

# CITY OF ALBUQUERQUE



December 1, 2015

Richard J. Berry, Mayor

Jeffrey T. Wooten  
Wooten Engineering  
1368 Reynosa Loop SE  
Rio Rancho, NM, 87124

**RE: Commercial & Apartment Building – Phase I  
4<sup>th</sup> St NW and Freeman Ave NW  
Grading and Drainage Plan  
Engineer's Stamp Date 11-23-2015 (File: G14D066)**

Dear Mr. Wooten:

Based upon the information received in your submittal received 11-23-2015, the above referenced Grading and Drainage Plan is approved for Building Permit. Please attach a copy of this approved plan in the construction sets when submitting for a building permit.

Ensure the appropriate paperwork has been completed for the Floodplain Construction Permit.

PO Box 1293

Prior to Certificate of Occupancy release, Engineer Certification per the DPM Checklist will be required.

Albuquerque

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

New Mexico 87103

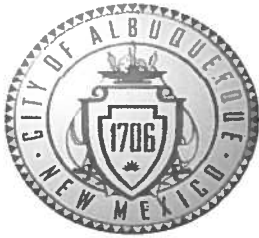
Sincerely

Abiel Carrillo, P.E.  
Principal Engineer, Planning Dept.  
Development Review Services

www.cabq.gov

RA/AC

Orig: Drainage file  
c.pdf Addressee via Email



# City of Albuquerque

Planning Department

Development & Building Services Division

## DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

614 DOLB

Project Title: Commercial & Apartment Building - Phase 1 Building Permit #: \_\_\_\_\_ City Drainage #: \_\_\_\_\_  
DRB#: \_\_\_\_\_ EPC#: \_\_\_\_\_ Work Order#: \_\_\_\_\_  
Legal Description: Tract 1-A, Block 1, Belmont Place  
City Address: 4419 4th St NW

Engineering Firm: Wooten Engineering Contact: Jeffrey T. Wooten, P.E.  
Address: 1368 Reynosa Loop SE, Rio Rancho, NM 87124  
Phone#: 505-980-3560 Fax#: N/A E-mail: jeffwooten.pe@gmail.com

Owner: \_\_\_\_\_ Contact: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone#: \_\_\_\_\_ Fax#: \_\_\_\_\_ E-mail: \_\_\_\_\_

Architect: Scott C Anderson & Associates Architects Contact: Scott Anderson  
Address: 7604 Rio Penasco NW, ABQ, NM 87120  
Phone#: 505-401-7575 Fax#: N/A E-mail: andersonscottc@comcast.net

Other Contact: \_\_\_\_\_ Contact: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone#: \_\_\_\_\_ Fax#: \_\_\_\_\_ E-mail: \_\_\_\_\_

Check all that Apply:

### DEPARTMENT:

- ☒ HYDROLOGY/ DRAINAGE  
☐ TRAFFIC/ TRANSPORTATION  
☐ MS4/ EROSION & SEDIMENT CONTROL

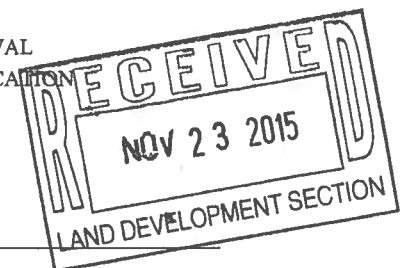
### TYPE OF SUBMITTAL:

- ☐ ENGINEER/ ARCHITECT CERTIFICATION  
☐ CONCEPTUAL G & D PLAN  
☒ GRADING PLAN  
☐ DRAINAGE MASTER PLAN  
☐ DRAINAGE REPORT  
☐ CLOMR/LOMR  
☐ TRAFFIC CIRCULATION LAYOUT (TCL)  
☐ TRAFFIC IMPACT STUDY (TIS)  
☐ EROSION & SEDIMENT CONTROL PLAN (ESC)  
☐ OTHER (SPECIFY) \_\_\_\_\_

