CITY OF ALBUQUERQUE



September 6, 2006

Mr. Gilbert Aldaz, PE

APPLIED ENGINEERING, INC.
1605 Blair Drive NE
Albuquerque, NM 87112

RE: VILLA PLAZA VIEJA SUBDIVISION (J-12/D19)

Engineers Certification for Release of Financial Guaranty

Engineers Stamp dated 08/22/2005

Engineers Certification dated 09/05/2006

Dear Gilbert:

Based upon the information provided in your Engineer's Certification Submittal dated 09/05/2006, the above referenced plan is adequate to satisfy the Grading and Drainage Certification for Release of Financial Guaranty.

P.O. Box 1293

If you have any questions, you can contact me at 924-3982.

Albuquerque

Sincerely,

New Mexico 87103

Arlene V. Portillo

Plan Checker, Planning Dept.- Hydrology

Development and Building Services

www.cabq.gov

C: Marilyn Maldonado, COA# 642482

File

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/28/2003rd)

→	
PROJECT TITLE: Villa Plaza Vieja DRB #: 1004267 EPC#:	ZONE MAP/DRG. FILE #:
DRB #: 1004267	WORK ORDER#: 642482
LEGAL DESCRIPTION: Lots 1-A-1 thru 1-A-6 Law CITY ADDRESS:	as of Manuel 4-Cathy Gonzales
ENGINEERING FIRM: Applied Engr Trac ADDRESS: 1605 Blair Dr. NE	CONTACT: Gilbert Aldzz PHONE: 237-1456
CITY, STATE: Albuq NM 87112	ZIP CODE: 87112
OWNER: Centurion Builders ADDRESS: 2517 Mountain Rd NW	CONTACT: Gary Mirabal PHONE: 250-8565
CITY, STATE: Albug. NM	PHONE: 250-8565 ZIP CODE: 87104
ARCHITECT:	
= ADDRESS:	CONTACT:PHONE:
CITY, STATE:	ZIP CODE:
SURVEYOR:	
ADDRESS	CONTACT:PHONE:
CITY, STATE:	ZIP CODE:
CONTRACTOR:	CONTACT:
ADDRESS:	PHONE:
CITY, STATE:	ZIP CODE:
CHECK TYPE OF SUBMITTAL:	CHECK TYPE OF APPROVAL SOUGHT:
DRAINAGE REPORT	X SIA / FINANCIAL GUARANTEE RELEASE
DRAINAGE PLAN 1 st SUBMITTAL, REQUIRES TCL or equal DRAINAGE PLAN RESUBMITTAL	PRELIMINARY PLAT APPROVAL
CONCEPTUAL GRADING & DRAINAGE PLAN	S. DEV. PLAN FOR SUB'D. APPROVAL
GRADING PLAN	S. DEV. PLAN FOR BLDG. PERMIT APPROVAL SECTOR PLAN APPROVAL
EROSION CONTROL PLAN	FINAL PLAT APPROVAL
ENGINEER'S CERTIFICATION (HYDROLOGY) CLOMR/LOMR	FOUNDATION PERMIT APPROVAL
TRAFFIC CIRCULATION LAYOUT (TCL)	BUILDING PERMIT APPROVAL
ENGINEERS CERTIFICATION (TCL)	CERTIFICATE OF OCCUPANCY (PERM.) CERTIFICATE OF OCCUPANCY (TEMP.)
ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN) OTHER	GRADING PERMIT APPROVAL
OINCH	_ PAVING PERMIT APPROVAL
	WORK ORDER APPROVAL — OTHER (SPECIFY)
WAS A PRE-DESIGN CONFERENCE ATTENDED:	[] [B] [B] [D] [B] [D] [B] [B] [B] [B] [B] [B] [B] [B] [B] [B
YES	
NO COPY PROVIDED	SEP 0 5 2006 -
	HYDROLOGY SECTION
	I WODOLOGY SHUIUN I
	HYDROLOGI GEG
JATE SUBMITTED: 09-05-06 BY:	Aldaz.

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope of the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

- 1. Conceptual Grading and Drainage Plan: Required for approval of Site Development Plans greater than five (5) acres and Sector Plans.
- 2. Drainage Plans: Required for building permits, grading permits, paving permits and site plans less than five (5) acres.

