



# *Downtown Parking and Traffic Study Village of Tinley Park*



*Prepared for:*  
*Village of Tinley Park, Illinois*

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*June 2004*

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## ***Summary of Key Findings and Recommendations***

The Village of Tinley Park has commissioned this downtown traffic and parking study to assess the traffic and parking conditions when several new projects are realized in the downtown area. The study area includes the downtown from 175<sup>th</sup> Street to 171<sup>st</sup> Street and Elmore Plaza. The intersection of 167<sup>th</sup> Street and Oak Park Avenue was also included in the analysis. This summary presents the key findings and recommendations of the study.

### **Exiting Conditions**

#### ***Existing Traffic Conditions***

- There are three signalized intersections in the study area:
  - Oak Park Avenue/167<sup>th</sup> Street
  - Oak Park Avenue/171<sup>st</sup> Street
  - Oak Park Avenue/173<sup>rd</sup>/Place
- Two of these intersections currently operate at acceptable level of service; however, some of the movements at Oak Park Avenue/171<sup>st</sup> Street operate at capacity during the P.M. peak, specifically the eastbound and the southbound approaches. A southbound right-turn lane is recommended for immediate implementation.
- There are also five unsignalized intersections included in the study area:
  - Oak Park Avenue/172<sup>nd</sup> Street
  - Oak Park Avenue/173<sup>rd</sup> Street
  - Oak Park Avenue/South Street
  - Oak Park Avenue/175<sup>th</sup> Street
  - Oak Park Avenue/66<sup>th</sup> Court
- These intersections operate at acceptable levels of service, except for the left-turn movements on Oak Park Avenue at South Street and at 175<sup>th</sup> Street.

#### ***Existing Parking Conditions***

- There is currently surplus parking capacity in the downtown. During the evenings, the curb parking in the vicinity of Bogart's and Hollstein's is well used, but there is capacity in the Metra lots.
- The daily fee (\$1.50 per day) private commuter pay lot on South Street is full, indicating a high demand for daily fee commuter parking
- In the early evening on a weekday at 6:00 P.M., there are over 300 parking spaces available in the Metra parking lots east of Oak Park Avenue.



## **Future Conditions**

### ***Proposed Development Projects***

There are six developments currently under consideration in downtown Tinley Park, plus the potential for one or two projects on the west side of Oak Park Avenue, north of 173<sup>rd</sup> Place. The two key developments are the proposed North Street Development and the proposed South Street Development. The proposed North Street Development will have 116 residential condominium units, 22,493 square feet of retail (including a bank), 12,725 square feet of office, 24,072 square feet of restaurant/coffee shop space, and a 1,920-seat cinema. A potential parking structure is proposed in conjunction with this project to accommodate Metra commuters and downtown visitors.

The proposed South Street Development will be built in two phases. Phase I will have 39 residential condominium units and 15,100 square feet of retail space. Phase II will have 30 residential units and 11,966 square feet of retail space.

### ***Future Traffic Conditions***

- The key downtown intersections will operate at acceptable levels of service with the proposed changes, including a new traffic signal at 175<sup>th</sup> Street and Oak Park Avenue, as well as improvements at 171<sup>st</sup> Street and Oak Park Avenue, including a southbound right-turn lane and eastbound through lane. The traffic on Oak Park Avenue will increase by about 200 vehicles per hour in the afternoon. With that increase, Oak Park Avenue will be operating at or near its effective capacity.
- Following is a summary of the other key recommendations of the analysis of future traffic conditions:
  - Oak Park Avenue at 171<sup>st</sup> Street—install eastbound and westbound left-turn lanes.
  - Oak Park Avenue at 167<sup>th</sup> Street—consider installation of right-turn lanes on all legs of the intersection if traffic increases as projected in the next 10 years.
  - Oak Park Avenue at 175<sup>th</sup> Street—install northbound and southbound left-turn lanes when the traffic signal project is implemented.
  - Extend 175<sup>th</sup> Street west to South Street.

### ***Future Parking Conditions***

- Except for the proposed North Street project, there will be adequate parking for the other proposed downtown developments.
- The highest parking demand for the proposed North and South Street developments is in the evening and on weekends when there is capacity available in the Metra parking lots.
- There is enough parking available in the Metra parking lots to absorb the loss of the existing pay lot on South Street.
- The proposed North Street Development will have a shortage of almost 900 additional parking spaces in the evening without taking into account spaces available in the Metra parking lots.

- The proposed North Street Development will require a minimum of about 600 additional parking spaces, if the available Metra spaces north of the railroad tracks can be used by theater, restaurant, and other patrons of the development.
- A parking structure will be required to meet the needs of the proposed North Street Development. The required capacity will depend on several factors, including the following:
  - The site used for the parking structure
  - Replacement of any existing surface parking permanently eliminated by construction of the parking structure
  - Number of Metra parking spaces that are considered available for the development
  - Negotiations with the developer

## **Recommendations**

### ***Traffic Recommendations***

#### *Recommendations Related to Existing Conditions*

- Add southbound right-turn lane at 171<sup>st</sup>/Oak Park.
- Continue to monitor the eastbound approach of 171<sup>st</sup> Street. Consider a long-term improvement to add a separate dedicated eastbound left-turn lane to allow eastbound through traffic to proceed without being trapped in the existing left-turn/through lane. Pursue this intersection improvement if redevelopment occurs at any or all of the corners of this intersection.
- Coordinate signals along Oak Park Avenue. Signal timings should be reviewed approximately every three years.
- Employ shared and cross access easements on the west side of Oak Park Avenue between 167<sup>th</sup> and 171<sup>st</sup> Streets and from 171<sup>st</sup> Street to 173<sup>rd</sup> Place to consolidate driveway access, increase the distance from intersections to driveways, and increase driveway corner clearance and driveway spacing.
- Extend 175<sup>th</sup> Street to the west and install a traffic signal at this intersection.
- Stripe the southbound lane of Oak Park Avenue, south of 167<sup>th</sup> Street, with yellow markings to shift vehicles into the right lane before the left turn at Tinley Park Drive.
- Stripe the parking on Oak Park Avenue, between 171<sup>st</sup> Street and 173<sup>rd</sup> Place, and stripe left merge pavement markings on southbound Oak Park Avenue, south of 171<sup>st</sup> Street, to direct vehicles to the left lane, away from the cars parked on Oak Park Avenue.
- Upgrade the streets in the study area that do not meet urban standards with sidewalks and curb and gutter. These should be upgraded as redevelopment progresses, including 67<sup>th</sup> Avenue south of the railroad tracks.
- Implement the Village plan for the 66<sup>th</sup> Court/Oak Forest Avenue realignment to improve stop sign controlled intersections.

#### *Future Traffic Recommendations*

Following is a summary of the other key recommendations of the analysis of future traffic conditions:

- Oak Park Avenue at 171<sup>st</sup> Street—install eastbound and westbound left-turn lanes.
- Oak Park Avenue at 167<sup>th</sup> Street—consider installation of right-turn lanes on all legs of the intersection if traffic increases as projected in the next 10 years.
- Oak Park Avenue at 175<sup>th</sup> Street—install northbound and southbound left-turn lanes when the traffic signal project is implemented.

### ***Parking Recommendations***

#### ***Existing Parking Recommendations***

- There is capacity in the Metra lots at the present time. Continued availability is contingent on the timing of the North and South Street developments. If those projects will not begin immediately, consider selling additional Metra monthly parking permits if demand warrants. Sell a limited number of permits and monitor the lot usage as permit sales increase to make sure the peak parking occupancy stays within acceptable limits.
- Create a wayfinding and graphics program for the parking lots that directs patrons to parking and also lists the parking rates and time limits.
- *Zoning Ordinance*
  - Put a shared parking section in the zoning code that reflects the Urban Land Institute's shared parking methodology for mixed use developments.
  - Re-evaluate the \$500 in-lieu of fee for parking a developer does not provide to reflect the actual costs to the Village of developing alternative parking facilities, which can range from \$1,500 for a simple surface parking lot, to as much as \$12,000 to \$20,000 per space for a multi-level parking structure.
  - Adjust the parking dimension standards in the zoning code to reflect current standards for bay sizes and stall and aisle dimensions.
- Consider selling permits for weekday downtown employees in locations that do not conflict with Metra parking, such as the leased lot west of 68<sup>th</sup> Court or Village Lot F south of the Subway franchise.
- Keep existing on-street parking on Oak Park Avenue, between 173<sup>rd</sup> Place and 171<sup>st</sup> Street, for convenient short-term customer parking for business on Oak Park Avenue.
- Continue to implement the proposed plan for off-street parking behind the businesses on the west side of Oak Park Avenue.
- Simplify the parking regulations in the lot south of 173<sup>rd</sup> Place, west of Bogart's Restaurant, to make them easier for users and customers to understand.

#### ***Future Parking Recommendations***

A parking structure will be required to meet the added demand from the proposed North Street development. The parking structure should be planned to meet the needs of the project and Metra parking and consider the needs of cinema patrons with significant inbound and outbound traffic movements occurring at the same time. The parking deck should also be planned to minimize vehicle conflicts with pedestrians going to and from the deck.

# 1.

## ***Introduction***

### **Background and Introduction**

The Village of Tinley Park has commissioned this downtown traffic and parking study to assess the existing conditions in the downtown, but more importantly to assess the traffic and parking conditions once several new projects are realized in the downtown area. In 1998, the Village created a plan for Old Town, the heart of the downtown area, centered at the Metra commuter railroad station east of Oak Park Avenue. Since that time, Metra and the Village have created a handsome new commuter rail station and reconfigured parking that symbolize the changes that are about to occur as new developments are built in the downtown. The Village has also created a tax increment financing (TIF) district for the downtown and created H-1 Historic zoning for the downtown to recognize the special needs of a downtown area with multiple land uses and shared parking.

The new developments will help create a critical mass for the downtown and a sense of place with a more urban character. But the Village is concerned about the parking and traffic implications of new projects. The new developments will not only generate additional traffic, but the additional cars will require parking. One of the key questions that the Village wants to answer is whether the new developments will require construction of a multi-level parking structure, and if so, where it should be located and how much it will cost. This report will assist the Village in understanding the traffic and parking requirements for the new projects and provide a framework plan for accommodating those needs.

This report presents the results of the parking and traffic analyses conducted for downtown Tinley Park, including existing conditions in the downtown and future traffic and parking conditions with developments that are currently proposed for the downtown, and recommendations to accommodate future changes.

### **Study Area Boundary**

For the purpose of this analysis, the study area boundaries extend from 175<sup>th</sup> Street on the south to 171<sup>st</sup> Street on the north. In general, the study focuses on the downtown core area, but includes the area currently occupied by Elmore Plaza at Oak Park Avenue and 171<sup>st</sup> Street. The general study area boundaries are shown in Figure 1. For the purposes of this study and the analysis, the study area has been divided into 19 blocks, as shown in Figure 1. It should also be noted that, although it is not shown on the map, the intersection of 167<sup>th</sup> Street and Oak Park Avenue has been included in the study because this is the northern gateway into the Tinley Park downtown.

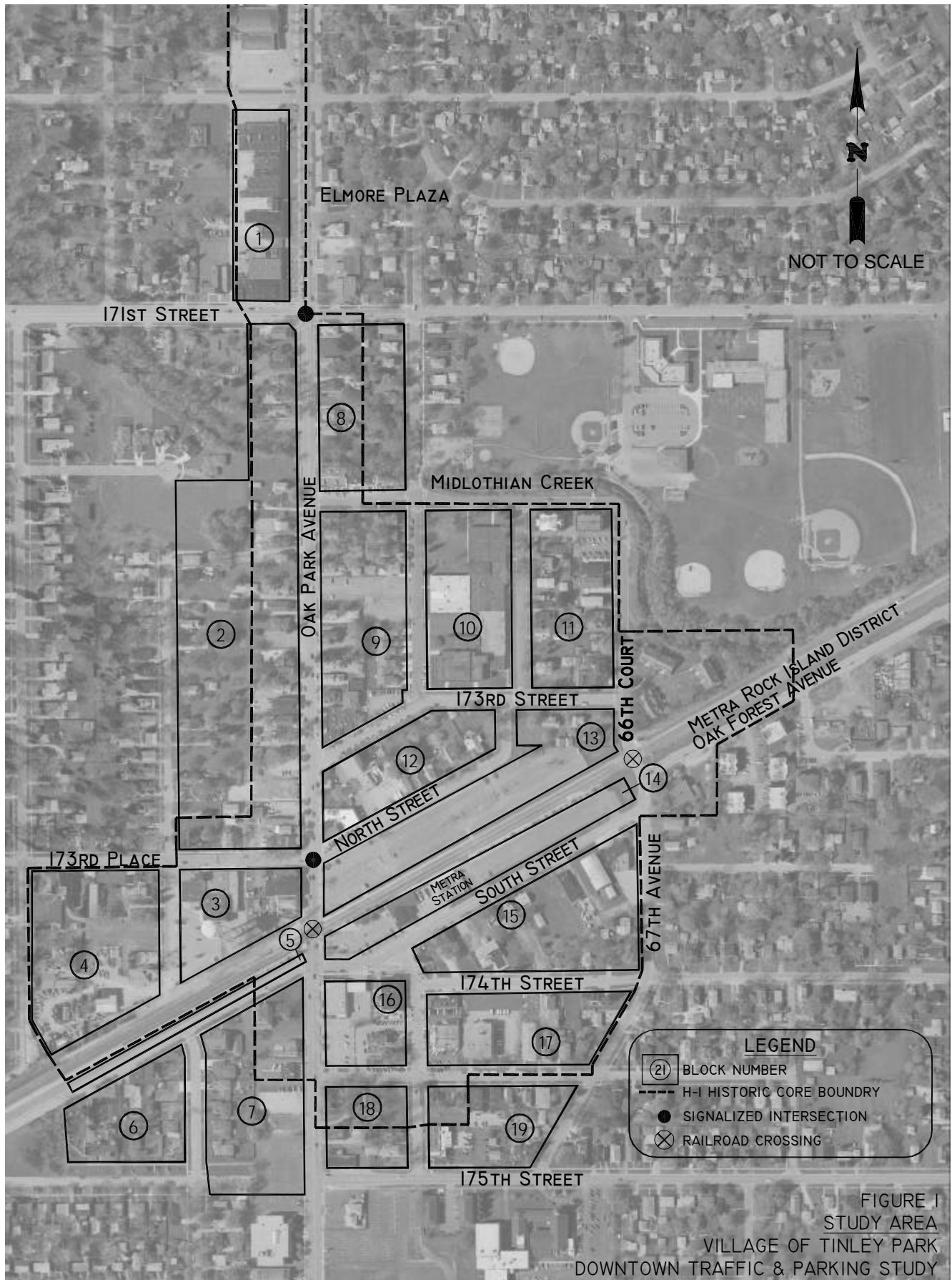


FIGURE I  
STUDY AREA  
VILLAGE OF TINLEY PARK  
DOWNTOWN TRAFFIC & PARKING STUDY

## **2.**

### ***Stakeholder Meetings***

Two stakeholder meetings were conducted at the beginning of the study to obtain input from the public and from key business and community leaders. The meetings were conducted on Wednesday, February 18, 2004. Summaries of the meetings are contained in Appendix A. Following is a brief synopsis of the key comments and observations.

#### **Parking**

- The Village parking lot west of Bogart's restaurant is very confusing for patrons
- Signage is confusing for parking patrons, especially in the Metra lots
- Employee parking is an issue for many businesses, including the restaurants
- The School and Park Districts have issues with parking and circulation on 171<sup>st</sup> Street east of Oak Park Avenue during events
- Participants are supporting the Village plan to create a linear parking lot behind the buildings on the west side of Oak Park Avenue
- The three-hour time limits in the parking lots are not uniformly enforced

#### **Traffic and Access**

- It is difficult to make left turns onto Oak Park Avenue at the unsignalized intersections, from the east and west sides
- The curve at 66<sup>th</sup> Court adjacent to Midlothian Creek is dangerous, especially for children using the pedestrian bridge to go to Fulton School
- It is very difficult to make a left turn onto eastbound 173<sup>rd</sup> Place at southbound Harlem Avenue or to make a left turn from westbound 173<sup>rd</sup> Place onto southbound Harlem Avenue
- In the past several years, on-street parking on Oak Park Avenue at 173<sup>rd</sup> Place and North Street has been eliminated for traffic and intersection improvements to facilitate traffic flow
- Westbound trains block traffic on Oak Park Avenue in the evening peak period
- Most of the population in Tinley Park is concentrated west and south of the downtown
- There is not enough space for delivery vehicles in the Village lot west of Oak Park Avenue and north of 173<sup>rd</sup> Place

### **3.**

## ***Existing Parking Conditions***

### **Existing Parking System**

The existing parking system serving the downtown consists of on-street curb parking, Village parking lots, and private lots. Currently, there are no parking structures in the downtown area. Table 1 is a summary of the existing parking supply for the 19 blocks in the study area, Figure 2 shows the location of existing off-street parking, and Figure 3 shows the on-street parking time limits for the downtown.

There are about 2,146 parking spaces in the study area, including Elmore Plaza, which is a self-contained center with several businesses, located just outside and north of the downtown area. There are about 2,012 parking spaces serving the downtown area south of 171<sup>st</sup> Street, as shown in Table 2.

Approximately 18 percent of the parking is provided by on-street curb parking. The remaining 82 percent is provided by off-street parking lots, split almost evenly between public and private facilities. It should be noted that the study area includes some residential areas, most of which have a two-hour time limit during the day to discourage use by Metra commuters.

### **Parking Counts**

A parking study was conducted for the Village of Tinley Park in June of 2000. That information was reviewed, and additional parking counts were conducted during the peak times at mid-morning and early afternoon, and again on a Friday evening to establish the level of demand and usage during the peak times. The complete results of the parking count are shown in Appendix B for both on-street and off-street facilities.

The on-street parking is very lightly used during the day. During the Friday evening count, the curb spaces around Bogart's and Hollsteins were well used because of the activity associated with these and other restaurants in this area.

The off-street parking was 62 percent occupied at noon. The municipal lot adjacent to Bogart's was well used, and the VFW parking on 172<sup>nd</sup> Street was also well used; otherwise, there was considerable available capacity in most locations. The exception is the commuter pay lot in Block 15, which is discussed below.

### **Metra Commuter Parking**

The Village provides parking in several locations for Metra commuters. In addition to the Village lots adjacent to the train station, Village parking is available west of Oak Park Avenue and south of 173<sup>rd</sup> Place in a lot west of the fire station. In addition to the Village parking, there is currently a private parking lot south of the station on South Street for daily fee parking. The parking fee is \$1.50 per day in the lot.



