

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

May 24, 2024

David Thompson, PE
Thompson Engineering Consultants, Inc.
PO Box 65760
Albuquerque, NM 87193

RE: Stripe Burritos
2781 57th Street NW
Permanent C.O. – Accepted
Engineer's Certification Date: 05/22/24
Engineer's Stamp Date: 11/08/22
Hydrology File: H11D073

Dear Mr. Thompson:

PO Box 1293

Based on the Certification received 05/24/2024 and site visit on 05/24/2024, this letter serves as a “green tag” from Hydrology Section for a Permanent Certificate of Occupancy to be issued by the Building and Safety Division.

Albuquerque

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

NM 87103

Sincerely,

www.cabq.gov

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

DRAINAGE PLAN:

LEGAL DESCRIPTION: TRACT C-1-B, ALBUQUERQUE WEST

SITE AREA: 0.6464 ACRES

BENCHMARK: ACS BM 19-H11, ELEV = 5107.965, NAVD 1988

FLOOD HAZARD STATEMENT: F.E.M.A. FLOODWAY BOUNDARY AND FLOODWAY MAP DATED NOVEMBER 4, 2016 (PANEL NO. 35001C0327J) 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 1 SO THE 100-YEAR, 6-HOUR STORM EVENT IS 2.17 INCHES. THE SITE IS LOCATED JUST SOUTH OF THE INTERSECTION OF QUAIL AND 57TH STREET NW. CURRENTLY THE SITE DRAINS FROM WEST TO EAST TO 57TH STREET. THE EXISTING PEAK RUNOFF FROM THE SITE UNDER EXISTING CONDITIONS IS 1.88 CFS DURING A 100-YEAR, 6-HOUR STORM. THERE ARE NO OFF-SITE FLOWS THAT REACH THE PROPERTY.

DEVELOPED DRAINAGE CONDITIONS:

THIS PROJECT INVOLVES THE CONSTRUCTION OF A STRIPES BURRITOS WITH PARKING AND LANDSCAPING. THE SITE HAS BEEN DIVIDED INTO FIVE DRAINAGE BASINS TO FOLLOW THE WATER QUALITY PONDS. BASIN A INCLUDES THE NORTHWEST PORTION OF THE SITE AND THE BUILDING. BASIN A DRAINS TO A WATER QUALITY POND IN THE LANDSCAPED AREA NORTH AND WEST OF THE BUILDING WITH A VOLUME OF 320 CF. BASIN B INCLUDES THE SOUTHWEST PART OF THE SITE. BASIN B DRAINS TO A WATER QUALITY POND WITH A VOLUME OF 106 CF. BASIN C INCLUDES THE SOUTHEAST PART OF THE SITE. BASIN C DRAINS TO A WATER QUALITY POND WITH A VOLUME OF 363 CF. THE BASIN C WATER QUALITY POND DRAINS THROUGH A 24-INCH SIDEWALK CULVERT TO 57TH STREET. BASIN D INCLUDES THE AREA JUST EAST OF THE BUILDING. BASIN D DRAINS TO A WATER QUALITY POND WITH A VOLUME OF 30 CF. AND BASIN E INCLUDES THE NORTHEAST PART OF THE SITE. BASIN E DRAINS DIRECTLY TO 57TH STREET. THE WATER QUALITY POND IN BASIN A INCLUDES THE ADDITIONAL WATER QUALITY VOLUME OF 80 CF FROM BASIN E. BASINS A, B, C, AND D ALL DRAIN TO THE WATER QUALITY POND AT THE SOUTHEAST CORNER OF THE SITE AND TO 57TH STREET VIA A 24-INCH SIDEWALK CULVERT.

