TIERRA WEST, LLC

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Monday, November 11, 2024

Margaret L. Haynes, P.E., District 3 Traffic Engineer
New Mexico Department of Transportation District 3 Office
7500 Pan American Freeway N.E.
P. O. Box 91750
Albuquerque, New Mexico 87199-1750

Re: Demi's Pavilion Retail Development – Deceleration Lane Assessment and Crash Analysis

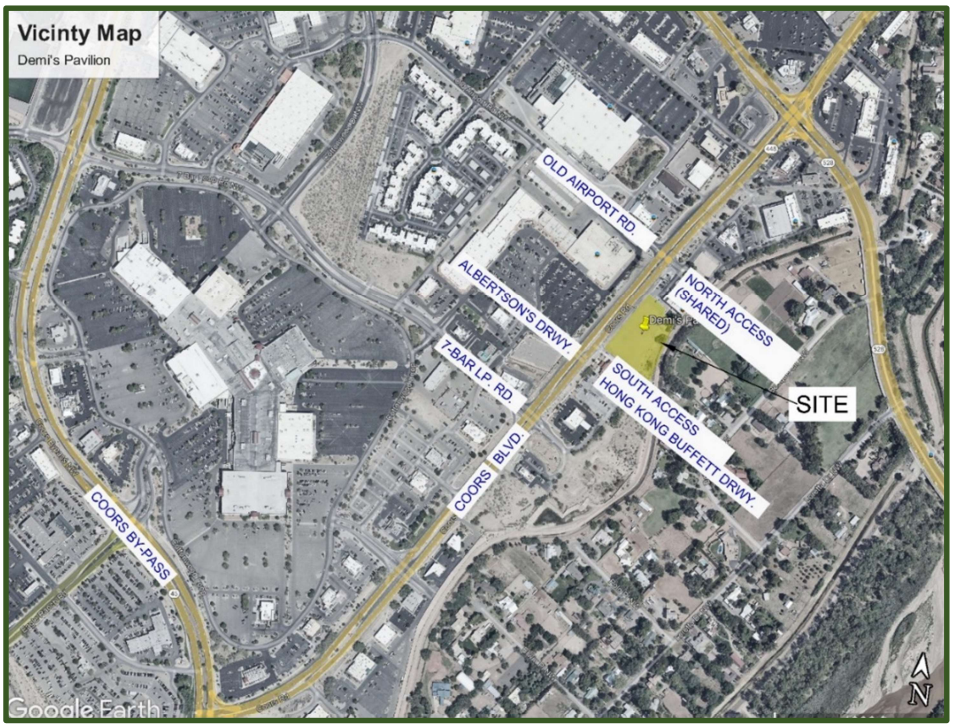
Dear Ms. Haynes:

As request by you during our scoping meeting for Demi's Pavilion Retail Development Project on October 10, 2024, this letter contains:

1. Results of the deceleration lane assessment including comparison of the existing deceleration lane capacities and geometries to the minimum requirements specified in the State Access Management Manual (SAMM) and recommendations to comply with the requirements.
2. 2020-2022 crash data and analysis results at the study area intersections and corridors.

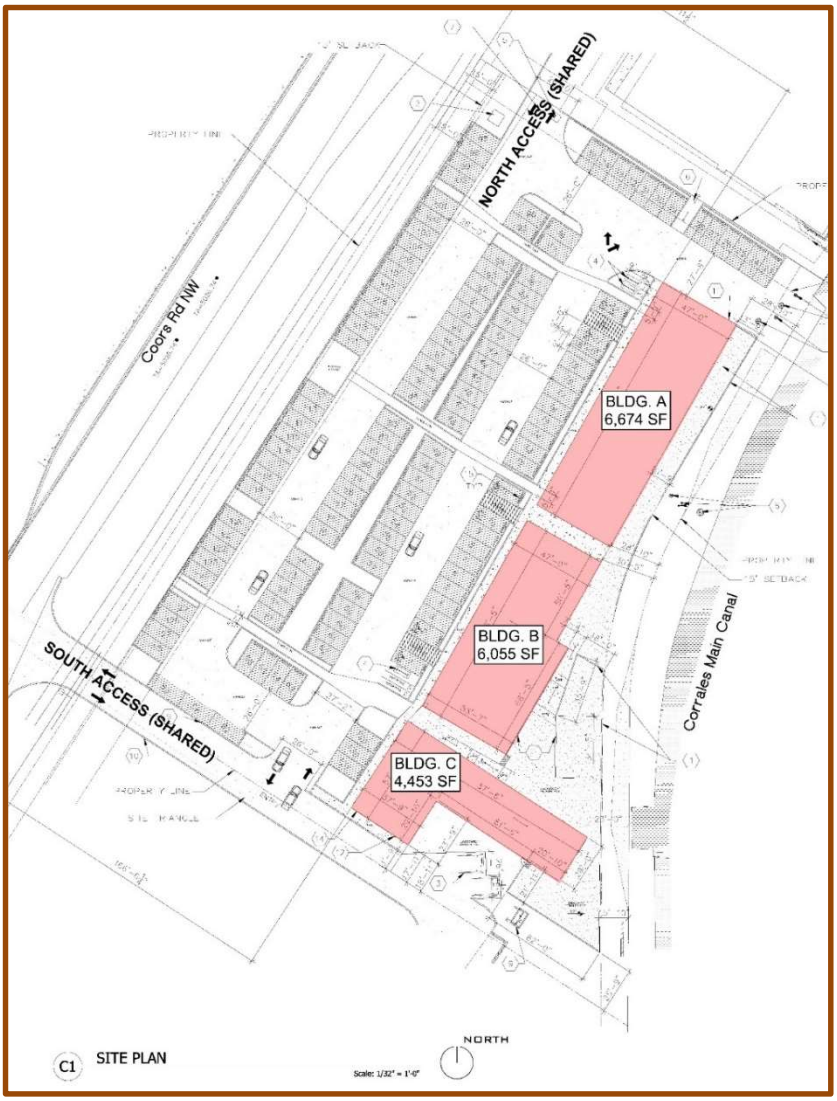
Project Location

The project is located at 10120 Coors Blvd., NW. See the Vicinity Map below. Coors Blvd. is classified as a principal arterial on the NMDOT's functional class map and has a speed limit of 40 mph.



Project Description

The proposed development is a Strip Shopping Center with 17,200 sq. ft. of retail space, constructed on 2.47 acres of vacant land. See the Site Plan below and in EXHIBIT 1.



Based on the ITE Trip Generation Manual, 11th Edition, for a Strip Plaza (ITE Land Use Code 822), the development is expected to generate 28 AM Peak Hour Trips (17 Entering and 11 Exiting) and 80 PM Peak Hour Trips (40 Entering and 40 Exiting) including a 30% pass-by trip rate. See EXHIBIT 2.

