

# CITY OF ALBUQUERQUE

Planning Department  
Alan Varela, Director



Mayor Timothy M. Keller

August 1, 2025

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

**RE: Ventana Square Self-Storage  
9610 Universe Blvd. NW  
Grading and Drainage Plan  
Engineer's Stamp Date: 7/8/25  
Hydrology File: B10D003C3D  
Case # HYDR-2025-00250**

Dear Mr. Thompson:

PO Box 1293

Based upon the information provided in your submittal received 07/22/2025, the Grading & Drainage Plans are approved for Building Permit and Grading Permit. Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter.

Albuquerque

**PRIOR TO CERTIFICATE OF OCCUPANCY:**

NM 87103

1. Engineer's Certification, per the DPM Part 6-14 (F): *Engineer's Certification Checklist For Non-Subdivision* is required.

www.cabq.gov

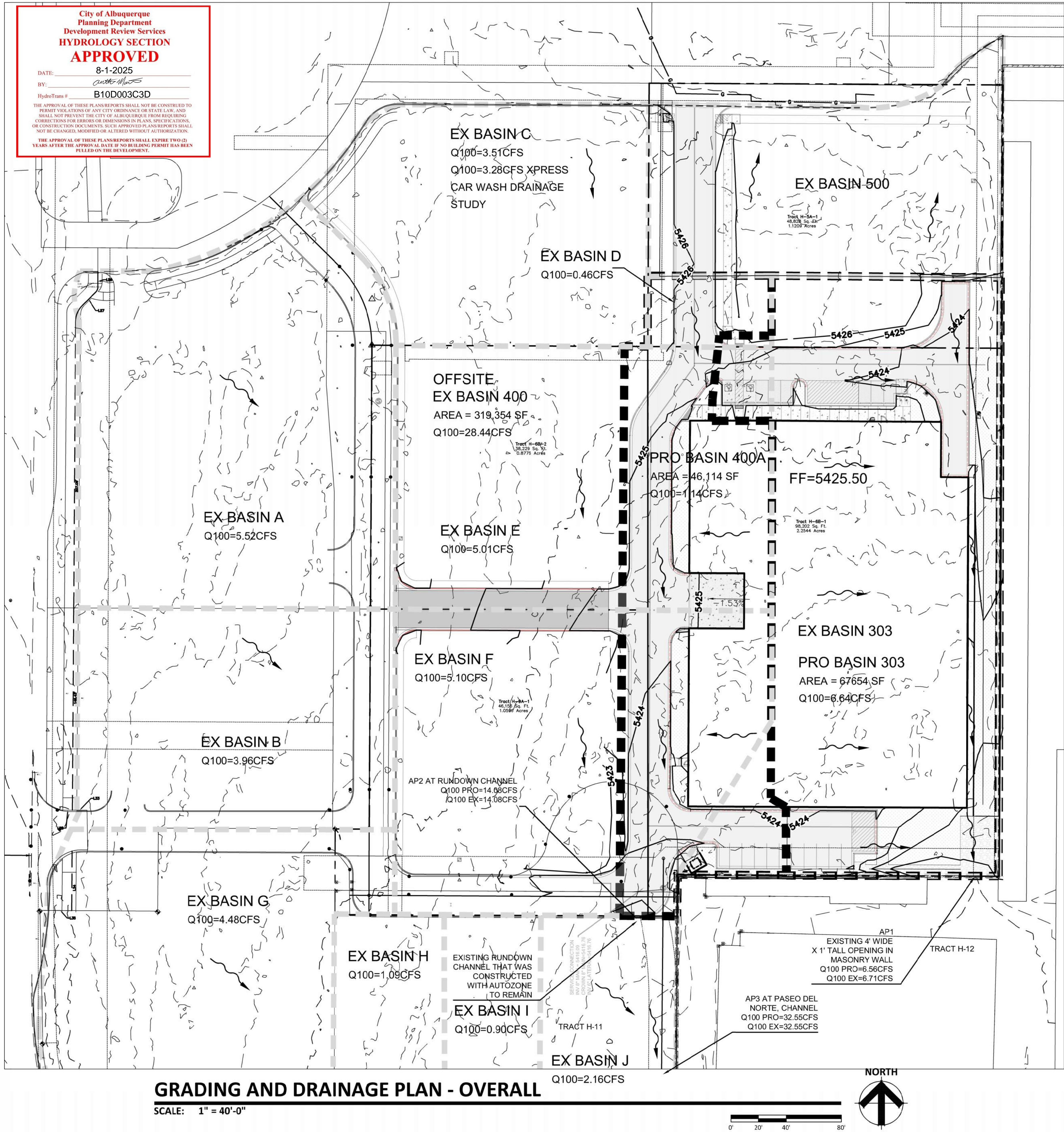
As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Doug Hughes, PE, [jhughes@cabq.gov](mailto:jhughes@cabq.gov), 505-924-3420) 14 days prior to any earth disturbance.

If you have any questions, please contact me at 505-924-3314 or [amontoya@cabq.gov](mailto:amontoya@cabq.gov).

