CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director

Mayor Timothy M. Keller

June 14, 2023

Mark H. Burak, P.E.
1512 Sagebrush Trail SE
Albuquerque, NM 87123

RE: Buner Metal Bldg – 2nd St. NW
Grading and Drainage Plans
Engineer's Stamp Date: 05/05/23
Hydrology File: G14D101

Dear Mr. Burak:

Based upon the information provided in your submittal received 06/08/2023, the Grading & Drainage Plan is approved for Building Permit and Grading 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 provide the executed paper Drainage Covenant (latest revision) printed on one-side only with Exhibit A and a check for **$25.00** made out to "**Bernalillo County**" for the stormwater quality ponds per Article 6-15(C) of the DPM to Hydrology for review at Plaza de Sol.

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: Bruner Metal Building Building Permit #: _____ Hydrology File #: G14101
DRB #: _____ EPC #: _____ Work Order #: _____
Legal Description: Lots 4 & 5, Monkbridge Addition
City Address: 4012, 4016 Second St NW, Albuquerque, NM

Applicant Burak Consulting Contact: Mark Burak, PE
Address: 1512 Sagebrush Tr SE, 87123
Phone #: (505) 235-2256 Fax #: _____ E-mail: mburak@comcast.net

Other Contact: R^2 Architectural Design, LLC Contact: Rob Rayner, AIA
Address: 12024 Paisano Ct NE, ABQ 87112
Phone #: (505) 321-3932 Fax #: _____ E-mail: _____

TYPE OF DEVELOPMENT : _____ PLAT (# of lots) _____ RESIDENCE _____ 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
____ 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
____ 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: May 25, 2023 By: Mark Burak

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED
DATE: 06/14/23
BY: Renée C. Brissette
HydroTrans # G14D101

THIS APPROVAL OF THESE PLANS/REPORT SHALL NOT BE CONSTRUED TO PERMIT VIOLATIONS OF ANY CITY ORDINANCE OR STATE LAW, AND SHALL NOT PREVENT THE CITY OF ALBUQUERQUE FROM REQUIRING CORRECTION OF ERRORS IN THE PLANS/REPORT, SPECIFICATIONS, OR CONSTRUCTIONS. SUCH APPROVED PLANS SHALL NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT AUTHORIZATION.

UPC: 101406049624342216
Owner: HENRY J BRUNER PROPERTIES LLC
Owner Address: 1606 SAN SAULO RD SW ALBUQUERQUE NM 87105-2730
Situs Address: 4016 2ND ST NW ALBUQUERQUE NM 87107
*Legal Description: * 004 A MONKBRIDGE REPL*
Acres: 0.1377

VICINITY MAP G-14

NOTES

Site Location - As shown by the Vicinity Map (Zone Atlas Map G-14), the 0.28-acre commercial two lot project site is located on the east side of Second Street NW between Mescalero Road and Headingly Avenue. At present, the site is mostly developed with metal buildings and sheds with a paved parking area adjacent to Second Street. This project consists of the construction of an additional 2,100 sf metal building near the southeast corner of the property. The site drains roughly from east to west across the paved driveway and discharges into Second Street. No offsite runoff impacts this site due to the proximity of the fully developed surrounding properties.

Project Scope - The purpose of this project is to estimate the impact of the proposed building on the overall site grading and drainage. The development of the site with the new building will provide an opportunity to improve the surrounding drainage around the existing buildings and also incorporate integrated water quality ponding areas to help reduce the impact to the current flood conditions within Second Street.

To control rainfall runoff throughout the project, the volumetric capacity of the site including the existing driveways and parking, along with the proposed building pad will need to be assessed. It is the intent of this analysis to illustrate that the entire 100-year runoff peak volume will be entirely controlled within the property limits of the subdivision. Calculations show that the two easterly water quality/ retention ponds within the site will hold the entire ten-day runoff volume at a depth of one to two feet within the rear area of the existing building and within the landscape area in front of the proposed building. To reduce the impact of the driveway runoff to Second Street, two small landscaped areas are proposed for the sides of the driveway. These landscaped areas are to be depressed about one foot to collect the runoff from the existing paved parking area. A new handicap parking space and an additional parking space are proposed on the existing pavement located in front of the proposed building.

