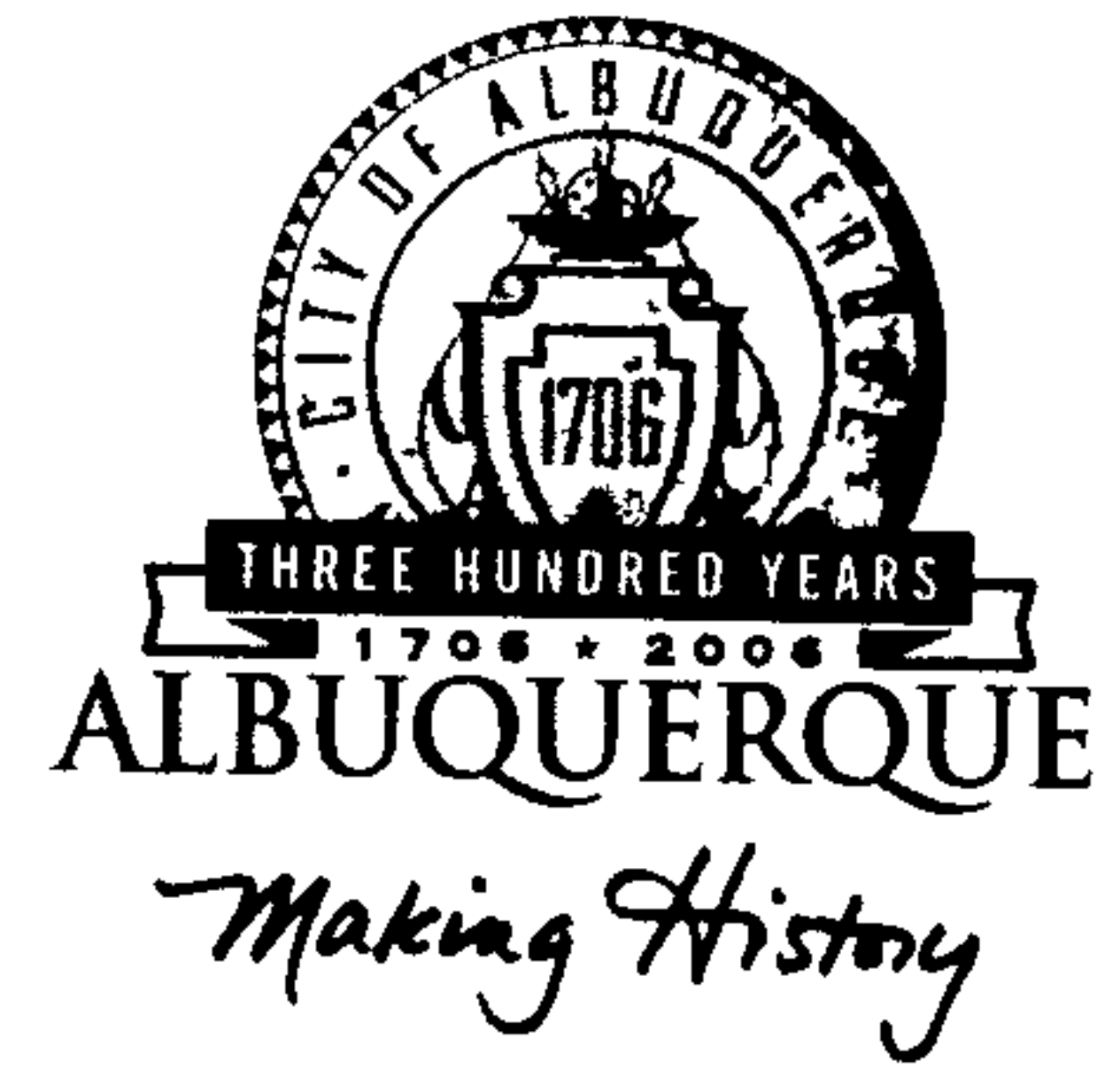


CITY OF ALBUQUERQUE



March 22, 2005

Mr. Ronald R. Bohannon, PE
TIERRA WEST, LLC
8509 Jefferson St. NE
Albuquerque, NM 87113

RE: RIVERVIEW ACRES SUBDIVISION (H-12/D3)
Engineers Certification for Release of Financial Guaranty
Engineers Stamp dated 10/09/2003
Engineers Certification dated 03/22/2005

Dear Ron:

Based upon the information provided in your Engineer's Certification Submittal dated 03/22/2005, the above referenced plan is adequate to satisfy the Grading and Drainage Certification for Release of Financial Guaranty.

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

Sincerely,

Arlene V. Portillo
Plan Checker, Planning Dept.- Hydrology
Development and Building Services

P.O. Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

C: Marilyn Maldonado, COA# 502582
File

DRAINAGE AND TRANSPORTATION SHEET

(REV. 1/28/2003rd)

PROJECT TITLE: Riverview Acres Subdivision
DRB 100097 EPC #: _____

ZONE MAP/DRG. FILE # H12/D3
WORK ORDER #: 5025.82

LEGAL DESCRIPTION Riverview Acres
CITY ADDRESS: Lots 1-13 Calle Facio

ENGINEERING FIRM: Tierra West, LLC
ADDRESS: 8509 Jefferson NE
CITY, STATE: Albuquerque, NM

CONTACT: Ronald R Bohannon
PHONE: (505) 858-3100
ZIP CODE: 87113

OWNER: STV Investments VI LLC
ADDRESS: 1015 Tijeras NW Ste 210
CITY, STATE: Albuquerque, NM

CONTACT: Tim McNaney
PHONE: 338-2286
ZIP CODE: 87102

ARCHITECT: N/A
ADDRESS: _____
CITY, STATE: _____

CONTACT: _____
PHONE: _____
ZIP CODE: _____

SURVEYOR: Precision Surveys
ADDRESS: 8414-D Jefferson NE
CITY, STATE: Albuquerque, NM

CONTACT: Larry Medrano
PHONE: 856-5700
ZIP CODE: 87113

CONTRACTOR: Salls Brothers Construction
ADDRESS: 7301 Reading Dr.
CITY, STATE: Albuquerque, NM

CONTACT: Fred Salls
PHONE: 873-8780
ZIP CODE: 87105

CHECK TYPE OF SUBMITTAL:

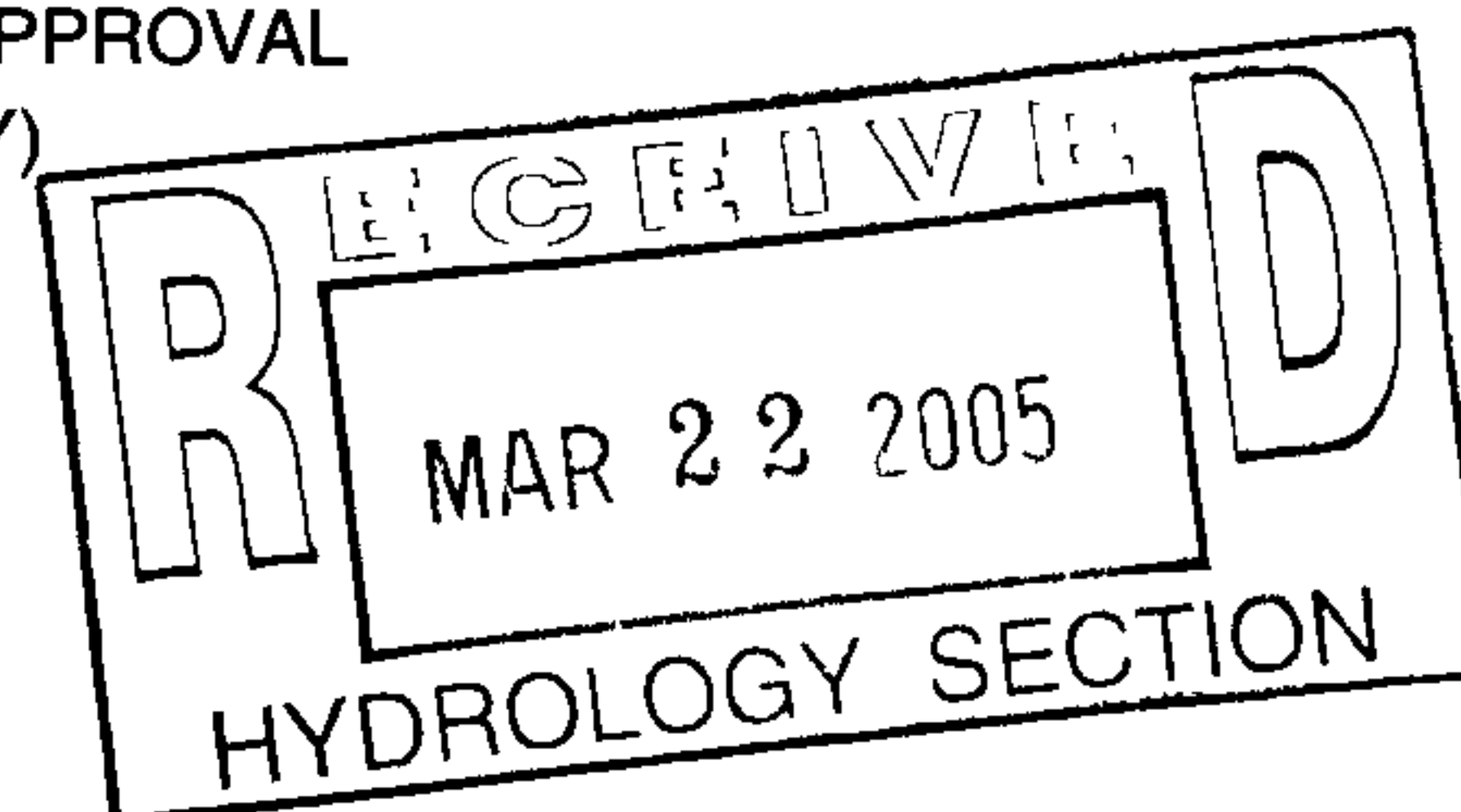
- ☐ DRAINAGE REPORT
☐ DRAINAGE PLAN 1st SUBMITTAL, **REQUIRES TCL or equal**
☐ DRAINAGE PLAN RESUBMITTAL
☐ CONCEPTUAL GRADING & DRAINAGE PLAN
☐ GRADING PLAN
☐ EROSION CONTROL PLAN
☒ ENGINEER'S CERTIFICATION (HYDROLOGY)
☐ CLOMR/LOMR
☐ TRAFFIC CIRCULATION LAYOUT (TCL)
☐ ENGINEERS CERTIFICATION (TCL)
☐ ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN)
☐ OTHER

CHECK TYPE OF APPROVAL SOUGHT:

- ☒ SIA / FINANACIAL 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



DATE SUBMITTED: 3/22/2005 BY: Brad Frosch

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 Plans:** 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.
3. **Drainage Report:** Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or more.



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

November 6, 2003

Ron Bohannon, PE
Tierra West LLC
8509 Jefferson NE
Albuquerque, NM 87113

Re: Riverview Acres Subdivision Drainage Report
Engineer Stamp date 10-9-03 (H12/D3)

Dear Mr. Bohannon,

Based on information provided in your submittal dated 10-9-03, the above referenced report is approved for Preliminary Plat action by the DRB. Once that board has approved the plan, please submit a mylar copy for my signature in order to obtain the Grading Permit.

This project requires a National Pollutant Discharge Elimination System (NPDES) permit. Refer to the attachment that is provided with this letter for details. If you have any questions please feel free to call the Public Works Hydrology section at 768-3654 (Charles Caruso) or 768-3645 (Brian Wolfe).

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

Sincerely,

Bradley L. Bingham, PE
Sr. Engineer, Planning Dept.
Development and Building Services

C: Chuck Caruso, CoA
file

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 01/28/2003rd)

PROJECT TITLE: Riverview Acres
DRB #: 1000997 EPC #: _____

ZONE MAP/DRG. FILE #: H-12
WORK ORDER #: _____

LEGAL DESCRIPTION: All or a portion of Tracts E1 and F1, American Square
CITY ADDRESS: Southwest corner of Carlisle and Claremont

ENGINEERING FIRM: TIERRA WEST, LLC
ADDRESS: 8509 JEFFERSON NE
CITY, STATE: ALBUQUERQUE, NM

CONTACT: RONALD R. BOHANNAN, P.E.
PHONE: (505) 858-3100
ZIP CODE: 87113

OWNER: _____
ADDRESS: _____
CITY, STATE: _____

CONTACT: _____
PHONE: _____
ZIP CODE: _____

ARCHITECT: _____
ADDRESS: _____
CITY, STATE: _____

CONTACT: _____
PHONE: _____
ZIP CODE: _____

SURVEYOR: Precision Surveys
ADDRESS: 8414-D Jefferson NE
CITY, STATE: Albuquerque, NM

CONTACT: Larry Medrano
PHONE: 856-5700
ZIP CODE: 87113

CONTRACTOR: _____
ADDRESS: _____
CITY, STATE: _____

CONTACT: _____
PHONE: _____
ZIP CODE: _____

CHECK TYPE OF SUBMITTAL:

<input checked="" type="checkbox"/>	DRAINAGE REPORT
<input type="checkbox"/>	DRAINAGE PLAN 1st SUBMITTAL, REQUIRES TCL or equal
<input type="checkbox"/>	DRAINAGE PLAN RESUBMITTAL
<input type="checkbox"/>	CONCEPTUAL GRADING & DRAINAGE PLAN
<input checked="" type="checkbox"/>	GRADING PLAN
<input type="checkbox"/>	EROSION CONTROL PLAN
<input type="checkbox"/>	ENGINEER'S CERTIFICATION (HYDROLOGY)
<input type="checkbox"/>	CLOMR/LOMR
<input type="checkbox"/>	TRAFFIC CIRCULATION LAYOUT (TCL)
<input type="checkbox"/>	ENGINEERS CERTIFICATION (TCL)
<input type="checkbox"/>	ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN)
<input type="checkbox"/>	OTHER

CHECK TYPE OF APPROVAL SOUGHT:

<input type="checkbox"/>	SIA / FINANACIAL GUARANTEE RELEASE
<input checked="" type="checkbox"/>	PRELIMINARY PLAT APPROVAL
<input type="checkbox"/>	S. DEV. PLAN FOR SUB'D. APPROVAL
<input type="checkbox"/>	S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
<input type="checkbox"/>	SECTOR PLAN APPROVAL
<input type="checkbox"/>	FINAL PLAT APPROVAL
<input type="checkbox"/>	FOUNDATION PERMIT APPROVAL
<input type="checkbox"/>	BUILDING PERMIT APPROVAL
<input type="checkbox"/>	CERTIFICATE OF OCCUPANCY (PERM.)
<input type="checkbox"/>	CERTIFICATE OF OCCUPANCY (TEMP.)
<input type="checkbox"/>	GRADING PERMIT APPROVAL
<input type="checkbox"/>	PAVING PERMIT APPROVAL
<input type="checkbox"/>	WORK ORDER APPROVAL
<input checked="" type="checkbox"/>	OTHER (SPECIFY) Drainage Approval

WAS A PRE-DESIGN CONFERENCE ATTENDED:

<input type="checkbox"/>	YES
<input checked="" type="checkbox"/>	NO
<input type="checkbox"/>	COPY PROVIDED

DATE SUBMITTED: 10/9/2003 BY: Tyler Ashton, PE

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 Plans:** 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.
3. **Drainage Report:** Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or more.

