Item # 50
P&Z Dept.

MEMORANDUM

TO: Andrew Moore, Case Manager
Planning and Zoning Department
Members of the Planning Commission

CC: Kathy G. Smith, P.E., PTOE HDR Engineering

FROM: Scott A. James, P.E., PTOE
Natalia Rodriguez, Land Use Review/Transportation
Development Services Department

DATE: July 29, 2016

SUBJECT: Traffic Impact Analysis for 1414 West Oltorf (aka The Market)
Zoning Case No. C14-2015-0146

Section 25-6-113 of the Land Development Code requires that a traffic impact analysis (TIA) be conducted for a project if the project is anticipated to generate more than 2,000 daily trips. The project site is located in Austin, at the northeast quadrant of South Lamar Boulevard and West Oltorf Street. The property is currently zoned CS, SF-3 and CS-CO for Tract 1, and CS-MU-V-CO for Tract 2.

The applicant is requesting a zoning change to CS-MU-CO for Tract 1 and CS-MU-V-CO for Tract 2 to allow for a market style development and a mix of commercial and office land uses. The anticipated build out year is 2017. A TIA dated May 27, 2016 was submitted and reviewed for this project. The results of the staff review are summarized as follows:

Nearby Roadways

South Lamar Boulevard is a major four lane divided arterial roadway with center two way left turn lane in the vicinity of the site. According to TxDOT volume records, S. Lamar Blvd served approximately 39,000 vehicles per day. The 2014 Austin Bicycle Plan recommends a protected bicycle lane in the vicinity of the site, which is also the subject of the South Lamar Corridor Study.

Collier Street is a two lane undivided minor arterial roadway located west of South Lamar Boulevard and is aligned with Evergreen Avenue. Approximately, 1,100 vpd are using Collier Street.

Evergreen Avenue is a two lane local street aligned with Collier Street. Peak hour traffic counts indicate approximately 1,000 vpd use the roadway east of South Lamar Boulevard.

Hether Street is a two lane local street aligned with West Mary Street. According to the peak hour traffic counts, approximately 3,200 vpd use the roadway.

West Mary Street is classified a two lane undivided minor arterial roadway east of South Lamar Boulevard and is aligned with Hether Street and offers connection to Evergreen Avenue. According to the peak hour traffic counts conducted, approximately 3,600 vpd use West Mary Street to travel east of S. Lamar Blvd. The 2014 Austin Bicycle Plan recommends protected bicycle lanes on Mary Street.

West Oltorf Street is classified as a four lane undivided major arterial roadway serving approximately 8,700 vpd (based upon peak hour traffic counts). The 2014 Austin Bicycle Plan recommends protected bicycle lanes east of South Lamar Boulevard.

Bluebonnet Lane is classified as a two lane minor arterial roadway. According to peak hour traffic count data, Bluebonnet Lane serves approximately 4,600 vpd. The 2014 Austin Bicycle Plan recommends protected bicycle lanes on Bluebonnet Lane.

Del Curto Road is a two lane local street located east of South Lamar Boulevard. According to the peak traffic counts conducted, approximately 1,600 vpd are using Del Curto Road. The 2014 Austin Bicycle Plan recommends bicycle lanes on Del Curto Road.

Kinney Avenue is a two lane local street south of South Lamar Boulevard which serving approximately 1,200 vpd according to peak traffic count data.

Thornton Road is a two lane local street with connection to West Oltorf Street. Daily traffic volume data indicates approximately 2,600 vpd use Thornton Road.

Estimated Trip Generation

Based on the ITE publication Trip Generation, 9th Edition, Table 1 provides the estimated unadjusted daily trip generation rates for the proposed development.

Table 1 – Estimated Daily Trip Generation

Land Use	Size	Trip Generation
General Office Building[1]	43,000 SF	691
Specialty Retail Center[2]	17,000 SF	753
Supermarket	29,000 SF	2,965
	Total	**4,409**

[1] Includes an event space
[2] Includes small restaurants

Access to the development will be provided by one driveway onto South Lamar Boulevard and two driveways onto West Oltorf Street. The majority of the site traffic is expected to use South Lamar Boulevard to access the site. The analysis included an annual growth rate of 1%. A 10% transit reduction was assumed for all land uses during both peak periods, and a 28% pass-by reduction was assumed during the PM peak period for the Supermarket land use.