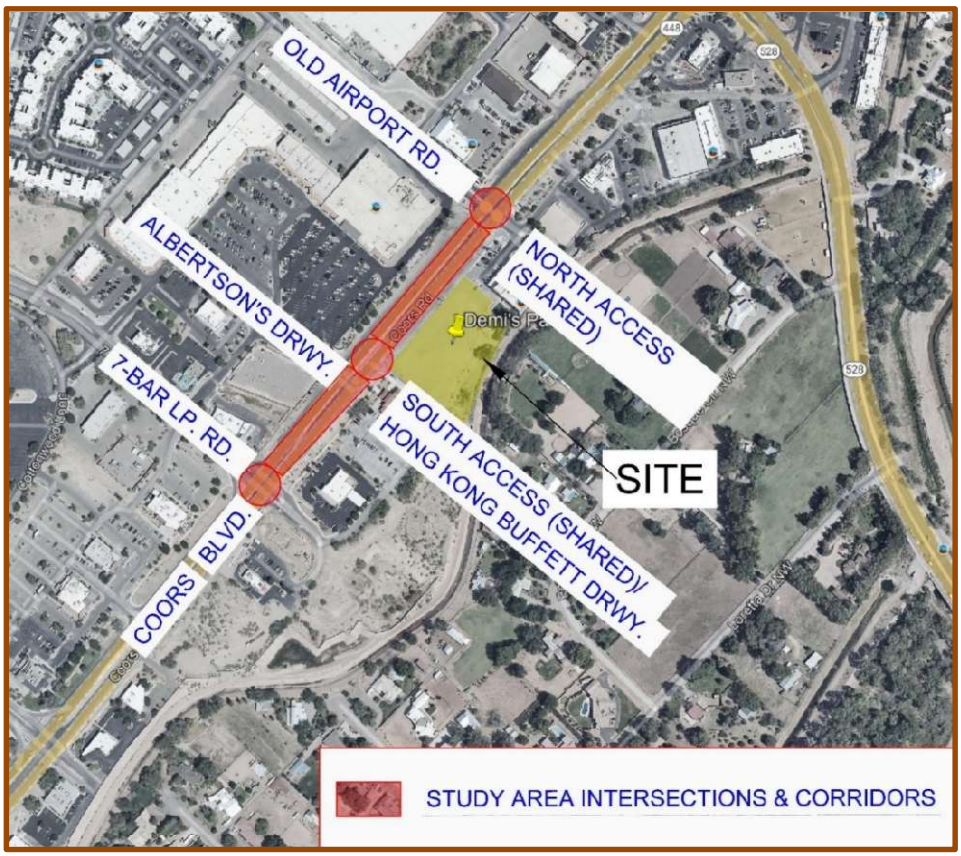
The proposed development will be accessed via two existing access driveways on the north and south boundaries of the site as shown in the diagram above. These driveways will be shared with the existing developments bordering the site.

Offsite improvements along the project frontage of Coors Blvd. will include new pedestrian sidewalk, street lighting, curb and gutter, and northbound turn lane taper extension. All improvements will be designed in accordance with the City of Albuquerque Development Process Manual (DPM). See EXHIBIT 6.

Study Area

The study area is fully developed and all parcels in the vicinity of the project are occupied by commercial retail businesses and restaurants. The study area includes the following intersections, corridors, and associated deceleration lanes:

Intersections	**Traffic Control**
Seven Bar Loop/Coors Blvd.	Signalized
Hong Kong Buffet Access/Coors Blvd.	Unsignalized, 2-Way Stop
Albertson's Access/Coors Blvd.	Unsignalized, 2-Way Stop
Old Airport Rd./Coors Blvd.	Signalized
Corridors	**Geometry**
Coors Blvd. between Seven Bar Loop and Old Airport Rd.	4-Lane Divided Roadway



Deceleration Lane Assessment

Deceleration distances and taper lengths of ten deceleration lanes (EXHIBITS 3 & 4) in the study area were assessed against the minimum lengths listed Table 18.K-1 of the State Access Management Manual (SAMM). The minimum deceleration lengths and taper geometry for a posted speed limit of 40mph (speed limit on Coors Blvd.) are highlighted in Table 18.K-1 below. Right turn deceleration lanes were compared to the "slow to 15mph" standard (300-ft) and left-turn deceleration lanes were compared to the "Stop Condition" criteria (325-ft). Minimum deceleration distances include a 125-ft long taper.

Table 18.K-1
Deceleration and Acceleration Lengths (feet)

Speed Change Lane Condition	Posted Speed (mph)									
	25	30	35	40	45	50	55	60	65	70
Deceleration Distance										
Stop Condition	150	200	250	325	400	475	550	650	725	850
Slow to 15 mph	130	175	230	300	370	450	525	620	700	820
Deceleration Taper										
Length for 12-foot Lane	50	75	100	125	150	175	200	225	250	250
Straight Line Ratios (L:W)	4:1	6:1	8:1	10.5:1	12.5:1	14.5:1	16.5:1	18.5:1	21:1	21:1
Acceleration Lane Length	NA	190	270	380	550	760	960	1,170	1,380	1,590
Acceleration Taper										
Length for 12-foot Lane	NA	100	120	150	170	180	230	270	300	300
Straight Line Ratios (L:W)	NA	8:1	10:1	12.5:1	14:1	15:1	19:1	22.5:1	25:1	25:1

This table assumes level terrain and acceleration distances for the passenger car/pickup design vehicle. Refer to the text discussion of Sub-Section 18.K for additional guidance regarding the design of speed change lanes.

Queue capacities of the deceleration lanes were compared to 2035 Queue lengths for the BUILD condition as reported in the 7-Bar Retail Development Traffic Impact Study approved by the City Albuquerque and NMDOT in January 2024. The results of the assessment are summarized in EXHIBIT 5.

Crash Analysis

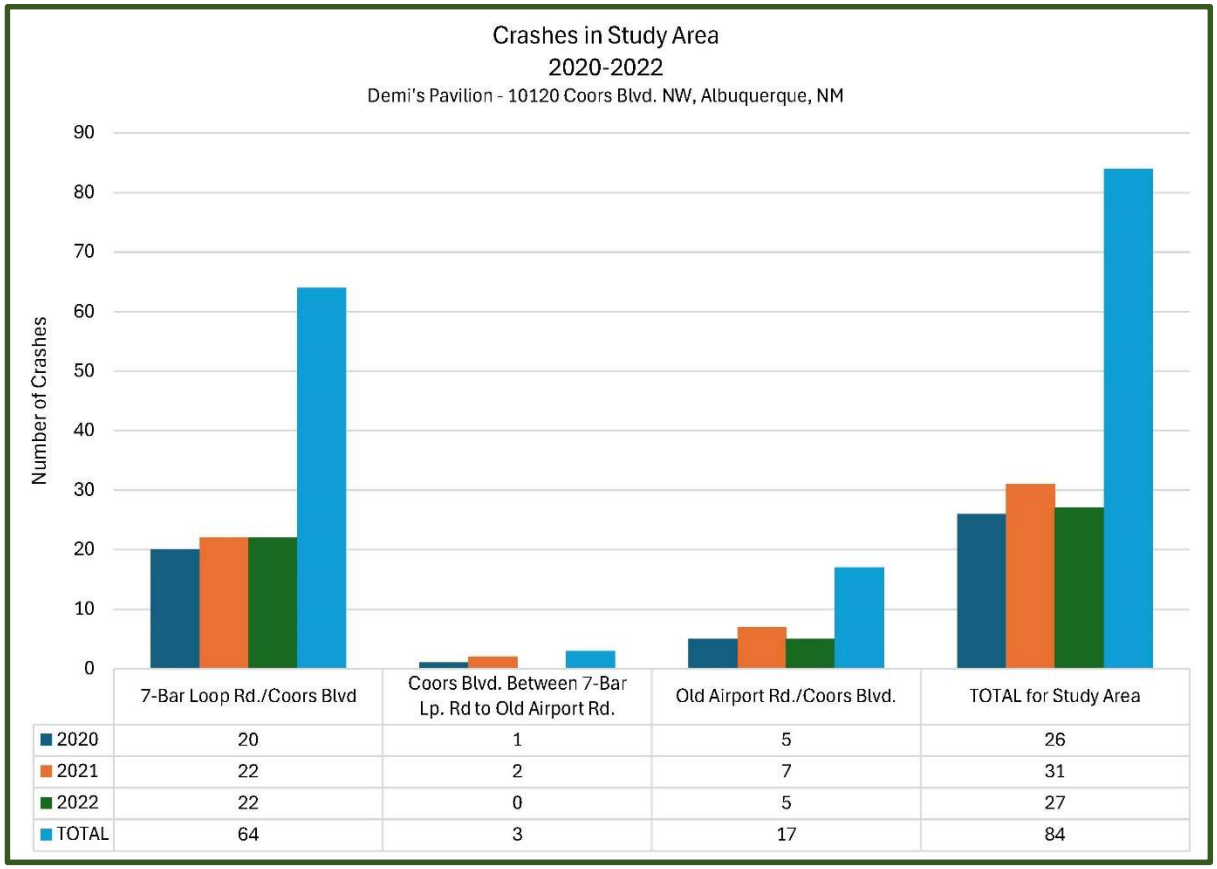
Crash data from 2020 thru 2022 for the study area was extracted using the AASHTOWare Safety Transportation Crash Query Application developed by Numetric. The extracted information was compared with the Mid-Region Council of Governments' High Fatal and Injury Network (HFIN) dataset to verify consistency between the two platforms and confirm that the crash data on both systems align. A report summarizing the data is in the following table.