H-12/03

TW

Tierra West, LLC.

(505) 858-3100

8509 Jefferson NE, Albuquerque, NM 87113

TO Mr. Brad Bingham, PE
Sr. Engineer, Planning Dept.
Development and Building Services
City of Albuquerque
PO Box 1293
Albuquerque, NM 87113

LETTER OF TRANSMITTAL

DATE:	10/9/03	JOB NO:	200090T
ATTENTION: Mr. Brad Bingham			
RE:	Revised Drainage Report		
Riverview Acres Subdivision			

WE ARE SENDING YOU

☒

Attached

☐

Under Separate cover via _____ the following items:

☐

Shop drawings

☐

Prints

☐

Plans

☐

Samples

☐

Specifications

☐

Copy of letter

☐

Change order

☐

COPIES	DATED	NO.	DESCRIPTION
1		200090T	Revised Drainage Report
			Riverview Acres Subdivision

THESE ARE TRANSMITTED as checked below:

☒

For approval

☐

Approved as submitted

☐

FOR SIGNATURE(S)

☒

For your use

☐

Approved as noted

☐☒

As requested

☐

Returned for corrections

☐

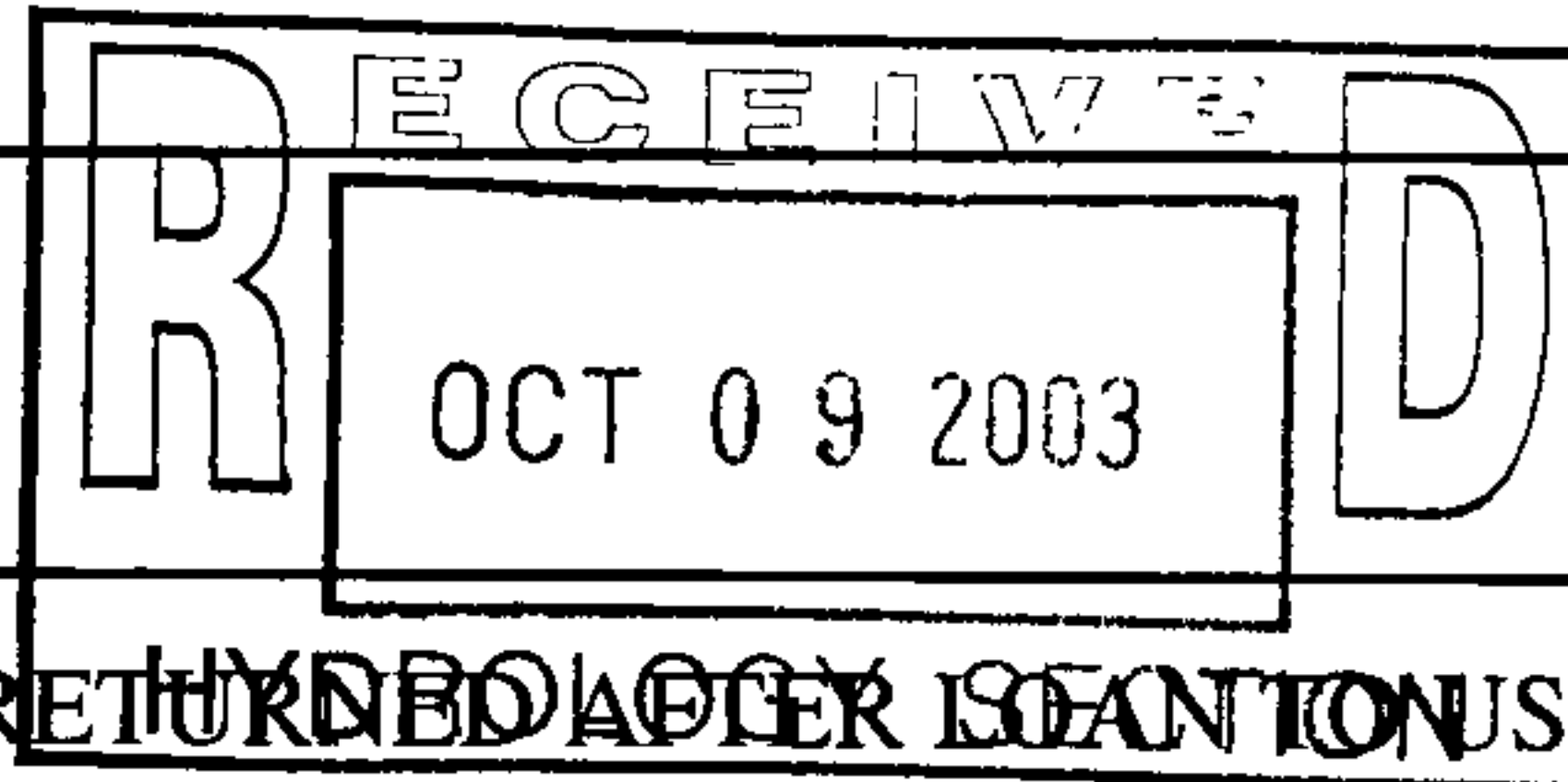
For review and comments

☐☐

FOR BIDS DUE _____ 20 _____

☐

PRINTS RETURNED AFTER SECTIONS



REMARKS

COPY TO _____

RECEIVED BY _____

SIGNED

Debbie Gale for
Tyler J. Ashton, PE

TIERRA WEST, LLC

8509 Jefferson NE
Albuquerque, NM 87113

(505) 858-3100
fax (505) 858-1118

twllc@tierrawestllc.com
1-800-245-3102

October 9, 2003

Mr. Brad Bingham, PE
Sr. Engineer, Planning Dept.
Development and Building Services
City of Albuquerque
PO Box 1293
Albuquerque, NM 87113

RE: Riverview Acres Subdivision Revised Drainage Report

Dear Mr. Bingham:

Tierra West, LLC is requesting approval of the attached revised Drainage Report, dated October 9, 2003 for the property referenced above. Listed below, please find the following comments from your letter dated September 17, 2003 and the responses addressing the comments.

- 1) The flat grading scheme is appropriate to use on this project but the land treatments should be adjusted to reflect allowable impervious surfaces. The DPM states that the maximum impervious area (type D) is 45%, which must include half the street, driveway, sidewalk, etc. The rest is calculated as type B. The maximum water surface elevation must be shown on the grading plan. The centerline of the road is 0.33 feet above this elevation and the pad should be 1 foot above the WSE. Please include the maximum pad area as well.

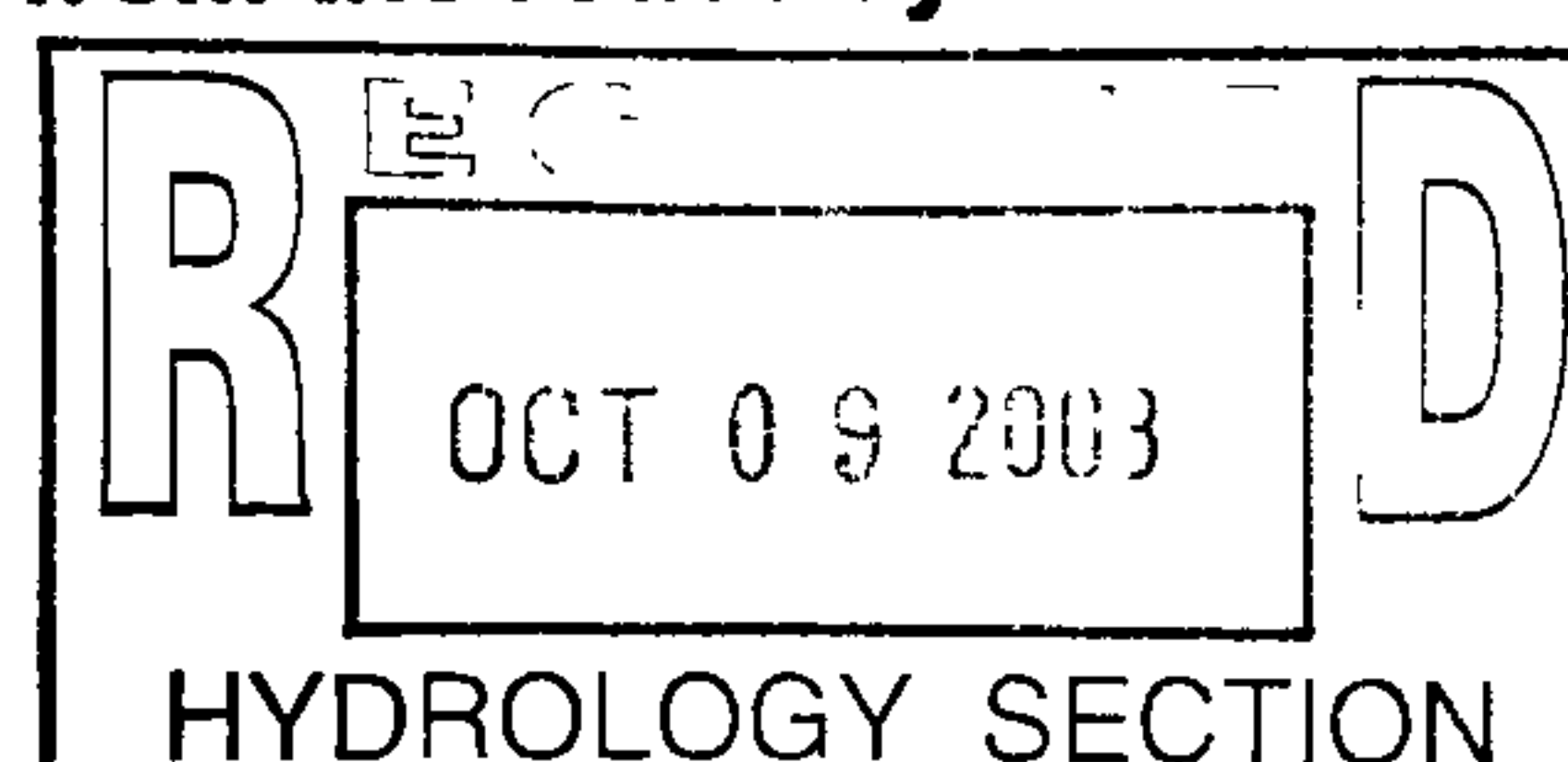
Response:

Runoff calculations have been adjusted to use 55% B and 45% D, see calculation section. Maximum water surface elevation is shown in a table on the grading plan along with maximum pad area.

- 2) The lots should be graded to accept the runoff from the road and not pond at the R/W or roadway easement.

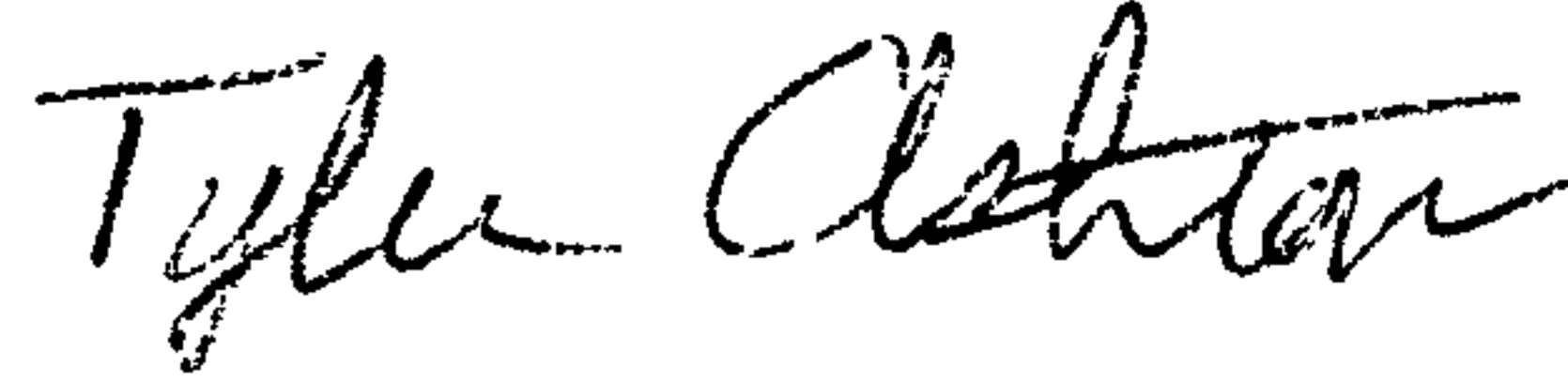
Response:

Lots have been re-graded to accept runoff from the roadway and no water will be ponding in the roadway R/W



If you have any questions or need additional information regarding this matter, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Tyler Ashton". The signature is fluid and cursive, with a horizontal line extending from the end.

