_p(t/T_p)$
$y = \frac{Q}{Q_{peak}}$ $Q = y(Q_{peak})$
V_{100} = RA
$V_{100} = \frac{0.9}{12}$ (2x43560) = 6534 cf

BASIN (1)

LOCATION Pinnacle View
ANALYSIS POINT # K-1, K-2
(DR. AREA) A = 2.8 ACRES
T_c 10 MIN
POINT RAINFALL 2.55 IN. FROM PLATE 22.2 D-1
CN = 80 FROM PLATES 22.2 C-2, 22.2 C-3
RUNOFF VOLUME R = 0.9 IN. FROM PLATE 22.2 C-4
COMPUTED T_p = 10 MIN. ($T_p = T_c$ (Rounded to even minute))
$q_p = \frac{45.4A}{T_p}$ = 12.7 CFS./INCH OF RUNOFF
(R X q_p) = Q_{peak} = 11.4 CFS
t(COLUMN)=(t/T_p) $t=T_p(t/T_p)$
$y = \frac{Q}{Q_{peak}}$ $Q = y(Q_{peak})$
V_{100} = RA = 0.9/12 (2.8x43560) = 9150 cf

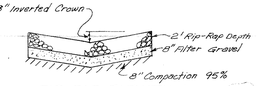
RIPRAP AND FILTER MATERIAL GRADATION

RIPRAP

RIPRAP Designation	% Smaller Than Given Size By Weight	Minimum Dimension Inches
Type M	100	18
	35-55	12
	10	3

FILTER GRAVEL

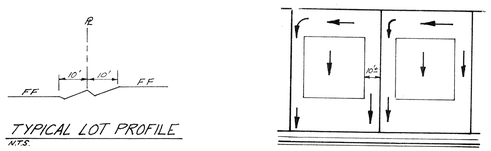
Sieve Size	% By Weight Passing Square Mesh Sieves
2"	90 - 100
3/4"	20 - 90
#4	0 - 20
#200	0 - 3



RIP-RAP ELEVATION

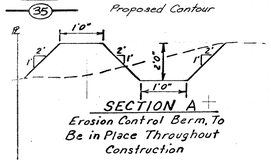
TRACT E EMBUDO HILLS

NOTE: 1. For MSL Elevation Add 5900.00
2. All Pad Elevations Are Finished Floor



TYPICAL LOT PROFILE
N.T.S.

TYPICAL LOT PLAN FLOW PATTERN
N.T.S.

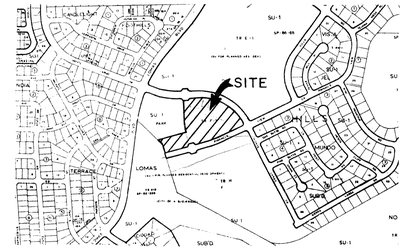


SECTION A
Erosion Control Berm, To Be in Place Throughout Construction

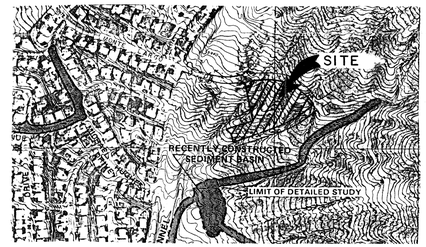
Legend

- Drainage Basin Boundary
- 6' Retaining Wall
- 4' Retaining Wall
- TW= 33.0 — Top Of Wall Elev. (Proposed)
- BW=27.00 — Bottom Of Wall Elev. (Proposed)
- TC= 21.4 — Top Of Curb Elev. (Proposed)
- FL= 29.62 — Flow Line Elev (Proposed)
- 29.2 — Spot Elev (Proposed)
- Erosion Control Berm
- Flow Arrow
- Type "A" Catch Basin w/ 18" Connector Pipe
- (1) — DRAINAGE BASIN #
- Backyard Pond (1' Depth All Ponds, Vol=175cf)
- Proposed Contour

	NARCISCO ST.	PINNACLE VIEW
Q_{100}	36.6 cfs	135 cfs
Q_{10}	24 cfs	89 cfs
V_{100}	6.9 fps	9.7 fps
V_{10}	5.2 fps	9.2 fps
D_{10}	0.38'	0.58'
$D_{10} \times V_{10}$	2.0 < 6.5 (OK)	5.33 < 6.5 (OK)



VICINITY MAP
SCALE 1"=800' J-23-Z



FEMA MAP
SCALE: 1"=500'

BENCHMARK DATA

10-J23 Located At The Intersection Of Lomas Boulevard & Parsons Street N.E. A Square "□" Chiseled On Top Of WNW Curb Return. Elev = 5896.319 ft.
T.B.M. Property Corner @ N.W. Return Of Pinnacle View Drive And Monte Largo Drive. Elev = 5936.7

PROFESSIONAL ENGINEER — NEW MEXICO — NO. 1967 — FRED N. DEGNER — 9/17/87
ENGINEER'S STAMP

APPROVED FOR DRAINAGE
24 Sept 87
DATE
G S Reeder, P.E. CE/HOR.
SIGNATURE TITLE
ADVISE DRANAGE INSPECTOR WHEN GRADING EXECUTED

RECEIVED SEP 21 1987 HYDROLOGY SECTION

CONSULTING ENGINEERS · PLANNERS · SURVEYORS
2400 COMANCHE ROAD, NE · ALBUQUERQUE, NM 87107
TELEPHONE (505) 884-0555

F.D.A. JOB NO. 944.11