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December 6, 2021

Mr. Eric Clore  
Lowe  
5299 DTC Boulevard, Suite 1260  
Greenwood Village, CO 80111

Re: Canyons South  
Castle Rock, CO  
LSC #210310

Dear Mr. Clore:

In response to your request, LSC Transportation Consultants, Inc. has prepared this updated traffic impact analysis for the proposed Canyons South development to address Town comments and to evaluate the local access points to the proposed collector streets. As shown on Figure 1, the site is located northeast of Founders Parkway (SH 86) and is proposed for annexation into the Town of Castle Rock, Colorado.

## **REPORT CONTENTS**

The report contains the following: the existing roadway and traffic conditions in the vicinity of the site including the lane geometries, traffic controls, posted speed limits, etc.; the existing weekday peak-hour traffic volumes; the existing daily traffic volumes in the area; an adjustment to account for the ongoing pandemic; the typical weekday site-generated traffic volume projections for the site; the assignment of the projected traffic volumes to the area roadways; the projected short-term and long-term background and resulting total traffic volumes; the site's projected traffic impacts; and any recommended roadway improvements to mitigate the growth in background traffic or the impact of the site.

## **LAND USE AND ACCESS**

The site is proposed to include about 474 single-family detached dwelling units, about 30,000 square feet of retail space, and about 20,000 square feet of office space. Access is proposed from several locations as shown in the conceptual site plan in Figure 2. The proposed collector street system will provide connectivity between Founders Parkway (SH 86), Crowfoot Valley Road, and Castle Oaks Drive.

## **ROADWAY AND TRAFFIC CONDITIONS**

### **Area Roadways**

The major roadways in the site's vicinity are shown on Figure 1 and are described below.

- **Founders Parkway (SH 86)** is a four-lane arterial roadway southwest of the site. The intersections with Allen Way, Front Street, Woodlands Boulevard, Crowfoot Valley Road, and 5<sup>th</sup> Street/SH 86 are signalized with auxiliary turn lanes. The posted speed limit is 50 mph in the vicinity of the site. It is classified by CDOT as RA (Regional Highway). The CDOT Straight Line Diagram is attached.
- **Crowfoot Valley Road** is a north-south, four-lane major arterial north of the site. The intersection with Founders Parkway (SH 86) is signalized with auxiliary turn lanes. The posted speed limit is 40 mph in the vicinity of Founders Parkway but increases to 45 mph to the north. It is planned to be a four-lane roadway from Castle Rock to Parker over time.
- **Castle Oaks Drive** is a two-lane collector roadway east of the site with a 40 mph posted speed limit. The proposed Community Collector roadway (Minor Collector) is planned to connect east to Castle Oaks Drive and northwest towards Crowfoot Valley Road.

### **Existing Traffic Conditions**

Figure 3a shows the existing traffic volumes, lane geometry, and traffic control in the site's vicinity on a typical weekday. The weekday peak-hour traffic volumes and average daily traffic volumes are from the attached traffic counts conducted in April, May, and June, 2021 by Counter Measures, Inc.

### **Pandemic Adjustment**

Figure 3b shows the existing traffic volumes adjusted for the ongoing pandemic. The traffic volumes at Intersection #8 are based on the higher of the traffic volumes in Figure 3a and the 2019 traffic volumes provided by Town staff (attached for reference) grown for two years at an annual rate of four percent. The traffic volumes at Intersection #7 were increased by five percent to maintain a conservative analysis because the traffic volumes at Intersection #8 were generally higher than the historic 2019 traffic volumes. Intersections #1, #2, #3, #4, and #6 were adjusted based on the higher of the traffic volumes in Figure 3a and the 2018 traffic volumes in Figure 3 of the *Pine Canyon TIA* by Kimley Horn grown for three years at an annual rate of three percent.

### **2025 and 2041 Background Traffic**

Figure 4 shows the estimated 2025 background traffic and Figure 5 shows the estimated 2041 background traffic. The 2025 background traffic in Figure 4 assumes four years of growth at an annual rate of three percent plus half of the 2041 background traffic passing through the site. Little or no growth was assumed for movements serving built out developments. The 2041 background traffic in Figure 5 assumes the 2041 total traffic volumes in Figure 9 less the total site-generated trips in Figure 7d with the following exception: Intersection #8 is based on the 2040 traffic projections provided by Town staff (attached) grown for one year at an annual rate of three percent. This was done because the Canyons South development was not included in the modeling that resulted in the 2040 traffic volumes provided. The volumes on the south leg of Intersection #6 are based on the traffic volumes in Figure 7a from the 2017 *Pine Canyon TIA*

by LSC. The buildout lane geometry at Intersection #8 is based on the figure provided by Town staff (attached). The side road volumes at Intersections #1, #2, #3, and #4 are based on the 2040 total traffic volumes from Figure 12 of the 2020 *Pine Canyon TIA* by Kimley Horn with some adjustments based on the recent traffic counts.

About 30 percent of Castle Oaks Drive traffic at Intersection #7 is expected to divert to the proposed minor collector roadway through the site.

### **Existing, 2025, and 2041 Background Levels of Service**

Level of service (LOS) is a quantitative measure of the level of congestion or delay at an intersection. Level of service is indicated on a scale from “A” to “F.” LOS A is indicative of little congestion or delay and LOS F is indicative of a high level of congestion or delay. Attached are specific level of service definitions for signalized and unsignalized intersections.

The intersections in Figures 3b, 4, and 5 were analyzed to determine the existing, 2025, and 2041 background levels of service using Synchro. Table 1 shows the level of service analysis results. The level of service reports are attached. CDOT and the Town plan to implement adaptive traffic signal control between I-25 and Crowfoot Valley Road so those intersections were optimized with a 120-second cycle length per coordination with CDOT and Town staff.

- 1. Founders Parkway (SH 86)/Allen Way:** This signalized intersection currently operates at an overall LOS “C” during both morning and afternoon peak-hours and is expected to do so through 2025. By 2041, this intersection is expected to operate at LOS “C” during the morning peak-hour and LOS “D” during the afternoon peak-hour.
- 2. Founders Parkway (SH 86)/Front Street:** This signalized intersection currently operates at an overall LOS “C” during the morning peak-hour and LOS “D” during the afternoon peak-hour. By 2025, it is expected to operate at LOS “B” during the morning peak-hour and LOS “D” during the afternoon peak-hour. By 2041, this intersection is expected to operate at LOS “C” during the morning peak-hour and LOS “D” during the afternoon peak-hour.
- 3. Founders Parkway (SH 86)/Woodlands Boulevard:** This signalized intersection currently operates at an overall LOS “B” during both morning and afternoon peak-hours. By 2025, it is expected to operate at LOS “B” during the morning peak-hour and LOS “C” during the afternoon peak-hour. By 2041, this intersection is expected to operate at LOS “C” during the morning peak-hour and LOS “E” during the afternoon peak-hour. With implementation of the recommended mitigation the afternoon peak-hour can be improved to LOS “C”.
- 4. Founders Parkway (SH 86)/Crowfoot Valley Road:** This signalized intersection currently operates at an overall LOS “C” during the morning peak-hour and LOS “B” during the afternoon peak-hour and is expected to operate at LOS “C” through 2041.
- 5. Connector Collector Road/Internal Collector Roadway:** This future roundabout controlled intersection is expected to operate at an overall LOS “A” during both morning and afternoon peak-hours through 2041.

6. **Founders Parkway/Pioneer Ranch Access/Connector Collector Roadway:** This future signalized intersection is expected to operate at an overall LOS “B” or better through 2041.
7. **Castle Oaks Drive/Internal Community Collector:** This future roundabout controlled intersection is expected to operate at an overall LOS “A” during both morning and afternoon peak-hours through 2041.
8. **Founders Parkway (SH 86)/Ridge Road/5<sup>th</sup> Street/SH 86:** This signalized intersection currently operates at an overall LOS “C” during both morning and afternoon peak-hours and is expected to operate at LOS “D” or better through 2041.
9. **Connector Collector Roadway/Commercial Access:** This intersection was only analyzed in the total traffic scenarios.
10. **Internal Collector Roadway/Site Access #10:** This intersection was only analyzed in the total traffic scenarios.
11. **Internal Collector Roadway/Site Access #11:** This intersection was only analyzed in the total traffic scenarios.
12. **Internal Collector Roadway/Site Access #12:** This intersection was only analyzed in the total traffic scenarios.
13. **Internal Collector Roadway/Site Access #13:** This intersection was only analyzed in the total traffic scenarios.
14. **Internal Collector Roadway/Site Access #14:** This intersection was only analyzed in the total traffic scenarios.
15. **Internal Collector Roadway/Site Access #15:** This intersection was only analyzed in the total traffic scenarios.

## **TRIP GENERATION**

Table 2 shows the estimated average weekday, morning peak-hour, and afternoon peak-hour trip generation for the proposed site based on the rates from *Trip Generation, 10<sup>th</sup> Edition, 2017* by the Institute of Transportation Engineers (ITE).

The site is projected to generate about 7,321 vehicle-trips on the average weekday, with about half entering and half exiting during a 24-hour period. During the morning peak-hour, which generally occurs for one hour between 6:30 and 8:30 a.m., about 125 vehicles would enter and about 277 vehicles would exit the site. During the afternoon peak-hour, which generally occurs for one hour between 4:00 and 6:00 p.m., about 407 vehicles would enter and about 309 vehicles would exit. Table 2 also shows the estimated pass-by trips.

**TRIP DISTRIBUTION**

Figure 6 shows the estimated directional distribution of the primary site-generated traffic volumes on the area roadways. The estimates were based on the location of the site with respect to the regional population, employment, and activity centers; and the site's proposed land use.

**TRIP ASSIGNMENT**

Figures 7a and 7b show the estimated assignment of the residential site-generated traffic volumes based on the directional distribution percentages (from Figure 6) and the residential trip generation estimate (from Table 2).

Figures 7c and 7d show the assignment of primary non-residential site-generated traffic based on the directional distribution percentages (from Figure 6) and the non-residential trip generation estimate (from Table 2).

Figure 7e shows the assignment of the passby site-generated traffic.

Figure 7f shows the assignment of the total site-generated traffic which is the sum of the volumes in Figures 7a through 7e.

**2025 AND 2041 TOTAL TRAFFIC**

Figures 8a and 8b show the 2025 total traffic which is the sum of the 2025 background traffic volumes (from Figure 4) and the total site-generated traffic volumes (from Figure 7f). Figures 8a and 8b also shows the recommended 2025 lane geometry and traffic control.

Figures 9a and 9b shows the 2041 total traffic which is the sum of the 2041 background traffic volumes (from Figure 5) and the total site-generated traffic volumes (from Figure 7f). Figures 9a and 9b also shows the recommended 2041 lane geometry and traffic control.

**PROJECTED LEVELS OF SERVICE**

The intersections in Figures 8a through 9b were analyzed to determine the 2025 and 2041 total traffic levels of service. Table 1 shows the level of service analysis results.

- 1. Founders Parkway (SH 86)/Allen Way:** This signalized intersection is expected to operate at an overall LOS "D" or better during both morning and afternoon peak-hours through 2041.
- 2. Founders Parkway (SH 86)/Front Street:** This signalized intersection is expected to operate at an overall LOS "D" or better during both morning and afternoon peak-hours through 2041.
- 3. Founders Parkway (SH 86)/Woodlands Boulevard:** This signalized intersection is expected to operate at an overall LOS "B" during the morning peak-hour and LOS "C" during the

afternoon peak-hour through 2025. By 2041, this intersection is expected to operate at LOS “C” during the morning peak-hour and LOS “D” during the afternoon peak-hour.

4. **Founders Parkway (SH 86)/Crowfoot Valley Road:** This signalized intersection is expected to operate at an overall LOS “C” during both morning and afternoon peak-hours through 2025. By 2041, this intersection is expected to operate at LOS “D” during the morning peak-hour and LOS “C” during the afternoon peak-hour.
5. **Connector Collector Road/Internal Collector Roadway:** This future roundabout controlled intersection is expected to operate at an overall LOS “A” during both morning and afternoon peak-hours through 2041.
6. **Founders Parkway (SH 86)/Pioneer Ranch Access/Connector Collector Roadway:** This future signalized intersection is expected to operate at an overall LOS “C” or better through 2041.
7. **Castle Oaks Drive/Internal Community Collector:** This future roundabout controlled intersection is expected to operate at an overall LOS “A” during both morning and afternoon peak-hours through 2041.
8. **Founders Parkway (SH 86)/Ridge Road/5<sup>th</sup> Street/SH 86:** This signalized intersection is expected to operate at an overall LOS “D” or better during both morning and afternoon peak-hours through 2041.
9. **Connector Collector Roadway/Commercial Access:** All movements at this future stop-sign controlled intersection are expected to operate at LOS “C” or better during both morning and afternoon peak-hours through 2041.
10. **Internal Collector Roadway/Site Access #10:** All movements at this unsignalized intersection are expected to operate at LOS “B” or better through 2041.
11. **Internal Collector Roadway/Site Access #11:** All movements at this unsignalized intersection are expected to operate at LOS “B” or better through 2041.
12. **Internal Collector Roadway/Site Access #12:** All movements at this unsignalized intersection are expected to operate at LOS “B” or better through 2041.
13. **Internal Collector Roadway/Site Access #13:** All movements at this unsignalized intersection are expected to operate at LOS “B” or better through 2041.
14. **Internal Collector Roadway/Site Access #14:** All movements at this unsignalized intersection are expected to operate at LOS “B” or better through 2041.
15. **Internal Collector Roadway/Site Access #15:** All movements at this unsignalized intersection are expected to operate at LOS “B” or better through 2041.

**TRAFFIC SIGNAL WARRANT ANALYSIS**

The projected traffic volumes at Intersection #6 (Founders Parkway (SH 86)/Pioneer Ranch Access/Connector Collector Roadway) shown in Figure 8a (2025 Total Traffic) and Figure 9a (2041 Total Traffic) are sufficient to warrant traffic signal control over time based on the 70 percent reduced criteria due to the posted speed limit being over 40 mph on Founders Parkway (SH 86).

**95<sup>th</sup> PERCENTILE QUEUING ANALYSIS**

The estimated 2025 and 2041 95<sup>th</sup> percentile queue lengths for the signalized intersections in the study area are shown in Table 3 along with the recommended turn lane lengths.

**PEDESTRIAN AND BICYCLE ACCOMMODATION**

The site plan will include an east-west multi-use path through the site along the prominent drainage as well as a multi-use path along the site's frontage to Founders Parkway.

**RECOMMENDED IMPROVEMENTS**

Table 4 shows the 2025 and 2041 recommended improvements to the public street network.

**CONCLUSIONS AND RECOMMENDATIONS****Trip Generation**

1. The site is projected to generate about 7,321 vehicle-trips on the average weekday, with about half entering and half exiting during a 24-hour period. During the morning peak-hour, about 125 vehicles would enter and about 277 vehicles would exit the site. During the afternoon peak-hour, about 407 vehicles would enter and about 309 vehicles would exit. Table 2 also shows the estimated pass-by trips.

**Projected Levels of Service**

2. The two future roundabout controlled intersections are expected to operate at an overall LOS "A" through 2041.
3. All movements at the unsignalized intersections are expected to operate at LOS "C" or better through 2041.
4. All of the signalized intersections are expected to operate at an overall LOS "D" or better with implementation of the recommended improvements shown in Figures 8a through 9b and in Tables 3 and 4.

**Conclusions**

5. The impact of the site can be accommodated by the existing and planned roadway improvements with the recommended improvements.

**Recommendations**

6. The recommended improvements are shown in Figures 8a through 9b and in Tables 3 and 4.

\* \* \* \* \*

We trust our findings will assist you in gaining approval of the Canyons South development. Please contact me if you have any questions or need further assistance.

Sincerely,

LSC TRANSPORTATION CONSULTANTS, INC.

By  \_\_\_\_\_  
 Christopher S. McGranahan, PE, PTOE  
 Principal



CSM/wc

12-6-21

- Enclosures:
- Tables 1 - 4
  - Figures 1 - 9b
  - CDOT Straight Line Diagram
  - Traffic Counts
  - 2019 Traffic Volumes provided by Town Staff
  - Figure 3 from 2020 *Pine Canyon TIA* by Kimley Horn
  - 2040 Traffic Projections provided by Town Staff
  - Figure 7a from 2017 *Pine Canyon TIA* by LSC
  - Buildout Lane Geometry of Founders Parkway/Ridge Road/5<sup>th</sup> Street/SH 86 provided by Town Staff
  - Figure 12 from 2020 *Pine Canyon TIA* by Kimley Horn
  - Level of Service Definitions
  - Level of Service Reports
  - Queuing Reports



**Table 1 (Page 1 of 4)**  
**Intersection Levels of Service Analysis**  
**Canyons South**  
**Castle Rock, CO**  
**LSC #210310; December, 2021**

