

# LOVEJOY REALTY FBO

Development of Regional Impact # 1451

HENRY COUNTY, GA

## TRAFFIC IMPACT STUDY

**Prepared for:**

Big 5 Enterprises, LLC  
1065 Jodeco Road  
Stockbridge, GA 30281

**Prepared by:**



**A&R Engineering Inc.**

2160 Kingston Court, Suite O  
Marietta, GA 30067  
Tel: (770) 690-9255 Fax: (770) 690-9210  
[www.areng.com](http://www.areng.com)

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A&R Project No: 07-061

# EXECUTIVE SUMMARY

The purpose of this study is to determine the traffic impact that will result from the Lovejoy Realty FBO development proposed along Selfridge Road to the northwest of the intersection of Lower Woolsey Road / Selfridge Road in Henry County, Georgia. The proposed development will consist of 873,600 s.f. of aircraft hanger space, 352 residential condominium / townhouse units and 45,544 s.f. of retail space. The traffic analysis evaluated the following scenarios: existing conditions, the year 2009 without additional traffic generated by the development, and the year 2009 with the traffic generated by the development.

From the existing condition analysis it was found that one study intersection within the study area is currently not operating at the level of service standard of D. Analysis of the Base Year 2009 also revealed that one study intersection being analyzed will not meet the required LOS standard.

The Future 2009 traffic including the site-generated traffic was then evaluated using existing lane geometry. The analysis revealed that one study network intersection will not meet the required LOS standard after the project is completed if no roadway improvements are implemented. Improvements were recommended to restore this intersection back to the LOS standard. Additionally, recommendations to allow the site accesses to operate at satisfactory LOS were identified. Details can be found in the site access analysis section of the report.

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# **1. PROJECT DESCRIPTION**

The purpose of this study is to determine the traffic impact that will result from the Lovejoy Realty FBO development proposed along Selfridge Road to the northwest of the intersection of Lower Woolsey Road / Selfridge Road in Henry County, Georgia. The proposed development will consist of 873,600 s.f. of aircraft hanger space, 352 residential condominium / townhouse units and 45,544 s.f. of retail space. The site is proposed to have three full access driveways along Selfridge Road. A location map for the site is shown in Figure 1.

## **1.1 Site Plan**

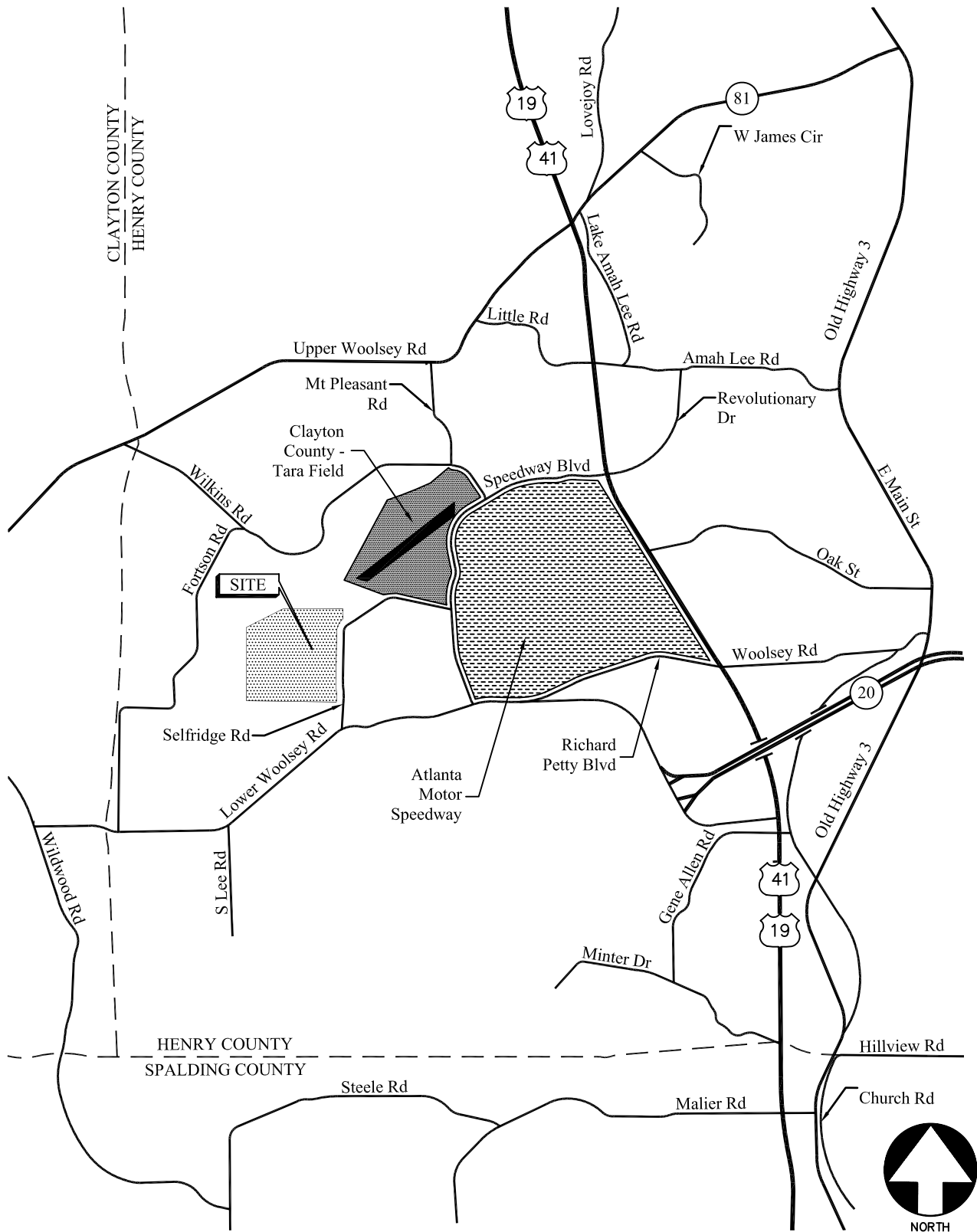
A site plan for this project is shown in Figure 2. A larger size drawing and a digital copy of the site plan are also provided with this report.

## **1.2 Consistency with Adopted Comprehensive County Plan**

The existing zoning is residential – agricultural and the proposed zoning is PUD. The county's future land use plan indicates industrial land use; however, there is a significant demand throughout Georgia for additional longer space. The future land use plan will be updated to reflect the proposed zoning.

## **1.3 Project Phasing**

The project's impact will be evaluated in one phase, estimated for completion in the year 2009. This study will evaluate the traffic operations in the vicinity of the site for existing conditions year 2007, the year 2009 without additional traffic generated by the development, and the year 2009 with the additional traffic generated by the development.



LOCATION MAP

FIGURE 1

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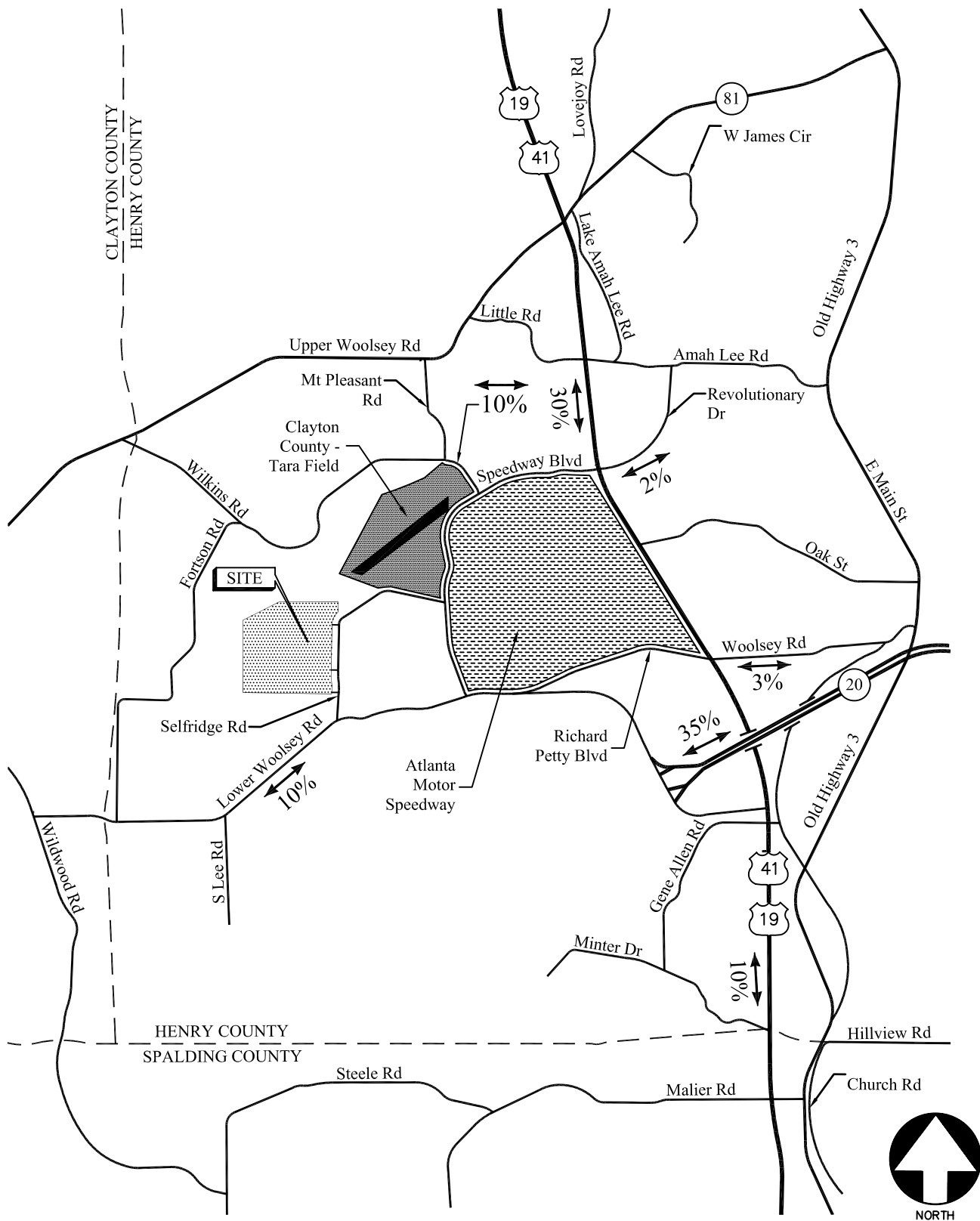
## 2. TRIP GENERATION

Trip generation estimates for the project were based on the rates and equations published in the 7th edition of the Institute of Transportation Engineers (ITE) Trip Generation report. The ITE Trip Generation report contains traffic volume count data collected at similar facilities nationwide. The proposed development will consist of 873,600 s.f. of aircraft hanger space, 352 residential condominium / townhouse units and 45,544 s.f. of retail space. Trip generation calculations for the Lovejoy Realty FBO development are shown in Table 1.

| <b>TABLE 1</b>                          |                    |                       |             |               |                       |             |               |                |
|-----------------------------------------|--------------------|-----------------------|-------------|---------------|-----------------------|-------------|---------------|----------------|
| <b>TRIP GENERATION</b>                  |                    |                       |             |               |                       |             |               |                |
| <b>Land Use</b>                         | <b>Total Size</b>  | <b>A.M. Peak Hour</b> |             |               | <b>P.M. Peak Hour</b> |             |               | <b>24-Hour</b> |
|                                         |                    | <b>Enter</b>          | <b>Exit</b> | <b>Totals</b> | <b>Enter</b>          | <b>Exit</b> | <b>Totals</b> | <b>2-way</b>   |
| 022 – General Aviation Airport          | 208 based aircraft | 35                    | 35          | 70            | 51                    | 42          | 93            | 952            |
| 230 – Residential Condominium/Townhouse | 352 units          | 24                    | 117         | 141           | 113                   | 56          | 169           | 1,871          |
| 820 – Shopping Center                   | 45,544 s.f.        | 60                    | 38          | 98            | 179                   | 194         | 373           | 4,073          |
| <b>Total</b>                            |                    | <b>119</b>            | <b>190</b>  | <b>309</b>    | <b>343</b>            | <b>292</b>  | <b>635</b>    | <b>6,896</b>   |

## 3. TRIP DISTRIBUTION & ASSIGNMENT

The trip distribution is the percentage of the traffic generated by the site that travels to and from the site on each segment of the surrounding roadway network. The trip distribution was based on the location of major roadways, highways and residential concentrations that will serve the development. The trip distribution is shown in Figure 3. The distribution was discussed and agreed upon in the methodology meeting. The site-generated volumes were then distributed to the surrounding roadway network based on the driver's destination, and the most easily accessible route.



TRIP DISTRIBUTION

FIGURE 3

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## 4. STUDY NETWORK DETERMINATION

The study network was determined by evaluating the amount of traffic that the proposed development will add to each roadway segment in the area. According to GRTA requirements, a roadway segment carries a “significant” amount of traffic if the project contributes 7% or more trips to the two-way daily service volumes of the roadway at the appropriate level of service standard. Upon agreement with GRTA a level of service standard of “D” was used for determining the study area network.

The traffic generated by the proposed project was then assigned to the area roadways using the trip distribution to determine the site-generated traffic on each roadway segment. The boundaries of the study network extend to the most distant intersections where at least 7% of the service volumes on the segment are attributed to project traffic. The following intersections fell within the 7% rule and have been included in the traffic study:

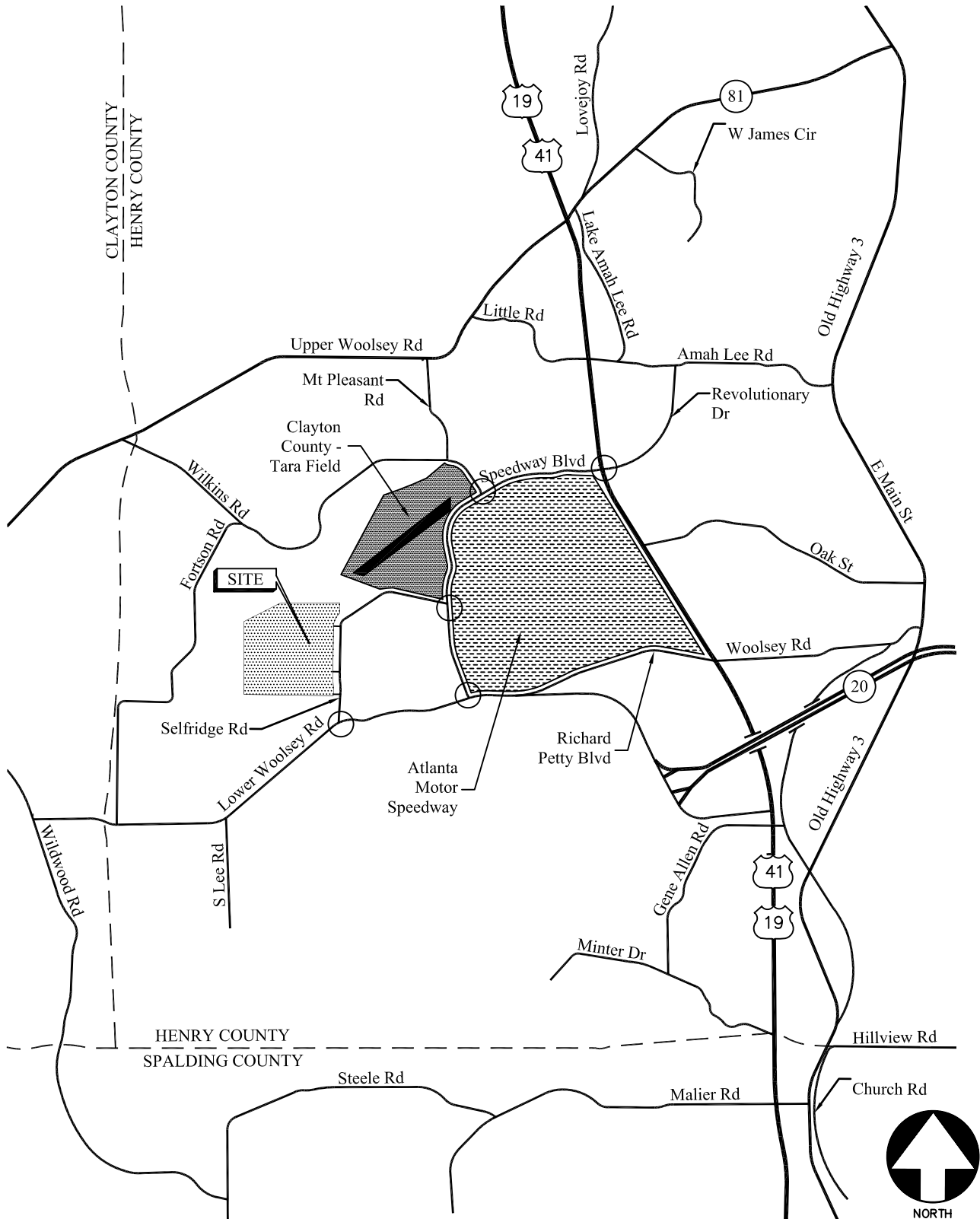
- 1) US 19 (US 41) / Speedway Boulevard / Revolutionary Drive
- 2) Speedway Boulevard / Mt Pleasant Road / Champions Club Parking Driveway
- 3) Speedway Boulevard / Selfridge Road
- 4) Woolsey Road / Speedway Boulevard
- 5) Lower Woolsey Road / Woolsey Road / Selfridge Road

The study intersections are shown graphically in Figure 4. Other intersections within this corridor, such as unsignalized side streets, right-in / right-out driveways or private driveways were viewed as insignificant and have not been included in the study network. In addition to the above intersections, three site driveways along Selfridge Road have been included in the analysis during the A.M. and P.M peak hours as agreed upon in the methodology meeting.



# **LEGEND**

- - Intersections to be included in the detailed analysis



STUDY INTERSECTIONS

FIGURE 4

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## 5. PLANNED & PROGRAMMED IMPROVEMENTS

The following improvements have been identified in the Atlanta Regional Commission's Transportation Improvement Program (TIP) and Regional Transportation Plan (RTP). These improvements are within the vicinity of the proposed development. Additional improvements for Henry County have been identified, but they are not relevant to this project. Details of the planned programs can be found in the Appendix.

- HE-166 : US 19 / US 41 (Herman Talmadge Highway) from Laprade Road in Spalding County to SR 20 (Richard Petty Boulevard / Woolsey Road) in Henry County
  - Includes widening of US 19 / US 41 from four lanes to six lanes.
- GDOT Project ID 0000294
  - Includes widening of SR 3 / US 19/41 from CR 18 / Laprade Road to SR 20 in Henry County
- GDOT Project ID 0005959
  - Includes addition of median turn lanes on SR 3 / US 19/41 from Spalding County to Clayton County
- GDOT Project ID 343060
  - Includes widening of SR 20 relocation from west of SR 3 / US 19/41 to west of Towaliga River

## **6. EXISTING CONDITIONS**

An inventory was performed of the roadways in the area surrounding the site. The following is a brief description of each of these facilities.

### **6.1 Description of Transportation Facilities in Study Network**

#### **US 19 (US 41)**

US 19 is a north-south four lane divided roadway with a posted speed limit of 55 mph.

#### **Woolsey Road**

Woolsey Road is an east-west four lane undivided roadway with a posted speed limit of 55 mph. It extends between W Main Street in the east and Lower Woolsey Road in the west.

#### **Lower Woolsey Road**

Lower Woolsey Road is an east-west two lane roadway with a posted speed limit of 35 mph. It extends between US 19 (US 41) in the east and Wildwood Road in the west.

#### **Speedway Boulevard**

Speedway Boulevard is a four lane undivided roadway with a posted speed limit of 45 mph. It extends between Lower Woolsey Road and US 19 (US 41).

#### **Selfridge Road**

Selfridge Road is a two lane unpaved roadway with a posted speed limit of 15 mph. It extends between Lower Woolsey Road and Speedway Boulevard.

#### **Mt Pleasant Road**

Mt Pleasant Road is a north-south two lane undivided roadway with a posted speed limit of 30 mph. It extends between Upper Woolsey Road in the north and Speedway Boulevard in the south.

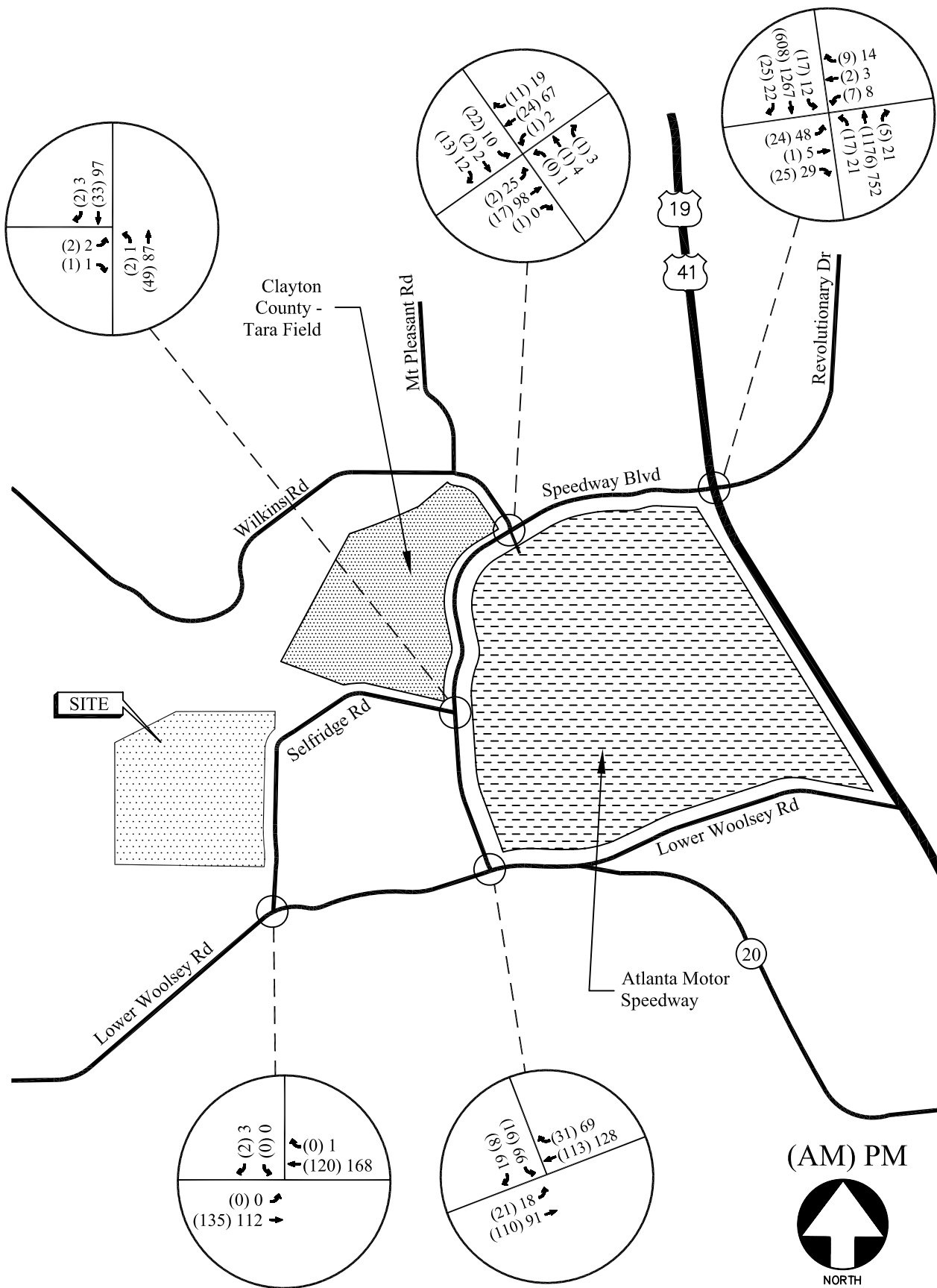
#### **Revolutionary Drive**

Revolutionary Drive is a two lane undivided roadway with a posted speed limit of 25 mph. It extends between US 19 (US 41) and Amah Lee Road.

## **6.2 Analysis Summary**

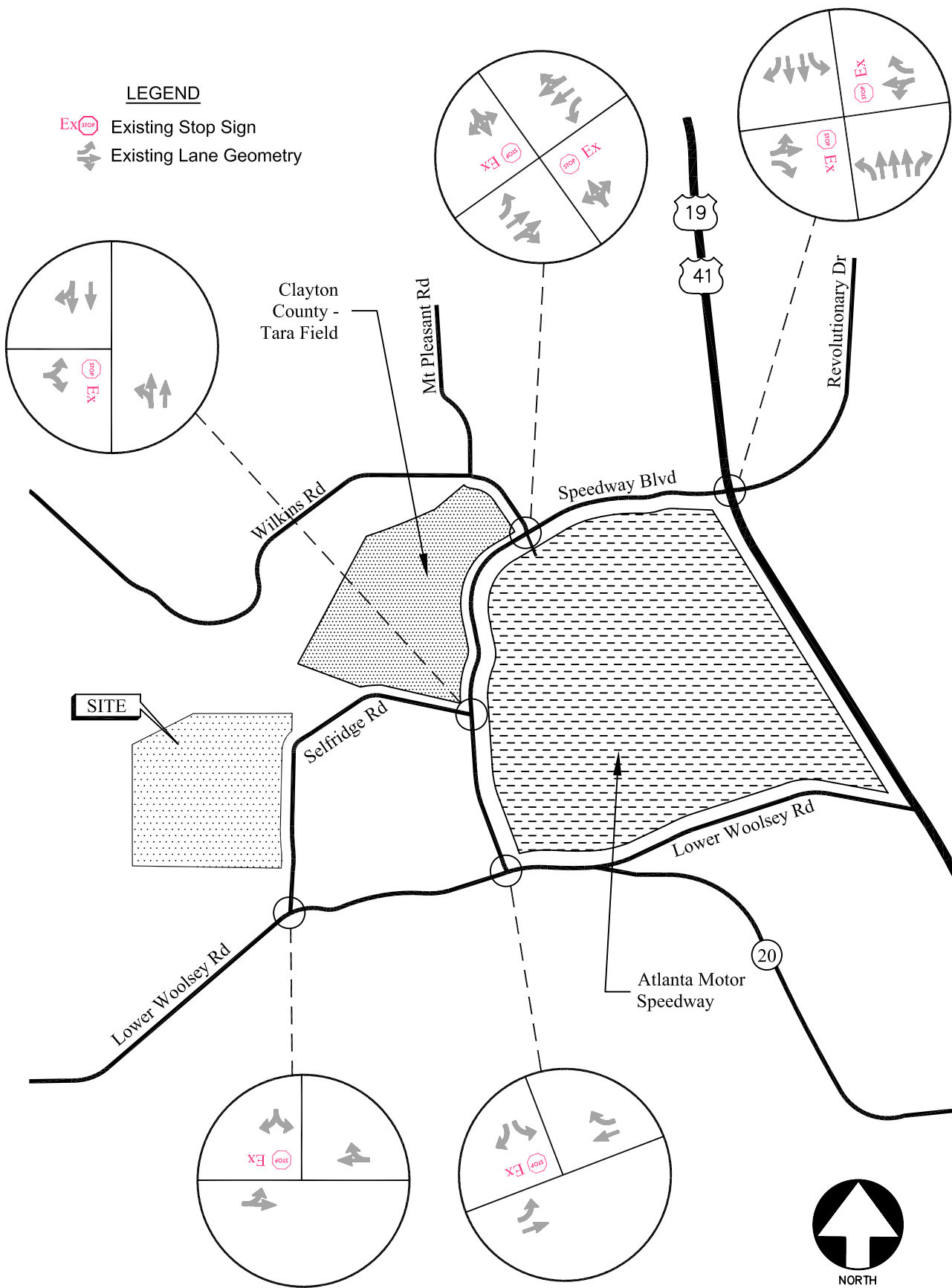
Existing traffic counts were performed at the intersections listed in Section 4 - Study Area Network. In addition to traffic counts, intersection geometry data was also obtained. Turning movement counts were collected during the agreed upon hours of 7:00 AM – 9:00 A.M. and 4:00 P.M. – 6:00 P.M. on weekdays. The four consecutive 15-minute interval volumes that summed to produce the highest volume at each intersection during each two-hour period were then determined. These volumes make up the A.M. and P.M. peak hour traffic volumes for the intersections counted. The existing traffic volumes are shown in Figure 5 and the existing intersection traffic control and lane geometry for the study area network is shown in Figure 6.

The site-generated volumes shown in Table 1 were distributed to the surrounding roadway network in accordance with the trip distribution. The site-generated volumes for the study intersections are shown in Figure 7. Existing traffic operations were analyzed at all the existing intersections in accordance with the HCM methodology using Synchro software. The results of the analysis are shown in Table 2.



EXISTING WEEKDAY PEAK-HOUR VOLUMES

FIGURE 5  
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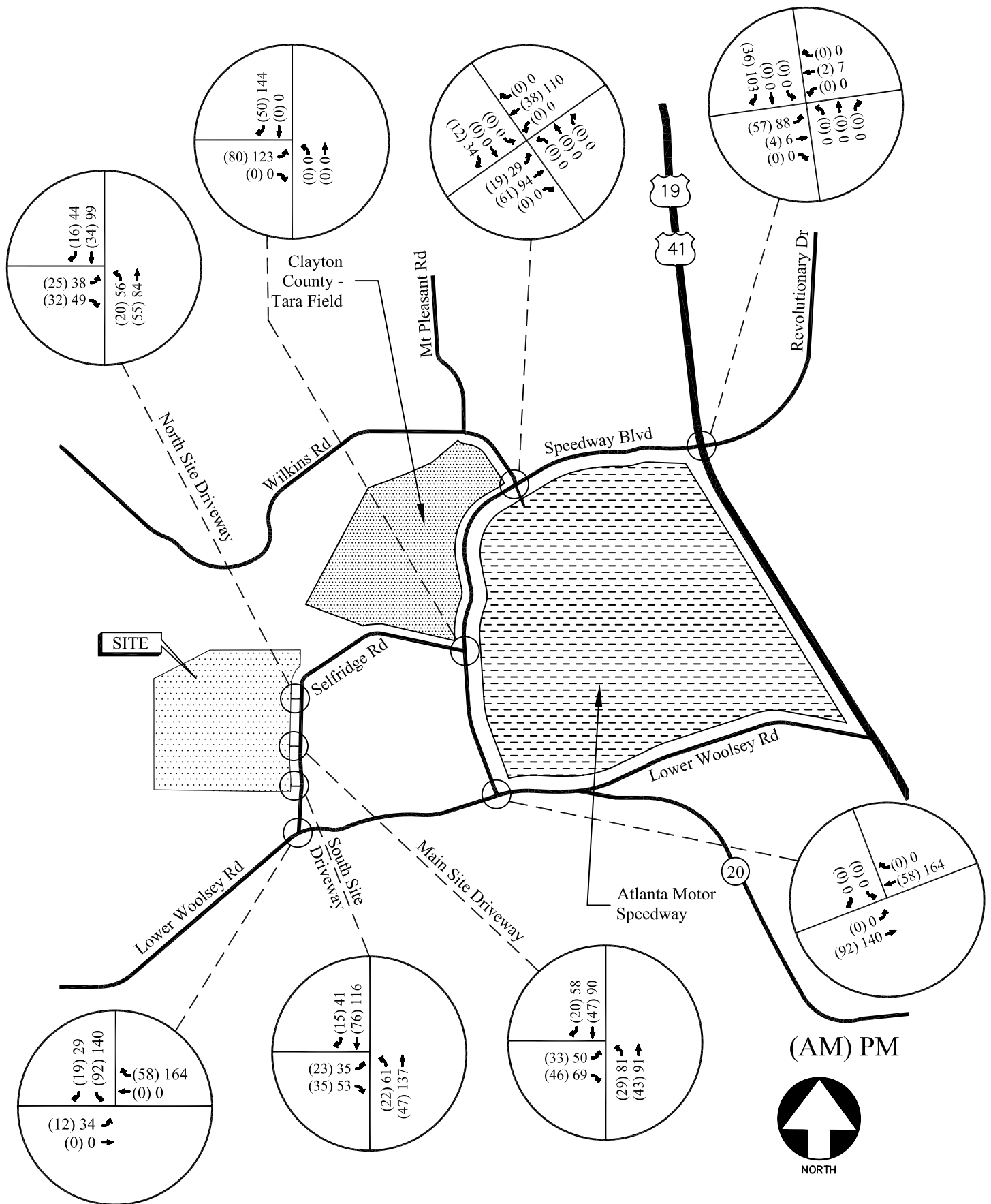


EXISTING TRAFFIC CONTROL AND LANE GEOMETRY

FIGURE 6  
A&R Engineering Inc.

| TABLE 2                                                              |                          |                    |                |       |                |       |
|----------------------------------------------------------------------|--------------------------|--------------------|----------------|-------|----------------|-------|
| EXISTING INTERSECTION OPERATIONS                                     |                          |                    |                |       |                |       |
| Intersection                                                         | AM/PM<br>LOS<br>Standard | Traffic Control    | A.M. Peak Hour |       | P.M. Peak Hour |       |
|                                                                      |                          |                    | LOS            | Delay | LOS            | Delay |
| US 19 / Speedway Boulevard / Revolutionary Dr                        |                          |                    |                |       |                |       |
| -Eastbound Approach                                                  | D/E                      | Stop Controlled on | D              | 25.6  | F              | 97.2  |
| -Westbound Approach                                                  | D/D                      | Speedway Blvd /    | D              | 34.0  | D              | 30.2  |
| -Northbound Left                                                     | D/D                      | Revolutionary Dr   | A              | 8.5   | B              | 10.7  |
| -Southbound Left                                                     | D/D                      |                    | B              | 10.5  | A              | 9.0   |
| Speedway Boulevard / Mt Pleasant Rd /<br>Champions Club Parking Drwy |                          |                    |                |       |                |       |
| -Eastbound Left                                                      | D/D                      | Stop Controlled on | A              | 7.3   | A              | 7.5   |
| -Westbound Left                                                      | D/D                      | Mt Pleasant Rd /   | A              | 7.3   | A              | 7.4   |
| -Northbound Approach                                                 | D/D                      | Champions Club     | A              | 8.6   | B              | 10.0  |
| -Southbound Approach                                                 | D/D                      | Parking Drwy       | A              | 9.0   | A              | 9.8   |
| Speedway Boulevard / Selfridge Rd                                    |                          |                    |                |       |                |       |
| -Eastbound Approach                                                  | D/D                      | Stop Controlled on | A              | 8.7   | A              | 9.1   |
| -Northbound Left                                                     | D/D                      | Selfridge Rd       | A              | 1.2   | A              | 0.9   |
| Woolsey Rd / Speedway Boulevard                                      |                          |                    |                |       |                |       |
| -Eastbound Left                                                      | D/D                      | Stop Controlled on | A              | 7.5   | A              | 7.5   |
| -Southbound Approach                                                 | D/D                      | Speedway Blvd      | A              | 9.9   | B              | 10.1  |
| Lower Woolsey Rd / Woolsey Rd / Selfridge Rd                         |                          |                    |                |       |                |       |
| -Southbound Approach                                                 | D/D                      | Stop Controlled on | A              | 8.9   | A              | 9.2   |
| -Southbound Approach                                                 |                          | Selfridge Rd       |                |       |                |       |

As shown in Table 2, one study intersection is not operating at the LOS standard.



SITE GENERATED WEEKDAY PEAK HOUR VOLUMES

FIGURE 7

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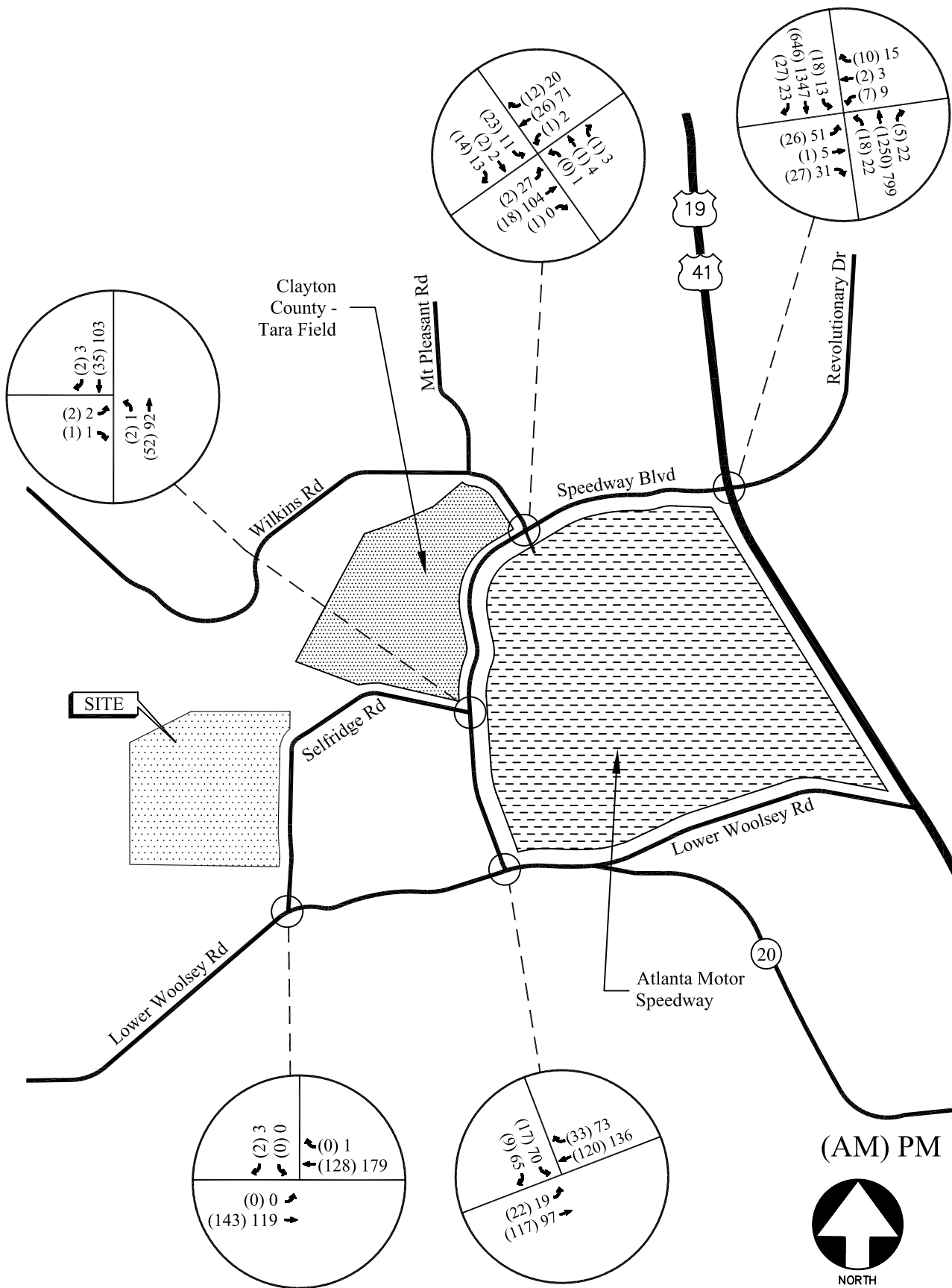
## **7. FUTURE YEAR BACKGROUND TRAFFIC**

In order to evaluate future traffic operations in this area, a projection was made of future base year traffic volumes. The Georgia Department of Transportation collected ADT's in the vicinity of the site over the last several years. Using this information, the annual growth factor was estimated to be 3.1%. This growth factor was applied to the existing traffic volumes on the roadways to estimate the future year 2009 traffic volumes prior to the addition of the site-generated volumes. Further details are included in the correspondence section of Appendix. The future year (base) traffic volumes for 2009 at all the study intersections are shown in Figure 8.

A traffic operation analyses for the following Base Scenario was performed:

- Base Year 2009 traffic with existing lane geometry.
- Base Year 2009 traffic with additional recommended improvements to bring all intersections to LOS standard of D.

Results of the analyses for the above scenarios are shown in Tables 3 and 4. Recommendations to bring the intersections back to the LOS standard are discussed after Table 3.



BASE 2009 WEEKDAY PEAK HOUR VOLUMES

FIGURE 8

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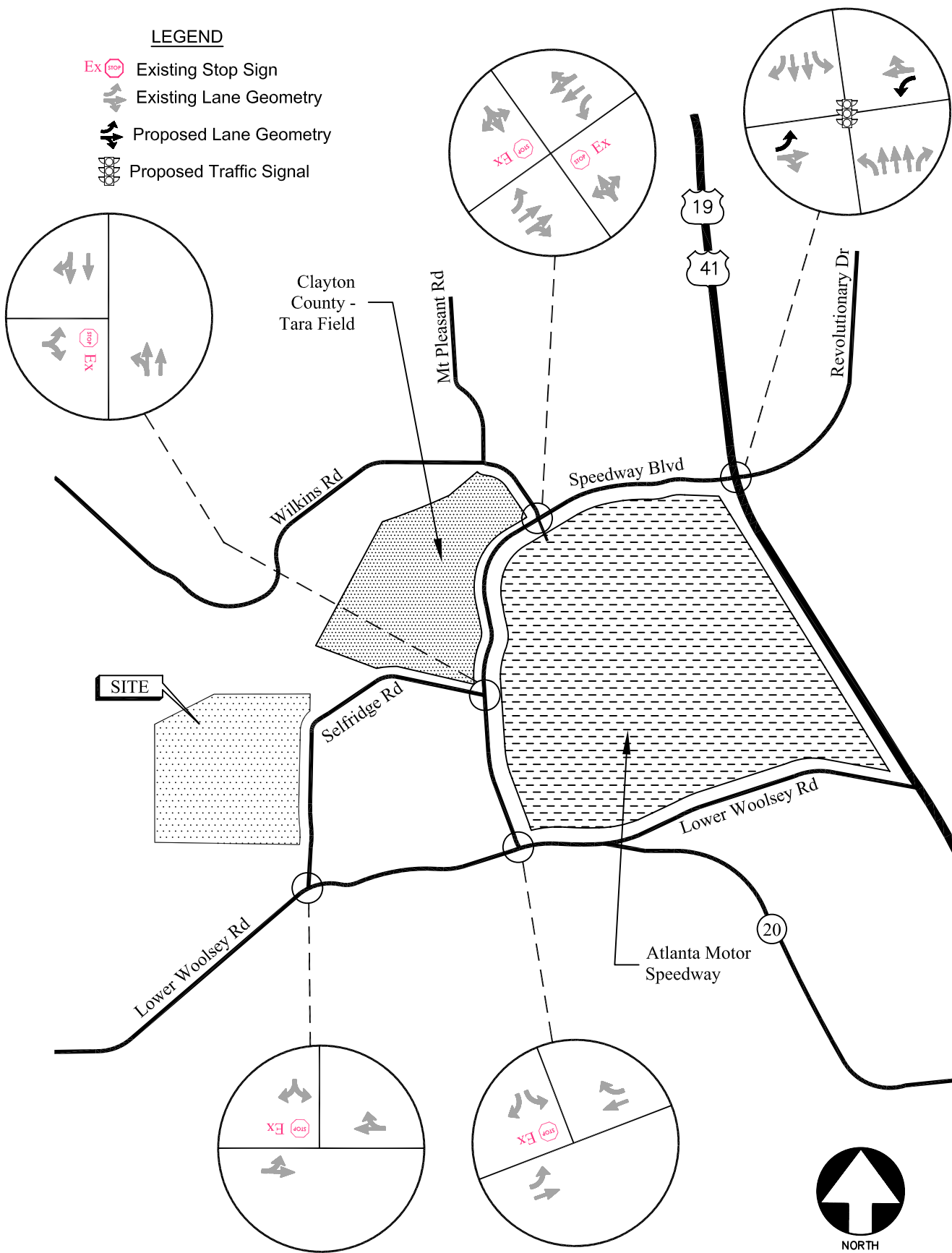
| <b>TABLE 3</b>                                                       |                                   |                        |                       |              |                       |              |
|----------------------------------------------------------------------|-----------------------------------|------------------------|-----------------------|--------------|-----------------------|--------------|
| <b>BASE INTERSECTION OPERATIONS</b>                                  |                                   |                        |                       |              |                       |              |
| <b>Intersection</b>                                                  | <b>AM/PM<br/>LOS<br/>Standard</b> | <b>Traffic Control</b> | <b>A.M. Peak Hour</b> |              | <b>P.M. Peak Hour</b> |              |
|                                                                      |                                   |                        | <b>LOS</b>            | <b>Delay</b> | <b>LOS</b>            | <b>Delay</b> |
| US 19 / Speedway Boulevard / Revolutionary Dr                        |                                   |                        |                       |              |                       |              |
| -Eastbound Approach                                                  | D/E                               | Stop Controlled on     | D                     | 29.1         | F                     | 150.9        |
| -Westbound Approach                                                  | D/D                               | Speedway Blvd /        | E                     | 37.6         | E                     | 37.9         |
| -Northbound Left                                                     | D/D                               | Revolutionary Dr       | A                     | 8.6          | B                     | 11.1         |
| -Southbound Left                                                     | D/D                               |                        | B                     | 10.8         | A                     | 9.1          |
| Speedway Boulevard / Mt Pleasant Rd /<br>Champions Club Parking Drwy |                                   |                        |                       |              |                       |              |
| -Eastbound Left                                                      | D/D                               | Stop Controlled on     | A                     | 7.3          | A                     | 7.5          |
| -Westbound Left                                                      | D/D                               | Mt Pleasant Rd /       | A                     | 7.3          | A                     | 7.5          |
| -Northbound Approach                                                 | D/D                               | Champions Club         | A                     | 8.7          | B                     | 10.1         |
| -Southbound Approach                                                 | D/D                               | Parking Drwy           | A                     | 9.0          | A                     | 9.9          |
| Speedway Boulevard / Selfridge Rd                                    |                                   |                        |                       |              |                       |              |
| -Eastbound Approach                                                  | D/D                               | Stop Controlled on     | A                     | 8.7          | A                     | 9.1          |
| -Northbound Left                                                     | D/D                               | Selfridge Rd           | A                     | 1.2          | A                     | 0.8          |
| Woolsey Rd / Speedway Boulevard                                      |                                   |                        |                       |              |                       |              |
| -Eastbound Left                                                      | D/D                               | Stop Controlled on     | A                     | 7.5          | A                     | 7.6          |
| -Southbound Approach                                                 | D/D                               | Speedway Blvd          | B                     | 10.0         | B                     | 10.2         |
| Lower Woolsey Rd / Woolsey Rd / Selfridge Rd                         |                                   |                        |                       |              |                       |              |
| -Southbound Approach                                                 | D/D                               | Stop Controlled on     | A                     | 9.0          | A                     | 9.3          |
| -Southbound Approach                                                 |                                   | Selfridge Rd           |                       |              |                       |              |

Analysis of the future year (Base 2009) traffic volumes indicates that one study intersection will not operate within the LOS standard. The following improvements were identified for those intersections that did not comply with the LOS standard.

