

CITY OF ALBUQUERQUE



September 9, 2015

Ronald R. Bohannon, PE
Tierra West, LLC
5571 Midway Park Place NE
Albuquerque, NM 87109

Re: Dr. Ken Hurt
3710 Bosque Plaza NW
Request Permanent C.O. - Accepted
Engineer's Stamp dated: 5-16-14 (E12D006D)
Certification dated: 8-3-15

Dear Mr. Bohannon,

Based on the Certification received 9/3/2015, the above mentioned building is acceptable for release of Certificate of Occupancy by Hydrology.

PO Box 1293

If you have any questions, you can contact me at 924-3695 or Totten Elliott at 924-3982.

Albuquerque

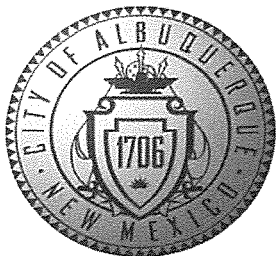
Sincerely,

New Mexico 87103

Rita Harmon, P.E.
Senior Engineer, Hydrology
Planning Department

www.cabq.gov

C: TE/RH
email



City of Albuquerque

Planning Department

Development & Building Services Division

RAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: Dr. Ken Hurt City Drainage #: _____

DRB#: _____ EPC#: _____ Work Order#: _____

Legal Description: Bosque Plaza Tract 5A

City Address: 3710 Bosque Plaza NW

Engineering Firm: Tierra West, LLC Contact: Ronald R. Bohannon

Address: 5571 Midway Park Place NE Albuquerque, NM 87109

Phone#: 505-858-3100 Fax#: 505-858-1118 E-mail: rrb@tierrawestll.com

Owner: Ken Hurt Contact: Ken Hurt

Address: 6330 Riverside Plaza Lane

Phone#: 505-897-2060 Fax#: _____ E-mail: khurt53@earthlink.net

Architect: Darren Sowell Architects, LLC Contact: Janet Sowell

Address: 4700 Lincoln Rd NE Suite #111

Phone#: 505-342-6200 Fax#: 505-342-6201 E-mail: janets@dsaabq.com

Surveyor: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

Contractor: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

TYPE OF SUBMITTAL:

- ☐ DRAINAGE REPORT
- ☐ DRAINAGE PLAN 1st SUBMITTAL
- ☐ DRAINAGE PLAN RESUBMITTAL
- ☐ CONCEPTUAL G & D PLAN
- ☐ GRADING PLAN
- ☐ EROSION & SEDIMENT CONTROL PLAN (ESC)
- ☒ ENGINEER'S CERT (HYDROLOGY)
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ ENGINEER'S CERT (TCL)
- ☐ ENGINEER'S CERT (DRB SITE PLAN)
- ☐ ENGINEER'S CERT (ESC)
- ☐ SO-19
- ☐ OTHER (SPECIFY) _____

CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

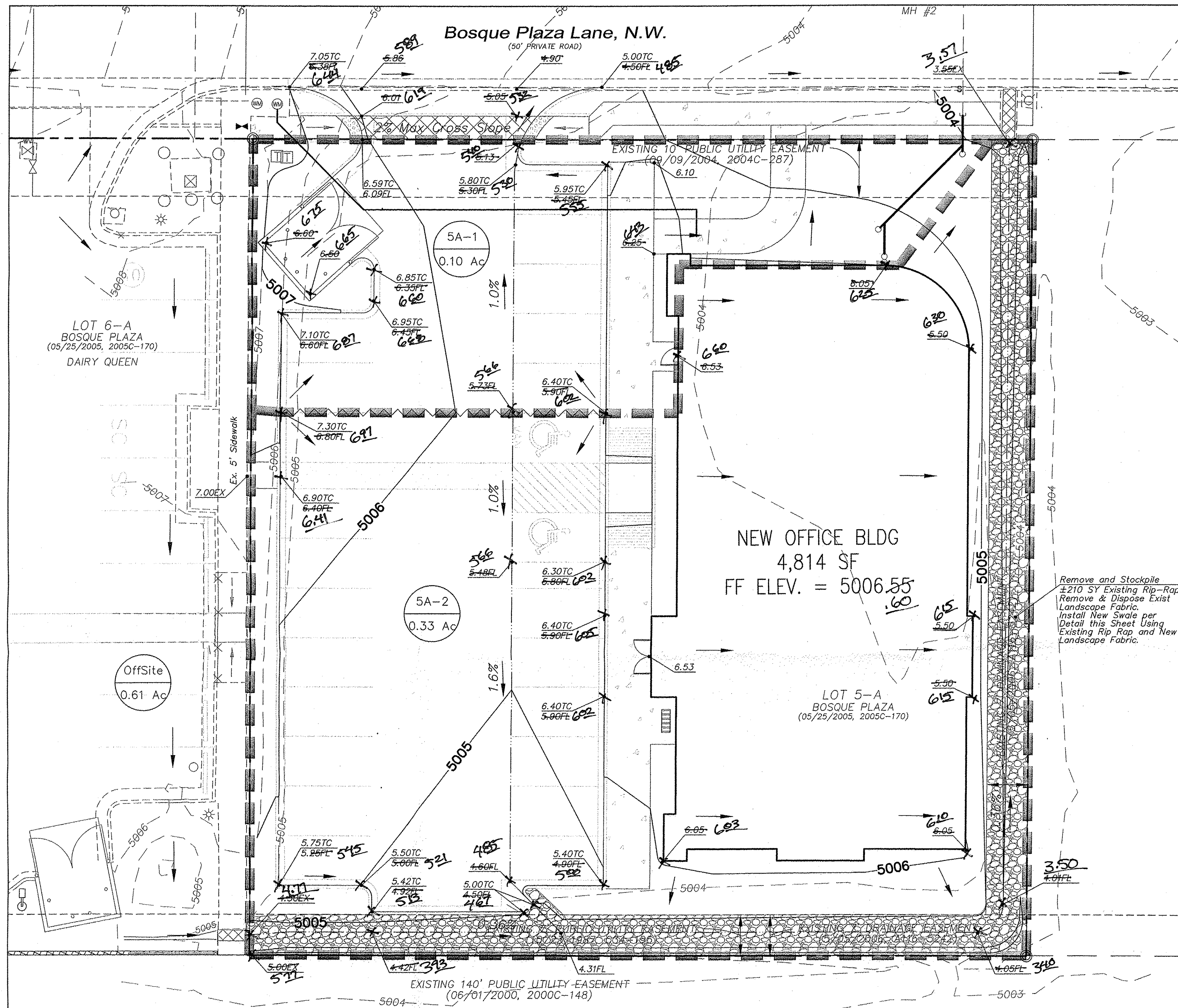
- ☐ SIA/FINANCIAL GUARANTEE RELEASE
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ S. DEV. PLAN FOR SUB'D APPROVAL
- ☐ S. DEV. FOR BLDG. PERMIT APPROVAL
- ☐ SECTOR PLAN APPROVAL
- ☐ FINAL PLAT APPROVAL
- ☒ CERTIFICATE OF OCCUPANCY (PERM)
- ☐ CERTIFICATE OF OCCUPANCY (TCL TEMP)
- ☐ FOUNDATION PERMIT APPROVAL
- ☐ BUILDING PERMIT APPROVAL
- ☐ GRADING PERMIT APPROVAL
- ☐ PAVING PERMIT APPROVAL
- ☐ WORK ORDER APPROVAL
- ☐ GRADING CERTIFICATION
- ☐ SO-19 APPROVAL
- ☐ ESC PERMIT APPROVAL
- ☐ ESC CERT. ACCEPTANCE
- ☐ OTHER (SPECIFY) _____

