# CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director



March 26, 2020

Jeremy Shell Respec 5971 Jefferson St. NE Albuquerque, NM 87109

**RE:** US Eagle FCU – Juan Tabo

1955 Juan Tabo NE

Grading and Drainage Plan Stamp Date: 2/24/20

**Hydrology File: H21D029** 

Dear Mr. Shell:

PO Box 1293

Based on the re-submittal received on 3/12/20, this project is approved for Building Permit. 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..

Albuquerque

Prior to Certificate of Occupancy (For Information):

NM 87103

1. Engineer's Certification, per the DPM Chapter 22.7: *Engineer's Certification Checklist For Non-Subdivision* is required.

www.cabq.gov

2. City acceptance and close-out of the public Work Order will be required, unless a financial guarantee has been posted.

If you have any questions, please contact me at 924-3986 or earmijo@cabq.gov.

Sincerely,

Ernest Armijo, P.E.

Principal Engineer, Planning Dept. Development Review Services



# City of Albuquerque

## Planning Department

#### Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

Project Title:	Building P	ermit #: Hydrology File #:
		Work Order#:
Legal Description:		
City Address:		
Applicant:		Contact:
Address:		
		E-mail:
Owner:		Contact:
Address:		
		E-mail:
TYPE OF SUBMITTAL: PLA	T (# OF LOTS)	RESIDENCE DRB SITE ADMIN SITE
IS THIS A RESUBMITTAL?:	Yes	No
DEPARTMENT: TRAFFIC/ T	RANSPORTATION _	HYDROLOGY/ DRAINAGE
Check all that Apply:  TYPE OF SUBMITTAL:  ENGINEER/ARCHITECT CERT PAD CERTIFICATION  CONCEPTUAL G & D PLAN  GRADING PLAN  DRAINAGE MASTER PLAN  DRAINAGE REPORT  FLOODPLAIN DEVELOPMENT  ELEVATION CERTIFICATE  CLOMR/LOMR  TRAFFIC CIRCULATION LAY  TRAFFIC IMPACT STUDY (TI  OTHER (SPECIFY)  PRE-DESIGN MEETING?	Γ PERMIT APPLIC OUT (TCL) S)	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 SURMITTED:	By:	

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED:

FEE PAID:\_\_\_\_\_



#### TREASURY DIVISION DAILY DEPOSIT

Transmittals for: PROJECTS Only

	J-24 Di		
Dates	3/23/2020	Office: ANNEX	
Station I		Cashier: E41709	
	11201	Transf 12	
EPOSIT		Activity 1D7547210	
Account:	461615	Project ID24_MS4	
Dept ID:			
Alloc Amt	1 \$37824		

# Payment-in-Lieu for Storm Water Quality Volume Requirement

CASH COUNT	AMOUNT	ACCOUNT NUMBER	FUND NUMBER	BUSINESS UNIT	PROJECT ID	ACTIVITY ID	AMOUNT
TOTAL CHECKS	\$ 3824	461615	305	PCDMD	24_MS4	7547210	\$ 3824
TOTAL AMOUNT						TOTAL DEPOSIT	\$3824

Hydrology#	H21D029 Payment In-Lieu For Storm Water Quality Volume Requirement	Name:	US Eagle FCU – Juan Tabo	
Address/Leg	al Description: Lot 14-G, Block 95-A, Snow F	Heights		
DEPARTM	ENT NAME: Planning Department/Developm	nent Review	v Services, Hydrology	
PREPAREI	D BYErnest Armijo	PHONE	505-924-3986	
BUSINESS	DATE 3/20/2020			
DUAL VER	IFICATION OF DEPOSIT EMPLOYEE SIGNA	TURE		
AND BY	EMPLOYEE SIGNATURE			
REMITTER:				
AMOUNT:			-	
BANK:				
CHECK#:	DATE ON CHECK:		American de la compansión de la compansi	

The Payment-in-Lieu can be paid at the Plaza del Sol Treasury, 600 2<sup>nd</sup> St. NW. **Bring three copies of this invoice to the Treasury** and provide a copy of the receipt to Hydrology, Suite 201, 600 2<sup>nd</sup> St. NW, or e-mail with the Hydrology submittal to PLNDRS@cabq.gov.

