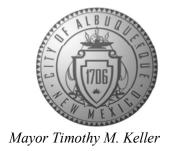
CITY OF ALBUQUERQUE

Planning Department Alan Varela, Director



June 24, 2025

Donna Sandoval Tierra West, LLC 5571 Midway Park Place NE Albuquerque, NM 87109

RE: 2500 Phoenix Ave. NE

Grading & Drainage Plan

Engineer's Stamp Date: 5/21/2025

Hydrology File: H16D156 Case # HYDR-2025-00060

Dear Ms. Sandoval:

PO Box 1293

Based upon the information provided in your submittal received 5/21/2025, the Grading & Drainage Plans are 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.

Albuquerque

PRIOR TO CERTIFICATE OF OCCUPANCY:

NM 87103

1. Engineer's Certification, per the DPM Part 6-14 (F): *Engineer's Certification Checklist For Non-Subdivision* is required.

www.cabq.gov

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 505-924-3314 or amontoya@cabq.gov.

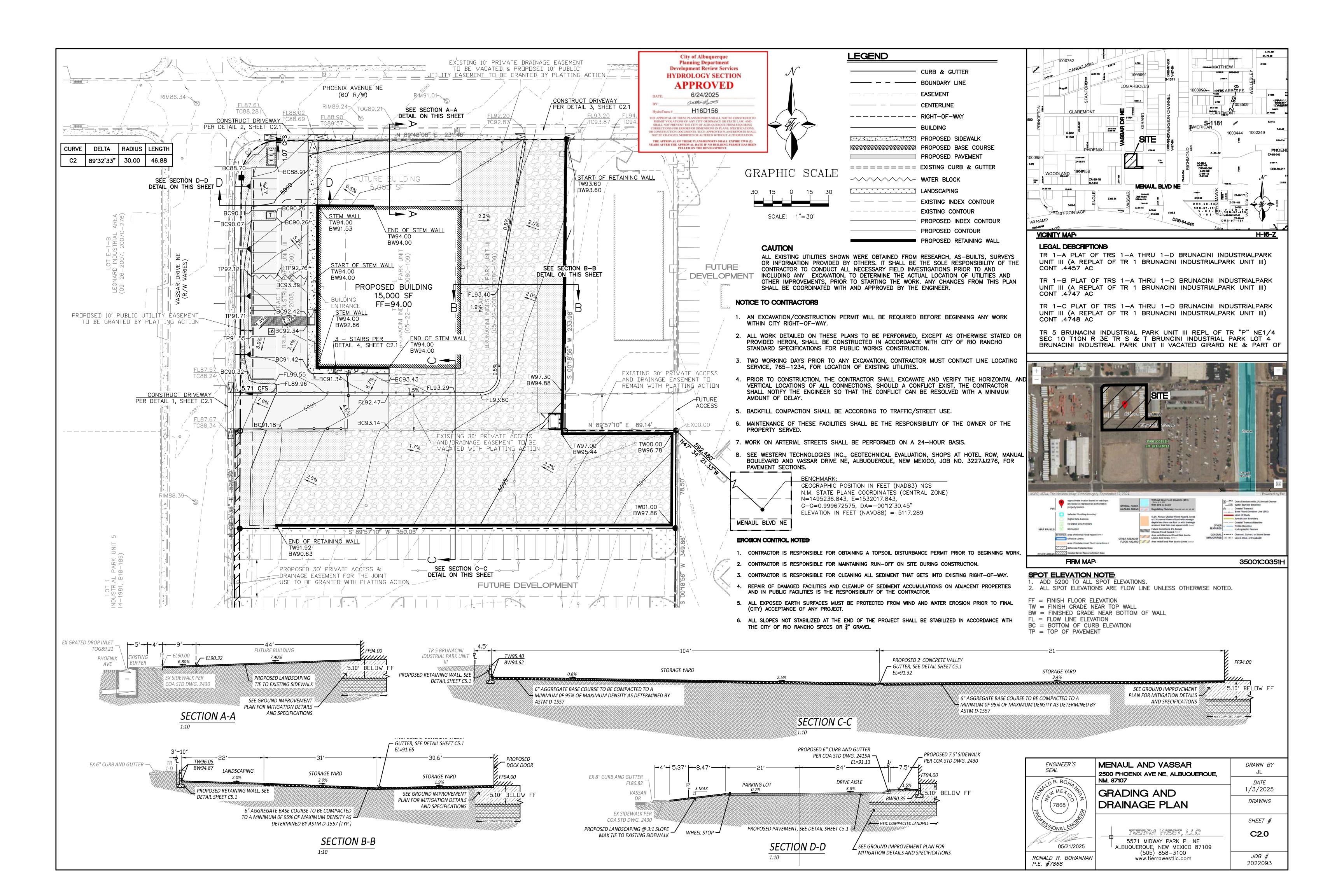
Sincerely,

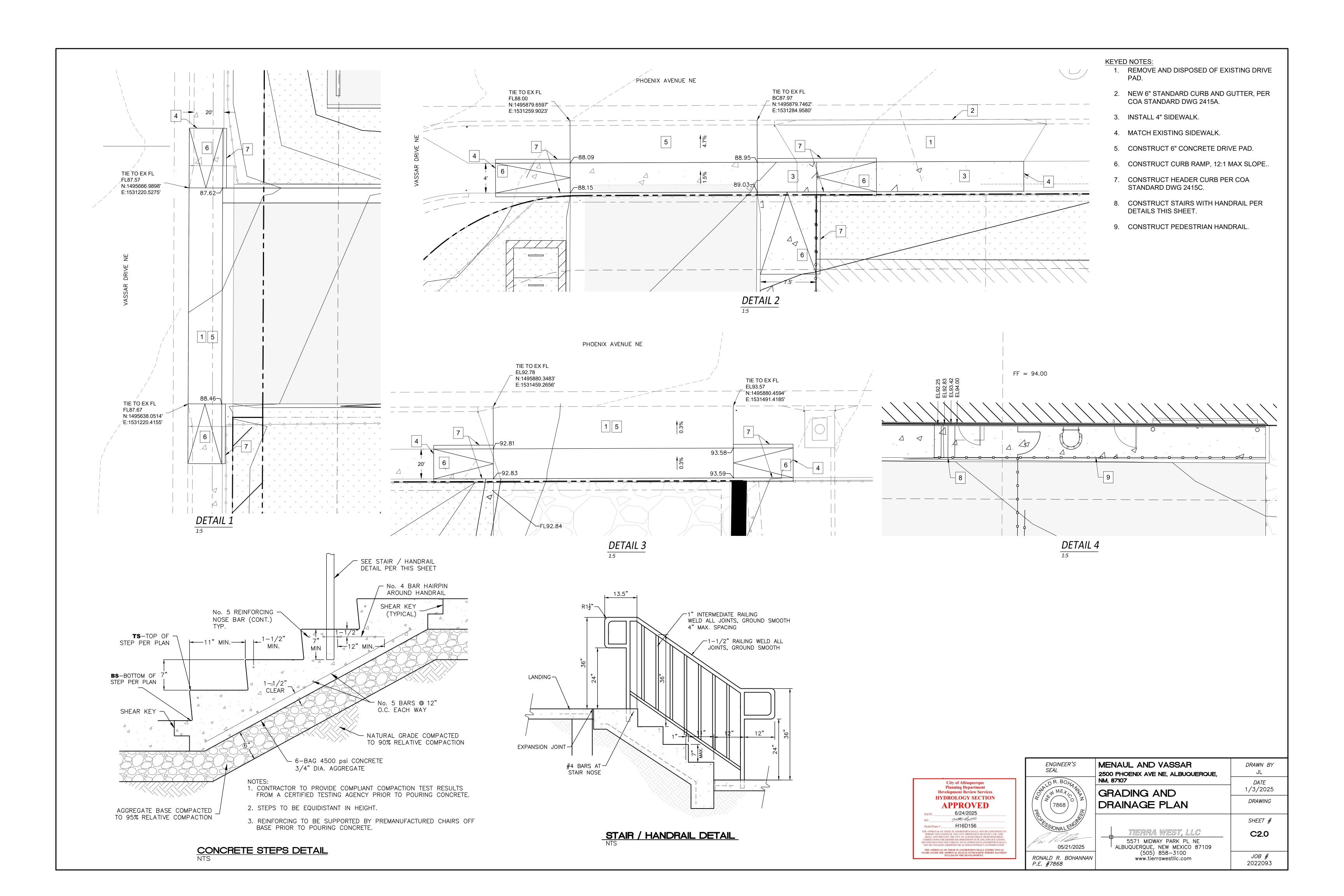
Anthony Montoya, Jr., P.E.

anth Mars

Senior Engineer, Hydrology

Planning Department, Design Review Services





FLOOD PLAIN

THE SITE IS LOCATED WITHIN FLOOD ZONE X, WHICH IS DEFINED AS "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN." THE SITE DOES NOT LIE WITHIN A FLOOD HAZARD AREA AS SHOWN ON FIRM MAP 35001C0351H AND REQUIRES NO FURTHER FLOOD—PROOFING OR OTHER FLOOD MITIGATION.