IS THIS A RESUBMITTAL?: ☒ Yes ☐ No

### CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- ☒ BUILDING PERMIT APPROVAL  
☐ CERTIFICATE OF OCCUPANCY  
☐ PRELIMINARY PLAT APPROVAL  
☐ SITE PLAN FOR SUB'D APPROVAL  
☐ SITE PLAN FOR BLDG. PERMIT APPROVAL  
☐ FINAL PLAT APPROVAL  
☐ SIA/ RELEASE OF FINANCIAL GUARANTEE  
☐ FOUNDATION PERMIT APPROVAL  
☒ GRADING PERMIT APPROVAL  
☐ SO-19 APPROVAL  
☒ PAVING PERMIT APPROVAL  
☐ GRADING/ PAD CERTIFICATION  
☐ WORK ORDER APPROVAL  
☐ CLOMR/LOMR  
☐ PRE-DESIGN MEETING  
☐ OTHER (SPECIFY) \_\_\_\_\_



DATE SUBMITTED: 11/23/2015 By: Jeffrey T. Wooten, P.E.

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: \_\_\_\_\_



**Wooten Engineering**  
1005 21<sup>st</sup> Street SE, Suite B1  
Rio Rancho, NM 87124  
505-980-3560  
jeffwooten.pe@gmail.com

November 23, 2015

Mr. Abiel Carillo, PE  
Principal Engineer, Planning Department  
City of Albuquerque  
PO Box 1293  
Albuquerque, NM 87103

**VIA E-Mail:** acarillo@cabq.gov

RE: Commercial & Apartment Building – Phase 1, 4419 4<sup>th</sup> St NW  
Grading and Drainage Plans, Revised 11/23/2015 (File: G14/D066)

Abiel,

We are in receipt of your comments dated November 16, 2015 regarding the subject project. The revised plans are included with this resubmittal. Below are responses to your comments.

1. Per our phone discussion on 11/20/15 we have removed the statement about accepting 'any offsite flows'. The flow in question was a very small area at the southeast corner of our site which will flow along the property line and not across the site. All other flows on the property to the south are contained on their site. An easement will not be required.
2. We have added some cobble at the northwest corner of the site to minimize erosion from the pond's potential overflow discharge.
3. The curb openings were already called out on the TCL plan, which you likely did not receive a copy. We have added notes to the Grading Plan as well identifying the curb cut locations.
4. The necessary notes have been added to the plans showing that work within the right-of-way will be per separate work order. We also removed the SO-19 notes.

We are also aware that we will need a Floodplain Construction Permit. I will try to find you when I visit your office today so that I can fill in the form.