CITY OF ALBUQUERQUE



September 2, 2005

Gilbert Aldaz, P.E. Applied Engineering, Inc. 1605 Blair Dr. NE Albuquerque, NM 87112

Villa Plaza Vieja, Lots 1-A-1 thru 1-A-6, Lands of Manuel & Cathy Gonzales Re: Grading & Drainage Plan - Engineer Stamp date 8-22-05 (J12/D19)

Dear Ms. Aldaz,

Based upon information provided in your submittal dated 8-22-05, the above referenced plan is approved as amended. This will be the plan that must be certified for Release of Financial Guaranty. Submit a mylar copy of the grading plan for my signature in order to

obtain a Grading Permit.

P.O. Box 1293

If you have any questions, you can contact me at 924-3990.

Albuquerque

Sincerely,

Phillip J. Lovato, E.I., C.F.M.

New Mexico 87103 Associate Engineer, Planning Department

Development and Building Services

www.cabq.gov

file Cc:

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/28/2003rd)

PROJECT TITLE: Villa Plaza Vieja DRB #: 1004267 EPC#:	ZONE MAP/DRG. FILE #: J-12/D19 WORK ORDER#: 642482
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LEGAL DESCRIPTION: Lots 1-A-1 thru 1-A-6 Law CITY ADDRESS:	ds of Manuel & Cathy Gonzales
ENGINEERING FIRM: Applied Engr Trac ADDRESS: 1605 Blair Dr. NE CITY, STATE: Albug Nm 87112	CONTACT: Gilbert Aldze PHONE: 237-1456 ZIP CODE: 87112
OWNER: Centurion Builders	CONTACT: Gavy Mirabal PHONE: 250-8565
ADDRESS:CITY, STATE:	
·	ZIP CODE:
ARCHITECT:	CONTACT:
= ADDRESS:CITY, STATE:	PHONE:
	ZIP CODE:
SURVEYOR:	CONTACT:
ADDRESS	PHONE:
CITY, STATE:	ZIP CODE:
CONTRACTOR:	CONTACT:
ADDRESS:	PHONE:
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CHECK TYPE OF SUBMITTAL:	CHECK TYPE OF APPROVAL SOUGHT:
DRAINAGE REPORT DRAINAGE PLAN 1st Submittal, Requires tcl or equal Drainage Plan Resubmittal CONCEPTUAL GRADING & DRAINAGE PLAN GRADING PLAN EROSION CONTROL PLAN ENGINEER'S CERTIFICATION (HYDROLOGY) CLOMR/LOMR TRAFFIC CIRCULATION LAYOUT (TCL) ENGINEERS CERTIFICATION (TCL) ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN) OTHER	SIA / FINANCIAL GUARANTEE RELEASE PRELIMINARY PLAT APPROVAL S. DEV. PLAN FOR SUB'D. APPROVAL S. DEV. PLAN FOR BLDG. PERMIT APPROVAL SECTOR PLAN APPROVAL FINAL PLAT APPROVAL FOUNDATION PERMIT APPROVAL BUILDING PERMIT APPROVAL CERTIFICATE OF OCCUPANCY (PERM.) CERTIFICATE OF OCCUPANCY (TEMP.) GRADING PERMIT APPROVAL PAVING PERMIT APPROVAL WORK ORDER APPROVAL OTHER (SPECIFY)
WAS A PRE-DESIGN CONFERENCE ATTENDED: YES NO COPY PROVIDED	D 国 区 区 D — AUG 2 2 2005 — HYDROLOGY SECTION
JATE SUBMITTED: 08-22-05 BY:	filbert Aldaz

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope of the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