Tyler J. Ashton, P.E.

Enclosure/s

JN: 200090T
TA/dg

200090T B Bingham 100903

DRAINAGE REPORT

for

Riverview Acres

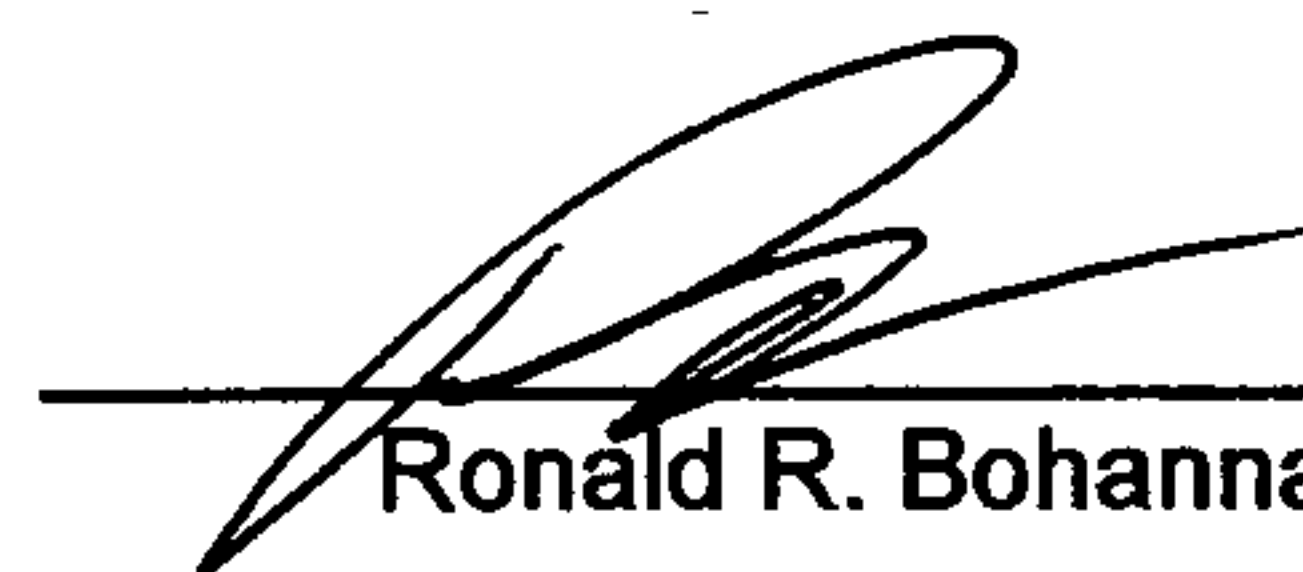
Prepared by

Tierra West, LLC
8509 Jefferson NE
Albuquerque, New Mexico 87113

Prepared for

Tim S. McNaney
400 Gold Avenue SW, Suite 700
Albuquerque, NM 87102

October 2003



Ronald R. Bohannon P.E. No. 7868

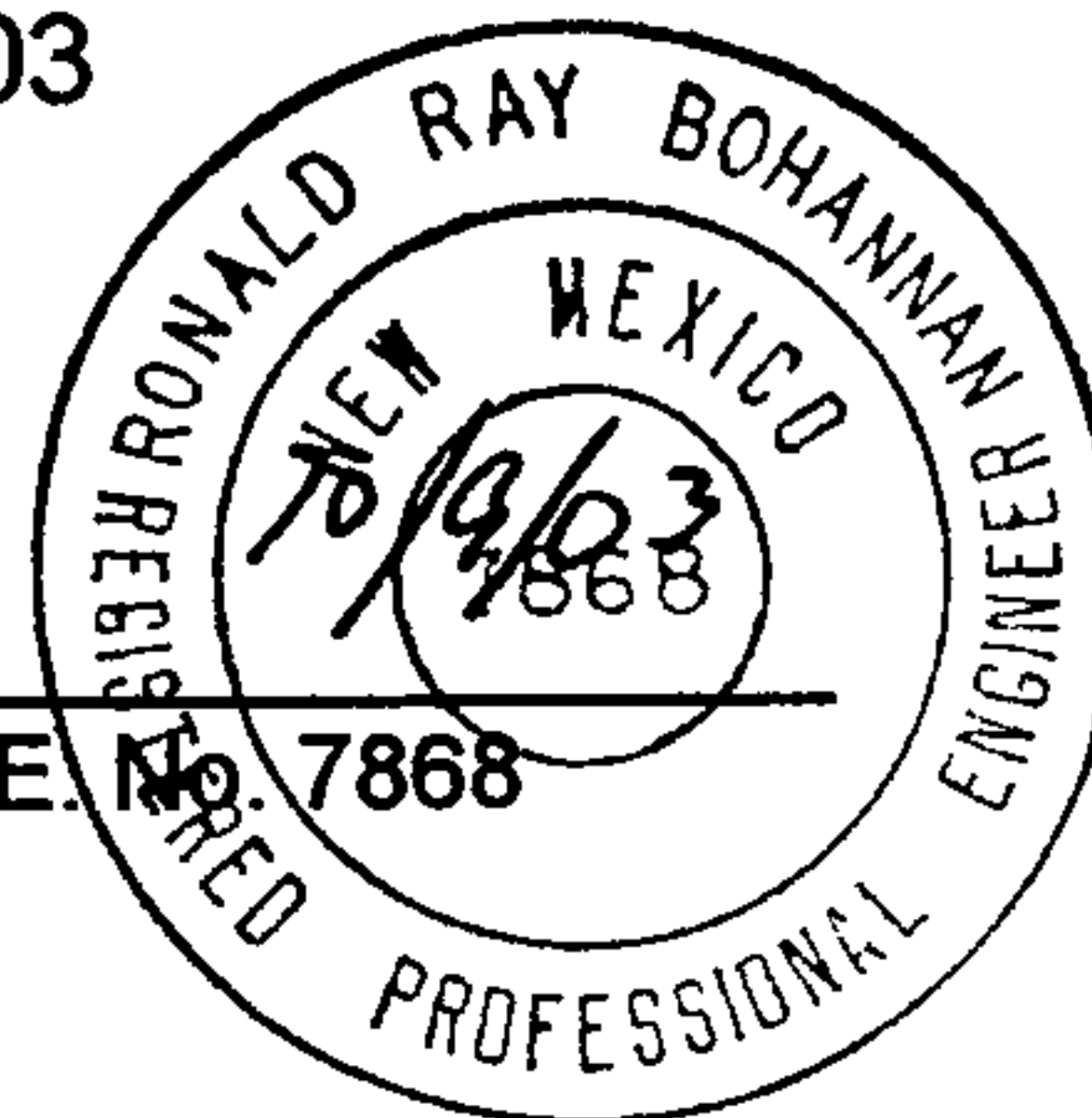


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Location.....2

Existing Drainage Conditions.....2

On-Site Drainage Management Plan.....2-4

Vicinity Map & Firm Map.....3

Calculations.....4

Summary.....4

Calculations

 Weighted E-MethodAppendix A

 Pond Volume Calculations.....Appendix A

Grading & Drainage Plan.....Map Pocket A

Basin Map.....Map Pocket B

Location

The site is located on the west side of Gabaldon Road NW just south of Interstate 40. The site is shown on the attached Zone Atlas Map H-12 and contains approximately 9 acres. We propose to grade the site and build a fourteen-lot single-family subdivision. The purpose of this report is to provide the drainage analysis and management plan for the new subdivision.

Existing Drainage Conditions

The site is undeveloped and at one time was used as farmland. Currently any water that falls on the site remains on site with little to no runoff.

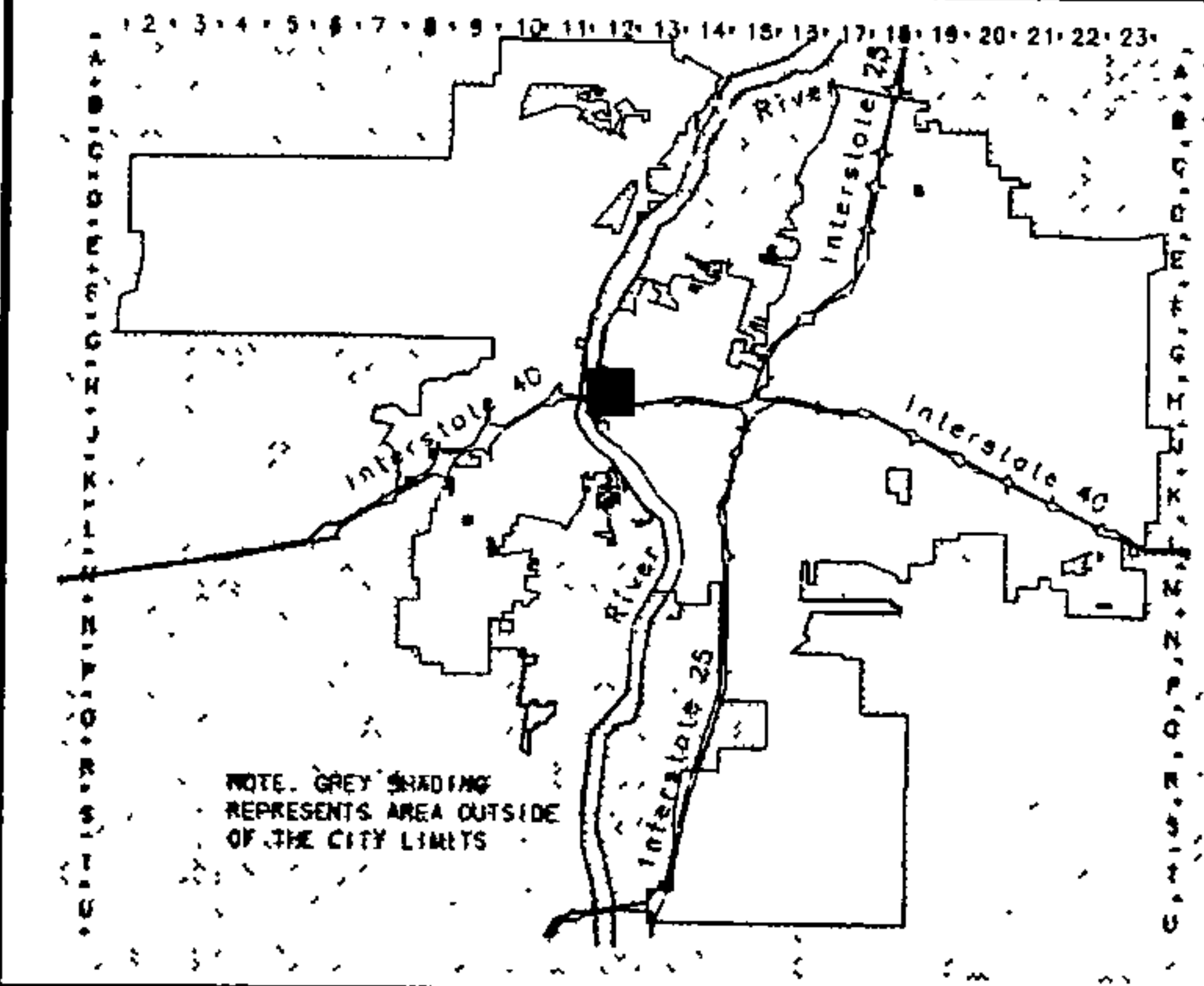
FIRM Map

The site is located on FIRM Map section 35001C0327 D and 35001C03331 D as shown on the attached excerpt. The maps show that the site lies within Zone X.

