# **CITY OF ALBUQUERQUE**



January 30, 2017

Richard J. Berry, Mayor

Jackie S. McDowell, P.E. McDowell Engineering, Inc. 7820 Beverly Hills Ave. NE Albuquerque, NM, 87122

RE: Jones Casas Devine Townhomes Grading and Drainage Plan Engineer's Stamp Date 1-10-2017 (File: J13D204)

Dear Mrs. Jackie:

Based upon the information provided in your submittal received 1-10-2017, the above referenced Grading and Drainage Plan is approved for final plat and building permit.

PO Box 1293 Please attach a copy of this approved plan in the construction sets for Building Permit processing. 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 924-3999.

New Mexico 87103

Sincerely,

www.cabq.gov

Shahab Biazar, P.E. City Engineer, Planning Dept. Development Review Services

MA/SB



# City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

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:
Surveyor:		Contact:
Address:		
Phone#: Fax#:		E-mail:
Contractor:		Contact:
Address:		
Phone#: Fax#:		E-mail:
TYPE OF SUBMITTAL:	CHECK TYPE OF APPROV	AL/ACCEPTANCE SOUGHT:
DRAINAGE REPORT	SIA/FINANCIAL GUARAN	TEE RELEASE
DRAINAGE PLAN 1st SUBMITTAL	PRELIMINARY PLAT APPI	ROVAL
DRAINAGE PLAN RESUBMITTAL	S. DEV. PLAN FOR SUB'D	APPROVAL
CONCEPTUAL G & D PLAN	S. DEV. FOR BLDG. PERMI	IT APPROVAL
GRADING PLAN	SECTOR PLAN APPROVAL	_
EROSION & SEDIMENT CONTROL PLAN (ESC)	FINAL PLAT APPROVAL	
ENGINEER'S CERT (HYDROLOGY)	CERTIFICATE OF OCCUPA	ANCY (PERM)
CLOMR/LOMR	CERTIFICATE OF OCCUPA	ANCY (TCL TEMP)
TRAFFIC CIRCULATION LAYOUT (TCL)	FOUNDATION PERMIT AP	PROVAL
ENGINEER'S CERT (TCL)	BUILDING PERMIT APPRO	DVAL
ENGINEER'S CERT (DRB SITE PLAN)	GRADING PERMIT APPRO	VAL SO-19 APPROVAL
ENGINEER'S CERT (ESC)	PAVING PERMIT APPROV	AL ESC PERMIT APPROVAL
SO-19	WORK ORDER APPROVAL	ESC CERT. ACCEPTANCE
OTHER (SPECIFY)	GRADING CERTIFICATION	N OTHER (SPECIFY)
WAS A PRE-DESIGN CONFERENCE ATTENDED:	Yes No Co	ppy Provided
DATE SUBMITTED:	By:	

