

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

May 27, 2022

David Thompson, PE
Thompson Engineering Consultants, Inc.
PO Box 65760
Albuquerque, NM 87193

**RE: Ventana Square Subdivision
9500 Universe NW
Supplemental Drainage Report – Retention Pond Redesign
Engineer’s Stamp Date: 05/17/22
Hydrology File: B10D003C3**

Dear Mr. Thompson:

PO Box 1293
Based upon the information provided in your submittal received 05/17/2022, the Supplemental Drainage Report for the Retention Pond Redesign is approved for Grading Permit and for Work Order.

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 Stormwater Quality Engineer (Doug Hughes, PE, jhughes@cabq.gov, 924-3420) 14 days prior to any earth disturbance.

NM 87103

www.cabq.gov

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

Sincerely,

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 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/ TRANSPORTATION _____ HYDROLOGY/ DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

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

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

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

DATE SUBMITTED: _____ **By:** _____

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

SUPPLEMENTAL DRAINAGE REPORT
FOR
VENTANA SQUARE
TRACTS H-5A, H-6A, H-6B, H-7A, H-8A, H-9A, H-10, & H-11

May 2022

SUPPLEMENTAL DRAINAGE REPORT
FOR
VENTANA SQUARE
TRACTS H-5A, H-6A, H-6B, H-7A, H-8A, H-9A, H-10, & H-11

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED

DATE: 05/27/22
BY: *Renee C. Brissette*
HydroTrans # B10D003C3

THE APPROVAL OF THESE PLANS/REPORT SHALL NOT BE
CONSTRUED TO PERMIT VIOLATIONS OF ANY CITY
ORDINANCE OR STATE LAW, AND SHALL NOT PREVENT
THE CITY OF ALBUQUERQUE FROM REQUIRING
CORRECTION, OR ERROR OR DIMENSIONS IN PLANS,
SPECIFICATIONS, OR CONSTRUCTIONS. SUCH APPROVED PLANS
SHALL NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT
AUTHORIZATION.



Prepared by:
Thompson Engineering Consultants, Inc.
P.O. Box 65760
Albuquerque, NM 87193

May 2022

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INTRODUCTION

Due to existing rock in the proposed retention pond excavation area, the retention pond grading plan has been adjusted to avoid the existing rock. This Supplemental Drainage Report addresses the regrading of the retention pond.

DEVELOPED DRAINAGE CONDITIONS

The existing retention pond accepts runoff from basins 100 through 400. The total 100-year, 10-day volume reaching the retention pond is 7.25 acre-feet, which exceeds the volume of the existing retention pond. So, the existing retention pond will be excavated to increase the volume. Table 2 shows the developed conditions hydrology results. See Appendix B for hydrologic calculations.