- US 19 / Speedway Boulevard / Revolutionary Drive
  - A signal warrant analysis for the AM and PM peak hours was performed to determine if the peak hour warrant is met at this intersection. The traffic conditions warrant at least the peak hour signal warrant required for installation of a traffic signal for the Base 2009 traffic volumes. Therefore, a signal may be considered at this intersection. A detailed signal warrant analysis is recommended prior to the installation of a traffic signal at this location.
  - If a traffic signal is installed it is recommended to restripe the existing eastbound and westbound approaches on Speedway Boulevard and Revolutionary Drive to include a dedicated left turn lane and a shared through / right turn lane. This restriping will not require any additional pavement.

The LOS at the above intersection in the year 2009 with just background traffic after the above improvements are implemented is shown in Table 4. The recommended base intersection traffic control and lane geometry are shown in Figure 9.

| TABLE 4                                          |                          |                 |                |      |                |      |
|--------------------------------------------------|--------------------------|-----------------|----------------|------|----------------|------|
| BASE INTERSECTION OPERATIONS – WITH IMPROVEMENTS |                          |                 |                |      |                |      |
| Intersection                                     | AM/PM<br>LOS<br>Standard | Traffic Control | A.M. Peak Hour |      | P.M. Peak Hour |      |
|                                                  |                          |                 | LOS<br>(Delay) | v/c  | LOS<br>(Delay) | v/c  |
| US 19 / Speedway Blvd / Revolutionary Dr         | D/E                      | Signalized      | A (4.0)        | 0.31 | A (5.9)        | 0.49 |



BASE 2009 TRAFFIC CONTROL AND LANE GEOMETRY

FIGURE 9  
A&R Engineering Inc.

## **8. FUTURE YEAR TOTAL TRAFFIC**

The traffic volumes that will be generated by the proposed development were added to the future base year 2009 traffic volumes in order to determine the traffic volumes that will be on the roadway network after completion of the project. The future traffic volumes for the year 2009 including the site-generated volumes for the study intersections are shown in Figure 10.

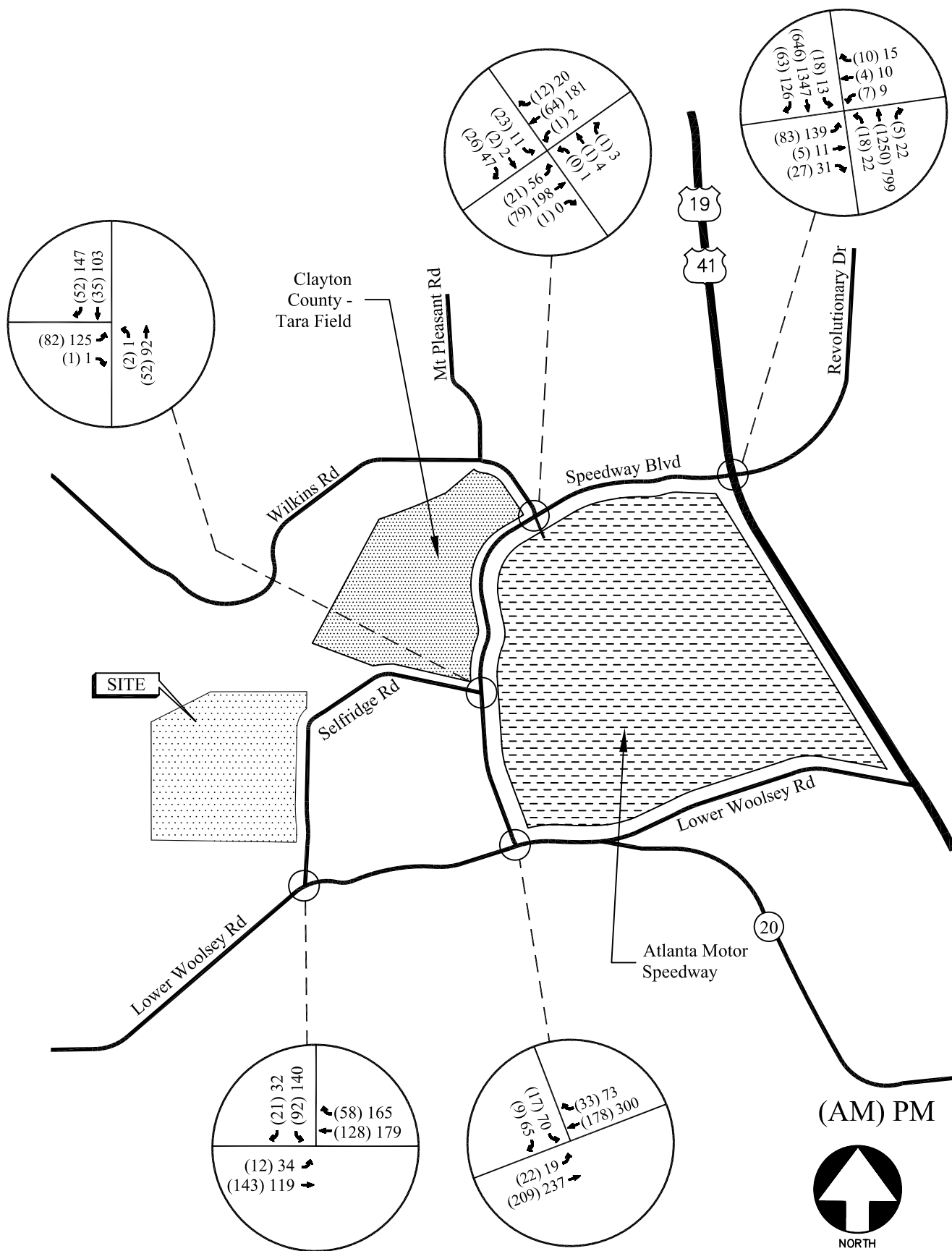
## **9. FACILITY NEEDS ANALYSIS**

### **9.1 Intersection Analysis**

The future year total traffic volumes were used to analyze the study network intersections. Traffic operations analyses for the following scenarios were performed:

- Future Year 2009 Traffic Volumes with site generated traffic and existing lane geometry.
- Future Year 2009 Traffic Volumes with site generated traffic and the recommended improvements to bring all intersections to LOS standard.

The results of the analysis for the above scenarios are shown in Tables 5 and 6. Recommendations to bring the intersections to the LOS standard are discussed after each appropriate section.



FUTURE 2009 WEEKDAY PEAK HOUR VOLUMES

FIGURE 10

A&R Engineering Inc.

| <b>TABLE 5</b>                                                       |                                   |                        |                       |              |                       |              |
|----------------------------------------------------------------------|-----------------------------------|------------------------|-----------------------|--------------|-----------------------|--------------|
| <b>FUTURE INTERSECTION OPERATIONS (WITHOUT IMPROVEMENTS)</b>         |                                   |                        |                       |              |                       |              |
| <b>Intersection</b>                                                  | <b>AM/PM<br/>LOS<br/>Standard</b> | <b>Traffic Control</b> | <b>A.M. Peak Hour</b> |              | <b>P.M. Peak Hour</b> |              |
|                                                                      |                                   |                        | <b>LOS</b>            | <b>Delay</b> | <b>LOS</b>            | <b>Delay</b> |
| US 19 / Speedway Boulevard / Revolutionary Dr                        |                                   |                        |                       |              |                       |              |
| -Eastbound Approach                                                  | D/E                               | Stop Controlled on     | F                     | 110.8        | F                     | 856.1        |
| -Westbound Approach                                                  | D/D                               | Speedway Blvd /        | E                     | 43.0         | F                     | 53.4         |
| -Northbound Left                                                     | D/D                               | Revolutionary Dr       | A                     | 8.6          | B                     | 11.1         |
| -Southbound Left                                                     | D/D                               |                        | B                     | 10.8         | A                     | 9.1          |
| Speedway Boulevard / Mt Pleasant Rd /<br>Champions Club Parking Drwy |                                   |                        |                       |              |                       |              |
| -Eastbound Left                                                      | D/D                               | Stop Controlled on     | A                     | 7.5          | A                     | 7.9          |
| -Westbound Left                                                      | D/D                               | Mt Pleasant Rd /       | A                     | 7.4          | A                     | 7.7          |
| -Northbound Approach                                                 | D/D                               | Champions Club         | A                     | 9.2          | B                     | 12.6         |
| -Southbound Approach                                                 | D/D                               | Parking Drwy           | A                     | 9.7          | B                     | 10.8         |
| Speedway Boulevard / Selfridge Rd                                    |                                   |                        |                       |              |                       |              |
| -Eastbound Approach                                                  | D/D                               | Stop Controlled on     | B                     | 10.3         | B                     | 13.1         |
| -Northbound Left                                                     | D/D                               | Selfridge Rd           | A                     | 1.2          | A                     | 0.9          |
| Woolsey Rd / Speedway Boulevard                                      |                                   |                        |                       |              |                       |              |
| -Eastbound Left                                                      | D/D                               | Stop Controlled on     | A                     | 7.7          | A                     | 8.0          |
| -Southbound Approach                                                 | D/D                               | Speedway Blvd          | B                     | 11.0         | B                     | 13.1         |
| Lower Woolsey Rd / Woolsey Rd / Selfridge Rd                         |                                   |                        |                       |              |                       |              |
| -Eastbound Left                                                      | D/D                               | Stop Controlled on     | A                     | 0.7          | A                     | 2.5          |
| -Southbound Approach                                                 | D/D                               | Selfridge Rd           | B                     | 11.5         | C                     | 24.1         |

Analysis of the future year 2009 traffic volumes indicates that one study intersection will not operate within the LOS standard. The following lists the improvement needed to restore that intersection back to the LOS standard for the future year 2009 traffic:

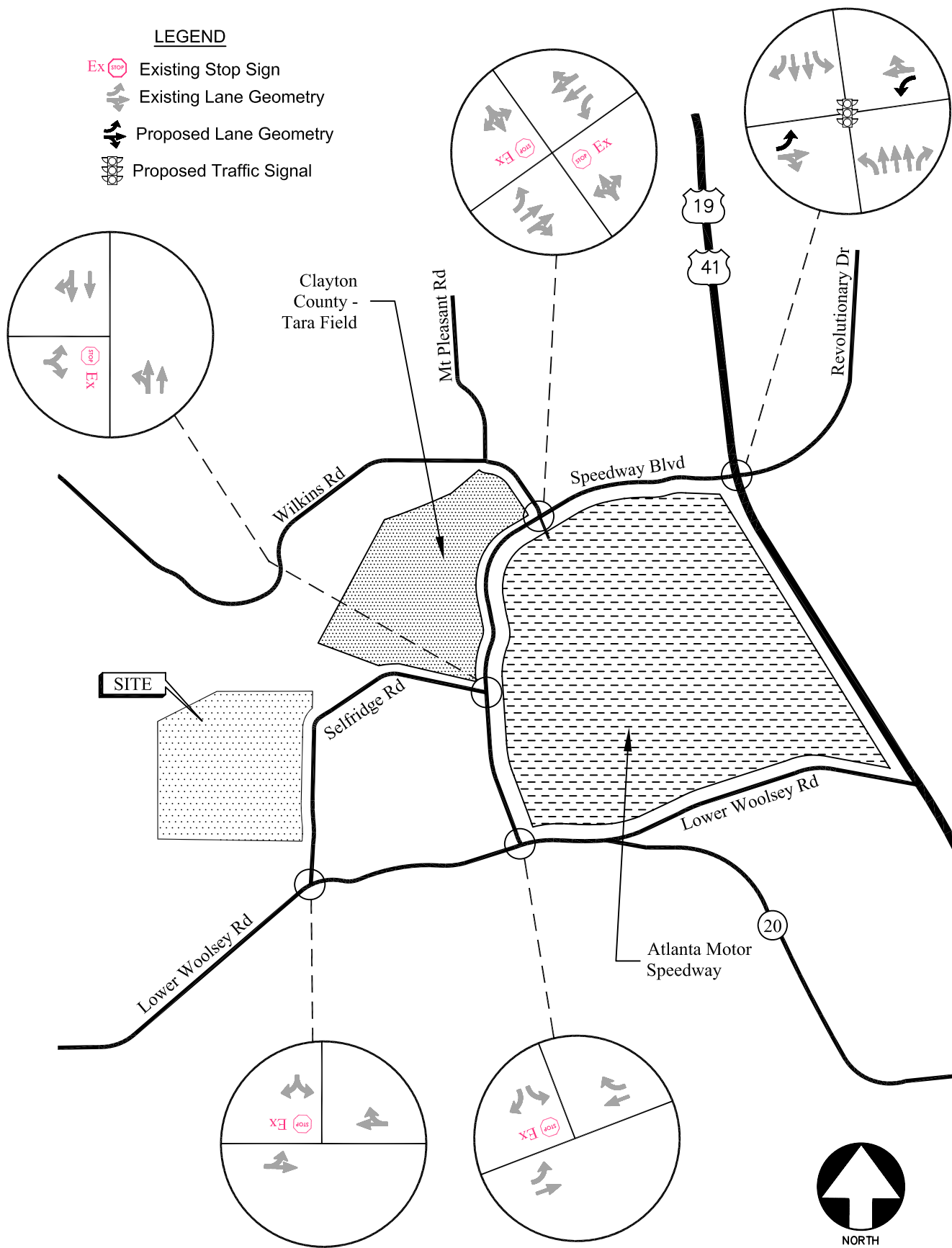
- US 19 / Speedway Boulevard / Revolutionary Drive
  - A signal warrant analysis for the AM and PM peak hours was performed to determine if the peak hour warrant is met at this intersection. The traffic conditions warrant at least the peak hour signal warrant required for installation of a traffic signal for the Future 2009 traffic volumes with the addition of site-generated traffic. Therefore, a signal may be considered at this intersection. A detailed signal warrant analysis is recommended prior to the installation of a traffic signal at this location.
  - If a traffic signal is installed it is recommended to restripe the existing eastbound and westbound approaches on Speedway Boulevard and Revolutionary Drive to include a dedicated left turn lane and a shared through / right turn lane. This restriping will not require any additional pavement.



The LOS for the above intersection in the year 2009 with the addition of site-generated traffic after the implementation of above recommended improvements are shown in Table 6.

| <b>TABLE 6</b>                                   |                          |                 |                |      |                |      |
|--------------------------------------------------|--------------------------|-----------------|----------------|------|----------------|------|
| FUTURE INTERSECTION OPERATIONS WITH IMPROVEMENTS |                          |                 |                |      |                |      |
| <b>Intersection</b>                              | AM/PM<br>LOS<br>Standard | Traffic Control | A.M. Peak Hour |      | P.M. Peak Hour |      |
|                                                  |                          |                 | LOS<br>(Delay) | v/c  | LOS<br>(Delay) | v/c  |
| US 19 / Speedway Blvd / Revolutionary Dr         | D/E                      | Signalized      | A (7.8)        | 0.38 | B (11.6)       | 0.59 |

The future intersections traffic control and lane geometry for the study area network needed to bring all intersections to the LOS standard are shown in Figure 11.



FUTURE 2009 TRAFFIC CONTROL AND LANE GEOMETRY

FIGURE 11

A&R Engineering Inc.

## 9.2 Site Access Analysis

The site is proposed to have three full access driveways along Selfridge Road. The future traffic volumes at the site driveways are shown in Figure 12. The recommended traffic control and lane geometry at these driveways are presented in the following sections.

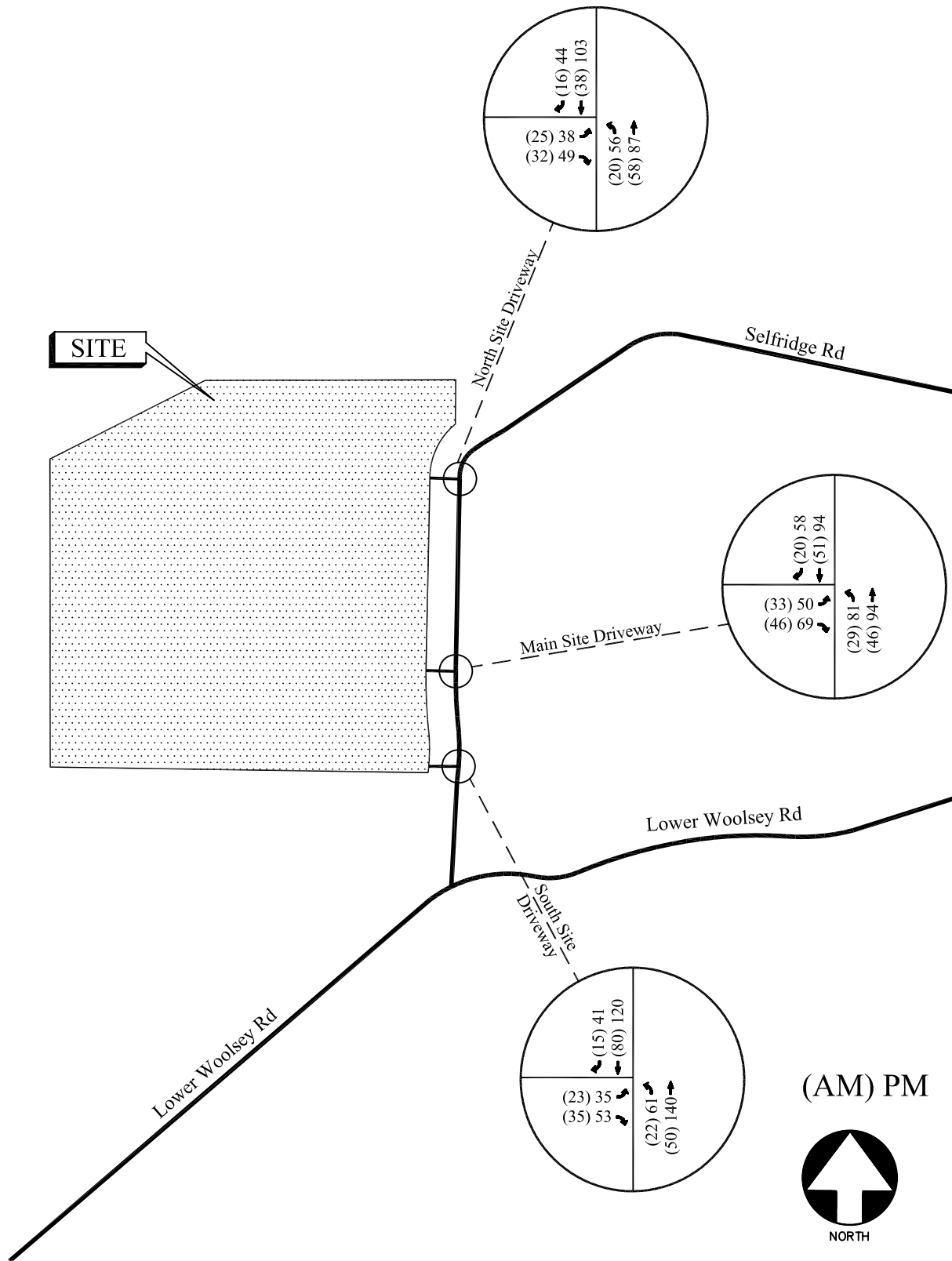
The site access analysis was performed for the Future Year 2009 traffic volumes with recommended lane geometry. Results of the analysis are shown in Table 7. Traffic control and lane geometry adopted to operate the intersections at the LOS standard are discussed in the following pages.

| <b>TABLE 7</b><br>FUTURE SITE DRIVEWAY OPERATIONS                               |                                   |                                           |                       |                        |                       |                        |
|---------------------------------------------------------------------------------|-----------------------------------|-------------------------------------------|-----------------------|------------------------|-----------------------|------------------------|
| <b>Intersection</b>                                                             | <b>AM/PM<br/>LOS<br/>Standard</b> | <b>Traffic Control</b>                    | <b>A.M. Peak Hour</b> |                        | <b>P.M. Peak Hour</b> |                        |
|                                                                                 |                                   |                                           | <b>LOS</b>            | <b>Delay<br/>(sec)</b> | <b>LOS</b>            | <b>Delay<br/>(sec)</b> |
| Selfridge Rd / Main Site Driveway<br>- Eastbound Approach<br>- Northbound Left  | D/D                               | Stop Controlled on<br>Main Site Driveway  | A                     | 9.4                    | B                     | 11.1                   |
|                                                                                 | D/D                               |                                           | A                     | 3.0                    | A                     | 3.8                    |
| Selfridge Rd / North Site Driveway<br>- Eastbound Approach<br>- Northbound Left | D/D                               | Stop Controlled on<br>North Site Driveway | A                     | 9.2                    | B                     | 10.4                   |
|                                                                                 | D/D                               |                                           | A                     | 2.0                    | A                     | 3.2                    |
| Selfridge Rd / South Site Driveway<br>- Eastbound Approach<br>- Northbound Left | D/D                               | Stop Controlled on<br>South Site Driveway | A                     | 9.4                    | B                     | 10.8                   |
|                                                                                 | D/D                               |                                           | A                     | 2.4                    | A                     | 2.6                    |

The following lists the recommended lane geometry for the site driveways.

- Selfridge Road / Main Site Driveway, North Site Driveway, South Site Driveway
  - It is recommended that the Selfridge Road be paved between Speedway Boulevard and Lower Woolsey Road.
  - It is recommended that the intersection have a stop controlled side streets (Main Site Driveway, North Site Driveway, South Site Driveway), with Selfridge Road remaining free flow.
  - Provide a shared left / right turn lane on Main Site Driveway, North Site Driveway and South Site Driveway.

The recommended traffic control and lane geometry for the site driveways is shown in Figure 13.



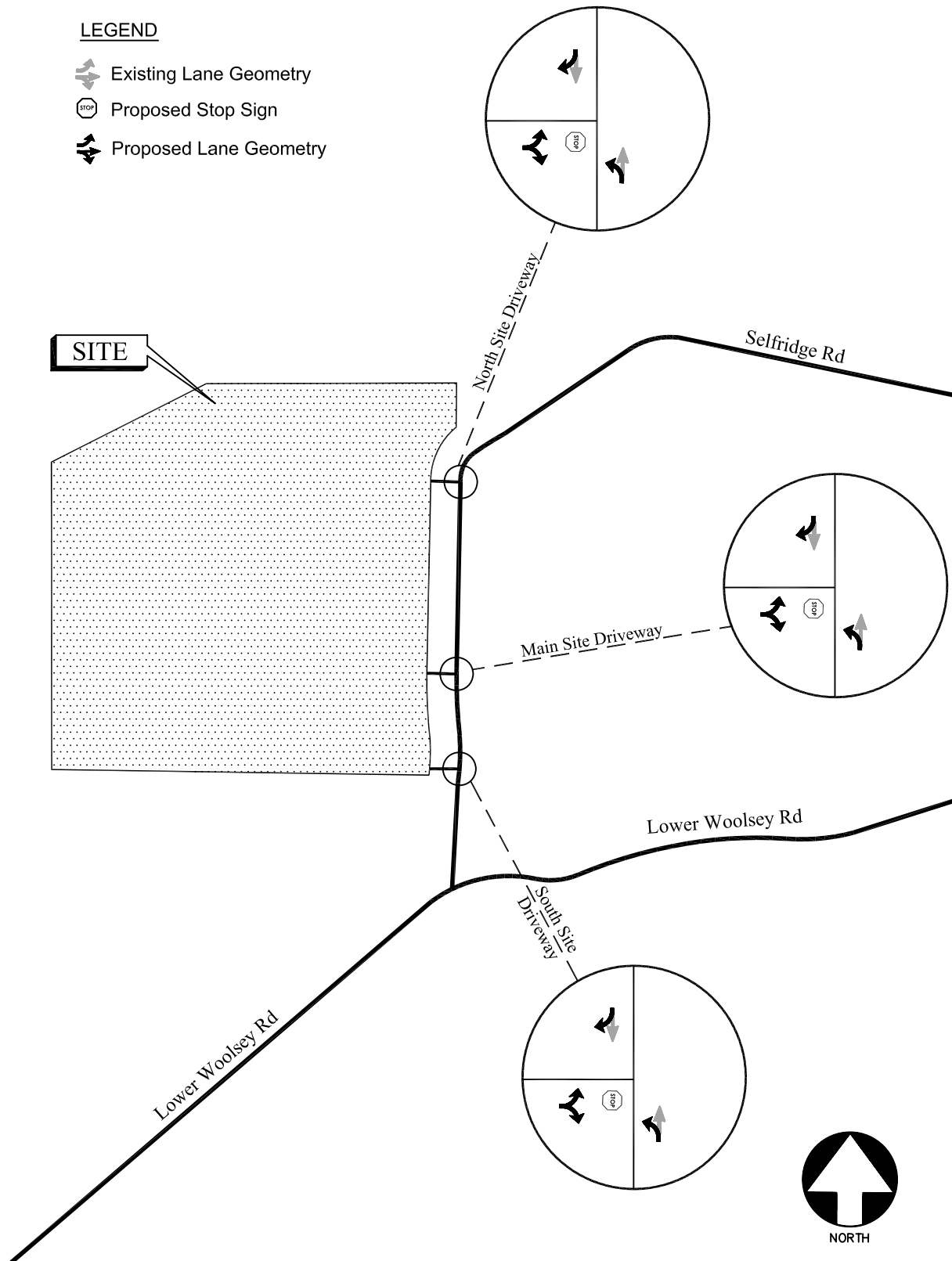
FUTURE 2009 SITE ACCESS PEAK HOUR VOLUMES

FIGURE 12

A&R Engineering Inc.

**LEGEND**

-  Existing Lane Geometry
-  Proposed Stop Sign
-  Proposed Lane Geometry



FUTURE 2009 SITE ACCESS TRAFFIC CONTROL AND  
LANE GEOMETRY

FIGURE 13  
A&R Engineering Inc.

## **10. NON-EXPEDITED CRITERIA**

### **10.1 Regional Mobility and Location**

#### **1. Quality, Character, Convenience, and Flexibility of Transportation Options**

The Lovejoy Reality FBO development is proposed in an area where there is significant need for additional hanger space for aircrafts and support services due to the proximity of the site to Tara Field and Atlanta Motor Speedway.

#### **2. Vehicle Miles Traveled**

The proposed DRI will mainly provide much needed hanger space and support services (retail and residential) in close proximity to the Tara Field and the Atlanta Motor Speedway. Due to the mixed use nature of the project, there will be some mixed-use reductions although the study did not include these reductions.

#### **3. Relationship between Location of Proposed DRI and Regional Mobility**

The proposed DRI is located directly adjacent to US 41 / SR. These highways provide direct connection to interstate system improving regional mobility.

#### **4. Relationship between Proposed DRI and Existing or Planned Transit Facilities**

The proposed DRI is located in the Henry County, which has limited public transit facilities in the area

#### **5. Transportation Management Area Designation**

The area around the proposed project is not designated as a transportation management area.

#### **6. Offsite Trip Reduction and Trip Reduction Techniques**

Due to the nature of the development, some mixed-use reductions are applicable. However these reductions were not quantified in the study as they are significant.

#### **7. Balance of Land Uses – Jobs/Housing Balance**

Please refer to the AOI study submitted along with the DRI package.

## **8. Relationships between Proposed DRI and Existing Development and Infrastructure**

The proposed DRI is located in an area where adequate public facilities will be available to serve the proposed development. Regarding transportation, the traffic study has identified transportation improvements relating to the site access, along with improvements to the surrounding roadway network, which will allow traffic in the area to operate at the LOS standard.

## **10.2 Pedestrian and Internal Circulation**

Internal roadways will provide adequate circulation of vehicular traffic as designed in the site plan. Vehicles exiting the site will be able to move internally to the site exit without experiencing excessive delays.

## **11. OTHER PERTINENT INFORMATION**

At this time no other pertinent information is available with regards to this development. All significant characteristics of the proposed development are fully discussed within this report. Additionally, an Area of Influence study has been prepared and submitted at the same time as the rest of this package.

## **12. SIGNIFICANT IMPACT ANALYSIS**

There is capacity at all but one study network intersections to accommodate the traffic that will be generated by the proposed project. Improvements were identified for the one study intersection that will not be at the LOS standard. After the implementation of the recommended improvements, all intersections in the study area network will operate at acceptable levels of service.

## **Appendix**



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## **Traffic Counts**

# Reliable Traffic Data Services, LLC

Tel: (770) 578-5158 Fax: (770) 578-8159

email: reliabletraffic@msn.com

TMC Data

File Name : 22700001

Site Code : 22700001

Start Date : 6/7/2007

Page No : 1

## Groups Printed- Cars, Trucks & Buses

| Start Time    | US41 / US19 Northbound |      |       |      |            | US41 / US19 Southbound |      |       |      |            | Speedway Blvd Eastbound |      |       |      |            | Revolutionary Dr Westbound |      |       |      |            | Int. Total |
|---------------|------------------------|------|-------|------|------------|------------------------|------|-------|------|------------|-------------------------|------|-------|------|------------|----------------------------|------|-------|------|------------|------------|
|               | Left                   | Thru | Right | Peds | App. Total | Left                   | Thru | Right | Peds | App. Total | Left                    | Thru | Right | Peds | App. Total | Left                       | Thru | Right | Peds | App. Total |            |
| 07:00 AM      | 3                      | 285  | 1     | 0    | 289        | 3                      | 128  | 3     | 0    | 134        | 3                       | 0    | 3     | 0    | 6          | 2                          | 0    | 1     | 0    | 3          | 432        |
| 07:15 AM      | 5                      | 317  | 0     | 0    | 322        | 2                      | 143  | 5     | 0    | 150        | 3                       | 0    | 4     | 0    | 7          | 3                          | 0    | 3     | 0    | 6          | 485        |
| 07:30 AM      | 4                      | 302  | 2     | 0    | 308        | 5                      | 156  | 4     | 0    | 165        | 5                       | 0    | 6     | 0    | 11         | 1                          | 0    | 2     | 0    | 3          | 487        |
| 07:45 AM      | 5                      | 293  | 1     | 0    | 299        | 3                      | 164  | 7     | 0    | 174        | 7                       | 1    | 8     | 0    | 16         | 1                          | 1    | 2     | 0    | 4          | 493        |
| Total         | 17                     | 1197 | 4     | 0    | 1218       | 13                     | 591  | 19    | 0    | 623        | 18                      | 1    | 21    | 0    | 40         | 7                          | 1    | 8     | 0    | 16         | 1897       |
| 08:00 AM      | 3                      | 264  | 2     | 0    | 269        | 7                      | 145  | 9     | 0    | 161        | 9                       | 0    | 7     | 0    | 16         | 2                          | 1    | 2     | 0    | 5          | 451        |
| 08:15 AM      | 7                      | 245  | 0     | 0    | 252        | 5                      | 136  | 7     | 0    | 148        | 5                       | 0    | 9     | 0    | 14         | 1                          | 0    | 3     | 0    | 4          | 418        |
| 08:30 AM      | 4                      | 223  | 1     | 0    | 228        | 3                      | 129  | 3     | 0    | 135        | 6                       | 0    | 6     | 0    | 12         | 2                          | 1    | 2     | 0    | 5          | 380        |
| 08:45 AM      | 6                      | 207  | 1     | 0    | 214        | 4                      | 123  | 5     | 0    | 132        | 4                       | 0    | 4     | 0    | 8          | 3                          | 0    | 3     | 0    | 6          | 360        |
| Total         | 20                     | 939  | 4     | 0    | 963        | 19                     | 533  | 24    | 0    | 576        | 24                      | 0    | 26    | 0    | 50         | 8                          | 2    | 10    | 0    | 20         | 1609       |
| *** BREAK *** |                        |      |       |      |            |                        |      |       |      |            |                         |      |       |      |            |                            |      |       |      |            |            |
| 04:00 PM      | 4                      | 163  | 3     | 0    | 170        | 4                      | 249  | 5     | 0    | 258        | 9                       | 2    | 11    | 0    | 22         | 2                          | 1    | 2     | 0    | 5          | 455        |
| 04:15 PM      | 7                      | 168  | 5     | 0    | 180        | 5                      | 263  | 7     | 0    | 275        | 14                      | 0    | 13    | 0    | 27         | 2                          | 1    | 4     | 0    | 7          | 489        |
| 04:30 PM      | 5                      | 179  | 2     | 0    | 186        | 3                      | 274  | 8     | 0    | 285        | 8                       | 3    | 9     | 0    | 20         | 3                          | 0    | 5     | 0    | 8          | 499        |
| 04:45 PM      | 8                      | 185  | 2     | 0    | 195        | 3                      | 282  | 5     | 0    | 290        | 10                      | 0    | 6     | 0    | 16         | 5                          | 1    | 4     | 0    | 10         | 511        |
| Total         | 24                     | 695  | 12    | 0    | 731        | 15                     | 1068 | 25    | 0    | 1108       | 41                      | 5    | 39    | 0    | 85         | 12                         | 3    | 15    | 0    | 30         | 1954       |
| 05:00 PM      | 6                      | 206  | 4     | 0    | 216        | 1                      | 307  | 6     | 0    | 314        | 18                      | 1    | 9     | 0    | 28         | 1                          | 0    | 3     | 0    | 4          | 562        |
| 05:15 PM      | 4                      | 192  | 7     | 0    | 203        | 3                      | 335  | 7     | 0    | 345        | 12                      | 2    | 8     | 0    | 22         | 2                          | 1    | 4     | 0    | 7          | 577        |
| 05:30 PM      | 5                      | 179  | 6     | 0    | 190        | 3                      | 318  | 5     | 0    | 326        | 10                      | 0    | 5     | 0    | 15         | 1                          | 1    | 3     | 0    | 5          | 536        |
| 05:45 PM      | 6                      | 175  | 4     | 0    | 185        | 5                      | 307  | 4     | 0    | 316        | 8                       | 2    | 7     | 0    | 17         | 4                          | 1    | 4     | 0    | 9          | 527        |
| Total         | 21                     | 752  | 21    | 0    | 794        | 12                     | 1267 | 22    | 0    | 1301       | 48                      | 5    | 29    | 0    | 82         | 8                          | 3    | 14    | 0    | 25         | 2202       |
| Grand Total   | 82                     | 3583 | 41    | 0    | 3706       | 59                     | 3459 | 90    | 0    | 3608       | 131                     | 11   | 115   | 0    | 257        | 35                         | 9    | 47    | 0    | 91         | 7662       |
| Apprch %      | 2.2                    | 96.7 | 1.1   | 0    |            | 1.6                    | 95.9 | 2.5   | 0    |            | 51                      | 4.3  | 44.7  | 0    |            | 38.5                       | 9.9  | 51.6  | 0    |            |            |
| Total %       | 1.1                    | 46.8 | 0.5   | 0    | 48.4       | 0.8                    | 45.1 | 1.2   | 0    | 47.1       | 1.7                     | 0.1  | 1.5   | 0    | 3.4        | 0.5                        | 0.1  | 0.6   | 0    | 1.2        |            |

# Reliable Traffic Data Services, LLC

Tel: (770) 578-5158 Fax: (770) 578-8159

email: reliabletraffic@msn.com

TMC Data

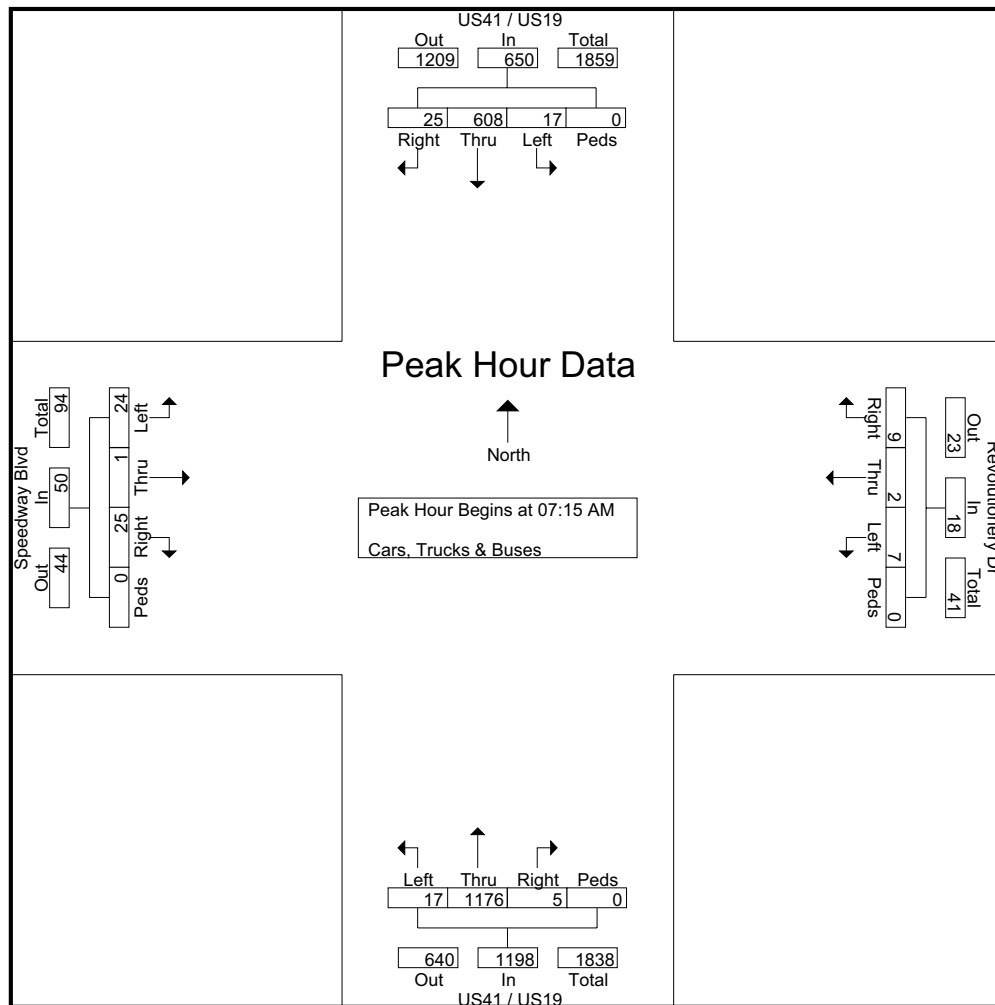
File Name : 22700001

Site Code : 22700001

Start Date : 6/7/2007

Page No : 2

|                                                            | US41 / US19<br>Northbound |      |       |      |            | US41 / US19<br>Southbound |      |       |      |            | Speedway Blvd<br>Eastbound |      |       |      |            | Revolutionary Dr<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|---------------------------|------|-------|------|------------|---------------------------|------|-------|------|------------|----------------------------|------|-------|------|------------|-------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                      | Thru | Right | Peds | App. Total | Left                      | Thru | Right | Peds | App. Total | Left                       | Thru | Right | Peds | App. Total | Left                          | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                           |      |       |      |            |                           |      |       |      |            |                            |      |       |      |            |                               |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:15 AM       |                           |      |       |      |            |                           |      |       |      |            |                            |      |       |      |            |                               |      |       |      |            |            |
| 07:15 AM                                                   | 5                         | 317  | 0     | 0    | 322        | 2                         | 143  | 5     | 0    | 150        | 3                          | 0    | 4     | 0    | 7          | 3                             | 0    | 3     | 0    | 6          | 485        |
| 07:30 AM                                                   | 4                         | 302  | 2     | 0    | 308        | 5                         | 156  | 4     | 0    | 165        | 5                          | 0    | 6     | 0    | 11         | 1                             | 0    | 2     | 0    | 3          | 487        |
| 07:45 AM                                                   | 5                         | 293  | 1     | 0    | 299        | 3                         | 164  | 7     | 0    | 174        | 7                          | 1    | 8     | 0    | 16         | 1                             | 1    | 2     | 0    | 4          | 493        |
| 08:00 AM                                                   | 3                         | 264  | 2     | 0    | 269        | 7                         | 145  | 9     | 0    | 161        | 9                          | 0    | 7     | 0    | 16         | 2                             | 1    | 2     | 0    | 5          | 451        |
| Total Volume                                               | 17                        | 1176 | 5     | 0    | 1198       | 17                        | 608  | 25    | 0    | 650        | 24                         | 1    | 25    | 0    | 50         | 7                             | 2    | 9     | 0    | 18         | 1916       |
| % App. Total                                               | 1.4                       | 98.2 | 0.4   | 0    |            | 2.6                       | 93.5 | 3.8   | 0    |            | 48                         | 2    | 50    | 0    |            | 38.9                          | 11.1 | 50    | 0    |            |            |
| PHF                                                        | .850                      | .927 | .625  | .000 | .930       | .607                      | .927 | .694  | .000 | .934       | .667                       | .250 | .781  | .000 | .781       | .583                          | .500 | .750  | .000 | .750       | .972       |



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Tel: (770) 578-5158 Fax: (770) 578-8159

email: reliabletraffic@msn.com

TMC Data

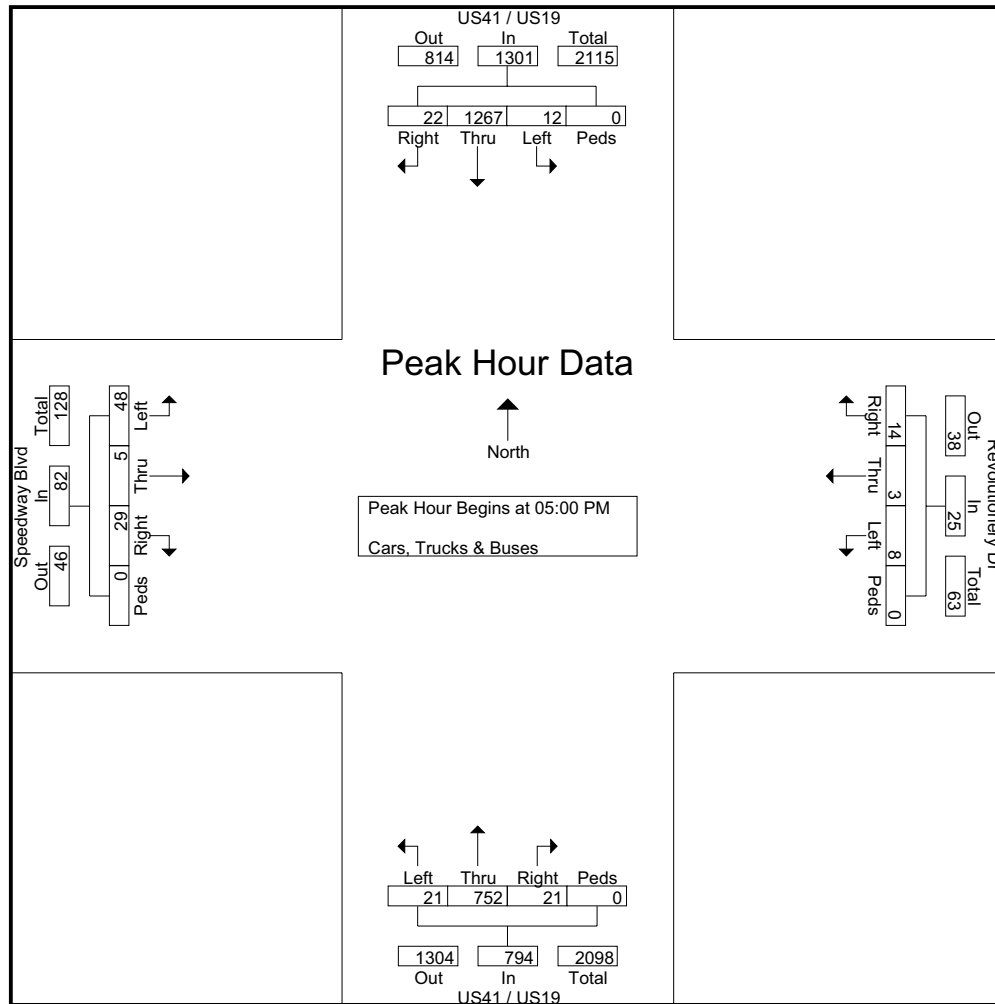
File Name : 22700001

Site Code : 22700001

Start Date : 6/7/2007

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|                                                            | US41 / US19<br>Northbound |      |       |      |            | US41 / US19<br>Southbound |      |       |      |            | Speedway Blvd<br>Eastbound |      |       |      |            | Revolutionary Dr<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|---------------------------|------|-------|------|------------|---------------------------|------|-------|------|------------|----------------------------|------|-------|------|------------|-------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                      | Thru | Right | Peds | App. Total | Left                      | Thru | Right | Peds | App. Total | Left                       | Thru | Right | Peds | App. Total | Left                          | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                           |      |       |      |            |                           |      |       |      |            |                            |      |       |      |            |                               |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM       |                           |      |       |      |            |                           |      |       |      |            |                            |      |       |      |            |                               |      |       |      |            |            |
| 05:00 PM                                                   | 6                         | 206  | 4     | 0    | 216        | 1                         | 307  | 6     | 0    | 314        | 18                         | 1    | 9     | 0    | 28         | 1                             | 0    | 3     | 0    | 4          | 562        |
| 05:15 PM                                                   | 4                         | 192  | 7     | 0    | 203        | 3                         | 335  | 7     | 0    | 345        | 12                         | 2    | 8     | 0    | 22         | 2                             | 1    | 4     | 0    | 7          | 577        |
| 05:30 PM                                                   | 5                         | 179  | 6     | 0    | 190        | 3                         | 318  | 5     | 0    | 326        | 10                         | 0    | 5     | 0    | 15         | 1                             | 1    | 3     | 0    | 5          | 536        |
| 05:45 PM                                                   | 6                         | 175  | 4     | 0    | 185        | 5                         | 307  | 4     | 0    | 316        | 8                          | 2    | 7     | 0    | 17         | 4                             | 1    | 4     | 0    | 9          | 527        |
| Total Volume                                               | 21                        | 752  | 21    | 0    | 794        | 12                        | 1267 | 22    | 0    | 1301       | 48                         | 5    | 29    | 0    | 82         | 8                             | 3    | 14    | 0    | 25         | 2202       |
| % App. Total                                               | 2.6                       | 94.7 | 2.6   | 0    |            | 0.9                       | 97.4 | 1.7   | 0    |            | 58.5                       | 6.1  | 35.4  | 0    |            | 32                            | 12   | 56    | 0    |            |            |
| PHF                                                        | .875                      | .913 | .750  | .000 | .919       | .600                      | .946 | .786  | .000 | .943       | .667                       | .625 | .806  | .000 | .732       | .500                          | .750 | .875  | .000 | .694       | .954       |



