

# CITY OF ALBUQUERQUE

Planning Department  
Alan Varela, Interim Director



Mayor Timothy M. Keller

October 29, 2021

Ronald Bohannon, P.E.  
Tierra West, LLC  
5571 Midway Park Place NE  
Albuquerque, NM 87109

**RE: Encompass Health Parking Lot Expansion  
7000 Jefferson St NE  
Grading and Drainage Plan  
Engineer's Stamp Date: 08/10/2010  
Hydrology File: D17D061C1**

Dear Mr. Bohannon:

PO Box 1293  
Based upon the information provided in your submittal received 09/08/2021, the Grading & Drainage Plan is approved for Grading Permit and Paving Permit. Once the grading and paving of the project is complete, please provide an as-built for Hydrology's records.

Albuquerque  
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](mailto:jhughes@cabq.gov), 924-3420) 14 days prior to any earth disturbance.

NM 87103

www.cabq.gov  
If you have any questions, please contact me at 924-3995 or [rbrissette@cabq.gov](mailto: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:** Encompass Health Parking Lot Expansion **Building Permit #:** \_\_\_\_\_ **Hydrology File #:** \_\_\_\_\_

**DRB#:** \_\_\_\_\_ **EPC#:** \_\_\_\_\_ **Work Order#:** \_\_\_\_\_

**Legal Description:** A Portion of Tract 4B-1 Correction Plat of Tract 4B-1 and 4B-2

**City Address:** 7000 Jefferson

**Applicant:** Tierra West, LLC **Contact:** J. Miller

**Address:** 5571 Midway Park Place NE Albuquerque NM 87109

**Phone#:** 505-858-3100 **Fax#:** 505-858-1118 **E-mail:** jmillers@tierrawestllc.com

**Other Contact:** \_\_\_\_\_ **Contact:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Phone#:** \_\_\_\_\_ **Fax#:** \_\_\_\_\_ **E-mail:** \_\_\_\_\_

**TYPE OF DEVELOPMENT:** \_\_\_\_\_ PLAT (# of lots) \_\_\_\_\_ RESIDENCE \_\_\_\_\_ DRB SITE ☒ ADMIN SITE

IS THIS A RESUBMITTAL? \_\_\_\_\_ Yes ☒ No

**DEPARTMENT** \_\_\_\_\_ TRANSPORTATION ☒ HYDROLOGY/DRAINAGE

Check all that Apply:

### TYPE OF SUBMITTAL:

- ☐ ENGINEER/ARCHITECT CERTIFICATION
- ☐ PAD CERTIFICATION
- ☐ CONCEPTUAL G & D PLAN
- ☒ 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) Paving
- ☐ PRE-DESIGN MEETING?

