CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Interim Director

Mayor Timothy M. Keller

December 23, 2021

David B. Thompson, P.E.
Thompson Engineering Consultants Inc.
P.O. Box 65760
Albuquerque, NM 87193

RE: 615 Iron Ave SW
615 Iron Ave SW
Grading and Drainage Plan
Engineer's Stamp Date: 11/8/2021
Hydrology File: K14D225

Dear Mr. Thompson:

PO Box 1293

Albuquerque

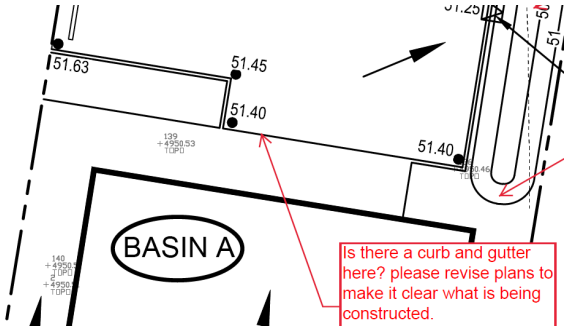
NM 87103

www.cabq.gov

Based upon the information provided in your submittal received 11/10/2021, the Grading & Drainage Plan **is not** approved for Building Permit, or Grading Permit. The following comments need to be addressed for approval of the above referenced project:

SHEET C-1

1. Show adjacent lots and street/alley grades to show how grades tie in and show how the site will not drain into adjacent sites.
2. Provide a drainage covenant for all ponds.
3. Please include
4. Basin A
    a. Please provide survey of the alley and show how this will tie into the alley with the proposed grades.
    b. There is no curb, please show how this will discharge into the alley.
        i. Curb cut shown is not applicable.
    c. Please provide a detail of the proposed pond and elevations of how it will drain north into the alley. Provide spot elevations at the north and south of pond to show this drainage. Show the water quality level to be retained.
    d. What is preventing stormwater to drain toward the building here?



5. Basin B
    a. Please provide Water Quality Volume for this basin as well.
    b. For the outlet please show how this will be provided. See standard detail 2235.
    c. You can move the parking spots east a few feet to fit a pond in this landscape area and adjust grades to allow drainage to enter into the pond.
    d. The driveway will need to be adjusted and perhaps maintain the current drive.
        i. There is a meter box in the middle of the proposed drive which will not be acceptable. Please check with the Water Authority for their comment.
    e. The sidewalk is in poor condition and will need replacement and the driveway will need to be paved. Check with Transportation for their requirements.
6. Please review and ensure no ponding takes place and drainage is away from the building.

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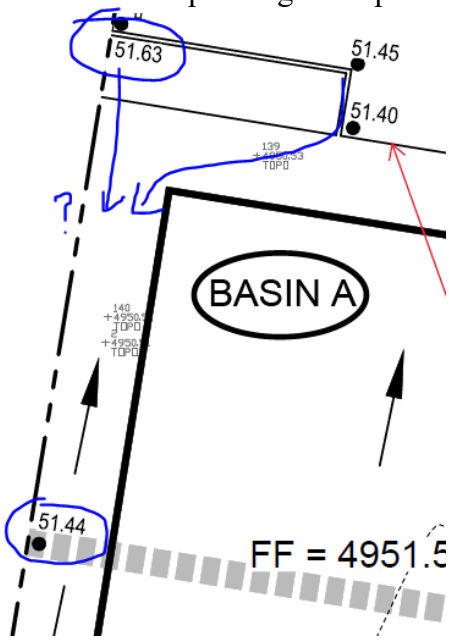
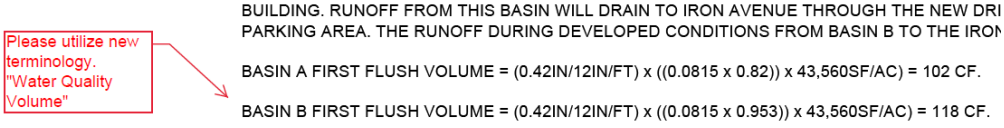


7. Please utilize current terminology. First Flush is no longer utilized. Water Quality Volume is appropriate and in agreement with the current DPM



