CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director

Mayor Timothy M. Keller

July 7, 2023

Sheldon Greer, P.E.
Respec
5971 Jefferson St. NE
Albuquerque, NM 8710

RE: Markana Flats Apartments
Revised Grading & Drainage Plans
Engineer's Stamp Date: 07/06/22
Hydrology File: J19D047A

Dear Mr. Greer:

Based upon the information provided in your submittal received 06/30/2023, the Grading & Drainage Plans are approved for Building Permit and SO-19 Permit. Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter.

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

PRIOR TO CERTIFICATE OF OCCUPANCY:

1. Engineer's Certification, per the DPM Part 6-14 (F): *Engineer's Certification Checklist For Non-Subdivision* is required.
2. Please pay the Payment-in-Lieu of **$ 18,048.00** by emailing the attached approved Waiver Application from Stormwater Quality Volume Management On-site to PLNDRS@cabg.gov. Once this is received, a receipt will then be produced and email back. Follow the instructions on the bottom of the form and pay it at the Treasury in Plaza de Sol. Once paid, please email me proof of payment.

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

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: UPC: 101905803924632211

Applicant: Legacy Development Contact: _____

Address: _____

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

Other Contact: RESPEC Contact: Sheldon Greer

Address: 7770 Jefferson Street NE, Suite 200, Albuquerque, NM 87109

Phone#: 505.264.0472 Fax#: _____ E-mail: sheldon.greer@respec.com

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

IS THIS A RESUBMITTAL? _____ Yes X No

DEPARTMENT _____ TRANSPORTATION X HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

____ ENGINEER/ARCHITECT CERTIFICATION
____ PAD CERTIFICATION
____ CONCEPTUAL G & D PLAN
X GRADING PLAN
X 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:

X BUILDING PERMIT APPROVAL
____ CERTIFICATE OF OCCUPANCY

____ PRELIMINARY PLAT APPROVAL
____ SITE PLAN FOR SUB'D APPROVAL
X SITE PLAN FOR BLDG. PERMIT APPROVAL
____ FINAL PLAT APPROVAL

____ SIA/ RELEASE OF FINANCIAL GUARANTEE
____ FOUNDATION PERMIT APPROVAL
____ GRADING PERMIT APPROVAL
X SO-19 APPROVAL
____ PAVING PERMIT APPROVAL
____ GRADING/ PAD CERTIFICATION
____ WORK ORDER APPROVAL
____ CLOMR/LOMR
____ FLOODPLAIN DEVELOPMENT PERMIT
____ OTHER (SPECIFY) _____

DATE SUBMITTED: 6/30/2023 By: Sheldon Greer

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

CITY OF ALBUQUERQUE
PLANNING DEPARTMENT
HYDROLOGY DEVELOPMENT SECTION

WAIVER APPLICATION FROM STORMWATER QUALITY VOLUME MANAGEMENT ON-SITE

GENERAL INFORMATION

APPLICANT: Legacy Development & Management, LLC DATE: 07/19/2022

DEVELOPMENT: Markana Flats Apartments

LOCATION: Tract B-1-A, Mesa Del Norte

South of Constitution Ave between Louisiana Blvd and Mesilla St

STORMWATER QUALITY POND VOLUME

Per the DPM Article 6-12 - Stormwater Quality and Low-Impact Development, the calculated sizing for required Stormwater Quality Pond volume is equal to the impervious area draining to the BMP multiplied by 0.42 inches for new development sites and by 0.26 inches for redevelopment sites.

The required volume is 2256 cubic feet

The provided volume is 0 cubic feet

The deficient volume is 2256 cubic feet

WAIVER JUSTIFICATION

Per the DPM Article 6-12(C), private off-site mitigation and payment-in-lieu may only be considered if management on-site is waived in accordance with the following criteria and procedures.