### 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 SUBMITTED:** 8/13/2021 **By:** Jay Miller

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: \_\_\_\_\_

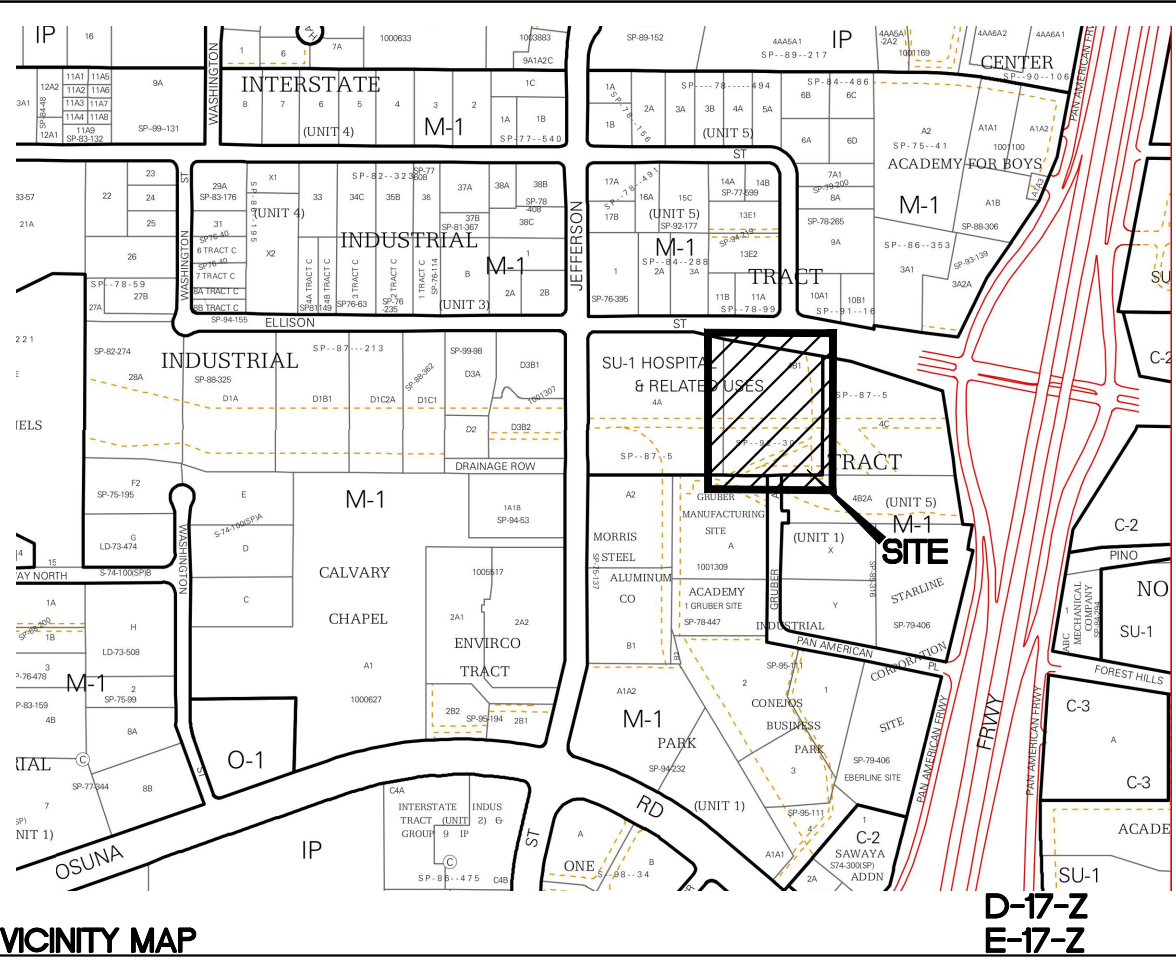
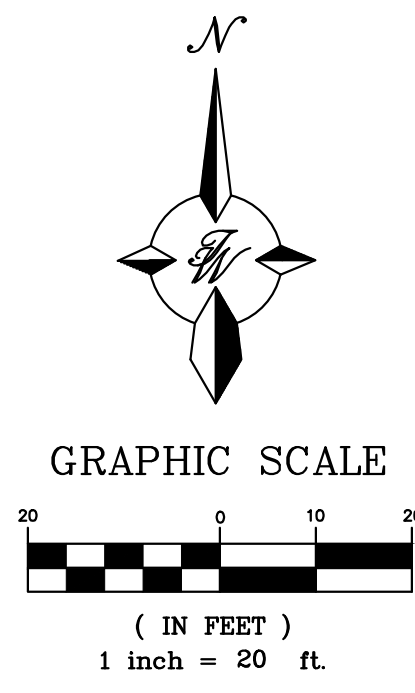
FEE PAID: \_\_\_\_\_



- KEYED NOTES
- 1 6" CURB AND GUTTER
  - 2 ASPHALT PAVING (SEE GEOTECH REPORT)
  - 3 CATCH BASIN SEE CALL OUT DETAIL THIS SHEET
  - 4 MAINTAIN EXISTING LANDSCAPING
  - 5 MATCH EXISTING ASPHALT PAVEMENT, CURB AND GUTTER



**CAUTION**  
ALL EXISTING UTILITIES SHOWN WERE OBTAINED FROM RESEARCH, AS-BUILTS, SURVEYS OR INFORMATION PROVIDED BY OTHERS. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO AND INCLUDING ANY EXCAVATION, TO DETERMINE THE ACTUAL LOCATION OF UTILITIES AND OTHER IMPROVEMENTS, PRIOR TO STARTING THE WORK. ANY CHANGES FROM THIS PLAN SHALL BE COORDINATED WITH AND APPROVED BY THE ENGINEER.

