

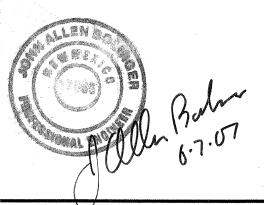
SCANNED BY PLANNING

DEVELOPMENT PLANS FOR CORIANDA COURT

RECORD DRAWINGS Alen Boliner of the firm of Smith Engineering Company, a

Registered Professional Engineer in the State of New Mexico, do hereby state that to the best of my knowledge and belief, the infrastructure for this project as shown on the plans has been constructed in general accordance with the project plans and in general accordance with the City of Albuquerque Standard Specifications for Public Works Construction (Including all updates), and that the general intent of the plans has been met except as noted on the as-built construction drawings. The infrastructure construction has been observed by a qualified person from Smith Engineering Company and this statement covers infrastructure installation that was observed while a representative from Smith Engineering was on site. This statement is based on site observations by Smith Engineering Company personnel and on as-built information provided to Smith Engineering Company TIM ALDRICH

NMPS number 7119 (PS#).



UTILITY COMPANY CONTACTS

BU	ISINESS	PHONE/E-MAIL	PERSON
	&T 1 3rd Street NW ., NM 87103	Office phone: (505)842—2911 Office fax: (505)842—2890 dcrowel@att.com	David Crowell Resource Supervisor
46	mcast 11 Montbel NE ., NM 87107	Office phone: (505)761-6235 Office fax: (505)761-0599 rita_erickson@cable.comcast.com	Rita Erickson Planning and Design Supervisor
505	spire 5 Marquette NW, Suite 1605 ., NM 87102	Office phone: (505)998-2274 Office fax: (505)998-9161 john.mares@espire.net	John Mares
522 MC:	nuity 21 N. O'Connor :HQL11A22 ng, TX 75039		Dennis Paulsen OSP Engineering
370	l Worldcom 00 Singer NE, Suite A ., NM 87109	Office phone: (505)346-4476 Office fax: (505)346-4481 andy.darnell@wcom.com	Andy Darnell Operations Manager
505	LeodUSA 5 Marquette NW, Suite 1600 ., NM 87102	Office phone: (505)244-3161 Office fax: (505)244-0094 Cell Phone: (505)228-3329	Rick Mueller Supervisor of Outside Techs.
420	M—Electric D1 Edith NE ., NM 87107	Office phone: (505)241-3490 Office fax: (505)241-3620 Cell phone: (505)934-8818 warthur@pnm.com	Warren Arthur Engineering Representative III
462	M—Gas 25 Edith NE ., NM 87107	Office phone: (505)241-7752 Office fax: (505)241-7753 Pager: (505)790-5575 kbouska@pnm.com	Kelly Bouska District Engineer
	est O 3rd Street NW, Suite 700 ., NM 87102	Office phone: (505)245-8706 Office fax: (505)245-6831 dmuller@uswest.com	David Muller Capacity Provisioning Specialist
387	ne—Warner Telecom 30 Singer NE, Suite 1000 ., NM 87109	Office phone: (505)938-7339 Office fax: (505)938-7380 Royal.Harrison@twtwlwcom.com	Royal Harrison Plant Manager