| Intersection No. & Location                    | Traffic Control | Existing Traffic |                  | 2025 Background Traffic |                  | 2025 Total Traffic |                  | 2041 Background Traffic |                  | 2041 Background Mitigated <sup>(1)</sup> |                  | 2041 Total Traffic |                  |
|--|-----------------|------------------|------------------|-------------------------|------------------|--------------------|------------------|-------------------------|------------------|--|------------------|--------------------|------------------|
|  |                 | Level of Service | Level of Service | Level of Service        | Level of Service | Level of Service   | Level of Service | Level of Service        | Level of Service | Level of Service                         | Level of Service | Level of Service   | Level of Service |
|  |                 | AM               | PM               | AM                      | PM               | AM                 | PM               | AM                      | PM               | AM                                       | PM               | AM                 | PM               |
| <b>1) Founders Parkway/Allen Way</b>           | Signalized      |                  |                  |                         |                  |                    |                  |                         |                  |  |                  |                    |                  |
| EB Left  |                 | E                | E                | D                       | E                | E                  | E                | E                       | E                |  |                  | E                  | E                |
| EB Through/Right                               |                 | A                | B                | A                       | C                | B                  | C                | B                       | E                |  |                  | B                  | E                |
| WB Left  |                 | A                | A                | A                       | B                | A                  | B                | A                       | B                |  |                  | A                  | B                |
| WB Through                                     |                 | C                | B                | C                       | C                | B                  | C                | D                       | C                |  |                  | D                  | C                |
| WB Right                                       |                 | A                | A                | A                       | A                | A                  | A                | A                       | A                |  |                  | A                  | A                |
| NB Left  |                 | D                | E                | D                       | D                | E                  | E                | E                       | E                |  |                  | E                  | E                |
| NB Through/Right                               |                 | C                | D                | C                       | C                | C                  | C                | C                       | D                |  |                  | C                  | D                |
| SB Left  |                 | D                | D                | D                       | D                | D                  | E                | D                       | E                |  |                  | D                  | E                |
| SB Through                                     |                 | D                | E                | D                       | D                | D                  | D                | D                       | D                |  |                  | D                  | D                |
| SB Right                                       |                 | E                | E                | B                       | C                | C                  | D                | D                       | D                |  |                  | D                  | D                |
| Entire Intersection Delay (sec /veh)           |                 | 26.3             | 30.0             | 19.9                    | 32.2             | 20.1               | 33.4             | 31.5                    | 46.2             |  |                  | 39.6               | 49.7             |
| Entire Intersection LOS                        |                 | C                | C                | B                       | C                | C                  | D                | C                       | D                |  |                  | D                  | D                |
| <b>2) Founders Parkway/Front Street</b>        | Signalized      |                  |                  |                         |                  |                    |                  |                         |                  |  |                  |                    |                  |
| SEB Left                                       |                 | B                | B                | C                       | D                | C                  | D                | C                       | E                |  |                  | C                  | E                |
| SEB Through/Right                              |                 | B                | B                | B                       | D                | B                  | D                | B                       | E                |  |                  | C                  | E                |
| NWB Left                                       |                 | A                | E                | A                       | D                | A                  | D                | A                       | E                |  |                  | B                  | E                |
| NWB Through/Right                              |                 | B                | B                | B                       | C                | B                  | B                | C                       | B                |  |                  | C                  | B                |
| NEB Left                                       |                 | E                | F                | D                       | E                | D                  | E                | D                       | E                |  |                  | D                  | E                |
| NEB Through                                    |                 | D                | E                | D                       | D                | D                  | D                | D                       | D                |  |                  | D                  | D                |
| NEB Right                                      |                 | A                | D                | A                       | C                | A                  | C                | A                       | C                |  |                  | A                  | C                |
| SWB Left                                       |                 | D                | D                | D                       | C                | C                  | D                | C                       | D                |  |                  | C                  | D                |
| SWB Right or Through/Right                     |                 | C                | D                | C                       | D                | C                  | D                | C                       | D                |  |                  | C                  | D                |
| Entire Intersection Delay (sec /veh)           |                 | 20.0             | 47.4             | 19.1                    | 41.2             | 20.2               | 42.9             | 26.6                    | 51.0             |  |                  | 30.4               | 54.1             |
| Entire Intersection LOS                        |                 | C                | D                | B                       | D                | C                  | D                | C                       | D                |  |                  | C                  | D                |
| <b>3) Founders Parkway/Woodlands Boulevard</b> | Signalized      |                  |                  |                         |                  |                    |                  |                         |                  |  |                  |                    |                  |
| EB Left  |                 | A                | A                | A                       | A                | A                  | A                | A                       | A                | A  | A                | A                  | A                |
| EB Through                                     |                 | B                | B                | B                       | C                | B                  | D                | --                      | --               | --                                       | --               | --                 | --               |
| EB Through/Right or Right                      |                 | A                | A                | A                       | A                | A                  | A                | C                       | D                | C  | D                | C                  | D                |
| WB Left  |                 | B                | D                | B                       | D                | B                  | D                | D                       | E                | D  | D                | D                  | D                |
| WB Through                                     |                 | B                | A                | B                       | B                | B                  | B                | --                      | --               | --                                       | --               | --                 | --               |
| WB Through/Right or Right                      |                 | A                | A                | A                       | A                | A                  | A                | B                       | B                | B  | A                | B                  | A                |
| NB Left  |                 | D                | D                | D                       | D                | D                  | D                | D                       | D                | E  | E                | E                  | E                |
| NB Through or Through/Right                    |                 | D                | E                | D                       | D                | D                  | E                | B                       | F                | D  | E                | D                  | E                |
| NB Right                                       |                 | B                | A                | A                       | A                | A                  | D                | --                      | --               | A  | E                | A                  | E                |
| SB Left  |                 | D                | E                | D                       | E                | D                  | D                | D                       | E                | D  | E                | D                  | E                |
| SB Through/Right                               |                 | D                | D                | D                       | D                | D                  | D                | D                       | D                | D  | D                | D                  | D                |
| Entire Intersection Delay (sec /veh)           |                 | 14.2             | 16.4             | 15.1                    | 23.5             | 15.7               | 32.6             | 24.3                    | 66.4             | 22.8                                     | 34.2             | 23.7               | 41.7             |
| Entire Intersection LOS                        |                 | B                | B                | B                       | C                | B                  | C                | C                       | E                | C  | C                | C                  | D                |

(1) Recommended mitigation is a short 75-foot northbound right-turn lane with overlap phasing with the westbound left-turn movement.

**Table 1 (Page 2 of 4)**  
**Intersection Levels of Service Analysis**  
**Canyons South**  
**Castle Rock, CO**  
**LSC #210310; December, 2021**

| Intersection No. & Location   | Traffic Control | Existing Traffic |                  | 2025 Background Traffic |                  | 2025 Total Traffic |                  | 2041 Background Traffic |                  | 2041 Background Mitigated <sup>(1)</sup> |                  | 2041 Total Traffic |                  |
|---|-----------------|------------------|------------------|-------------------------|------------------|--------------------|------------------|-------------------------|------------------|--|------------------|--------------------|------------------|
|   |                 | Level of Service | Level of Service | Level of Service        | Level of Service | Level of Service   | Level of Service | Level of Service        | Level of Service | Level of Service                         | Level of Service | Level of Service   | Level of Service |
|   |                 | AM               | PM               | AM                      | PM               | AM                 | PM               | AM                      | PM               | AM                                       | PM               | AM                 | PM               |
| 4) <u>Founders Parkway/Crowfoot Valley Road</u>                             | Signalized      |                  |                  |                         |                  |                    |                  |                         |                  |  |                  |                    |                  |
| EB Left   |                 | D                | D                | D                       | D                | E                  | D                | E                       | D                |  |                  | E                  | D                |
| EB Through  |                 | A                | A                | A                       | A                | A                  | A                | A                       | A                |  |                  | A                  | A                |
| WB Through  |                 | B                | C                | C                       | C                | C                  | C                | D                       | D                |  |                  | D                  | D                |
| WB Right  |                 | A                | A                | A                       | A                | A                  | A                | A                       | A                |  |                  | A                  | A                |
| SB Left   |                 | E                | C                | C                       | C                | C                  | C                | D                       | C                |  |                  | D                  | C                |
| SB Right  |                 | A                | A                | A                       | A                | A                  | A                | A                       | A                |  |                  | A                  | A                |
| Entire Intersection Delay (sec /veh)  |                 | 20.7             | 18.4             | 21.3                    | 20.6             | 22.3               | 20.4             | 31.0                    | 24.5             |  |                  | 36.1               | 27.4             |
| Entire Intersection LOS   |                 | C                | B                | C                       | C                | C                  | C                | C                       | C                |  |                  | D                  | C                |
| 5) <u>Connector Collector Roadway/Internal Collector Roadway</u>            | Roundabout      |                  |                  |                         |                  |                    |                  |                         |                  |  |                  |                    |                  |
| EB Approach   |                 | --               | --               | A                       | A                | A                  | A                | A                       | A                |  |                  | A                  | A                |
| WB Approach   |                 | --               | --               | A                       | A                | A                  | A                | A                       | A                |  |                  | A                  | A                |
| NB Approach   |                 | --               | --               | A                       | A                | A                  | A                | A                       | A                |  |                  | A                  | A                |
| Entire Intersection Delay (sec /veh)  |                 | --               | --               | 3.2                     | 3.3              | 4.4                | 4.6              | 3.5                     | 3.8              |  |                  | 4.8                | 5.2              |
| Entire Intersection LOS   |                 | --               | --               | A                       | A                | A                  | A                | A                       | A                |  |                  | A                  | A                |
| 6) <u>Founders Parkway/Pioneer Ranch Access/Connector Collector Roadway</u> | Signalized      |                  |                  |                         |                  |                    |                  |                         |                  |  |                  |                    |                  |
| EB Left   |                 | --               | --               | A                       | A                | A                  | B                | B                       | A                |  |                  | D                  | D                |
| EB Through  |                 | --               | --               | A                       | A                | A                  | A                | A                       | A                |  |                  | B                  | B                |
| EB Right  |                 | --               | --               | --                      | --               | --                 | --               | A                       | A                |  |                  | A                  | A                |
| WB Left   |                 | --               | --               | --                      | --               | --                 | --               | A                       | A                |  |                  | A                  | A                |
| WB Through  |                 | --               | --               | A                       | A                | B                  | B                | B                       | B                |  |                  | D                  | C                |
| WB Right  |                 | --               | --               | A                       | A                | A                  | A                | A                       | A                |  |                  | A                  | A                |
| NB Left   |                 | --               | --               | --                      | --               | --                 | --               | E                       | E                |  |                  | D                  | D                |
| NB Through/Right  |                 | --               | --               | --                      | --               | --                 | --               | A                       | A                |  |                  | C                  | D                |
| SB Left   |                 | --               | --               | E                       | E                | D                  | E                | D                       | D                |  |                  | C                  | D                |
| SB Right or Through/Right   |                 | --               | --               | A                       | A                | D                  | B                | B                       | A                |  |                  | D                  | C                |
| Entire Intersection Delay (sec /veh)  |                 | --               | --               | 4.9                     | 4.0              | 15.2               | 11.6             | 16.5                    | 10.3             |  |                  | 32.0               | 21.0             |
| Entire Intersection LOS   |                 | --               | --               | A                       | A                | B                  | B                | B                       | B                |  |                  | C                  | C                |
| 7) <u>Castle Oaks Drive/Internal Community Collector</u>                    | Roundabout      |                  |                  |                         |                  |                    |                  |                         |                  |  |                  |                    |                  |
| EB Approach   |                 | --               | --               | A                       | A                | A                  | A                | A                       | A                |  |                  | A                  | A                |
| NB Approach   |                 | --               | --               | A                       | A                | A                  | A                | A                       | A                |  |                  | A                  | A                |
| SB Approach   |                 | --               | --               | A                       | A                | A                  | A                | A                       | A                |  |                  | A                  | A                |
| Entire Intersection Delay (sec /veh)  |                 | --               | --               | 4.1                     | 4.1              | 4.2                | 4.2              | 5.1                     | 5.1              |  |                  | 5.2                | 5.2              |
| Entire Intersection LOS   |                 | --               | --               | A                       | A                | A                  | A                | A                       | A                |  |                  | A                  | A                |

**Table 1 (Page 3 of 4)**  
**Intersection Levels of Service Analysis**  
**Canyons South**  
**Castle Rock, CO**  
**LSC #210310; December, 2021**

| Intersection No. & Location                             | Traffic Control | Existing Traffic |                  | 2025 Background Traffic |                  | 2025 Total Traffic |                  | 2041 Background Traffic |                  | 2041 Background Mitigated <sup>(1)</sup> |                  | 2041 Total Traffic |                  |
|---|-----------------|------------------|------------------|-------------------------|------------------|--------------------|------------------|-------------------------|------------------|--|------------------|--------------------|------------------|
|   |                 | Level of Service | Level of Service | Level of Service        | Level of Service | Level of Service   | Level of Service | Level of Service        | Level of Service | Level of Service                         | Level of Service | Level of Service   | Level of Service |
|   |                 | AM               | PM               | AM                      | PM               | AM                 | PM               | AM                      | PM               | AM                                       | PM               | AM                 | PM               |
| 8) <u>Founders Parkway/Ridge Road/5th Street/SH 86</u>  | Signalized      |                  |                  |                         |                  |                    |                  |                         |                  |  |                  |                    |                  |
| EB Left   |                 | B                | C                | C                       | C                | C                  | C                | B                       | C                |  |                  | B                  | C                |
| EB Through  |                 | C                | D                | C                       | E                | C                  | E                | C                       | D                |  |                  | C                  | D                |
| EB Right  |                 | A                | A                | A                       | A                | A                  | A                | A                       | A                |  |                  | A                  | A                |
| WB Left   |                 | B                | C                | B                       | E                | B                  | E                | B                       | C                |  |                  | B                  | D                |
| WB Through  |                 | C                | D                | C                       | D                | D                  | D                | C                       | C                |  |                  | C                  | C                |
| WB Right  |                 | A                | A                | A                       | A                | A                  | A                | A                       | A                |  |                  | A                  | A                |
| NB Left   |                 | C                | C                | C                       | C                | C                  | C                | E                       | D                |  |                  | E                  | D                |
| NB Through  |                 | D                | D                | D                       | E                | D                  | E                | D                       | D                |  |                  | D                  | D                |
| NB Right  |                 | A                | A                | A                       | A                | A                  | A                | A                       | A                |  |                  | A                  | A                |
| SB Left   |                 | C                | E                | D                       | E                | D                  | E                | E                       | D                |  |                  | E                  | D                |
| SB Through  |                 | D                | D                | D                       | C                | D                  | C                | D                       | C                |  |                  | D                  | C                |
| SB Right  |                 | A                | A                | A                       | A                | A                  | A                | A                       | A                |  |                  | A                  | A                |
| Entire Intersection Delay (sec /veh)                    |                 | 24.3             | 31.9             | 26.0                    | 37.9             | 26.8               | 38.4             | 27.4                    | 30.9             |  |                  | 27.6               | 31.1             |
| Entire Intersection LOS                                 |                 | C                | C                | C                       | D                | C                  | D                | C                       | C                |  |                  | C                  | C                |
| 9) <u>Connector Collector Roadway/Commercial Access</u> | TWSC            |                  |                  |                         |                  |                    |                  |                         |                  |  |                  |                    |                  |
| WB Left   |                 | --               | --               | --                      | --               | B                  | B                | --                      | --               |  |                  | B                  | C                |
| WB Right  |                 | --               | --               | --                      | --               | A                  | A                | --                      | --               |  |                  | A                  | B                |
| SB Left   |                 | --               | --               | --                      | --               | A                  | A                | --                      | --               |  |                  | A                  | A                |
| Critical Movement Delay (sec/veh)                       |                 | --               | --               | --                      | --               | 11.5               | 14.0             | --                      | --               |  |                  | 12.4               | 15.8             |
| 10) <u>Internal Collector Roadway/Site Access #10</u>   | TWSC            |                  |                  |                         |                  |                    |                  |                         |                  |  |                  |                    |                  |
| WB Approach   |                 | --               | --               | --                      | --               | A                  | A                | --                      | --               |  |                  | B                  | A                |
| SB Left/Through   |                 | --               | --               | --                      | --               | A                  | A                | --                      | --               |  |                  | A                  | A                |
| Critical Movement Delay (sec/veh)                       |                 | --               | --               | --                      | --               | 9.9                | 9.3              | --                      | --               |  |                  | 10.3               | 9.5              |
| 11) <u>Internal Collector Roadway/Site Access #11</u>   | TWSC            |                  |                  |                         |                  |                    |                  |                         |                  |  |                  |                    |                  |
| NB Left   |                 | --               | --               | --                      | --               | A                  | A                | --                      | --               |  |                  | A                  | A                |
| EB Approach   |                 | --               | --               | --                      | --               | A                  | B                | --                      | --               |  |                  | A                  | B                |
| WB Approach   |                 | --               | --               | --                      | --               | B                  | B                | --                      | --               |  |                  | B                  | B                |
| SB Left   |                 | --               | --               | --                      | --               | A                  | A                | --                      | --               |  |                  | A                  | A                |
| Critical Movement Delay (sec/veh)                       |                 | --               | --               | --                      | --               | 11.2               | 11.8             | --                      | --               |  |                  | 11.7               | 12.6             |
| 12) <u>Internal Collector Roadway/Site Access #12</u>   | TWSC            |                  |                  |                         |                  |                    |                  |                         |                  |  |                  |                    |                  |
| WB Approach   |                 | --               | --               | --                      | --               | B                  | A                | --                      | --               |  |                  | B                  | A                |
| SB Left   |                 | --               | --               | --                      | --               | A                  | A                | --                      | --               |  |                  | A                  | A                |
| Critical Movement Delay (sec/veh)                       |                 | --               | --               | --                      | --               | 10.2               | 9.6              | --                      | --               |  |                  | 10.6               | 9.9              |

**Table 1 (Page 4 of 4)**  
**Intersection Levels of Service Analysis**  
**Canyons South**  
**Castle Rock, CO**  
**LSC #210310; December, 2021**

| Intersection No. & Location                           | Traffic Control | Existing Traffic |                  | 2025 Background Traffic |                  | 2025 Total Traffic |                  | 2041 Background Traffic |                  | 2041 Background Mitigated <sup>(1)</sup> |                  | 2041 Total Traffic |                  |
|---|-----------------|------------------|------------------|-------------------------|------------------|--------------------|------------------|-------------------------|------------------|--|------------------|--------------------|------------------|
|   |                 | Level of Service | Level of Service | Level of Service        | Level of Service | Level of Service   | Level of Service | Level of Service        | Level of Service | Level of Service                         | Level of Service | Level of Service   | Level of Service |
|   |                 | AM               | PM               | AM                      | PM               | AM                 | PM               | AM                      | PM               | AM                                       | PM               | AM                 | PM               |
| 13) <u>Internal Collector Roadway/Site Access #13</u> | TWSC            |                  |                  |                         |                  |                    |                  |                         |                  |  |                  |                    |                  |
| EB Left   |                 | --               | --               | --                      | --               | A                  | A                | --                      | --               |  |                  | A                  | A                |
| SB Approach   |                 | --               | --               | --                      | --               | A                  | A                | --                      | --               |  |                  | B                  | A                |
| Critical Movement Delay (sec/veh)                     |                 | --               | --               | --                      | --               | 9.9                | 9.4              | --                      | --               |  |                  | 10.3               | 9.7              |
| 14) <u>Internal Collector Roadway/Site Access #14</u> | TWSC            |                  |                  |                         |                  |                    |                  |                         |                  |  |                  |                    |                  |
| NB Approach   |                 | --               | --               | --                      | --               | B                  | B                | --                      | --               |  |                  | B                  | B                |
| WB Left/Through                                       |                 | --               | --               | --                      | --               | A                  | A                | --                      | --               |  |                  | A                  | A                |
| Critical Movement Delay (sec/veh)                     |                 | --               | --               | --                      | --               | 10.1               | 10.4             | --                      | --               |  |                  | 10.7               | 11.2             |
| 15) <u>Internal Collector Roadway/Site Access #15</u> | TWSC            |                  |                  |                         |                  |                    |                  |                         |                  |  |                  |                    |                  |
| NB Approach   |                 | --               | --               | --                      | --               | A                  | A                | --                      | --               |  |                  | A                  | A                |
| EB Approach   |                 | --               | --               | --                      | --               | A                  | B                | --                      | --               |  |                  | B                  | B                |
| WB Approach   |                 | --               | --               | --                      | --               | B                  | A                | --                      | --               |  |                  | B                  | A                |
| SB Approach   |                 | --               | --               | --                      | --               | A                  | A                | --                      | --               |  |                  | A                  | A                |
| Critical Movement Delay (sec/veh)                     |                 | --               | --               | --                      | --               | 10.3               | 10.2             | --                      | --               |  |                  | 10.8               | 10.6             |

**Table 2**  
**ESTIMATED TRAFFIC GENERATION**  
**Canyons South**  
**Castle Rock, CO**  
**LSC #210310; December, 2021**

| Trip Generating Category              | Quantity              | Trip Generation Rates <sup>(1)</sup> |              |       |              |       | Total Trips Generated |              |            |              |            |
|---------------------------------------|-----------------------|--------------------------------------|--------------|-------|--------------|-------|-----------------------|--------------|------------|--------------|------------|
|                                       |                       | Average                              | AM Peak-Hour |       | PM Peak-Hour |       | Average               | AM Peak-Hour |            | PM Peak-Hour |            |
|                                       |                       | Weekday                              | In           | Out   | In           | Out   | Weekday               | In           | Out        | In           | Out        |
| <b>CURRENTLY PROPOSED LAND USE</b>    |                       |                                      |              |       |              |       |                       |              |            |              |            |
| Single-Family Detached <sup>(2)</sup> | 474 DU <sup>(3)</sup> | 9.44                                 | 0.185        | 0.555 | 0.624        | 0.366 | 4,475                 | 88           | 263        | 296          | 174        |
| Shopping Center <sup>(4)</sup>        | 30 KSF <sup>(5)</sup> | 88.38                                | 0.583        | 0.357 | 3.567        | 3.864 | 2,651                 | 17           | 11         | 107          | 116        |
| Office <sup>(6)</sup>                 | 20 KSF <sup>(5)</sup> | 9.74                                 | 0.998        | 0.162 | 0.184        | 0.966 | 195                   | 20           | 3          | 4            | 19         |
| <b>Total =</b>                        |                       |                                      |              |       |              |       | <b>7,321</b>          | <b>125</b>   | <b>277</b> | <b>407</b>   | <b>309</b> |
| Passby Trips <sup>(7)</sup> =         |                       |                                      |              |       |              |       | 901                   | 5            | 5          | 38           | 38         |
| <b>Net External Trips =</b>           |                       |                                      |              |       |              |       | <b>6,420</b>          | <b>120</b>   | <b>272</b> | <b>369</b>   | <b>271</b> |

Notes:

- (1) Source: *Trip Generation*, Institute of Transportation Engineers, 10th Edition, 2017.
- (2) ITE Land Use No. 210 - Single-Family Detached Housing
- (3) DU = Dwelling Unit
- (4) ITE Land Use No. 820 - Shopping Center - formula rates for daily and afternoon peak-hour; average rates for morning peak-hour
- (5) KSF = 1,000 square feet
- (6) ITE Land Use No. 710 - General Office Building
- (7) A passby rate of 34% was assumed for the shopping center land use.