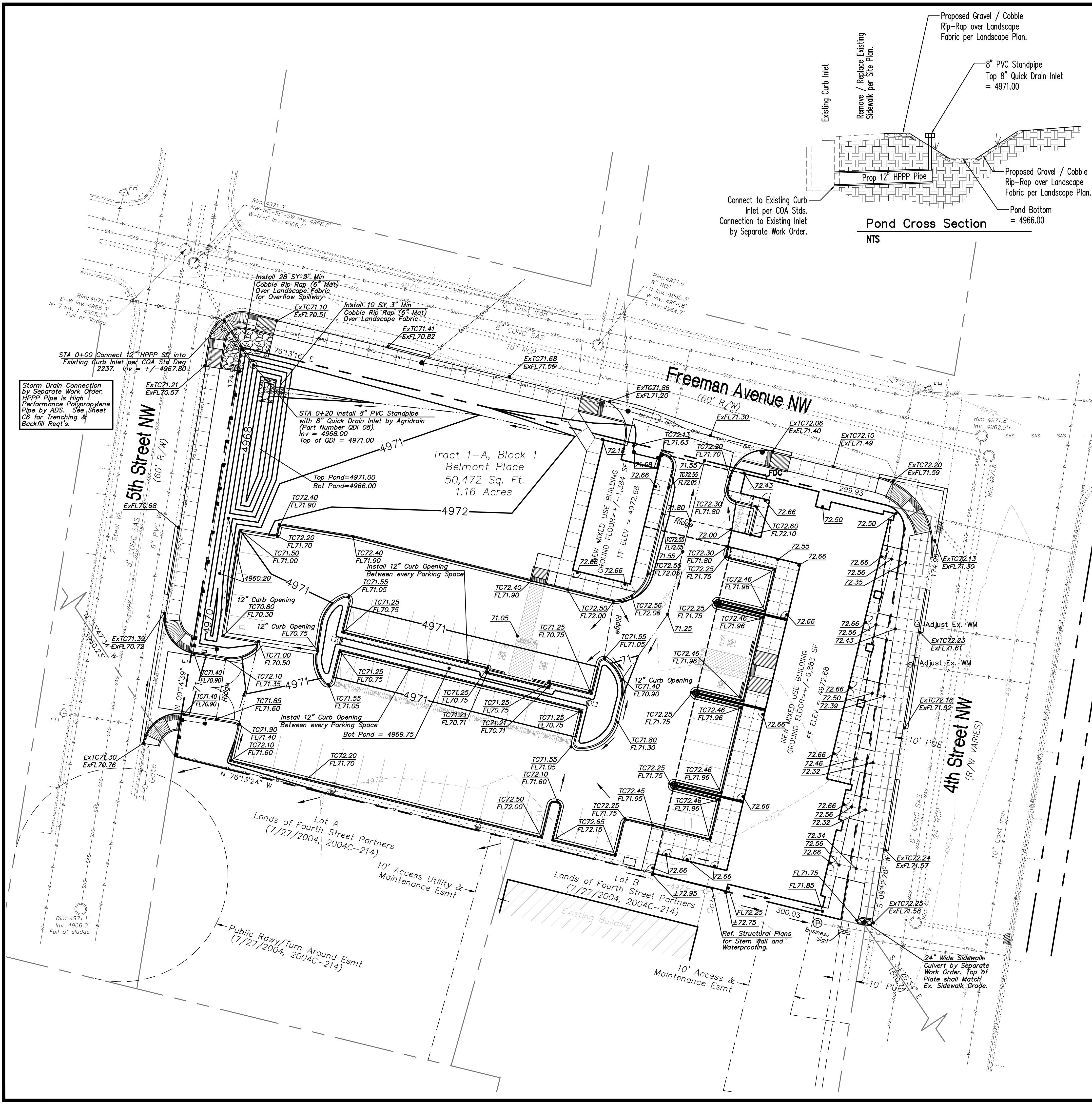
5. A cross section of the proposed pond outfall has been added to the plan.
6. We have updated the notes on the plan to show the pipe connecting to the existing inlet as a 12" HPPP pipe.
7. A note regarding the smooth transition has been added to the plan.
8. We have addressed the comments from the transportation department and the changes to the site plan are reflected on the attached revised plans.

We believe we have addressed all engineering related comments on the plans. Please feel free to call if you have any further questions or comments concerning the revised plans.

Respectfully submitted,

**WOOTEN ENGINEERING**

Jeffrey T. Wooten, P.E.  
Owner



CAUTION - NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL NEW MEXICO ONE CALL (811) AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

