CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director

Mayor Timothy M. Keller

December 28, 2022

Reza Afaghpour, P.E.
SBS Construction and Engineering, LLC
10209 Snowflake Ct NW
Albuquerque, NM 87114

RE: **Lot 15 Block 5 Volcano Cliffs Unit 18 SAD 228**
7808 Compass Dr. NW
Grading and Drainage Plan
Engineers Stamp Date Rev. 12/16/2022 (D10D003G36)

Mr. Afaghpour,

Based upon the information provided in your submittal received 12/26/2022, this plan is approved for revised grading plan.

Hydrology inspection is required before final CO is granted.

If you should have any questions please contact me at 505-924-3695 or Rudy E. Rael at 505-924-3977

Sincerely,

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

RR/TC
File: D10D003G36

PO Box 1293
Albuquerque
NM 87103
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City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: 7808 COMPASS DR., NW Building Permit #: _____ Hydrology File #: D10D003G36

DRB#: _____ EPC#: _____ Work Order#: _____

Legal Description: LOT 36, BLOCK 2, VOLCANO CLIFFS UNIT 19

City Address: 7808 COMPASS DR., NW

Applicant: SBS CONSTRUCTION AND ENGINEEING, LLC Contact: SHAWN BIAZAR

Address: 7632 William Moyers Avenue, NE, ALBUQUERQUE, NM 87114

Phone#: (505) 804-5013 Fax#: (505) 897-4996 E-mail: AECLLC@AOL.COM

Other Contact: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

TYPE OF DEVELOPMENT: _____ PLAT (# of lots) __X__ RESIDENCE _____ DRB SITE ___ ADMIN SITE

IS THIS A RESUBMITTAL? _____ Yes ___X___ No

DEPARTMENT _____ TRANSPORTATION __X__ HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

____ ENGINEER/ARCHITECT CERTIFICATION
____ PAD CERTIFICATION
____ CONCEPTUAL G & D PLAN
__X__ GRADING PLAN
__X__ DRAINAGE REPORT
____ DRAINAGE MASTER PLAN
____ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
____ ELEVATION CERTIFICATE
____ CLOMR/LOMR
____ TRAFFIC CIRCULATION LAYOUT (TCL)
____ TRAFFIC IMPACT STUDY (TIS)
____ STREET LIGHT LAYOUT
____ OTHER (SPECIFY) _____
____ PRE-DESIGN MEETING?

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

__X__ 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
__X__ GRADING PERMIT APPROVAL
____ SO-19 APPROVAL
____ PAVING PERMIT APPROVAL
____ GRADING/ PAD CERTIFICATION
____ WORK ORDER APPROVAL
____ CLOMR/LOMR
____ FLOODPLAIN DEVELOPMENT PERMIT
____ OTHER (SPECIFY) _____

DATE SUBMITTED: 12-19-2022 By: SHAWN BIAZAR

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

Location

This project is located at 7808 Compass Dr., NW. NW and contains 0.3565 acre. See attached portion of Vicinity Map D-10-Z for exact location.

Purpose

The purpose of this drainage report is to present a grading and drainage solution for the new pool on this lot.

Existing Drainage Conditions

This project falls within SAD 228 master drainge plan. This site specifically falls within drainage Basin 201. This lot drains from north to south. No offsite runoff enters this site. There are existing ponds on this site with a pump that was installed previously.

Proposed Conditions and On-Site Drainage Management Plan

The drainage patterns will remain the same. The entire runoff from the site will be retain on site along the south property line. The allowable discharge volume based on the 100-year/24-hour volume is 2,003.37 cf and 100-year/24-hour volume under the proposed conditins is 2,081.67 cf. Therefore, the required ponding volume is 78.30 cf. But the first flush volume ponding requirement is 244.60 cf which exceeds the 78.30 cf. The actual ponding volume provided is 1,351.73 cf.

VOLUME CALCULATIONS

BASIN	AREA (SF)	AREA (AC)	AREA (MI^2)
ON-SITE	15,530.00	0.3565	0.000557

$$E = \frac{EA(AA) + EB(AB) + EC(AC) + ED(AD)}{AA + AB + AC + AD}$$

V-360 = E (AA + AB + AC + AD)/12

V-24HR HOUR = V-360 + AD (P-1440 - P-360) / 12

EA = 0.55
EB = 0.73
EC = 0.95
ED = 2.24

P-60 = 1.69
P-360 = 2.17
P-1440 = 2.49
P-10 Day = 3.90

ALLOWABLE CONDITIONS	PROPOSED CONDITIONS
From SAD 228, Basin 201 M	AA = 0.00%
Q = 10.17 CFS / 5.17 AC = 1.97 CFS/AC	AB =30.00%
Q = 1.97 * 0.5701 = 1.12 cfs	AC = 25.00%
	AD = 45.00%
V-24 HOUR = 0.667/5.17 = 0.129 AC-FT/AC	**E = 1.46 IN**
V-24 HOUR = 0.129 * 0.3565 = 0.04599 AC-FT	**V-360 = 0.0435 AC-FT**
V-24 HOUR = 2,003.37 CF	**V-360 = 1,895.31**
	AD = 0.1604 AC
	V-24 HOUR = **2,081.67 CF**