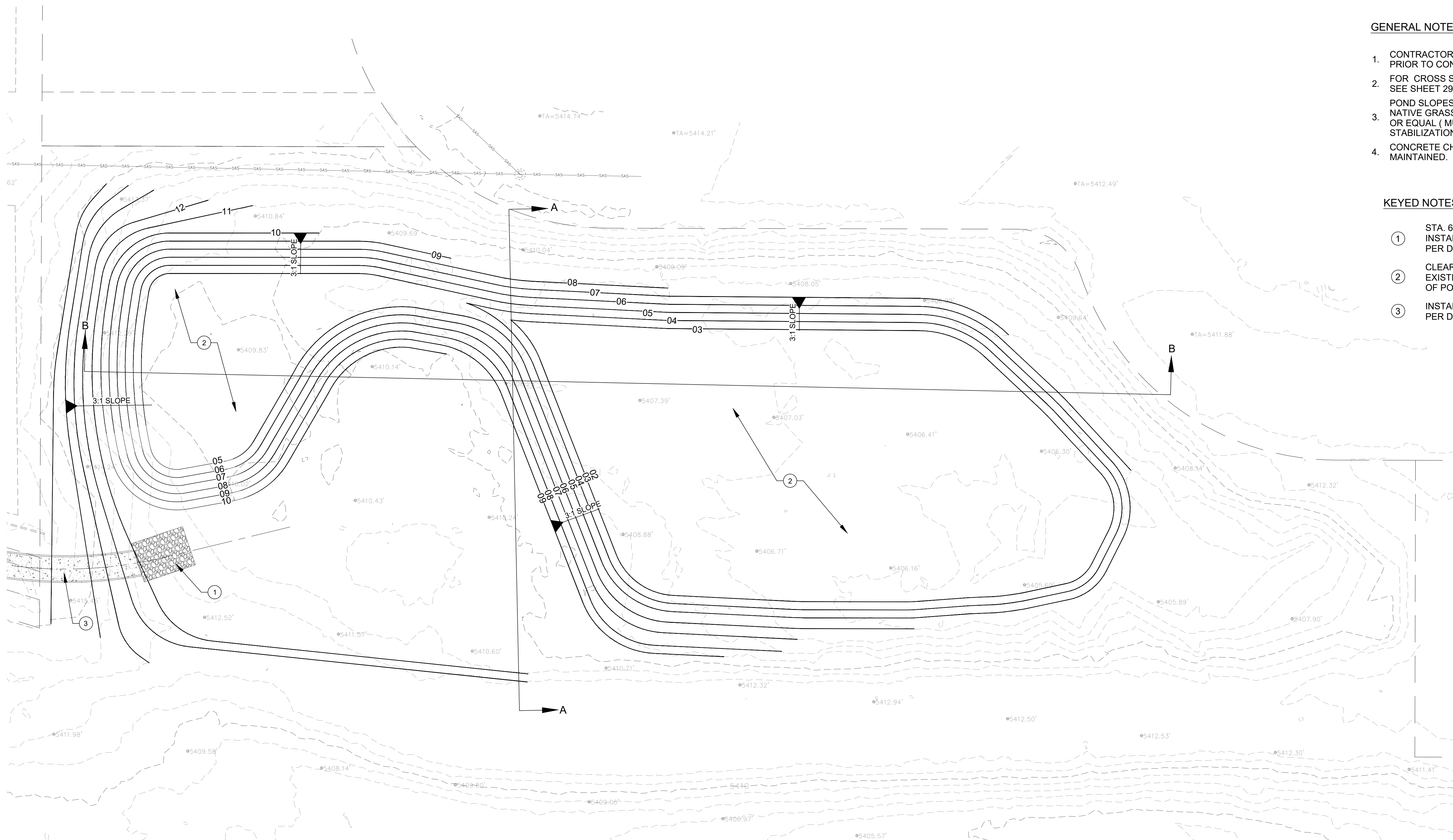
Table 1 Developed Drainage Conditions

BASIN	Area (acres)	100yr-6hr Peak Flow (cfs)	100yr-10 day Runoff Volume (ac-ft)	Land Treatment
100	2.16	4.67	0.13	100%B
101	0.27	1.11	0.09	100%D
200	12.06	40.78	2.54	23%B, 23%C, 54%D
301	2.92	11.53	0.88	5%B, 6%C, 89%D
302	1.97	8.12	0.65	100%D
303	1.73	6.71	0.50	7.5%B, 7.5%C, 85%D
400	8.39	32.55	2.45	7.5%B, 7.5%C, 85%D
500	0.81	3.14	0.24	7.5%B, 7.5%C, 85%D

DRAINAGE IMPROVEMENT PLAN

Description

The development of the remainder of Ventana Square will require the construction of drainage improvements. As noted in the previous section, the existing retention pond needs to be excavated to store the 100-year, 10-day volume for the full buildout condition. As shown on the attached Retention Pond Grading Plan, the retention pond will be excavated to avoid the existing rock without expanding the pond foot print. The 100-year, 10-day volume in the pond after excavation is complete will be 7.25 acre-feet. The 100-year water surface elevation will be 5411.32 resulting in a freeboard of 1.18 feet to the top of the pond. The total impervious area draining to the retention pond from basins 100 through 400 is 19.95 acres. The first flush volume during a 0.42-inch storm is 0.698 acre-feet. The water surface elevation of the first flush volume at full buildout will be 0.80 feet.

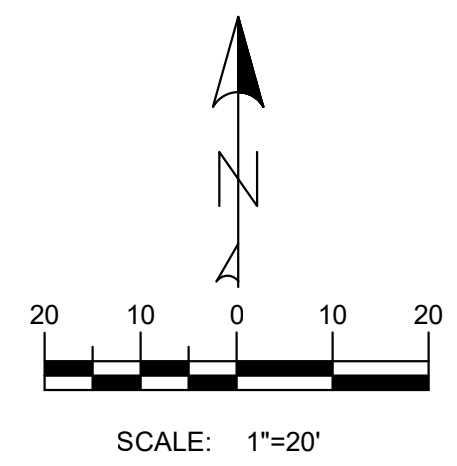


GENERAL NOTES:

1. CONTRACTOR TO FIELD VERIFY ALL UTILITIES PRIOR TO CONSTRUCTION.
2. FOR CROSS SECTIONS & DRAINAGE DETAILS SEE SHEET 29
3. POND SLOPES NEED TO BE STABILIZED WITH NATIVE GRASS SEED WITH AGGREGATE MULCH OR EQUAL (MUST SATISFY THE "FINAL STABILIZATION CRITERIA" CGP22.14.b)
4. CONCRETE CHANNEL TO BE PRIVATELY MAINTAINED.

KEYED NOTES:

- ① STA. 65+12 TO STA. 65+32 INSTALL 15'x20" RIPRAP OUTFALL PER DETAIL SHEET 29
- ② CLEAR AND GRUB BOTTOM OF EXISTING POND EXCAVATE BOTTOM OF POND TO ELEVATION SHOWN
- ③ INSTALL CONCRETE CHANNEL PER DETAIL ON SHEET 29



Thompson
Engineering
Consultants, Inc.
tecnm@yahoo.com

P.O. BOX 65760 ALBUQUERQUE, NM 87193 PHONE: (505) 271-2199
 FAX: (505) 830-9998

AS BUILT INFORMATION	
CONTRACTOR	DATE
WORK	DATE
STAMPED BY	DATE
ACCEPTANCE BY	DATE
FIELD VERIFICATION BY	DATE
CORRECTED BY	DATE
MICRO-FILM INFORMATION	
RECORDED BY	DATE
NO.	NO.

