CITY OF ALBUQUERQUE

Planning Department Brennon Williams, Director



Mayor Timothy M. Keller

May 7, 2021

Jeremy Shell, P.E. Respec 5971 Jefferson St. NE Albuquerque, NM 8710

RE: The Peaks by Markana Revised Conceptual Grading & Drainage Plan Engineer's Stamp Date: 04/27/21 Hydrology File: C18D088

Dear Mr. Shell:

Sincerely,

PO Box 1293 Based upon the information provided in your submittal received 04/27/2021, the Revised Conceptual Grading & Drainage Plan is approved for Grading Permit and for action by the DRB on Platting action, Site Plan for Building Permit and Site Plan for Subdivision.

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.

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

www.cabq.gov

Renée C. Brissette

Renée C. Brissette, P.E. CFM Senior Engineer, Hydrology Planning Department

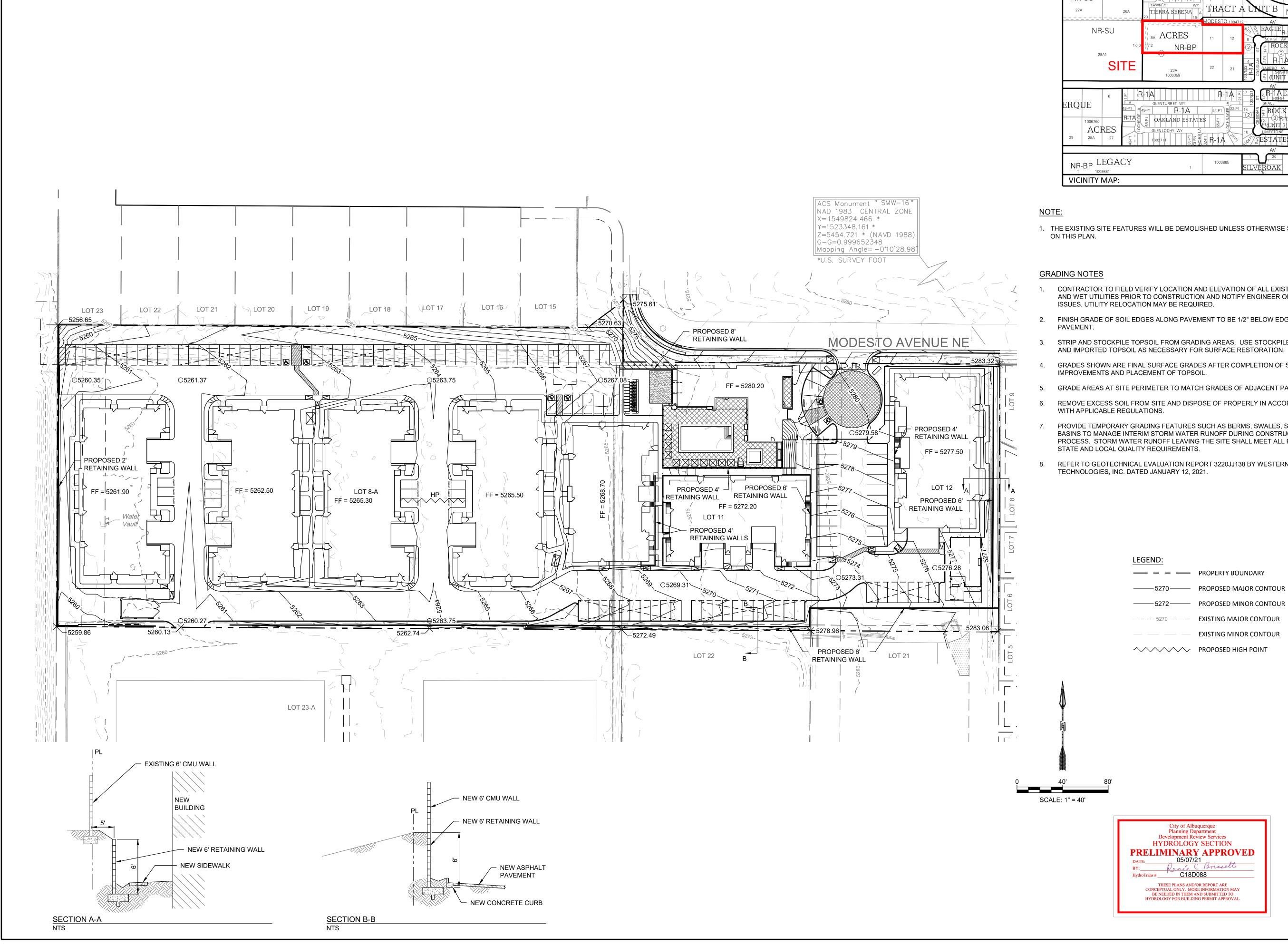


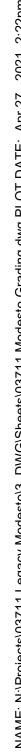
City of Albuquerque

Planning Department Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

The Peaks by Markana	Building Pe	rmit #:		Hydrology File #:		
DRB#:	EPC#:			Work Order#:		
Legal Description: Lots 8-A, 11, and 12	2, Block 26, North	Albuquerque Acres,	Tract	A, Unit B		