Crash Data Summary

Demi's Pavilion -10120 Coors Blvd., Albuquerque, NM

		7-Bar Loop Rd./Coors Blvd	Coors Blvd. Between 7-Bar Lp. Rd to Old Airport Rd.	Old Airport Rd./Coors Blvd.	TOTAL for Study Area
Year	2020	20	1	5	26
	2021	22	2	7	31
	2022	22	0	5	27
	TOTAL	64	3	17	84
KABCO Crash Severity	K (Fatal)	0	0	0	0
	A (Serious Injury)	0	0	0	0
	B (Minor Injury)	5	0	5	10
	C(Possible Injury)	18	1	7	26
	O(Property Damage Only)	41	2	5	48
Contributing Factor	Other, No Driver Error	38	2	14	54
	Avoid No Contact Other		1		1
	Avoid No Contact Vehicle			1	1
	Disregarded Traffic Signal	4		1	5
	Driver Distracted by Passenger	1			1
	Driver Distracted by Other Activity		1		1
	Driver Inattention	25		7	32
	Excessive Speed	4			4
	Failed to Yield Right of Way	7		6	13
	Following too Closely	10			10
	Improper Lane Change	1			1
	Made Improper Turn	1			1
	Other Improper Driving	6			6
	Passed a Stop Sign			1	1
	Speed too Fast for Conditions		1		1
	Under the Influence of Alcohol	1			1
	Under the Influence of Drugs	1	1		2
	Animal(s) in Roadway	1			1
Other Conditions	Pedestrian Involved				0
	Pedacycle Invoved	2		1	3
	Fixed Object			1	1

The charts below show a graphical representation of the data. The first graph illustrates the total crashes at each intersection and the total for the study are by year. The second graph displays the contributing factors to the crashes at the two study area intersections and the corridor between the intersections.



	7-Bar Loop Rd./Coors Blvd	Coors Blvd. Between 7-Bar Lp. Rd to Old Airport Rd.	Old Airport Rd./Coors Blvd.	TOTAL for Study Area
2020	20	1	5	26
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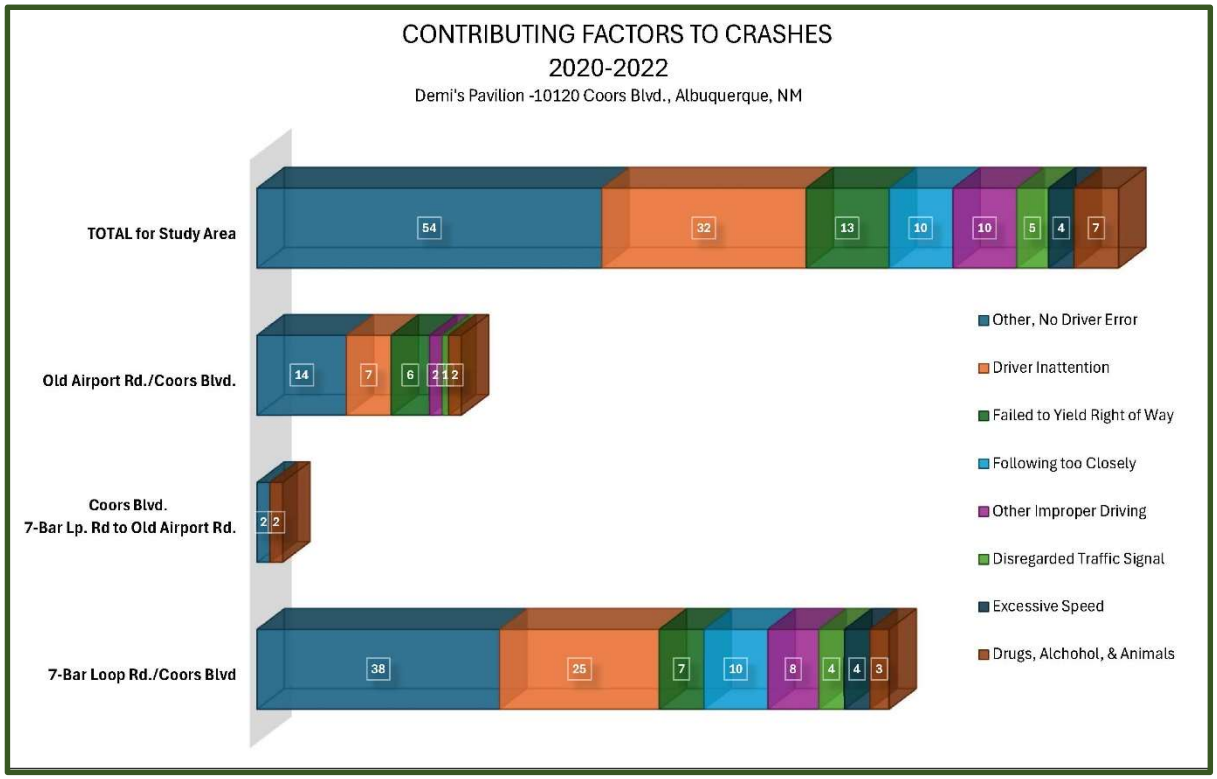
TOTAL	64	3	17	84



Conclusions

- All deceleration lanes in the study area have sufficient queue capacity but do not meet the minimum taper ratio requirement (10.5:1 or 125-ft long for a 12-ft wide lane) in the SAMM.

- Half of the lanes meet the deceleration distance requirements and half of the lanes are too short.