**Table 1**  
**Existing Parking Supply; Village of Tinley Park**

**February 2004**

	Capacity (spaces)								
	On-Street Parking					Off-Street Parking			Total Parking
Block	15- Minute	2-Hour	4-Hour	Unrestricted	Subtotal	Public Lot	Private Lot	Subtotal	
1	Elmore Plaza				0	0	134	134	134
2	3	30	0	19	52	36	232	268	320
3	0	4	0	0	4	0	119	119	123
4	0	0	0	0	0	53	0	53	53
5	0	0	0	0	0	133	0	133	133
6	0	18	0	0	18	0	0	0	18
7	0	6	0	0	6	0	172	172	178
8	0	0	0	25	25	0	5	5	30
9	0	4	20	16	40	73	51	124	164
10	0	68	0	0	68	0	0	0	68
11	0	16	0	0	16	0	0	0	16
12	0	39	11	0	50	0	23	23	73
13	0	0	0	0	0	304	0	304	304
14	0	0	0	0	0	186	0	186	186
15	0	16	0	0	16	77	72	149	165
16	0	22	0	10	32	0	46	46	78
17	0	39	0	0	39	0	57	57	96
18	0	0	0	10	10	0	14	14	24
19	0	0	0	7	7	0	64	64	71
<b>Total</b>	<b>3</b>	<b>262</b>	<b>31</b>	<b>87</b>	<b>383</b>	<b>862</b>	<b>989</b>	<b>1,851</b>	<b>2,234</b>

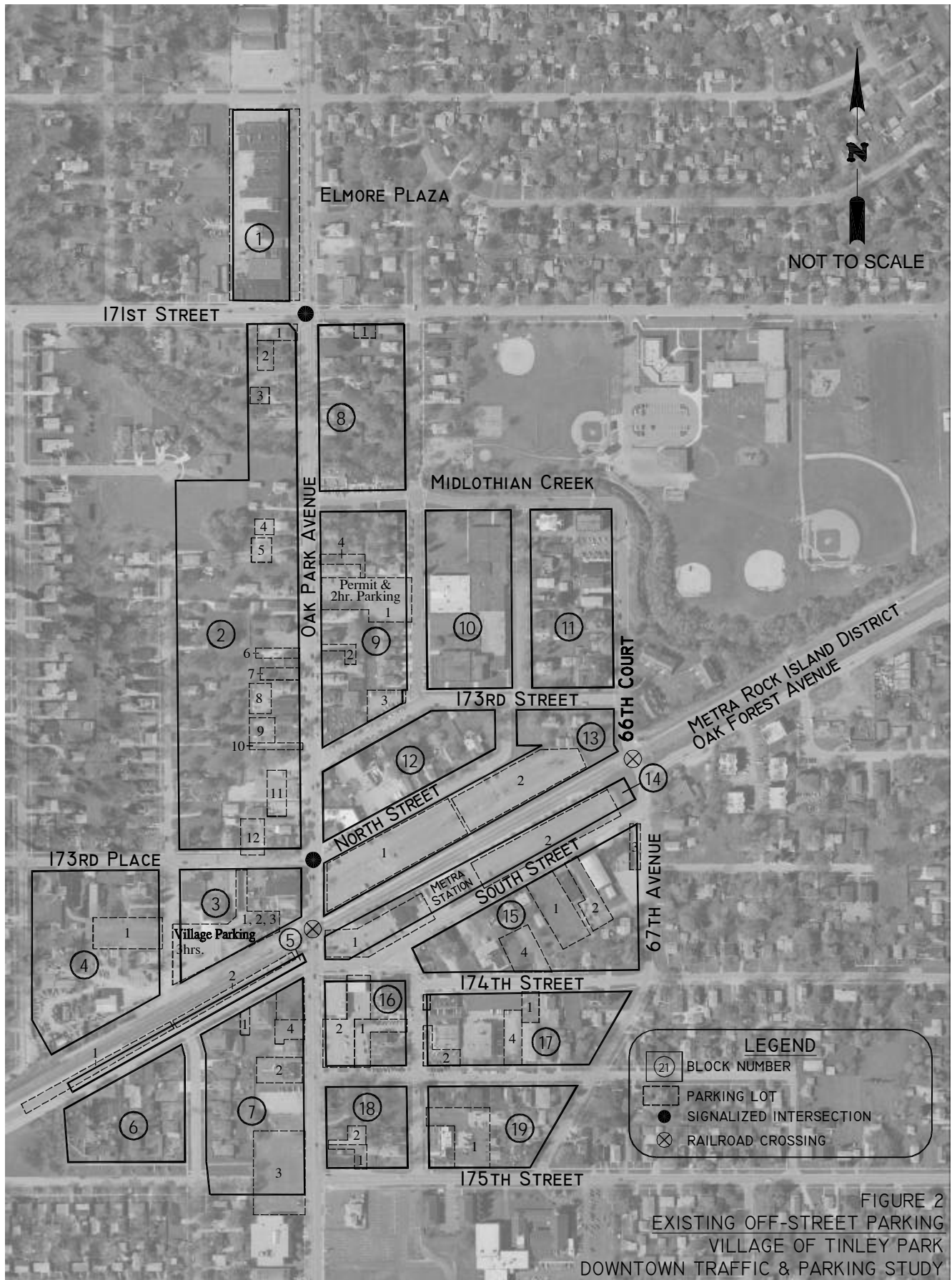
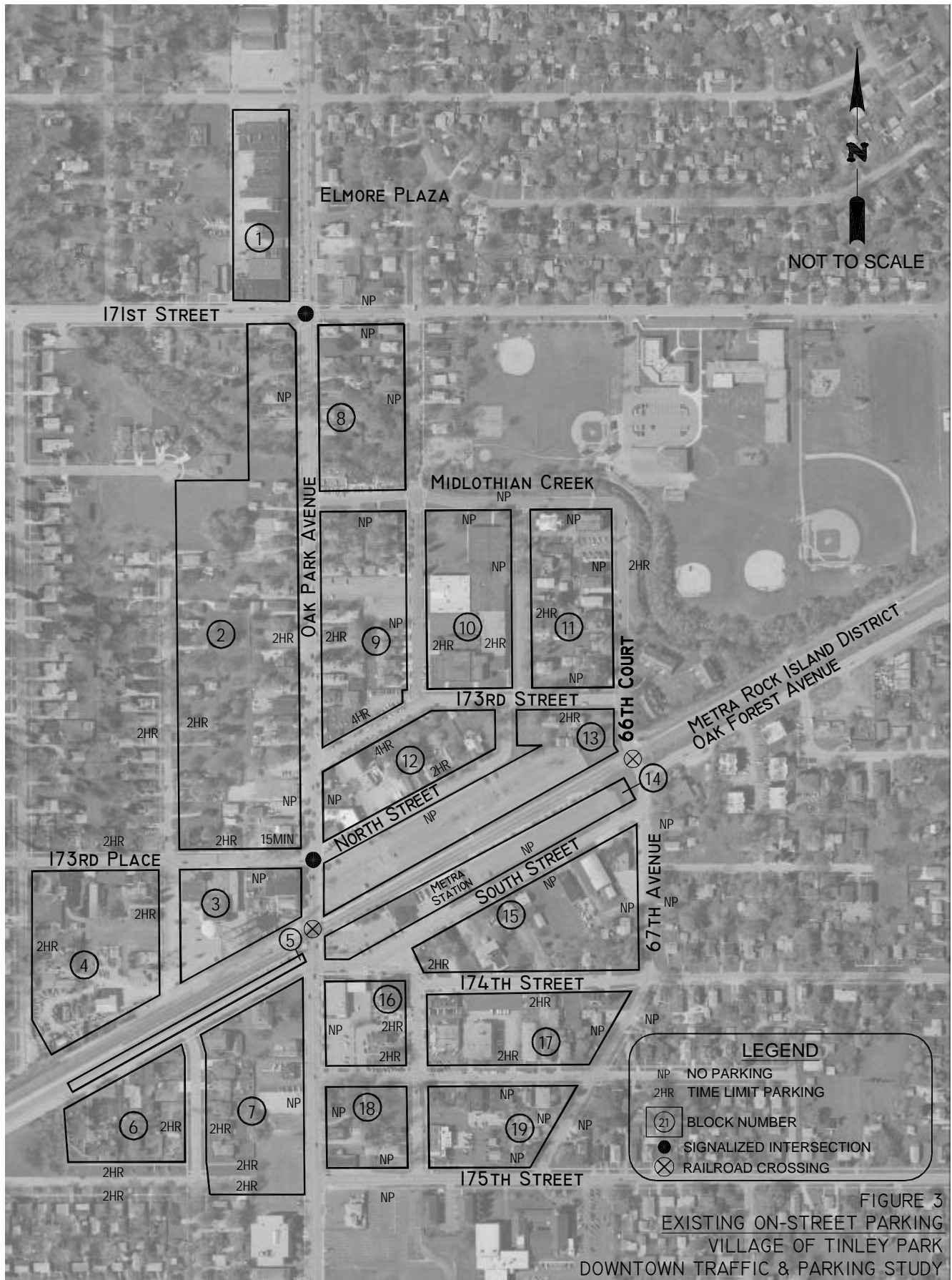


FIGURE 2  
EXISTING OFF-STREET PARKING  
VILLAGE OF TINLEY PARK  
DOWNTOWN TRAFFIC & PARKING STUDY



**Table 2**  
**Existing Downtown Parking—Village of Tinley Park**

	<b>Spaces</b>	<b>Percent</b>
<b>On-Street Parking</b>		
Time Limit: 15 minutes	3	—
Time Limit: 2 hours	262	12%
Time Limit: 4 hours	31	1%
Unrestricted: No time Limit	87	4%
<b>Total On-Street</b>	<b>383</b>	<b>18%</b>
<b>Off-Street Parking</b>		
Public Parking	862	41%
Private Parking	855	41%
<b>Total Off-Street</b>	<b>1,717</b>	<b>82%</b>
<b>Total Parking Supply</b>	<b>2,012</b>	<b>100%</b>

There was capacity available in the Village’s Metra lots during the peak times. The peak occupancy was 75 percent in the six permit parking areas in this lot. By contrast, the private daily parking fee lot was full. A summary of the peak-period parking occupancy in the Village’s Metra lots is shown in Table 3.

**Table 3**  
**Metra Commuter Parking Usage—Village of Tinley Park**

<b>Commuter Lots</b>	<b>Capacity (spaces)</b>	<b>Number of Parked Cars</b>	<b>Percent</b>
Commuter Lot A	66	63	95%
Commuter Lot B	63	43	68%
Commuter Lot C	123	105	85%
Commuter Lot D and N	304	228	75%
Commuter Lot E	<u>67</u>	<u>24</u>	<u>36%</u>
<b>Totals</b>	<b>623</b>	<b>466</b>	<b>75%</b>

The peak parking usage in Tinley Park is lower than in other downtown Metra parking situations that have been studied. In many cases at peak times, Metra parking is used at or near capacity by commuters. There is clearly a high demand for daily fee parking, as evidenced by the private parking lot operating at capacity. It is also possible to sell more permits for the lots, based on these surveys. It

is customary in situations like this for the parking operator or operating entity to oversell the number of permits based on the actual use of the facility. As of February 2, 2004, a total of 496 monthly parking permits were sold, including 15 permits in the church lot west of 68<sup>th</sup> Court and the fire station. In this case, it appears that additional Metra permits can be sold, depending on the demand. However, at this time, the Village wants to maintain a reasonable surplus in the Metra lots for any overflow parking and to provide additional customer parking.

### **Signage and Graphics**

The current signage and graphics for the off-street parking system are not always clear to patrons. It would be desirable to have a unified graphics and signage program to direct patrons to parking, identify the parking lot as a Village lot with a logo or identity symbol, and clearly delineate the parking time limits and fees, if any.

### **Existing Zoning Ordinance**

The off-street parking provisions of the Tinley Park Zoning Ordinance have been analyzed to determine whether any changes would be appropriate. The parking provisions of the zoning ordinance have been modified for the H-1 Historic overlay district that encompasses the downtown core. In general, the parking provisions of the zoning code reflect suburban parking generation rates with no provision for reduced parking requirements for shared parking for mixed-use developments. In many cases, because of differences in peak time/day of use, the parking required for some types of mixed-use developments is less than the parking required for individual land uses taken separately. This has been shown in parking analyses conducted based on the Urban Land Institute's shared parking methodology. It would be appropriate to put a shared parking section in the zoning code that would require mixed-use property developers to have a shared parking analysis conducted by a qualified parking consultant to provide the Village with a rationale for a shared parking reduction.

The H-1 overlay district does take into account the municipal parking available in the downtown, both in off-street parking lots and at curb parking spaces. It allows a reduction in the number of spaces, if it can be shown that adequate parking exists within 500 feet of the business. It also requires that project owners make a one-time payment of \$500 for every parking space that cannot be provided. The purpose of the in-lieu payment is to offset, at least partially, the cost of providing the parking. Even \$500 is a very low figure, if it is the Village's intent to use the funds to develop new parking. In general, developing a surface parking lot can cost \$1,200 to \$2,000 per space, excluding property acquisition. If the Village were in the position of needing to build a multi-level parking facility, the per-space cost would range from \$12,000 to \$20,000 for a multi-level, above-ground facility, far exceeding the in-lieu contribution by developers.

The zoning ordinance provides guidelines for parking stall dimensions and bay sizes. The parking stall width dimension of nine feet is consistent with current parking practice. However, the combination of the aisle and stall requirements results in overall parking bay dimensions that exceed the current minimum recommended standards of the National Parking Association Consultants Council and the Urban Land Institute in *The Dimensions of Parking* (4th Edition, 2000). For instance, in the current zoning ordinance, the overall bay width for 90-degree parking is 63 feet, with a 26-foot-wide driving aisle. This compares with the recommended minimum bay width of 60 feet, with a 24-foot-wide drive aisle in *The Dimensions of Parking*. Following is a comparison of the current Tinley Park zoning code requirements with the minimum standards in *The Dimensions of Parking*.

Parking Module	Tinley Park Zoning Ordinance	Dimensions of Parking Minimum
90 degree parking	63 feet	60 feet
75 degree parking-wall to wall	61 feet	56 feet
60 degree parking-wall to wall	56 feet	52.5 feet
45 degree parking-wall to wall	50 feet	48 feet

Some adjustment to the current zoning standards is recommended to bring them more in line with current standards for two reasons. The first is to reduce the area devoted to surface parking for a given project, and the second is to provide a more reasonable dimension for those projects that may require multi-level parking facilities. The cost implications become greater when parking structures are considered, with the current Tinley Park zoning standards requiring four to nine percent more area than the ULI/NPA minimum guidelines.

### **Proposed Combined Off-Street Parking Lot West of Oak Park Avenue**

The Village is proposing the construction a multi-use parking lot west of the businesses on Oak Park Avenue. This concept has several desirable objectives, including a reduction in the number of curb cuts and driveways on Oak Park Avenue, creation of additional off-street parking to serve these businesses, and consolidation of parking. Kimley-Horn concurs with this concept and recommends that the Village proceed with the development of a final, detailed concept that takes into account the loading and access issues discussed at the stakeholder meetings.

### **Curb Parking On Oak Park Avenue**

There is some on-street curb parking on Oak Park Avenue between 171<sup>st</sup> Street and 173<sup>rd</sup> Street. At other locations, the curb parking on Oak Park Avenue has been eliminated. Short-term curb parking is beneficial to businesses for customer parking, even with the off-street parking provided in the rear of the stores. It is important that the spaces be marked and that the transition zones between areas where curb parking is prohibited to where it is allowed be striped so moving vehicles are warned when to move toward the center of the road. Some peak-hour prohibitions may be needed to provide additional traffic capacity. However, at the present time there is no reasonable alternative for adding additional lanes on Oak Park Avenue, so the parking can be allowed at all times.

### **Other Parking Issues**

The parking issues related to the School and the Park District properties on 171<sup>st</sup> Street are outside the scope of this project. However, the existing issue with the head-in curb parking should be addressed to alleviate the current congestion. It is recommended that alternatives be explored for creating additional off-street parking to serve this area to minimize the conflicts between entering/exiting traffic and parking. High attendance events at the school or the park district sometimes use the former Central School site for temporary parking. This area will not be available for parking when the site is redeveloped. This issue should be evaluated with the School and the Park District to determine the extent of the problem and whether there are other reasonable alternatives for providing parking. One potential future option could open up with the potential redevelopment of the 250-acre State of Illinois Mental Health Facility on Harlem

Avenue. If it is acquired by the Village for development, one option that could be considered is setting aside 25 to 30 acres for development of recreational facilities with football and soccer fields with better access and parking than is currently available at the 171<sup>st</sup> Street site.

The existing Village parking lot by the fire station and serving Bogart's restaurant and the other restaurants on Oak Park Avenue is very confusing for patrons because there is three-hour Village parking, as well as parking reserved for Bogart's and fire station employees. The regulations in the lot should be simplified, and the lot should be assigned as much as possible to put all the short-term parking closest to Oak Park Avenue and the restaurants, with employee parking on the west side of the lot.

Employee parking is one issue that was identified by several business owners during the stakeholder meetings. The restaurants in particular have indicated a need for employee parking. The peak times for restaurant activity are typically in the evening, especially Friday and Saturday evenings. At those times, restaurant employees can park in the lots used during the daytime by Metra commuters. It is recommended that the Village provide the option for employers or employees to purchase a parking permit for selected locations, such as the leased parking lot west of 68<sup>th</sup> Court or Village Lot F, which is very lightly used during the day.

### **Summary of Recommendations**

- There is capacity in the Metra lots at this time. Continued availability is contingent on the timing of the North and South Street developments. If those projects will not begin immediately, consider selling additional Metra monthly parking permits if demand warrants. Sell a limited number of permits and monitor the lot usage as permit sales increase to make sure the peak parking occupancy stays within acceptable limits.
- Create a wayfinding and graphics program for the parking lots that directs patrons to parking and also lists the parking rates and time limits.
- *Zoning Ordinance*
  - Put a shared parking section in the zoning code that reflects the Urban Land Institute's shared parking methodology.
  - Re-evaluate the \$500 in-lieu of fee for parking a developer does not provide to reflect the actual costs to the Village of developing alternative parking facilities.
  - Adjust the parking dimension standards in the zoning code to reflect current standards for bay sizes and stall and aisle dimensions.
- Consider selling permits for weekday downtown employees in locations that do not conflict with Metra parking, such as the leased lot west of 68<sup>th</sup> Court or Village Lot F south of the Subway franchise.
- Keep existing on-street parking on Oak Park Avenue between 173<sup>rd</sup> Place and 172<sup>nd</sup> Street for short-term customer parking.
- Implement the proposed plan for off-street parking behind the businesses on the west side of Oak Park Avenue.
- Simplify the parking regulations in the lot south of 173<sup>rd</sup> Place, west of Bogart's Restaurant.



## **4.**

### ***Existing Traffic Conditions***

#### **Existing Traffic Conditions**

For this analysis, peak-hour turning movement traffic counts were conducted in February 2004. The counts were performed between 6:30 and 8:30 AM and between 4:30 and 6:30 PM at key intersections in the downtown area. Those intersections are as follows:

- Oak Park Avenue/167<sup>th</sup> Street
- Oak Park Avenue/171<sup>st</sup> Street
- Oak Park Avenue/172<sup>nd</sup> Street
- Oak Forest Avenue/66<sup>th</sup> Court
- Oak Park Avenue/175<sup>th</sup> Street
- Oak Park Avenue/South Street
- Oak Park Avenue/173<sup>rd</sup> Place

In addition, observations were made of the traffic operations and conditions during peak times. The existing traffic volumes are shown in Figure 4. The existing intersection geometry at each of these key intersections is shown in Figure 5.

#### **Existing Level of Service**

The level of service (LOS) at the existing intersections was evaluated using the traffic counts collected in February. The LOS for the above-mentioned intersections was evaluated using the *2000 Highway Capacity Manual* (HCM) methodology for unsignalized and signalized intersections. These techniques use traffic volumes, intersection geometry, and traffic signal timings (for signalized intersections) as inputs to estimate the average delays, queue lengths, and levels of service for movements and approaches at an intersection and for the intersection as a whole. LOS values are based on total average delay and range from LOS A (totally free-flowing traffic) to LOS F (extremely congested traffic). The interpretation of each of the LOS values and the associated average delay range is shown in Table 4. Most municipalities consider LOS values of A through D acceptable for peak-hour operation. The LOS ranges differ between signalized and unsignalized intersections. Both sets of ranges are shown in Table 4.

The existing intersection geometry and control, shown in Figure 5, was used to obtain the LOS. The results of the analysis for the signalized intersections of Oak Park Avenue with 167<sup>th</sup> Street, 171<sup>st</sup> Street, and 173<sup>rd</sup> Place (North Street) are shown in Table 5.

