## CITY OF ALBUQUERQUE

Planning Department Alan Varela, Director



Mayor Timothy M. Keller

September 29, 2022

Matt Satches, PE Bohannan Huston, Inc. 7500 Jefferson St NE Albuquerque, NM 87109

RE: Allaso at JC6 7501 Jefferson St. NE Revised Conceptual Grading & Drainage Plan Engineer's Stamp Date: 09/06/22 Hydrology File: D17D112

Dear Mr. Satches:

- PO Box 1293 Based upon the information provided in your submittal received 09/12/2022, the Revised Conceptual Grading & Drainage Plan is approved for action by the DRB for Site Plan for Building Permit.
- Albuquerque
   As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the
   NM 87103
   Stormwater Quality Engineer (Doug Hughes, PE, jhughes@cabq.gov, 924-3420) 14 days prior to any earth disturbance.

www.cabq.gov If you have any questions, please contact me at 924-3995 or <u>rbrissette@cabq.gov</u>.

Sincerely,

Renée C. Brissette

Renée C. Brissette, P.E. CFM Senior Engineer, Hydrology Planning Department



## City of Albuquerque

Planning Department Development & Building Services Division DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

Project Title:	Building	g Permit #: Hydrology File #:
DRB#:	EPC#:	Work Order#:
Legal Description:		
City Address:		
Applicant:		Contact:
Address:		
Phone#:	Fax#:	E-mail:
Owner:		Contact:
Address:		
Phone#:	Fax#:	E-mail:
TYPE OF SUBMITTAL: PLAT (	# OF LOTS)	RESIDENCE DRB SITE ADMIN SITE
IS THIS A RESUBMITTAL?:	Yes	No
DEPARTMENT: TRAFFIC/ TRA	NSPORTATION	HYDROLOGY/ DRAINAGE
Check all that Apply:		TYPE OF APPROVAL/ACCEPTANCE SOUGHT:
TYPE OF SUBMITTAL:	~	BUILDING PERMIT APPROVAL
ENGINEER/ARCHITECT CERTIF	ICATION	CERTIFICATE OF OCCUPANCY
PAD CERTIFICATION		PRELIMINARY PLAT APPROVAL
CONCEPTUAL G & D PLAN		SITE PLAN FOR SUB'D APPROVAL
GRADING PLAN		SITE PLAN FOR BLDG. PERMIT APPROVAL
DRAINAGE MASTER PLAN		FINAL PLAT APPROVAL
ELOODDI AIN DEVELODMENT DI	EDMIT ADDI IC	SIA/ RELEASE OF FINANCIAL GUARANTEE
ELEVATION CERTIFICATE		FOUNDATION PERMIT APPROVAL
		GRADING PERMIT APPROVAL
TRAFFIC CIRCULATION LAYOU	T (TCL)	SO-19 APPROVAL
TRAFFIC IMPACT STUDY (TIS)	1 (102)	GPADING/PAD CEPTIEICATION
OTHER (SPECIFY)		
PRE-DESIGN MEETING?		CLOMR/LOMR
		FLOODPLAIN DEVELOPMENT PERMIT
		OTHER (SPECIFY)
DATE SUBMITTED:	Bv	

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED:

FEE PAID:





2

# DRAINAGE NARRATIVE

### INTRODUCTION:

Weighted
Curve #
86
86
86
86
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![](_page_3_Picture_4.jpeg)

THE JC 6 ALLASO MULTIFAMILY PROJECT IS LOCATED ON THE NORTHWEST CORNER OF JEFFERSON AND MASTHEAD. THE SITE IS CURRENTLY UNDEVELOPED BUT WAS PREVIOUSLY DISTURBED. PER FEMA FIRM MAP PANELS #35001C0137H AND #35001C0136G, THE SITE IS NOT LOCATED WITHIN A FLOODPLAIN, THOUGH IT IS IMMEDIATELY ADJACENT TO THE EXISTING NORTH PINO ARROYO NORTH OF THE SITE. THE SITE IS IN RAINFALL ZONE 2 (CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, CHAPTER 6, FIGURE 6.2.3). METHODOLOGY:

#### METHODOLOG

THE HYDROLOGIC AND HYDRAULIC ANALYSES PROVIDED WITH THIS DRAINAGE SUBMITTAL HAVE BEEN PREPARED IN ACCORDANCE WITH CHAPTER 6 OF THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL (DRAINAGE, FLOOD CONTROL, AND EROSION CONTROL). THE SITE WAS DIVIDED INTO FOUR DRAINAGE BASINS IN ORDER TO CALCULATE THE SITE'S EXISTING RAINWATER RUNOFF TO THE EXISTING STORM DRAIN INFRASTRUCTURE IN THE SURROUNDING ROADS AND CHANNEL. TWO ANALYSIS POINTS WERE ANALYZED AS PRIMARY DISCHARGE LOCATIONS FOR THE SITE. LAND TREATMENT PERCENTAGES WERE CALCULATED BASED ON THE OBSERVED CONDITIONS IN EACH ONSITE BASIN AND ARE SUMMARIZED IN THE "EXISTING DEVELOPED CONDITIONS BASIN DATA TABLE" (THIS SHEET). THE SITE WAS ANALYZED FOR THE 100-YEAR, 6-HOUR STORM EVENT.

#### EXISTING CONDITIONS:

THE EXISTING SITE IS CURRENTLY UNDEVELOPED, WITHOUT BUILDINGS OR PAVED AREAS, YET HAS BEEN DISTURBED, LEADING TO MINIMAL EXISTING VEGETATIVE COVER. THE SITE SLOPES GENERALLY TO THE NORTH AND WEST. AN ENGINEERED BERM IS LOCATED ALONG THE WEST SIDE OF THE SITE. THIS BERM INTERCEPTS AND DIRECTS FLOWS FROM THE CENTER OF THE SITE NORTHWARD TOWARD THE EXISTING NORTH PINO ARROYO (ANALYSIS PT #1). THE REMAINING RUNOFF THAT DOES NOT DISCHARGE NORTH DISCHARGES TO THE ADJACENT ROADWAYS (ANALYSIS PT #2).

THIS SITE IS PART OF THE LARGER JOURNAL CENTER MASTER DRAINAGE MANAGEMENT PLAN (HYDRO FILE D17D000 DATED NOVEMBER 1990). REMAINING CONSISTENT WITH THE JOURNAL CENTER MASTER DMP, ALL RUNOFF VALUES AT ANALYSIS POINTS HAVE BEEN REPORTED TO THE NEAREST WHOLE NUMBER. THE SITE IS ANALYZED AS BASIN "J". BASED ON THE DRAINAGE MANAGEMENT PLAN, BASIN "J" IS ALLOWED TO DISCHARGE 17 CFS INTO THE NORTH PINO ARROYO. MASTHEAD IS LOCATED IMMEDIATELY SOUTH OF THE SITE AND IS ANALYZED AS BASIN "J ST". BASED ON THE DRAINAGE MANAGEMENT PLAN, BASIN "J ST" DISCHARGES 3 CFS NEAR THE SOUTHWEST CORNER OF THE SITE.

ANALYSIS POINT #1 IS LOCATED IN THE NORTHWEST CORNER OF THE SITE, SAME AS "BASIN J" AS REFERENCED IN THE APPROVED MASTER DMP. ANALYSIS POINT #1 CONTAINS BASIN "A". BASED ON OUR EXISTING ANALYSIS, THIS BASIN CONTRIBUTES APPROXIMATELY 12 CFS INTO THE EXISTING NORTH PINO ARROYO, LESS THAN THE 17 CFS THAT IS ALLOWED.