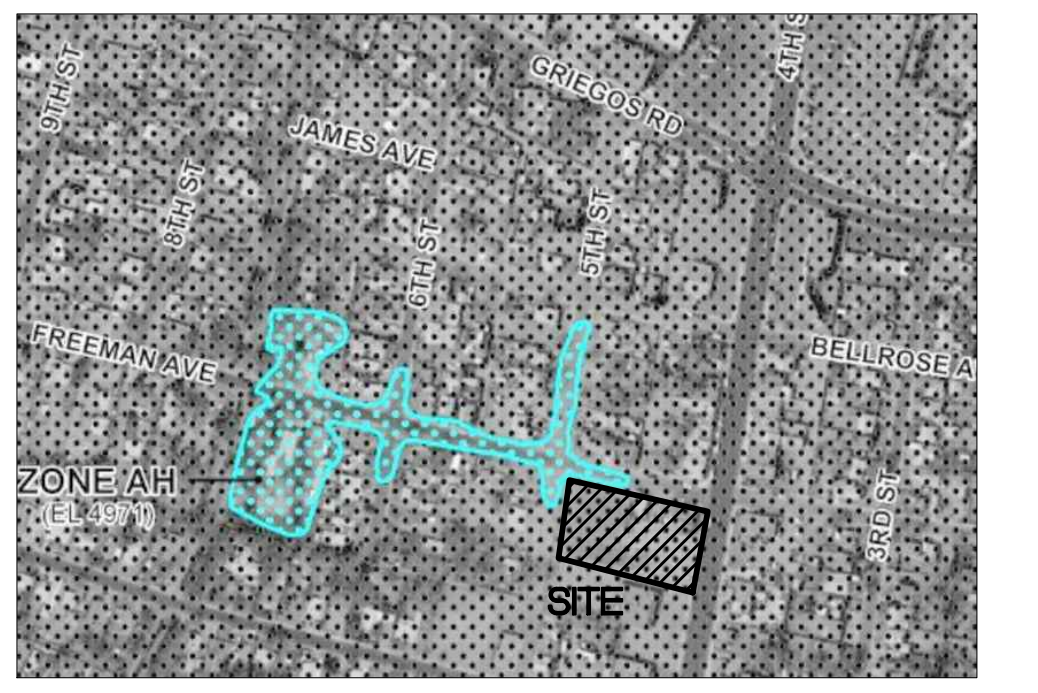
**LEGEND**

- FLOW ARROW
- PROPOSED TOP OF GRADE/PVMT ELEVATIONS
- PROPOSED FLOW LINE/GUTTER ELEVATIONS
- PROPOSED TOP OF CURB ELEVATIONS
- EXISTING CONTOUR
- PROPOSED CONTOUR
- EXISTING STORM DRAIN
- FLOW LINE
- RIDGE LINE

- GRADING NOTES**
- EXCEPT AS PROVIDED HEREIN, GRADING SHALL BE PERFORMED AT THE ELEVATIONS AND IN ACCORDANCE WITH THE DETAILS SHOWN ON THIS PLAN.
  - THE COST FOR REQUIRED CONSTRUCTION DUST AND EROSION CONTROL MEASURES SHALL BE INCIDENTAL TO THE PROJECT COST.
  - ALL WORK RELATIVE TO FOUNDATION CONSTRUCTION, SITE PREPARATION, AND PAVEMENT INSTALLATION, AS SHOWN ON THIS PLAN, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "GEOTECHNICAL INVESTIGATION," AS PROVIDED BY THE ARCHITECT OR OWNER. ALL OTHER WORK SHALL, UNLESS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT, (FIRST PRIORITY) SPECIFICATIONS, AND/OR THE CITY OF ALBUQUERQUE (COA) STANDARD SPECIFICATIONS FOR PUBLIC WORKS (SECOND PRIORITY).
  - EARTH SLOPES SHALL NOT EXCEED 3 HORIZONTAL TO 1 VERTICAL UNLESS SHOWN OTHERWISE.
  - IT IS THE INTENT OF THESE PLANS THAT THIS CONTRACTOR SHALL NOT PERFORM ANY WORK OUTSIDE OF THE PROPERTY BOUNDARIES EXCEPT AS REQUIRED BY THIS PLAN.
  - THE CONTRACTOR IS TO ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PROPERTY OR PUBLIC RIGHT-OF-WAY. THIS SHOULD BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS OR SILT FENCE AT THE PROPERTY LINES AND WETTING THE SOIL TO PROTECT IT FROM WIND EROSION.
  - A DISPOSAL SITE FOR ANY & ALL EXCESS EXCAVATION MATERIAL, AND UNSUITABLE MATERIAL AND/OR A BORROW SITE CONTAINING ACCEPTABLE FILL MATERIAL SHALL BE OBTAINED BY THE CONTRACTOR IN COMPLIANCE WITH APPLICABLE ENVIRONMENTAL REGULATIONS AND APPROVED BY THE OBSERVER. ALL COSTS INCURRED IN OBTAINING A DISPOSAL OR BORROW SITE AND HAUL TO OR FROM SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE.
  - PAVING AND ROADWAY GRADES SHALL BE +/- 0.05' FROM PLAN ELEVATIONS. PAD ELEVATION SHALL BE +/- 0.05' FROM BUILDING PLAN ELEVATION.
  - ALL PROPOSED CONTOURS AND SPOT ELEVATIONS REFLECT TOP OF PAVEMENT ELEVATIONS IN THE PARKING AREA AND MUST BE ADJUSTED FOR PAVEMENT, MEDIANS, AND ISLANDS.
  - VERIFY ALL ELEVATIONS SHOWN ON PLAN FROM BASIS OF ELEVATION CONTROL STATION (IF APPLICABLE) PRIOR TO BEGINNING CONSTRUCTION.
  - THE CONTRACTOR SHALL PROVIDE THE SWPPP DOCUMENT (IF NECESSARY) AND SHALL ABIDE BY ALL LOCAL, STATE, AND FEDERAL LAWS, RULES AND REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS, INCLUDING EPA REQUIREMENTS WITH RESPECT TO STORM WATER DISCHARGE.