It was determined through field investigation that the corridor should operate under coordination at a common cycle length. As a result, the capacity analyses were conducted by determining the optimum cycle length for the corridor based on the Synchro 5 simulation model. A 100-second cycle length was selected for both the AM and PM peak periods. The overall level of service for the study area signalized intersections indicates acceptable operating conditions; however, some movements (specifically the eastbound and southbound approaches) at 171<sup>st</sup>/Oak Park operate at capacity during the PM peak. The poor LOS for the eastbound and westbound movements at 173<sup>rd</sup> Place can be attributed to the background cycle being too long for these low-volume approaches and do not represent significant capacity concerns.

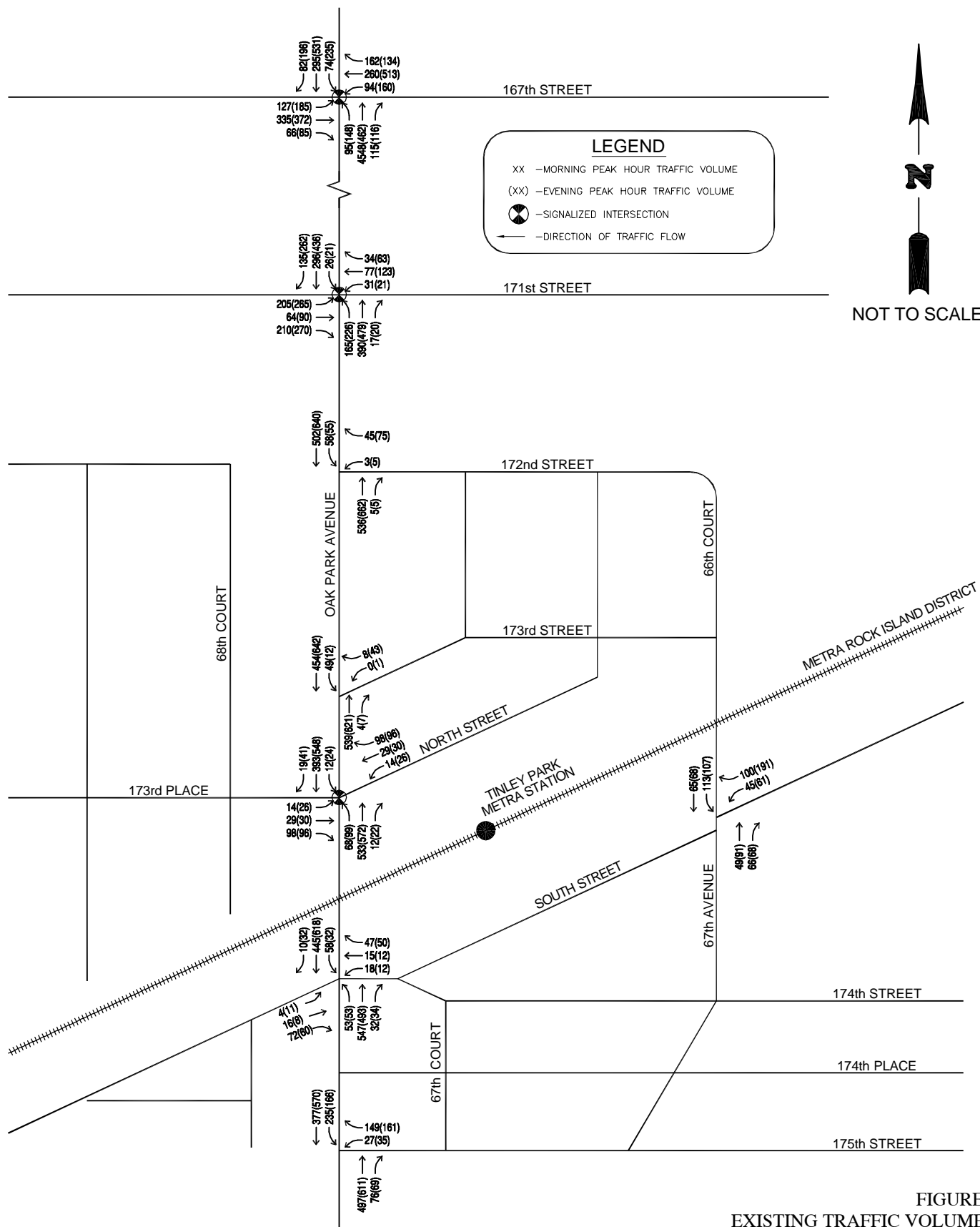


FIGURE 4  
EXISTING TRAFFIC VOLUMES  
VILLAGE OF TINLEY PARK  
DOWNTOWN TRAFFIC & PARKING STUDY

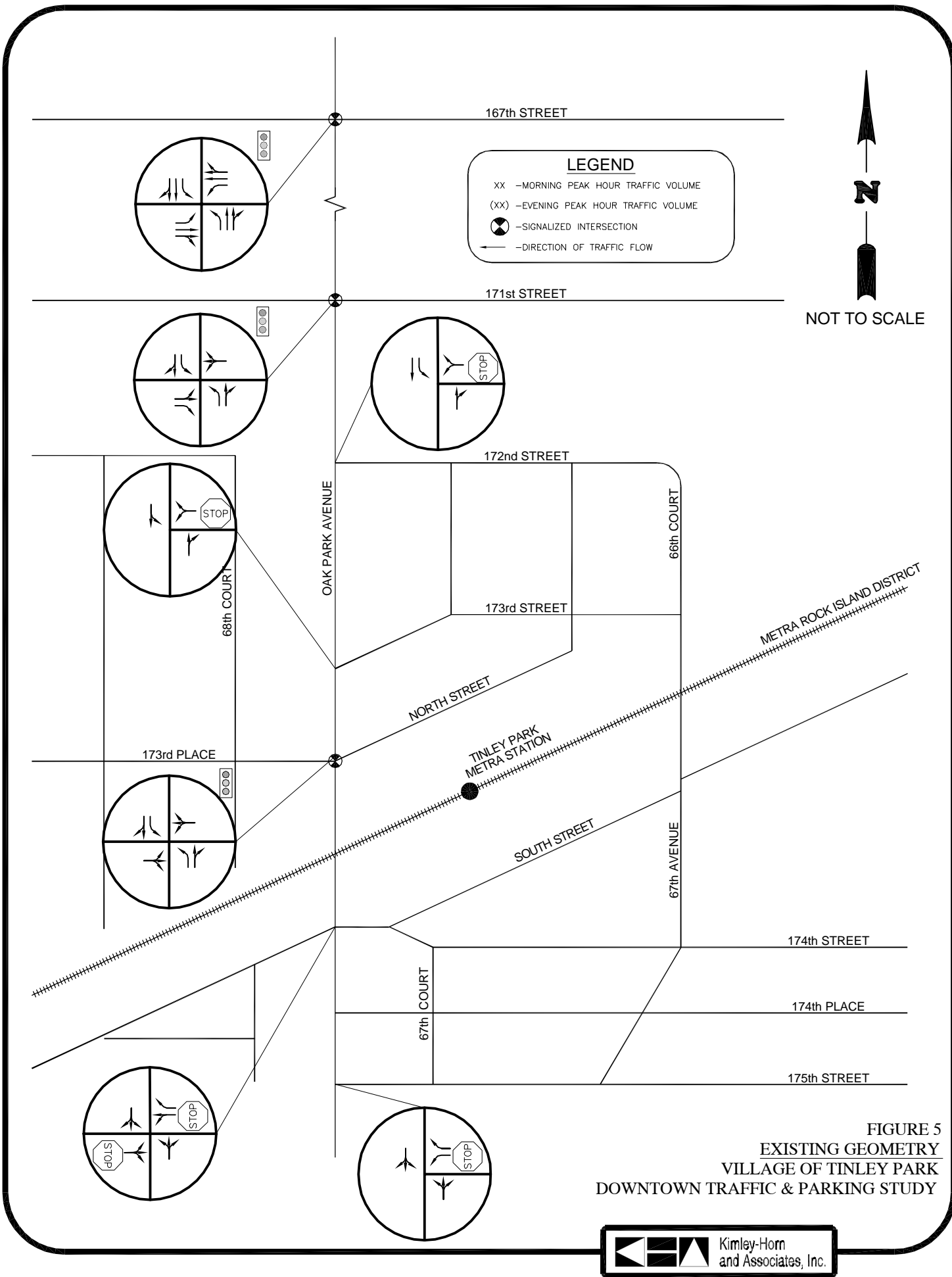


FIGURE 5  
EXISTING GEOMETRY  
 VILLAGE OF TINLEY PARK  
 DOWNTOWN TRAFFIC & PARKING STUDY

**Table 4**  
**Level of Service Criteria for Signalized (and *Unsignalized*) Intersections**

Level of Service	Interpretation	Total Delay per Vehicle (seconds)
A	Very short delay. Most vehicles arrive during the green phase (for signalized intersections) and do not stop at all.	< 10.0 < (10.0)
B	More vehicles stopping than for LOS A, causing higher levels of average delay	10.1 – 20.0 (10.1 – 15.0)
C	Light congestion, the number of vehicles stopping becomes significant at this level.	20.1 – 35.0 (15.1 – 25.0)
D	Congestion is more noticeable, with longer delays resulting from heavy traffic demands relative to the intersection's capacity.	35.1 – 55.0 (25.1 – 35.0)
E	High delays result as traffic demand approaches capacity.	55.1 – 80.0 (35.1 – 50.0)
F	Traffic demand exceeds the capacity of the lane, approach, or intersection.	>80.0 >(50.0)
Source: <i>Highway Capacity Manual</i> , 2000.		

In order to mitigate the eastbound and southbound approaches at Oak Park Avenue/171<sup>st</sup> Street various improvements were considered. Table 5 illustrates the results of these analyses.

The results of the improvement analysis indicate that the southbound right-turn lane represents the most significant capacity improvement at the 171<sup>st</sup> Street/Oak Park Avenue intersection. This improvement is also anticipated to have the greatest cost/benefit ratio. Although the addition of the eastbound left-turn lane will also have positive capacity impacts, its benefits are less significant (probably as a result of the low number of through vehicles in the travel stream). It should be mentioned that the low number of through vehicles in the eastbound approach at this intersection is likely due to the excessive delay currently experienced for through vehicles on this approach. In other words, if the intersection were improved to provide an eastbound left-turn lane, additional through vehicles could immediately appear due to latent demand and the excessive existing delay. The addition of the eastbound left-turn lane is, however, anticipated to be more costly than the southbound right-turn lane, requiring some property acquisition to accommodate the improvement. Therefore, the southbound right-turn lane currently under consideration is the recommended solution. The results of the analysis of options for Oak Park Avenue/171<sup>st</sup> Street are shown in Table 6.

The results of the analysis for the unsignalized intersections of Oak Park Avenue with 172<sup>nd</sup> Street, 173<sup>rd</sup> Street, South Street, and 175<sup>th</sup> Street and Oak Forest Avenue/66<sup>th</sup> Court are shown in Table 7.

**Table 5**  
**Signalized Intersection Level of Service (LOS) Analysis**

Intersection	Approach	Movement	AM Peak Delay (sec/veh)	AM Peak LOS	PM Peak Delay (sec/veh)	PM Peak LOS
Oak Park Ave/167 <sup>th</sup> Street	Eastbound	Left	22.2	C	30.4	C
		Through/Right	31.2	C	33.3	C
	Westbound	Left	24.7	C	27.0	C
		Through/Right	34.8	C	47.6	D
	Northbound	Left	8.6	A	13.0	B
		Through/Right	14.2	B	19.3	B
	Southbound	Left	14.3	B	15.9	B
		Through/Right	19.0	B	24.8	C
	Overall Average		22.9	C	28.9	C
Oak Park Ave/171 <sup>st</sup> Street	Eastbound	Left/Through	48.0	D	61.4	E
		Right	21.9	C	25.2	C
	Westbound	Left/Thru/Right	28.3	C	23.5	C
	Northbound	Left	10.5	B	53.8	D
		Through/Right	11.5	B	21.7	C
	Southbound	Left	8.9	A	12.0	B
		Through/Right	14.9	B	61.0	E
	Overall Average		21.0	C	43.6	D
Oak Park Ave/173 <sup>rd</sup> Place	Eastbound	Left/Thru/Right	90.6	F	19.2	B
	Northbound	Left	2.8	A	19.1	B
		Through/Right	4.5	A	17.9	B
	Southbound	Left	2.7	A	9.7	A
		Through/Right	2.9	A	20.6	C
	Westbound	Left/Thru/Right	42.3	D	54.2	D
	Overall Average		15.0	B	32.5	C
* Intersection capacity analyses did not consider the distribution of railroad pre-emption. Railroad pre-emption was simulated and could be reported based upon network (or corridor) measures of effectiveness.						

**Table 6****Analysis of Options for Oak Park Avenue/171<sup>st</sup> Street Intersection**

Intersection	Approach	Movement	AM Peak Delay (sec/veh)	AM Peak LOS	PM Peak Delay (sec/veh)	PM Peak LOS
Oak Park Ave/171 <sup>st</sup> Street (with separate dedicated southbound right turn lane)	Eastbound	Left/Through	48.0	D	61.4	E
		Right	21.9	C	25.2	C
	Westbound	Left/Thru/Right	28.3	C	23.5	C
	Northbound	Left	9.3	A	23.9	C
		Through/Right	11.5	B	21.7	C
	Southbound	Left	8.9	A	12.0	B
		Through	12.1	B	19.2	B
		Right	7.4	A	12.5	B
Overall Average			21.0	C	27.1	C
Oak Park Ave/171 <sup>st</sup> Street (with separate dedicated eastbound left turn lane)	Eastbound	Left	34.2	C	39.7	D
		Thru/Right	28.6	C	28.2	C
	Westbound	Left/Thru/Right	32.4	C	33.9	C
	Northbound	Left	12.3	B	53.8	D
		Through/Right	13.6	B	21.7	C
	Southbound	Left	9.9	A	11.9	B
		Through/Right	17.6	B	60.7	E
Overall Average			21.2	C	41.0	D
Oak Park Ave/171 <sup>st</sup> Street (with separate dedicated eastbound left turn lane and southbound right-turn lane)	Eastbound	Left	34.2	C	39.7	D
		Thru/Right	28.6	C	28.2	C
	Westbound	Left/Thru/Right	32.4	C	33.9	C
	Northbound	Left	11.0	B	23.9	C
		Through/Right	13.6	B	21.7	C
	Southbound	Left	9.9	A	11.9	B
		Through	14.1	B	19.0	B
		Right	9.0	A	11.9	B
Overall Average			19.7	B	24.4	C

**Table 7**  
**Unsignalized Intersections Level of Service (LOS) Summary**

Intersection	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
Oak Park Avenue and 172 <sup>nd</sup> Street												
AM Peak	—			A	—		—			C		
PM Peak	—			A	—		—			C		
Oak Park Avenue and 173 <sup>rd</sup> Street												
AM Peak	—			A		—			B			
PM Peak	—			A		—			B			
Oak Park Avenue and South Street												
AM Peak	A			A		E			F	B		
PM Peak	A			A		E			F	B		
Oak Park Avenue and 175 <sup>th</sup> Street												
AM Peak	A			A		—			F	B		
PM Peak	A			A		—			F	C		
Oak Forest Avenue and 66 <sup>th</sup> Court												
AM Peak	A			A		—			B			
PM Peak	A			A		—			B			

The study intersections operate at satisfactory LOS, with the exception of the westbound left turns at the intersections of Oak Park Avenue with South Street and 175<sup>th</sup> Street and the east-bound approach at the intersection of Oak Park Avenue/175<sup>th</sup> Street. The delays accompanying this LOS are common at stop-controlled intersections along major arterials during the peak hours due to the reduction in acceptable gaps in traffic. Due to the poor LOS at these intersections, a signal warrant analysis was completed.

### **Signal Warrant Analysis for 175<sup>th</sup> Street/Oak Park Avenue Intersection**

Stakeholders indicated excessive delay and frustration when attempting to turn left (southbound) onto Oak Park Avenue from either South Street or 175<sup>th</sup> Street. As a result, the intersections of Oak Park Avenue with South Street and with 175<sup>th</sup> Street were evaluated based on existing traffic volumes to determine whether the intersections warrant the installation of a signal. The signal warrant analysis was prepared based on the *Manual on Uniform Control Devices (MUTCD)* 2000 Millennium Edition. Warrant 3, the Peak-Hour Warrant, evaluation was prepared for the intersections. A copy of *Figure 4C-3 Warrant 3 – Peak Hour* is provided in Appendix D in addition to the analysis worksheets for each intersection. It was determined that Warrant 3 is met at the intersection of Oak Park Avenue/175<sup>th</sup> Street based on the existing traffic volumes. The peak-hour warrant was not met at the intersection of Oak Park Avenue/South Street. Additional data collection would have to be conducted to determine whether this intersection satisfies additional MUTCD warrants (although unlikely). The close proximity of the railroad crossing and the signalized intersection of Oak Park Avenue/North Street would make it difficult to provide progression along Oak Park Avenue if a signal is installed at the South Street



intersection. It should be noted that the signal warrant analyses did not account for any reduction of right-turning traffic (reductions of right turns is customary for IDOT when conducting signal warrant analyses). Putting a traffic signal at the Oak Park Avenue intersection also offers the opportunity to extend 175<sup>th</sup> Street to the west to Hickory Street to provide a location for eastbound traffic to make a left turn as well.

### **Capacity of Oak Park Avenue**

In an urban environment, the capacity of a roadway is typically determined by the capacity of the intersections. The capacity of a signalized intersection is determined by beginning with a base saturation flow rate and applying adjustment factors, which represent intersection specific characteristics. The HCM methodology assumes a base saturation flow rate of 1,900 vehicles/hour/lane. The base flow rate is then adjusted for lane widths, heavy vehicles, grades, parking maneuvers, pedestrians, the type of area (central business district or other), the presence of dedicated turn lanes, arrival type, and allocated green time. Based on the HCM methodology, the capacity of Oak Park Avenue is between 650 and 950 vehicles/hour in the peak direction.

The Florida Department of Transportation has developed generalized tables relating LOS to hourly volumes based on the type of roadway and level of urbanization. Given the characteristics of Oak Park Avenue, the table corresponding to generalized peak-hour directional volumes for urbanized areas on non-state roadways that are major city/county roadways was used. The generalized peak volume based on the FDOT tables would be 810 vehicles per hour in the peak direction.

The railroad crossing on Oak Park Avenue creates a unique situation by blocking the flow of traffic on Oak Park Avenue. It is estimated that the train blocks traffic for approximately 3 minutes when in the station and arrives at the station between 3 and 4 times in the PM peak hour. The interruption in traffic flow will decrease the capacity of Oak Park Avenue. Taking into account the railroad crossing, it is anticipated that Oak Park Avenue will be able to accommodate between 520 and 760 vehicles per hour in the peak direction. Once peak-hour traffic volumes exceed this threshold, it may be necessary to construct an additional through lane in each direction or consider other measures to reduce the peak-hour queues at the train crossings.

### **Access Management**

As development continues and area traffic volumes grow, it becomes increasingly important to maintain the efficiency of arterial streets within the Village. One way of improving safety and improving capacity of a roadway is through the development of an access management plan. Vehicles turning onto and off Oak Park Avenue generate conflicts, adversely impact travel flow, and result in a reduction of both capacity and safety. In general, the more driveways onto a roadway, the lower the capacity. This is especially true for two-lane roadways where through vehicles do not have an alternate lane to bypass turning vehicles.

One area of concern is the west side of Oak Park Avenue between 167<sup>th</sup> Street and 171<sup>st</sup> Street. The numerous driveways along this section increase congestion. It is recommended that, where possible, existing access be modified to combine access between parcels and employ cross access and shared access easements. It is also recommended that corner clearance dimensions (the distance from the cross street of a major intersection to the nearest driveway) be increased as much as practical in order to balance the competing objectives for increased commercial access and the preservation of efficiency on the public street system.