ANALYSIS POINT #2 IS LOCATED NEAR THE NORTHEAST CORNER OF THE ROUNDABOUT INTERSECTION OF TIBURON AND MASTHEAD. 3 ADDITIONAL BASINS (B, C, AND D) CONTRIBUTE TO THIS ANALYSIS POINT. THIS ANALYSIS POINT CONTRIBUTES APPROXIMATELY 4 CFS TO THE INTERSECTION UNDER EXISTING CONDITIONS, MORE THAN THE 3 CFS THAT IS ALLOWABLE PER THE JOURNAL CENTER MASTER PLAN.

![](_page_3_Picture_13.jpeg)

![](_page_3_Picture_14.jpeg)

PROJECT

ARCHITECT

![](_page_3_Picture_16.jpeg)

## DESIGN REVIEW BOARD (DRB) -APPLICATION

REVISIONS

DRAWN BY
REVIEWED BY
DATE 00.00.0000
PROJECT NO. 20-0029
DRAWING NAME
EXISTING
CONDITIONS
DRAINAGE

DRAINAGE MANAGEMENT PLAN

C-001

SHEET NO.

![](_page_3_Picture_22.jpeg)

![](_page_3_Picture_23.jpeg)

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![](_page_4_Figure_0.jpeg)

2

						JO	URNAL CE	NTER 6					
					Propo	sed Devel	oped Conditi	ons Basin Da	ata Table				
This table is based on the DPM Chapter 6, Zone: 2													
Basin	Area	Area	Land	d Treatme	nt Percent	ages	Q(100yr)	Q(100yr)	V(100yr)	<b>V</b> (100yr-6hr)	<b>V</b> (100yr-24hr)	Weighted	FIRSTFLUSH
ID	(SQ. FT)	(AC.)	A	В	C	D	(cfs/ac.)	(CFS)	(inches)	(CF)	(CF)	Curve #	(CF)
C	ONSITE BASIN	S											
BASIN A	A 33700	0.77	0.0%	0.0%	10.0%	90.0%	4.21	3.3	2.20	6178	6937	97	1062
BASIN E	3 21682	0.50	0.0%	0.0%	50.0%	50.0%	3.70	1.8	1.68	3035	3307	92	379
BASINO	C 87491	2.01	0.0%	0.0%	10.0%	90.0%	4.21	8.5	2.20	16040	18009	97	2756
BASINE	D 49397	1.13	0.0%	0.0%	10.0%	90.0%	4.21	4.8	2.20	9056	10168	97	1556
BASIN E	E 3227	0.07	0.0%	0.0%	5.0%	95.0%	4.28	0.3	2.27	609	686	97	107
BASINF	= 10754	0.25	0.0%	0.0%	95.0%	5.0%	3.11	0.8	1.10	981	995	87	19
BASINO	G 8675	0.20	0.0%	0.0%	90.0%	10.0%	3.18	0.6	1.16	839	860	87	30
BASINH	- 9563	0.22	0.0%	0.0%	95.0%	5.0%	3.11	0.7	1.10	873	885	87	17
TOTAL	224489	5.15	-	-	-	-	-	20.7	_	37612	41845		5926

# DRAINAGE NARRATIVE

### PROPOSED CONDITIONS:

SEE SHEET C-001 FOR INTRODUCTION, EXISTING CONDITIONS AND METHODOLOGY.

THE SITE IS DIVIDED INTO 8 ONSITE BASINS (A - H). FOR CONTINUITY PURPOSES, THE TWO ANALYSIS POINTS FROM EXISTING CONDITIONS ARE AGAIN REPRESENTED FOR DEVELOPED CONDITIONS. BASINS A, C, D, E, AND G ALL DISCHARGE TO THE NORTHWEST CORNER OF THE SITE (ANALYSIS PT 1). BASINS B, F, AND H ALL DISCHARGE TO THE PUBLIC RIGHT OF WAY (ANALYSIS PT #2).

BASED ON PROPOSED SITE DEVELOPMENT CONDITIONS, APPROXIMATELY 17 CFS IS CONTRIBUTED TO ANALYSIS PT 1. THIS RUNOFF WILL BE DISCHARGED DIRECTLY TO THE NORTH PINO ARROYO VIA A NEW PIPE PENETRATION TO BE COORDINATED WITH AND APPROVED BY AMAFCA.