# Reliable Traffic Data Services, LLC

Tel: (770) 578-5158 Fax: (770) 578-8159

email: reliabletraffic@msn.com

TMC Data

File Name : 22700002

Site Code : 22700002

Start Date : 6/6/2007

Page No : 1

## Groups Printed- Cars, Trucks & Buses

|               | Champions Club<br>Parking Drwy<br>Northbound |      |       |      |            | Mt Pleasant Rd<br>Southbound |      |       |      |            | Speedway Blvd<br>Eastbound |      |       |      |            | Speedway Blvd<br>Westbound |      |       |      |            |            |
|---------------|----------------------------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|----------------------------|------|-------|------|------------|----------------------------|------|-------|------|------------|------------|
| Start Time    | Left                                         | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Left                       | Thru | Right | Peds | App. Total | Left                       | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 0                                            | 0    | 0     | 0    | 0          | 3                            | 1    | 2     | 0    | 6          | 0                          | 4    | 0     | 0    | 4          | 0                          | 3    | 3     | 0    | 6          | 16         |
| 07:15 AM      | 0                                            | 0    | 0     | 0    | 0          | 5                            | 1    | 2     | 0    | 8          | 1                          | 6    | 0     | 0    | 7          | 0                          | 5    | 4     | 0    | 9          | 24         |
| 07:30 AM      | 0                                            | 0    | 1     | 0    | 1          | 6                            | 0    | 4     | 0    | 10         | 0                          | 4    | 0     | 0    | 4          | 1                          | 5    | 2     | 0    | 8          | 23         |
| 07:45 AM      | 0                                            | 0    | 0     | 0    | 0          | 6                            | 1    | 5     | 0    | 12         | 0                          | 3    | 0     | 0    | 3          | 0                          | 7    | 3     | 0    | 10         | 25         |
| Total         | 0                                            | 0    | 1     | 0    | 1          | 20                           | 3    | 13    | 0    | 36         | 1                          | 17   | 0     | 0    | 18         | 1                          | 20   | 12    | 0    | 33         | 88         |
| 08:00 AM      | 0                                            | 0    | 0     | 0    | 0          | 5                            | 0    | 2     | 0    | 7          | 1                          | 4    | 1     | 0    | 6          | 0                          | 7    | 2     | 0    | 9          | 22         |
| 08:15 AM      | 0                                            | 0    | 0     | 0    | 0          | 3                            | 1    | 1     | 0    | 5          | 0                          | 7    | 0     | 0    | 7          | 0                          | 4    | 3     | 0    | 7          | 19         |
| 08:30 AM      | 0                                            | 0    | 0     | 0    | 0          | 4                            | 2    | 2     | 0    | 8          | 1                          | 4    | 0     | 0    | 5          | 0                          | 8    | 2     | 0    | 10         | 23         |
| 08:45 AM      | 0                                            | 0    | 0     | 0    | 0          | 3                            | 0    | 1     | 0    | 4          | 0                          | 5    | 0     | 0    | 5          | 0                          | 6    | 2     | 0    | 8          | 17         |
| Total         | 0                                            | 0    | 0     | 0    | 0          | 15                           | 3    | 6     | 0    | 24         | 2                          | 20   | 1     | 0    | 23         | 0                          | 25   | 9     | 0    | 34         | 81         |
| *** BREAK *** |                                              |      |       |      |            |                              |      |       |      |            |                            |      |       |      |            |                            |      |       |      |            |            |
| 04:00 PM      | 0                                            | 1    | 1     | 0    | 2          | 2                            | 0    | 2     | 0    | 4          | 3                          | 16   | 0     | 0    | 19         | 0                          | 11   | 3     | 0    | 14         | 39         |
| 04:15 PM      | 1                                            | 0    | 1     | 0    | 2          | 3                            | 1    | 3     | 0    | 7          | 5                          | 19   | 0     | 0    | 24         | 0                          | 14   | 5     | 0    | 19         | 52         |
| 04:30 PM      | 0                                            | 2    | 0     | 0    | 2          | 2                            | 0    | 2     | 0    | 4          | 6                          | 23   | 0     | 0    | 29         | 1                          | 17   | 5     | 0    | 23         | 58         |
| 04:45 PM      | 0                                            | 0    | 1     | 0    | 1          | 4                            | 0    | 4     | 0    | 8          | 8                          | 28   | 0     | 0    | 36         | 0                          | 19   | 7     | 0    | 26         | 71         |
| Total         | 1                                            | 3    | 3     | 0    | 7          | 11                           | 1    | 11    | 0    | 23         | 22                         | 86   | 0     | 0    | 108        | 1                          | 61   | 20    | 0    | 82         | 220        |
| 05:00 PM      | 1                                            | 1    | 2     | 0    | 4          | 2                            | 1    | 4     | 0    | 7          | 6                          | 21   | 0     | 0    | 27         | 0                          | 15   | 4     | 0    | 19         | 57         |
| 05:15 PM      | 0                                            | 1    | 0     | 0    | 1          | 2                            | 1    | 2     | 0    | 5          | 5                          | 26   | 0     | 0    | 31         | 1                          | 16   | 3     | 0    | 20         | 57         |
| 05:30 PM      | 0                                            | 0    | 1     | 0    | 1          | 1                            | 0    | 1     | 0    | 2          | 4                          | 21   | 0     | 0    | 25         | 0                          | 14   | 6     | 0    | 20         | 48         |
| 05:45 PM      | 0                                            | 1    | 0     | 0    | 1          | 0                            | 0    | 2     | 0    | 2          | 2                          | 17   | 0     | 0    | 19         | 0                          | 11   | 4     | 0    | 15         | 37         |
| Total         | 1                                            | 3    | 3     | 0    | 7          | 5                            | 2    | 9     | 0    | 16         | 17                         | 85   | 0     | 0    | 102        | 1                          | 56   | 17    | 0    | 74         | 199        |
| Grand Total   | 2                                            | 6    | 7     | 0    | 15         | 51                           | 9    | 39    | 0    | 99         | 42                         | 208  | 1     | 0    | 251        | 3                          | 162  | 58    | 0    | 223        | 588        |
| Apprch %      | 13.3                                         | 40   | 46.7  | 0    |            | 51.5                         | 9.1  | 39.4  | 0    |            | 16.7                       | 82.9 | 0.4   | 0    |            | 1.3                        | 72.6 | 26    | 0    |            |            |
| Total %       | 0.3                                          | 1    | 1.2   | 0    | 2.6        | 8.7                          | 1.5  | 6.6   | 0    | 16.8       | 7.1                        | 35.4 | 0.2   | 0    | 42.7       | 0.5                        | 27.6 | 9.9   | 0    | 37.9       |            |

# Reliable Traffic Data Services, LLC

Tel: (770) 578-5158 Fax: (770) 578-8159

email: reliabletraffic@msn.com

TMC Data

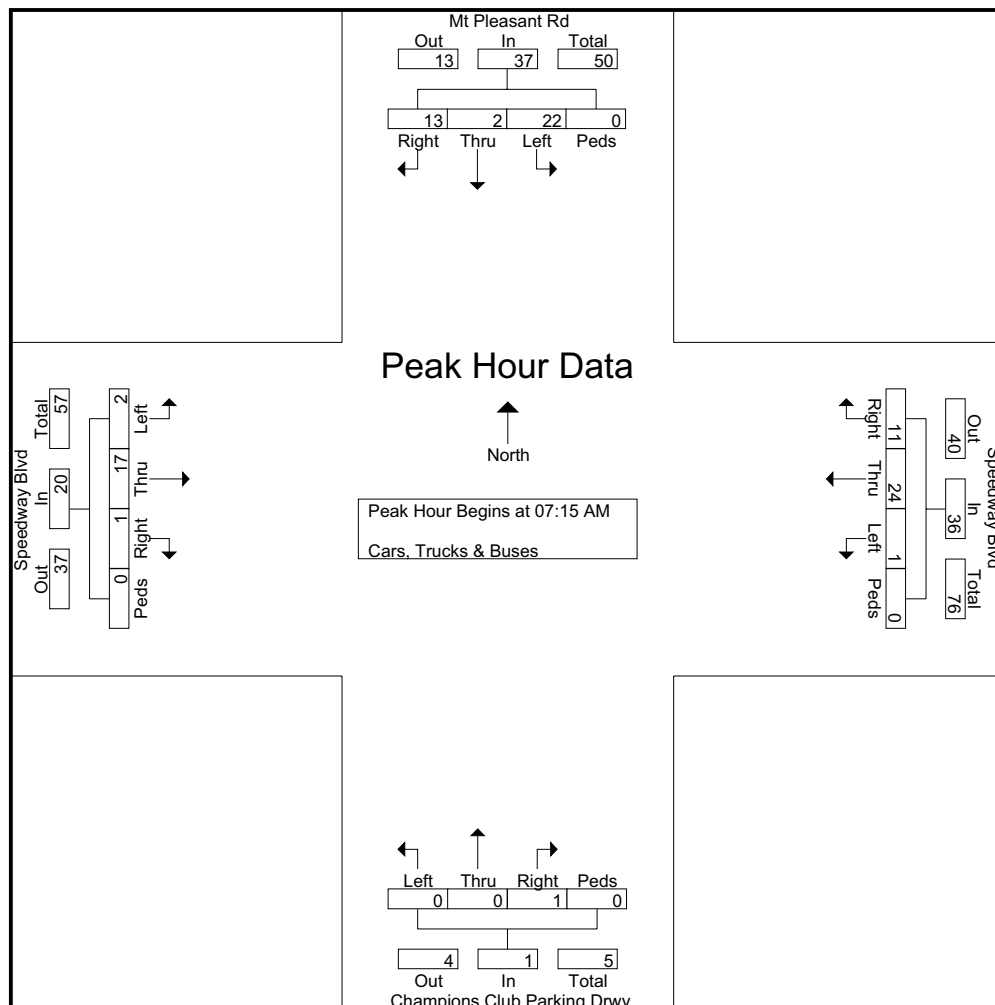
File Name : 22700002

Site Code : 22700002

Start Date : 6/6/2007

Page No : 2

|                                                            | Champions Club<br>Parking Drwy<br>Northbound |      |       |      |            | Mt Pleasant Rd<br>Southbound |      |       |      |            | Speedway Blvd<br>Eastbound |      |       |      |            | Speedway Blvd<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|----------------------------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|----------------------------|------|-------|------|------------|----------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                         | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Left                       | Thru | Right | Peds | App. Total | Left                       | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                                              |      |       |      |            |                              |      |       |      |            |                            |      |       |      |            |                            |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:15 AM       |                                              |      |       |      |            |                              |      |       |      |            |                            |      |       |      |            |                            |      |       |      |            |            |
| 07:15 AM                                                   | 0                                            | 0    | 0     | 0    | 0          | 5                            | 1    | 2     | 0    | 8          | 1                          | 6    | 0     | 0    | 7          | 0                          | 5    | 4     | 0    | 9          | 24         |
| 07:30 AM                                                   | 0                                            | 0    | 1     | 0    | 1          | 6                            | 0    | 4     | 0    | 10         | 0                          | 4    | 0     | 0    | 4          | 1                          | 5    | 2     | 0    | 8          | 23         |
| 07:45 AM                                                   | 0                                            | 0    | 0     | 0    | 0          | 6                            | 1    | 5     | 0    | 12         | 0                          | 3    | 0     | 0    | 3          | 0                          | 7    | 3     | 0    | 10         | 25         |
| 08:00 AM                                                   | 0                                            | 0    | 0     | 0    | 0          | 5                            | 0    | 2     | 0    | 7          | 1                          | 4    | 1     | 0    | 6          | 0                          | 7    | 2     | 0    | 9          | 22         |
| Total Volume                                               | 0                                            | 0    | 1     | 0    | 1          | 22                           | 2    | 13    | 0    | 37         | 2                          | 17   | 1     | 0    | 20         | 1                          | 24   | 11    | 0    | 36         | 94         |
| % App. Total                                               | 0                                            | 0    | 100   | 0    |            | 59.5                         | 5.4  | 35.1  | 0    |            | 10                         | 85   | 5     | 0    |            | 2.8                        | 66.7 | 30.6  | 0    |            |            |
| PHF                                                        | .000                                         | .000 | .250  | .000 | .250       | .917                         | .500 | .650  | .000 | .771       | .500                       | .708 | .250  | .000 | .714       | .250                       | .857 | .688  | .000 | .900       | .940       |



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TMC Data

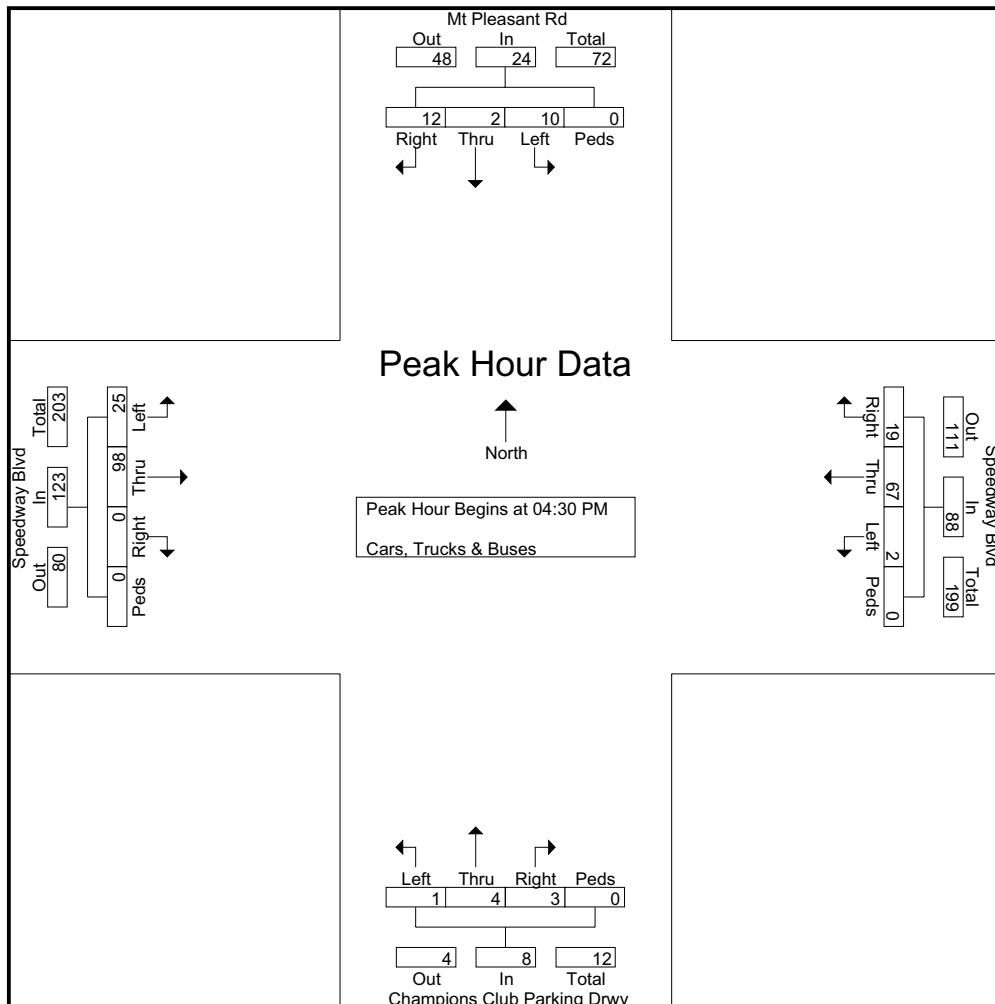
File Name : 22700002

Site Code : 22700002

Start Date : 6/6/2007

Page No : 3

|                                                            | Champions Club<br>Parking Drwy<br>Northbound |      |       |      |            | Mt Pleasant Rd<br>Southbound |      |       |      |            | Speedway Blvd<br>Eastbound |      |       |      |            | Speedway Blvd<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|----------------------------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|----------------------------|------|-------|------|------------|----------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                         | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Left                       | Thru | Right | Peds | App. Total | Left                       | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                                              |      |       |      |            |                              |      |       |      |            |                            |      |       |      |            |                            |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 04:30 PM       |                                              |      |       |      |            |                              |      |       |      |            |                            |      |       |      |            |                            |      |       |      |            |            |
| 04:30 PM                                                   | 0                                            | 2    | 0     | 0    | 2          | 2                            | 0    | 2     | 0    | 4          | 6                          | 23   | 0     | 0    | 29         | 1                          | 17   | 5     | 0    | 23         | 58         |
| 04:45 PM                                                   | 0                                            | 0    | 1     | 0    | 1          | 4                            | 0    | 4     | 0    | 8          | 8                          | 28   | 0     | 0    | 36         | 0                          | 19   | 7     | 0    | 26         | 71         |
| 05:00 PM                                                   | 1                                            | 1    | 2     | 0    | 4          | 2                            | 1    | 4     | 0    | 7          | 6                          | 21   | 0     | 0    | 27         | 0                          | 15   | 4     | 0    | 19         | 57         |
| 05:15 PM                                                   | 0                                            | 1    | 0     | 0    | 1          | 2                            | 1    | 2     | 0    | 5          | 5                          | 26   | 0     | 0    | 31         | 1                          | 16   | 3     | 0    | 20         | 57         |
| Total Volume                                               | 1                                            | 4    | 3     | 0    | 8          | 10                           | 2    | 12    | 0    | 24         | 25                         | 98   | 0     | 0    | 123        | 2                          | 67   | 19    | 0    | 88         | 243        |
| % App. Total                                               | 12.5                                         | 50   | 37.5  | 0    |            | 41.7                         | 8.3  | 50    | 0    |            | 20.3                       | 79.7 | 0     | 0    |            | 2.3                        | 76.1 | 21.6  | 0    |            |            |
| PHF                                                        | .250                                         | .500 | .375  | .000 | .500       | .625                         | .500 | .750  | .000 | .750       | .781                       | .875 | .000  | .000 | .854       | .500                       | .882 | .679  | .000 | .846       | .856       |





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email: reliabletraffic@msn.com

TMC Data

File Name : 22700003

Site Code : 22700003

Start Date : 6/7/2007

Page No : 1

## Groups Printed- Cars, Trucks & Buses

|               | Speedway Blvd Northbound |      |       |      |            | Speedway Blvd Southbound |      |       |      |            | Selfridge Rd (Gravel) Eastbound |      |       |      |            | Westbound |      |       |      |            |            |
|---------------|--------------------------|------|-------|------|------------|--------------------------|------|-------|------|------------|---------------------------------|------|-------|------|------------|-----------|------|-------|------|------------|------------|
| Start Time    | Left                     | Thru | Right | Peds | App. Total | Left                     | Thru | Right | Peds | App. Total | Left                            | Thru | Right | Peds | App. Total | Left      | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 0                        | 9    | 0     | 0    | 9          | 0                        | 4    | 0     | 0    | 4          | 0                               | 0    | 0     | 0    | 0          | 0         | 0    | 0     | 0    | 0          | 13         |
| 07:15 AM      | 0                        | 11   | 0     | 0    | 11         | 0                        | 6    | 1     | 0    | 7          | 1                               | 0    | 0     | 0    | 1          | 0         | 0    | 0     | 0    | 0          | 19         |
| 07:30 AM      | 1                        | 15   | 0     | 0    | 16         | 0                        | 8    | 0     | 0    | 8          | 0                               | 0    | 1     | 0    | 1          | 0         | 0    | 0     | 0    | 0          | 25         |
| 07:45 AM      | 0                        | 12   | 0     | 0    | 12         | 0                        | 10   | 1     | 0    | 11         | 1                               | 0    | 0     | 0    | 1          | 0         | 0    | 0     | 0    | 0          | 24         |
| Total         | 1                        | 47   | 0     | 0    | 48         | 0                        | 28   | 2     | 0    | 30         | 2                               | 0    | 1     | 0    | 3          | 0         | 0    | 0     | 0    | 0          | 81         |
| 08:00 AM      | 0                        | 10   | 0     | 0    | 10         | 0                        | 8    | 0     | 0    | 8          | 0                               | 0    | 0     | 0    | 0          | 0         | 0    | 0     | 0    | 0          | 18         |
| 08:15 AM      | 1                        | 12   | 0     | 0    | 13         | 0                        | 7    | 1     | 0    | 8          | 1                               | 0    | 0     | 0    | 1          | 0         | 0    | 0     | 0    | 0          | 22         |
| 08:30 AM      | 0                        | 9    | 0     | 0    | 9          | 0                        | 6    | 0     | 0    | 6          | 0                               | 0    | 0     | 0    | 0          | 0         | 0    | 0     | 0    | 0          | 15         |
| 08:45 AM      | 0                        | 10   | 0     | 0    | 10         | 0                        | 7    | 0     | 0    | 7          | 1                               | 0    | 0     | 0    | 1          | 0         | 0    | 0     | 0    | 0          | 18         |
| Total         | 1                        | 41   | 0     | 0    | 42         | 0                        | 28   | 1     | 0    | 29         | 2                               | 0    | 0     | 0    | 2          | 0         | 0    | 0     | 0    | 0          | 73         |
| *** BREAK *** |                          |      |       |      |            |                          |      |       |      |            |                                 |      |       |      |            |           |      |       |      |            |            |
| 04:00 PM      | 1                        | 16   | 0     | 0    | 17         | 0                        | 18   | 1     | 0    | 19         | 1                               | 0    | 1     | 0    | 2          | 0         | 0    | 0     | 0    | 0          | 38         |
| 04:15 PM      | 0                        | 18   | 0     | 0    | 18         | 0                        | 23   | 0     | 0    | 23         | 0                               | 0    | 1     | 0    | 1          | 0         | 0    | 0     | 0    | 0          | 42         |
| 04:30 PM      | 0                        | 20   | 0     | 0    | 20         | 0                        | 25   | 1     | 0    | 26         | 1                               | 0    | 0     | 0    | 1          | 0         | 0    | 0     | 0    | 0          | 47         |
| 04:45 PM      | 0                        | 23   | 0     | 0    | 23         | 0                        | 22   | 1     | 0    | 23         | 0                               | 0    | 1     | 0    | 1          | 0         | 0    | 0     | 0    | 0          | 47         |
| Total         | 1                        | 77   | 0     | 0    | 78         | 0                        | 88   | 3     | 0    | 91         | 2                               | 0    | 3     | 0    | 5          | 0         | 0    | 0     | 0    | 0          | 174        |
| 05:00 PM      | 0                        | 21   | 0     | 0    | 21         | 0                        | 27   | 0     | 0    | 27         | 0                               | 0    | 0     | 0    | 0          | 0         | 0    | 0     | 0    | 0          | 48         |
| 05:15 PM      | 1                        | 23   | 0     | 0    | 24         | 0                        | 23   | 1     | 0    | 24         | 1                               | 0    | 0     | 0    | 1          | 0         | 0    | 0     | 0    | 0          | 49         |
| 05:30 PM      | 0                        | 18   | 0     | 0    | 18         | 0                        | 19   | 0     | 0    | 19         | 0                               | 0    | 1     | 0    | 1          | 0         | 0    | 0     | 0    | 0          | 38         |
| 05:45 PM      | 0                        | 15   | 0     | 0    | 15         | 0                        | 16   | 1     | 0    | 17         | 1                               | 0    | 0     | 0    | 1          | 0         | 0    | 0     | 0    | 0          | 33         |
| Total         | 1                        | 77   | 0     | 0    | 78         | 0                        | 85   | 2     | 0    | 87         | 2                               | 0    | 1     | 0    | 3          | 0         | 0    | 0     | 0    | 0          | 168        |
| Grand Total   | 4                        | 242  | 0     | 0    | 246        | 0                        | 229  | 8     | 0    | 237        | 8                               | 0    | 5     | 0    | 13         | 0         | 0    | 0     | 0    | 0          | 496        |
| Apprch %      | 1.6                      | 98.4 | 0     | 0    |            | 0                        | 96.6 | 3.4   | 0    |            | 61.5                            | 0    | 38.5  | 0    |            | 0         | 0    | 0     | 0    |            |            |
| Total %       | 0.8                      | 48.8 | 0     | 0    | 49.6       | 0                        | 46.2 | 1.6   | 0    | 47.8       | 1.6                             | 0    | 1     | 0    | 2.6        | 0         | 0    | 0     | 0    | 0          |            |

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TMC Data

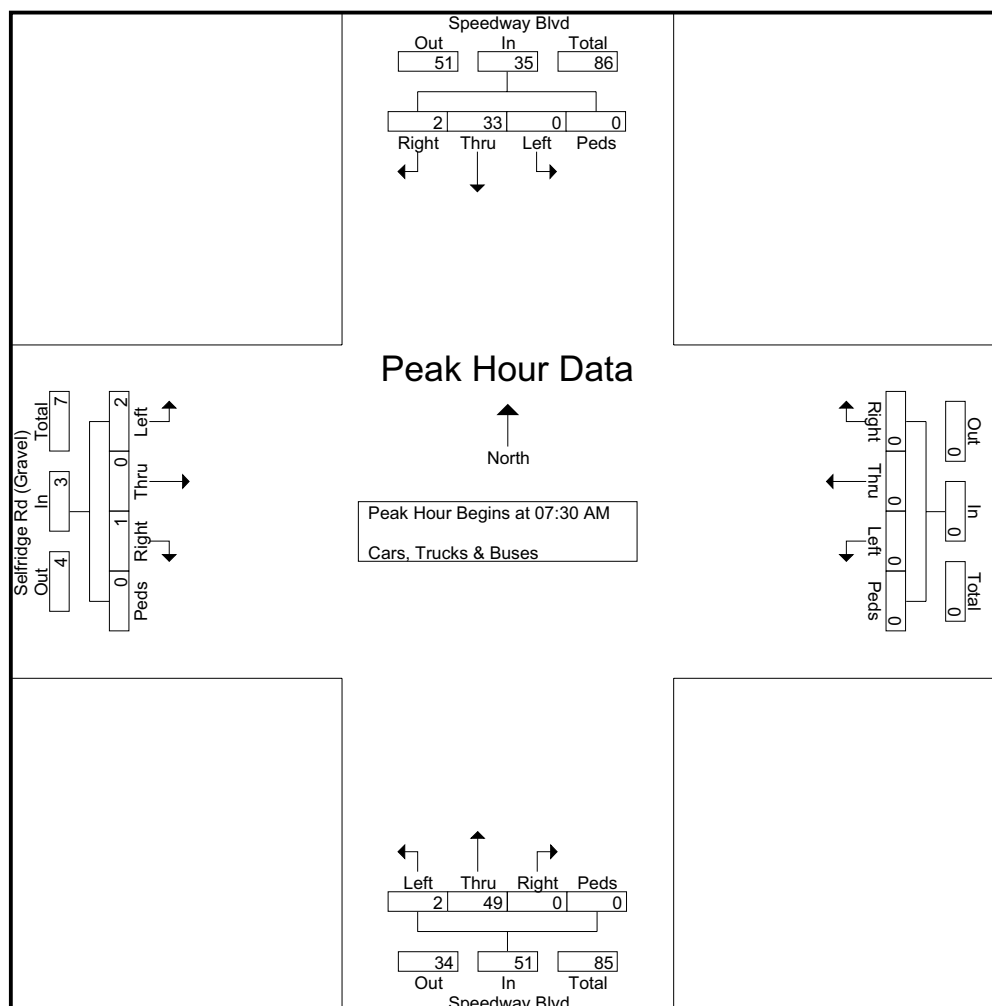
File Name : 22700003

Site Code : 22700003

Start Date : 6/7/2007

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|                                                            | Speedway Blvd Northbound |      |       |      |            | Speedway Blvd Southbound |      |       |      |            | Selfridge Rd (Gravel) Eastbound |      |       |      |            | Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------|------|-------|------|------------|--------------------------|------|-------|------|------------|---------------------------------|------|-------|------|------------|-----------|------|-------|------|------------|------------|
| Start Time                                                 | Left                     | Thru | Right | Peds | App. Total | Left                     | Thru | Right | Peds | App. Total | Left                            | Thru | Right | Peds | App. Total | Left      | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                          |      |       |      |            |                          |      |       |      |            |                                 |      |       |      |            |           |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM       |                          |      |       |      |            |                          |      |       |      |            |                                 |      |       |      |            |           |      |       |      |            |            |
| 07:30 AM                                                   | 1                        | 15   | 0     | 0    | 16         | 0                        | 8    | 0     | 0    | 8          | 0                               | 0    | 1     | 0    | 1          | 0         | 0    | 0     | 0    | 0          | 25         |
| 07:45 AM                                                   | 0                        | 12   | 0     | 0    | 12         | 0                        | 10   | 1     | 0    | 11         | 1                               | 0    | 0     | 0    | 1          | 0         | 0    | 0     | 0    | 0          | 24         |
| 08:00 AM                                                   | 0                        | 10   | 0     | 0    | 10         | 0                        | 8    | 0     | 0    | 8          | 0                               | 0    | 0     | 0    | 0          | 0         | 0    | 0     | 0    | 0          | 18         |
| 08:15 AM                                                   | 1                        | 12   | 0     | 0    | 13         | 0                        | 7    | 1     | 0    | 8          | 1                               | 0    | 0     | 0    | 1          | 0         | 0    | 0     | 0    | 0          | 22         |
| Total Volume                                               | 2                        | 49   | 0     | 0    | 51         | 0                        | 33   | 2     | 0    | 35         | 2                               | 0    | 1     | 0    | 3          | 0         | 0    | 0     | 0    | 0          | 89         |
| % App. Total                                               | 3.9                      | 96.1 | 0     | 0    |            | 0                        | 94.3 | 5.7   | 0    |            | 66.7                            | 0    | 33.3  | 0    |            | 0         | 0    | 0     | 0    |            |            |
| PHF                                                        | .500                     | .817 | .000  | .000 | .797       | .000                     | .825 | .500  | .000 | .795       | .500                            | .000 | .250  | .000 | .750       | .000      | .000 | .000  | .000 | .000       | .890       |



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TMC Data

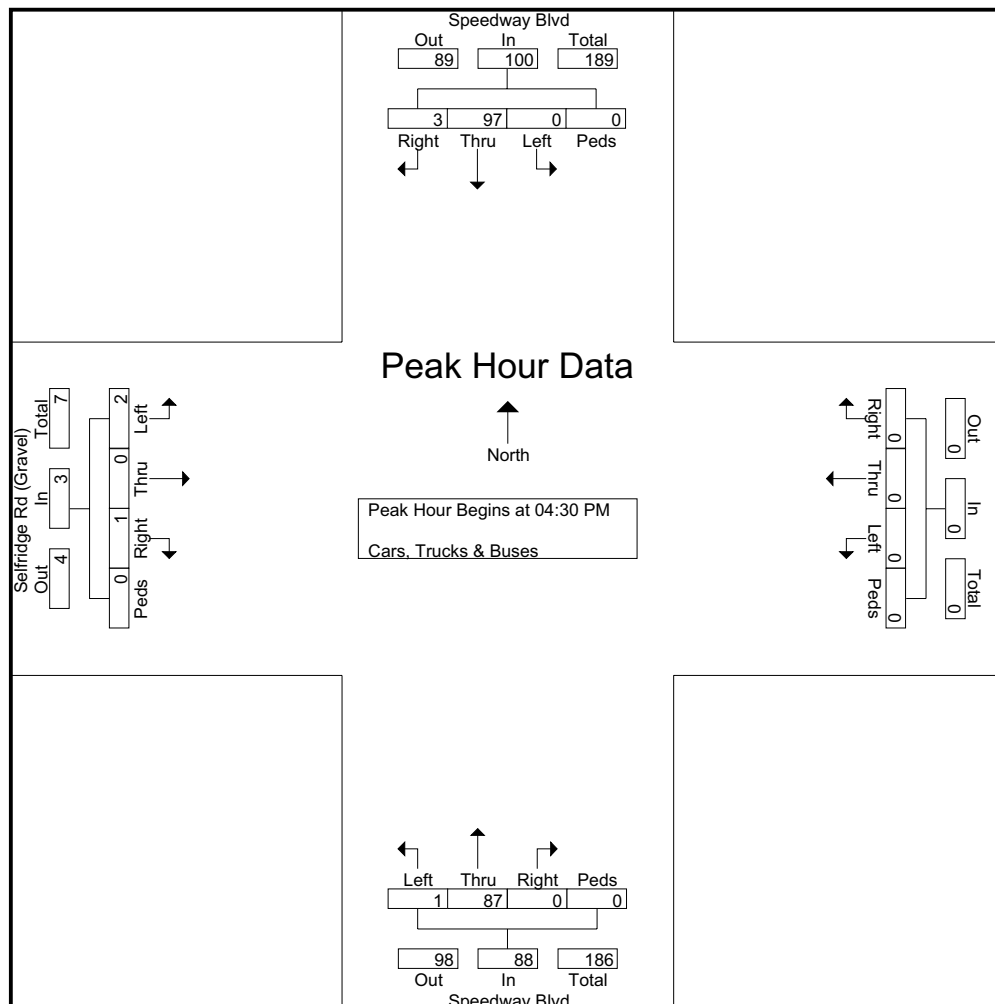
File Name : 22700003

Site Code : 22700003

Start Date : 6/7/2007

Page No : 3

|                                                            | Speedway Blvd Northbound |      |       |      |            | Speedway Blvd Southbound |      |       |      |            | Selfridge Rd (Gravel) Eastbound |      |       |      |            | Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------|------|-------|------|------------|--------------------------|------|-------|------|------------|---------------------------------|------|-------|------|------------|-----------|------|-------|------|------------|------------|
| Start Time                                                 | Left                     | Thru | Right | Peds | App. Total | Left                     | Thru | Right | Peds | App. Total | Left                            | Thru | Right | Peds | App. Total | Left      | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                          |      |       |      |            |                          |      |       |      |            |                                 |      |       |      |            |           |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 04:30 PM       |                          |      |       |      |            |                          |      |       |      |            |                                 |      |       |      |            |           |      |       |      |            |            |
| 04:30 PM                                                   | 0                        | 20   | 0     | 0    | 20         | 0                        | 25   | 1     | 0    | 26         | 1                               | 0    | 0     | 0    | 1          | 0         | 0    | 0     | 0    | 0          | 47         |
| 04:45 PM                                                   | 0                        | 23   | 0     | 0    | 23         | 0                        | 22   | 1     | 0    | 23         | 0                               | 0    | 1     | 0    | 1          | 0         | 0    | 0     | 0    | 0          | 47         |
| 05:00 PM                                                   | 0                        | 21   | 0     | 0    | 21         | 0                        | 27   | 0     | 0    | 27         | 0                               | 0    | 0     | 0    | 0          | 0         | 0    | 0     | 0    | 0          | 48         |
| 05:15 PM                                                   | 1                        | 23   | 0     | 0    | 24         | 0                        | 23   | 1     | 0    | 24         | 1                               | 0    | 0     | 0    | 1          | 0         | 0    | 0     | 0    | 0          | 49         |
| Total Volume                                               | 1                        | 87   | 0     | 0    | 88         | 0                        | 97   | 3     | 0    | 100        | 2                               | 0    | 1     | 0    | 3          | 0         | 0    | 0     | 0    | 0          | 191        |
| % App. Total                                               | 1.1                      | 98.9 | 0     | 0    |            | 0                        | 97   | 3     | 0    |            | 66.7                            | 0    | 33.3  | 0    |            | 0         | 0    | 0     | 0    |            |            |
| PHF                                                        | .250                     | .946 | .000  | .000 | .917       | .000                     | .898 | .750  | .000 | .926       | .500                            | .000 | .250  | .000 | .750       | .000      | .000 | .000  | .000 | .000       | .974       |



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email: reliabletraffic@msn.com

TMC Data

File Name : 22700004

Site Code : 22700004

Start Date : 6/7/2007

Page No : 1

## Groups Printed- Cars, Trucks & Buses

|               | Northbound |      |       |      |            | Speedway Blvd<br>Southbound |      |       |      |            | Woolsey Rd<br>Eastbound |      |       |      |            | Woolsey Rd<br>Westbound |      |       |      |            |            |
|---------------|------------|------|-------|------|------------|-----------------------------|------|-------|------|------------|-------------------------|------|-------|------|------------|-------------------------|------|-------|------|------------|------------|
| Start Time    | Left       | Thru | Right | Peds | App. Total | Left                        | Thru | Right | Peds | App. Total | Left                    | Thru | Right | Peds | App. Total | Left                    | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 0          | 0    | 0     | 0    | 0          | 3                           | 0    | 1     | 0    | 4          | 4                       | 23   | 0     | 0    | 27         | 0                       | 25   | 4     | 0    | 29         | 60         |
| 07:15 AM      | 0          | 0    | 0     | 0    | 0          | 4                           | 0    | 2     | 0    | 6          | 5                       | 25   | 0     | 0    | 30         | 0                       | 31   | 6     | 0    | 37         | 73         |
| 07:30 AM      | 0          | 0    | 0     | 0    | 0          | 5                           | 0    | 3     | 0    | 8          | 7                       | 28   | 0     | 0    | 35         | 0                       | 28   | 8     | 0    | 36         | 79         |
| 07:45 AM      | 0          | 0    | 0     | 0    | 0          | 3                           | 0    | 2     | 0    | 5          | 5                       | 31   | 0     | 0    | 36         | 0                       | 30   | 9     | 0    | 39         | 80         |
| Total         | 0          | 0    | 0     | 0    | 0          | 15                          | 0    | 8     | 0    | 23         | 21                      | 107  | 0     | 0    | 128        | 0                       | 114  | 27    | 0    | 141        | 292        |
| 08:00 AM      |            |      |       |      |            |                             |      |       |      |            |                         |      |       |      |            |                         |      |       |      |            |            |
| 08:15 AM      | 0          | 0    | 0     | 0    | 0          | 3                           | 0    | 4     | 0    | 7          | 6                       | 21   | 0     | 0    | 27         | 0                       | 26   | 6     | 0    | 32         | 66         |
| 08:30 AM      | 0          | 0    | 0     | 0    | 0          | 3                           | 0    | 2     | 0    | 5          | 3                       | 19   | 0     | 0    | 22         | 0                       | 23   | 4     | 0    | 27         | 54         |
| 08:45 AM      | 0          | 0    | 0     | 0    | 0          | 2                           | 0    | 3     | 0    | 5          | 2                       | 16   | 0     | 0    | 18         | 0                       | 19   | 5     | 0    | 24         | 47         |
| Total         | 0          | 0    | 0     | 0    | 0          | 12                          | 0    | 10    | 0    | 22         | 15                      | 82   | 0     | 0    | 97         | 0                       | 92   | 23    | 0    | 115        | 234        |
| *** BREAK *** |            |      |       |      |            |                             |      |       |      |            |                         |      |       |      |            |                         |      |       |      |            |            |
| 04:00 PM      | 0          | 0    | 0     | 0    | 0          | 13                          | 0    | 10    | 0    | 23         | 4                       | 15   | 0     | 0    | 19         | 0                       | 27   | 10    | 0    | 37         | 79         |
| 04:15 PM      | 0          | 0    | 0     | 0    | 0          | 13                          | 0    | 13    | 0    | 26         | 3                       | 18   | 0     | 0    | 21         | 0                       | 29   | 12    | 0    | 41         | 88         |
| 04:30 PM      | 0          | 0    | 0     | 0    | 0          | 17                          | 0    | 16    | 0    | 33         | 5                       | 20   | 0     | 0    | 25         | 0                       | 32   | 15    | 0    | 47         | 105        |
| 04:45 PM      | 0          | 0    | 0     | 0    | 0          | 16                          | 0    | 15    | 0    | 31         | 6                       | 23   | 0     | 0    | 29         | 0                       | 29   | 17    | 0    | 46         | 106        |
| Total         | 0          | 0    | 0     | 0    | 0          | 59                          | 0    | 54    | 0    | 113        | 18                      | 76   | 0     | 0    | 94         | 0                       | 117  | 54    | 0    | 171        | 378        |
| 05:00 PM      |            |      |       |      |            |                             |      |       |      |            |                         |      |       |      |            |                         |      |       |      |            |            |
| 05:15 PM      | 0          | 0    | 0     | 0    | 0          | 15                          | 0    | 14    | 0    | 29         | 3                       | 22   | 0     | 0    | 25         | 0                       | 32   | 17    | 0    | 49         | 103        |
| 05:30 PM      | 0          | 0    | 0     | 0    | 0          | 13                          | 0    | 12    | 0    | 25         | 5                       | 21   | 0     | 0    | 26         | 0                       | 31   | 15    | 0    | 46         | 97         |
| 05:45 PM      | 0          | 0    | 0     | 0    | 0          | 10                          | 0    | 10    | 0    | 20         | 4                       | 19   | 0     | 0    | 23         | 0                       | 32   | 11    | 0    | 43         | 86         |
| Total         | 0          | 0    | 0     | 0    | 0          | 56                          | 0    | 52    | 0    | 108        | 16                      | 88   | 0     | 0    | 104        | 0                       | 130  | 63    | 0    | 193        | 405        |
| Grand Total   | 0          | 0    | 0     | 0    | 0          | 142                         | 0    | 124   | 0    | 266        | 70                      | 353  | 0     | 0    | 423        | 0                       | 453  | 167   | 0    | 620        | 1309       |
| Apprch %      | 0          | 0    | 0     | 0    |            | 53.4                        | 0    | 46.6  | 0    |            | 16.5                    | 83.5 | 0     | 0    |            | 0                       | 73.1 | 26.9  | 0    |            |            |
| Total %       | 0          | 0    | 0     | 0    | 0          | 10.8                        | 0    | 9.5   | 0    | 20.3       | 5.3                     | 27   | 0     | 0    | 32.3       | 0                       | 34.6 | 12.8  | 0    | 47.4       |            |