GENERAL NOTES

- 1. All work detailed on these plans to be performed under this contract shall, except as otherwise stated or provided for herein, be constructed in accordance with the details and specifications of "City of Albuquerque Standard Specifications for Public Works Construction, 1986 Edition" as amended through update No. 7.
- 2. An Excavation Permit and Grading and Paving Permit will be required before beginning any work within City right-of-way.
- 3. Five (5) working days prior to beginning construction, the Contractor shall submit to Construction Coordination Division a detailed Construction Schedule. Two (2) days prior to the start of construction, the Contractor shall obtain a Barricading Permit from the Construction Coordination Division. The Contractor shall notify The Construction Coordination Engineer (924-3400) prior to occupying an intersection. Refer to Section 19 of the General Conditions of the Standard Specifications
- 4. Two working days prior to any excavation, the Contractor shall contact the New Mexico One Call System, 260-1990, for location of existing lines.
- 5. All street striping altered or destroyed shall be replaced with plastic reflectorized pavement markings by the Contractor. Striping shall be placed in the pre-construction location or as indicated by this plan set.
- 6. Prior to construction, the Contractor shall excavate and verify the horizontal and vertical location of all obstructions including existing utilities. Should a conflict exist, the Contractor shall notify the Engineer or Surveyor so that the conflict can be resolved with a minimum amount of delay.
- 7. Contractor shall coordinate with Water Systems Division (857-8200) seven working days in advance of any work that may affect existing public water or sewer utilities. Existing valves to be operated by city personnel only. Contractor shall contact the Water Systems Division seven working days prior to needing valves turned on or off. Refer to Section 18 of the
- 8. All water lines to be PVC C900 and all sanitary sewer lines are to be PVC SDR 35 pipe.
- 9. The Contractor will not be allowed to use Class IV or V soils for embedment of flexible pipe. The Contractor will not be allowed to deflect joints in flexible pipe. Any deflections required to meet horizontal or vertical alignment will be achieved between joints.
- 10. Back fill compaction requirements shall be according to residential street use.
- 11. The Contractor shall assume responsibility for any damage to existing pavement, pavement markings, curb and gutter, drivepads, wheel chair ramps and sidewalk during construction, apart from those sections indicated for removal on the plans; and shall repair or replace damaged items per City of Albuquerque standards at the Contractor's own expense.
- 12. Contractor shall record data on all utility lines and accessories as required by the City of Albuquerque for the preparation of "As Constructed" drawings. Contractor shall not cover utility lines and accessories until all data has been recorded.
- 13. All existing signs, markers, delineators, etc., within the construction limits shall be removed, stored and reset by the Contractor.
- 14. The Contractor shall notify the Engineer not less than seven (7) days prior to starting work in order that the Surveyor may take necessary measures to insure the preservation of survey monuments. Contractor shall not disturb permanent survey monuments without the consent of the Surveyor and shall notify the Surveyor and bear the expense of replacing any that may be disturbed without permission. Replacement shall be done only by the City Surveyor. When a change is made in the finished elevations of any roadway in which a Permanent Survey Monument is located, the Contractor shall, at his own expense, adjust the monument cover to the new grade unless otherwise specified. Refer to Section 4.4 of the General Conditions of the Standard Specifications.
- 15. The Contractor will be responsible for disposing of all debris, including but not limited to hazardous waste at disposal sites approved by governmental agencies regulating the disposal
- 16. All excavation will be governed by Federal State and Local laws, rules and regulations concerning construction safety and health.
- 17. All signs and coding will be in accordance with the "Manual of Uniform Traffic Control Devices" 2003 Edition.
- 18. When abutting new pavement to existing intersection streets, saw cut existing pavement to a straight line and at right angles and remove any broken or cracked pavement. No direct payment will be made for saw cutting.
- 19. Contractor will make all water valves and manholes accessible to the City at all times.
- 20. Contractor will confine his work, equipment, supplies and employee parking within the designated construction limits and/or public right—of—way.
- 21. The Contractor agrees to take necessary safety precautions as required by Federal, State and Local Authorities to protect pedestrian and vehicular traffic in the construction area, which includes but is not limited to: maintaining adequate warning signs, barricades, lights, guard fences, walks and bridges.
- 22. All asphaltic concrete shall be minimum 1800 lb. stability and compacted to 93%-97% Modified Marshall Density.

SURVEYOR'S CERTIFICATION

built' surveys performed by me or under my supe

23. All excavating, trenching and shoring activities must be carried out in accordance with OSHA 29CFR 1926.650, Subpart P.

