

CITY OF ALBUQUERQUE



July 25, 2017

Jeffery Wooten, P.E.
Wooten Engineering
1005 21st St SE, Suite A5
Rio Rancho, NM 87124

RE: **Blakes Lotaburger**
1640 Gibson Blvd SE
Revised Grading and Drainage Plan
Engineer's Stamp Date 7/24/17 (File: M15D012A)

Dear Mr. Wooten:

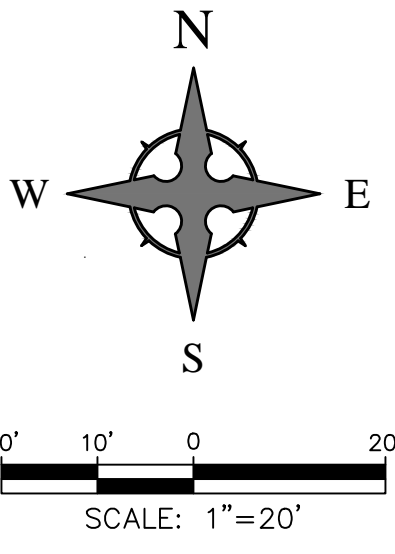
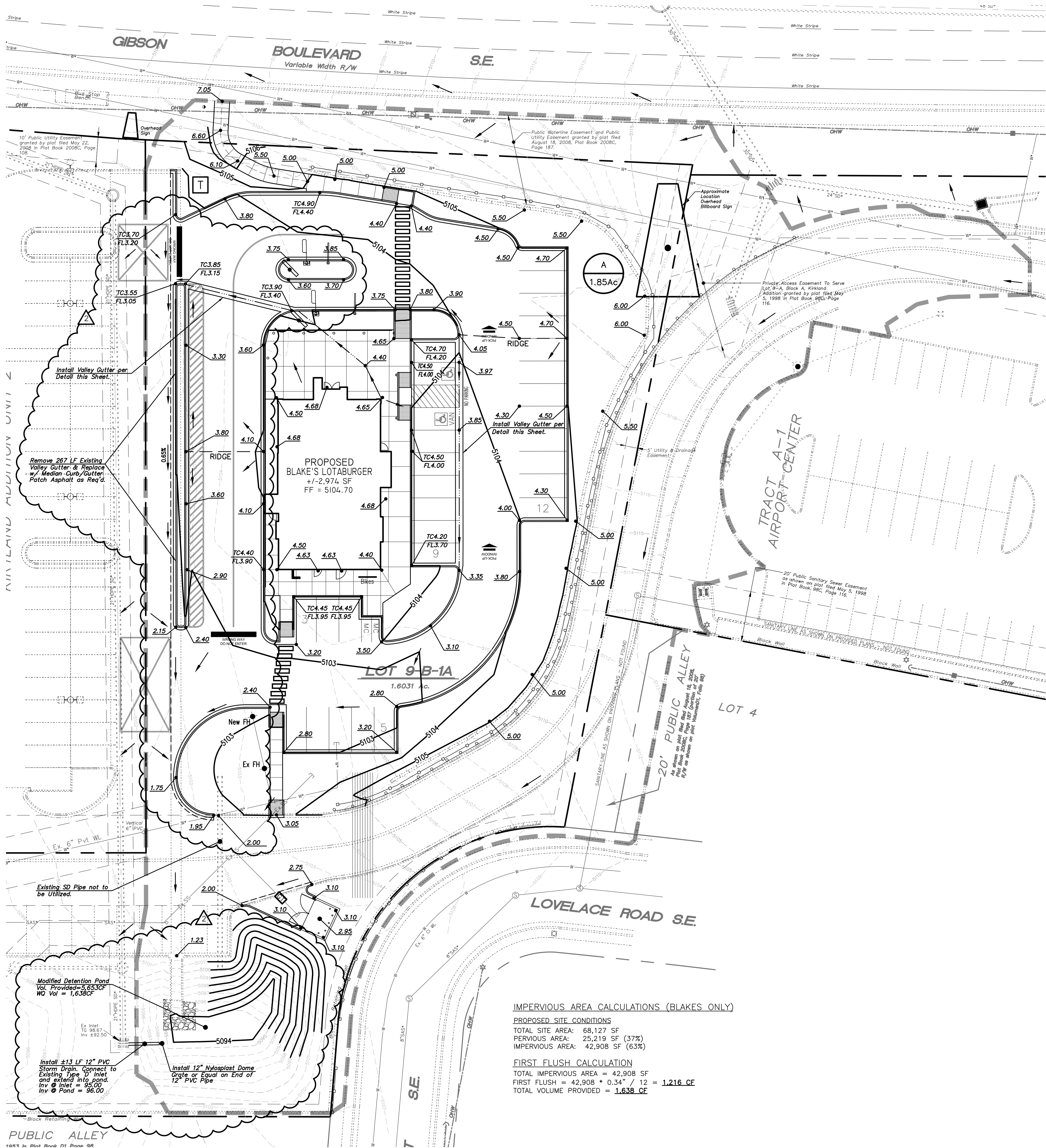
Based upon the information provided in your submittal received 7/24/17, the Revised Grading and Drainage Plan is approved for Grading and Building Permit.