WAS A PRE-DESIGN CONFERENCE ATTENDED: _____ Yes _____ No _____ Copy Provided

DATE SUBMITTED: 9/2/15 By: Ron Bohannon

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location, and scope to 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
3. **Drainage Report:** Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more
4. **Erosion and Sediment Control Plan:** Required for any new development and redevelopment site with 1-acre or more of land disturbing area, including project less than 1-acre than are part of a larger common plan of development



LEGEND

- CURB & GUTTER
- BOUNDARY LINE
- EASEMENT
- CENTERLINE
- RIGHT-OF-WAY
- BUILDING
- SIDEWALK
- SCREEN WALL
- RETAINING WALL
- 5010 CONTOUR MAJOR
- 5011 CONTOUR MINOR
- x 5048.25 SPOT ELEVATION
- FLOW ARROW
- EXISTING CURB & GUTTER
- EXISTING BOUNDARY LINE
- 5010 EXISTING CONTOUR MAJOR
- 5011 EXISTING CONTOUR MINOR
- x 5048.25 EXISTING SPOT ELEVATION

DRAINAGE MANAGEMENT PLAN

INTRODUCTION

The purpose of this submittal is to provide a final drainage management plan for the proposed office building and parking lot serving a new office building located at 3710 Bosque Plaza Lane NW in Albuquerque, New Mexico. The site contains approximately 0.43 acres.

EXISTING HYDROLOGIC CONDITIONS

The site is part of an approved master drainage plan titled "Revised Drainage Report for Southeast Corner of La Orilla and Coors, Lots 1, 2, 3, 4, 5, 6A, 7A, 8 of the Lands of Martin L. Taylor" dated September 25, 2002. An updated grading plan dated August 5, 2004 was approved that affects the subject property as well as the Dairy Queen site to the west.

