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Memorandum

SRF No. 8196

To: Vincent J. Driessen
The Driessen Group, LLC

From: Craig Vaughn, PE, PTOE, Senior Associate
Emily Gross, EIT, Engineer

Date: August 1, 2013

Subject: Shoppes II at Riverdale Commons Parking and Circulation Study

Introduction

As requested, SRF has conducted a parking evaluation and site plan review for a proposed drive-thru lane at the Lot 3, Block 1, Martha Gabriela Addition (current Panera location) within the Shoppes II Riverdale Commons retail development, located in the southeast quadrant of the CSAH 14 (Main Street) and Riverdale Boulevard NW intersection in the City of Coon Rapids (see Figure 1: Project Location). The proposed site plan includes a drive-thru lane located on the south and east faces of the existing Panera building with improvements to the existing parking lot. The main objectives of this study are to review the current and proposed parking supply and demand, including conformance with City of Coon Rapids requirements, and provide site plan circulation comments based on the proposed drive-thru lane.

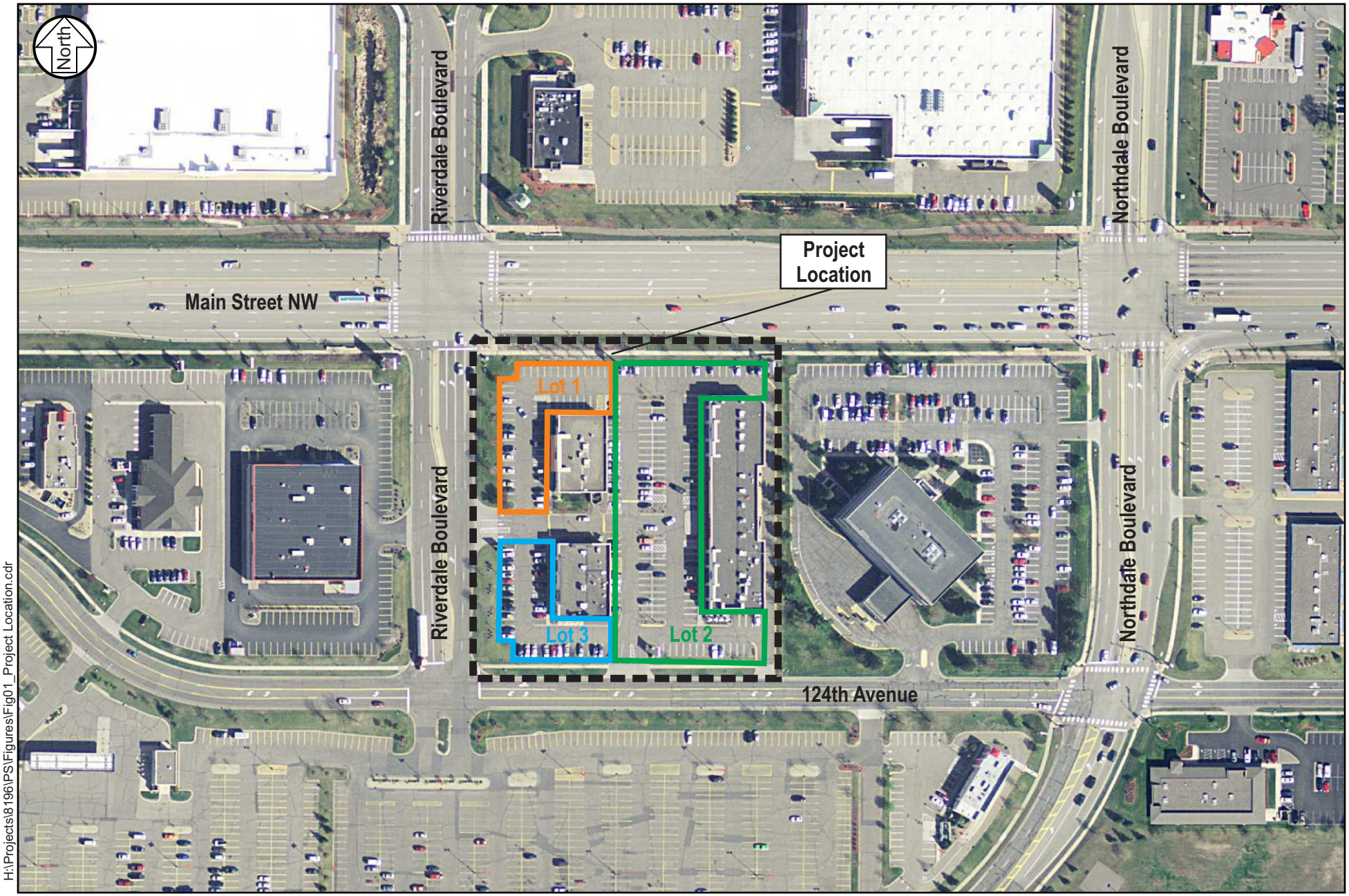
Existing Conditions

In order to establish a baseline parking condition for comparison purposes, a parking inventory was completed to determine the existing parking supply and demand. The parking demand and supply was reviewed for the entire Martha Gabriela Addition retail development (Lot 1, Lot 2, and Lot 3), which operates under a recorded perpetual reciprocal cross-access and parking agreement.

The parking lot currently provides 236 parking spaces. Parking utilization surveys were collected on Friday, July 26, 2013 at 12 p.m. and on Saturday, July 27, 2013 at 12 p.m. and 2 p.m. These parking periods were selected because they coincide with the peak parking demand of general retail and restaurant land uses, as described by the *Institute of Transpiration Engineering, (ITE) Parking Generation Handbook, 4th Edition*. A summary of the existing parking supply and demand is shown in Table 1.

Table 1
Existing Parking Summary

Lot	Parking Supply	Parked Vehicles Collected (Utilization Percent)		
		Friday at 12 p.m.	Saturday at 12 p.m.	Saturday at 2 p.m.
Lot 1	53	36 (68%)	31 (58%)	21 (40%)