- Three of the ten deceleration lanes in the study area will be used by traffic generated by the development. The taper length of one of these lanes, the northbound right turn lane at Old Airport Rd./Coors Blvd., is short by 63-ft or about 2.5 vehicle lengths. This could be corrected during the construction of the new curb and gutter along the project frontage as part of the offsite infrastructure improvements.

- Out of the 84 crashes in the study area, 64 (or 76%), occurred at the 7-Bar Loop Rd./Coors Blvd. intersection.

- Total crashes were consistent from year to year.

- The highest contributing factor reported was "Other, No Driver Error" which, unfortunately, has no further description in the accident reports. The next highest causes of crashes were driver inattention, failure to yield right of way, and following too closely.

- 3.5% of crashes (3 crashes) involved pedestrians which were all on bicycles.

- There were no crashes involving fatalities or serious injuries. This is a significant improvement to crash rates reported on the MRMPO Region High Fatal and Injury Network (HFIN) for the previous five years (2017-2021), when 4 people were killed and 133 people were injured because of crashes at the same locations.

- 57% (48 Crashes) of the crashes involved property damage only. The other 43% (36 Crashes) involved only minor or possible injuries.

- Drugs and alcohol were not major contributing factors to crashes, only 3 out of 84 crashes involved drugs or alcohol.

Please call me if you have questions.

Best Regards,

Judith Becker, P.E.

cc: Curtis Cherne, Traffic Engineer, City of Albuquerque; Penny Dudley, Architect, Penny Designs

EXHIBITS

EXHIBIT 1 Site Plan

EXHIBIT 2 ITE Trip Generation Table and Graphs

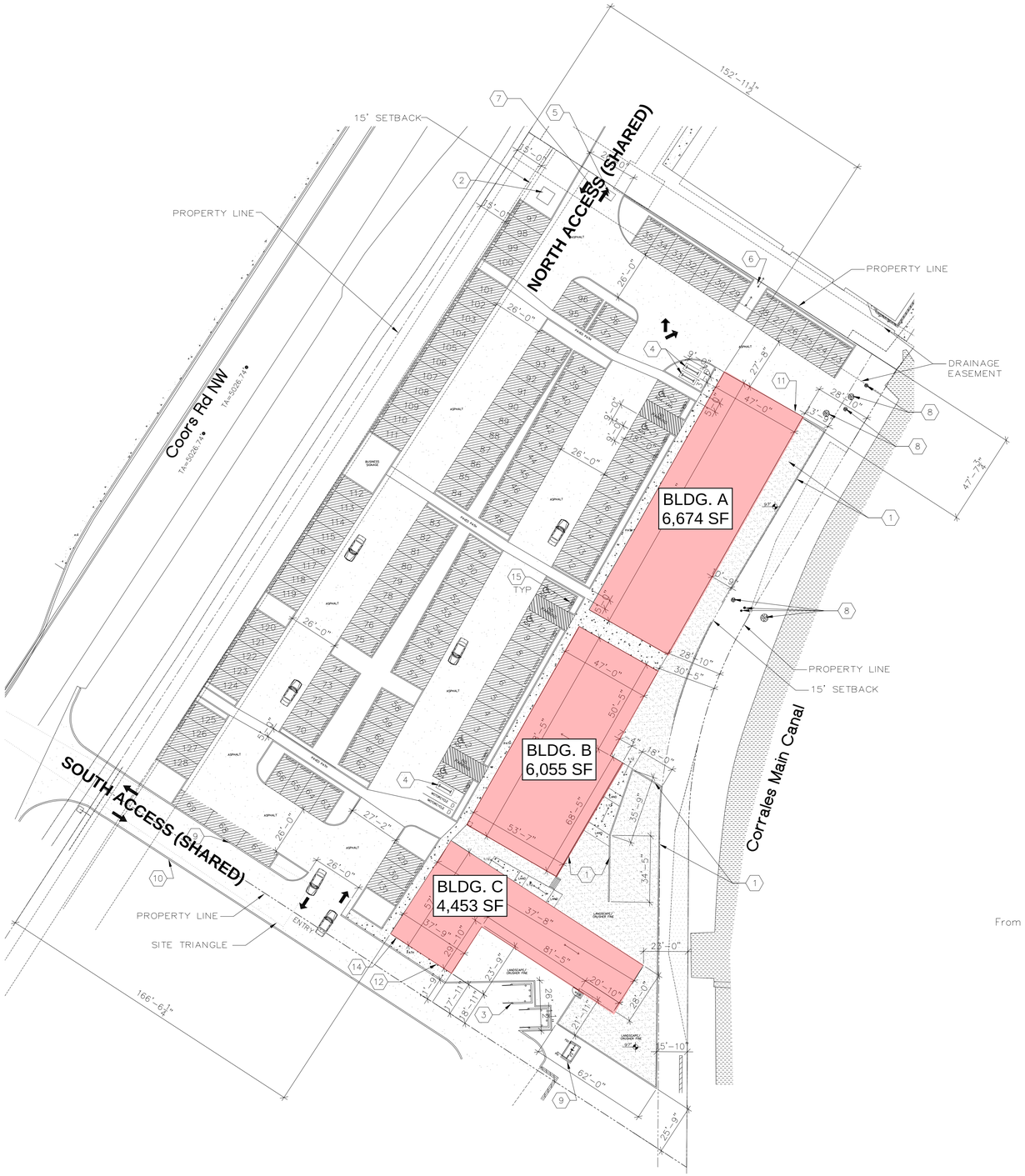
EXHIBIT 3 Deceleration Lanes at and near 7-Bar Loop Rd./Coors Blvd.

EXHIBIT 4 Deceleration Lanes at Old Airport Rd./Coors Blvd.

EXHIBIT 5 Deceleration Lanes Assessment Summary Table

EXHIBIT 6 Proposed Off-site Improvements

EXHIBIT 1 - SITE PLAN



C1 SITE PLAN

Scale: 1/32" = 1'-0"

NOTES

NOTE 1: LANDSCAPING AND SIGNAGE WILL NOT INTERFERE WITH CLEAR SIGHT REQUIREMENTS. THEREFORE, SIGNS, WALLS, TREES, AND SHRUBBERY BETWEEN 3 AND 8 FEET TALL (AS MEASURED FROM THE GUTTER PAN) WILL NOT BE ACCEPTABLE IN THE CLEAR SIGHT TRIANGLE.
NOTE 2: ALL WORK LOCATED IN THE THE RIGHT OF WAY MUST BE INCLUDED ON THE WORK ORDER.
NOTE 3: ALL BROKEN OR CRACKED SIDEWALK MUST BE REPLACED WITH SIDEWALK AND CURB & GUTTER.
NOTE 4: SIGNAGE FOR ADA MUST BE IN ALL CAPS – "NO PARKING" EACH OF WHICH SHALL BE AT LEAST ONE FOOT HIGH AND AT LEAST TWO INCHES WIDE, PLACED AT THE REAR OF THE PARKING SPACE SO AS TO BE CLOSE TO WHERE AN ADJACENT VEHICLES REAR TIRE WOULD BE PLACED.
NOTE 5: SIGNAGE FOR ADA PARKING MUST BE IN ALL CAPS – "VIOLATORS ARE SUBJECT TO A FINE AND/OR TOWING"
NOTE 6: OWNER PROVIDED. BIKE RACK SHALL BE MINIMUM 30" TALL AND 18" WIDE. RACK SHALL BE SUPPORTED 2 OR MORE PLACES. COMB/TOASTER RACKS NOT ALLOWED. RACK DESIGNED TO SUPPORT BIKE IN UPRIGHT POSITION. RACK MUST ALLOW VARYING BIKE FRAMES/STYLES. USER NOT REQUIRED TO LIFT BIKE ONTO RACK. EACH BIKE PARKING SPACE ACCESSIBLE W/OUT MOVING ANOTHER BIKE.
NOTE 7: BIKE RACK STURDY/ANCHORED TO CONCRETE PAD W/1'–0" CLEAR ZONE.
NOTE 8: THE APPROPRIATE DRIVE–PAD DRAWING WILL BE INCLUDED IN WITH THE BUILDING PERMIT SET. (per Matt Grush)