City Address:						
				Contact:		
Address:						
Phone#:	Fax#:			E-mail:		
Other Contact: RESPEC				Contact: Jeremy Shell		
Address: 5971 Jefferson Street NE, Suite						
Phone#: 505.918.1053	Fax#:			E-mail: jeremy.shell@respec.com		
TYPE OF DEVELOPMENT: PL	LAT (# of lots)	RESIDENCE	X	DRB SITEADMIN SITE		
IS THIS A RESUBMITTAL? X Y	Yes No					
DEPARTMENT TRANSPORTATIO	DN <u>X</u> HYI	DROLOGY/DRAINA	AGE			
Check all that Apply: TYPE OF SUBMITTAL: PAD CERTIFICATION CONCEPTUAL G & D PLAN GRADING PLAN DRAINAGE REPORT DRAINAGE MASTER PLAN FLOODPLAIN DEVELOPMENT PERM ELEVATION CERTIFICATE CLOMR/LOMR TRAFFIC CIRCULATION LAYOUT (TRAFFIC IMPACT STUDY (TIS) STREET LIGHT LAYOUT OTHER (SPECIFY) PRE-DESIGN MEETING?	MIT APPLIC TCL)	BUILDIN X CERTIFIC X SITE PLA X SITE PLA X FINAL PI SIA/ REL SIA/ REL SO-19 AP QRADING QRADING	G PER CATE C NARY N FOF N FOF CAT A EASE TION I G PER G PER G PAD RDER A COMR LAIN D	OF FINANCIAL GUARANTEE PERMIT APPROVAL MIT APPROVAL		
DATE SUBMITTED: 4/27/21	_{By:} _Jere	my Shell				
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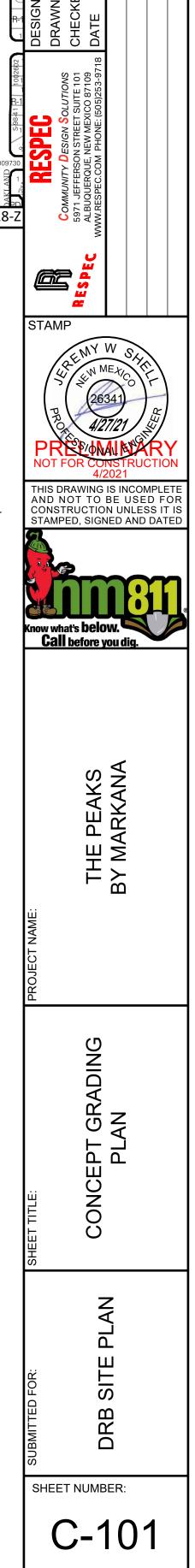