1. Management on-site shall be waived by the City Engineer if the following conditions are met:

a. Stormwater quality can be effectively controlled through private off-site mitigation or through an arrangement (approved by the City) to use a cooperator's existing regional stormwater management infrastructure or facilities that are available to control stormwater quality.
b. Any of the following conditions apply:
    i. The lot is too small to accommodate management on site while also accommodating the full plan of development.
    ii. The soil is not stable as demonstrated by a geotechnical report certified by a professional engineer licensed in the State of New Mexico.
    iii. The site use is inconsistent with the capture and reuse of stormwater.
    iv. Other physical conditions exist where compliance with on-site stormwater quality control leaves insufficient area.
    v. Public or private off-site facilities provide an opportunity to effectively accomplish the mitigation requirements of the Drainage Ordinance (Part 14-5-2 ROA 1994) as demonstrated on as-built construction drawings and an approved drainage report.
    vi. The developer constructs a project to replenish regional groundwater supplies at an off-site location.
    vii. A waiver to State water law or acquisition of water rights would be required in order to implement management on site.

2. The basis for requesting payment-in-lieu or private off-site mitigation is to be clearly demonstrated on the drainage plan.

This project's justification: Payment-in-lieu is requested on the basis of condition 1 as highlighted above. This project involves a single apartment building on a 1.6 acre tract. The first floor of the building along with all exterior drive aisles are utilized for parking. There is no on-site detention pond since the site is allowed free discharge. Given the aforementioned conditions, the site has insufficient area for a water quality pond without rendering the development economically unfeasible. Consequently, we respectfully request payment-in-lieu.

Jeremy Shell, PE

Professional Engineer or Architect

PAYMENT-IN-LIEU

Per the DPM Article 6-12(C)(1), the amount of payment-in-lieu is deficient volume (cubic feet) times $6 per cubic feet for detached single-family residential projects or $8 per cubic feet for all other projects.

