

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

February 1, 2023

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

**RE: Blvd 2500
2500 Carlisle Blvd NE
Conceptual Grading & Drainage Plans
Engineer's Stamp Date: 01/30/23
Hydrology File: H17D002**

Dear Mr. Bohannon:

PO Box 1293
Based upon the information provided in your submittal received 01/17/2023, the Conceptual Grading & Drainage Plans are preliminary approved for action by the Development Facilitation Team (DFT) and Development Hearing Officer (DHO) on Preliminary/Final Plat.

Albuquerque
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.

NM 87103

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

Sincerely,

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

Project Title: Blvd 2500 **Building Permit #** _____ **Hydrology File #** _____
DRB# PR-2018-00158 **EPC#** _____
Legal Description: TRS 1 2 & 3 Unit 1 Together w/TRS 4 5 & 6A Unit 2
Dale J Bellamahs Carlisle Replat & Lot 22A Plat of Lt 22A City Address OR Parcel 2500 & 2412 Carlisle Blvd NE
Blk 22 Timoteo Chavez Addition & Port of BLKS N & O Timoteo Chavez Addition

Applicant/Agent: Tierra West LLC **Contact:** VINNY PEREA
Address: 5571 Midway Park Place NE Albuquerque, NM 87109 **Phone:** 505-858-3100
Email: vperea@tierrawestllc.com

Applicant/Owner: Rhino Investments NM Hotel LLC **Contact:** Sanjiv Chopra
Address: 101 E Vineyard Ave Suite 201 **Phone:** 702-843-4251
Email: sanjiv@rhinoig.com

TYPE OF DEVELOPMENT: ☒ PLAT (#of lots) _____ ☐ RESIDENCE _____ ☐ DRB SITE _____ ☐ ADMIN SITE: _____
RE-SUBMITTAL: _____ YES ☒ NO

DEPARTMENT: _____ ☐ TRANSPORTATION ☒ HYDROLOGY/DRAINAGE
Check all that apply:

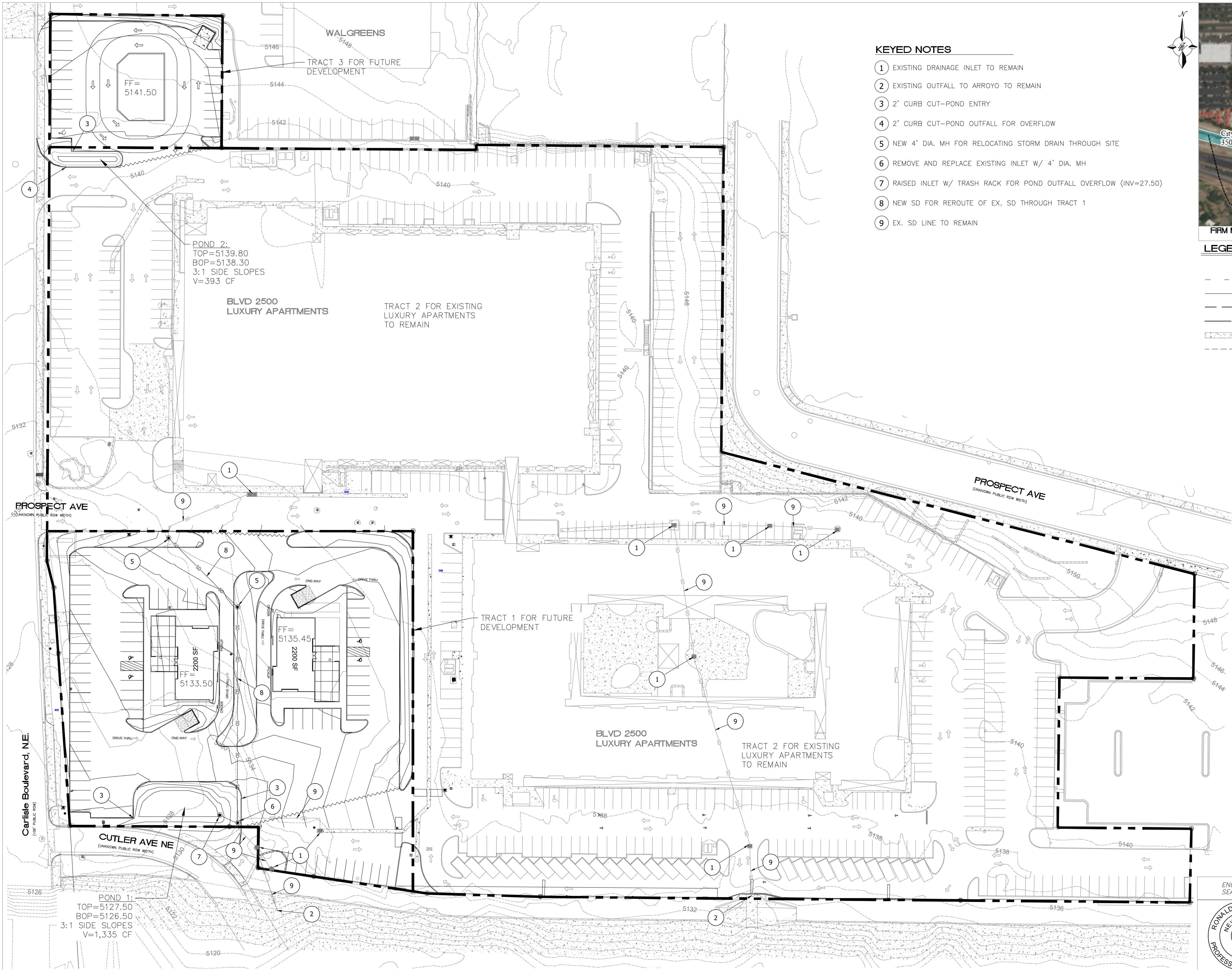
TYPE OF SUBMITTAL:

☐ ENGINEER/ARCHITECT CERTIFICATION
☐ PAD CERTIFICATION
☒ CONCEPTUAL G&D PLAN
☐ GRADING PLAN
☐ DRAINAGE REPORT
☐ DRAINAGE MASTER PLAN
☐ FLOOD PLAN DEVELOPMENT PERMIT APP.
☐ ELEVATION CERTIFICATE
☐ CLOMR/LOMR
☐ TRAFFIC CIRCULATION LAYOUT (TCL)
☐ ADMINISTRATIVE
☐ TRAFFIC CIRCULATION LAYOUT FOR DRB
APPROVAL
☐ TRAFFIC IMPACT STUDY (TIS)
☐ STREET LIGHT LAYOUT
☐ OTHER (SPECIFY) _____
☐ PRE-DESIGN MEETING?

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

☐ BUILDING PERMIT APPROVAL
☐ CERTIFICATE OF OCCUPANCY
☐ CONCEPTUAL TCL DRB APPROVAL
☒ 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
☐ FLOOD PLAN DEVELOPMENT PERMIT
☐ OTHER (SPECIFY) _____

DATE SUBMITTED: 01.16.2023



KEYED NOTES

- 1 EXISTING DRAINAGE INLET TO REMAIN
- 2 EXISTING OUTFALL TO ARROYO TO REMAIN
- 3 2' CURB CUT-POND ENTRY
- 4 2' CURB CUT-POND OUTFALL FOR OVERFLOW
- 5 NEW 4' DIA. MH FOR RELOCATING STORM DRAIN THROUGH SITE
- 6 REMOVE AND REPLACE EXISTING INLET W/ 4' DIA. MH
- 7 RAISED INLET W/ TRASH RACK FOR POND OUTFALL OVERFLOW (INV=27.50)
- 8 NEW SD FOR REROUTE OF EX. SD THROUGH TRACT 1
- 9 EX. SD LINE TO REMAIN

