## CITY OF ALBUQUERQUE

Planning Department Alan Varela, Director



Mayor Timothy M. Keller

April 13, 2023

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

## Buner Metal Bldg – 2<sup>nd</sup> St. NW RE: **Grading and Drainage Plans** Engineer's Stamp Date: 04/04/23 Hydrology File: G14D101

Dear Mr. Burak:

Based upon the information provided in your submittal received 04/05/2023, the Grading & Drainage Plans are not approved for Building Permit and Grading Permit. The following comments need to be addressed for approval of the above referenced project:

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

1. For automotive repair and parts shops, per the DPM Section 6-12(D)(1) These land uses include shops that repair any portion of a vehicle (e.g. automotive body shops or general automotive repair) and retail automotive parts stores that have parking for customers. The exterior impervious area of these land uses shall drain to a surface stormwater quality facility that will remove pollutants from the stormwater prior to discharge into the street or drainage facility. Since the current site is an automotive repair shop, the all existing asphalt will have to be regraded. Please take another approach to this development with respect to the required SWQ ponds. An outfall pipe to the curb may be needed is the ponds are to be where you are showing them and SO-19 notes will have to be added.

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>.

Sincerely,

Renée C. Brissette

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



## City of Albuquerque

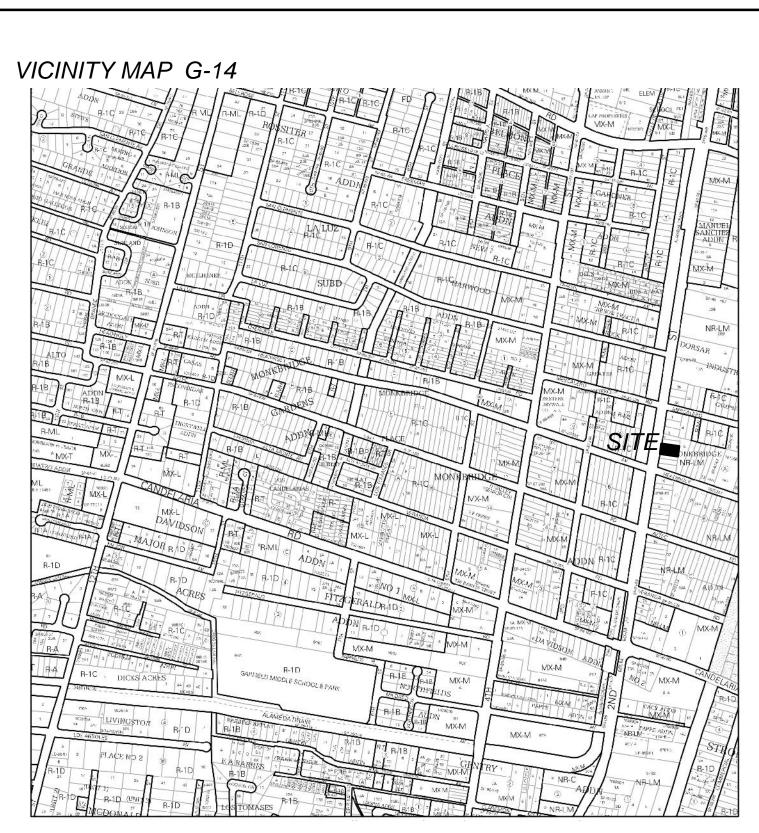
PlanningDepartment Development& Building ServicesDivision

DRAINAGE AND TRANSPORTATIONINFORMATION SHEET (REV 6/2018)

ProjectTitle: Bruner Metal Building	_Building Permit#:	Hydrology File#:				
DRB#:						
Legal Description: Lots 4 & 5, Monkbr						
City Address: 4012, 4016 Second						
Applicant Burak Consulting		Contact:Mark Burak, PE				
Address: 1512 Sagebrush Tr SE, 871						
Phone# <u>: (505) 235-2256</u>	_Fax#:	E-mail: <u>mburak@comcast.net</u>				
Other Contat:R² Architectural Design,Address:12024 Paisano Ct NE, APhone#:(505) 321-3932	BQ 87112	Contact: Rob Rayner, AIA				
TYPE OF DEVELOPMENT : PLAT	# of lots) RESIDENCE	DRB SITE ADMIN SITE				
IS THIS A RESUBMITTAL? Yes	<u>X</u> No					
DEPARTMENT TRANSPORTATION		Ξ				
Check all that Apply:	TYPE OF APPRO	VAL/ACCEPTANCE SOUGHT:				
TYPE OF SUBMITTAL:   ENGINEER/ARCHITECT CERTIFICATION   PAD CERTIFICATION   CONCEPTUALG & D PLAN    X  GRADING PLAN   DRAINAGE REPORT   DRAINAGE MASTER PLAN   FLOODPLAIN DEVELOPMENT PERMIT /   ELEVATION CERTIFICATE   CLOMR/LOMR   TRAFFIC CIRCULATION LAYOUT (TCL)   TRAFFIC IMPACT STUDY (TIS)   STREET LIGHT LAYOUT   OTHER (SPECIFY)   PREDESIGNMEETING?	CERTIFICAT	RMIT APPROVAL E OFOCCUPANCY Y PLAT APPROVAL DR SUB'D APPROVAL DR BLDG. PERMIT APPROVAL APPROVAL EOF FINANCIAL GUARANTEE N PERMIT APPROVAL RMIT APPROVAL MIT APPROVAL AD CERTIFICATION R APPROVAL				
DATE SUBMITTED:April 5, 2023	By: Mark Burak					
COA STAFF:	ELECTRONIC SUBMITTAL RECEIVED:					

FEE PAID: **\$0** 





## 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 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. 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.

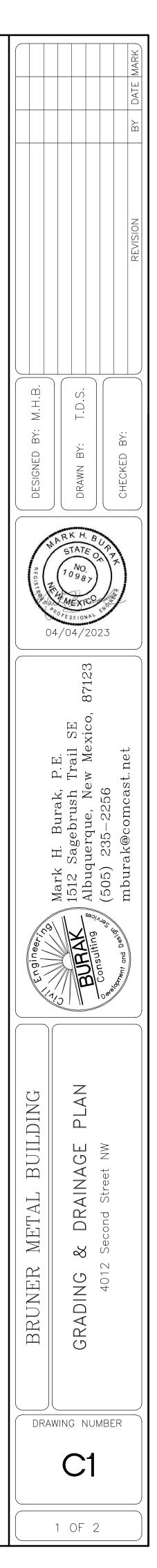
**Existing Conditions** – The project site consists of one 2,000 square foot metal building, a small shed and a storage container. One driveway/curb cut per parcel allows access onto the paved parking area from Second Street NW. Approximately one-third of the project is currently paved.

**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.

**90<sup>th</sup> 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.





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