AMOUNT OF PAYMENT-IN-LIEU = $ 18,048

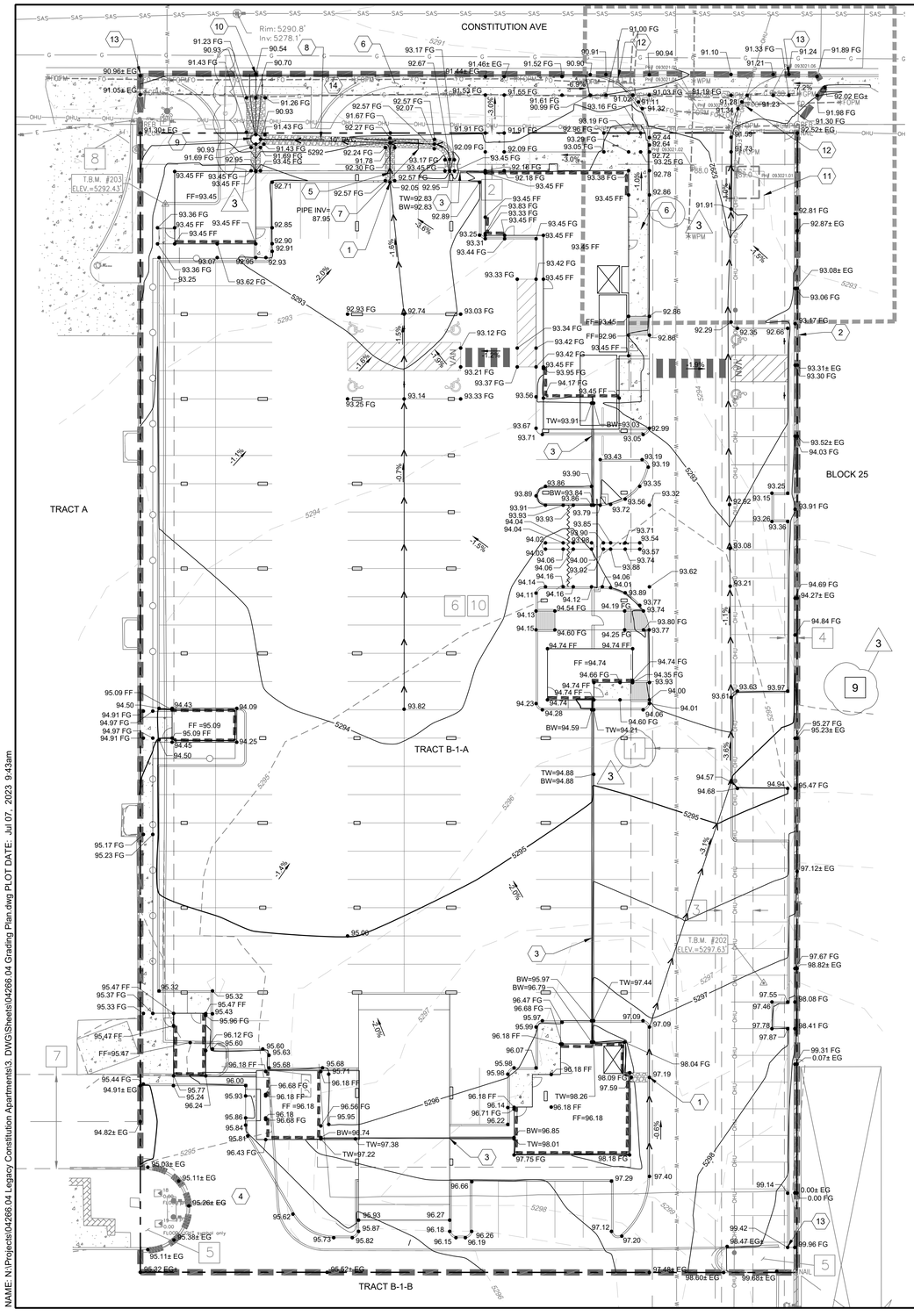
THIS SECTION IS FOR CITY USE ONLY

[x] Waiver is approved. The amount of payment-in-lieu from above must be paid prior to Certificate of Occupancy.

[ ] Waiver is DENIED.

Renée C. Brissette

City of Albuquerque
Hydrology Section



NAME: N:\Projects\04266.04 Legacy Constitution Apartments\3. DWG\Sheets\04266.04 Grading Plan.dwg PLOT DATE: Jul 07, 2023 9:43am

Easement Notes

1. EXISTING 20' WATERLINE EASEMENT (8/26/1988, BK. MISC. 658A, PG. 565-568, DOC. NO. 88-78280)
2. EXISTING 10' P.U.E. (5/24/2011, 2011C-48)
3. EXISTING 10' UTILITY EASEMENT (10/29/1981, C19-2)
4. EXISTING 4' UNDERGROUND TELEPHONE EASEMENT (1/28/1972, BK. D 911, PG. 230, DOC. NO. 67687)
5. EXISTING LANDSCAPE EASEMENT (5/24/2011, 2011C-48) BURDENING SUBJECT PROPERTY, BENEFITING TRACT B-1-B
6. A PRIVATE RECIPROCAL CROSS LOT ACCESS, PARKING, AND DRAINAGE EASEMENT FILED ON MAY 24, 2011, IN BOOK 2011C, PAGE 48, FOR THE BENEFIT AND USE BY AND FOR THE OWNERS OF TRACTS B-1-A AND B-1-B, AND IS TO BE MAINTAINED BY SAID OWNERS AND CONSISTS OF THE ENTIRE PARCEL EXCLUSIVE OF THE BUILDING AREA, BLANKET IN NATURE (5/24/2011, 2011C-48)
7. EXISTING 30' COMMON ACCESS EASEMENT (10/29/1981, C19-2)
8. RESERVED UTILITY EASEMENTS BY THE PUBLIC ALLEY VACATION ORDINANCE NO. 85-95, SHOWN HEREON AS
9. EXISTING COMCAST OF NEW MEXICO, INC. EASEMENT (4/4/2011, DOC. NO. 2011032074), BLANKET OVER THE WEST 1/2 BLOCK 21, EAST 1/2 OF BLOCK 25 AND VACATED CHAMA STREET OF MESA DEL NORTE ADDITION
10. EXISTING EASEMENT FOR CABLE TELEVISION, BLANKET IN NATURE OVER TRACTS B-1-A AND B-1-B (3/15/1994, BK. 94-8, PG. 7991-7998, DOC. NO. 94034242)