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TMC Data

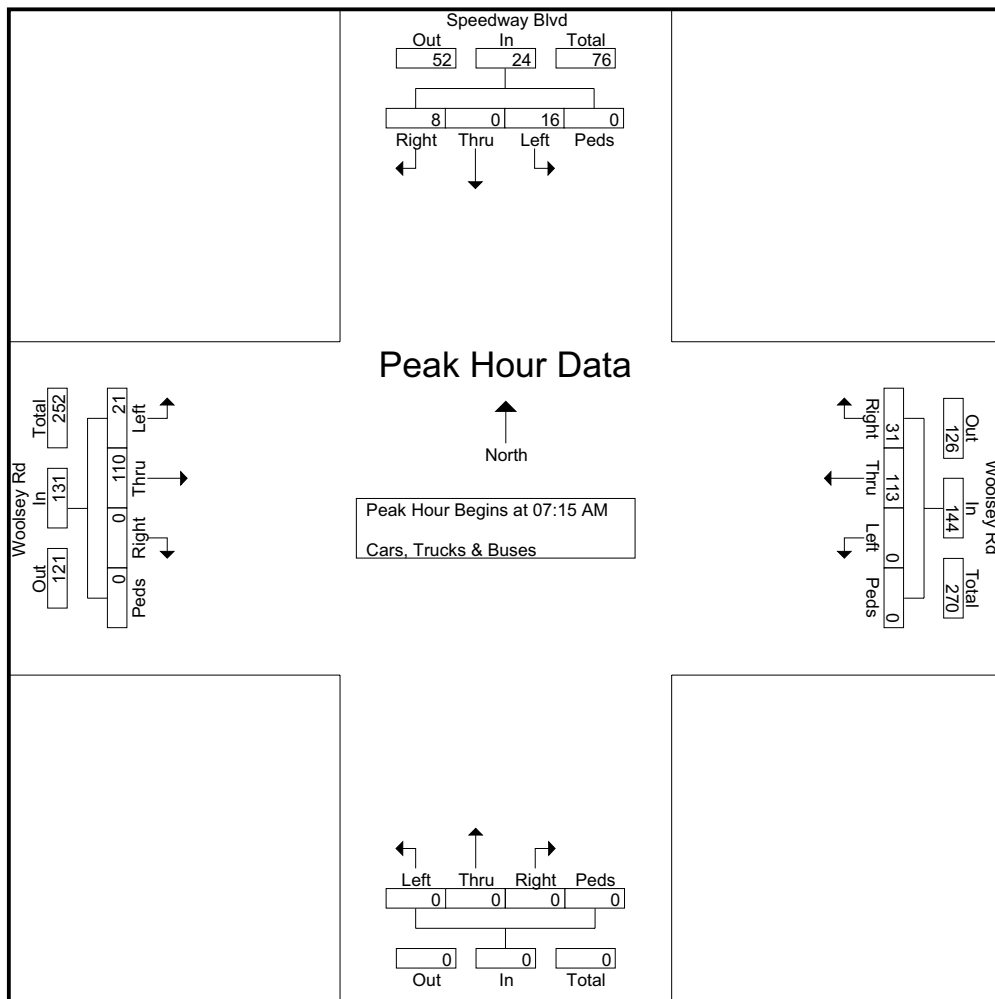
File Name : 22700004

Site Code : 22700004

Start Date : 6/7/2007

Page No : 2

|                                                            | Northbound |      |       |      |            | Speedway Blvd Southbound |      |       |      |            | Woolsey Rd Eastbound |      |       |      |            | Woolsey Rd Westbound |      |       |      |            |            |
|------------------------------------------------------------|------------|------|-------|------|------------|--------------------------|------|-------|------|------------|----------------------|------|-------|------|------------|----------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left       | Thru | Right | Peds | App. Total | Left                     | Thru | Right | Peds | App. Total | Left                 | Thru | Right | Peds | App. Total | Left                 | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |            |      |       |      |            |                          |      |       |      |            |                      |      |       |      |            |                      |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:15 AM       |            |      |       |      |            |                          |      |       |      |            |                      |      |       |      |            |                      |      |       |      |            |            |
| 07:15 AM                                                   | 0          | 0    | 0     | 0    | 0          | 4                        | 0    | 2     | 0    | 6          | 5                    | 25   | 0     | 0    | 30         | 0                    | 31   | 6     | 0    | 37         | 73         |
| 07:30 AM                                                   | 0          | 0    | 0     | 0    | 0          | 5                        | 0    | 3     | 0    | 8          | 7                    | 28   | 0     | 0    | 35         | 0                    | 28   | 8     | 0    | 36         | 79         |
| 07:45 AM                                                   | 0          | 0    | 0     | 0    | 0          | 3                        | 0    | 2     | 0    | 5          | 5                    | 31   | 0     | 0    | 36         | 0                    | 30   | 9     | 0    | 39         | 80         |
| 08:00 AM                                                   | 0          | 0    | 0     | 0    | 0          | 4                        | 0    | 1     | 0    | 5          | 4                    | 26   | 0     | 0    | 30         | 0                    | 24   | 8     | 0    | 32         | 67         |
| Total Volume                                               | 0          | 0    | 0     | 0    | 0          | 16                       | 0    | 8     | 0    | 24         | 21                   | 110  | 0     | 0    | 131        | 0                    | 113  | 31    | 0    | 144        | 299        |
| % App. Total                                               |            |      |       |      |            | 66.7                     |      | 33.3  |      |            |                      |      |       |      |            | 78.5                 | 21.5 |       |      |            |            |
| PHF                                                        | .000       | .000 | .000  | .000 | .000       | .800                     | .000 | .667  | .000 | .750       | .750                 | .887 | .000  | .000 | .910       | .000                 | .911 | .861  | .000 | .923       | .934       |



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TMC Data

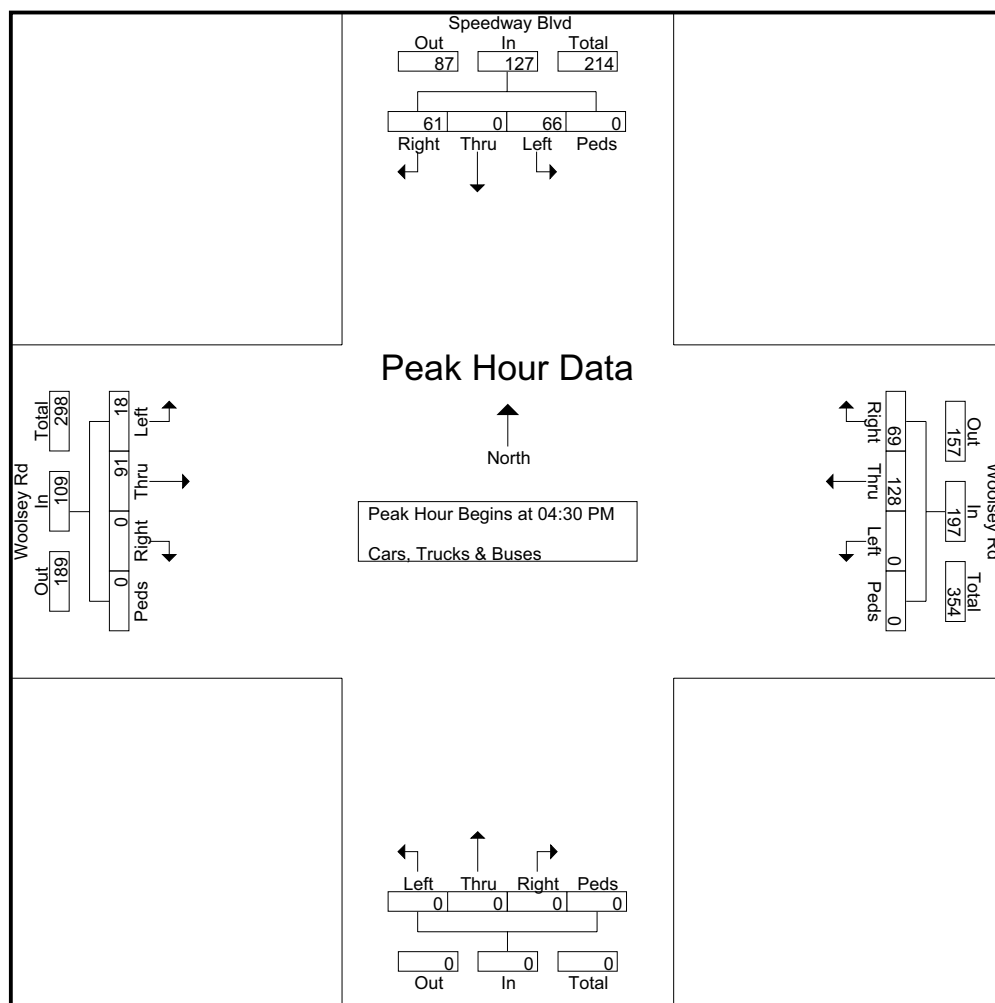
File Name : 22700004

Site Code : 22700004

Start Date : 6/7/2007

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|                                                            | Northbound |      |       |      |            | Speedway Blvd<br>Southbound |      |       |      |            | Woolsey Rd<br>Eastbound |      |       |      |            | Woolsey Rd<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|------------|------|-------|------|------------|-----------------------------|------|-------|------|------------|-------------------------|------|-------|------|------------|-------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left       | Thru | Right | Peds | App. Total | Left                        | Thru | Right | Peds | App. Total | Left                    | Thru | Right | Peds | App. Total | Left                    | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |            |      |       |      |            |                             |      |       |      |            |                         |      |       |      |            |                         |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 04:30 PM       |            |      |       |      |            |                             |      |       |      |            |                         |      |       |      |            |                         |      |       |      |            |            |
| 04:30 PM                                                   | 0          | 0    | 0     | 0    | 0          | 17                          | 0    | 16    | 0    | 33         | 5                       | 20   | 0     | 0    | 25         | 0                       | 32   | 15    | 0    | 47         | 105        |
| 04:45 PM                                                   | 0          | 0    | 0     | 0    | 0          | 16                          | 0    | 15    | 0    | 31         | 6                       | 23   | 0     | 0    | 29         | 0                       | 29   | 17    | 0    | 46         | 106        |
| 05:00 PM                                                   | 0          | 0    | 0     | 0    | 0          | 18                          | 0    | 16    | 0    | 34         | 4                       | 26   | 0     | 0    | 30         | 0                       | 35   | 20    | 0    | 55         | 119        |
| 05:15 PM                                                   | 0          | 0    | 0     | 0    | 0          | 15                          | 0    | 14    | 0    | 29         | 3                       | 22   | 0     | 0    | 25         | 0                       | 32   | 17    | 0    | 49         | 103        |
| Total Volume                                               | 0          | 0    | 0     | 0    | 0          | 66                          | 0    | 61    | 0    | 127        | 18                      | 91   | 0     | 0    | 109        | 0                       | 128  | 69    | 0    | 197        | 433        |
| % App. Total                                               |            |      |       |      |            |                             |      |       |      |            | 16.5                    | 83.5 |       |      |            |                         |      |       |      |            |            |
| PHF                                                        | .000       | .000 | .000  | .000 | .000       | .917                        | .000 | .953  | .000 | .934       | .750                    | .875 | .000  | .000 | .908       | .000                    | .914 | .863  | .000 | .895       | .910       |



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Tel: (770) 578-5158 Fax: (770) 578-8159

email: reliabletraffic@msn.com

TMC Data

File Name : 22700005

Site Code : 22700005

Start Date : 6/6/2007

Page No : 1

## Groups Printed- Cars, Trucks & Buses

|               | Northbound |      |       |      |            | Selfridge Rd (Gravel)<br>Southbound |      |       |      |            | Lower Woolsey Rd<br>Eastbound |      |       |      |            | Woolsey Rd<br>Westbound |      |       |      |            |            |
|---------------|------------|------|-------|------|------------|-------------------------------------|------|-------|------|------------|-------------------------------|------|-------|------|------------|-------------------------|------|-------|------|------------|------------|
| Start Time    | Left       | Thru | Right | Peds | App. Total | Left                                | Thru | Right | Peds | App. Total | Left                          | Thru | Right | Peds | App. Total | Left                    | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 0          | 0    | 0     | 0    | 0          | 0                                   | 0    | 0     | 0    | 0          | 0                             | 26   | 0     | 0    | 26         | 0                       | 26   | 0     | 0    | 26         | 52         |
| 07:15 AM      | 0          | 0    | 0     | 0    | 0          | 0                                   | 0    | 0     | 0    | 0          | 0                             | 32   | 0     | 0    | 32         | 0                       | 29   | 0     | 0    | 29         | 61         |
| 07:30 AM      | 0          | 0    | 0     | 0    | 0          | 0                                   | 0    | 1     | 0    | 1          | 0                             | 37   | 0     | 0    | 37         | 0                       | 33   | 0     | 0    | 33         | 71         |
| 07:45 AM      | 0          | 0    | 0     | 0    | 0          | 0                                   | 0    | 0     | 0    | 0          | 0                             | 34   | 0     | 0    | 34         | 0                       | 30   | 0     | 0    | 30         | 64         |
| Total         | 0          | 0    | 0     | 0    | 0          | 0                                   | 0    | 1     | 0    | 1          | 0                             | 129  | 0     | 0    | 129        | 0                       | 118  | 0     | 0    | 118        | 248        |
| 08:00 AM      |            |      |       |      |            |                                     |      |       |      |            |                               |      |       |      |            |                         |      |       |      |            |            |
| 08:15 AM      | 0          | 0    | 0     | 0    | 0          | 0                                   | 0    | 0     | 0    | 0          | 0                             | 23   | 0     | 0    | 23         | 0                       | 25   | 0     | 0    | 25         | 48         |
| 08:30 AM      | 0          | 0    | 0     | 0    | 0          | 0                                   | 0    | 1     | 0    | 1          | 0                             | 19   | 0     | 0    | 19         | 0                       | 22   | 0     | 0    | 22         | 42         |
| 08:45 AM      | 0          | 0    | 0     | 0    | 0          | 0                                   | 0    | 0     | 0    | 0          | 0                             | 21   | 0     | 0    | 21         | 0                       | 19   | 0     | 0    | 19         | 40         |
| Total         | 0          | 0    | 0     | 0    | 0          | 0                                   | 0    | 2     | 0    | 2          | 0                             | 95   | 0     | 0    | 95         | 0                       | 94   | 0     | 0    | 94         | 191        |
| *** BREAK *** |            |      |       |      |            |                                     |      |       |      |            |                               |      |       |      |            |                         |      |       |      |            |            |
| 04:00 PM      | 0          | 0    | 0     | 0    | 0          | 0                                   | 0    | 1     | 0    | 1          | 0                             | 20   | 0     | 0    | 20         | 0                       | 33   | 0     | 0    | 33         | 54         |
| 04:15 PM      | 0          | 0    | 0     | 0    | 0          | 0                                   | 0    | 1     | 0    | 1          | 0                             | 24   | 0     | 0    | 24         | 0                       | 39   | 1     | 0    | 40         | 65         |
| 04:30 PM      | 0          | 0    | 0     | 0    | 0          | 0                                   | 0    | 0     | 0    | 0          | 0                             | 23   | 0     | 0    | 23         | 0                       | 38   | 0     | 0    | 38         | 61         |
| 04:45 PM      | 0          | 0    | 0     | 0    | 0          | 0                                   | 0    | 0     | 0    | 0          | 0                             | 25   | 0     | 0    | 25         | 0                       | 42   | 0     | 0    | 42         | 67         |
| Total         | 0          | 0    | 0     | 0    | 0          | 0                                   | 0    | 2     | 0    | 2          | 0                             | 92   | 0     | 0    | 92         | 0                       | 152  | 1     | 0    | 153        | 247        |
| 05:00 PM      |            |      |       |      |            |                                     |      |       |      |            |                               |      |       |      |            |                         |      |       |      |            |            |
| 05:15 PM      | 0          | 0    | 0     | 0    | 0          | 0                                   | 0    | 0     | 0    | 0          | 0                             | 29   | 0     | 0    | 29         | 0                       | 42   | 1     | 0    | 43         | 72         |
| 05:30 PM      | 0          | 0    | 0     | 0    | 0          | 0                                   | 0    | 1     | 0    | 1          | 0                             | 26   | 0     | 0    | 26         | 0                       | 39   | 0     | 0    | 39         | 66         |
| 05:45 PM      | 0          | 0    | 0     | 0    | 0          | 0                                   | 0    | 0     | 0    | 0          | 0                             | 23   | 0     | 0    | 23         | 0                       | 37   | 0     | 0    | 37         | 60         |
| Total         | 0          | 0    | 0     | 0    | 0          | 0                                   | 0    | 3     | 0    | 3          | 0                             | 110  | 0     | 0    | 110        | 0                       | 163  | 1     | 0    | 164        | 277        |
| Grand Total   | 0          | 0    | 0     | 0    | 0          | 0                                   | 0    | 8     | 0    | 8          | 0                             | 426  | 0     | 0    | 426        | 0                       | 527  | 2     | 0    | 529        | 963        |
| Apprch %      | 0          | 0    | 0     | 0    |            | 0                                   | 0    | 100   | 0    |            | 0                             | 100  | 0     | 0    |            | 0                       | 99.6 | 0.4   | 0    |            |            |
| Total %       | 0          | 0    | 0     | 0    | 0          | 0                                   | 0    | 0.8   | 0    | 0.8        | 0                             | 44.2 | 0     | 0    | 44.2       | 0                       | 54.7 | 0.2   | 0    | 54.9       |            |

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TMC Data

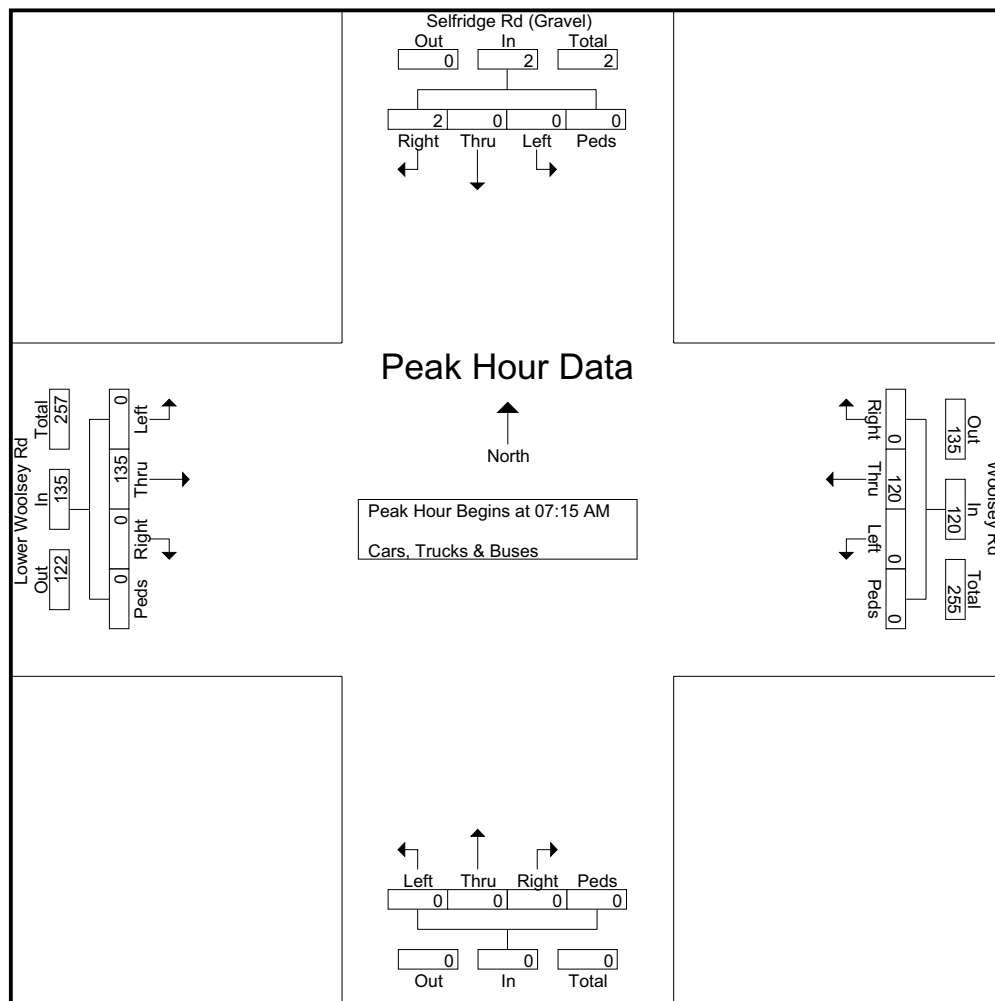
File Name : 22700005

Site Code : 22700005

Start Date : 6/6/2007

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|                                                            | Northbound |      |       |      |            | Selfridge Rd (Gravel)<br>Southbound |      |       |      |            | Lower Woolsey Rd<br>Eastbound |      |       |      |            | Woolsey Rd<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|------------|------|-------|------|------------|-------------------------------------|------|-------|------|------------|-------------------------------|------|-------|------|------------|-------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left       | Thru | Right | Peds | App. Total | Left                                | Thru | Right | Peds | App. Total | Left                          | Thru | Right | Peds | App. Total | Left                    | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |            |      |       |      |            |                                     |      |       |      |            |                               |      |       |      |            |                         |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:15 AM       |            |      |       |      |            |                                     |      |       |      |            |                               |      |       |      |            |                         |      |       |      |            |            |
| 07:15 AM                                                   | 0          | 0    | 0     | 0    | 0          | 0                                   | 0    | 0     | 0    | 0          | 0                             | 32   | 0     | 0    | 32         | 0                       | 29   | 0     | 0    | 29         | 61         |
| 07:30 AM                                                   | 0          | 0    | 0     | 0    | 0          | 0                                   | 0    | 1     | 0    | 1          | 0                             | 37   | 0     | 0    | 37         | 0                       | 33   | 0     | 0    | 33         | 71         |
| 07:45 AM                                                   | 0          | 0    | 0     | 0    | 0          | 0                                   | 0    | 0     | 0    | 0          | 0                             | 34   | 0     | 0    | 34         | 0                       | 30   | 0     | 0    | 30         | 64         |
| 08:00 AM                                                   | 0          | 0    | 0     | 0    | 0          | 0                                   | 0    | 1     | 0    | 1          | 0                             | 32   | 0     | 0    | 32         | 0                       | 28   | 0     | 0    | 28         | 61         |
| Total Volume                                               | 0          | 0    | 0     | 0    | 0          | 0                                   | 0    | 2     | 0    | 2          | 0                             | 135  | 0     | 0    | 135        | 0                       | 120  | 0     | 0    | 120        | 257        |
| % App. Total                                               |            |      |       |      |            |                                     |      | 100   | 0    |            |                               | 100  | 0     | 0    |            |                         | 100  | 0     | 0    |            |            |
| PHF                                                        | .000       | .000 | .000  | .000 | .000       | .000                                | .000 | .500  | .000 | .500       | .000                          | .912 | .000  | .000 | .912       | .000                    | .909 | .000  | .000 | .909       | .905       |





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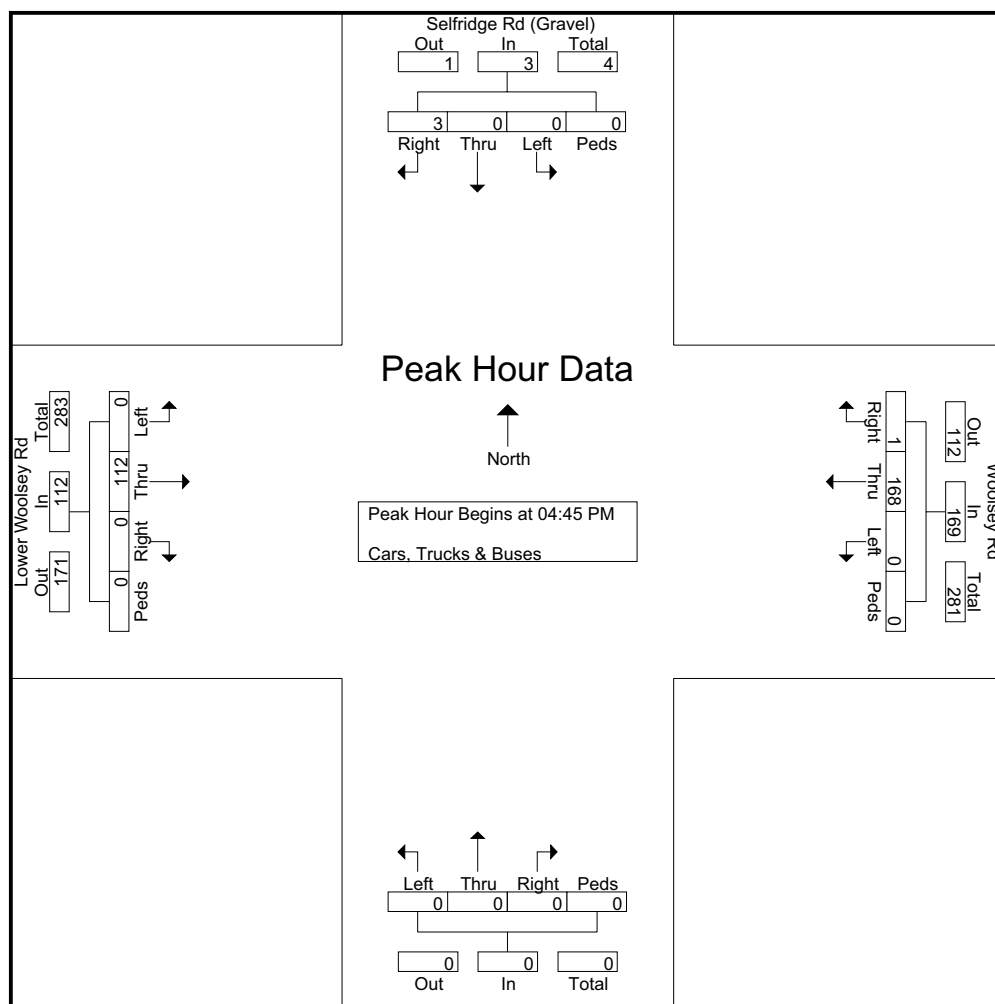
File Name : 22700005

Site Code : 22700005

Start Date : 6/6/2007

Page No : 3

|                                                            | Northbound |      |       |      |            | Selfridge Rd (Gravel)<br>Southbound |      |       |      |            | Lower Woolsey Rd<br>Eastbound |      |       |      |            | Woolsey Rd<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|------------|------|-------|------|------------|-------------------------------------|------|-------|------|------------|-------------------------------|------|-------|------|------------|-------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left       | Thru | Right | Peds | App. Total | Left                                | Thru | Right | Peds | App. Total | Left                          | Thru | Right | Peds | App. Total | Left                    | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |            |      |       |      |            |                                     |      |       |      |            |                               |      |       |      |            |                         |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 04:45 PM       |            |      |       |      |            |                                     |      |       |      |            |                               |      |       |      |            |                         |      |       |      |            |            |
| 04:45 PM                                                   | 0          | 0    | 0     | 0    | 0          | 0                                   | 0    | 0     | 0    | 0          | 0                             | 25   | 0     | 0    | 25         | 0                       | 42   | 0     | 0    | 42         | 67         |
| 05:00 PM                                                   | 0          | 0    | 0     | 0    | 0          | 0                                   | 0    | 2     | 0    | 2          | 0                             | 32   | 0     | 0    | 32         | 0                       | 45   | 0     | 0    | 45         | 79         |
| 05:15 PM                                                   | 0          | 0    | 0     | 0    | 0          | 0                                   | 0    | 0     | 0    | 0          | 0                             | 29   | 0     | 0    | 29         | 0                       | 42   | 1     | 0    | 43         | 72         |
| 05:30 PM                                                   | 0          | 0    | 0     | 0    | 0          | 0                                   | 0    | 1     | 0    | 1          | 0                             | 26   | 0     | 0    | 26         | 0                       | 39   | 0     | 0    | 39         | 66         |
| Total Volume                                               | 0          | 0    | 0     | 0    | 0          | 0                                   | 0    | 3     | 0    | 3          | 0                             | 112  | 0     | 0    | 112        | 0                       | 168  | 1     | 0    | 169        | 284        |
| % App. Total                                               |            |      |       |      |            |                                     |      | 100   | 0    |            |                               | 100  | 0     | 0    |            |                         | 99.4 | 0.6   |      |            |            |
| PHF                                                        | .000       | .000 | .000  | .000 | .000       | .000                                | .000 | .375  | .000 | .375       | .000                          | .875 | .000  | .000 | .875       | .000                    | .933 | .250  | .000 | .939       | .899       |



## **Existing AM Intersection Analysis**

Lanes, Volumes, Timings  
1: Speedway Boulevard & US 19 / US 41

Lanes, Volumes, Timings  
1: Speedway Boulevard & US 19 / US 41

| HCM Unsignalized Intersection Capacity Analysis | Existing AM |
|-------------------------------------------------|-------------|
| 1: Speedway Boulevard & US 19 / US 41           | 6/14/2007   |

| HCM Unsignalized Intersection Capacity Analysis | Existing AM |
|-------------------------------------------------|-------------|
| 1: Speedway Boulevard & US 19 / US 41           | 6/14/2007   |

Lanes, Volumes, Timings  
2: Speedway Boulevard & Mt Pleasant Rd

Existing AM  
6/14/2007



| Lane Group                              | EBL  | EBT  | WBL  | WBT  | NBT  | SBT  |
|-----------------------------------------|------|------|------|------|------|------|
| Lane Group Flow (vph)                   | 4    | 28   | 4    | 44   | 5    | 48   |
| Sign Control                            | Free | Free | Free | Free | Stop | Stop |
| <b>Intersection Summary</b>             |      |      |      |      |      |      |
| Control Type: Unsignalized              |      |      |      |      |      |      |
| Intersection Capacity Utilization 18.8% |      |      |      |      |      |      |
| Analysis Period (min) 15                |      |      |      |      |      |      |
| ICU Level of Service A                  |      |      |      |      |      |      |

HCM Unsignalized Intersection Capacity Analysis  
2: Speedway Boulevard & Mt Pleasant Rd

Existing AM  
6/14/2007



| Movement                          | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|-----------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations               | ↔    | ↔    |      | ↔    | ↔    |      |      | ↔    |      |      | ↔    | ↔    |
| Sign Control                      | Free | Free |      | Free | Free |      |      | Stop |      |      | Stop | Stop |
| Grade                             |      |      |      |      |      |      |      |      |      |      |      |      |
| Volume (veh/h)                    | 2    | 17   | 1    | 1    | 24   | 11   | 0    | 1    | 1    | 22   | 2    | 13   |
| Peak Hour Factor                  | 0.50 | 0.71 | 0.25 | 0.25 | 0.86 | 0.69 | 0.92 | 0.92 | 0.25 | 0.92 | 0.50 | 0.65 |
| Hourly flow rate (vph)            | 4    | 24   | 4    | 4    | 28   | 16   | 0    | 1    | 4    | 24   | 4    | 20   |
| Pedestrians                       |      |      |      |      |      |      |      |      |      |      |      |      |
| Lane Width (ft)                   |      |      |      |      |      |      |      |      |      |      |      |      |
| Walking Speed (ft/s)              |      |      |      |      |      |      |      |      |      |      |      |      |
| Percent Blockage                  |      |      |      |      |      |      |      |      |      |      |      |      |
| Right turn flare (veh)            |      |      |      |      |      |      |      |      |      |      |      |      |
| Median type                       |      |      |      |      |      |      |      | None |      |      |      | None |
| Median storage (veh)              |      |      |      |      |      |      |      |      |      |      |      |      |
| Upstream signal (ft)              |      |      |      |      |      |      |      |      |      |      |      |      |
| pX, platoon unblocked             |      |      |      |      |      |      |      |      |      |      |      |      |
| VC, conflicting volume            |      |      |      |      |      |      |      |      |      |      |      |      |
| VC1, stage 1 conf vol             |      |      |      |      |      |      |      |      |      |      |      |      |
| VC2, stage 2 conf vol             |      |      |      |      |      |      |      |      |      |      |      |      |
| vCu, unblocked vol                |      |      |      |      |      |      |      |      |      |      |      |      |
| tC, single (s)                    |      |      |      |      |      |      |      |      |      |      |      |      |
| tC, 2 stage (s)                   |      |      |      |      |      |      |      |      |      |      |      |      |
| tF (s)                            |      |      |      |      |      |      |      |      |      |      |      |      |
| p0 queue free %                   |      |      |      |      |      |      |      |      |      |      |      |      |
| cM capacity (veh/h)               |      |      |      |      |      |      |      |      |      |      |      |      |
| Direction, Lane #                 | EB 1 | EB 2 | EB 3 | WB 1 | WB 2 | WB 3 | NB 1 | SB 1 |      |      |      |      |
| Volume Total                      | 4    | 16   | 12   | 4    | 19   | 25   | 5    | 48   |      |      |      |      |
| Volume Left                       | 4    | 0    | 0    | 4    | 0    | 0    | 0    | 24   |      |      |      |      |
| Volume Right                      | 0    | 0    | 4    | 0    | 0    | 16   | 4    | 20   |      |      |      |      |
| cSH                               | 1563 | 1700 | 1700 | 1589 | 1700 | 1700 | 993  | 952  |      |      |      |      |
| Volume to Capacity                | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 0.01 | 0.01 | 0.05 |      |      |      |      |
| Queue Length 95th (ft)            | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 4    |      |      |      |      |
| Control Delay (s)                 | 7.3  | 0.0  | 0.0  | 7.3  | 0.0  | 0.0  | 8.6  | 9.0  |      |      |      |      |
| Lane LOS                          | A    | A    | A    | A    | A    | A    | A    | A    |      |      |      |      |
| Approach Delay (s)                | 0.9  |      |      | 0.6  |      |      | 8.6  | 9.0  |      |      |      |      |
| Approach LOS                      |      |      |      |      |      |      | A    | A    |      |      |      |      |
| <b>Intersection Summary</b>       |      |      |      |      |      |      |      |      |      |      |      |      |
| Average Delay                     |      |      |      |      |      |      |      |      |      |      |      |      |
| Intersection Capacity Utilization |      |      |      |      |      |      |      |      |      |      |      |      |
| Analysis Period (min)             |      |      |      |      |      |      |      |      |      |      |      |      |

Lanes, Volumes, Timings  
3: Selfridge Rd & Speedway Boulevard

Existing AM  
6/14/2007



| Lane Group                        | EBL   | NBT  | SBT  |
|-----------------------------------|-------|------|------|
| Lane Group Flow (vph)             | 8     | 64   | 44   |
| Sign Control                      | Stop  | Free | Free |
| Intersection Summary              |       |      |      |
| Control Type: Unsignalized        |       |      |      |
| Intersection Capacity Utilization | 13.3% |      |      |
| Analysis Period (min)             | 15    |      |      |
| ICU Level of Service A            |       |      |      |

HCM Unsignalized Intersection Capacity Analysis  
3: Selfridge Rd & Speedway Boulevard

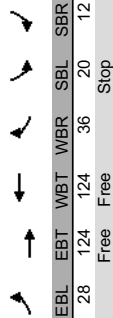
Existing AM  
6/14/2007



| Movement                          | EBL   | EBR  | NBL  | NBT  | SBT  | SBR  |
|-----------------------------------|-------|------|------|------|------|------|
| Lane Configurations               | W     |      |      | W    | W    |      |
| Sign Control                      | Stop  |      |      | Free | Free |      |
| Grade                             | 0%    |      |      | 0%   | 0%   |      |
| Volume (veh/h)                    | 2     | 1    | 2    | 49   | 33   | 2    |
| Peak Hour Factor                  | 0.50  | 0.25 | 0.50 | 0.82 | 0.82 | 0.50 |
| Hourly flow rate (vph)            | 4     | 4    | 4    | 60   | 40   | 4    |
| Pedestrians                       |       |      |      |      |      |      |
| Lane Width (ft)                   |       |      |      |      |      |      |
| Walking Speed (ft/s)              |       |      |      |      |      |      |
| Percent Blockage                  |       |      |      |      |      |      |
| Right turn flare (veh)            |       |      |      |      |      |      |
| Median type                       | None  |      |      |      |      |      |
| Median storage (veh)              |       |      |      |      |      |      |
| Upstream signal (ft)              |       |      |      |      |      |      |
| pX, platoon unblocked             |       |      |      |      |      |      |
| VC, conflicting volume            | 80    | 22   | 44   |      |      |      |
| VC1, stage 1 conf vol             |       |      |      |      |      |      |
| VC2, stage 2 conf vol             |       |      |      |      |      |      |
| VCu, unblocked vol                | 80    | 22   | 44   |      |      |      |
| tC, single (s)                    | 6.8   | 6.9  | 4.1  |      |      |      |
| tC, 2 stage (s)                   |       |      |      |      |      |      |
| tF (s)                            | 3.5   | 3.3  | 2.2  |      |      |      |
| p0 queue free %                   | 100   | 100  | 100  |      |      |      |
| cM capacity (veh/h)               | 911   | 1050 | 1562 |      |      |      |
| <b>Direction, Lane #</b>          |       |      |      |      |      |      |
|                                   | EB 1  | NB 1 | NB 2 | SB 1 | SB 2 |      |
| Volume Total                      | 8     | 24   | 40   | 27   | 17   |      |
| Volume Left                       | 4     | 4    | 0    | 0    | 0    |      |
| Volume Right                      | 4     | 0    | 0    | 0    | 4    |      |
| cSH                               | 975   | 1562 | 1700 | 1700 | 1700 |      |
| Volume to Capacity                | 0.01  | 0.00 | 0.02 | 0.02 | 0.01 |      |
| Queue Length 95th (ft)            | 1     | 0    | 0    | 0    | 0    |      |
| Control Delay (s)                 | 8.7   | 1.2  | 0.0  | 0.0  | 0.0  |      |
| Lane LOS                          | A     | A    |      |      |      |      |
| Approach Delay (s)                | 8.7   | 0.5  |      | 0.0  |      |      |
| Approach LOS                      | A     |      |      |      |      |      |
| <b>Intersection Summary</b>       |       |      |      |      |      |      |
| Average Delay                     | 0.9   |      |      |      |      |      |
| Intersection Capacity Utilization | 13.3% |      |      |      |      |      |
| ICU Level of Service              | A     |      |      |      |      |      |
| Analysis Period (min)             | 15    |      |      |      |      |      |

Lanes, Volumes, Timings  
4: Woolsey Rd & Speedway Boulevard

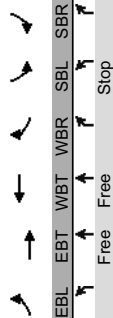
Existing AM  
6/14/2007



| Lane Group                              | EBL  | EBT  | WBT  | WBR  | SBL  | SBR  |
|-----------------------------------------|------|------|------|------|------|------|
| Lane Group Flow (vph)                   | 28   | 124  | 124  | 36   | 20   | 12   |
| Sign Control                            | Free | Free | Free | Free | Stop | Stop |
| <b>Intersection Summary</b>             |      |      |      |      |      |      |
| Control Type: Unsignalized              |      |      |      |      |      |      |
| Intersection Capacity Utilization 17.8% |      |      |      |      |      |      |
| Analysis Period (min) 15                |      |      |      |      |      |      |
| ICU Level of Service A                  |      |      |      |      |      |      |

HCM Unsignalized Intersection Capacity Analysis  
4: Woolsey Rd & Speedway Boulevard

Existing AM  
6/14/2007



| Movement                          | EBL   | EBT  | WBT  | WBR                  | SBL  | SBR  |
|-----------------------------------|-------|------|------|----------------------|------|------|
| Lane Configurations               | ↔     | ↑    | ↑    | ↑                    | ↔    | ↑    |
| Sign Control                      | Free  | Free | Free | Free                 | Stop | Stop |
| Grade                             | 0%    | 0%   | 0%   | 0%                   | 0%   | 0%   |
| Volume (veh/h)                    | 21    | 110  | 113  | 31                   | 16   | 8    |
| Peak Hour Factor                  | 0.75  | 0.89 | 0.91 | 0.86                 | 0.80 | 0.67 |
| Hourly flow rate (vph)            | 28    | 124  | 124  | 36                   | 20   | 12   |
| Pedestrians                       |       |      |      |                      |      |      |
| Lane Width (ft)                   |       |      |      |                      |      |      |
| Walking Speed (ft/s)              |       |      |      |                      |      |      |
| Percent Blockage                  |       |      |      |                      |      |      |
| Right turn flare (veh)            |       |      |      |                      |      |      |
| Median type                       |       |      |      |                      | None |      |
| Median storage (veh)              |       |      |      |                      |      |      |
| Upstream signal (ft)              |       |      |      |                      |      |      |
| pX, platoon unblocked             |       |      |      |                      |      |      |
| VC, conflicting volume            | 124   |      |      |                      | 304  | 124  |
| VC1, stage 1 conf vol             |       |      |      |                      |      |      |
| VC2, stage 2 conf vol             |       |      |      |                      |      |      |
| VCu, unblocked vol                | 124   |      |      |                      | 304  | 124  |
| tC, single (s)                    | 4.1   |      |      |                      | 6.4  | 6.2  |
| tC, 2 stage (s)                   |       |      |      |                      |      |      |
| tF (s)                            | 2.2   |      |      |                      | 3.5  | 3.3  |
| p0 queue free %                   | 98    |      |      |                      | 97   | 99   |
| cM capacity (veh/h)               | 1463  |      |      |                      | 675  | 927  |
| Direction, Lane #                 | EB 1  | EB 2 | WB 1 | WB 2                 | SB 1 | SB 2 |
| Volume Total                      | 28    | 124  | 124  | 36                   | 20   | 12   |
| Volume Left                       | 28    | 0    | 0    | 0                    | 20   | 0    |
| Volume Right                      | 0     | 0    | 0    | 36                   | 0    | 12   |
| cSH                               | 1463  | 1700 | 1700 | 1700                 | 675  | 927  |
| Volume to Capacity                | 0.02  | 0.07 | 0.07 | 0.02                 | 0.03 | 0.01 |
| Queue Length 95th (ft)            | 1     | 0    | 0    | 0                    | 2    | 1    |
| Control Delay (s)                 | 7.5   | 0.0  | 0.0  | 0.0                  | 10.5 | 8.9  |
| Lane LOS                          | A     |      |      |                      | B    | A    |
| Approach Delay (s)                | 1.4   |      | 0.0  |                      | 9.9  |      |
| Approach LOS                      |       |      |      |                      | A    |      |
| <b>Intersection Summary</b>       |       |      |      |                      |      |      |
| Average Delay                     | 1.5   |      |      |                      |      |      |
| Intersection Capacity Utilization | 17.8% |      |      | ICU Level of Service |      |      |
| Analysis Period (min)             | 15    |      |      | A                    |      |      |

Lanes, Volumes, Timings  
5: Lower Woolsey Rd & Selfridge Rd

Existing AM  
6/14/2007



| Lane Group                              | EBT  | WBT  | SBL  |
|-----------------------------------------|------|------|------|
| Lane Group Flow (vph)                   | 148  | 132  | 4    |
| Sign Control                            | Free | Free | Stop |
| <b>Intersection Summary</b>             |      |      |      |
| Control Type: Unsignalized              |      |      |      |
| Intersection Capacity Utilization 17.1% |      |      |      |
| Analysis Period (min) 15                |      |      |      |
| ICU Level of Service A                  |      |      |      |

HCM Unsignalized Intersection Capacity Analysis  
5: Lower Woolsey Rd & Selfridge Rd

Existing AM  
6/14/2007



| Movement                          | EBL  | EBT  | WBT   | WBR  | SBL  | SBR                    |
|-----------------------------------|------|------|-------|------|------|------------------------|
| Lane Configurations               |      | 4    | 1     |      | W    |                        |
| Sign Control                      |      | Free | Free  |      | Stop |                        |
| Grade                             |      | 0%   | 0%    |      | 0%   |                        |
| Volume (veh/h)                    | 0    | 135  | 120   | 0    | 0    | 2                      |
| Peak Hour Factor                  | 0.92 | 0.91 | 0.91  | 0.92 | 0.92 | 0.50                   |
| Hourly flow rate (vph)            | 0    | 148  | 132   | 0    | 0    | 4                      |
| Pedestrians                       |      |      |       |      |      |                        |
| Lane Width (ft)                   |      |      |       |      |      |                        |
| Walking Speed (ft/s)              |      |      |       |      |      |                        |
| Percent Blockage                  |      |      |       |      |      |                        |
| Right turn flare (veh)            |      |      |       |      |      |                        |
| Median type                       |      |      |       |      | None |                        |
| Median storage (veh)              |      |      |       |      |      |                        |
| Upstream signal (ft)              |      |      |       |      |      |                        |
| pX, platoon unblocked             |      |      |       |      |      |                        |
| VC, conflicting volume            | 132  |      |       |      | 280  | 132                    |
| VC1, stage 1 conf vol             |      |      |       |      |      |                        |
| VC2, stage 2 conf vol             |      |      |       |      |      |                        |
| VCu, unblocked vol                | 132  |      |       |      | 280  | 132                    |
| tC, single (s)                    | 4.1  |      |       |      | 6.4  | 6.2                    |
| tC, 2 stage (s)                   |      |      |       |      |      |                        |
| tF (s)                            | 2.2  |      |       |      | 3.5  | 3.3                    |
| p0 queue free %                   | 100  |      |       |      | 100  | 100                    |
| cM capacity (veh/h)               | 1453 |      |       |      | 710  | 917                    |
| Direction, Lane #                 | EB 1 | WB 1 | SB 1  |      |      |                        |
| Volume Total                      | 148  | 132  | 4     |      |      |                        |
| Volume Left                       | 0    | 0    | 0     |      |      |                        |
| Volume Right                      | 0    | 0    | 4     |      |      |                        |
| cSH                               | 1453 | 1700 | 917   |      |      |                        |
| Volume to Capacity                | 0.00 | 0.08 | 0.00  |      |      |                        |
| Queue Length 95th (ft)            | 0    | 0    | 0     |      |      |                        |
| Control Delay (s)                 | 0.0  | 0.0  | 8.9   |      |      |                        |
| Lane LOS                          |      |      | A     |      |      |                        |
| Approach Delay (s)                | 0.0  | 0.0  | 8.9   |      |      |                        |
| Approach LOS                      |      |      | A     |      |      |                        |
| <b>Intersection Summary</b>       |      |      |       |      |      |                        |
| Average Delay                     |      |      | 0.1   |      |      |                        |
| Intersection Capacity Utilization |      |      | 17.1% |      |      | ICU Level of Service A |
| Analysis Period (min)             |      |      | 15    |      |      |                        |

## **Existing PM Intersection Analysis**



Lanes, Volumes, Timings  
1: Speedway Boulevard & US 19 / US 41

Existing PM  
6/14/2007

|                                         | →    | ↗    | ←    | ↖    | ↑    | ↗    | ↖    | ↓    | ↘    |
|-----------------------------------------|------|------|------|------|------|------|------|------|------|
| Lane Group                              | EBT  | EBR  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBR  |
| Lane Group Flow (vph)                   | 63   | 28   | 15   | 12   | 19   | 662  | 23   | 17   | 1067 |
| Sign Control                            | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free |
| <b>Intersection Summary</b>             |      |      |      |      |      |      |      |      |      |
| Control Type: Unsignalized              |      |      |      |      |      |      |      |      |      |
| Intersection Capacity Utilization 44.7% |      |      |      |      |      |      |      |      |      |
| Analysis Period (min) 15                |      |      |      |      |      |      |      |      |      |
| ICU Level of Service A                  |      |      |      |      |      |      |      |      |      |

HCM Unsignalized Intersection Capacity Analysis  
1: Speedway Boulevard & US 19 / US 41