## **One-Way Streets**

One issue that was discussed at the stakeholder meetings was the concept of one-way streets. One-way streets can be beneficial to increase traffic capacity, especially where two nearby parallel streets are available. In the case of Tinley Park, there is no street parallel to Oak Park Avenue that continues through the community for consideration of a north/south one-way pair. North Street and South Street are parallel east/west streets, but it is not reasonable to create a one-way pair with these two streets because they are separated by the railroad tracks and would require undue extra circulation for drivers coming into or leaving the downtown.

## **Railroad Crossing at 66<sup>th</sup> Court**

There is currently a stop sign on 66<sup>th</sup> Court for southbound vehicles and a stop sign for west-bound vehicles on Oak Forest Avenue. Vehicles do not stop northbound at Oak Forest Avenue. It is not desirable for vehicles to stop and potentially block the tracks, but there are no indications that there are any current issues with this condition, and it is not uncommon at other area communities with Metra railroad crossings. The Village has considered a plan to acquire the property at the southeast corner of this intersection to realign South Street and Oak Forest Avenue. This realignment would create more distance between the tracks and the stop sign and would be a significant improvement for this intersection. It is recommended that this improvement be implemented by the Village.

## **Oak Park Avenue South of 167<sup>th</sup> Street**

Oak Park Avenue south of 167<sup>th</sup> Street changes from a four-lane roadway to a two-lane roadway. There is a sign indicating that vehicles should merge right; however, there is a left-turn lane at Tinley Park Drive. Yellow pavement striping is needed as well to direct through drivers to the right, and then provide the left-turn lane. Currently, many drivers continue through in the left-turn lane, creating the potential for a rear-end collision with a driver stopped to make the left turn. Figure 6 shows the existing condition looking south on Oak Park Avenue.

## **Wayfinding from Harlem Avenue**

There are currently some signs on Harlem Avenue directing patrons to the historic core. It is recommended that in the future the Village develop additional signage directing southbound patrons on Harlem to turn left at 171<sup>st</sup> Street and 173<sup>rd</sup> Place. Northbound vehicles on Harlem Avenue should be directed to 173<sup>rd</sup> Place. Additional signage on 171<sup>st</sup> Street would also be desirable. It would also be desirable to create some sort of a gateway at the north and south sides of Oak Park Avenue to indicate to motorists that they are entering the Village's historic core.

## **Street Standards**

Several of the streets in the study area are rural roads that do not have sidewalks or curb and gutter. As developments occur, particularly on the south side of the railroad tracks, the roads should be upgraded to urban street standards with sidewalks and curb and gutter. This would include 67<sup>th</sup> Avenue and 67<sup>th</sup> Court.



**Figure 6**  
**Oak Park Avenue Looking South-South of 167<sup>th</sup> Street**

### **Summary of Recommendations**

- Add southbound right-turn lane at 171<sup>st</sup>/Oak Park as a short-term improvement plan.
- Continue to monitor the eastbound approach of 171<sup>st</sup> Street. Consider a long-term improvement to add a separate dedicated eastbound left-turn lane to allow eastbound through traffic to proceed without being trapped in the existing left-turn/through lane. Pursue this intersection improvement if redevelopment occurs at any or all of the corners of this intersection.
- Coordinate signals along Oak Park Avenue. Signal timings should be reviewed approximately every three years.
- Employ shared and cross access easement on the west side of Oak Park Avenue between 167<sup>th</sup> and 171<sup>st</sup> Street to increase driveway corner clearance and driveway spacing.
- Extend 175<sup>th</sup> Street to the west and install a traffic signal at this intersection.
- Stripe the southbound lane of Oak Park Avenue, south of 167<sup>th</sup> Street, with yellow markings to shift vehicles into the right lane before the left turn at Tinley Park Drive.

## 5.

### ***Proposed Downtown Development Plans***

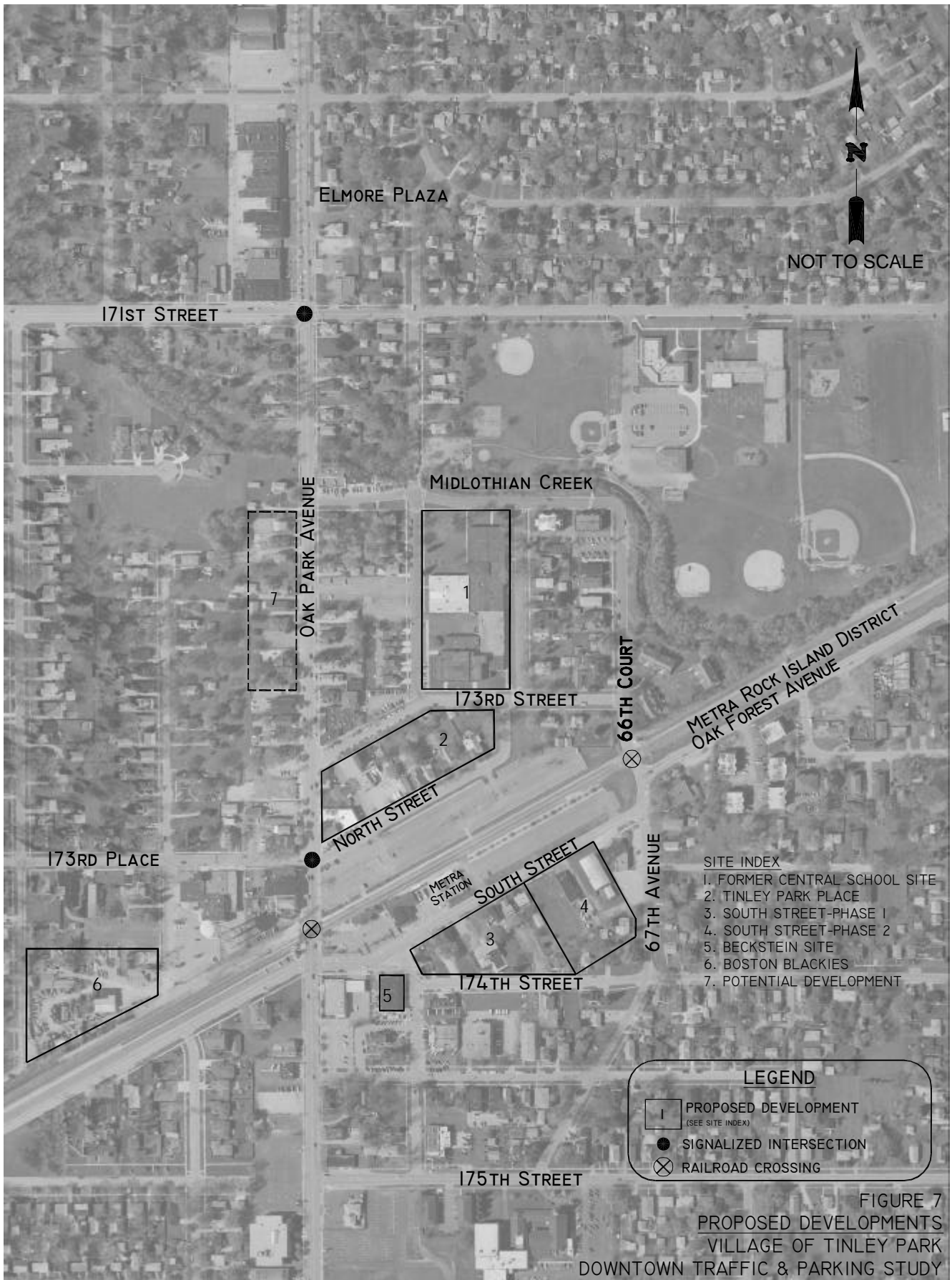
Several developments have been identified in the downtown in the next several years. The details about these developments were determined based on conversations with the Village and with the developers. There are six developments currently under consideration, plus the potential for one or two projects on the west side of Oak Park Avenue, north of 173<sup>rd</sup> Place. The locations of these developments are shown in Figure 7, and the details for the type of use and the on-site parking are shown in Table 8.

**Table 8**  
**Proposed Downtown Developments; Village of Tinley Park**

	North Street	Former Central School Site	Bechstein Site	South Street, Phase I	South Street, Phase II	Boston Blackies	Potential Project—Oak Park Avenue
Residential (units)							
• Condos/Apts	116		50	39	30		8
• Townhouses		38					
Retail (square feet)	22,493			15,100	11,966		6,000
Office (square feet)	12,725						
Cinema (seats)	1,920						
Restaurant (sq. ft.)	24,072			6,500	5,100	4,000 (120 seats)	
Parking Provided with Project (no. of spaces)							
Off-Street Lot	0			41	88		TBD
Off-Street Garage	137	76	100	72	126		0
On-Street	<u>94</u>	<u>0</u>	<u>0</u>	<u>49</u>	<u>24</u>		0
<b>Total Parking</b>	<b>231</b>	<b>76</b>	<b>100</b>	<b>162</b>	<b>238</b>		<b>TBD</b>

The two key developments are the proposed North Street Development and the proposed South Street Development. The proposed North Street Development will have 116 residential condominium units, 22,493 square feet of retail (including a bank), 12,725 square feet of office, 24,072 square feet of restaurant/coffee shop space, and a 1,920-seat cinema. A potential parking structure is proposed in conjunction with this project to accommodate Metra parkers and downtown visitors.

The proposed South Street Development will be built in two phases. Phase I will have 39 residential condominium units and 15,100 square feet of retail space. Phase II will have 30 residential units and 11,966 square feet of retail space.



## **6.**

### ***Future Parking Conditions***

The future parking conditions in downtown Tinley Park were determined based on the proposed land use and project information supplied by the Village and by project developers. The parking requirements for these projects, and the downtown, were evaluated taking into account a number of interrelated factors, including the following:

- The estimated peak parking demand for each project
- The number of parking spaces being provided by each project
- The parking available in the Metra parking lots during off-peak evening and weekend times
- Variations in demand by time of day and day of the week, whether weekday or weekend
- Loss of existing parking to development
- Urban Land Institute (ULI) shared parking methodology

#### **Proposed Parking**

The estimated parking demand for the proposed downtown development projects is shown in detail in Table 9. This table also shows the details for each project with the proposed uses and the proposed parking requirements. The peak parking demand is shown for three distinct conditions. The first is based on the current Village of Tinley Park Zoning Ordinance. The second and third conditions are based on ULI parking requirements. The primary difference between the two estimates is higher retail requirement in the Village Zoning Ordinance. The requirements are shown by land use in Table 10.

#### **Metra Parking Use**

The Metra parking lots are most heavily used on weekdays from early morning until about 5 PM, but during weekday evenings there is considerable capacity available, as well as on weekends. An hourly estimate of the weekday parking use in the Metra lots was developed based on the parking counts conducted by Kimley-Horn and on counts conducted for a previous downtown parking study. A summary of those counts are shown in Table 11, with a more detailed account by lot in Appendix F.

The counts have been adjusted to reflect the future loss of the pay parking lot that now occupies a portion of the South Street development site. For the purpose of this analysis, it was assumed that the daily fee parkers who now park in those lots would be distributed equally between the north and south sides of the railroad tracks. As shown in Table 11, during the day there are about 85 spaces available, but in the evening after at 6:00 PM, there are over 300 spaces available. By 8:00 PM, there are almost 500 spaces available. These are spaces that can be used to accommodate weekday evening retail, restaurant or cinema patrons. More spaces are available on the north

Table 9																	
Estimated Parking Demand For Proposed Downtown Village of Tinley Park				Developments													
							</										



**Table 10**  
**Parking Requirements by Land Use**

Land Use	Parking Requirements		
	Existing Zoning Code	ULI Shared Parking	
		Weekday	Saturday
Residential	2.0 spaces per unit	2.0 spaces per unit	2.0 spaces per unit
Retail	5.0 per 1,000 sf	2.6 per 1,000 sf	4.0 per 1,000 sf
Office	1 per 250 sf	3.4 per 1,000 sf	0.5 per 1,000 sf
Cinema	1 per 4 seats	0.24 per seat	0.27 per seat
Restaurant	None	16 per 1,000 sf	18 per 1,000 sf
Restaurant/Bar	1 per 3 seats plus 1 per employee	22 per 1,000 sf	25 per 1,000 sf

**Table 11**  
**Estimated Weekday Metra Parking Availability**  
**In North and South Lots After the Loss of Existing Pay Lot on South Street**

Time	Parking Spaces Available		
	North Side	South Side	Total
9:00 AM	77	33	110
10:00	73	30	103
11:00	65	25	90
Noon	62	23	85
1:00 PM	62	23	85
2:00	62	23	85
3:00	75	32	107
4:00	72	30	102
5:00	125	66	191
6:00	196	114	310
7:00	267	162	428
8:00	305	188	493
9:00	316	195	511

side of the tracks than on the south side. For instance, at 7:00 PM there are about 267 spaces available in the lots north of the tracks, but only 162 in the lots on the south. Thus, there is clearly capacity in the Metra lots to accommodate some of the evening patronage associated with the proposed downtown developments.

### Parking Requirements

A summary of the parking requirements for the proposed projects is presented in Table 12, showing the surplus or shortage, based on the zoning code and ULI uses, with no shared parking. The need is compared with the parking provided with the project, but it does not include any available capacity in the Metra lots, nor does it consider time of day or day of the week variations in parking use, or the need for a parking surplus, even during peak times. For the Bechstein site and the former Central School site residential developments, we have assumed that there will be adequate parking provided to meet the needs.

**Table 12**  
**Future Parking Analysis Summary, Village of Tinley Park**

Proposed Project	Number of Parking Spaces						
	Parking Space Requirements				Parking Surplus/Shortage		
	Village Code	Urban Land Institute (no shared use)		Parking Provided <sup>1</sup>	Village Code	ULI (no shared use)	
		Weekday	Weekend			Weekday	Weekend
North Street	1,196	1,180	1,280	231	(965)	(949)	(1,049)
South Street							
Phase I	158	176	138	162	4	(14)	24
Phase II	123	137	108	238	115	101	130
School Site	95	76	76	95	0	19	19
Bechstein Site	100	100	100	125	25	25	25
Boston Blackies	40	40	40	0	(40)	(40)	(40)
1 Assume School Site and Bechstein Site meet Village requirements of 2.0 spaces per unit.							

Only two of the developments will not have adequate parking at all times—the North Street project and Boston Blackies. Of the two, the North Street project is most deficient, needing 965 spaces according to the zoning code, and 1,049 spaces on the weekend based on ULI requirements. There is available existing capacity to accommodate the demand at Boston Blackies and there will also be available capacity with the proposed South Street development.

### Shared Parking Analysis

A shared parking analysis was conducted for both the North and South Street developments to determine the impact of the daily and weekday/weekend variations on parking demand, as well as the availability of early and late afternoon parking availability in the Metra parking lots. For the purpose of the analysis it was assumed that the parking north of the tracks would not be used

by people going south of the tracks, and visa versa. The details of the analysis are shown in Appendix G and summarized in Table 13. Also shown in Table 13 are the surplus or shortage and the effect of the available capacity in the Metra lots. At the peak time during a weekday, the shortage for the proposed North Street Development is only 590 spaces if the spaces in the north Metra lots are assumed to be available for parking. This is a reduction of about 300 spaces from the analysis without the Metra lots.

In either case, it is clear from the analysis that a multi-level parking structure will be needed to meet the demands of the North Street Development. The size of the structure will depend on the number of Metra spaces that are made available to the project, as well as the displacement of any existing surface spaces that are eliminated by the footprint of the proposed structure. In any case, the development will require an additional 600 to 900 spaces to support its needs, plus replacement of any surface parking spaces permanently eliminated by the deck construction, based on the proposed project parameters. It should be noted that this analysis should be updated as the project uses become more defined, especially the distinction between sit-down restaurants and coffee shops, since their parking characteristics are different.

As shown in Table 13, the proposed South Street Development will have more than adequate capacity under either scenario, with over 250 spaces available on a weekday evening.

### **Parking Structure Planning Considerations**

The construction of a multi-level parking structure will be required to meet the needs of the proposed North Street Development. As discussed above, the size of the structure will need to be determined based on the needs of the project, the amount of Metra parking that will be made available and the replacement of spaces that are eliminated by deck construction. The developer of the proposed North Street Development has shown a location for the parking structure northeast of the project. That site has limitations that do not work well for the particular requirements for an efficient parking structure. In lieu of that site, Figure 8 shows the location of a structure on the northeast end of the north Metra lots that also encompasses some of the property to the east. The benefit of this configuration is that a ramp with acceptable slopes will work well in this location, plus the access to the garage can be arranged at the west end of the structure to minimize conflicts with pedestrian flow from the garage, with most of the access to the garage expected to come from the west on North Street, via Oak Park Avenue.

The garage footprint shown is about 300 feet long by about 120 feet wide. This is long enough to provide an internal parking ramp between levels with a slope of about five percent, which is considered optimum. A garage with this footprint would have about 110 parking spaces per level.

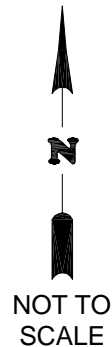
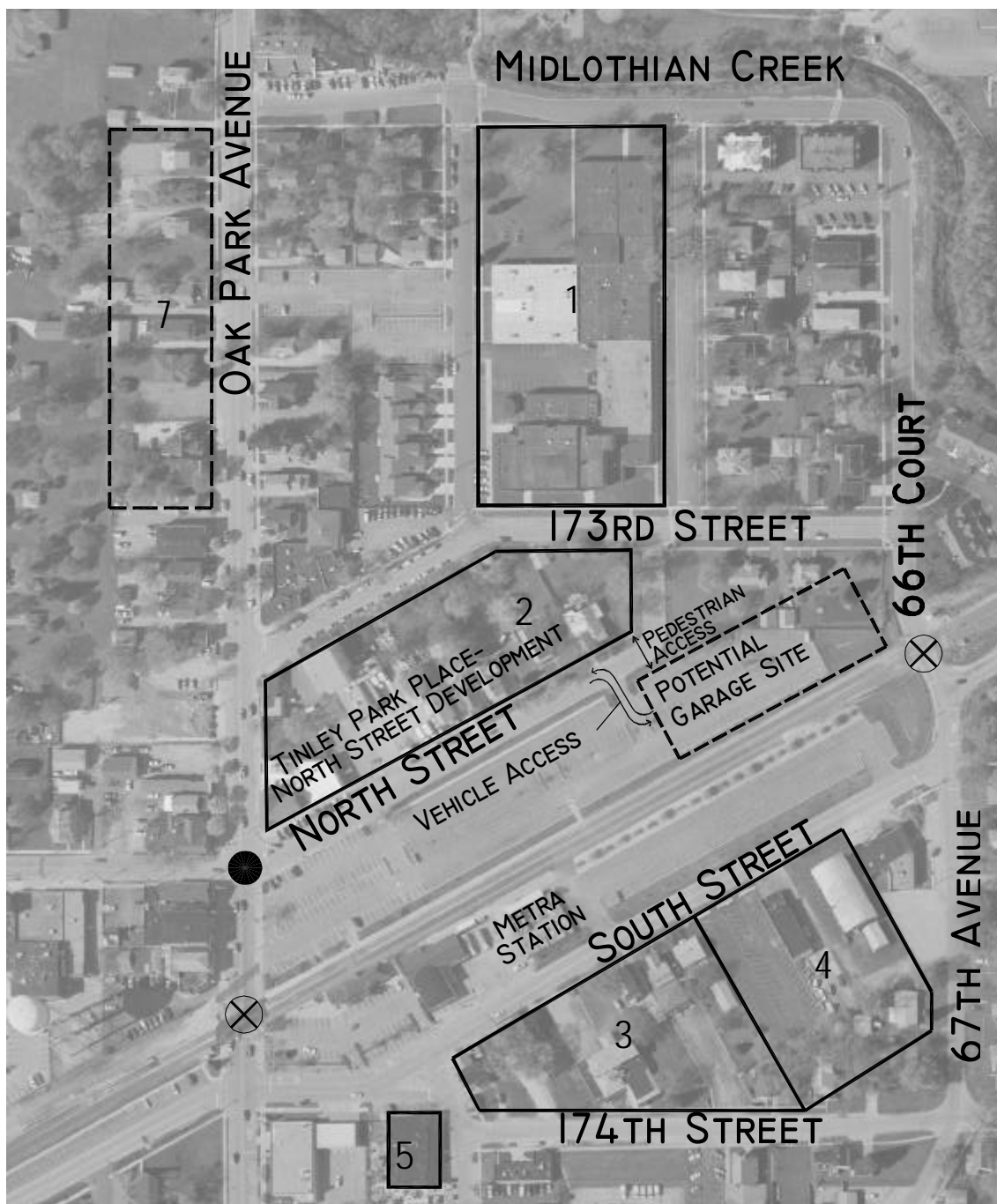
In planning for a parking structure at this location, it would be desirable to have the lower level at grade with very short-term parking only, say with a limit of one hour, for customer parking. Cinema patrons and others would use parking on the upper floors. It would also be desirable for the structure to have one up-bound ramp and one out-bound ramp to accommodate the needs of the cinema, with many parkers entering and leaving at the same time. A single two-way ramp may create conflicts for inbound and outbound patrons.