Sincerely,

Anthony Montoya, Jr., P.E., C.F.M.  
Senior Engineer, Hydrology  
Planning Department, Development Review Services





## I. PURPOSE AND SCOPE

THE PURPOSE OF THIS DRAINAGE PLAN IS TO PRESENT THE EXISTING AND PROPOSED DRAINAGE CONDITIONS FOR THE PROPOSED VENTANA SQUARE SELF-STORAGE PROJECT. THE NEW BUILDING IS LOCATED AT THE NORTH EAST CORNER OF PASEO DEL NORTE AND UNIVERSE BOULEVARD IN NORTHWEST ALBUQUERQUE. THE ZONE ATLAS PAGE FOR THE SITE IS B-10-Z.

## II. SITE DESCRIPTION AND HISTORY

THE PROJECT SITE IS LOCATED ON THE NORTH EAST CORNER OF PASEO DEL NORTE NW, AND UNIVERSE BOULEVARD NW IN THE VENTANA SQUARE DEVELOPMENT. THE SITE IS CURRENTLY VACANT. PROPERTIES TO THE EAST AND SOUTH HAVE BEEN DEVELOPED AND CONTAIN SELF STORAGE UNITS. A SHARED STORMWATER POND HAS BEEN CONSTRUCTED TO THE SOUTH EAST OF VENTANA SQUARE ALONG PASEO DEL NORTE. THE POND HAS BEEN SIZED TO ACCEPT RUNOFF FROM THE PROJECT SITE, INCLUDING WATER QUALITY VOLUMES.

## III. COMPUTATIONAL PROCEDURES

HYDROLOGIC ANALYSIS WAS PERFORMED UTILIZING THE DESIGN CRITERIA BASED ON CHAPTER 6, HYDROLOGY, OF THE DEVELOPMENT PROCESS MANUAL RELEASED 2020. TABLES WITHIN CHAPTER 6, WERE USED TO AID IN THE STUDY OF THE SITE HYDROLOGY.

## IV. PRECIPITATION

THE STORM EVENT USED FOR THE FOLLOWING CALCULATIONS IS THE 100YR-24HR STORM. THE PROJECT SITE IS LOCATED IN ZONE 1 (WEST OF RIO GRANDE).

## V. EXISTING DRAINAGE CONDITIONS

THE SITE IS CURRENTLY UNDEVELOPED. THE SITE TO THE EAST AND SOUTH IS FULLY DEVELOPED AS A SELF STORAGE FACILITY. RUNOFF FROM THIS SITE UNDER THE PRIOR DRAINAGE PLAN (DRAINAGE REPORT FOR VENTANA SQUARE DATED DECEMBER 2020, PREPARED BY THIS OFFICE) ALLOWS FOR 6.71CFS TO BE DISCHARGED AT THE SOUTHEAST CORNER OF THE PROJECT SITE. THIS RUNOFF WILL PASS THROUGH THE ADJACENT DEVELOPMENT TO REACH THE WATER QUALITY AND RETENTION POND ALONG PASEO DEL NORTE.

THE DRAINAGE MASTERPLAN IDENTIFIED A RIDGELINE WITHIN THE PARCEL TO THE NORTH. THE PROJECT SITE WILL ALLOW FROM BASIN 500 TO ENTER AND PASS THROUGH THE PROJECT SITE. THE PARCEL TO THE WEST DRAINS SOUTH AND WILL JOIN RUNOFF WITH OTHER PARCELS AS PART OF A 8.39 ACRE DRAINAGE BASIN. THE PEAK FLOW RATE FROM BASIN 400 IS 32.55CFS. BASIN 400 WILL ALSO DRAIN TO THE RETENTION POND ALONG PASEO DEL NORTE.

THE EXISTING BASIN MAP ALSO INCLUDES THE REFINED SUB-BASINS FROM A PRIOR DRAINAGE STUDY FROM 2021. BASIN WITH LETTERS ARE DERIVED FROM THAT STUDY. THE SUMMATION OF THE LETTERED SUB-BASIN EQUAL THE MASTERPLANNED DRAINAGE BASIN #400.

PASEO DEL NORTE CONTAINS STORMWATER COLLECTION AND CONVEYANCE CHANNELS AND PIPING THAT DISCHARGE INTO THE LARGE STORMWATER RETENTION POND. AS MENTIONED IN THE SITE DESCRIPTION AND HISTORY PORTION, THE DRAINAGE MASTER PLAN FOR VENTANA SQUARE REQUIRES THAT THE FLOW RATE OFF THE SITE MATCH THE 6.71CFS AND 32.55CFS RESPECTIVELY.