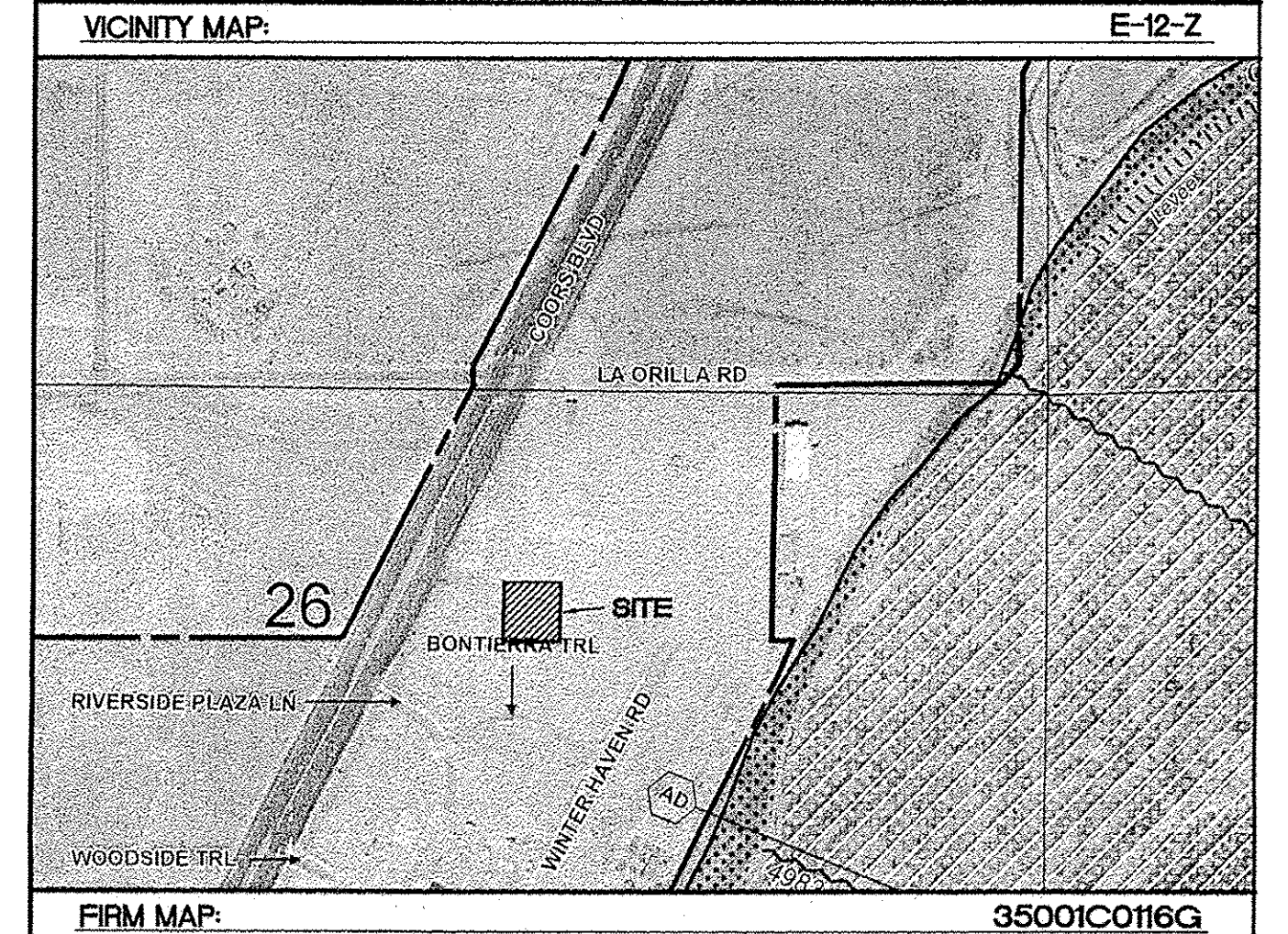
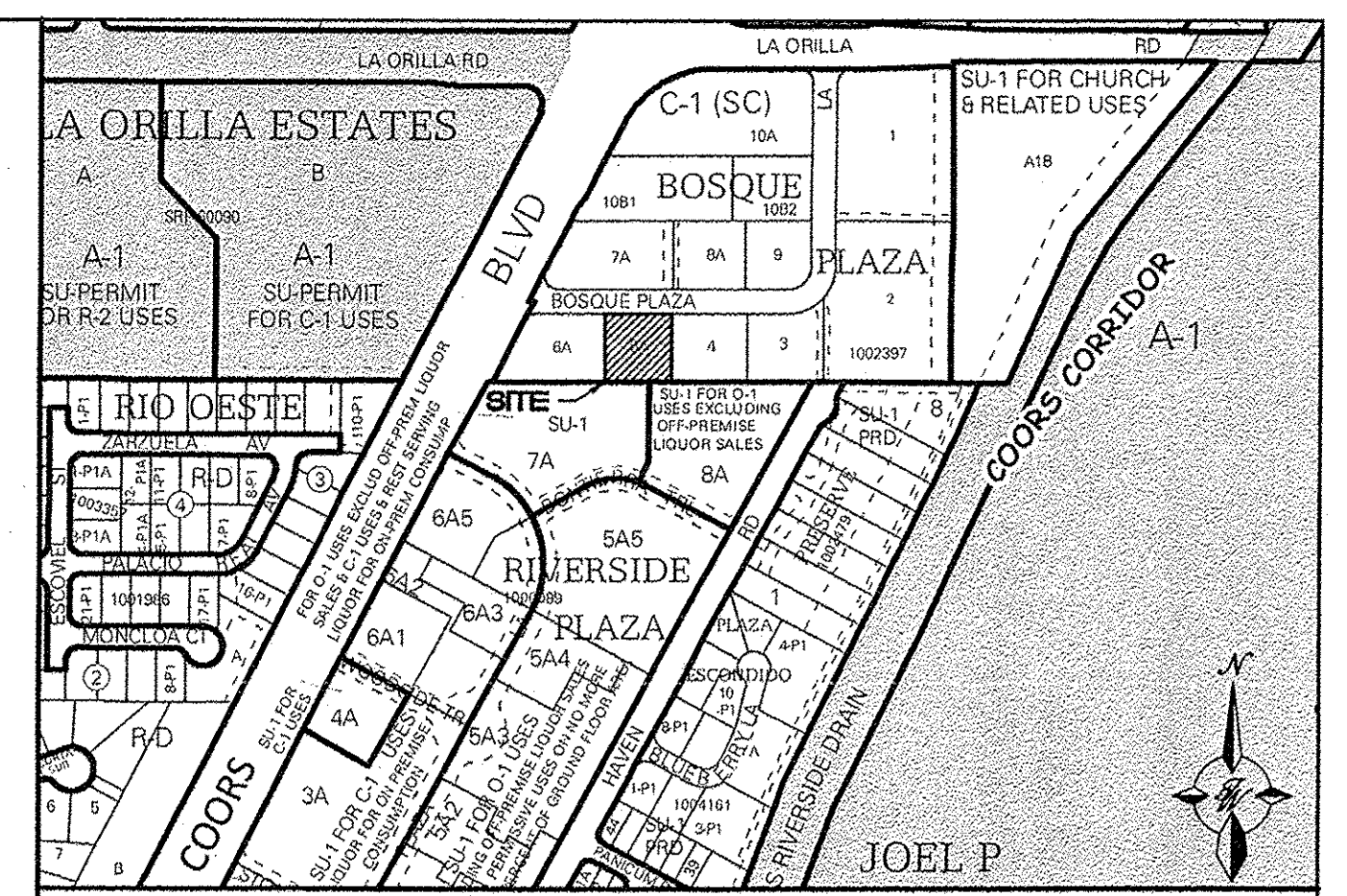
The site is currently undeveloped and drains via surface flow from west to east and then north to Bosque Plaza Lane in a Rip-Rap lined swale. There is an existing Dairy Queen development (0.61 Acres) to the west of the subject that drains through the existing Rip-Rap lined swale as well. Per the Drainage Calculations table, the total drainage from the 100-Yr storm event is 3.37 cfs and discharges to Bosque Plaza Lane.