**Table 3**  
**95th Percentile Queue Lengths**  
**Canyons South**  
**Castle Rock, CO**  
**LSC #210310; December, 2021**

| Intersection No. & Location   | Existing Turn Lane Lengths (feet) | 2025 Queue Length |                |                                | 2041 Queue Length |                |                                |
|---|-----------------------------------|-------------------|----------------|--------------------------------|-------------------|----------------|--------------------------------|
|   |                                   | AM Peak (feet)    | PM Peak (feet) | Recommended Lane Length (feet) | AM Peak (feet)    | PM Peak (feet) | Recommended Lane Length (feet) |
| <b>1) Founders Parkway/Allen Way</b>  |                                   |                   |                |                                |                   |                |                                |
| EB Left   | 2 @ 290                           | 154               | 309            |                                | 198               | 260            |                                |
| EB Through/Right  | --                                | 263               | 1,146          |                                | 317               | 1,295          |                                |
| WB Left   | 320                               | m9                | m15            |                                | m6                | m11            |                                |
| WB Through  | --                                | 910               | * m712         |                                | 1,107             | m780           |                                |
| WB Right  | 175                               | m6                | m18            |                                | m1                | m9             |                                |
| NB Left   | 100                               | 65                | 87             | 2 @ 100                        | 90                | 139            | 2 @ 100                        |
| NB Through/Right  | --                                | 63                | 98             |                                | 68                | 125            |                                |
| SB Left   | 140                               | 84                | 143            |                                | 98                | 210            |                                |
| SB Through  | --                                | 31                | 60             |                                | 33                | 67             |                                |
| SB Right  | 1 @ 105; 1 @ 265                  | 83                | 147            |                                | 143               | 175            |                                |
| <b>2) Founders Parkway/Front Street</b>                                     |                                   |                   |                |                                |                   |                |                                |
| SEB Left  | 465                               | 76                | m132           |                                | 82                | m135           |                                |
| SEB Through/Right   | --                                | 150               | m544           |                                | 357               | m522           |                                |
| NWB Left  | 195                               | 34                | 207            |                                | 39                | 195            |                                |
| NWB Through/Right   | --                                | 530               | 411            |                                | 993               | 464            |                                |
| NEB Left  | 1 @ 285; 1 Continuous             | 210               | 381            |                                | 258               | 297            |                                |
| NEB Through   | --                                | 77                | 136            |                                | 103               | 187            |                                |
| NEB Right   | Continuous                        | 9                 | 166            |                                | 0                 | 171            |                                |
| SWB Left  | 225                               | 14                | 52             |                                | 13                | 59             |                                |
| SWB Right or Through/Right  | --                                | 48                | 71             |                                | 65                | 102            |                                |
| <b>3) Founders Parkway/Woodlands Boulevard</b>                              |                                   |                   |                |                                |                   |                |                                |
| EB Left   | 450                               | 6                 | 7              |                                | 6                 | 6              |                                |
| EB Through or Through/Right   | --                                | 264               | 960            |                                | 279               | 887            |                                |
| EB Right  | Continuous                        | 17                | 46             |                                | --                | --             |                                |
| WB Left   | 500                               | 192               | 290            |                                | 564               | 293            |                                |
| WB Through or Through/Right   | --                                | 1,066             | 600            |                                | 629               | 331            |                                |
| WB Right  | Continuous                        | 20                | 20             |                                | --                | --             |                                |
| NB Left   | 220                               | 157               | 127            |                                | 240               | 184            | 2 @ 250                        |
| NB Through or Through/Right   | --                                | 52                | 74             |                                | 57                | 74             |                                |
| NB Right  | Continuous                        | 0                 | 0              |                                | 77                | 582            | 75                             |
| SB Left   | 125                               | 59                | 201            | 200                            | 65                | 202            | 200                            |
| SB Through/Right  | --                                | 18                | 42             |                                | 19                | 41             |                                |
| <b>4) Founders Parkway/Crowfoot Valley Road</b>                             |                                   |                   |                |                                |                   |                |                                |
| EB Left   | 1 @ 475; 1 Continuous             | 195               | 494            |                                | 288               | 553            |                                |
| EB Through  | --                                | 122               | 367            |                                | 122               | 466            |                                |
| WB Through  | --                                | 865               | 510            |                                | 998               | 735            |                                |
| WB Right  | Continuous                        | 56                | 40             |                                | 62                | 69             |                                |
| SB Left   | 1 @ 140; 1 Continuous             | 168               | 115            |                                | 249               | 240            |                                |
| SB Right  | Continuous                        | 0                 | 0              |                                | 0                 | 0              |                                |
| <b>6) Founders Parkway/Pioneer Ranch Access/Connector Collector Roadway</b> |                                   |                   |                |                                |                   |                |                                |
| EB Left   | --                                | 25                | 247            | 655                            | 143               | 443            | 655                            |
| EB Through  | --                                | 36                | 281            |                                | 218               | 676            |                                |
| EB Right  | --                                | --                | --             |                                | 0                 | 28             | 380                            |
| WB Left   | --                                | --                | --             |                                | 6                 | 9              | 400                            |
| WB Through  | --                                | 476               | 372            |                                | 881               | 521            |                                |
| WB Right  | --                                | 14                | 24             | 380                            | 0                 | 21             | 380                            |
| NB Left   | --                                | --                | --             |                                | 129               | 92             | 150                            |
| NB Through/Right  | --                                | --                | --             |                                | 20                | 24             |                                |
| SB Left   | --                                | 103               | 131            | 150                            | 94                | 121            | 150                            |
| SB Through/Right  | --                                | 0                 | 0              |                                | 252               | 109            |                                |
| <b>8) Founders Parkway/Ridge Road/5th Street/SH 86</b>                      |                                   |                   |                |                                |                   |                |                                |
| EB Left   | 360                               | 74                | 153            |                                | 52                | 155            | 300                            |
| EB Through  | --                                | 229               | 560            |                                | 83                | 281            |                                |
| EB Right  | 410                               | 0                 | 0              |                                | 0                 | 0              | 300                            |
| WB Left   | 600                               | 80                | 154            |                                | 78                | 146            | 250                            |
| WB Through  | --                                | 444               | 265            |                                | 178               | 146            |                                |
| WB Right  | 450                               | 0                 | 0              |                                | 0                 | 0              | Continuous                     |
| NB Left   | 425                               | 285               | 135            |                                | 186               | 131            | 2 @ 250                        |
| NB Through  | --                                | 429               | 473            |                                | 287               | 266            |                                |
| NB Right  | 450                               | 0                 | 0              |                                | 0                 | 0              | Continuous                     |
| SB Left   | 600                               | 265               | 661            | 675                            | 176               | 414            | 2 @ 600                        |
| SB Through  | --                                | 180               | 469            |                                | 96                | 311            |                                |
| SB Right  | Continuous                        | 0                 | 0              |                                | 0                 | 0              | 600                            |

m = metered by adjacent intersection

**Table 4 (Page 1 of 2)**  
**Recommended Improvements to Public Street Network**  
**Canyons South**  
**Castle Rock, CO**  
**LSC #210310; December, 2021**

| Inter-section No.           | Intersection Location   | Recommended Improvements by 2025 <sup>(1)</sup>                     | Responsibility   | Recommended Improvements by 2041 <sup>(1)</sup>                     | Responsibility |
|-----------------------------|---|---|------------------|---|----------------|
| #1                          | Founders Parkway/Allen Way  | NB LT - Add second left-turn lane (2 @ 100 feet)                    | Others           |   |                |
| #2                          | Founders Parkway/Front Street                                     | None  |                  |   |                |
| #3                          | Founders Parkway/Woodlands Boulevard                              | SB LT - Restripe from 125 feet to 200 feet                          | Others           | NB LT - Add second lane (2 @ 250 feet)                              | Others         |
|                             |   |   |                  | NB RT - construct lane - 1 @ 75 feet + Overlap Phasing              | Others         |
| #4                          | Founders Parkway/Crowfoot Valley Road                             | None  |                  |   |                |
| #5                          | Connector Collector Roadway/<br>Internal Collector Roadway        | Construct single-lane modern roundabout                             | Applicant        |   |                |
| #6                          | Founders Parkway/Pioneer Ranch Access/Connector Collector Roadway | EB LT - construct lane - 1 @ 655 feet and 180-foot transition taper | Applicant        | WB LT - construct lane - 1 @ 400 feet and 180-foot transition taper | Others         |
|                             |   | WB RT - construct lane - 1 @ 320 feet and 180-foot transition taper | Applicant        | EB RT - construct lane - 1 @ 320 feet and 180-foot transition taper | Others         |
|                             |   | SB LT - construct lane - 1 @ 150 feet and 120-foot transition taper | Applicant        | NB LT - construct lane - 1 @ 150 feet and 120-foot transition taper | Others         |
|                             |   | SB to WB Accel Lane - 1 @ 580 feet and 180-foot transition taper    | Applicant        | NB to EB Accel Lane - 580 feet and 180-foot transition taper        | Others         |
|                             |   | Traffic signal installation when warranted                          | Applicant/Others |   |                |
| #7                          | Castle Oaks Drive/Connector Collector                             | Construct single-lane modern roundabout                             | Applicant/Others |   |                |
| #8                          | Founders Parkway/Ridge Road/<br>5th Street/SH 86                  | SB LT - lengthen lane from 600' to 675'                             | Others           | Intersection Reconstruction by Town including:                      |                |
|                             |   |   |                  | EB LT - construct lane - 1 @ 300 feet                               | Others         |
|                             |   |   |                  | EB Through - construct 2 lanes                                      | Others         |
|                             |   |   |                  | EB RT - construct lane - 1 @ 300 feet                               | Others         |
|                             |   |   |                  | WB LT - construct lane - 1 @ 250 feet                               | Others         |
|                             |   |   |                  | WB Through - construct 2 lanes                                      | Others         |
|                             |   |   |                  | WB RT - construct continuous lane                                   | Others         |
|                             |   |   |                  | NB LT - construct lanes - 2 @ 250 feet                              | Others         |
|                             |   |   |                  | NB Through - construct 2 lanes                                      | Others         |
|                             |   |   |                  | NB RT - construct continuous lane                                   | Others         |
|                             |   |   |                  | SB LT - construct lanes - 2 @ 600 feet                              | Others         |
|                             |   |   |                  | SB Through - construct 2 lanes                                      | Others         |
|                             |   |   |                  | SB RT - construct lane - 1 @ 600 feet                               | Others         |
| Traffic Signal Modification | Others  |   |                  |   |                |

(1) An appropriate redirect taper for 50 mph is 50:1; for 35 mph is 20:1, and for 30 mph or less is 15:1.  
(2) Percent indicate the site's percentage of the movement or intersection based on the 2041 volumes.

**Table 4 (Page 2 of 2)**  
**Recommended Improvements to Public Street Network**  
**Canyons South**  
**Castle Rock, CO**  
**LSC #210310; December, 2021**

Inter-section

| No. | Intersection Location                                   | Recommended Improvements by 2025 <sup>(1)</sup>                     | Responsibility | Recommended Improvements by 2041 <sup>(1)</sup> | Responsibility |
|-----|---|---|----------------|---|----------------|
| #9  | Connector Collector Roadway/<br>Commercial Access       | NB RT - construct lane - 1 @ 190 feet and 120-foot transition taper | Applicant      |   |                |
|     |   | SB LT - construct lane - 1 @ 220 feet and 120-foot transition taper | Applicant      |   |                |
|     |   | WB LT - construct lane - 1 @ 150 feet and 90-foot transition taper  | Applicant      |   |                |
| #10 | Internal Connector Collector<br>Roadway/Site Access #10 | None  |                |   |                |
| #11 | Internal Connector Collector<br>Roadway/Site Access #11 | EB LT - construct lane - 1 @ 205 feet and 120-foot transition taper | Applicant      |   |                |
|     |   | WB LT - construct lane - 1 @ 250 feet and 120-foot transition taper | Applicant      |   |                |
| #12 | Internal Connector Collector<br>Roadway/Site Access #15 | EB LT - construct lane - 1 @ 245 feet and 120-foot transition taper | Applicant      |   |                |
|     |   |   |                |   |                |
| #13 | Internal Connector Collector<br>Roadway/Site Access #13 | EB LT - construct lane - 1 @ 265 feet and 120-foot transition taper | Applicant      |   |                |
|     |   |   |                |   |                |
| #14 | Internal Connector Collector<br>Roadway/Site Access #14 | EB RT - construct lane - 1 @ 190 feet and 120-foot transition taper | Applicant      |   |                |
|     |   |   |                |   |                |
| #15 | Internal Connector Collector<br>Roadway/Site Access #15 | None  |                |   |                |
|     |   |   |                |   |                |

(1) An appropriate redirect taper for 50 mph is 50:1; for 35 mph is 20:1, and for 30 mph or less is 15:1.



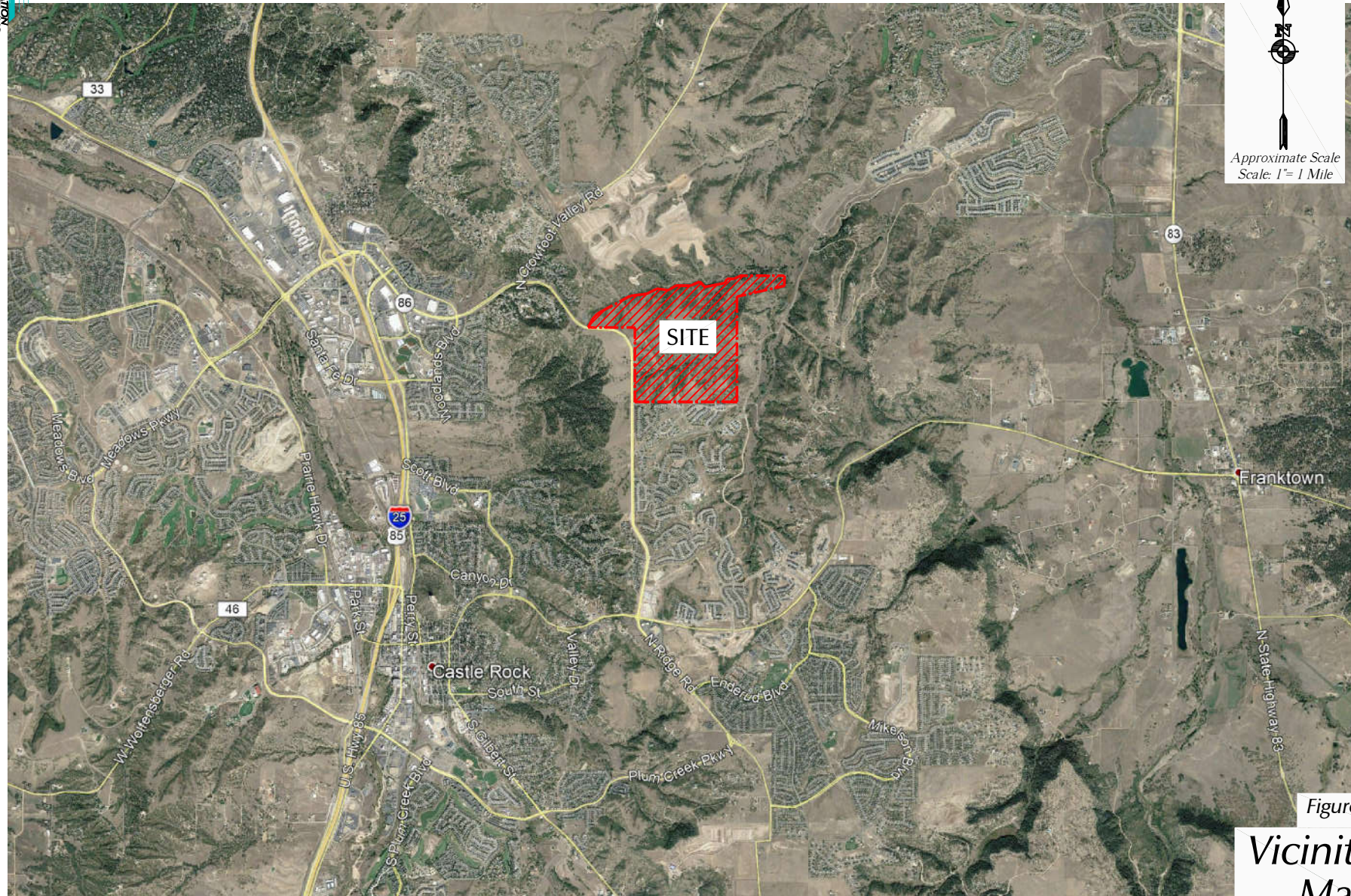
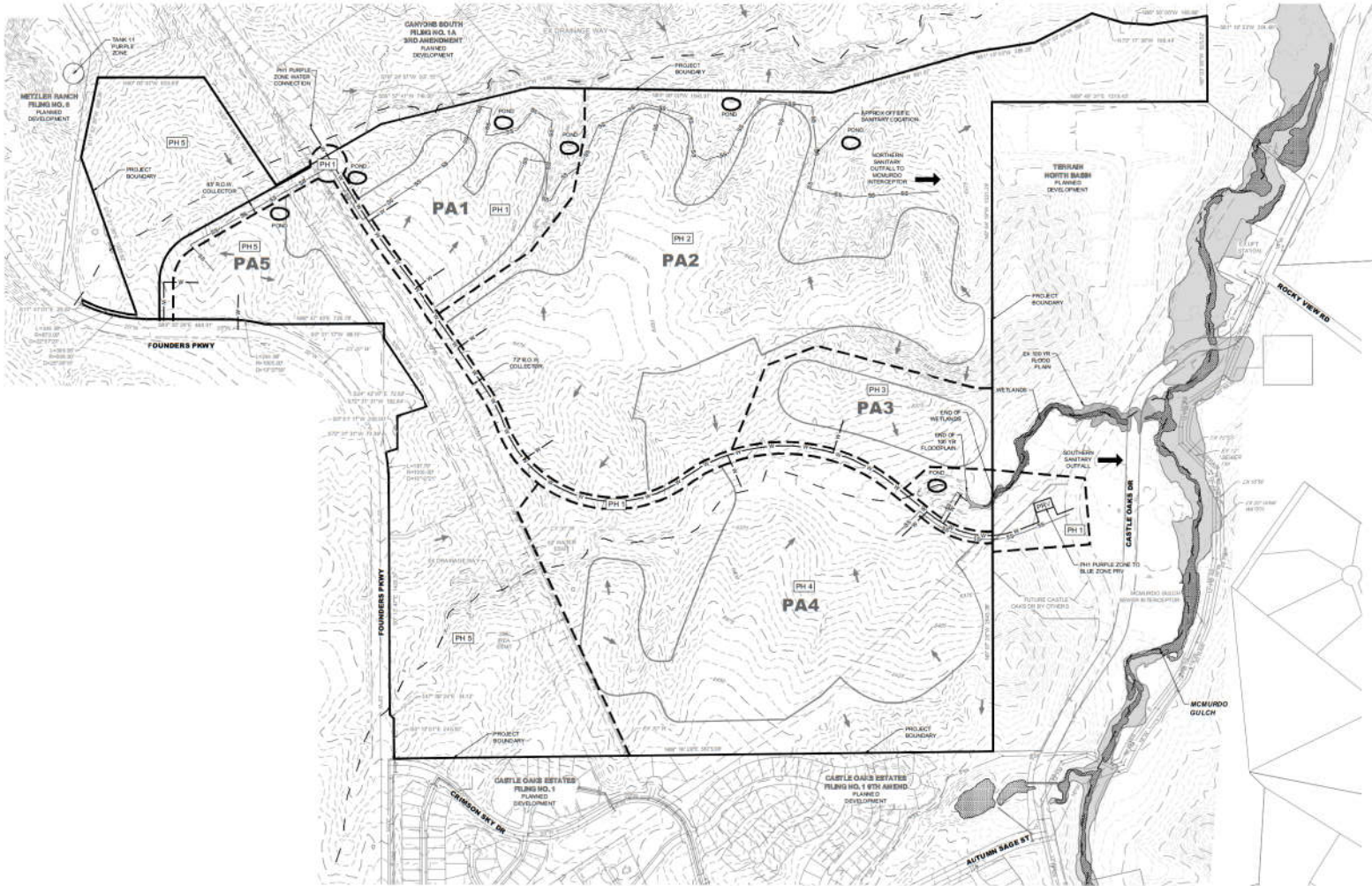