Existing PM  
6/14/2007

| Movement                          | EBL   | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|-----------------------------------|-------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations               | ↔     | ↔    | ↔    | ↔    | ↔    | ↔    | ↔    | ↔    | ↔    | ↔    | ↔    | ↔    |
| Sign Control                      | Stop  | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| Grade                             | 0%    | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   |
| Volume (veh/h)                    | 38    | 4    | 23   | 6    | 2    | 11   | 17   | 602  | 17   | 10   | 1014 | 18   |
| Peak Hour Factor                  | 0.67  | 0.62 | 0.81 | 0.50 | 0.75 | 0.88 | 0.88 | 0.91 | 0.75 | 0.60 | 0.95 | 0.79 |
| Hourly flow rate (vph)            | 57    | 6    | 28   | 12   | 3    | 12   | 19   | 662  | 23   | 17   | 1067 | 23   |
| Pedestrians                       |       |      |      |      |      |      |      |      |      |      |      |      |
| Lane Width (ft)                   |       |      |      |      |      |      |      |      |      |      |      |      |
| Walking Speed (ft/s)              |       |      |      |      |      |      |      |      |      |      |      |      |
| Percent Blockage                  |       |      |      |      |      |      |      |      |      |      |      |      |
| Right turn flare (veh)            |       |      |      |      |      |      |      | 2    |      |      |      |      |
| Median type                       |       |      |      |      |      |      |      |      |      |      |      |      |
| Median storage (veh)              |       |      |      |      |      |      |      |      |      |      |      |      |
| Upstream signal (ft)              |       |      |      |      |      |      |      |      |      |      |      |      |
| pX, platoon unblocked             |       |      |      |      |      |      |      |      |      |      |      |      |
| VC, conflicting volume            | 1471  | 1801 | 534  | 1270 | 1801 | 331  | 1067 |      |      | 662  |      |      |
| VC1, stage 1 conf vol             |       |      |      |      |      |      |      |      |      |      |      |      |
| VC2, stage 2 conf vol             |       |      |      |      |      |      |      |      |      |      |      |      |
| VCu, unblocked vol                | 1471  | 1801 | 534  | 1270 | 1801 | 331  | 1067 |      |      | 662  |      |      |
| tC, single (s)                    | 7.5   | 6.5  | 6.9  | 7.5  | 6.5  | 6.9  | 4.1  |      |      | 4.1  |      |      |
| tC, 2 stage (s)                   |       |      |      |      |      |      |      |      |      |      |      |      |
| tF (s)                            | 3.5   | 4.0  | 3.3  | 3.5  | 4.0  | 3.3  | 2.2  |      |      | 2.2  |      |      |
| p0 queue free %                   | 30    | 91   | 94   | 89   | 96   | 98   | 97   |      |      | 98   |      |      |
| cM capacity (veh/h)               | 81    | 75   | 491  | 106  | 75   | 665  | 649  |      |      | 923  |      |      |
| Direction, Lane #                 | EB 1  | EB 2 | WB 1 | NB 1 | NB 2 | NB 3 | NB 4 | SB 1 | SB 2 | SB 3 | SB 4 | SB 4 |
| Volume Total                      | 63    | 28   | 27   | 19   | 331  | 331  | 23   | 17   | 534  | 534  | 23   | 23   |
| Volume Left                       | 57    | 0    | 12   | 19   | 0    | 0    | 0    | 17   | 0    | 0    | 0    | 0    |
| Volume Right                      | 0     | 28   | 12   | 0    | 0    | 0    | 23   | 0    | 0    | 0    | 23   | 23   |
| cSH                               | 81    | 491  | 186  | 649  | 1700 | 1700 | 1700 | 923  | 1700 | 1700 | 1700 | 1700 |
| Volume to Capacity                | 0.78  | 0.06 | 0.15 | 0.03 | 0.19 | 0.19 | 0.01 | 0.02 | 0.31 | 0.31 | 0.01 | 0.01 |
| Queue Length 95th (ft)            | 97    | 5    | 13   | 2    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 0    |
| Control Delay (s)                 | 135.1 | 12.8 | 30.2 | 10.7 | 0.0  | 0.0  | 0.0  | 9.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| Lane LOS                          | F     | B    | D    | B    |      |      |      | A    |      |      |      |      |
| Approach Delay (s)                | 97.2  |      | 30.2 | 0.3  |      |      |      | 0.1  |      |      |      |      |
| Approach LOS                      | F     |      | D    |      |      |      |      |      |      |      |      |      |
| Intersection Summary              |       |      |      |      |      |      |      |      |      |      |      |      |
| Average Delay                     | 5.2   |      |      |      |      |      |      |      |      |      |      |      |
| Intersection Capacity Utilization | 44.7% |      |      |      |      |      |      |      |      |      |      |      |
| Analysis Period (min)             | 15    |      |      |      |      |      |      |      |      |      |      |      |
| ICU Level of Service A            |       |      |      |      |      |      |      |      |      |      |      |      |

Lanes, Volumes, Timings  
2: Speedway Boulevard & Mt Pleasant Rd

Existing PM  
6/14/2007



| Lane Group                              | EBL  | EBT  | WBL  | WBT  | NBT  | SBT  |
|-----------------------------------------|------|------|------|------|------|------|
| Lane Group Flow (vph)                   | 32   | 111  | 4    | 104  | 20   | 36   |
| Sign Control                            | Free | Free | Free | Free | Stop | Stop |
| <b>Intersection Summary</b>             |      |      |      |      |      |      |
| Control Type: Unsignalized              |      |      |      |      |      |      |
| Intersection Capacity Utilization 18.2% |      |      |      |      |      |      |
| Analysis Period (min) 15                |      |      |      |      |      |      |
| ICU Level of Service A                  |      |      |      |      |      |      |

HCM Unsignalized Intersection Capacity Analysis  
2: Speedway Boulevard & Mt Pleasant Rd

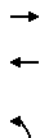
Existing PM  
6/14/2007



| Movement                          | EBL   | EBT  | EBR  | WBL  | WBT  | WBR  | NBL                  | NBT  | NBR  | SBL  | SBT  | SBR  |
|-----------------------------------|-------|------|------|------|------|------|----------------------|------|------|------|------|------|
| Lane Configurations               | ↔     | ↔    | ↔    | ↔    | ↔    | ↔    |                      | ↔    | ↔    | ↔    | ↔    | ↔    |
| Sign Control                      | Free  | Free | Free | Free | Free | Free |                      | Stop | Stop | Stop | Stop | Stop |
| Grade                             |       |      |      |      |      |      |                      |      |      |      |      |      |
| Volume (veh/h)                    | 25    | 98   | 0    | 2    | 67   | 19   | 1                    | 4    | 3    | 10   | 2    | 12   |
| Peak Hour Factor                  | 0.78  | 0.88 | 0.92 | 0.50 | 0.88 | 0.68 | 0.25                 | 0.50 | 0.38 | 0.62 | 0.50 | 0.75 |
| Hourly flow rate (vph)            | 32    | 111  | 0    | 4    | 76   | 28   | 4                    | 8    | 8    | 16   | 4    | 16   |
| Pedestrians                       |       |      |      |      |      |      |                      |      |      |      |      |      |
| Lane Width (ft)                   |       |      |      |      |      |      |                      |      |      |      |      |      |
| Walking Speed (ft/s)              |       |      |      |      |      |      |                      |      |      |      |      |      |
| Percent Blockage                  |       |      |      |      |      |      |                      |      |      |      |      |      |
| Right turn flare (veh)            |       |      |      |      |      |      |                      |      |      |      |      |      |
| Median type                       |       |      |      |      |      |      |                      |      |      |      |      |      |
| Median storage (veh)              |       |      |      |      |      |      |                      |      |      |      |      |      |
| Upstream signal (ft)              |       |      |      |      |      |      |                      |      |      |      |      |      |
| pX, platoon unblocked             |       |      |      |      |      |      |                      |      |      |      |      |      |
| VC, conflicting volume            | 104   |      |      | 111  |      |      | 240                  | 288  | 56   | 230  | 274  | 52   |
| VC1, stage 1 conf vol             |       |      |      |      |      |      |                      |      |      |      |      |      |
| VC2, stage 2 conf vol             |       |      |      |      |      |      |                      |      |      |      |      |      |
| vCu, unblocked vol                | 104   |      |      | 111  |      |      | 240                  | 288  | 56   | 230  | 274  | 52   |
| tC, single (s)                    | 4.1   |      |      | 4.1  |      |      | 7.5                  | 6.5  | 6.9  | 7.5  | 6.5  | 6.9  |
| tC, 2 stage (s)                   |       |      |      |      |      |      |                      |      |      |      |      |      |
| tF (s)                            | 2.2   |      |      | 2.2  |      |      | 3.5                  | 4.0  | 3.3  | 3.5  | 4.0  | 3.3  |
| p0 queue free %                   | 98    |      |      | 100  |      |      | 99                   | 99   | 99   | 98   | 99   | 98   |
| cM capacity (veh/h)               | 1485  |      |      | 1476 |      |      | 668                  | 606  | 999  | 680  | 617  | 1005 |
| Direction, Lane #                 | EB 1  | EB 2 | EB 3 | WB 1 | WB 2 | WB 3 | NB 1                 | SB 1 |      |      |      |      |
| Volume Total                      | 32    | 74   | 37   | 4    | 51   | 53   | 20                   | 36   |      |      |      |      |
| Volume Left                       | 32    | 0    | 0    | 4    | 0    | 0    | 4                    | 16   |      |      |      |      |
| Volume Right                      | 0     | 0    | 0    | 0    | 0    | 28   | 8                    | 16   |      |      |      |      |
| cSH                               | 1485  | 1700 | 1700 | 1476 | 1700 | 1700 | 734                  | 783  |      |      |      |      |
| Volume to Capacity                | 0.02  | 0.04 | 0.02 | 0.00 | 0.03 | 0.03 | 0.03                 | 0.05 |      |      |      |      |
| Queue Length 95th (ft)            | 2     | 0    | 0    | 0    | 0    | 0    | 2                    | 4    |      |      |      |      |
| Control Delay (s)                 | 7.5   | 0.0  | 0.0  | 7.4  | 0.0  | 0.0  | 10.0                 | 9.8  |      |      |      |      |
| Lane LOS                          | A     |      |      | A    |      |      | B                    | A    |      |      |      |      |
| Approach Delay (s)                | 1.7   |      |      | 0.3  |      |      | 10.0                 | 9.8  |      |      |      |      |
| Approach LOS                      |       |      |      |      |      |      | B                    | A    |      |      |      |      |
| <b>Intersection Summary</b>       |       |      |      |      |      |      |                      |      |      |      |      |      |
| Average Delay                     | 2.7   |      |      |      |      |      |                      |      |      |      |      |      |
| Intersection Capacity Utilization | 18.2% |      |      |      |      |      | ICU Level of Service |      |      |      |      |      |
| Analysis Period (min)             | 15    |      |      |      |      |      | A                    |      |      |      |      |      |

Lanes, Volumes, Timings  
3: Selfridge Rd & Speedway Boulevard

Existing PM  
6/14/2007



| Lane Group                              | EBL  | NBT  | SBT  |
|-----------------------------------------|------|------|------|
| Lane Group Flow (vph)                   | 8    | 96   | 112  |
| Sign Control                            | Stop | Free | Free |
| <b>Intersection Summary</b>             |      |      |      |
| Control Type: Unsignalized              |      |      |      |
| Intersection Capacity Utilization 13.3% |      |      |      |
| Analysis Period (min) 15                |      |      |      |
| ICU Level of Service A                  |      |      |      |

HCM Unsignalized Intersection Capacity Analysis  
3: Selfridge Rd & Speedway Boulevard

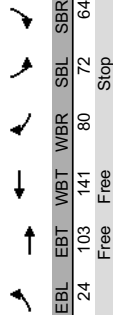
Existing PM  
6/14/2007



| Movement                          | EBL   | EBR  | NBL  | NBT  | SBT  | SBR  |
|-----------------------------------|-------|------|------|------|------|------|
| Lane Configurations               | W     |      |      | W    | W    |      |
| Sign Control                      | Stop  |      |      | Free | Free |      |
| Grade                             | 0%    |      |      | 0%   | 0%   |      |
| Volume (veh/h)                    | 2     | 1    | 1    | 87   | 97   | 3    |
| Peak Hour Factor                  | 0.50  | 0.25 | 0.25 | 0.95 | 0.90 | 0.75 |
| Hourly flow rate (vph)            | 4     | 4    | 4    | 92   | 108  | 4    |
| Pedestrians                       |       |      |      |      |      |      |
| Lane Width (ft)                   |       |      |      |      |      |      |
| Walking Speed (ft/s)              |       |      |      |      |      |      |
| Percent Blockage                  |       |      |      |      |      |      |
| Right turn flare (veh)            |       |      |      |      |      |      |
| Median type                       | None  |      |      |      |      |      |
| Median storage (veh)              |       |      |      |      |      |      |
| Upstream signal (ft)              |       |      |      |      |      |      |
| pX, platoon unblocked             |       |      |      |      |      |      |
| VC, conflicting volume            | 164   | 56   | 112  |      |      |      |
| VC1, stage 1 conf vol             |       |      |      |      |      |      |
| VC2, stage 2 conf vol             |       |      |      |      |      |      |
| VCu, unblocked vol                | 164   | 56   | 112  |      |      |      |
| tC, single (s)                    | 6.8   | 6.9  | 4.1  |      |      |      |
| tC, 2 stage (s)                   |       |      |      |      |      |      |
| tF (s)                            | 3.5   | 3.3  | 2.2  |      |      |      |
| p0 queue free %                   | 100   | 100  | 100  |      |      |      |
| cM capacity (veh/h)               | 809   | 999  | 1476 |      |      |      |
| <b>Direction, Lane #</b>          |       |      |      |      |      |      |
|                                   | EB 1  | NB 1 | NB 2 | SB 1 | SB 2 |      |
| Volume Total                      | 8     | 35   | 61   | 72   | 40   |      |
| Volume Left                       | 4     | 4    | 0    | 0    | 0    |      |
| Volume Right                      | 4     | 0    | 0    | 0    | 4    |      |
| cSH                               | 894   | 1476 | 1700 | 1700 |      |      |
| Volume to Capacity                | 0.01  | 0.00 | 0.04 | 0.04 | 0.02 |      |
| Queue Length 95th (ft)            | 1     | 0    | 0    | 0    | 0    |      |
| Control Delay (s)                 | 9.1   | 0.9  | 0.0  | 0.0  | 0.0  |      |
| Lane LOS                          | A     | A    |      |      |      |      |
| Approach Delay (s)                | 9.1   | 0.3  |      | 0.0  |      |      |
| Approach LOS                      | A     |      |      |      |      |      |
| <b>Intersection Summary</b>       |       |      |      |      |      |      |
| Average Delay                     | 0.5   |      |      |      |      |      |
| Intersection Capacity Utilization | 13.3% |      |      |      |      |      |
| ICU Level of Service              | A     |      |      |      |      |      |
| Analysis Period (min)             | 15    |      |      |      |      |      |

Lanes, Volumes, Timings  
4: Woolsey Rd & Speedway Boulevard

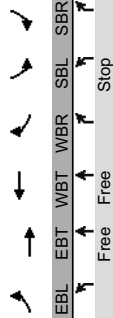
Existing PM  
6/14/2007



| Lane Group                        | EBL   | EBT  | EBR  | WBL  | WBT  | WBR  | SBL  | SBR  |
|-----------------------------------|-------|------|------|------|------|------|------|------|
| Lane Group Flow (vph)             | 24    | 103  | 141  | 80   | 72   | 64   |      |      |
| Sign Control                      | Free  | Free | Free | Free | Free | Stop | Stop | Stop |
| <b>Intersection Summary</b>       |       |      |      |      |      |      |      |      |
| Control Type: Unsignalized        |       |      |      |      |      |      |      |      |
| Intersection Capacity Utilization | 23.7% |      |      |      |      |      |      |      |
| Analysis Period (min)             | 15    |      |      |      |      |      |      |      |
| ICU Level of Service              | A     |      |      |      |      |      |      |      |

HCM Unsignalized Intersection Capacity Analysis  
4: Woolsey Rd & Speedway Boulevard

Existing PM  
6/14/2007



| Movement                          | EBL   | EBT  | EBR  | WBL  | WBT  | WBR  | SBL  | SBR  |
|-----------------------------------|-------|------|------|------|------|------|------|------|
| Lane Configurations               | Free  | Free | Free | Free | Free | Free | Stop | Stop |
| Sign Control                      | Free  | Free | Free | Free | Free | Free | Stop | Stop |
| Grade                             | 0%    | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   |
| Volume (veh/h)                    | 18    | 91   | 128  | 69   | 66   | 61   |      |      |
| Peak Hour Factor                  | 0.75  | 0.88 | 0.91 | 0.86 | 0.92 | 0.95 |      |      |
| Hourly flow rate (vph)            | 24    | 103  | 141  | 80   | 72   | 64   |      |      |
| Pedestrians                       |       |      |      |      |      |      |      |      |
| Lane Width (ft)                   |       |      |      |      |      |      |      |      |
| Walking Speed (ft/s)              |       |      |      |      |      |      |      |      |
| Percent Blockage                  |       |      |      |      |      |      |      |      |
| Right turn flare (veh)            |       |      |      |      |      |      |      |      |
| Median type                       |       |      |      |      |      |      |      |      |
| Median storage (veh)              |       |      |      |      |      |      |      |      |
| Upstream signal (ft)              |       |      |      |      |      |      |      |      |
| pX, platoon unblocked             |       |      |      |      |      |      |      |      |
| VC, conflicting volume            | 141   |      |      |      |      |      | 292  | 141  |
| VC1, stage 1 conf vol             |       |      |      |      |      |      |      |      |
| VC2, stage 2 conf vol             |       |      |      |      |      |      |      |      |
| vCu, unblocked vol                | 141   |      |      |      |      |      | 292  | 141  |
| tC, single (s)                    | 4.1   |      |      |      |      |      | 6.4  | 6.2  |
| tC, 2 stage (s)                   |       |      |      |      |      |      |      |      |
| tF (s)                            | 2.2   |      |      |      |      |      | 3.5  | 3.3  |
| p0 queue free %                   | 98    |      |      |      |      |      | 90   | 93   |
| cM capacity (veh/h)               | 1442  |      |      |      |      |      | 687  | 907  |
| Direction, Lane #                 | EB 1  | EB 2 | WB 1 | WB 2 | SB 1 | SB 2 |      |      |
| Volume Total                      | 24    | 103  | 141  | 80   | 72   | 64   |      |      |
| Volume Left                       | 24    | 0    | 0    | 0    | 72   | 0    |      |      |
| Volume Right                      | 0     | 0    | 0    | 80   | 0    | 64   |      |      |
| cSH                               | 1442  | 1700 | 1700 | 1700 | 687  | 907  |      |      |
| Volume to Capacity                | 0.02  | 0.06 | 0.08 | 0.05 | 0.10 | 0.07 |      |      |
| Queue Length 95th (ft)            | 1     | 0    | 0    | 0    | 9    | 6    |      |      |
| Control Delay (s)                 | 7.5   | 0.0  | 0.0  | 0.0  | 10.8 | 9.3  |      |      |
| Lane LOS                          | A     |      |      |      | B    | A    |      |      |
| Approach Delay (s)                | 1.4   |      |      |      | 10.1 |      |      |      |
| Approach LOS                      |       |      |      |      | B    |      |      |      |
| <b>Intersection Summary</b>       |       |      |      |      |      |      |      |      |
| Average Delay                     | 3.2   |      |      |      |      |      |      |      |
| Intersection Capacity Utilization | 23.7% |      |      |      |      |      |      |      |
| ICU Level of Service              | A     |      |      |      |      |      |      |      |
| Analysis Period (min)             | 15    |      |      |      |      |      |      |      |

Lanes, Volumes, Timings  
5: Lower Woolsey Rd & Selfridge Rd

Existing PM  
6/14/2007



| Lane Group                              | EBT  | WBT  | SBL  |
|-----------------------------------------|------|------|------|
| Lane Group Flow (vph)                   | 127  | 185  | 8    |
| Sign Control                            | Free | Free | Stop |
| <b>Intersection Summary</b>             |      |      |      |
| Control Type: Unsignalized              |      |      |      |
| Intersection Capacity Utilization 18.9% |      |      |      |
| Analysis Period (min) 15                |      |      |      |
| ICU Level of Service A                  |      |      |      |

HCM Unsignalized Intersection Capacity Analysis  
5: Lower Woolsey Rd & Selfridge Rd

Existing PM  
6/14/2007



| Movement                          | EBL  | EBT   | WBT  | WBR  | SBL                  | SBR  |
|-----------------------------------|------|-------|------|------|----------------------|------|
| Lane Configurations               | 4    | 1     | 1    | 1    | W                    | W    |
| Sign Control                      | Free | Free  | Free | Free | Stop                 | Stop |
| Grade                             | 0%   | 0%    | 0%   | 0%   | 0%                   | 0%   |
| Volume (veh/h)                    | 0    | 112   | 168  | 1    | 0                    | 3    |
| Peak Hour Factor                  | 0.92 | 0.88  | 0.93 | 0.25 | 0.92                 | 0.38 |
| Hourly flow rate (vph)            | 0    | 127   | 181  | 4    | 0                    | 8    |
| Pedestrians                       |      |       |      |      |                      |      |
| Lane Width (ft)                   |      |       |      |      |                      |      |
| Walking Speed (ft/s)              |      |       |      |      |                      |      |
| Percent Blockage                  |      |       |      |      |                      |      |
| Right turn flare (veh)            |      |       |      |      |                      |      |
| Median type                       |      |       |      |      | None                 |      |
| Median storage (veh)              |      |       |      |      |                      |      |
| Upstream signal (ft)              |      |       |      |      |                      |      |
| pX, platoon unblocked             |      |       |      |      |                      |      |
| VC, conflicting volume            |      | 185   |      |      | 310                  | 183  |
| VC1, stage 1 conf vol             |      |       |      |      |                      |      |
| VC2, stage 2 conf vol             |      |       |      |      |                      |      |
| vCu, unblocked vol                |      | 185   |      |      | 310                  | 183  |
| tC, single (s)                    |      | 4.1   |      |      | 6.4                  | 6.2  |
| tC, 2 stage (s)                   |      |       |      |      |                      |      |
| tF (s)                            |      | 2.2   |      |      | 3.5                  | 3.3  |
| p0 queue free %                   |      | 100   |      |      | 100                  | 99   |
| cM capacity (veh/h)               |      | 1390  |      |      | 682                  | 860  |
| <b>Direction, Lane #</b>          |      |       |      |      |                      |      |
|                                   | EB 1 | WB 1  | SB 1 |      |                      |      |
| Volume Total                      | 127  | 185   | 8    |      |                      |      |
| Volume Left                       | 0    | 0     | 0    |      |                      |      |
| Volume Right                      | 0    | 4     | 8    |      |                      |      |
| cSH                               | 1390 | 1700  | 860  |      |                      |      |
| Volume to Capacity                | 0.00 | 0.11  | 0.01 |      |                      |      |
| Queue Length 95th (ft)            | 0    | 0     | 1    |      |                      |      |
| Control Delay (s)                 | 0.0  | 0.0   | 9.2  |      |                      |      |
| Lane LOS                          |      |       | A    |      |                      |      |
| Approach Delay (s)                | 0.0  | 0.0   | 9.2  |      |                      |      |
| Approach LOS                      |      |       | A    |      |                      |      |
| <b>Intersection Summary</b>       |      |       |      |      |                      |      |
| Average Delay                     |      |       | 0.2  |      |                      |      |
| Intersection Capacity Utilization |      | 18.9% |      |      | ICU Level of Service | A    |
| Analysis Period (min)             |      | 15    |      |      |                      |      |

## **Base AM Intersection Analysis**

**Base 2009 AM**

Lanes, Volumes, Timings  
1: Speedway Boulevard & US 19 / US 41

Base AM  
6/14/2007

|                                         | →    | ↗    | ↖    | ←    | ↘    | ↙    | ↑    | ↗    | ↖    | ↓    | ↘ |
|-----------------------------------------|------|------|------|------|------|------|------|------|------|------|---|
| Lane Group                              | EBT  | EBR  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |   |
| Lane Group Flow (vph)                   | 34   | 27   | 14   | 11   | 16   | 1075 | 6    | 23   | 556  | 30   |   |
| Sign Control                            | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |   |
| <b>Intersection Summary</b>             |      |      |      |      |      |      |      |      |      |      |   |
| Control Type: Unsignalized              |      |      |      |      |      |      |      |      |      |      |   |
| Intersection Capacity Utilization 44.3% |      |      |      |      |      |      |      |      |      |      |   |
| Analysis Period (min) 15                |      |      |      |      |      |      |      |      |      |      |   |
| ICU Level of Service A                  |      |      |      |      |      |      |      |      |      |      |   |

HCM Unsignalized Intersection Capacity Analysis  
1: Speedway Boulevard & US 19 / US 41

Base AM  
6/14/2007

| Movement                          | EBL   | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|-----------------------------------|-------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations               | ↰     | ↰    | ↰    | ↰    | ↰    | ↰    | ↰    | ↰    | ↰    | ↰    | ↰    | ↰    |
| Sign Control                      | Stop  | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| Grade                             | 0%    | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   |
| Volume (veh/h)                    | 20    | 1    | 21   | 6    | 2    | 8    | 14   | 1000 | 4    | 14   | 517  | 21   |
| Peak Hour Factor                  | 0.67  | 0.25 | 0.78 | 0.58 | 0.50 | 0.75 | 0.85 | 0.93 | 0.62 | 0.61 | 0.93 | 0.69 |
| Hourly flow rate (vph)            | 30    | 4    | 27   | 10   | 4    | 11   | 16   | 1075 | 6    | 23   | 556  | 30   |
| Pedestrians                       |       |      |      |      |      |      |      |      |      |      |      |      |
| Lane Width (ft)                   |       |      |      |      |      |      |      |      |      |      |      |      |
| Walking Speed (ft/s)              |       |      |      |      |      |      |      |      |      |      |      |      |
| Percent Blockage                  |       |      |      |      |      |      |      |      |      |      |      |      |
| Right turn flare (veh)            |       |      |      |      |      |      | 2    |      |      |      |      |      |
| Median type                       |       |      |      |      |      |      |      |      |      |      |      |      |
| Median storage (veh)              |       |      |      |      |      |      |      |      |      |      |      |      |
| Upstream signal (ft)              |       |      |      |      |      |      |      |      |      |      |      |      |
| pX, platoon unblocked             |       |      |      |      |      |      |      |      |      |      |      |      |
| vC, conflicting volume            | 1174  | 1710 | 278  | 1434 | 1710 | 538  | 556  |      |      | 1075 |      |      |
| VC1, stage 1 conf vol             |       |      |      |      |      |      |      |      |      |      |      |      |
| VC2, stage 2 conf vol             |       |      |      |      |      |      |      |      |      |      |      |      |
| vCu, unblocked vol                | 1174  | 1710 | 278  | 1434 | 1710 | 538  | 556  |      |      | 1075 |      |      |
| tC, single (s)                    | 7.5   | 6.5  | 6.9  | 7.5  | 6.5  | 6.9  | 4.1  |      |      | 4.1  |      |      |
| tC, 2 stage (s)                   |       |      |      |      |      |      |      |      |      |      |      |      |
| tF (s)                            | 3.5   | 4.0  | 3.3  | 3.5  | 4.0  | 3.3  | 2.2  |      |      | 2.2  |      |      |
| p0 queue free %                   | 78    | 95   | 96   | 88   | 95   | 98   | 98   |      |      | 96   |      |      |
| cM capacity (veh/h)               | 133   | 85   | 719  | 84   | 85   | 488  | 1011 |      |      | 644  |      |      |
| Direction, Lane #                 | EB 1  | EB 2 | WB 1 | NB 1 | NB 2 | NB 3 | NB 4 | SB 1 | SB 2 | SB 3 | SB 4 |      |
| Volume Total                      | 34    | 27   | 25   | 16   | 538  | 538  | 6    | 23   | 278  | 278  | 30   |      |
| Volume Left                       | 30    | 0    | 10   | 16   | 0    | 0    | 0    | 23   | 0    | 0    | 0    |      |
| Volume Right                      | 0     | 27   | 11   | 0    | 0    | 0    | 6    | 0    | 0    | 0    | 30   |      |
| cSH                               | 125   | 719  | 147  | 1011 | 1700 | 1700 | 644  | 1700 | 1700 | 1700 | 1700 |      |
| Volume to Capacity                | 0.27  | 0.04 | 0.17 | 0.02 | 0.32 | 0.32 | 0.00 | 0.04 | 0.16 | 0.16 | 0.02 |      |
| Queue Length 95th (ft)            | 26    | 3    | 15   | 1    | 0    | 0    | 0    | 3    | 0    | 0    | 0    |      |
| Control Delay (s)                 | 44.2  | 10.2 | 37.6 | 8.6  | 0.0  | 0.0  | 0.0  | 10.8 | 0.0  | 0.0  | 0.0  |      |
| Lane LOS                          | E     | B    | E    | A    |      |      |      | B    |      |      |      |      |
| Approach Delay (s)                | 29.1  |      | 37.6 | 0.1  |      |      |      | 0.4  |      |      |      |      |
| Approach LOS                      | D     |      | E    |      |      |      |      |      |      |      |      |      |
| Intersection Summary              |       |      |      |      |      |      |      |      |      |      |      |      |
| Average Delay                     | 1.7   |      |      |      |      |      |      |      |      |      |      |      |
| Intersection Capacity Utilization | 44.3% |      |      |      |      |      |      |      |      |      |      |      |
| ICU Level of Service              | A     |      |      |      |      |      |      |      |      |      |      |      |
| Analysis Period (min)             | 15    |      |      |      |      |      |      |      |      |      |      |      |



Lanes, Volumes, Timings  
2: Speedway Boulevard & Mt Pleasant Rd

Base AM  
6/14/2007



| Lane Group                              | EBL  | EBT  | WBL  | WBT  | NBT  | SBT  |
|-----------------------------------------|------|------|------|------|------|------|
| Lane Group Flow (vph)                   | 4    | 29   | 4    | 47   | 5    | 51   |
| Sign Control                            | Free | Free | Free | Free | Stop | Stop |
| Intersection Summary                    |      |      |      |      |      |      |
| Control Type: Unsignalized              |      |      |      |      |      |      |
| Intersection Capacity Utilization 18.9% |      |      |      |      |      |      |
| Analysis Period (min) 15                |      |      |      |      |      |      |
| ICU Level of Service A                  |      |      |      |      |      |      |

HCM Unsignalized Intersection Capacity Analysis  
2: Speedway Boulevard & Mt Pleasant Rd

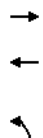
Base AM  
6/14/2007



| Movement                          | EBL                    | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|-----------------------------------|------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations               | ↔                      | ↕↕   | ↔    | ↔    | ↕↕   | ↔    | ↔    | ↕↕   | ↔    | ↔    | ↕↕   | ↔    |
| Sign Control                      | Free                   | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| Grade                             | 0%                     | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   |
| Volume (veh/h)                    | 2                      | 18   | 1    | 1    | 26   | 12   | 0    | 1    | 1    | 23   | 2    | 14   |
| Peak Hour Factor                  | 0.50                   | 0.71 | 0.25 | 0.25 | 0.86 | 0.69 | 0.92 | 0.92 | 0.25 | 0.92 | 0.50 | 0.65 |
| Hourly flow rate (vph)            | 4                      | 25   | 4    | 4    | 30   | 17   | 0    | 1    | 4    | 25   | 4    | 22   |
| Pedestrians                       |                        |      |      |      |      |      |      |      |      |      |      |      |
| Lane Width (ft)                   |                        |      |      |      |      |      |      |      |      |      |      |      |
| Walking Speed (ft/s)              |                        |      |      |      |      |      |      |      |      |      |      |      |
| Percent Blockage                  |                        |      |      |      |      |      |      |      |      |      |      |      |
| Right turn flare (veh)            |                        |      |      |      |      |      |      |      |      |      |      |      |
| Median type                       |                        |      |      |      |      |      |      | None |      |      | None |      |
| Median storage (veh)              |                        |      |      |      |      |      |      |      |      |      |      |      |
| Upstream signal (ft)              |                        |      |      |      |      |      |      |      |      |      |      |      |
| pX, platoon unblocked             |                        |      |      |      |      |      |      |      |      |      |      |      |
| VC, conflicting volume            | 48                     |      |      | 25   |      |      | 82   | 91   | 15   | 72   | 80   | 24   |
| VC1, stage 1 conf vol             |                        |      |      |      |      |      |      |      |      |      |      |      |
| VC2, stage 2 conf vol             |                        |      |      |      |      |      |      |      |      |      |      |      |
| vCu, unblocked vol                | 48                     |      |      | 25   |      |      | 82   | 91   | 15   | 72   | 80   | 24   |
| tC, single (s)                    | 4.1                    |      |      | 4.1  |      |      | 7.5  | 6.5  | 6.9  | 7.5  | 6.5  | 6.9  |
| tC, 2 stage (s)                   |                        |      |      |      |      |      |      |      |      |      |      |      |
| tF (s)                            | 2.2                    |      |      | 2.2  |      |      | 3.5  | 4.0  | 3.3  | 3.5  | 4.0  | 3.3  |
| p0 queue free %                   | 100                    |      |      | 100  |      |      | 100  | 100  | 100  | 97   | 100  | 98   |
| cM capacity (veh/h)               | 1558                   |      |      | 1587 |      |      | 871  | 794  | 1061 | 903  | 805  | 1047 |
| Direction, Lane #                 | EB 1                   | EB 2 | EB 3 | WB 1 | WB 2 | WB 3 | NB 1 | SB 1 |      |      |      |      |
| Volume Total                      | 4                      | 17   | 12   | 4    | 20   | 27   | 5    | 51   |      |      |      |      |
| Volume Left                       | 4                      | 0    | 0    | 4    | 0    | 0    | 0    | 25   |      |      |      |      |
| Volume Right                      | 0                      | 0    | 4    | 0    | 0    | 17   | 4    | 22   |      |      |      |      |
| cSH                               | 1558                   | 1700 | 1700 | 1587 | 1700 | 1700 | 990  | 949  |      |      |      |      |
| Volume to Capacity                | 0.00                   | 0.01 | 0.01 | 0.00 | 0.01 | 0.02 | 0.01 | 0.05 |      |      |      |      |
| Queue Length 95th (ft)            | 0                      | 0    | 0    | 0    | 0    | 0    | 0    | 4    |      |      |      |      |
| Control Delay (s)                 | 7.3                    | 0.0  | 0.0  | 7.3  | 0.0  | 0.0  | 8.7  | 9.0  |      |      |      |      |
| Lane LOS                          | A                      | A    | A    | A    | A    | A    | A    | A    |      |      |      |      |
| Approach Delay (s)                | 0.9                    |      |      | 0.6  |      |      | 8.7  | 9.0  |      |      |      |      |
| Approach LOS                      |                        |      |      | A    |      |      | A    | A    |      |      |      |      |
| Intersection Summary              |                        |      |      |      |      |      |      |      |      |      |      |      |
| Average Delay                     | 4.0                    |      |      |      |      |      |      |      |      |      |      |      |
| Intersection Capacity Utilization | 18.9%                  |      |      |      |      |      |      |      |      |      |      |      |
| Analysis Period (min)             | 15                     |      |      |      |      |      |      |      |      |      |      |      |
|                                   | ICU Level of Service A |      |      |      |      |      |      |      |      |      |      |      |

Lanes, Volumes, Timings  
3: Selfridge Rd & Speedway Boulevard

Base AM  
6/14/2007



| Lane Group                              | EBL  | NBT  | SBT  |
|-----------------------------------------|------|------|------|
| Lane Group Flow (vph)                   | 8    | 67   | 47   |
| Sign Control                            | Stop | Free | Free |
| <b>Intersection Summary</b>             |      |      |      |
| Control Type: Unsignalized              |      |      |      |
| Intersection Capacity Utilization 13.3% |      |      |      |
| Analysis Period (min) 15                |      |      |      |
| ICU Level of Service A                  |      |      |      |

HCM Unsignalized Intersection Capacity Analysis  
3: Selfridge Rd & Speedway Boulevard

Base AM  
6/14/2007



| Movement                          | EBL   | EBR  | NBL  | NBT  | SBT  | SBR  |
|-----------------------------------|-------|------|------|------|------|------|
| Lane Configurations               | W     |      |      | W    | W    |      |
| Sign Control                      | Stop  |      |      | Free | Free |      |
| Grade                             | 0%    |      |      | 0%   | 0%   |      |
| Volume (veh/h)                    | 2     | 1    | 2    | 52   | 35   | 2    |
| Peak Hour Factor                  | 0.50  | 0.25 | 0.50 | 0.82 | 0.82 | 0.50 |
| Hourly flow rate (vph)            | 4     | 4    | 4    | 63   | 43   | 4    |
| Pedestrians                       |       |      |      |      |      |      |
| Lane Width (ft)                   |       |      |      |      |      |      |
| Walking Speed (ft/s)              |       |      |      |      |      |      |
| Percent Blockage                  |       |      |      |      |      |      |
| Right turn flare (veh)            |       |      |      |      |      |      |
| Median type                       | None  |      |      |      |      |      |
| Median storage (veh)              |       |      |      |      |      |      |
| Upstream signal (ft)              |       |      |      |      |      |      |
| pX, platoon unblocked             |       |      |      |      |      |      |
| VC, conflicting volume            | 84    | 23   | 47   |      |      |      |
| VC1, stage 1 conf vol             |       |      |      |      |      |      |
| VC2, stage 2 conf vol             |       |      |      |      |      |      |
| VCu, unblocked vol                | 84    | 23   | 47   |      |      |      |
| tC, single (s)                    | 6.8   | 6.9  | 4.1  |      |      |      |
| tC, 2 stage (s)                   |       |      |      |      |      |      |
| tF (s)                            | 3.5   | 3.3  | 2.2  |      |      |      |
| p0 queue free %                   | 100   | 100  | 100  |      |      |      |
| cM capacity (veh/h)               | 905   | 1048 | 1559 |      |      |      |
| <b>Direction, Lane #</b>          |       |      |      |      |      |      |
|                                   | EB 1  | NB 1 | NB 2 | SB 1 | SB 2 |      |
| Volume Total                      | 8     | 25   | 42   | 28   | 18   |      |
| Volume Left                       | 4     | 4    | 0    | 0    | 0    |      |
| Volume Right                      | 4     | 0    | 0    | 0    | 4    |      |
| cSH                               | 971   | 1559 | 1700 | 1700 | 1700 |      |
| Volume to Capacity                | 0.01  | 0.00 | 0.02 | 0.02 | 0.01 |      |
| Queue Length 95th (ft)            | 1     | 0    | 0    | 0    | 0    |      |
| Control Delay (s)                 | 8.7   | 1.2  | 0.0  | 0.0  | 0.0  |      |
| Lane LOS                          | A     | A    |      |      |      |      |
| Approach Delay (s)                | 8.7   | 0.4  |      | 0.0  |      |      |
| Approach LOS                      | A     |      |      |      |      |      |
| <b>Intersection Summary</b>       |       |      |      |      |      |      |
| Average Delay                     | 0.8   |      |      |      |      |      |
| Intersection Capacity Utilization | 13.3% |      |      |      |      |      |
| ICU Level of Service              | A     |      |      |      |      |      |
| Analysis Period (min)             | 15    |      |      |      |      |      |

|                       |      |      |      |      |      |      |
|-----------------------|------|------|------|------|------|------|
| Lane Group            | EBL  | EBT  | WBT  | WBR  | SBL  | SBR  |
| Lane Group Flow (vph) | 29   | 131  | 132  | 38   | 21   | 13   |
| Sign Control          | Free | Free | Free | Free | Stop | Stop |

Intersection Summary

Control Type: Unsignalized  
Intersection Capacity Utilization 17.9%  
Analysis Period (min) 15

ICU Level of Service A



|                                   |      |      |      |       |      |      |
|-----------------------------------|------|------|------|-------|------|------|
| Movement                          | EBL  | EBT  | WBT  | WBR   | SBL  | SBR  |
| Lane Configurations               | EBL  | EBT  | WBT  | WBR   | SBL  | SBR  |
| Sign Control                      | Free | Free | Free | Free  | Stop | Stop |
| Grade                             | 0%   | 0%   | 0%   | 0%    | 0%   | 0%   |
| Volume (veh/h)                    | 22   | 117  | 120  | 33    | 17   | 9    |
| Peak Hour Factor                  | 0.75 | 0.89 | 0.91 | 0.86  | 0.80 | 0.67 |
| Hourly flow rate (vph)            | 29   | 131  | 132  | 38    | 21   | 13   |
| Pedestrians                       |      |      |      |       |      |      |
| Lane Width (ft)                   |      |      |      |       |      |      |
| Walking Speed (ft/s)              |      |      |      |       |      |      |
| Percent Blockage                  |      |      |      |       |      |      |
| Right turn flare (veh)            |      |      |      |       |      |      |
| Median type                       |      |      |      |       | None |      |
| Median storage (veh)              |      |      |      |       |      |      |
| Upstream signal (ft)              |      |      |      |       |      |      |
| pX, platoon unblocked             |      |      |      |       |      |      |
| VC, conflicting volume            | 132  |      |      |       | 322  | 132  |
| VC1, stage 1 conf vol             |      |      |      |       |      |      |
| VC2, stage 2 conf vol             |      |      |      |       |      |      |
| vCu, unblocked vol                | 132  |      |      |       | 322  | 132  |
| tC, single (s)                    | 4.1  |      |      |       | 6.4  | 6.2  |
| tC, 2 stage (s)                   |      |      |      |       |      |      |
| tF (s)                            | 2.2  |      |      |       | 3.5  | 3.3  |
| p0 queue free %                   | 98   |      |      |       | 97   | 99   |
| cM capacity (veh/h)               | 1453 |      |      |       | 658  | 917  |
| Direction, Lane #                 | EB 1 | EB 2 | WB 1 | WB 2  | SB 1 | SB 2 |
| Volume Total                      | 29   | 131  | 132  | 38    | 21   | 13   |
| Volume Left                       | 29   | 0    | 0    | 0     | 21   | 0    |
| Volume Right                      | 0    | 0    | 0    | 38    | 0    | 13   |
| cSH                               | 1453 | 1700 | 1700 | 1700  | 658  | 917  |
| Volume to Capacity                | 0.02 | 0.08 | 0.08 | 0.02  | 0.03 | 0.01 |
| Queue Length 95th (ft)            | 2    | 0    | 0    | 0     | 2    | 1    |
| Control Delay (s)                 | 7.5  | 0.0  | 0.0  | 0.0   | 10.7 | 9.0  |
| Lane LOS                          | A    |      |      |       | B    | A    |
| Approach Delay (s)                | 1.4  |      | 0.0  |       | 10.0 |      |
| Approach LOS                      |      |      |      |       | B    |      |
| Intersection Summary              |      |      |      |       |      |      |
| Average Delay                     |      |      |      | 1.6   |      |      |
| Intersection Capacity Utilization |      |      |      | 17.9% |      |      |
| ICU Level of Service              |      |      |      |       | A    |      |
| Analysis Period (min)             |      |      |      | 15    |      |      |



| Lane Group                              | EBT  | WBT  | SBL  |
|-----------------------------------------|------|------|------|
| Lane Group Flow (vph)                   | 157  | 141  | 4    |
| Sign Control                            | Free | Free | Stop |
| <b>Intersection Summary</b>             |      |      |      |
| Control Type: Unsignalized              |      |      |      |
| Intersection Capacity Utilization 17.5% |      |      |      |
| Analysis Period (min) 15                |      |      |      |
| ICU Level of Service A                  |      |      |      |



| Movement                          | EBL  | EBT   | WBT  | WBR  | SBL  | SBR  |
|-----------------------------------|------|-------|------|------|------|------|
| Lane Configurations               | 4    | 4     | 4    | 4    | 4    | 4    |
| Sign Control                      | Free | Free  | Free | Free | Stop | Stop |
| Grade                             | 0%   | 0%    | 0%   | 0%   | 0%   | 0%   |
| Volume (veh/h)                    | 0    | 143   | 128  | 0    | 0    | 2    |
| Peak Hour Factor                  | 0.92 | 0.91  | 0.91 | 0.92 | 0.92 | 0.50 |
| Hourly flow rate (vph)            | 0    | 157   | 141  | 0    | 0    | 4    |
| Pedestrians                       |      |       |      |      |      |      |
| Lane Width (ft)                   |      |       |      |      |      |      |
| Walking Speed (ft/s)              |      |       |      |      |      |      |
| Percent Blockage                  |      |       |      |      |      |      |
| Right turn flare (veh)            |      |       |      |      |      |      |
| Median type                       |      |       |      |      | None |      |
| Median storage (veh)              |      |       |      |      |      |      |
| Upstream signal (ft)              |      |       |      |      |      |      |
| pX, platoon unblocked             |      |       |      |      |      |      |
| VC, conflicting volume            | 141  |       |      |      | 298  | 141  |
| VC1, stage 1 conf vol             |      |       |      |      |      |      |
| VC2, stage 2 conf vol             |      |       |      |      |      |      |
| vCu, unblocked vol                | 141  |       |      |      | 298  | 141  |
| tC, single (s)                    | 4.1  |       |      |      | 6.4  | 6.2  |
| tC, 2 stage (s)                   |      |       |      |      |      |      |
| tF (s)                            | 2.2  |       |      |      | 3.5  | 3.3  |
| p0 queue free %                   | 100  |       |      |      | 100  | 100  |
| cM capacity (veh/h)               | 1442 |       |      |      | 693  | 907  |
| <b>Direction, Lane #</b>          |      |       |      |      |      |      |
|                                   | EB 1 | WB 1  | SB 1 |      |      |      |
| Volume Total                      | 157  | 141   | 4    |      |      |      |
| Volume Left                       | 0    | 0     | 0    |      |      |      |
| Volume Right                      | 0    | 0     | 4    |      |      |      |
| cSH                               | 1442 | 1700  | 907  |      |      |      |
| Volume to Capacity                | 0.00 | 0.08  | 0.00 |      |      |      |
| Queue Length 95th (ft)            | 0    | 0     | 0    |      |      |      |
| Control Delay (s)                 | 0.0  | 0.0   | 9.0  |      |      |      |
| Lane LOS                          |      |       | A    |      |      |      |
| Approach Delay (s)                | 0.0  | 0.0   | 9.0  |      |      |      |
| Approach LOS                      |      |       | A    |      |      |      |
| <b>Intersection Summary</b>       |      |       |      |      |      |      |
| Average Delay                     |      |       | 0.1  |      |      |      |
| Intersection Capacity Utilization |      | 17.5% |      |      |      | A    |
| Analysis Period (min)             |      | 15    |      |      |      |      |