Table 13  
Estimated Parking Supply and Demand  
Proposed North Street and South Street Developments

Proposed North Street Development						
			Surplus/Shortage with North Street Capacity Only		Surplus/Shortage with North Street Capacity and Available Metra Parking	
Time	Parking Accumulation (Cars)	Parking Required (1) (Spaces)	Capacity (North Street)	Surplus/ (Shortage)	Metra Capacity Available	Surplus/ Shortage
9:00 AM	320	356	231	(125)	77	(48)
10:00 AM	363	403	231	(172)	73	(99)
11:00 AM	400	444	231	(213)	65	(148)
Noon	594	660	231	(429)	62	(367)
1:00 PM	696	773	231	(542)	62	(480)
2:00 PM	528	587	231	(356)	62	(294)
3:00 PM	576	640	231	(409)	75	(334)
4:00 PM	592	658	231	(427)	72	(355)
5:00 PM	632	702	231	(471)	125	(346)
6:00 PM	746	829	231	(598)	196	(402)
7:00 PM	922	1024	231	(793)	267	(526)
<b>8:00 PM</b>	<b>1013</b>	<b>1126</b>	<b>231</b>	<b>(895)</b>	<b>305</b>	<b>(590)</b>
9:00 PM	999	1110	231	(879)	316	(563)
Proposed South Street Development						
			Surplus/Shortage with South Street Capacity Only		Surplus/Shortage with North Street Capacity and Available Metra Parking	
Time	Parking Accumulation (Cars)	Parking Required (1) (Spaces)	Capacity (South Street)	Surplus/ (Shortage)	Metra Capacity Available	Surplus/ Shortage
9:00 AM	175	194	399	205	33	238
10:00 AM	203	226	399	173	30	203
11:00 AM	227	252	399	147	25	172
Noon	259	288	399	111	23	134
1:00 PM	288	320	399	79	23	102
2:00 PM	206	229	399	170	23	193
3:00 PM	205	228	399	171	32	203
4:00 PM	214	238	399	161	30	191
5:00 PM	216	240	399	159	66	225
6:00 PM	264	293	399	106	114	220
<b>7:00 PM</b>	<b>322</b>	<b>358</b>	<b>399</b>	<b>41</b>	<b>162</b>	<b>203</b>
8:00 PM	320	356	399	43	188	231
9:00 PM	306	340	399	59	195	254

(1) Assumes 90 percent occupancy at peak times

Note: Peak hour shown in bold



#### LEGEND

- 1 PROPOSED DEVELOPMENT  
(SEE SITE INDEX)
- SIGNALIZED INTERSECTION
- ⊗ RAILROAD CROSSING

#### SITE INDEX

- 1. FORMER CENTRAL SCHOOL SITE
- 2. TINLEY PARK PLACE
- 3. SOUTH STREET-PHASE 1
- 4. SOUTH STREET-PHASE 2
- 5. BECKSTEIN SITE
- 6. BOSTON BLACKIES
- 7. POTENTIAL DEVELOPMENT

FIGURE 8  
PROPOSED PARKING STRUCTURE  
VILLAGE OF TINLEY PARK  
DOWNTOWN TRAFFIC & PARKING STUDY



Kimley-Horn  
and Associates, Inc.

## **Parking Summary**

Following is a summary of the key points of the parking analysis:

- Except for the proposed North Street project, there will be adequate parking for the other proposed downtown developments.
- The highest parking demand for the proposed North and South Street developments is in the evening and on weekends when there is capacity available in the Metra parking lots.
- There is enough parking available in the Metra parking lots to absorb the loss of the existing pay lot on South Street.
- The proposed North Street Development will have a shortage of almost 900 additional parking spaces in the evening without taking into account spaces available in the Metra parking lots.
- The proposed North Street Development will require a minimum of about 600 additional parking spaces, if the available Metra spaces north of the railroad tracks can be used by theater, restaurant, and other patrons of the development.
- A parking structure will be required to meet the needs of the proposed North Street Development. The required capacity will depend on several factors, including the following:
  - The site used for the garage
  - Replacement of any existing surface parking permanently eliminated by the garage construction
  - Number of Metra parking spaces that are considered available for the development
  - Negotiations with the developer
- The parking structure should be planned to meet the needs of the North Street project and Metra parking and consider the needs of cinema patrons with significant inbound and outbound traffic movements occurring at the same time. The garage should also be planned to minimize vehicle conflicts with pedestrians going to and from the garage.

## 7. Future Traffic Conditions

### Trip Generation

The future traffic conditions in the study area were estimated based on the proposed land use changes discussed previously. *Trip Generation*, 6th Edition, published by the Institute of Transportation Engineers (ITE) was used to estimate the number of daily and peak-hour trips that can be attributed to the proposed developments.

It is reasonable to expect that a reduction in trip-making will occur as a result of the mix of residential, commercial, and employment land uses within some of the developments. To account for this internal reduction, the methodology for estimating internally captured trips in the *ITE Trip Generation Handbook* (October 1998, Chapter 7) was used to calculate internal inter-action for each of the proposed mixed-use developments. The trip generation characteristics of the site are summarized in Table 14.

**Table 14**  
**Project Trip Generation**

Development	Land Use	ITE Code	Quantity	Units	Daily	AM Peak			PM Peak		
					Total	In	Out	Total	In	Out	Total
School Site	Residential Condo/Townhouse	230	38	DU	282	4	20	24	18	9	27
North Street	Specialty Retail	814	20,168	SF	894	66	72	138	24	31	55
	High-Turnover (Sit-Down) Restaurant	932	24,072	SF	3,061	144	133	277	160	103	263
	Drive-in Bank	912	2,325	SF	573	16	13	29	53	53	106
	General Office	710	12,725	SF	140	18	2	20	3	16	19
	Apartment	220	116	DU	780	12	47	59	25	47	72
	Theater with Matinee	444	1,920	No. of Seats	NA	NA	NA	NA	74	60	134
	Internal Capture				1,426				86	86	172
	External Trips				4,022	256	267	523	253	224	477
South Street Phase 1	Residential Condo/Townhouse	230	39	DU	288	4	20	24	19	9	28
	Shopping Center	820	21,800	SF	936	13	9	22	39	43	82
	Internal Capture				180				9	9	18
	External Trips				1,044	17	29	46	49	43	92
South Street Phase 2	Residential Condo/Townhouse	230	30	DU	231	3	17	20	15	7	22
	Shopping Center	820	17,066	SF	733	11	7	18	31	33	64
	Internal Capture				142				7	7	14
	External Trips				822	14	24	38	39	33	72
Boston Blackies	High-Turnover (Sit-Down) Restaurant	932	10,000	SF	1,272	60	55	115	66	43	109
Beckstein Site	Apartment	220	50	DU	336	5	21	26	11	20	31
Potential Project Oak Park Avenue	Residential Condo/Townhouse	230	8	DU	75	1	6	7	5	3	8
	Shopping Center	820	6,000	SF	258	4	2	6	11	12	23
	Internal Capture				46				2	2	4
	External Trips				287	5	8	13	14	13	27
Total External Trip Generation					8,065	361	424	785	450	385	835

Specialty Retail Center (ITE 7th Edition)

Daily (ITE 814)	$T = 44.32 \times (\text{1000's of SF})$	50% In	50% Out
AM Peak Hour (ITE 814)*	$T = 6.84 \times (\text{1000's of SF})$	48% In	52% Out
PM Peak Hour (ITE 814)	$T = 2.71 \times (\text{1000's of SF})$	43% In	57% Out

\* AM Peak Hour of Generator

High-Turnover (Sit-Down) Restaurant (ITE 7th Edition)

Daily (ITE 932)	$T = 127.15 \times (\text{1000's of SF})$	50% In	50% Out
AM Peak Hour (ITE 932)	$T = 11.52 \times (\text{1000's of SF})$	52% In	48% Out
PM Peak Hour (ITE 932)	$T = 10.92 \times (\text{1000's of SF})$	61% In	39% Out

General Office (ITE 7th Edition)

Daily (ITE 710)	$T = 11.01 \times (\text{1000's of SF})$	50% In	50% Out
AM Peak Hour (ITE 710)	$T = 1.55 \times (\text{1000's of SF})$	88% In	12% Out
PM Peak Hour (ITE 710)	$T = 1.49 \times (\text{1000's of SF})$	17% In	83% Out

Apartments (7th Edition)

Daily (ITE 220)	$T = 6.72 \times (\text{number of DU's})$	50% In	50% Out
AM Peak Hour (ITE 220)	$T = 0.51 \times (\text{number of DU's})$	20% In	80% Out
PM Peak Hour (ITE 220)	$T = 0.62 \times (\text{number of DU's})$	65% In	35% Out

Residential Condominium/Townhouse (ITE 7th Edition)

Daily (ITE 230)	$\text{Ln}(T) = 0.850 \times \text{Ln}(\text{number of DU's}) + 2.55$	50% In	50% Out
AM Peak Hour (ITE 230)	$\text{Ln}(T) = 0.80 \times \text{Ln}(\text{number of DU's}) + 0.26$	17% In	83% Out
PM Peak Hour (ITE 230)	$\text{Ln}(T) = 0.82 \times \text{Ln}(\text{number of DU's}) + 0.32$	67% In	33% Out

Theater with Matinee (ITE 7th Edition)

Daily (ITE 444)	Not Applicable	(not given)	50% In	50% Out
AM Peak Hour (ITE 444)	Not Applicable	(not given)	50% In	50% Out
PM Peak Hour (ITE 444)*	$T = 0.07 \times (\text{Number of Seats})$		55% In	45% Out

\* Friday Peak Hour of Adjacent Street

Taking into consideration internal capture, the proposed developments are expected to add 8,065 total daily trips, 785 A.M. peak-hour trips, and 835 P.M. peak-hour trips to the network.

## Trip Distribution and Traffic Assignment

Trip distribution was determined by considering the existing and future roadway network near the site. Existing travel patterns were analyzed to determine the trip distribution for the proposed development traffic. Trips were assigned to the roadway network based on the trip distribution and the likely travel patterns to and from the site. Figure 9 shows the results of the traffic assignment.

## Future Traffic

Total traffic is a combination of proposed development traffic and background traffic. The background traffic volumes for the buildout year, which was assumed to be 2014, were calculated based on existing traffic counts and an annual growth rate 1.0 percent per year to account for ambient growth in traffic not directly related to the proposed developments. The results of the traffic assignment were added to the 2014 background traffic volumes to produce total traffic volumes for the study area, which are shown in Figure 10.

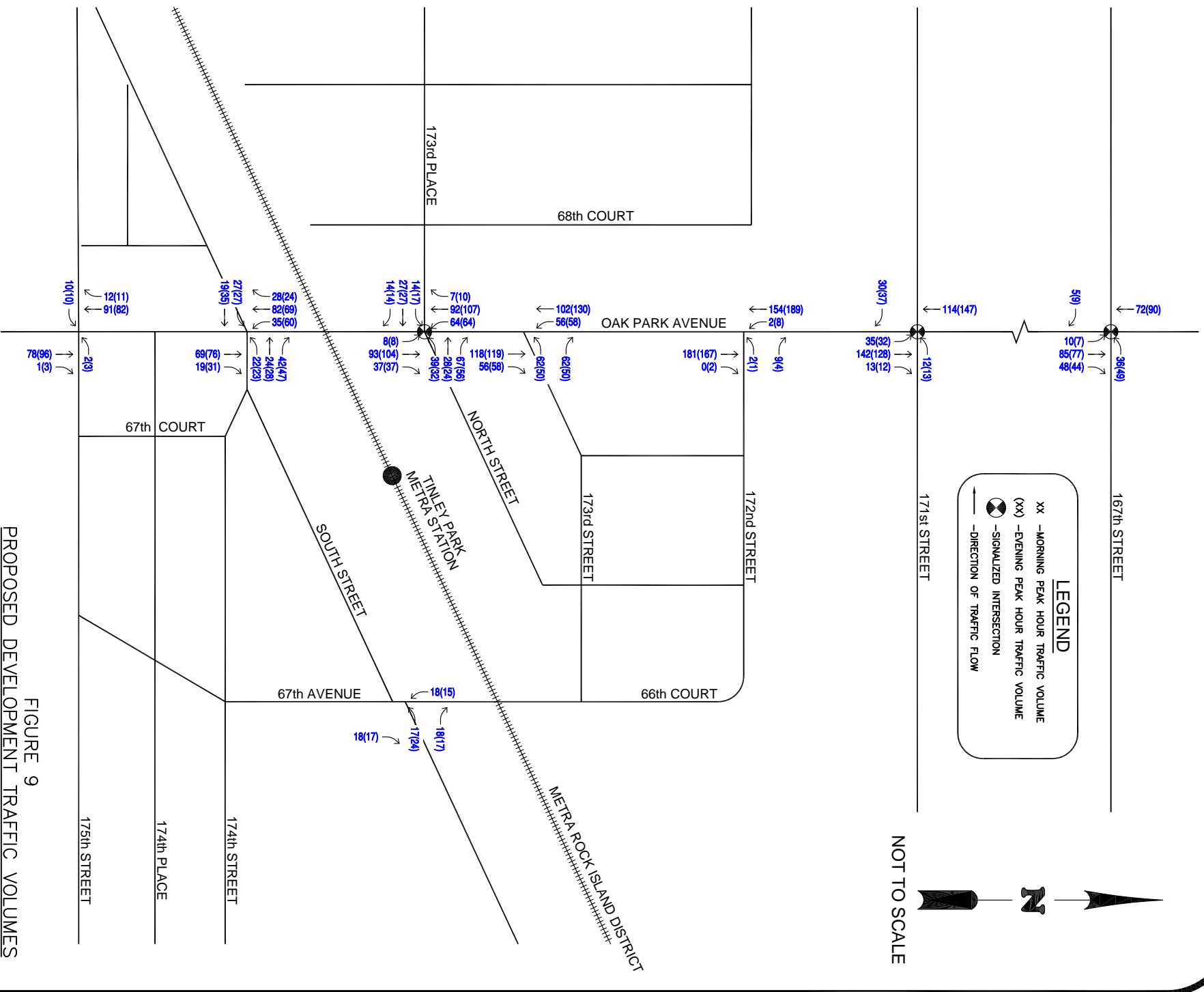


**LEGEND**

- xx -MORNING PEAK HOUR TRAFFIC VOLUME
- (xx) -EVENING PEAK HOUR TRAFFIC VOLUME
- ⊗ -SIGNALIZED INTERSECTION
- -DIRECTION OF TRAFFIC FLOW



NOT TO SCALE



**FIGURE 9**  
**PROPOSED DEVELOPMENT TRAFFIC VOLUMES**  
**DOWNTOWN TRAFFIC & PARKING STUDY**  
**TINLEY PARK, ILLINOIS**

xx

-MORNING PEAK HOUR TRAFFIC VOLUME

(xx)

-EVENING PEAK HOUR TRAFFIC VOLUME

-SIGNALIZED INTERSECTION

-DIRECTION OF TRAFFIC FLOW



NOT TO SCALE

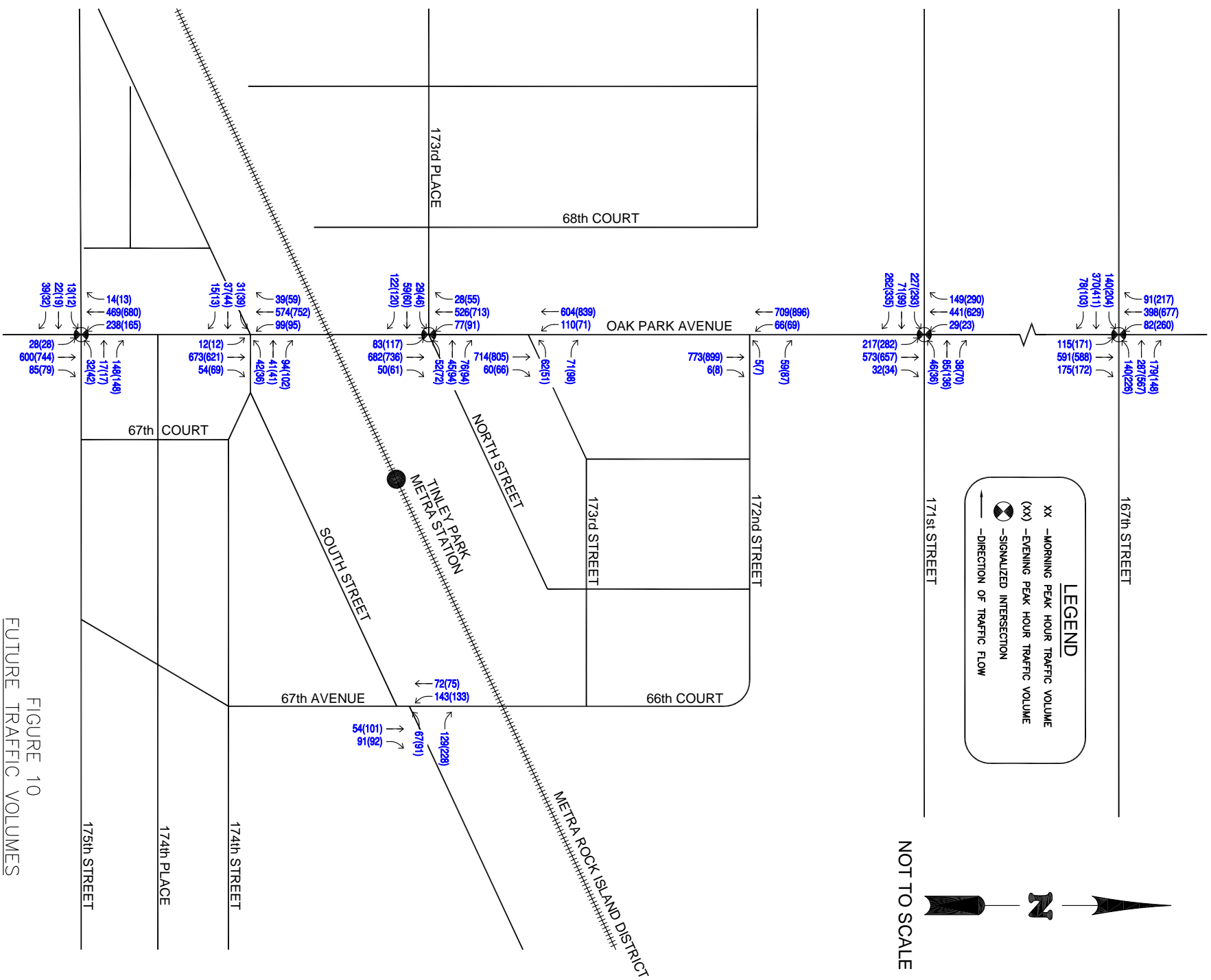


FIGURE 10  
FUTURE TRAFFIC VOLUMES  
DOWNTOWN TRAFFIC & PARKING STUDY  
TINLEY PARK, ILLINOIS

## Level of Service Analysis

The intersections in the study area were evaluated based on the total traffic shown in Figure 10. The results of the analysis for the signalized intersections are shown in Table 15. The level of service (LOS) for the study area intersections for 2014 was evaluated using the *2000 Highway Capacity Manual* methodology for unsignalized and signalized intersections. The future analysis was completed assuming that the recommendations shown in the analysis of existing conditions were implemented and that 175<sup>th</sup> Street extends west of Oak Park Avenue.