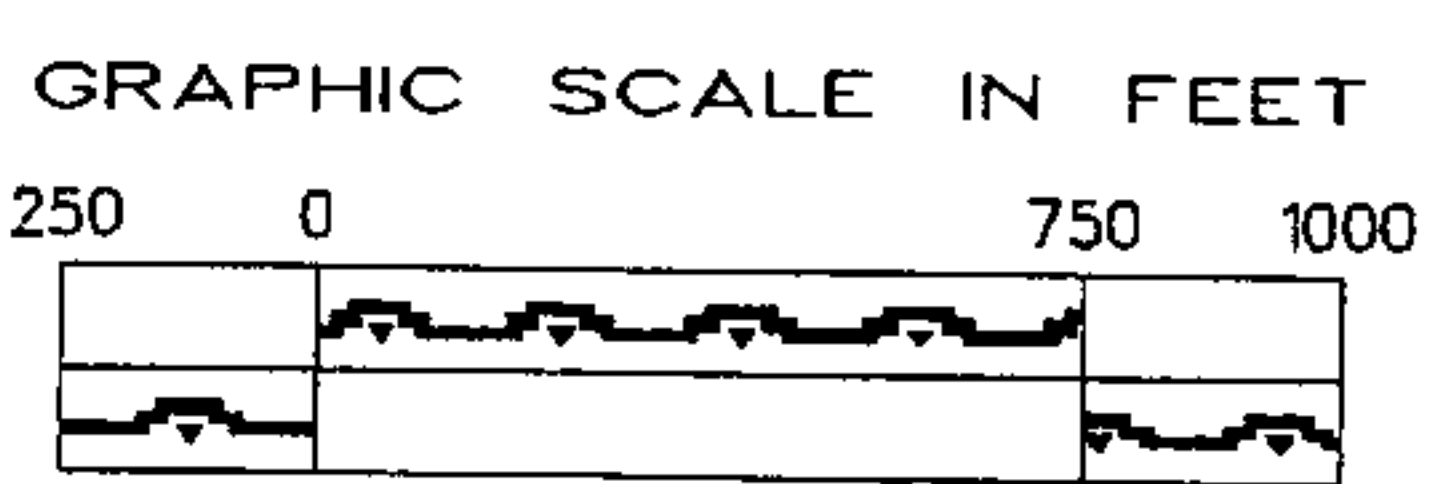
On-Site Drainage Management Plan

The site was divided into 15 developed basins, see attached basin map. The site will follow a normal flat valley grading scheme where all storm drainage will be retained on-site. Each lot, basins 1-14, will drain into individual ponds that are located on each lot. The treatment for these basins is as follows: 0% A, 55% B, 0% C and 45% D per the flat grading scheme. Calle Facio, basin 15 at the entrance of the subdivision, drainage will be retained in two ponds to the north

VICINITY MAP AND FIRM MAP



CITY OF
Albuquerque
Albuquerque **G**eographic **I**nformation **S**ystem
PLANNING DEPARTMENT
© Copyright 2003



Zone Atlas Page
H12-Z
Map Amended through July 30, 2003



Firm Maps:
35001C0327 D
35001C0331 D

and south of the roadway. All ponds were sized to hold the 100-year, 10-day volume storm. With storms larger than the 100-year, 10-day, the runoff will flow towards the river, which borders the property to the west. See following tables for runoff and pond calculations.

Calculations

The Weighted E method from the “City of Albuquerque Development Process Manual Volume II – Chapter 22, 2003 Revision” was used to calculate the runoff and volume for the site.

Summary

There is no offsite drainage flowing onto this site and all onsite water will be detained within the ponds on site. All of the onsite ponds have more than enough capacity to hold the 100-year, 10-day storm.

CALCULATIONS

200090 Riverview Acres

Weighted E Method

Zone #2

Developed Basins

Basin	Area (sf)	Area (acres)	Area (sq miles)	Treatment A		Treatment B		Treatment C		Treatment D		100-Year			100-Year 10 day
				%	(acres)	%	(acres)	%	(acres)	%	(acres)	Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	Volume (ac-ft)
1	32363.49	0.743	0.00116	0%	0	55%	0.409	0%	0	45%	0.334	1.383	0.086	2.50	0.130
2	25946.00	0.596	0.00093	0%	0	55%	0.328	0%	0	45%	0.268	1.383	0.069	2.01	0.104
3	25162.00	0.578	0.00090	0%	0	55%	0.318	0%	0	45%	0.260	1.383	0.067	1.95	0.101
4	25028.00	0.575	0.00090	0%	0	55%	0.316	0%	0	45%	0.259	1.383	0.066	1.94	0.101
5	24912.00	0.572	0.00089	0%	0	55%	0.315	0%	0	45%	0.257	1.383	0.066	1.93	0.100
6	27272.00	0.626	0.00098	0%	0	55%	0.344	0%	0	45%	0.282	1.383	0.072	2.11	0.110
7	32037.00	0.735	0.00115	0%	0	55%	0.405	0%	0	45%	0.331	1.383	0.085	2.48	0.129
8	27641.00	0.635	0.00099	0%	0	55%	0.349	0%	0	45%	0.286	1.383	0.073	2.14	0.111
9	25316.00	0.581	0.00091	0%	0	55%	0.320	0%	0	45%	0.262	1.383	0.067	1.96	0.102
10	24633.00	0.565	0.00088	0%	0	55%	0.311	0%	0	45%	0.254	1.383	0.065	1.91	0.099
11	24505.00	0.563	0.00088	0%	0	55%	0.309	0%	0	45%	0.253	1.383	0.065	1.90	0.099
12	24376.00	0.560	0.00087	0%	0	55%	0.308	0%	0	45%	0.252	1.383	0.064	1.89	0.098
13	24248.00	0.557	0.00087	0%	0	55%	0.306	0%	0	45%	0.250	1.383	0.064	1.88	0.098
14	29677.00	0.681	0.00106	0%	0	55%	0.375	0%	0	45%	0.307	1.383	0.079	2.30	0.119
15	21813.00	0.501	0.00078	0%	0	55%	0.275	0%	0	45%	0.225	1.383	0.058	1.69	0.088

394929.49

Equations:

Weighted E = $E_a \cdot A_a + E_b \cdot A_b + E_c \cdot A_c + E_d \cdot A_d$ / (Total Area)

Volume = Weighted E * Total Area

Flow = $Q_a \cdot A_a + Q_b \cdot A_b + Q_c \cdot A_c + Q_d \cdot A_d$

Pond Volume Calculations

Lot	Top Elevation (ft)	Bottom Elevation (ft)	Top Area (sf)	Bottom Area (sf)	Volume Req'd (ac-ft)	Volume Provided (ac-ft)	WSEL (ft)	Min Pad Elev (ft)
1	4956.33	4953.7	6273	2647	0.13	0.269	4954.97	4955.97
2	4956.74	4953.45	5081	2163	0.10	0.274	4954.71	4955.71
3	4954.94	4953.39	4866	2068	0.10	0.123	4954.66	4955.66
4	4954.88	4953.33	4789	2069	0.10	0.122	4954.61	4955.61
5	4954.83	4953.28	4740	2088	0.10	0.121	4954.56	4955.56
6	4954.35	4952.8	7260	2587	0.11	0.175	4953.77	4954.77
7	4955.75	4953.38	4916	1301	0.13	0.169	4955.19	4956.19
8	4956.04	4953.37	6129	2234	0.11	0.256	4954.53	4955.53
9	4956.04	4953.74	5853	1849	0.10	0.203	4954.89	4955.89
10	4955.6	4954.02	5089	2292	0.10	0.134	4955.19	4956.19
11	4955.02	4954.02	6517	3383	0.10	0.114	4954.89	4955.89
12	4955.02	4954.02	6550	3403	0.10	0.114	4954.88	4955.88
13	4955.02	4954.02	6601	3377	0.10	0.115	4954.87	4955.87
14	4957.5	4953.4	6184	2520	0.12	0.410	4954.60	4955.60
Pond 1	4956.56	4955.33	2703	824	0.04	0.050	4956.42	--
Pond 2	4956.56	4955.33	2901	1057	0.04	0.056	4956.30	--

Lot	Area (sq ft)	45%	Roadway Area (sq ft)	Max Pad Size (sq ft)
1	32363.49	14564	5229	9335
2	25946.00	11676	2117	9559
3	25162.00	11323	2034	9289
4	25028.00	11263	1962	9301
5	24912.00	11210	1911	9299
6	27272.00	12272	1890	10382
7	32037.00	14417	966	13451
8	27641.00	12438	713	11725
9	25316.00	11392	2161	9231
10	24633.00	11085	2008	9077
11	24505.00	11027	2008	9019
12	24376.00	10969	2008	8961
13	24248.00	10912	2008	8904
14	29677.00	13355	4892	8463

MAP POCKET A

MAP POCKET B



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

September 17, 2003

Ron Bohannon, PE
Tierra West LLC
8509 Jefferson NE
Albuquerque, NM 87113

Re: Riverview Acres Subdivision Drainage Report
Engineer Stamp date 8-20-03 (H12/D3)

Dear Mr. Bohannon,

Based on information provided in your submittal dated 8-20-03, the above referenced report cannot be approved for Preliminary Plat until the following comments are addressed.

- The flat grading scheme is appropriate to use on this project but the land treatments should be adjusted to reflect allowable impervious surfaces. The DPM states that the maximum impervious area (type D) is 45%, which must include half the street, driveway, sidewalk, etc. The rest is calculated as type B. The maximum water surface elevation must be shown on the grading plan. The centerline of the road is 0.33 feet above this elevation and the pad should be 1 foot above the WSE. Please include the maximum pad area as well.
- The lots should be graded to accept the runoff from the road and not pond at the R/W or roadway easement.
- I have attached a sketch of what the typical lot should look like.

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

Sincerely,

Bradley L. Bingham, PE
Sr. Engineer, Planning Dept.
Development and Building Services

C: file

DRAINAGE AND TRANSPORTATION SHEET

(REV. 1/28/2003rd)

PROJECT TITLE: Riverview Acres
DRB: 1000997 EPC #: _____

ZONE MAP/DRG. FILE #: H-12
WORK ORDER #: _____

LEGAL DESCRIPTION: All or a portion of Tracts E1 and F1, American Square
CITY ADDRESS: Southwest corner of Carlisle and Claremont

ENGINEERING FIRM: Tierra West, LLC
ADDRESS: 8509 Jefferson NE
CITY, STATE: Albuquerque, NM

CONTACT: RONALD R. BOHANNAN OR TYLER ASHT
PHONE: (505) 858-3100
ZIP CODE: 87113

OWNER: _____
ADDRESS: _____
CITY, STATE: _____

CONTACT: _____
PHONE: _____
ZIP CODE: _____

ARCHITECT: _____
ADDRESS: _____
CITY, STATE: _____

CONTACT: _____
PHONE: _____
ZIP CODE: _____

SURVEYOR: Precision Surveys
ADDRESS: 8414-D Jefferson Street, NE
CITY, STATE: Albuquerque, NM

CONTACT: Larry Medrano
PHONE: 856-5700
ZIP CODE: 87113

CONTRACTOR: _____
ADDRESS: _____
CITY, STATE: _____

CONTACT: _____
PHONE: _____
ZIP CODE: _____

CHECK TYPE OF SUBMITTAL:

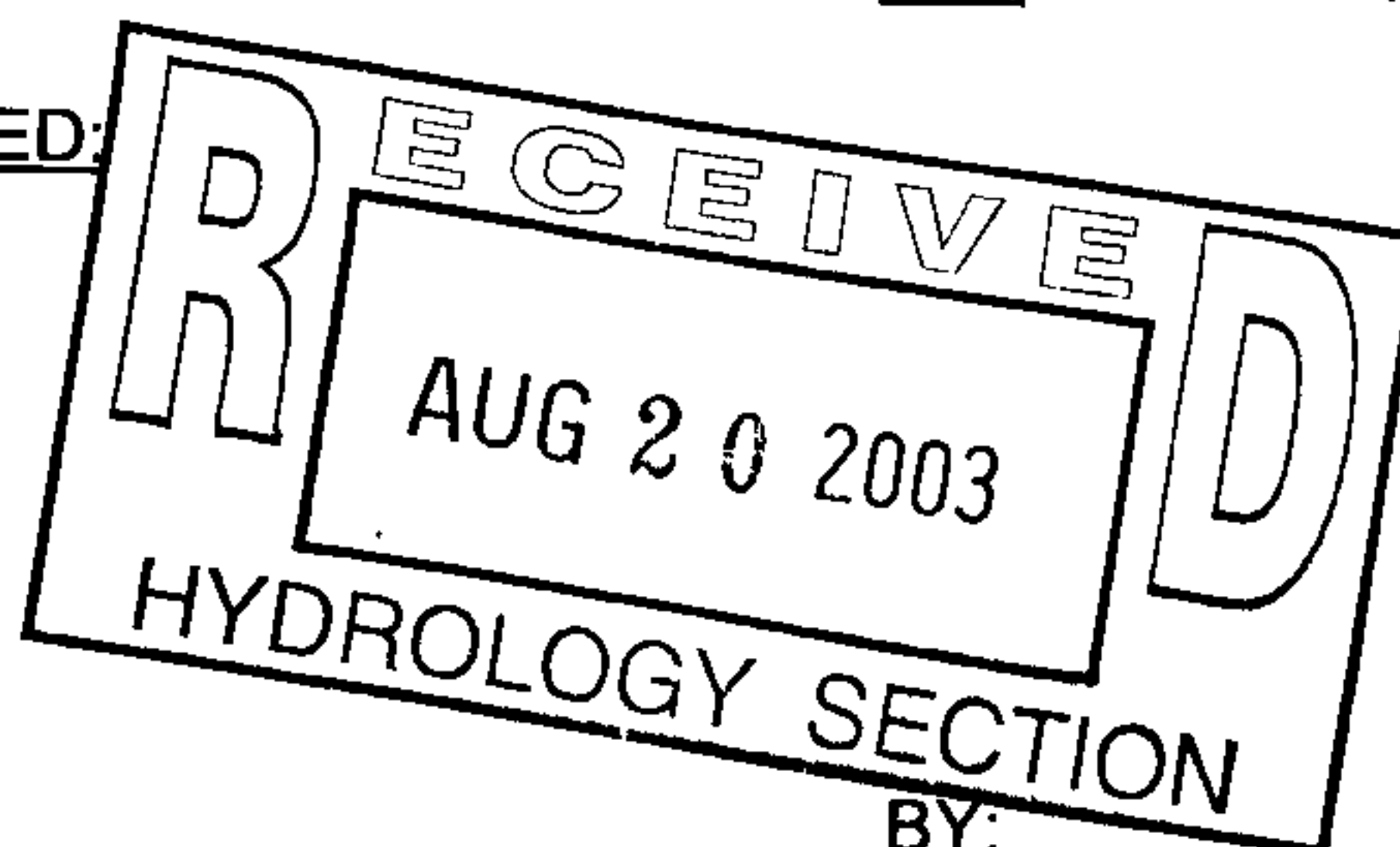
- ☒ DRAINAGE REPORT
☐ DRAINAGE PLAN 1st SUBMITTAL, **REQUIRES TCL or equal**
☐ DRAINAGE PLAN RESUBMITTAL
☐ CONCEPTUAL GRADING & DRAINAGE PLAN
☒ GRADING PLAN
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☐ ENGINEER'S CERTIFICATION (HYDROLOGY)
☐ CLOMR/LOMR
☐ TRAFFIC CIRCULATION LAYOUT (TCL)
☐ ENGINEERS CERTIFICATION (TCL)
☐ ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN)
☐ OTHER

CHECK TYPE OF APPROVAL SOUGHT:

- ☐ SIA / FINANACIAL 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) DRAINAGE APPROVAL

WAS A PRE-DESIGN CONFERENCE ATTENDED:

- ☐ YES
☒ NO
☐ COPY PROVIDED



DATE SUBMITTED: 8/19/2003 BY: Tyler Ashton

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 Plans** 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.
3. **Drainage Report** Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or more.