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

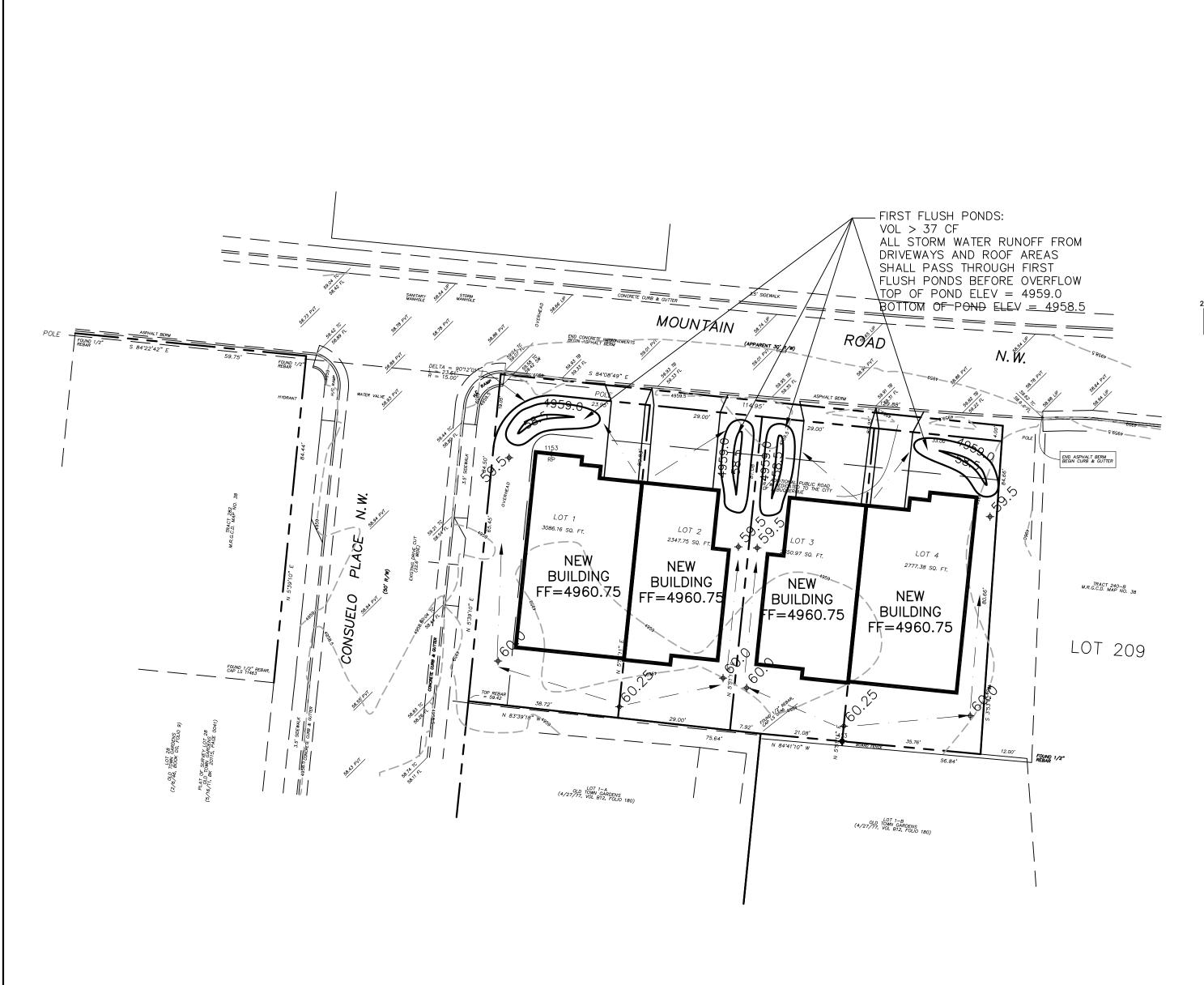
1. Conceptual Grading and Drainage Plan: Required for approval of Site Development Plans greater than five (5) acres and Sector Plans

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

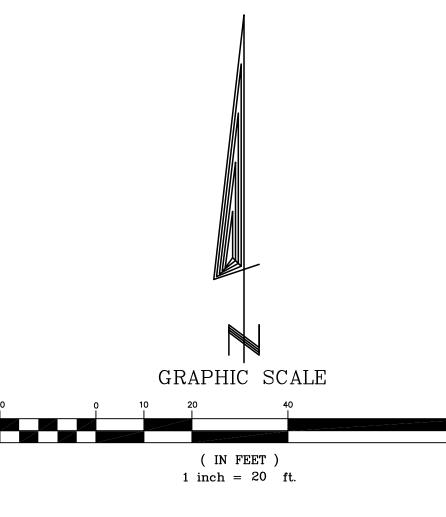
STANDARD GRADING NOTE: THE MAXIMUM GRADED SIDE SLOPE SHALL NOT EXCEED 3 FEET (HORIZONTALLY) TO 1 FOOT (VERTICALLY). AREAS DISTURBED BY GRADING WHICH WILL NOT BE TREATED WITH LANDSCAPING SHALL BE SEEDED.