**Table 15**  
**Level of Service (LOS) for Signalized Intersections; Village of Tinley Park**

Intersection	Approach	Movement	AM Peak				PM Peak			
			Existing		Future		Existing		Future	
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Oak Park Ave & 167 <sup>th</sup> Street	Eastbound	Left	22.2	C	47.9	D	30.4	C	35.7	D
		Thru/Right	31.2	C	44.3	D	33.3	C	38.2	D
	Westbound	Left	24.7	C	51.8	D	27	C	30.1	C
		Thru/Right	34.8	C	51.3	D	47.6	D	51.6	D
	Northbound	Left	9.1	A	10.6	B	12.7	B	24.9	C
		Thru/Right	4.4	B	14.8	B	17.6	B	31.4	C
	Southbound	Left	14.3	B	16.5	B	15.8	B	26.4	C
		Thru/Right	19	B	13.2	B	24.4	C	29.4	C
	Overall Average		22.9	C	29.5	C	25.8	C	35.2	C
Oak Park Ave & 171 <sup>st</sup> Street	Eastbound	Thru/Left	48	D	72.3	E	61.4	E	72.7	E
		Right	21.9	C	22.8	C	25.2	C	15.5	B
	Westbound	Thru/Right/Left	28.3	C	30.1	C	23.5	C	23.9	C
	Northbound	Left	16.8	B	10.4	B	58.4	D	100	F
		Thru/Right	11.8	B	16.1	B	24.2	C	34	C
	Southbound	Left	8.9	A	8.4	A	12	B	36.6	D
		Thru	14.9	B	11.7	B	61	E	65.1	E
		Right			3.5	A			30.8	C
	Overall Average		21.7	C	23.3	C	44.6	D	49.2	D
Oak Park Ave & 173 <sup>rd</sup> Place	Eastbound	Left/Thru/Right	26.2	C	41.1	D	27	C	22.2	C
	Westbound	Left/Thru/Right	19.1	B	45	D	23.9	C	31	C
	Northbound	Left	4.6	A	5	A	7	A	12.1	B
		Thru/Right	7.1	A	8.4	A	7.9	A	11.6	B
	Southbound	Left	4.7	A	4	A	8.4	A	10.7	B
		Thru/Right	6.7	A	4.6	A	10.8	B	10.8	B
	Overall Average		9.4	B	14.1	B	12.1	B	14.6	B
Oak Park Ave & 175 <sup>th</sup> Street	Eastbound	Left/Thru/Right			22.2	C			20.7	C
		Thru/Left			21.1	C			21	C
	Westbound	Right			54.4	D			37	D
	Northbound	Left/Thru/Right			5.2	A			7.5	A
	Southbound	Left/Thru/Right			17.1	B			20	C
	Overall Average		NA	NA	15.7	B	NA	NA	16	B

The signalized intersections are anticipated to operate acceptably with the exception of Oak Park Avenue at 175<sup>th</sup> Street and 171<sup>st</sup> Street. Mitigation at this intersection is discussed later in this report. The level of service at the unsignalized intersections is shown in Table 16.

**Table 16****Level of Service (LOS) for Unsignalized Intersections; Village of Tinley Park**

Intersection	Approach	Movement	AM Peak				PM Peak			
			Existing		Future		Existing		Future	
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Oak Park Ave & 172 <sup>nd</sup> Street	Westbound	Left/Thru/Right	13.2	B	20.2	C	16.9	C	29.6	D
	Northbound	Thru/Right	-	-	-	-	-	-	-	-
	Southbound	Left	8.8	A	9.8	A	9.3	A	10.5	B
		Thru	-	-	-	-	-	-	-	-
	Overall Average		13.2	B	20.2	C	16.9	C	29.6	D
Oak Park Ave & 173 <sup>rd</sup> Street	Westbound	Left/Thru/Right	12	B	93.3	F	13.9	B	156	F
	Northbound	Thru/Right	-	-	-	-	-	-	-	-
	Southbound	Left/Thru	8.8	A	10.1	B	8.9	A	10.3	B
	Overall Average		12	B	93.3	F	13.9	B	156	F
Oak Park Ave & South Street	Eastbound	Left/Thru/Right	20.1	C	388.5	F	26.2	D	907.7	F
	Westbound	Left/Thru	51.3	F	363.2	F	50.2	F	650.6	F
		Right	12.8	B	16.1	C	12.3	B	15.5	C
	Northbound	Left/Thru/Right	8.5	A	8.8	A	9.2	A	9.6	A
	Southbound	Left/Thru/Right	8.9	A	9.8	A	8.6	A	9.6	A
	Overall Average		28.7	D	388.5	F	26.2	D	907.7	F
South Street & 167 <sup>th</sup> Ave	Westbound	Left/Thru/Right	10.5	B	11.9	B	11.8	B	14.3	B
	Northbound	Thru/Right	-	-	-	-	-	-	-	-
	Southbound	Left/Thru	7.6	A	7.8	A	7.7	A	7.9	A
	Overall Average		10.5	B	11.9	B	11.8	B	14.3	B

Several of the unsignalized intersections do not operate acceptably during the peak periods due to insufficient gaps in traffic for vehicles turning left onto Oak Park Avenue. This delay is common at stop-controlled intersections on an arterial. The HCM analysis does not take into consideration the platooning of vehicles due to upstream vehicles, and levels of service will likely be better than what is shown. If delays become excessive, drivers will likely find other routes. Mitigation is not recommended at this time.

#### **Intersections of Oak Park Avenue with 171<sup>st</sup> Street and 175<sup>th</sup> Street: Left-Turn Lanes**

- The intersection of *Oak Park Avenue and 171<sup>st</sup> Street* does not operate acceptably under 2014 buildout conditions. The eastbound and westbound approaches would operate at poor levels of service. To alleviate the delay, it is recommended that eastbound and westbound left-turn lanes be installed at this location. The level of service with left-turn lanes is shown in Table 17.
- Left-turn lanes are typically recommended when left-turn volumes exceed 100 vehicles per hour. Due to the high left-turn volume and the increase in through traffic, a southbound left-turn lane is recommended at the intersection of *Oak Park Avenue and 175<sup>th</sup> Street*. To maintain lane balance across the intersection, a northbound left-turn lane should also be constructed at this intersection even though the northbound left-turn volume is less than 100 vehicles per hour. The level of service after implementation of the left-turn lanes is shown in Table 18.

**Table 17**  
**Level of Service at Oak Park Avenue and 171<sup>st</sup> Street**  
**with Eastbound and Westbound Left-Turn Lanes**

Intersection	Approach	Movement	AM Peak		PM Peak	
			Delay	LOS	Delay	LOS
Oak Park Avenue & 171 <sup>st</sup> Street	Eastbound	Left	27.4	C	43.5	D
		Thru	27.9	C	27.2	C
		Right	23.3	C	21	C
	Westbound	Left	33.5	C	33.1	C
		Thru/Right	38.5	D	46.8	D
	Northbound	Left	13	B	50.3	D
		Thru/Right	19.2	B	24.9	C
	Southbound	Left	11.4	B	15	B
		Thru	16.3	B	35.4	D
		Right	4.7	A	7.7	A
Overall Average			19.9	B	31	C

**Table 18**  
**Level of Service at Oak Park Avenue and 175<sup>th</sup> Street**  
**with Northbound and Southbound Left-Turn Lanes**

Intersection	Approach	Movement	AM Peak		PM Peak	
			Delay	LOS	Delay	LOS
Oak Park Ave & 175 <sup>th</sup> Street	Eastbound	Left/Thru/Right	22.2	C	20.7	C
	Westbound	Thru/Left	21.1	C	21	C
		Right	54.4	D	37	D
	Northbound	Left	2.1	A	2.5	A
		Thru/Right	4.7	A	6.6	A
	Southbound	Left	7.4	A	6.4	A
		Thru/Right	3.4	A	3.2	A
Overall Average			10.2	B	8.5	A

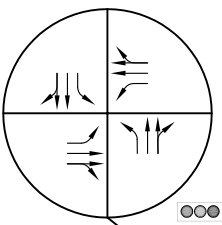
#### **Intersection of Oak Park Avenue with 167<sup>th</sup> Street: Right-Turn Lanes**

- The intersection of *Oak Park Avenue and 167<sup>th</sup> Street* is anticipated to operate at acceptable levels of service in 2014; however, the intersection will be approaching capacity. Review of the 2014 total traffic volumes under the buildout condition (previously shown in Figure 10) reveals high right-turn volumes at this intersection in the northbound, southbound, and westbound directions. Some consideration should be given to adding dedicated right-turn lanes in the northbound, southbound, and/or westbound direction to increase future intersection capacity and minimize delay.

The recommended geometry to accommodate future traffic volumes is shown in Figure 11.

#### **Traffic Summary**

Table 19 shows the existing and future levels of service at the key study intersections after implementation of the recommended improvements.



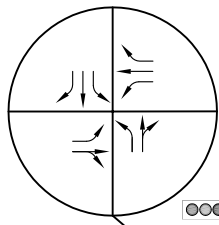
167th STREET

### LEGEND

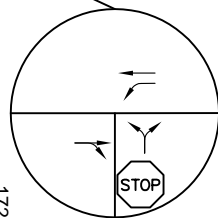
- xx -MORNING PEAK HOUR TRAFFIC VOLUME
- (xx) -EVENING PEAK HOUR TRAFFIC VOLUME
- ⊗ -SIGNALIZED INTERSECTION
- -DIRECTION OF TRAFFIC FLOW



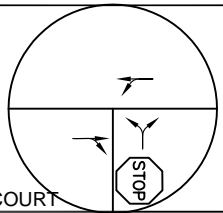
NOT TO SCALE



171st STREET



172nd STREET

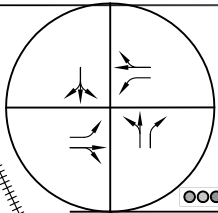


68th COURT

173rd STREET

66th COURT

173rd PLACE



NORTH STREET

SOUTH STREET

67th AVENUE

67th COURT

175th STREET

174th PLACE

174th STREET

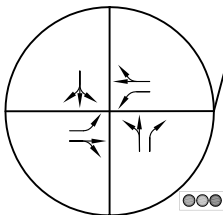
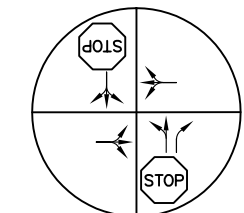


FIGURE 11  
RECOMMENDED FUTURE GEOMETRY  
DOWNTOWN TRAFFIC & PARKING STUDY  
TINLEY PARK, ILLINOIS



Kimley-Horn  
and Associates, Inc.

**Table 19**  
**Existing and Future Level of Service with Proposed Downtown Development**  
**Village of Tinley Park**

Intersection	Level of Service (LOS)				
	Existing Conditions			Future Conditions	
	A.M.	P.M.		A.M.	P.M.
Oak Park Avenue and 167th Street	C	C		C	C
Oak Park Avenue and 171st Street (without eastbound through lane)	C	D		C	D
Oak Park Avenue and 171st Street (with eastbound through lane)	C	C		B	C
Oak Park Avenue and 173rd Place	B	B		B	B
Oak Park Avenue and 175th Street	not signalized			B	A

The key downtown intersections will operate at acceptable levels of service with the proposed changes, including a new traffic signal at 175<sup>th</sup> Street and Oak Park Avenue, as well as improvements at 171<sup>st</sup> Street and Oak Park Avenue, including a southbound right-turn lane and eastbound through lane. The traffic on Oak Park Avenue will increase by about 200 vehicles per hour in the afternoon. With that increase, Oak Park Avenue will be operating at or near its effective capacity.

Following is a summary of the other key recommendations of the analysis of future traffic conditions:

- Oak Park Avenue at 171<sup>st</sup> Street—install eastbound and westbound left-turn lanes.
- Oak Park Avenue at 167<sup>th</sup> Street—consider installation of right-turn lanes on all legs of the intersection if traffic increases as projected in the next 10 years.
- Oak Park Avenue at 175th Street—install northbound and southbound left-turn lanes when the traffic signal project is implemented.

## **Appendix A**

### **Summary of Stakeholder Meetings**





## ***Meeting Summary***

Project: Village of Tinley Park  
Downtown Parking and Traffic Study

Subject Stakeholder Meeting #1

Meeting Date: February 18, 2004

Location: Tinley Park Village Hall

Attendees: Mike Mertens, Village of Tinley Park  
Ivan Baker, Village of Tinley Park  
David Samuelson, Village of Tinley Park  
Jay Olson, Kimley-Horn and Associates, Inc.  
Will Van Dyke, Kimley-Horn and Associates, Inc.  
See attached attendance list

Following is a brief summary of the items brought up by the stakeholders at the meeting:

- The village lot west of Bogart's is very confusing for people. On weekend evenings the lot is full and there is not adequate parking west of Oak Park Avenue for valet parking. There is parking available in the Metra lot, but it is not perceived as close, particularly in the winter months. It is not an effective location for valet parking because of the time it takes for valets to cross Oak Park Avenue.
- The signage for patrons is confusing, especially in the village lot. Also it is not clear to patrons what to do if the lot is full, and where they should park. The Metra lot signage is also not clear or indicating that there is free parking after 11:30 AM.
- There is not enough parking for all the businesses and restaurants around the Oak Park Avenue/173rd Place intersection.
- In the past three years some curb parking on Oak Park Avenue, at 173<sup>rd</sup> Place has been eliminated for traffic improvements, including left turn lanes on Oak Park Avenue.
- Employee parking is an issue. Bogarts has over 50 employees and Hollsteins about 40.
- The lot west of Oak Park Avenue well used, but has a mix of uses
- The park district has issues with parking and circulation for Bulldog football and baseball games. The head in parking on the south side of the street causes blocked traffic when cars back out across both lanes of traffic to go west on



171<sup>st</sup> Street. The former Central School site at 172<sup>nd</sup> Street is occasionally used for large events, but it will not be available after the site is developed in the future. The lot is also used for large events in the downtown.

- Westbound Metra trains block traffic on Oak Park Avenue, but there is no solution for this. A question was asked whether it is possible to time the signals for longer green time on Oak Park Avenue after the train clears the tracks to facilitate traffic flow. Aldrich Electric is the firm that deals with the village signals.
- The Metra crossing at 66<sup>th</sup> Court just south of the tracks is not seen as a safety issue.
- Discussed one way streets as a future option.
- Making a left turn at 175<sup>th</sup> Street is very difficult. Is it possible to put a traffic single in at that location?
- Making a left turn at 173<sup>rd</sup> Place and Harlem is very difficult and dangerous because of the heavy volumes on Harlem.
- Most of the residences in Tinley Park are concentrated west and south of the downtown, so access from these areas is important for the downtown area.
- Is it possible to create a road through Vogt Woods to Ridgeland to alleviate the traffic issue at the school and allow better access from the west.
- The two way intersection where 66<sup>th</sup> Court meets 172<sup>nd</sup> Street at the footbridge across Midlothian Creek is dangerous because of the proximity of the road to the footbridge which children use to go to school
- Community Consolidated School District 146 does not allow buses to use the 66<sup>th</sup> Court Metra crossing.



## ***Meeting Summary***

Project: Village of Tinley Park  
Downtown Parking and Traffic Study

Subject Stakeholder Meeting #2

Meeting Date: February 18, 2004

Location: Tinley Park Village Hall

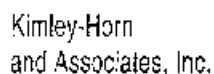
Attendees: Ivan Baker, Village of Tinley Park  
Jay Olson, Kimley-Horn and Associates, Inc.  
Will Van Dyke, Kimley-Horn and Associates, Inc.  
Other attendees, see attached attendance list

Following is a brief summary of the items brought up by the Main Street stakeholders at the meeting:

- The intersection of 171<sup>st</sup> and Oak Park Avenue is an issue. There is a combined eastbound through and left turn lane. Vehicles waiting to make a left turn, can block eastbound through traffic.
- The intersection of 175<sup>th</sup> Street and Oak Park Avenue is an issue because of the difficulty of making left turns across Oak Park Avenue.
- The change in lanes on Oak Park Avenue from 4 to 2 is an issue at the southbound left turn lane into the residential neighborhood to the east.
- Need a right turn lane on southbound Oak Park Avenue at 171<sup>st</sup> Street.
- Would like to see a town square created with on way street system.
- Build a multi-level parking garage east of Oak Park Avenue and north of the railroad tracks, similar to Naperville.
- The proposed project for parking behind the stores on the west side of Oak Park Avenue has not happened. What can be done to make it happen.
- Need parking as close as possible to the businesses.
- The street lighting on Oak Park Avenue is perceived as too dark.
- It is very difficult to make a left turn onto Oak Park Avenue from South Street, just south of the Metra tracks.
- Possible one-way traffic flow, clockwise, north and south of the train station.
- There is an issue with delivery vehicles in the rear parking lot on the west side of Oak Park Avenue, north of 173<sup>rd</sup> Place. There is not enough room for them to park or maneuver easily, especially compared with parking on-street on Oak Park Avenue.
- 179th Street is used for a cut through from Ridgeland to Harlem.

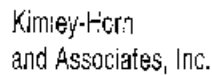


- Want ComEd utility poles eliminated and replaced with buried utilities.
- Access on Hickory to the downtown from the west is not good because of the difficulty making a left turn at Oak Park Avenue.
- Idea to continue Hickory through the State of Illinois Mental Health property.
- 179<sup>th</sup> Street is the best access to Oak Park Avenue. It is currently a two lane rural road in an unincorporated area under the jurisdiction of Bremen Township
- Idea was brought up for a tram system to connect various venues.
- Tweeter Center is too far away from the existing train stations to make using Metra a viable option for access.
- Employees need to park farther away from the customer parking to make spaces available for customers.
- There is a need for employee parking in the downtown.
- The three hour time limits are not enforced very well.
- Employees cannot park in the commuter lots.
- Move parking to the rear of the stores to limit the number of driveways on Oak Park Avenue.



4:30 p.m.

