

# CITY OF ALBUQUERQUE

Planning Department  
Brennon Williams, Director



Mayor Timothy M. Keller

April 20, 2020

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

**RE: Ram RV  
8100 Jacs Lane NE  
Grading & Drainage Plan  
Engineer's Stamp Date: 04/13/20  
Hydrology File: D16D002A8**

Dear Mr. Fierro:

PO Box 1293

Based upon the information provided in your submittal received 04/14/2020, the Grading & Drainage Plan is approved for Building Permit.

Albuquerque

Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter. Prior to approval in support of Permanent Release of Occupancy by Hydrology, Engineer Certification per the DPM checklist will be required.

NM 87103

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), 924-3420) 14 days prior to any earth disturbance.

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

Also as a reminder, please provide Drainage Covenant for the stormwater quality ponds per Chapter 17 of the DPM prior to Permanent Release of Occupancy. Please submit this on the 4th floor of Plaza de Sol. A \$25 fee will be required.

If you have any questions, please contact me at 924-3995 or [rbrissette@cabq.gov](mailto: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 3/2018)

**Project Title:** \_\_\_\_\_ **Building Permit #:** \_\_\_\_\_ **Hydrology File #:** \_\_\_\_\_

**DRB#:** \_\_\_\_\_ **EPC#:** \_\_\_\_\_ **Work Order#:** \_\_\_\_\_

**Legal Description:** \_\_\_\_\_

**City Address:** \_\_\_\_\_

**Applicant:** \_\_\_\_\_ **Contact:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Phone#:** \_\_\_\_\_ **Fax#:** \_\_\_\_\_ **E-mail:** \_\_\_\_\_

**Other Contact:** \_\_\_\_\_ **Contact:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Phone#:** \_\_\_\_\_ **Fax#:** \_\_\_\_\_ **E-mail:** \_\_\_\_\_

Check all that Apply:

IS THIS A RESUBMITTAL?:  Yes  No

**DEPARTMENT:**

- HYDROLOGY/ DRAINAGE
- TRAFFIC/ TRANSPORTATION

**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) \_\_\_\_\_

**TYPE OF SUBMITTAL:**

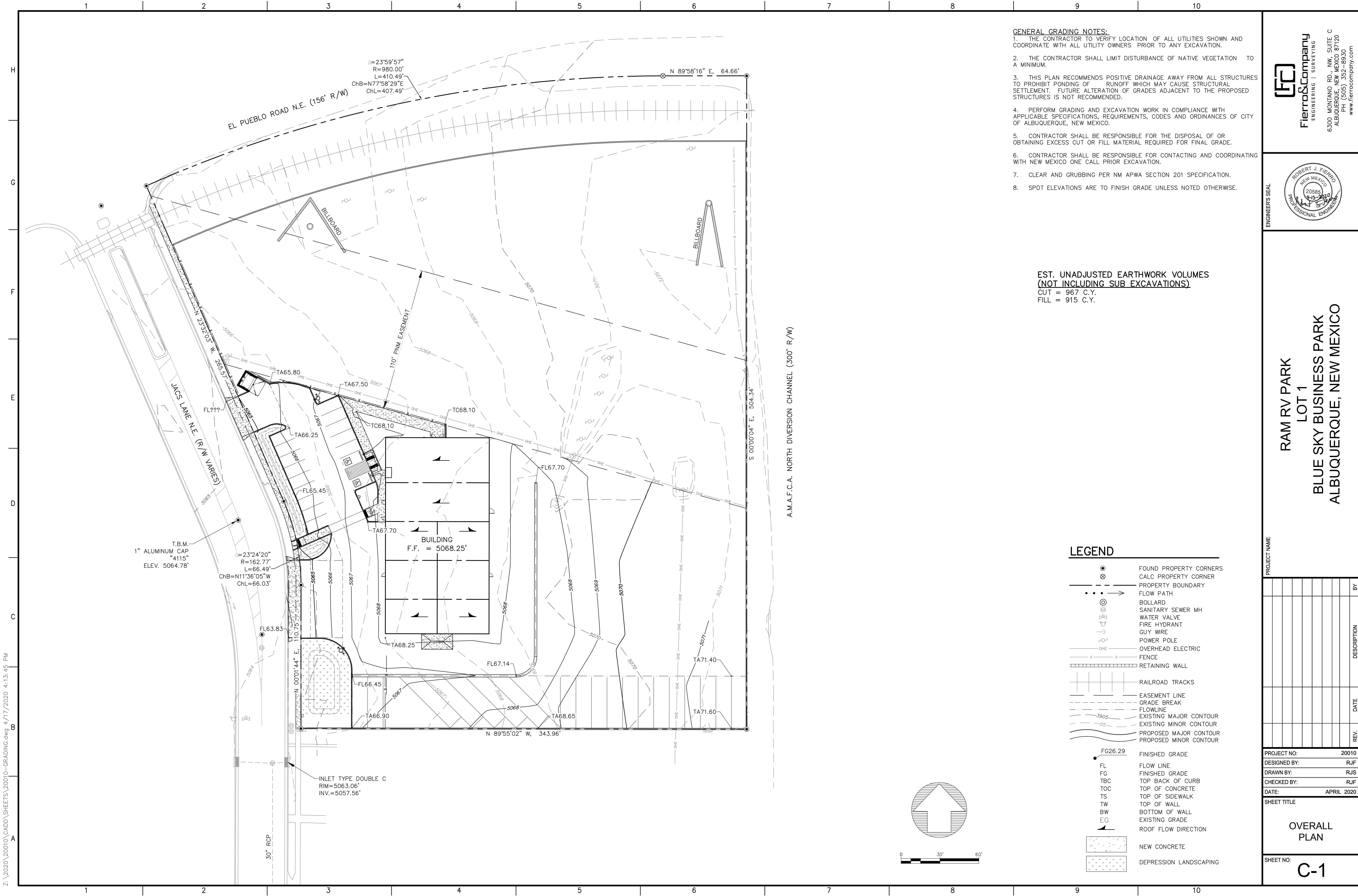
- ENGINEER/ARCHITECT CERTIFICATION
- PAD CERTIFICATION
- CONCEPTUAL G & D PLAN
- GRADING PLAN
- DRAINAGE MASTER PLAN
- DRAINAGE REPORT
- FLOODPLAIN DEVELOPMENT PERMIT APPLIC
- ELEVATION CERTIFICATE
- CLOMR/LOMR
- TRAFFIC CIRCULATION LAYOUT (TCL)
- TRAFFIC IMPACT STUDY (TIS)
- OTHER (SPECIFY) \_\_\_\_\_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

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

COA STAFF:

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

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

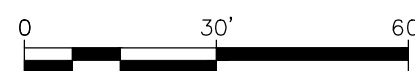
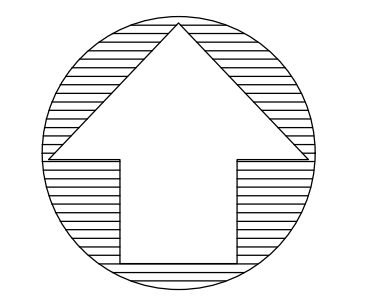


- GENERAL GRADING NOTES:**
1. THE CONTRACTOR TO VERIFY LOCATION OF ALL UTILITIES SHOWN AND COORDINATE WITH ALL UTILITY OWNERS PRIOR TO ANY EXCAVATION.
  2. THE CONTRACTOR SHALL LIMIT DISTURBANCE OF NATIVE VEGETATION TO A MINIMUM.
  3. THIS PLAN RECOMMENDS POSITIVE DRAINAGE AWAY FROM ALL STRUCTURES TO 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.

**EST. UNADJUSTED EARTHWORK VOLUMES  
(NOT INCLUDING SUB EXCAVATIONS)**  
 CUT = 967 C.Y.  
 FILL = 915 C.Y.

**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
- FG26.29 FINISHED GRADE
- FL FLOW LINE
- FG FINISHED GRADE
- TBC TOP BACK OF CURB
- TOC TOP OF CONCRETE
- TS TOP OF SIDEWALK
- TW TOP OF WALL
- BW BOTTOM OF WALL
- EG EXISTING GRADE
- ROOF FLOW DIRECTION
- NEW CONCRETE
- DEPRESSION LANDSCAPING