METHODOLOGY

THE HYDROLOGIC ANALYSIS PROVIDED WITH THIS DRAINAGE MANAGEMENT PLAN HAS BEEN PREPARED IN ACCORDANCE WITH ARTICLE 6-2 OF THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL. THE SITE IS IN PRECIPITATION ZONE 2 PER TABLE 6.2.7 OF SECTION 6-2(A)(1). THE DESIGN STORM FOR EXISTING AND PROPOSED HYDROLOGY IS THE 100 YEAR 6 HR EVENT. LAND TREATMENT PERCENTAGES WERE CALCULATED BASED ACCORDING TO THE SITE CONDITIONS. THE WEIGHTED E TABLE AND EQUATIONS USED ARE SHOWN ON THIS SHEET.

EXISTING CONDITIONS

THE EXISTING 2.02 ACRES FOR THE SUBJECT IS CURRENTLY DEVELOPED AND COVERED WITH MOSTLY COMPACTED SOIL, BASE COURSE AND PAVEMENT. THERE IS APPROXIMATELY 22-FT OF FALL FROM THE SOUTHEAST TO THE NORTHWEST. AS SHOWN ON THIS SHEET, THE SITE IS DIVIDED INTO SEVEN BASINS AND REFERRED TO AS E1, E2, E3, O1, O2, O3, O4.

BASIN E1 IS THE SOUTH HALF OF THE SUBJECT SITE AND MADE OF TREATMENT C (55%) AND TREATMENT D (45%). IT GENERATES APPROXIMATELY 2.94 CFS FOR A 100-YEAR STORM.

BASIN E2 IS A MAJORITY OF THE NORTH HALF OF THE SUBJECT SITE AND IS MADE OF TREATMENT C (100%). IT GENERATES APPROXIMATELY 3.15 CFS FOR A 100-YEAR STORM.

