

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Interim Director



Mayor Timothy M. Keller

September 14, 2021

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

**RE: Markana Flats Apartments
Revised Conceptual Grading & Drainage Plan
Engineer's Stamp Date: 08/25/21
Hydrology File: J19D047A**

Dear Mr. Shell:

Based upon the information provided in your submittal received 08/27/2021, the Revised Conceptual Grading & Drainage Plan is approved for action by the DRB on Site Plan for Building Permit and Site Plan for Subdivision.

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 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 6/2018)

Project Title: Markana Flats Apartments **Building Permit #:** _____ **Hydrology File #:** J19-D047A

DRB#: _____ **EPC#:** _____ **Work Order#:** _____

Legal Description: Tract B-1-A, Mesa Del Norte Addition

City Address: _____

Applicant: Legacy Development **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

Other Contact: RESPEC **Contact:** Jeremy Shell

Address: _____

Phone#: 505.918.1053 **Fax#:** _____ **E-mail:** jeremy.shell@respec.com

TYPE OF DEVELOPMENT: _____ PLAT (# of lots) _____ RESIDENCE ☒ DRB SITE _____ ADMIN SITE

IS THIS A RESUBMITTAL? ☒ Yes _____ No

DEPARTMENT _____ TRANSPORTATION ☒ HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

- ☐ ENGINEER/ARCHITECT CERTIFICATION
- ☐ PAD CERTIFICATION
- ☒ CONCEPTUAL G & D PLAN
- ☐ GRADING PLAN
- ☐ DRAINAGE REPORT
- ☐ DRAINAGE MASTER PLAN
- ☐ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
- ☐ ELEVATION CERTIFICATE
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ TRAFFIC IMPACT STUDY (TIS)
- ☐ STREET LIGHT LAYOUT
- ☐ 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) _____

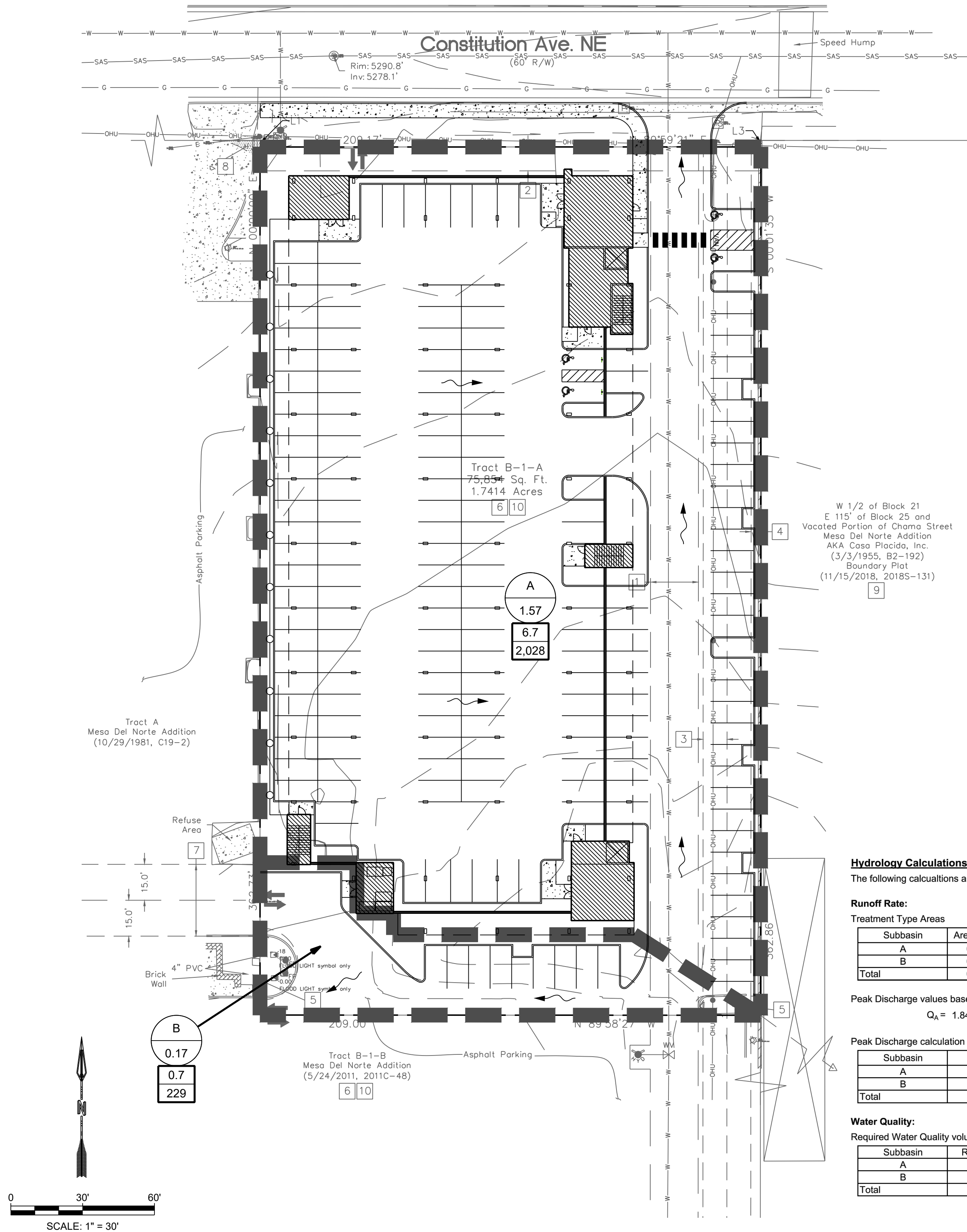
DATE SUBMITTED: 8/27/21 **By:** Jeremy Shell