PROPOSED HYDROLOGIC CONDITIONS

The subject site will continue to drain via surface flow to Bosque Plaza Lane. The north portion of the site (0.10 acres) will drain directly to Bosque Plaza Lane; whereas the southern portion of the site (0.33 acres) will drain south and east into the drainage swale which discharges onto Bosque Plaza Lane at the northeast corner of the site. Per the Drainage Calculations table, the Post Developed discharge from the site is 4.25 cfs including the drainage from the Dairy Queen site to the west. We are proposing to reconstruct this existing swale as our analysis shows that it does not have enough capacity to carry the 100-Yr storm. Reference the cross section detail this sheet for capacity calculations of the proposed swale.

CONCLUSION

This drainage management plan provides for grading and drainage elements which are capable of safely passing the 100 year storm and which meets city requirements. The proposed improvements to the site should not have any negative impacts to facilities downstream. With this submittal, we are requesting approval for EPC, DRB, and Building Permit.



BENCHMARK: ELEVATION DATUM IS BASED ON NAVD 1988 FROM AGRS MONUMENT "NM_448_N8" PUBLISHED ELEVATION (FEET) = 5021.651

DRAINAGE CERTIFICATION WITH SURVEY WORK DONE BY PROFESSIONAL SURVEYOR

DRAINAGE CERTIFICATION
I, RONALD R. BOHANNAN, NMPE # 7868, OF THE FIRM, TIERRA WEST LLC, HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 06/17/2000. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY CAVEY, ELIZABETH, NMPS # 6666, OF THE FIRM, ALPHABETICALLY. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON 4/23/14 AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR PERMANENT BUILDING CERTIFICATE OF OCCUPANCY.