BASIN 01 IS APPROXIMATELY 1.11 ACERS OF TRACT 5 AND IS COVERED WITH MOSTLY COMPACTED SOILS, BASE COURSE, AND PAVEMENT CONTAINING TREATMENT C (83%) AND TREATMENT D (17%). IT GENERATES APPROXIMATELY 3.62 CFS FOR A 100-YEAR STORM.

BASIN 02 IS APPROXIMATELY 0.06 ACERS OF TRACT 1-D AND IS MADE OF TREAMENT D (100%). IT GENERATES APPROXIMATELY 0.27 CFS FOR A 100-YEAR STORM.

BASIN 03 IS APPROXIMATELY 0.01 ACERS OF TRACT 1-D AND IS MADE OF TREAMENT C (100%). IT GENERATES APPROXIMATELY 0.03 CFS FOR A 100-YEAR STORM.

ALL FLOWS FROM BASIN E1, E2, O1, O2, O3 ARE DIRECTED NORTHWEST ONTO PHOENIX AVE. AND CAPTURED BY A ROADWAY CURB INLET APPROXIMATELY 75-FT WEST OF THE INTERSECTION. THE COMBINED DISCHARGE IS 10.03 CFS FOR A 100-YEAR STORM.

BASIN E3 IS THE NORTHEAST CORNER OF THE SITE AND IS MADE OF TREATMENT C (100%). IT GENERATES APPROXIMATELY 0.54 CFS FOR A 100-YEAR STORM.

BASIN 04 IS APPROXIMATELY 0.01 ACERS OF TRACT 1-D AND IS MADE OF TREATMENT C (100%). IT GENERATES APPROXIMATELY 0.04 CFS FOR A 100-YEAR STORM.

ALL FLOWS FROM BASIN E3 AND 04 CONVEYS RUNOFF ONTO PHOENIX AVE AND CAPTURED BY A ROADWAY CURB INLET APPROXIMATELY 124-FT EAST OF THE INTERSECTION. THE COMBINED DISCHARGE IS 0.58 CFS FOR A 100-YEAR STORM.

REMAINING OFFSITE FLOWS FROM TRACT 1-D ARE EXCLUDED DUE TO THE PROPERTIES USE OF STANDARD 6-INCH CURB AND GUTTER THAT DIRECTS FLOW THROUGH A 1-FOOT CONCRETE RUNDOWN INTO A VALLEY GUTTER AND DISCHARGES ONTO PHOENIX AVE AS SEEN BY FIELD OBSERVATION AND A GRADING AND DRAINAGE PLAN PREPARED BY TGC ENGINEERING, INC. (9/24/2008)

THE OFFSITE FLOWS FROM TRACTS 2, 3, AND 4 ARE EXCLUDED DUE TO THE PROPERTIES' USE OF HEADER CURBS. THE GRADING AND DRAINAGE PLAN PREPARED BY LEVI VALDEZ (2/23/2006) AND SITE INSPECTION CONFIRMS CURBING EXISTENCE.

PROPOSED CONDITIONS

ACCORDING TO THE ALBUQUERQUE MASTER DRAINAGE STUDY, VOLUME I, DATED JANUARY 1981, THE SUBJECT SITE IS ALLOWED FREE DISCHARGE ONTO VASSAR DR. AND PHOENIX AVE. THE PROPOSED INDUSTRIAL DEVELOPMENT IS DIVIDED UP INTO TWO PROPOSED BASINS AND THE EXISTING OFFSITE BASINS. THEY ARE REFERRED TO AS P1, P2, O1, O2, O3, AND O4 AS SHOWN ON THIS SHEET.

BASIN P1 IS APPROXIMATELY 0.80 ACRES AND GENERATES APPROXIMATELY 2.85 CFS FOR A 100-YEAR STORM. BASIN 02 WILL TRAVEL ONTO BASIN P1 GENERATING A COMBINED FLOW RATE OF APPROXIMATELY 3.12 CFS. FLOWS ARE DIRECTED NORTH THROUGH THE PARKING LOT BY A 2' VALLEY GUTTER AND CONVEY ONTO PHOENIX AVE.

BASIN P2 IS APPROXIMATELY 1.22 ACRES AND GENERATES 4.15 CFS FOR A 100 YEAR STORM. FLOWS ARE DIRECTED SOUTH THROUGH THE PARKING LOT AND SOUTHWEST THROUGH THE GRAVEL YARD BY A 2' VALLEY GUTTER. ALL FLOWS WILL CONVEY ONTO VASSAR DR AND PHOENIX AVE.