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DRAINAGE REPORT

FOR THE

GEORGE GONZALES SUBDIVISION

ON

LOTS 1-A-1 THRU 1-A-6

LANDS OF MANUEL AND CATHY GONZALES

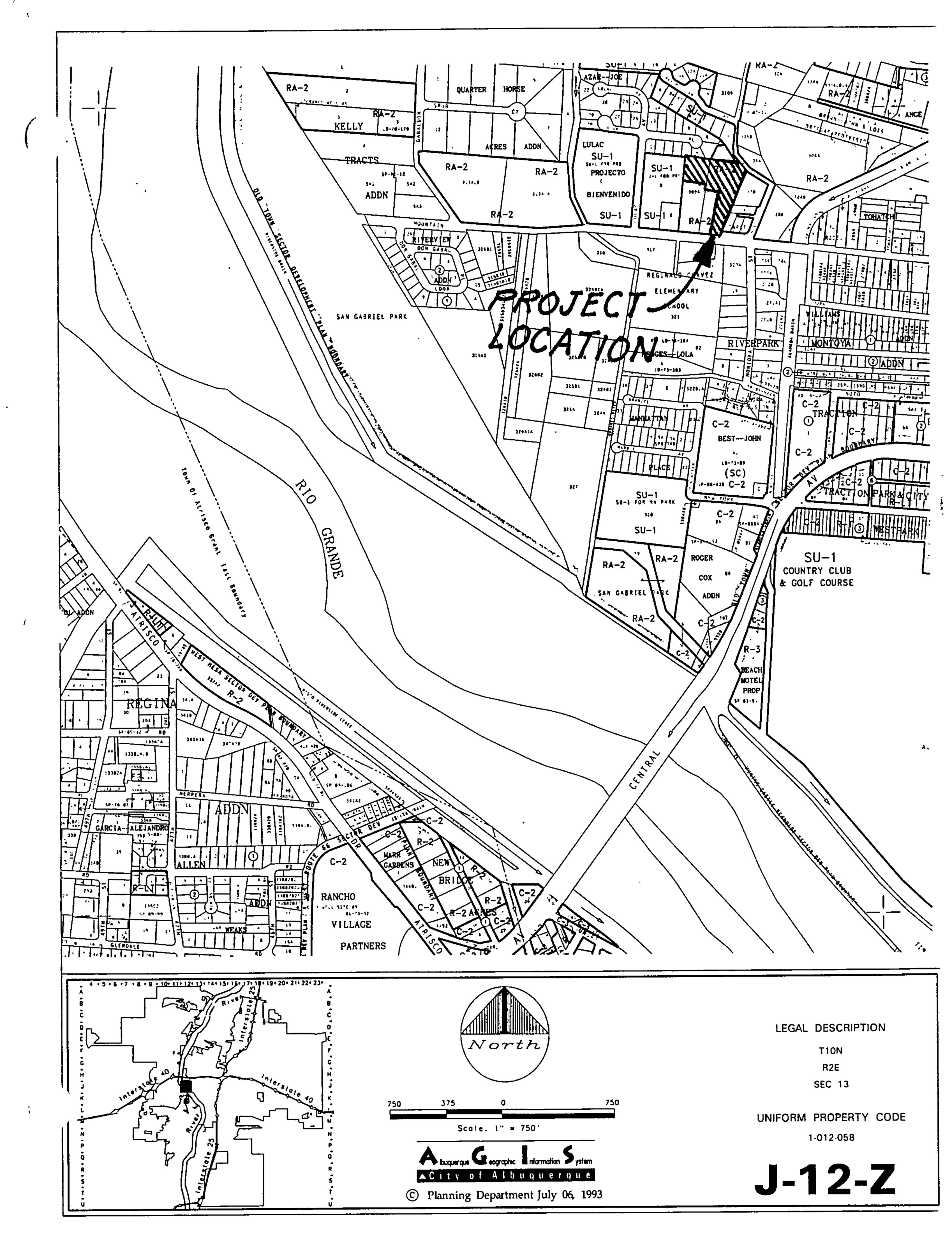
SECTION 13, T. 10 N., R. 2 E., N.M.P.M.