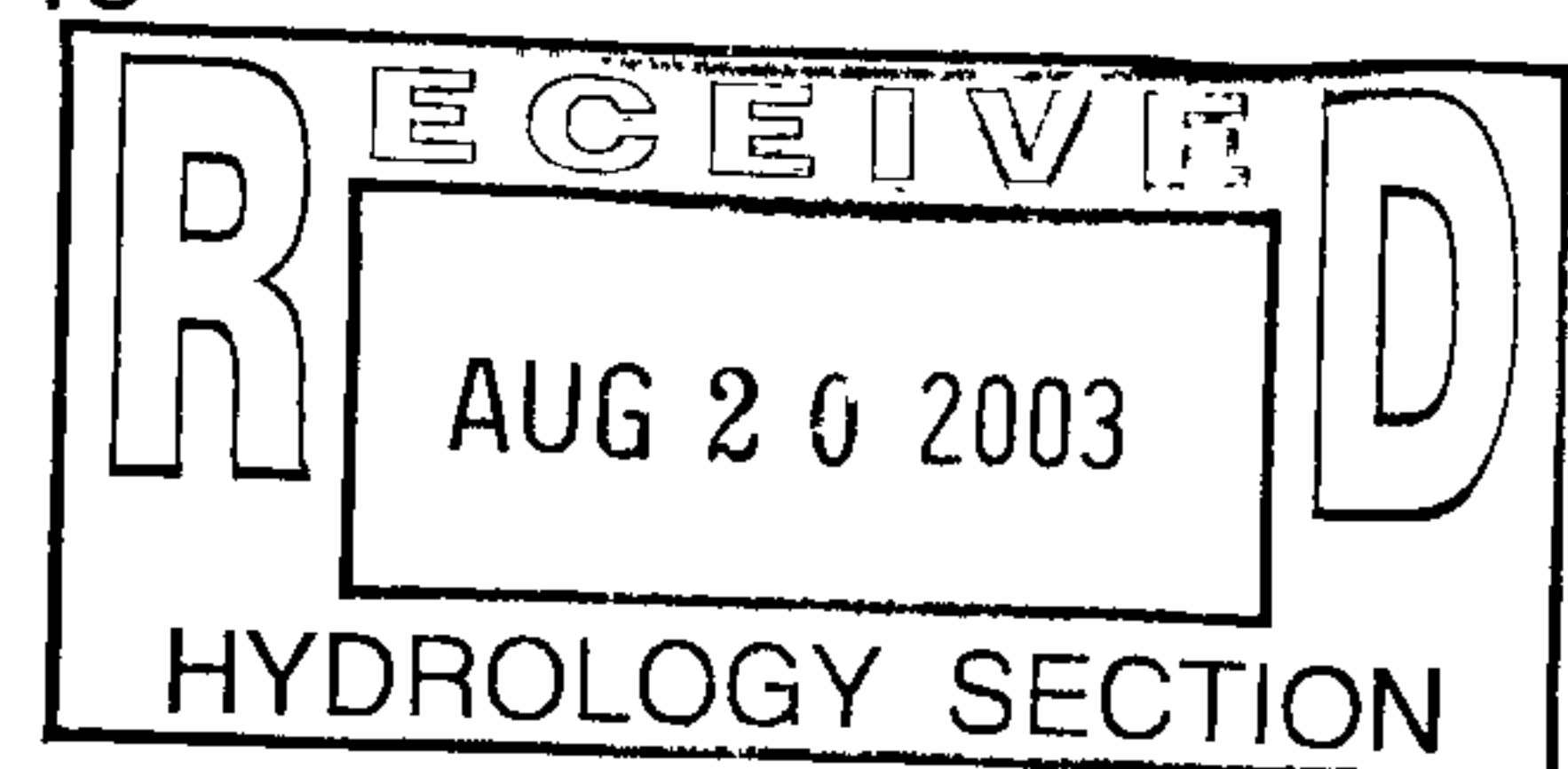
DRAINAGE REPORT

for

Riverview Acres

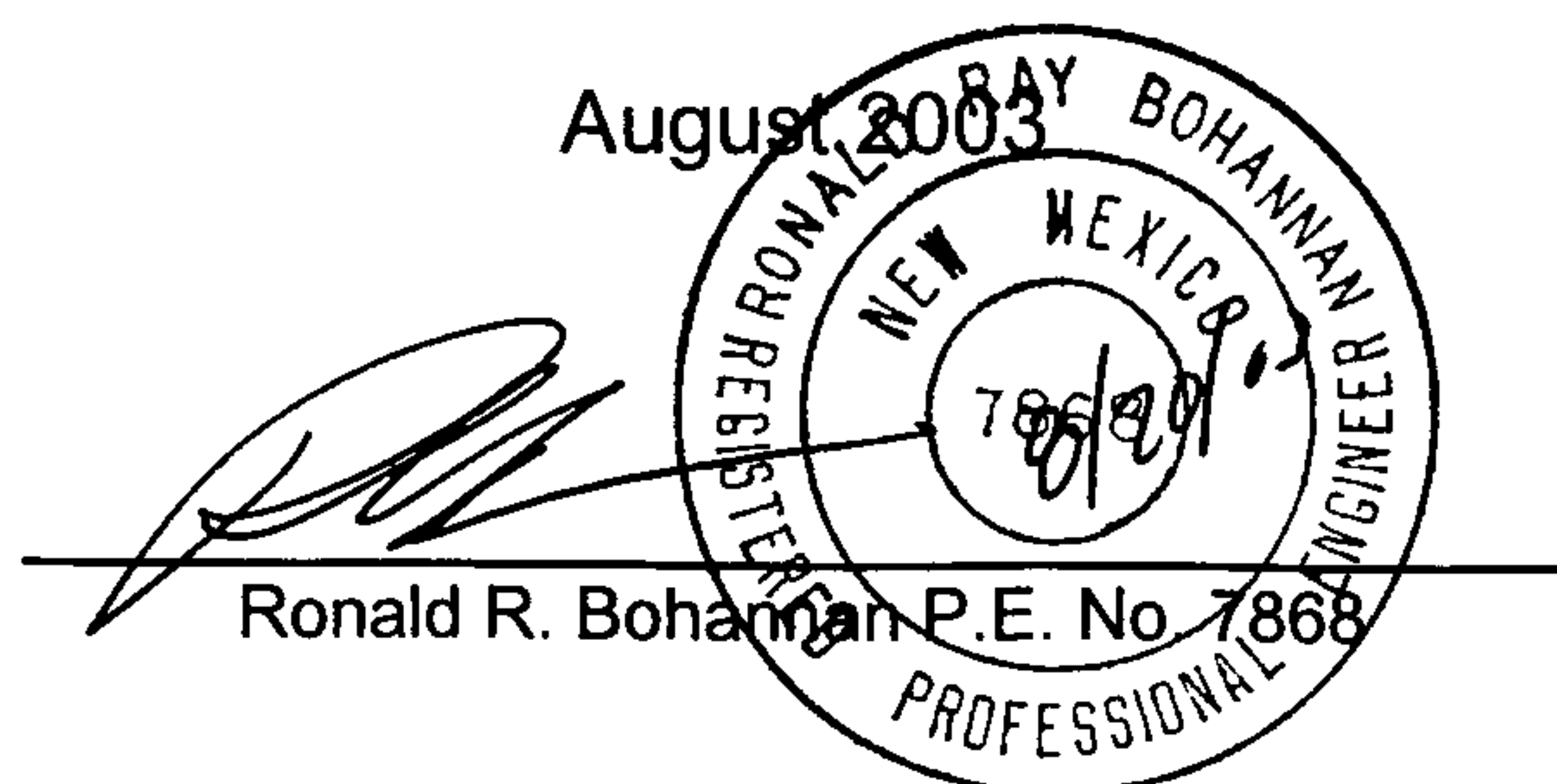
Prepared by

Tierra West, LLC
8509 Jefferson NE
Albuquerque, New Mexico 87113



Prepared for

Tim S. McNaney
400 Gold Avenue SW, Suite 700
Albuquerque, NM 87102



Location

The site is located on the west side of Gabaldon Road NW just south of Interstate 40. The site is shown on the attached Zone Atlas Map H-12 and contains approximately 9 acres. We propose to grade the site and build a fourteen-lot single-family subdivision. The purpose of this report is to provide the drainage analysis and management plan for the new subdivision.

Existing Drainage Conditions

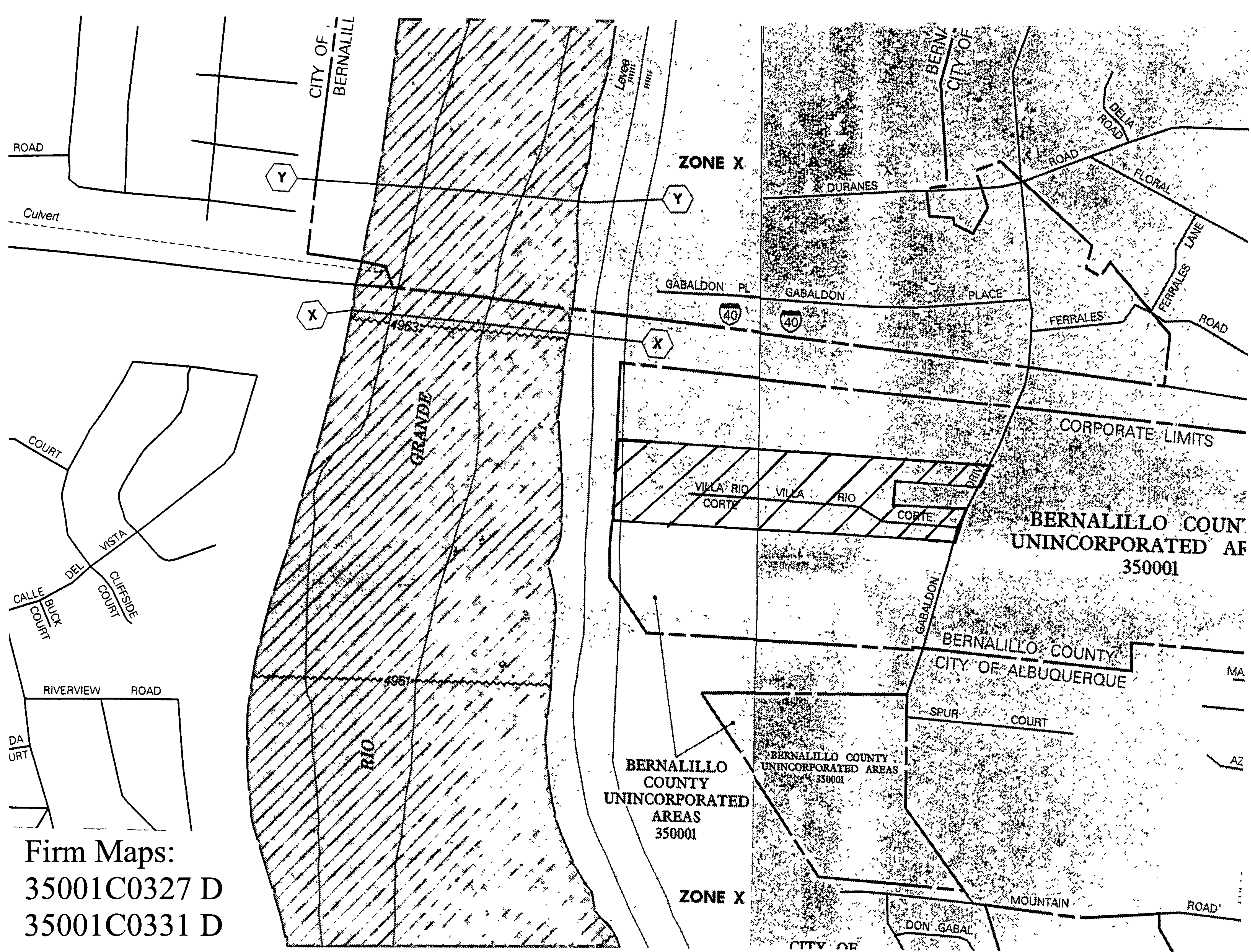
The site is undeveloped and at one time was used as farmland. Currently any water that falls on the site remains on site with little to no runoff.

