



# **ALDRIDGE TRANSPORTATION CONSULTANTS, LLC**

*Advanced Transportation Planning and Traffic Engineering*

John M.W. Aldridge, P.E.  
Colorado Licensed Professional Engineer

1082 Chimney Rock Road  
Highlands Ranch, CO 80126  
303-703-9112  
Mobile: 303-594-4132  
Email: [john@atceng.com](mailto:john@atceng.com)

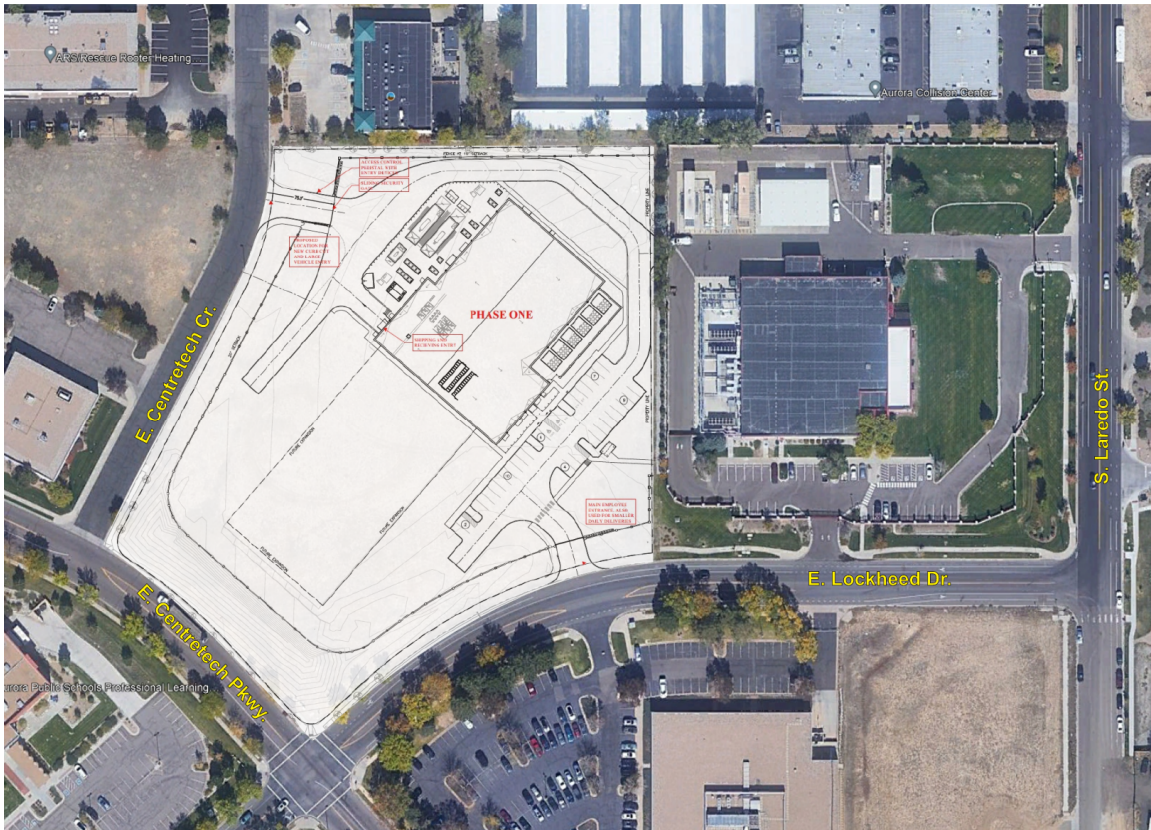
May 24, 2022

Mr. Leonardo Maldonado  
Jackson/Main Architecture  
311 First Avenue South  
Seattle, Washington 98104

Re: Traffic Letter  
Version - 15851 E. Centretech Parkway, Aurora

Dear Mr. Maldonado:

This letter provides a trip generation and intersection operational analysis as it pertains to the proposed building addition to the existing Verizon complex at 15841 E. Centretech Parkway in Aurora. The graphic shows the location of the site, site plan, and the adjacent streets and intersections. The proposed building is approximately 20,000 square feet in size.