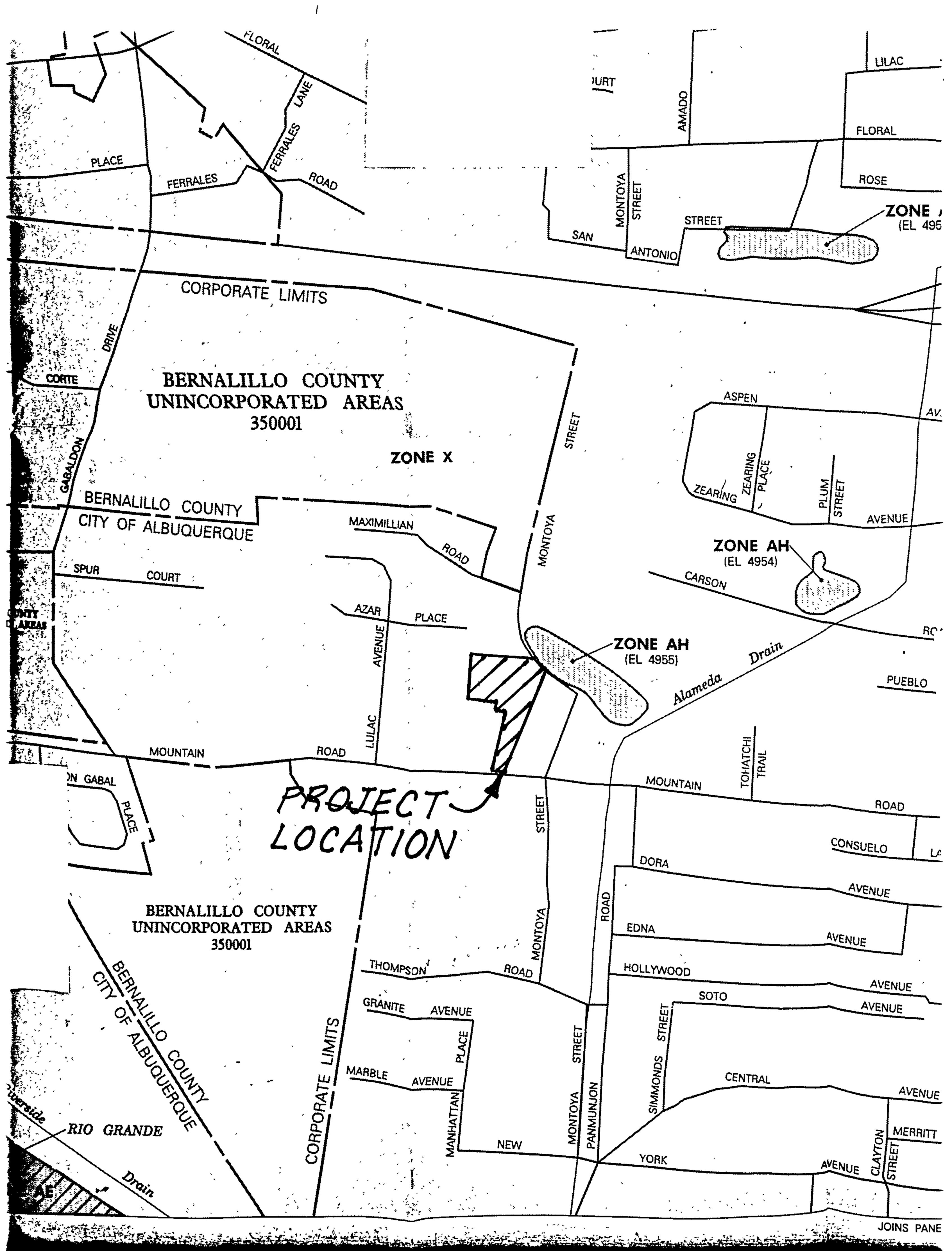
ALBUQUERQUE, NEW MEXICO

APRIL, 2000

PREPARED BY

APPLIED ENGINEERING AND SURVEYING, INC.
1605 BLAIR DRIVE NE
ALBUQUERQUE, NEW MEXICO 87112
(505)237-1456





DRAINAGE PLAN

THE FOLLOWING ITEMS CONCERNING A NEW SUBDIVISION FOR LOTS 1-A-1 THRU 1-A-6, LANDS OF MANUEL AND CATHY GONZALES, SECTION 13, T. 10 N, R. 2 E., N.M.P. M., ALBUQUERQUE, NEW MEXICO, GRADING AND DRAINAGE PLAN ARE CONTAINED HEREON:

- 1. VICINITY MAP
- 2. GRADING AND DRAINAGE PLAN
- 3. FLOODMAP
- 4. DRAINAGE CALCULATIONS

EXPING CONDITIONS

AS SHOWN BY THE VICINITY MAP, THE SITE CONTAINS APPROXIMATELY 2.21 ACRES AND IS LOCATED ON THE WEST SIDE OF MONTOYA ROAD NW, NORTH OF MOUNTAIN ROAD NW, (SEE ATTACHED VICINITY MAP). THIS SITE CONTAINS ONE EXISTING RESIDENCE AS SHOWN ON LOT 1-A-6, THE REMAINING PROPOSED LOT ARE UNDEVELOPED.