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 924-3965 or dggutierrez@cabq.gov

Sincerely,

David G. Gutierrez, P.E.
Senior Engineer, Hydrology
Planning Departmen

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City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

Project Title: 615 Iron Ave SW Building Permit #: _____ Hydrology File #: K14

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

Legal Description: Lot 16-A, Block X, Atlantic and Pacific Addition

City Address: 615 Iron Ave SW

Applicant: Thompson Engineering Consultants, Inc. Contact: David B. Thompson

Address: P.O. Box 65760, Albuquerque, NM 87193

Phone#: (505) 271-2199 Fax#: _____ E-mail: tecnm@yahoo.com

Owner: Sierra Hacienda Builders Contact: Tim Borror

Address: P.O. Box 52126, Albuquerque, NM 87181

Phone#: (505) 220-1525 Fax#: _____ E-mail: trb607ca@hotmail.com

TYPE OF SUBMITTAL: _____ PLAT (___# OF LOTS) ____ RESIDENCE ____ DRB SITE X ADMIN SITE

IS THIS A RESUBMITTAL?: _____ Yes X No

DEPARTMENT: _____ TRAFFIC/ TRANSPORTATION X HYDROLOGY/ DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

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

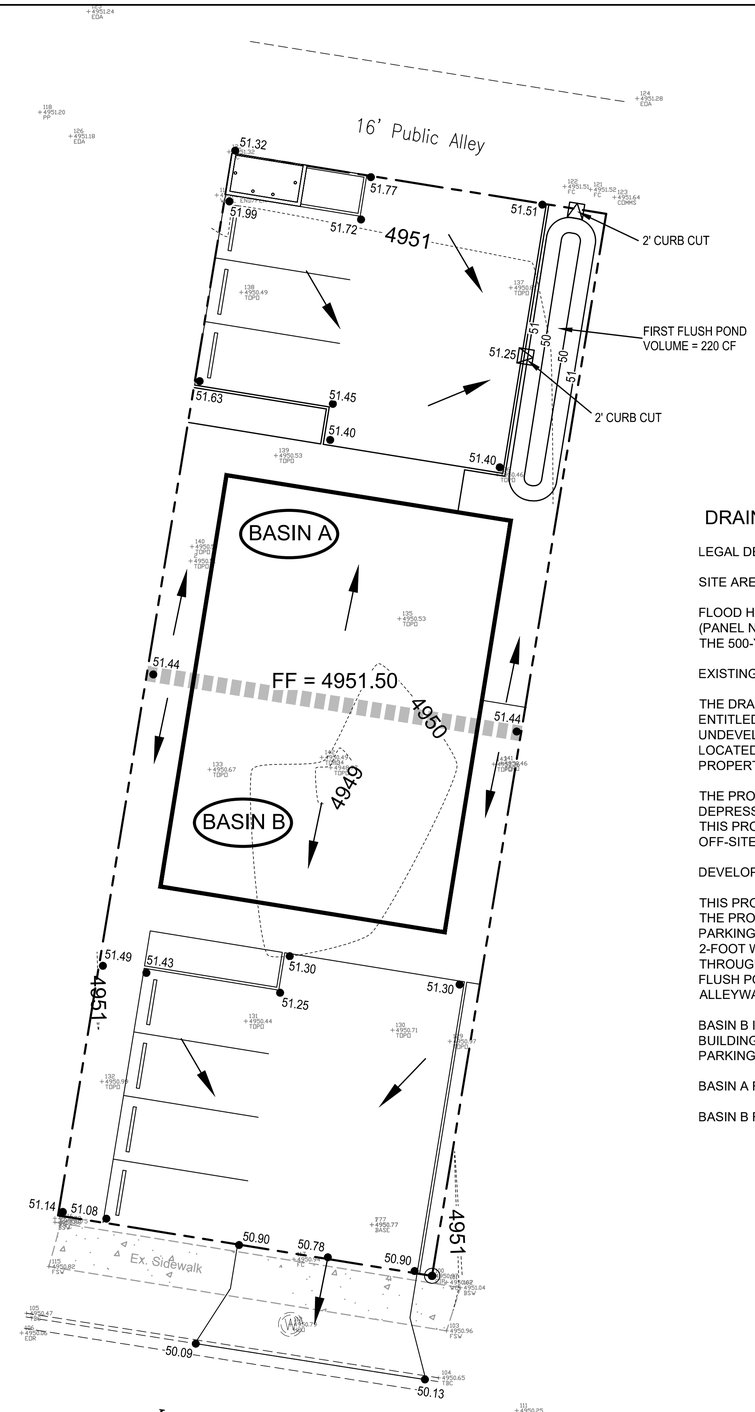
TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

