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Lenexa, KS 66219

May 21, 2020

Mr. Skip Hymer, RA, LEED AP
Principal
RMTA
2000 Shawnee Mission Parkway
Suite 100
Mission Woods, KS 66205

SUBJECT: Pine Tree Plaza Shopping Center - Parking Evaluations
Lee's Summit, Missouri

Dear Mr. Hymer:

As requested, GBA personnel have completed the traffic engineering services necessary to perform an evaluation of the existing and proposed parking conditions for the Pine Tree Plaza Shopping Center, located at 276 SW Blue Parkway in Lee's Summit, Missouri. Our completed parking evaluation focused primarily on the current parking supply provided with the existing shopping center configuration, in order to determine whether sufficient parking areas are already available on the property to accommodate a minor reduction in parking spaces due to the addition of a proposed drive-through ATM facility for the JP Morgan Chase Bank. As suggested by the City planning staff, we have also prepared an alternative parking supply calculation based on the nationally-accepted parking generation data provided by the Institute of Transportation Engineers (ITE). This letter report details our parking evaluation procedures, findings, and recommendations.

PROJECT BACKGROUND

Through our preliminary coordination with RMTA regarding the existing shopping center surface lot configuration, available parking supply, and current / anticipated land uses, we reviewed the provided existing and proposed development site plans to evaluate the proposed layout for the drive-through ATM facility and determine its anticipated impacts on the overall parking situation. We also verified the preliminary parking requirements prepared by the City planning staff, as provided to us by RMTA via email, through a phone conversation with the City's case planner, Mr. Shannon McGuire.

As a result of these preliminary discussions, we prepared the "Parking Conditions Summary" presented in the attached ***Table 1***. As shown in this table, a parking lot rehabilitation project was recently completed in 2017 that modified the surface parking areas within the Pine Tree Plaza Shopping Center. In association with that improvement project, the parking lots were slightly reconfigured resulting in a net loss of 10 parking spaces and leaving an on-site parking supply of 606 spaces. RMTA also indicated to us that one of the restaurant out-parcels located along SW Blue Parkway has since removed four parking spaces adjacent to its building in order to provide an outdoor patio area, resulting in the current overall parking supply of 602 total spaces within the shopping center.

With the provision of the proposed drive-through ATM facility toward the western end of the shopping center's surface parking lot, an additional eight parking spaces would be displaced. Therefore, with the completion of this proposed facility improvement the overall parking supply would be reduced to 594 total spaces. As shown in the table, this minor reduction would result in an overall parking ratio of 4.33 spaces being provided per 1,000-square feet of the existing Pine Tree Plaza Shopping Center, with its total Gross Floor Area (GFA) of 137,400-square feet.

Table 1 also summarizes the City's application of its current zoning / parking codes to this shopping center facility. As noted in your previous correspondence with the City's case planner, one key consideration to note is that the City is calculating the parking demand for the two restaurant out-parcels (i.e., totaling 10,300-square feet combined) separately from the remainder of the shopping center. For the 127,100-square foot "strip mall" shopping center area, which includes the 25,000-square foot fitness center, the current City codes require five parking spaces per 1,000-square feet of GFA. Similarly, the combined 10,300-square feet of restaurant out-parcels need to provide 14 parking spaces per 1,000-square feet of GFA by the City's criteria.

Based on these combined City criteria, an overall total supply of 780 parking spaces would need to be provided within the Pine Tree Plaza Shopping Center in order to meet the City's parking supply requirements. Given the available parking supply of 594 parking spaces following the installation of the proposed drive-through ATM facility, a net parking supply deficit of 186 parking spaces would be indicated as shown in ***Table 1***.

ALTERNATE PARKING GENERATION

GBA's traffic engineers completed an alternate parking generation study for the current / anticipated land uses and building square footages provided within the existing Pine Tree Plaza Shopping Center. This alternate parking generation calculation has been based upon the studies and information provided in the latest edition (i.e., 5th Ed.) of the ITE "*Parking Generation Manual*." During the preparation of these parking calculations, several important criteria have been considered. First, the location of the shopping center has been classified as being within a general urban / suburban setting. For the purposes of this evaluation, we have considered the typical "non-December" data provided by ITE to represent the shopping center's normal parking demands instead of those increased demands that would be experienced during the Holiday shopping season. Finally, when the restaurant out-parcels were independently considered for comparative parking generation purposes, they were assumed to be High-Turnover (Sit-Down) Restaurants (i.e., ITE Land Use 932) with a family-style environment, and not including a lounge / bar area.