THE SITE TOPOGRAPHY IS FLAT IN THIS AREA AS THE MAJORITY OF THE VALLEY IS AT THIS LOCATION. THE SITE IS SPARSELY COVERED WITH NATIVE GRASSES.

PROPOSED CONDITIONS

AS SHOWN BY THE PLAN, THE PROJECT CONSISTS OF A SUBDIVISION WITH 6 NEW LOTS, AN EXISTING RESIDENCE WILL REMAIN IN LOT 1-A-6. DUE TO THE NATURE OF THE PROPERTY AND THE LACK OF STORM DRAINAGE FACILITIES, A "FLAT" GRADING SCHEME IS PROPOSED.

DUE TO THE FLAT GRADING SCHEME REQUIREMENTS FOR ROAD CONSTRUCTION, (THE HIGH POINT OF THE ROADWAY IS TO BE 4" ABOVE THE 100-YEAR, 10 DAY WATER SURFACE ELEVATION). THE NEW ROADWAY WILL BE DESIGNED WITH A NORMAL CROWN AND ESTATE TYPE CURB IN ORDER TO ALLOW THE STREET FLOW FRONTAGE TO DRAIN INTO EACH OF THE PROPERTYS. THE PLAN SHOWS THE PROPOSED ELEVATIONS REQUIRED TO PROPERLY GRADE THE REQUIRED PAVING AND DRAINAGE IMPROVEMENTS. ALL DRIVEWAYS AND PARKING AREAS WILL BE PAVED, LANDSCAPING IS TO BE PROVIDED PER ZONING REQUIREMENTS.

WITH REGARDS TO THE PROPOSED CONDITIONS THAT ARE SHOWN IN THE CALCULATIONS, THE AVERAGE HOUSE IN THIS AREA IS ABOUT 1300 SQUARE FEET. DUE TO THE SIZE OF THE 0.25 ACRE LOT A 2000 SQUARE FEET HOUSE WAS ASSUMED WITH ABOUT 500 SQUARE FEET FOR DRIVEWAYS AND SIDEWALKS.

THE CALCULATIONS WHICH APPEAR HEREON, ANALYZE BOTH THE EXISTING AND DEVELOPED CONDITIONS FOR THE 100-YEAR, 6 HOUR RAINFALL RUNOFF FOR PEAK FLOWS AND STORM DURATION FOR VOLUME REQUIREMENTS. THE PROCEDURE FOR 40 ACRE AND SMALLER BASINS AS SET FORTH IN THE REVISION OF SECTION 22.7 HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME 2, DESIGN CRITERIA, DATED JANUARY 1993. THIS D.P.M. PROCEDURE IS USED FOR ANALYZING ONSITE FLOWS.

DOWNSTREAM CAPACITY

THERE ARE NO ACCESSIBLE STORM DRAIN FACILITIES IN THIS AREA THAT THIS SUBDIVISION CAN DRAIN INTO; THEREFORE DOWNSTREAM DRAINAGE CAPACITY IS NOT AN ISSUE.

ACCORDING TO THE FLOOD INSURANCE RATE MAP (SEE ATTACHED MAP COPY), PANEL 35001C0331 D, DATED SEPTEMBER 20, 1996, THIS SITE DOES NOT LIE IN A DESIGNATED FLOODPLAIN.

EROSION CONTROL

TEMPORARY EROSION CONTROL WILL BE REQUIRED DURING THE CONSTRUCTION PHASE TO PROTECT DOWNSTREAM PROPERY AND IMPROVEMENTS FROM SEDIMENT AND UNCONTROLLED RUNOFF. THE CONTRACTOR SHALL INCLUDE TEMPORARY EARTH BERMING ALONG THE SOUTH, NORTH, EAST AND WEST SIDE OF THE PROJECT BOUNDARIES TO HOLD RUNOFF DURING CONSTRUTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROPERLY MAINTAIN THESE FACILITIES DURING THE CONSTRUCTION PHASE OF THE PROJECT.

OFFSITE FLOWS

THERE ARE NO OFFSITE FLOWS THAT ENTER THIS PROPERTY, SINCE THE SURROUNDING PROPERTY IS FLAT.

