

1.0 Introduction

The proposed "Movin' Out" development is a mixed use development in the northeast quadrant of the intersection of West Broadway and Fayette Avenue in the City of Madison. The purpose of this memo is to summarize the expected traffic impacts of the proposed development on Fayette Avenue and the impacted intersections on West Broadway. It includes a summary of the trip generation, access locations, and site circulation and traffic impacts for the proposed development.

1.1 Description of Proposed Development

The proposed development is in the northeast quadrant of the intersection of West Broadway and Fayette Avenue. The site is currently occupied by a vacant lot. It is bordered by a tavern on the east, a residential area on the north, West Broadway on the south, and Fayette Avenue on the west. A project location map is included in Exhibit 1.

The proposed development includes residential and commercial land uses in a four story building: This includes 2,800 square feet of commercial space on the first floor and 48 multi-family residential units. There are no specific plans for the commercial space. Possible uses include a coffee shop and office space. For the purpose of generating traffic, these were assumed to be 1,400 square feet each. The proposed site plan is included in Exhibit 2.

1.2 Existing Roadways and Intersections

West Broadway is a four-lane divided urban roadway with a 40 MPH speed limit and is classified as a major arterial. The year 2015 AADT (Average Annual Daily Traffic) was 14,800 vehicles per day.

Fayette Avenue is a 30 foot wide local roadway with a 25 MPH speed limit. Fayette Avenue intersects West Broadway from the north at a stop controlled intersection. A median restricts movements at that intersection to right-in, right-out to and from westbound West Broadway. Left turns are not permitted to or from eastbound West Broadway.

There is a PDQ gas station/convenience store in the northwest quadrant of Fayette Avenue and West Broadway that has two driveway accesses onto Fayette Avenue and one driveway access onto Frazier Avenue. North of the PDQ and the proposed development location, Fayette Avenue is a residential street.

2.0 Development Driveways

2.1 Existing Driveway

The existing vacant lot has one driveway onto West Broadway. It is a shared driveway with Antler's Tavern just east of the proposed development. A median break on West Broadway allows for vehicles to turn left into the driveway from the west and out of the driveway to travel to the east. There is a 125 foot left turn lane on eastbound West Broadway to accommodate vehicle storage for vehicles turning left.

2.2 Proposed Driveways

It is proposed that the existing shared driveway onto West Broadway be maintained to serve the residential underground and above ground parking. There is no connection proposed from the commercial parking lot to the shared driveway.

To serve the new 11 vehicle commercial parking lot at the northwest corner of the site, a new driveway on Fayette Avenue which is essentially across from the north PDQ driveway.

3.0 Bicycle/Pedestrian/Transit

There are marked bike lanes on West Broadway in both directions. Fayette Avenue is a residential street with a 25 mph speed limit. Therefore, bicycles can easily access the site from all directions.

There is currently sidewalk on both sides of West Broadway and the east side of Fayette Avenue north of the development. The development plans include an extension of the Fayette Avenue sidewalk to West Broadway. Pedestrians can cross Fayette Avenue at a marked crosswalk at the Broadway intersection. To cross West Broadway, they should use the marked crosswalk and pedestrian signals at the intersection of West Broadway and Frazier Avenue approximately 200 feet west of Fayette Avenue.

The proposed development is served by three transit routes. One of them provides all day service and two of them provide peak hour service. All three travel along West Broadway and stop at Fayette Avenue when traveling to the west. The eastbound buses stop between Frazier Avenue and Fayette Avenue.

4.0 Existing and New Traffic

4.1 Existing Traffic Volumes

AM and PM peak hour (7:15-8:15 AM & 4:30-5:30 PM) intersection turning movement counts were completed by KL Engineering on Wednesday, May 31. These counts cover the busiest hours of the day and included the intersection of West Broadway and Fayette Avenue, the PDQ driveways on Fayette Avenue and the Antler's Tavern driveway intersection. A summary is shown in Exhibit 3.