## VI. PROPOSED DRAINAGE CONDITIONS

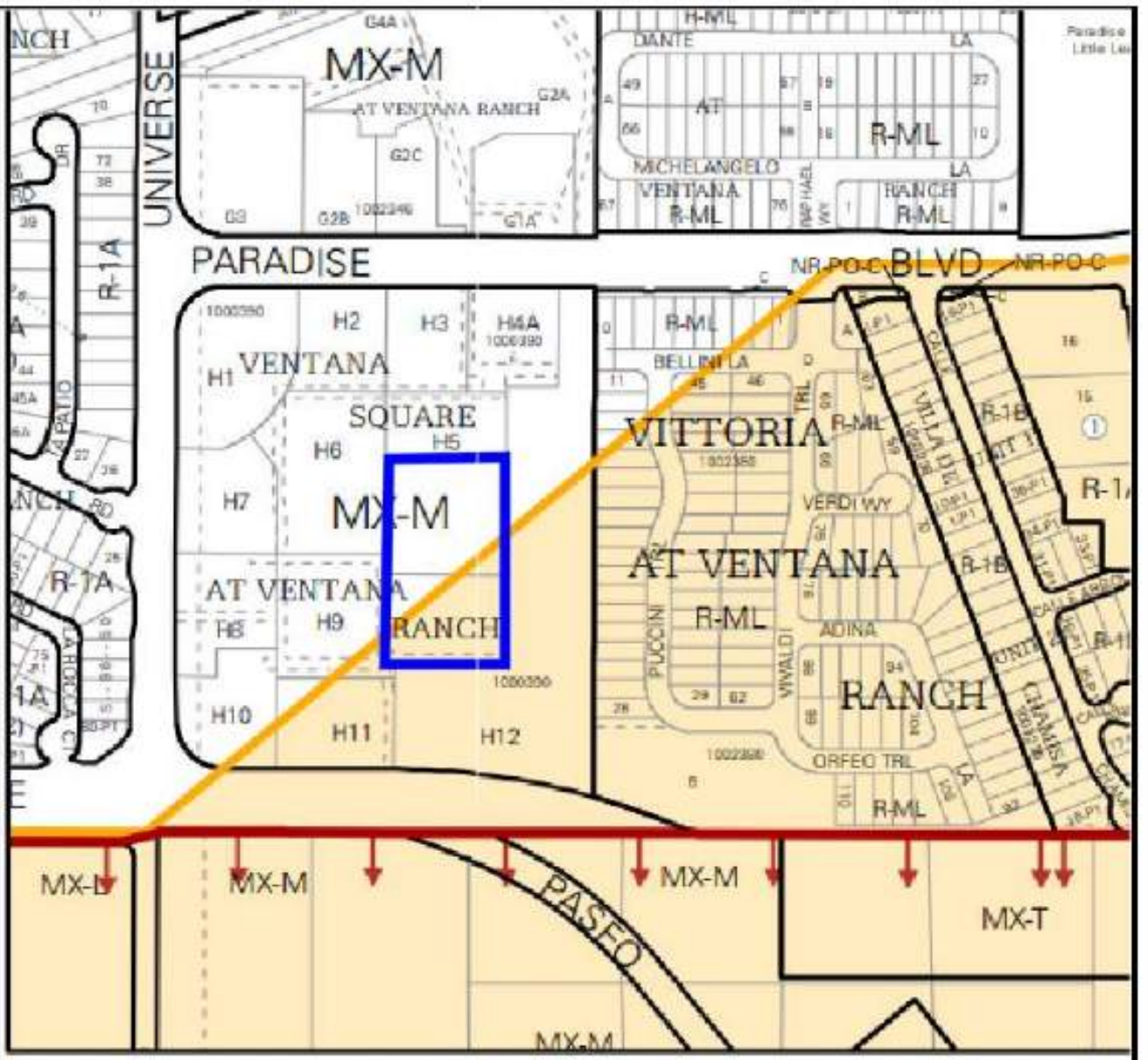
THE NEW BUILDING WILL BE 45,632SF FOOTPRINT, TWO STORY SELF STORAGE BUILDING. THE ROOF WILL HAVE A CENTER RIDGE AND WILL SLOPE BOTH EAST AND WEST. ROOF DOWNSPOUTS WILL CONVEY RUNOFF TO THE GROUND, WHERE SPLASH BLOCKS AND RIPRAP RUNDOWNS WILL CONVEY RUNOFF TO THE SURROUNDING STREET NETWORK OR CONCRETE RUNDOWN CHANNEL. THE ROOF RIDGE IS SLIGHTLY ALTERED FROM THE MASTERPLAN FOR BASIN 303 AND ADDITIONAL PARKING RUNOFF HAS BEEN ADDED TO THE BASIN TO MAINTAIN A SIMILAR FLOWRATE. FLOWRATE AT THE SOUTHEAST CORNER IS REDUCED BY 0.15CFS AT ANALYSIS POINT AP1.

THE WESTERN PART OF THE SITE HAS BEEN IDENTIFIED AT SUB-BASIN PRO BASIN 400A. PRO BASIN 400A GENERATES A PEAK RUNOFF OF 4.11CFS. PRO BASIN 400A WHEN COMBINED WITH OFFSITE PRO BASIN 400 FROM THE PRIOR DRAINAGE STUDY THAT CONTAINS THE REMAINING 28.44 CFS (WILL EQUAL THE DEFINED FLOW RATE OF 32.55CFS). THE LANDSCAPING PERCENTAGE IS SLIGHTLY HIGHER THAN UTILIZED IN THE PRIOR DRAINAGE MASTERPLAN. CONSERVATIVE VALUES FOLLOWING THE MASTER DRAINAGE PLAN HAVE BEEN USED, 7.5% FOR TYPE B AND TYPE C SOILS, AS THIS IS A SUBBASIN WITHIN THE 8.39 ACRE BASIN 400.