The attached ***Table 2*** provides a summary of the parking generation calculations that have been prepared based on the most applicable ITE data. For these calculations, the current building square footages were utilized for each respective land use. As noted in the table, the available data for the Shopping Center and Restaurant land uses are actually based on Gross Leasable Area (GLA). Since the Pine Tree Plaza Shopping Center has more of a "strip mall" configuration, except for the two out-parcels, there are no common areas and we have assumed that the GLA and the GFA are identical.

The ITE data for each respective land use is generally available for various time periods on a variety of days throughout the week, as shown in the table. For instance, individual data plots are available for the "typical weekday" operations from Monday through Thursday. In addition, data plots are also available for Fridays, Saturdays, and Sundays, which each have different traffic peaks and parking demands. The ITE data is generally provided for each of these time / day criteria using an "average rate" approach, as well as a regressed equation determined from the study data points whenever possible. For the purposes of this evaluation, we have also considered the upper limit of the 95th-percentile confidence interval as well as the reported 85th-percentile parking generation rate. The 95th-percentile confidence interval is a measure of confidence in the statistical data itself, relative to the reported "average." It is considered to fall between two standard deviations above and below the average rate and indicates the range within there is a 95 percent likelihood that the "average rate" will fall. ITE only provides this information whenever data is available from 20 or more independent study sites. Likewise, the 85th-percentile represents the point at which only 15 percent of the study's values are above this level. The ITE manual states that this threshold data is not intended to recommend a policy about the level of parking that should

be supplied. Rather, it is intended to provide only a qualitative point of reference and we have reported it during these evaluations to represent more of a "worst case" for the parking supply estimate.

As shown in ***Table 2***, we have prepared two parking generation scenarios for this evaluation. The first Scenario #1 considers the entire Pine Tree Plaza Shopping Center as a whole. The ITE parking demand database includes data from "strip mall," neighborhood, community, town center, and regional shopping centers. According to the ITE manual, some of these shopping centers also contain non-merchandising facilities like office buildings, movie theaters, restaurants, post offices, banks, health clubs, and entertainment / recreational facilities. In addition to having integrated shops into one building like the Pine Tree Plaza shopping center, many of the sites studied for ITE also include peripheral buildings or "pad sites" located on the perimeter of the shopping center, adjacent to the streets and access points. We consider these criteria to be very consistent with the conditions of this particular shopping center property, and therefore feel that the application of this estimation approach is very appropriate.

As shown in the table, utilizing this approach with Scenario #1 results in a wide range of estimated parking demands for the shopping center. Based primarily on the "average rate," regressed equation, and 95th-percentile confidence interval criteria, the ITE data indicates that the existing configuration and land uses within the Pine Tree Plaza Shopping Center could be expected to require between 260 and 430 parking spaces during the peak time / day periods. It should be noted that these criteria all indicate that the peak parking demand is exhibited on a Saturday between the hours of 11:00 a.m. and 5:00 p.m. If even the "worst case" 85th-percentile levels of parking demand are considered, a maximum parking demand of almost 520 parking spaces is indicated for both the Friday and Saturday periods. This would generally indicate that the proposed parking condition will still have an excess parking supply of approximately 75 to 80 parking spaces, after the installation of the drive-through ATM facility.

As discussed previously, we have also prepared Scenario #2 which separately considers the restaurant out-parcels for parking generation purposes, as shown in ***Table 2***. While good "average rate" data is again provided within the ITE manual for the Shopping Center itself (i.e., ITE Land Use 820), the data for the selected restaurant land use is less reliable with very few regression curves or 95th-percentile confidence interval information provided. In addition, the standard deviations and coefficients of variation for the available statistical information are much larger and more variable. From the available "average rate" data, it should still be noted that the Shopping Center land use generally has an observed parking demand rate in the range of 1.90 to 2.90 spaces per 1,000-square feet of GLA, as compared to the City's code requirement of five spaces. Likewise, the "average rate" data for the Restaurant land use is generally between 9.40 and 12.30 spaces per 1,000-square feet of GLA, as compared to the current City code requirement of 14 spaces.