SURVEY LEGEND:

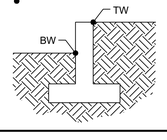
- N 90°00'00" E — MEASURED BEARINGS AND DISTANCES
- COVERED AREA
- CONCRETE
- UTILITY PEDESTAL
- WIRE FENCE
- BLOCK WALL
- BOLLARD
- OHU — OVERHEAD UTILITY LINE
- UTILITY POLE
- ANCHOR
- PULL BOX
- LIGHT POLE
- FLOOD LIGHT
- WV — WATER VALVE
- FIRE HYDRANT
- FLAGPOLE
- S — SANITARY SEWER MANHOLE
- SIGN
- G — UNDERGROUND GAS UTILITY LINE
- W — UNDERGROUND WATER UTILITY LINE
- SAS — UNDERGROUND SANITARY SEWER LINE
- E — UNDERGROUND ELECTRIC UTILITY LINE
- WOOD BOLLARD AND WIRE BARRIER

SITE CIVIL LEGEND:

- PROPERTY BOUNDARY
- 5270 — PROPOSED MAJOR CONTOUR
- 5272 — PROPOSED MINOR CONTOUR
- 5272 — EXISTING MAJOR CONTOUR
- 5272 — EXISTING MINOR CONTOUR
- RETAINING WALL
- FLOWLINE
- STEM WALL AND FOUNDATION RETAINING WALL
- 4"-6" DIA. ALL-FACE BROKEN ROCK INSTALLED 9" DEEP
- GRADE BREAK / HIGH POINT
- LIMITS OF GRADING

SPOT ELEVATION SYMBOLS

- 20.00 FLOWLINE
- EG 20.00± EXISTING GROUND
- BW=20.00 BOTTOM WALL
- TW=20.00 TOP WALL
- FG 20.00 FINISHED GRADE
- FF 20.00 FINISHED FLOOR



KEYED NOTES:

1. INSTALL CURB OPENING PER DETAIL ON THIS SHEET
2. RETAIN UP TO 1.5' AGAINST EXISTING PRIVACY WALL AS NECESSARY
3. RETAINING WALL DESIGN BY OTHERS (SEE STRUCTURAL PLANS).
4. SAWCUT, REMOVE AND DISPOSE ONSITE ASPHALT. ADJUST GRADES PER PLAN AND INSTALL NEW PAVEMENT.
5. INSTALL 2 TURNED BLOCKS IN PRIVACY WALL AT FINISHED GRADE
6. INSTALL 4" THICK CONCRETE SIDEWALK PER ALBUQUERQUE STD. DWG 2430 (REMOVE AND DISPOSE EXISTING SIDEWALK)
7. SEE PLUMBING PLANS FOR CONTINUATION
8. INSTALL PERFORATED PIPE (SIZE PER PLAN) PER DETAIL ON THIS SHEET
9. INSTALL 2' DIA. ADS CATCH BASIN WITH 24" DIA. DUCTILE IRON DROP IN GRATE. PIPE INVERT EAST=87.95
10. INSTALL TWO 24" SIDEWALK CULVERTS PER ALBUQUERQUE STD. DWG 2236
11. LOCATION OF PROPOSED WATER METER VAULT
12. RELOCATE ELECTRIC PULLBOX BEHIND SIDEWALK
13. TIE NEW CURB TO EXISTING CURB
14. REMOVE AND DISPOSE EXISTING VALLEY GUTTER, CURB RETURNS, AND SIDEWALK ALONG SITE FRONTAGE

PRIVATE DRAINAGE FACILITIES WITHIN CITY RIGHT OF WAY NOTICE TO CONTRACTOR (SPECIAL ORDER 19~ "SO-19')