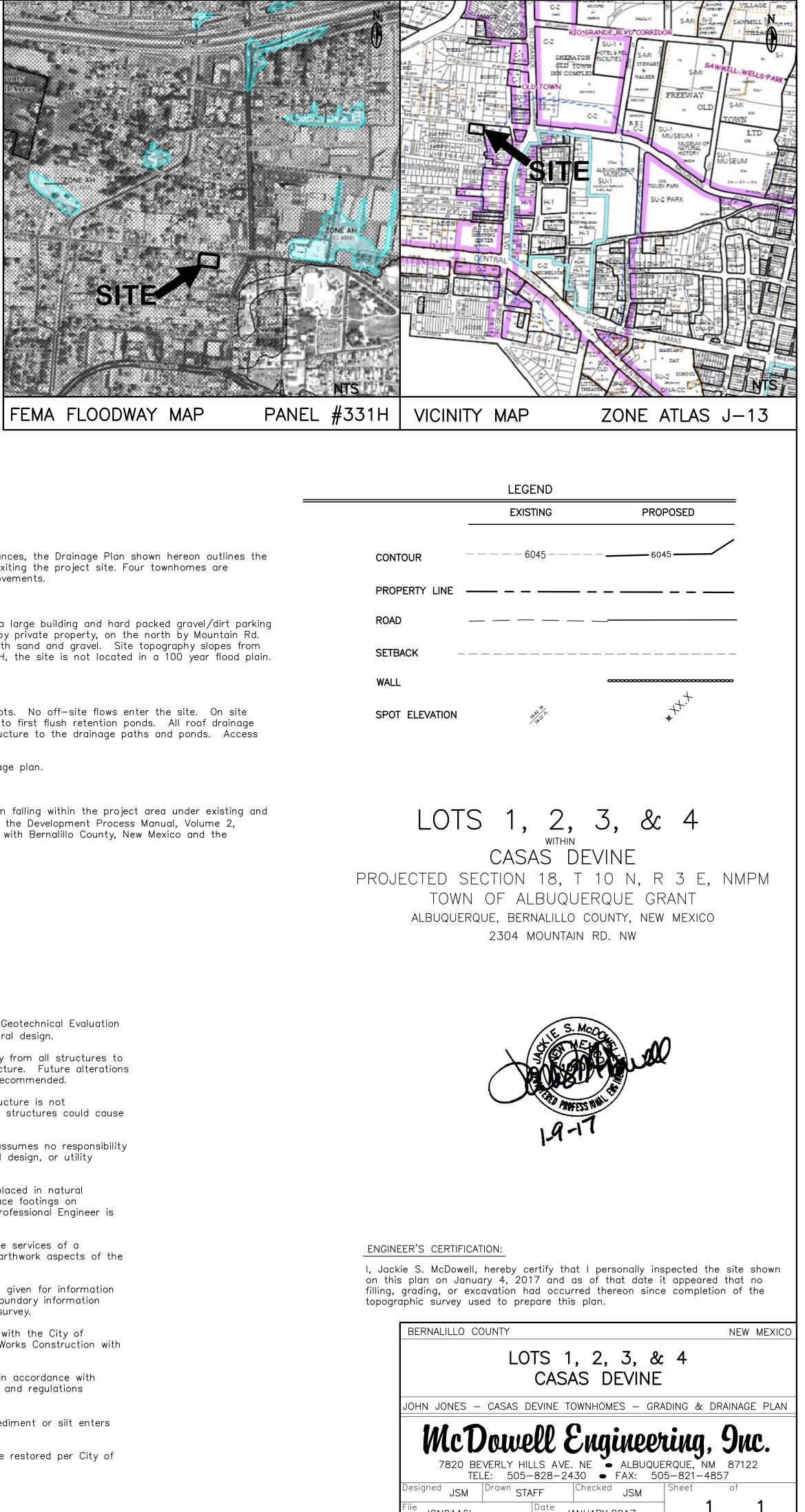


FIRST FLUSH REQUIRED POND VOLUME:						
LOT NO. IMP. AREA (AC) 0.34" POND VOL. (CF						
1	0.03	37				
2	0.03	37				
3	0.03	37				
4	0.03	37				

LOTS 1 & 4			LOTS 2 & 3				
POND VOLU	me provid	ED:	POND VOLUME PROVIDED:				
ELEV.	AREA	VOL. (CF)	ELEV.	AREA	VOL. (CF)		
4959	154		4959	158			
		4 <b>1</b> .75			44.5		
495 <mark>8</mark> .5	13		<b>4958.5</b>	20			

