

# CITY OF ALBUQUERQUE

*Planning Department*  
Alan Varela, Director



*Mayor Timothy M. Keller*

March 4, 2022

Robert Fierro, P.E.  
Fierro & Company  
6300 Montano Rd. NW  
Albuquerque, NM 87120

**RE: Ram RV  
8100 Jacs Ln NE  
Grading and Drainage Plan  
Engineer's Stamp Date: 4/13/2020  
Certification Date: 2/22/22  
Hydrology File: D16D002A8**

Dear Mr. Fierro:

PO Box 1293

Based on the submittal received on 3/1/22 and site visit on 3/3/22, this certification is approved in support of Permanent Certificate of Occupancy by Hydrology.

Albuquerque

If you have any questions, please contact me at 924-3986 or [earmijo@cabq.gov](mailto:earmijo@cabq.gov).

NM 87103

Sincerely,

[www.cabq.gov](http://www.cabq.gov)

Ernest Armijo, P.E.  
Principal Engineer, Planning Dept.  
Development Review Services



# 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) \_\_\_\_\_

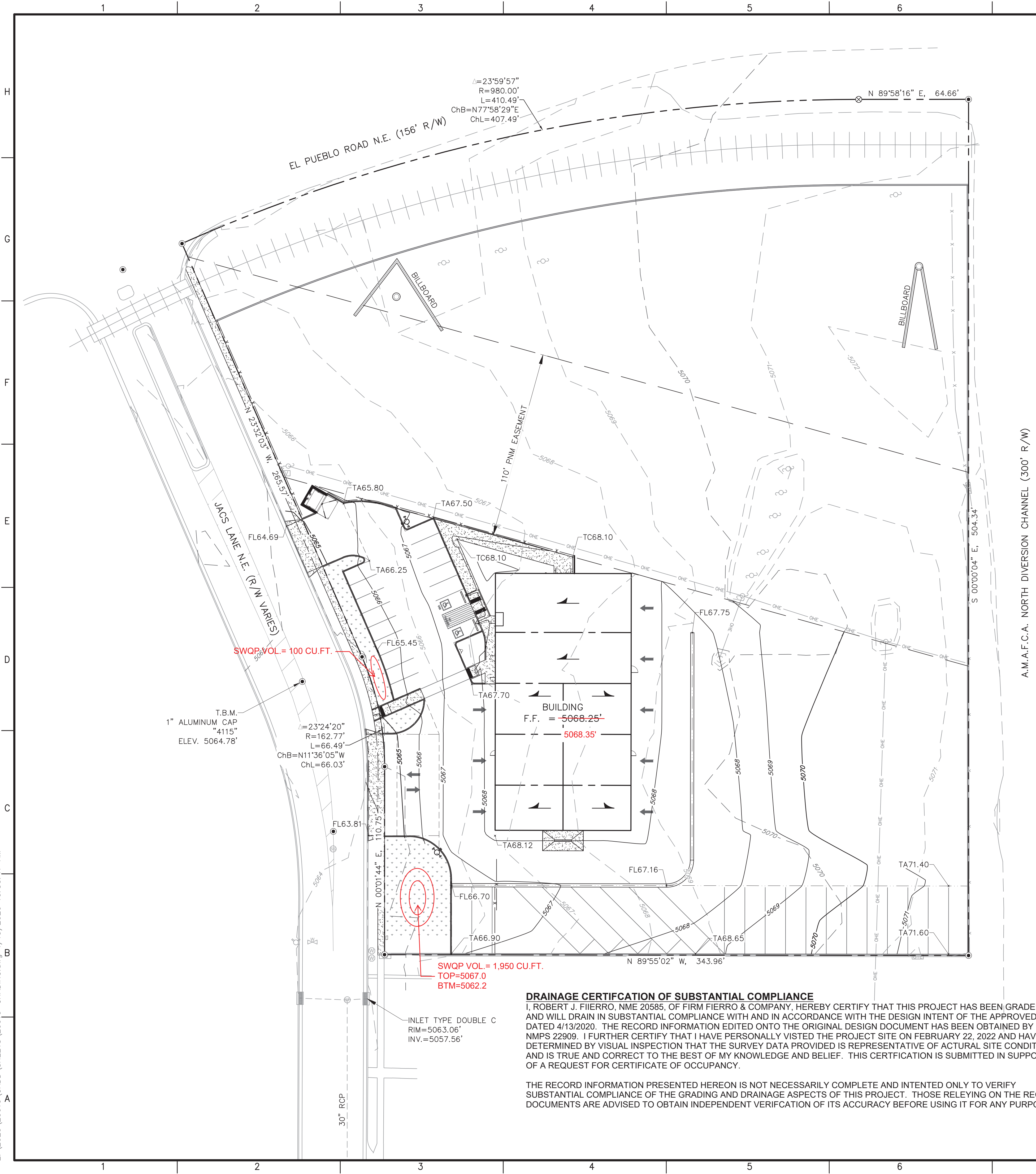
**DATE SUBMITTED:** \_\_\_\_\_ **By:** \_\_\_\_\_