Data collection and nearby roadways

For this study, traffic counts were conducted at the following dates and locations:

South Lamar Boulevard & Collier Street/Evergreen Avenue (Wednesday, September 1, 2015)
South Lamar Boulevard & Kinney Street (Wednesday, September 1, 2015)
South Lamar Boulevard & Del Curto Road (Wednesday, September 1, 2015)
West Oltorf Street & Thornton Road (Tuesday, June 2, 2015)
*South Lamar Boulevard & Hether Street/Mary Street (Tuesday, September 23, 2014)
*South Lamar Boulevard & West Oltorf Street (Tuesday, September 23, 2014)
*South Lamar Boulevard & Bluebonnet Lane (Tuesday, September 23, 2104)

*The use of traffic counts from the South Lamar Corridor Study was permitted in the approved scope of study provided to the applicant.

Traffic Analysis

The intersections identified for analysis were evaluated using the 2010 Highway Capacity Manual (HCM) method for capacity analysis. Table 2 below summarizes the findings of the average delay per vehicle (in seconds) from the analysis:

Table 2 Existing Conditions - 2015

Intersection	Traffic Controls	AM Peak Hour		PM Peak Hour	
S. Lamar Boulevard and Hether Street/Mary Street	Signal	B	12.9 sec	B	14.5 sec
S. Lamar Boulevard and Oltorf Street	Signal	C	21.6 sec	C	24.9 sec
S. Lamar Boulevard and Bluebonnet Lane	Signal	B	19.3 sec	C	33.8 sec
S. Lamar Boulevard and Collier Street/Evergreen Avenue	Stop sign	C	16.4 sec	**E**	42.7 sec
S. Lamar Boulevard and Kinney Avenue	Stop sign	**E**	42.3 sec	**F**	132.8 sec
S. Lamar Boulevard and Del Curto Road	Stop sign	A	5.1 sec	A	0.9 sec
Thornton Road and Oltorf Street	Stop sign	A	2.0 sec	B	10.6 sec

Table 3 shows the results of the traffic analysis for the "no build" and "build out" conditions. Recommendations identified within the South Lamar Corridor Study and the Thornton Road traffic studies were incorporated into the "build out" condition analysis. When the estimated site generated trips were added to the study intersections, the analyses showed a slight reduction in operational capacity.

Table 3 Future Conditions – (No Build vs Build)

	2017 Background			2017 Background + Site		
Intersection	Traffic Controls	AM/PM Peak Hour (sec/veh)		Traffic Controls	AM/PM Peak Hour (sec/veh)	
S. Lamar Boulevard and Hether Street/Mary Street	Signal	B (13.5)	B (15.5)	Signal	B (12.6)	B (12.6)
S. Lamar Boulevard and Oltorf Street	Signal	C (31.8)	C (27.8)	Signal	D (51.7)	D (36.2)
S. Lamar Boulevard and Bluebonnet Lane	Signal	C (21.4)	C (35.8)	Signal	C (20.1)	C (21.2)
S. Lamar Boulevard and Collier Street/Evergreen Avenue	Stop sign	D (34.5)	**F** (76.2)	Signal	B (10.2)	B (13.3)
S. Lamar Boulevard and Kinney Avenue	Stop sign	**F** (61.8)	**F** (467.0)	Stop sign	**F** (60.2)	**F** (448.2)
S. Lamar Boulevard and Del Curto Road	Stop sign	A (6.5)	A (1.0)	Signal	B (11.0)	A (9.7)
Thornton Road and Oltorf Street	Stop sign	A (2.0)	B (13.3)	Stop sign	A (1.8)	B (10.7)
S. Lamar Boulevard and Driveway A	[redacted]			Stop sign	A (0.3)	A (0.4)
Driveway B and Oltorf Street				Stop sign	A (1.6)	A (3.4)
Driveway C and Oltorf Street				Stop sign	A (0.1)	A (0.1)

South Lamar Boulevard & Hether Street/Mary Street intersection

The South Lamar Corridor Study recommends prohibiting left turn movements along the Mary Street approach to the intersection, and this improvement was assumed to be in place as part of the 'build out' condition of the TIA analysis.