DRAINAGE CALCULATIONS

- 1. PRECIPITATION ZONE = 2
- 2. DESIGN STORM = DEPTH (INCHES) AT 100-YEAR STORM

6-HOUR = 2.35 INCHES

24-HOUR = 2.75 INCHES

10 DAY = 3.95 INCHES

- 3. PEAK DISCHARGE (CFS/ACRE) FIR 100-YEAR, ZONE 2, TABLE A-9:
 - Q = 1.56 CFS/ACRE SOIL UNCOMPACTED "A"
 - Q = 2.28 CFS/ACRE LANDSCAPED "B"
 - Q = 3.14 CFS/AC COMPACTED SOIL "C"
 - Q = 4.70 CFS/ACRE IMPERVIOUS AREA "D"

FOR WATERSHEDS LESS THAN OR EQUAL TO 40 ACRES

- 4. EXCESS PRECIPITATION, E (INCHES), 6 HOUR STORM, ZONE 2, TABLE A-8:
 - E = 0.53 INCHES SOIL UNCOMPACTED "A"
 - E = 0.78 INCHES LANDSCAPED "B"
 - E = 1.13 INCHES COMPACTED SOIL "C"
 - E = 2.12 INCHES IMPERVIOUS AREA 'D"
- 5. EXISTING CONDITIONS ONSITE,

LOT 1-A-6:

EXISTING 2800SF RESIDENCE AND 1000SF PATIO/DRIVEWAY, TREATMENT "D", AREA = 0.09ACRES

REMAINING PORTION OF LOT, TREATMENT "C", AREA = 0.56 ACRES

TREATMENT	AREA(ACRES)
Α	0
В	0
C	0.56(COMPATED BY HUMAN ACTIVITY)
D	0.09 (RESIDENCE AND DRIVEWAY/PATIO)

Q(EXISTING) = (3.14 X 0.56) + (4.70 X 0.09) = 2.18CFS (6HR) EXISTING ONSITE FLOW V(EXISTING-6HR) = ((1.13 X 0.56) + (2.12 X 0.09))/ 12) = 0.07AC-FT = 3049CF V(EXISTING-24HR) = (0.07AC-FT) + ((0.09AC X (2.75 - 2.35))/12 = 0.07AC-FT = 3,180CF V(EXISTING-10DAY) = (0.07AC-FT) + ((0.09AC X (3.95 - 2.35))/12 = 0.11AC-FT = 3,571CF

LOTS 1-A-1 THRU 1-A-5:

SOIL UNCOMPACTED, TREATMENT "A", AREA = 1.56ACRES

TREATMENT	AREA(ACRES)
Α	1.56
В	0
C	0
D	n

Q(EXISTING) = $(1.56 \times 1.56) = 2.4$ CFS EXISTING ONSITE FLOW V(EXISTING-6HR) = $((0.53 \times 1.56)) / 12) = 0.069$ AC-FT = 3006CF = V(24HR) = V(10DAY) NO IMPERVIOUS AREA

6. PROPOSED CONDITIONS ONSITE

TOTAL SUBDIVISION ACREAGE = 2.21 ACRES

LOT 1- A - 1 = 0.26 ACRES

LOT 1- A - 2 = 0.27 ACRES

LOT 1- A - 3 = 0.25 ACRES

LOT 1- A - 4 = 0.25 ACRES

LOT 1- A - 5 = 0.25 ACRES

LOT 1- A - 6 = 0.65 ACRES (NO ADDT. IMPROVEMENTS TO THIS LOT) ROADWAY = 0.28 ACRES

LOTS 1-A-1 THRU 1-A-5

IMPERVIOUS BUILDING AREA "D" = ((2000SF HOUSE X 5 LOTS) + (500SF DRVY X 5 LOTS) + (12,197SF ROADWAY))/43,560 = 0.57 ACRES TREATMENT "D"

LANDSCAPED AREA "B", ASSUME 30 % OF ACREAGE IS LANDSCAPED = 0.30 X 1.28 ACRES(LOTS 1-A-1 THRU 1-A-5) = 0.38ACRES TREATMENT "B"

ASSUME REMAINING AREA IS COMPACTED SOIL "C" = (1.28 - 0.57 - 0.38) = 0.61ACRES TREATMENT "C"

TREATMENT	AREA(ACRES)
Α	Q
В	0.38
C	0.61
D	0.57

Q(PROPOSED) = (2.28 X 0.38) + (3.14 X 0.61) + (4.70 X 0.57) = 5.46CFS PROPOSED ONSITE FLOW V(PROPOSED-6HR) = ((0.78 X 0.38) + (1.13 X 0.61) + (2.12 X 0.57)) /12 = 0.183AC-FT = 7,965CF V(PROPOSED-24HR) = (0.183AC-FT) + ((0.57AC X (2.75 - 2.35))/12 = 0.202AC-FT = 8,799CF