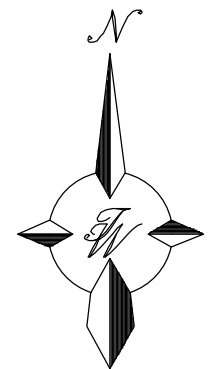


FIRM MAP

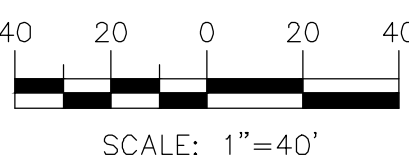
LEGEND

- EXISTING STREET LIGHTS
- EXISTING LANE
- EXISTING STRIPING
- EXISTING CURB & GUTTER
- EXISTING BOUNDARY LINE
- EXISTING SIDEWALK
- LIMITS OF GRADING

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
PRELIMINARY APPROVED
DATE: 02/01/23
BY: *Ronald R. Bohannon*
HydroTrans # H17D002
THESE PLANS AND/OR REPORT ARE
CONCEPTUAL ONLY. MORE INFORMATION MAY
BE NEEDED IN THEM AND SUBMITTED TO
HYDROLOGY FOR BUILDING PERMIT APPROVAL.



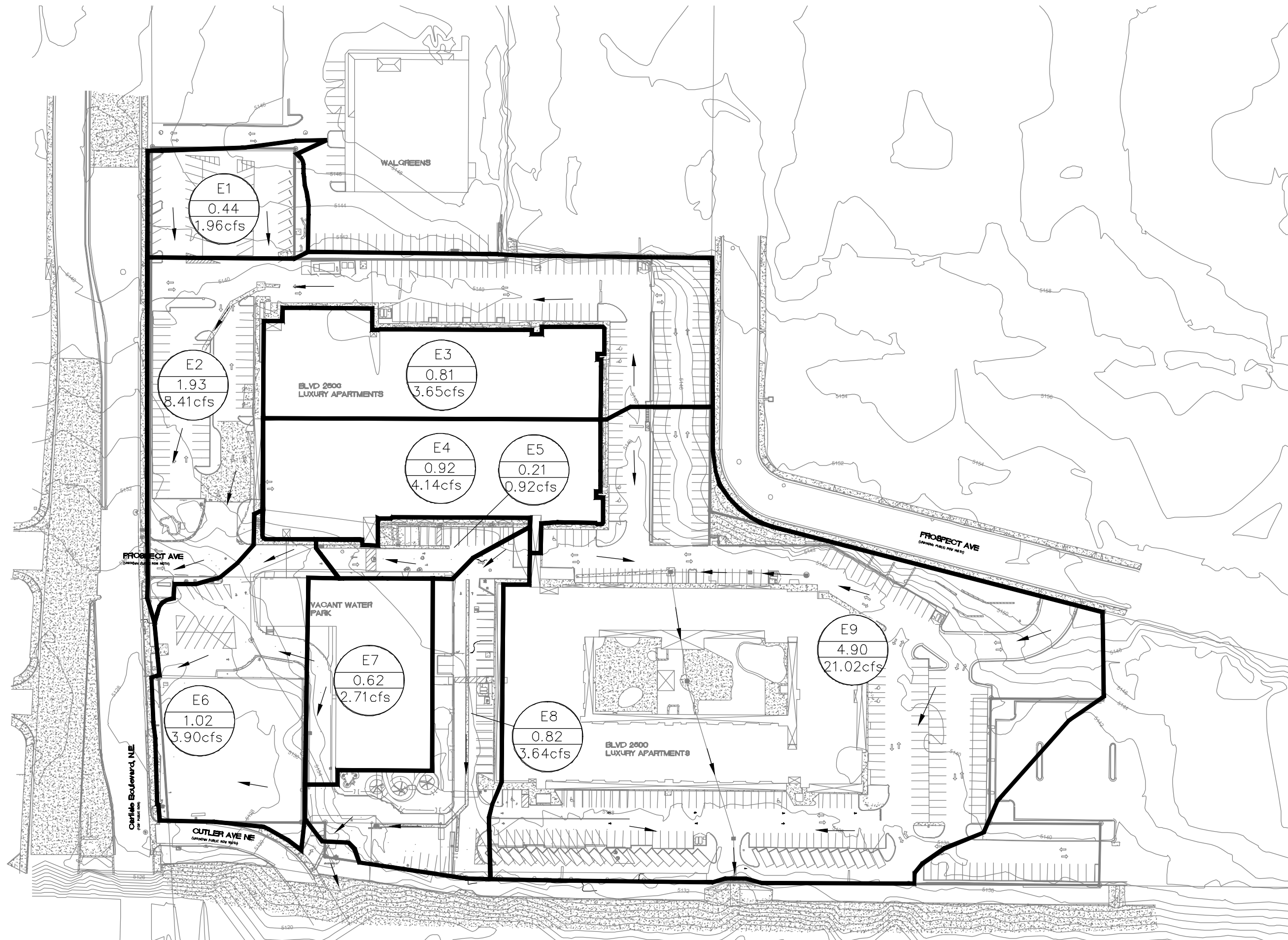
GRAPHIC SCALE



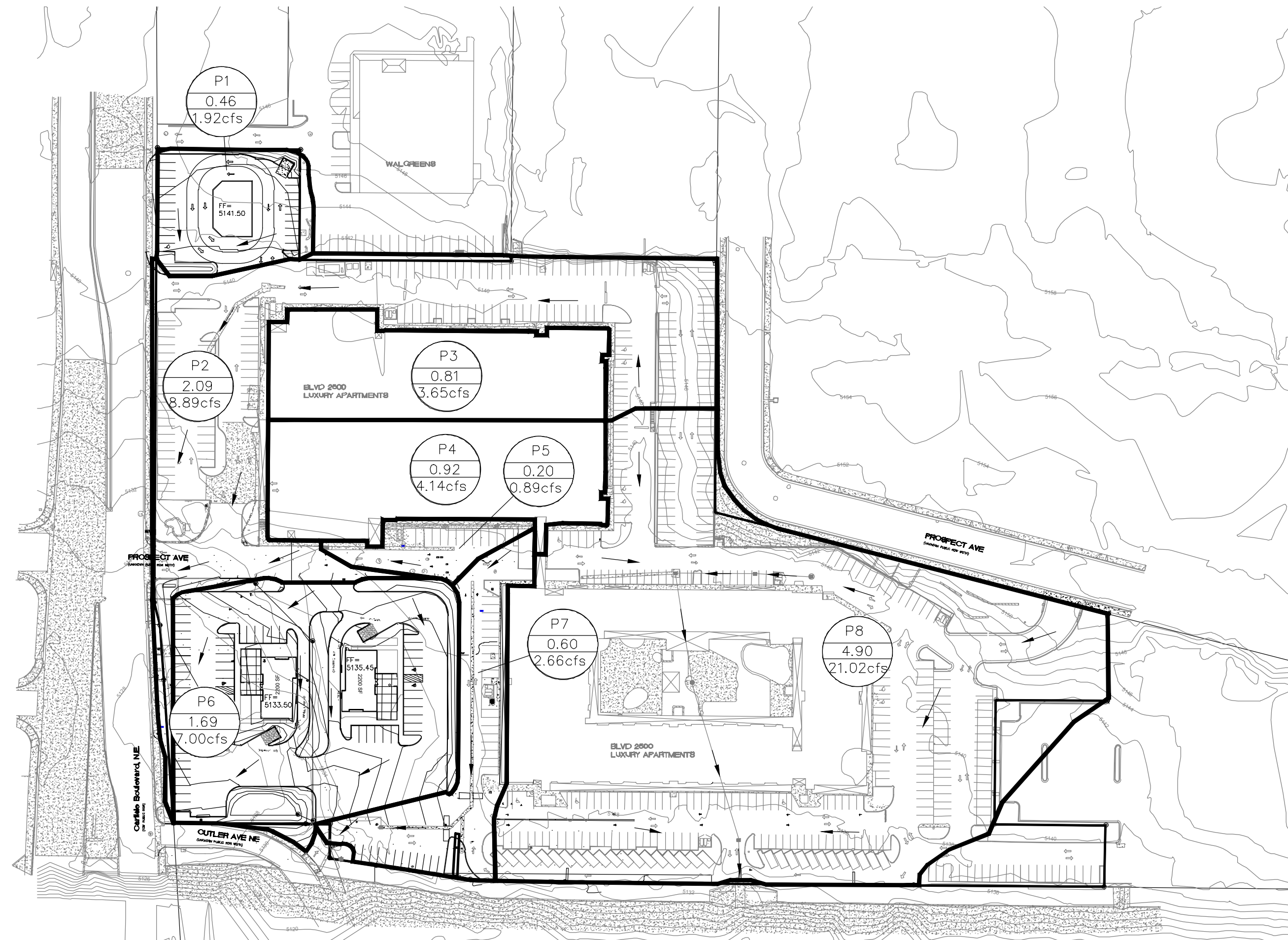
ENGINEER'S SEAL
RONALD R. BOHANNAN
NEW MEXICO
7868
PROFESSIONAL ENGINEER
01-30-23
RONALD R. BOHANNAN
P.E. #7868