The enlarged south pond with additional dead storage is an acceptable modification, but will need to be surveyed, as-built, and the constructed volume certified as part of the Engineer's Drainage Certification.

If you have any questions, please contact me at 924-3695 or dpeterson@cabq.gov.

Sincerely,

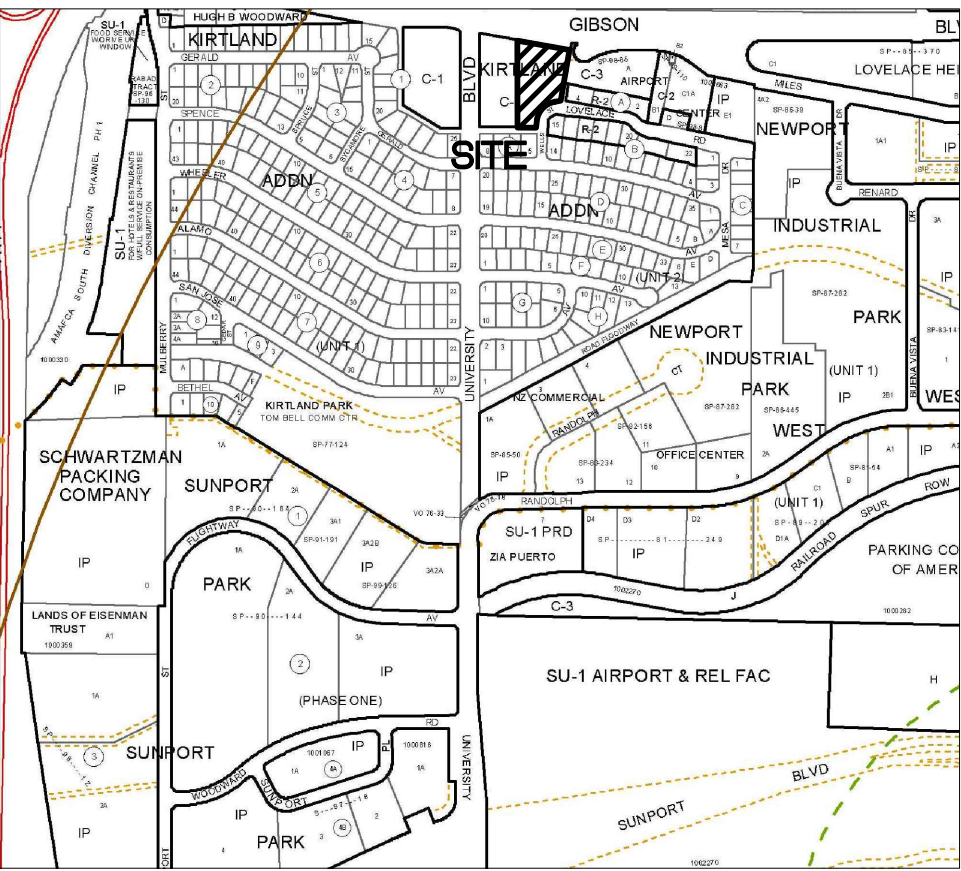
Dana Peterson, P.E.
Senior Engineer, Planning Dept.
Development Review Services