V(PROPOSED-10DAY) = (0.183AC-FT) + ((0.57AC X (3.95 - 2.35))/12= 0.259AC-FT = 11,282CF

7. <u>DEPTH OF STORMWATER</u>

AREA AVAILABLE FOR "STANDING" STORM WATER
= 0.12 + 0.15 + 0.14 + 0.12 + 0.13AC = 0.66AC

DEPTH OF STORM WATER:

V(PROPOSED-6HR) = 7.965CF / (0.66AC X 43560) = 0.28FT = 3.3INCH

V(PROPOSED-24HR) = 8,799CF / (0.66AC X 43560) = 0.31FT = 3.6INCH

V(PROPOSED-10DAY) = 11,282CF / (0.66AC X 43560) = 0.39FT = 4.7INCH

USE 0.40 FEET DEPTH - 10DAY (100YEAR) EVENT

ALBUQUERQUE NEW MEXICO

City of Albuquerque

May 10, 2000

Gilbert Aldaz, PE Applied Engineering & Survey, Inc. 1605 Blair Dr. NE Albuquerque, NM 87112

Re: George Gonzales Subdivision Grading Plan

Engineer's Stamp dated 4-25-00(J12/D19)

Dear Mr. Aldaz,

Based upon the information provided in your submittal dated 4-26-00, the above referenced plan is approved for Preliminary Plat action by the DRB. As you are aware, the Infrastructure List will need to have the CMU perimeter wall on it.

This plan is also approved for Grading Permit release.

Prior to Final Plat sign-off, the Subdivision Improvements Agreement (SIA) must be executed. Please be advised that the Grading Certification, including the perimeter wall, is required prior to release of the SIA.

If you have any questions, you can contact me at 924-3986.

Sincerely,

Bradley L. Bingham, PE

Hydrology Review Engineer

C: file

DRAINAGE INFORMATION SHEET

PROJECT TITLE: George Gonzales Subd. ZONE DRB #: 99-347 EPC #: LEGAL DESCRIPTION: Lots 1-A-1 thru 1-A-6, Lands	ATLAS/DRNG. FILE #:
PROJECT TITLE: 4019 PPC #	WORK ORDER #:
DRB #:	of Manuel & Cothy Gonzales
CITY ADDRESS:	111 1 11-
ENGINEERING FIRM: Applied Engineering & Surv.	CONTACT: Collbert Hidde
ADDRESS: 1605 Blair Dr NE	PHONE:
OWNER: George Gonzales	CONTACT:
ADDRESS: 2719 Mountain Ed NW	PHONE: 842-8/32
ARCHITECT:	CONTACT:
ADDRESS:	PHONE:
SURVEYOR: Marquez Surveying. SURVEYOR: George Marquez	contact: <u>George</u>
ADDRESS: 902 Fifth Street NW	PHONE: 842-6579
CONTRACTOR:	CONTACT:
ADDRESS:	PHONE:
CHECK	TYPE OF APPROVAL SOUGHT:
TAKE OF PODMITIME:	SKETCH PLAT APPROVAL
DRAINAGE REPORT Y	PRELIMINARY PLAT APPROVAL
DKAINAGE FLAN	S. DEV. PLAN FOR SUB'D. APPROVAL
COMPETINE GENERAL OF PROTEINS	
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ENGINEER'S CERTIFICATION X	FINAL PLAT APPROVAL
	FOUNDATION PERMIT APPROVAL
	BUILDING PERMIT APPROVAL
MINDUTENC.	CERTIFICATE OF OCCUPANCY APPROVAL
AKR-DR2TCM LEETTING.	GRADING PERMIT APPROVAL
YES	PAVING PERMIT APPROVAL
X NO	S.A.D. DRAINAGE REPORT
COPY PROVIDED D	•
[]] APR 2 6 2000 U	DRAINAGE REQUIREMENTS
	OTHER (SPECIFY)
HYDROLOGY SECTION	
DATE SUBMITTED: 04-26-00	
1.1/2	
BY: <u>Gilbert Aldaz</u>	