4.2 Traffic Generation

Traffic expected to result from a proposed development is referred to as "trips generated." The trips for this development were calculated using the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 9th Edition*. Based on the site plan and correspondence with the developer, the anticipated ITE land uses resulting from the proposed development are: Apartment, Coffee/Doughnut Shop without Drive-Through Window, and General Office. A trip is defined as a one-way movement of a vehicle entering or exiting the development. Therefore, one vehicle that enters and leaves the development results in two trips.

The total number of trips was reduced to account for people who will walk, bicycle or take mass transit. This is referred to as a "multimodal reduction." As discussed, there are established and easily accessible pedestrian, bicycle, and transit accommodations leading to this site. A summary of the trip generation including the multimodal reductions is shown in Exhibit 4.

It should be noted that ITE indicates that a coffee shop is a large traffic generator and therefore the projected numbers are on the high end of possible development scenarios. This coffee shop will not have direct access from the west which may present limitations, and result in less traffic than ITE would project.

A portion of traffic from the commercial space that is seeking to travel east may use neighborhood streets due to limited access at Fayette Avenue. The increase in traffic onto neighborhood streets is anticipated to be less than 15 vehicles per hour.

4.3 Traffic Distribution

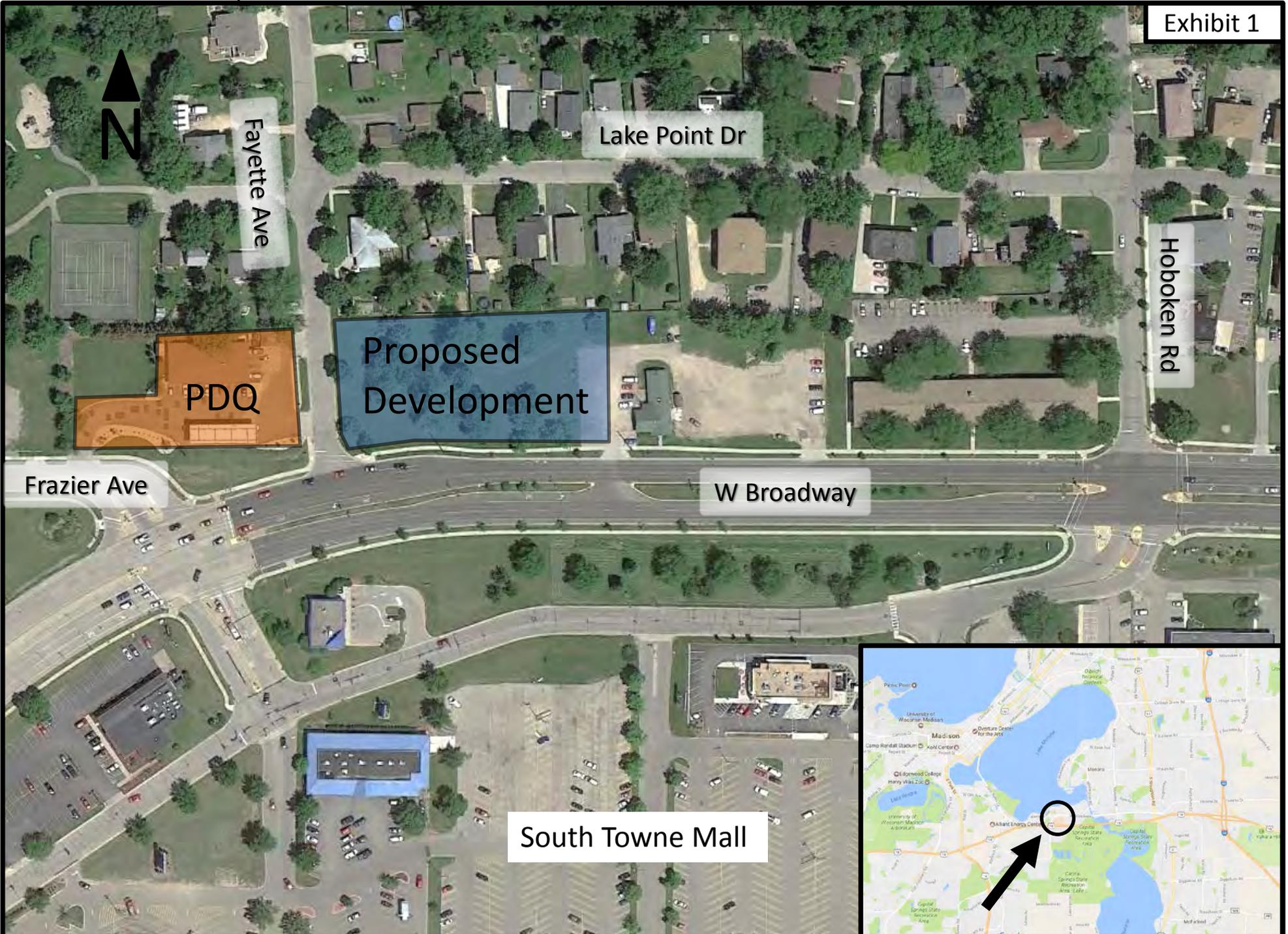
The traffic expected to be generated by the development were assigned to the roadway network based on access availability and traffic patterns on the existing roadways. In addition, West Broadway traffic was adjusted for pass-by trips. Pass-by trips are trips that were already present on the roadway network that are expected to stop at the proposed land use and then continue to their destination. Therefore, they do not add any additional trips to the roadway network, they just result in more traffic turning into and out of the development. The apartment complex and the general office building trips are expected to be new trips. However, a coffee shop generally has a high percentage of pass-by trips.