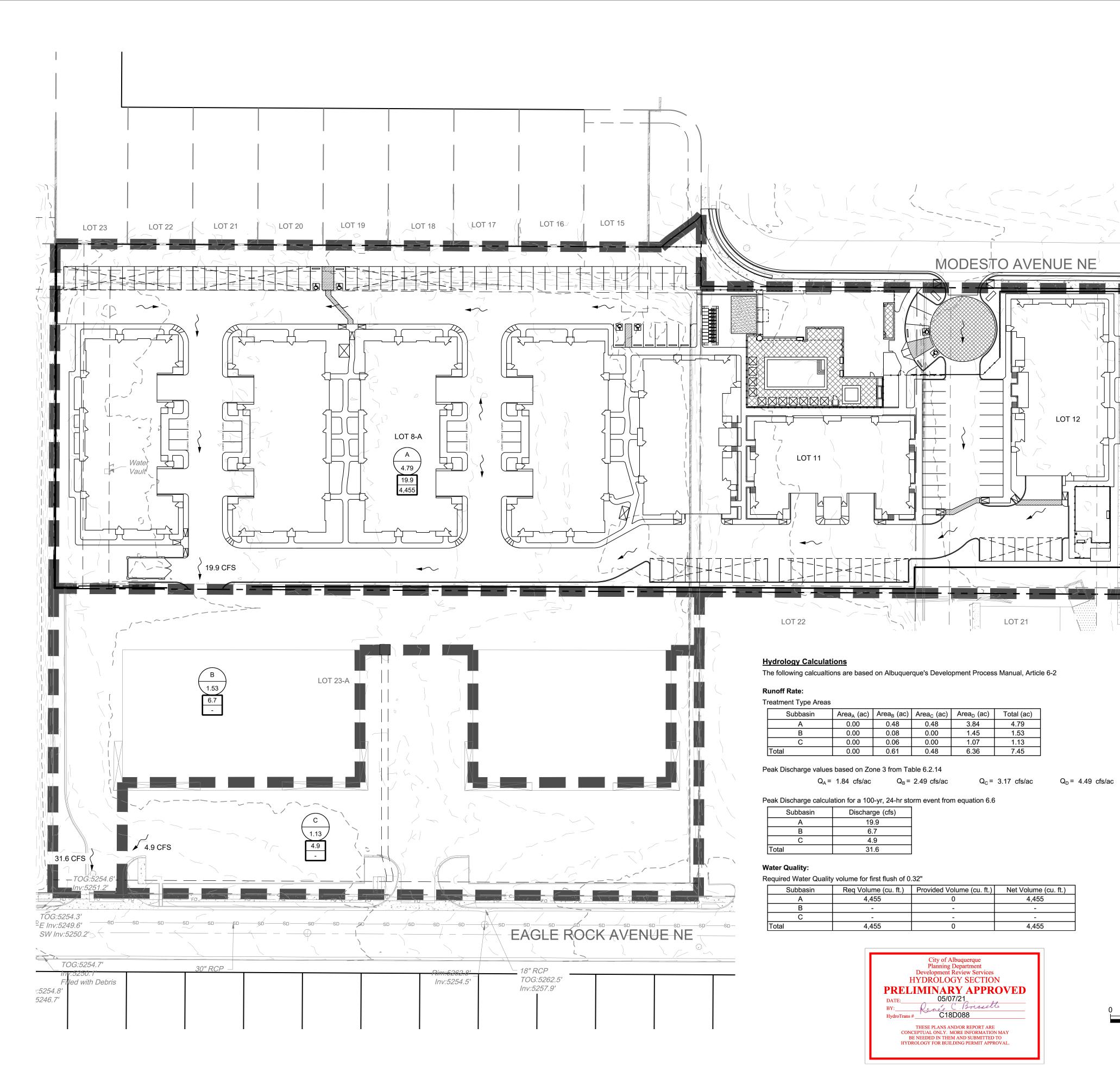


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27A 26A	TIERRA SERENA	UNIT B NR-PO-C		
NR-SU	ACRES 11 12	SCHIST AV 5 4 8-P	JS JS JS 4.27.2021	
^{29A1} SITE			DESIGNED DRAWN CHECKED DATE	
FROUE	GLENLUCHY WY		RESPEC COMMUNITY DESIGN SOLUTIONS 5971 JEFFERSON STREET SUITE 101 ALBUQUERQUE, NEW MEXICO 87109 WWW.RESPEC.COM PHONE: (505)253-9718	
29 28A 27 E			RESPEC COMMUNITY DESIGN SOLUTIONS 5971 JEFFERSON STREET SUITE 101 ALBUQUERQUE, NEW MEXICO 87109 W.RESPEC.COM PHONE: (505)253-9	
NR-BP LEGACY	1 1003865 SI	1 20 LVEROAK 15 16 VLSU	COMMUNITY 5971 JEFFERS ALBUQUERQL	
VICINITY MAP:		C-18-Z	AL AL AL	