"I, Timothy Aldrich, a duly qualified Registered Professional Land Surveyor under the laws of the State of New Mexico, do hereby certify that the 'as-built' information shown on these drawings was obtained from field construction and 'as-

24. The Contractor shall perform all work in accordance with the National Pollutant Discharge Elimination System (NPDES) and site specific Storm Water Pollution Prevention Plan (SWPPP)

VICINITY MAP NO. G-13

SHEET INDEX

SHEET NO.	SHEET DESCRIPTION
1	COVER SHEET
2	PLAT
3	GRADING AND DRAINAGE PLAN
4	STREET LAYOUT
5	STREET PLAN AND PROFILE
6	UTILITY LAYOUT
7	UTILITY PLAN AND PROFILE

NOTE: Privata Straats require street name signs, stop signs and any necessary striping are Developer's

> APPROVED AS RECORD DRAWINGS DESIGN REVIEW SECTION **CITY CONSTRUCTION ENGINEER** Gregory El lea 7-16-07



BORDENAVE DESIGNS P.O. BOX 91194, ALBUQUERQUE, NM 87199 (505) 823-1344 FAX (505) 821-9105

			-	:			i
		·					140 140
			ŕ		·		
RE	V. SHEETS	CITY ENGR.	DATE	USER DEPT	T. DAT	E USER DEPT.	DATE
E	NGINEER'S SEAI	L APPROVAL	ŕ	ENGINEER	DATE	APPROVED FO	
1		DRC CHAIRMAN		16512	3/20/06	CONSTRUCTION	NC
		WATER/WASTEWATER	3	Villiam Q. Baler	2/28/06		
I	WHITE OFESSION	TRANS. DEV.	Í	111/	2/28/54	;; qc ±	
1	THE SUPPLEMENT OF THE PROPERTY	HYDROLOGY		ILALE	2/28/06		
,	5110) 8 A				2 5	Bradley J. Binglam	. 11/17/06
1	20 2					CITY ENCINEED	DATE

DRB PROJECT NO. 1000795 CITY PROJECT NO. 771681

CONSTR. COORD.

SHEET

information shown on these drawings was added, by

2006034704 6422265 Page: 2 of 2 63/16/2006 02:32P Bk-2006C Pg-80 . co. PLAT R 12.06

LOTS 1 THROUGH 5

2005073964

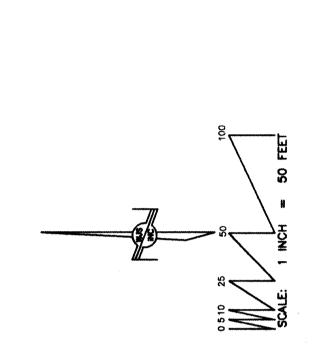
907

ALVARADO GARDENS UNIT (filed August 15, 1932; Vol. C2, folio 10) (Rec. S 8517'00" E 200.00') 83°03'15" E

RNER FALLS - NOT SET

1.78.175

Set 1/2" Rebar-Witness Corner, 20.00 S. on line cap "LS 14269"



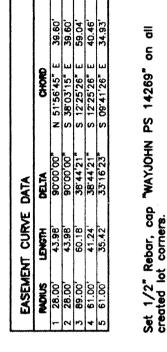
Rebar, 14269

(Orig. plat Rec. S 06'57'00" W & S (SEE NOTE 9) 543.74"

29044.09 s.f.
0.6668 Ac. (Gross)
17992.41 s.f.
0.4130 Ac. (Net)

(Ovig. plot Rec. N 06'57'00" E)

2351



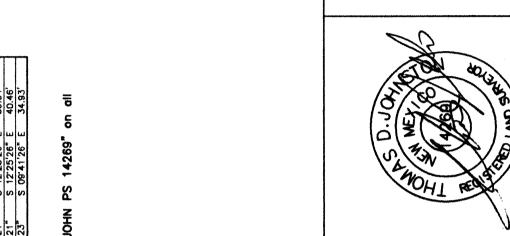
Set 1/2" Rel

Garage PS T

(See Note 7)

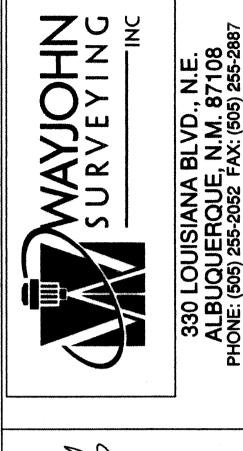
COURT, N. W. CHIEN SUNIT 1

(Tiled June 16, 1993; Vol. 93C, folio 170)