This results in minimal additional traffic on West Broadway, but does result in an increase in traffic using the south leg of Fayette Avenue between West Broadway and the proposed commercial driveway.

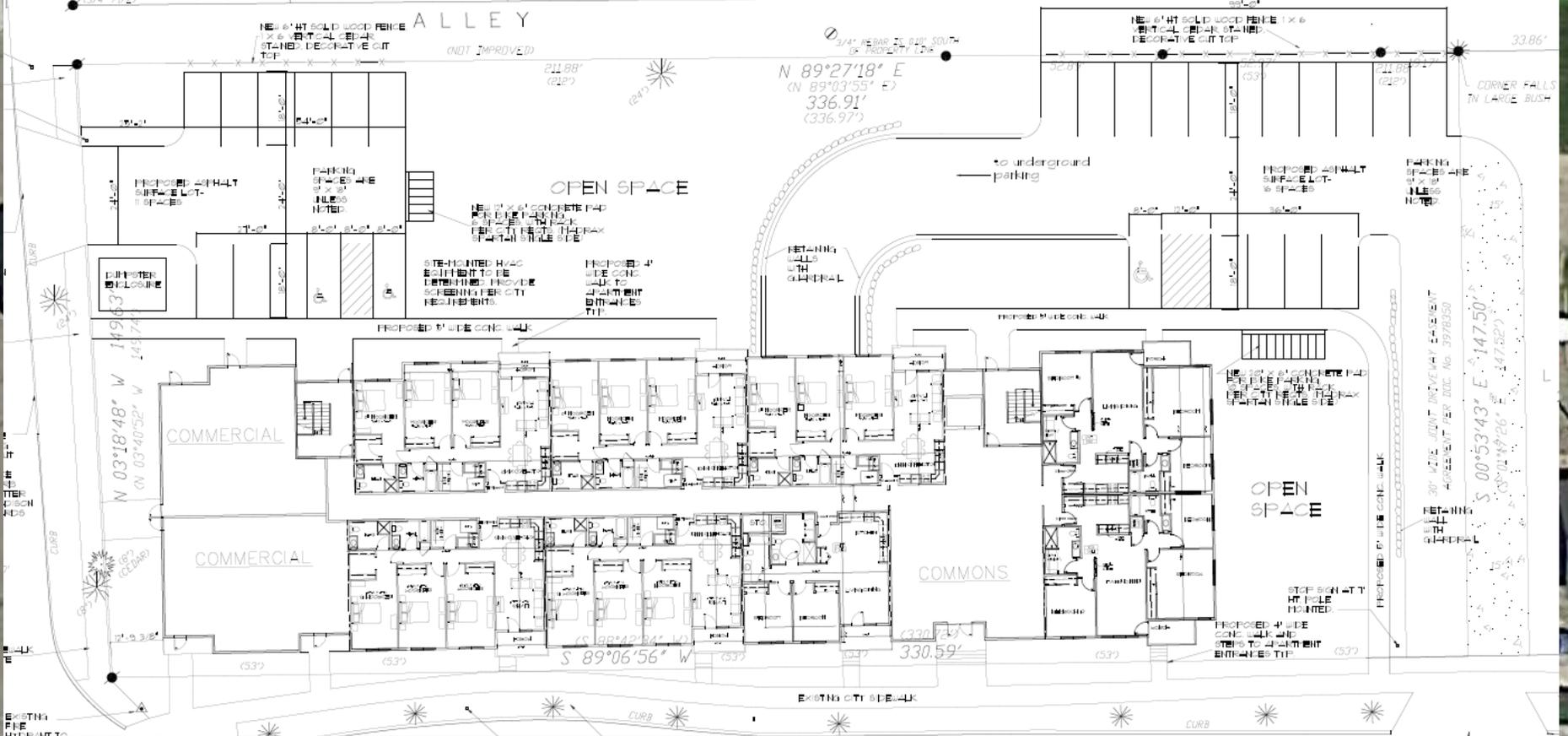
See Exhibit 5 for anticipated development generated traffic volumes.