**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**

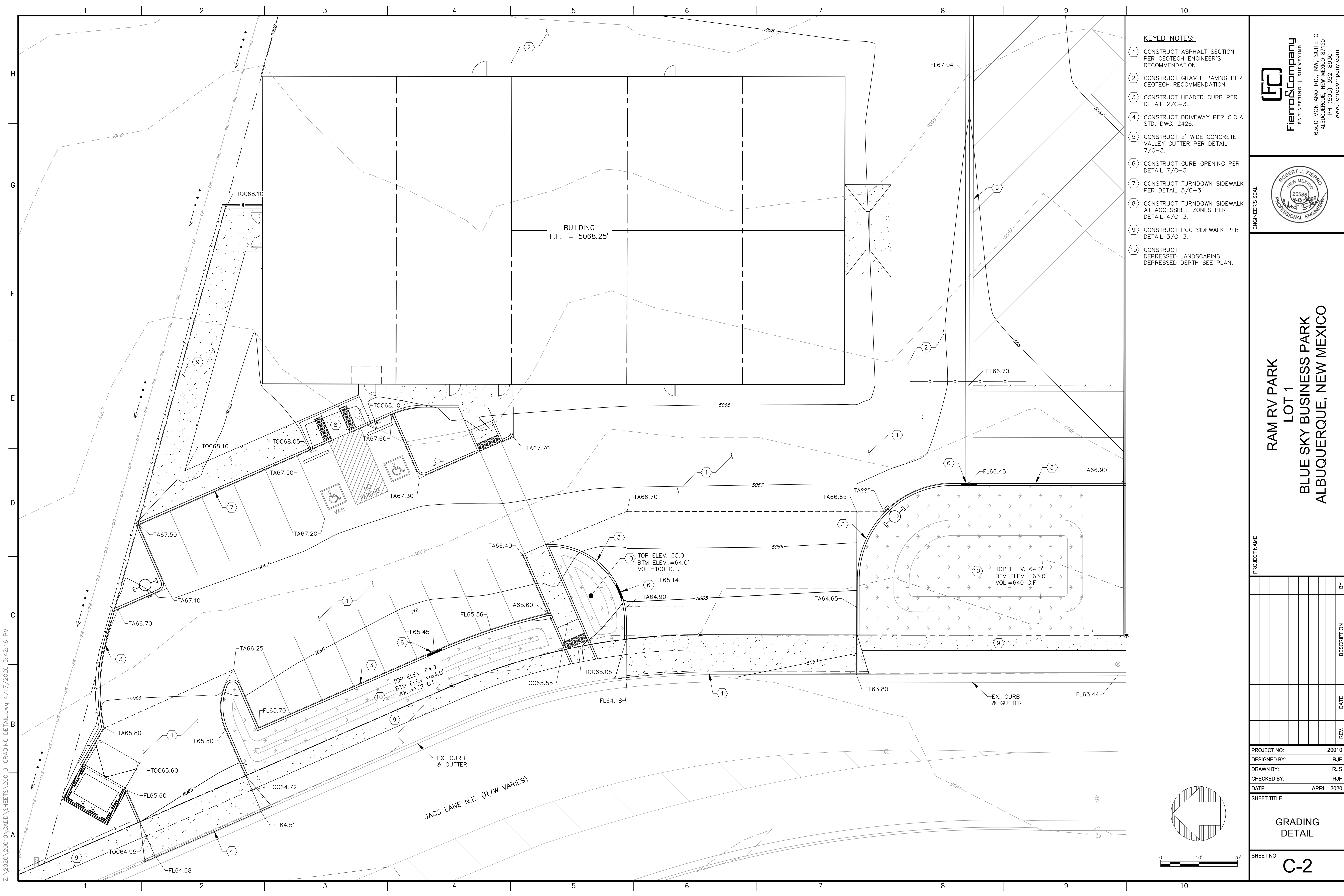
PROJECT NAME	PROJECT NO.	DATE	DESCRIPTION	BY
	20010	APRIL 2020		

DESIGNED BY:	RJF
DRAWN BY:	RJS
CHECKED BY:	RJF

**OVERALL PLAN**

SHEET NO: **C-1**

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- 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.