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: \_\_\_\_\_

FEE PAID: \_\_\_\_\_

Z:\2020\20010\CADD\Sheets\20010-GRADING.dwg 4/13/2020 10:50:47 AM



A.M.A.F.C.A. NORTH DIVERSION CHANNEL (300' R/W)

- GENERAL GRADING NOTES:**
1. THE CONTRACTOR TO VERIFY LOCATION OF ALL UTILITIES SHOWN AND COORDINATE WITH ALL UTILITY OWNERS PRIOR TO ANY EXCAVATION.
  2. THE CONTRACTOR SHALL LIMIT DISTURBANCE OF NATIVE VEGETATION TO A MINIMUM.
  3. THIS PLAN RECOMMENDS POSITIVE DRAINAGE AWAY FROM ALL STRUCTURES TO PROHIBIT PONDING OF RUNOFF WHICH MAY CAUSE STRUCTURAL SETTLEMENT. FUTURE ALTERATION OF GRADES ADJACENT TO THE PROPOSED STRUCTURES IS NOT RECOMMENDED.
  4. PERFORM GRADING AND EXCAVATION WORK IN COMPLIANCE WITH APPLICABLE SPECIFICATIONS, REQUIREMENTS, CODES AND ORDINANCES OF CITY OF ALBUQUERQUE, NEW MEXICO.
  5. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF OR OBTAINING EXCESS CUT OR FILL MATERIAL REQUIRED FOR FINAL GRADE.
  6. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING AND COORDINATING WITH NEW MEXICO ONE CALL PRIOR EXCAVATION.
  7. CLEAR AND GRUBBING PER NM APWA SECTION 201 SPECIFICATION.
  8. SPOT ELEVATIONS ARE TO FINISH GRADE UNLESS NOTED OTHERWISE.
  9. DEPRESSED LANDSCAPING DEPTH IS MEASURED BELOW CURB'S FLOWLINE.

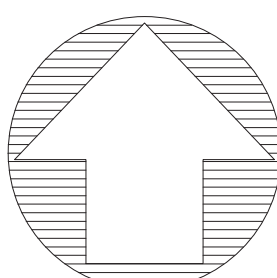
**LEGEND**

- |  |                        |
|--|------------------------|
|  | FOUND PROPERTY CORNERS |
|  | CALC PROPERTY CORNER   |
|  | PROPERTY BOUNDARY      |
|  | FLOW PATH              |
|  | BOLLARD                |
|  | SANITARY SEWER MH      |
|  | WATER VALVE            |
|  | FIRE HYDRANT           |
|  | GUY WIRE               |
|  | POWER POLE             |
|  | OVERHEAD ELECTRIC      |
|  | FENCE                  |
|  | RETAINING WALL         |
|  | RAILROAD TRACKS        |
|  | EASEMENT LINE          |
|  | GRADE BREAK            |
|  | FLOWLINE               |
|  | EXISTING MAJOR CONTOUR |
|  | EXISTING MINOR CONTOUR |
|  | PROPOSED MAJOR CONTOUR |
|  | PROPOSED MINOR CONTOUR |
|  | FINISHED GRADE         |
|  | FLOW LINE              |
|  | FINISHED GRADE         |
|  | TOP BACK OF CURB       |
|  | TOP OF CONCRETE        |
|  | TOP OF SIDEWALK        |
|  | TOP OF WALL            |
|  | BOTTOM OF WALL         |
|  | EXISTING GRADE         |
|  | ROOF FLOW DIRECTION    |
|  | NEW CONCRETE           |
|  | DEPRESSION LANDSCAPING |

**DRAINAGE CERTIFICATION OF SUBSTANTIAL COMPLIANCE**

I, ROBERT J. FIERRO, NME 20585, OF FIRM FIERRO & COMPANY, HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 4/13/2020. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY ME, NMPS 22909. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISTED THE PROJECT SITE ON FEBRUARY 22, 2022 AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR CERTIFICATE OF OCCUPANCY.