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 THE APPROPRIATE UTILITY COMPANY 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
 - 27.8 PROPOSED TOP OF GRADE/PVMT ELEVATIONS
 - FL27.8 PROPOSED FLOW LINE/GUTTER ELEVATIONS
 - TC27.8 PROPOSED TOP OF CURB ELEVATIONS
 - 515 EXISTING CONTOUR
 - 515 PROPOSED CONTOUR
 - EXISTING STORM DRAIN
 - A 1.85Ac DRAINAGE BASIN LABEL
 - Basin Area (Acres)



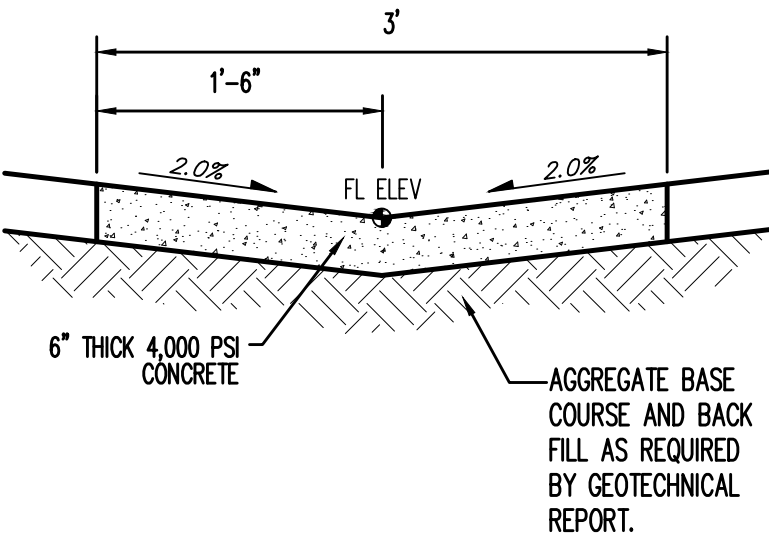
VICINITY MAP - Zone Map M-15-Z
Legal Description: Lots 9-B-1A, Kirtland Addition Block A; Tract A, Airport Center



FIRM MAP 35001C0342G
Per Firm Map 35001C0342G, dated September 26, 2008, the site is not located in the Floodplain and determined to be outside the 0.2% chance Annual Floodplain.

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.

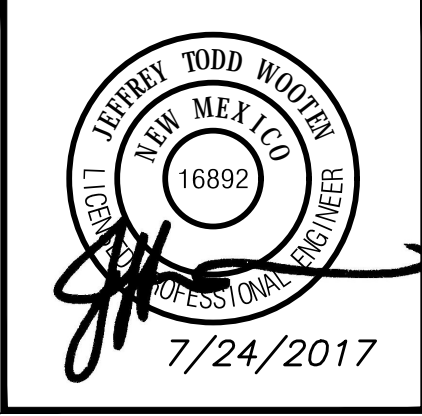


Valley Gutter Detail
NTS

Wooten Engineering
1005 21st St SE, Suite 13
Rio Rancho, N.M. 87124
Phone: (505) 980-3560

REV	DATE	BY	REVISION
1	7/24/17	JTW	CITY COMMENTS
2	7/12/17	JTW	REVISED DRIVE-THRU LANE AND POND PER CLIENT
3	6/15/17	JTW	REVISED DRIVE-THRU LANE AND POND PER CLIENT

MODULUS ARCHITECTS
100 SUN AVENUE N.E., Ste 305
ALBUQUERQUE, NEW MEXICO 87109
PHONE (505) 338-1499 FAX (505) 338-1498



PROJECT TITLE BLAKE'S LOTABURGER 1640 GIBSON BLVD. SE ALBUQUERQUE, NEW MEXICO 87106	DRAWN BY: JEFF WOOTEN
PROJECT MANAGER JEFF WOOTEN	SHEET TITLE Grading Plan
JOB NO. 2016033	DATE 7/24/2017
SCALE AS NOTED	SHEET NO. C1.1