5.0 Summary and Conclusions

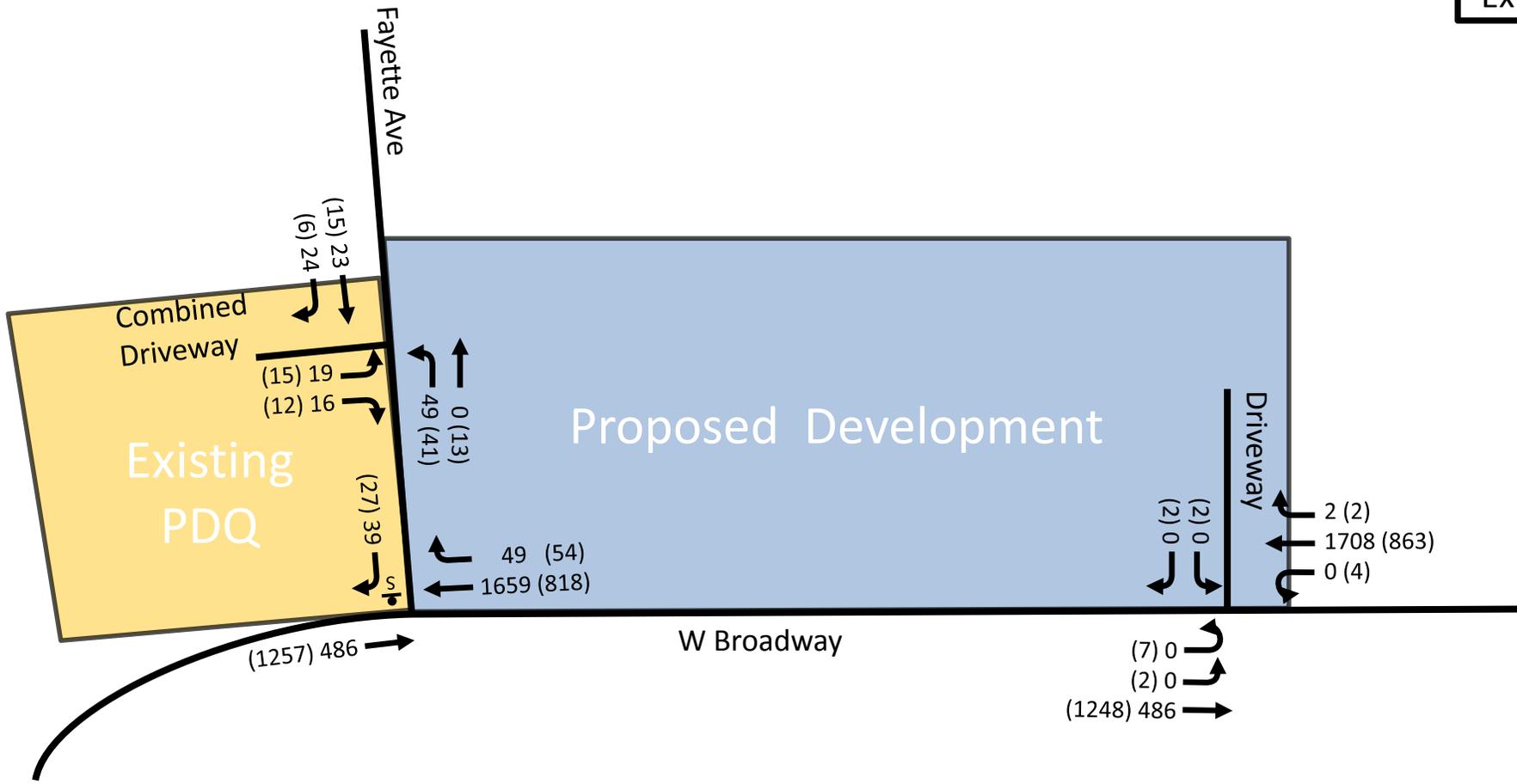
- The proposed development is anticipated to generate up to 144 vehicles during the AM peak hour (123 on Fayette Street) and 72 vehicles during the PM peak hour (48 on Fayette Street)
- For comparison, the existing PDQ driveway traffic volume (total entering and exiting) was 108 vehicles during the AM peak hour, and 74 during the PM peak hour
- Most of the traffic generated by the development will be pass-by trips; therefore, a minimal increase (less than 2%) is anticipated for the volume of traffic on West Broadway
- The development is anticipated to have a minor impact on neighborhood traffic using Fayette Avenue north of the proposed development (to travel east)
- The additional traffic generated by the proposed development is not expected to result in undue traffic congestion or unsafe conditions for non-motorized users



Fayette Ave



W Broadway



LEGEND

XX = AM Peak (7:15-8:15 AM)

(XX) = PM Peak (4:30-5:30 PM)