THE DISCHARGE RATE AT THE ENTRANCE OF THE CHANNEL (AP2) ON THE EAST SIDE OF AUTOZONE WILL REMAIN AS PREVIOUSLY DESIGNED AT 14.08 CFS. THE DISCHARGE RATE AT ANALYSIS POINT 3 (AP3) REMAINS THE SAME AS THE DRAINAGE REPORT FOR VENTANA SQUARE DATED DECEMBER 2020 AT 32.55CFS AT THE SOUTH WEST CORNER OF TRACT H-11 WHERE RUNOFF ENTERS THE CONCRETE CHANNEL THAT CONVEYS RUNOFF TO THE DETENTION POND. WATER QUALITY VOLUMES WERE COMPUTED FOR 85% IMPERVIOUS FOR THE 98,202SF LOT ARE 2.365CF. THE SITE DOES NOT CONTAIN A LOCATION FOR RETENTION OF THE WATER QUALITY VOLUME. PER THE "DRAINAGE REPORT FOR VENTANA SQUARE" DATED DECEMBER 2020 THE ADJACENT POND ALONG PASEO DEL NORTE DOES CONTAIN SUFFICIENT VOLUME TO CONTAIN AND INFILTRATE THE 2.365CF OF RUNOFF TO SATISFY THE WATER QUALITY REQUIREMENTS. PER THE 2020 REPORT THE FULL BUILD OUT DEPTH WILL BE 0.80' DEEP IN THE SHARED RETENTION POND.

## VII. CONCLUSIONS

THIS DRAINAGE STUDY HAS BEEN PREPARED IN ACCORDANCE WITH THE DRAINAGE REPORT FOR VENTANA SQUARE DATED DECEMBER 2020. RUNOFF FROM THE PROJECT SITE WILL DRAIN OUT AT ANALYSIS POINTS AP1 AND AP2 AT THE OR SLIGHTLY REDUCED FROM THE PRIOR STUDY. NO CHANGES ARE REQUIRED TO DOWNSTREAM USERS, AS THIS PROJECT WILL NOT CAUSE AN INCREASE IN FLOWRATE, WATER QUALITY VOLUME OR EXCESS RUNOFF VOLUME FROM THE DRAINAGE REPORT FOR VENTANA SQUARE DATED DECEMBER 2020.



## ZONE ATLAS PAGE B-10Z

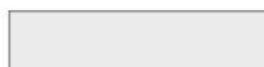

NOT TO SCALE



## FEMA FLOOD ZONE MAP 35001C0103H

NOT TO SCALE

## MATERIAL LEGEND

	HEAVY DUTY ASPHALT
	HEAVY DUTY CONCRETE PAVEMENT
	4\"
	EROSION PROTECTION, PER DETAIL ON SHEET G&D3
	LANDSCAPING AREA.

## LINEWORK LEGEND

	EXISTING CONTOURS
	PROPOSED CONTOURS
	DRAINAGE BASIN DEFINITION FROM MASTER DRAINAGE PLAN
	PROPOSED BASIN DEFINITION LINE

## GRADING AND DRAINAGE PLAN

## VENTANA SQUARE SELF-STORAGE

NEC OF PASEO DEL NORTE BLVD AND UNIVERSE BLVD

ALBUQUERQUE, NM 87114

DATE: 07-03-2025 (100% CD PLANS)