**VICINITY MAP Zone Atlas G-14**  
Legal Description: Tract 1-A, Block 1, Belmont Place



**FIRM MAP 35001C0119G**  
Per FIRM Map 35001C0119G, dated September 26, 2008, the site is not located in the "Zone X Floodplain" and determined to be within the 0.2% chance Annual Floodplain area with depths of less than 1 foot.

- NOTICE TO CONTRACTORS**
- AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
  - ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 UPDATE NO. 8.
  - TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NM ONE CALL FOR LOCATION OF EXISTING UTILITIES. (NM ONE CALL = 811)
  - PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
  - BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
  - MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
  - WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.

No	Revision	Item	Date

**SCOTT C. ANDERSON & ASSOCIATES**  
architects  
7600 RIO PENASCO NW  
ALBUQUERQUE, NM 87120  
andersonscott@scottanderson.com  
505.481.7575

**COMMERCIAL & APARTMENT BUILDING PHASE 1**  
4419 4th ST NW  
ALBUQUERQUE, NM 87107

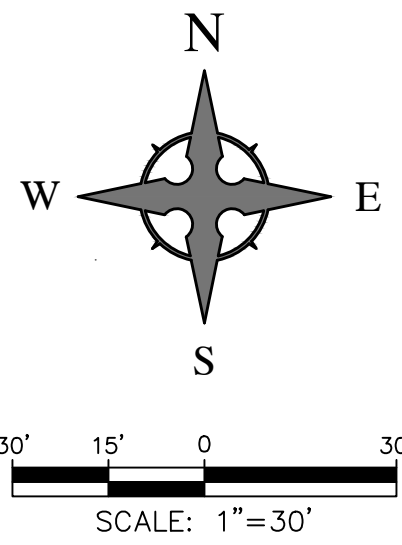
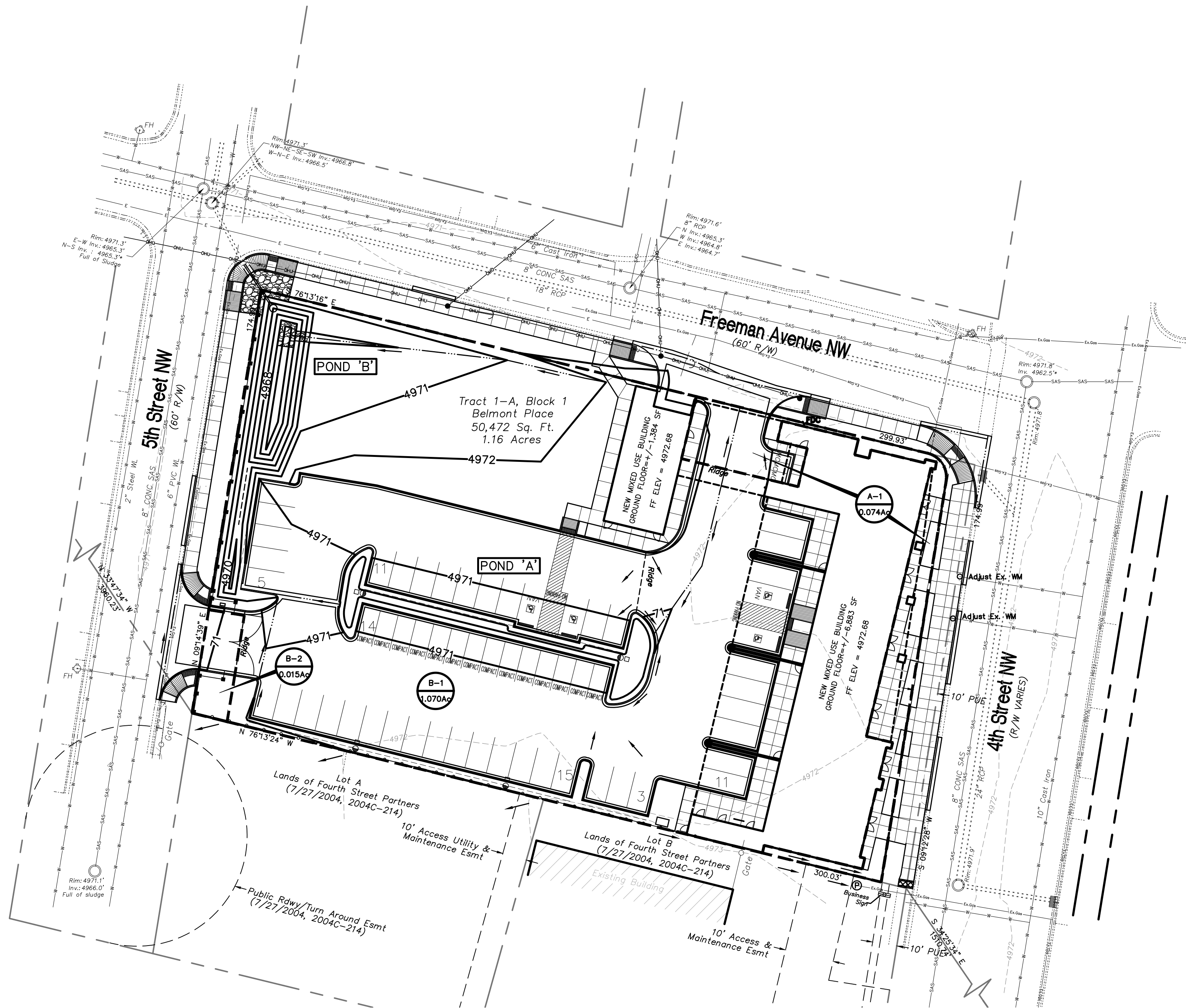
DRAWING TITLE: **Grading Plan**

DESIGNED	JTW	PROJECT NO	WE2014059
DRAWN	JTW	SCALE	See Plan