107.00'- 107

N 08.28,42" E



CLERK COUNTY CLERK CONNER: JOHN & NADINE MINER CHECKED: T LOCATION: SEC. 6 T.10 N., R.3 E., N.M.P.M. ALVARADO GARDENS UNIT 1 SP20105.DW(1.17.02	ALE
OB	INDEXING INFORMATION FOR COUNTY	
<u>a</u>	DWNER: JOHN & NADINE MINER	CHECKED: 1 [
	LUCARAN: SEC. 8 T.10 N., R.3 E., N.M.P.M. ALVARADO GARDENS UNIT 1	DRAWING NO. SP20105.DW(

1.17.5	PHC
DEXING INFORMATION FOR COUNTY	DRAWN:
MER. JOHN & NADINE MINER	CHECKED:
MAIRM: SEC. 6 10 N., R.3 E., N.M.P.M. VADADO CADDENS HNT 1	DRAWING NO.
treed depend on 1	Srz0103.

	A DHG	日常	8		ALBUQUERQUE, N.M. 87 PHONE: (505) 255-2052 FAX: (505)	ထြ
COUNTY	DRAWN:	E ×	` ≥	×	SCALE:	匝
ER	CHECKED: T D J	-	۵	5	1" = 50	R S
	DRAWING NO. SP20105.DWG	≧	ပြ		10 FEB 2005	\rightarrow \text{S}

DEXING INFORMATION FOR COUNTY ERK WHER: JOHN & MADINE MINER CHECKED: CATON: SEC. 6 DRAWING NO. 10 N., R.3 E., N.M.P.M. SP20105.	1.17.02	PHO
LOHN & NADINE MINER ON: SEC. 6 I., R.3 E., N.M.P.M. DO GARDENS UNIT 1	EXING INFORMATION FOR COUNTY	DRAWN:
8	NER: JOHN & NADINE MINER	CHECKED:
	O N., R.J E., N.M.P.M. ARADO GARDENS UNIT 1	SP20105

83.03'15" V (Rec. N 83'1) A V E N O. W.)

* >₀

°,0 €

三~

LAND SE		330	330 LOUISI/
1.17.02		ALBU	ALBUQUERC
	Ĭ	ONE: (5	PHONE: (505) 255-2
ATION FOR COUNTY	DRAWN:	EWK)S
NADINE MINER	CHECKED: T D J	707	-
N.M.P.W. NS UNIT 1	DRAWING NO. SP20105.DWG	DWG.	10 F

1.12.CL	ALBUQI PHONE: (505)	ALBUQI ONE: (505)	2 m iii	1 分 8	いれの
4G INFORMATION FOR COUNTY	DRAWN:	m	EWK	¥	
JOHN & NADINE MINER	CHECKED:	-	T D J	ŋ	
R.3 E., N.M.P.M. DO GARDENS UNIT 1	DRAWING NO. SP20105.DWG	ă	ပ္		
					l

PLAT OF LOTS 1 THROUGH 5 CORIANDA COURT

907

05028

308

MAYJOF SURVEYII

HUDEXING INFORMATION FOR CLERK.
OWNER: JOHN & NADINE N.
LOCATION: SEC. 6
T. 10 N., R.3 E., N.M.P.M.
ALVARADO GARDENS UNIT

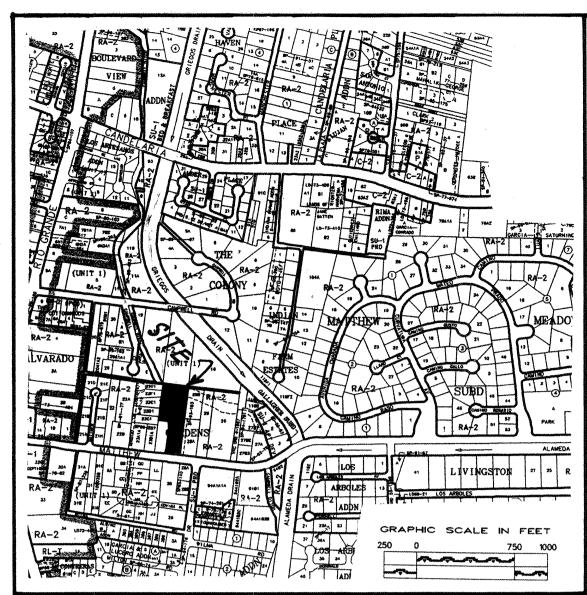
330 LOUISIANA BLVD., N.E. ALBUQUERQUE, N.M. 87108 HONE: (505) 255-2052 FAX: (505) 255-288 E.W. K. SCALE: IFILE NO