Figure 1

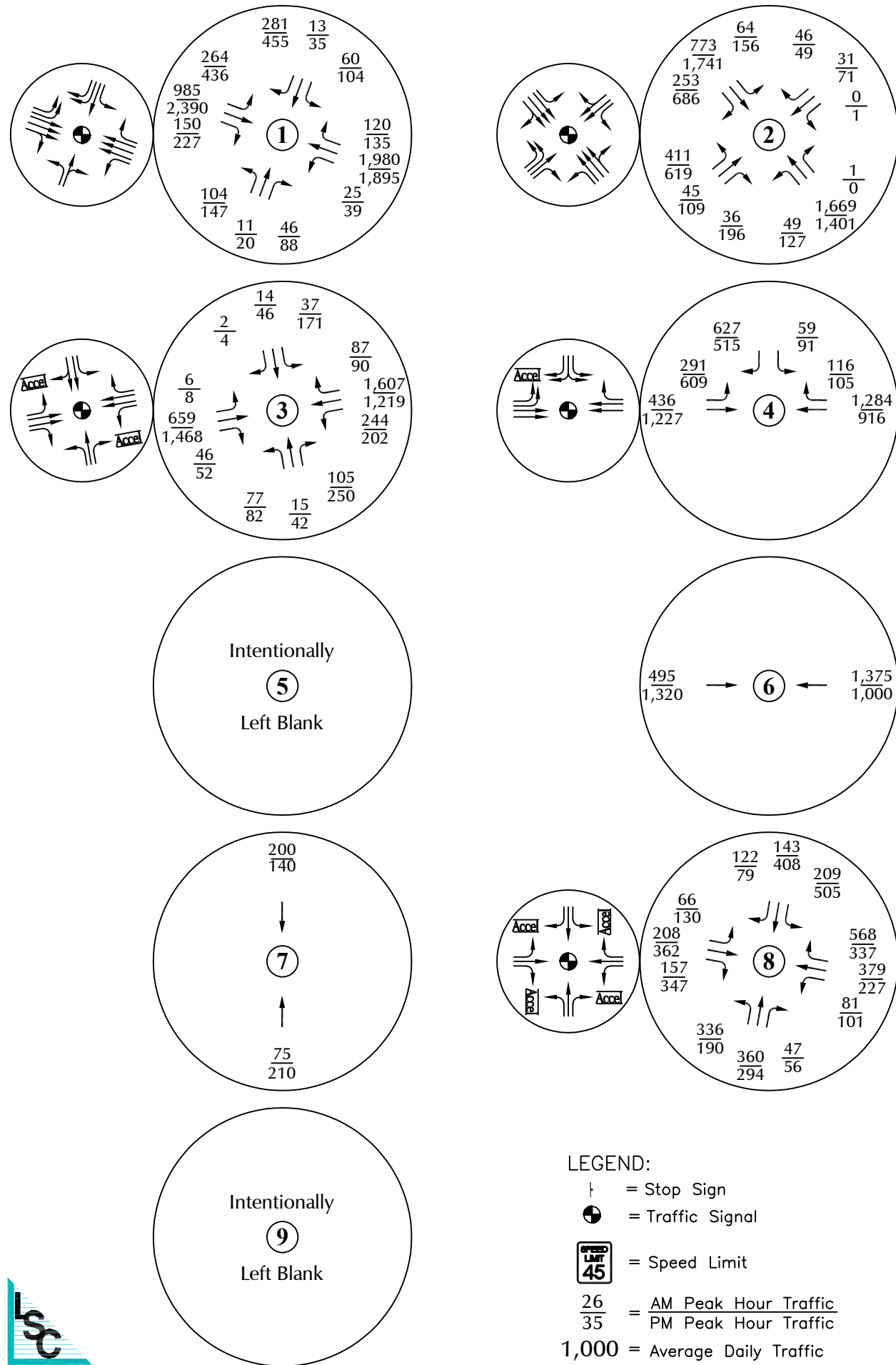
# Vicinity Map

Canyons South (LSC #210310)



Approximate Scale  
 Scale: NTS

Figure 2  
**Site Plan**  
 Canyons South (LSC #210310)



LEGEND:

- ⊥ = Stop Sign
- = Traffic Signal
- = Speed Limit
- $\frac{26}{35}$  = AM Peak Hour Traffic / PM Peak Hour Traffic
- 1,000 = Average Daily Traffic

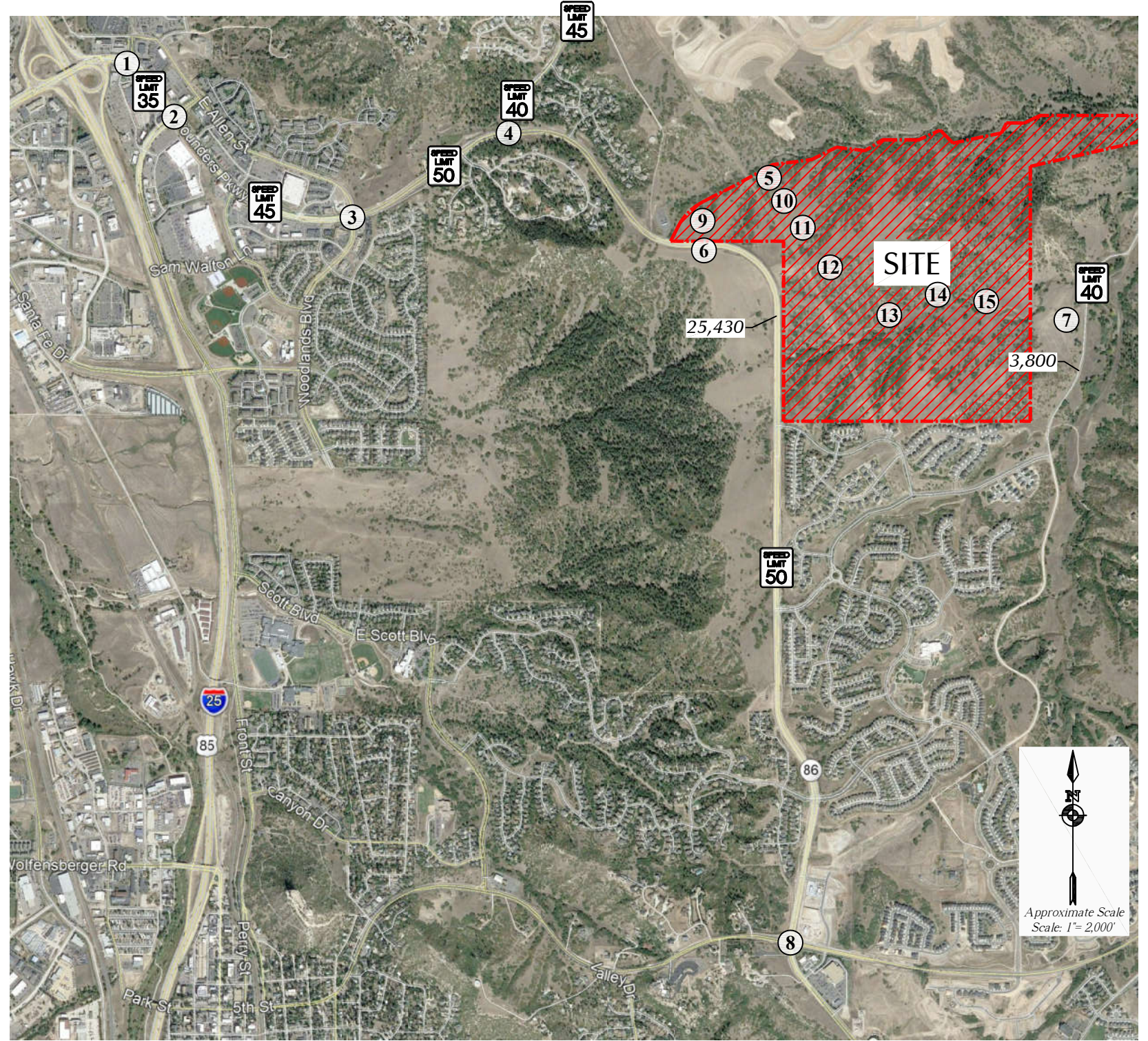
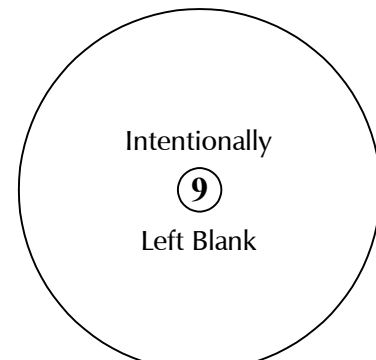
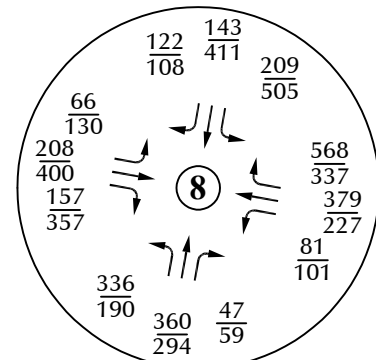
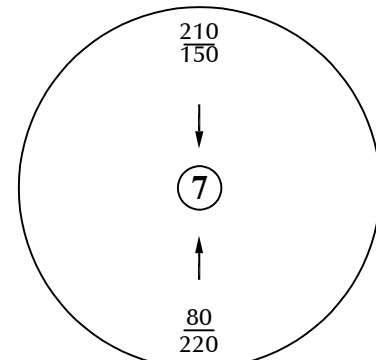
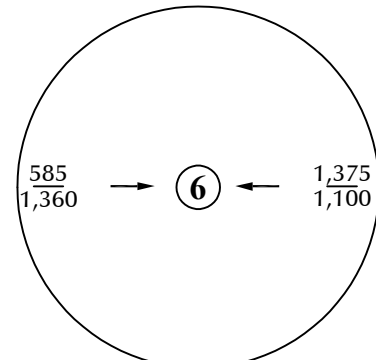
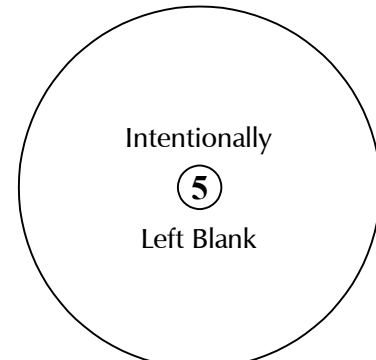
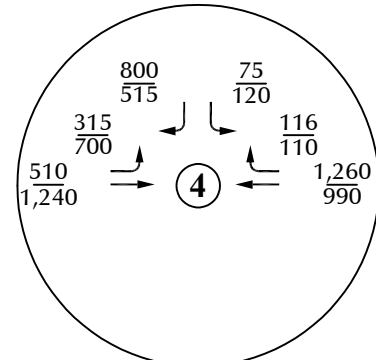
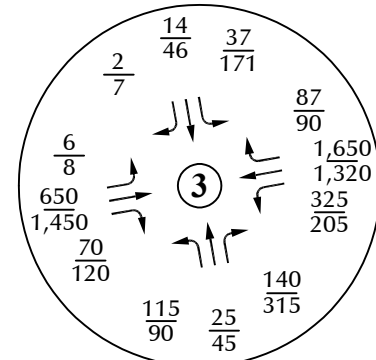
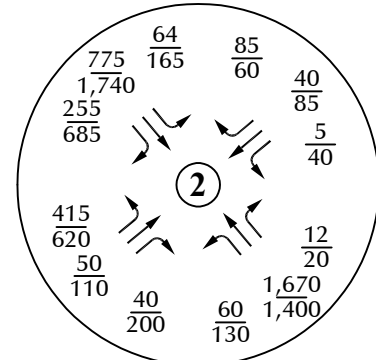
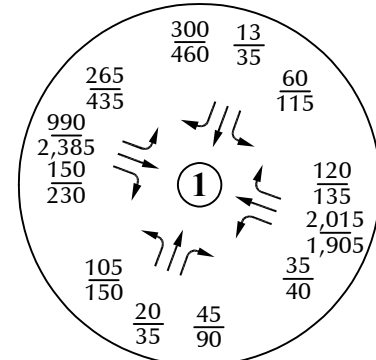
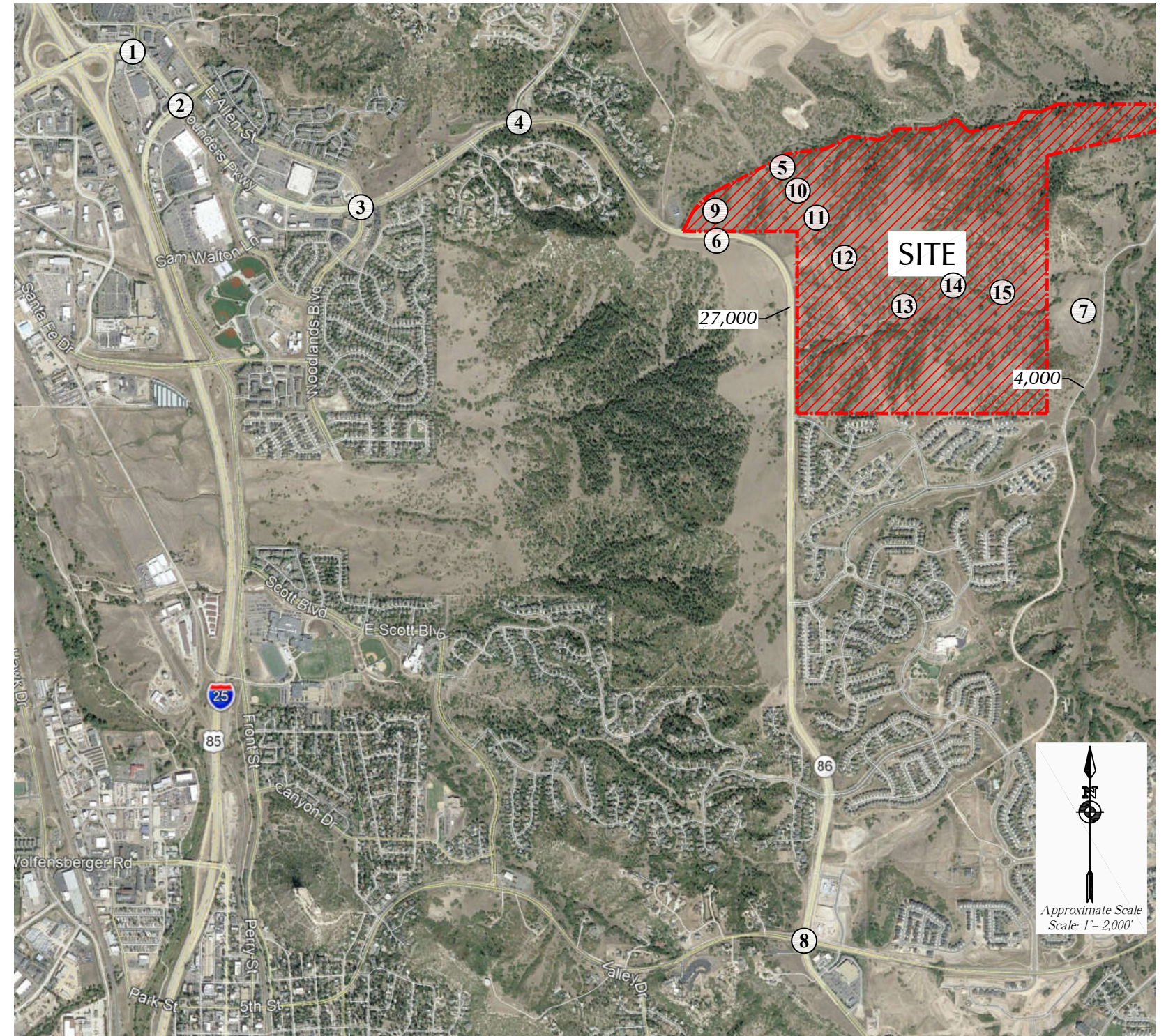


Figure 3a  
 May, 2021 Existing Traffic,  
 Lane Geometry and Traffic Control  
 Canyons South (LSC #210310)