Under this calculation scenario, when the available "average rate" criteria for the two respective land uses are combined, the estimated overall parking demand for the shopping center is estimated to be between 350 and 500 parking spaces. As a result, an excess parking supply of about 100 to 150 parking spaces would be expected to remain during the heaviest Friday and Saturday peak demand periods, while up to 200 parking spaces would be expected to be available during the "typical weekday" conditions. A parking deficit would only be indicated by the provided 85th-percentile ITE data for these combined land use estimations, as shown in ***Table 2***. Again, we consider this to represent an overly-conservative "worst case" evaluation that may not be appropriate to consider in this case.

CONCLUSIONS & RECOMMENDATIONS

Through the completion of this independent parking generation evaluation, based on nationally-accepted study data available from ITE, we believe that the appropriate calculations have been made to indicate the adequacy of the existing / proposed parking supply provided within the surface parking areas of the

Pine Tree Plaza Shopping Center. It is our opinion that the displacement of only eight parking spaces in order to accommodate the proposed drive-through ATM facility for the JP Morgan Chase Bank should have a minimal impact on the required parking utilizations within the shopping center. Further, we trust that this parking generation study has provided an acceptable alternative method of calculations for the City planning staff to determine that the actual parking demand on the site is expected to be considerably less than that required by their current zoning / parking codes and conclude that the available parking supply will remain adequate. As shown in the attached ***Table 2***, with the preferred ITE-based calculations determined by Scenario #1, up to 426 parking spaces (i.e., 3.10 spaces per 1,000-square feet) will be required to serve the critical parking conditions expected to occur on a Saturday between the hours of 11:00 a.m. and 5:00 p.m., as compared to the 594 parking spaces that will remain available within the Pine Tree Plaza Shopping Center after construction of the proposed drive-through ATM facility.

As we have discussed previously, at this time we are unable to perform any valid on-site verifications of the current parking utilization rates within the Pine Tree Plaza Shopping Center. In a similar situation to this one, we may have also completed parking accumulation studies during the weekday and weekend peak traffic and/or parking periods to establish a baseline utilization level for the study location. Then, by estimating additional parking demands for any vacant shops or restaurants based on the available ITE resources, an overall parking supply requirement could be determined. Unfortunately, this field observation-based process cannot be completed at this time due to the obvious impacts of the ongoing COVID-19 pandemic that is reducing both City-wide traffic volumes and the parking demands that would normally be associated with a retail / commercial property like this one. If desired, these additional studies could still be completed at a later date to further confirm these findings and recommendations. However, it should be noted that the available ITE data may also be reduced in the future by the long-term effects of the COVID-19 pandemic on the economic viability of “brick and mortar” retail / commercial land uses, as well as their associated traffic and parking generation demands.

We appreciate the opportunity to be of service to you, the RMTA project development team, and JP Morgan Chase Bank on this very important project. If you should have any questions or need additional information, please do not hesitate to contact us. In addition, we will be available to you for any further discussions that should be necessary with the City of Lee’s Summit planning staff regarding this proposed improvement project.

Respectfully submitted,

GEORGE BUTLER ASSOCIATES, INC.