CHECKED	JTW	DRAWING NO	C2_6
REVIEWED	JTW	DATE	11/23/2015

**JEFFREY TODD WOOTEN**  
NEW MEXICO  
16892  
PROFESSIONAL ENGINEER

11/23/2015

**Wooten Engineering**  
1005 21st Street SE, Suite B1  
Rio Rancho, N.M. 87124  
Phone: (505) 980-3560



CAUTION – NOTICE TO CONTRACTOR

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DRAINAGE MANAGEMENT PLAN

INTRODUCTION

The purpose of this submittal is to provide a final drainage management plan for the Redevelopment of 4419 4th St NW, located at the SWC of 4th St NW and Freeman Ave NW in Albuquerque, NM. The site contains approximately 1.16 acres. We were unable to locate an existing Drainage Study for the site.

EXISTING HYDROLOGIC CONDITIONS

Although a portion of the site used to be developed as office building, the site was razed in +/-1996 and we are analyzing the site in its current condition. The site is currently undeveloped and sheet flows from east to west into adjacent roadways, Freeman Ave and 5th St. These flows ultimately drain to several existing curb inlets located at the intersection of 5th St/Freeman Ave. This storm drain system flows eastward toward 4th St. Per the Calculations table this sheet, the total existing flow leaving the site is 3.64 cfs during the 100–Yr, 6–Hr Storm Event.