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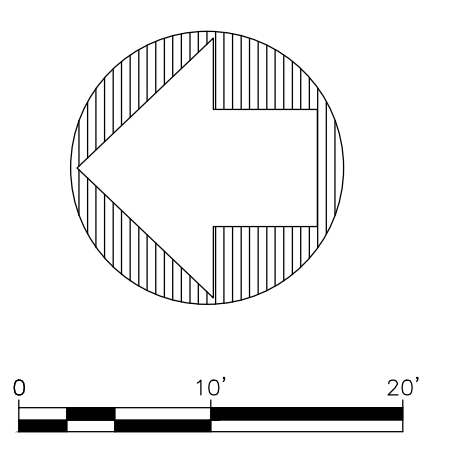
PROJECT NAME

REV.	DATE	DESCRIPTION	BY

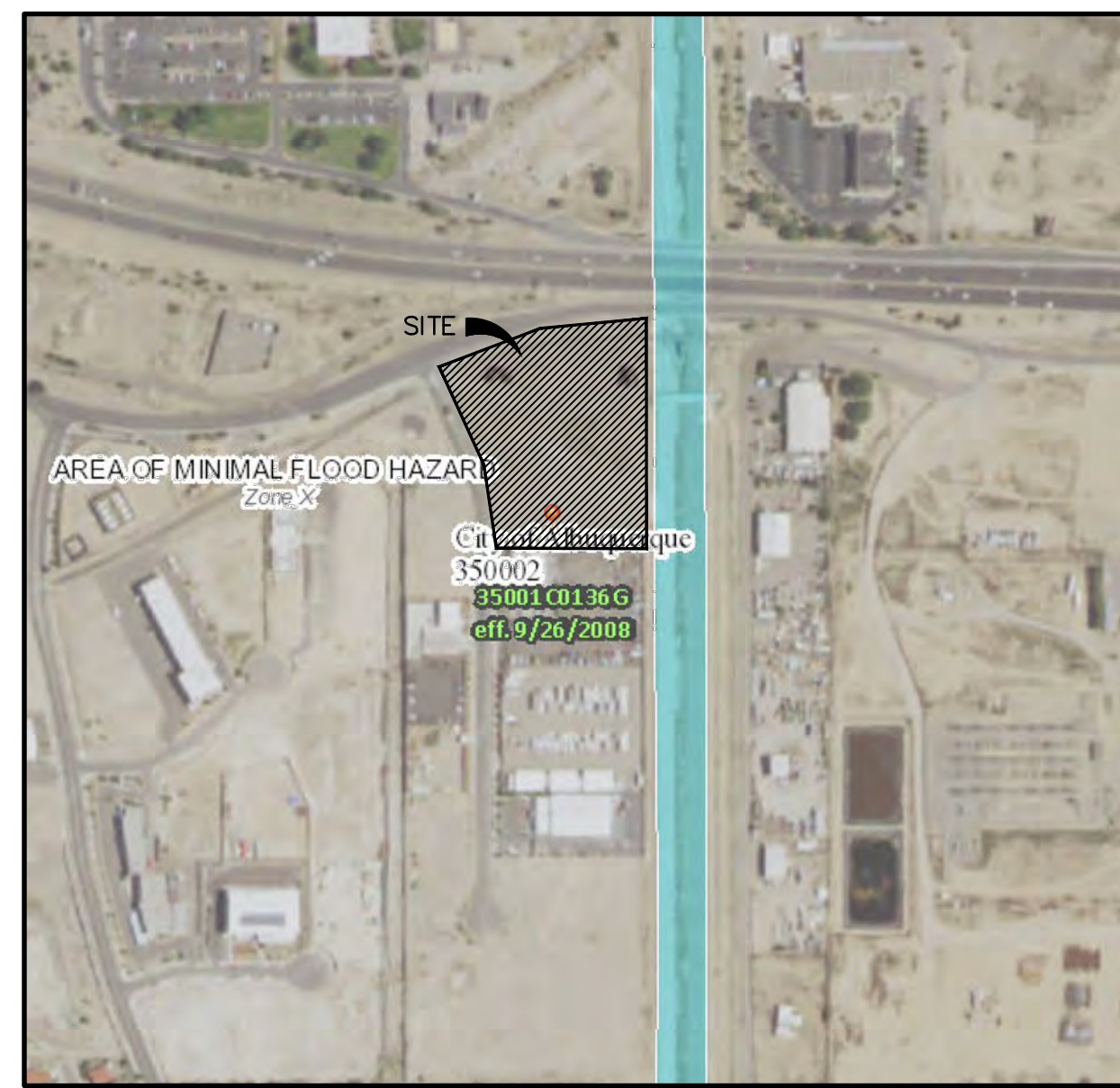
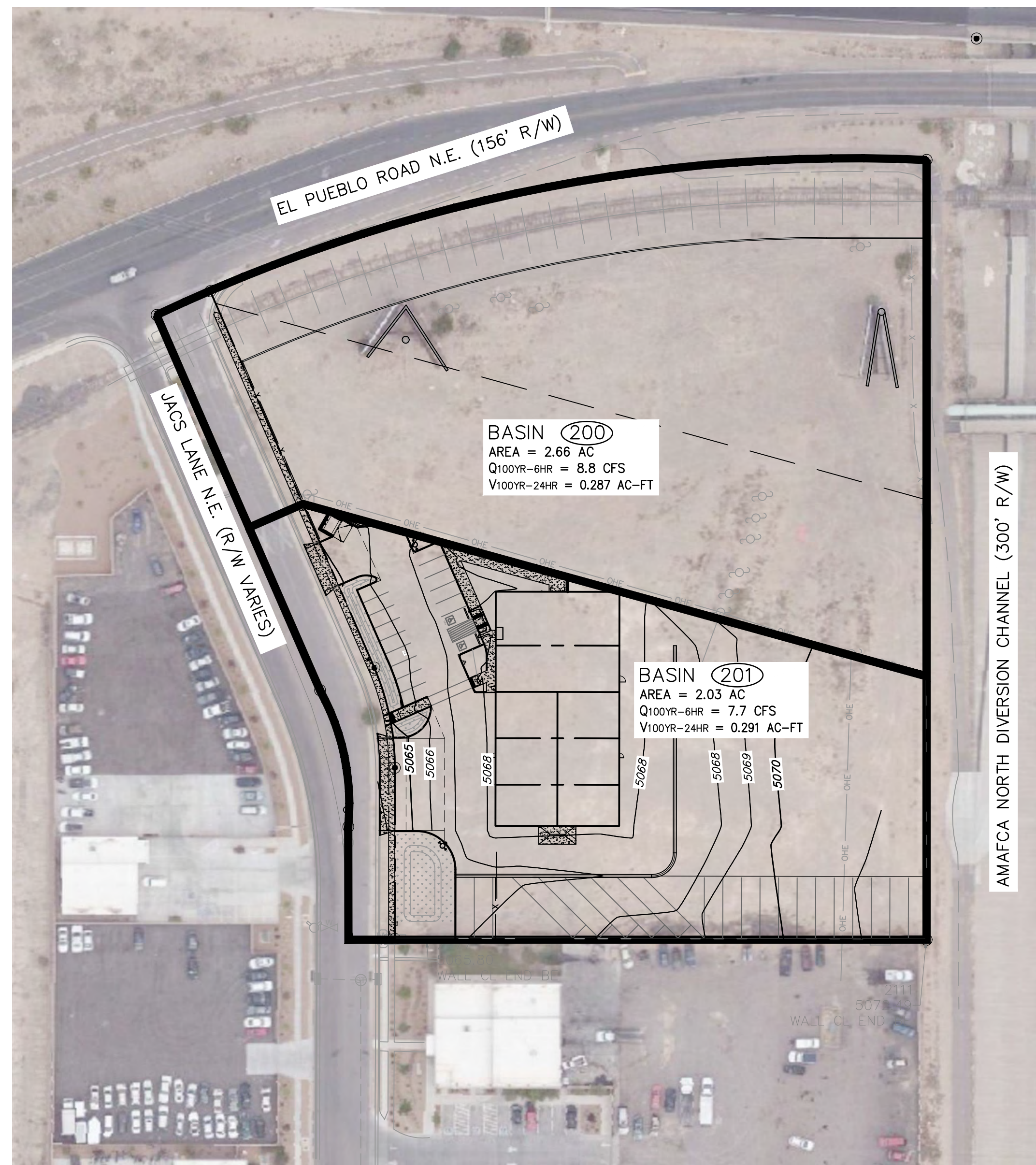
PROJECT NO: 20010  
DESIGNED BY: RJF  
DRAWN BY: RJS  
CHECKED BY: RJF  
DATE: APRIL 2020