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

NAME: N:\Projects\04-266-04 Legacy Constitution Apartments3.DWG\Sheets\04266-04 Drainage.dwg PLOT DATE: Aug 27, 2021 8:43am



Hydrology Calculations

The following calculations are based on Albuquerque's Development Process Manual, Article 6-2

Runoff Rate:

Treatment Type Areas

Subbasin	Area ₁ (ac)	Area ₂ (ac)	Area ₃ (ac)	Area ₄ (ac)	Total (ac)
A	0.00	0.12	0.12	1.33	1.57
B	0.00	0.01	0.01	0.15	0.17
Total	0.00	0.13	0.13	1.48	1.74

Peak Discharge values based on Zone 3 from Table 6.2.14

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

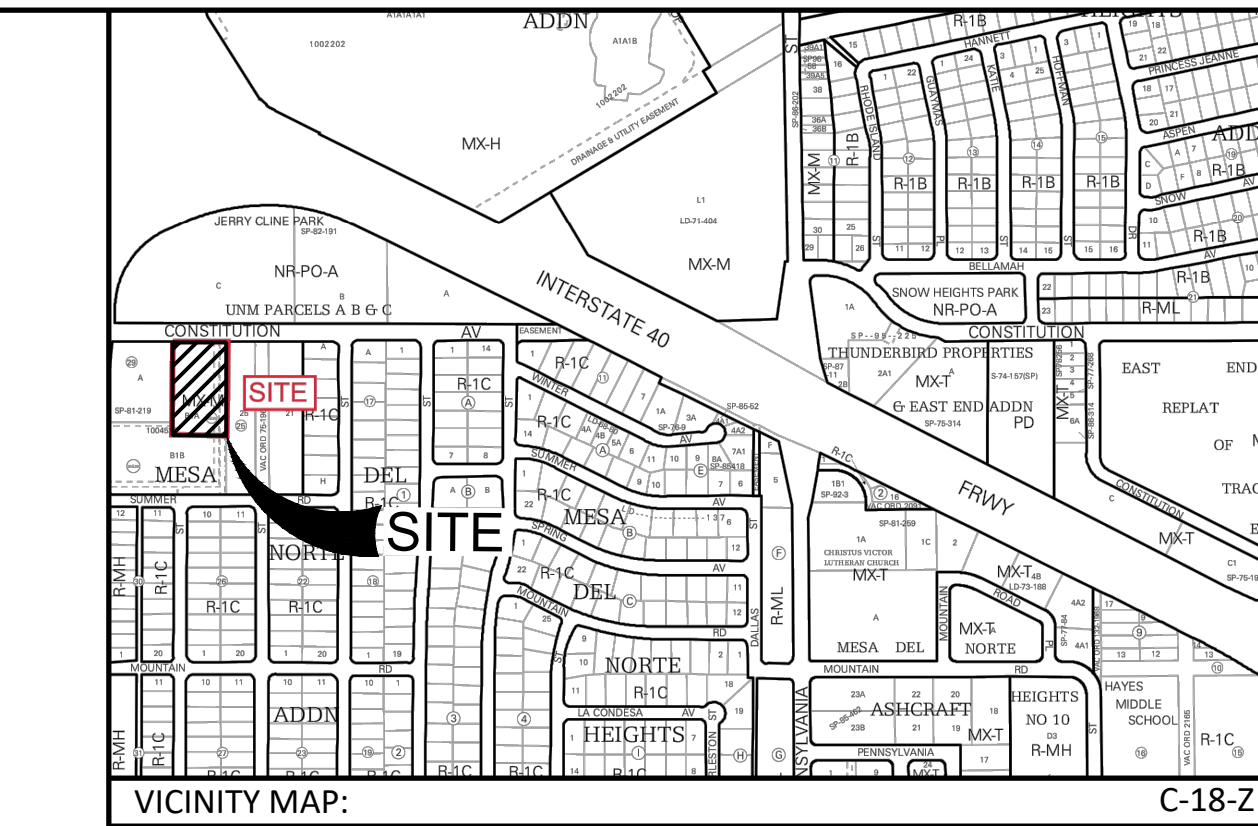
Peak Discharge calculation for a 100-yr, 24-hr storm event from equation 6.6