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THE RECORD DOCUMENTS ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY PURPOSE.



**Fierro & Company**  
ENGINEERING & SURVEYING  
6300 MONTANO RD., NW, SUITE C  
ALBUQUERQUE, NEW MEXICO 87120  
PH (505) 352-8930  
www.fierrocompany.com



RAM RV PARK  
LOT 1  
BLUE SKY BUSINESS PARK  
ALBUQUERQUE, NEW MEXICO

PROJECT NAME

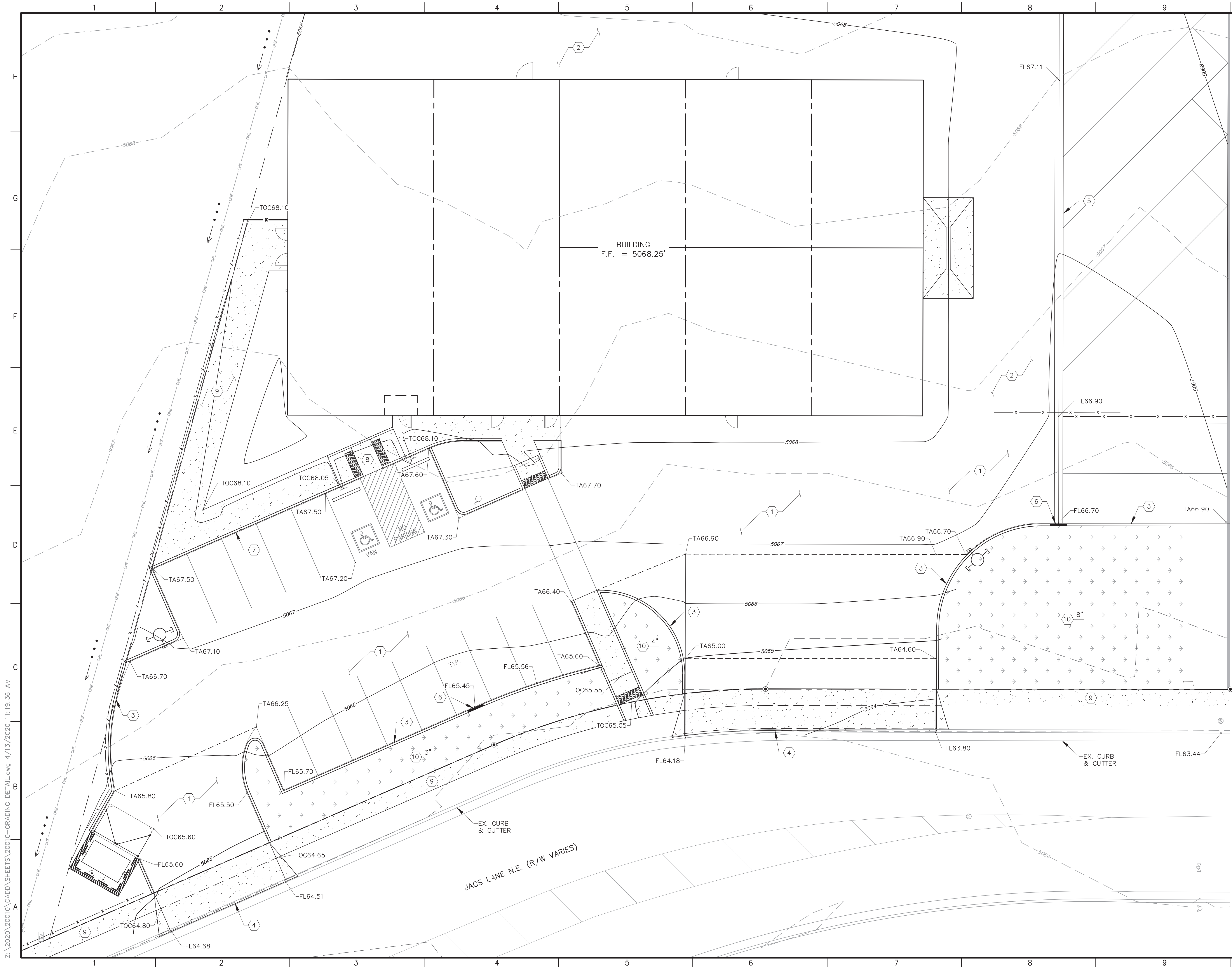
REV.	DATE	DESCRIPTION	BY

PROJECT NO: 20010  
DESIGNED BY: RJF  
DRAWN BY: RJS  
CHECKED BY: RJF  
DATE: APRIL 2020  
SHEET TITLE

OVERALL PLAN

SHEET NO: C-1





- ### KEYED NOTES:
- ① CONSTRUCT ASPHALT SECTION PER GEOTECH ENGINEER'S RECOMMENDATION.
  - ② CONSTRUCT GRAVEL PAVING PER GEOTECH RECOMMENDATION.
  - ③ CONSTRUCT HEADER CURB PER DETAIL 2/C-3.
  - ④ CONSTRUCT DRIVEWAY PER C.O.A. STD. DWG. 2426.
  - ⑤ CONSTRUCT 2' WIDE CONCRETE VALLEY GUTTER PER DETAIL 7/C-3.
  - ⑥ CONSTRUCT CURB OPENING PER DETAIL 7/C-3.
  - ⑦ CONSTRUCT TURNDOWN SIDEWALK PER DETAIL 5/C-3.
  - ⑧ CONSTRUCT TURNDOWN SIDEWALK AT ACCESSIBLE ZONES PER DETAIL 4/C-3.
  - ⑨ CONSTRUCT PCC SIDEWALK PER DETAIL 3/C-3.
  - ⑩ CONSTRUCT DEPRESSED LANDSCAPING. DEPRESSED DEPTH SEE PLAN.



RAM RV PARK  
LOT 1  
BLUE SKY BUSINESS PARK  