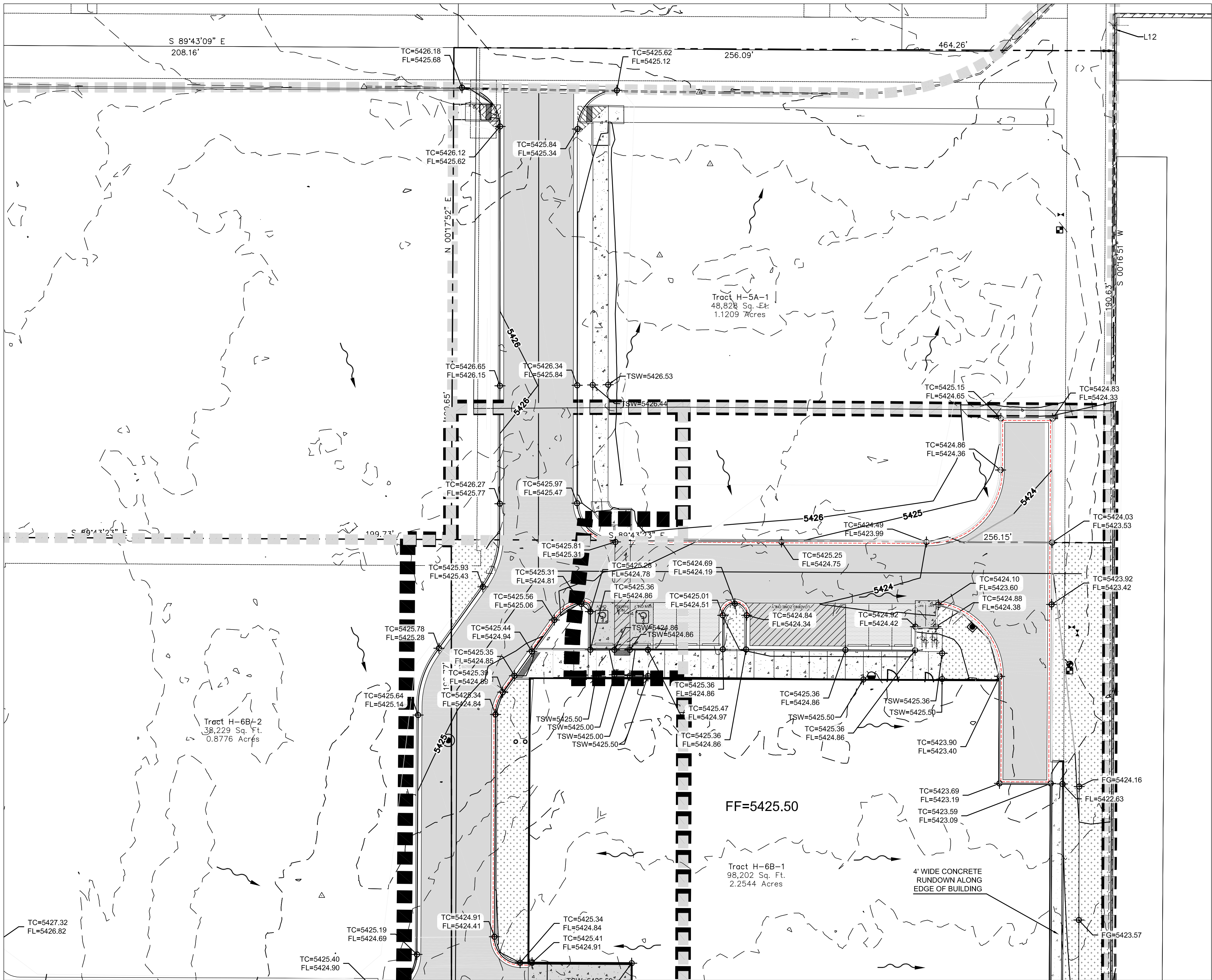
G&D 1

RKAA# 22116.00

© 2024 R K A A  
ARCHITECTS, INC. ALL  
RIGHTS RESERVED.  
THIS DRAWING IS AN  
INSTRUMENT OF  
SERVICE. IT IS THE  
PROPERTY OF R K A A  
ARCHITECTS, INC. AND  
N.A.Y. NOT BE  
DUPLICATED, USED OR  
DISCLOSED WITHOUT  
WRITTEN PERMISSION  
OF THE ARCHITECT.

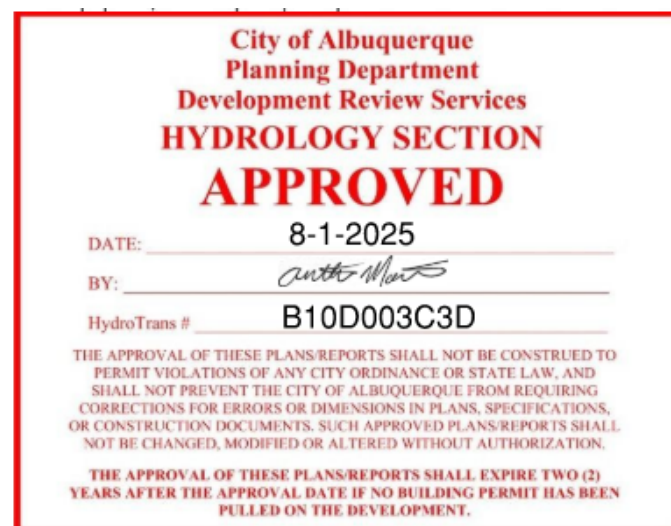
Tompson  
Engineering  
Consultants, Inc.  
tccm@yahoo.com  
P.O. BOX 65740  
ALBUQUERQUE, NM 87113  
PHONE: (505) 271-2199  
FAX: (505) 830-9246





## GRADING AND DRAINAGE PLAN - ENLARGED

SCALE: 1" = 20'-0"



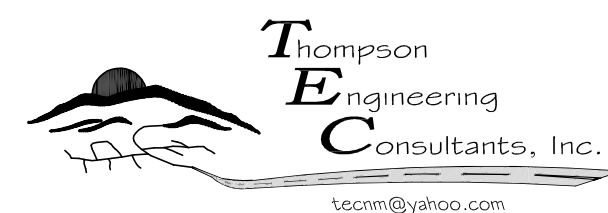
VENTANA SQUARE SELF-STORAGE  
NEC OF PASEO DEL NORTE BLVD AND UNIVERSE BLVD  
ALBUQUERQUE, NM 87114  
DATE: 07-03-2025 (100% CD PLANS)