Subbasin	Discharge (cfs)
A	6.7
B	0.7
Total	7.4

Water Quality:

Required Water Quality volume for first flush of 0.42"

Subbasin	Req Volume (cu. ft.)	Provided Volume (cu. ft.)	Net Volume (cu. ft.)
A	2,028	0	2,028
B	229	0	229
Total	2,256	0	2,256



BACKGROUND

TRACT B-1-A, MESA DEL NORTE ADDITION IS APPROXIMATELY 1.7 ACRES IN THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO. THE PROPERTY IS LOCATED SOUTH OF CONSTITUTION AVENUE BETWEEN LOUISIANA BOULEVARD AND MESILLA STREET. TRACT B-1-A IS CURRENTLY UNDEVELOPED. THERE IS AN EXISTING POWER LINE AND WATER LINE THAT CROSS THE EAST SIDE OF THE SITE. THE PROPOSED PROJECT IS AN APARTMENT COMPLEX. THE FIRST LEVEL WILL BE A PARKING GARAGE AND THE FOUR LEVELS ABOVE WILL BE THE DWELLING UNITS AND VARIOUS AMENITIES. THE GRADING & DRAINAGE PLAN FOR LOUISIANA PLACE BY HUITT-ZOLLARS 2006 AS WELL AS THE GRADING & DRAINAGE PLAN FOR LOUISIANA PLACE DATED DECEMBER 1987 SHOULD BE REFERENCED FOR BACKGROUND RELATED TO THIS PROPOSED DEVELOPMENT. THE SITE IS ALLOWED FREE DISCHARGE. THERE IS NO DESIGNATED 100-YEAR FLOODPLAIN SHOWN ON THE SITE.

METHODOLOGY

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 0.42". ALL HYDROLOGIC AND HYDRAULIC CALCULATIONS CAN BE FOUND ON THIS SHEET.

EXISTING CONDITIONS

THE SITE, IN GENERAL, SLOPES FROM SOUTH TO NORTH AT A SLOPE OF APPROXIMATELY 2%. STORM WATER RUNOFF GENERATED BY THE SITE DRAINS NORTH AND DISCHARGES TO CONSTITUTION AVENUE.

DEVELOPED CONDITIONS

THE DRAINAGE INTENTION OF THE DEVELOPED CONDITIONS IS TO MATCH THE EXISTING DRAINAGE PATTERN.

SUB-BASIN A IS A MAJORITY OF THE NEW APARTMENT DEVELOPMENT. IT CONTAINS 1.57 ACRES AND GENERATES 6.7 CFS. SIMILAR TO EXISTING CONDITIONS, THIS SUB-BASIN DISCHARGES NORTH INTO CONSTITUTION AVENUE.