ALBUQUERQUE, NEW MEXICO

			PROJECT NAME
REV.	DATE	DESCRIPTION	BY

PROJECT NO:	20010
DESIGNED BY:	RJF
DRAWN BY:	RJS
CHECKED BY:	RJF
DATE:	APRIL 2020

SHEET TITLE

## GRADING DETAIL

SHEET NO: C-2



Z:\2020\20010\CADD\20010-SHEETS\20010-DRAINAGE.dwg 4/13/2020 10:53:43 AM

H  
G  
F  
E  
D  
C  
B  
A



EXISTING BASIN MAP

Sub-Basin 100 - Existing		
Area of Treatment A	=	0 ft <sup>2</sup>
Area of Treatment B	=	0 ac
Area of Treatment C	=	183942 ft <sup>2</sup>
Area of Treatment D	=	20438 ft <sup>2</sup>
Total Area	=	204380 ft <sup>2</sup>
		4.692 ac
Volumetric Flow		
Weighted E	=	1.229 inches
Volume (6hr)	=	0.481 acre-ft
Volume (24hr)	=	0.496 acre-ft
Volume (4days)	=	0.518 acre-ft
Volume (10days)	=	0.543 acre-ft
Peak Rate of Discharge		
Q <sub>100</sub>	=	15.5 cfs

Sub-Basin 200 - Proposed		
Area of Treatment A	=	0 ft <sup>2</sup>
Area of Treatment B	=	0 ac
Area of Treatment C	=	102470 ft <sup>2</sup>
Area of Treatment D	=	13500 ft <sup>2</sup>
Total Area	=	115970 ft <sup>2</sup>
		2.662 ac
Volumetric Flow		
Weighted E	=	1.245 inches
Volume (6hr)	=	0.276 acre-ft
Volume (24hr)	=	0.287 acre-ft
Volume (4days)	=	0.301 acre-ft
Volume (10days)	=	0.318 acre-ft
Peak Rate of Discharge		
Q <sub>100</sub>	=	8.8 cfs