BLVD 2500
ALBUQUERQUE, NM
**CONCEPTUAL
GRADING & DRAINAGE PLAN**
TERRA WEST, LLC
5571 MIDWAY PARK PL. NE
ALBUQUERQUE, NEW MEXICO 87109
(505) 858-3100
www.tierrowestllc.com

DRAWN BY
SB
DATE
01-16-23
DRAWING
2022083 GRADING
SHEET #
C1.0
JOB #
2022083



EXISTING BASIN MAP



PROPOSED BASIN MAP

CONCEPTUAL GRADING & DRAINAGE NARRATIVE

The purpose of this submittal is to provide a conceptual grading and drainage management plan for the property owner to replat the overall +/-11.55 acre site into 3 separate tracts. One proposed tract consists of existing luxury apartments that will remain in place while the two other proposed tracts will be developed at a later date, with no current development plan for each tract. This conceptual plan assumes drive-thru restaurant uses for the proposed tracts, as those are the most likely uses for future development.

FLOOD PLAIN

The site is not within a floodplain as shown on FIRM Map 35001C0351H.

EXISTING CONDITIONS

The site is currently developed and consists of an existing Water Park building (which should be demolished in the near future from the date of this plan), and existing buildings/parking lots for a Luxury Apartment Residence. There also is a vacant lot within the site along the frontage of Carlisle Blvd where a Hotel Building once stood but has since been demolished and cleared. Basins E1-E3, and E6 all front Carlisle Blvd, where drainage from these basins are directed from NE to SW and free discharge into the Carlisle Blvd ROW. The Luxury Apartments are primarily within Basins E-4, E5, and E10 and discharge into two Storm Drain Systems that eventually daylight and free discharge into the Embudo Arroyo. Basins E7, E8, and E9 are primarily the existing Water Park site, drainage from these basins flow from north to south towards existing inlets and storm drain system along the south side of the site, which (which also picks up the drainage from Basins E4 and E5) and daylights and free discharges into the Embudo Arroyo. The overall site is 90% impervious with a total 100-year 6-hour peak flow of 50.30 cfs.