## Hydrology Calculations

The following calcualtions are based on Albuquerque's Development Process Manual, Seciton 22.2

## Runoff Rate:

## Treatment Type Areas

Subbasin	Area <sub>A</sub> (ac)	Area <sub>B</sub> (ac)	Area <sub>C</sub> (ac)	Area <sub>D</sub> (ac)	Total (ac)
EC1	0.00	0.02	0.02	0.57	0.60
EC2	0.00	0.00	0.10	0.00	0.10
DC1	0.00	0.04	0.04	0.51	0.59
DC2	0.00	0.00	0.12	0.00	0.12

## Peak Discharge values based on Zone 4 from Table A-9

 $Q_A = 2.20 \text{ cfs/ac}$   $Q_B = 2.92 \text{ cfs/ac}$   $Q_C = 3.73 \text{ cfs/ac}$   $Q_D = 5.25 \text{ cfs/ac}$ 

## Peak Discharge calculation for a 100-yr, 24-hr storm event from equation A-10

Subbasin	Discharge (cfs)
EC1	3.1
EC2	0.4
Total EC	3.5
DC1	2.9
DC2	0.4
Total DC	3.4
	EC2 Total EC DC1 DC2

## Water Quality:

Total

R	equired Water Qualit	y volume for first flush o
	Subbasin	Volume (cu. ft.)
	DC1	478
	DC2	0

(Fee-in-Lieu = \$5,000)

#### **KEYED NOTES**

I.D.# DESCRIPTION

PROPOSED MODIFIED TYPE D INLET. SEE SHEET C-500, DETAIL 13.

#### BACKGROUND

LOT 14-G, BLOCK 95-A OF SNOW HEIGHTS IS APPROXIMATELY 0.7 ACRES IN THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO. THE PROPERTY IS LOCATED AT THE SOUTHWEST CORNER OF THE JUAN TABO BOULEVARD AND BRENTWOOD HILLS BOULEVARD INTERSECTION. THE SITE WAS PREVIOUSLY DEVELOPED AS A SMALL RESTAURANT BUILDING WITH A PARKING LOT. THE BUILDING WAS RECENTLY DEMOLISHED. THE PROPOSED PROJECT IS A US EAGLE FEDERAL CREDIT UNION. THE EXISTING PARKING LOT WILL BE DEMOLISHED. 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) SECTION 22.2 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 0.26". ALL HYDROLOGIC AND HYDRAULIC CALCULATIONS CAN BE FOUND ON THIS SHEET.

#### **EXISTING CONDITIONS**

THE SITE, IN GENERAL, SLOPES FROM SOUTHEAST TO NORTHWEST AT VARYING SLOPES FROM 3% - 8%. STORM WATER RUNOFF GENERATED BY THE EXISTING BUILDING AND PARKING AREA OF LOT 14-G FREELY DISCHARGES INTO BRENTWOOD HILLS BOULEVARD THROUGH THE EXISTING DRIVEWAY LOCATED NEAR THE NORTHWEST CORNER OF THE PROPERTY. A PORTION OF THE WESTERN SIDE OF THE SITE IS SLOPED TO MATCH GRADE AT THE PUBLIC ALLEY ALONG THE PROPERTY'S WESTERN BOUNDARY. THIS SLOPED LANDSCAPE AREA SHEET DRAINS INTO THE ALLEY. THE SITE RECEIVES A SMALL AMOUNT OF OFFSITE FLOWS FROM LOT 14-F, THE NEIGHBORING PROPERTY TO THE SOUTH. THE EXISTING SITE HAS BEEN SPLIT INTO TWO SUB-BASINS.

SUB-BASIN EC1 IS 0.6 ACRES CONSISTING OF THE EXISTING BUILDING AND PARKING AREA. THIS SUB-BASIN GENERATES 3.1 CFS AND FLOWS IN THE PARKING AREA TOWARD THE NORTHWEST CORNER OF THE PROPERTY WHERE WATER FREELY DISCHARGES INTO BRENTWOOD HILLS BOULEVARD.