Sub-Basin 201 - Proposed		
Area of Treatment A	=	0 ft <sup>2</sup>
Area of Treatment B	=	0 ac
Area of Treatment C	=	50883 ft <sup>2</sup>
Area of Treatment D	=	13500 ft <sup>2</sup>
Total Area	=	88409 ft <sup>2</sup>
		2.030 ac
Volumetric Flow		
Weighted E	=	1.550 inches
Volume (6hr)	=	0.262 acre-ft
Volume (24hr)	=	0.291 acre-ft
Volume (4days)	=	0.330 acre-ft
Volume (10days)	=	0.377 acre-ft
Peak Rate of Discharge		
Q <sub>100</sub>	=	7.7 cfs

### SUMMARY

#### PEAK DISCHARGE

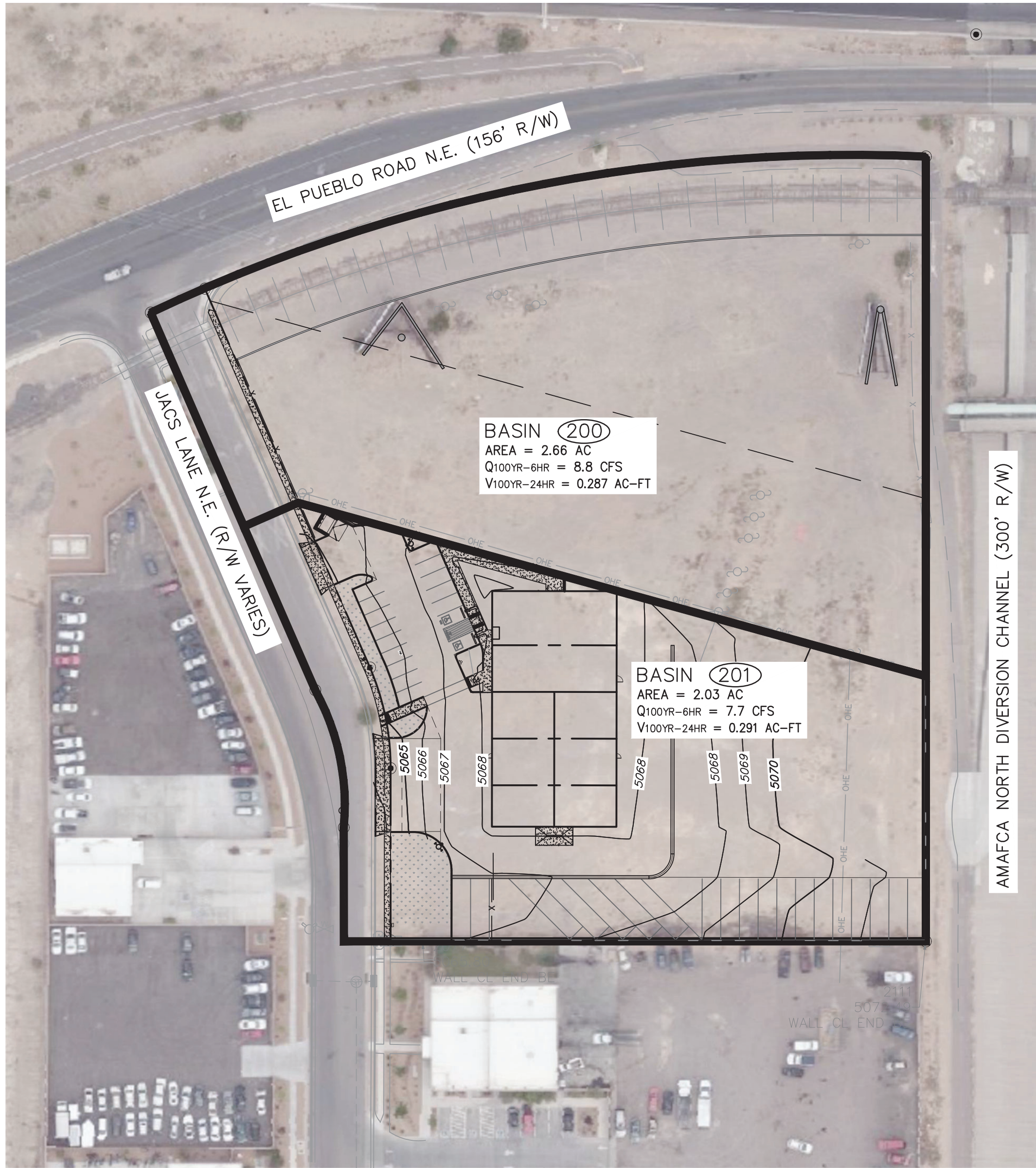
ALLOWABLE PEAK RATE DISCHARGE PER BLUE SKY BUSINESS PARK = 20.5 CFS  
DEVELOPED PEAK RATE OF DISCHARGE UNDER PROPOSED IMPROVEMENTS = 16.6 CFS  
THEREFORE, THE DEVELOPED PEAK DISCHARGE IS AT OR BELOW THE ALLOWED.