V-24 HOUR (REQUIRED) :
= 2,081.67-2,003.37 = 78.30 CF

FIRST FLIUSH PONDING REQUIREMENT

IMPERVIOUS AREA =6,988.50 SF
FIRST FLUSH VOL. REQI. = 0.42" x 6,988.50 / 12 = 244.60 CF

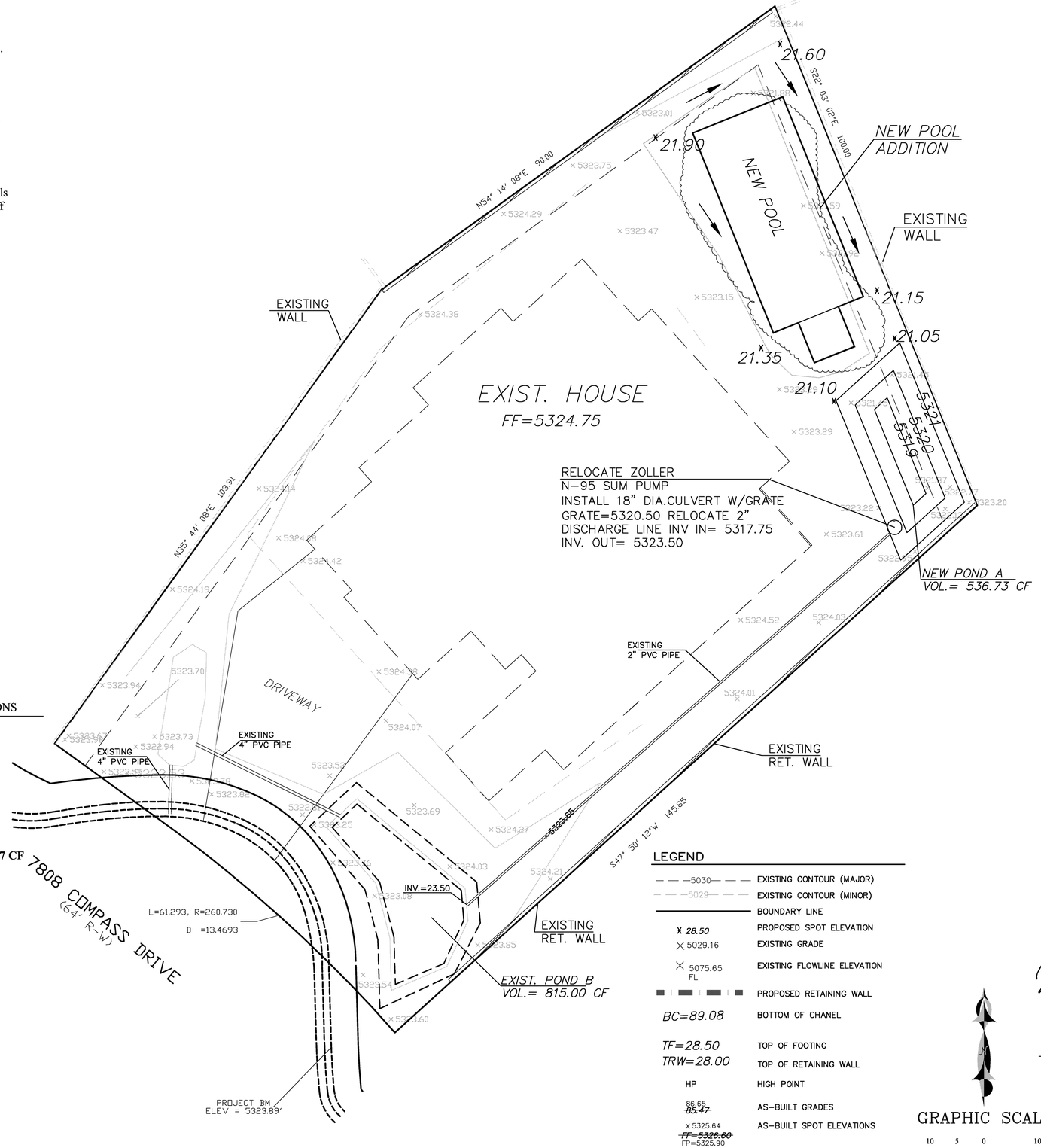
PONDING VOLUME CALCULATION

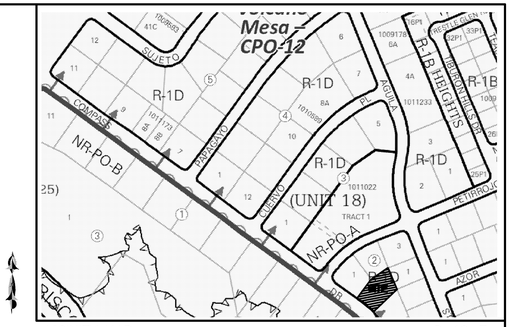
TOTAL POND AREA PROVIDED =
PONDING CALCULATIONS:

POND A NEW:
AREA @ ELEV. 21.00 = 479.22 SF
AREA @ ELEV. 19.00 = 57.51 SF
POND VOLUME=(479.22+57.51)/2*2.00=536.73 CF

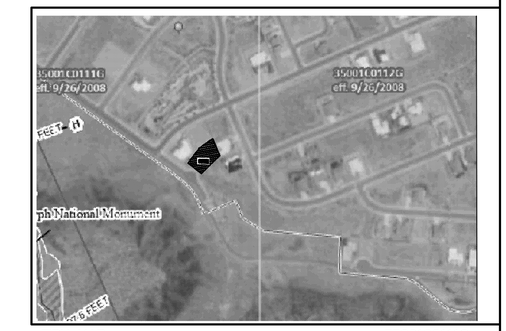
POND B EXISTING:
POND VOLUME= 815.25 CF

TOTAL PONDING VOLUME PROVIDED = 536.73+815.00=1,351.73 CF





VICINITY MAP: D-10-Z



FIRM MAP: 35001C0111G

LEGAL DESCRIPTION:
Lots 36, BIOCK 2, VOLCANO CLIFFS SUBDIVISION, UNIT 19
ADDRESS: 7808 COMPASS DR., N.W.

BENCHMARK
CITY BNCHMARK 17_D10, ELEEVATION OF 5325.068 FEET ABOVE SEA LEVEL.

EROSION CONTROL PLAN AND POLLUTION PREVENTION NOTES

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
2. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT OUT OF EXISTING RIGHT-OF-WAY.
3. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL STORM RUNOFF ON SITE.
4. REPAIR OF DAMAGED FACILITIES AND CLEAN-UP OF SEDIMENT ACCUMULATION ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.

GENERAL NOTES:

1: CONTOUR INTERVAL IS HALF (1.00) FOOT.
2: ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE CONTROL STATION 17_D10, HAVING AN ELEVATION OF 5325.068 FEET ABOVE SEA LEVEL.
3: UTILITIES SHOWN HEREON ARE IN THEIR APPROXIMATE LOCATION BASED ONLY ON ABOVE GROUND EVIDENCE FOUND IN THE FIELD AND AS-BUILT INFORMATION PROVIDED BY THE CLIENT. UTILITIES SHOWN HEREON, WHETHER INDICATED AS ABANDONED OR NOT, SHALL BE VERIFIED BY OTHERS FOR EXACT LOCATION AND/ OR DEPTH PRIOR TO EXCAVATION OR DESIGN CON-SIDERATIONS.
4: THIS IS NOT A BOUNDARY SURVEY, BEARINGS ARE ASSUMED, DISTANCES AND FOUND PROPERTY CORNERS ARE FOR INFORMATIONAL PURPOSES ONLY.
5: SLOPES ARE AT 3:1 MAXIMUM.
6: ADD 5300 TO ALL PROPOSED SPOT ELEVATIONS.

LEGEND

—5030—	EXISTING CONTOUR (MAJOR)
—5029—	EXISTING CONTOUR (MINOR)
	BOUNDARY LINE
X 28.50	PROPOSED SPOT ELEVATION
X 5029.16	EXISTING GRADE
X 5075.65 FL	EXISTING FLOWLINE ELEVATION
	PROPOSED RETAINING WALL
BC=89.08	BOTTOM OF CHANEL
TF=28.50	TOP OF FOOTING
TRW=28.00	TOP OF RETAINING WALL
HP	HIGH POINT
86.65 ~~85.47~~	AS-BUILT GRADES
X 5325.64 ~~TF=5326.60~~ FP=5325.90	AS-BUILT SPOT ELEVATIONS

GRAPHIC SCALE
10 5 0 10
SCALE: 1"=10'

REZA AFAGHPOUR
NEW MEXICO
11814
12/16/2022
LICENSED PROFESSIONAL ENGINEER

REZA AFAGHPOUR
P.E. #11814

SBS CONSTRUCTION AND ENGINEERING, LLC
7632 WILLIAM MOYERS AVE., NE
ALBUQUERQUE, NEW MEXICO 87122
(505)804-5013

7808 COMPASS DR., N.W.
GRADING PLAN

DRAWING:	DRAWN BY:	DATE:	SHEET #
202202-GD.DWG	SH-B	2-22-21	1

LAST REVISION: 12-17-2022