SITE INFORMATION

UPC: 101406522038520302
Owner: CDR HOLDINGS LLC
Owner Address: 3554 WHITE HORSE DR SE
RIO RANCHO, NM 87124
Site Address: 10120 COORS BLVD 87114
Legal Description: tr 13–a TRACTS 13–A, 13–b & 13–C BLACK RANCH (BEING A REPLAT OF TRACT 13 BLACK RANCH)
Acres: 2.4677
Zone Map Name: B–14–Z

SETBACKS

FRONT: 15'–0"
INTERIOR SIDE: 0'
REAR: 15'–0

PARKING

VEHICLE
REQUIRED: N/A
PROVIDED: 131

ADA
REQUIRED: N/A
PROVIDED: 6

MOTORCYCLE
REQUIRED: N/A
PROVIDED: 2

BICYCLE
REQUIRED: N/A
PROVIDED: 6

BUILDING INFO

Occupancy Group:	B (BUSINESS) §310.4		
Construction Type:	TYPE II–B § Table 601		
Sprinklered:	FACILITY IS SPRINKLED		
Allowable Floor Area:	B II–B S: 10,500 sf Allowable § Table 503	B II–B S: 10,500 sf Allowable § Table 503	C B II–B S: 10,500 sf Allowable §
Actual Floor Area:	A 6,674 sf Actual ok	B 6,055 sf Actual ok	C 4,453 sf Actual ok Table 503
	ALLOWABLE	ACTUAL	
Building Height:	20'	18' Table 504.3	
Number of Stories:	2	1 Table 504.4	
Area Separation Required:	1 HR Tenant Separation Firewall with Sprinklers		
Maximum Travel Distances: From the Exit Access to the Door or the Nearest Exit	PERMITTED 300'	PROVIDED N/A Table 1017.2	

PROJECT DESCRIPTION

DESIGN OF WARM SHELL BUILDING A – SPACE @ 17,182 SF FOR THE FUTURE INTENDED USE OF OCCUPANCY GROUP B.

GENERAL SHEET NOTES

- DO NOT SCALE DRAWINGS
- ALL DIMENSIONS TO THE FACE OF STUD UNLESS OTHERWISE NOTED
- ALL DIMENSIONS TO BE FIELD VERIFIED

SHEET KEYNOTES

1. BLOCK RETAINING WALL – SEE STRUCTURAL/SEE CIVIL
2. NEW TRANSFORMER PAD – SEE ELECTRICAL
3. WASTE – BLOCK WALL MUST MAINTAIN 30"
4. BIKE RACK – SEE NOTE 6 & 7
5. EXISTING TRANSFORMER TO BE MOVED. SEE NOTE 2.
6. PEDESTRIAN ACCESS
7. CROSS LOT ACCESS
8. EXISTING TREE TO REMAIN
9. HOTBOX
10. SIGHT TRIANGLE
11. BUILDING DESIGNATION (FIRE) – A –LETTERING TO BE PICKED BY OWNER
12. BUILDING DESIGNATION (FIRE) – B – LETTERING TO BE PICKED BY OWNER
13. BUILDING DESIGNATION (FIRE) – C – LETTERING TO BE PICKED BY OWNER
14. KNOX BOX
15. ADA SIGNAGE – SEE NOTES 4 & 5

LEGEND

PERMEABLE PAVERS – ECORASTER

PENNY DESIGN, LLC
302 SANDIARD NW
ALBUQUERQUE, NEW MEXICO 87107
505.280.5439

DEMI'S PAVILLIONS
10120 COORS BLVD NW
ALBUQUERQUE, NM
87114

MARK	DATE	DESCRIPTION

DATE: 10/15/2024
DRAWN BY: pd
CHECKED BY:
SET NO:
SHEET TITLE: SITE PLAN

AS101

EXHIBIT 2 - ITE TRIP GENERATION TABLE

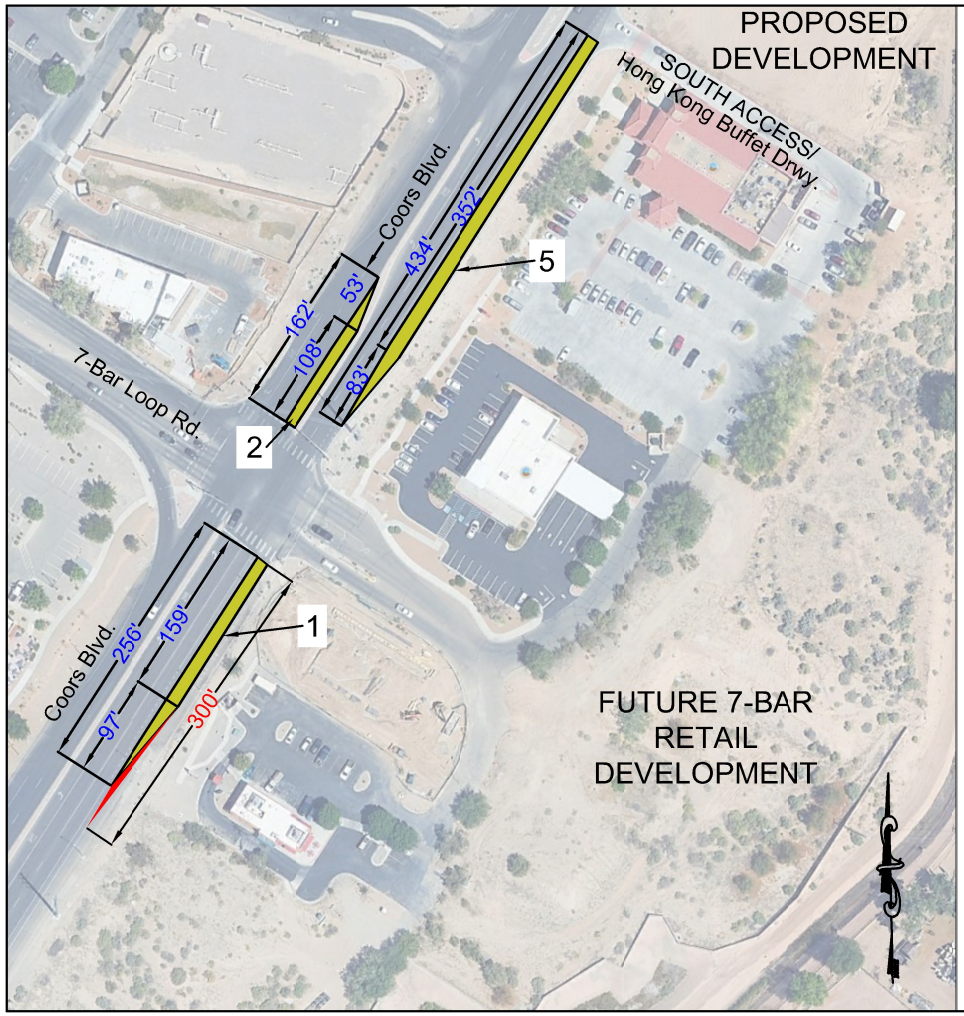
Demi's Pavillions

Trip Generation Data (ITE Trip Generation Manual - 11th Edition)