South Lamar Boulevard & West Oltorf Street

The South Lamar Corridor Study recommends removing the right turn channel and installation of a "queue jump" on the northbound approach, which would improve transit service and pedestrian access at this intersection. This improvement was assumed to be in place as part of the 'build out' condition of the TIA analysis.

South Lamar Boulevard & Blue Bonnet Lane

The South Lamar Corridor Study recommends prohibiting left turn movements on the northbound approach of Bluebonnet Lane, as well as upgrades to the traffic signal. This improvement was assumed to be in place as part of the 'build out' condition of the TIA analysis.

South Lamar Boulevard & Collier Street/Evergreen Avenue

The South Lamar Corridor Study recommends installation of a traffic signal at this location, if and when the warranting criteria are met. This improvement was assumed to be in place as part of the 'build out' condition of the TIA analysis.

South Lamar Boulevard & Kinney Avenue

The analysis of this intersection indicated a considerable increase in individual vehicular delay for both 'build out' and 'no build' conditions. The South Lamar Corridor Study recommends reconstruction of the intersection to improve pedestrian and cyclist access but due to the close proximity with the intersection of West Oltorf Street, no additional traffic controls are proposed. As a result, no physical improvements were reflected as part of the 'build out' condition of the TIA analysis.

Recommended improvements from the TIA

The improvements listed in Table 4 below are from the TIA, with a proposed cost participation based upon the calculation of site traffic volumes as a percentage ('pro rata') of the overall traffic within a given intersection.

Table 4 – List of Improvements

Intersection	Improvements	Estimated Cost	Developer Share $
S. Lamar Boulevard and Collier Street/Evergreen Avenue	Installation of a traffic signal	$250,000	$9,250
S. Lamar Boulevard and Heather Street/Mary Street	Restrict turning movements and realign intersection approaches	$343,867	$13,755
S. Lamar Boulevard and Oltorf Street	Reconstruct northbound approach and install transit queue jump	$300,000	$18,900
S. Lamar Boulevard and Del Curto Road	Installation of a traffic signal	$250,000	$10,250
S. Lamar Boulevard and Bluebonnet Lane	Restrict turning movements and upgrade traffic signal	$343,867	$12,725
Thornton Road and West Oltorf Street	Construct travel lane on Thornton Road approach to West Oltorf Street	$276,388	$7,185
	Additional traffic control devices[1]	$250,000[1]	$6,500[1]
	Total	**$2,014,122**	**$78,565[1]**

1 May include pedestrian hybrid beacon or full traffic signal

Conclusion and conditions of approval:

In light of the extensive list of recommended improvements related to both the South Lamar Corridor Study and adjacent development related traffic studies, staff recommends the applicant contribute a higher sum to offset the costs. Therefore, staff recommends approval of this rezoning application subject to the following:

1. Applicant to contribute a sum of $300,000 towards the identified improvements listed above, including but not limited to specific improvements from the South Lamar Corridor Study, the Thornton Road traffic study and this subject application traffic impact analysis. These funds may be posted at the time of site development permit application.
2. Access to South Lamar Boulevard from the site is restricted to right in/right out only.
3. Recommend applicant adhere to all applicable design guidelines, dimensions, and right-of-way dedication requirements to insure compliance with goals identified in the South Lamar Corridor Study.
4. Three copies of the final TIA, sealed and signed, incorporating all corrections and revisions must be submitted prior to 3rd reading of the zoning case.
5. Development of this property should not vary from the approved uses, nor exceed the approved intensities and estimated traffic generation assumptions within the TIA document (May 27, 2016), including land uses, trip generation rates, trip distribution, traffic controls and other identified conditions.

If you have any questions or require additional information, please contact me (512) 974 - 2208.

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