1. BUILD SIDEWALK CULVERT PER COA STD DWG 2236. WORK IS PERMITTED AND INSPECTED BY DMD CONSTRUCTION SERVICES DIVISION.
2. AN EXCAVATION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
3. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
4. PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL, DIAL "811" [OR (505) 260-1990] FOR THE LOCATION OF EXISTING UTILITIES.
5. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
6. BACKFILL COMPACTION SHALL BE 95%.
7. MAINTENANCE OF THE FACILITY SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY BEING SERVED.
8. WORK ON ARTERIAL STREETS MAY BE REQUIRED ON A 24-HOUR BASIS.
9. FOR EXCAVATION AND BARRICADING INSPECTIONS, CONTACT DMD CONSTRUCTION SERVICES DIVISION.

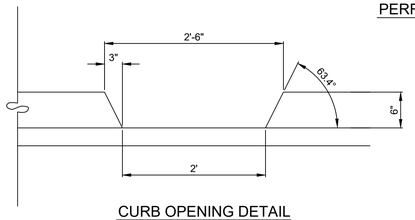
REV. 01/22/21

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED
DATE: 07/07/23
BY: Renée Brissette
HydroTrans #: J19D047A

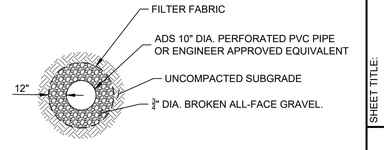
THE APPROVAL OF THESE PLANS/REPORT SHALL NOT BE CONSTRUED TO PERMIT VIOLATIONS OF ANY CITY ORDINANCE OR STATE LAW. NEITHER THE DEPARTMENT NOR THE CITY OF ALBUQUERQUE FROM REQUIRING CORRECTION, OR ERROR OR DIMENSIONS IN PLANS, SPECIFICATIONS, OR CONSTRUCTIONS. SUCH APPROVED PLANS SHALL NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT AUTHORIZATION.

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. GRADES SHOWN ARE FINAL SURFACE GRADES AFTER COMPLETION OF SURFACE IMPROVEMENTS AND PLACEMENT OF TOPSOIL.
4. GRADE AREAS AT SITE PERIMETER TO MATCH GRADES OF ADJACENT PARCELS.
5. REMOVE EXCESS SOIL FROM SITE AND DISPOSE OF PROPERLY IN ACCORDANCE WITH APPLICABLE REGULATIONS.
6. 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.
7. REFER TO GEOTECHNICAL EVALUATION REPORT 3221JJ127 BY WESTERN TECHNOLOGIES, INC. DATED DECEMBER 10, 2021.
8. THE EXISTING SITE FEATURES WILL BE DEMOLISHED UNLESS OTHERWISE SPECIFIED ON THIS PLAN.
9. PAVEMENT SECTION BY OWNERS DIRECTION.
10. COMPOSITE SLOPE IN HANDICAP PARKING SPACES SHALL NOT EXCEED 2%.
11. CROSS SLOPE ON ADA CROSSWALKS SHALL NOT EXCEED 2%. LONGITUDINAL SLOPE SHALL NOT EXCEED 5%.
12. LONGITUDINAL SLOPE ON CURB RAMPS SHALL NOT EXCEED 8.33%. CROSS SLOPE SHALL NOT EXCEED 2%.
13. COMPOSITE SLOPE ON RAMP LANDINGS SHALL NOT EXCEED 2%.



CURB OPENING DETAIL
NOT TO SCALE



PERFORATED PIPE DETAIL
NOT TO SCALE

0 20 40
SCALE: 1" = 20'

REVISION			
3.	COMMENTS & EDITS FROM OWNER		7/6/2023

DESIGNED JMS
DRAWN JMS
CHECKED JS
DATE 7/6/2023

RESPEC
COMMUNITY DESIGN SOLUTIONS
5971 JEFFERSON STREET SUITE 101
ALBUQUERQUE NEW MEXICO 87109
WWW.RESPEC.COM PHONE: (505)823-9718