X 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
X GRADING PERMIT APPROVAL
____ SO-19 APPROVAL
____ PAVING PERMIT APPROVAL
____ GRADING/ PAD CERTIFICATION
____ WORK ORDER APPROVAL
____ CLOMR/LOMR
____ FLOODPLAIN DEVELOPMENT PERMIT
____ OTHER (SPECIFY) _____

DATE SUBMITTED: November 10, 2021 By: David B Thompson

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____



VICINITY MAP : K-14-Z

DRAINAGE PLAN:

LEGAL DESCRIPTION: LOT 16-A, BLOCK X, ATLANTIC AND PACIFIC ADITION

SITE AREA: 0.163 ACRES

FLOOD HAZARD STATEMENT: F.E.M.A. FLOODWAY BOUNDARY AND FLOODWAY MAP DATED SEPTEMBER 26, 2008 (PANEL NO. 35001C0334G) INDICATES A FLOOD HAZARD ZONE X WHICH IS AN AREA DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN.

EXISTING DRAINAGE CONDITIONS:

THE DRAINAGE ANALYSIS FOR THIS SITE IS IN ACCORDANCE WITH CHAPTER 6, ARTICLE 6-2, SECTION 6-2(A), ENTITLED "PROCEDURE FOR 40-ACRE AND SMALLER BASINS." THE DESIGN STORM USED FOR BOTH UNDEVELOPED AND DEVELOPED CONDITIONS IS THE 100-YEAR, 6-HOUR STORM EVENT FOR RUNOFF. THE SITE IS LOCATED IN ZONE 2 SO THE 100-YEAR, 6-HOUR STORM EVENT IS 2.29 INCHES. UNDER EXISTING CONDITIONS, THE PROPERTY IS VACANT.

THE PROPERTY IS LOCATED ON IRON, BETWEEN 6TH STREET AND 7TH STREET. THE VACANT LOT DRAINS TO A DEPRESSED ARE IN THE MIDDLE OF THE LOT. THIS PROPERTY IS LOCATED IN ZONE 2. THE PEAK RUNOFF FROM THIS PROPERTY UNDER EXISTING CONDITIONS IS 0.28 CFS DURING A 100-YEAR, 6-HOUR STORM. THERE ARE NO OFF-SITE FLOWS THAT REACH THE PROPERTY.

DEVELOPED DRAINAGE CONDITIONS:

THIS PROPERTY A SINGLE MULTI-FAMILY BUILDING WITH PARKING ON THE NORTH AND SOUTH OF THE BUILDING. THE PROPERTY IS DIVIDED INTO 2 BASINS. BASIN A INCLUDES THE NORTH HALF OF THE BUILDING AND THE PARKING AND LANDSCAPED AREA NORTH OF THE BUILDING. RUNOFF FROM THIS BASIN WILL DRAIN THROUGH A 2-FOOT WIDE CURB CUT TO A FIRST FLUSH POND ON THE EAST SIDE OF THE PROPERTY WHICH WILL DRAIN THROUGH ANOTHER 2-FOOT WIDE CURB CUT TO THE ALLEYWAY TO THE NORTH. THE VOLUME OF THE FIRST FLUSH POND IS 220 CUBIC-FEET. THE RUNOFF DURING DEVELOPED CONDITIONS FROM BASIN A TO THE ALLEYWAY IS 0.33 CFS.