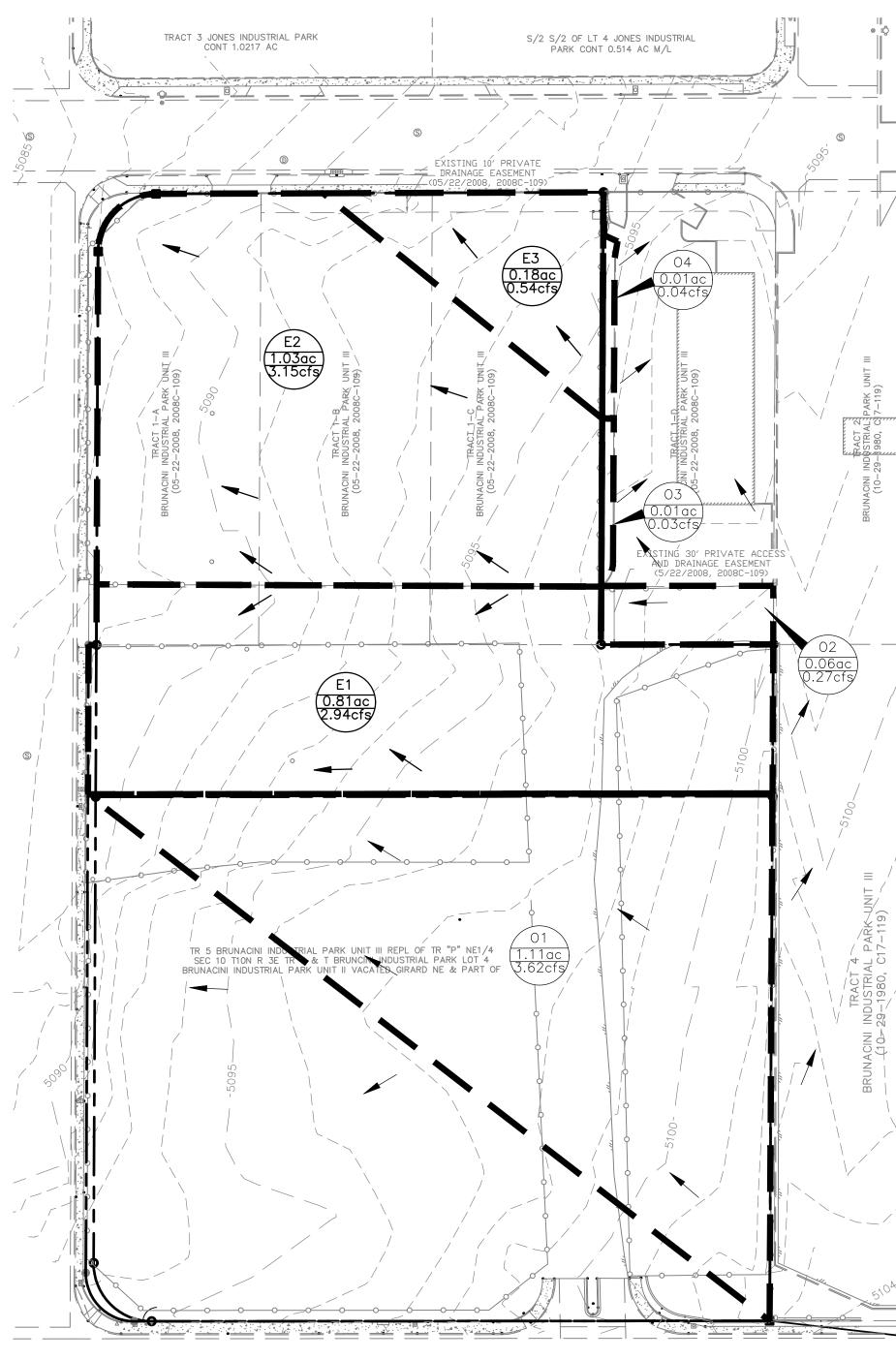
ALL FLOWS FROM P1, P2, AND O2 WILL TRAVEL WEST ON PHOENIX AVE AND CAPTURED BY THE ROADWAY CURB INLET APPROXIMATELY 75-FT WEST

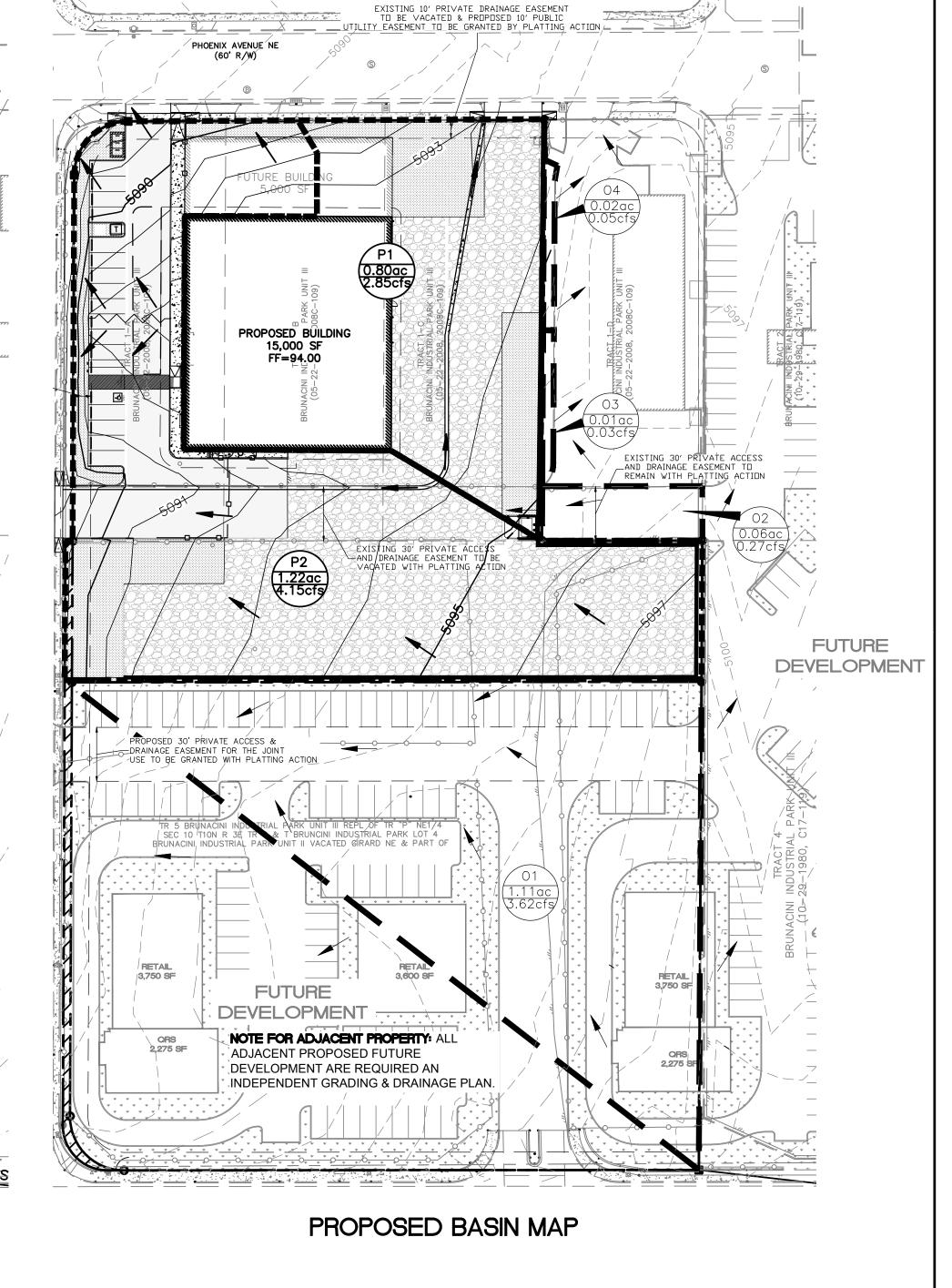
OF THE INTERSECTION. THE COMBINED DISCHARGE IS APPROXIMATELY 6.78 CFS FOR A 100-YEAR STORM.