STAMP

SHELDON E. GREER
NEW MEXICO
17154
LICENSED PROFESSIONAL ENGINEER
7/6/2023

THIS DRAWING IS INCOMPLETE AND NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS STAMPED, SIGNED AND DATED

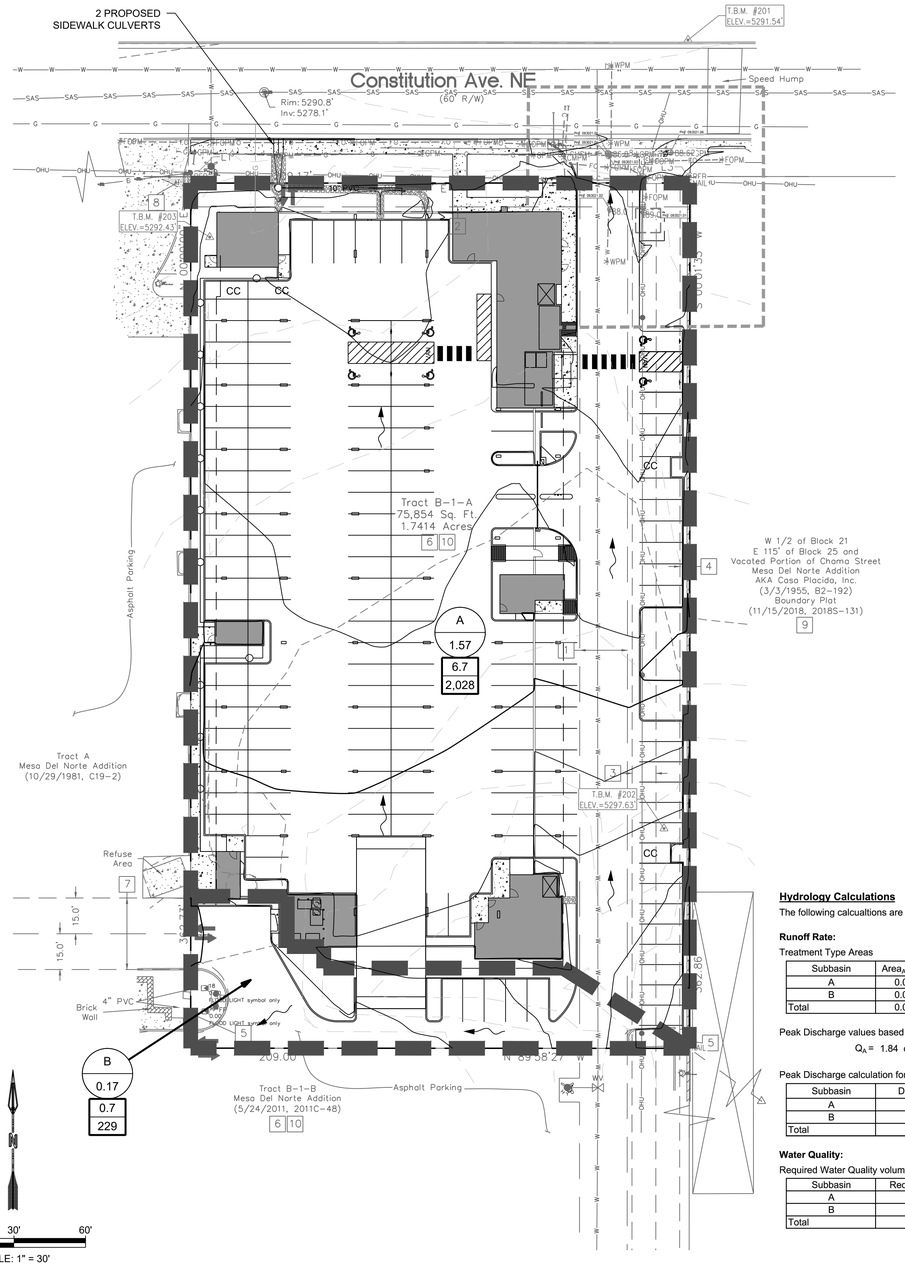
nm811 Know what's below. Call before you dig.