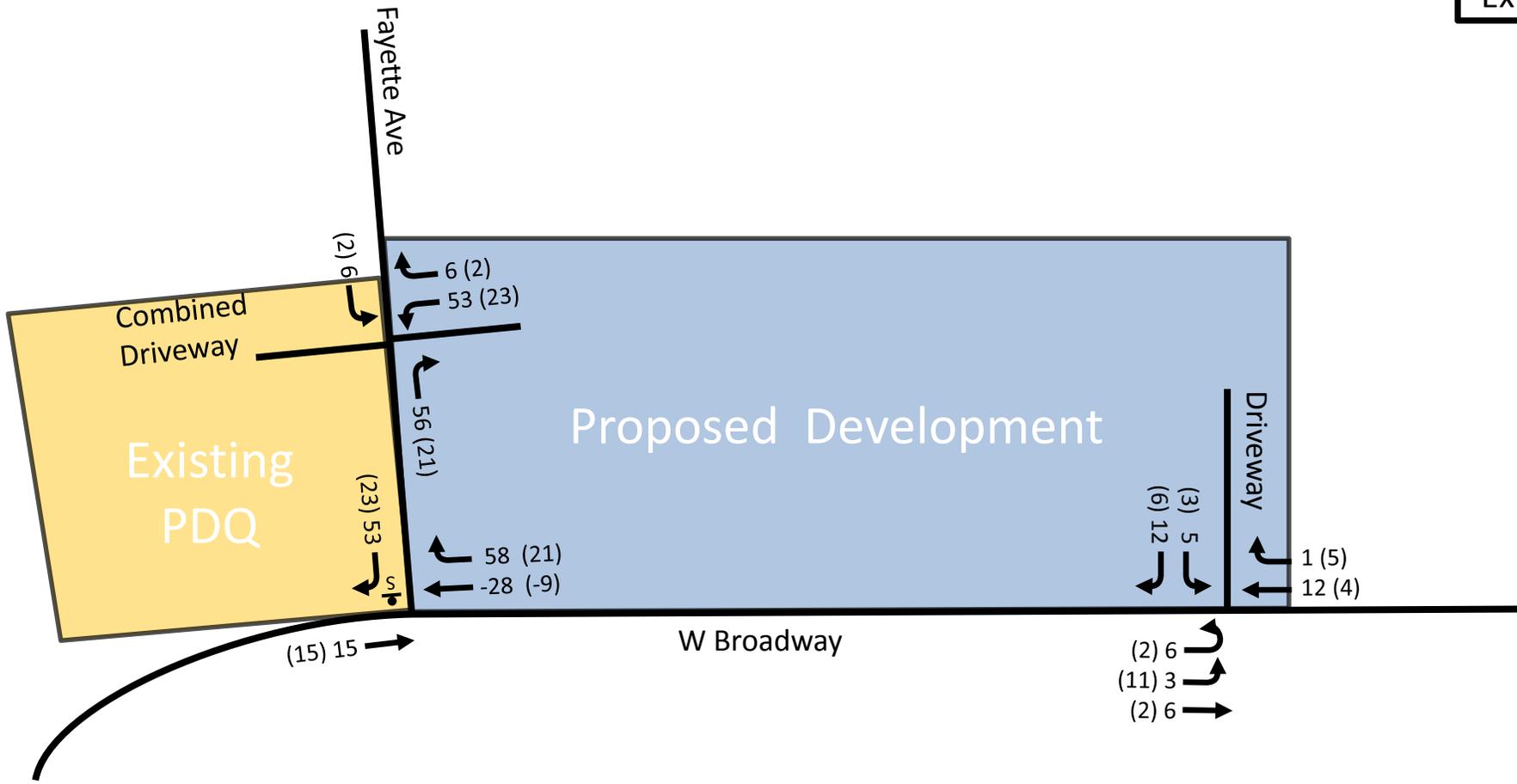
⊙ = Stop Sign

MOVIN' OUT PROPOSED DEVELOPMENT TRIP GENERATION

Land Use	ITE Land Use Code	Size	Weekday Daily Trips (rate)	AM Peak			PM Peak		
				In (%)	Out (%)	Total (rate)	In (%)	Out (%)	Total (rate)
Apartment	220	48 Units	319 (6.65)	5 (20%)	22 (80%)	27 (0.57)	20 (65%)	11 (35%)	30 (0.62)
General Office	710	1,400 SF	15 (11.03)	2 (88%)	0 (12%)	2 (1.56)	0 (17%)	2 (83%)	2 (1.49)
Coffee/Donut Shop without Drive-Thru Window	936	1,400 SF	1,146 (818.58)	78 (51%)	74 (49%)	152 (108.38)	29 (50%)	29 (50%)	57 (40.75)
Total Generated Trips:			1,480	85	96	181	49	42	89

Trips after multi-modal(Ped/Bike/Transit) Reduction of 20%	Weekday Daily Trips	AM Peak			PM Peak		
		In	Out	Total	In	Out	Total
Apartment	255	4	17	21	16	9	25
General Office	12	2	0	2	0	2	2
Coffee/Donut Shop w/o Drive-thru	917	62	59	121	23	23	46
Total Roadway Vehicle Trips:	1,185	68	76	144	39	34	72