[illegible]



**Village of Tinley Park  
Stakeholder Meeting 2  
Wednesday, February 18, 2004  
Sign-In Sheet**

[illegible]

## **Appendix B**

### **Parking Occupancy Counts**

Appendix Table B-1									
On-Street Parking Inventory and Parking Counts									
Tinley Park, Illinois									
							Parking Count		
Study Block	Street	Street Boundaries		Time Limit or Regulation	Capacity (spaces)	10 AM-Noon	Noon-2 PM	6-8 PM	
		From	To						
1		Elmore Plaza							
2	Oak Park Avenue	171 st Street	To	173rd Place	No Time Limit	19	6	6	2
	173rd Place	68th Court	To	Oak Park Avenue	15 minutes	3	0	1	1
					2 hours	4	0	4	4
	68th Court	172nd Street	To	173rd Place	2 hours	26	0	0	0
				Subtotal		52	6	11	7
3	Oak Park Avenue	173rd Place	To	RR Tracks	No Parking	4	0	0	0
	173rd Place	68th Court	To	Oak Park Avenue	No Parking	0	0	0	0
	68th Court	RR Tracks	To	173rd Place	No Parking	0	0	0	10
				Subtotal		4	0	0	10
4	68th Court	RR Tracks	To	173rd Place	No Parking	0	0	3	3
	173rd Place	69th Court	To	68th Court	No Parking	0	0	0	1
	69th Avenue	RR Tracks	To	173rd Place	No Parking	0	0	2	6
				Subtotal		0	0	5	10
5	Included in off-street parking								
6	68th Court	Hickory Street	To	175th Street	2 hours	8	0	0	0
	175th Street	68th Court	To	69th Court	2 hours	10	0	0	0
	Hickory Street	69th Court	To	68th Court	No Parking	0	0	0	0
				Subtotal		18	0	0	0
7	Hickory Street	68th Court	To	Oak Park Avenue	No Parking	0	0	0	0
	Oak Park Avenue	Hickory Street	To	175th Street	No Parking	0	0	0	0
	68th Court	Hickory Street	To	175th Street	2 hours	0	1	0	1
	175th Street	68th Court	To	Dead End	2 hours	6			
				Subtotal		6	1	0	1
8	171st Street	Oak Park Avenue	To	67th Street	No Parking	0	0	0	1
	67th Court	171st Street	To	172nd Street	No Parking	0	0	0	4
	172nd Avenue	Oak Park Avenue	To	67th Court	VFW	25	8	4	21
	Oak Park Avenue	172nd Street	To	171st Street	No Parking	0	0	0	0
				Subtotal		25	8	4	26
9	172nd Street	Oak Park Avenue	To	67th Court	4 hours	10	3	0	0
	67th Court	173rd Street	To	172nd Street	4 hours	10	0	0	0
	173rd Street	Oak Park Avenue	To	67th Court	No Time Limit	16	4	4	0
	Oak Park Avenue	172nd Street	To	173rd Street	2 hours	4	4	3	0
				Subtotal		40	11	7	0
10	172nd	67th Court	To	67th Avenue	No Parking	0	0	0	0
	67th Avenue	172nd Street	To	173rd Street	2 hours	28	0	0	0
	173rd Street	67th Court	To	67th Avenue	2 Hours	12	0	0	0
	67th Court	172nd Street	To	173rd Street	2 Hours	28	0	0	0
				Subtotal		68	0	0	0
11	172nd	67th Avenue	To	66th Court	No Parking	0	0	0	0
	67th Avenue	172nd Street	To	173rd Street	2 hours	16	0	0	0
	173rd Street	67th Avenue	To	66th Court	No Parking	0	0	1	0
	66th Court	172nd Street	To	173rd Street	No Parking	0	0	0	1
				Subtotal		16	0	1	1
12	173rd Street	Oak Park Avenue	To	67th Avenue	4 hours	11	3	3	8
				2 hours		4	0	0	0
	Oak Park Avenue	173rd Street	To	North Street	No Parking	0	0	0	0
	67th Avenue	173rd Street	To	North Street	2 hours	6	0	0	0
	North Street	Oak Park Avenue	To	67th Avenue	2 hours	29	2	2	8
				Subtotal		50	5	5	16
13	North Street	Oak Park Avenue	To	67th Avenue	No Parking	0	0	0	12
	173rd Street	67th Avenue	To	66th Court	No Parking	0	0	0	0
				Subtotal		0	0	0	12
14	South Street	Oak Park Avenue	To	66th Court	No Parking	0	0	0	0
				Subtotal		0	0	0	0
15	South Street	67th Court	To	66th Court	No Parking	0	0	0	0
	66th Court	South Street	To	174th Street	No Parking	0	0	0	0
	174th Street	67th Court	To	66th Court	2 hours	16	2	6	1
				Subtotal		16	2	6	1
16	South Street	Oak Park Avenue	To	67th Court	2 hours	8	5	0	0
	67th Court	174th Street	To	174th Place	2 hours	14	7	0	3
	174th Place	Oak Park Avenue	To	67th Court	No Time Limit	10	0	0	1
	Oak Park Avenue	South Street	To	174th Place	No Parking	0	0	0	3
				Subtotal		32	12	0	7
17	174th Street	67th court	To	67th Avenue	2 hours	17	0	1	0
	67th Avenue	175th Street	To	174th Place	No Parking	0	2	0	5
	174th Place	67th court	To	67th Avenue	2 hours	22	0	0	6
	67th Court	174th Street	To	174th Place	No Parking	0	0	0	2
				Subtotal		39	2	1	13
18	174th Place	Oak Park Avenue	To	67th Court	No Parking	10	0	0	0
	67th Court	174th Place	To	175th Street	No Parking	0	0	0	0
	175th Street	Oak Park Avenue	To	67th Court	No Parking	0	2	0	0
	Oak Park Avenue	174th Place	To	175th Street	No Parking	0	0	0	0
				Subtotal		10	2	0	0
19	174th Place	67th court	To	67th Avenue	2 hours	7	0	0	0
	67th Court	175th Street	To	174th Place	No Parking	0	0	0	0
	175th Street	67th court	To	67th Avenue	No Parking	0	0	0	0
	Oak Park Avenue	175th Street	To	174th Place	No Parking	0	0	0	0
				Subtotal		7	0	0	0
				Total		383	49	40	104
				Percent Occupancy		13%	10%	27%	



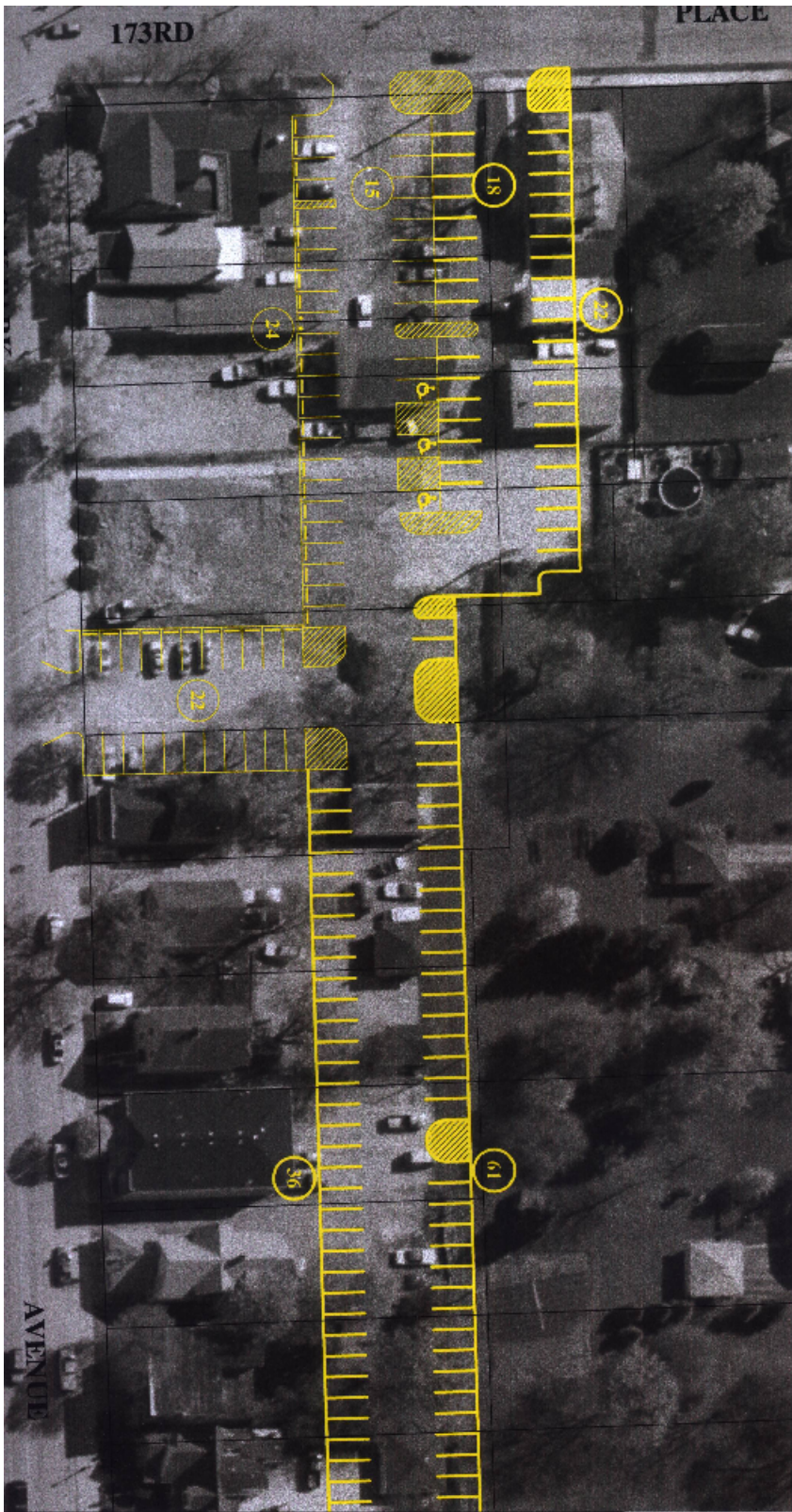
Appendix Table B-2						
Off-Street Parking Inventory and Parking Counts						
Tinley Park, Illinois						
				Parking Count		
Study Block	Facility Number	Facility Name/Type	Capacity (spaces)	10 AM-Noon	Noon-2 PM	Friday Evening 6-8 PM
1	1	Elmore Plaza Lot	134	67	68	NS
2	1	Smith Consulting	8	7	2	0
	2	Prcky Services	3	2	2	0
	3	Evon's Trophies	6	0	3	0
	4	Donna K. Bridal	8	0	1	0
	5	Pass Inc.	12	4	5	1
	6	Matts TV	11	3	4	3
	7	Rick's Photos	8	0	2	1
	8	State Farm Insurance	7	5	7	4
	9	Village Pizza	9	1	1	8
	10	Blue Electric	7	5	0	6
	11	City Parking (3 hours)	36	17	23	30
	12	Wman/Eddy/Joe's	19	4	10	19
		<b>Subtotal</b>	<b>268</b>	<b>115</b>	<b>128</b>	<b>72</b>
3	1	Public Safety	90	49	84	69
	2	Bogarts	5	2	6	5
	3	JW Hollsteins	24	8	13	24
		<b>Subtotal</b>	<b>119</b>	<b>59</b>	<b>103</b>	<b>98</b>
4	1	Permit Parking	53	41	24	33
5	1	Municipal Lot A	66	60	63	6
	2	Municipal Lot E	67	25	24	1
		<b>Subtotal</b>	<b>133</b>	<b>126</b>	<b>87</b>	<b>7</b>
6		No off-street parking	0	0	0	0
7	1	Residential/Office	31	7	12	0
	2	Mickey's	28	2	19	16
	3	First Midwest Bank	109	42	41	9
	4	Attic Door	4	3	4	0
		<b>Subtotal</b>	<b>172</b>	<b>54</b>	<b>76</b>	<b>25</b>
8	1	Leonard's and Associates	5	2	1	0
9	1	Municipal Lot 7	73	9	16	36
	2	E Time Pay	17	5	4	1
	3	Tinley Office	21	15	16	1
	4	Subway	8	7	8	8
		<b>Subtotal</b>	<b>124</b>	<b>38</b>	<b>45</b>	<b>46</b>
10		No off-street parking	0	0	0	0
11		No off-street parking	0	0	0	0
12	1	Liquor Store	23	12	13	10
13	1	Commuter Lot N	61	Lot D count includes Lot N		
	2	Commuter Lot D	243	228	239	78
		<b>Subtotal</b>	<b>304</b>	<b>228</b>	<b>239</b>	<b>78</b>
14	1	Commuter Lot B	63	42	43	5
	2	Commuter Lot C	123	91	105	44
		<b>Subtotal</b>	<b>186</b>	<b>133</b>	<b>148</b>	<b>49</b>
15	1	Pay Lot	77	87	89	2
	2	Frozen Food	13	8	8	7
	3	Lavery's Pub	29	16	16	24
	4	Terry's	30	19	19	1
		<b>Subtotal</b>	<b>149</b>	<b>130</b>	<b>132</b>	<b>34</b>
16	1	Park District Lot	12	0	0	3
	2	Citibank Lot	34	12	12	1
		<b>Subtotal</b>	<b>46</b>	<b>12</b>	<b>12</b>	<b>4</b>
17	1	Landmark Church	18	8	7	6
	2	American Legion	21	14	20	9
	3	Mortgage Depot	5	5	4	0
	4	Ameritech	13	8	7	3
		<b>Subtotal</b>	<b>57</b>	<b>35</b>	<b>38</b>	<b>18</b>
18	1	Angelic Gifts	8	3	5	0
	2	Barber Shop	6	3	3	2
		<b>Subtotal</b>	<b>14</b>	<b>6</b>	<b>8</b>	<b>8</b>
19	1	Viking	64	12	20	64
		<b>Totals</b>	<b>1798</b>	<b>1029</b>	<b>1118</b>	<b>513</b>
		Percent Occupied		<b>57%</b>	<b>62%</b>	<b>29%</b>

## **Appendix C**

### **Proposed Parking Lot West of Oak Park Avenue**

# VILLAGE of TINLEY PARK, ILLINOIS

## PARKING PLAN

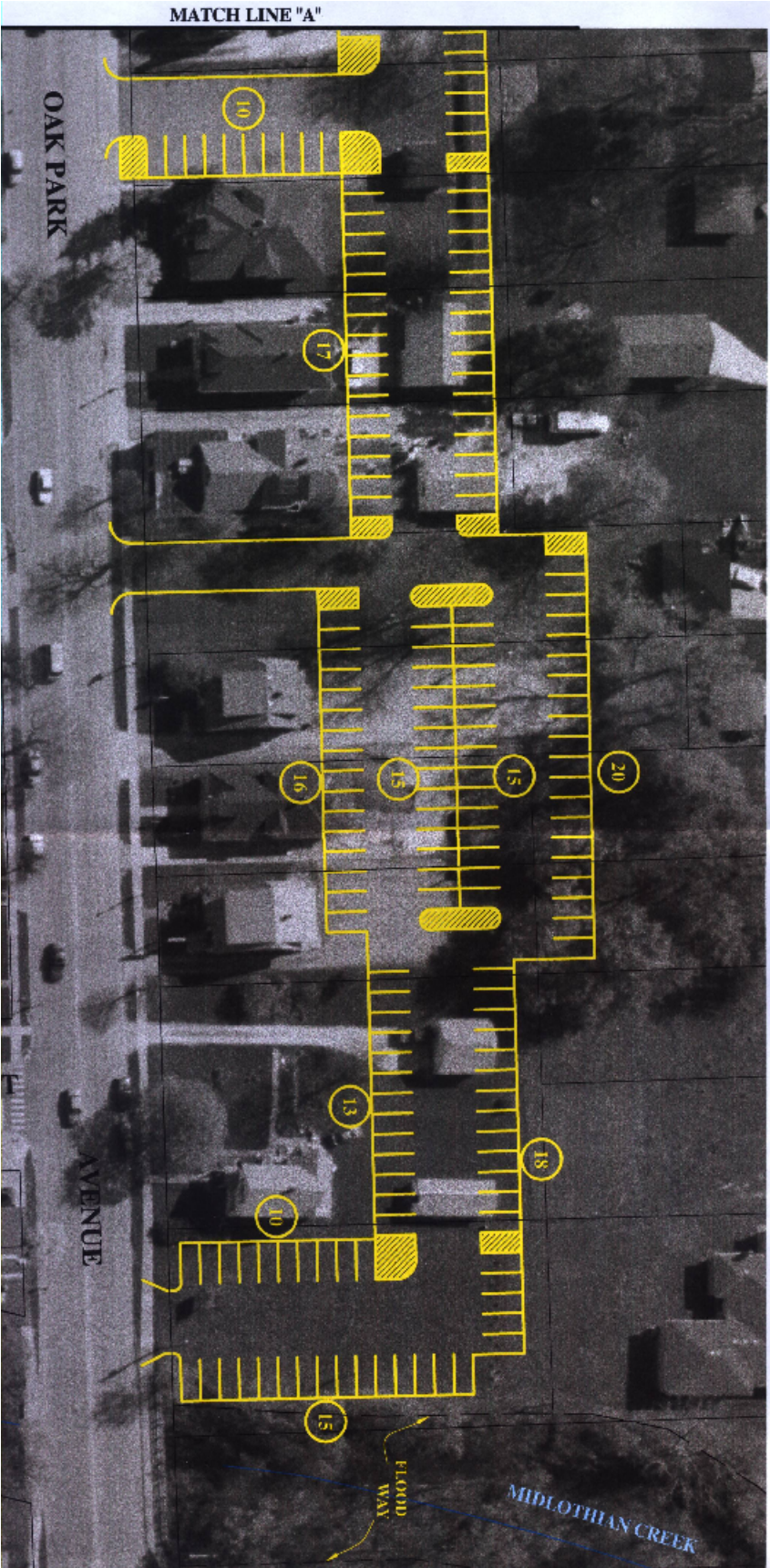


MATCH LINE "A"



# VILLAGE of TINLEY PARK, ILLINOIS

## PARKING PLAN



## **Appendix D**

### **Traffic Signal Warrant Analysis**

# TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET:	Oak Park Avenue	NB	SB	# OF APPROACH LANES:	1
MINOR STREET:	175th Street	EB	WB	# OF APPROACH LANES:	1
CITY, STATE:	Tinley Park, IL				
COMMENTS:	Existing Conditions				

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): N

			Oak Park Avenue		Total	175th Street		Minor Street Heavy Leg
			NB Approach	SB Approach		EB Approach	WB Approach	
06:00 AM	TO	07:00 AM			0			0
07:00 AM	TO	08:00 AM	573	572	1145	0	176	176
08:00 AM	TO	09:00 AM			0			0
09:00 AM	TO	10:00 AM			0			0
10:00 AM	TO	11:00 AM			0			0
11:00 AM	TO	12:00 PM			0			0
12:00 PM	TO	01:00 PM			0			0
01:00 PM	TO	02:00 PM			0			0
02:00 PM	TO	03:00 PM			0			0
03:00 PM	TO	04:00 PM			0			0
04:00 PM	TO	05:00 PM			0			0
05:00 PM	TO	06:00 PM			0			0
06:00 PM	TO	07:00 PM	680	736	1416	0	196	196
07:00 PM	TO	08:00 PM			0			0
08:00 PM	TO	09:00 PM			0			0
09:00 PM	TO	10:00 PM			0			0

03/16/04

Kimley-Horn and Associates

# TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET:	Oak Park Avenue	NB	SB	# OF APPROACH LANES:	1
MINOR STREET:	South Street	EB	WB	# OF APPROACH LANES:	1
CITY, STATE:	Tinley Park, IL				
COMMENTS:	Existing Conditions				

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): N

			Oak Park Avenue		Total	South Street		Minor Street Heavy Leg
			NB Approach	SB Approach		EB Approach	WB Approach	
06:00 AM	TO	07:00 AM			0			0
07:00 AM	TO	08:00 AM	632	513	1145	92	80	92
08:00 AM	TO	09:00 AM			0			0
09:00 AM	TO	10:00 AM			0			0
10:00 AM	TO	11:00 AM			0			0
11:00 AM	TO	12:00 PM			0			0
12:00 PM	TO	01:00 PM			0			0
01:00 PM	TO	02:00 PM			0			0
02:00 PM	TO	03:00 PM			0			0
03:00 PM	TO	04:00 PM			0			0
04:00 PM	TO	05:00 PM			0			0
05:00 PM	TO	06:00 PM			0			0
06:00 PM	TO	07:00 PM	580	682	1262	79	74	79
07:00 PM	TO	08:00 PM			0			0
08:00 PM	TO	09:00 PM			0			0
09:00 PM	TO	10:00 PM			0			0