USE (ITE CODE)		24 HR VOL	A. M. PEAK HR.		P. M. PEAK HR.	
DESCRIPTION		*GROSS*	*ENTER*	*EXIT*	*ENTER*	*EXIT*
Summary Sheet	Units					
Strip Retail Plaza <40K - Linear (822)	17.20	937	24	16	57	57
Subtotal		**937**	**24**	**16**	**57**	**57**
Pass-By Trips	30%		*-7*	*-5*	*-17*	*-17*
Total Primary Trips			**17**	**11**	**40**	**40**

EXHIBIT 3

7-BAR LOOP RD./COORS BLVD.
DECELERATION LANE GEOMETRY



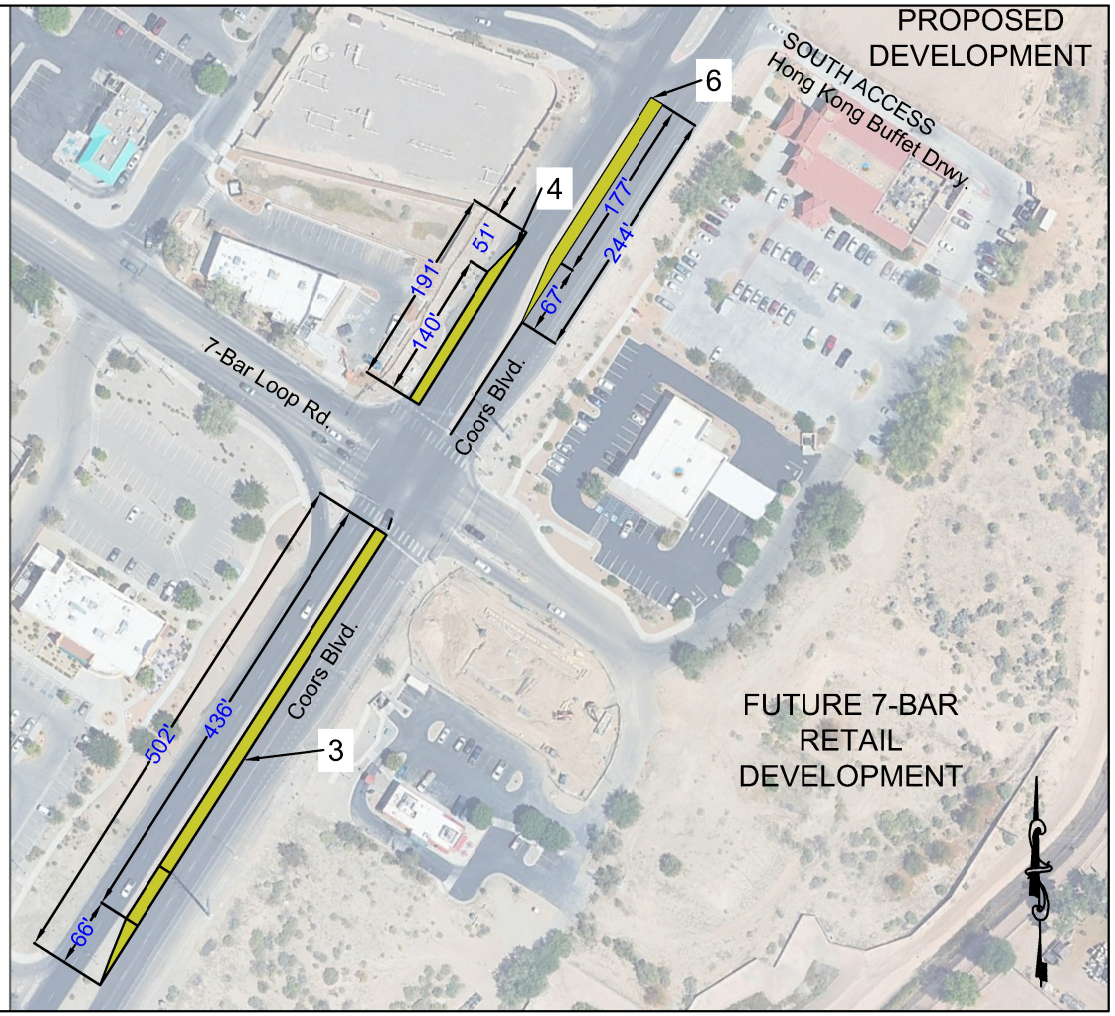
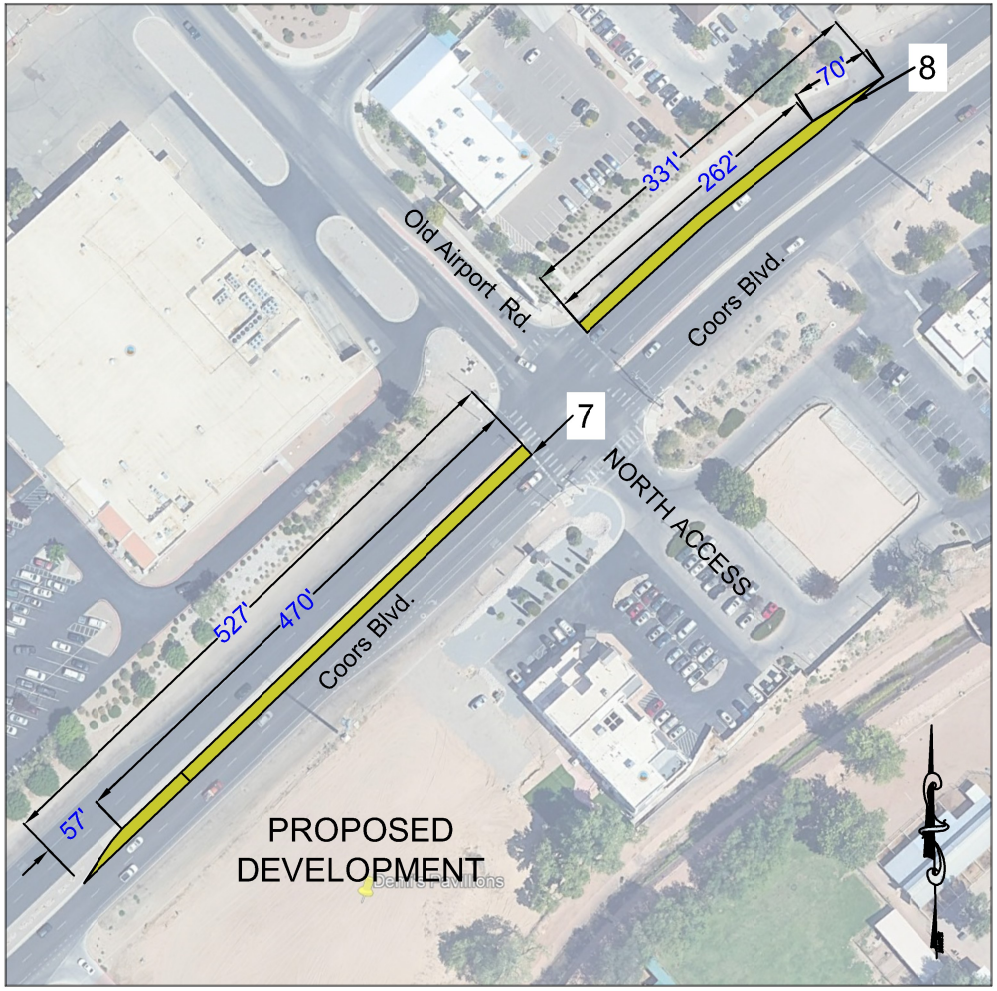