#### RUNOFF VOLUME

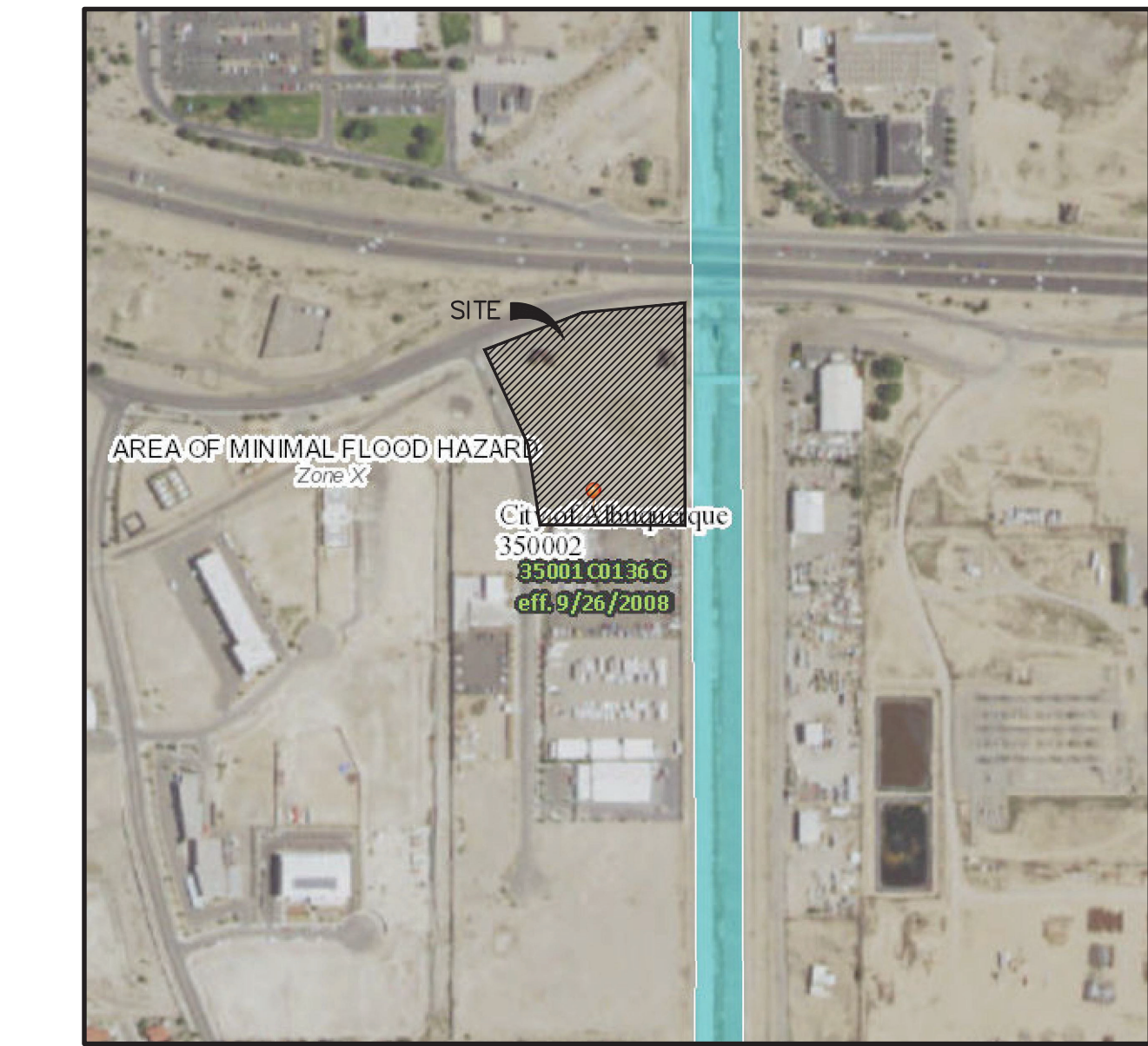
ALLOWABLE RUNOFF VOLUME PER BLUE SKY BUSINESS PARK = .76 AC-FT  
DEVELOPED RUNOFF VOLUME UNDER PROPOSED IMPROVEMENTS = 0.78 CFS  
THEREFORE, THE DEVELOPED RUNOFF VOLUME IS AT OR BELOW THE ALLOWED.

