# CITY OF ALBUQUERQUE

Planning Department Alan Varela, Director



Mayor Timothy M. Keller

March 24, 2023

Robert Fierro, P.E. Fierro & Company 6300 Montano Rd NW Albuquerque NM, 87104

RE: The Varela Residence Volcano Cliffs Unit 18 6505 Pato Rd NW, S.A.D. 228, Lot 21 Block 6 Grading and Drainage Plan Date 12/27/16 (D10D003M21) Pad Certification Date 1/25/17 CO Approval Date 6/2/2020 Revised G&D plan for pool Date: 3/20/2023

Mr. Fierro,

Based upon the information provided in your submittal received 3/24/2023, this plan is approved for a revised Grading Permit, and will now be the plan of record.

Prior to Building permit approval a Pad Certification will be required, provided by the Engineer or a registered Land Surveyor.

Advise the owner contractor not to use dirt as a ramp to climb the curb, use lumber or crusher fines for this purpose.

Reiterate to the Owner/Contractor that a separate permit for a garden/retaining wall must be obtained with the approved G&D plan and Pad Certification. Also, if a swimming pool is to be placed the grading and drainage plan will change and will need to be resubmitted.

Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist is required.

If you have any questions, please contact me at 924-3695 or Rudy Rael at 924-3977.

Sincerely,

- Cha liegue

Tiequan Chen, P.E. Principal Engineer, Hydrology Planning Department, Development Review Services

RR/SB C: File D10D003M21



# City of Albuquerque

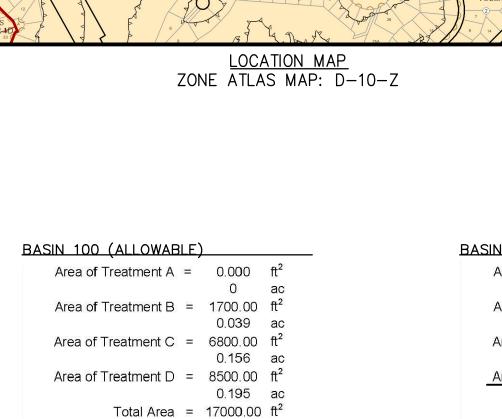
Planning Department Development & Building Services Division DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

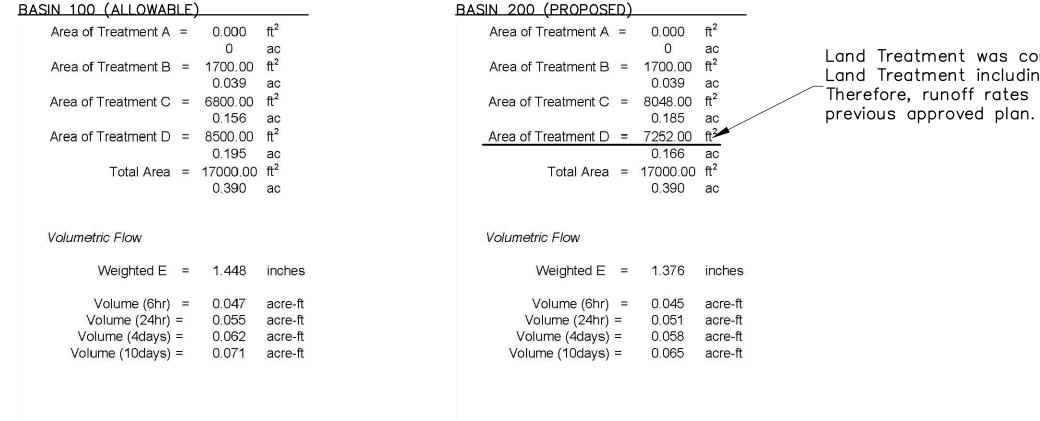
Project Title:	Building	Permit #: Hydrology File #:
		Work Order#:
Legal Description:		
City Address:		
Applicant:		Contact:
Address:		
		E-mail:
Owner:		Contact:
Address:		
Phone#:	Fax#:	E-mail:
TYPE OF SUBMITTAL: PLAT (	_# OF LOTS)	RESIDENCE DRB SITE ADMIN SITE
IS THIS A RESUBMITTAL?:	Yes	No
DEPARTMENT: TRAFFIC/ TRAM	SPORTATION	HYDROLOGY/ DRAINAGE
Check all that Apply:		TYPE OF APPROVAL/ACCEPTANCE SOUGHT
TYPE OF SUBMITTAL:		BUILDING PERMIT APPROVAL
ENGINEER/ARCHITECT CERTIFIC	CATION	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 APPROVA
DRAINAGE MASTER PLAN		FINAL PLAT APPROVAL
DRAINAGE REPORT		SIA/ RELEASE OF FINANCIAL GUARANTE
FLOODPLAIN DEVELOPMENT PEI	RMIT APPLIC	FOUNDATION PERMIT APPROVAL
ELEVATION CERTIFICATE		GRADING PERMIT APPROVAL
CLOMR/LOMR		SO-19 APPROVAL
TRAFFIC CIRCULATION LAYOUT	(TCL)	PAVING PERMIT APPROVAL
TRAFFIC IMPACT STUDY (TIS)		GRADING/ PAD CERTIFICATION
OTHER (SPECIFY)		WORK ORDER APPROVAL
PRE-DESIGN MEETING?		CLOMR/LOMR
		FLOODPLAIN DEVELOPMENT PERMIT
		OTHER (SPECIFY)
DATE SUBMITTED	Bv	