SUB-BASIN EC2 IS 0.1 ACRES AND GENERATES 0.4 CFS. THIS SUB-BASIN CONSISTS OF THE SLOPED AREA ON THE WEST SIDE OF THE PROPERTY. RUNOFF SHEET FLOWS INTO THE PUBLIC ALLEY ALONG THE SITES WESTERN BOUNDARY. WATER IN THE ALLEY FLOWS NORTH AND ALSO DISCHARGES INTO BRENTWOOD HILLS BOULEVARD.

#### DEVELOPED CONDITIONS

THE DRAINAGE INTENTION OF THE DEVELOPED CONDITIONS IS TO MATCH THE EXISTING DRAINAGE PATTERN. THE SITE HAS BEEN SPLIT INTO TWO DEVELOPED CONDITIONS SUB-BASINS.

SUB-BASIN DC1 IS 0.59 ACRES CONSISTING OF THE PROPOSED BUILDING AND PARKING AREA. THIS SUB-BASIN GENERATES 2.9 CFS. RUNOFF FROM THE ROOF IS COLLECTED IN A STORM DRAIN SYSTEM INTERNAL TO THE BUILDING. THIS STORM DRAIN DISCHARGES TO A MODIFIED TYPE "D" INLET IN THE PARKING LOT THAT WILL ACT AS BOTH A BUBBLER AND A FRENCH DRAIN. SEE DETAIL ON SHEET C-500. RUNOFF FROM LARGER STORM EVENTS WILL BUBBLE UP THROUGH THE INLET AND INTO THE PARKING AREA. WATER THAT REMAINS IN THE INLET WILL INFILTRATE INTO THE GROUND THROUGH THE BOTTOM OF THE MODIFIED INLET. SIMILAR TO SUB-BASIN EC1, FLOWS FROM THE PARKING LOT ARE ROUTED THROUGH THE PARKING AREA TOWARD THE NORTHWEST CORNER OF THE PROPERTY. FROM THERE, RUNOFF FLOWS OUT THE EXISTING DRIVEWAY INTO BRENTWOOD HILLS BOULEVARD.

SUB-BASIN DC2 IS 0.12 ACRES AND GENERATES 0.4 CFS. THIS SUB-BASIN CONSISTS OF THE SLOPED LANDSCAPE AREA ON THE WESTSIDE OF THE PROPERTY. THIS SUB-BASIN WILL MATCH THE EXISTING DRAINAGE PATTERN AND SHEET FLOW INTO THE EXISTING PUBLIC ALLEY.

THE WATER QUALITY TABLE AT THE BOTTOM LEFT CORNER OF 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 478 CUBIC FEET. THEREFORE, THE PAYMENT AMOUNT IS 478 CF X \$8/CF = \$3,824.

## BENCH MARKS

 LACS MONUMENT "15-H22" HAVING AN ELEVATION OF 5615.532'. (NAVD 1988). US SURVEY FEET.

## SYMBOL LEGEND



OF 0.34"

100 YEAR STORM, CFS

BASIN INFORMATION

REQUIRED WATER QUALITY

VOLUME FOR FIRST FLUSH

	EXISTING SUB-BASIN BOUNDARY
	PROPOSED SUB-BASIN BOUNDARY
5610 ———	EXISTING MAJOR CONTOUR
- 5612	EXISTING MINOR CONTOUR
	PROPERTY LINE
•~	DIRECTION OF DRAINAGE FLOW



PROPOSED MODIFIED TYPE

D INLET

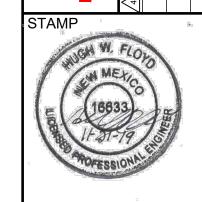
MF SS

REVISION

DESIGNED A
DRAWN D
CHECKED S

RESPEC 5971 Jefferson Street Suite 1 Albuquerque, New Mexico 871 Water and Natural Resources respec.com 505.253.9718 REFUSE ENCLOSURE F







FCU JUAN TABO

PROJECT NAME:

US EAGLE F

DRAINAGE PLAN

BUILDING PERMIT

SHEET NUMBER:

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