ALL FLOWS FROM BASINS 01, 02, 03, AND 04 ARE EXCLUDED FROM DRAINING ONTO SUBJECT SITE AS SHOWN ON GRADING PLAN.

STORMWATER QUALITY

ARTICLE 6-12 OF THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL STATES THAT ALL NEW DEVELOPMENT MUST MANAGE THE STORMWATER QUALITY VOLUME BY MANAGEMENT ON-SITE OR PAYMENT-IN-LIEU. THE PROPOSED PROJECT IS UNABLE TO ACCOMMODATE MANAGEMENT ON-SITE DUE THE AMOUNT OF FALL AND THE SIZE OF THE SITE RELATIVE TO THE EXISTING 22-FT OF FALL FROM THE SOUTHEAST TO THE NORTHWEST. PAYMENT-IN-LIEU IS THE NECESSARY OPTION TO ACCOMMODATE THE REQUIREMENT. THE SITE IS LOCATED IN A METROPOLITAN REDEVELOPMENT AREA. ACCORDING TO SECTION 6-12(C)(1), PAYMENT-IN-LIEU SHALL BE WAIVED.





S/2 S/2 OF LT 4 JONES INDUSTRIAL PARK CONT 0.514 AC M/L

EXISTING BASIN MAP

WEIGHTED E METHOD

Existing Basins

Existing Das	Basin Area Treatments						100-Year			10-Year							
Basin	Area	Area	Area	Treati	ment A	Treatr	nent B	Treatr	nent C	Treatr	nent D	Weighted E	Volume	Flow	Weighted E	Volume	Flow
	(sf)	(acres)	(sq miles)	%	(acres)	%	(acres)	%	(acres)	%	(acres)	(ac-ft)	(ac-ft)	cfs	(ac-ft)	(ac-ft)	cfs
E1	35,324.5	0.81	0.001	0%	0.00	0%	0.00	55%	0.45	45%	0.36	1.615	0.109	2.94	0.944	0.064	1.70
E2	45,035.0	1.03	0.002	0%	0.00	0%	0.00	100%	1.03	0%	0.00	1.030	0.089	3.15	0.480	0.041	1.64
E3	7,766.8	0.18	0.000	0%	0.00	0%	0.00	100%	0.18	0%	0.00	1.030	0.015	0.54	0.480	0.007	0.28
01	48,294.5	1.11	0.002	0%	0.00	0%	0.00	83%	0.92	17%	0.19	1.251	0.116	3.62	0.655	0.061	1.97
O2	2,704.1	0.06	0.000	0%	0.00	0%	0.00	0%	0.00	100%	0.06	2.330	0.012	0.27	1.510	0.008	0.17
O3	497.7	0.01	0.000	0%	0.00	0%	0.00	100%	0.01	0%	0.00	1.030	0.001	0.03	0.480	0.000	0.02
04	574.3	0.01	0.000	0%	0.00	0%	0.00	100%	0.01	0%	0.00	1.030	0.001	0.04	0.480	0.001	0.02
Total	140,196.9	3.218	0.00503	0%		0%		81%		19%			0.343	10.61		0.182	5.81

Developed Basins

	Basin Area Treatments							10-Year									
Basin	Area	Area	Area	Treati	nent A	Treatr	nent B	Treatr	nent C	Treatn	nent D	Weighted E	Volume	Flow	Weighted E	Volume	Flow
	(sf)	(acres)	(sq miles)	%	(acres)	%	(acres)	%	(acres)	%	(acres)	(ac-ft)	(ac-ft)	cfs	(ac-ft)	(ac-ft)	cfs
P1	34,771.0	0.80	0.001	0%	0.00	16%	0.13	35%	0.28	49%	0.39	1.630	0.108	2.85	0.956	0.064	1.63
P2	53,229.0	1.22	0.002	0%	0.00	13%	0.16	53%	0.65	34%	0.42	1.442	0.147	4.15	0.807	0.082	2.31
01	48,294.5	1.11	0.002	0%	0.00	0%	0.00	83%	0.92	17%	0.19	1.251	0.116	3.62	0.655	0.061	1.97
O2	2,704.1	0.06	0.000	0%	0.00	0%	0.00	0%	0.00	100%	0.06	2.330	0.012	0.27	1.510	800.0	0.17
O3	497.7	0.01	0.000	0%	0.00	0%	0.00	100%	0.01	0%	0.00	1.030	0.001	0.03	0.480	0.000	0.02
O4	574.3	0.01	0.000	0%	0.00	0%	0.00	100%	0.01	0%	0.00	1.030	0.001	0.04	0.480	0.001	0.02
Total	90,704.1	2.1	0.0	0%		14%		45%		42%			0.3	7.3		0.2	4.1