Legal Description - Lots 4&5, Block A Monkbridge Addition, Albuquerque, New Mexico containing 0.28 acres. Address is 4012 and 4016 Second Street, NW.

Benchmark - Elevation is from 2010 Bernalillo County aerial topography and mapping. Basis of Bearing is NM State Plane Coordinates, Central Zone 1927 and runs along the back of curb on Second Street.

Hydrologic Methods - The process outlined in the City of Albuquerque Development Process Manual (DPM), Chapter 6 was used to quantify the peak flow rates and volumes throughout the project site. Due to the upstream surrounding developments, no offsite runoff will impact the project site. The calculation spreadsheet analyzes the fully developed conditions for the 100-year, 6-hour rainfall event, Precipitation Zone 2. This spreadsheet outlines the peak runoff and volume for each sub-basin for existing and fully developed conditions. For existing conditions, the property was assumed to consist of only Treatment C in the undeveloped areas and Treatment D for all other areas. Fully developed conditions assumed typically treatment C for the retention ponding areas and unpaved areas and treatment D for the impervious paved areas. The percentages are illustrated on the spreadsheet calculations.

The drainage basin map shows ten separate sub-basins A through K to assess peak flow rates at various points impacting the project site. The peak rate of runoff for the project under existing conditions was calculated as 1.0-cfs. Fully developed, the total runoff was estimated at 1.1-cfs. The runoff volume generated on the entire site east of the paved parking area is to be retained on the site. The impact to Second Street would be decreased to only the area within the existing paved parking adjacent to the street due to the on-site retention ponds.
Flood Zone - As shown by the FIRM, Panel 332G of 825 of the National Flood Insurance Program Flood Insurance Rate Maps (FIRM) for the City of Albuquerque, New Mexico, dated September 26, 2008, this site does not lie within a designated Flood Hazard Zone.

Existing Conditions – The project site consists of one 2,000 square foot metal building, a small shed and a storage container. One driveway/curb cut per parcel allows access onto the paved parking area from Second Street NW. Approximately one-third of the project is currently paved. The parking area slopes about 2.5 percent towards Second Street.

Proposed Grading & Storm Drainage- The existing pavement will remain in current conditions. The new building will be located as shown with a significant area between the building and pavement to be utilized for landscaping and water quality retention. The southern half of the proposed building will direct the gutters to drain to the west to discharge into the proposed ponding area. The area behind the existing metal building will be excavated approximately two feet to provide adequate retention volume to hold all of the existing building runoff along with the northern half of the proposed building. Additional grading along the north side of the existing building will help improve the on-site drainage of the site. A small channelized area on the north side of the building sloped at one percent will be able to carry the runoff impacting that location to the northern retention pond.

Any runoff overtopping the retention basins will overflow over the existing pavement area into Second Street right-of-way. The south retention pond is to be at least one foot deep with 5:1 side slopes and the northern retention pond will be two feet deep with 3:1 maximum side slopes and will have adequate capacity to retain the entire volume generated east of the paved parking within the site.

To reduce the current impact to Second Street from the existing paved parking area, two additional water quality ponding areas are to be installed on each side of the driveway entrance. These ponding areas are also to be landscaped. To salvage the existing pavement and also direct the runoff into the two ponds, an asphalt diversion hump is to be installed that will intercept the sheet flow from the paved area and divert it into the two ponds. The asphalt hump is to extend across the entire driveway as shown and is to be at least two inches high. The angle shown on the plan illustrates a one-half percent slope towards the ponds. The current slope is about 2.5 percent. The northern pond has the capacity of 70 cubic feet where subbasin "A" will generate 85 cubic feet. The southern side will only hold about 16 cubic feet while subbasin "B" generated 71 cubic feet. The excess will overtop back into Second Street.

90th Percentile Compensatory Volume – The first flush has been mitigated based on the area of the project site that is proposed to be impervious. This equates to a volume of 470 cubic feet. This storage has been provided on the plan within the retention areas. The maximum cumulative volume of the proposed south pond is over 240 cubic feet and the north pond is 950 cubic feet before overtopping onto Second Street NW.