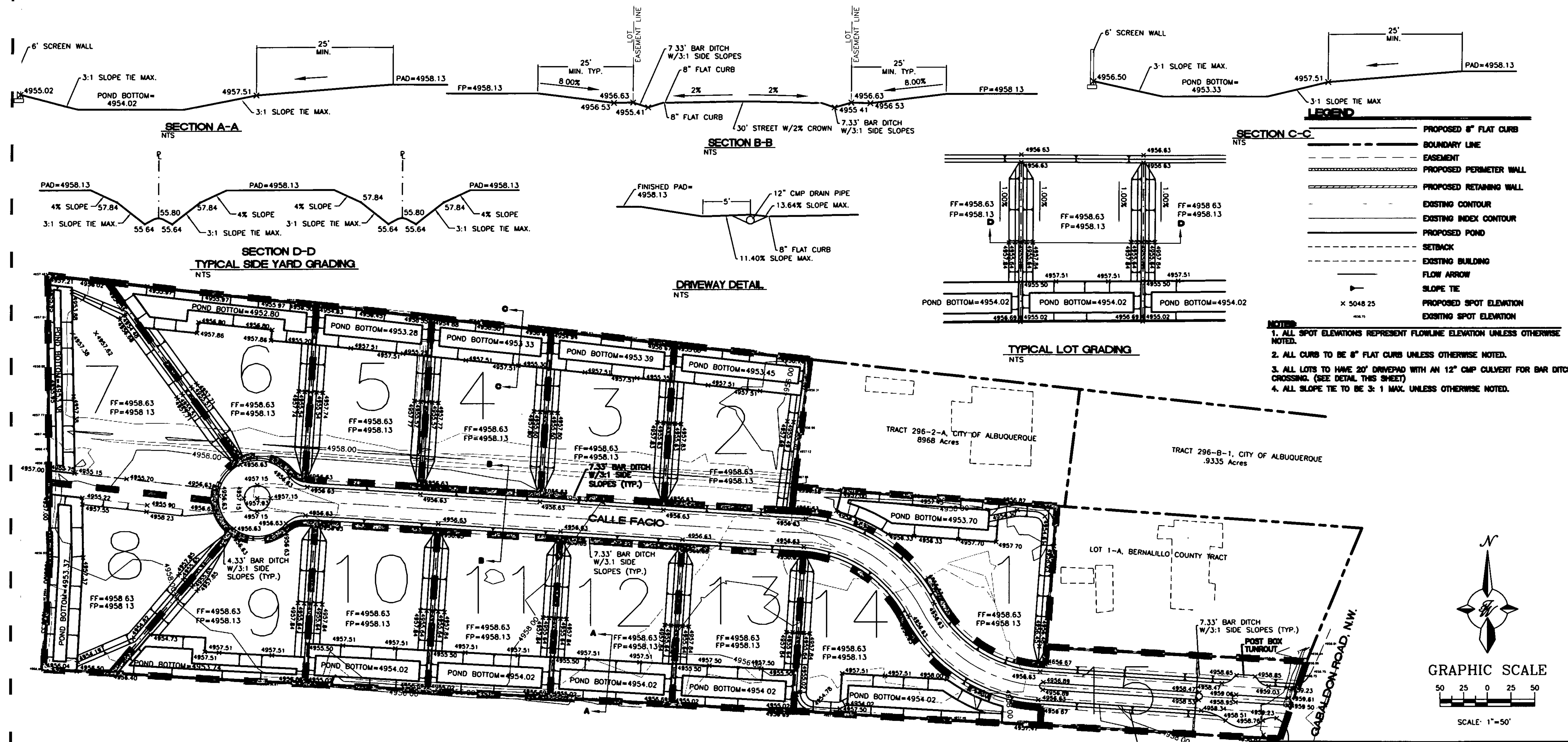
FIRM Map

The site is located on FIRM Map section 35001C0327 D and 35001C03331 D as shown on the attached excerpt. The maps show that the site lies within Zone X.

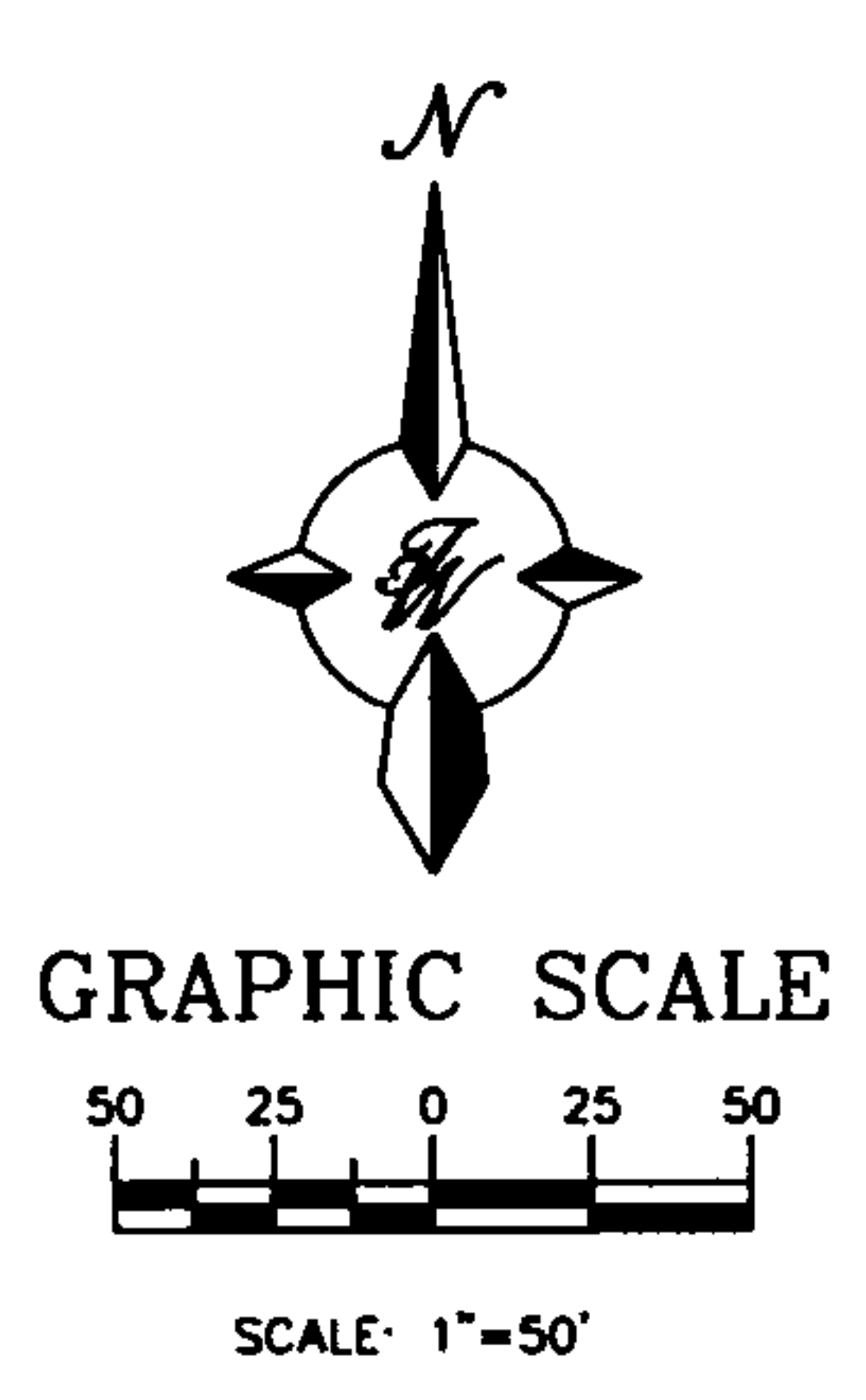
On-Site Drainage Management Plan

The site was divided into 15 developed basins, see attached basin map. The site will follow a normal flat valley grading scheme where all storm drainage will be retained on-site. Each lot, basins 1-14, will drain into individual ponds that are located on each lot. The treatment for these basins is as follows: 5% A, 25% B, 30% C and 40% D. Calle Facio, basin 15, drainage will be retained within the bar ditch that runs along each side of the proposed road. All ponds were sized to





- NOTES:**
1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
 2. ALL CURB TO BE 8" FLAT CURB UNLESS OTHERWISE NOTED.
 3. ALL LOTS TO HAVE 20' DRIVEPAD WITH AN 12" CMP CULVERT FOR BAR DITCH CROSSING. (SEE DETAIL THIS SHEET)
 4. ALL SLOPE TIE TO BE 3: 1 MAX. UNLESS OTHERWISE NOTED.



ENGINEER'S SEAL	RIVERVIEW ACRES SUBDIVISION	DRAWN BY WCUJ
	BASIN MAP	DATE 8-13-03
TIERRA WEST, LLC 8509 JEFFERSON NE ALBUQUERQUE, NEW MEXICO 87113 (505)858-3100		2090BASIN.DWG
		SHEET # -
RONALD R. BOHANNAN P.E. #7868		JOB # 200090

hold the 100-year, 10-day volume storm. With storms larger than the 100-year, 10-day, the runoff will flow towards the river, which borders the property to the west. See following tables for runoff and pond calculations.

Calculations

The Weighted E method from the “City of Albuquerque Development Process Manual Volume II – Chapter 22, 2003 Revision” was used to calculate the runoff and volume for the site.

Summary

There is no offsite drainage flowing onto this site and all onsite water will be detained within the ponds on site. All of the onsite ponds have more than enough capacity to hold the 100-year, 10-day storm.

200090 Riverview Acres

Weighted E Method

Zone #2

Developed Basins

Basin	Area (sf)	Area (acres)	Area (sq miles)	Treatment A		Treatment B		Treatment C		Treatment D		100-Year			100-Year 10 day
				%	(acres)	%	(acres)	%	(acres)	%	(acres)	Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	Volume (ac-ft)
1	24915.00	0.572	0.00089	5%	0.028598	25%	0.143	35%	0.200189	40%	0.229	1 465	0.070	2.07	0.100
2	22836.00	0.524	0.00082	5%	0 026212	25%	0.131	30%	0.157273	40%	0.210	1 409	0.062	1.82	0.089
3	22177.00	0.509	0.00080	5%	0.025456	25%	0.127	30%	0.152734	40%	0.204	1 409	0.060	1.77	0.087
4	22148.00	0.508	0 00079	5%	0.025422	25%	0.127	30%	0.152534	40%	0.203	1.409	0.060	1.76	0.087
5	22115.00	0.508	0.00079	5%	0.025385	25%	0 127	30%	0.152307	40%	0.203	1.409	0.060	1.76	0.087
6	25015.00	0.574	0.00090	5%	0.028713	25%	0.144	30%	0.17228	40%	0.230	1.409	0.067	1.99	0.098
7	30854.00	0.708	0.00111	5%	0.035416	25%	0.177	30%	0.212493	40%	0.283	1.409	0.083	2.46	0 121
8	26768.00	0.615	0.00096	5%	0.030725	25%	0.154	30%	0.184353	40%	0.246	1.409	0.072	2.13	0.105
9	22674.00	0.521	0.00081	5%	0.026026	25%	0.130	30%	0.156157	40%	0.208	1.409	0.061	1.81	0 089
10	21686.00	0.498	0.00078	5%	0 024892	25%	0.124	30%	0.149353	40%	0.199	1.409	0.058	1.73	0.085
11	21558.00	0.495	0.00077	5%	0.024745	25%	0.124	30%	0.148471	40%	0.198	1.409	0.058	1.72	0.084
12	21429.00	0.492	0.00077	5%	0.024597	25%	0.123	30%	0.147583	40%	0.197	1.409	0.058	1.71	0.084
13	21301.00	0.489	0.00076	5%	0.02445	25%	0.122	30%	0.146701	40%	0.196	1.409	0.057	1.70	0.083
14	22551.00	0.518	0.00081	5%	0.025885	25%	0.129	30%	0.15531	40%	0.207	1.409	0.061	1.80	0 088
15	67048.00	1.539	0.00241	0%	0	0%	0.000	29%	0.446371	71%	1.093	1.833	0.235	6.54	0.381

395075.00

Equations:

Weighted E = $E_a \cdot A_a + E_b \cdot A_b + E_c \cdot A_c + E_d \cdot A_d$ / (Total Area)

Volume = Weighted E * Total Area

Flow = $Q_a \cdot A_a + Q_b \cdot A_b + Q_c \cdot A_c + Q_d \cdot A_d$

Pond Volume Calculations

Pond	Top Elevation (ft)	Bottom Elevation (ft)	Top Area (sf)	Bottom Area (sf)	Volume Req'd (ac-ft)	Volume Provided (ac-ft)
1	4956.33	4953.7	6273	2647	0.098	0.269
2	4956.74	4953.45	5081	2163	0.089	0.274
3	4954.94	4953.39	4866	2068	0.087	0.123
4	4954.88	4953.33	4789	2069	0.087	0.122
5	4954.83	4953.28	4740	2088	0.087	0.121
6	4954.35	4952.8	7260	2587	0.098	0.175
7	4955.75	4953.38	4916	1301	0.121	0.169
8	4956.04	4953.37	6129	2234	0.105	0.256
9	4956.04	4953.74	5853	1849	0.089	0.203
10	4955.6	4954.02	5089	2292	0.085	0.134
11	4955.02	4954.02	5089	2292	0.084	0.085
12	4955.02	4954.02	5123	2305	0.084	0.085
13	4955.02	4954.02	5173	2286	0.083	0.086
14	4957.5	4954.02	6184	2520	0.088	0.348
15	Bar ditch with varying depth see basin map				0.381	0.446



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

August 29, 1994

Marvin R. Kortum
1605 Speakman Dr. SE
Albuquerque, NM 87123

RE: PRELIMINARY PLAT APPROVAL FOR LA BOTANICA SUBDIVISION (H-12/D3)
ENGINEER'S STAMP DATED 8/26/94

Dear Mr. Kortum:

Based upon your 8/29/94 resubmittal, the referenced project is approved for Preliminary Plat.