DRAINAGE MANAGEMENT PLAN

INTRODUCTION

The purpose of this submittal is to provide a grading plan and drainage management plan for the redevelopment of Lot 9–B–1A, Kirtland Addition, Block A; Tract A, Airport Center. The site is located at 1640 Gibson Blvd SE in the SEQ of Gibson and University in Albuquerque, NM. The site contains approximately 1.56 acres. The proposed redevelopment consists of a new Blakes Lotaburger restaurant with the associated parking lot and landscaping. Prior plans for the site were developed by ABQ Engineering, Inc. (Martin J. Garcia) signed on 7/21/2008 and Wooten Engineering (Jeffrey T. Wooten) signed on 5/14/2015. The City Drainage File Number is M15–D012D.

EXISTING HYDROLOGIC CONDITIONS

The site previously consisted of three buildings that were built in approximately 2008. When the economy took a downturn, the project was abandoned and not completed. In 2015, the site was redeveloped with a Chili–Titi–A to the west of the subject site and a Chili's restaurant to the east. The site for Blakes Lotaburger is currently undeveloped and drains from east to west and then into an existing retention pond that was designed to account for undeveloped conditions. For the purpose of pre–developed calculations on this plan, we are using current site conditions and not those as identified in the plans by ABQ Engineering, Inc (2008) since a majority of those improvements were not constructed. A portion of the Chili's site to the east drains onto the existing shared access drive and into the pond located on the Blakes site.

Per the calculations table this sheet, the total existing flow discharging from Basin A is 5.81cfs (7,587 CF) during the 100–Yr, 6–Hr storm event.

PROPOSED HYDROLOGIC CONDITIONS

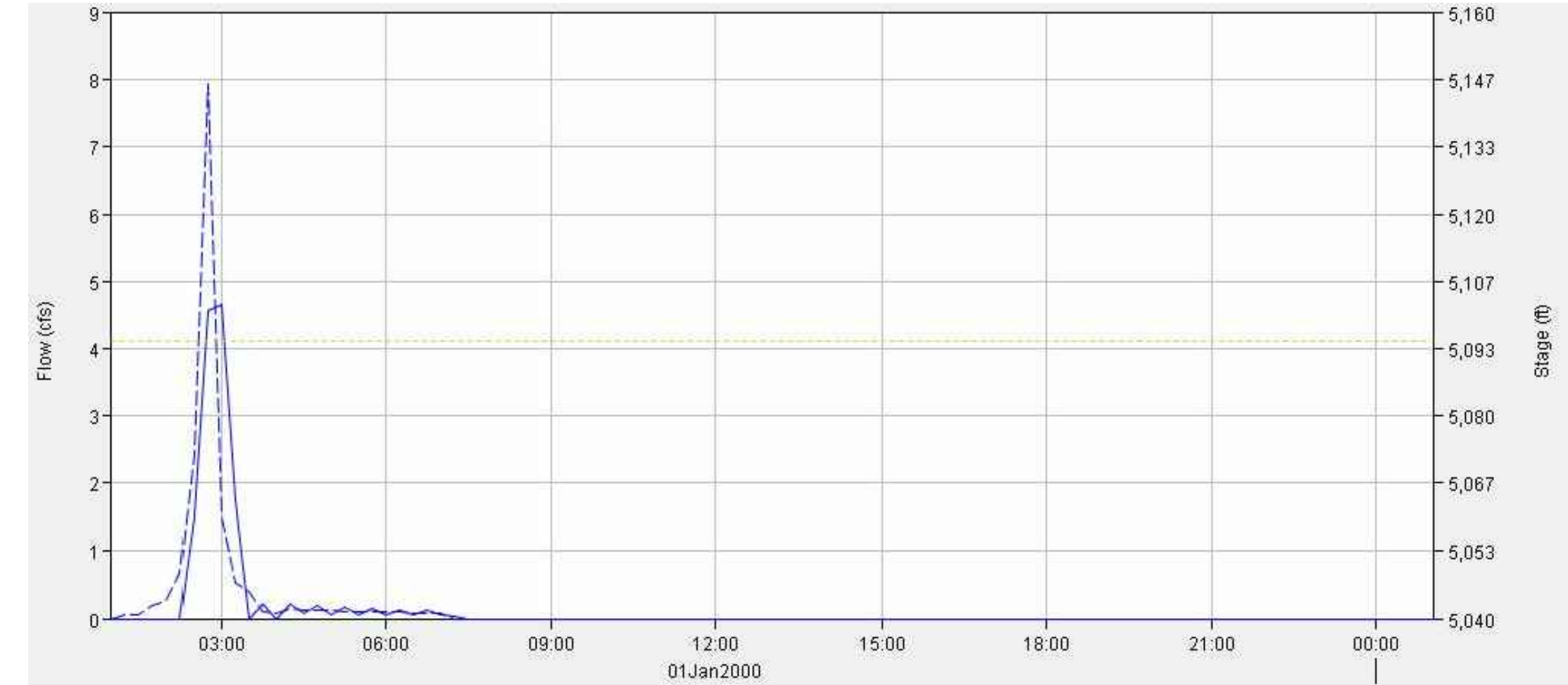
Basin A will continue to drain to the existing pond as described above; however, an outfall pipe has been designed to convert the retention pond into a detention pond. This is to accomodate the additional impervious area yet keep the post–developed flows below pre–developed conditions. According to the Basin Calculations table this sheet, there is approximately 7.63cfs (11,775 CF) generated from the developed site during the 100–Yr, 6–Hr Storm that will drain to the new detention pond. A new 12" storm drain pipe has been analyzed as the outlet for the pond with an invert elevation of 5096.00. The bottom of the pond is at an elevation of 5094.00 and the top of the pond is 5099.00. Per the calculations on this sheet, the maximum water surface elevation of the pond is 5098.00 allowing for 1' of freeboard. Any excess flows will overflow the pond as it does today and into the existing Type 'D' inlet adjacent to the pond. The detention pond is also providing 1,638 CF of water quality ponding volume per the First Flush Calculations below.