Summary - The entire 0.28-acre site may be developed according to the proposed development plan without adversely impacting downstream structures. The proposed retention basins will limit the outfall to Second Street NW. Downstream impact will be reduced when compared to existing conditions.

MARK	DATE	BY	REVISION

DESIGNED BY: M.H.B.
DRAWN BY: T.D.S.
CHECKED BY:

MARK H. BURAK
STATE OF NEW MEXICO
NO. 10987
REGISTERED PROFESSIONAL ENGINEER
05/05/2023

Mark H. Burak, P.E.
1512 Sagebrush Trail SE
Albuquerque, New Mexico, 87123
(505) 235-2256
mburak@comcast.net

Civil Engineering Services
BURAK Consulting
Development and Design

BRUNER METAL BUILDING

GRADING & DRAINAGE PLAN

4012 Second Street NW

DRAWING NUMBER
C1

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED
DATE: 06/14/23
BY: Randy C. Brissette
HydroTrans # G14D101

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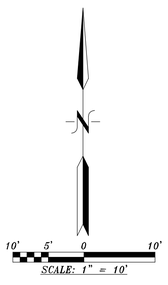
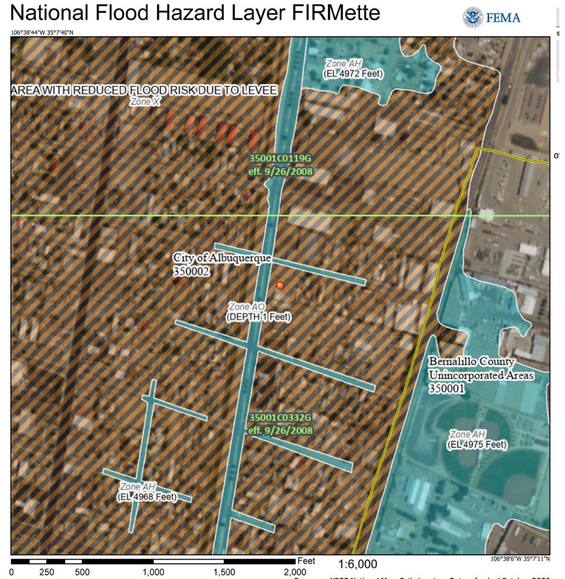


National Flood Hazard Layer FIRMette



Hydrologic Calculations - COA DPM Ch 6 (100-Year, 6-Hour Storm) — **4012 2ND ST NW** — **Burak Consulting**

		P60	P360	P1440	P4days	P10days
Precipitation Zone 2	(DPM Ch6 Table 6.2)	1.78	2.29	2.59	2.96	3.62
Excess Precipitation	(DPM Ch6 Table 6.7)	0.62 inches-A	0.8 inches-B	0.86 inches-C	0.95 inches-D	
Peak Discharge	(DPM Ch6 Table 6.8)	1.71 cfs/ac-A	2.36 cfs/ac-B	3.05 cfs/ac-C	4.34 cfs/ac-D	

		P60	P360	P1440	P4days	P10days
Precipitation Zone 2	(DPM Ch6 Table 6.2)	1.78	2.29	2.59	2.96	3.62
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Drainage Areas

	Land Treatments - Existing Conditions							Land Treatments - Fully Developed Conditions							
	A	Percent A	B	Percent B	C	Percent C	D	Percent D	Area (sf)	A	Percent A	B	Percent B	C	Percent C	D	Percent D	Area (sf)
Basin A	0.00	0%	0.00	0%	0.00	0%	0.02	100%	1,078	0.00	0%	0.00	0%	0.00	10%	0.02	90%	1,078
Basin B	0.00	0%	0.00	0%	0.00	0%	0.02	100%	910	0.00	0%	0.00	0%	0.00	10%	0.02	90%	910
Basin C	0.00	0%	0.00	0%	0.02	100%	0.00	0%	1,050	0.00	0%	0.00	0%	0.00	0%	0.02	100%	1,050
Basin D	0.00	0%	0.00	0%	0.02	100%	0.00	0%	520	0.00	0%	0.00	0%	0.01	100%	0.00	0%	535
Basin E	0.00	0%	0.00	0%	0.02	100%	0.00	0%	1,050	0.00	0%	0.00	0%	0.00	0%	0.02	100%	1,050
Basin F	0.00	0%	0.00	0%	0.02	100%	0.00	0%	865	0.00	0%	0.00	0%	0.00	0%	0.02	100%	865
Basin G	0.00	0%	0.00	0%	0.00	0%	0.02	100%	926	0.00	0%	0.00	0%	0.00	0%	0.02	100%	926
Basin H	0.00	0%	0.00	0%	0.00	0%	0.02	100%	926	0.00	0%	0.00	0%	0.00	0%	0.02	100%	926
Basin J	0.00	0%	0.00	0%	0.02	100%	0.00	0%	923	0.00	0%	0.00	0%	0.02	100%	0.00	0%	923
Basin K	0.00	0%	0.00	0%	0.02	100%	0.00	0%	745	0.00	0%	0.00	0%	0.02	100%	0.00	0%	745
									6,636.20 sf									