If I can be of further assistance, feel free to contact me at 768-3622.

Cordially,

Scott Davis
PWD, Hydrology Division

c: Andrew Garcia
File

DRAINAGE INFORMATION SHEET

Grading and Drainage Plan

PROJECT TITLE: La Botanica

H 12/ D03 existing plan for part of property, to be changed
ZONE ATLAS/DRNG. FILE #: H12/D03

LEGAL DESCRIPTION: La Botanica Subdivision, Lots 1 through 26

CITY ADDRESS: Gabaldon Road, NW (A few hundred feet south of I-40)

ENGINEERING FIRM: Marvin R Kortum

CONTACT: Marvin R Kortum

ADDRESS: 1605 Speakman Dr. SE
Albuquerque, NM 87123

PHONE: (505) 299-0774

OWNER: Construction Professionals

CONTACT: Julia Millon

ADDRESS: P. O. Box 7484
Albuquerque, NM 87194

PHONE: 344-1776

ARCHITECT:

CONTACT:

ADDRESS:

PHONE:

SURVEYOR: SW Survey Co., Inc.

CONTACT: Dan Graney

ADDRESS: 555 Lomas Blvd. NE
Albuquerque, NM 87102

PHONE: 247-4444

CONTRACTOR:

CONTACT:

ADDRESS:

PHONE:

PRE-DESIGN MEETING:

☒ YES

☐ NO

☐ COPY OF CONFERENCE RECAP
SHEET PROVIDED

DRB NO. 94-315

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)

AUG 29 1994

DATE SUBMITTED: August 26, 1994

BY: Marvin R Kortum

Marvin R Kortum
1605 Speakman Drive SE
Albuquerque, New Mexico 87123
NMPE 6519
(505) 299-0774

August 26, 1994

City of Albuquerque
Design Hydrology Section
Public Works Department
P. O. Box 1293
Albuquerque, New Mexico 87103

REFERENCE: Grading and drainage plan for La Botanica subdivision, located west of Gabldon Road, NW, 500 feet south of the intersection of Gabaldon Road NW and Interstate-40, Albuquerque, New Mexico. H12/D03 (Project No. 5025, DRB No. 94-315)

Dear Mr. Aguirre:

The drawings for the referenced project have been revised in accordance with your verbal directions on August 24, 1994, as relayed by Mr. Scott Davis. The option for the perimeter berms has been deleted, and the block floodwalls specified for the perimeter. Ponding on lot 2 is also deleted. The subdivision grading and drainage plan provides for essentially flat grading, with all precipitation retained on site.

Please review the plan for comment and approval. Contact me by telephone if there are further questions.

Thank you.

Sincerely,


Marvin R. Kortum

City

DRAINAGE INFORMATION SHEET

Grading and Drainage Plan

PROJECT TITLE:

La Botanica

H 12/ D03 existing plan for part of property, to be changed
ZONE ATLAS/DRNG. FILE #: H-12/43

LEGAL DESCRIPTION:

La Botanica Subdivision, Lots 1 through 26

CITY ADDRESS:

Gabaldon Road, NW (A few hundred feet south of I-40)

ENGINEERING FIRM:

Marvin R Kortum

CONTACT:

Marvin R Kortum

ADDRESS:

1605 Speakman Dr. SE
Albuquerque, NM 87123

PHONE:

(505) 299-0774

OWNER:

Construction Professionals

CONTACT:

Julia Millon

ADDRESS:

P. O. Box 7484
Albuquerque, NM 87194

PHONE:

344-1776

ARCHITECT:

CONTACT:

ADDRESS:

PHONE:

SURVEYOR:

SW Survey Co., Inc.

CONTACT:

Dan Graney

ADDRESS:

333 Lomas Blvd. NE
Albuquerque, NM 87102

PHONE:

247-4444

CONTRACTOR:

CONTACT:

ADDRESS:

PHONE:

PRE-DESIGN MEETING:

☒ YES

☐ NO

☐ COPY OF CONFERENCE RECAP
SHEET PROVIDED

DRB NO.

94-315

EPC NO. X

PROJ. NO.

TYPE OF SUBMITTAL:

☐ DRAINAGE REPORT

☒ DRAINAGE PLAN

☐ CONCEPTUAL GRADING & DRAINAGE PLAN

☒ GRADING PLAN

☐ EROSION CONTROL PLAN

☐ ENGINEER'S CERTIFICATION

☐ REVISION TO GRADING AND DRAINAGE
PLAN

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)

RECEIVED
FEB 6 1995

DATE SUBMITTED:

January 17, 1995

BY:

Marvin R Kortum

Marvin R Kortum
1605 Speakman Drive SE
Albuquerque, New Mexico 87123
NMPE 6519
(505) 299-0774

January 17, 1995

City of Albuquerque
Design Hydrology Section
Public Works Department
P. O. Box 1293
Albuquerque, New Mexico 87103

REFERENCE: Grading and drainage plan for La Botanica subdivision, located west of Gabldon Road, NW, 500 feet south of the intersection of Gabaldon Road NW and Interstate-40, Albuquerque, New Mexico. H12/D03 (Project No. 5025, DRB No. 94-315)

Dear Mr. Aguirre:

Attached is a revised to January 12, 1995 copy of sheet 9 of 9 of project 5025 (5 of 7 on the grading and drainage plan), which is the street plan for the entrance to the subdivision as described in the referenced grading and drainage plan.

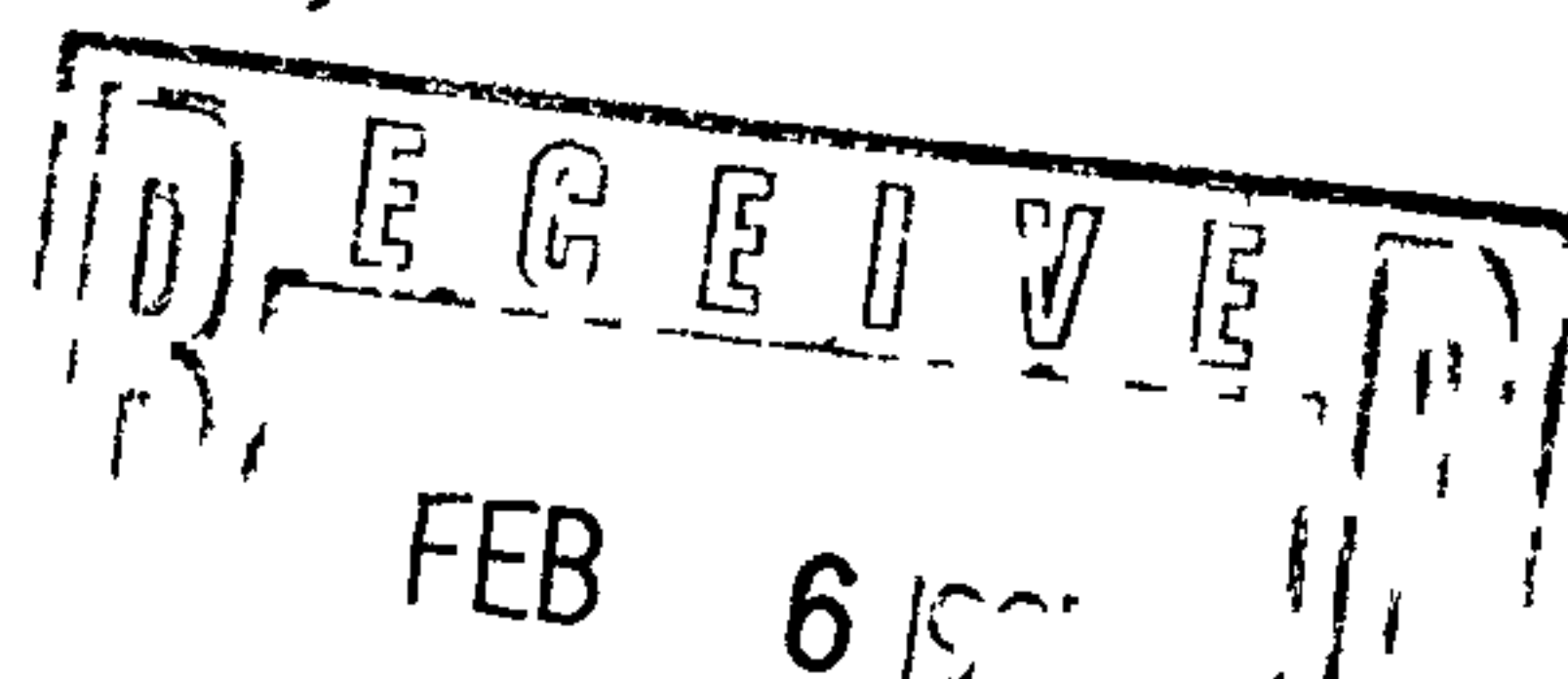
The entry street is now 28 feet wide, as compared to the 52 feet shown on the original plan and on the referenced grading and drainage plan. The change will reduce the amount of impervious surface for lots 1 and 2, and will increase the area of the landscaped areas. The changes will not adversely effect the approved grading and drainage plan.

Please review the plan for comment and approval. Contact me by if there are questions.

Thank you.

Sincerely,


Marvin R. Kortum



8387

DRAINAGE INFORMATION SHEET

Grading and Drainage Plan

PROJECT TITLE: La BotanicaH 12/ D03 existing plan for part
of property, to be changed
ZONE ATLAS/DRNG. FILE #: H12/D13LEGAL DESCRIPTION: La Botanica Subdivision, Lots 1 through 26CITY ADDRESS: Gabalton Road, NW (A few hundred feet south of I-40)ENGINEERING FIRM: Marvin R KortumCONTACT: Marvin R KortumADDRESS: 1605 Speakman Dr. SE
Albuquerque, NM 87123PHONE: (505) 299-0774OWNER: Construction ProfessionalsCONTACT: Julia MillonADDRESS: P. O. Box 7484
Albuquerque, NM 87194PHONE: 344-1776

ARCHITECT: _____

CONTACT: _____

ADDRESS: _____

PHONE: _____

SURVEYOR: SW Survey Co., Inc.CONTACT: Dan GraneyADDRESS: 333 Lomas Blvd. NE
Albuquerque, NM 87102PHONE: 247-4444

CONTRACTOR: _____

CONTACT: _____

ADDRESS: _____

PHONE: _____

PRE-DESIGN MEETING:

☒ YES

DRB NO. _____

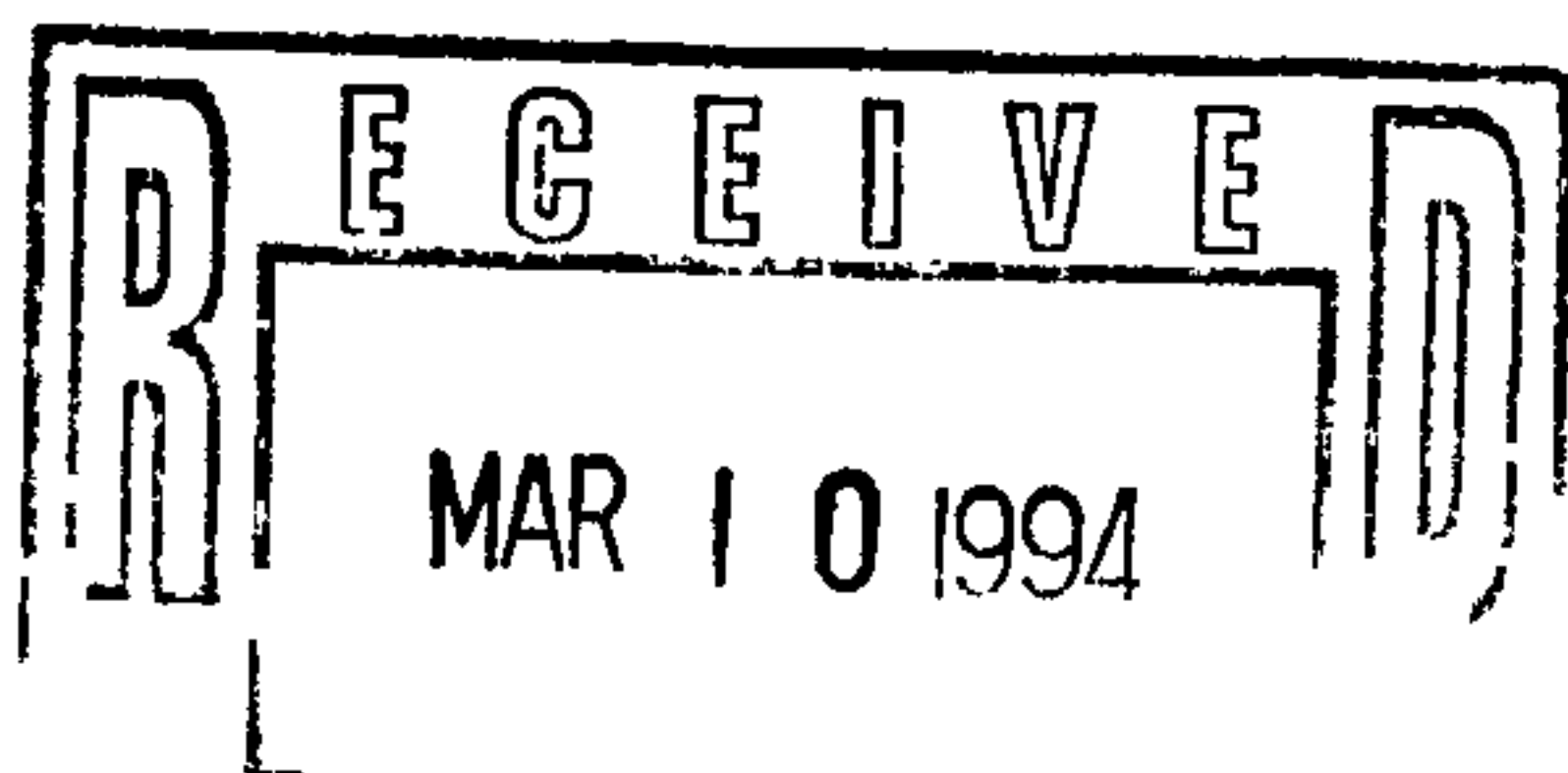
☐ NOEPC NO. ☒ _____☐ COPY OF CONFERENCE RECAP
SHEET PROVIDED

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: March 8, 1994BY: Marvin R Kortum