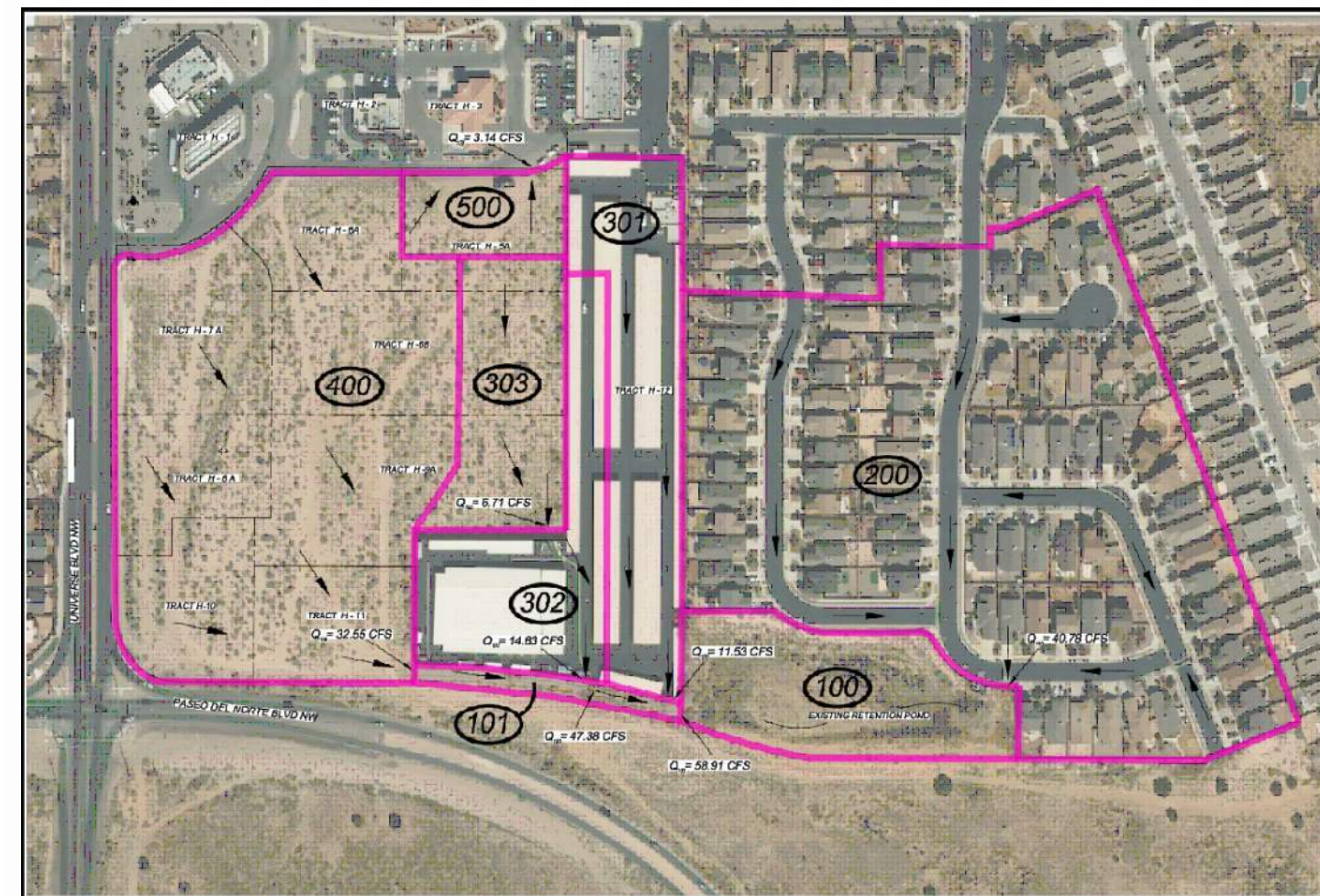
G&D 2

RKAA# 22116.00

© 2024 RKA  
ARCHITECTS, INC. ALL  
RIGHTS RESERVED.  
THIS DRAWING IS AN  
INSTRUMENT OF  
SERVICE. IT IS THE  
PROPERTY OF RKA  
ARCHITECTS, INC. AND  
MAY NOT BE  
DUPLICATED, USED OR  
DISCLOSED WITHOUT  
WRITTEN PERMISSION  
OF THE ARCHITECT.