FIRST FLUSH CALCULATIONS

Per the Impervious Area Calculations Table this sheet, we are required to provide a Water Quality Pond with a volume of 1,149 CF. The volume of the Water Quality Pond designed is 1,638 CF, which is larger than that required.

CONCLUSION

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



Existing Blake's Lotaburger Drainage Calculations												
This table is based on the COA DPM Section 22.2, Zone:12												
BASIN	Area (SQ. FT.)	Area (AC.)	Land Treatment Percentages				Q(100) (cfs/ac.)	Q(100) (CFS)	WT E (inches)	V(100) ³⁶⁰ (CF)	V(100) ¹⁴⁴⁰ (CF)	V(100) ^{10day} (CF)
A	80575	1.85	0.0%	0.0%	100.0%	0.0%	3.14	5.81	1.13	7587	7587	7587
TOTAL	80575	1.85						5.81		7587	7587	7587

Proposed Blake's Lotaburger Drainage Calculations												
Ultimate Development Conditions Basin Data Table												
This table is based on the COA DPM Section 22.2, Zone:12												
BASIN	Area (SQ. FT.)	Area (AC.)	Land Treatment Percentages				Q(100) (cfs/ac.)	Q(100) (CFS)	WT E (inches)	V(100) ³⁶⁰ (CF)	V(100) ¹⁴⁴⁰ (CF)	V(100) ^{10day} (CF)
A	80575	1.85	0.0%	0.0%	37.0%	63.0%	4.12	7.63	1.75	11775	13467	18544
TOTAL	80575	1.85						7.63		11775	13467	18544

Detention Pond Volume Calculations			
Elevation (ft)	Area (sq.ft)	Volume (cu-ft)	Volume Sum (cu-ft)
5094.0	476	0.0	0.0
5095.0	788	632.0	632.0
5096.0	1,224	1006.0	1638.0
5097.0	1,710	1467.0	3105.0
5098.0	2,234	1972.0	5077.0
5099.0	2,882	2558.0	7635.0
(0.175 acre-ft)			

IMPERVIOUS AREA CALCULATIONS (BLAKES ONLY)

PROPOSED SITE CONDITIONS

TOTAL SITE AREA: 68,127 SF
PERVIOUS AREA: 25,219 SF (37%)
IMPERVIOUS AREA: 42,908 SF (63%)