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Grading and Drainage Plan La Botanica H 12/ D03 existing plan for part of property, to be changed
 LEGAL DESCRIPTION: La Botanica Subdivision, Lots 1 through 23 ZONE ATLAS/DRNG. FILE #: H-12

CITY ADDRESS: Gabaldon Road, NW (A few hundred feet south of I-40)

ENGINEERING FIRM: Marvin R Kortum CONTACT: Marvin R Kortum
 ADDRESS: 1605 Speakman Dr. SE PHONE: (505) 299-0774
Albuquerque, NM 87123

OWNER: Construction Professionals CONTACT: Julia Millon
 ADDRESS: P. O. Box 7484 PHONE: 344-1776
Albuquerque, NM 87194

ARCHITECT: _____ CONTACT: _____
 ADDRESS: _____ PHONE: _____

SURVEYOR: SW Survey Co., Inc. CONTACT: Dan Graney
 ADDRESS: 333 Lomas Blvd. NE PHONE: 247-4444
Albuquerque, NM 87102

CONTRACTOR: _____ CONTACT: _____
 ADDRESS: _____ PHONE: _____

PRE-DESIGN MEETING:

☒ YES
☐ NO
☐ COPY OF CONFERENCE RECAP SHEET PROVIDED

DRB NO. 94-315
 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)

AUG 4 1994

August 2 1994

DATE SUBMITTED: _____
 BY: Marvin R Kortum

D.R.B. Case No. 94-315
D.R.C. Project No. _____
Date Submitted _____
Prelim. Plat Approved _____
Prelim. Plat Expires _____

Figure 12
EXHIBIT "A"
To Subdivision Improvements Agreement
DEVELOPMENT REVIEW BOARD (DRB) REQUIRED INFRASTRUCTURE LISTING
for VIA LA BOTANICA

Following is a summary of Public/Private Infrastructure required to be constructed or financially guaranteed to be constructed for the above development. This summary is not necessarily a complete listing. During the design process, if the City determines that appurtenant items have not been included in the summary, those items will be included in the listing and related financial guarantee, if the items normally are the Subdivider responsibility. In addition, any unforeseen items which arise during construction which are necessary to complete the project and which normally are the Subdivider's responsibility are the responsibility of the Subdivider and will be included in the financial guarantee provided to the City.

Size	Type of Improvement	Location	From	To
<u>8"</u>	<u>SEWER MAIN</u>	<u>25'/20' PUE</u>	<u>DRAIN</u>	<u>GABALDON</u>
<u>28' FF</u>	<u>RESIDENTIAL PAVING</u> <u>W/ CURB</u>	<u>STREET</u>	<u>GABALDON</u>	<u>WEST END OF STREET</u>
<u>8"</u>	<u>WATER MAIN</u>	<u>25'/20' PUE</u>	<u>GABALDON</u>	<u>WEST END OF STREET</u>
<u>22'-3200</u>	<u>BASE COURSE 16" DEEP</u> <u>GRAVEL</u>	<u>PRIVATE ACCESS</u>	<u>LA BOTANICA</u>	<u>END OF EASEMENT</u>
<u>22' CUT</u> <u>20' IN</u>	<u>PAVING RESIDENTIAL</u> <u>W/ 10' MEDIAN</u>	<u>ENTRANCE</u>	<u>GABALDON</u>	<u>LOT 2</u>
<u>4'</u>	<u>SIDEWALK</u>	<u>SOUTH SIDE</u> <u>VIA LA BOTANICA</u>	<u>CUL-DE-SAC</u>	<u>GABALDON</u>

Prepared by: Julia Melloy
Print Name: JULIA MILLOY
Firm: Construction Prof. Inc.

***** Development Review Board Member Approvals *****

Transportation Dev. Date 11/16/94 Utility Dev. Date 11/16/94 Date Cult. and Rec. Date

City Engineer/AMAFCA Date 11/16/94 DRB Chairman Date

PRIVATE FACILITY
DRAINAGE COVENANT

This drainage Covenant, between Construction Professionals, Incorporated, ("Owner"), whose address is P.O. Box 7484, Albuquerque, New Mexico 87194, and the City of Albuquerque, a New Mexico municipal corporation ("City"), whose address is P.O. Box 1293, Albuquerque, New Mexico 87103, is made in Albuquerque, Bernalillo Count, New Mexico and is entered into as of the date Owner signs this Covenant.

1. Recital: The Owner is the owner of the following described real property located at the intersection of Via La Botanica, NW, and Gabaldon Road, NW, and more particularly described by the legal description, Lots 1 through 23, La Botanica Subdivision, Section 12, T. 10 N, R. 2 E., NMPM, Bernalillo County, New Mexico, (the "property"). Owner has submitted and the City has approved the preliminary plat of the property under the proposed legal description of LA BOTANICA.

2. Description and Construction of Drainage Facility: The Owner shall construct the following "Drainage Facility" within the Property at the Owner's sole expense in accordance with the standards, plans and specifications approved by the City pursuant to Drainage File No. H-12/D13:

~~Perimeter-impermeable solid walls shall be placed along the perimeter as shown, specifically along the western, 1000 feet of the south boundary, and the southern 450 feet of the west boundary.~~

Perimeter impermeable compacted berm shall be constructed along the northern 168 feet of the west boundary, and along the north boundary. Impermeable solid walls may be constructed in place of the berms.

A solid wall shall be constructed along the east side of lot number 23.

The Via La Botanica street embankment shall be placed at the elevation shown on the drawings, and that embankment shall serve as a divider for drainage within the subdivision.

All lots within each section of the subdivision shall be graded essentially flat, except for structures which will be elevated above the estimated 100 year flood plain. Each section of the subdivision is as defined by the exterior walls or berms, and the interior walls or berms. The surface of each lot will be maintained at the designated elevation, plus or minus 0.25 feet, for perpetuity.

Individual property owners are responsible for

1994
MAY 15

acceptance of street storm water runoff, and acceptance of overflow from storm runoff from adjacent property. Individual lot owners will be responsible for the construction of a wall or berm along the edges of property to be flood irrigated. Such walls or berms shall be for the purpose of limiting the flow of irrigation water, and shall be no higher than 8 inches below the minimum finished floor elevations of the houses on the lot in order to not reduce the storm runoff storage capacity.

The Drainage Facility is more particularly described on sheets one through six, Grading and Drainage Plan, LA BOTANICA SUBDIVISION, and by City of Albuquerque Project _____, for street grading.

3. Maintenance of Drainage Facility. The Owner shall maintain the Drainage Facility at the Owner's sole cost in accordance with the approved Drainage Report and plans. In particular, the Owner shall maintain grades, irrigation ditch gates, concrete walls and drainage on each lot so that runoff from any on-lot source or irrigation ditch will remain within the lot, accumulating away from building foundations, perimeter walls sidewalks and streets. The Owner may install landscaping designed to increase the rate of percolation and evaporation. Flow from precipitation into and along the master irrigation ditch shall be permitted without regard to lot boundary lines.

The Owner may install lot irrigation systems, watering systems, or water using appliances, appurtenances or equipment within each individual lot provided that any such system or equipment shall be designed, installed and maintained to prevent overflow and runoff on to adjacent property.

The Owner shall construct, or cause to be constructed, all structures intended for human habitation within the Property such that minimum finished floor elevations for the lower, or ground floor, of each such structure is 4959.20 feet for lots 1-16, and 4958.50 for lots 17-23, above mean sea level, 1929 Datum.

4. Benefit to Property. The Owner acknowledges and understands that the Drainage Facility required herein to be constructed on the Owner's property is for the private benefit and protection of the Owner's property and that failure to maintain such facility could result in damage or loss to the Property.

5. Inspection of Drainage Facility. The City shall have no duty or obligation whatsoever to perform any inspection, maintenance or repair of the Drainage Facility, it being the duty of the Owner, its heirs, successors and assigns to construct and maintain the facility in accordance with approved plans and specifications.

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6. Liability of City. The Owner understands and agrees that the City shall not be liable to the Owner, its heirs, successors or assigns, or to any third parties for any damages resulting from the Owner's failure to construct, maintain or repair the Drainage Facility.

7. Indemnification. The Owner owns and controls the Drainage Facility and shall not permit the Drainage Facility to constitute a hazard to the health or safety of the general public. The Owner agrees to indemnify, defend and hold harmless the City, its officials, agents and employees, from any claims, actions, suits or other proceedings arising from or out of the negligent acts or omissions of the Owner, its agents, representatives, contractors or subcontractors or arising from the failure of the Owner, its agents, representatives, contractors or subcontractors to perform any act or duty required of the Owner, its agents, representatives, contractors or subcontractors to perform any act or duty required of the Owner herein; provided, however, to the extent, if at all, Section 56-7-1 NMSA 1978 is applicable to this Agreement, this Agreement to indemnify will not extend to liability, claims, damages, losses or expenses, including attorney's fees, arising out of (1) the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or specifications by the respective indemnitee, or the agents or employees of the respective indemnitee; or (2) the giving or the failure to give direction or instructions by the respective indemnitee, where such giving or failure to give directions or instructions is the primary cause of bodily injury to persons or damage to property.

8. Assessment. Nothing in the Covenant shall be construed to relieve the Owner, its heirs, assigns and successors from an assessment against the Owner's Property for improvements to Property under a duly authorized and approved Special Assessment District. The parties specifically agree that the value of the Drainage Facility will not reduce the amount assessed by the City.

9. Binding on Owner's Property. The covenants and obligations of the Owner set forth herein shall be binding on the Owner, its heirs, assigns and successors and on the Owner's Property and constitute covenants running with the Owner's Property until released by the City. This Covenant can only be released by the City's Chief Administrative Office with the concurrence of the City Engineer.

10. Entire Covenant. This Covenant contains the entire agreement of the parties and supersedes any and all other agreements or understandings, oral or written, whether previous to the execution hereof or contemporaneous herewith.

11. Changes to the Covenant. Changes to this Covenant are not binding unless made in writing, signed by both

parties.

12. Effective Date of Covenant. This Covenant shall be effective as of the date of signature of the owner.

RECEIVED
AUG 4 1994



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

March 17, 1994

Mr. Marvin R. Kortum
1605 Speakman Dr. SE
Albuquerque, NM 87123

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RE: SITE DEVELOPMENT PLAN APPROVAL FOR LA BOTANICA SUBDIVISION (H-12/B13)
ENGINEER'S STAMP DATED 3/9/94

Dear Mr. Kortum:

Based upon your 3/10/94 submittal for the referenced project, several concerns will have to be addressed prior to authorizing Site Development Plan approval. My comments and concerns are as follows:

1. You have not addressed in your report whether or not there is existing or programmed drainage improvements downstream of your site which could accept storm flows from your site. Prior to accepting the total retention scenario you have proposed it needs to be demonstrated that the downstream facilities are not in place or are not currently planned.
2. Assuming that you are able to demonstrate that no existing storm flows cross your site and that total retention is your only viable option, then your plan needs to be modified in the following manner to make it acceptable to the City:
 - a) It will be required that an acceptable flood wall be constructed around the perimeter of the site. The height of the wall should be a minimum of 6" above the expected onsite floodwater elevation. Please identify on the grading plan elevations of the floodwall at appropriate locations.
 - b) The entire site should be graded flat with no localized ponding onsite. The pads, as you have defined, should be elevated a minimum of 1' above the 100-year water surface elevation.
 - c) The onsite roadway should include mountable, or equal, curb such that water will leave the roadway laterally onto each adjacent lot. Provisions will have to be made at the entrance from Gabaldon to ensure that no offsite floodwaters can enter the site. Please provide elevations along Gabaldon adjacent to the site.

- d) If you expect that flood irrigation will be possible on these lots, the drainage plan should show a mandatory flood wall between each lot. This would not be a required infrastructure item at this time but would be a requirement of the individual lot owners.
- e) A Drainage Covenant defining the drainage management plan for the site needs to be prepared so that perspective lot owners are well aware of the total retention concept.

Again, if you can show that total retention is your only viable option in the development of this site then your proposed drainage plan, with the above modifications, should be acceptable. Please be advised that when you are ready to submit for Preliminary Plat approval, it will help expedite the review process if you include the Infrastructure List and any Drainage Covenants with that submittal.

If I can be of further assistance, feel free to call me at 768-3622.

Cordially,



Scott Davis
PWD, Hydrology Division

(WP+8387)

c: File