1. THE EXISTING SITE FEATURES WILL BE DEMOLISHED UNLESS OTHERWISE SPECIFIED

- CONTRACTOR TO FIELD VERIFY LOCATION AND ELEVATION OF ALL EXISTING DRY AND WET UTILITIES PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY ISSUES. UTILITY RELOCATION MAY BE REQUIRED.
- FINISH GRADE OF SOIL EDGES ALONG PAVEMENT TO BE 1/2" BELOW EDGE OF
- STRIP AND STOCKPILE TOPSOIL FROM GRADING AREAS. USE STOCKPILED TOPSOIL AND IMPORTED TOPSOIL AS NECESSARY FOR SURFACE RESTORATION.
- GRADES SHOWN ARE FINAL SURFACE GRADES AFTER COMPLETION OF SURFACE
- GRADE AREAS AT SITE PERIMETER TO MATCH GRADES OF ADJACENT PARCELS.
- REMOVE EXCESS SOIL FROM SITE AND DISPOSE OF PROPERLY IN ACCORDANCE
- PROVIDE TEMPORARY GRADING FEATURES SUCH AS BERMS, SWALES, SUMPS AND BASINS TO MANAGE INTERIM STORM WATER RUNOFF DURING CONSTRUCTION PROCESS. STORM WATER RUNOFF LEAVING THE SITE SHALL MEET ALL FEDERAL,
- REFER TO GEOTECHNICAL EVALUATION REPORT 3220JJ138 BY WESTERN





Subbasin	Area _A (ac)	Area _B (ac)	Area _c (ac)	Area _D (ac)	Total (ac)
А	0.00	0.48	0.48	3.84	4.79
В	0.00	0.08	0.00	1.45	1.53
С	0.00	0.06	0.00	1.07	1.13
Total	0.00	0.61	0.48	6.36	7.45

$Q_A = 1.84 \text{ cfs/ac}$ $Q_B = 2.49$	cfs/ac $Q_C = 3.17$ cfs/ac	$Q_D = 4.49$ cfs/a

Ρ	Peak Discharge calculation for a 100-yr, 24-hr storm event						
	Subbasin	Discharge (cfs)					
	А	19.9					
	В	6.7					
	С	4.9					
	Total	21.6					

R	Required Water Quality volume for first flush of 0.32"								
	Subbasin	Req Volume (cu. ft.)	Provided Volume (cu. ft.)	Net Volume (cu. ft.)					
	A	4,455	0	4,455					
	В	-	-	-					
	С	-	-	-					
	Total	1 155	0	1 155					

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BACKGROUND

LOTS 8-A, 11, AND 12, BLOCK 26 NORTH ALBUQUERQUE ACRES, TRACT A, UNIT B IS APPROXIMATELY 4.8 ACRES IN THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO. THE PROPERTY IS LOCATED SOUTH OF MODESTO AVENUE AND NORTH OF THE EXISTING EAGLE ROCK BUSINESS CENTER. LOT 8-A WAS PREVIOUSLY DEVELOPED AS A HARLEY DAVIDSON TRAINING AREA. LOTS 11 AND 12 ARE PRIMARILY UNDEVELOPED WITH TWO EXISTING DRIVE AISLES THAT SERVE LOT 21. THE PROPOSED PROJECT IS A 120 UNIT APARTMENT COMPLEX. EXISTING SITE FEATURES WILL BE REMOVED. THE DRAINAGE REPORT FOR EAGLE ROCK BUSINESS CENTER BY MARK GOODWIN & ASSOCIATES 2008 SHOULD BE REFERENCED FOR BACKGROUND RELATED TO THE EAGLE ROCK BUSINESS CENTER. THERE IS IS NO DESIGNATED 100-YEAR FLOODPLAIN SHOWN ON THE SITE.