EXCEPTIONS:
NONE TAKEN

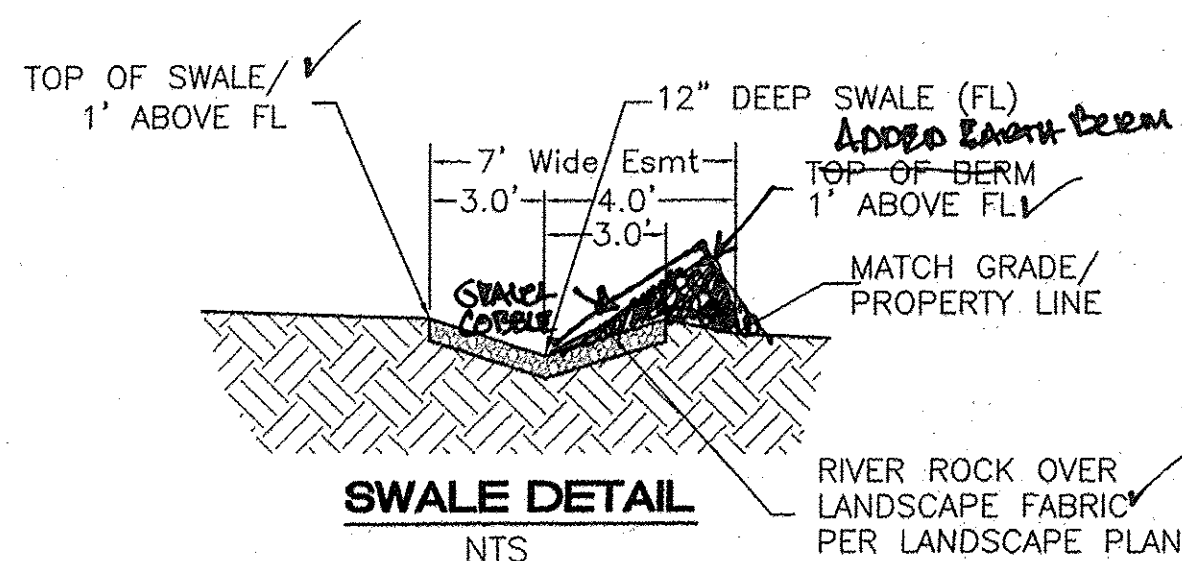
THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERY SUBSTANTIAL COMPLIANCE WITH THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD INFORMATION SHOULD OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

RONALD R. BOHANNAN, NMPE # 7868
DATE: 4/23/14
PROFESSIONAL ENGINEER

(SEAL)

ROUGH GRADING APPROVAL

DATE



Drainage Calculations:
Known:
S=0.36% Min
A=3.0 SF
Wp=6.1'
R=0.49
n=0.030
Q100=3.84 cfs
Calculated:
Qcalc = A(1.486/n)*(R^0.67)*(S^0.5)
Qcalc = 3.0(1.486/0.030)*(0.49^0.67)*(0.0036^0.5)
Qcalc = 5.53 cfs
Depth = 0.89'
Velocity = 1.67fps

