# CITY OF ALBUQUERQUE



Richard J. Berry, Mayor

March 23, 2017

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

RE: Blakes Lotaburger
1640 Gibson Blvd SE
Grading and Drainage Plan
Engineer's Stamp Date 3/10/17 (File: M15D012A)

Dear Mr. Wooten:

Based upon the information provided in your submittal received 3/14/17, the Grading and Drainage Plan cannot be approved for Grading or Building Permit until the following is addressed:

1. This work requires an Erosion and Sediment Control Plan to be submitted to the storm water quality engineer (Curtis Cherne, PE, ccherne@cabq.gov).

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

New Mexico 87103

PO Box 1293

Albuquerque

Sincerely,

www.cabq.gov

Dana Peterson, P.E.

Senior Engineer, Planning Dept. Development Review Services



## City of Albuquerque

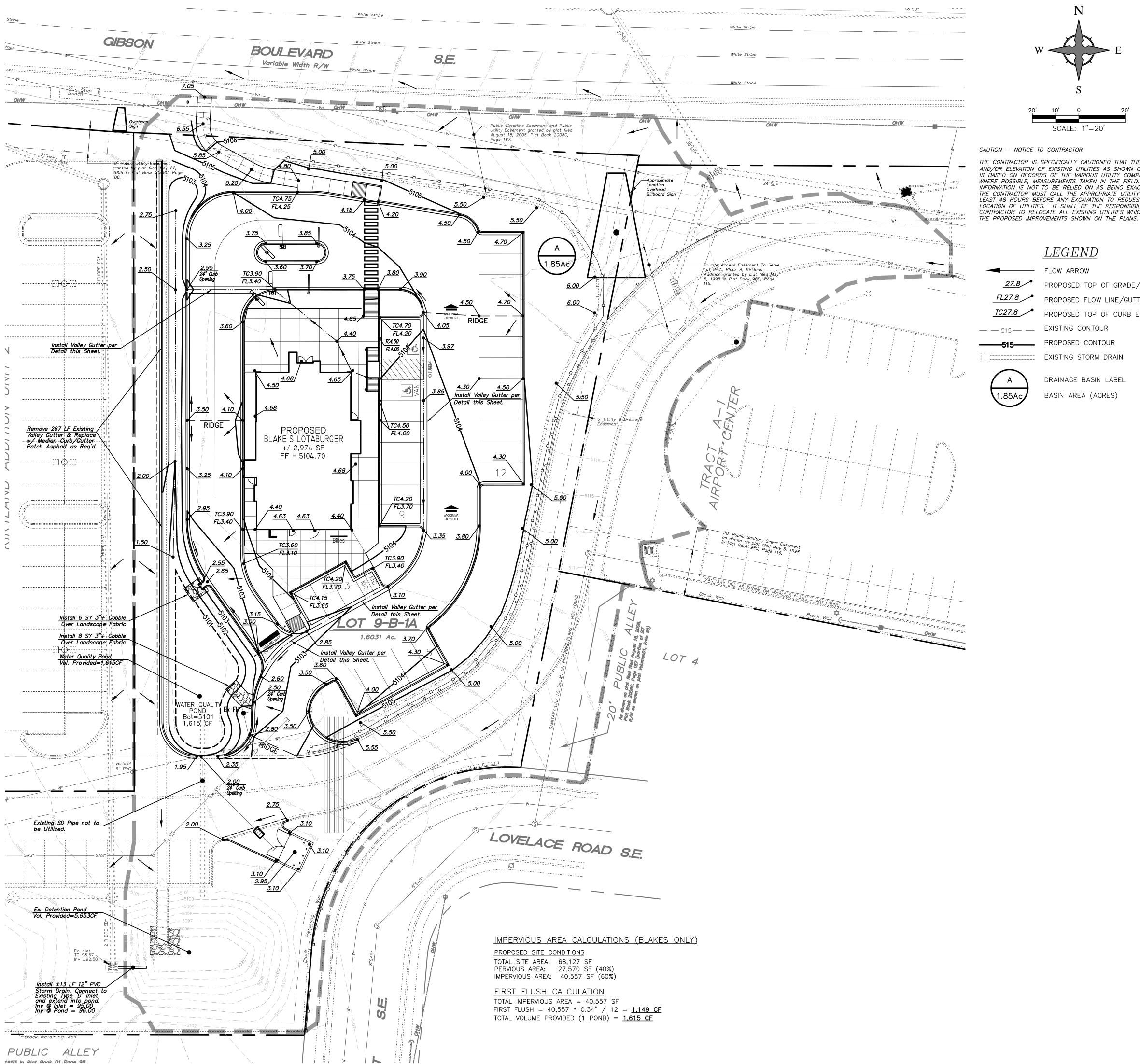
#### Planning Department

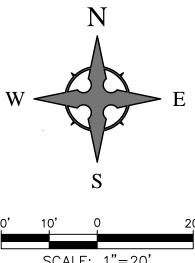
#### Development & Building Services Division

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

Project Title:	Building Permit #: City Drainage #:
DRB#: EPC#:	
Legal Description:	
City Address:	
Engineering Firm:	Contact:
Address:	
Phone#: Fax#:	E-mail:
Owner:	Contact:
Address:	
Phone#: Fax#:	E-mail:
Architect:	
Address:	
	E-mail:
Other Contact:	Contact:
Address:	
Phone#: Fax#:	E-mail:
DEPARTMENT: HYDROLOGY/ DRAINAGE TRAFFIC/ TRANSPORTATION MS4/ EROSION & SEDIMENT CONTROL	CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:BUILDING PERMIT APPROVALCERTIFICATE OF OCCUPANCY
	CERTIFICATE OF OCCUPANCE
TYPE OF SUBMITTAL:	PRELIMINARY PLAT APPROVAL
ENGINEER/ ARCHITECT CERTIFICATION	SITE PLAN FOR SUB'D APPROVAL
CONCEPTUAL G & D PLAN	SITE PLAN FOR BLDG. PERMIT APPROVAL
GRADING PLAN	FINAL PLAT APPROVAL SIA/ RELEASE OF FINANCIAL GUARANTEE
DRAINAGE MASTER PLAN	FOUNDATION PERMIT APPROVAL
DRAINAGE REPORT	GRADING PERMIT APPROVAL
CLOMR/LOMR	SO-19 APPROVAL
	PAVING PERMIT APPROVAL
TRAFFIC CIRCULATION LAYOUT (TCL)	GRADING/ PAD CERTIFICATION
TRAFFIC IMPACT STUDY (TIS)	WORK ORDER APPROVAL
EROSION & SEDIMENT CONTROL PLAN (ESC)	CLOMR/LOMR
OTHER (SPECIFY)	PRE-DESIGN MEETING
	OTHER (SPECIFY)
IS THIS A RESUBMITTAL?: Yes No	
DATE SUBMITTED:By:	

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



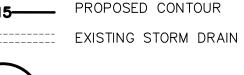


CAUTION - NOTICE TO CONTRACTOR

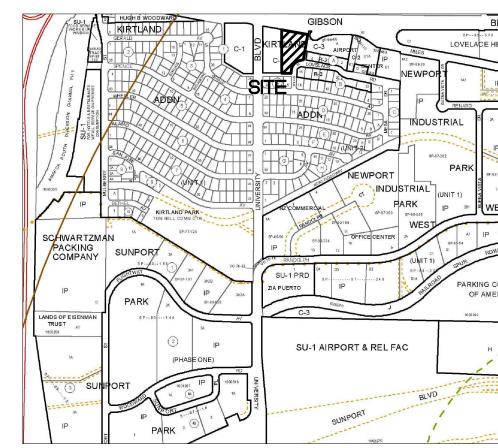
THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR 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