SUB-BASIN B IS A SMALL PORTION OF THE SOUTH SIDE OF THE DEVELOPMENT. IT IS 0.17 ACRES AND GENERATES 0.7 CFS. THIS SUB-BASIN DISCHARGES TO THE ADJACENT PROPERTIES TO THE WEST AT THE SOUTHWEST CORNER OF THE SITE.

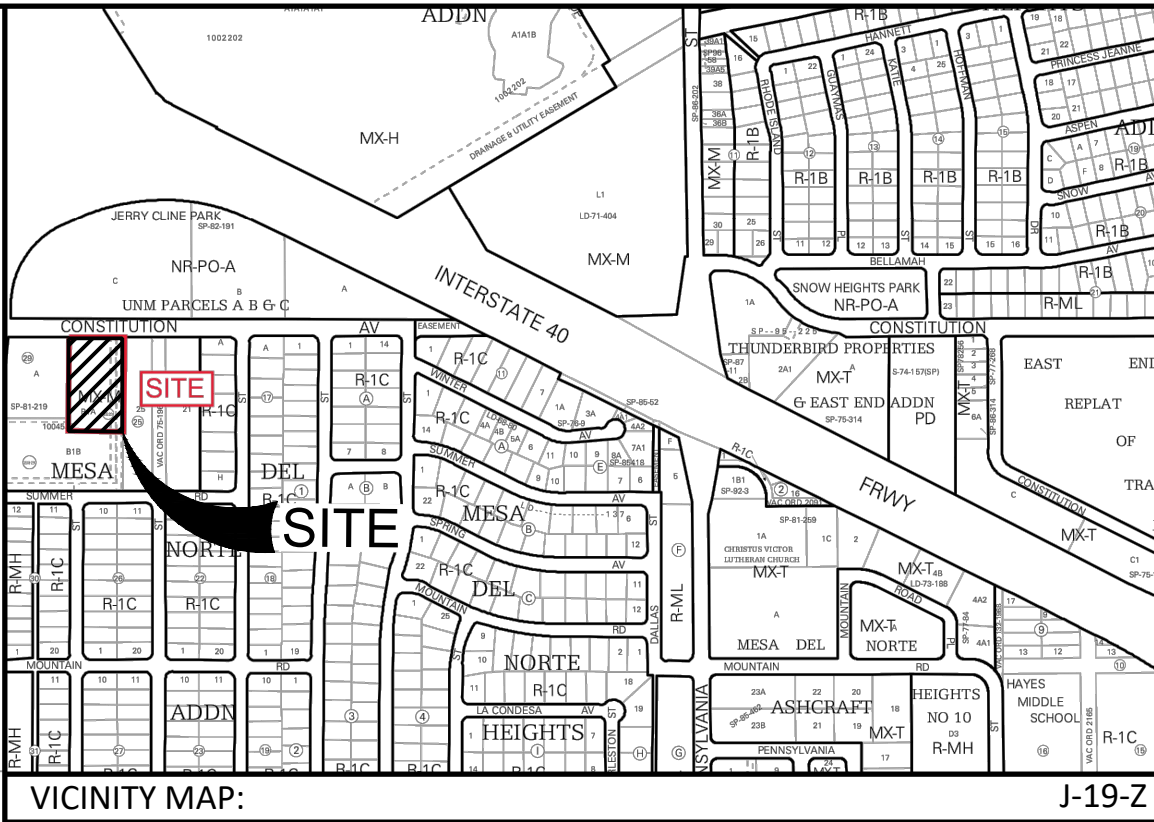
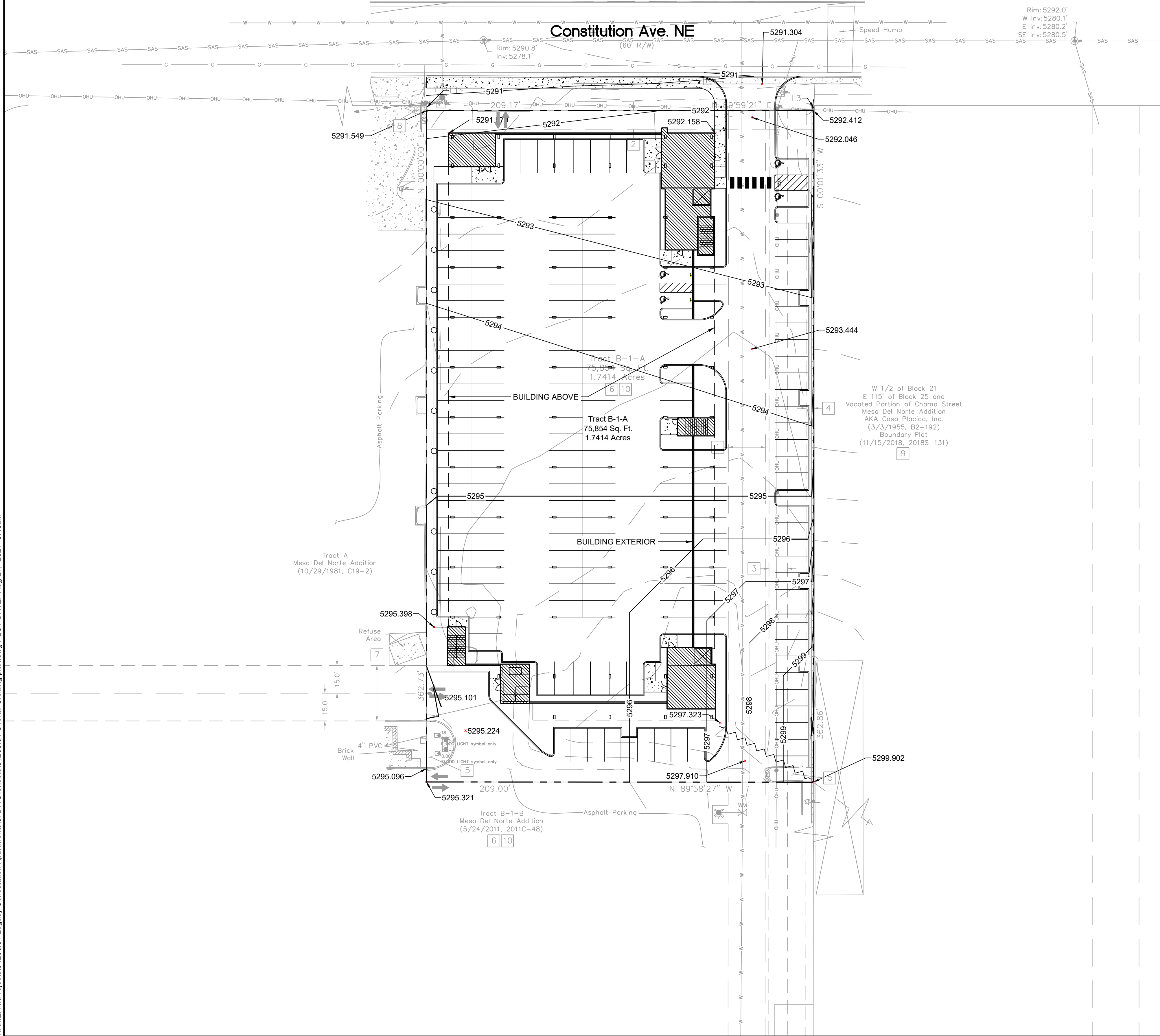
THE WATER QUALITY TABLE ON THIS SHEET UNDER "HYDROLOGY CALCULATIONS" SUMMARIZES THE WATER QUALITY VOLUMES REQUIRED FOR DEVELOPED CONDITIONS. THE OWNER HAS ELECTED TO PAY THE FEE-IN-LIEU OF STORM WATER QUALITY PONDING REQUIREMENTS. THE TOTAL VOLUME REQUIRED IS 2,256 CUBIC FEET. THEREFORE, THE PAYMENT AMOUNT IS 2,256 CF X \$8/CF = \$18,048.

