HYDROLOGY L19/D36 APARTMENTS

L19/D36

APARTMENTS

1 PLAN

GRADING AND DRAINAGE PLAN

T.B.M. – A.C.S. NO. 6 – LIB
ELEV. 5327.694

S.M.H.
N. RIM ELEV. 5333.49
INV. N 5325.52
INV. S 5325.51

NOTES

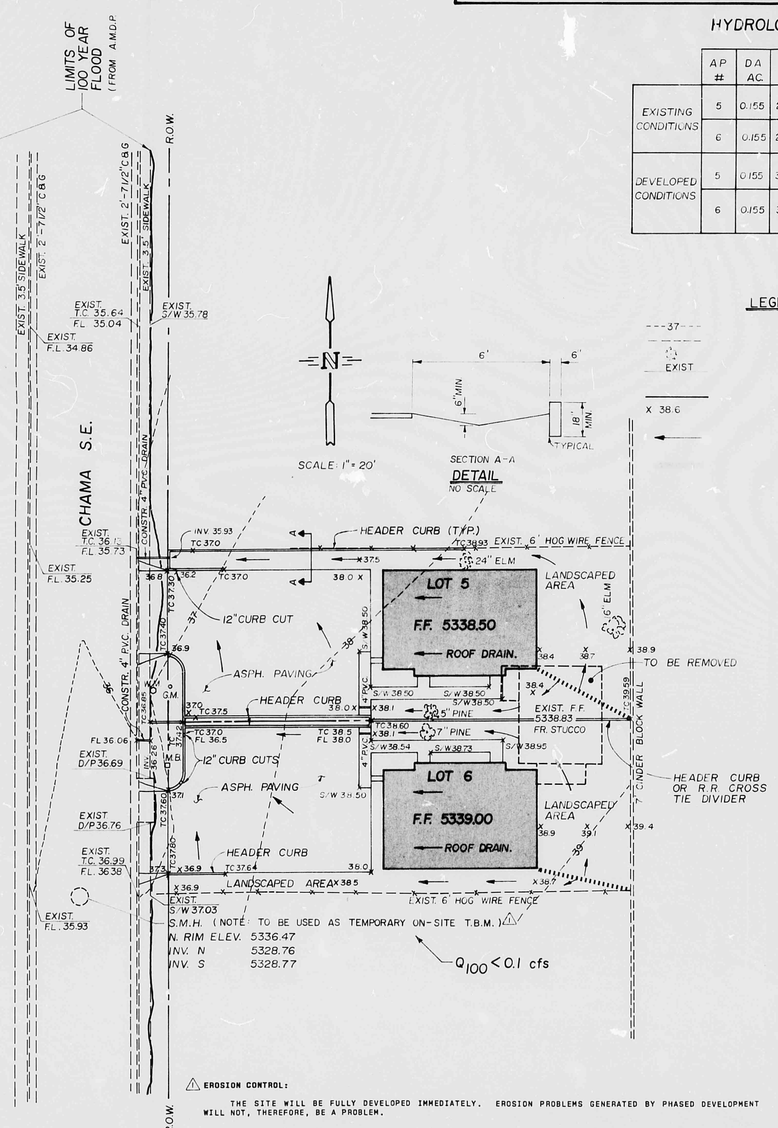
1. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER THIS CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION – 1979 EDITION (REFERENCED TO HEREIN AS THE STANDARD SPECIFICATIONS)
2. ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.
3. BACKFILL COMPACTION SHALL BE A MINIMUM 90% MODIFIED PROCTOR (D1557).
4. DISPOSAL OF ALL WASTE MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AS SPECIFIED IN SECTION 6.29 OF THE GENERAL CONDITIONS IN THE NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1979 EDITION.
5. THESE DRAWINGS ARE AND SHALL REMAIN THE PROPERTY OF EASTERLING & ASSOCIATES, INC.
6. THESE PLANS DO NOT CONTAIN THE NECECSARY PROVISIONS FOR CONSTRUCTION SAFETY. CONSTRUCTION SAFETY IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.
7. FINISHED FLOOR ELEVATIONS WILL BE CERTIFIED BY AN ENGINEER BEFORE A CERTIFICATE OF OCCUPANCY WILL BE ISSUED.
8. EXISTING 5" AND 7" PINE TREES TO REMAIN.

