

July 10, 2024

Curtis Cherne, P.E., Senior Engineer City of Albuquerque Planning Department 600 2nd St. NW Albuquerque, NM 87102

Re: [2023065] – OPUS Transport Apartments – Flightway Ave. at University Blvd. in Albuquerque, NM.

Dear Mr. Cherne:

The purpose of this letter is to provide the responses and clarification to comments and questions from the City of Albuquerque pertaining to the draft Traffic Impact Study associated with the subject project, OPUS Transport Apartments located at Flightway Ave. at University Blvd. in Albuquerque, NM.

1) Numerous Synchro results summary sheets are labeled "Signalized." Per our discussion they were STOP sign controlled. Please confirm and revise as necessary.

Response: Tierra West LLC. confirms that LVAM tables were labeled "Signalized" instead of "Unsignalized." Revisions were made to LVAM tables within the report and appendices to reflect the intersection control type as well as the data presented in the tables.

- 2) Woodward Rd and University Blvd:
 - a) Eastbound Woodward to northbound University has an LOS of F in the 2025 and 2035 Conditions, with the 2035 condition having a longer delay (104 vs. 72 seconds) than in 2025 and appears to meet the signal warrants. The City agrees the signal would be too close to the signal at Sunport Blvd.

Response: Tierra West LLC. confirms that the LOS F signal Warrant 3 Peak Hour criteria (attached in Appendix 13) is met however due to the distance between the intersection of University Blvd. at Woodward Rd. and University Blvd. at Sunport Blvd. The speed limit along University Blvd. is 30 mph and along Woodward Rd. (an Urban Collector), 25 mph. Woodward Rd. is 430 feet north of the intersection of Sunport Blvd. Based on Table 18.C-1 the driveway meets the minimal access spacing standards of 330 ft for full access driveways or unsignalized intersections

with non-traversal median, however it does not meet the minimum access spacing standards of 1,100 ft for signalized intersections.

Table 18.C-1 Access Spacing Standards for Intersections and Driveways (centerline to centerline spacing in feet)						
Access Category	Posted Speed (mph)	Intersection Spacing (feet) 1		Driveway Spacing (feet) ²		
				Non-Traversable Median		Traversable
		Signalized	Unsignalized ³	Full Access	Access	Median ⁴
Controlled- Access, Non-Interstate Highways	All Speeds	5,280	2,640	2,640	2,640	-NA-
UPA	≤ 30 mph	2,640	1,320	1,320	200	200
	35 to 40 mph	2,640	1,320	1,320	325	325
	45 to 50 mph	2,640	1,320	1,320	450	450
	≥ 55 mph	5,280	1,320	1,320	625	625
UMA	≤ 30 mph	1,760	660	660	175	175
	35 to 40 mph	1,760	660	660	275	275
	45 to 50 mph	2,640	660	660	400	400
	≥ 55 mph	5,280	1,320	1,320	600	600
UCOL	≤ 30 mph	1,100	330	330	150	150
	35 to 40 mph	1,320	330	330	225	225
	45 to 55 mph	1,760	660	660	350	350
RPA	≤ 30 mph	2,640	1,320	1,320	225	225
	35 to 40 mph	2,640	1,320	1,320	350	350
	45 to 50 mph	5,280	2,640	2,640	500	500
	≥ 55 mph	5,280	2,640	2,640	775	775
RMA	≤ 30 mph	1,760	660	660	200	200
	35 to 40 mph	2,640	660	660	325	325
	45 to 50 mph	2,640	1,320	1,320	450	450
	≥ 55 mph	5,280	2,640	2,640	725	725
RCOL	≤ 30 mph	1,320	330	330	200	200
	35 to 40 mph	1,760	660	660	300	300
	45 to 50 mph	2,640	1,320	1,320	425	425
	≥ 55 mph	2,640	1,320	1,320	550	550

This table and explanation have been added to the report in the "Intersection Level of Service Evaluation" in both the Executive Summary and the report.

b) With over 840 vehicles southbound on University and 183 (2025 Build Volume) cars turning right from Woodward Rd. onto University Blvd. and no striped right-turn lane, why is there no delay for cars turning right onto southbound University Blvd?

Response: Tierra West LLC. confirms that the delay is not presented separately for the single right-turn movement since the eastbound approach on Woodward Rd. is a shared lane for both the left-turn and right-turn movements. The tables have been corrected to reflect the LOS and Delay for the single lane approach.

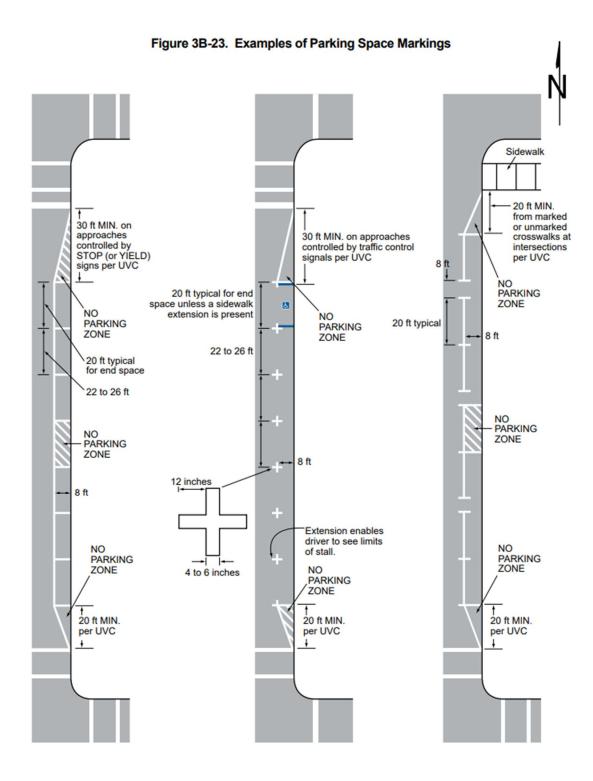
c) Please extrapolate/provide details on the recommendation "Striping is recommended along the entire roadway to delineate lanes...".