THIS IS TO CERTIFY THAT TAXES ARE CURRENT UPC# 1 013 060 112 085 30613

ight Hemera

 \mathbb{Z}

cardens Unit No. 1 into five lots the Sewer and Water and Public Utility the desires of the undersigned and indefeasible title in fee simple



VICINITY MAP

EROSION CONTROL MEASURES:

- THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR MANAGEMENT OF STORM RUNOFF DURING CONSTRUCTION; HE SHALL ENSURE THAT THE FOLLOWING MEASURES ARE
- 1) ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY CONSTRUCTION OF BERMS, DIKES, SWALES, PONDS, AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUNOFF FROM LEAVING THE SUBJECT SITE AND ENTERING ADJACENT PROPERTIES.
- 2) ADJACENT PUBLIC RIGHT-OF-WAYS SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUNOFF FROM THE SUBJECT SITE. NO SEDIMENT BEARING
- 3) THE CONTRACTOR SHALL IMMEDIATELY AND THOROUGHLY REMOVE ANY AND ALL SEDIMENT FROM PUBLIC STREETS THAT HAS BEEN ERODED FROM THE SUBJECT SITE AND DEPOSITED THEREON

CONSTRUCTION NOTES:

- 1) TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION. CONTRACTOR MUST CONTACT LINE LOCATING SERVICE AT 260-1990 FOR THE ACTUAL FIELD LOCATION OF THE EXISTING SURFACE OF SUB-SURFACE UTILITIES.
- 2) PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION(S) OF ALL POTENTIAL OBSTRUCTIONS; SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM OF
- 3) ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH
- 4) ALL CONSTRUCTION WITHIN PUBLIC STREET RIGHT-OF-WAY(S) SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE/BERNALILLO COUNTY STANDARDS AND PROCEDURES.

LEGEND:

- TOP OF CURB ELEVATION = 7C = 63.25 CURB FLOWLINE ELEVATION = FL = 62.37
- EXISTING SPOT ELEVATION = -- 628 EXISTING CONTOUR ELEVATION = ___ - 63.0 _ _ -
- PROPOSED SPOT ELEVATION = 4-635 PROPOSED CONTOUR ELEVATION = 4/4
- PROPOSED OR EXISTING CONCRETE SURFACE = J.:::::::::
- EXISTING FENCE LINE = **

GENERAL NOTES:

- 1) NO PERIMETER BOUNDARY CORNERS HAVE BEEN FIELD ESTABLISHED PER THIS SURVEY OF THE SUBJECT PROPERTY.
- 2) NO SEARCH HAS BEEN MADE FOR EASEMENTS OF RECORD OTHER THAN

NOTES

- 1. CONTRACTOR MUST OBTAIN A TOPSOIL DISTURBANCE PERMIT FROM THE ENVIRONMENTAL HEALTH DIVISION PRIOR TO
- CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION SHALL GOVERN ALL WORK. THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE AND FEDERAL DUST CONTROL MEASURES AND REQUIREMENTS AND WILL BE RESPONSIBLE FOR PREPARING AND OBTAINING ALL
- NECESSARY APPLICATIONS AND APPROVALS. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE LOTS INTO PUBLIC RIGHT—OF—WAY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AND WETTING THE SOIL TO KEEP IT FROM BLOWING.



MOTES:

LOCATION MAP

A REMOVE 2 EXISTING CURB CUTS, PROVIDE HEN 28' KIDE CURB CUT FOR HEN 28' PRIVATE DRIVE PER C.O.A. STANDARDS. B. RELOCATE EXISTING POWER POLE. O-> EXISTING CURB CUT TO BE REMOVED AND REPLACED WITH HEW SIDEWILK.

(T) - PROPOSED 28' PAVED PRIVATE DRIVE.