EXHIBIT 4

OLD AIRPORT RD./COORS BLVD.
DECELERATION LANE GEOMETRY



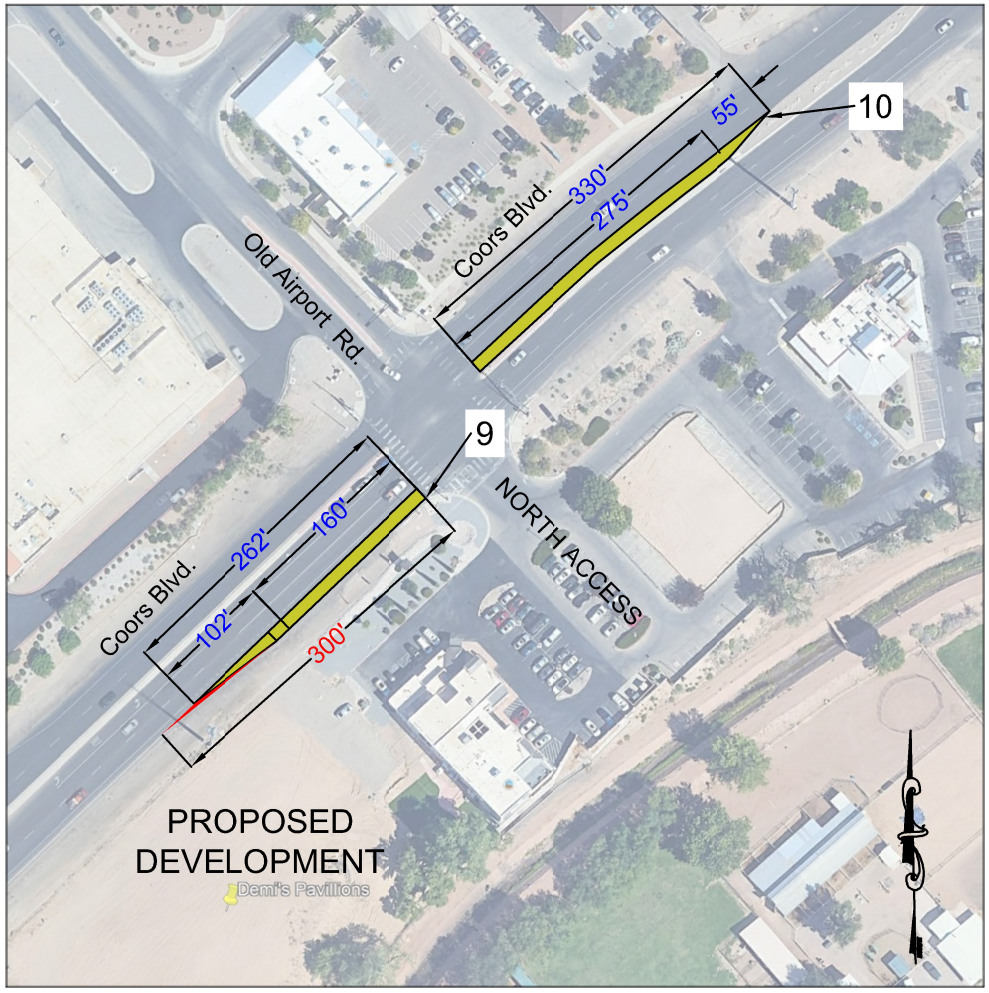


EXHIBIT 5

DECELERATION LANE GEOMETRY ASSESSMENT SUMMARY TABLE

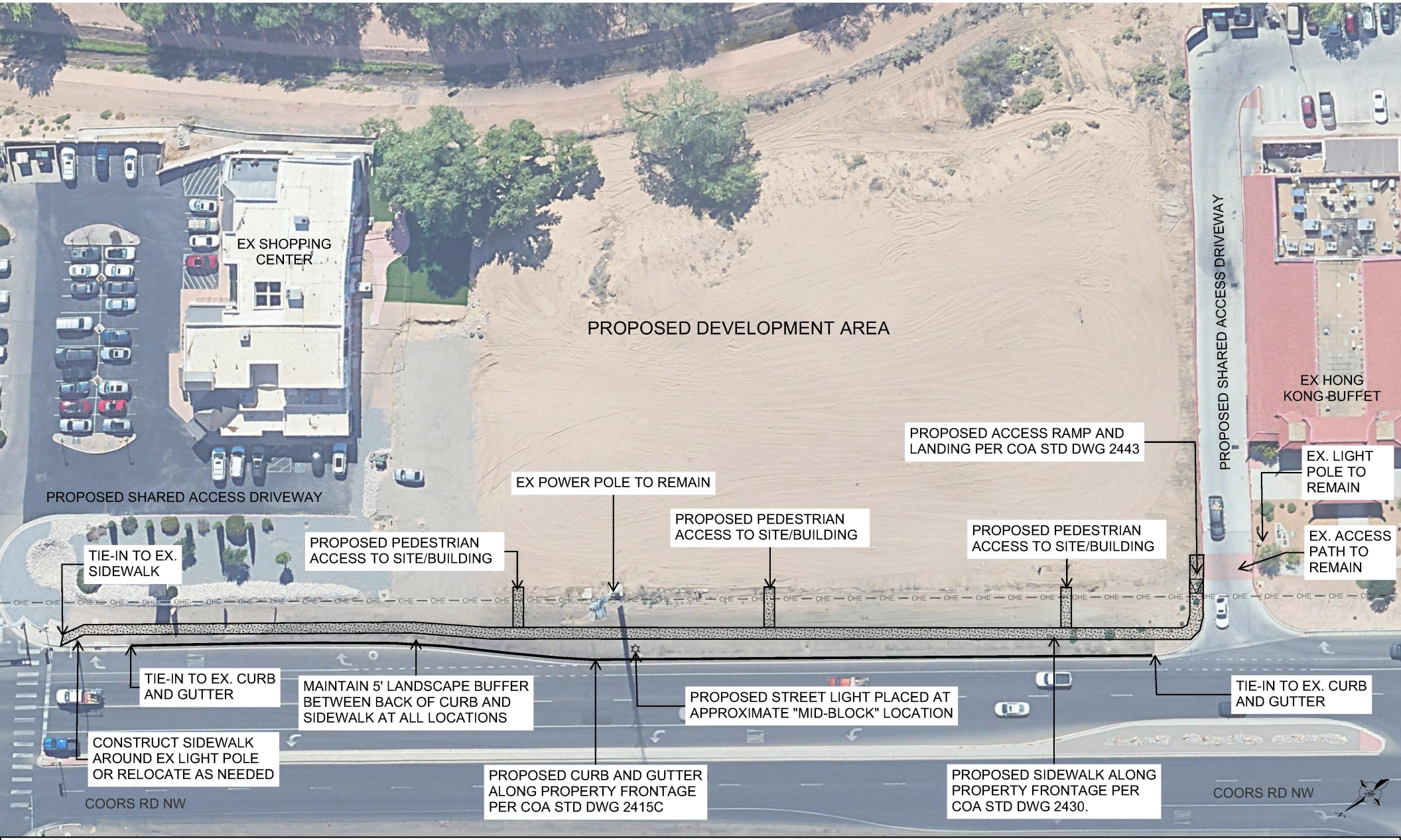
DEMI'S PAVILION - 10120 COORS BLVD, ALBUQUEQUE, NM