PROPOSED CONDITIONS

Proposed Tract 2, which is the majority of the site, will remain in place as a Luxury Apartment residence. Proposed Tracts 1 and 3 will be redeveloped in the future for commercial uses. Basin P1 will consist of the future-developed Tract 3, drainage from this basin will surface flow from NE to SW towards a stormwater quality retention pond via curb cut. An overflow curb cut will allow the remaining drainage runoff to free discharge into Basin P2 once the stormwater quality volume is reached in the retention pond. Basin P2 and P3 consists of a portion of the Tract 2 Luxury Apartments that will sheet flow and free discharge into Carlisle Blvd. Because these basins do not have any proposed development within, no stormwater quality retention is required. Basin P9 consists of a majority of the remaining portion of proposed Tract 2. Drainage from this basin will remain as it does today in which the runoff is collected in a storm drain system that daylights into the Embudo Arroyo. Basins P4, P5, P7 and P8 are the remaining areas of the Luxury apartments that will remain, runoff from these basins are also currently collected in a storm drain system that daylights into the Embudo Arroyo. a portion of this storm drain system runs through Basin P6, which will be re-routed through this basin upon the future development of Tract 1. Basin P6 is the future development of Tract 1 as a commercial use, which will sheet flow from north to south and enter a stormwater quality retention pond via curb cuts. Once the stormwater quality retention volume is reached the remaining runoff will discharge through a raised inlet in the pond that will connect to the existing storm drain system that discharges into the Embudo Arroyo. The overall 100-year 6-hour peak discharge is 50.17 cfs, which is less than the existing peak discharge and also includes stormwater quality retention.

Existing Conditions																	
Basin Descriptions											100-Year, 6-Hr			10-Year, 6-Hr			
Basin ID	Area (sf)	Area (acres)	Area (sq miles)	Treatment A		Treatment B		Treatment C		Treatment D		Weighted E (in)	Volume (ac-ft)	Flow cfs	Weighted E (in)	Volume (ac-ft)	Flow cfs
				%	(acres)	%	(acres)	%	(acres)	%	(acres)						
E1	19,352.51	0.444	0.00069	0%	0.000	4%	0.018	0%	0.000	96%	0.427	2.511	0.093	1.96	1.588	0.059	1.22
E2	84,244.70	1.934	0.00302	0%	0.000	7%	0.135	0%	0.000	93%	1.799	2.460	0.396	8.41	1.549	0.250	5.20
E3	35,392.90	0.813	0.00127	0%	0.000	0%	0.000	0%	0.000	100%	0.813	2.580	0.175	3.65	1.640	0.111	2.28
E4	40,146.53	0.922	0.00144	0%	0.000	0%	0.000	0%	0.000	100%	0.922	2.580	0.198	4.14	1.640	0.126	2.59
E5	9,162.97	0.210	0.00033	0%	0.000	5%	0.011	0%	0.000	95%	0.200	2.494	0.044	0.92	1.575	0.028	0.57
E6	44,191.65	1.015	0.00159	0%	0.000	6%	0.061	40%	0.406	54%	0.548	1.881	0.159	3.90	1.114	0.094	2.29
E7	26,867.05	0.617	0.00096	0%	0.000	5%	0.031	0%	0.000	95%	0.586	2.494	0.128	2.71	1.575	0.081	1.68
E8	35,797.92	0.822	0.00128	0%	0.000	3%	0.025	0%	0.000	97%	0.797	2.528	0.173	3.64	1.601	0.110	2.27
E9	213,445.68	4.900	0.00766	0%	0.000	8%	0.392	3%	0.147	89%	4.361	2.398	0.979	21.02	1.502	0.613	12.92
Total	508,601.91	11.676	0.01824	0%	0.000	0.672			0.553	10.451			2.345	50.35		1.471	31.02