LOT 1								LOT 2 & 3								L <mark>OT</mark> 4
Areas: (acres)		Existing	Proposed					Areas: (acres)		Existing	Proposed					Areas:
Treatment A		0.00	0.00					Treatment A		0.00	. 0.00					Treatme
Treatment B		0.00	0.04	1				Treatment B		0.00	0.02					Treatm
Treatment C		0.05	0.00	1				Treatment C		0.03	0.00					Treatm
Treatment D		0.02	0.03					Treatment D		0.02	0.03					Treatme
	Total (acres) =	0.07	0.07						Total (acres) =	0.05	0.05					
				-												
Volume		100 year	100 year	10 year	10 year	2 year	2 year	Volume		100 year	100 year	10 year	10 year	2 year	2 year	Volume
		Existing	Proposed	Existing	Proposed	Existing	Proposed			Existing	Proposed	Existing	Proposed	Existing	Proposed	
	Volume (acre-feet) =	0.007	0.007	0.004	0.004	0.002	0.002		Volume (acre-feet) =	0.006	0.006	0.003	0.003	0.002	0.002	
	Volume (cubic feet) =	323	312	170	167	74	80		Volume (cubic feet) =	251	263	138	151	65	79	
													· ·			
Fotal Q(p), cfs:								Total Q(p), cfs:								Total Q
Total Q(p), cfs:		100 year	100 year	10 year	10 year	2 year	2 year	Total Q(p), cfs:		100 year	100 year	10 year	10 year	2 year	2 year	Total Q
Total Q(p), cfs:		-	-		Proposed	Existing	2 year Proposed	Total Q(p), cfs:		Existing	Proposed	Existing	Proposed	-	2 year Proposed	Total Q
Total Q(p), cfs:		Existing	Proposed	Existing	Proposed	-		Total Q(p), cfs:		Existing	Proposed	Existing	Proposed	Existing		Total Q
		Existing	Proposed Q(p)*A	Existing Q(p)*A	Proposed	Existing Q(p)*A	Proposed Q(p)*A	Total Q(p), cfs: Treatment A		Existing	Proposed	Existing	Proposed Q(p)*A	Existing Q(p)*A	Proposed Q(p)*A	
Treatment A		Existing Q(p)*A	Proposed Q(p)*A 0.00	Existing Q(p)*A 0.00	Proposed Q(p)*A	Existing Q(p)*A 0.00	Proposed Q(p)*A 0.00			Existing Q(p)*A	Proposed Q(p)*A 0.00	Existing Q(p)*A	Proposed Q(p)*A 0.00	Existing Q(p)*A 0.00	Proposed Q(p)*A 0.00	Treatme
Treatment A Treatment B		Existing Q(p)*A 0.00	Proposed Q(p)*A 0.00	Existing Q(p)*A 0.00 0.00	Proposed Q(p)*A 0.00	Existing Q(p)*A 0.00 0.00	Proposed Q(p)*A 0 0.00 0 0.00	Treatment A		Existing Q(p)*A 0.00	Proposed Q(p)*A 0.00 0.04	Existing Q(p)*A 0.00	Proposed Q(p)*A 0.00	Existing Q(p)*A 0.00 0.00	Proposed Q(p)*A 0.00	Treatme Treatme
Total Q(p), cfs: Treatment A Treatment B Treatment C Treatment D		Existing Q(p)*A 0.00 0.00	Proposed Q(p)*A 0.00 0.08 0.00	Existing Q(p)*A 0.00 0.00 0.07	Proposed Q(p)*A 0.00 0.03	Existing Q(p)*A 0.00 0.00 0.02	Proposed Q(p)*A 0 0.00 0 0.00 2 0.00	Treatment A Treatment B		Existing Q(p)*A 0.00 0.00	Proposed Q(p)*A 0.00 0.04 0.00	Existing Q(p)*A 0.00 0.00	Proposed Q(p)*A 0.00 0.02 0.00	Existing Q(p)*A 0.00 0.00 0.01	Proposed Q(p)*A 0.00 0.00 0.00	Total Q Treatme Treatme Treatme





DRAINAGE PLAN

ALBUQUERQUE CONTROL STATION 5\_J13A

N = 1491318.377 E = 1515633.327 CENTRAL ZONE NAD 83 GROUND TO GRID = 0.999684462 MAPPING ANGLE = -014'23.54" ELEVATION = 4960.499 NAVD 88

1002 4960.499 FIELD 5J13A

### SCOPE:

Pursuant to the latest City of Albuquerque and Bernalillo County Ordinances, the Drainage Plan shown hereon outlines the drainage management criteria for controlling developed runoff on and exiting the project site. Four townhomes are proposed with associated parking, access, landscaping, and utility improvements.