Pre-Developed Drainage Calculations

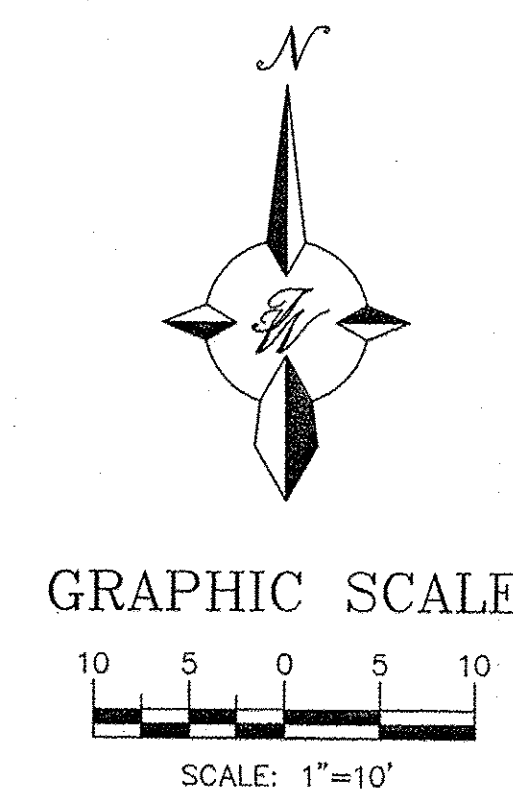
This table is based on the COA DPM Section 22.2, Zone 1

| BASIN | Area (SQ. FT) | Area (AC.) | A | B | C | D | Q(100) (cfs/ac.) | Q(100) (CFS) | WTE (inches) | V(100)669 (CF) | V(100)1440 (CF) | V(100)1000yr (CF) |
|---------|---------------|------------|------|--------|-------|-------|------------------|--------------|--------------|----------------|-----------------|-------------------|
| Offsite | 26650 | 0.61 | 0.0% | 0.0% | 19.0% | 81.0% | 4.09 | 2.50 | 1.78 | 3962 | 5473 | 7515 |
| 5A-1 | 4413 | 0.10 | 0.0% | 100.0% | 0.0% | 0.0% | 2.03 | 0.21 | 0.67 | 246 | 246 | 835 |
| 5A-2 | 14313 | 0.33 | 0.0% | 100.0% | 0.0% | 0.0% | 2.03 | 0.67 | 0.67 | 799 | 799 | 2708 |
| TOTAL | 45376 | 1.04 | | | | | | 3.37 | | 5007 | 6518 | 11057 |

Post Developed Drainage Calculations

Ultimate Development Conditions Basin Data Table
This table is based on the COA DPM Section 22.2, Zone 1

| BASIN | Area (SQ. FT) | Area (AC.) | A | B | C | D | Q(100) (cfs/ac.) | Q(100) (CFS) | WTE (inches) | V(100)669 (CF) | V(100)1440 (CF) | V(100)1000yr (CF) |
|---------|---------------|------------|------|------|-------|-------|------------------|--------------|--------------|----------------|-----------------|-------------------|
| Offsite | 26650 | 0.61 | 0.0% | 0.0% | 19.0% | 81.0% | 4.09 | 2.50 | 1.78 | 3962 | 5473 | 7515 |
| 5A-1 | 4413 | 0.10 | 0.0% | 0.0% | 20.0% | 80.0% | 4.07 | 0.41 | 1.77 | 652 | 900 | 1241 |
| 5A-2 | 14313 | 0.33 | 0.0% | 0.0% | 20.0% | 80.0% | 4.07 | 1.34 | 1.77 | 2116 | 2917 | 4024 |
| TOTAL | 45376 | 1.04 | | | | | | 4.25 | | 6730 | 9290 | 12780 |



| | | |
|--|--|--|
| ENGINEER'S SEAL JEFFREY TODD WOOTEN NEW MEXICO 16892 PROFESSIONAL ENGINEER | OFFICE BUILDING DR. KEN HURT GRADING AND DRAINAGE PLAN | DRAWN BY JW DATE 4/23/14 2014012-GRE |
| RONALD R. BOHANNAN P.E. #7868 | TIERRA WEST, LLC 5571 MIDWAY PARK PLACE NE ALBUQUERQUE, NM 87109 (505) 858-3100 www.tierrawest.com | SHEET # C1 JOB # 2014012 |

RECEIVED
MAY 19 2014
LAND DEVELOPMENT SECTION