CURB & GUTTER PER C.O.A. STXNDARDS.

(2) - 3:1 MAX. ON ALL SIDE SLOPES (TYPICAL)

LEGAL DESCRIPTION: LOTS 24A, 24B, 24C, 24D, & 24E, ALVARADO GARDENS, UNIT 1, (BEING A REPLAT OF PORTION OF LOT 24), ALBUQUERQUE, NEW MEXICO.

BENCHMARK REFERENCE: ACS STATION "3-G12", LOCATED AT THE WEST SIDE OF THE INTERSECTION OF MATTHEW AVE. N.W. AND RIO GRANDE BLVD. N.W.; ELEV. = 4963.294, (T.B.M. AS SHOWN).

TABLE A-9. PEAK DISCHARGE (cfs/acre) ВС 2 1.56 2.28 3.14 4.70 [0.00, 0.38] [0.08, 0.95] [0.60, 1.71] [1.86, 3.14] 1.87 2.60 3.45 5.02 [0.00, 0.58] [0.21, 1.19] [0.78, 2.00] [2.04, 3.39]

TABLE A-10. PEAK INTENSITY (IN/HR at to = 0.2 hour)				
Zone	intensity	100-YR [2-YR, 10-YR]		
1	4,70 { 1.84, 3,14 }			
2	5,05 [2.04, 3.41]			
3	5.38 [2.21, 3.65]			
4	5.61 [2.34, 3.83]	,		

INTRODUCTION AND SITE LOCATION

The proposed Alvarado Gardens Subdivision as shown hereon is located east of Rio Grande Boulevard just north of Matthew Avenue. The 2.0 acre property will be subdivided into 5 residential lots. The site generally drains from north to south.

METHODOLOGY

The hydrologic and hydraulic criteria in Section 22 of the City of Albuquerque Development Process Manual (DPM), entitled "Drainage, Flood Control, and Erosion Control," was followed to perform the analyses given in this report. The design storm used for both the existing undeveloped and developed conditions of the Alvarado Gardens Subdivision are the 100-year, 6-hour, 100-year, 24-hour and 100-year, 10-day storm events for runoff volume computations.

EXISTING DRAINAGE CONDITIONS

INTRODUCTION

The FEMA Flood Insurance Rate Map Number 35001C0331D, effective date September 20. 1996, shown in Figure 1, indicates that the property is in Zone X, which is an area of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood.

OFF-SITE FLOWS

There are no offsite flows that reach the site.

ON-SITE FLOWS

For the existing conditions hydrologic analysis, land treatment types, C and D were used to determine peak flows. The Type D land treatment was used for the existing buildings onsite. Although there is only one drainage basin during existing conditions, runoff calculations were calculated for each proposed lot for comparison purposes.

DEVELOPED DRAINAGE CONDITIONS

DRAINAGE BASIN DELINEATION

Plate 1 shows that each lot will be a drainage basin since it will have CMU garden walls/berms along the lot lines. The building pads and the road will be raised above the natural ground to allow for ponding on the lots.

HYDROLOGIC ANALYSIS

To determine the peak flows of each basin a hydrologic analysis was performed in accordance to section 22.2 of the Development Process Manual (DPM). The property is located in Zone 2, which has a 100-year 24-hour storm event of 2.75 inches and a 100-year, 10 day storm event of 3.95 inches.

The subdivision was assigned land treatment values in accordance with Tables A-4 and A-5 of the DPM's section 22.2. Table 2 shows the Land Treatments and peak flows for each basin.

DRAINAGE CONCEPT

It is proposed that this subdivision will follow the "flat grading scheme." The subdivision fits all of the requirements for a flat grading scheme. The site is flat with no off-site flows. The maximum impervious area for each lot will be approximately 55% including the pad and the driveway. The access road will have a paved surface with no sidewalks. The pad elevation will be a minimum of one foot above the 100-year, 10-day storm water surface elevation. The high point of the road will be a minimum 4 inches above the 100-year, 10-day storm water surface elevation. The flow between the front yard and back yard will not be obstructed to allow for equalization of ponded water.