Lot 2	147	60 (41%)	52 (35%)	49 (33%)
Lot 3	36	35 (97%)	33 (92%)	29 (81%)
Total	**236**	**131 (56%)**	**116 (49%)**	**99 (42%)**



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Project Location

Shoppes II at Riverdale Commons Parking and Circulation Study

City of Coon Rapids

Figure 1

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Results of the existing parking utilization surveys indicate that while Lot 3 was nearly full, the combined parking demand for Lot 1, Lot 2, and Lot 3 had a maximum utilization of 56 percent. Furthermore, field observations collected during each peak time period indicate that there is available parking in Lot 2 that is in close proximity to the businesses in Lot 3. Therefore, the current parking supply provides adequate capacity to meet the parking demand of the existing land uses.

It should be noted that the former Green Mill restaurant space, which at one time included a full service bar and restaurant (6,500 square feet/220 seats) and was located in Lot 2, was still closed and vacant at the time of the data collection. Additionally, that space will now be partitioned into three separate spaces. Based on discussion with the developer, it is known that a portion of the vacant space will be occupied by a fast-food/casual restaurant without a liquor license (2,587 square feet/58 seats). The future tenants for the other two vacancies are unknown at this time. These other two spaces combine for approximately 4,000 square feet; general retail sales will be assumed as the land use for their future consideration.

Proposed Development

The building owner and the current Panera, located within the Martha Gabriela Addition retail development, have proposed adding a drive-thru lane on their south and east faces of the building. The addition of this drive-thru lane will modify the parking lot layout and reduce the parking supply by six (6) spaces in Lot 2 and six (6) spaces in Lot 3 for a resultant total parking supply of 224 spaces. Figure 2 presents the proposed drive-thru lane and parking lot modification layout. It should be noted that there is the potential to provide proof of parking (identified in Figure 3), which would provide an additional 26 spaces for a total of 250 spaces in the three combined lots.