P.O. BOX 65760  
ALBUQUERQUE, NM 87193  
PHONE: (505) 271-2199  
FAX: (505) 630-9240



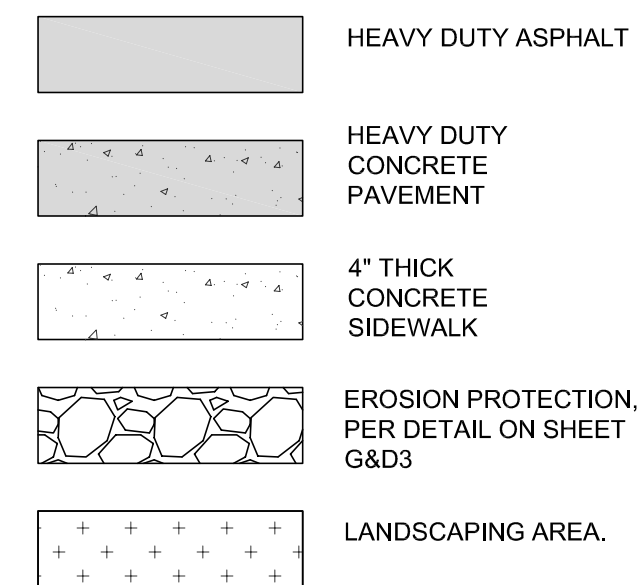
BASIN MAP FROM PRIOR STUDY

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

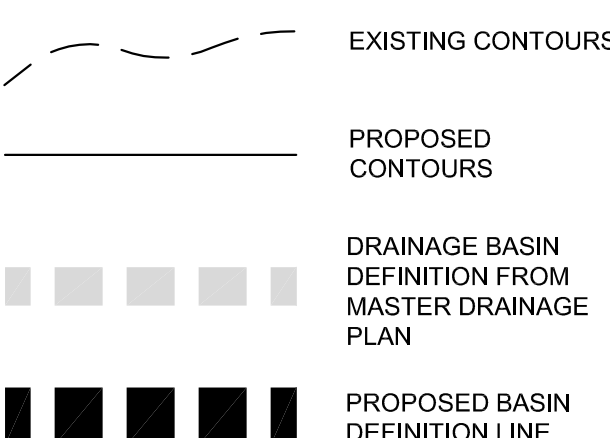
BASIN CALCULATIONS FROM PRIOR STUDY

Drainage Summary				
Project:	Ventana Square Self-Storage			
Project Number:	Ventana Square Self-Storage			
Date:	01/21/24			
By:	MTD			
Site Location				
Precipitation Zone	1 Per COA DPM Chapter 6			
Existing summary				
Basin Name	EX 303	EX 400	EX 500	
Area (sf)	75450	365468.4	35283.6	
Area (acres)	1.73	8.39	0.81	
%A Land treatment	0	0	0	
%B Land treatment	7.5	7.5	7.5	
%C Land treatment	7.5	7.5	7.5	
%D Land treatment	85	85	85	
Soil Treatment (acres)				
Area "A"	0.00	0.00	0.00	
Area "B"	0.13	0.63	0.06	
Area "C"	0.13	0.63	0.06	
Area "D"	1.47	7.13	0.69	
Excess Runoff (acre-feet)				
100yr. 6hr.	0.2930	1.4193	0.1370	acre-ft.
10yr. 6hr.	0.1829	0.8860	0.0855	acre-ft.
2yr. 6hr.	0.1144	0.5541	0.0535	acre-ft.
100yr. 24hr.	0.3323	1.6095	0.1554	acre-ft.
Peak Discharge (cfs)				
100 yr.	6.72	32.55	3.14	cfs
10yr.	4.08	19.76	1.91	cfs
2yr.	2.36	11.45	1.11	cfs