**Base 2009 AM Improved**

Lanes, Volumes, Timings  
1: Speedway Boulevard & US 19 / US 41

HCM Signalized Intersection Capacity Analysis  
1: Speedway Boulevard & US 19 / US 41

Base AM - Improved  
6/14/2007

| Movement                | EBL            | EBT  | WBL  | WBT  | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|-------------------------|----------------|------|------|------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL            | EBT  | WBL  | WBT  | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Group Flow (vph)   | 39             | 39   | 12   | 17   | 21    | 1344  | 8     | 30    | 695   | 39    |
| Act Effct Green (s)     | 8.3            | 8.3  | 8.3  | 8.3  | 106.4 | 106.4 | 106.4 | 106.4 | 106.4 | 106.4 |
| Actuated g/C Ratio      | 0.07           | 0.07 | 0.07 | 0.07 | 0.89  | 0.89  | 0.89  | 0.89  | 0.89  | 0.89  |
| v/c Ratio               | 0.41           | 0.27 | 0.13 | 0.13 | 0.04  | 0.30  | 0.01  | 0.12  | 0.22  | 0.03  |
| Control Delay           | 65.0           | 23.4 | 54.0 | 29.8 | 1.6   | 1.6   | 0.8   | 2.7   | 1.5   | 0.5   |
| Queue Delay             | 0.0            | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay             | 65.0           | 23.4 | 54.0 | 29.8 | 1.6   | 1.6   | 0.8   | 2.7   | 1.5   | 0.5   |
| LOS                     | E              | C    | D    | C    | A     | A     | A     | A     | A     | A     |
| Approach Delay          | 44.2 39.8 1.6  |      |      |      |       |       |       |       |       |       |
| Approach LOS            | D D D          |      |      |      |       |       |       |       |       |       |
| Queue Length 50th (ft)  | 30             | 3    | 9    | 3    | 2     | 47    | 0     | 2     | 32    | 0     |
| Queue Length 95th (ft)  | 48             | 0    | 18   | 10   | 5     | 73    | 1     | 6     | 54    | 3     |
| Internal Link Dist (ft) | 3427 1642 2919 |      |      |      |       |       |       |       |       |       |
| Turn Bay Length (ft)    | 521            | 626  | 512  | 627  | 548   | 4508  | 1404  | 241   | 3137  | 1408  |
| Base Capacity (vph)     | 0              | 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     |
| Starvation Cap Reductn  | 0              | 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     |
| Spillback Cap Reductn   | 0              | 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     |
| Storage Cap Reductn     | 0              | 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     |
| Reduced v/c Ratio       | 0.07           | 0.06 | 0.02 | 0.03 | 0.04  | 0.30  | 0.01  | 0.12  | 0.22  | 0.03  |

| Movement               | EBL  | EBT  | WBL  | WBT  | NBL  | NBT   | NBR   | SBL   | SBT   | SBR   |
|------------------------|------|------|------|------|------|-------|-------|-------|-------|-------|
| Lane Configurations    | 1900 | 1900 | 1900 | 1900 | 1900 | 1900  | 1900  | 1900  | 1900  | 1900  |
| Ideal Flow (vphpl)     | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |
| Total Lost time (s)    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| Lane Util. Factor      | 1.00 | 0.87 | 1.00 | 0.89 | 1.00 | 1.00  | 0.85  | 1.00  | 0.95  | 1.00  |
| Flt Protected          | 0.95 | 1.00 | 0.95 | 1.00 | 0.95 | 1.00  | 1.00  | 0.95  | 1.00  | 1.00  |
| Satd. Flow (prot)      | 1770 | 1612 | 1770 | 1649 | 1770 | 5085  | 1583  | 1770  | 3539  | 1583  |
| Flt Permitted          | 0.75 | 1.00 | 0.73 | 1.00 | 0.39 | 1.00  | 1.00  | 0.19  | 1.00  | 1.00  |
| Satd. Flow (perm)      | 1390 | 1612 | 1363 | 1649 | 722  | 5085  | 1583  | 350   | 3539  | 1583  |
| Volume (vph)           | 26   | 1    | 27   | 7    | 2    | 10    | 18    | 1250  | 5     | 18    |
| Peak-hour factor, PHF  | 0.67 | 0.25 | 0.78 | 0.58 | 0.50 | 0.75  | 0.85  | 0.93  | 0.62  | 0.61  |
| Adj. Flow (vph)        | 39   | 4    | 35   | 12   | 4    | 13    | 21    | 1344  | 8     | 30    |
| RTOR Reduction (vph)   | 0    | 33   | 0    | 0    | 12   | 0     | 0     | 1     | 0     | 0     |
| Lane Group Flow (vph)  | 39   | 6    | 0    | 12   | 5    | 0     | 21    | 1344  | 7     | 30    |
| Turn Type              | Perm | Perm | Perm | Perm | Perm | Perm  | Perm  | Perm  | Perm  | Perm  |
| Protected Phases       | 8    | 8    | 4    | 4    | 4    | 6     | 6     | 2     | 2     | 2     |
| Permitted Phases       | 8    | 8    | 4    | 4    | 4    | 6     | 6     | 2     | 2     | 2     |
| Actuated Green, G (s)  | 7.2  | 7.2  | 7.2  | 7.2  | 7.2  | 104.8 | 104.8 | 104.8 | 104.8 | 104.8 |
| Effective Green, g (s) | 7.2  | 7.2  | 7.2  | 7.2  | 7.2  | 104.8 | 104.8 | 104.8 | 104.8 | 104.8 |
| Actuated g/C Ratio     | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.87  | 0.87  | 0.87  | 0.87  | 0.87  |
| Clearance Time (s)     | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |
| Vehicle Extension (s)  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Lane Grp Cap (vph)     | 83   | 97   | 82   | 99   | 82   | 631   | 4441  | 1382  | 306   | 3091  |
| v/s Ratio Prot         | 0.03 | 0.00 | 0.01 | 0.01 | 0.03 | 0.26  | 0.00  | 0.09  | 0.20  | 0.02  |
| v/c Ratio Perm         | 0.47 | 0.06 | 0.15 | 0.05 | 0.03 | 0.30  | 0.01  | 0.10  | 0.22  | 0.02  |
| Uniform Delay, d1      | 54.6 | 53.2 | 53.5 | 53.2 | 53.2 | 1.0   | 1.3   | 1.0   | 1.1   | 1.2   |
| Progression Factor     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| Incremental Delay, d2  | 4.2  | 0.3  | 0.8  | 0.2  | 0.1  | 0.2   | 0.0   | 0.6   | 0.2   | 0.0   |
| Delay (s)              | 58.7 | 53.5 | 54.3 | 53.4 | 53.4 | 1.1   | 1.5   | 1.0   | 1.7   | 1.4   |
| Level of Service       | E    | D    | D    | D    | D    | A     | A     | A     | A     | A     |
| Approach Delay (s)     | 56.1 | 53.8 | 53.8 | 53.8 | 53.8 | 1.5   | 1.5   | 1.4   | 1.4   | 1.4   |
| Approach LOS           | E    | D    | D    | D    | D    | A     | A     | A     | A     | A     |

| Intersection Summary              |       |
|-----------------------------------|-------|
| HCM Average Control Delay         | 4.0   |
| HCM Volume to Capacity ratio      | 0.31  |
| Actuated Cycle Length (s)         | 120.0 |
| Intersection Capacity Utilization | 38.9% |
| Analysis Period (min)             | 15    |
| Critical Lane Group               |       |

## **Base PM Intersection Analysis**

**Base 2009 PM**



|                                         |      |      |      |     |     |      |     |     |      |     |
|-----------------------------------------|------|------|------|-----|-----|------|-----|-----|------|-----|
| Lane Group                              | EBT  | EBR  | WBT  | WBR | NBL | NBT  | NBR | SBL | SBT  | SBR |
| Lane Group Flow (vph)                   | 67   | 31   | 18   | 14  | 20  | 702  | 24  | 17  | 1134 | 24  |
| Sign Control                            | Stop | Stop | Stop |     |     | Free |     |     | Free |     |
| Intersection Summary                    |      |      |      |     |     |      |     |     |      |     |
| Control Type: Unsignalized              |      |      |      |     |     |      |     |     |      |     |
| Intersection Capacity Utilization 46.4% |      |      |      |     |     |      |     |     |      |     |
| Analysis Period (min) 15                |      |      |      |     |     |      |     |     |      |     |
| ICU Level of Service A                  |      |      |      |     |     |      |     |     |      |     |

[illegible]

Lanes, Volumes, Timings  
2: Speedway Boulevard & Mt Pleasant Rd

Base PM  
6/14/2007



| Lane Group                              | EBL  | EBT  | WBL  | WBT  | NBT  | SBT  |
|-----------------------------------------|------|------|------|------|------|------|
| Lane Group Flow (vph)                   | 35   | 118  | 4    | 110  | 20   | 39   |
| Sign Control                            | Free | Free | Free | Free | Stop | Stop |
| <b>Intersection Summary</b>             |      |      |      |      |      |      |
| Control Type: Unsignalized              |      |      |      |      |      |      |
| Intersection Capacity Utilization 18.6% |      |      |      |      |      |      |
| Analysis Period (min) 15                |      |      |      |      |      |      |
| ICU Level of Service A                  |      |      |      |      |      |      |

HCM Unsignalized Intersection Capacity Analysis  
2: Speedway Boulevard & Mt Pleasant Rd

Base PM  
6/14/2007



| Movement                          | EBL  | EBT  | EBR  | WBL  | WBT  | WBR   | NBL                  | NBT  | NBR  | SBL  | SBT  | SBR  |
|-----------------------------------|------|------|------|------|------|-------|----------------------|------|------|------|------|------|
| Lane Configurations               | ↔    | ↔↔   | ↔    | ↔    | ↔↔   | ↔     |                      | ↔    |      |      | ↔↔   |      |
| Sign Control                      | Free | Free | Free | Free | Free | Free  |                      | Stop |      |      | Stop |      |
| Grade                             |      | 0%   |      |      | 0%   |       |                      | 0%   |      |      | 0%   |      |
| Volume (veh/h)                    | 27   | 104  | 0    | 2    | 71   | 20    | 1                    | 4    | 3    | 11   | 2    | 13   |
| Peak Hour Factor                  | 0.78 | 0.88 | 0.92 | 0.50 | 0.88 | 0.68  | 0.25                 | 0.50 | 0.38 | 0.62 | 0.50 | 0.75 |
| Hourly flow rate (vph)            | 35   | 118  | 0    | 4    | 81   | 29    | 4                    | 8    | 8    | 18   | 4    | 17   |
| Pedestrians                       |      |      |      |      |      |       |                      |      |      |      |      |      |
| Lane Width (ft)                   |      |      |      |      |      |       |                      |      |      |      |      |      |
| Walking Speed (ft/s)              |      |      |      |      |      |       |                      |      |      |      |      |      |
| Percent Blockage                  |      |      |      |      |      |       |                      |      |      |      |      |      |
| Right turn flare (veh)            |      |      |      |      |      |       |                      |      |      |      |      |      |
| Median type                       |      |      |      |      |      |       |                      | None |      |      | None |      |
| Median storage (veh)              |      |      |      |      |      |       |                      |      |      |      |      |      |
| Upstream signal (ft)              |      |      |      |      |      |       |                      |      |      |      |      |      |
| pXX, platoon unblocked            |      |      |      |      |      |       |                      |      |      |      |      |      |
| VC, conflicting volume            | 110  |      |      | 118  |      |       | 255                  | 306  | 59   | 244  | 291  | 55   |
| VC1, stage 1 conf vol             |      |      |      |      |      |       |                      |      |      |      |      |      |
| VC2, stage 2 conf vol             |      |      |      |      |      |       |                      |      |      |      |      |      |
| vCu, unblocked vol                | 110  |      |      | 118  |      |       | 255                  | 306  | 59   | 244  | 291  | 55   |
| tC, single (s)                    | 4.1  |      |      | 4.1  |      |       | 7.5                  | 6.5  | 6.9  | 7.5  | 6.5  | 6.9  |
| tC, 2 stage (s)                   |      |      |      |      |      |       |                      |      |      |      |      |      |
| tF (s)                            | 2.2  |      |      | 2.2  |      |       | 3.5                  | 4.0  | 3.3  | 3.5  | 4.0  | 3.3  |
| p0 queue free %                   | 98   |      |      | 100  |      |       | 99                   | 99   | 99   | 97   | 99   | 98   |
| cM capacity (veh/h)               | 1478 |      |      | 1468 |      |       | 649                  | 591  | 994  | 664  | 602  | 1000 |
| Direction, Lane #                 | EB 1 | EB 2 | EB 3 | WB 1 | WB 2 | WB 3  | NB 1                 | SB 1 |      |      |      |      |
| Volume Total                      | 35   | 79   | 39   | 4    | 54   | 56    | 20                   | 39   |      |      |      |      |
| Volume Left                       | 35   | 0    | 0    | 4    | 0    | 0     | 4                    | 18   |      |      |      |      |
| Volume Right                      | 0    | 0    | 0    | 0    | 0    | 29    | 8                    | 17   |      |      |      |      |
| Volume to Capacity                | 1478 | 1700 | 1700 | 1468 | 1700 | 1700  | 720                  | 771  |      |      |      |      |
| Queue Length 95th (ft)            | 0.02 | 0.05 | 0.02 | 0.00 | 0.03 | 0.03  | 0.03                 | 0.03 | 0.05 |      |      |      |
| Control Delay (s)                 | 2    | 0    | 0    | 0    | 0    | 0     | 2                    | 4    |      |      |      |      |
| Lane LOS                          | A    |      |      | A    |      |       | B                    | A    |      |      |      |      |
| Approach Delay (s)                | 1.7  |      |      | 0.3  |      |       | 10.1                 | 9.9  |      |      |      |      |
| Approach LOS                      |      |      |      |      |      |       | B                    | A    |      |      |      |      |
| Intersection Summary              |      |      |      |      |      |       |                      |      |      |      |      |      |
| Average Delay                     |      |      |      |      |      | 2.7   |                      |      |      |      |      |      |
| Intersection Capacity Utilization |      |      |      |      |      | 18.6% | ICU Level of Service |      |      |      |      |      |
| Analysis Period (min)             |      |      |      |      |      | 15    | A                    |      |      |      |      |      |

Lanes, Volumes, Timings  
3: Selfridge Rd & Speedway Boulevard

Base PM  
6/14/2007



| Lane Group                        | EBL   | NBT  | SBT  |
|-----------------------------------|-------|------|------|
| Lane Group Flow (vph)             | 8     | 101  | 118  |
| Sign Control                      | Stop  | Free | Free |
| Intersection Summary              |       |      |      |
| Control Type: Unsignalized        |       |      |      |
| Intersection Capacity Utilization | 13.3% |      |      |
| Analysis Period (min)             | 15    |      |      |
| ICU Level of Service A            |       |      |      |

HCM Unsignalized Intersection Capacity Analysis  
3: Selfridge Rd & Speedway Boulevard

Base PM  
6/14/2007



| Movement                          | EBL   | EBR  | NBL  | SBT  | SBR  |
|-----------------------------------|-------|------|------|------|------|
| Lane Configurations               | W     |      | W    | W    | W    |
| Sign Control                      | Stop  |      | Free | Free | Free |
| Grade                             | 0%    |      | 0%   | 0%   | 0%   |
| Volume (veh/h)                    | 2     | 1    | 1    | 92   | 103  |
| Peak Hour Factor                  | 0.50  | 0.25 | 0.25 | 0.95 | 0.90 |
| Hourly flow rate (vph)            | 4     | 4    | 4    | 97   | 114  |
| Pedestrians                       |       |      |      |      |      |
| Lane Width (ft)                   |       |      |      |      |      |
| Walking Speed (ft/s)              |       |      |      |      |      |
| Percent Blockage                  |       |      |      |      |      |
| Right turn flare (veh)            |       |      |      |      |      |
| Median type                       | None  |      |      |      |      |
| Median storage (veh)              |       |      |      |      |      |
| Upstream signal (ft)              |       |      |      |      |      |
| pX, platoon unblocked             |       |      |      |      |      |
| VC, conflicting volume            | 173   | 59   | 118  |      |      |
| VC1, stage 1 conf vol             |       |      |      |      |      |
| VC2, stage 2 conf vol             |       |      |      |      |      |
| vCu, unblocked vol                | 173   | 59   | 118  |      |      |
| tC, single (s)                    | 6.8   | 6.9  | 4.1  |      |      |
| tC, 2 stage (s)                   |       |      |      |      |      |
| tF (s)                            | 3.5   | 3.3  | 2.2  |      |      |
| p0 queue free %                   | 99    | 100  | 100  |      |      |
| cM capacity (veh/h)               | 798   | 994  | 1467 |      |      |
| Direction, Lane #                 | EB 1  | NB 1 | NB 2 | SB 1 | SB 2 |
| Volume Total                      | 8     | 36   | 65   | 76   | 42   |
| Volume Left                       | 4     | 4    | 0    | 0    | 0    |
| Volume Right                      | 4     | 0    | 0    | 0    | 4    |
| cSH                               | 885   | 1467 | 1700 | 1700 |      |
| Volume to Capacity                | 0.01  | 0.00 | 0.04 | 0.04 | 0.02 |
| Queue Length 95th (ft)            | 1     | 0    | 0    | 0    | 0    |
| Control Delay (s)                 | 9.1   | 0.8  | 0.0  | 0.0  | 0.0  |
| Lane LOS                          | A     | A    |      |      |      |
| Approach Delay (s)                | 9.1   | 0.3  |      | 0.0  |      |
| Approach LOS                      | A     |      |      |      |      |
| <b>Intersection Summary</b>       |       |      |      |      |      |
| Average Delay                     | 0.5   |      |      |      |      |
| Intersection Capacity Utilization | 13.3% |      |      |      |      |
| ICU Level of Service              | A     |      |      |      |      |
| Analysis Period (min)             | 15    |      |      |      |      |

|                                         |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-----------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                         |  |  |  |  |  |  |
| Lane Group                              | EBL                                                                                 | EBT                                                                                 | WBT                                                                                 | WBR                                                                                 | SBL                                                                                 | SBR                                                                                 |
| Lane Group Flow (vph)                   | 25                                                                                  | 110                                                                                 | 149                                                                                 | 85                                                                                  | 76                                                                                  | 68                                                                                  |
| Sign Control                            | Free                                                                                |                                                                                     |                                                                                     | Stop                                                                                |                                                                                     |                                                                                     |
| Intersection Summary                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Control Type: Unsignalized              |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization 24.4% |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Analysis Period (min) 15                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| ICU Level of Service A                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

| Movement                          | EBL   | EBT     | WBT  | WBR  | SBL  | SBR              |
|-----------------------------------|-------|---------|------|------|------|------------------|
| Lane Configurations               | ↔     | ↔       | ↔    | ↔    | ↔    | ↔                |
| Sign Control                      | Free  |         |      | Stop |      |                  |
| Grade                             | 0%    |         |      | 0%   |      |                  |
| Volume (veh/h)                    | 19    | 97      | 136  | 73   | 70   | 65               |
| Peak Hour Factor                  | 0.75  | 0.88    | 0.91 | 0.86 | 0.92 | 0.95             |
| Hourly flow rate (vph)            | 25    | 110     | 149  | 85   | 76   | 68               |
| Pedestrians                       |       |         |      |      |      |                  |
| Lane Width (ft)                   |       |         |      |      |      |                  |
| Walking Speed (ft/s)              |       |         |      |      |      |                  |
| Percent Blockage                  |       |         |      |      |      |                  |
| Right turn flare (veh)            |       |         |      |      |      |                  |
| Median type                       | None  |         |      |      |      |                  |
| Median storage (veh)              |       |         |      |      |      |                  |
| Upstream signal (ft)              |       |         |      |      |      |                  |
| pX, platoon unblocked             |       |         |      |      |      |                  |
| VC, conflicting volume            | 149   | 310 149 |      |      |      |                  |
| VC1, stage 1 conf vol             |       |         |      |      |      |                  |
| VC2, stage 2 conf vol             |       |         |      |      |      |                  |
| VCu, unblocked vol                | 149   | 310 149 |      |      |      |                  |
| tC, single (s)                    | 4.1   | 6.4 6.2 |      |      |      |                  |
| tC, 2 stage (s)                   |       |         |      |      |      |                  |
| tF (s)                            | 2.2   | 3.5 3.3 |      |      |      |                  |
| p0 queue free %                   | 98    | 89 92   |      |      |      |                  |
| cM capacity (veh/h)               | 1432  | 670 897 |      |      |      |                  |
| Direction, Lane #                 | EB 1  | EB 2    | WB 1 | WB 2 | SB 1 | SB 2             |
| Volume Total                      | 25    | 110     | 149  | 85   | 76   | 68               |
| Volume Left                       | 25    | 0       | 0    | 0    | 76   | 0                |
| Volume Right                      | 0     | 0       | 0    | 85   | 0    | 68               |
| cSH                               | 1432  | 1700    | 1700 | 1700 | 670  | 897              |
| Volume to Capacity                | 0.02  | 0.06    | 0.09 | 0.05 | 0.11 | 0.08             |
| Queue Length 95th (ft)            | 1     | 0       | 0    | 0    | 10   | 6                |
| Control Delay (s)                 | 7.6   | 0.0     | 0.0  | 0.0  | 11.1 | 9.3              |
| Lane LOS                          | A     | B A     |      |      |      |                  |
| Approach Delay (s)                | 1.4   | 10.2    |      |      |      |                  |
| Approach LOS                      | B     |         |      |      |      |                  |
| Intersection Summary              |       |         |      |      |      |                  |
| Average Delay                     | 3.3   |         |      |      |      | ICU Level of Ser |
| Intersection Capacity Utilization | 24.4% |         |      |      |      | 15               |
| Analysis Period (min)             |       |         |      |      |      |                  |





| Lane Group                              | EBT  | WBT  | SBL  |
|-----------------------------------------|------|------|------|
| Lane Group Flow (vph)                   | 135  | 196  | 8    |
| Sign Control                            | Free | Free | Stop |
| <b>Intersection Summary</b>             |      |      |      |
| Control Type: Unsignalized              |      |      |      |
| Intersection Capacity Utilization 19.5% |      |      |      |
| Analysis Period (min) 15                |      |      |      |
| ICU Level of Service A                  |      |      |      |



| Movement                          | EBL  | EBT   | WBT  | WBR  | SBL                  | SBR  |
|-----------------------------------|------|-------|------|------|----------------------|------|
| Lane Configurations               | 4    | 1     | 1    | 1    | 1                    | 1    |
| Sign Control                      | Free | Free  | Free | Free | Stop                 | Stop |
| Grade                             | 0%   | 0%    | 0%   | 0%   | 0%                   | 0%   |
| Volume (veh/h)                    | 0    | 119   | 179  | 1    | 0                    | 3    |
| Peak Hour Factor                  | 0.92 | 0.88  | 0.93 | 0.25 | 0.92                 | 0.38 |
| Hourly flow rate (vph)            | 0    | 135   | 192  | 4    | 0                    | 8    |
| Pedestrians                       |      |       |      |      |                      |      |
| Lane Width (ft)                   |      |       |      |      |                      |      |
| Walking Speed (ft/s)              |      |       |      |      |                      |      |
| Percent Blockage                  |      |       |      |      |                      |      |
| Right turn flare (veh)            |      |       |      |      |                      |      |
| Median type                       |      |       |      |      | None                 |      |
| Median storage (veh)              |      |       |      |      |                      |      |
| Upstream signal (ft)              |      |       |      |      |                      |      |
| pX, platoon unblocked             |      |       |      |      |                      |      |
| VC, conflicting volume            |      | 196   |      |      | 330                  | 194  |
| VC1, stage 1 conf vol             |      |       |      |      |                      |      |
| VC2, stage 2 conf vol             |      |       |      |      |                      |      |
| VCu, unblocked vol                |      | 196   |      |      | 330                  | 194  |
| tC, single (s)                    |      | 4.1   |      |      | 6.4                  | 6.2  |
| tC, 2 stage (s)                   |      |       |      |      |                      |      |
| tF (s)                            |      | 2.2   |      |      | 3.5                  | 3.3  |
| p0 queue free %                   |      | 100   |      |      | 100                  | 99   |
| cM capacity (veh/h)               |      | 1376  |      |      | 665                  | 847  |
| Direction, Lane #                 | EB 1 | WB 1  | SB 1 |      |                      |      |
| Volume Total                      | 135  | 196   | 8    |      |                      |      |
| Volume Left                       | 0    | 0     | 0    |      |                      |      |
| Volume Right                      | 0    | 4     | 8    |      |                      |      |
| cSH                               | 1376 | 1700  | 847  |      |                      |      |
| Volume to Capacity                | 0.00 | 0.12  | 0.01 |      |                      |      |
| Queue Length 95th (ft)            | 0    | 0     | 1    |      |                      |      |
| Control Delay (s)                 | 0.0  | 0.0   | 9.3  |      |                      |      |
| Lane LOS                          |      | A     |      |      |                      |      |
| Approach Delay (s)                | 0.0  | 0.0   | 9.3  |      |                      |      |
| Approach LOS                      |      | A     |      |      |                      |      |
| <b>Intersection Summary</b>       |      |       |      |      |                      |      |
| Average Delay                     |      |       | 0.2  |      |                      |      |
| Intersection Capacity Utilization |      | 19.5% |      |      | ICU Level of Service | A    |
| Analysis Period (min)             |      | 15    |      |      |                      |      |

**Base 2009 PM Improved**

Lanes, Volumes, Timings  
1: Speedway Boulevard & US 19 / US 41

HCM Signalized Intersection Capacity Analysis  
1: Speedway Boulevard & US 19 / US 41

Base PM - Improved  
6/14/2007

| Movement                | EBL  | EBT  | WBL  | WBT  | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|-------------------------|------|------|------|------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL  | EBT  | WBL  | WBT  | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Group Flow (vph)   | 76   | 46   | 18   | 21   | 25    | 878   | 29    | 22    | 1418  | 29    |
| Act Effct Green (s)     | 11.2 | 11.2 | 11.1 | 11.1 | 103.6 | 103.6 | 103.6 | 103.6 | 103.6 | 103.6 |
| Actuated g/C Ratio      | 0.09 | 0.09 | 0.09 | 0.09 | 0.86  | 0.86  | 0.86  | 0.86  | 0.86  | 0.86  |
| v/c Ratio               | 0.58 | 0.25 | 0.14 | 0.13 | 0.12  | 0.20  | 0.02  | 0.05  | 0.46  | 0.02  |
| Control Delay           | 69.3 | 21.9 | 50.4 | 24.6 | 3.8   | 2.0   | 0.8   | 2.4   | 3.2   | 0.8   |
| Queue Delay             | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay             | 69.3 | 21.9 | 50.4 | 24.6 | 3.8   | 2.0   | 0.8   | 2.4   | 3.2   | 0.8   |
| LOS                     | E    | C    | D    | C    | A     | A     | A     | A     | A     | A     |
| Approach Delay          | 51.4 |      | 36.5 |      | 2.0   |       |       |       | 3.1   |       |
| Approach LOS            | D    |      | D    |      | A     |       |       |       | A     |       |
| Queue Length 50th (ft)  | 57   | 6    | 13   | 3    | 3     | 35    | 0     | 2     | 114   | 0     |
| Queue Length 95th (ft)  | 76   | 19   | 19   | 21   | 11    | 59    | 4     | 5     | 189   | 4     |
| Internal Link Dist (ft) | 3427 |      | 1642 |      | 2919  |       |       |       | 2484  |       |
| Turn Bay Length (ft)    | 150  |      | 600  |      | 600   |       | 180   | 160   | 366   |       |
| Base Capacity (vph)     | 404  | 503  | 395  | 490  | 200   | 4392  | 1371  | 467   | 3057  | 1371  |
| Starvation Cap Reductn  | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     |
| Spillback Cap Reductn   | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     |
| Storage Cap Reductn     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     |
| Reduced v/c Ratio       | 0.19 | 0.09 | 0.05 | 0.04 | 0.13  | 0.20  | 0.02  | 0.05  | 0.46  | 0.02  |

|                                                                      |  |  |  |  |  |  |  |  |  |  |
|----------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|
| <b>Intersection Summary</b>                                          |  |  |  |  |  |  |  |  |  |  |
| Cycle Length: 120                                                    |  |  |  |  |  |  |  |  |  |  |
| Actuated Cycle Length: 120                                           |  |  |  |  |  |  |  |  |  |  |
| Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBT, Start of Green |  |  |  |  |  |  |  |  |  |  |
| Control Type: Actuated-Coordinated                                   |  |  |  |  |  |  |  |  |  |  |
| Maximum v/c Ratio: 0.58                                              |  |  |  |  |  |  |  |  |  |  |
| Intersection Signal Delay: 5.5                                       |  |  |  |  |  |  |  |  |  |  |
| Intersection Capacity Utilization 53.4%                              |  |  |  |  |  |  |  |  |  |  |
| Analysis Period (min) 15                                             |  |  |  |  |  |  |  |  |  |  |

## **Future AM Intersection Analysis**



**Future 2009 AM**

Lanes, Volumes, Timings  
1: Speedway Boulevard & US 19 / US 41

Future AM  
6/14/2007

|                                         | →    | ↗    | ←    | ↖    | ↑    | ↘    | ↓    | ↙    |      |      |
|-----------------------------------------|------|------|------|------|------|------|------|------|------|------|
| Lane Group                              | EBT  | EBR  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Group Flow (vph)                   | 115  | 27   | 16   | 11   | 16   | 1075 | 6    | 23   | 556  | 72   |
| Sign Control                            | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| Intersection Summary                    |      |      |      |      |      |      |      |      |      |      |
| Control Type: Unsignalized              |      |      |      |      |      |      |      |      |      |      |
| Intersection Capacity Utilization 44.8% |      |      |      |      |      |      |      |      |      |      |
| Analysis Period (min) 15                |      |      |      |      |      |      |      |      |      |      |
| ICU Level of Service A                  |      |      |      |      |      |      |      |      |      |      |

HCM Unsignalized Intersection Capacity Analysis  
1: Speedway Boulevard & US 19 / US 41

Future AM  
6/14/2007

| Movement                          | EBL                    | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|-----------------------------------|------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations               | ↔                      | ↔    | ↔    | ↔    | ↔    | ↔    | ↔    | ↔    | ↔    | ↔    | ↔    | ↔    |
| Sign Control                      | Stop                   | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| Grade                             | 0%                     | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   |
| Volume (veh/h)                    | 66                     | 4    | 21   | 6    | 3    | 8    | 14   | 1000 | 4    | 14   | 517  | 50   |
| Peak Hour Factor                  | 0.67                   | 0.25 | 0.78 | 0.58 | 0.50 | 0.75 | 0.85 | 0.93 | 0.62 | 0.61 | 0.93 | 0.69 |
| Hourly flow rate (vph)            | 99                     | 16   | 27   | 10   | 6    | 11   | 16   | 1075 | 6    | 23   | 556  | 72   |
| Pedestrians                       |                        |      |      |      |      |      |      |      |      |      |      |      |
| Lane Width (ft)                   |                        |      |      |      |      |      |      |      |      |      |      |      |
| Walking Speed (ft/s)              |                        |      |      |      |      |      |      |      |      |      |      |      |
| Percent Blockage                  |                        |      |      |      |      |      |      |      |      |      |      |      |
| Right turn flare (veh)            |                        |      |      |      |      |      | 2    |      |      |      |      |      |
| Median type                       |                        |      |      |      |      |      |      |      |      |      |      |      |
| Median storage (veh)              |                        |      |      |      |      |      |      |      |      |      |      |      |
| Upstream signal (ft)              |                        |      |      |      |      |      |      |      |      |      |      |      |
| pX, platoon unblocked             |                        |      |      |      |      |      |      |      |      |      |      |      |
| VC, conflicting volume            | 1175                   | 1710 | 278  | 1440 | 1710 | 538  | 556  |      |      | 1075 |      |      |
| VC1, stage 1 conf vol             |                        |      |      |      |      |      |      |      |      |      |      |      |
| VC2, stage 2 conf vol             |                        |      |      |      |      |      |      |      |      |      |      |      |
| VCu, unblocked vol                | 1175                   | 1710 | 278  | 1440 | 1710 | 538  | 556  |      |      | 1075 |      |      |
| tC, single (s)                    | 7.5                    | 6.5  | 6.9  | 7.5  | 6.5  | 6.9  | 4.1  |      |      | 4.1  |      |      |
| tC, 2 stage (s)                   |                        |      |      |      |      |      |      |      |      |      |      |      |
| tF (s)                            | 3.5                    | 4.0  | 3.3  | 3.5  | 4.0  | 3.3  | 2.2  |      |      | 2.2  |      |      |
| p0 queue free %                   | 25                     | 81   | 96   | 86   | 93   | 98   | 98   |      |      | 96   |      |      |
| cM capacity (veh/h)               | 131                    | 85   | 719  | 74   | 85   | 488  | 1011 |      |      | 644  |      |      |
| Direction, Lane #                 | EB 1                   | EB 2 | WB 1 | NB 1 | NB 2 | NB 3 | NB 4 | SB 1 | SB 2 | SB 3 | SB 4 |      |
| Volume Total                      | 115                    | 27   | 27   | 16   | 538  | 538  | 6    | 23   | 278  | 278  | 72   |      |
| Volume Left                       | 99                     | 0    | 10   | 16   | 0    | 0    | 0    | 23   | 0    | 0    | 0    |      |
| Volume Right                      | 0                      | 27   | 11   | 0    | 0    | 0    | 6    | 0    | 0    | 0    | 72   |      |
| cSH                               | 122                    | 719  | 129  | 1011 | 1700 | 1700 | 644  | 1700 | 1700 | 1700 | 1700 |      |
| Volume to Capacity                | 0.94                   | 0.04 | 0.21 | 0.02 | 0.32 | 0.32 | 0.00 | 0.04 | 0.16 | 0.16 | 0.04 |      |
| Queue Length 95th (ft)            | 153                    | 3    | 19   | 1    | 0    | 0    | 0    | 3    | 0    | 0    | 0    |      |
| Control Delay (s)                 | 134.5                  | 10.2 | 43.0 | 8.6  | 0.0  | 0.0  | 0.0  | 10.8 | 0.0  | 0.0  | 0.0  |      |
| Lane LOS                          | F                      | B    | E    | A    |      |      |      | B    |      |      |      |      |
| Approach Delay (s)                | 110.8                  |      | 43.0 | 0.1  |      |      |      | 0.4  |      |      |      |      |
| Approach LOS                      | F                      |      | E    |      |      |      |      |      |      |      |      |      |
| Intersection Summary              |                        |      |      |      |      |      |      |      |      |      |      |      |
| Average Delay                     | 9.0                    |      |      |      |      |      |      |      |      |      |      |      |
| Intersection Capacity Utilization | 44.8%                  |      |      |      |      |      |      |      |      |      |      |      |
| Analysis Period (min)             | 15                     |      |      |      |      |      |      |      |      |      |      |      |
|                                   | ICU Level of Service A |      |      |      |      |      |      |      |      |      |      |      |

Lanes, Volumes, Timings  
2: Speedway Boulevard & Mt Pleasant Rd

Future AM  
6/14/2007



| Lane Group                              | EBL  | EBT  | WBL  | WBT  | NBT  | SBT  |
|-----------------------------------------|------|------|------|------|------|------|
| Lane Group Flow (vph)                   | 42   | 115  | 4    | 91   | 5    | 69   |
| Sign Control                            | Free | Free | Free | Free | Stop | Stop |
| <b>Intersection Summary</b>             |      |      |      |      |      |      |
| Control Type: Unsignalized              |      |      |      |      |      |      |
| Intersection Capacity Utilization 24.1% |      |      |      |      |      |      |
| Analysis Period (min) 15                |      |      |      |      |      |      |
| ICU Level of Service A                  |      |      |      |      |      |      |

HCM Unsignalized Intersection Capacity Analysis  
2: Speedway Boulevard & Mt Pleasant Rd

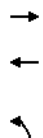
Future AM  
6/14/2007



| Movement                          | EBL  | EBT  | EBR  | WBL  | WBT  | WBR   | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|-----------------------------------|------|------|------|------|------|-------|------|------|------|------|------|------|
| Lane Configurations               | ↔    | ↔    |      | ↔    | ↔    |       |      | ↔    |      |      | ↔    | ↔    |
| Sign Control                      | Free | Free |      | Free | Free |       |      | Stop |      |      | Stop | Stop |
| Grade                             |      |      |      |      |      |       |      |      |      |      |      |      |
| Volume (veh/h)                    | 21   | 79   | 1    | 1    | 64   | 12    | 0    | 1    | 1    | 23   | 2    | 26   |
| Peak Hour Factor                  | 0.50 | 0.71 | 0.25 | 0.25 | 0.86 | 0.69  | 0.92 | 0.92 | 0.25 | 0.92 | 0.50 | 0.65 |
| Hourly flow rate (vph)            | 42   | 111  | 4    | 4    | 74   | 17    | 0    | 1    | 4    | 25   | 4    | 40   |
| Pedestrians                       |      |      |      |      |      |       |      |      |      |      |      |      |
| Lane Width (ft)                   |      |      |      |      |      |       |      |      |      |      |      |      |
| Walking Speed (ft/s)              |      |      |      |      |      |       |      |      |      |      |      |      |
| Percent Blockage                  |      |      |      |      |      |       |      |      |      |      |      |      |
| Right turn flare (veh)            |      |      |      |      |      |       |      |      |      |      |      |      |
| Median type                       |      |      |      |      |      |       |      | None |      |      |      | None |
| Median storage (veh)              |      |      |      |      |      |       |      |      |      |      |      |      |
| Upstream signal (ft)              |      |      |      |      |      |       |      |      |      |      |      |      |
| pX, platoon unblocked             |      |      |      |      |      |       |      |      |      |      |      |      |
| VC, conflicting volume            | 92   |      | 111  |      |      |       | 284  | 297  | 58   | 235  | 286  | 46   |
| VC1, stage 1 conf vol             |      |      |      |      |      |       |      |      |      |      |      |      |
| VC2, stage 2 conf vol             |      |      |      |      |      |       |      |      |      |      |      |      |
| vCu, unblocked vol                | 92   |      | 111  |      |      |       | 284  | 297  | 58   | 235  | 286  | 46   |
| tC, single (s)                    | 4.1  |      | 4.1  |      |      |       | 7.5  | 6.5  | 6.9  | 7.5  | 6.5  | 6.9  |
| tC, 2 stage (s)                   |      |      |      |      |      |       |      |      |      |      |      |      |
| tF (s)                            | 2.2  |      | 2.2  |      |      |       | 3.5  | 4.0  | 3.3  | 3.5  | 4.0  | 3.3  |
| p0 queue free %                   | 97   |      | 100  |      |      |       | 100  | 100  | 100  | 96   | 99   | 96   |
| cM capacity (veh/h)               | 1501 |      | 1476 |      |      |       | 603  | 595  | 996  | 679  | 603  | 1014 |
| Direction, Lane #                 | EB 1 | EB 2 | EB 3 | WB 1 | WB 2 | WB 3  | NB 1 | SB 1 |      |      |      |      |
| Volume Total                      | 42   | 74   | 41   | 4    | 50   | 42    | 5    | 69   |      |      |      |      |
| Volume Left                       | 42   | 0    | 0    | 4    | 0    | 0     | 0    | 25   |      |      |      |      |
| Volume Right                      | 0    | 0    | 4    | 0    | 0    | 17    | 4    | 40   |      |      |      |      |
| cSH                               | 1501 | 1700 | 1700 | 1476 | 1700 | 1700  | 871  | 832  |      |      |      |      |
| Volume to Capacity                | 0.03 | 0.04 | 0.02 | 0.00 | 0.03 | 0.02  | 0.01 | 0.08 |      |      |      |      |
| Queue Length 95th (ft)            | 2    | 0    | 0    | 0    | 0    | 0     | 0    | 7    |      |      |      |      |
| Control Delay (s)                 | 7.5  | 0.0  | 0.0  | 7.4  | 0.0  | 0.0   | 9.2  | 9.7  |      |      |      |      |
| Lane LOS                          | A    |      |      | A    |      |       | A    | A    |      |      |      |      |
| Approach Delay (s)                | 2.0  |      |      | 0.3  |      |       | 9.2  | 9.7  |      |      |      |      |
| Approach LOS                      |      |      |      |      |      |       | A    | A    |      |      |      |      |
| <b>Intersection Summary</b>       |      |      |      |      |      |       |      |      |      |      |      |      |
| Average Delay                     |      |      |      |      |      | 3.2   |      |      |      |      |      |      |
| Intersection Capacity Utilization |      |      |      |      |      | 24.1% |      |      |      |      |      | A    |
| Analysis Period (min)             |      |      |      |      |      | 15    |      |      |      |      |      |      |

Lanes, Volumes, Timings  
3: Selfridge Rd & Speedway Boulevard

Future AM  
6/14/2007



| Lane Group                              | EBL  | NBT  | SBT  |
|-----------------------------------------|------|------|------|
| Lane Group Flow (vph)                   | 168  | 67   | 147  |
| Sign Control                            | Stop | Free | Free |
| <b>Intersection Summary</b>             |      |      |      |
| Control Type: Unsignalized              |      |      |      |
| Intersection Capacity Utilization 14.6% |      |      |      |
| Analysis Period (min) 15                |      |      |      |
| ICU Level of Service A                  |      |      |      |

HCM Unsignalized Intersection Capacity Analysis  
3: Selfridge Rd & Speedway Boulevard

Future AM  
6/14/2007



| Movement                          | EBL   | EBR  | NBL  | NBT  | SBT  | SBR  |
|-----------------------------------|-------|------|------|------|------|------|
| Lane Configurations               | W     |      |      | W    | W    |      |
| Sign Control                      | Stop  |      |      | Free | Free |      |
| Grade                             | 0%    |      |      | 0%   | 0%   |      |
| Volume (veh/h)                    | 82    | 1    | 2    | 52   | 35   | 52   |
| Peak Hour Factor                  | 0.50  | 0.25 | 0.50 | 0.82 | 0.82 | 0.50 |
| Hourly flow rate (vph)            | 164   | 4    | 4    | 63   | 43   | 104  |
| Pedestrians                       |       |      |      |      |      |      |
| Lane Width (ft)                   |       |      |      |      |      |      |
| Walking Speed (ft/s)              |       |      |      |      |      |      |
| Percent Blockage                  |       |      |      |      |      |      |
| Right turn flare (veh)            |       |      |      |      |      |      |
| Median type                       | None  |      |      |      |      |      |
| Median storage (veh)              |       |      |      |      |      |      |
| Upstream signal (ft)              |       |      |      |      |      |      |
| pX, platoon unblocked             |       |      |      |      |      |      |
| VC, conflicting volume            | 134   | 73   | 147  |      |      |      |
| VC1, stage 1 conf vol             |       |      |      |      |      |      |
| VC2, stage 2 conf vol             |       |      |      |      |      |      |
| vCu, unblocked vol                | 134   | 73   | 147  |      |      |      |
| tC, single (s)                    | 6.8   | 6.9  | 4.1  |      |      |      |
| tC, 2 stage (s)                   |       |      |      |      |      |      |
| tF (s)                            | 3.5   | 3.3  | 2.2  |      |      |      |
| p0 queue free %                   | 81    | 100  | 100  |      |      |      |
| cM capacity (veh/h)               | 843   | 974  | 1433 |      |      |      |
| Direction, Lane #                 | EB 1  | NB 1 | NB 2 | SB 1 | SB 2 |      |
| Volume Total                      | 168   | 25   | 42   | 28   | 118  |      |
| Volume Left                       | 164   | 4    | 0    | 0    | 0    |      |
| Volume Right                      | 4     | 0    | 0    | 0    | 104  |      |
| cSH                               | 846   | 1433 | 1700 | 1700 | 1700 |      |
| Volume to Capacity                | 0.20  | 0.00 | 0.02 | 0.02 | 0.07 |      |
| Queue Length 95th (ft)            | 18    | 0    | 0    | 0    | 0    |      |
| Control Delay (s)                 | 10.3  | 1.2  | 0.0  | 0.0  | 0.0  |      |
| Lane LOS                          | B     | A    |      |      |      |      |
| Approach Delay (s)                | 10.3  | 0.5  |      | 0.0  |      |      |
| Approach LOS                      | B     |      |      |      |      |      |
| <b>Intersection Summary</b>       |       |      |      |      |      |      |
| Average Delay                     | 4.6   |      |      |      |      |      |
| Intersection Capacity Utilization | 14.6% |      |      |      |      |      |
| ICU Level of Service              | A     |      |      |      |      |      |
| Analysis Period (min)             | 15    |      |      |      |      |      |

Lanes, Volumes, Timings  
4: Woolsey Rd & Speedway Boulevard

Future AM  
6/14/2007

|                       | ↗    | →   | ←    | ↖   | ↘    | ↙   |
|-----------------------|------|-----|------|-----|------|-----|
| Lane Group            | EBL  | EBT | WBT  | WBR | SBL  | SBR |
| Lane Group Flow (vph) | 29   | 235 | 196  | 38  | 21   | 13  |
| Sign Control          | Free |     | Free |     | Stop |     |

Intersection Summary

Control Type: Unsignalized  
Intersection Capacity Utilization 26.0%  
Analysis Period (min) 15

ICU Level of Service A

HCM Unsignalized Intersection Capacity Analysis  
4: Woolsey Rd & Speedway Boulevard