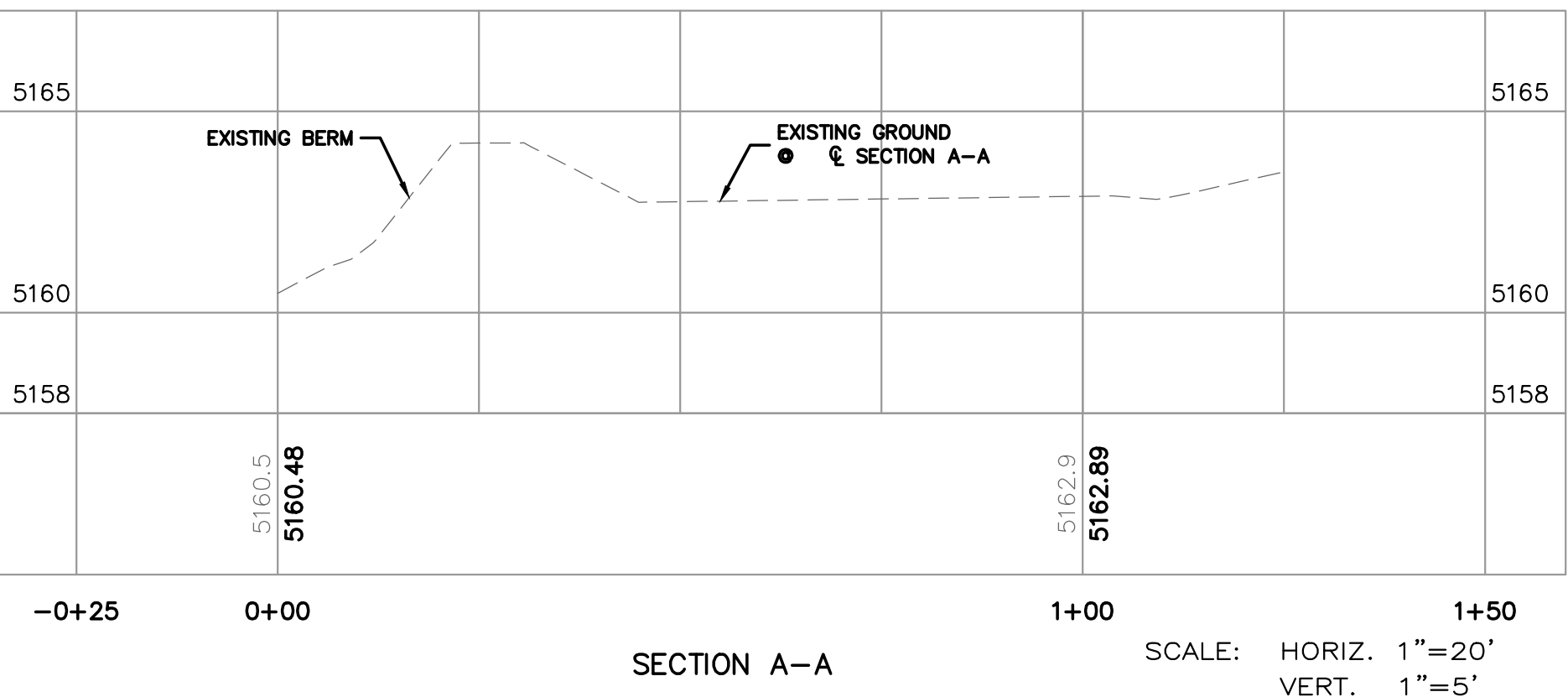


**LEGAL DESCRIPTION:**  
CORRECTION PLAT OF TRACT 4B-1 AND 4B-2 (04/07/1992, VOL. 92-C, FOLIO 50)  
ELEVATION DATUM IS BASED ON NAVD 1988 FROM AGRS MONUMENT "12\_E17", PUBLISHED ELEVATION (FEET) = 5118.702

- LEGEND**
- CURB & GUTTER
  - BOUNDARY LINE
  - EASEMENT
  - RIGHT-OF-WAY
  - BUILDING
  - SIDEWALK
  - 5010 CONTOUR MAJOR
  - 5011 CONTOUR MINOR
  - x 5048.25
  - FLOW ARROW
  - EXISTING CURB & GUTTER
  - EXISTING BOUNDARY LINE
  - 5010 EXISTING CONTOUR MAJOR
  - EXISTING CONTOUR MINOR
  - x 5048.25
  - EXISTING SPOT ELEVATION
  - EXISTING LIGHT STANDARD

City of Albuquerque  
Planning Department  
Development Review Services  
**HYDROLOGY SECTION**  
**APPROVED**  
DATE: 10/29/21  
BY: *Ronald R. Bohannan*  
HydroTeam 6  
D170061C1