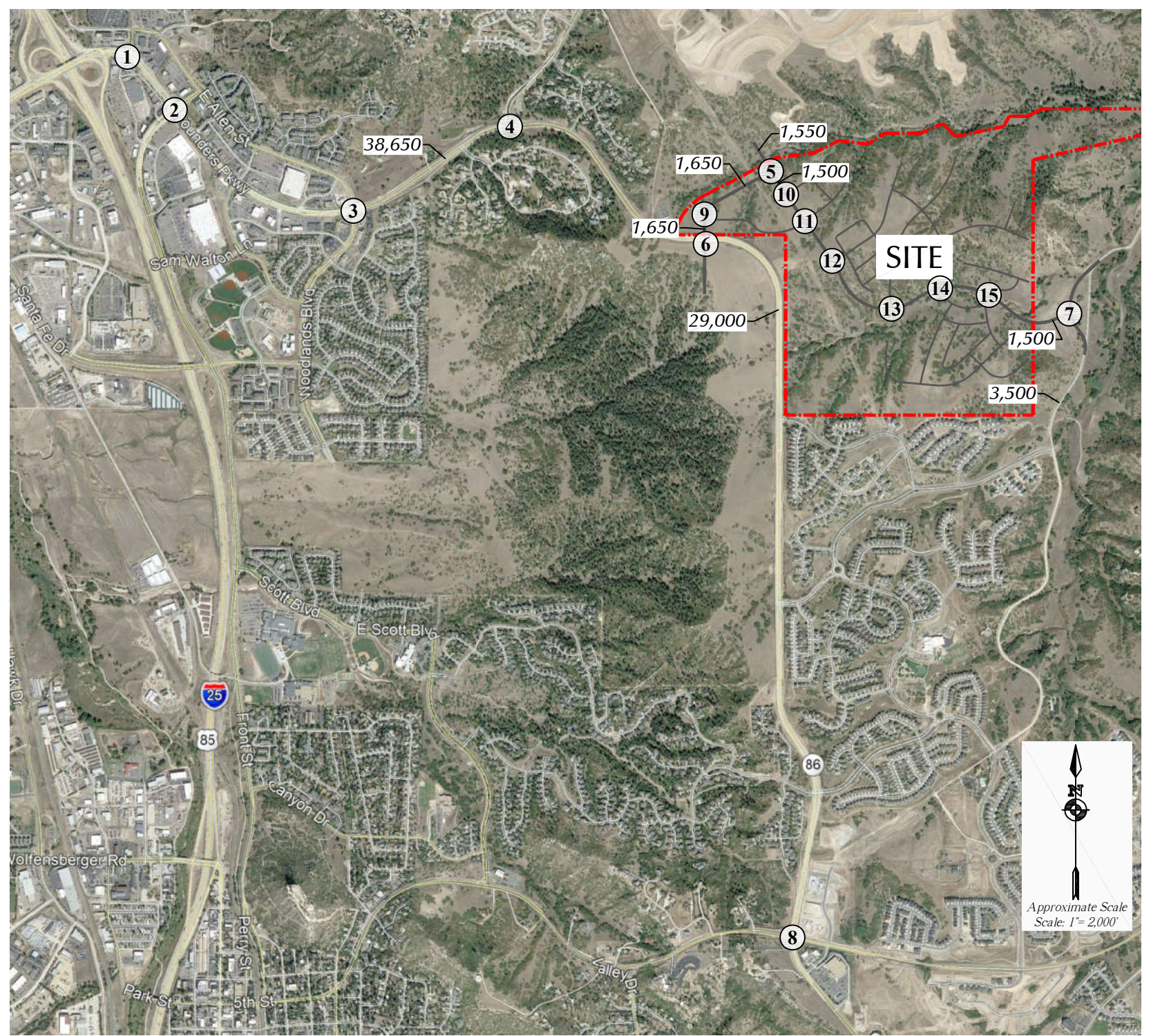
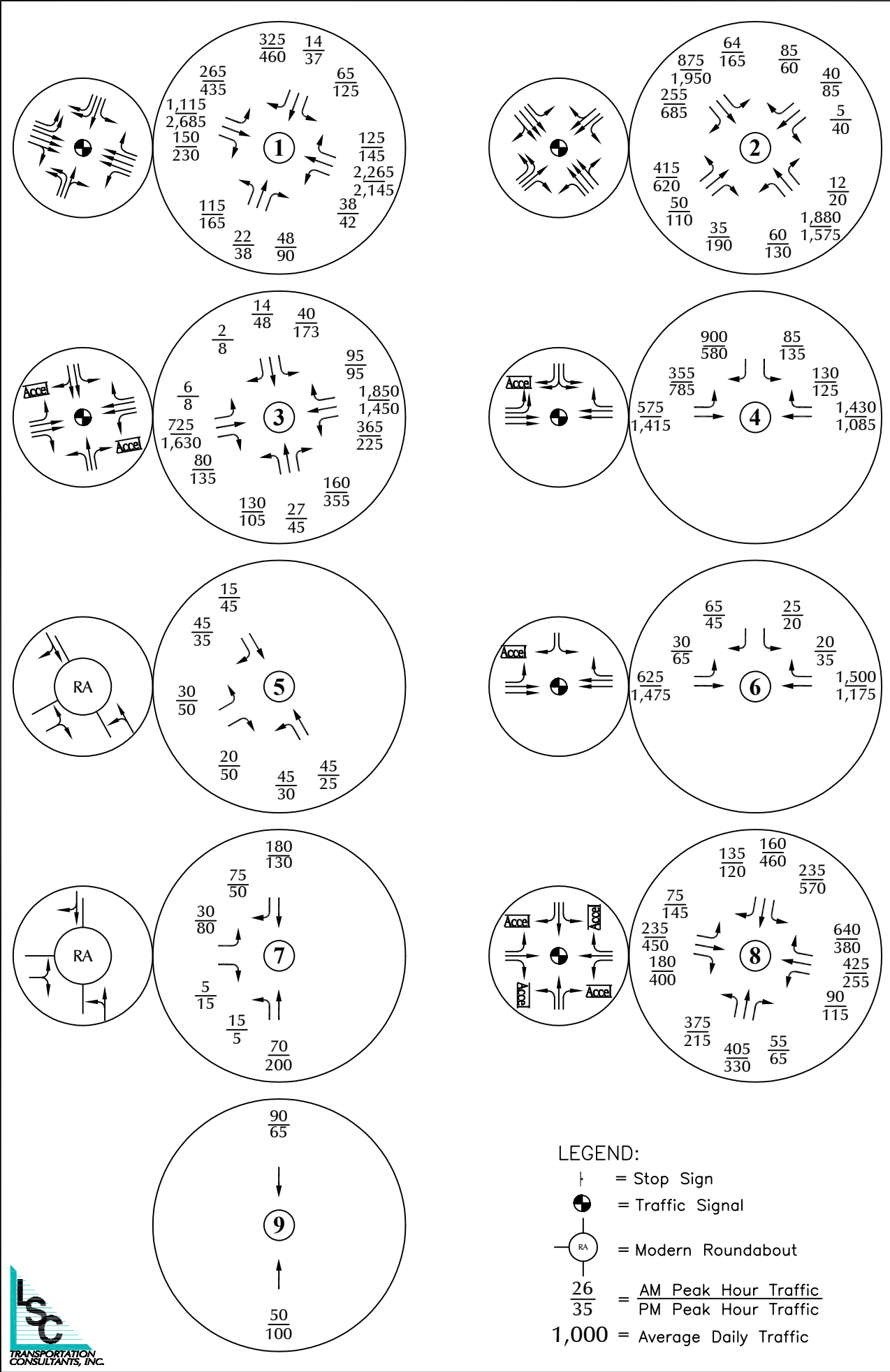
LEGEND:  
 $\frac{26}{35}$  = AM Peak Hour Traffic / PM Peak Hour Traffic  
 1,000 = Average Daily Traffic



Notes:

1. Volumes at #8 are based on the higher of the volumes in Figure 3a and the 2019 volumes provided by Town staff grown for two years at an annual rate of four percent.
2. Volumes at #7 were increased by five percent to maintain a conservative analysis because the volumes at #8 were generally higher than the historic 2019 counts.
3. Intersections #1, #2, #3, #4 and #6 were adjusted based on the higher of the volumes in Figure 3a and the 2018 volumes in Figure 3 from the 2020 Pine Canyon TIA by Kimley Horn grown for three years at an annual rate of three percent.

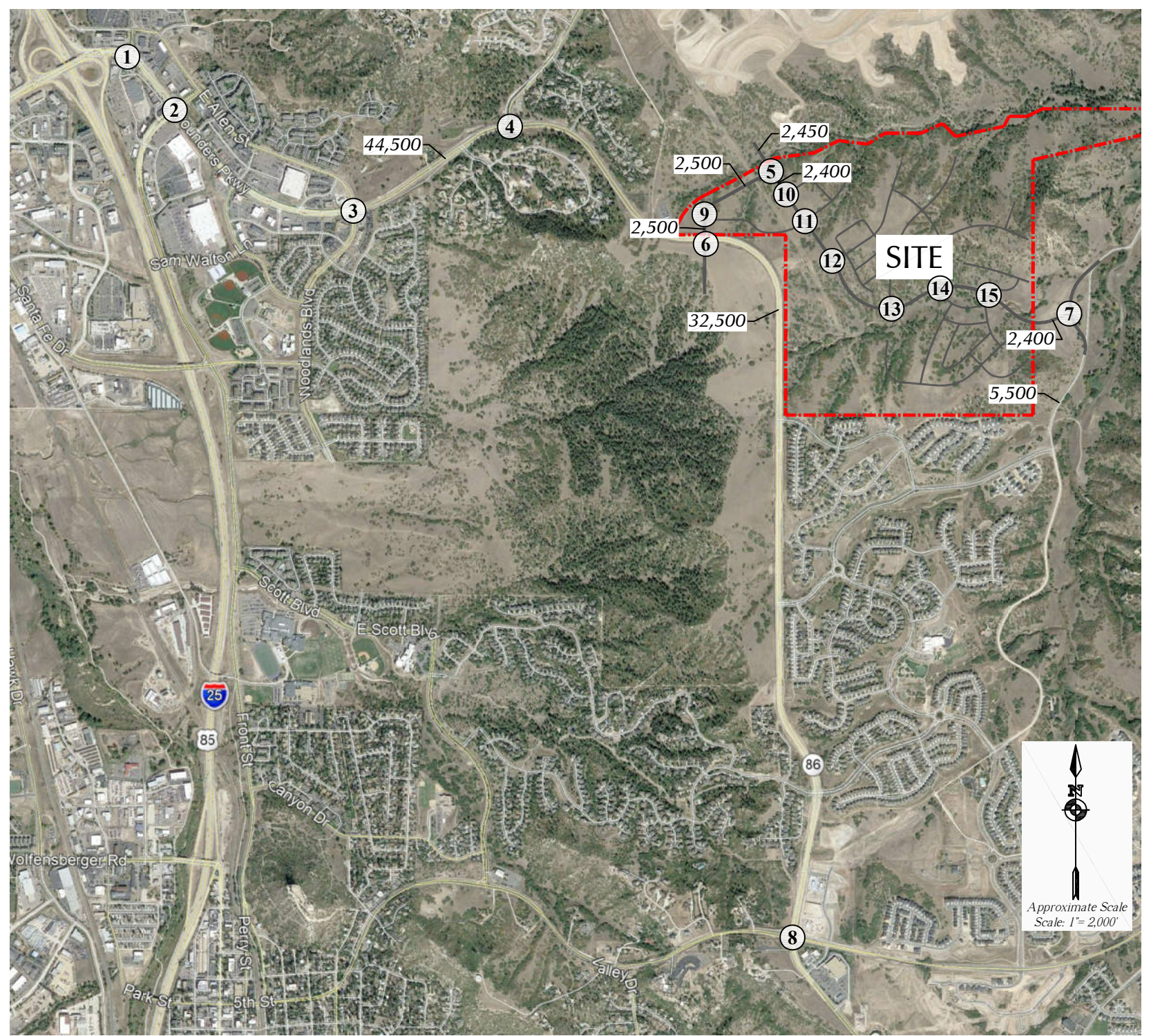
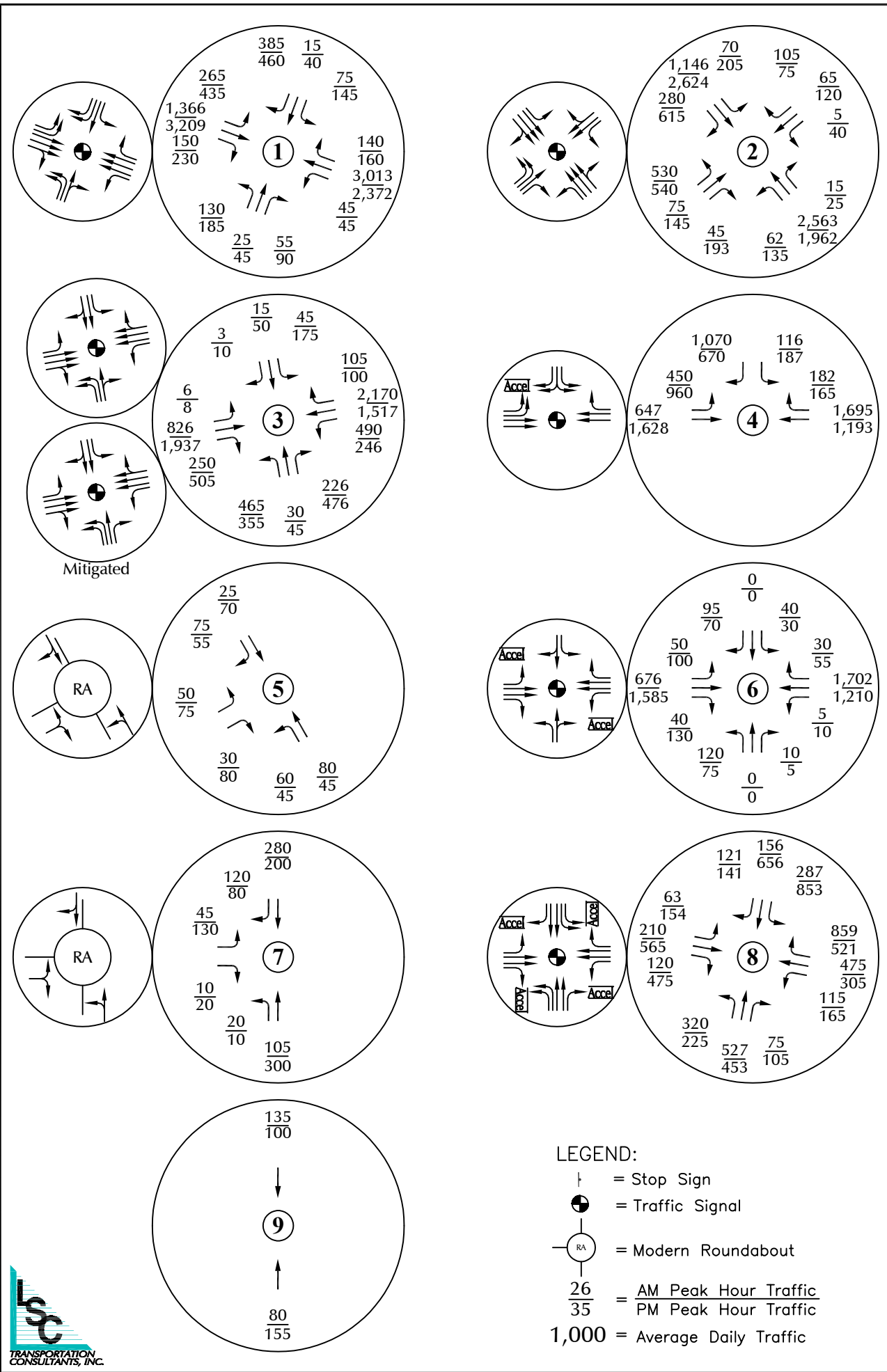
Figure 3b  
**Existing Traffic  
 Adjusted for Pandemic**  
 Canyons South (LSC #210310)



Note: Assumes four years of growth at an annual rate of three percent plus a portion of the 2041 Background traffic passing through the site. Little or no growth was assumed for movements serving built-out developments.

Figure 4  
**Year 2025 Background Traffic,  
 Lane Geometry and Traffic Control**  
 Canyons South (LSC #210310)

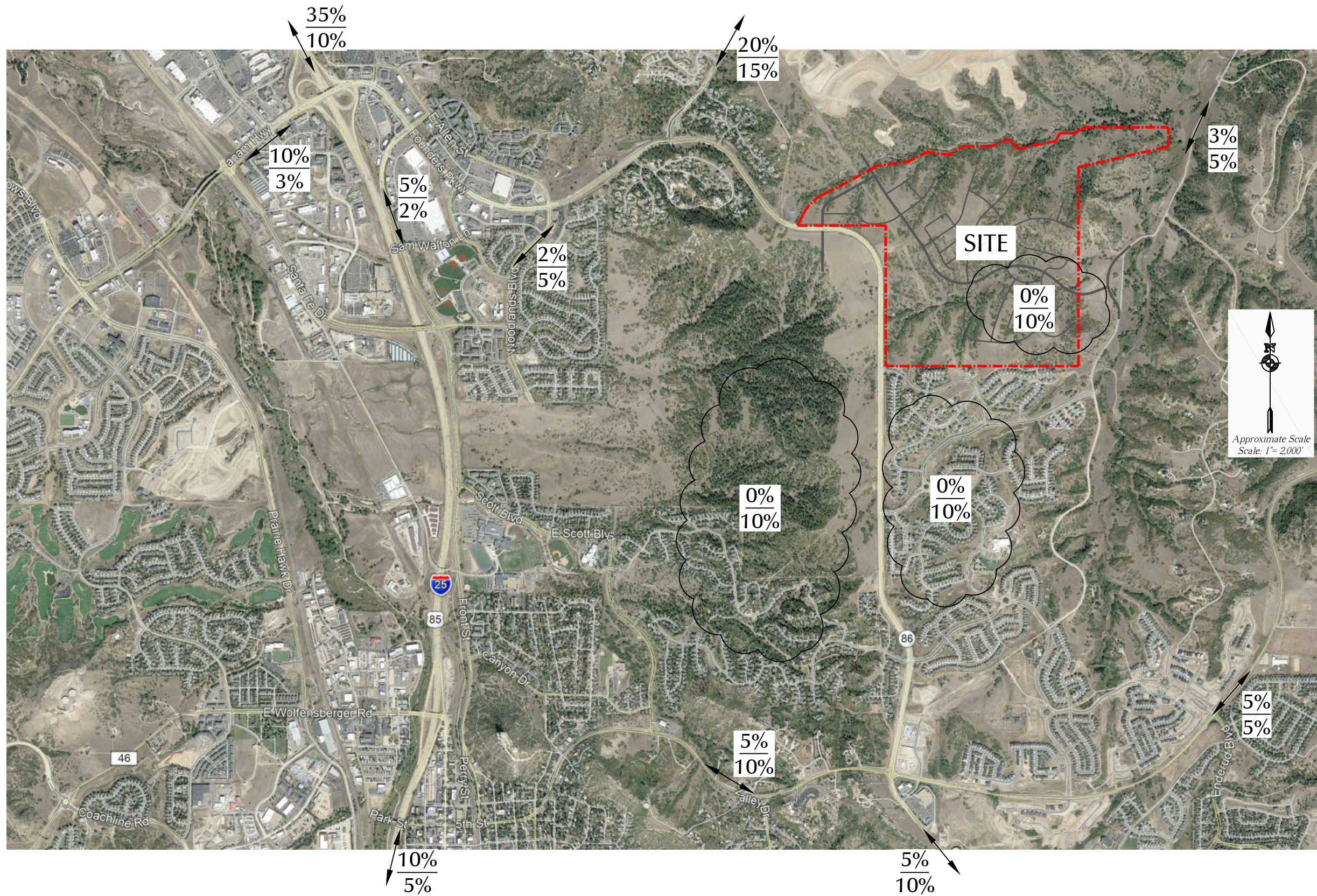





Notes:  
 1. These volumes are the 2041 total traffic volumes in Figure 9 less the total site-generated trips in Figure 7d with the exception of Note 2 below.  
 2. Intersection #8 is based on the 2040 projections provided by Town staff grown for one year at an annual rate of three percent.