Future AM  
6/14/2007



| Movement                          | EBL   | EBT  | WBT  | WBR  | SBL                  | SBR  |     |
|-----------------------------------|-------|------|------|------|----------------------|------|-----|
| Lane Configurations               | ↖     | ↗    | ↗    | ↖    | ↖                    | ↗    |     |
| Sign Control                      | Free  |      | Free |      | Stop                 |      |     |
| Grade                             | 0%    |      | 0%   |      | 0%                   |      |     |
| Volume (veh/h)                    | 22    | 209  | 178  | 33   | 17                   | 9    |     |
| Peak Hour Factor                  | 0.75  | 0.89 | 0.91 | 0.86 | 0.80                 | 0.67 |     |
| Hourly flow rate (vph)            | 29    | 235  | 196  | 38   | 21                   | 13   |     |
| Pedestrians                       |       |      |      |      |                      |      |     |
| Lane Width (ft)                   |       |      |      |      |                      |      |     |
| Walking Speed (ft/s)              |       |      |      |      |                      |      |     |
| Percent Blockage                  |       |      |      |      |                      |      |     |
| Right turn flare (veh)            |       |      |      |      |                      |      |     |
| Median type                       | None  |      |      |      |                      |      |     |
| Median storage (veh)              |       |      |      |      |                      |      |     |
| Upstream signal (ft)              |       |      |      |      |                      |      |     |
| pX, platoon unblocked             |       |      |      |      |                      |      |     |
| VC, conflicting volume            | 196   |      |      |      |                      | 489  | 196 |
| VC1, stage 1 conf vol             |       |      |      |      |                      |      |     |
| VC2, stage 2 conf vol             |       |      |      |      |                      |      |     |
| VCu, unblocked vol                | 196   |      |      |      |                      | 489  | 196 |
| tC, single (s)                    | 4.1   |      |      |      |                      | 6.4  | 6.2 |
| tC, 2 stage (s)                   |       |      |      |      |                      |      |     |
| tF (s)                            | 2.2   |      |      |      |                      | 3.5  | 3.3 |
| p0 queue free %                   | 98    |      |      |      |                      | 96   | 98  |
| cM capacity (veh/h)               | 1377  |      |      |      |                      | 527  | 846 |
| Direction, Lane #                 | EB 1  | EB 2 | WB 1 | WB 2 | SB 1                 | SB 2 |     |
| Volume Total                      | 29    | 235  | 196  | 38   | 21                   | 13   |     |
| Volume Left                       | 29    | 0    | 0    | 0    | 21                   | 0    |     |
| Volume Right                      | 0     | 0    | 0    | 38   | 0                    | 13   |     |
| cSH                               | 1377  | 1700 | 1700 | 1700 | 527                  | 846  |     |
| Volume to Capacity                | 0.02  | 0.14 | 0.12 | 0.02 | 0.04                 | 0.02 |     |
| Queue Length 95th (ft)            | 2     | 0    | 0    | 0    | 3                    | 1    |     |
| Control Delay (s)                 | 7.7   | 0.0  | 0.0  | 0.0  | 12.1                 | 9.3  |     |
| Lane LOS                          | A     |      |      |      |                      | B    | A   |
| Approach Delay (s)                | 0.9   | 0.0  |      |      |                      | 11.0 |     |
| Approach LOS                      | B     |      |      |      |                      |      |     |
| Intersection Summary              |       |      |      |      |                      |      |     |
| Average Delay                     | 1.1   |      |      |      |                      |      |     |
| Intersection Capacity Utilization | 26.0% |      |      |      | ICU Level of Service |      |     |
| Analysis Period (min)             | 15    |      |      |      | A                    |      |     |
|                                   |       |      |      |      |                      |      |     |

Lanes, Volumes, Timings  
5: Lower Woolsey Rd & Selfridge Rd

Future AM  
6/14/2007



| Lane Group                              | EBT  | WBT  | SBL  |
|-----------------------------------------|------|------|------|
| Lane Group Flow (vph)                   | 170  | 204  | 142  |
| Sign Control                            | Free | Free | Stop |
| <b>Intersection Summary</b>             |      |      |      |
| Control Type: Unsignalized              |      |      |      |
| Intersection Capacity Utilization 30.5% |      |      |      |
| Analysis Period (min) 15                |      |      |      |
| ICU Level of Service A                  |      |      |      |

HCM Unsignalized Intersection Capacity Analysis  
5: Lower Woolsey Rd & Selfridge Rd

Future AM  
6/14/2007



| Movement                          | EBL  | EBT  | WBT   | WBR  | SBL  | SBR  |
|-----------------------------------|------|------|-------|------|------|------|
| Lane Configurations               | 4    | 1    | 1     | 1    | W    | W    |
| Sign Control                      | Free | Free | Free  | Free | Stop | Stop |
| Grade                             | 0%   | 0%   | 0%    | 0%   | 0%   | 0%   |
| Volume (veh/h)                    | 12   | 143  | 128   | 58   | 92   | 21   |
| Peak Hour Factor                  | 0.92 | 0.91 | 0.91  | 0.92 | 0.92 | 0.50 |
| Hourly flow rate (vph)            | 13   | 157  | 141   | 63   | 100  | 42   |
| Pedestrians                       |      |      |       |      |      |      |
| Lane Width (ft)                   |      |      |       |      |      |      |
| Walking Speed (ft/s)              |      |      |       |      |      |      |
| Percent Blockage                  |      |      |       |      |      |      |
| Right turn flare (veh)            |      |      |       |      |      |      |
| Median type                       |      |      |       |      | None |      |
| Median storage (veh)              |      |      |       |      |      |      |
| Upstream signal (ft)              |      |      |       |      |      |      |
| pX, platoon unblocked             |      |      |       |      |      |      |
| VC, conflicting volume            | 204  |      |       |      | 355  | 172  |
| VC1, stage 1 conf vol             |      |      |       |      |      |      |
| VC2, stage 2 conf vol             |      |      |       |      |      |      |
| vCu, unblocked vol                | 204  |      |       |      | 355  | 172  |
| tC, single (s)                    | 4.1  |      |       |      | 6.4  | 6.2  |
| tC, 2 stage (s)                   |      |      |       |      |      |      |
| tF (s)                            | 2.2  |      |       |      | 3.5  | 3.3  |
| p0 queue free %                   | 99   |      |       |      | 84   | 95   |
| cM capacity (veh/h)               | 1368 |      |       |      | 637  | 871  |
| <b>Direction, Lane #</b>          |      |      |       |      |      |      |
|                                   | EB 1 | WB 1 | SB 1  |      |      |      |
| Volume Total                      | 170  | 204  | 142   |      |      |      |
| Volume Left                       | 13   | 0    | 100   |      |      |      |
| Volume Right                      | 0    | 63   | 42    |      |      |      |
| cSH                               | 1368 | 1700 | 692   |      |      |      |
| Volume to Capacity                | 0.01 | 0.12 | 0.21  |      |      |      |
| Queue Length 95th (ft)            | 1    | 0    | 19    |      |      |      |
| Control Delay (s)                 | 0.7  | 0.0  | 11.5  |      |      |      |
| Lane LOS                          | A    | B    | B     |      |      |      |
| Approach Delay (s)                | 0.7  | 0.0  | 11.5  |      |      |      |
| Approach LOS                      |      | B    |       |      |      |      |
| <b>Intersection Summary</b>       |      |      |       |      |      |      |
| Average Delay                     |      |      | 3.4   |      |      |      |
| Intersection Capacity Utilization |      |      | 30.5% |      |      | A    |
| Analysis Period (min)             |      |      | 15    |      |      |      |

**Future 2009 AM Improved**

Lanes, Volumes, Timings  
1: Speedway Boulevard & US 19 / US 41

HCM Signalized Intersection Capacity Analysis  
1: Speedway Boulevard & US 19 / US 41

Future AM - Improved  
6/14/2007

| Movement                | EBL  | EBT  | WBL  | WBT  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|-------------------------|------|------|------|------|------|------|------|------|------|------|
| Lane Group              | EBL  | EBT  | WBL  | WBT  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Group Flow (vph)   | 124  | 55   | 12   | 21   | 21   | 1344 | 8    | 30   | 695  | 91   |
| Act Effct Green (s)     | 14.6 | 14.6 | 14.6 | 14.6 | 14.6 | 97.4 | 97.4 | 97.4 | 97.4 | 97.4 |
| Actuated g/C Ratio      | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 |
| v/c Ratio               | 0.73 | 0.23 | 0.07 | 0.10 | 0.04 | 0.33 | 0.01 | 0.14 | 0.24 | 0.07 |
| Control Delay           | 74.4 | 23.7 | 44.7 | 26.6 | 3.2  | 3.4  | 1.8  | 4.9  | 3.2  | 0.8  |
| Queue Delay             | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| Total Delay             | 74.4 | 23.7 | 44.7 | 26.6 | 3.2  | 3.4  | 1.8  | 4.9  | 3.2  | 0.8  |
| LOS                     | E    | C    | D    | C    | A    | A    | A    | A    | A    | A    |
| Approach Delay          | 58.8 |      |      |      |      |      |      |      |      |      |
| Approach LOS            | E    |      |      |      |      |      |      |      |      |      |
| Queue Length 50th (ft)  | 94   | 14   | 8    | 6    | 3    | 76   | 0    | 4    | 52   | 0    |
| Queue Length 95th (ft)  | 109  | 0    | 16   | 12   | 9    | 124  | 2    | 9    | 92   | 5    |
| Internal Link Dist (ft) | 3427 |      |      |      |      |      |      |      |      |      |
| Turn Bay Length (ft)    | 543  | 682  | 526  | 670  | 496  | 4126 | 1286 | 215  | 2871 | 1301 |
| Base Capacity (vph)     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Starvation Cap Reductn  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Spillback Cap Reductn   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Storage Cap Reductn     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced v/c Ratio       | 0.23 | 0.08 | 0.02 | 0.03 | 0.04 | 0.33 | 0.01 | 0.14 | 0.24 | 0.07 |

| Movement               | EBL  | EBT  | WBL  | WBT  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|------------------------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations    | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Ideal Flow (vphpl)     | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  |
| Total Lost time (s)    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lane Util. Factor      | 1.00 | 0.90 | 1.00 | 0.91 | 1.00 | 1.00 | 0.85 | 1.00 | 0.95 | 1.00 |
| Flt Protected          | 0.95 | 1.00 | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 |
| Satd. Flow (prot)      | 1770 | 1685 | 1770 | 1690 | 1770 | 5085 | 1583 | 1770 | 3539 | 1583 |
| Flt Permitted          | 0.74 | 1.00 | 0.72 | 1.00 | 0.38 | 1.00 | 1.00 | 0.18 | 1.00 | 1.00 |
| Satd. Flow (perm)      | 1385 | 1685 | 1343 | 1690 | 708  | 5085 | 1583 | 340  | 3539 | 1583 |
| Volume (vph)           | 83   | 5    | 27   | 7    | 4    | 10   | 18   | 1250 | 5    | 18   |
| Peak-hour factor, PHF  | 0.67 | 0.25 | 0.78 | 0.58 | 0.50 | 0.75 | 0.85 | 0.93 | 0.62 | 0.61 |
| Adj. Flow (vph)        | 124  | 20   | 35   | 12   | 8    | 13   | 21   | 1344 | 8    | 30   |
| RTOR Reduction (vph)   | 0    | 31   | 0    | 0    | 11   | 0    | 0    | 2    | 0    | 0    |
| Lane Group Flow (vph)  | 124  | 24   | 0    | 12   | 10   | 0    | 21   | 1344 | 6    | 30   |
| Turn Type              | Perm | Perm | Perm | Perm | Perm | Perm | Perm | Perm | Perm | Perm |
| Protected Phases       | 8    | 8    | 4    | 4    | 4    | 6    | 6    | 2    | 2    | 2    |
| Permitted Phases       | 8    | 8    | 4    | 4    | 4    | 6    | 6    | 2    | 2    | 2    |
| Actuated Green, G (s)  | 14.6 | 14.6 | 14.6 | 14.6 | 14.6 | 97.4 | 97.4 | 97.4 | 97.4 | 97.4 |
| Effective Green, g (s) | 14.6 | 14.6 | 14.6 | 14.6 | 14.6 | 97.4 | 97.4 | 97.4 | 97.4 | 97.4 |
| Actuated g/C Ratio     | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 |
| Clearance Time (s)     | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  |
| Vehicle Extension (s)  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  |
| Lane Grp Cap (vph)     | 169  | 205  | 163  | 206  | 575  | 4127 | 1285 | 276  | 2872 | 1285 |
| v/s Ratio Prot         | 0.09 | 0.01 | 0.01 | 0.01 | 0.03 | 0.26 | 0.00 | 0.09 | 0.20 | 0.05 |
| v/s Ratio Perm         | 0.73 | 0.12 | 0.07 | 0.05 | 0.04 | 0.33 | 0.01 | 0.11 | 0.24 | 0.06 |
| Uniform Delay, d1      | 50.8 | 47.0 | 46.7 | 46.6 | 2.2  | 2.9  | 2.1  | 2.3  | 2.6  | 2.2  |
| Progression Factor     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2  | 15.2 | 0.3  | 0.2  | 0.1  | 0.1  | 0.2  | 0.0  | 0.8  | 0.2  | 0.1  |
| Delay (s)              | 66.0 | 47.2 | 46.9 | 46.6 | 2.3  | 3.1  | 2.1  | 3.1  | 2.8  | 2.3  |
| Level of Service       | E    | D    | D    | D    | A    | A    | A    | A    | A    | A    |
| Approach Delay (s)     | 60.2 |      |      |      |      |      |      |      |      |      |
| Approach LOS           | E    |      |      |      |      |      |      |      |      |      |

| Intersection Summary              |       |  |  |  |  |  |  |  |  |
|-----------------------------------|-------|--|--|--|--|--|--|--|--|
| HCM Average Control Delay         | 7.8   |  |  |  |  |  |  |  |  |
| HCM Volume to Capacity ratio      | 0.38  |  |  |  |  |  |  |  |  |
| Actuated Cycle Length (s)         | 120.0 |  |  |  |  |  |  |  |  |
| Intersection Capacity Utilization | 42.1% |  |  |  |  |  |  |  |  |
| Analysis Period (min)             | 15    |  |  |  |  |  |  |  |  |
| c Critical Lane Group             |       |  |  |  |  |  |  |  |  |



## **Future PM Intersection Analysis**

**Future 2009 PM**

Lanes, Volumes, Timings  
1: Speedway Boulevard & US 19 / US 41

Future PM  
6/14/2007

|                                         | →    | ↗    | ←    | ↖    | ↑    | ↘    | ↙    | ↓    | ↘    |      |
|-----------------------------------------|------|------|------|------|------|------|------|------|------|------|
| Lane Group                              | EBT  | EBR  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Group Flow (vph)                   | 181  | 31   | 25   | 14   | 20   | 702  | 24   | 17   | 1134 | 128  |
| Sign Control                            | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| Intersection Summary                    |      |      |      |      |      |      |      |      |      |      |
| Control Type: Unsignalized              |      |      |      |      |      |      |      |      |      |      |
| Intersection Capacity Utilization 49.7% |      |      |      |      |      |      |      |      |      |      |
| Analysis Period (min) 15                |      |      |      |      |      |      |      |      |      |      |
| ICU Level of Service A                  |      |      |      |      |      |      |      |      |      |      |

HCM Unsignalized Intersection Capacity Analysis  
1: Speedway Boulevard & US 19 / US 41

Future PM  
6/14/2007

| Movement                          | EBL                    | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|-----------------------------------|------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations               | ↰                      | ↰    | ↰    | ↰    | ↰    | ↰    | ↰    | ↰    | ↰    | ↰    | ↰    | ↰    |
| Sign Control                      | Stop                   | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| Grade                             | 0%                     | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   |
| Volume (veh/h)                    | 111                    | 9    | 25   | 7    | 8    | 12   | 18   | 639  | 18   | 10   | 1077 | 101  |
| Peak Hour Factor                  | 0.67                   | 0.62 | 0.81 | 0.50 | 0.75 | 0.88 | 0.88 | 0.91 | 0.75 | 0.60 | 0.95 | 0.79 |
| Hourly flow rate (vph)            | 166                    | 15   | 31   | 14   | 11   | 14   | 20   | 702  | 24   | 17   | 1134 | 128  |
| Pedestrians                       |                        |      |      |      |      |      |      |      |      |      |      |      |
| Lane Width (ft)                   |                        |      |      |      |      |      |      |      |      |      |      |      |
| Walking Speed (ft/s)              |                        |      |      |      |      |      |      |      |      |      |      |      |
| Percent Blockage                  |                        |      |      |      |      |      |      |      |      |      |      |      |
| Right turn flare (veh)            |                        |      |      |      |      |      |      |      |      |      |      |      |
| Median type                       |                        |      |      |      |      |      |      |      |      |      |      |      |
| Median storage (veh)              |                        |      |      |      |      |      |      |      |      |      |      |      |
| Upstream signal (ft)              |                        |      |      |      |      |      |      |      |      |      |      |      |
| pX, platoon unblocked             |                        |      |      |      |      |      |      |      |      |      |      |      |
| VC, conflicting volume            | 1564                   | 1910 | 567  | 1351 | 1910 | 351  | 1134 |      |      | 702  |      |      |
| VC1, stage 1 conf vol             |                        |      |      |      |      |      |      |      |      |      |      |      |
| VC2, stage 2 conf vol             |                        |      |      |      |      |      |      |      |      |      |      |      |
| VCu, unblocked vol                | 1564                   | 1910 | 567  | 1351 | 1910 | 351  | 1134 |      |      | 702  |      |      |
| tC, single (s)                    | 7.5                    | 6.5  | 6.9  | 7.5  | 6.5  | 6.9  | 4.1  |      |      | 4.1  |      |      |
| tC, 2 stage (s)                   |                        |      |      |      |      |      |      |      |      |      |      |      |
| tF (s)                            | 3.5                    | 4.0  | 3.3  | 3.5  | 4.0  | 3.3  | 2.2  |      |      | 2.2  |      |      |
| p0 queue free %                   | 0                      | 77   | 93   | 83   | 83   | 98   | 97   |      |      | 98   |      |      |
| cM capacity (veh/h)               | 62                     | 64   | 467  | 81   | 64   | 645  | 612  |      |      | 891  |      |      |
| Direction, Lane #                 | EB 1                   | EB 2 | WB 1 | NB 1 | NB 2 | NB 3 | NB 4 | SB 1 | SB 2 | SB 3 | SB 4 |      |
| Volume Total                      | 180                    | 31   | 38   | 20   | 351  | 351  | 24   | 17   | 567  | 567  | 128  |      |
| Volume Left                       | 166                    | 0    | 14   | 20   | 0    | 0    | 0    | 17   | 0    | 0    | 0    |      |
| Volume Right                      | 0                      | 31   | 14   | 0    | 0    | 0    | 24   | 0    | 0    | 0    | 128  |      |
| cSH                               | 62                     | 467  | 114  | 612  | 1700 | 1700 | 1700 | 891  | 1700 | 1700 | 1700 |      |
| Volume to Capacity                | 2.90                   | 0.07 | 0.34 | 0.03 | 0.21 | 0.21 | 0.01 | 0.02 | 0.33 | 0.33 | 0.08 |      |
| Queue Length 95th (ft)            | 461                    | 5    | 33   | 3    | 0    | 0    | 0    | 1    | 0    | 0    | 0    |      |
| Control Delay (s)                 | 1000.4                 | 13.3 | 53.4 | 11.1 | 0.0  | 0.0  | 0.0  | 9.1  | 0.0  | 0.0  | 0.0  |      |
| Lane LOS                          | F                      | B    | F    | B    | F    | F    | A    | A    |      |      |      |      |
| Approach Delay (s)                | 856.1                  |      | 53.4 | 0.3  |      |      |      | 0.1  |      |      |      |      |
| Approach LOS                      | F                      |      | F    |      |      |      |      |      |      |      |      |      |
| Intersection Summary              |                        |      |      |      |      |      |      |      |      |      |      |      |
| Average Delay                     | 80.5                   |      |      |      |      |      |      |      |      |      |      |      |
| Intersection Capacity Utilization | 49.7%                  |      |      |      |      |      |      |      |      |      |      |      |
| Analysis Period (min)             | 15                     |      |      |      |      |      |      |      |      |      |      |      |
|                                   | ICU Level of Service A |      |      |      |      |      |      |      |      |      |      |      |

Lanes, Volumes, Timings  
2: Speedway Boulevard & Mt Pleasant Rd

Future PM  
6/14/2007



| Lane Group                              | EBL  | EBT  | WBL  | WBT  | NBT  | SBT  |
|-----------------------------------------|------|------|------|------|------|------|
| Lane Group Flow (vph)                   | 72   | 225  | 4    | 235  | 20   | 85   |
| Sign Control                            | Free | Free | Free | Stop | Stop | Stop |
| Intersection Summary                    |      |      |      |      |      |      |
| Control Type: Unsignalized              |      |      |      |      |      |      |
| Intersection Capacity Utilization 24.5% |      |      |      |      |      |      |
| Analysis Period (min) 15                |      |      |      |      |      |      |
| ICU Level of Service A                  |      |      |      |      |      |      |

HCM Unsignalized Intersection Capacity Analysis  
2: Speedway Boulevard & Mt Pleasant Rd

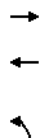
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6/14/2007



| Movement                          | EBL   | EBT  | EBR  | WBL  | WBT  | WBR  | NBL                  | NBT  | NBR  | SBL  | SBT  | SBR  |
|-----------------------------------|-------|------|------|------|------|------|----------------------|------|------|------|------|------|
| Lane Configurations               | ↔     | ↕    |      | ↔    | ↕    |      |                      | ↕    |      |      | ↕    |      |
| Sign Control                      | Free  | Free |      | Free | Free |      |                      | Stop |      |      | Stop |      |
| Grade                             | 0%    | 0%   |      | 0%   | 0%   |      |                      | 0%   |      |      | 0%   |      |
| Volume (veh/h)                    | 56    | 198  | 0    | 2    | 181  | 20   | 1                    | 4    | 3    | 11   | 2    | 47   |
| Peak Hour Factor                  | 0.78  | 0.88 | 0.92 | 0.50 | 0.88 | 0.68 | 0.25                 | 0.50 | 0.38 | 0.62 | 0.50 | 0.75 |
| Hourly flow rate (vph)            | 72    | 225  | 0    | 4    | 206  | 29   | 4                    | 8    | 8    | 18   | 4    | 63   |
| Pedestrians                       |       |      |      |      |      |      |                      |      |      |      |      |      |
| Lane Width (ft)                   |       |      |      |      |      |      |                      |      |      |      |      |      |
| Walking Speed (ft/s)              |       |      |      |      |      |      |                      |      |      |      |      |      |
| Percent Blockage                  |       |      |      |      |      |      |                      |      |      |      |      |      |
| Right turn flare (veh)            |       |      |      |      |      |      |                      |      |      |      |      |      |
| Median type                       |       |      |      |      |      |      |                      | None |      |      | None |      |
| Median storage (veh)              |       |      |      |      |      |      |                      |      |      |      |      |      |
| Upstream signal (ft)              |       |      |      |      |      |      |                      |      |      |      |      |      |
| pXX, platoon unblocked            |       |      |      |      |      |      |                      |      |      |      |      |      |
| VC, conflicting volume            | 235   |      |      | 225  |      |      | 544                  | 612  | 112  | 496  | 597  | 118  |
| VC1, stage 1 conf vol             |       |      |      |      |      |      |                      |      |      |      |      |      |
| VC2, stage 2 conf vol             |       |      |      |      |      |      |                      |      |      |      |      |      |
| vCu, unblocked vol                | 235   |      |      | 225  |      |      | 544                  | 612  | 112  | 496  | 597  | 118  |
| tC, single (s)                    | 4.1   |      |      | 4.1  |      |      | 7.5                  | 6.5  | 6.9  | 7.5  | 6.5  | 6.9  |
| tC, 2 stage (s)                   |       |      |      |      |      |      |                      |      |      |      |      |      |
| tF (s)                            | 2.2   |      |      | 2.2  |      |      | 3.5                  | 4.0  | 3.3  | 3.5  | 4.0  | 3.3  |
| p0 queue free %                   | 95    |      |      | 100  |      |      | 99                   | 98   | 99   | 96   | 99   | 93   |
| cM capacity (veh/h)               | 1329  |      |      | 1341 |      |      | 373                  | 384  | 919  | 426  | 391  | 912  |
| Direction, Lane #                 | EB 1  | EB 2 | EB 3 | WB 1 | WB 2 | WB 3 | NB 1                 | SB 1 |      |      |      |      |
| Volume Total                      | 72    | 150  | 75   | 4    | 137  | 98   | 20                   | 84   |      |      |      |      |
| Volume Left                       | 72    | 0    | 0    | 4    | 0    | 0    | 4                    | 18   |      |      |      |      |
| Volume Right                      | 0     | 0    | 0    | 0    | 0    | 29   | 8                    | 63   |      |      |      |      |
| Volume to Capacity                | 1329  | 1700 | 1700 | 1341 | 1700 | 1700 | 495                  | 700  |      |      |      |      |
| Queue Length 95th (ft)            | 0.05  | 0.09 | 0.04 | 0.00 | 0.08 | 0.06 | 0.04                 | 0.12 |      |      |      |      |
| Control Delay (s)                 | 4     | 0    | 0    | 0    | 0    | 0    | 3                    | 10   |      |      |      |      |
| Lane LOS                          | A     |      |      | A    |      |      | B                    | B    |      |      |      |      |
| Approach Delay (s)                | 1.9   |      |      | 0.1  |      |      | 12.6                 | 10.8 |      |      |      |      |
| Approach LOS                      |       |      |      |      |      |      | B                    | B    |      |      |      |      |
| Intersection Summary              |       |      |      |      |      |      |                      |      |      |      |      |      |
| Average Delay                     | 2.8   |      |      |      |      |      | A                    |      |      |      |      |      |
| Intersection Capacity Utilization | 24.5% |      |      |      |      |      | ICU Level of Service |      |      |      |      |      |
| Analysis Period (min)             | 15    |      |      |      |      |      |                      |      |      |      |      |      |

Lanes, Volumes, Timings  
3: Selfridge Rd & Speedway Boulevard

Future PM  
6/14/2007



| Lane Group                              | EBL  | EBR  | NBT  | SBT  |
|-----------------------------------------|------|------|------|------|
| Lane Group Flow (vph)                   | 254  | 101  | 310  |      |
| Sign Control                            | Stop | Free | Free | Free |
| <b>Intersection Summary</b>             |      |      |      |      |
| Control Type: Unsignalized              |      |      |      |      |
| Intersection Capacity Utilization 21.2% |      |      |      |      |
| Analysis Period (min) 15                |      |      |      |      |
| ICU Level of Service A                  |      |      |      |      |

HCM Unsignalized Intersection Capacity Analysis  
3: Selfridge Rd & Speedway Boulevard

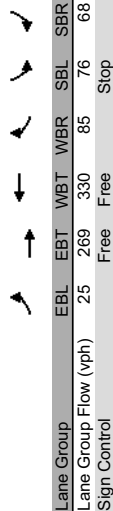
Future PM  
6/14/2007



| Movement                          | EBL   | EBR  | NBL  | SBT  | SBR  |
|-----------------------------------|-------|------|------|------|------|
| Lane Configurations               | W     |      | W    | W    | W    |
| Sign Control                      | Stop  |      | Free | Free | Free |
| Grade                             | 0%    |      | 0%   | 0%   | 0%   |
| Volume (veh/h)                    | 125   | 1    | 1    | 92   | 103  |
| Peak Hour Factor                  | 0.50  | 0.25 | 0.25 | 0.95 | 0.90 |
| Hourly flow rate (vph)            | 250   | 4    | 4    | 97   | 114  |
| Pedestrians                       |       |      |      |      |      |
| Lane Width (ft)                   |       |      |      |      |      |
| Walking Speed (ft/s)              |       |      |      |      |      |
| Percent Blockage                  |       |      |      |      |      |
| Right turn flare (veh)            |       |      |      |      |      |
| Median type                       | None  |      |      |      |      |
| Median storage (veh)              |       |      |      |      |      |
| Upstream signal (ft)              |       |      |      |      |      |
| pX, platoon unblocked             |       |      |      |      |      |
| VC, conflicting volume            | 269   | 155  | 310  |      |      |
| VC1, stage 1 conf vol             |       |      |      |      |      |
| VC2, stage 2 conf vol             |       |      |      |      |      |
| VCu, unblocked vol                | 269   | 155  | 310  |      |      |
| tC, single (s)                    | 6.8   | 6.9  | 4.1  |      |      |
| tC, 2 stage (s)                   |       |      |      |      |      |
| tF (s)                            | 3.5   | 3.3  | 2.2  |      |      |
| p0 queue free %                   | 64    | 100  | 100  |      |      |
| cM capacity (veh/h)               | 696   | 863  | 1247 |      |      |
| <b>Direction, Lane #</b>          |       |      |      |      |      |
|                                   | EB 1  | NB 1 | NB 2 | SB 1 | SB 2 |
| Volume Total                      | 254   | 36   | 65   | 76   | 234  |
| Volume Left                       | 250   | 4    | 0    | 0    | 0    |
| Volume Right                      | 4     | 0    | 0    | 0    | 196  |
| cSH                               | 698   | 1247 | 1700 | 1700 | 1700 |
| Volume to Capacity                | 0.36  | 0.00 | 0.04 | 0.04 | 0.14 |
| Queue Length 95th (ft)            | 42    | 0    | 0    | 0    | 0    |
| Control Delay (s)                 | 13.1  | 0.9  | 0.0  | 0.0  | 0.0  |
| Lane LOS                          | B     | A    |      |      |      |
| Approach Delay (s)                | 13.1  | 0.3  |      | 0.0  |      |
| Approach LOS                      | B     |      |      |      |      |
| <b>Intersection Summary</b>       |       |      |      |      |      |
| Average Delay                     | 5.0   |      |      |      |      |
| Intersection Capacity Utilization | 21.2% |      |      |      |      |
| ICU Level of Service              | A     |      |      |      |      |
| Analysis Period (min)             | 15    |      |      |      |      |

Lanes, Volumes, Timings  
4: Woolsey Rd & Speedway Boulevard

Future PM  
6/14/2007



| Lane Group            | EBL  | EBT  | WBT  | WBR  | SBL  | SBR  |
|-----------------------|------|------|------|------|------|------|
| Lane Group Flow (vph) | 25   | 269  | 330  | 85   | 76   | 68   |
| Sign Control          | Free | Free | Free | Free | Stop | Stop |

Intersection Summary

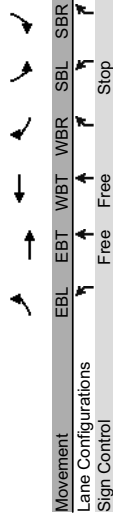
Control Type: Unsignalized  
Intersection Capacity Utilization 26.5%  
Analysis Period (min) 15

ICU Level of Service A

A61

HCM Unsignalized Intersection Capacity Analysis  
4: Woolsey Rd & Speedway Boulevard

Future PM  
6/14/2007



| Movement            | EBL  | EBT  | WBT  | WBR  | SBL  | SBR  |
|---------------------|------|------|------|------|------|------|
| Lane Configurations | ↔    | ↔    | ↔    | ↔    | ↔    | ↔    |
| Sign Control        | Free | Free | Free | Free | Stop | Stop |
| Grade               | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   |

Volume (veh/h)  
19 237 300 73 70 65  
Peak Hour Factor  
0.75 0.88 0.91 0.86 0.92 0.95  
Hourly flow rate (vph)  
25 269 330 85 76 68  
Pedestrians

Lane Width (ft)

Walking Speed (ft/s)

Percent Blockage

Right turn flare (veh)

Median type

Median storage (veh)

Upstream signal (ft)

pX, platoon unblocked

VC, conflicting volume

VC1, stage 1 conf vol

VC2, stage 2 conf vol

VCu, unblocked vol

tC, single (s)

tC, 2 stage (s)

tF (s)

p0 queue free %

cM capacity (veh/h)

Direction, Lane #

EB 1 EB 2 WB 1 WB 2 SB 1 SB 2

Volume Total

Volume Left

Volume Right

cSH

Volume to Capacity

Queue Length 95th (ft)

Control Delay (s)

Lane LOS

Approach Delay (s)

Approach LOS

Intersection Summary

Average Delay

Intersection Capacity Utilization

Analysis Period (min)

ICU Level of Service

Lanes, Volumes, Timings  
5: Lower Woolsey Rd & Selfridge Rd

Future PM  
6/14/2007



| Lane Group                              | EBT  | WBT  | SBL  |
|-----------------------------------------|------|------|------|
| Lane Group Flow (vph)                   | 172  | 852  | 236  |
| Sign Control                            | Free | Free | Stop |
| <b>Intersection Summary</b>             |      |      |      |
| Control Type: Unsignalized              |      |      |      |
| Intersection Capacity Utilization 47.4% |      |      |      |
| Analysis Period (min) 15                |      |      |      |
| ICU Level of Service A                  |      |      |      |

HCM Unsignalized Intersection Capacity Analysis  
5: Lower Woolsey Rd & Selfridge Rd

Future PM  
6/14/2007



| Movement                          | EBL  | EBT   | WBT  | WBR  | SBL                  | SBR  |
|-----------------------------------|------|-------|------|------|----------------------|------|
| Lane Configurations               | 4    | 4     | 4    | 4    | 4                    | 4    |
| Sign Control                      | Free | Free  | Free | Free | Stop                 | Stop |
| Grade                             | 0%   | 0%    | 0%   | 0%   | 0%                   | 0%   |
| Volume (veh/h)                    | 34   | 119   | 179  | 165  | 140                  | 32   |
| Peak Hour Factor                  | 0.92 | 0.88  | 0.93 | 0.25 | 0.92                 | 0.38 |
| Hourly flow rate (vph)            | 37   | 135   | 192  | 660  | 152                  | 84   |
| Pedestrians                       |      |       |      |      |                      |      |
| Lane Width (ft)                   |      |       |      |      |                      |      |
| Walking Speed (ft/s)              |      |       |      |      |                      |      |
| Percent Blockage                  |      |       |      |      |                      |      |
| Right turn flare (veh)            |      |       |      |      |                      |      |
| Median type                       |      |       |      |      | None                 |      |
| Median storage (veh)              |      |       |      |      |                      |      |
| Upstream signal (ft)              |      |       |      |      |                      |      |
| pX, platoon unblocked             |      |       |      |      |                      |      |
| VC, conflicting volume            |      | 852   |      |      | 732                  | 522  |
| VC1, stage 1 conf vol             |      |       |      |      |                      |      |
| VC2, stage 2 conf vol             |      |       |      |      |                      |      |
| VCu, unblocked vol                |      | 852   |      |      | 732                  | 522  |
| tC, single (s)                    |      | 4.1   |      |      | 6.4                  | 6.2  |
| tC, 2 stage (s)                   |      |       |      |      |                      |      |
| tF (s)                            |      | 2.2   |      |      | 3.5                  | 3.3  |
| p0 queue free %                   |      | 95    |      |      | 59                   | 85   |
| cM capacity (veh/h)               |      | 787   |      |      | 370                  | 554  |
| Direction, Lane #                 | EB 1 | WB 1  | SB 1 |      |                      |      |
| Volume Total                      | 172  | 852   | 236  |      |                      |      |
| Volume Left                       | 37   | 0     | 152  |      |                      |      |
| Volume Right                      | 0    | 660   | 84   |      |                      |      |
| cSH                               | 787  | 1700  | 420  |      |                      |      |
| Volume to Capacity                | 0.05 | 0.50  | 0.56 |      |                      |      |
| Queue Length 95th (ft)            | 4    | 0     | 84   |      |                      |      |
| Control Delay (s)                 | 2.5  | 0.0   | 24.1 |      |                      |      |
| Lane LOS                          | A    | C     | C    |      |                      |      |
| Approach Delay (s)                | 2.5  | 0.0   | 24.1 |      |                      |      |
| Approach LOS                      | C    | C     | C    |      |                      |      |
| <b>Intersection Summary</b>       |      |       |      |      |                      |      |
| Average Delay                     |      |       | 4.8  |      |                      |      |
| Intersection Capacity Utilization |      | 47.4% |      |      | ICU Level of Service | A    |
| Analysis Period (min)             |      | 15    |      |      |                      |      |

**Future 2009 PM Improved**



Lanes, Volumes, Timings  
1: Speedway Boulevard & US 19 / US 41

HCM Signalized Intersection Capacity Analysis  
1: Speedway Boulevard & US 19 / US 41

Future PM - Improved  
6/14/2007

Future PM - Improved  
6/14/2007

| Lane Group              | EBL  | EBT  | WBL  | WBT  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|-------------------------|------|------|------|------|------|------|------|------|------|------|
| Lane Group Flow (vph)   | 207  | 56   | 18   | 30   | 25   | 878  | 29   | 22   | 1418 | 159  |
| Act Effct Green (s)     | 21.8 | 21.8 | 21.8 | 21.8 | 90.2 | 90.2 | 90.2 | 90.2 | 90.2 | 90.2 |
| Actuated g/C Ratio      | 0.18 | 0.18 | 0.18 | 0.18 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| v/c Ratio               | 0.82 | 0.17 | 0.07 | 0.09 | 0.17 | 0.23 | 0.02 | 0.06 | 0.53 | 0.13 |
| Control Delay           | 72.0 | 18.0 | 37.8 | 22.0 | 9.2  | 5.2  | 2.0  | 5.8  | 7.8  | 1.2  |
| Queue Delay             | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| Total Delay             | 72.0 | 18.0 | 37.8 | 22.0 | 9.2  | 5.2  | 2.0  | 5.8  | 7.8  | 1.2  |
| LOS                     | E    | B    | D    | C    | A    | A    | A    | A    | A    | A    |
| Approach Delay          | 60.5 |      |      |      |      |      |      |      |      |      |
| Approach LOS            | E    |      |      |      |      |      |      |      |      |      |
| Queue Length 50th (ft)  | 156  | 12   | 12   | 8    | 5    | 64   | 0    | 4    | 205  | 0    |
| Queue Length 95th (ft)  | 157  | 23   | 17   | 25   | 21   | 107  | 7    | 9    | 340  | 13   |
| Internal Link Dist (ft) | 3427 |      |      |      |      |      |      |      |      |      |
| Turn Bay Length (ft)    | 481  | 610  | 469  | 607  | 146  | 3820 | 1196 | 393  | 2659 | 1229 |
| Base Capacity (vph)     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Starvation Cap Reductn  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Spillback Cap Reductn   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Storage Cap Reductn     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced v/c Ratio       | 0.43 | 0.09 | 0.04 | 0.05 | 0.17 | 0.23 | 0.02 | 0.06 | 0.53 | 0.13 |

Intersection Summary

|                                                                      |                        |
|----------------------------------------------------------------------|------------------------|
| Cycle Length: 120                                                    |                        |
| Actuated Cycle Length: 120                                           |                        |
| Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBT, Start of Green |                        |
| Control Type: Actuated-Coordinated                                   |                        |
| Maximum v/c Ratio: 0.82                                              |                        |
| Intersection Signal Delay: 11.8                                      | Intersection LOS: B    |
| Intersection Capacity Utilization 58.3%                              | ICU Level of Service B |
| Analysis Period (min) 15                                             |                        |

| Movement               | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations    | ↔    | ↔    | ↔    | ↔    | ↔    | ↔    | ↔    | ↔    | ↔    | ↔    | ↔    | ↔    |
| Ideal Flow (vphpl)     | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s)    | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  |
| Lane Util. Factor      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Flt Protected          | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 |
| Satd. Flow (prot)      | 1770 | 1673 | 1770 | 1704 | 1770 | 1704 | 1770 | 5085 | 1583 | 1770 | 3539 | 1583 |
| Flt Permitted          | 0.74 | 1.00 | 0.72 | 1.00 | 0.72 | 1.00 | 0.15 | 1.00 | 0.30 | 1.00 | 1.00 | 1.00 |
| Satd. Flow (perm)      | 1374 | 1673 | 1342 | 1704 | 1342 | 1704 | 284  | 5085 | 1583 | 564  | 3539 | 1583 |
| Volume (vph)           | 139  | 11   | 31   | 9    | 10   | 15   | 22   | 799  | 22   | 13   | 1347 | 126  |
| Peak-hour factor, PHF  | 0.67 | 0.62 | 0.81 | 0.50 | 0.75 | 0.88 | 0.88 | 0.91 | 0.75 | 0.60 | 0.95 | 0.79 |
| Adj. Flow (vph)        | 207  | 18   | 38   | 18   | 13   | 17   | 25   | 878  | 29   | 22   | 1418 | 159  |
| RTOR Reduction (vph)   | 0    | 31   | 0    | 0    | 14   | 0    | 0    | 0    | 7    | 0    | 0    | 39   |
| Lane Group Flow (vph)  | 207  | 25   | 0    | 18   | 16   | 0    | 25   | 878  | 22   | 22   | 1418 | 120  |
| Turn Type              | Perm | Perm | Perm | Perm | Perm | Perm | Perm | Perm | Perm | Perm | Perm | Perm |
| Protected Phases       | 8    | 8    | 4    | 4    | 4    | 4    | 6    | 6    | 6    | 2    | 2    | 2    |
| Permitted Phases       | 8    | 8    | 4    | 4    | 4    | 4    | 6    | 6    | 6    | 2    | 2    | 2    |
| Actuated Green, G (s)  | 21.8 | 21.8 | 21.8 | 21.8 | 21.8 | 21.8 | 90.2 | 90.2 | 90.2 | 90.2 | 90.2 | 90.2 |
| Effective Green, g (s) | 21.8 | 21.8 | 21.8 | 21.8 | 21.8 | 21.8 | 90.2 | 90.2 | 90.2 | 90.2 | 90.2 | 90.2 |
| Actuated g/C Ratio     | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| Clearance Time (s)     | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  |
| Vehicle Extension (s)  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  |
| Lane Grp Cap (vph)     | 250  | 304  | 244  | 310  | 310  | 310  | 213  | 3822 | 1190 | 424  | 2660 | 1190 |
| v/s Ratio Prot         |      | 0.01 |      | 0.01 |      | 0.01 |      | 0.17 |      |      | 0.04 |      |
| v/s Ratio Perm         | 0.15 |      | 0.01 |      | 0.01 |      | 0.09 |      | 0.01 | 0.04 |      | 0.08 |
| v/c Ratio              | 0.83 | 0.08 | 0.07 | 0.05 | 0.05 | 0.05 | 0.12 | 0.23 | 0.02 | 0.05 | 0.53 | 0.10 |
| Uniform Delay, d1      | 47.3 | 40.8 | 40.7 | 40.6 | 40.6 | 40.6 | 4.1  | 4.5  | 3.8  | 3.9  | 6.2  | 4.0  |
| Progression Factor     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2  | 19.7 | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 1.1  | 0.1  | 0.0  | 0.2  | 0.8  | 0.2  |
| Delay (s)              | 67.0 | 40.9 | 40.9 | 40.6 | 40.6 | 40.6 | 5.2  | 4.6  | 3.8  | 4.1  | 6.9  | 4.2  |
| Level of Service       | E    | D    | D    | D    | D    | D    | A    | A    | A    | A    | A    | A    |
| Approach Delay (s)     | 61.4 |      |      |      |      |      |      |      |      |      | 6.6  |      |
| Approach LOS           | E    |      |      |      |      |      |      |      |      |      | A    |      |

Intersection Summary

|                                   |       |                      |     |
|-----------------------------------|-------|----------------------|-----|
| HCM Average Control Delay         | 11.6  | HCM Level of Service | B   |
| HCM Volume to Capacity ratio      | 0.59  |                      |     |
| Actuated Cycle Length (s)         | 120.0 | Sum of lost time (s) | 8.0 |
| Intersection Capacity Utilization | 58.3% | ICU Level of Service | B   |
| Analysis Period (min)             | 15    |                      |     |
| c Critical Lane Group             |       |                      |     |

## **Future Site Access Analysis**

## **Future 2009 AM Site Access Analysis**

HCM Unsignalized Intersection Capacity Analysis  
6: Main Site Driveway & Selfridge Rd

Future AM - Improved  
6/29/2007

| Movement                          | EBL  | EBR  | NBL   | NBT  | SBT  | SBR  |
|-----------------------------------|------|------|-------|------|------|------|
| Lane Configurations               | W    |      |       | 4    | Free | Free |
| Sign Control                      | Stop |      |       | Free | 0%   | 0%   |
| Grade                             | 0%   |      |       | 0%   | 0%   | 0%   |
| Volume (veh/h)                    | 33   | 46   | 29    | 46   | 51   | 20   |
| Peak Hour Factor                  | 0.92 | 0.92 | 0.92  | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph)            | 36   | 50   | 32    | 50   | 55   | 22   |
| Pedestrians                       |      |      |       |      |      |      |
| Lane Width (ft)                   |      |      |       |      |      |      |
| Walking Speed (ft/s)              |      |      |       |      |      |      |
| Percent Blockage                  |      |      |       |      |      |      |
| Right turn flare (veh)            |      |      |       |      |      |      |
| Median type                       | None |      |       |      |      |      |
| Median storage (veh)              |      |      |       |      |      |      |
| Upstream signal (ft)              |      |      |       |      |      |      |
| pX, platoon unblocked             |      |      |       |      |      |      |
| vC, conflicting volume            | 179  | 66   | 77    |      |      |      |
| vC1, stage 1 conf vol             |      |      |       |      |      |      |
| vC2, stage 2 conf vol             |      |      |       |      |      |      |
| vCu, unblocked vol                | 179  | 66   | 77    |      |      |      |
| tC, single (s)                    | 6.4  | 6.2  | 4.1   |      |      |      |
| tC, 2 stage (s)                   |      |      |       |      |      |      |
| tF (s)                            | 3.5  | 3.3  | 2.2   |      |      |      |
| p0 queue free %                   | 95   | 95   | 98    |      |      |      |
| cM capacity (veh/h)               | 793  | 997  | 1521  |      |      |      |
| Direction, Lane #                 | EB 1 | NB 1 | SB 1  |      |      |      |
| Volume Total                      | 86   | 82   | 77    |      |      |      |
| Volume Left                       | 36   | 32   | 0     |      |      |      |
| Volume Right                      | 50   | 0    | 22    |      |      |      |
| cSH                               | 901  | 1521 | 1700  |      |      |      |
| Volume to Capacity                | 0.10 | 0.02 | 0.05  |      |      |      |
| Queue Length 95th (ft)            | 8    | 2    | 0     |      |      |      |
| Control Delay (s)                 | 9.4  | 3.0  | 0.0   |      |      |      |
| Lane LOS                          | A    | A    |       |      |      |      |
| Approach Delay (s)                | 9.4  | 3.0  | 0.0   |      |      |      |
| Approach LOS                      | A    |      |       |      |      |      |
| Intersection Summary              |      |      |       |      |      |      |
| Average Delay                     |      |      | 4.3   |      |      |      |
| Intersection Capacity Utilization |      |      | 22.0% |      |      | A    |
| Analysis Period (min)             |      |      | 15    |      |      |      |