Equations:

 $P_{6HR} = 2.20 IN$

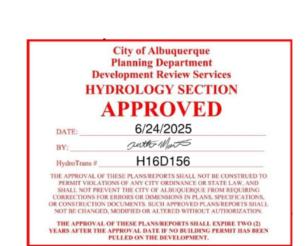
Weighted E = Ea*Aa + Eb*Ab + Ec*Ac + Ed*Ad / (Total Area)

Volume = Weighted D * Total Area

Flow = Qa * Aa + Qb * Ab + Qc * Ac + Qd * Ad

FIRST FLUSH VOLUME= Impervious Area*0.42 inches $V_{10-DAY}=V_{6HR}+A_D(P_{10DAYS}-P_{6HR})/12$ IN/FT $P_{10DAYS}=3.67$ IN

(For New Development sites)



TRACT 3 JONES INDUSTRIAL PARK

ENGINEER'S SEAL	MENAUL AND VASSAR 2500 PHOENIX AVE NE, ALBUQUERQUE, NM, 87107					
DR. BOHANDER TO THE TOTAL PROPERTY OF THE PROP	GRADING AND					
PROPERTY OF THE PROPERTY OF TH	_					
05/21/2025	T 5571 MIDWAY PARK PL NE ALBUQUERQUE, NEW MEXICO 87109					
RONALD R. BOHANNAN P.E. #7868	(505) 858—3100 www.tierrawestllc.com					