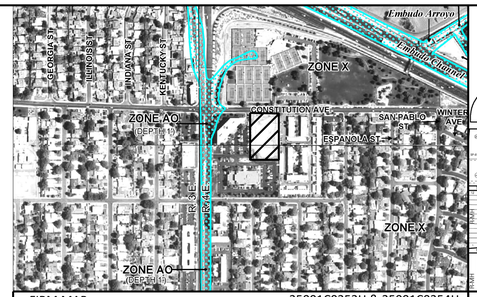
PROJECT NAME: MARKANA FLATS APARTMENTS

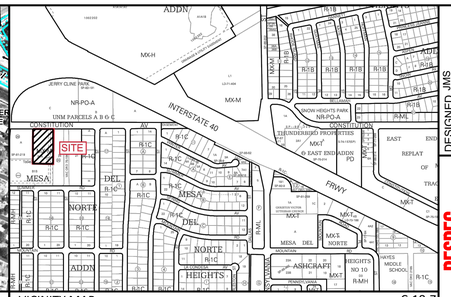
SHEET TITLE: GRADING PLAN

SUBMITTED FOR: BUILDING PERMIT

SHEET NUMBER: C-101







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DATE: 07/07/23
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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 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. THIS DISCHARGE OCCURS VIA SURFACE FLOW AT THE DRIVEWAY AND TWO SIDEWALK CULVERTS.

THE ROOF DRAINAGE IS INCLUDED IN SUB-BASIN A. THE ROOF FLOWS ARE COLLECTED INTERNAL TO THE BUILDING AND CONVEYED TO THE NORTH FACE OF THE BUILDING. THE FLOWS ARE THEN RELEASED AT GROUND LEVEL VIA 2 DOWNSPOUTS ALONG WITH AN UNDERGROUND PIPE / BUBBLER MANHOLE SYSTEM. THE DOWNSPOUTS AND BUBBLER MANHOLE DISCHARGE INTO ROCK LINED SWALES THAT CONVEY THE RUNOFF INTO THE PROPOSED SIDEWALK CULVERTS ALONG CONSTITUTION AVENUE. AN ADDITIONAL SUBGRADE PARKING STRUCTURE WILL BE CONSTRUCTED BELOW THE FIRST FLOOR PARKING LEVEL. THE MINOR STORM WATER THAT MAY ENTER THIS AREA WILL BE COLLECTED IN A SUMP AND PUMPED TO THE FIRST FLOOR PARKING LEVEL AND DISCHARGE TOGETHER WITH THE MINOR RUNOFF FROM THIS LEVEL.

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.

Hydrology Calculations

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

Runoff Rate:

Treatment Type Areas

Subbasin	Area$_A$ (ac)	Area$_B$ (ac)	Area$_C$ (ac)	Area$_D$ (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 cfs/ac Q_B = 2.49 cfs/ac Q_C = 3.17 cfs/ac Q_D = 4.49 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

LEGEND:

XX / XX — BASIN DESIGNATION; BASIN AREA, ACRES — BASIN NAME AND AREA

XX / XX — 100 YEAR STORM, CFS; REQUIRED WATER QUALITY VOLUME — BASIN HYDROLOGIC RESULTS

SUB-BASIN BOUNDARY

FLOW ARROW

RESPEC
COMMUNITY DESIGN SOLUTIONS
5971 JEFFERSON STREET SUITE 101
ALBUQUERQUE, NEW MEXICO 87109
WWW.RESPEC.COM PHONE: (505)823-9719

DESIGNED JMS
DRAWN JMS
CHECKED JS
DATE 7/6/2023

REVISION

STAMP

SHELDON E. GREER
NEW MEXICO
17154
LICENSED PROFESSIONAL ENGINEER
7/6/2023

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nm811 Know what's below. Call before you dig.

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SHEET TITLE: DRAINAGE PLAN

SUBMITTED FOR: BUILDING PERMIT

SHEET NUMBER: C-102