DECELERATION LANE NO.	EXHIBIT #	INTERSECTION	DIRECTION	RIGHT (RT) OR LEFT (LT) TURN LANE	EXISTING DECELERATION DISTANCE (FT)	MINIMUM REQUIRED DECELERATION DISTANCE(1) (FT)	QUEUE CAPACITY (FT)	2034 QUEUE LENGTH (2) (FT)	IS QUEUE CAPCITY SUFFICIENT?	TAPER RATIO≥ MINIMUM REQUIRED TAPER RATIO (1)?	LANE USED BY TRAFFIC GENERATED BY DEVELOPMENT?	ADDITIONAL LANE LENGTH REQUIRED (FT)	NOTES
1	1	7-BAR/COORS	NORTHBOUND	RT	256	300	159	83	YES	NO	NO	44	• ADDITIONAL 44-FT OF DECELERATION LENGTH REQUIRED TO MEET MINIMUM STANDARD (1) • QUEUE CAPACITY > 2034 QUEUE LENGTH (2) • LANE NOT USED BY TRAFFIC GENERATED BY PROPOSED DEVELOPMENT • TAPER RATIO<STANDARD TAPER RATIO (1)
2	1	7-BAR/COORS	SOUTHBOUND	LT	162	325	108	35	YES	NO	NO	163	• ADDITIONAL 163-FT OF DECELERATION LENGTH REQUIRED TO MEET MINIMUM STANDARD (1) BUT CANNOT EXTEND DUE TO PROXIMITY TO NORTHBOUND LT TURN LANE AT ALBERTSON'S DRWY. • QUEUE CAPACITY > 2034 QUEUE LENGTH (2) • LANE NOT USED BY TRAFFIC GENERATED BY PROPOSED DEVELOPMENT • TAPER RATIO<STANDARD TAPER RATIO (1)
3	1	7-BAR/COORS	NORTHBOUND	LT	502	325	436	45	YES	NO	NO	0	• NO ADDITIONAL OF DECELERATION LENGTH REQUIRED TO MEET MINIMUM STANDARD (1) • QUEUE CAPACITY > 2034 QUEUE LENGTH (2) • LANE NOT USED BY TRAFFIC GENERATED BY PROPOSED DEVELOPMENT • TAPER RATIO<STANDARD TAPER RATIO (1)
4	1	7-BAR/COORS	SOUTHBOUND	RT	191	300	140	18	YES	NO	NO	109	• ADDITIONAL 109-FT OF DECELERATION LENGTH REQUIRED TO MEET MINIMUM STANDARD (1). LANE COULD BE EXTENDED BY RESTRIPING THE PAVEMENT AND ADDING CURB & GUTTER. • QUEUE CAPACITY > 2034 QUEUE LENGTH (2) • LANE NOT USED BY TRAFFIC GENERATED BY PROPOSED DEVELOPMENT • TAPER RATIO<STANDARD TAPER RATIO (1)
5	1	HONG KONG BUFFET DRWY/COORS	NORTHBOUND	RT	434	300	352	UNKN.	YES	NO	YES	0	• NO ADDITIONAL DECELERATION LENGTH REQUIRED TO MEET MINIMUM STANDARD (1) • QUEUE CAPACITY > 2034 QUEUE LENGTH (2) • LANE USED BY TRAFFIC GENERATED BY PROPOSED DEVELOPMENT • TAPER RATIO<STANDARD TAPER RATIO (1)
6	1	ALBERTSON DRWY/COORS	NORTHBOUND	LT	244	325	177	10	YES	NO	NO	81	• ADDITIONAL 81-FT OF DECELERATION LENGTH REQUIRED TO MEET MINIMUM STANDARD (1) BUT CANNOT EXTEND DUE TO PROXIMITY TO SOUTHBOUND LT TURN LANE AT 7-BAR LP. RD. • QUEUE CAPACITY > 2034 QUEUE LENGTH (2) • LANE NOT USED BY TRAFFIC GENERATED BY PROPOSED DEVELOPMENT • TAPER RATIO<STANDARD TAPER RATIO (1)
7	2	OLD AIRPORT/COORS	NORTHBOUND	LT	527	325	470	93	YES	NO	NO	0	• NO ADDITIONAL DECELERATION LENGTH REQUIRED TO MEET MINIMUM STANDARD (1) • QUEUE CAPACITY > 2034 QUEUE LENGTH (2) • LANE NOT USED BY TRAFFIC GENERATED BY PROPOSED DEVELOPMENT • TAPER RATIO<STANDARD TAPER RATIO (1)
8	2	OLD AIRPORT/COORS	SOUTHBOUND	RT	331	300	262	40	YES	NO	NO	0	• NO ADDITIONAL DECELERATION LENGTH REQUIRED TO MEET MINIMUM STANDARD (1) • QUEUE CAPACITY > 2034 QUEUE LENGTH (2) • LANE NOT USED BY TRAFFIC GENERATED BY PROPOSED DEVELOPMENT • TAPER RATIO<STANDARD TAPER RATIO (1)
9	2	OLD AIRPORT/COORS	SOUTHBOUND	LT	262	325	160	100	YES	NO	YES	63	• ADDITIONAL 63-FT OF DECELERATION LENGTH REQUIRED TO MEET MINIMUM STANDARD (1) • QUEUE CAPACITY > 2034 QUEUE LENGTH (2) • LANE USED BY TRAFFIC GENERATED BY PROPOSED DEVELOPMENT • TAPER RATIO<STANDARD TAPER RATIO (1)
10	2	OLD AIRPORT/COORS	NORTHBOUND	RT	330	300	275	40	YES	NO	YES	0	• NO ADDITIONAL DECELERATION LENGTH REQUIRED TO MEET MINIMUM STANDARD (1) • QUEUE CAPACITY > 2034 QUEUE LENGTH (2) • LANE USED BY TRAFFIC GENERATED BY PROPOSED DEVELOPMENT • TAPER RATIO<STANDARD TAPER RATIO (1)

(1) Refer to Table 18.K-1, State Access Management Manual (SAMM), SEE PG. 2

(2) 2034 BUILD Vehicle Queue lengths taken from the 7-Bar Retail Development Traffic Impact Study, January 2024

EXHIBIT 6
PROPOSED OFFSITE IMPROVEMENTS



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DEMI'S PAVILIONS PROPOSED DEVELOPMENT

CIVIL INFRASTRUCTURE
CONCEPTUAL LAYOUT