PROPOSED HYDROLOGIC CONDITIONS

The proposed drainage patterns generally remain the same; however, there are a couple of very small drainage basins (A–1 and B–2) that need to be directed directly into adjacent roadways. These two basins equate to a minimal flow rate of 0.40 cfs per the calculations table this sheet. The remaining drainage from the site is calculated to contribute a total of 4.80 cfs during the 100–Yr storm. Since the site is located in the valley area, it is our understanding that the site is limited to a discharge of 2.75 cfs/acre. The subject site is 1.16 acres, so the total allowable discharge from the site is 3.19 cfs. Subtracting Basins A–1 and B–2 (0.40 cfs) which directly discharge into adjacent roadways, the total allowable discharge from the remainder of the site is 2.79 cfs.

In order to effectively reduce the 4.80 cfs discharge from Basin B–1 to the allowable 2.79 cfs rate of discharge, we are implementing a retention pond that is larger than the required first flush rate of 0.34". The proposed ponds 'A' and 'B' provide a total volume of 3,870.50 cubic feet which equates to a total capture of 1.07" of rainfall from the site. This is over 3.0 times that of the required first flush. We are also implementing a stormwater quality outlet (8" Agrigrain outlet) to protect against trash and oils discharging from the site.

FIRST FLUSH CALCULATIONS

Per the First Flush Calculations on this sheet, the total First Flush Volume required to be collected for the site is 1,232 CF. Per the Water Harvesting Pond Calculations table this sheet, we are actually retaining 3,870.50 CF of flow from the site which is just over 3 times the quantity required.

CONCLUSION

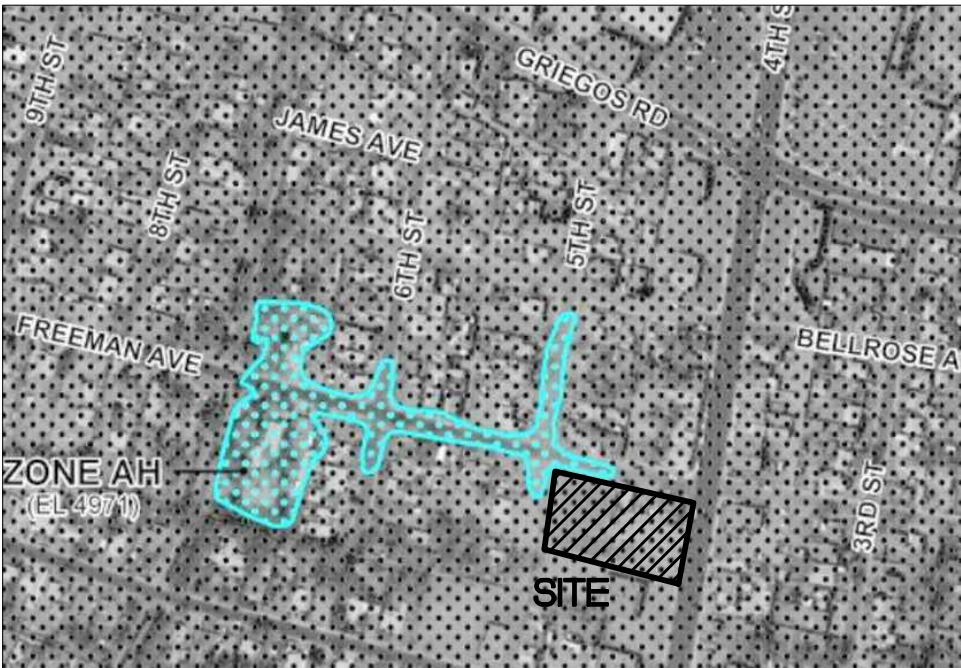
This drainage management plan provides for grading and drainage elements which reduce the impact to downstream systems; are capable of safely passing the 100 year storm, do not burden downstream systems, and meet city requirements. In addition, the proposed water harvesting ponds will help treat stormwater runoff per the DPM. The proposed improvements to the site should not have any negative impacts to facilities downstream. With this submittal, we are requesting Drainage Management Plan and Building Permit approval.