**EXISTING CONDITIONS**

E. Lockheed Dr. is a 2-Lane Main Street with bike lanes on both sides and parallel parking on the north side. It features a center left turn lane. It currently carries approximately 1,400 ADT (counts taken in July 2020) and is posted at 25 mph.

E. Centretech Parkway is a 2-Lane Main Street with detached sidewalks on both sides. It features a center painted median and left turn deceleration lanes. There are no bike lanes and on-street parking is not permitted. Traffic counts are not available. It is posted at 35 mph.

E. Centretech Circle is a 2-Lane Local Street with discontinuous sections of attached sidewalk. There are no lane markings. The speed limit is assumed to be 25 mph. It serves primarily as an access to various industrial/commercial buildings.

The intersection of E. Centretech Parkway and E. Lockheed Dr. is four-way stop sign controlled. The intersection of E. Centretech Parkway and E. Centretech Cr. is two-way stop sign controlled.

**ACCESS LOCATIONS**

Two full-movement access locations are proposed. One is on E. Lockheed Dr. and is for employee and small package deliveries. The other is on E. Centretech Circle and will be used only for large vehicle shipping and receiving. This access will be gated for security purposes.

**TRIP GENERATION**

The Verizon building a switch station that functions as an office building. The trip generation is small with only 10-15 employees. The following trip generation table is from the 11<sup>th</sup> Edition of the ITE Trip Generation Manual. It shows a total of 50 daily trips and 7 trips in the AM peak hour and 6 trips in the PM peak hour. The number of trips is too small to be meaningfully evaluated in terms of level of service impacts.

<b>Trip Generation Worksheet</b>								
<b>ITE CODE</b>	<b>LAND USE</b>	<b>UNIT</b>	<b>QUANTITY</b>	<b>ADT</b>	<b>AM</b>		<b>PM</b>	
					<b>IN</b>	<b>OUT</b>	<b>IN</b>	<b>OUT</b>
710	General Office	Employees	15	3.33	0.43	0.06	0.08	0.35
				50	6	1	1	5
<b>Total Trips</b>				50	6	1	1	5

**FUTURE CONDITIONS**

There are no forecast volumes for the adjacent streets and intersections. In the absence of these, the 2040 volumes are factored assuming a 2 percent increase per annum. That would put the ADT on E. Lockheed Dr. at 2,100 ADT. No counts are available for E. Centretech Pkwy.

**TRAFFIC OPERATIONS EVALUATION**

A traffic operations analysis with Synchro is not practical given the very low site generated volumes. Both accesses will operate acceptably in all current and future conditions. The 4-way stop controlled intersection will not be impacted by the small amount of traffic.



#### PEDESTRIAN CONNECTIVITY

The adjacent streets of E. Lockheed Dr. and E. Centretech Pkwy. have detached sidewalks on both sides. The site plan shows that attached sidewalk will be installed on E. Centretech Cr. Marked crosswalks are on all approaches to the intersection at E. Lockheed Dr. and E. Centretech Pkwy.

#### FINDINGS and RECOMMENDATIONS

Based on the analysis herein and in my professional opinion, the impact of the proposed new building is insignificant and cannot be measured meaningfully. The current traffic control configuration at the intersections function acceptably and no changes to accommodate the new building are necessary.

ATC appreciates the opportunity to be of service. Please call if you have any questions. We can be reached at 303-703-9112.

Respectfully submitted,

**Aldridge Transportation Consultants, LLC**

John M.W. Aldridge, P.E.  
Principal

ATC is professional service firm specializing in traffic engineering and transportation planning. ATC's principal, John M.W. Aldridge, is a Colorado licensed professional engineer. In the past 20 years, ATC has prepared over 1,000 traffic impact studies, designed over 100 traffic signals, and has provided expert witness testimony on engineering design and access issues on multi-million-dollar interchange and highway projects in Kansas and Colorado.