## $\underline{LEGEND}$

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



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



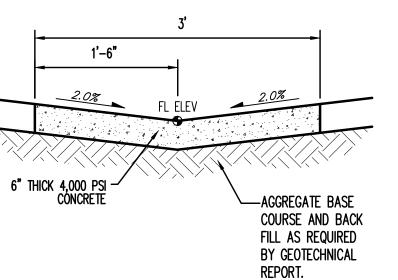
#### FIRM MAP 35001C0342G

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

- 1. EXCEPT AS PROVIDED HEREIN, GRADING SHALL BE PERFORMED AT THE ELEVATIONS AND IN ACCORDANCE WITH THE DETAILS SHOWN ON THIS PLAN. 2. THE COST FOR REQUIRED CONSTRUCTION DUST AND EROSION CONTROL
- MEASURES SHALL BE INCIDENTAL TO THE PROJECT COST. 3. 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).
- 4. EARTH SLOPES SHALL NOT EXCEED 3 HORIZONTAL TO 1 VERTICAL UNLESS SHOWN OTHERWISE.
- 5. 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.
- 6. 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.
- 7. 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.
- 8. PAVING AND ROADWAY GRADES SHALL BE +/- 0.05' FROM PLAN ELEVATIONS. PAD ELEVATION SHALL BE +/- 0.05' FROM BUILDING PLAN
- 9. ALL PROPOSED CONTOURS AND SPOT ELEVATIONS REFLECT TOP OF PAVEMENT ELEVATIONS IN THE PARKING AREA AND MUST BE ADJUSTED FOR PAVEMENT, MEDIANS, AND ISLANDS.
- 10. VERIFY ALL ELEVATIONS SHOWN ON PLAN FROM BASIS OF ELEVATION CONTROL STATION (IF APPLICABLE) PRIOR TO BEGINNING CONSTRUCTION.

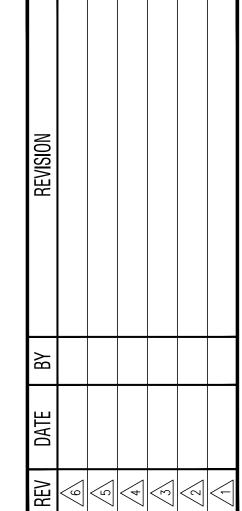
11. THE CONTRACTOR SHALL PROVIDE THE SWPPP DOCUMENT (IF NECESSARY) AND SHALL ABIDE BY ALL LOCAL, STATE, AND FEDERAL LAWS, RULES AND REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS, INCLUDING EPA REQUIREMENTS WITH RESPECT TO STORM WATER DISCHARGE.



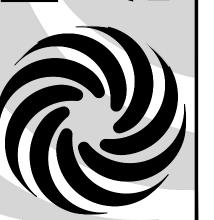
## Valley Gutter Detail

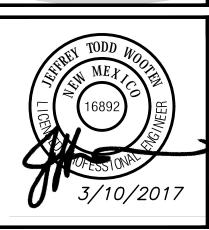


1005 21st St SE, Suite 13 Rio Rancho, N.M. 87124 Phone: (505) 980-3560



ERQUE (505) 3 ALBUQUE PHONE (





	<b>drawn by</b> Jeff Wootei	
:GER co 87106	<b>JOB NO.</b> 2016033	
BLAKE'S LOTABURGER 1640 GIBSON BLVD SE ALBUQUERQUE, NEW MEXICO 87106	PROJECT MANAGER JEFF WOOTEN	sheet mue Grading Plan
TE:	sheet-	
3/10/2017		1 1 <b>I</b>

#### 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 Chik—Fil—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 7.41cfs (11,283 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 5095.00 and the top of the pond is 5099.00. Per the calculations on this sheet, the maximum water surface elevation of the pond as it does today and into the existing Type 'D' inlet adjacent to the pond. In addition to the detention pond, we have utilized a landscape area along the west side of the property to provide a Water Quality Pond that will overflow onto the parking lot and then south into the detention pond. Refer to 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 1,615 CF, which is larger than that required.

#### CONCLUSIO

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.