VICINITY MAP Zone Atlas G-14

NTS

Legal Description: Tract 1–A, Block 1, Belmont Place



FIRM MAP 35001C0119G

Per FIRM Map 35001C0119G, dated September 26, 2008, the site is not located in the 'Zone X Floodplain' and determined to be within the 0.2% chance Annual Floodplain area with depths of less than 1 foot.

LEGEND

- 27.8' ← FLOW ARROW
- FL27.8' ← PROPOSED TOP OF GRADE/PVMT ELEVATIONS
- TC27.8' ← PROPOSED FLOW LINE/GUTTER ELEVATIONS
- ← 515 ← PROPOSED TOP OF CURB ELEVATIONS
- 515 — EXISTING CONTOUR
- 515 — PROPOSED CONTOUR
- EXISTING STORM DRAIN
- FLOW LINE
- RIDGE LINE

IMPERVIOUS AREA CALCULATIONS

PROPOSED SITE CONDITIONS

PERVIOUS AREA: 7,000 SF

IMPERVIOUS AREA: 43,472 SF

TOTAL SITE AREA: 50,472 SF

% IMPERVIOUS = 86.13%

FIRST FLUSH CALCULATION

TOTAL IMPERVIOUS AREA = 43,472 SF

FIRST FLUSH =  $43,472 \times 0.34" / 12 = 1,232 \text{ CF}$

WATER HARVESTING POND VOLUME CALCULATIONS			
	CONTOUR ELEVATION	AREA (SF)	VOLUME (CF)
POND 'A'	4970.75	1,362 SF	340.50 CF
	4969.75	0 SF	
	TOTAL		340.5 CF
POND 'B'	4970.50	1,864 SF	842 CF
	4970.00	1,504 SF	
	4969.00	1,202 SF	1,202 CF
	4968.00	614 SF	757 CF
	4967.00	356 SF	485 CF
	4966.00	132 SF	244 CF
	TOTAL		3,530 CF
GRAND TOTAL			3,870.50 CF

Pre-Developed Drainage Calculations												
This table is based on the COA DPM Section 22.2, Zone: 2												
BASIN	Area (SQ. FT)	Area (AC.)	Land Treatment Percentages				Q(100) (cfs/ac.)	Q(100) (CFS)	WT E (inches)	V(100) <sub>360</sub> (CF)	V(100) <sub>440</sub> (CF)	V(100) <sub>10day</sub> (CF)
Existing Site	50472	1.159	0.0%	0.0%	100.0%	0.0%	3.14	3.64	1.13	4753	4753	4753
TOTAL	50472	1.159						3.64		4753	4753	4753

Post-Developed Drainage Calculations												
Ultimate Development Conditions Basin Data Table												
This table is based on the COA DPM Section 22.2, Zone: 2												
BASIN	Area (SQ. FT)	Area (AC.)	Land Treatment Percentages				Q(100) (cfs/ac.)	Q(100) (CFS)	WT E (inches)	V(100) <sub>360</sub> (CF)	V(100) <sub>440</sub> (CF)	V(100) <sub>10day</sub> (CF)
A-1	3205	0.074	0.0%	0.0%	14.0%	86.0%	4.48	0.33	1.98	529	621	897
B-1	46629	1.070	0.0%	0.0%	14.0%	86.0%	4.48	4.80	1.98	7699	9036	13046
B-2	638	0.015	0.0%	0.0%	14.0%	86.0%	4.48	0.07	1.98	105	124	179
TOTAL	50472	1.159						5.19		8334	9781	14121

Wooten Engineering  
1005 21st Street SE, Suite B1  
Rio Rancho, N.M. 87124  
Phone: (505) 980-3560

No	Revision	Item	Date
COMMERCIAL & APARTMENT BUILDING PHASE 1 4419 4th ST NW ALBUQUERQUE, NM 87107			
DRAWING TITLE <b>Drainage Management Plan</b>			
SEAL 	DESIGNED JTW	PROJECT NO WE2014059	DRAWING NO <b>C3_6</b> DATE 10/5/15
DRAWN JTW	SCALE See Plan		
CHECKED JTW			
REVIEWED JTW			
11/23/2012			