Discharge

	Peak Flow Rate - Existing Conditions				100 yr	Peak Flow Rate - Developed Conditions				100 yr
	A	B	C	D	Q (cfs)	A	B	C	D	Q (cfs)
Basin A	0.00	0.00	0.00	0.11	0.1	0.00	0.00	0.01	0.10	0.1
Basin B	0.00	0.00	0.00	0.09	0.1	0.00	0.00	0.01	0.08	0.1
Basin C	0.00	0.00	0.07	0.00	0.1	0.00	0.00	0.00	0.10	0.1
Basin D	0.00	0.00	0.04	0.00	0.0	0.00	0.00	0.04	0.00	0.0
Basin E	0.00	0.00	0.07	0.00	0.1	0.00	0.00	0.00	0.10	0.1
Basin F	0.00	0.00	0.06	0.00	0.1	0.00	0.00	0.00	0.09	0.1
Basin G	0.00	0.00	0.00	0.09	0.1	0.00	0.00	0.00	0.09	0.1
Basin H	0.00	0.00	0.00	0.09	0.1	0.00	0.00	0.00	0.09	0.1
Basin J	0.00	0.00	0.06	0.00	0.1	0.00	0.00	0.06	0.00	0.1
Basin K	0.00	0.00	0.05	0.00	0.1	0.00	0.00	0.05	0.00	0.1
					0.7					0.8

Volume

	Runoff Volume - Existing Conditions — Six Hour Storm Event				100 yr V (cu-ft)	Runoff Volume - Developed Conditions — Six Hour Storm Event				100 yr V (cu-ft)
Basin A	0	0	0	85	85	0	0	8	77	85
Basin B	0	0	0	72	72	0	0	7	65	71
Basin C	0	0	75	0	76	0	0	9	83	83
Basin D	0	0	38	0	38	0	0	38	0	38
Basin E	0	0	75	0	75	0	0	0	83	83
Basin F	0	0	62	0	62	0	0	0	68	68
Basin G	0	0	0	73	73	0	0	0	73	73
Basin H	0	0	0	73	73	0	0	0	73	73
Basin J	0	0	66	0	66	0	0	66	0	66
Basin K	0	0	53	0	53	0	0	53	0	53
					674					695

Volume

	Runoff Volume - Existing Conditions — Ten Day Storm Event	100 yr 10 day V (cu-ft)	Runoff Volume - Developed Conditions — Ten Day Storm Event		100 yr 10 day V (cu-ft)
Basin A		205			192
Basin B		173	W/Q Pond, N. Driveway		162
			W/Q Pond S. Driveway		0
Basin C		76			200
Basin D		38			38
			South Water Quality Pond		238
Basin E		76			200
Basin F		62			164
Basin G		176			176
Basin H		176			176
Basin J		66			66
Basin K		52			53
			North Water Quality Pond		495
		1,100	339 CuFt First Flush Retention		1,427

MARK	DATE	BY	REVISION

DESIGNED BY: M.H.B.
DRAWN BY: T.D.S.
CHECKED BY:

MARK H. BURAK
STATE OF NEW MEXICO
NO. 10987
PROFESSIONAL ENGINEER
05/05/2023

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Civil Engineering — BURAK Consulting — Land Development and Surveying

BRUNER METAL BUILDING

GRADING & DRAINAGE PLAN

4012 Second Street NW

DRAWING NUMBER
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2 OF 2