Proposed Conditions																	
Basin Descriptions												100-Year, 6-Hr			10-Year, 6-Hr		
Basin ID	Area (sf)	Area (acres)	Area (sq miles)	Treatment A		Treatment B		Treatment C		Treatment D		Weighted E (in)	Volume (ac-ft)	Flow cfs	Weighted E (in)	Volume (ac-ft)	Flow cfs
				%	(acres)	%	(acres)	%	(acres)	%	(acres)						
P1	19,915.97	0.457	0.00071	0%	0.000	9%	0.041	8%	0.037	83%	0.379	2.306	0.088	1.92	1.433	0.055	1.17
P2	91,087.11	2.091	0.00327	0%	0.000	12%	0.251	0%	0.000	88%	1.840	2.374	0.414	8.89	1.484	0.259	5.44
P3	35,392.90	0.813	0.00127	0%	0.000	0%	0.000	0%	0.000	100%	0.813	2.580	0.175	3.65	1.640	0.111	2.28
P4	40,146.53	0.922	0.00144	0%	0.000	0%	0.000	0%	0.000	100%	0.922	2.580	0.198	4.14	1.640	0.126	2.59
P5	8,797.18	0.202	0.00032	0%	0.000	5%	0.010	0%	0.000	95%	0.192	2.494	0.042	0.89	1.575	0.027	0.55
P6	73,700.28	1.692	0.00264	0%	0.000	15%	0.254	4%	0.068	81%	1.370	2.262	0.319	7.00	1.400	0.197	4.24
P7	26,272.65	0.603	0.00094	0%	0.000	4%	0.024	0%	0.000	96%	0.579	2.511	0.126	2.66	1.588	0.080	1.65
P8	213,445.68	4.900	0.00766	0%	0.000	8%	0.392	3%	0.147	89%	4.361	2.398	0.979	21.02	1.502	0.613	12.92
Total	508,758.30	11.679	0.01825	0%	0.000	0.972		0.251		10.456		2.341	50.17		1.467	30.85	

Equations:

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

Excess Precipitation, E (in.)			
Zone 3	100-Year	10-Year	
Ea	0.67	0.18	
Eb	0.86	0.34	
Ec	1.09	0.52	
Ed	2.58	1.64	

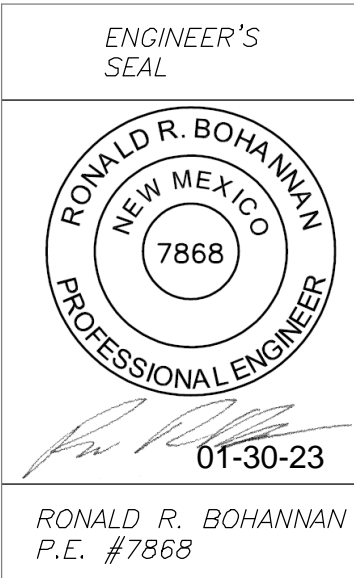
Peak Discharge (cfs/acre)			
Zone 3	100-Year	10-Year	
Qa	1.84	0.51	
Qb	2.49	1.07	
Qc	3.17	1.69	
Qd	4.49	2.81	

Tract 1 Water Quality Retention Volume Required:

Impervious Area = 1.370 Acres = 59,677.2 SF (Basin P6)
Rainfall Depth = 0.26 Inches = 0.0217 Ft (DPM 6-12 for Redevelopment)
V_{WQ} Required = 59,677.2 x 0.0217 = 1,295 CF = 0.03 Ac-Ft

Tract 3 Water Quality Retention Volume Required:

Impervious Area = 0.379 Acres = 16,509.24 SF (Basin P1)
Rainfall Depth = 0.26 Inches = 0.0217 Ft (DPM 6-12 for Redevelopment)
V_{WQ} Required = 15,509.24 x 0.0217 = 359 CF = 0.0082 Ac-Ft



BLVD 2500
ALBUQUERQUE, NM

CONCEPTUAL
HYDROLOGY CALCULATIONS

TERRA WEST, LLC
5571 MIDWAY PARK PL NE
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