BASIN B INCLUDES THE SOUTH HALF OF THE BUILDING AND THE PARKING AND LANDSCAPED AREA SOUTH OF THE BUILDING. RUNOFF FROM THIS BASIN WILL DRAIN TO IRON AVENUE THROUGH THE NEW DRIVEWAY TO THE PARKING AREA. THE RUNOFF DURING DEVELOPED CONDITIONS FROM BASIN B TO THE IRON AVENUE IS 0.35 CFS.

BASIN A FIRST FLUSH VOLUME = (0.42IN/12IN/FT) x ((0.0815 x 0.82)) x 43,560SF/AC) = 102 CF.

BASIN B FIRST FLUSH VOLUME = (0.42IN/12IN/FT) x ((0.0815 x 0.953)) x 43,560SF/AC) = 118 CF.

100-YEAR HYDROLOGIC CALCULATIONS

BASIN #	AREA (acre)	LAND TREATMENT A (%)	B (%)	C (%)	D (%)	WEIGHTED E (in)	100-YEAR PRECIPITATION V (6-hr) (acre-ft)	V (6-hr) (cu-ft)	V(24-hr) (acre-ft)	V(24-hr) (cu-ft)	Q (cfs)
EXISTING CONDITIONS											
BASIN A	0.0815	100.00	0.00	0.00	0.00	0.62	0.00	183	0.00	183	0.14
BASIN B	0.0815	100.00	0.00	0.00	0.00	0.62	0.00	183	0.00	183	0.14
TOTAL RUNOFF	0.1630						0.01	367	0.01	367	0.28
FULL DEVELOPMENT CONDITIONS											
BASIN A	0.0815	0.00	9.00	9.00	82.00	2.08	0.01	614	0.02	687	0.33
BASIN B	0.0815	0.00	2.30	2.40	95.30	2.26	0.02	670	0.02	754	0.35
TOTAL RUNOFF	0.1630						0.03	1,284	0.03	1,441	0.68
EXCESS PRECIP.		0.62	0.8	1.03	2.33	E_c (in)					
PEAK DISCHARGE		1.71	2.36	3.05	4.34	Q_{PK} (cfs)					

$WEIGHTED\ E\ (in) = (E_A)(\%A) + (E_B)(\%B) + (E_C)(\%C) + (E_D)(\%D)$
$V_{6\text{-}HR}\ (acre\text{-}ft) = (WEIGHTED\ E)(AREA)/12$
$V_{100AY}\ (acre\text{-}ft) = V_{6\text{-}HR} + (A_D)(P_{100AY} - P_{6\text{-}HR})/12$
$Q\ (cfs) = (Q_{PA})(A_A) + (Q_{PB})(A_B) + (Q_{PC})(A_C) + (Q_{PD})(A_D)$

ZONE = 2
$P_{6\text{-}HR}\ (in.) = 2.29$
$P_{24\text{-}HR}\ (in.) = 2.59$
$P_{100AY}\ (in.) = 3.62$

LEGEND

- 4951 — EXISTING CONTOURS
- PROPERTY LINE
- EXISTING SIDEWALK
- EXISTING C&G
- EXISTING WATER METER
- 50.00 — PROPOSED SPOT ELEVATION
- PROPOSED FLOW DIRECTION
- PROPOSED 2' CURB CUT
- PROPOSED CONCRETE
- BASIN A — BASIN ID

N

10 5 0 5 10

SCALE: 1"=10'

Thompson Engineering Consultants, Inc.
tecnm@yahoo.com
PHONE: (505) 271-2199
FAX: (505) 830-9246
P.O. BOX 65760
ALBUQUERQUE, NM 87193

NO.	REVISION	BY	DATE

PROJECT:
DATE:
HORIZ. SCALE:
VERT. SCALE:
DRAWN BY: DEM
CHECKED BY:
APPROVED BY:
FILE:

CITY/COUNTY REVIEW

DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MGMT. DIV.		
WATER SERVICES		
SUBDIVISION ENG.		
STREETS		
TRAFFIC		

FOR CITY/COUNTY USE ONLY

LOT 16-A, BLOCK X,
ATLANTIC AND PACIFIC ADDITION
ALBUQUERQUE, BERNALILLO COUNTY, NM
615 IRON AVE. SW

GRADING AND DRAINAGE PLAN

SHEET No.

C-1