BASED ON PROPOSED DITE DEVELOPMENT CONDITIONS, APPROXIMATELY 3 CFS IS CONTRIBUTED TO THIS INTERSECTION. THIS IS LESS THAN EXISTING CONDITIONS OF 4 CFS, DUE TO A REDUCTION OF CONTRIBUTING AREA.

LANDSCAPED ISLANDS WILL BE DEPRESSED WHERE POSSIBLE FOR STORMWATER QUALITY PURPOSES. ALL INLETS WILL BE INSTALLED AS STORMWATER QUALITY INLETS AS WELL. ANY REMAINING STORMWATER QUALITY VOLUME WILL BE PAID CASH-IN-LIEU.

THE MAXIMUM WATER SURFACE ELEVATION WITHIN THE CHANNEL WAS ANALYZED USING A FLOW OF 2,700 CFS PER THE USACE MODIFICATION TO EXISTING PROJECTS - ALBUQUERQUE ARROYOS - FEASIBILITY STUDY. THIS FLOW WAS ANALYZED IN THIS CHANNEL UNDER SUPERCRITICAL CONDITION BASED ON DISCUSSIONS WITH OUR TEAM AND AMAFCA. THE RESULTANT ANALYSIS SHOWED THAT DUE TO THE MAXIMUM WATER SURFACE ELEVATION, A SMALL FLOODWALL WAS NEEDED TO PROVIDE ADEQUATE FREEBOARD ABOVE THE CHANNEL AND TO PROTECT THE JC6 SITE STRUCTURES. THE FLOODWALLS PROVIDED WILL ALLOW FOR 2.5' OF FREEBOARD ABOVE THE MAXIMUM WATER SURFACE ELEVATION. CONCLUSION:

THE CALCULATED PEAK DISCHARGE FROM THE SITE IS IN COMPLIANCE WITH THE PREVIOUSLY APPROVED JOURNAL CENTER MASTER PLAN. RUNOFF TO THE RIGHT OF WAY IS LESS THAN EXISTING CONDITIONS AND ALSO CONSISTENT WITH THE MASTER-PLANNED ALLOWABLE DISCHARGE RATE. AS SUCH, DETENTION PONDS ARE NOT REQUIRED. THE GRADING AND DRAINAGE PLAN AS PRESENTED IS IN CONFORMANCE WITH THE CITY OF ALBUQUERQUE HYDROLOGY AND AMAFCA REQUIREMENTS. WITH THIS SUBMITTAL WE ARE REQUESTING COA AND AMAFCA DRB SITE PLAN FOR BUILDING PERMIT APPROVAL.

![](_page_4_Picture_11.jpeg)

ENGINEER NOT FOR CONSTRUCTION

![](_page_4_Picture_13.jpeg)

ARCHITECT

![](_page_4_Picture_14.jpeg)

**DESIGN REVIEW** 

BOARD (DRB) -

APPLICATION

REVISIONS

DRAWN BY

DATE

REVIEWED BY

PROJECT NO. DRAWING NAME

PROPOSED

DRAINAGE

PLAN

MANAGEMENT

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## LEGEND

	PROPERTY LINE
— — — 496 <del>0</del> — — —	EXISTING INDEX CONTOUR
4959	EXISTING INTERMEDIATE CONTOUR
	PROPOSED INDEX CONTOUR
	PROPOSED INTERMEDIATE CONTOUR
	EXISTING DRAINAGE BASIN
XX%	DIRECTION OF FLOW
~~~~~~	WATER BLOCK/GRADE BREAK
SD	PROPOSED STORM DRAIN LINE
•	PROPOSED STORM DRAIN INLETS

![](_page_4_Picture_17.jpeg)

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![](_page_4_Picture_18.jpeg)

![](_page_4_Picture_19.jpeg)

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20-0029