HCM Unsignalized Intersection Capacity Analysis  
7: South Site Driveway & Selfridge Rd

Future AM - Improved  
6/29/2007

| Movement                          | EBL  | EBR  | NBL   | NBT  | SBT  | SBR  |
|-----------------------------------|------|------|-------|------|------|------|
| Lane Configurations               | W    |      |       | 4    | Free | Free |
| Sign Control                      | Stop |      |       | Free | 0%   | 0%   |
| Grade                             | 0%   |      |       | 0%   | 0%   | 0%   |
| Volume (veh/h)                    | 23   | 35   | 22    | 50   | 80   | 15   |
| Peak Hour Factor                  | 0.92 | 0.92 | 0.92  | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph)            | 25   | 38   | 24    | 54   | 87   | 16   |
| Pedestrians                       |      |      |       |      |      |      |
| Lane Width (ft)                   |      |      |       |      |      |      |
| Walking Speed (ft/s)              |      |      |       |      |      |      |
| Percent Blockage                  |      |      |       |      |      |      |
| Right turn flare (veh)            |      |      |       |      |      |      |
| Median type                       | None |      |       |      |      |      |
| Median storage (veh)              |      |      |       |      |      |      |
| Upstream signal (ft)              |      |      |       |      |      |      |
| pX, platoon unblocked             |      |      |       |      |      |      |
| vC, conflicting volume            | 197  | 95   | 103   |      |      |      |
| vC1, stage 1 conf vol             |      |      |       |      |      |      |
| vC2, stage 2 conf vol             |      |      |       |      |      |      |
| vCu, unblocked vol                | 197  | 95   | 103   |      |      |      |
| tC, single (s)                    | 6.4  | 6.2  | 4.1   |      |      |      |
| tC, 2 stage (s)                   |      |      |       |      |      |      |
| tF (s)                            | 3.5  | 3.3  | 2.2   |      |      |      |
| p0 queue free %                   | 97   | 96   | 98    |      |      |      |
| cM capacity (veh/h)               | 779  | 962  | 1489  |      |      |      |
| Direction, Lane #                 | EB 1 | NB 1 | SB 1  |      |      |      |
| Volume Total                      | 63   | 78   | 103   |      |      |      |
| Volume Left                       | 25   | 24   | 0     |      |      |      |
| Volume Right                      | 38   | 0    | 16    |      |      |      |
| cSH                               | 880  | 1489 | 1700  |      |      |      |
| Volume to Capacity                | 0.07 | 0.02 | 0.06  |      |      |      |
| Queue Length 95th (ft)            | 6    | 1    | 0     |      |      |      |
| Control Delay (s)                 | 9.4  | 2.4  | 0.0   |      |      |      |
| Lane LOS                          | A    | A    |       |      |      |      |
| Approach Delay (s)                | 9.4  | 2.4  | 0.0   |      |      |      |
| Approach LOS                      | A    |      |       |      |      |      |
| Intersection Summary              |      |      |       |      |      |      |
| Average Delay                     |      |      | 3.2   |      |      |      |
| Intersection Capacity Utilization |      |      | 20.6% |      |      | A    |
| Analysis Period (min)             |      |      | 15    |      |      |      |

HCM Unsignalized Intersection Capacity Analysis  
8: North Site Driveway & Selfridge Rd

Future AM - Improved  
6/29/2007



| Movement                          | EBL  | EBR  | NBL   | NBT  | SBT  | SBR  |
|-----------------------------------|------|------|-------|------|------|------|
| Lane Configurations               | W    |      |       | 4    | Free | Free |
| Sign Control                      | Stop |      |       | Free | 0%   | 0%   |
| Grade                             | 0%   |      |       | 0%   | 0%   | 0%   |
| Volume (veh/h)                    | 25   | 32   | 20    | 58   | 38   | 16   |
| Peak Hour Factor                  | 0.92 | 0.92 | 0.92  | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph)            | 27   | 35   | 22    | 63   | 41   | 17   |
| Pedestrians                       |      |      |       |      |      |      |
| Lane Width (ft)                   |      |      |       |      |      |      |
| Walking Speed (ft/s)              |      |      |       |      |      |      |
| Percent Blockage                  |      |      |       |      |      |      |
| Right turn flare (veh)            |      |      |       |      |      |      |
| Median type                       |      |      |       |      |      |      |
| Median storage (veh)              |      |      |       |      |      |      |
| Upstream signal (ft)              |      |      |       |      |      |      |
| pX, platoon unblocked             |      |      |       |      |      |      |
| VC, conflicting volume            |      |      |       |      |      |      |
| VC1, stage 1 conf vol             |      |      |       |      |      |      |
| VC2, stage 2 conf vol             |      |      |       |      |      |      |
| VCu, unblocked vol                |      |      |       |      |      |      |
| tC, single (s)                    |      |      |       |      |      |      |
| tC, 2 stage (s)                   |      |      |       |      |      |      |
| tF (s)                            |      |      |       |      |      |      |
| p0 queue free %                   |      |      |       |      |      |      |
| cM capacity (veh/h)               |      |      |       |      |      |      |
| Direction, Lane #                 | EB 1 | NB 1 | SB 1  |      |      |      |
| Volume Total                      | 62   | 85   | 59    |      |      |      |
| Volume Left                       | 27   | 22   | 0     |      |      |      |
| Volume Right                      | 35   | 0    | 17    |      |      |      |
| cSH                               | 922  | 1545 | 1700  |      |      |      |
| Volume to Capacity                | 0.07 | 0.01 | 0.03  |      |      |      |
| Queue Length 95th (ft)            | 5    | 1    | 0     |      |      |      |
| Control Delay (s)                 | 9.2  | 2.0  | 0.0   |      |      |      |
| Lane LOS                          | A    | A    | A     |      |      |      |
| Approach Delay (s)                | 9.2  | 2.0  | 0.0   |      |      |      |
| Approach LOS                      | A    |      |       |      |      |      |
| Intersection Summary              |      |      |       |      |      |      |
| Average Delay                     |      |      | 3.6   |      |      |      |
| Intersection Capacity Utilization |      |      | 20.8% |      |      | A    |
| Analysis Period (min)             |      |      | 15    |      |      |      |

## **Future 2009 PM Site Access Analysis**

HCM Unsignalized Intersection Capacity Analysis  
6: Main Site Driveway & Selfridge Rd

Future PM - Improved  
6/29/2007

| Movement                          | EBL  | EBR   | NBL  | NBT  | SBT  | SBR  |
|-----------------------------------|------|-------|------|------|------|------|
| Lane Configurations               | W    |       |      | 4    | Free | Free |
| Sign Control                      | Stop |       |      | Free | 0%   | 0%   |
| Grade                             | 0%   |       |      | 0%   | 0%   | 0%   |
| Volume (veh/h)                    | 50   | 69    | 81   | 94   | 94   | 58   |
| Peak Hour Factor                  | 0.92 | 0.92  | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph)            | 54   | 75    | 88   | 102  | 102  | 63   |
| Pedestrians                       |      |       |      |      |      |      |
| Lane Width (ft)                   |      |       |      |      |      |      |
| Walking Speed (ft/s)              |      |       |      |      |      |      |
| Percent Blockage                  |      |       |      |      |      |      |
| Right turn flare (veh)            |      |       |      |      |      |      |
| Median type                       |      |       |      |      |      |      |
| Median storage (veh)              |      |       |      |      |      |      |
| Upstream signal (ft)              |      |       |      |      |      |      |
| pX, platoon unblocked             |      |       |      |      |      |      |
| VC, conflicting volume            | 412  | 134   | 165  |      |      |      |
| VC1, stage 1 conf vol             |      |       |      |      |      |      |
| VC2, stage 2 conf vol             |      |       |      |      |      |      |
| VCu, unblocked vol                | 412  | 134   | 165  |      |      |      |
| tC, single (s)                    | 6.4  | 6.2   | 4.1  |      |      |      |
| tC, 2 stage (s)                   |      |       |      |      |      |      |
| tF (s)                            | 3.5  | 3.3   | 2.2  |      |      |      |
| p0 queue free %                   | 90   | 92    | 94   |      |      |      |
| cM capacity (veh/h)               | 559  | 915   | 1413 |      |      |      |
| Direction, Lane #                 | EB 1 | NB 1  | SB 1 |      |      |      |
| Volume Total                      | 129  | 190   | 165  |      |      |      |
| Volume Left                       | 54   | 88    | 0    |      |      |      |
| Volume Right                      | 75   | 0     | 63   |      |      |      |
| cSH                               | 722  | 1413  | 1700 |      |      |      |
| Volume to Capacity                | 0.18 | 0.06  | 0.10 |      |      |      |
| Queue Length 95th (ft)            | 16   | 5     | 0    |      |      |      |
| Control Delay (s)                 | 11.1 | 3.8   | 0.0  |      |      |      |
| Lane LOS                          | B    | A     |      |      |      |      |
| Approach Delay (s)                | 11.1 | 3.8   | 0.0  |      |      |      |
| Approach LOS                      | B    |       |      |      |      |      |
| Intersection Summary              |      |       |      |      |      |      |
| Average Delay                     |      | 4.5   |      |      |      |      |
| Intersection Capacity Utilization |      | 34.9% |      |      |      | A    |
| Analysis Period (min)             |      | 15    |      |      |      |      |

HCM Unsignalized Intersection Capacity Analysis  
7: South Site Driveway & Selfridge Rd

Future PM - Improved  
6/29/2007

| Movement                          | EBL  | EBR   | NBL  | NBT  | SBT  | SBR  |
|-----------------------------------|------|-------|------|------|------|------|
| Lane Configurations               | W    |       |      | 4    | Free | Free |
| Sign Control                      | Stop |       |      | Free | 0%   | 0%   |
| Grade                             | 0%   |       |      | 0%   | 0%   | 0%   |
| Volume (veh/h)                    | 35   | 53    | 61   | 140  | 120  | 41   |
| Peak Hour Factor                  | 0.92 | 0.92  | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph)            | 38   | 58    | 66   | 152  | 130  | 45   |
| Pedestrians                       |      |       |      |      |      |      |
| Lane Width (ft)                   |      |       |      |      |      |      |
| Walking Speed (ft/s)              |      |       |      |      |      |      |
| Percent Blockage                  |      |       |      |      |      |      |
| Right turn flare (veh)            |      |       |      |      |      |      |
| Median type                       |      |       |      |      |      |      |
| Median storage (veh)              |      |       |      |      |      |      |
| Upstream signal (ft)              |      |       |      |      |      |      |
| pX, platoon unblocked             |      |       |      |      |      |      |
| VC, conflicting volume            | 438  | 153   | 175  |      |      |      |
| VC1, stage 1 conf vol             |      |       |      |      |      |      |
| VC2, stage 2 conf vol             |      |       |      |      |      |      |
| VCu, unblocked vol                | 438  | 153   | 175  |      |      |      |
| tC, single (s)                    | 6.4  | 6.2   | 4.1  |      |      |      |
| tC, 2 stage (s)                   |      |       |      |      |      |      |
| tF (s)                            | 3.5  | 3.3   | 2.2  |      |      |      |
| p0 queue free %                   | 93   | 94    | 95   |      |      |      |
| cM capacity (veh/h)               | 549  | 893   | 1401 |      |      |      |
| Direction, Lane #                 | EB 1 | NB 1  | SB 1 |      |      |      |
| Volume Total                      | 96   | 218   | 175  |      |      |      |
| Volume Left                       | 38   | 66    | 0    |      |      |      |
| Volume Right                      | 58   | 0     | 45   |      |      |      |
| cSH                               | 715  | 1401  | 1700 |      |      |      |
| Volume to Capacity                | 0.13 | 0.05  | 0.10 |      |      |      |
| Queue Length 95th (ft)            | 12   | 4     | 0    |      |      |      |
| Control Delay (s)                 | 10.8 | 2.6   | 0.0  |      |      |      |
| Lane LOS                          | B    | A     |      |      |      |      |
| Approach Delay (s)                | 10.8 | 2.6   | 0.0  |      |      |      |
| Approach LOS                      | B    |       |      |      |      |      |
| Intersection Summary              |      |       |      |      |      |      |
| Average Delay                     |      | 3.3   |      |      |      |      |
| Intersection Capacity Utilization |      | 34.7% |      |      |      | A    |
| Analysis Period (min)             |      | 15    |      |      |      |      |

HCM Unsignalized Intersection Capacity Analysis  
8: North Site Driveway & Selfridge Rd

Future PM - Improved  
6/29/2007



| Movement                          | EBL  | EBR  | NBL   | NBT  | SBT  | SBR  |
|-----------------------------------|------|------|-------|------|------|------|
| Lane Configurations               | W    |      |       | 4    | Free | Free |
| Sign Control                      | Stop |      |       |      | 0%   | 0%   |
| Grade                             | 0%   |      |       |      | 0%   | 0%   |
| Volume (veh/h)                    | 38   | 49   | 56    | 87   | 103  | 44   |
| Peak Hour Factor                  | 0.92 | 0.92 | 0.92  | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph)            | 41   | 53   | 61    | 95   | 112  | 48   |
| Pedestrians                       |      |      |       |      |      |      |
| Lane Width (ft)                   |      |      |       |      |      |      |
| Walking Speed (ft/s)              |      |      |       |      |      |      |
| Percent Blockage                  |      |      |       |      |      |      |
| Right turn flare (veh)            |      |      |       |      |      |      |
| Median type                       |      |      |       |      |      |      |
| Median storage (veh)              |      |      |       |      |      |      |
| Upstream signal (ft)              |      |      |       |      |      |      |
| pX, platoon unblocked             |      |      |       |      |      |      |
| VC, conflicting volume            |      |      |       |      |      |      |
| VC1, stage 1 conf vol             |      |      |       |      |      |      |
| VC2, stage 2 conf vol             |      |      |       |      |      |      |
| VCu, unblocked vol                |      |      |       |      |      |      |
| tC, single (s)                    |      |      |       |      |      |      |
| tC, 2 stage (s)                   |      |      |       |      |      |      |
| tF (s)                            |      |      |       |      |      |      |
| p0 queue free %                   |      |      |       |      |      |      |
| cM capacity (veh/h)               |      |      |       |      |      |      |
| Direction, Lane #                 | EB 1 | NB 1 | SB 1  |      |      |      |
| Volume Total                      | 95   | 155  | 160   |      |      |      |
| Volume Left                       | 41   | 61   | 0     |      |      |      |
| Volume Right                      | 53   | 0    | 48    |      |      |      |
| cSH                               | 755  | 1419 | 1700  |      |      |      |
| Volume to Capacity                | 0.13 | 0.04 | 0.09  |      |      |      |
| Queue Length 95th (ft)            | 11   | 3    | 0     |      |      |      |
| Control Delay (s)                 | 10.4 | 3.2  | 0.0   |      |      |      |
| Lane LOS                          | B    | A    |       |      |      |      |
| Approach Delay (s)                | 10.4 | 3.2  | 0.0   |      |      |      |
| Approach LOS                      | B    |      |       |      |      |      |
| Intersection Summary              |      |      |       |      |      |      |
| Average Delay                     |      |      | 3.6   |      |      |      |
| Intersection Capacity Utilization |      |      | 30.9% |      |      | A    |
| Analysis Period (min)             |      |      | 15    |      |      |      |

A71



## **Traffic Volume Worksheets**

**07-061 Lovejoy Realty FBO DRI**  
**Traffic Volumes**  
**Future Conditions**

**A&R Engineering**  
**June-07**

**US 19 (US 41)/ Speedway Boulevard / Revolutionary Drive**

**A.M. Peak Hour**

| Condition               | Northbound |      |     | Southbound |     |     | Eastbound |     |     | Westbound |     |     |
|-------------------------|------------|------|-----|------------|-----|-----|-----------|-----|-----|-----------|-----|-----|
|                         | L          | T    | R   | Tot        | L   | T   | R         | Tot | L   | T         | R   | Tot |
| Existing:               | 17         | 1176 | 5   | 1198       | 17  | 608 | 25        | 650 | 24  | 1         | 25  | 50  |
| Growth Factor (%):      | 3.1        | 3.1  | 3.1 |            | 3.1 | 3.1 | 3.1       |     | 3.1 | 3.1       | 3.1 |     |
| Base Condition:         | 18         | 1250 | 5   | 1273       | 18  | 646 | 27        | 691 | 26  | 1         | 27  | 53  |
| Total New Trips         | 0          | 0    | 0   | 0          | 0   | 0   | 36        | 36  | 57  | 4         | 0   | 61  |
| Future Traffic Volumes: | 18         | 1250 | 5   | 1273       | 18  | 646 | 63        | 727 | 83  | 5         | 27  | 114 |

**P.M. Peak Hour**

| Condition               | Northbound |     |     | Southbound |     |      | Eastbound |      |     | Westbound |     |     |
|-------------------------|------------|-----|-----|------------|-----|------|-----------|------|-----|-----------|-----|-----|
|                         | L          | T   | R   | Tot        | L   | T    | R         | Tot  | L   | T         | R   | Tot |
| Existing:               | 21         | 752 | 21  | 794        | 12  | 1267 | 22        | 1301 | 48  | 5         | 29  | 82  |
| Growth Factor (%):      | 3.1        | 3.1 | 3.1 |            | 3.1 | 3.1  | 3.1       |      | 3.1 | 3.1       | 3.1 |     |
| Base Condition:         | 22         | 799 | 22  | 844        | 13  | 1347 | 23        | 1383 | 51  | 5         | 31  | 87  |
| Total New Trips         | 0          | 0   | 0   | 0          | 0   | 0    | 103       | 103  | 88  | 6         | 0   | 94  |
| Future Traffic Volumes: | 22         | 799 | 22  | 844        | 13  | 1347 | 126       | 1486 | 139 | 11        | 31  | 181 |

**07-061 Lovejoy Realty FBO DRI**  
**Traffic Volumes**  
**Future Conditions**

**A&R Engineering**  
**June-07**

**Speedway Boulevard / Mt Pleasant Road**

**A.M. Peak Hour**

| Condition               | Northbound |     |     |     | Southbound |     |     |     | Eastbound |     |     |     | Westbound |     |     |     |
|-------------------------|------------|-----|-----|-----|------------|-----|-----|-----|-----------|-----|-----|-----|-----------|-----|-----|-----|
|                         | L          | T   | R   | Tot | L          | T   | R   | Tot | L         | T   | R   | Tot | L         | T   | R   | Tot |
| Existing:               | 0          | 0   | 1   | 1   | 22         | 2   | 13  | 37  | 2         | 17  | 1   | 20  | 1         | 24  | 11  | 36  |
| Growth Factor (%):      | 3.1        | 3.1 | 3.1 |     | 3.1        | 3.1 | 3.1 |     | 3.1       | 3.1 | 3.1 |     | 3.1       | 3.1 | 3.1 |     |
| Base Condition:         | 0          | 0   | 1   | 1   | 23         | 2   | 14  | 39  | 2         | 18  | 1   | 21  | 1         | 26  | 12  | 38  |
| Total New Trips         | 0          | 0   | 0   | 0   | 0          | 0   | 12  | 12  | 19        | 61  | 0   | 80  | 0         | 38  | 0   | 38  |
| Future Traffic Volumes: | 0          | 0   | 1   | 1   | 23         | 2   | 26  | 51  | 21        | 79  | 1   | 101 | 1         | 64  | 12  | 76  |

**P.M. Peak Hour**

| Condition               | Northbound |     |     |     | Southbound |     |     |     | Eastbound |     |     |     | Westbound |     |     |     |
|-------------------------|------------|-----|-----|-----|------------|-----|-----|-----|-----------|-----|-----|-----|-----------|-----|-----|-----|
|                         | L          | T   | R   | Tot | L          | T   | R   | Tot | L         | T   | R   | Tot | L         | T   | R   | Tot |
| Existing:               | 1          | 4   | 3   | 8   | 10         | 2   | 12  | 24  | 25        | 98  | 0   | 123 | 2         | 67  | 19  | 88  |
| Growth Factor (%):      | 3.1        | 3.1 | 3.1 |     | 3.1        | 3.1 | 3.1 |     | 3.1       | 3.1 | 3.1 |     | 3.1       | 3.1 | 3.1 |     |
| Base Condition:         | 1          | 4   | 3   | 9   | 11         | 2   | 13  | 26  | 27        | 104 | 0   | 131 | 2         | 71  | 20  | 94  |
| Total New Trips         | 0          | 0   | 0   | 0   | 0          | 0   | 34  | 34  | 29        | 94  | 0   | 123 | 0         | 110 | 0   | 110 |
| Future Traffic Volumes: | 1          | 4   | 3   | 9   | 11         | 2   | 47  | 60  | 56        | 198 | 0   | 254 | 2         | 181 | 20  | 204 |

**07-061 Lovejoy Realty FBO DRI**  
**Traffic Volumes**  
**Future Conditions**

**A&R Engineering**  
**June-07**

**Speedway Boulevard / Selfridge Road**

**A.M. Peak Hour**

| Condition               | Northbound |     |     | Southbound |     |     | Eastbound |     |     | Westbound |     |     |
|-------------------------|------------|-----|-----|------------|-----|-----|-----------|-----|-----|-----------|-----|-----|
|                         | L          | T   | R   | Tot        | L   | T   | L         | T   | R   | L         | T   | R   |
| Existing:               | 2          | 49  | 0   | 51         | 0   | 33  | 2         | 0   | 1   | 3         | 0   | 0   |
| Growth Factor (%):      | 3.1        | 3.1 | 3.1 |            | 3.1 | 3.1 | 3.1       | 3.1 | 3.1 | 3.1       | 3.1 | 3.1 |
| Base Condition:         | 2          | 52  | 0   | 54         | 0   | 35  | 2         | 0   | 1   | 3         | 0   | 0   |
| Total New Trips         | 0          | 0   | 0   | 0          | 0   | 0   | 50        | 0   | 0   | 80        | 0   | 0   |
| Future Traffic Volumes: | 2          | 52  | 0   | 54         | 0   | 35  | 52        | 0   | 1   | 83        | 0   | 0   |

**P.M. Peak Hour**

| Condition               | Northbound |     |     | Southbound |     |     | Eastbound |     |     | Westbound |     |     |
|-------------------------|------------|-----|-----|------------|-----|-----|-----------|-----|-----|-----------|-----|-----|
|                         | L          | T   | R   | Tot        | L   | T   | L         | T   | R   | L         | T   | R   |
| Existing:               | 1          | 87  | 0   | 88         | 0   | 97  | 3         | 2   | 0   | 3         | 0   | 0   |
| Growth Factor (%):      | 3.1        | 3.1 | 3.1 |            | 3.1 | 3.1 | 3.1       | 3.1 | 3.1 | 3.1       | 3.1 | 3.1 |
| Base Condition:         | 1          | 92  | 0   | 94         | 0   | 103 | 3         | 2   | 0   | 3         | 0   | 0   |
| Total New Trips         | 0          | 0   | 0   | 0          | 0   | 0   | 144       | 123 | 0   | 123       | 0   | 0   |
| Future Traffic Volumes: | 1          | 92  | 0   | 94         | 0   | 103 | 147       | 125 | 1   | 126       | 0   | 0   |

**A&R Engineering**  
**June-07**

### A.M. Peak Hour

| Condition               | Northbound |     |     |     | Southbound |     |     |     | Eastbound |     |     |     | Westbound |     |     |     |
|-------------------------|------------|-----|-----|-----|------------|-----|-----|-----|-----------|-----|-----|-----|-----------|-----|-----|-----|
|                         | L          | T   | R   | Tot | L          | T   | R   | Tot | L         | T   | R   | Tot | L         | T   | R   | Tot |
| Existing:               | 0          | 0   | 0   | 0   | 66         | 0   | 61  | 127 | 18        | 91  | 0   | 109 | 0         | 128 | 69  | 197 |
| Growth Factor (%):      | 3.1        | 3.1 | 3.1 |     | 3.1        | 3.1 | 3.1 |     | 3.1       | 3.1 | 3.1 |     | 3.1       | 3.1 | 3.1 |     |
| Base Condition:         | 0          | 0   | 0   | 0   | 70         | 0   | 65  | 135 | 19        | 97  | 0   | 116 | 0         | 136 | 73  | 209 |
| Total New Trips         | 0          | 0   | 0   | 0   | 0          | 0   | 0   | 0   | 0         | 140 | 0   | 140 | 0         | 164 | 0   | 164 |
| Future Traffic Volumes: | 0          | 0   | 0   | 0   | 70         | 0   | 65  | 135 | 19        | 237 | 0   | 256 | 0         | 300 | 73  | 373 |

**07-061 Lovejoy Realty FBO DRI**  
**Traffic Volumes**  
**Future Conditions**

**A&R Engineering**  
**June-07**

**Lower Woolsey Road / Selfridge Road**

**A.M. Peak Hour**

| Condition               | Northbound |     |     | Southbound |     |     | Eastbound |     |     | Westbound |     |     |
|-------------------------|------------|-----|-----|------------|-----|-----|-----------|-----|-----|-----------|-----|-----|
|                         | L          | T   | R   | Tot        | L   | T   | R         | Tot | L   | T         | R   | Tot |
| Existing:               | 0          | 0   | 0   | 0          | 0   | 0   | 2         | 2   | 0   | 135       | 0   | 135 |
| Growth Factor (%):      | 3.1        | 3.1 | 3.1 |            | 3.1 | 3.1 | 3.1       |     | 3.1 | 3.1       | 3.1 |     |
| Base Condition:         | 0          | 0   | 0   | 0          | 0   | 0   | 2         | 2   | 0   | 143       | 0   | 143 |
| Total New Trips         | 0          | 0   | 0   | 0          | 92  | 0   | 19        | 111 | 12  | 0         | 0   | 12  |
| Future Traffic Volumes: | 0          | 0   | 0   | 0          | 92  | 0   | 21        | 113 | 12  | 143       | 0   | 155 |

**P.M. Peak Hour**

| Condition               | Northbound |     |     | Southbound |     |     | Eastbound |     |     | Westbound |     |     |
|-------------------------|------------|-----|-----|------------|-----|-----|-----------|-----|-----|-----------|-----|-----|
|                         | L          | T   | R   | Tot        | L   | T   | R         | Tot | L   | T         | R   | Tot |
| Existing:               | 0          | 0   | 0   | 0          | 0   | 0   | 3         | 3   | 0   | 112       | 0   | 112 |
| Growth Factor (%):      | 3.1        | 3.1 | 3.1 |            | 3.1 | 3.1 | 3.1       |     | 3.1 | 3.1       | 3.1 |     |
| Base Condition:         | 0          | 0   | 0   | 0          | 0   | 0   | 3         | 3   | 0   | 119       | 0   | 119 |
| Total New Trips         | 0          | 0   | 0   | 0          | 140 | 0   | 29        | 169 | 34  | 0         | 0   | 34  |
| Future Traffic Volumes: | 0          | 0   | 0   | 0          | 140 | 0   | 32        | 172 | 34  | 119       | 0   | 153 |

**07-061 Lovejoy Realty FBO DRI**  
**Traffic Volumes**  
**Future Conditions**

**A&R Engineering**  
**June-07**

**Selfridge Road / Main Site Driveway**

**A.M. Peak Hour**

| Condition               | Northbound |     |     | Southbound |     |     | Eastbound |     |     | Westbound |     |     |
|-------------------------|------------|-----|-----|------------|-----|-----|-----------|-----|-----|-----------|-----|-----|
|                         | L          | T   | R   | Tot        | L   | T   | R         | Tot | L   | T         | R   | Tot |
| Existing:               | 0          | 3   | 0   | 3          | 0   | 4   | 0         | 4   | 0   | 0         | 0   | 0   |
| Growth Factor (%):      | 3.1        | 3.1 | 3.1 |            | 3.1 | 3.1 | 3.1       |     | 3.1 | 3.1       | 3.1 |     |
| Base Condition:         | 0          | 3   | 0   | 3          | 0   | 4   | 0         | 4   | 0   | 0         | 0   | 0   |
| Total New Trips         | 29         | 43  | 0   | 72         | 0   | 47  | 20        | 67  | 33  | 0         | 46  | 79  |
| Future Traffic Volumes: | 29         | 46  | 0   | 75         | 0   | 51  | 20        | 71  | 33  | 0         | 46  | 79  |

**P.M. Peak Hour**

| Condition               | Northbound |     |     | Southbound |     |     | Eastbound |     |     | Westbound |     |     |
|-------------------------|------------|-----|-----|------------|-----|-----|-----------|-----|-----|-----------|-----|-----|
|                         | L          | T   | R   | Tot        | L   | T   | R         | Tot | L   | T         | R   | Tot |
| Existing:               | 0          | 3   | 0   | 3          | 0   | 4   | 0         | 4   | 0   | 0         | 0   | 0   |
| Growth Factor (%):      | 3.1        | 3.1 | 3.1 |            | 3.1 | 3.1 | 3.1       |     | 3.1 | 3.1       | 3.1 |     |
| Base Condition:         | 0          | 3   | 0   | 3          | 0   | 4   | 0         | 4   | 0   | 0         | 0   | 0   |
| Total New Trips         | 81         | 91  | 0   | 172        | 0   | 90  | 58        | 148 | 50  | 0         | 69  | 119 |
| Future Traffic Volumes: | 81         | 94  | 0   | 175        | 0   | 94  | 58        | 152 | 50  | 0         | 69  | 119 |

**07-061 Lovejoy Realty FBO DRI**  
**Traffic Volumes**  
**Future Conditions**

**A&R Engineering**  
**June-07**

**Selfridge Road / North Site Driveway**

**A.M. Peak Hour**

| Condition               | Northbound |     |     | Southbound |     |     | Eastbound |     |     | Westbound |     |     |
|-------------------------|------------|-----|-----|------------|-----|-----|-----------|-----|-----|-----------|-----|-----|
|                         | L          | T   | R   | Tot        | L   | T   | R         | Tot | L   | T         | R   | Tot |
| Existing:               | 0          | 3   | 0   | 3          | 0   | 4   | 0         | 4   | 0   | 0         | 0   | 0   |
| Growth Factor (%):      | 3.1        | 3.1 | 3.1 |            | 3.1 | 3.1 | 3.1       |     | 3.1 | 3.1       | 3.1 |     |
| Base Condition:         | 0          | 3   | 0   | 3          | 0   | 4   | 0         | 4   | 0   | 0         | 0   | 0   |
| Total New Trips         | 20         | 55  | 0   | 75         | 0   | 34  | 16        | 50  | 25  | 0         | 0   | 0   |
| Future Traffic Volumes: | 20         | 58  | 0   | 78         | 0   | 38  | 16        | 54  | 25  | 0         | 0   | 0   |

**P.M. Peak Hour**

| Condition               | Northbound |     |     | Southbound |     |     | Eastbound |     |     | Westbound |     |     |
|-------------------------|------------|-----|-----|------------|-----|-----|-----------|-----|-----|-----------|-----|-----|
|                         | L          | T   | R   | Tot        | L   | T   | R         | Tot | L   | T         | R   | Tot |
| Existing:               | 0          | 3   | 0   | 3          | 0   | 4   | 0         | 4   | 0   | 0         | 0   | 0   |
| Growth Factor (%):      | 3.1        | 3.1 | 3.1 |            | 3.1 | 3.1 | 3.1       |     | 3.1 | 3.1       | 3.1 |     |
| Base Condition:         | 0          | 3   | 0   | 3          | 0   | 4   | 0         | 4   | 0   | 0         | 0   | 0   |
| Total New Trips         | 56         | 84  | 0   | 140        | 0   | 99  | 44        | 143 | 38  | 0         | 0   | 0   |
| Future Traffic Volumes: | 56         | 87  | 0   | 143        | 0   | 103 | 44        | 147 | 38  | 0         | 0   | 0   |



**07-061 Lovejoy Realty FBO DRI**  
**Traffic Volumes**  
**Future Conditions**

**A&R Engineering**  
**June-07**

**Selfridge Road / South Site Driveway**

**A.M. Peak Hour**

| Condition               | Northbound |     |     | Southbound |     |     | Eastbound |     |     | Westbound |     |     |
|-------------------------|------------|-----|-----|------------|-----|-----|-----------|-----|-----|-----------|-----|-----|
|                         | L          | T   | R   | Tot        | L   | T   | R         | Tot | L   | T         | R   | Tot |
| Existing:               | 0          | 3   | 0   | 3          | 0   | 4   | 0         | 4   | 0   | 0         | 0   | 0   |
| Growth Factor (%):      | 3.1        | 3.1 | 3.1 |            | 3.1 | 3.1 | 3.1       |     | 3.1 | 3.1       | 3.1 |     |
| Base Condition:         | 0          | 3   | 0   | 3          | 0   | 4   | 0         | 4   | 0   | 0         | 0   | 0   |
| Total New Trips         | 22         | 47  | 0   | 69         | 0   | 76  | 15        | 91  | 23  | 0         | 35  | 58  |
| Future Traffic Volumes: | 22         | 50  | 0   | 72         | 0   | 80  | 15        | 95  | 23  | 0         | 35  | 58  |

**P.M. Peak Hour**

| Condition               | Northbound |     |     | Southbound |     |     | Eastbound |     |     | Westbound |     |     |
|-------------------------|------------|-----|-----|------------|-----|-----|-----------|-----|-----|-----------|-----|-----|
|                         | L          | T   | R   | Tot        | L   | T   | R         | Tot | L   | T         | R   | Tot |
| Existing:               | 0          | 3   | 0   | 3          | 0   | 4   | 0         | 4   | 0   | 0         | 0   | 0   |
| Growth Factor (%):      | 3.1        | 3.1 | 3.1 |            | 3.1 | 3.1 | 3.1       |     | 3.1 | 3.1       | 3.1 |     |
| Base Condition:         | 0          | 3   | 0   | 3          | 0   | 4   | 0         | 4   | 0   | 0         | 0   | 0   |
| Total New Trips         | 61         | 137 | 0   | 198        | 0   | 116 | 41        | 157 | 35  | 0         | 53  | 88  |
| Future Traffic Volumes: | 61         | 140 | 0   | 201        | 0   | 120 | 41        | 161 | 35  | 0         | 53  | 88  |

## **Planned and Programmed Improvements**

**Short Title**

US 19/41 (HERMAN TALMADGE HIGHWAY) FROM LAPRADE ROAD IN SPALDING COUNTY TO SR 20 (RICHARD PETTY BOULEVARD / WOOLSEY ROAD) IN HENRY COUNTY

**GDOT Project No.**

0000294

**Federal ID No.**

NHS-0000-00(294)

**Status**

Programmed

**Detailed Description and Justification**

This project will widen US 19/41 from 4 to 6 lanes (3 in each direction). Much of the portion of this project is located in Spalding County. The widened facility will help to improve traffic flow during race days at the Atlanta Motor Speedway.

**Service Type**

Roadway Capacity

**Sponsor**

GDOT

**Jurisdiction**

Multi-County

**Existing Thru Lane**

4 (applicable for road projects only)

**Planned Thru Lane**

6 (applicable for road projects only)

**Corridor Length**

8.5 miles (not applicable for all project types)

**Network Year**

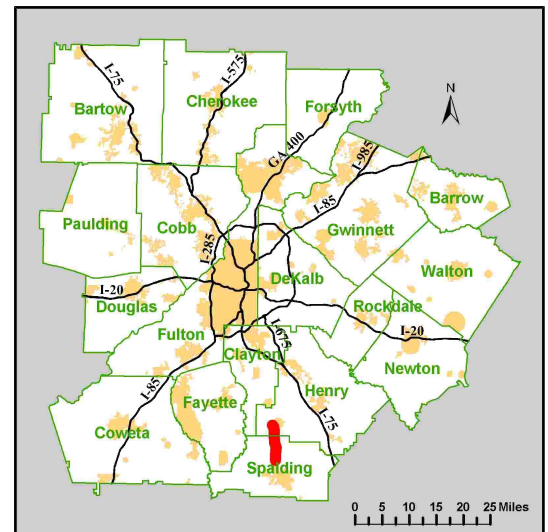
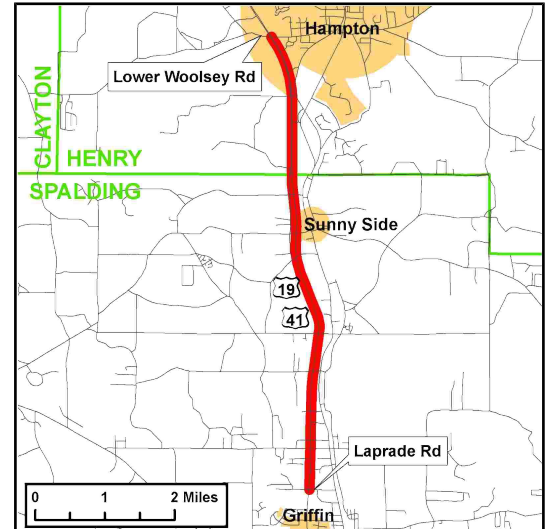
2015 (required if modeled for conformity)

**Completion Date**

2015

**Analysis Level**

In the Region's Air Quality Conformity Analysis



| Phase Status & Funding Information for 06-11 TIP |                         | FISCAL YEAR  | TOTAL PHASE COST   | BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE |                    |                |                |
|--------------------------------------------------|-------------------------|--------------|--------------------|-------------------------------------------------|--------------------|----------------|----------------|
|                                                  |                         |              |                    | FEDERAL                                         | STATE              | BONDS          | LOCAL/OTHER    |
| PE                                               | National Highway System | 2008         | <b>\$860,000</b>   | \$688,000                                       | \$172,000          | \$0,000        | \$0,000        |
| ROW                                              | National Highway System | 2009         | <b>\$2,472,000</b> | \$1,977,600                                     | \$494,400          | \$0,000        | \$0,000        |
| CST                                              | National Highway System | LR 2012-2020 | <b>\$8,600,000</b> | \$6,880,000                                     | \$1,720,000        | \$0,000        | \$0,000        |
|                                                  |                         |              |                    | <b>\$9,545,600</b>                              | <b>\$2,386,400</b> | <b>\$0,000</b> | <b>\$0,000</b> |

PE: Preliminary Engineering / Design / Study

ROW: Right-of-way Acquisition

CST: Construction / Implementation



For additional information about this project, please visit the Atlanta Regional Commission at [www.atlantaregional.com](http://www.atlantaregional.com) or call (404) 463-3100.



|                                  |                                                            |       |
|----------------------------------|------------------------------------------------------------|-------|
| <b>Project ID</b>                | 0000294                                                    |       |
| <b>Project Type</b>              | Reconstruction/Rehabilitation                              |       |
| <b>STIP Code</b>                 | Yes                                                        |       |
| <b>Construction Status Code</b>  | Long Range Program                                         |       |
| <b>Corridor</b>                  |                                                            |       |
| <b>Project Manager Office</b>    | Road Design                                                |       |
| <b>County</b>                    | Henry,Spalding                                             |       |
| <b>Project Accounting Number</b> | NHS-0000-00(294)                                           |       |
| <b>Primary Work Type</b>         | Widening                                                   |       |
| <b>Description</b>               | SR 3/US 19/41 FM CR 18/LAPRADE RD TO SR 20 IN HENRY COUNTY |       |
| <b>RCLink:</b>                   | 1511000300                                                 |       |
|                                  | <b>Begin Mile Point</b>                                    | 0.0   |
|                                  | <b>Prop Length</b>                                         | 1.95  |
|                                  | <b>End Mile Point</b>                                      | 1.95  |
| <b>RCLink:</b>                   | 2551000300                                                 |       |
|                                  | <b>Begin Mile Point</b>                                    | 7.06  |
|                                  | <b>Prop Length</b>                                         | 4.65  |
|                                  | <b>End Mile Point</b>                                      | 11.71 |
| <b>Let Status</b>                | UNLET                                                      |       |
| <b>Priority Code</b>             |                                                            |       |

|                                  |                                                                                                                                                                                                                                           |  |                         |     |                    |      |                       |      |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------|-----|--------------------|------|-----------------------|------|
| <b>Project ID</b>                | 0005959                                                                                                                                                                                                                                   |  |                         |     |                    |      |                       |      |
| <b>Project Type</b>              | Safety                                                                                                                                                                                                                                    |  |                         |     |                    |      |                       |      |
| <b>STIP Code</b>                 | Lump Sum                                                                                                                                                                                                                                  |  |                         |     |                    |      |                       |      |
| <b>Construction Status Code</b>  | Under Construction                                                                                                                                                                                                                        |  |                         |     |                    |      |                       |      |
| <b>Corridor</b>                  |                                                                                                                                                                                                                                           |  |                         |     |                    |      |                       |      |
| <b>Project Manager Office</b>    | Consultant Design                                                                                                                                                                                                                         |  |                         |     |                    |      |                       |      |
| <b>County</b>                    | Henry                                                                                                                                                                                                                                     |  |                         |     |                    |      |                       |      |
| <b>Project Accounting Number</b> | CSNHS-0005-00(959)                                                                                                                                                                                                                        |  |                         |     |                    |      |                       |      |
| <b>Primary Work Type</b>         | Turn Lanes                                                                                                                                                                                                                                |  |                         |     |                    |      |                       |      |
| <b>Description</b>               | SR 3/US 19/41 MEDIAN TURN LNS FM SPALDING CO TO CLAYTON CO                                                                                                                                                                                |  |                         |     |                    |      |                       |      |
| <b>RCLink:</b>                   | 1511000300 <table border="1" data-bbox="578 774 1343 911"> <tr> <td><b>Begin Mile Point</b></td> <td>0.0</td> </tr> <tr> <td><b>Prop Length</b></td> <td>5.39</td> </tr> <tr> <td><b>End Mile Point</b></td> <td>5.39</td> </tr> </table> |  | <b>Begin Mile Point</b> | 0.0 | <b>Prop Length</b> | 5.39 | <b>End Mile Point</b> | 5.39 |
| <b>Begin Mile Point</b>          | 0.0                                                                                                                                                                                                                                       |  |                         |     |                    |      |                       |      |
| <b>Prop Length</b>               | 5.39                                                                                                                                                                                                                                      |  |                         |     |                    |      |                       |      |
| <b>End Mile Point</b>            | 5.39                                                                                                                                                                                                                                      |  |                         |     |                    |      |                       |      |
| <b>Let Status</b>                | LET                                                                                                                                                                                                                                       |  |                         |     |                    |      |                       |      |
| <b>Priority Code</b>             |                                                                                                                                                                                                                                           |  |                         |     |                    |      |                       |      |

|                                  |                                                                                                                                                                                                           |                         |       |                    |      |                       |       |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------|--------------------|------|-----------------------|-------|
| <b>Project ID</b>                | 343060-                                                                                                                                                                                                   |                         |       |                    |      |                       |       |
| <b>Project Type</b>              | Reconstruction/Rehabilitation                                                                                                                                                                             |                         |       |                    |      |                       |       |
| <b>STIP Code</b>                 | Yes                                                                                                                                                                                                       |                         |       |                    |      |                       |       |
| <b>Construction Status Code</b>  | Under Construction                                                                                                                                                                                        |                         |       |                    |      |                       |       |
| <b>Corridor</b>                  |                                                                                                                                                                                                           |                         |       |                    |      |                       |       |
| <b>Project Manager Office</b>    | Road Design                                                                                                                                                                                               |                         |       |                    |      |                       |       |
| <b>County</b>                    | Henry                                                                                                                                                                                                     |                         |       |                    |      |                       |       |
| <b>Project Accounting Number</b> | MLP-20(150)                                                                                                                                                                                               |                         |       |                    |      |                       |       |
| <b>Primary Work Type</b>         | Widening                                                                                                                                                                                                  |                         |       |                    |      |                       |       |
| <b>Description</b>               | SR 20 RELOC/FM WEST OF SR 3/US 19/41 TO WEST OF TOWALIGA RVR                                                                                                                                              |                         |       |                    |      |                       |       |
| <b>RCLink:</b>                   | 1511002000 <table border="1"> <tr> <td><b>Begin Mile Point</b></td><td>15.99</td></tr> <tr> <td><b>Prop Length</b></td><td>3.27</td></tr> <tr> <td><b>End Mile Point</b></td><td>19.26</td></tr> </table> | <b>Begin Mile Point</b> | 15.99 | <b>Prop Length</b> | 3.27 | <b>End Mile Point</b> | 19.26 |
| <b>Begin Mile Point</b>          | 15.99                                                                                                                                                                                                     |                         |       |                    |      |                       |       |
| <b>Prop Length</b>               | 3.27                                                                                                                                                                                                      |                         |       |                    |      |                       |       |
| <b>End Mile Point</b>            | 19.26                                                                                                                                                                                                     |                         |       |                    |      |                       |       |
| <b>Let Status</b>                | LET                                                                                                                                                                                                       |                         |       |                    |      |                       |       |
| <b>Priority Code</b>             | TCI                                                                                                                                                                                                       |                         |       |                    |      |                       |       |

## **Proposed Facility Site Plan**