FIRST FLUSH CALCULATION

TOTAL IMPERVIOUS AREA = 42,908 SF
FIRST FLUSH = 42,908 * 0.34" / 12 = **1,216 CF**
TOTAL VOLUME PROVIDED = **1,638 CF**

100 YEAR (6 HOUR) POND ROUTING SUMMARY

HEC-HMS used for Pond Analysis
No Infiltration assumed in Calculations

INITIAL CONDITIONS

Starting WS Elev = 5094.00 ft
Starting Volume = 0.00 ac-ft
Starting Outflow = 0.00 cfs

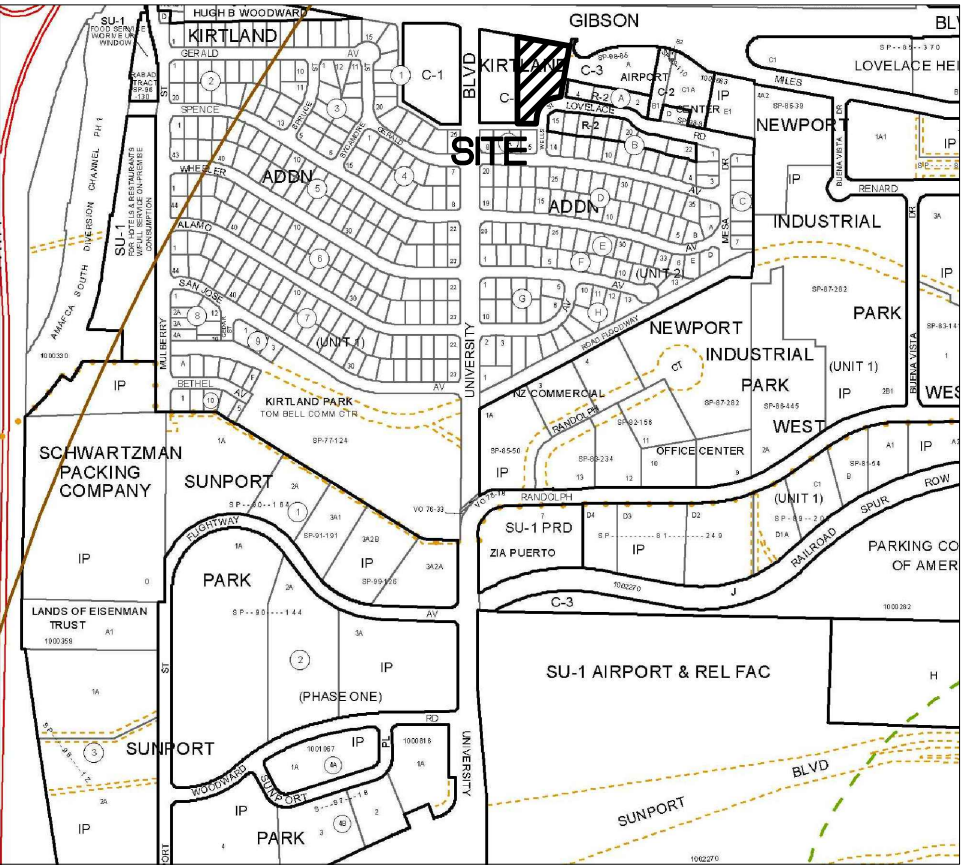
MAXIMUM STORAGE		
Tp, min	Elev, ft	Vol, ac-ft
120.00	5098.0	0.10

ACTUAL TOP OF POND ELEVATION = 5099.0
FREEBOARD PROVIDED = 1.0'

FORWARD FLOW PEAKS		
Tp, min	Qp, cfs	
Pond Inflow.....	105.00	7.90
Pond Outflow....	120.00	4.60