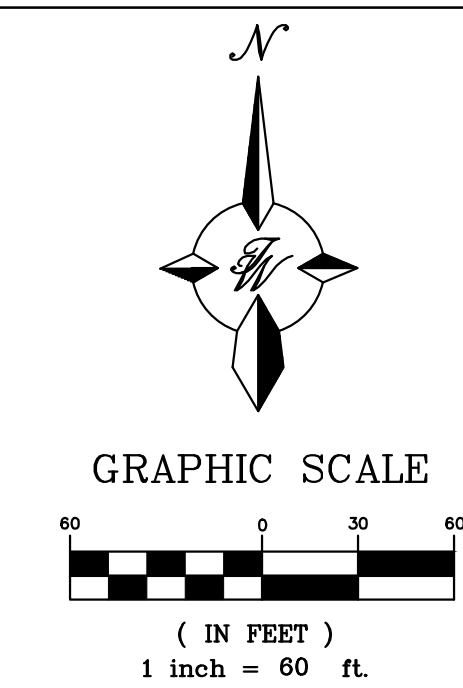
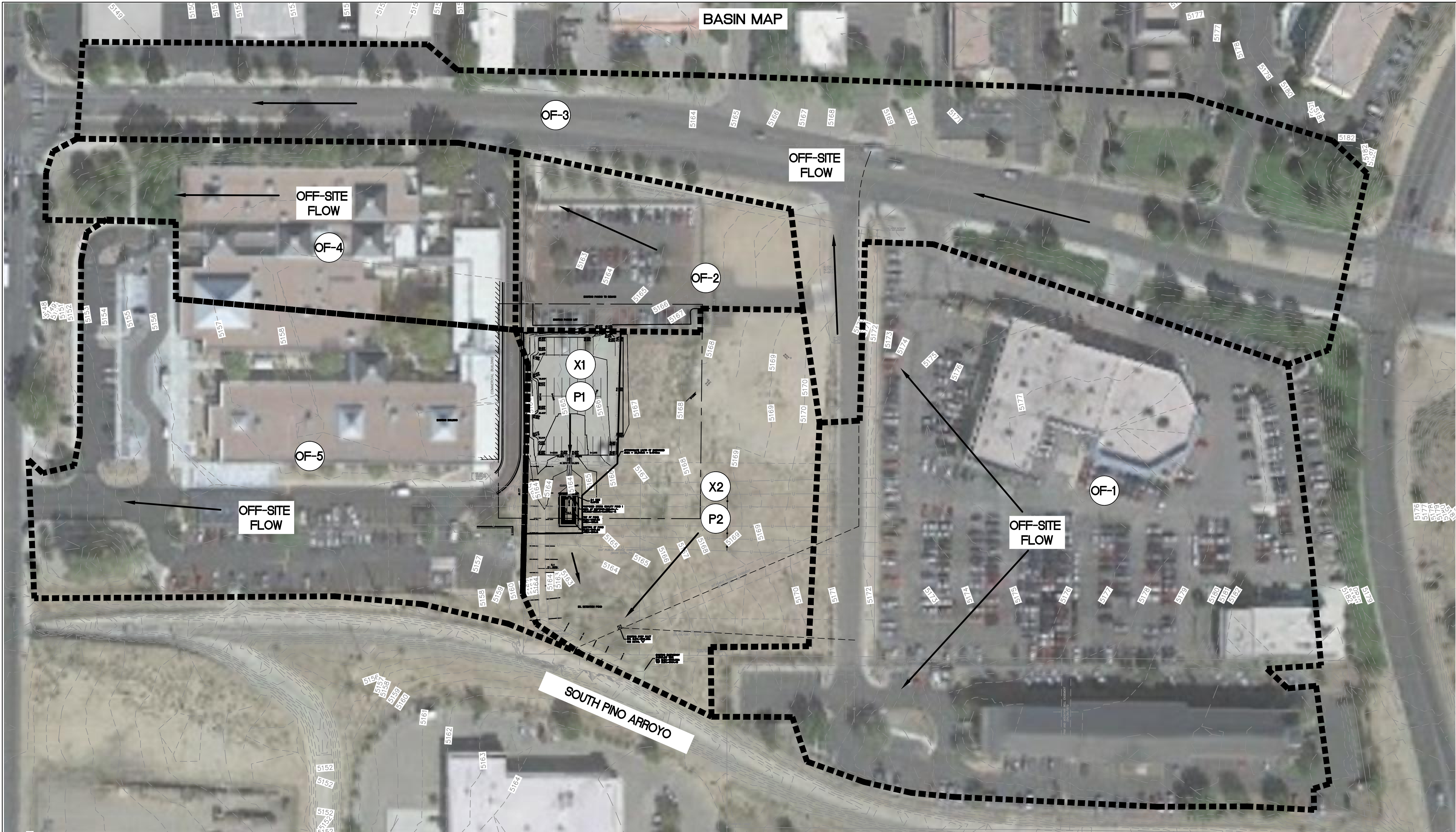
THE APPROVAL OF THESE PLANS DOES NOT BE  
CONSIDERED TO BE A GUARANTEE OF THE  
ACCURACY OF THE DATA AND SHALL NOT BE  
USED TO CONSTRUCT OR TO BE USED FOR  
CONSTRUCTION OR FOR ANY OTHER PURPOSE  
WITHOUT THE WRITTEN CONSENT OF THE  
ENGINEER. THE ENGINEER'S LIABILITY FOR  
SPECIFICATION, OR CONSTRUCTION, IS AS APPROVED, AND  
SHALL NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT  
AUTHORIZATION.