		Ex	isting Bl	ake's L	otaburg	er Drai	inage C	alculati	ons			
	TI	his table is based or	the COA DP	M Section	22.2, Zone:	2						
BASIN	Area	Area	Lan	d Treatmen	t Percentage	es	Q(100)	Q(100)	WTE	V(100) <sub>360</sub>	V(100) <sub>1440</sub>	V(100) <sub>10day</sub>
	(SQ. FT)	(AC.)	Α	В	С	D	(cfs/ac.)	(CFS)	(inches)	(CF)	(CF)	(CF)
Α	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

IOIAL	60373	1.05						5.61		7507	7507	7507
		Propo	sed Blake	e's Lota	burger	Draina	ge Calc	ulation	s			
			Ultimate	Developme	ent Conditio	ons Basin I	Data Table					
	Th	is table is based or	the COA DPI	M Section :	22.2, Zone:	2						
BASIN	Area	Area	Lan	d Treatment	t Percentag	es	Q(100)	Q(100)	WTE	V(100) <sub>360</sub>	V(100) <sub>1440</sub>	V(100) <sub>10da</sub>
	(SQ. FT)	(AC.)	Α	В	С	D	(cfs/ac.)	(CFS)	(inches)	(CF)	(CF)	(CF)
Α	80575	1.85	0.0%	0.0%	44.4%	55.6%	4.01	7.41	1.68	11283	12777	17257
TOTAL	80575	1.85						7.41		11283	12777	17257

#### Detention Pond Volume Calculations

Elevation (ft)	Area (sq.ft)	Volume (cu-ft)	Jolume Sum (cu-ft)
5095.0 5096.0 5097.0 5098.0 5099.0	562 934 1,396 1,824 2,436	0.0 748.0 1165.0 1610.0 2130.0 (0.130	0.0 748.0 1913.0 3523.0 5653.0 acre-ft)

IMPERVIOUS AREA CALCULATIONS (BLAKES ONLY)

PROPOSED SITE CONDITIONS

TOTAL SITE AREA: 68 127 SE

TOTAL SITE AREA: 68,127 SF
PERVIOUS AREA: 27,570 SF (40%)
IMPERVIOUS AREA: 40,557 SF (60%)

FIRST FLUSH CALCULATION

TOTAL IMPERVIOUS AREA = 40,557 SF

FIRST FLUSH = 40,557 \* 0.34" / 12 = 1.149 CF

TOTAL VOLUME PROVIDED (1 POND) = 1.615 CF

#### 100 YEAR (6 HOUR) POND ROUTING SUMMARY

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

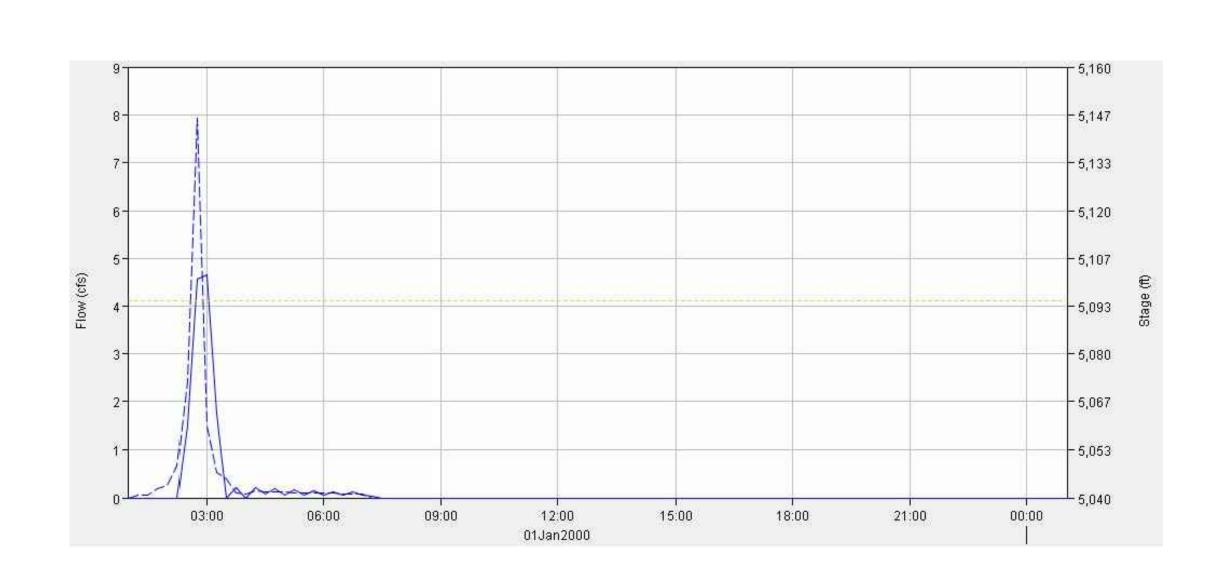
Starting WS Elev = 5095.00 ft Starting Volume = 0.00 ac-ft Starting Outflow = 0.00 cfs