Date	Time	Inflow (CFS)	Storage (AC-FT)	Elevation (FT)	Outflow (CFS)
01Jan2000	01:00	0.0	0.0	5095.0	0.0
01Jan2000	01:15	0.0	0.0	5095.0	0.0
01Jan2000	01:30	0.1	0.0	5095.1	0.0
01Jan2000	01:45	0.2	0.0	5095.2	0.0
01Jan2000	02:00	0.3	0.0	5095.5	0.0
01Jan2000	02:15	0.7	0.0	5096.0	0.0
01Jan2000	02:30	2.4	0.0	5096.7	1.5
01Jan2000	02:45	7.9	0.1	5098.0	4.6
01Jan2000	03:00	1.5	0.1	5098.0	4.6
01Jan2000	03:15	0.5	0.0	5096.7	1.8
01Jan2000	03:30	0.4	0.0	5096.4	0.0
01Jan2000	03:45	0.1	0.0	5096.5	0.2
01Jan2000	04:00	0.1	0.0	5096.5	0.0
01Jan2000	04:15	0.1	0.0	5096.5	0.2
01Jan2000	04:30	0.1	0.0	5096.5	0.1
01Jan2000	04:45	0.1	0.0	5096.5	0.2
01Jan2000	05:00	0.1	0.0	5096.5	0.1
01Jan2000	05:15	0.1	0.0	5096.5	0.2
01Jan2000	05:30	0.1	0.0	5096.5	0.1
01Jan2000	05:45	0.1	0.0	5096.5	0.1
01Jan2000	06:00	0.1	0.0	5096.5	0.1
01Jan2000	06:15	0.1	0.0	5096.5	0.1
01Jan2000	06:30	0.1	0.0	5096.5	0.1
01Jan2000	06:45	0.1	0.0	5096.5	0.1
01Jan2000	07:00	0.1	0.0	5096.5	0.1
01Jan2000	07:15	0.0	0.0	5096.5	0.0
01Jan2000	07:30	0.0	0.0	5096.5	0.0
01Jan2000	07:45	0.0	0.0	5096.5	0.0
01Jan2000	08:00	0.0	0.0	5096.5	0.0
01Jan2000	08:15	0.0	0.0	5096.5	0.0
01Jan2000	08:30	0.0	0.0	5096.5	0.0

POND TIME-STEP RESULTS



VICINITY MAP - Zone Map M-15-Z

Legal Description: Lots 9–B–1A, Kirtland Addition Block A; Tract A, Airport Center



FIRM MAP 35001C0342G

Per FIRM Map 35001C0342G, dated September 26, 2008, the site is not located in the Floodplain and determined to be outside the 0.2% chance Annual Floodplain.

REV	DATE	BY	REVISION	CITY COMMENTS
1				
2				
3				
4				
5				
6				
7	7/24/17	JTW		

MODULUS ARCHITECTS
100 SUN AVENUE N.E., Ste 305
ALBUQUERQUE, NEW MEXICO 87109
PHONE (505) 338-1499 FAX (505) 338-1498

7/24/2017

PROJECT TITLE
BLAKE'S LOTABURGER
1640 GIBSON BLVD. SE
ALBUQUERQUE, NEW MEXICO 87106

PROJECT MANAGER
JEFF WOOTEN

JOB NO.
2016033

DRAWN BY:
JEFF WOOTEN

SHEET TITLE
Drainage Management Plan

DATE
7/24/2017

SCALE
AS NOTED

SHEET NO.
C1.2

SHEET TOTAL
2

WE
Wooten Engineering
1005 21st St SE, Suite 13
Rio Rancho, N.M. 87124
Phone: (505) 980-3560



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

Project Title: _____ **Building Permit #:** _____ **City Drainage #:** _____
DRB#: _____ **EPC#:** _____ **Work Order#:** _____
Legal Description: _____
City Address: _____

Engineering Firm: _____ **Contact:** _____
Address: _____
Phone#: _____ **Fax#:** _____ **E-mail:** _____

Owner: _____ **Contact:** _____
Address: _____
Phone#: _____ **Fax#:** _____ **E-mail:** _____

Architect: _____ **Contact:** _____
Address: _____
Phone#: _____ **Fax#:** _____ **E-mail:** _____

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) _____

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) _____

IS THIS A RESUBMITTAL?: ☐ Yes ☐ No

DATE SUBMITTED: _____ **By:** _____

COA STAFF: _____ ELECTRONIC SUBMITTAL RECEIVED: _____