Figure 5  
**Year 2041 Background Traffic,  
 Lane Geometry and Traffic Control**  
 Canyons South (LSC #210310)



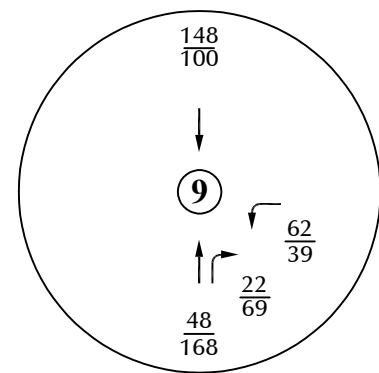
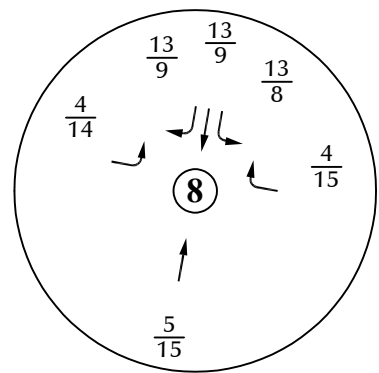
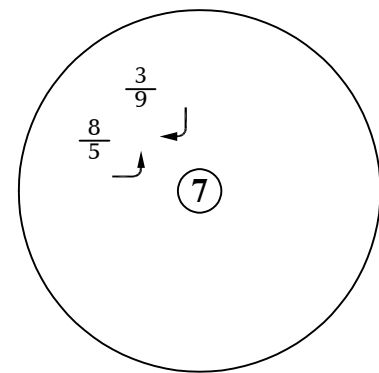
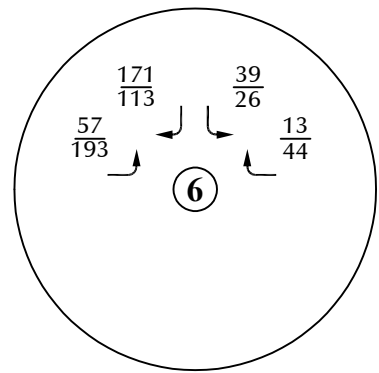
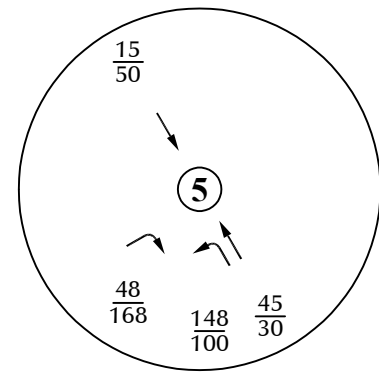
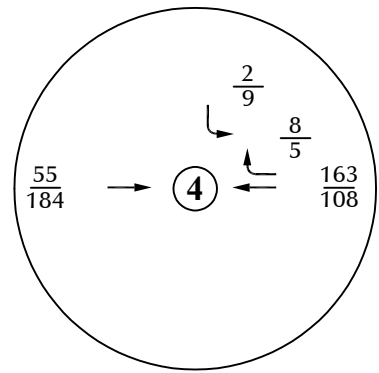
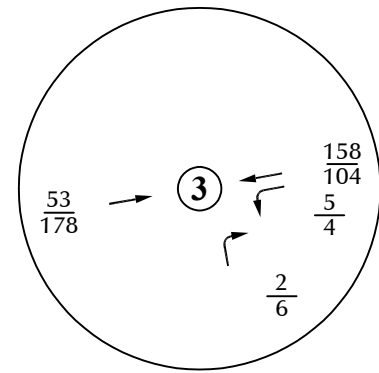
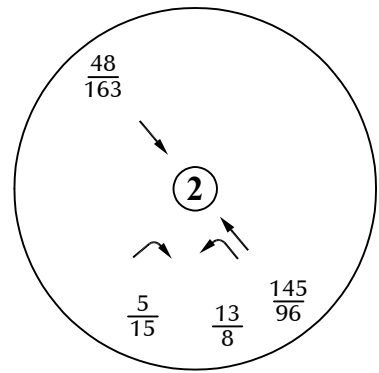
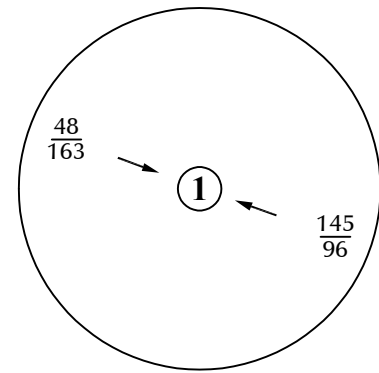


LEGEND:



$\frac{5\%}{5\%}$  = Residential Percent Directional Distribution  
 $\frac{5\%}{5\%}$  = Commercial Percent Directional Distribution

Figure 6  
*Directional Distribution  
 of Primary Site-Generated Traffic*  
 Canyons South (LSC #210310)



LEGEND:  
 $\frac{26}{35}$  = AM Peak Hour Traffic  
 $\frac{35}{26}$  = PM Peak Hour Traffic  
 1,000 = Average Daily Traffic

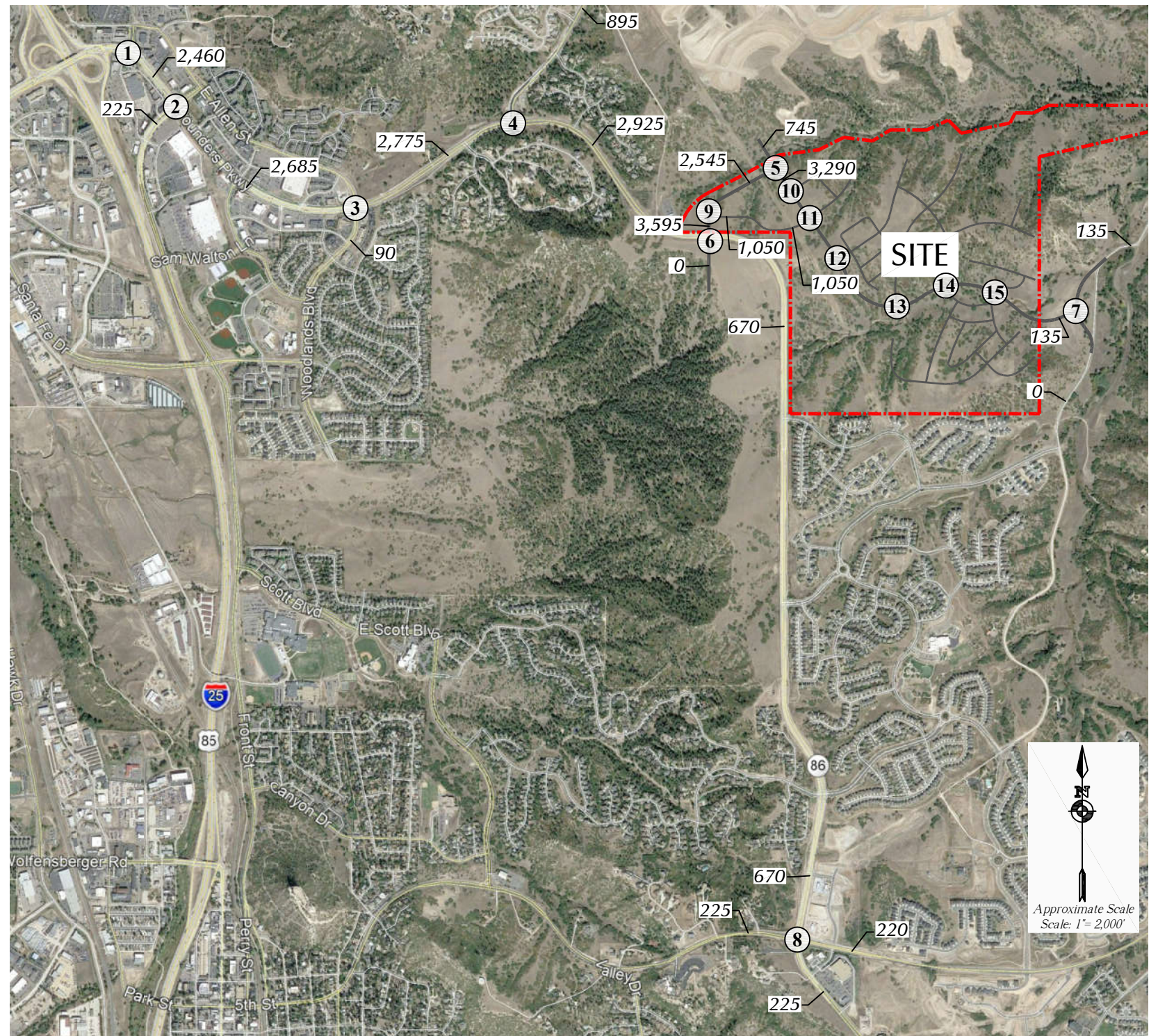


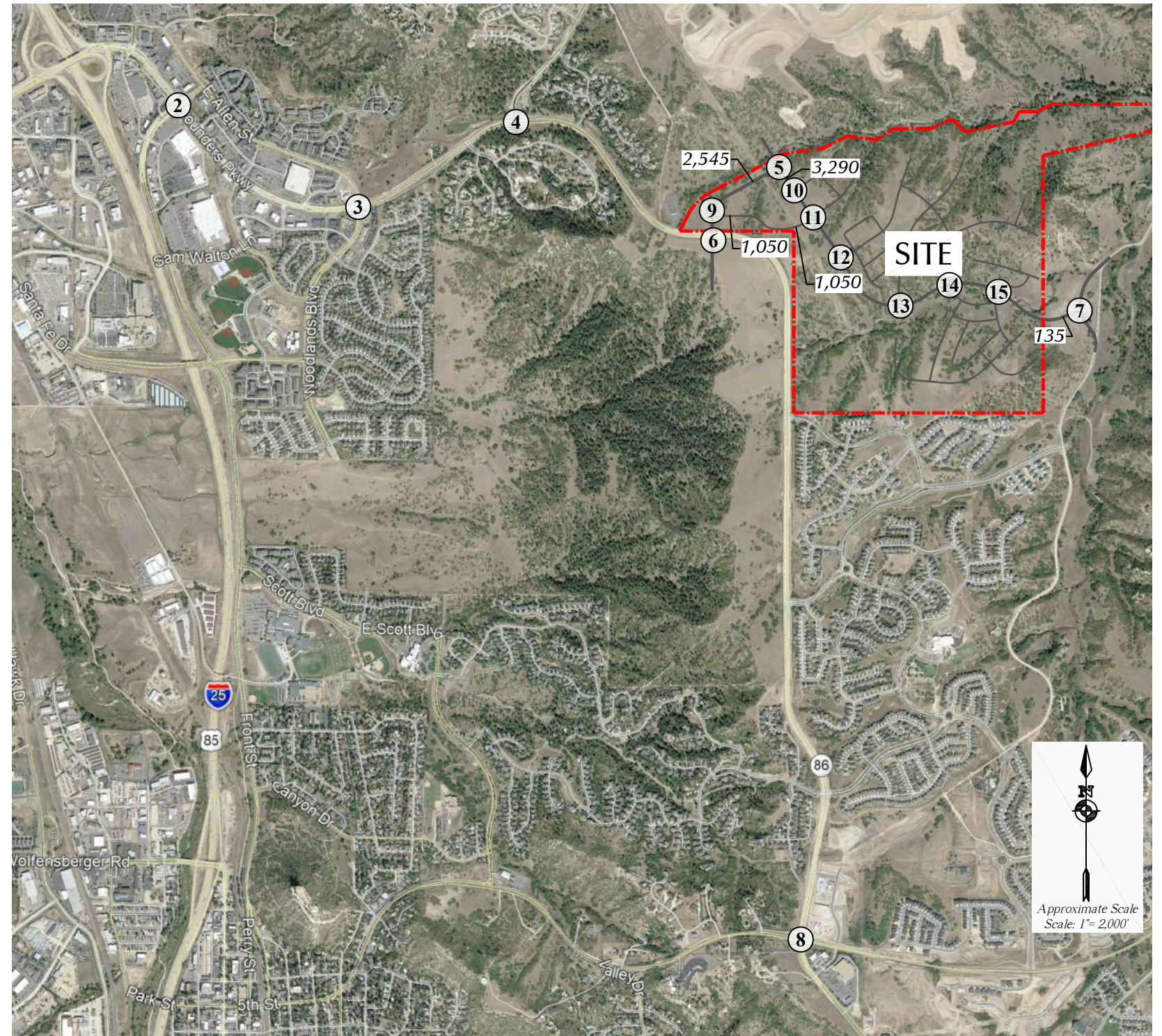
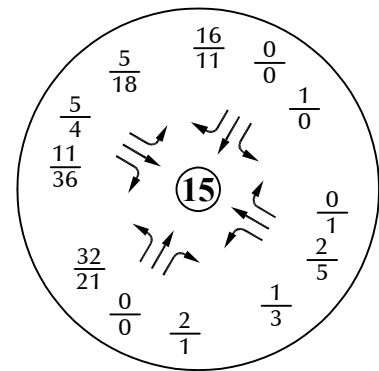
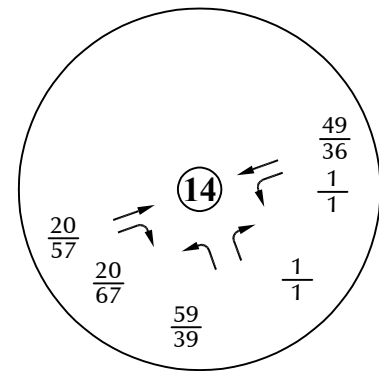
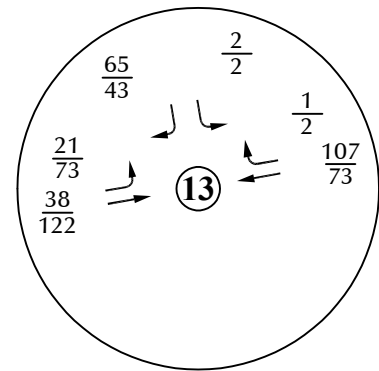
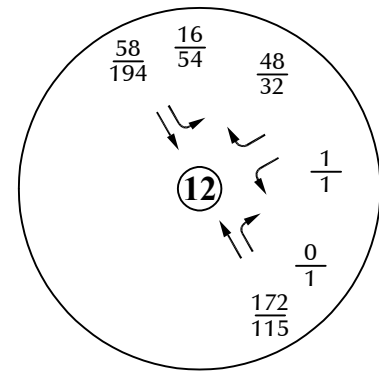
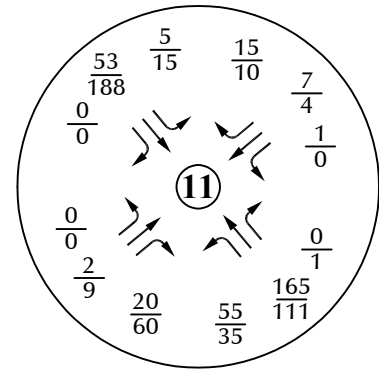
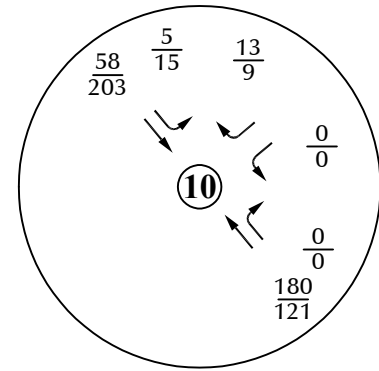
Figure 7a

## Major Intersections - Assignment of Residential Site-Generated Traffic

Canyons South (LSC #210310)

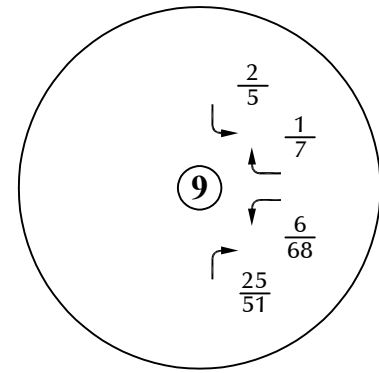
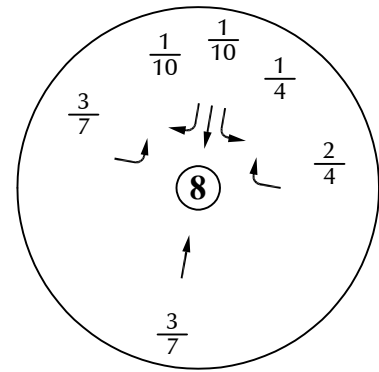
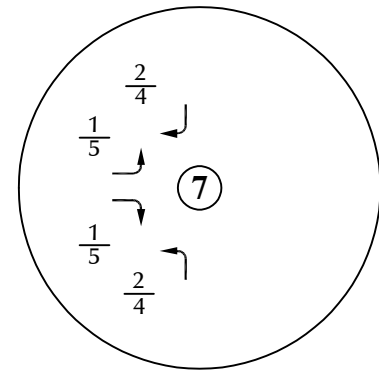
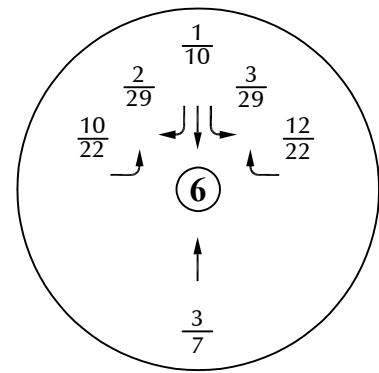
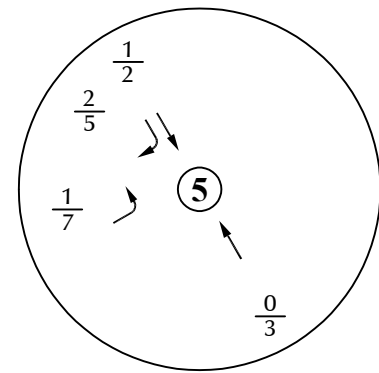
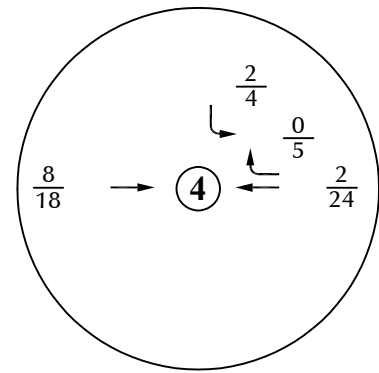
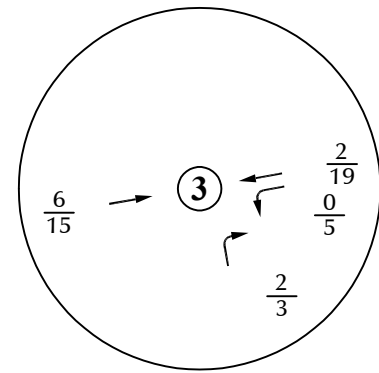
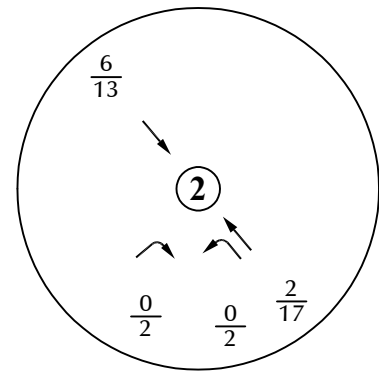
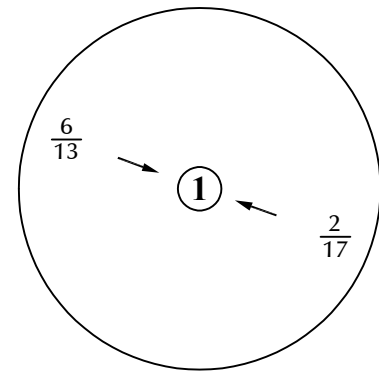






LEGEND:  
 $\frac{26}{35}$  = AM Peak Hour Traffic / PM Peak Hour Traffic  
 1,000 = Average Daily Traffic

Figure 7b  
 Access/Minor Intersections -  
 Assignment of Residential Site-Generated Traffic  
 Canyons South (LSC #210310)



LEGEND:  
 $\frac{26}{35}$  = AM Peak Hour Traffic  
 $\frac{35}{35}$  = PM Peak Hour Traffic  
 1,000 = Average Daily Traffic