SITE AREA: 1.97 ACRES, ZONE: TWO (2)

RECIPITATION:	360	===	2.35 IN
	1440	****	2.75 IN
	10 DAY	===	3 95 TN

EXCESS PRECIPITATION:	PEAK DISCHARGE: (CFS/
TREATMENT 'A' = 0.53 IN.	1.56
TREATMENT 'B' = 0.78 IN.	2.28
TREATMENT 'C' = 1.13 IN.	3.14
TREATMENT 'D' = 2.12 IN.	4.70

EXISTING CONDITIONS:

REATMENT	AREA/ACRES		FACTOR		<u>CFS</u>
\mathbf{c}	1.94	X	3.14		6.09
D	0.03	X	4.70	=	0.14

"Qp' = $\underline{6.23}$ CFS

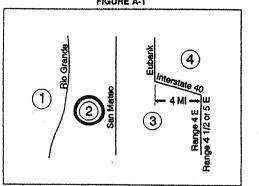
 $V100 - 360 = (1.15) \times (1.97) / 12 = 0.1888 \text{ AC./FT.} = 8,224.1 \text{ CU. FT.}$ $V100 - 1440 = (0.1888) + (0.03) \times (2.75 - 2.35) / 12 = 8,267.7 \text{ CU. FT.}$ $V100 - 10 DAY = (0.1888) + (0.03) \times (3.95 - 2.35) / 12 = 8,398.4 CU.FT.$ TO POND: 8,398.4 - 8,224.1 = 174.3 CU. FT.

A.1 PRECIPITATION ZONE

ernalillo County's four precipitation zones are indicated in TABLE A-1 and on

TABLE A-1. PRECIPITATION ZONES					
Zone	Location				
1	West of the Rio Grande				
②	Between the Rio Grande and San Mateo				
3	Between San Mateo and Eubank, North of Interstate 40; and between San Mateo and the East boundary of Range 4 East, South of Interstate 40				
4	East of Eubank, North of Interstate 40; and East of the East boundary of Range 4 East, South of Interstate 40				

FIGURE A-1



DPM SECTION 22.2 - HYDROLOGY

	TABLE A-4. LAND TREATMENTS				
Treatment	Land Condition				
'A	Soil uncompacted by human activity with 0 to 10 percent slopes. Native grasses, weeds and shrubs in typical densities with minimal disturbance to grading, groundcover and infiltration capacity. Croplands. Unlined arroyos.				
В	Irrigated lawns, parks and golf courses with 0 to 10 percent slopes. Native grasses, weeds and shrubs, and soil uncompacted by human activity with slopes greater than 10 percent and less than 20 percent				
С	Soil compacted by human activity. Minimal vegetation. Unpaved parking, roads, trails. Most vacant lots. Gravel or rock on plastic (desert landscaping). Irrigated lawns and parks with slopes greater than 10 percent. Native grasses, weeds and shrubs, and soil uncompacted by human activity with slopes at 20 percent or greater. Native grass, weed and shrub areas with clay or clay loam soils and other soils of very low permeability as classified by SCS Hydrologic Soil Group D.				
D	Impervious areas, pavement and roofs.				

Most watersheds contain a mix of land treatments. To determine proportional treatments, measure respective subareas. In lieu of specific measurement for

tment D, the areal percentages in TABLE A-5 may be employed.

PROPOSED DEVELOPED LOTS: (3,800 SQ. FT. ± RESIDENTIAL STRUCTURES, 0.09 AC.)

watershed extends across a zone boundary, use the zone which contains the largest portion of the

(LOT 24A, 0.28 AC.)

TREATMENT	AREA/ACRES	the seek typical	FACTOR	er a second a second	<u>C</u>
C	0.19	X	3.14		0.0
D	0.09	X	4.70	and the second s	0.4
" $Qp' = 1.02 C$	FS				

 $V100 - 360 = (1.45) \times (0.28) / 12 = 0.034 \text{ AC./FT.} = 1.481.0 \text{ CU. FT.}$ $V100 - 1440 = (0.034) + (0.09) \times (2.75 - 2.35) / 12 = 1,611.7 \text{ CU. FT.}$ $V100 - 10 DAY = (0.034) + (0.09) \times (3.95 - 2.35) / 12 = 2,003.8 CU.FT.$ TO POND: 2,003.8 - 1,481.0 = 522.8 CU. FT.