## EXISTING CONDITIONS:

Presently, the 0.25 acre site was previously historically developed with a large building and hard packed gravel/dirt parking surrounding the building. The site is bounded on the east and south by private property, on the north by Mountain Rd. NW, and on the west by Consuelo PI NW. The site is relatively level with sand and gravel. Site topography slopes from gently to the east along Mountain Rd. As shown on FEMA Panel #331H, the site is not located in a 100 year flood plain.

#### PROPOSED CONDITIONS:

As shown by the plan, the buildings are located in the center of the lots. No off-site flows enter the site. On site flows will drain around the structure via swales, and flow to the north to first flush retention ponds. All roof drainage will discharge from the roof to the lot and be directed around the structure to the drainage paths and ponds. Access will be taken from Mountain Rd. NW.

Supplemental calculations are shown as part of this Grading and Drainage plan.

### CALCULATIONS:

The calculations shown hereon define the 100 year—6 hour design storm falling within the project area under existing and developed conditions. The Hydrology is per "Section 22.2, Hydrology of the Development Process Manual, Volume 2, Design Criteria, for the City of Albuquerque, New Mexico in cooperation with Bernalillo County, New Mexico and the Albuquerque Metropolitan Arroyo Flood Control Authority.

# PROPERTY ADDRESS:

2304 Mountain Rd. NW

## TOPOGRAPHY:

Topographic information provided by Mike Shook dated January, 2017.

## GENERAL DRAINAGE PLAN NOTES:

1. It is recommended that the Owner obtain a Geotechnical Evaluation of the on-site soils prior to foundation/structural design.

2. This plan recommends positive drainage away from all structures to prohibit ponding of runoff adjacent to the structure. Future alterations of the grades next to the structures are not recommended.

3. Irrigation within 10 feet of any proposed structure is not recommended. Irrigation water adjacent to the structures could cause settlement.

4. This plan establishes on—site drainage and assumes no responsibility for subsurface analysis, foundation or structural design, or utility design.

5. Local codes may require all footings to be placed in natural undisturbed soil. If the contractor plans to place footings on engineered fill, a certification by a registered Professional Engineer is recommended.

6. It is recommended that the Owner obtain the services of a Geotechnical Engineer to test and inspect all earthwork aspects of the project.

7. The property boundary shown on this plan is given for information only to describe the project limits. Property boundary information shown hereon does not constitute a boundary survey.

8. All work shall be constructed in accordance with the City of Albuquerque Standard Specifications for Public Works Construction with updates.

9. All work on this project shall be performed in accordance with applicable Federal, State, and Local laws, rules, and regulations concerning construction safety and health.

10. Contactor shall ensure that no site soils/sediment or silt enters the righ-of-ways during construction.

11. Areas disturbed due to construction shall be restored per City of Albuquerque Spec. 1012 native seed mix.

acres)				1			
		Existing	Proposed				
n <b>t</b> A		0.00	0.00				
nt B		0.00	0.03				
n <b>t</b> C		0.04	0.00				
nt D		0.02	0.03				
	Total (acres) =	0.06	0.06				
		100 year	100 year	10 year	10 year	2 year	2 year
		Existing	Proposed	Existing	Proposed	Existing	Proposed
	Volume (acre-feet) =	0.007	0.007	0.004	0.004	0.002	0.002
	Volume (cubic feet) =	287	287	154	159	70	79
), cfs:							
		100 year	100 year	10 year	10 year	2 year	2 year
		Existing	Proposed	Existing	Proposed	Existing	Proposed
		Q(p)*A	Q(p)*A	Q(p)*A	Q(p)*A	Q(p)*A	Q(p)*A
nt A		0.00	0.00	0.00	0.00	0.00	0.00
nt B		0.00	0.06	0.00	0.02	0.00	0.00
nt C		0.11	0.00	0.06	0.00	0.02	0.00
n <mark>t</mark> D		0.09	0.13	0.06	0.09	0.03	0.05
	Total Q (cfs) =	0.20	0.19	0.12	0.11	0.05	0.05

JON0116L

JANUARY,2017