# MANTMIN GEODAGE

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

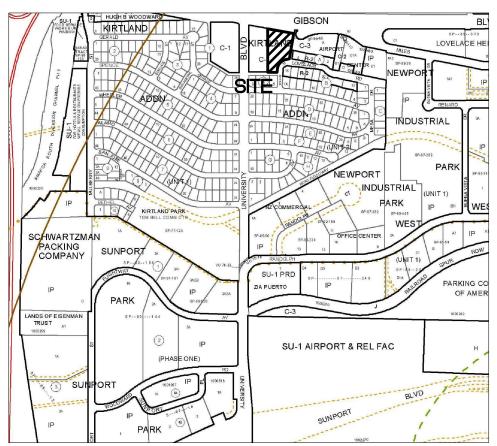
FORWARD FLOW PEAKS
Tp, min Qp, cfs

Pond Inflow.... 105.00 7.90
Pond Outflow.... 120.00 4.60



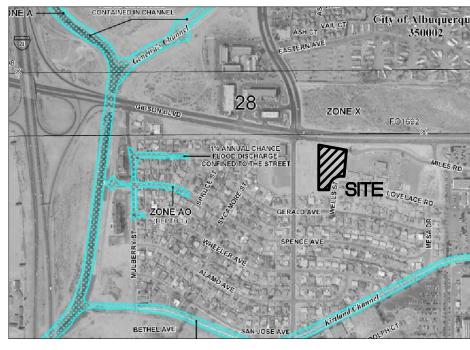
Date	Time	Inflow (CFS)	Storage (AC-FT)	Elevation (FT)	Outflow (CFS)
01Jan2000	01:00	0.0	0.0	5095.0	0.0
01Jan2000	01:15	0.0	0.0	5095.0	0.0
01Jan2000	01:30	0.1	0.0	5095.1	0.0
01Jan2000	01:45	0.2	0.0	5095.2	0.0
01Jan2000	02:00	0.3	0.0	5095.5	0.0
01Jan2000	02:15	0.7	0.0	5096.0	0.0
01Jan2000	02:30	2.4	0.0	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



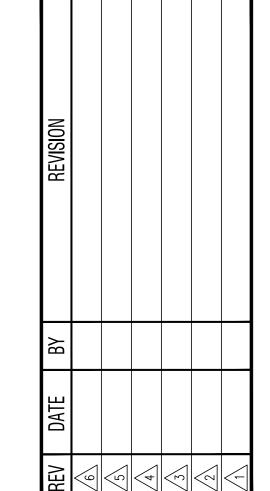
## VICINITY MAP - Zone Map M-15-Z

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.



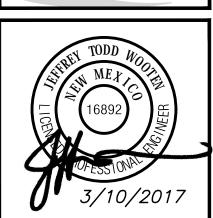
# 305 305 1C0 87109 FAX (505) 338-1498

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AVENUE N.E., Ste RQUE, NEW MEX

100 SUN AVENUE ALBUQUERQUE, N PHONE (505) 338





BLAKE S. LOIABUKGEK	(GEK	
1640 GIBSON BLVD SE		
ALBUQUERQUE, NEW MEXICO 87106	ICO 87106	
PROJECT MANAGER	JOB NO.	DRAWN BY:
JEFF WOOTEN	2016033	JEFF WOOTEN
SHEET TITLE		
Drainage Management Plan	nagement	. Plan