GENERAL NOTES:

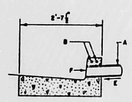
1. WHEN PLACING DRAIN THROUGH EXISTING CURB, REMOVE AND REPLACE ENTIRE STONE OF CURB AND GUTTER.
2. THE CITY DOES NOT ACCEPT RESPONSIBILITY FOR MAINTENANCE FOR ANY DRAIN LINES INSTALLED BY OR FOR PRIVATE PROPERTY OWNERS.

CONSTRUCTION NOTES:

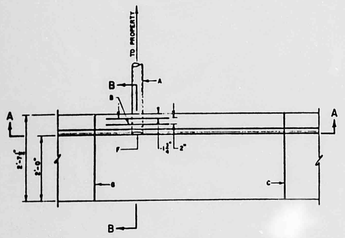
A. DRAIN, D.I. OR SCH. 40 P.V.C. PIPE, 4" NOM. SIZE (MIN.) TO PROPERTY.
B. 2-NO. 3 BARS, 2'-4" LONG, PLACED AS SHOWN.
C. COLD JOINT.
D. DISTANCE FROM ℄ OF DRAIN TO NEAREST JOINT, VARIABLE WITH 18" MIN.
E. SLOPE ¼" PER FT. WITHIN R.O.W.
F. DRAIN PIPE NOT TO PROTRUDE BEYOND CURB FACE.
G. JOINT NEAREST TO DRAIN TO BE AN EXPANSION JOINT



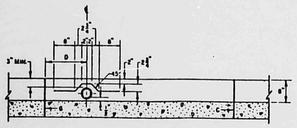
SECTION A-A
DETAIL
NO SCALE



SECTION B-B



PLAN



SECTION A-A

OUTLET PIPE
DETAIL
NO SCALE

Q Outlet = $CA\sqrt{2GH}$ = (.6)(.086) $\sqrt{64.4(.67)}$ = 0.33 cfs

EROSION CONTROL:

THE SITE WILL BE FULLY DEVELOPED IMMEDIATELY. EROSION PROBLEMS GENERATED BY PHASED DEVELOPMENT WILL NOT, THEREFORE, BE A PROBLEM.

CONSTRUCTION PHASE:

THE CONTRACTOR SHALL EXERCISE REASONABLE CARE DURING CONSTRUCTION TO PREVENT THE MOVEMENT OF SEDIMENT FROM THE SITE INTO THE STREET. LOOSE SOIL STOCKPILED IN THE STREET DURING UTILITY CONNECTION ACTIVITIES SHALL BE PROTECTED FROM BEING CARRIED DOWNSTREAM BY FLOWING WATER IN THE STREET.

SOILS INFORMATION

Soil series and map symbols	Degree and kind of limitations for— Septic tank absorption fields	Sewage lagoons	Shallow excavations	Dwellings without basements	Sanitary landfill (trench type)	Local roads and streets	Suitability as source of— Road fill	Sand	Gravel	Topsoil	Soil features affecting: Pond reservoir areas	Dikes, levees, and other embankments	Hydrologic soil group
Tijeras: TgB	Slight	Severe: seepage.	Severe: small stones, cutbanks cave.	Moderate: shrink swell.	Severe: seepage.	Moderate: shrink swell; low strength.	Fair: shrink swell; low strength.	Poor: excess fines.	Poor: excess fines.	Poor: small stones.	Seepage	Low strength; piping.	B
*Wink: WaB, WeB, WM. For Embudo part of WeB, see Embudo series; for Madurez part of WM, see Madurez series.	Slight	Severe: seepage.	Slight	Slight	Severe: seepage.	Slight	Fair: low strength.	Unsuited	Unsuited	Good	Seepage	Piping; creeks easily.	B

WeB—Wink-Embudo complex, 0 to 5 percent slopes. This mapping unit is about 65 percent a Wink fine sandy loam that has 1 to 5 percent slopes and 25 percent Embudo gravelly fine sandy loam, 0 to 5 percent slopes.

The Wink soil is on slight rises and ridges. It has a profile similar to that described as representative of the series, but it is alkaline and has a pale brown fine sandy loam surface layer about 4 inches thick and a strongly alkaline clay loam substratum below a depth of 40 inches. On about 70 percent of the acreage of Wink soil, the content of exchangeable sodium is more than 15 percent. The Embudo soil is in shallow depressions. It has a profile similar to that described as representative of the Embudo series, but the surface layer is yellowish brown gravelly fine sandy loam about 8 inches thick. On both soils, runoff is medium and the hazard of water erosion is moderate.