(LOT 24B, 0.28 AC.)

TREATMENT	AREA/ACRES		FACTOR		CH
c	0.19	X	3.14	enter spinor	0.0
D	0.09	\mathbf{X}	4.70	===	0.4

"Qp' = 1.02 CFS

 $V100 - 360 = (1.45) \times (0.28) / 12 = 0.034 \text{ AC./FT.} = 1.481.0 \text{ CU. FT.}$ $V100 - 1440 = (0.034) + (0.09) \times (2.75 - 2.35) / 12 = 1,611.7 \text{ CU. FT.}$ $V100 - 10 DAY = (0.034) + (0.09) \times (3.95 - 2.35) / 12 = 2,003.8 CU.FT.$ TO POND: 2,003.8 - 1,481.0 = 522.8 CU. FT.

(LOT 24C, 0.39 AC.)

IKEAIMENI	AREA/ACKES		FACTOR		<u>CF</u> :
C	0.18	x	3.14	200	0.5
D	0.21	X	4.70	ethioru Aujulip	0.9
"O-" - 1	ee org				

 $V100 - 360 = (1.66) \times (0.39) / 12 = 0.0540 \text{ AC./FT.} = 2,350.1 \text{ CU. FT.}$ $V100 - 1440 = (0.0540) + (0.21) \times (2.75 - 2.35) / 12 = 2,657.2 \text{ CU. FT.}$ $V100 - 10 DAY = (0.0540) + (0.21) \times (3.95 - 2.35) / 12 = 3,571.9 CU.FT.$ TO POND: 3,571.9 - 2,350.1 = 1,221.8 CU. FT.

(LOT 24D, 0.32 AC.)

KEAIMENI	AREA/ACRES	Pro to the transfer of	FACTOR	to the district of the second of the second of the second	<u>CF</u>
C	0.23	X	3.14	villages spinishe	0.7
D	0.09	X	4.70	===	0.4
"Op' = 1.1	4 CFS				

$V100 - 360 = (1.41) \times (0.32) / 12 = 0.0376 \text{ AC./FT.} = 1,637.9 \text{ CU. FT.}$

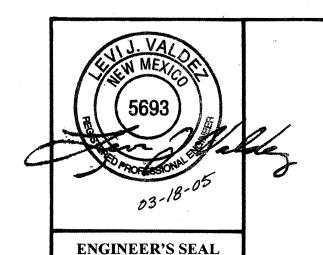
 $V100 - 1440 = (0.0376) + (0.09) \times (2.75 - 2.35) / 12 = 1.768.5 \text{ CU. FT.}$ $V100 - 10 DAY = (0.0376) + (0.09) \times (3.95 - 2.35) / 12 = 2,160.6 CU.FT.$ TO POND: 2,160.6 - 1,637.9 = 522.7 CU. FT.

(LOT 24E, 0.67 AC.)

<u> </u>	AREA/ACRES	<u> </u>	<u>FACTOR</u>		<u>CFS</u>
C	0.56	X	3.14	distant describ	1.76
D	0.11	X	4.70	Plants Named	0.52
" 0.1.0.1					

"Qp' = 2.28 CFS

 $V100 - 360 = (1.29) \times (0.67) / 12 = 0.0720 \text{ AC./FT.} = 3,136.3 \text{ CU. FT.}$ $V100 - 1440 = (0.0720) + (0.11) \times (2.75 - 2.35) / 12 = 3,296.0 \text{ CU. FT.}$ $V100 - 10 DAY = (0.0720) + (0.11) \times (3.95 - 2.35) / 12 = 3,775.2 CU.FT.$ TO POND: 3,775.2 - 3,136.3 = 638.9 CU. FT.



A PROPOSED

GRADING AND DRAINAGE PLAN

LOTS 24A, 24B, 24C, 24D, AND 24E

ALVARADO GARDENS, UNIT 1

ALBUQUERQUE, NEW MEXICO FEBRUARY, 2005

3 of 7