Parking Supply

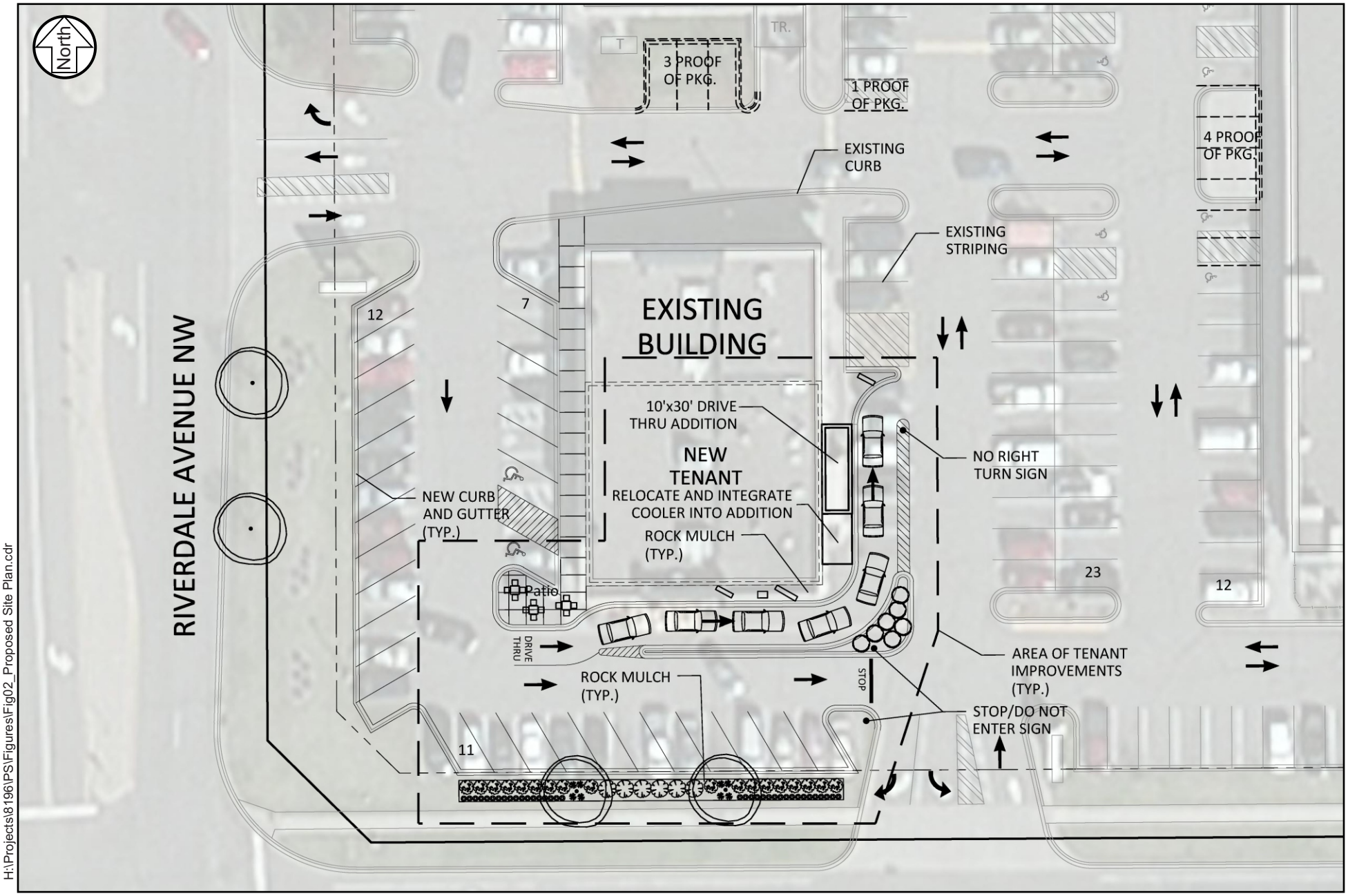
To determine if there will be sufficient parking to accommodate the proposed improvements, the City of Coon Rapids parking code was reviewed. As shown in Table 2, the land uses in the Martha Gabriela Addition retail development are currently either general retail or restaurant land uses. Land use types and sizes for each tenant are included in the Appendix.

Table 2
City Code Parking Requirements

Land Use	Parking Requirement Rate *
General Retail Sale	1 space per 250 square feet of floor area
Restaurant	1 space per 2 seats plus 1 space for every 40 square feet of banquet or meeting area **

* Parking requirements based on the City of Coon Rapids zoning code (section 11-1202.9).