<u>METHODOLOGY</u>

HYDROLOGY CALCULATIONS FOR THE SITE ARE PERFORMED IN ACCORDANCE WITH THE ALBUQUERQUE DEVELOPMENT PROCESS MANUAL (DPM) ARTICLE 6.2 USING THE RATIONAL METHOD TO CALCULATE PEAK FLOW RATES TO ENSURE ALL FLOW PATHS ARE SUFFICIENT TO CARRY FLOWS. THE REQUIRED WATER QUALITY VOLUME WAS CALCULATED BY MULTIPLYING THE IMPERVIOUS AREA BY THE FIRST FLUSH RUNOFF VALUE OF 0.32". THIS IS A WEIGHTED VALUE BASED ON THE AMOUNT OF AREA THAT IS CONSIDERED REDEVELOPMENT AND AREA THAT IS NEW DEVELOPMENT. ALL HYDROLOGIC AND HYDRAULIC CALCULATIONS CAN BE FOUND ON THIS SHEET.

EXISTING CONDITIONS

THE SITE, IN GENERAL, SLOPES FROM EAST TO WEST AT A SLOPE OF APPROXIMATELY 2% - 3%. STORM WATER RUNOFF GENERATED BY THE SITE DRAINS SOUTH THROUGH THE EAGLE ROCK BUSINESS CENTER AND ULTIMATELY DISCHARGES TO EAGLE ROCK AVENUE.

DEVELOPED CONDITIONS

THE DRAINAGE INTENTION OF THE DEVELOPED CONDITIONS IS TO MATCH THE EXISTING DRAINAGE PATTERN AND NOT TO EXCEED THE AMOUNT DISCHARGING TO EAGLE ROCK AVENUE UNDER EXISTING CONDITIONS.

SUB-BASIN A IS THE NEW APARTMENT DEVELOPMENT. IT CONTAINS 4.79 ACRES AND GENERATES 19.9 CFS. SIMILAR TO EXISTING CONDITIONS, THIS SUB-BASIN DISCHARGES TO THE EAGLE ROCK BUSINESS CENTER (SUB-BASN B) AND EVENTUALLY OUT INTO EAGLE ROCK AVENUE.

SUB-BASIN B IS THE NORTHERN AND WESTERN PORTIONS OF THE EAGLE ROCK BUSINESS CENTER. IT IS 1.53 ACRES AND GENERATES 6.7 CFS. THIS SUB-BASIN DISCHARGES DIRECTLY TO EAGLE ROCK AVENUE AT THE SOUTHWEST CORNER OF THE EAGLE ROCK BUSINESS CENTER SITE.

SUB-BASIN C IS THE SOUTHERN PORTION OF THE EAGLE ROCK BUSINESS CENTER. IT IS 1.13 ACRES AND GENERATES 4.9 CFS. THIS SUB-BASIN DISCHARGES INTO SUB-BASIN B AT THE SOUTHWEST CORNER OF THE EAGLE ROCK BUSINESS CENTER SITE.

THE TOTAL FLOW RATE DISCHARGING TO EAGLE ROCK AVENUE UNDER DEVELOPED CONDITIONS IS 31.6 CFS. PER THE DRAINAGE REPORT FOR EAGLE ROCK BUSINESS CENTER, THE TOTAL FLOW RATE DISCHARGING TO EAGLE ROCK IS 32.26 CFS. THEREFORE, THE DEVELOPED CONDITIONS FLOW RATE IS LESS THAN THE ALLOWABLE RATE.

THE WATER QUALITY TABLE ON THIS SHEET UNDER "HYDROLOGY CALCULATIONS" SUMMARIZES THE WATER QUALITY VOLUMES REQUIRED FOR DEVELOPED CONDITIONS. THE OWNER HAS ELECTED TO PAY THE FEE-IN-LIEU OF STORM WATER QUALITY PONDING REQUIREMENTS. THE TOTAL VOLUME REQUIRED IS 4,455 CUBIC FEET. THEREFORE, THE PAYMENT AMOUNT IS 4,455 CF X \$8/CF = \$35,640.

> LEGEND: > BASIN DESIGNATION xx ` BASIN NAME AND AREA XX V - BASIN AREA, ACRES [∽] 100 YEAR STORM, CFS XX BASIN HYDROLOGIC RESULTS XX REQUIRED WATER QUALITY VOLUME SUB-BASIN BOUNDARY FLOW ARROW

SCALE: 1" = 40'