BASIN A WATER QUALITY VOLUME = $(0.42\text{IN}/12\text{IN}/\text{FT}) \times ((0.653 \times .2401)) \times 43,560\text{SF}/\text{AC}) = 240\text{ CF}$ REQUIRED, 320 CF PROVIDED

BASIN B WATER QUALITY VOLUME = $(0.42\text{IN}/12\text{IN}/\text{FT}) \times ((0.91 \times .0762)) \times 43,560\text{SF}/\text{AC}) = 106\text{ CF}$ REQUIRED, 106 CF PROVIDED

BASIN C WATER QUALITY VOLUME = $(0.42\text{IN}/12\text{IN}/\text{FT}) \times ((0.963 \times .2474)) \times 43,560\text{SF}/\text{AC}) = 363\text{ CF}$ REQUIRED, 363 CF PROVIDED

BASIN D WATER QUALITY VOLUME = $(0.42\text{IN}/12\text{IN}/\text{FT}) \times ((0.705 \times .0267)) \times 43,560\text{SF}/\text{AC}) = 29\text{ CF}$ REQUIRED, 30 CF PROVIDED

BASIN E WATER QUALITY VOLUME = $(0.42\text{IN}/12\text{IN}/\text{FT}) \times ((0.922 \times .0560)) \times 43,560\text{SF}/\text{AC}) = 79\text{ CF}$ REQUIRED, 0 CF PROVIDED. THE DEVELOPER WILL COMPLETE A WAIVER APPLICATION AND PROVIDE TO THE CITY A PAYMENT-IN-LIEU OF \$632.00, WHICH IS \$8 PER CF FOR THE FIRST FLUSH VOLUME OF 79 CF.

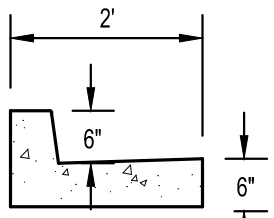
SIDEWALK CULVERT CAPACITY, WEIR EQUATION = $(2.7) \times (2\text{FT}) \times (7\text{IN}/12\text{IN}/\text{FT})^{1.5} = 2.4\text{ CFS}$

REV. 01/22/21

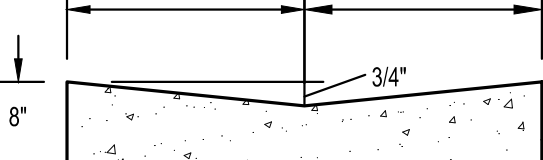
Private Drainage Facilities within City Right-of-Way
Notice to Contractor
(Special Order 19 ~ "SO-19")

- Build sidewalk culvert per COA STD DWG 2236. Work is permitted and inspected by DMD Construction Services Division.
- An excavation permit will be required before beginning any work within City Right-Of-Way.
- 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.
- Prior to any excavation, the contractor must contact New Mexico One Call, dial "811" [or (505) 260-1990] for the location of existing utilities.
- 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.
- Backfill compaction shall be 95%.
- Maintenance of the facility shall be the responsibility of the owner of the property being served.
- Work on arterial streets may be required on a 24-hour basis.
- For excavation and barricading inspections, contact DMD Construction Services Division.

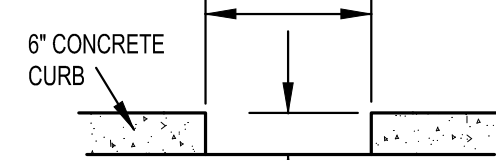
WATER QUALITY POND DATA						
POND	WATER QUALITY VOLUME (CF)	BOTTOM ELEVATION	TOP ELEVATION	INLET ELEVATION	OUTLET ELEVATION	SWQV ELEVATION
A	240	5106.00	5106.90	5107.13	5106.90	5106.90
B	106	5106.00	5106.72	5106.82	5106.72	5106.72
C	363	5104.00	5105.40	5106.00	5105.40	5105.40
D	30	5106.00	5106.70	5107.40	5106.70	5106.70