### MATERIAL LEGEND

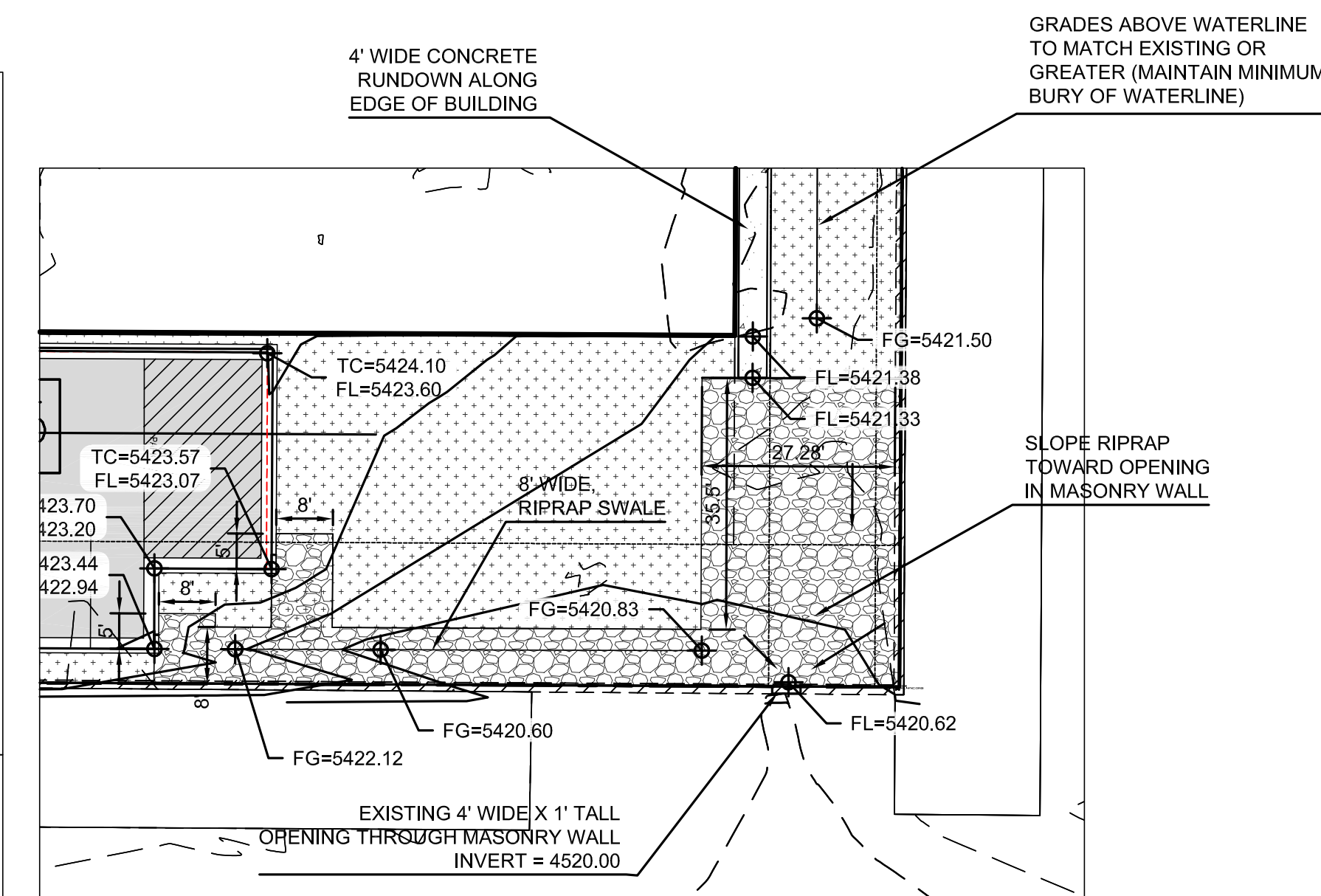


### LINEWORK LEGEND



## GRADING AND DRAINAGE PLAN





The diagram illustrates the difference between existing and proposed contours and drainage basin definition. It is divided into two main sections: 'EXISTING CONTOURS' and 'PROPOSED CONTOURS'.

**EXISTING CONTOURS:** This section shows a dashed line representing the existing contour. Below it, a solid line represents the proposed contour. The proposed contour is a straight line, while the existing contour is a dashed line that follows the topography of the area.

**PROPOSED CONTOURS:** This section shows a solid line representing the proposed contour. Below it, a dashed line represents the existing contour. The proposed contour is a straight line, while the existing contour is a dashed line that follows the topography of the area.

**DRAINAGE BASIN DEFINITION FROM MASTER DRAINAGE PLAN:** This section shows a series of five gray squares representing the drainage basin definition from the master drainage plan. Below them, a series of five black squares represent the proposed basin definition line.

**PROPOSED BASIN DEFINITION LINE:** This section shows a series of five black squares representing the proposed basin definition line. Below them, a series of five gray squares represent the existing contour.

P.O. BOX 65760      PHONE: (505) 271-2199  
ALBUQUERQUE, NM 87193      FAX: (505) 830-9248

The logo for RKA Architects, Inc. features the letters 'RKA' in a large, bold, red, distressed font. To the right of 'RKA', the words 'ARCHITECTS, INC.' are written in a smaller, grey, sans-serif font, stacked on two lines.

**City of Albuquerque  
Planning Department  
Development Review Services**

**HYDROLOGY SECTION**

**APPROVED**

DATE: 8-1-2025

BY: *Christi Mares*

Hydrology #: B1D0003C3D

THE APPROVAL OF THESE PLANS/SPECIFICATIONS SHALL NOT BE CONSTRUED TO PERMIT VIOLATIONS OF ANY CITY ORDINANCE OR STATE LAW, AND SHALL NOT PREVENT THE CITY FROM INITIATING ANY ENFORCEMENT OR PROSECUTION ACTIONS FOR VIOLATIONS OF ANY CITY ORDINANCE OR STATE LAW. THE CITY MAKES NO WARRANTY OR GUARANTEE, AND DOES NOT ACCEPT ANY LIABILITY, FOR ERRORS OR OMISSIONS IN PLANS, SPECIFICATIONS, OR CONSTRUCTION DOCUMENTS, SUCH AS APPROVED PLANS/SPECIFICATIONS SHALL NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT CITY AUTHORIZATION.

THE APPROVAL OF THESE PLANS/SPECIFICATIONS SHALL EXPIRE TWO (2) YEARS AFTER THE APPROVAL DATE IF NO BUILDING PERMIT HAS BEEN FILED ON THE ABOVE PROJECT.

DATE: 07-03-2025 (100% CD PLANS)