- NOTICE TO CONTRACTORS**
1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
  2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1985.
  3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, FOR LOCATION OF EXISTING UTILITIES.
  4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONNECTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
  5. BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
  6. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
  7. WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.

<p>ENGINEER'S SEAL</p> <p>RONALD R. BOHANNAN NEW MEXICO 7868 PROFESSIONAL ENGINEER</p> <p>08-10-2021</p> <p>RONALD R. BOHANNAN P.E. #7868</p>	<p><b>ENCOMPASS HEALTH PARKING LOT EXPANSION ALBUQUERQUE, NM</b></p>	<p>DRAWN BY AS</p>
	<p><b>GRADING PLAN</b></p>	<p>DATE 8-10-2021</p>
	<p><i>TERRA WEST, LLC</i> 5571 MIDWAY PARK PL. NE ALBUQUERQUE, NEW MEXICO 87109 (505) 858-3100 www.tierrawestllc.com</p>	<p>7000 JEFFERSON ST., ALBUQUERQUE, NM</p>
		<p>SHEET # <b>1</b></p>
		<p>JOB # 2021042</p>





LEGEND

- CURB & GUTTER
- BOUNDARY LINE
- EASEMENT
- CENTERLINE
- RIGHT-OF-WAY
- BUILDING
- SIDEWALK
- SCREEN WALL
- RETAINING WALL
- CONTOUR MAJOR
- CONTOUR MINOR
- SPOT ELEVATION
- FLOW ARROW
- EXISTING CURB & GUTTER
- EXISTING BOUNDARY LINE
- EXISTING CONTOUR MAJOR
- EXISTING CONTOUR MINOR
- EXISTING SPOT ELEVATION

2.25x2.25

62.00

H = 1 ft

Drop Inlet (2.25' square w/20-1" bars)

$Q_{cap-orif} = C(A_o)((2gh)^{0.5})$

C = 0.6

Ao = 3.46

H = 1

$Q_{cap-orif} = 16.7$

DETAIL "A"

10 ft

6 ft

10 ft

64.40

H = 1.4 ft

Emergency Overflow Weir

$Q_{cap-wier} = 2/3Cb(2g^0.5)(H^1.5)$

C = 0.6

b = 6

H = 1.4

$Q_{cap-wier} = 31.9$

DETAIL "B"

Drainage Calculations based on current COA DPM Article 6-2 Hydrology, Part 6-2(A) Procedure for 40-acre and Smaller Basins

Retention Volume Calculations based upon current COA DPM Article 6-12 Stormwater Quality & Low Impact Development

Existing Conditions

Basin ID	Description	Condition	Area (sf)	Area (acres)	Area (sq miles)	Basin Descriptions				Weighted E (in)	100-Year		
						Treatment A	Treatment B	Treatment C	Treatment D		Flow cfs	6 HR	Volume (ac-ft)
X1	Gravel Lot	Historic	12,484	0.2866	0.00045	0%	0.000	0.000	0.000	1.030	0.87	0.025	0.025
X2	Newly Graded	Historic	103,521	2.3765	0.00371	0%	0.000	0.000	100%	2.377	7.25	0.204	0.204
Total			116,005	2.6631	0.00416	0%	0.000	0.000	0.000	1.030	8.12	0.229	0.229

Proposed Conditions - Maverik Site

Basin ID	Description	Condition	Area (sf)	Area (acres)	Area (sq miles)	Basin Descriptions				Weighted E (in)	100-Year		
						Treatment A	Treatment B	Treatment C	Treatment D		Flow cfs	6 HR	Volume (ac-ft)
P1	Paved Lot	Developed	12,484	0.2866	0.00045	0%	0.000	0%	0.000	2.330	1.24	0.056	0.063
P2	Newly Graded	Developed	103,521	2.3765	0.00371	0%	0.000	100%	0.000	1.030	7.25	0.204	0.204
Total			116,005	2.66	0.00416	0%	0.000	100%	0.000	0.287	8.49	0.26	0.267