**No Martha Gabriela Addition restaurant land uses have banquet or meeting area space.



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Proposed Site Plan

Shoppes II at Riverdale Commons Parking and Circulation Study

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Figure 2

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Proof of Parking

Shoppes II at Riverdale Commons Parking and Circulation Study

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Figure 3

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Since the land uses in the Martha Gabriela Addition share the parking lot spaces (cross-access and parking agreement), the required parking based on the City code (section 11-1202.9) was determined for the entire development. It should be noted that this includes assumed parking demand requirements for the currently vacant restaurant (58 seats) and service retail (approximately 4,000 square feet) land uses. Results of the City code parking requirements shown in Table 3 indicate that the development requires a minimum of 219 parking spaces. Although Lot 3 has a parking deficit of 46 spaces, the overall parking lot will provide a surplus of five (5) spaces. Further, as previously noted, Lot 2, which has a surplus of 45 parking spaces, provides parking in close proximity to the businesses in Lot 3. Therefore, the proposed parking supply is sufficient to meet the City code requirements.

Table 3
Proposed Parking Supply Comparison – City Code

Lot	Parking Supply	City Parking Requirement	Surplus / (Deficit)
Lot 1	53	47	+6
Lot 2	141	96	+45
Lot 3	30	76	(46)
Total	**224**	**219**	**+5**

The following additional items should also be considered:

- Employee parking enforcement is recommended. This will help to ensure available parking in close proximity to business entrances.
- Incorporate Travel Demand Management Plan (TDMP) strategies, such as bike racks, to encourage a multi-modal transportation system.
- Based on experience in other communities, data has shown that when peak hours of operations for different land use types do not overlap, shared parking can occur. This is the case at the Martha Gabriela Addition, where the restaurant land uses have different peak parking demands than the service retail land uses. This essentially results in a reduced parking demand during the peak parking periods for each use.
- The proposed parking supply of 224 spaces does not include any proof of parking spaces, which would provide up to 26 additional spaces, for a surplus of 31 spaces.

Parking Demand

While the City code does not provide separate parking rate requirements for restaurants with or without a drive-thru lane, the *ITE Parking Generation Handbook, 4th Edition* has reviewed the impact of a drive-thru lane on the parking demand of a fast-food restaurant (i.e. Panera). It should be noted that site-specific parking data provides the best means to estimate the future parking demand characteristics of the proposed improvement. Therefore, ITE was only used to perform a qualitative assessment of the impacts to the parking demand for a fast-food restaurant land use with and without a drive-thru lane.

The ITE parking demand for a fast-food restaurant without a drive-thru lane (*ITE code 933*) was compared to the parking demand for a fast-food restaurant with a drive-thru lane (*ITE code 934*). Similar to the City code requirement, the number of seats in the restaurant was reviewed to determine the parking demand rate for each land use. This review indicates that the addition of a drive-thru lane to a fast-food restaurant is expected to reduce the parking demand of the land use. However, to provide a conservative estimate the existing parking demand (i.e. Panera without a drive-thru lane) was compared to the proposed parking supply shown in Table 4. Based on the parking surveys, Friday at 12:00 p.m. represents the worst-case condition and therefore was used for comparison.

Table 4
Proposed Parking Supply Comparison – Collected Parked Vehicles

Lot	Parking Supply	Collected Parked Vehicles	Surplus / (Deficit)
Lot 1	53	36	+17
Lot 2	141	60	+81
Lot 3	30	35	(5)
Total	**224**	**131**	**+93**

Results of this comparison indicate that while the proposed parking supply in Lot 3 will have a parking deficit, the entire retail development will continue to provide sufficient parking that accommodates the current demand. As previously mentioned, the parking surveys were collected while there were vacancies in Lot 2. However, based on the excess parking of 81 spaces in Lot 2, if/when those vacancies are occupied there is still expected to be a surplus of parking.

Site Plan Review

A review of the site plan was completed to determine if there are any site specific and/or circulation issues with the proposed improvements. The following is offered for consideration:

- Based on our discussions with the developer the 90-degree parking on the west and south side of Lot 3 was converted to angled parking.
  - This improvement will better serve the one-way traffic flow that is being proposed and improve circulation through the parking lot. Furthermore, angled parking provides better ability for vehicles to make ingress/egress maneuvers.
- Based on our discussions with the developer right-turn movements were recommended to be restricted for vehicles exiting the drive-thru lane.
  - Making a right-turn when exiting the drive-thru lane may be difficult for vehicles. In essence this maneuver would equate to a U-turn movement and if permitted may result in vehicles crossing into the northbound through lane of the internal drive-aisle while turning.
- Based on our discussions with the developer it is our understanding the new parking lot layout will be in compliance with the City of Coon Rapids code (section 11-1202.7) requirements for stall, aisle, stacking and loading space dimensions.