Included in this unit in mapping are areas of Madurez, Tijeras, and Bokan soils, which make up about 10 percent of the unit.

This mapping unit is used for community development, watershed, and wildlife habitat. Flooding and poor compaction are potential problems where this mapping unit is used for community development. Dryland capability subclass VIIe; native plant community 4.

TgB—Tijeras gravelly fine sandy loam, 1 to 5 percent slopes. This nearly level to gently sloping soil is on old alluvial fans on the East Mesa. It has a profile similar to that described as representative of the series, but has a yellowish brown surface layer about 6 inches thick and has less gravel and more lime between depths of 10 and 30 inches.

Included with this soil in mapping are areas of Embudo, Madurez, and Latene soils, which make up 20 percent of the unit.

Runoff is moderate, and the hazard of water erosion is moderate.

This soil is used for community development, range, watershed, and wildlife habitat. Dryland capability subclass VIIe; native plant community 4.

HYDROLOGY:

	AP #	DA AC.	H FT	S FT/FT	L FT	T_C MIN	SOIL TYPE	% IMP	CN	C	P_2 IN	P_{10} IN	P_{100} IN	I_2 IN/HR	I_{10} IN/HR	I_{100} IN/HR	V_2 FT	V_{10} FT	V_{100} FT	Q_2 CFS	Q_{10} CFS	Q_{100} CFS
EXISTING CONDITIONS	5	0.155	2.76	0.0917	144'	1.64 (10)	B	0	72	0.34	1.07	1.58	2.40	2.33	3.44	5.23	112	140	618	0.12	0.18	0.28
	6	0.155	2.69	0.0197	136.5'	1.56 (10)	B	0	72	0.34	1.07	1.58	2.40	2.33	3.44	5.23	112	281	618	0.12	0.18	0.28
DEVELOPED CONDITIONS	5	0.155	3.16	0.0223	142'	1.55 (10)	B	63	85	0.64	1.07	1.58	2.40	2.33	3.44	5.23	112	140	618	0.23	0.34	0.52
	6	0.155	3.19	0.0225	141.5	1.52 (10)	B	63	85	0.64	1.07	1.58	2.40	2.33	3.44	5.23	112	281	618	0.23	0.34	0.52

LEGEND

---37---	EXIST. CONTOUR
	EXIST. TOPO.
	EXIST. TREES
EXIST	EXIST. ELEV.
X 38.6	T.C., S/W, ETC.
	FLOOD LIMITS
	PROPOSED SPOT ELEVATIONS
	PROPOSED RUNOFF FLOW
	NEW FOUNDATIONS

TEXT

EXISTING CONDITIONS

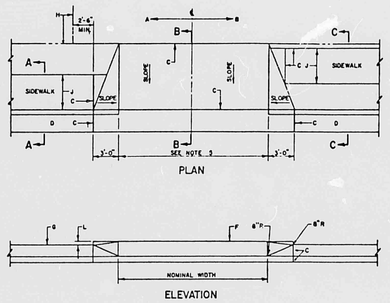
Onsite: Lots 5 and 6 are currently occupied by one house, centered on the lot line. There is very little runoff leaving the site under existing conditions; that runoff sheet flows in a northwesterly direction.

Offsite: The AMDP Volume II shows a flooding problem in this area due to upstream conditions. The extent of the flood plan on Chama is shown in the Flood Hazard Map, above, and the Site Plan.

DEVELOPED CONDITIONS

Onsite: This infill project proposes to redevelop an existing developed site. All runoff will be directed to and through landscaped areas. Some detention ponding will be provided as a consequence, although no credit for such is requested. Runoff will be directed through 4" diameter pipes to the street. In the event of a plugged pipe or extraordinary runoff event, runoff will exit via the driveways.

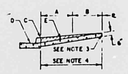
Offsite: In order to satisfy flood proofing requirements, the building finished floor elevations were set approximately 2.0 feet above top of curb and 1.5 feet above the AMDP Flood Elevation. Flows from the R-1 Lot to the south (if any) will be routed through the landscape and outlet pipes.