Numbers are not exact due to rounding

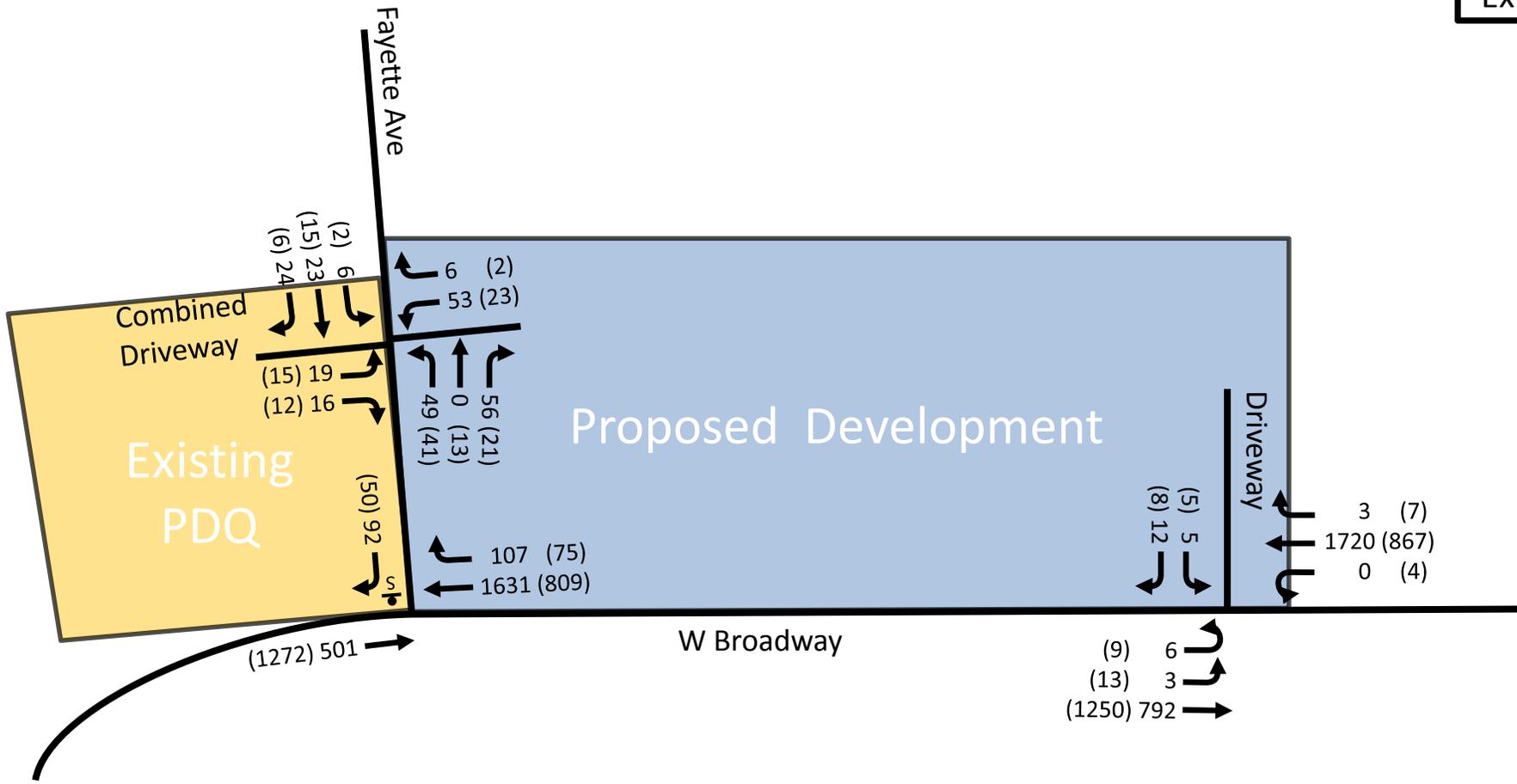


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