BENCH MARKS	
ACS MONUMENT 13-B10	DATE
NAD 1983 CENTRAL ZONE	BY
X= 1497757.7 *	NO.
Y= 162618.319 *	DATE
Z= 5424.81 *	BY
G-G= 0.99967778	NO.
MAPPING ANGLE = 0° 16' 30.69"	DATE
*U.S. SURVEY FEET	DATE

SURVEY INFORMATION	
FIELD NOTES	DATE
BY	BY
NO.	NO.

ENGINEER'S SEAL	

NO.	DATE	REMARKS	BY

DESIGNED BY	DATE
DRAWN BY	DATE
CHECKED BY	DATE

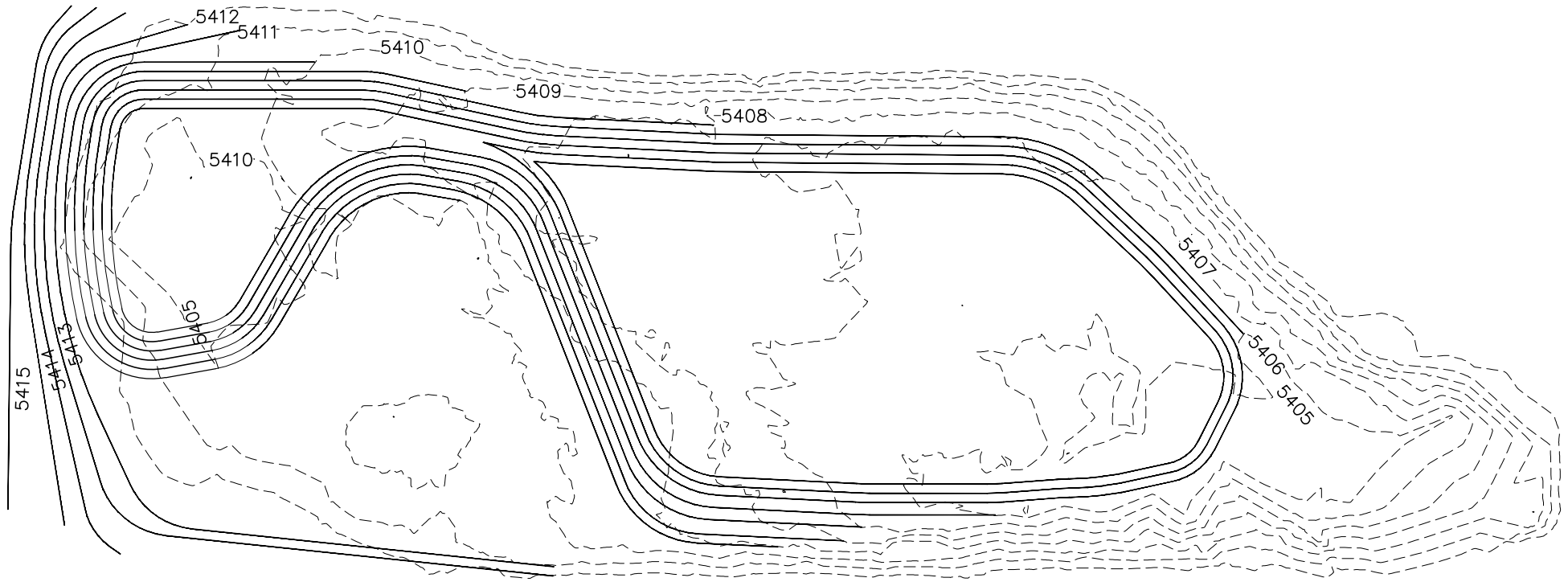
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
TRANSPORTATION DEVELOPMENT

VENTANA SQUARE
RETENTION POND IMPROVEMENTS

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAYYR.	MO./DAYYR.

City Project No. 670982 Zone Map No. B-10-Z Sheet 25 Of 30

APPENDIX A
RETENTION POND VOLUME CALCULATIONS



VENTANA SQUARE PROPOSED POND AREAS 4-19-22

5412	69,363.21
5411	64,836.06
5410	49,791.16
5409	43,952.23
5408	39,536.54
5407	34,840.30
5406	30,516.80
5405	25,835.88
5404	19,510.10
5403	17,777.95

VENTANA SQUARE DMP POND VOLUMES
APRIL 19, 2022

VITTORIA SUBDIVISION EXCAVATED RETENTION POND

ELEVATION	AREA (SF)	INC. VOLUME (CF)	CUM. VOLUME (CF)	CUM. VOLUME (AC-FT)
5402	0	0	0	0.0000
5403	17778	8889	8889	0.2041
5404	19415	18597	27486	0.6310
5405	25836	22626	50111	1.1504
5406	30517	28177	78288	1.7972
5407	34840	32679	110966	2.5474
5408	39537	37189	148155	3.4012
5409	43952	41745	189899	4.3595
5410	49791	46872	236771	5.4355
5411	64836	57314	294084	6.7512
5412	69363	67100	361184	8.2916