03/16/04

Kimley-Horn and Associates

# TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: Oak Park Avenue NB SB # OF APPROACH LANES: 1

MINOR STREET: 175th Street EB WB # OF APPROACH LANES: 1

CITY, STATE: Tinley Park, IL

COMMENTS: Existing Conditions

0

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): N

			MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2 Four-Hour	WARRANT 3 Peak Hour
					MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET		
THRESHOLD VALUES					500	150		750	75		400	120		600	60			
06:00 AM	TO	07:00 AM	0	0														
07:00 AM	TO	08:00 AM	1,145	176	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
08:00 AM	TO	09:00 AM	0	0														
09:00 AM	TO	10:00 AM	0	0														
10:00 AM	TO	11:00 AM	0	0														
11:00 AM	TO	12:00 PM	0	0														
12:00 PM	TO	01:00 PM	0	0														
01:00 PM	TO	02:00 PM	0	0														
02:00 PM	TO	03:00 PM	0	0														
03:00 PM	TO	04:00 PM	0	0														
04:00 PM	TO	05:00 PM	0	0														
05:00 PM	TO	06:00 PM	0	0														
06:00 PM	TO	07:00 PM	1,416	196	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
07:00 PM	TO	08:00 PM	0	0														
08:00 PM	TO	09:00 PM	0	0														
09:00 PM	TO	10:00 PM	0	0														
			2,561	372	2	2	2	2	2	2	2	2	2	2	2	2	2	2
					8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
					NOT SATISFIED			NOT SATISFIED			NOT SATISFIED						NOT SATISFIED	SATISFIED



# TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: Oak Park Avenue NB SB # OF APPROACH LANES: 1

MINOR STREET: South Street EB WB # OF APPROACH LANES: 1

CITY, STATE: Tinley Park, IL

COMMENTS: Existing Conditions

0

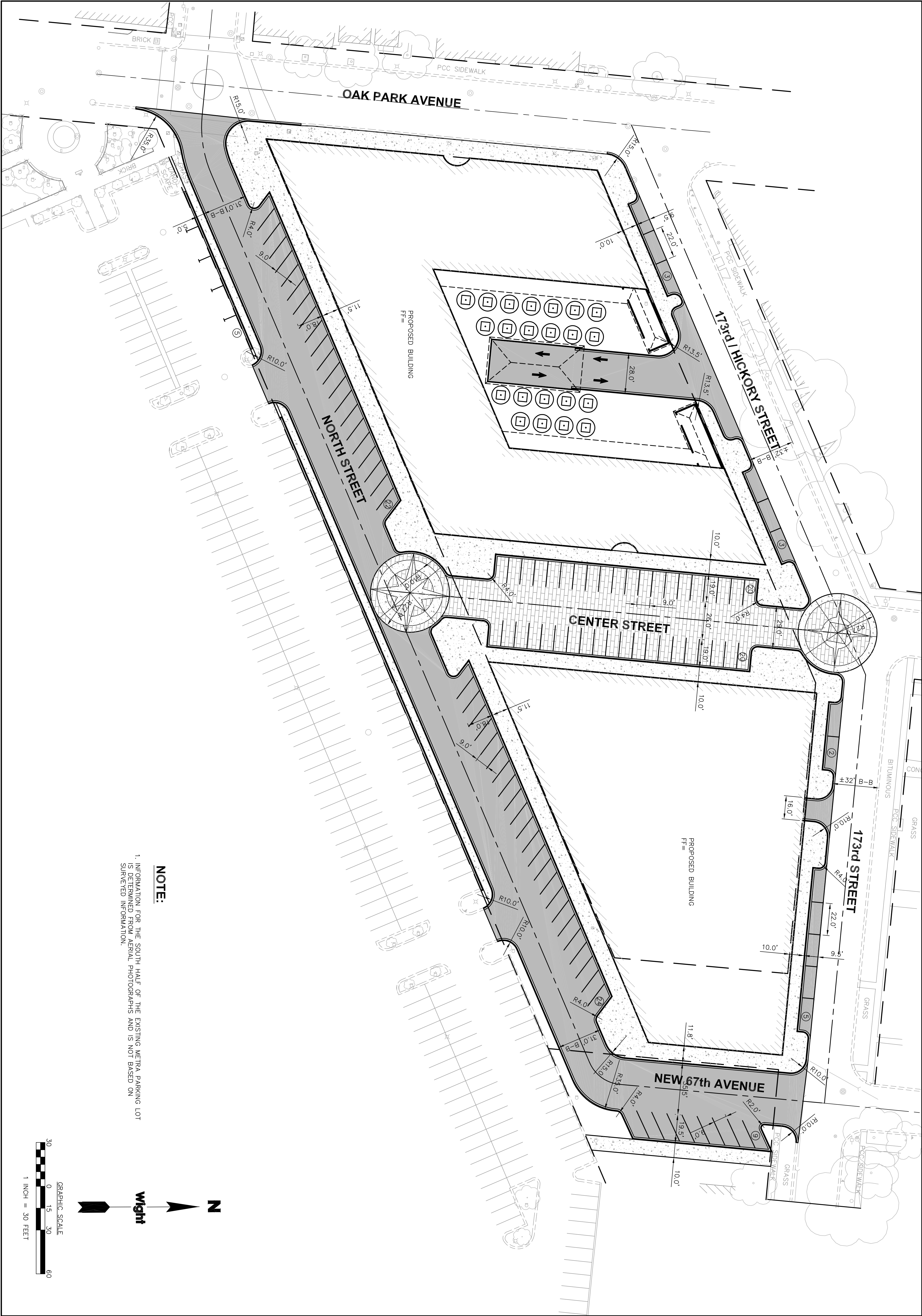
ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): N

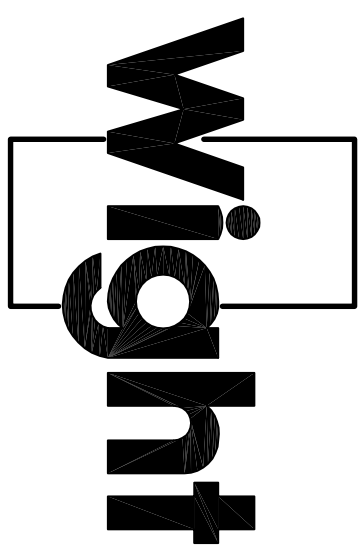
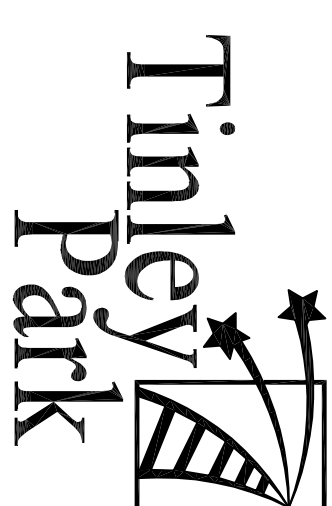
			MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2 Four-Hour	WARRANT 3 Peak Hour
					MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET		
THRESHOLD VALUES					500	150		750	75		400	120		600	60			
06:00 AM	TO	07:00 AM	0	0														
07:00 AM	TO	08:00 AM	1,145	92	Y			Y	Y	Y	Y			Y	Y	Y	Y	
08:00 AM	TO	09:00 AM	0	0														
09:00 AM	TO	10:00 AM	0	0														
10:00 AM	TO	11:00 AM	0	0														
11:00 AM	TO	12:00 PM	0	0														
12:00 PM	TO	01:00 PM	0	0														
01:00 PM	TO	02:00 PM	0	0														
02:00 PM	TO	03:00 PM	0	0														
03:00 PM	TO	04:00 PM	0	0														
04:00 PM	TO	05:00 PM	0	0														
05:00 PM	TO	06:00 PM	0	0														
06:00 PM	TO	07:00 PM	1,262	79	Y			Y	Y	Y	Y			Y	Y	Y		
07:00 PM	TO	08:00 PM	0	0														
08:00 PM	TO	09:00 PM	0	0														
09:00 PM	TO	10:00 PM	0	0														
			2,407	171	2	0	0	2	2	2	2	0	0	2	2	2	1	0
					8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
					NOT SATISFIED			NOT SATISFIED			NOT SATISFIED						NOT SATISFIED	NOT SATISFIED

## **Appendix E**

### **Site Plans for Proposed North Street and South Street Developments**



TINLEY PARK PLACE



Wight & Company  
814 Ogden Avenue - Downers Grove, IL 60515  
630.969.7000    630.969.7979 fax  
Design Firm Registration    184-000451

REV    DESCRIPTION    DATE

TINLEY PARK PLACE  
TINLEY PARK, IL.

TINLEY PARK PLACE  
WITH METRA PARKING  
LOT TO REMAIN  
AS IS

PROJECT NUMBER  
02-4968-02

SCALE  
1"=30'

DATE  
11-18-03

DRAWN BY  
JE

EX4.00

# PROJECT DATA

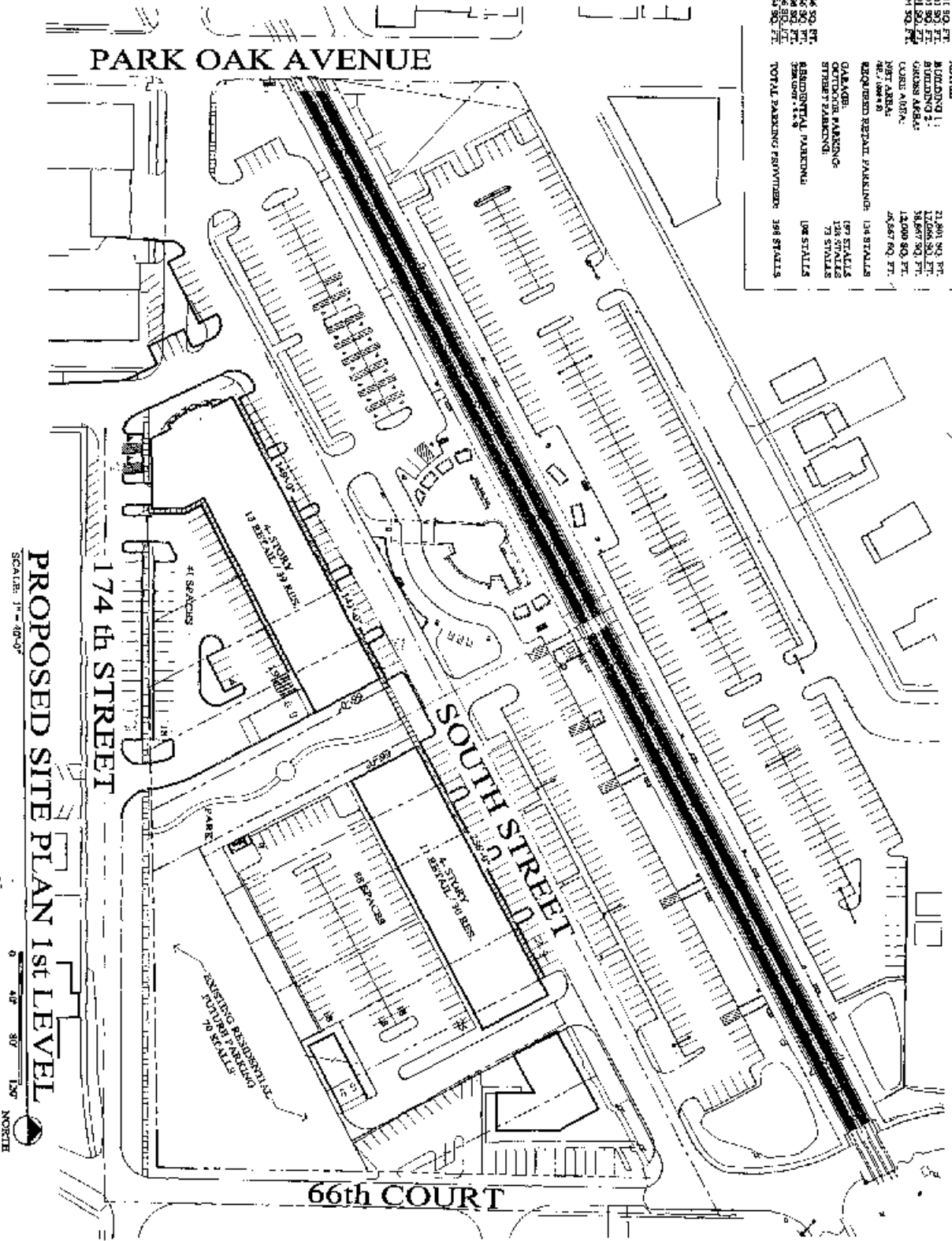
BUILDING 1 AREA		BUILDING 2 AREA	
FIRST FLOOR	21,801 SQ. FT.	FIRST FLOOR	17,046 SQ. FT.
SECOND FLOOR	21,801 SQ. FT.	SECOND FLOOR	17,046 SQ. FT.
THIRD FLOOR	21,801 SQ. FT.	THIRD FLOOR	17,046 SQ. FT.
FOURTH FLOOR	21,801 SQ. FT.	FOURTH FLOOR	17,046 SQ. FT.
TOTAL	86,249 SQ. FT.	TOTAL	68,184 SQ. FT.

BUILDING 3 AREA		BUILDING 4 AREA	
FIRST FLOOR	12,000 SQ. FT.	FIRST FLOOR	12,000 SQ. FT.
SECOND FLOOR	12,000 SQ. FT.	SECOND FLOOR	12,000 SQ. FT.
THIRD FLOOR	12,000 SQ. FT.	THIRD FLOOR	12,000 SQ. FT.
FOURTH FLOOR	12,000 SQ. FT.	FOURTH FLOOR	12,000 SQ. FT.
TOTAL	48,000 SQ. FT.	TOTAL	48,000 SQ. FT.

TOTAL PARKING REQUIREMENTS		TOTAL PARKING PROVIDED	
RETAIL	21,801 SQ. FT.	RETAIL	100 STALLS
OFFICE	17,046 SQ. FT.	OFFICE	100 STALLS
RESIDENTIAL	17,046 SQ. FT.	RESIDENTIAL	100 STALLS
RESTAURANT	17,046 SQ. FT.	RESTAURANT	100 STALLS
TOTAL	86,249 SQ. FT.	TOTAL	300 STALLS



**arete 3 llc**  
 design group  
 10000 N. 10th Ave., Suite 100  
 Phoenix, AZ 85020  
 (602) 998-1000  
 www.arete3.com

**PROPOSED  
 SITE  
 PLAN**

**SOUTH STREET  
 MIXED-USE  
 DEVELOPMENT**

**TINLEY PARK, II**

**SP-1**  
 10/21/2010  
 SCALE: 1" = 40'-0"  
 PREPARED FOR: ARETE 3 LLC  
 BY: SOUTH STREET

**Appendix F**  
**Estimated Weekday Metra Parking Availability after**  
**Loss of Existing Parking Lot on South Street**

[illegible]

## **Appendix G**

### **Shared Parking Analysis**

Appendix G-1							
Village of Tinley Park-North Street Development							
Shared Parking Estimation							
Weekday							
		Restaurant	Retail	Cinema	Office	Residential	Totals
06:00	a.m	0	0	0	1	232	233
07:00	a.m	6	4	0	9	232	250
08:00	a.m	14	8	0	27	232	281
09:00	a.m	28	20	0	40	232	319
10:00	a.m	55	32	0	43	232	362
11:00	a.m	83	41	0	43	232	399
12:00	Noon	138	45	138	39	232	593
01:00	p.m.	194	47	184	39	232	696
02:00	p.m.	28	45	230	42	232	577
03:00	p.m.	28	44	230	40	232	575
04:00	p.m.	55	41	230	33	232	592
05:00	p.m.	69	37	276	20	232	635
06:00	p.m.	166	38	300	10	232	746
07:00	p.m.	276	42	369	3	232	922
08:00	p.m.	276	41	461	3	232	1,013
09:00	p.m.	276	29	461	1	232	999
10:00	p.m.	249	34	461	1	232	977
11:00	p.m.	194	6	369	0	232	800
12:00	Midnight	138	0	323	0	232	693
Village of Tinley Park-North Street Development							
Shared Parking Estimation							
Saturday							
		Restaurant	Retail	Cinema	Office	Residential	Totals
06:00	a.m	0	0	0	0	232	232
07:00	a.m	6	2	0	0	232	240
08:00	a.m	9	7	0	1	232	250
09:00	a.m	19	22	0	4	232	276
10:00	a.m	25	32	0	5	232	294
11:00	a.m	31	53	0	5	232	321
12:00	Noon	93	61	156	6	232	548
01:00	p.m.	140	68	207	5	232	653
02:00	p.m.	62	72	207	4	232	577
03:00	p.m.	62	72	259	3	232	628
04:00	p.m.	62	65	363	3	232	724
05:00	p.m.	156	54	363	1	232	806
06:00	p.m.	280	47	415	1	232	975
07:00	p.m.	295	43	467	1	232	1,039
08:00	p.m.	311	40	518	1	232	1,102
09:00	p.m.	311	29	518	1	232	1,092
10:00	p.m.	295	27	518	0	232	1,073
11:00	p.m.	264	9	415	0	232	920
12:00	Midnight	218	0	363	0	232	813



Appendix G								
Village of Tinley Park-South Street Development-Phase One and Two								
Shared Parking Estimation								
Weekday								
		Restaurant	Retail	Cinema	Office	Residential	Totals	
06:00	a.m.	0	0	0	0	138	138	
07:00	a.m.	3	4	0	0	138	145	
08:00	a.m.	7	10	0	0	138	155	
09:00	a.m.	13	24	0	0	138	175	
10:00	a.m.	27	38	0	0	138	203	
11:00	a.m.	40	49	0	0	138	227	
12:00	Noon	67	54	0	0	138	259	
01:00	p.m.	94	56	0	0	138	288	
02:00	p.m.	13	54	0	0	138	206	
03:00	p.m.	13	53	0	0	138	205	
04:00	p.m.	27	49	0	0	138	214	
05:00	p.m.	33	44	0	0	138	216	
06:00	p.m.	80	46	0	0	138	264	
07:00	p.m.	134	50	0	0	138	322	
08:00	p.m.	134	49	0	0	138	320	
09:00	p.m.	134	34	0	0	138	306	
10:00	p.m.	120	40	0	0	138	299	
11:00	p.m.	94	7	0	0	138	239	
12:00	Midnight	67	0	0	0	138	205	
Village of Tinley Park-South Street Development-Phase One and Two								
Shared Parking Estimation								
Saturday								
		Restaurant	Retail	Cinema	Office	Residential	Totals	
06:00	a.m.	0	0	0	0	138	138	
07:00	a.m.	3	3	0	0	138	144	
08:00	a.m.	5	9	0	0	138	151	
09:00	a.m.	9	26	0	0	138	173	
10:00	a.m.	12	39	0	0	138	189	
11:00	a.m.	15	63	0	0	138	216	
12:00	Noon	45	73	0	0	138	257	
01:00	p.m.	68	82	0	0	138	288	
02:00	p.m.	30	86	0	0	138	254	
03:00	p.m.	30	86	0	0	138	254	
04:00	p.m.	30	78	0	0	138	246	
05:00	p.m.	75	65	0	0	138	278	
06:00	p.m.	135	56	0	0	138	329	
07:00	p.m.	143	52	0	0	138	333	
08:00	p.m.	150	48	0	0	138	336	
09:00	p.m.	150	35	0	0	138	323	
10:00	p.m.	143	33	0	0	138	314	
11:00	p.m.	128	11	0	0	138	277	
12:00	Midnight	105	0	0	0	138	243	