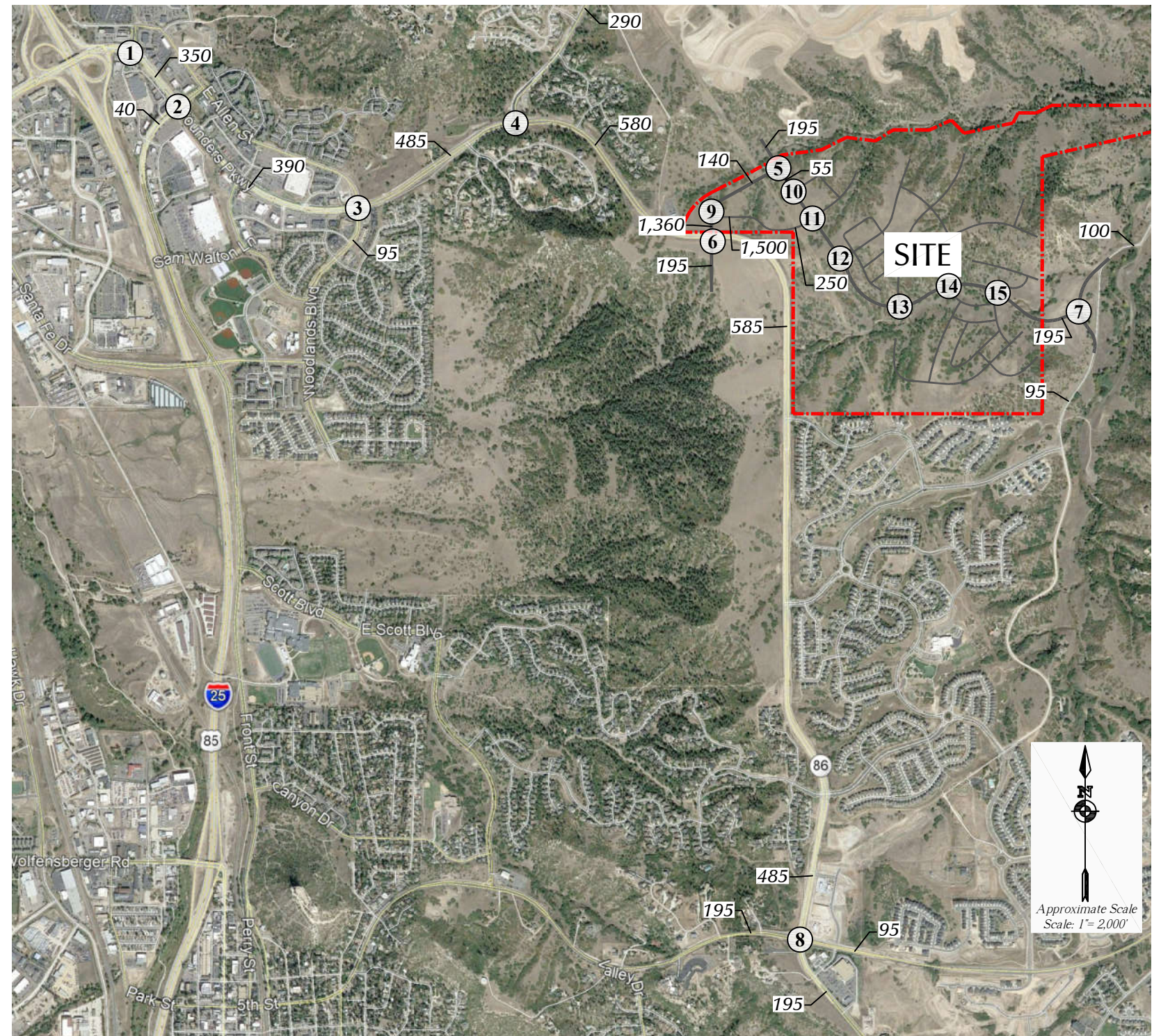
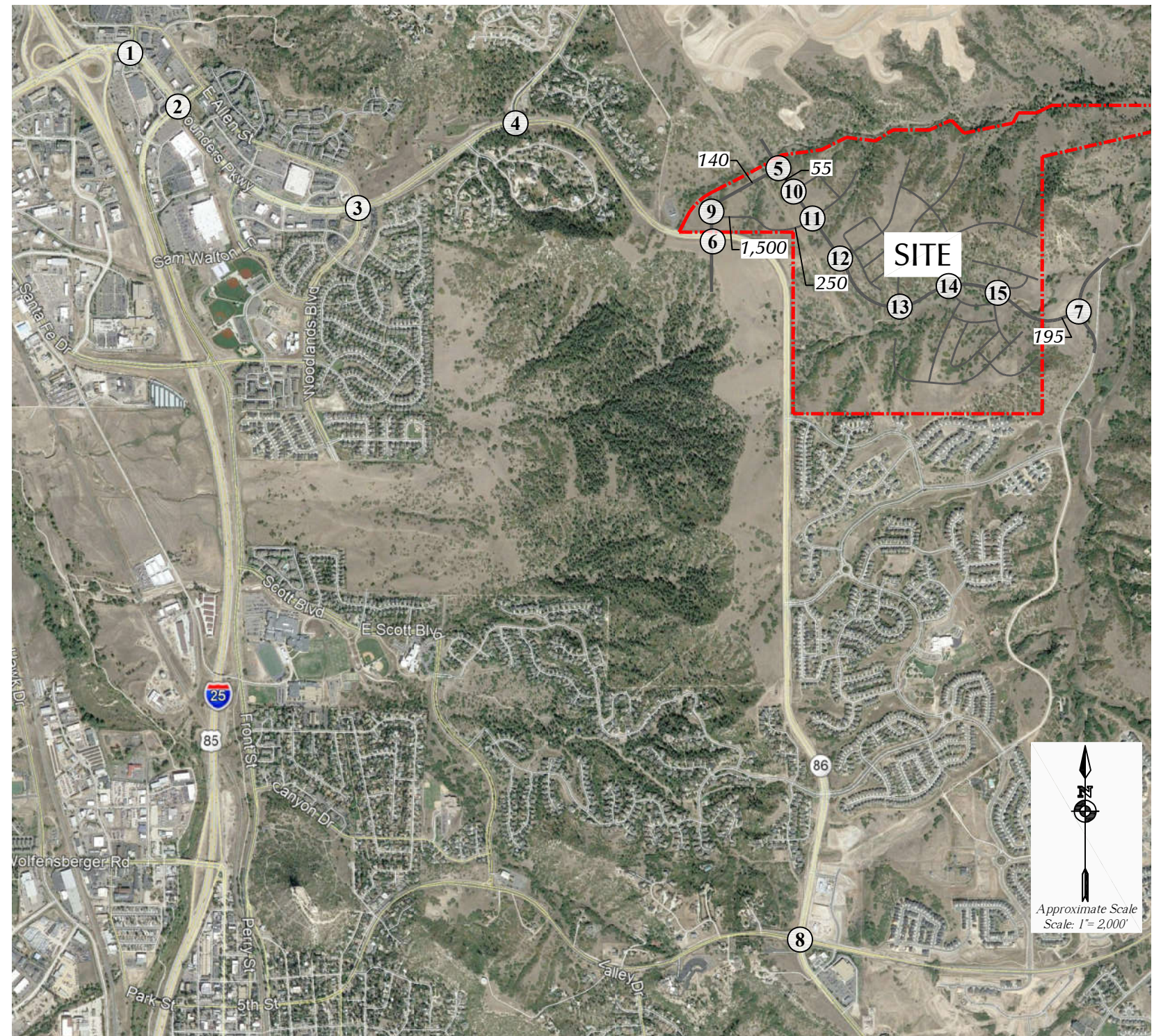
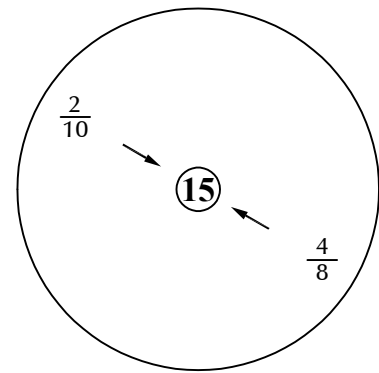
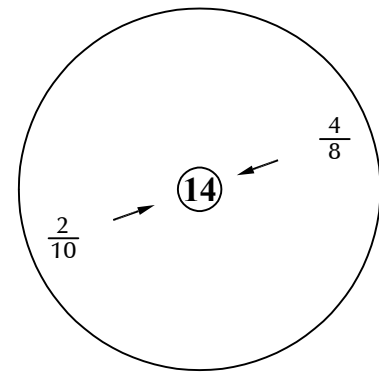
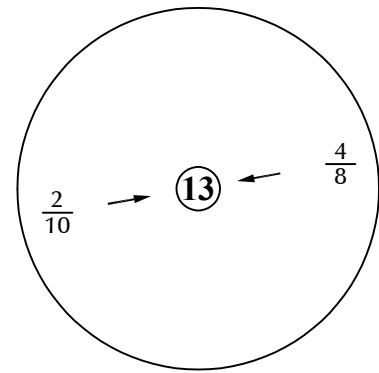
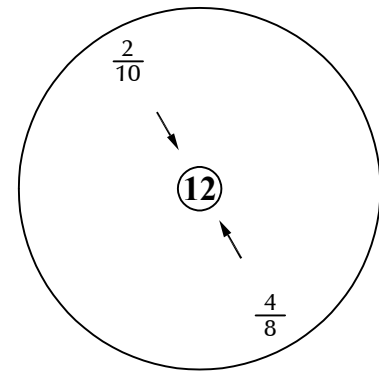
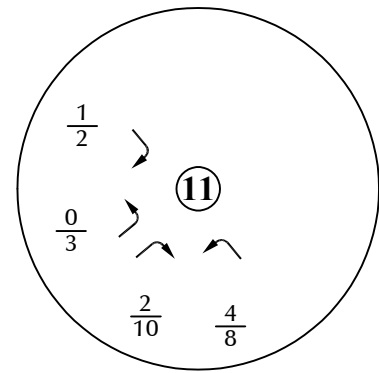
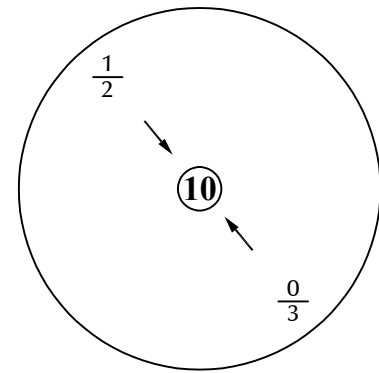
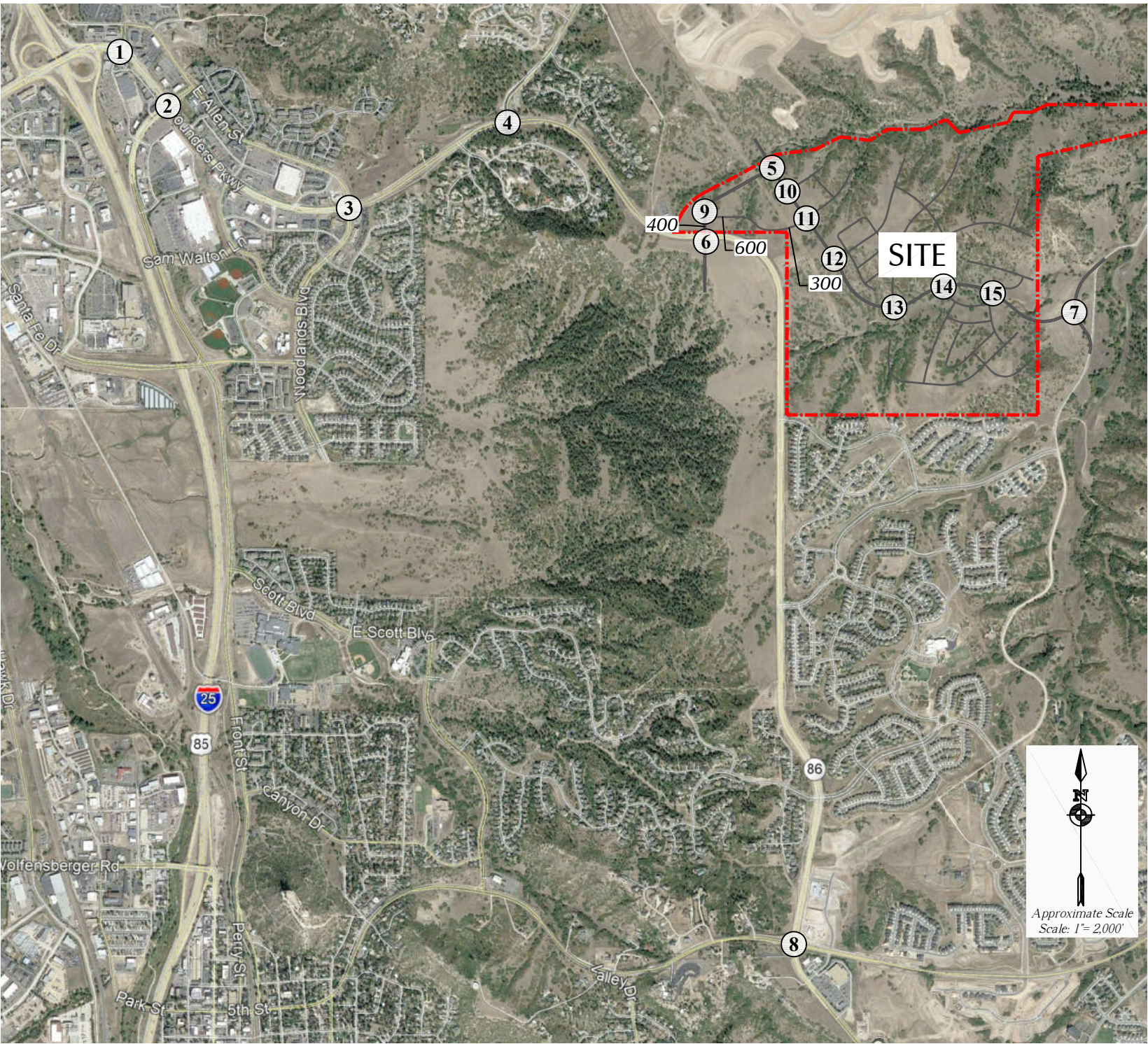
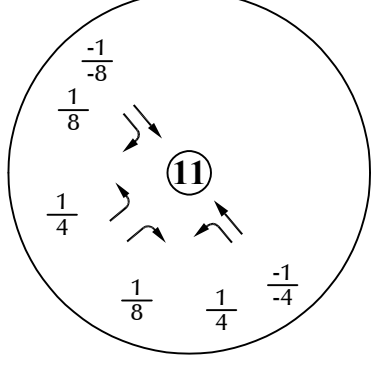
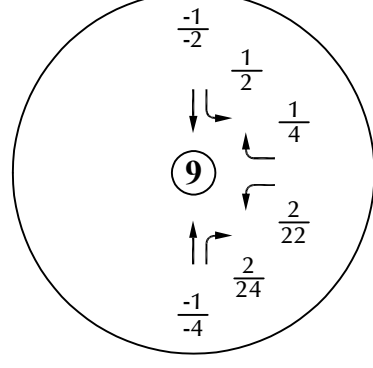
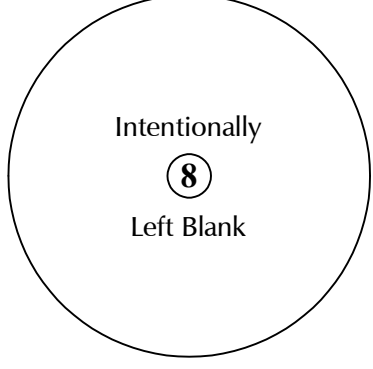
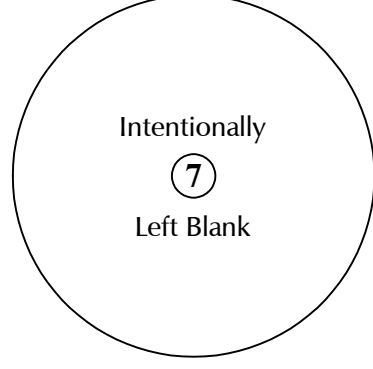
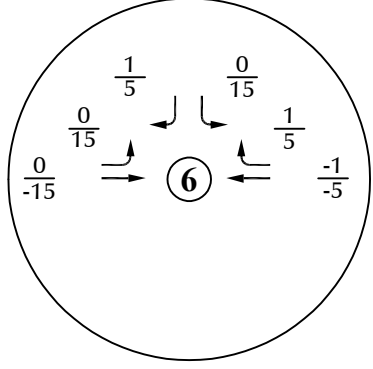
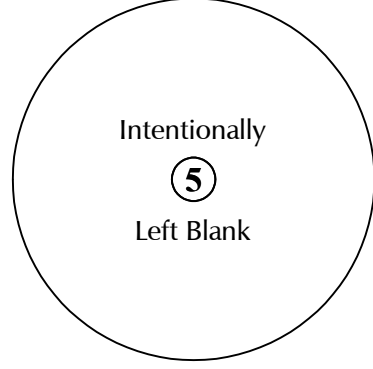
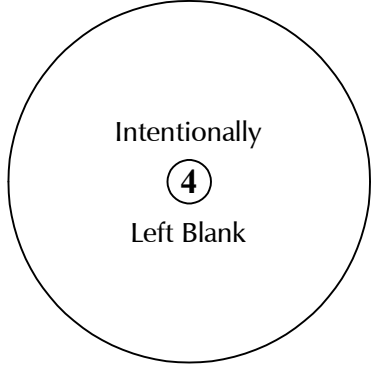
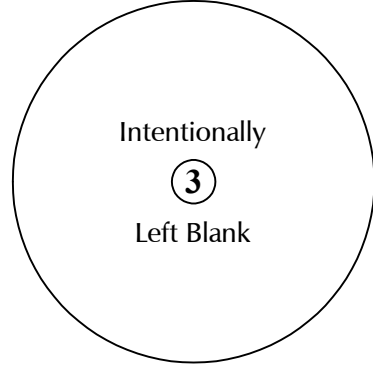
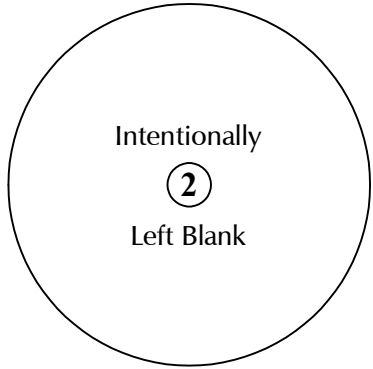
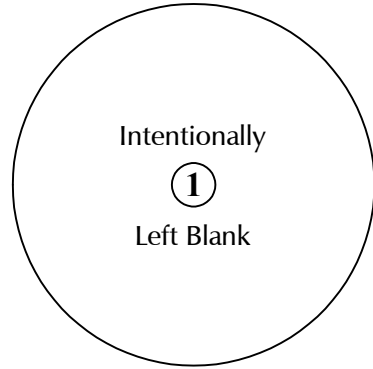


Figure 7c  
**Major Intersections -  
 Assignment of Primary  
 Non-Residential Site-Generated Traffic**  
 Canyons South (LSC #210310)



LEGEND:  
 $\frac{26}{35}$  = AM Peak Hour Traffic  
 $\frac{35}{35}$  = PM Peak Hour Traffic  
 1,000 = Average Daily Traffic