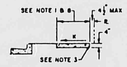
PLAN

ELEVATION

SECTION A-A



SECTION B-B



SECTION C-C

DRIVE PAD
DETAIL
NO SCALE

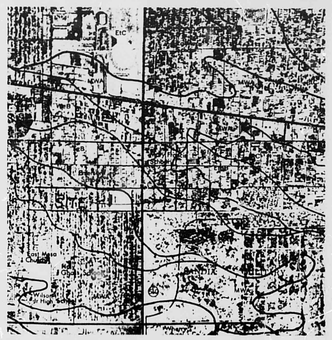
GENERAL NOTES:

1. DEVIATIONS FROM THESE STDS. SHALL BE SUBMITTED TO THE CITY ENGR. AND/OR TRAFFIC ENGR FOR APPROVAL PRIOR TO CONSTRUCTION.
2. REQUEST FOR SIDEWALK VARIANCES SHALL BE SUBMITTED TO THE DEVELOPMENT REVIEW BOARD
3. USE ½" EXP. JT. WHERE SIDEWALK OR DRIVEPAD ABUTS BLDGS., FENCES, WALLS OR OTHER IMMOVABLE OBJECTS
4. ALL DRIVEPADS SHALL BE A MIN. OF 6.5' IN DEPTH OR SHALL BE CONSTR. CTED FROM BACK OF CURB TO P/L, WHICHEVER IS GREATER
5. DRIVEPADS WIDER THAN 18' (NOMINAL) SHALL HAVE ½" EXP. JT. AT MIDPOINT. DRIVEPADS WIDER THAN 36' SHALL HAVE ½" EXP. JT. 18' MAX BETWEEN JT. EQUALLY SPACED
6. CURB TYPE SIDEWALK SHALL BE USED ONLY WHEN VARIANCE IS APPROVED
7. FOR SIDEWALK WIDTH, SEE CHAP 23 THE DEVEL PROC MANUAL.
8. SUBGRADE UNDER SIDEWALK & DRIVEPAD SHALL BE COMPACTED TO 90% MAX DENSITY TO A DEPTH OF 6"

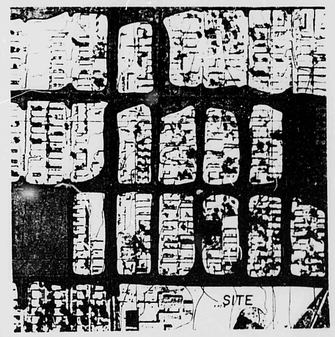
CONSTRUCTION NOTES:

A. CURB TYPE SIDEWALK
B. OFFSET SIDEWALK
C. ½" EXP. JT., ADJUST TO FIELD CONDITIONS ON REPLACEMENT WORK
D. CURB & GUTTER
E. SLOPE TO BE ADJUSTED TO PROVIDE A UNIFORM TRANSITION BETWEEN SIDEWALK & DRIVEPAD
F. TOP OF DRIVEPAD
G. TOP OF CURB
H. PROPERTY LINE
J. VARIABLE WIDTH
K. SLOPE ¼" PER FT
L. FINISH GRADE AT PROPERTY LINE SHALL BE 0.33' ABOVE TOP OF CURB, (TYPICAL) IN CASES OF INSUFFICIENT R/W. THIS REQUIREMENT CONFLICTS WITH SIDEWALK SLOPE REQUIREMENTS. DEVIATIONS MUST BE APPROVED BY CITY ENGR. PRIOR TO CONSTRUCTION

SOILS MAP, FROM SOIL SURVEY OF BERNALILLO CO., NEW MEXICO, U.S.D.



FLOOD HAZZARD MAP, FROM ALBUQUERQUE MASTER DRAIN. STUDY, MAP NO 36



VICINITY MAP, FROM CITY OF ALBUQUERQUE ZONE ATLAS

LEGAL DESCRIPTION
T 10 N
R 4 E
SEC 30

ZONE ATLAS MAP L-19-Z
LOTS 5 & 6, BLOCK 21
EMIL MANN ADDITION
ALBUQUERQUE, NEW MEXICO

RECEIVED
OCT 07 1985
HYDROLOGY SECTION

NO.	REVISIONS	BY	DATE
△		DM	10/7/85

618 CHAMA S.E.
LOTS 5 & 6 BLOCK 21
EMIL MANN ADDIT.

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
5643 Paradise Blvd. N.W.
Albuquerque, New Mexico 87114

Designed:	Drawn: DM	Checked:	Sheet 1
Job No:	Date: 9/85		of 1