LEGEND:

- XX BASIN DESIGNATION
- XX BASIN AREA, ACRES
- XX 100 YEAR STORM, CFS
- XX REQUIRED WATER QUALITY VOLUME
- SUB-BASIN BOUNDARY
- FLOW ARROW

DESIGNED JS	DRAWN MR	CHECKED JS	DATE 8.27.2021
RESPEC COMMUNITY DESIGN SOLUTIONS 5971 JEFFERSON STREET SUITE 101 WWW.RESPEC.COM PHONE (505) 253-9718			
STAMP JEREMY W. SHELL NEW MEXICO 26341 8/25/21 PRELIMINARY NOT FOR CONSTRUCTION 8/2021 THIS DRAWING IS INCOMPLETE AND NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS STAMPED, SIGNED AND DATED			
PROJECT NAME: MARKANA FLATS APARTMENTS			
SHEET TITLE: CONCEPT DRAINAGE PLAN			
SUBMITTED FOR: DRB SITE PLAN			
SHEET NUMBER: C-100			

NAME: N:\Projects\04-266\04 Legacy Constitution Apartments3.DWG\Sheets\04266.04 Overall Grading plan.dwg PLOT DATE: Aug 27, 2021 8:43am



NOTE:

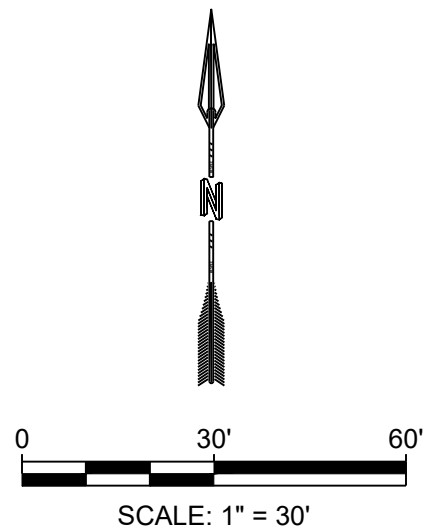
1. THE EXISTING SITE FEATURES WILL BE DEMOLISHED UNLESS OTHERWISE SPECIFIED ON THIS PLAN.

GRADING NOTES

1. 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.
2. FINISH GRADE OF SOIL EDGES ALONG PAVEMENT TO BE 1/2" BELOW EDGE OF PAVEMENT.
3. STRIP AND STOCKPILE TOPSOIL FROM GRADING AREAS. USE STOCKPILED TOPSOIL AND IMPORTED TOPSOIL AS NECESSARY FOR SURFACE RESTORATION.
4. GRADES SHOWN ARE FINAL SURFACE GRADES AFTER COMPLETION OF SURFACE IMPROVEMENTS AND PLACEMENT OF TOPSOIL.
5. GRADE AREAS AT SITE PERIMETER TO MATCH GRADES OF ADJACENT PARCELS.
6. REMOVE EXCESS SOIL FROM SITE AND DISPOSE OF PROPERLY IN ACCORDANCE WITH APPLICABLE REGULATIONS.
7. 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, STATE AND LOCAL QUALITY REQUIREMENTS.
8. REFER TO GEOTECHNICAL EVALUATION REPORT 3220JJ138 BY WESTERN TECHNOLOGIES, INC. DATED JANUARY 12, 2021.

LEGEND:

- PROPERTY BOUNDARY
- 5270— PROPOSED MAJOR CONTOUR
- 5272— PROPOSED MINOR CONTOUR
- - - 5270 - - - EXISTING MAJOR CONTOUR
- - - EXISTING MINOR CONTOUR
- ~~~~~ PROPOSED HIGH POINT



DESIGNED JS DRAWN MR CHECKED JS DATE 8.27.2021		REVISION
RESPEC COMMUNITY DESIGN SOLUTIONS 5971 JEFFERSON STREET SUITE 101 WWW.RESPEC.COM PHONE: 605.253.9718		
STAMP JEREMY W. SHELL NEW MEXICO 26341 8/25/21 PRELIMINARY NOT FOR CONSTRUCTION 8/2021 THIS DRAWING IS INCOMPLETE AND NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS STAMPED, SIGNED AND DATED nm811 Know what's below. Call before you dig.		PROJECT NAME: MARKANA FLATS APARTMENTS
SHEET TITLE: CONCEPT GRADING PLAN		
SUBMITTED FOR: DRB SITE PLAN		SHEET NUMBER: C-101