DRAWN BY

JL

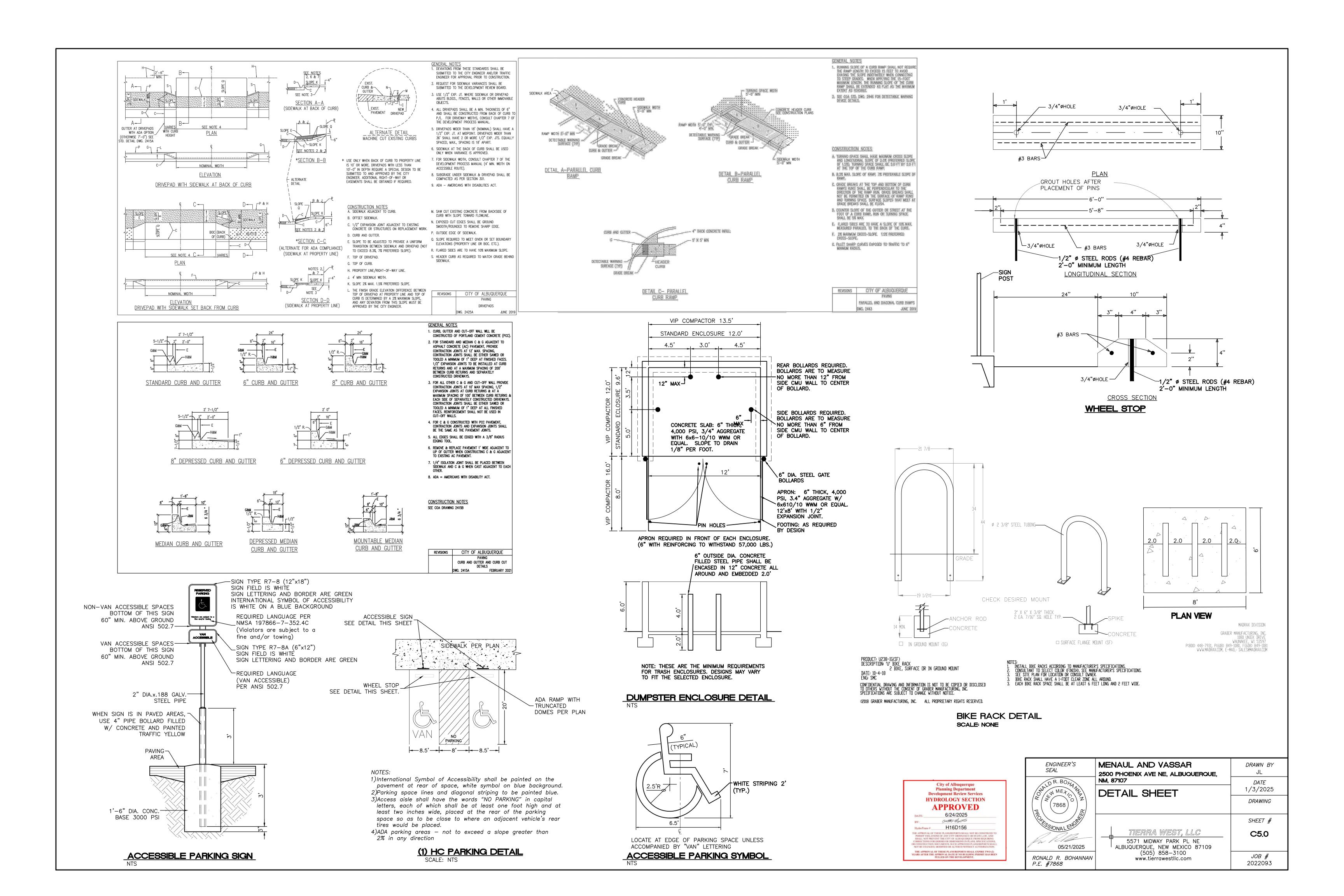
DATE 1/3/2025

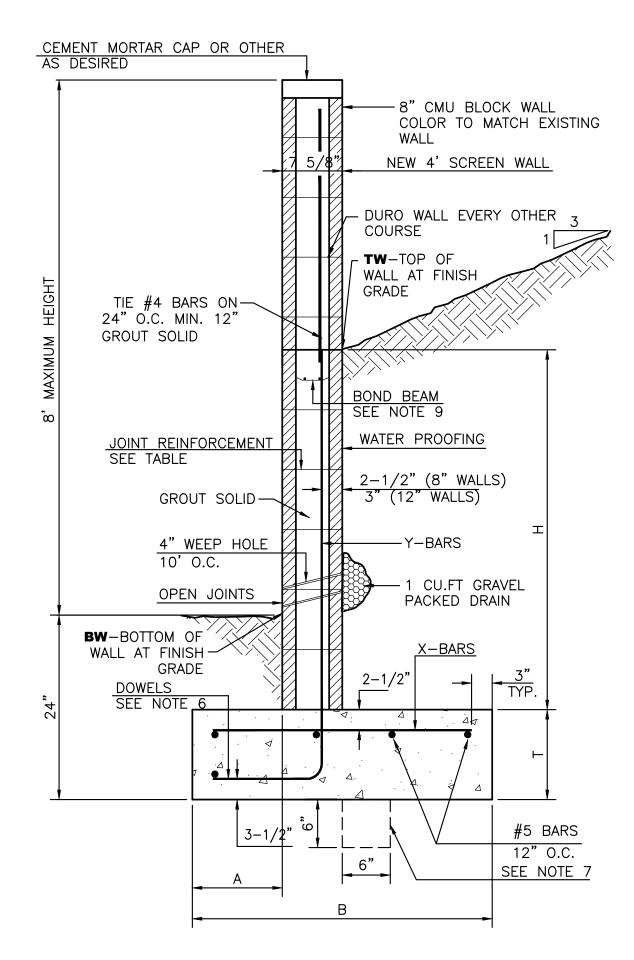
DRAWING

SHEET #

JOB #

2022093





8 INCH REINFORCED CONCRETE MASONRY WALL

Ι	Α	В	T	Y-BARS	X-BARS
ft.—in.	in.	ft.—in.	in.		
2'-0" 2'-8" 3'-4" 4'-0" 4'-8" 5'-4" 6'-0"	8" 8" 8" 10" 12" 14"	2'-0" 2'-0" 2'-4" 2'-8" 3'-4" 3'-10" 4'-8"	9" 9" 9" 9" 10" 12"	#4 @32" O.C. #4 @32" O.C. #4 @32" O.C. #4 @32" O.C. #5 @32" O.C. #6 @16" O.C. #6 @ 8" O.C.	#4 @24" O.C. #4 @24" O.C. #4 @24" O.C. #4 @18" O.C. #4 @18" O.C. #4 @12" O.C.

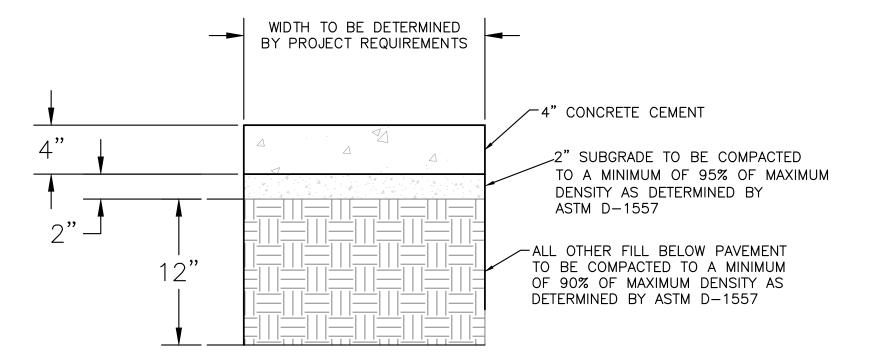
12 INCH REINFORCED CONCRETE MASONRY WALL

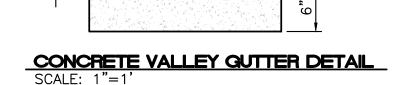
Н	Α	В	T	Y-BARS	X-BARS
ft.—in.	in.	ft.—in.	in.		
5'-4" 6'-0" 6'-8" 7'-4" 8'-0" 8'-8"	14" 15" 16" 18" 20" 20"	3'-8" 4'-2" 4'-6" 4'-10" 5'-4" 5'-8"	10" 12" 12" 12" 12" 12"	#6 @18" O.C. #4 @16" O.C. #6 @24" O.C. #6 @16" O.C. #7 @18" O.C. #7 @16" O.C.	#4 @24" O.C. #4 @18" O.C. #5 @18" O.C. #5 @18" O.C. #6 @12" O.C. #6 @12" O.C.

GENERAL NOTES:

- 1. ALL CONCRETE IS TO BE 4000 PSI @ 28 DAYS.
- 2. MINIMUM COMPACTION UNDER FOOTINGS IS TO BE 95% PER ASTM. D 1557 FOR A DEPTH OF 12" MOISTURE CONTENT IS TO BE \pm 2.0%.
- 3. BACK FILL AGAINST WALLS IS TO BE HAND-PLACED AND
- COMPACTED.
 4. ALL BARS ARE TO BE GRADE 60, ASTM 615.
- 5. TRUSS TYPE DUR-O-WALL EVERY OTHER COURSE.
- 6. DOWELS SHALL BE AT LEAST EQUAL IN SIZE AND SPACING TO V—BARS, SHALL PROJECT A MINIMUM OF 30 BAR DIA. INTO THE FILLED BLOCK CORES, AND SHALL EXTEND TO THE TOE OF THE FOOTING.
- 7. PROVIDE KEY FOR 8" AND 12" WALLS WHERE H EXCEEDS 6'-0" 8. USE EITHER EXPANSION JOINTS ON 20' CENTERS OR PILASTERS
- EVERY 16'.