6" CONCRETE CURB
NTS



2" CONCRETE SWALE
NTS



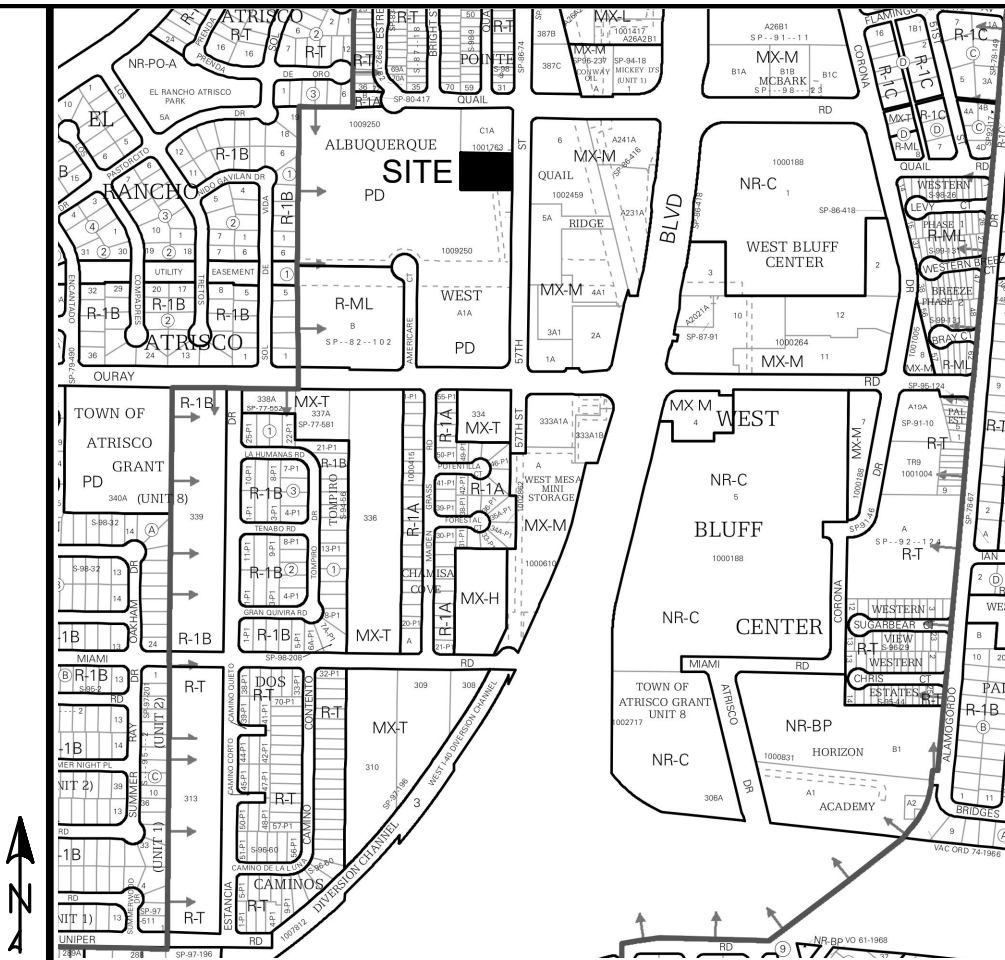
2" CURB CUT
NTS

100-YEAR HYDROLOGIC CALCULATIONS

BASIN #	AREA (acre)	LAND TREATMENT				WEIGHTED E (in)	100-YEAR PRECIPITATION					Q (cfs)
		A (%)	B (%)	C (%)	D (%)		V (6-hr) (acre-ft)	V (6-hr) (cu-ft)	V(24-hr) (acre-ft)	V(24-hr) (cu-ft)		
EXISTING CONDITIONS												
A	0.2401	0.00	0.00	100.00	0.00	0.95	0.02	828	0.02	828	0.69	
B	0.0762	0.00	0.00	100.00	0.00	0.95	0.01	263	0.01	263	0.22	
C	0.2474	0.00	0.00	100.00	0.00	0.95	0.02	853	0.02	853	0.71	
D	0.0267	0.00	0.00	100.00	0.00	0.95	0.00	92	0.00	92	0.08	
E	0.0560	0.00	0.00	57.50	42.50	1.50	0.01	305	0.01	332	0.19	
TOTAL RUNOFF	0.6464						0.05	2,341	0.05	2,368	1.88	
INTERIM DEVELOPMENT CONDITIONS												
A	0.2401	0.00	17.30	17.40	65.30	1.75	0.04	1,529	0.04	1,711	0.86	
B	0.0762	0.00	4.50	4.50	91.00	2.11	0.01	585	0.02	665	0.30	
C	0.2474	0.00	1.80	1.90	96.30	2.19	0.05	1,965	0.05	2,242	1.00	
D	0.0267	0.00	14.70	14.80	70.50	1.83	0.00	177	0.00	199	0.10	
E	0.0560	0.00	3.90	3.90	92.20	2.13	0.01	433	0.01	493	0.22	
TOTAL RUNOFF	0.6464						0.11	4,689	0.12	5,310	2.48	
EXCESS PRECIP.		0.55	0.73	0.95	2.24	E _i (in)						
PEAK DISCHARGE		1.54	2.16	2.87	4.12	Q _{PI} (cfs)						
ZONE = 1												
WEIGHTED E (in) = (E _A)(%A) + (E _B)(%B) + (E _C)(%C) + (E _D)(%D)							P _{6HR} (in.) = 2.17					
V _{6HR} (acre-ft) = (WEIGHTED E)(AREA)/12							P _{24HR} (in.) = 2.49					
V _{10DAY} (acre-ft) = V _{6HR} + (A _D)(P _{10DAY} - P _{6HR})/12							P _{10DAY} (in.) = 3.90					