Response: Tierra West LLC. has expounded on the recommendations to stripe the existing roadway with the following details beyond what is existing. Existing roadway markings include lane striping at the intersection of Flightway Ave. and University, delineating an exclusive left-turn lane and right-turn lane. The yellow center line markings extend 350 ft west from the stop bar to end of "No Pass Markings" delineating the eastbound and westbound movements. On street parking is available on the north and south sides of both Flightway Ave. and Woodward Rd.

Regulations are in place by the Federal Aviation Administration regarding the installation of reflective pavement markings, traffic signs, and roadway lighting in order to protect the safety of aircroft operators. The proposed site location has only a small portion of the property within the Airport Protection Overlay zone on the southeast corner of the parcel. The recommendation for stripping is for areas within the zone must meet the United States Department of Transportation Federal Aviation Administration 'Advisory Circular' Chapter 5. Other Surface Markings Section 5.2 Vehicle Roadway Markings.

The recommendation is to continue on-street parking along Transport St. on the east and west sides, as well as recommended improvements to the existing on-street pavement marking. Improvements include the stripping of the parking space to meet MUTCD Section 3B.27 Parking Space Markings standard applies the following:

On-street parking space markings shall be white.



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MUTCD Section 3B-02 Warrants for Yellow Center Lines standard applies the following:

Center line markings shall be placed on all paved undivided two-way urban arterials and collectors that have a traveled way of 20 feet or more in width and an ADT of 6,000 vehicles per day or greater. Center line markings shall also be placed on all paved undivided two-way streets or highways that have three or more lanes for moving motor vehicle traffic.

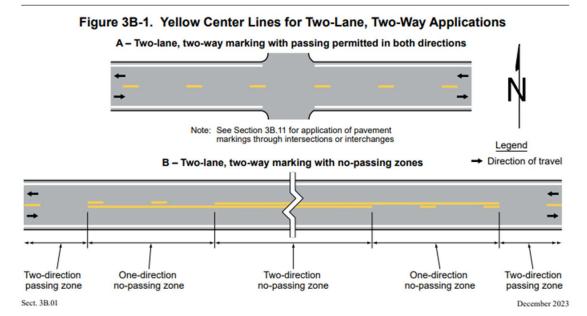
Although the Warrant for the Center Line is not met, engineering judgment was used to recommend continuous stripping beginning on Flightway Ave. from University Blvd. intersection west toward Transport St.

If the recommendation for stripping is not accepted, it is suggested that MUTCD Section 2C.33 No Center Line sign (W8-12) is considered along Flightway Ave., Transport St., and Woodward Rd. This standard applies the following:

An Advance Traffic Control sign may be used for additional emphasis of the primary traffic control device, even when the visibility distance to the device is satisfactory.

MUTCD Section 3B.01 Yellow Center Line Pavement Markings standard applies the following:

Center line pavement markings, when used, shall be the pavement markings used to delineate the separation of traffic lanes that have opposite directions of travel on a roadway and shall be yellow.



- A) Two-direction passing zone markings consisting of a normal width broken yellow line where crossing the center line markings for passing with care is permitted for traffic traveling in either direction
- B) Two-direction no-passing zone markings consisting of two normal width solid yellow lines where crossing the center line markings for passing is prohibited for traffic traveling in either direction.

A single solid yellow line shall not be used as a center line marking on a twoway roadway.

These recommendations and explanations have been added to the report in a new section named Improvements to Existing Conditions in both the Executive Summary and the report.

d) I do not think that accounting for autonomous vehicles becoming more prevalent in the future can be used to assume a delay will be reduced.

Response: Tierra West LLC. reaffirms that assumption of the delay would be reduced by the presence of autonomous vehicles should be accounted for, therefore the statement has been edited to support the reason for reduced delays. The new Highway Capacity Manual (7th Edition) allows for the ideal saturation flow rate to be increased as a result of the implementation of autonomous vehicles. Thus, the capacity of the roadway system and intersections will be increased incrementally based on the percentage of autonomous vehicles on the roadway.

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Currently information as to the traffic signal performance of the signalized

intersection of Sunport Blvd. at University Blvd. is beyond the scope of this project.

Therefore, we have no data supporting queue lengths extending north by the

southbound approach along University Blvd. blocking the intersection at Woodward

Rd. It can be assumed that the channelized free right-turn onto Sunport Blvd.

westbound toward Interstate 25 is reducing the queue length. It can also be

assumed that the remaining traffic will utilize the southbound through lane closest

to the median to turn onto Sunport Blvd. eastbound on ramp. Southbound traffic

toward the Albuquerque Airport can also be distributed into both southbound lanes

as well as another access road available on Transport St. to Albuquerque Airport

parking.

We appeal to you to allow the administrative amendment to continue to proceed while we are

working through these traffic issues.

Accompanying this letter is the Final Traffic Impact Study including the requested adjustments for

your review.

Please call me if you have any additional comments or questions regarding the responses

presented pertaining to the subject traffic impact study.

Thank you,

Jimeia Roberts

Jimeia Roberts, Traffic Engineer 1

Tierra West LLC.

Attachments: Opus Transport Apartments Draft Traffic Impact Study