SHEET TITLE  
**GRADING  
DETAIL**

SHEET NO:  
**C-2**

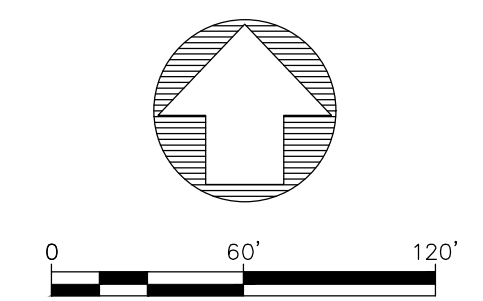


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FLOOD INSURANCE RATE MAP  
MAP NO. 35001C0136G  
EFFECTIVE DATE: 09/26/2008

**2-WIDE CURB OPENING**  
COMPUTATION BELOW:  
 $Q = CLH^{3/2}$   
 $Q = 2.7(2)(.5)^{3/2}$   
 $Q = 4.4$  CFS PER CURB OPENING  
  
TOTAL 3 OPENINGS CAPACITY = 13.2 CFS  
TOTAL CAPACITY IS GREATER THAN  $Q_{100} = 7.7$  CFS



EXISTING BASIN MAP

Sub-Basin 100 - Existing	
Area of Treatment A	= 0 ft <sup>2</sup> 0 ac
Area of Treatment B	= 0 ft <sup>2</sup> 0 ac
Area of Treatment C	= 183942 ft <sup>2</sup> 4.223 ac
Area of Treatment D	= 20438 ft <sup>2</sup> 0.469 ac
<b>Total Area</b>	<b>= 204380 ft<sup>2</sup> 4.692 ac</b>
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> 0 ac
Area of Treatment B	= 0 ft <sup>2</sup> 0 ac
Area of Treatment C	= 102470 ft <sup>2</sup> 2.352 ac
Area of Treatment D	= 13500 ft <sup>2</sup> 0.310 ac
<b>Total Area</b>	<b>= 115970 ft<sup>2</sup> 2.662 ac</b>
Volumetric Flow	
Weighted E	= 1.245 inches
Volume (6hr)	= 0.276 acre-ft
Volume (24hr)	= 0.291 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

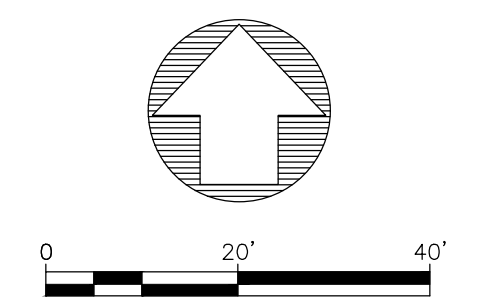
Sub-Basin 201 - Proposed	
Area of Treatment A	= 0 ft <sup>2</sup> 0 ac
Area of Treatment B	= 0 ft <sup>2</sup> 0 ac
Area of Treatment C	= 50883 ft <sup>2</sup> 1.168 ac
Area of Treatment D	= 37526 ft <sup>2</sup> 0.861 ac
<b>Total Area</b>	<b>= 88409 ft<sup>2</sup> 2.030 ac</b>
Volumetric Flow	
Weighted 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.  
DEPRESS LANDSCAPING VOLUME = 912 CU.FT.  
THEREFORE, FIRST FLUSH REQUIREMENT MET.



**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 an 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 Lomas 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 than 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 NAME  
**RAM RV PARK  
LOT 1  
BLUE SKY BUSINESS PARK  
ALBUQUERQUE, NEW MEXICO**

REV.	DATE	DESCRIPTION	BY

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

SHEET TITLE  
**DRAINAGE PLAN**

SHEET NO:  
**C-4**

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