 9. BOND BEAM, 1-#4 BARS FOR WALLS UNDER 3'-4", 2-#4 BARS FOR WALLS UNDER 5'-4", 2-#5 BARS FOR WALLS OVER 5'-4".

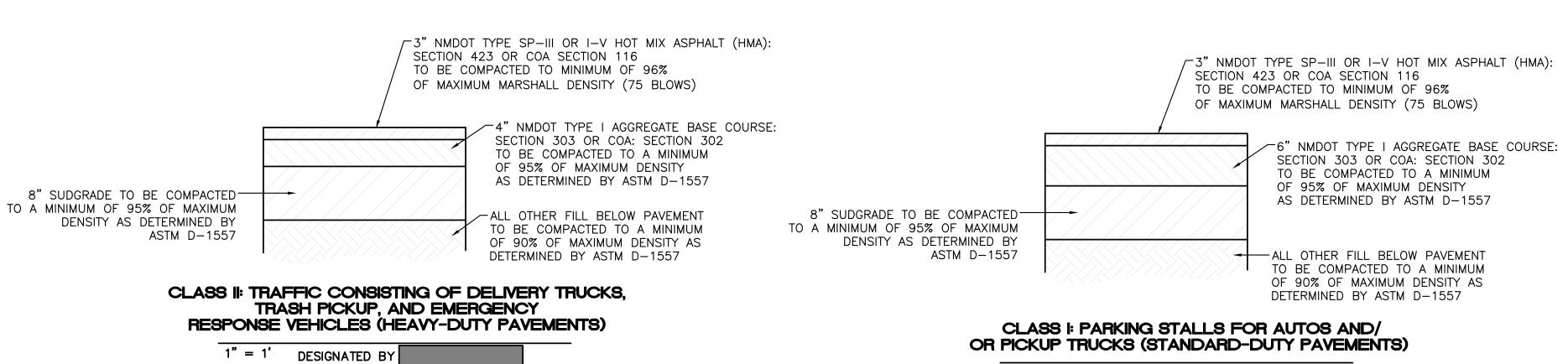




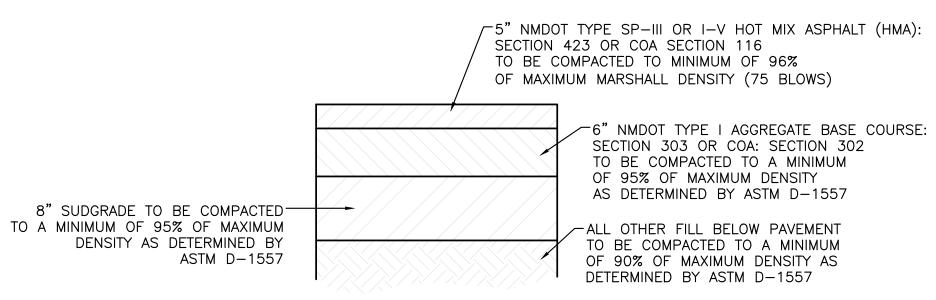
CONCRETE SIDEWALK SECTION

RETAINING WALL DETAIL

NTS



1" = 1' DESIGNATED BY



CLASS III: TRAFFIC CONSISTING OF TRACTOR TRAILER, SEMI-HAIL-TRUCKS AND CITY AND SCHOOL BUSES (EXTRA-HEAVY-DUTY PAVEMENTS)

1" = 1' DESIGNATED BY

	City of Albuquerque Planning Department
Deve	elopment Review Services
HYD	PROLOGY SECTION
A	PPROVED
DATE:	6/24/2025
BY:	anth Mars
HydroTrans #	H16D156
	HESE PLANS/REPORTS SHALL NOT BE CONSTRUED TO NS OF ANY CITY ORDINANCE OR STATE LAW, AND
	NT THE CITY OF ALBUQUERQUE FROM REQUIRING
	ERRORS OR DIMENSIONS IN PLANS, SPECIFICATIONS,
	OCUMENTS, SUCH APPROVED PLANS/REPORTS SHALI
NOT BE CHANGED,	MODIFIED OR ALTERED WITHOUT AUTHORIZATION.
	F THESE PLANS/REPORTS SHALL EXPIRE TWO (2)
	PPROVAL DATE IF NO BUILDING PERMIT HAS BEEN ULLED ON THE DEVELOPMENT.

ENGINEER'S SEAL	MENAUL AND VASSAR 2500 PHOENIX AVE NE, ALBUQUERQUE,	<i>DRAWN BY</i> JL
DR. BOH	NM, 87107	DATE
ON METICOZ	DETAIL SHEET	1/3/2025
7868		DRAWING
P (7888)		
PROPERTY OF THE STATE OF THE ST		SHEET #
05/ONALEN 05/21/2025	TIERRA WEST, LLC 5571 MIDWAY PARK PL NE ALBUQUERQUE, NEW MEXICO 87109	C5.1
	(505) 858-3100	10P #
RONALD R. BOHANNAN P.E. #7868	www.tiérrawestllc.com	<i>JOB #</i> 2022093