Q (cfs) = (Q _{PA})(A _A) + (Q _{PB})(A _B) + (Q _{PC})(A _C) + (Q _{PD})(A _D)												

CAUTION:

EXISTING UTILITIES ARE NOT SHOWN. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATION TO DETERMINE THE ACTUAL LOCATION OF UTILITIES & OTHER IMPROVEMENTS.



ZONE ATLAS: H-11-Z

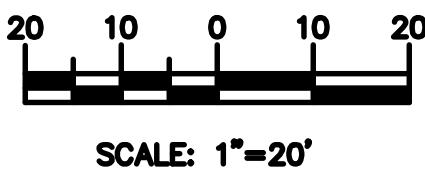
LEGEND

FF=5100.50	FINISHED PAD SITE ELEVATION
06.50	SPOT ELEVATIONS
XG=5106.22	EXIST. SPOT ELEVATION
---	EXIST. MAJOR CONTOURS
---	EXIST. MINOR CONTOURS
---	FLOW DIRECTION
---	PROPOSED SWALE
---	BOUNDARY
---	PROPOSED CONCRETE
---	PROPOSED PONDING
---	PROPOSED BASIN BOUNDARY
(A)	DRAINAGE BASIN NUMBER

FINISHED PAD CERTIFICATION:
I, DAVID B. THOMPSON, NMPE 9677, OF THE FIRM THOMPSON ENGINEERING CONSULTANTS, INC., HEREBY CERTIFY THAT FINISHED PAD ELEVATIONS ARE IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 11/8/22. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY BRAIN MARTINEZ, NMPS 18374, OF THE FIRM CARTESIAN SURVEYS, INC. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON MAY 21, 2024 AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.
THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE FINISHED PAD ELEVATION ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

DAVID B. THOMPSON, NMPE 9677

5-22-24
DATE



2781 57th Street NW Albuquerque, New Mexico 87120		GRADING & DRAINAGE PLAN	
CITY/COUNTY REVIEW		FOR CITY/COUNTY USE ONLY	
DEPARTMENT	DATE	SIGN-OFF	
WASTEWATER MGMT. DIV.			
WATER SERVICES			
SUBDIVISION ENG.			
STREETS			
TRAFFIC			
SHEET No.		C-1	