Equations:

Weighted E = Ea\* $A_a$  + Eb\* $A_b$  + Ec\* $A_c$  + Ed\* $A_d$  / (Total Area)

Volume<sub>100</sub> = Weighted E \* Total Area

Volume<sub>100</sub> =  $V_{100} + A_o * (P_{100} - P_{100}) / 12 \text{ in/ft}$

Flow =  $Q_aA_a + Q_bA_b + Q_cA_c + Q_dA_d$

Storm Water Quality Volume (SWQV) =  $Ad * (0.26 \text{ in}) / (12 \text{ in/ft}) = 270.5 \text{ cft} = 0.00621 \text{ ac-ft} = \text{Retention Volume Required}$

RETENTION POND CALCULATIONS					
POND No.	AREA AT MIDPOINT (SF)	POND DEPTH (FT)	POND VOLUME (CF)	POND VOLUME (AC-FT)	VOLUME REQUIRED (AC-FT)
1	325	1.0	325	0.0075	
Total			325	0.0075	0.0062

Excess Precipitation, E (in)	
Zone 2	100-Year
Ea	0.62
Eb	0.80
Ec	1.03
Ed	2.33

Peak Discharge (cfs/acre)	
Zone 2	100-Year
Qa	1.71
Qb	2.36
Qc	3.05
Qd	4.34

PROPOSED DRAINAGE:

THE TEMPORARY PARKING AREA WILL BE PAVED, NEW CURB & GUTTER AND A VALLEY GUTTER WILL BE INSTALLED TO CONTAIN RUN-OFF GENERATED ACROSS THE PARKING AREA AND DIRECT FLOWS AWAY FROM AN EXISTING RETAINING WALL AND INTO A NEW DETENTION POND THAT WILL ACCOMMODATE A STORM WATER QUALITY VOLUME OF APPROXIMATELY 325 cft. A NEW COBBLE LINED SWALE WILL BE INSTALLED TO CONVEY RUN-OFF FROM THE NEWLY PAVED PARKING AREA INTO THE NEW STORM WATER QUALITY DETENTION POND.

DRAINAGE ACROSS THE REMAINING VACANT AREA WILL MAINTAIN PRE-DEVELOPMENT FLOW PATHS, OUTFALL LOCATIONS AND DISCHARGE CAPACITIES.

EXISTING DRAINAGE:

A MAJORITY OF THIS SITE IS CURRENTLY VACANT (APPROXIMATELY 2.3765 acres) WITH A PORTION (APPROXIMATELY 0.2866 acres) BEING USED AS A TEMPORARY PARKING AREA. THE SITE IS LOCATED TO THE SOUTH OF ELLISON, WEST OF I-25 AND EAST OF JEFFERSON STREET. THE SITE DRAINS FROM NORTHEAST TO SOUTHWEST. EXCESS RUN-OFF IS DIRECTED INTO AN EXISTING DETENTION PONDING AREA THAT INCLUDES AN EXISTING DROP INLET WHICH SERVES AS AN OUTLET THAT DELIVERS FLOWS INTO THE ADJACENT CONCRETE LINED CHANNEL KNOWN AS THE "SOUTH PINO ARROYO". REFERRING TO DETAIL "A" ON THIS SHEET THE DROP INLET HAS A CAPACITY OF APPROXIMATELY 16.7 cfs. EXCESS FLOWS ENTERING THE DETENTION POND WILL ENTER THE ADJACENT LINED CHANNEL VIA AN EXISTING CONCRETE LINED WEIR WHICH PRIDES A CAPACITY OF ALMOST 32 cfs (SEE DETAIL "B" THIS SHEET).

CAUTION

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ENCOMPASS HEALTH  
PARKING LOT EXPANSION  
ALBUQUERQUE, NM

DRAINAGE PLAN

TERRA WEST, LLC  
5571 MIDWAY PARK PL. NE.  
ALBUQUERQUE, NEW MEXICO 87109  
(505) 858-3100  
www.tierrawestllc.com

DRAWN BY  
AS

DATE  
8-10-2021

7000 JEFFERSON ST.,  
ALBUQUERQUE, NM

SHEET #

2

JOB #  
2021042