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED:

FEE PAID:





Peak Rate of Discharge

Q<sub>100</sub> = 1.380 cfs

 $\frown$  HYDROLOGY FROM APPROVED PLAN D10D003M21

## INTRODUCTION

A SWIMMING POOL WITH DECK IS BEING PROPOSED. THE RESIDENCE ON THIS PROPERTY WAS CONSTRUCTED IN 2020 ALONG WITH TWO EXISTING STORM WATER QUALITY PONDS. THE PURPOSE OF THIS GRADING & DRAINAGE PLAN IS TO SATISFY THE FIRST FLUSH REQUIREMENT AND SEEK APPROVAL FOR THE CONSTRUCTION OF THE PROPOSED SWIMMING POOL.

Peak Rate of Discharge

Q<sub>100</sub> = 1.337 cfs

#### METHODOLOGY

HYDROLOGIC PROCEDURES PRESENTED IN THE HYDROLOGY SECTION OF THE DMP, ARTICLE 6-2(A), APPROVED JUNE 8, 2020 WERE FOLLOWED. PRECIPITATION ZONE 1 DATA WAS USED IN THE HYDROLOGIC COMPUTATIONS.

## EXISTING CONDITION

THE SITE'S LOT DIMENSION IS 100'X145'. THE LOT DOES NOT RECEIVE OFFSITE RUNOFF. THE PROPERTY WAS DEVELOPED IN 2020. THERE ARE TWO EXISITNG STORM WATER QUALITY PONDS WHICH ARE SHOWN ON THE DRAINAGE CERTIFICATION WITH ENGINEER STAMP DATE 6/2/2020 AND APPROVED UNDER HYDROLOGY FILE D10D003M21.

#### PROPOSED CONDITION

A SWIMMING POOL WITH DECK IS PROPOSED WHICH WILL BE AN ADDITIONAL 1,000 SQ.FT. OF IMPERVIOUS AREA. THE RUNOFF FROM THE ADDITIONAL IMPERVIOUS AREA WILL DISCHARGE TO THE EAST STORM WATER QUALITY POND. THE EAST STORM WATER QUALITY POND WILL BE RECONSTRUCTED TO STORE ALL REQUIRED STORM WATER QUALITY VOLUME GENERATED FROM EXISTING AND PROPOSED IMPERVIOUS AREA WHICH DISCHARGE TO THIS POND. IMPROVEMENTS TO THE WEST POND ARE NOT REQUIRED. DRAINAGE PATTERN WILL NOT BE ALTERED.

LAND TREATMENT VALUES FROM THE PRIOR APPROVED PLAN WERE CONSERVATIVE. THE LAND TREATMENT D UNDER THE PRIOR APPROVED PLAN IS GREATER THAN THE LAND TREATMENT D PERCENTAGE OF THIS SITE WITH A POOL. THEREFORE, NEW HYDROLOGIC CALCULATIONS WERE NOT PERFORMED UNDER THIS GRADING PLAN OTHER THAN CALCULATING THE STORM WATER QUALITY REQUIREMENT. DISCHARGE RATE CALCULATIONS ARE SHOWN ON THE PREVIOUSLY APPROVED GRADING PLAN.

REQUIRED STORMWATER QUALITY VOLUME: TOTAL LAND TREATMENT "D" AREA = 6,450 SQ.FT. WATER QUALITY STORAGE REQUIRED = 6,450 SQ.FT.\*(0.34")\*(1'/12")=183 CU.FT.

PROVIDED POND STORMWATER QUALITY VOLUME: TOTAL REQUIRED VOL. = (EAST SWQP. + WEST SWQP.)

= (40 cu.ft. + 144 cu.ft.)= 184 cu.ft.

THEREFORE, STORMWATER QUALITY VOLUME REQUIREMENT IS MET. POND STORAGE CAPACITY IS GREATER THAN REQUIRED VOLUME. WATER SURFACE ELEVATION OF POND = 5347.0