#### FIRST FLUSH

NEW LAND TREATMENT "D" ROUTED THROUGH DEPRESS LANDSCAPING:  
TOTAL AREA = 30,700 SQ.FT.  
REQUIRED FIRST FLUSH VOLUME=30,700 SQ.FT.\*(.34")\*(1'/12")=870 CU.FT.  
DEPRESSED LANDSCAPING VOLUME =1,447 CU.FT.  
THEREFORE, FIRST FLUSH REQUIREMENT MET.



PROPOSED BASIN MAP



FLOOD INSURANCE RATE MAP  
MAP NO. 35001C0136G  
EFFECTIVE DATE: 09/26/2008

### Introduction

The site is Lot 1 of Blue Sky Business Park, Albuquerque, NM located South of El Pueblo Road, which is South of Paseo del Norte, and West of and adjacent to the AMAFCA North Diversion Channel. The site lies within Zone X, Area of minimal flood hazard, as shown on the Flood Insurance Rate Maps, Map No. 35001C0136G. Blue Sky Business Park Grading & Drainage Plan identifies the site as being Sub-Basin I-2 and a portion of Sub-Basin I-3. This plan allows said sub-basins to free discharge into Jacs Lane with a imperious area of approximately 90%. The site is currently vacant; however, it is encumbered by several easements such as railroad, gas line, PNM transmission line, and PNM Roadway easement. The proposed improvements includes a commercial building with a footprint of 12,100 sq.ft., paved parking lot, and gravel parking for recreational vehicles. The purpose of this Grading & Drainage Plan is to 1) provide hydrologic and hydraulic analysis of the existing and proposed condition, 2) limit the proposed runoff to the allowable rates per the Blue Sky Business Park Grading & Drainage, and 3) seek permit approval.

### Methodology

Hydrologic procedures presented in the Hydrology Section of the DMP, Section 22.2, revised April 7, 1993 were followed.

### Existing Condition

The existing 4.5-acre site is vacant with the exception of public utilities such as overhead electric, gas line, railroad, and a PNM roadway. There is sparse and scattered vegetation. The site generally slopes East to West with slopes between 2% to 4%. The site does not receive any offsite runoff. On-site runoff surface drains to Jacs Lane. A storm drain is located on Jacs Lane just south of the site that intercepts the runoff and discharges it to a regional detention pond located at Las Lomitas Business Park Subdivision. Sub-basin 100 as shown on the Existing Basin Map includes the project site and half of Jacs Lane along the property as Sub-Basin 100, which is identified as Sub-Basin I-2 and I-3 in the Blue Sky Business Park Grading & Drainage Plan.

### Proposed Condition

The proposed basin map shown hereon list Sub-Basin 200 and Sub-Basin 201. Gravel parking for RVs is proposed within Sub-Basin 200. Sub-basin 200 grades will remain similar and runoff will continue sheet flowing into Jacs Lane N.E.. Improvements within Sub-Basin 201 includes a commercial building, asphalt parking, and gravel parking for RVs. The site will store the first flush volume via depressed landscaping along the west boundary line. Runoff greater then the first flush will overtop the sidewalk and drain into Jacs Lane N.E..

### Conclusion

The proposed condition meets the allowable discharge per the Blue Sky Business Park Grading & Drainage Plan, and meets the City's first flush requirement. This drainage report is being submitted for approval by City's Hydrology to seek building permit.

PROJECT NO.	20010
DESIGNED BY:	RJF
DRAWN BY:	RJS
CHECKED BY:	RJF
DATE:	APRIL 2020
SHEET TITLE	DRAINAGE PLAN
SHEET NO.	C-4