David J. Mennenga, P.E., PTOE
Associate / Project Manager

cc: JKE, file

Table 1

Parking Conditions Summary

Pine Tree Plaza Shopping Center
Lee's Summit, Missouri

Existing Parking Supply (per 2017 Rehabilitation Site Plan)	606 spaces
Parking loss due to existing restaurant patio area	-4 spaces
Current Parking Supply:	**602 spaces**

Proposed Parking Supply (per RMTA Site Plans)	602 spaces
Parking loss due to proposed drive-through ATM	-8 spaces
Proposed Parking Supply:	**594 spaces**
Overall Parking Ratio for 137,400 sq. ft. Shopping Center: (per 1,000 sq. ft. of Gross Floor Area)	**4.33 spaces**

Required Parking Supply (per LSMO City Codes)

Shopping Center land uses (127,100 sq. ft.)	127.1 (1000 sq. ft.)
City requirement per 1000 sq. ft. GFA	5 spaces
	635.5 spaces
Restaurant land uses (Out Parcels) (10,300 sq. ft.)	10.3 (1000 sq. ft.)
City requirement per 1000 sq. ft. GFA	14 spaces
	144.2 spaces
Required Parking Supply per City Code:	**779.7 spaces**
Overall Parking Ratio for 137,400 sq. ft. Shopping Center: (per 1,000 sq. ft. of Gross Floor Area)	**5.68 spaces**

NET Parking Supply Deficit (Proposed vs. Required)	**186 spaces**

GBA

Table 2

Parking Generation Calculations
Institute of Transportation Engineers (ITE) - 5th Edition

Pine Tree Plaza Shopping Center
Lee's Summit, Missouri

ITE LAND USE CODE	LAND USE DESCRIPTION	Quantity	Unit	Average Rate		Regressed Equation		95% Confidence Interval		85th-Percentile			
				Rate	Result	R^2 Value	Result	Upper Limit	Result	Rate	Std. Dev.	Coef. of Var.	Result
SCENARIO #1 - ENTIRE SHOPPING CENTER AS A WHOLE													
820	Shopping Center (Non-December) (Urban/Suburban)	137,400	Sq. Ft. GLA										
	Weekday (Monday - Thursday) (12:00 - 6:00. p.m.)			1.95	268	0.97	305	2.17	298	3.68	0.75	38%	506
	Friday (12:00 - 6:00 p.m.)			2.61	359	0.96	355	2.83	389	3.78	0.67	26%	519
	Saturday (11:00 a.m. - 5:00 p.m.)			2.91	400	0.95	421	3.10	426	3.74	0.74	25%	514
	Sunday (12:00 - 3:00 p.m.)			1.89	260	0.98	268	N/A	N/A	2.27	0.30	16%	312
SCENARIO #2 - SHOPPING CENTER WITH RESTAURANTS SEPARATED													
820	Shopping Center (Non-December) (Urban / Suburban)	127,100	Sq. Ft. GLA										
	Weekday (Monday - Thursday) (12:00 - 6:00 p.m.)			1.95	248	0.97	290	2.17	276	3.68	0.75	38%	468
	Friday (12:00 - 6:00 p.m.)			2.61	332	0.96	328	2.83	360	3.78	0.67	26%	480
	Saturday (11:00 a.m. - 5:00 p.m.)			2.91	370	0.95	393	3.10	394	3.74	0.74	25%	475
	Sunday (12:00 - 3:00 p.m.)			1.89	240	0.98	250	N/A	N/A	2.27	0.30	16%	289
932	High-Turnover (Sit Down) Restaurant (Family) (Urban / Suburban)	10,300	Sq. Ft. GLA										
	Weekday (Monday - Thursday) (12:00 - 1:00 p.m. & 6:00 - 8:00 p.m.)			9.44	97	N/A	N/A	10.92	112	17.40	5.38	57%	179
	Friday (12:00 - 1:00 p.m. & 6:00 - 8:00 p.m.)			11.33	117	N/A	N/A	N/A	N/A	17.64	4.34	38%	182
	Saturday (10:00 a.m. - 12:00 p.m. & 6:00 - 9:00 p.m.)			12.28	126	N/A	N/A	N/A	N/A	24.91	6.10	50%	257
	Sunday (10:00 a.m. - 12:00 p.m. & 5:00 - 6:00 p.m.)			11.25	116	0.77	92	N/A	N/A	14.58	2.30	20%	150
	Combined Land Uses (Worst Case Scenario)												
	Weekday (Monday - Thursday)				345		N/A		388				647
	Friday				449		N/A		N/A				662
	Saturday				496		N/A		N/A				732
	Sunday				356		342		N/A				439

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