Conclusions and Recommendations

Based on our review of the proposed improvements, we offer the following comments for your consideration:

- The proposed parking layout with the addition of the drive-thru lane at the Panera will reduce the current parking supply from 236 parking spaces to 224 parking spaces (includes the restaurant and retail sale land uses in the currently vacant space).
  - City parking code requires 219 parking spaces. Therefore, the proposed site plan provides a surplus of five (5) parking spaces.
  - Based on the parking supply and demand utilization surveys collected during the Friday midday peak (worst-case condition) the entire parking lot is expected to provide a surplus of 93 parking spaces.
    - ITE parking demand rates indicate that the addition of a drive-thru lane to a fast-food restaurant is expected to reduce the parking demand of the land use. However, to provide a conservative estimate the existing parking demand (i.e. Panera without a drive-thru lane) was compared to the proposed parking supply.
  - Based on the City parking code requirements and the utilization surveys collected, the parking lot will provide sufficient parking under the proposed conditions.
- The following additional items should also be considered:
  - Employee parking enforcement is recommended. This will help to ensure available parking in close proximity to business entrances.
  - Incorporate Travel Demand Management Plan (TDMP) strategies, such as bike racks, to encourage a multi-modal transportation system.
  - Based on experience in other communities, data has shown that when peak hours of operations for different land use types do not overlap, shared parking can occur. This is the case at the Martha Gabriela Addition, where the restaurant land uses have different peak parking demands than the service retail land uses. This essentially results in a reduced parking demand during the peak parking periods for each use.
  - The proposed parking supply of 224 spaces does not include any proof of parking spaces, which would provide up to 26 additional spaces, for a surplus of 31 spaces.

Appendix

Table A-1
City Parking Requirement – Proposed Parking Layout

Lot	Tenant/Bay	Use Type	Gross SF	City Parking Requirement	Proposed Parking Supply	Surplus/ (Deficit)
Lot 1	AT&T	General Retail Sales- 1 space per 250 sf of floor area	4,398	18		
	Potbelly Sandwich Works	Restaurant w/57 seats-1 space per 2 seats plus 1 space for every 40 sf of banquet or meeting area	2,400	29		
		Lot 1 Totals	**6,798**	**47**	**53**	**+6**
Lot 2	FedEx/Kinkos	General Retail Sales-1 space per 250 sf of floor area	5,321	21		
	FedEx/Kinkos	General Retail Sales-1 space per 250 sf of floor area	1,250	5		
	Tobacco Shop	General Retail Sales-1 space per 250 sf of floor area	2,305	9		
	Cash N Pawn	General Retail Sales-1 space per 250 sf of floor area	2,480	10		
	Kids Hair	General Retail Sales-1 space per 250 sf of floor area	1,240	5		
	Mech/Elect/Sprkr	N/A	167			
	Vacant	TBD/General Retail Sales-1 space for 250 sf of floor area	2,328	9		
	Vacant	TBD/General Retail Sales-1 space for 250 sf of floor area	1,634	7		
	Vacant/Five Guys/Restaurant	Restaurant w/ 58 seats-1 space per 2 seats plus 1 space for every 40 sf of banquet or meeting area	2,587	29		
		Lot 2 Totals	**19,312**	**96**	**141**	**+45**
Lot 3	Panera [1]	Restaurant w/100 seats-1 space per 2 seats plus 1 space for every 40 sf of banquet or meeting area	4,010	50		
	Cherry Berry	Restaurant w/45 seats-1 space per 2 seats plus 1 space for every 40 sf of banquet or meeting area	1,620	23		
	Hawaii Nails	General Retail Sales-1 space per 250 sf of floor area	871	3		
	Mech/Elec/Trash	N/A	364			
		Lot 3 Totals	**6,865**	**76**	**30**	**(46)**
Total Development		**Lots 1, 2, 3 Combined Total**	**32,975**	**219**	**224**	**+5**

[1] The Panera building square footage and number of seats were assumed to remain the same with the addition of the drive-thru lane under proposed conditions (4,010 square feet/100 seats).