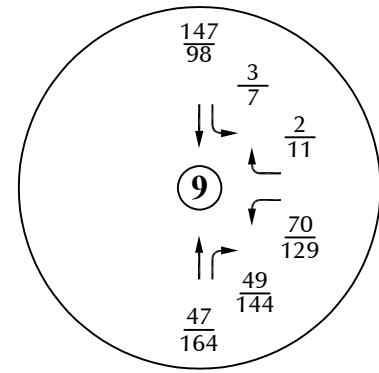
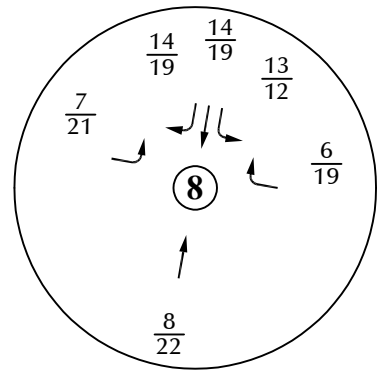
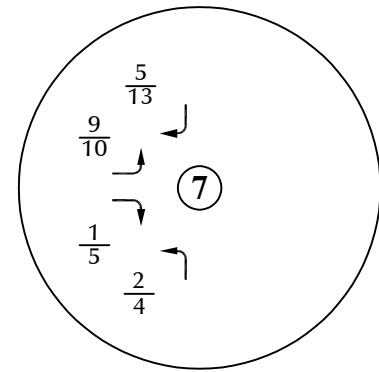
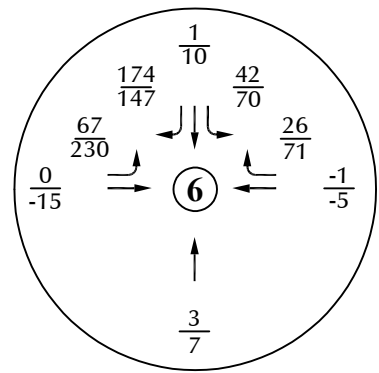
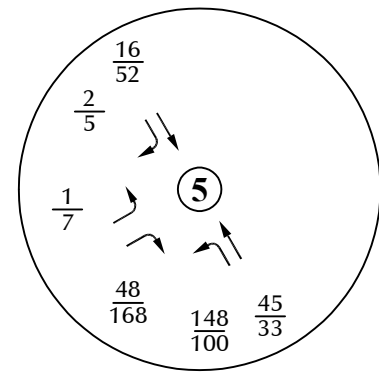
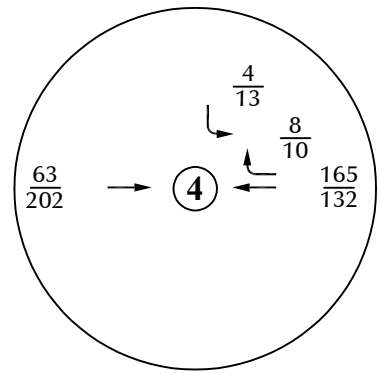
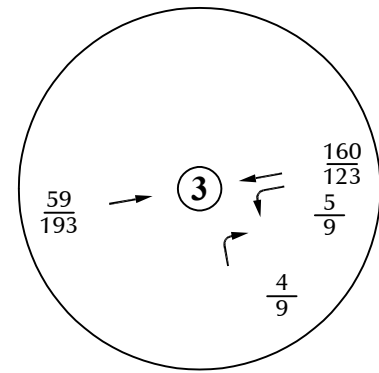
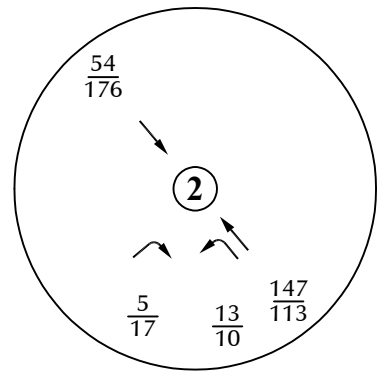
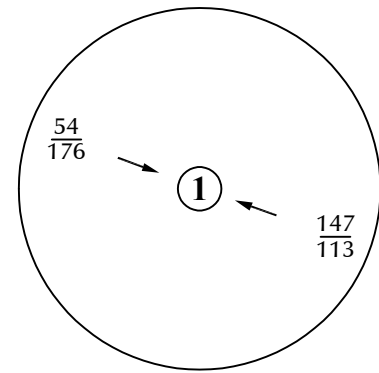
Figure 7d  
 Access/Minor Intersections -  
 Assignment of Primary  
 Non-Residential Site-Generated Traffic  
 Canyons South (LSC #210310)



LEGEND:  
 $\frac{26}{35}$  = AM Peak Hour Traffic  
 $\frac{35}{35}$  = PM Peak Hour Traffic  
 1,000 = Average Daily Traffic

Figure 7e  
**Assignment of  
 Passby Site-Generated Traffic**  
 Canyons South (LSC #210310)





LEGEND:  
 $\frac{26}{35}$  = AM Peak Hour Traffic  
 $\frac{35}{26}$  = PM Peak Hour Traffic  
 1,000 = Average Daily Traffic

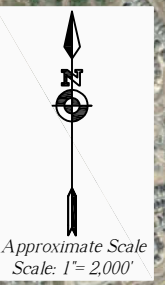
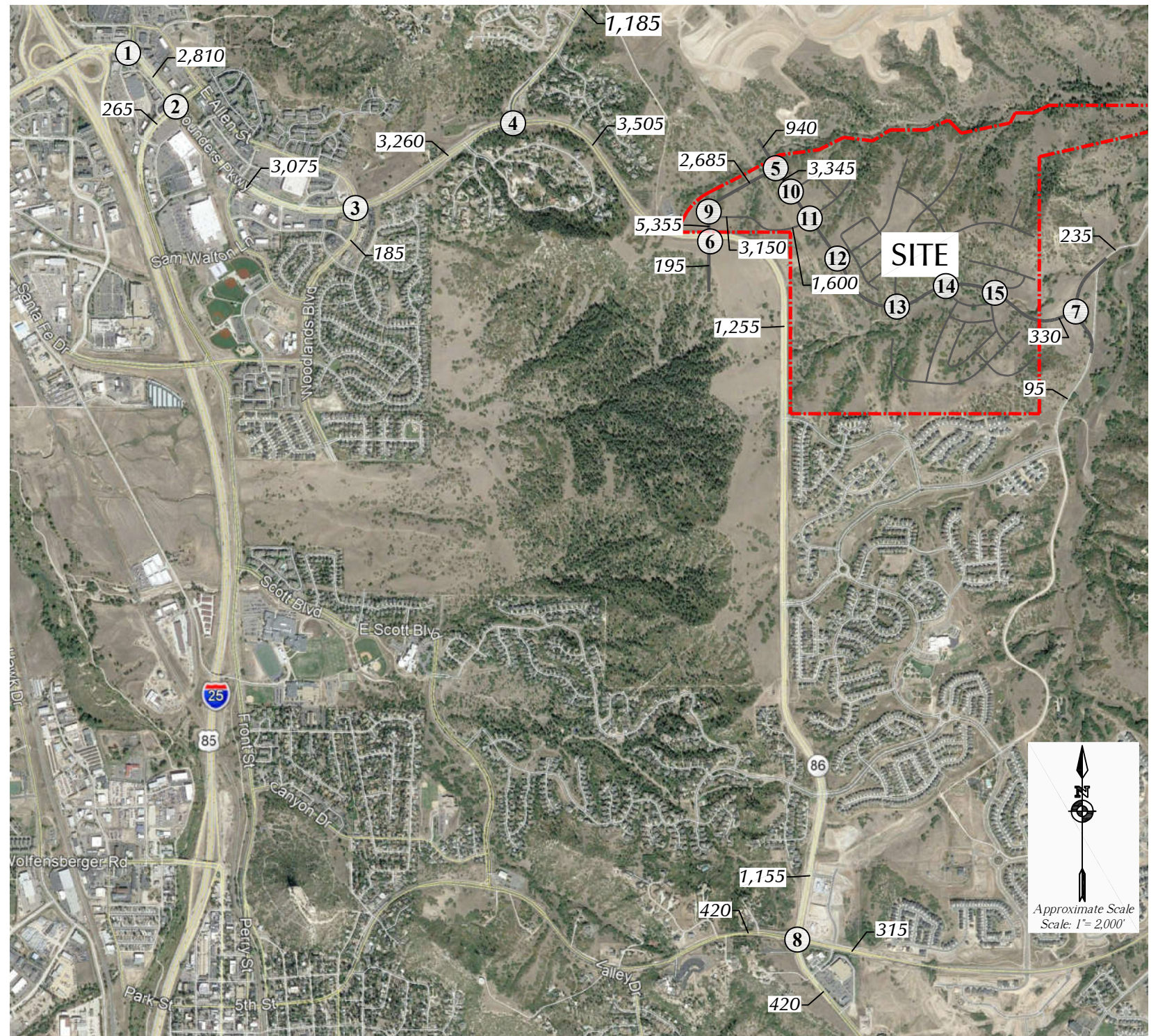
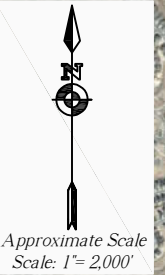
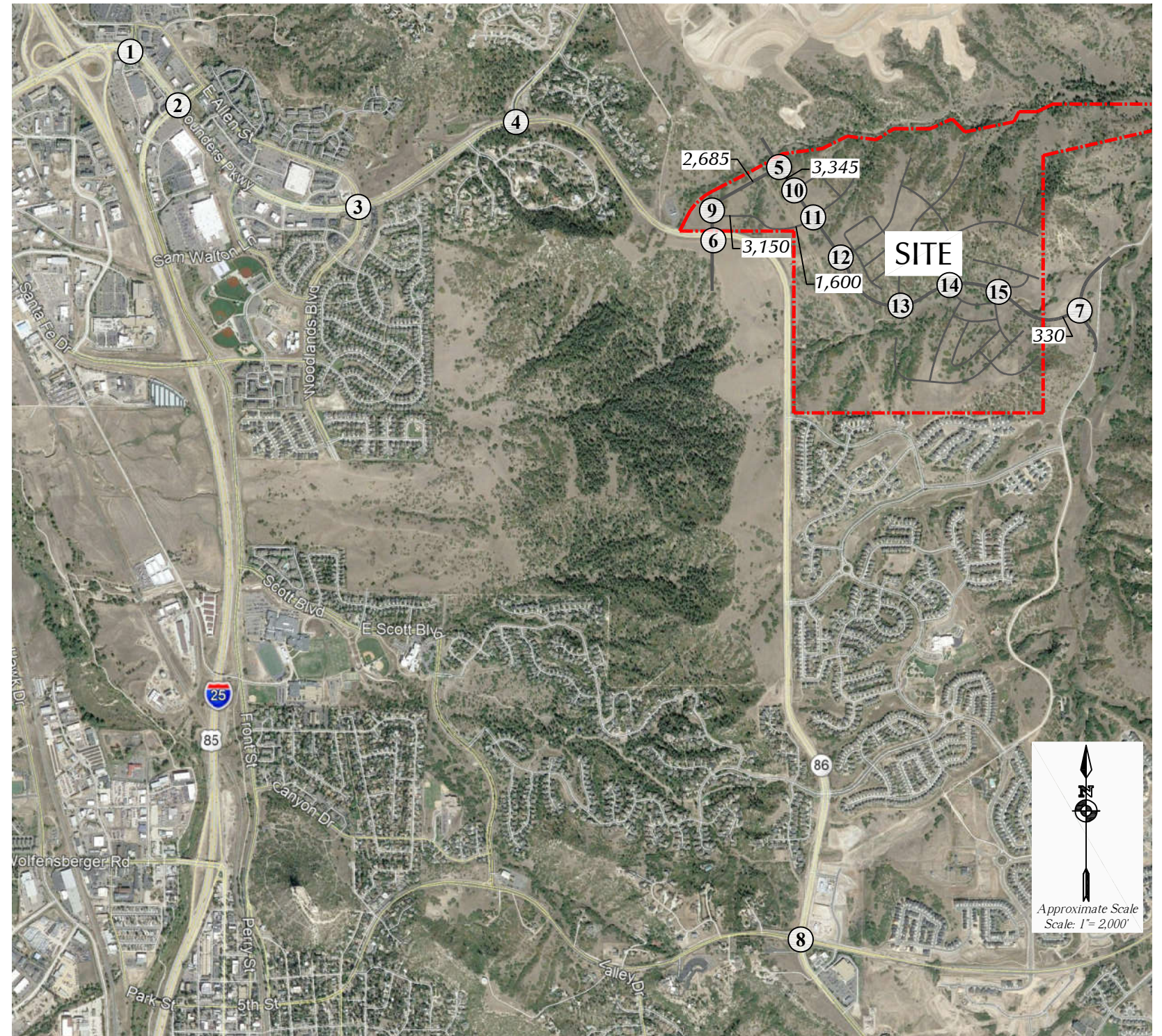
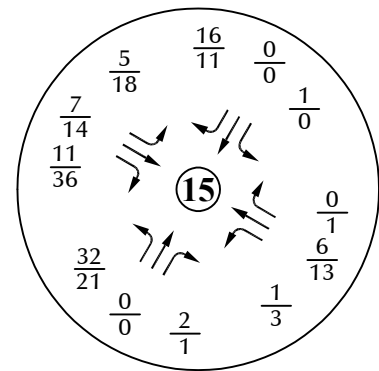
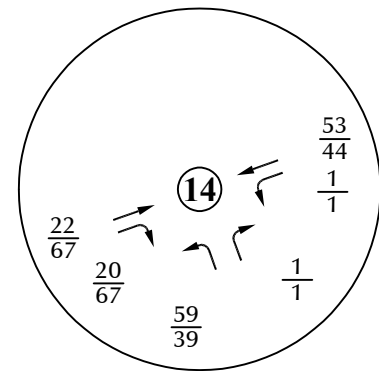
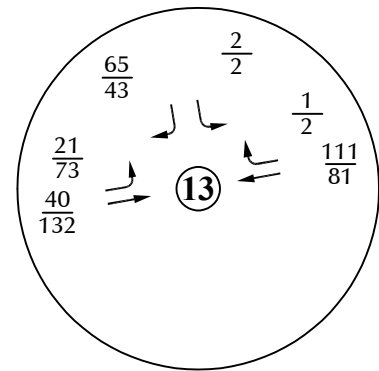
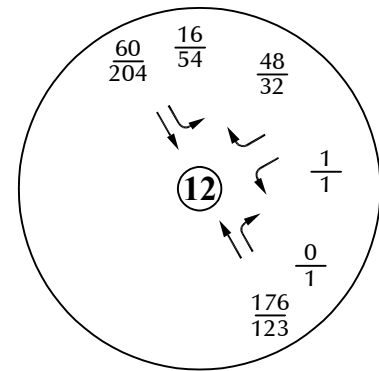
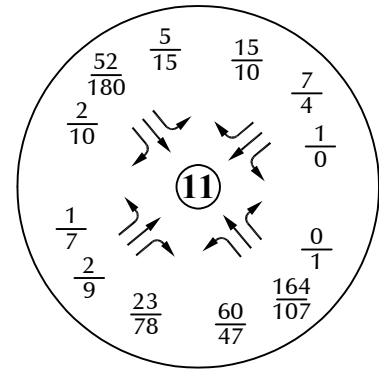
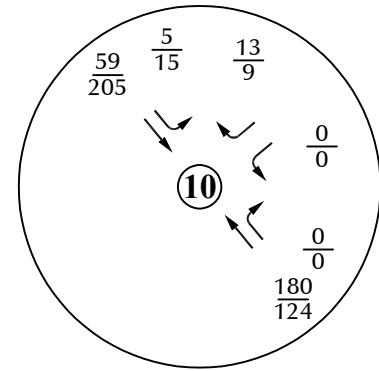


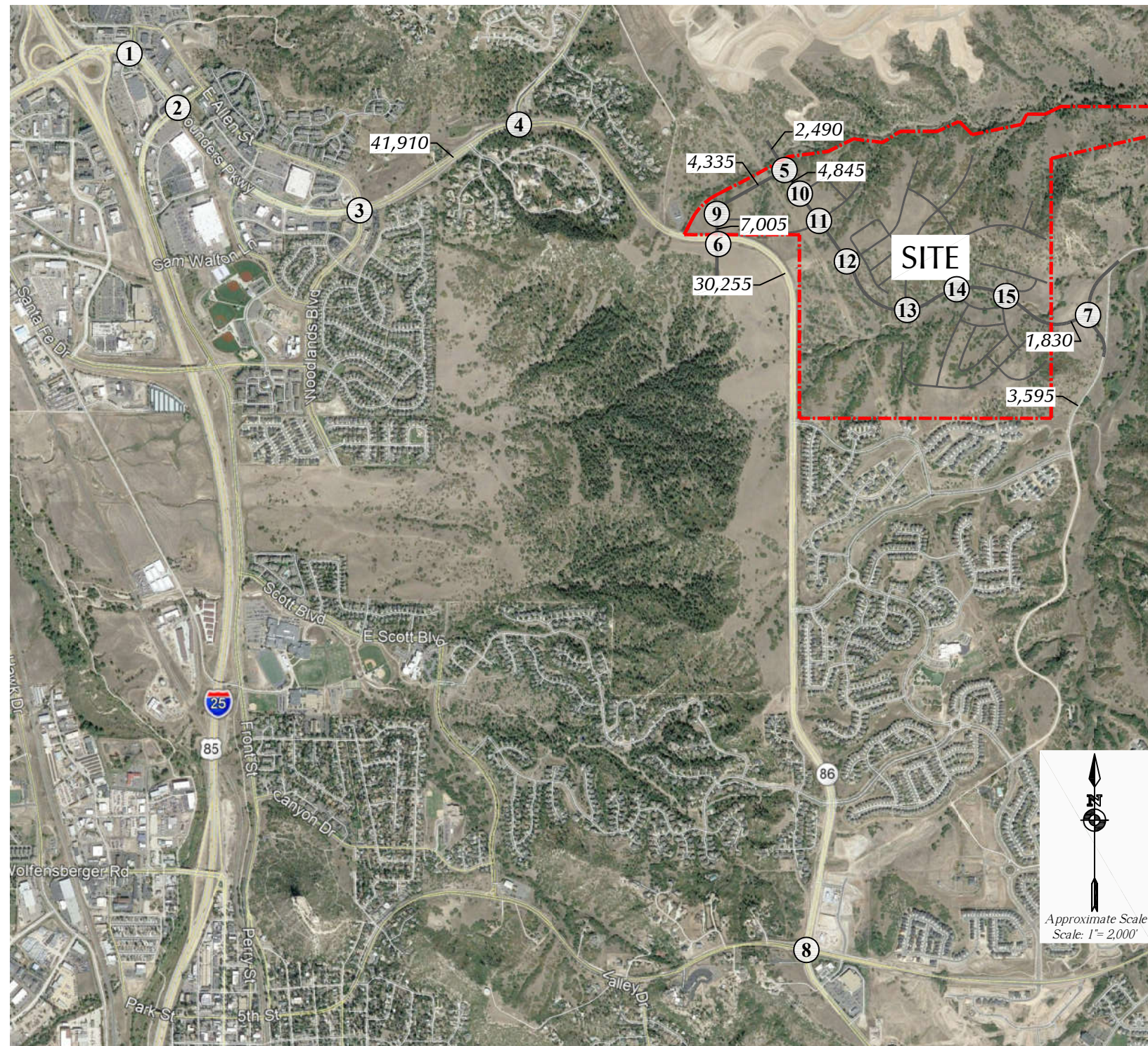
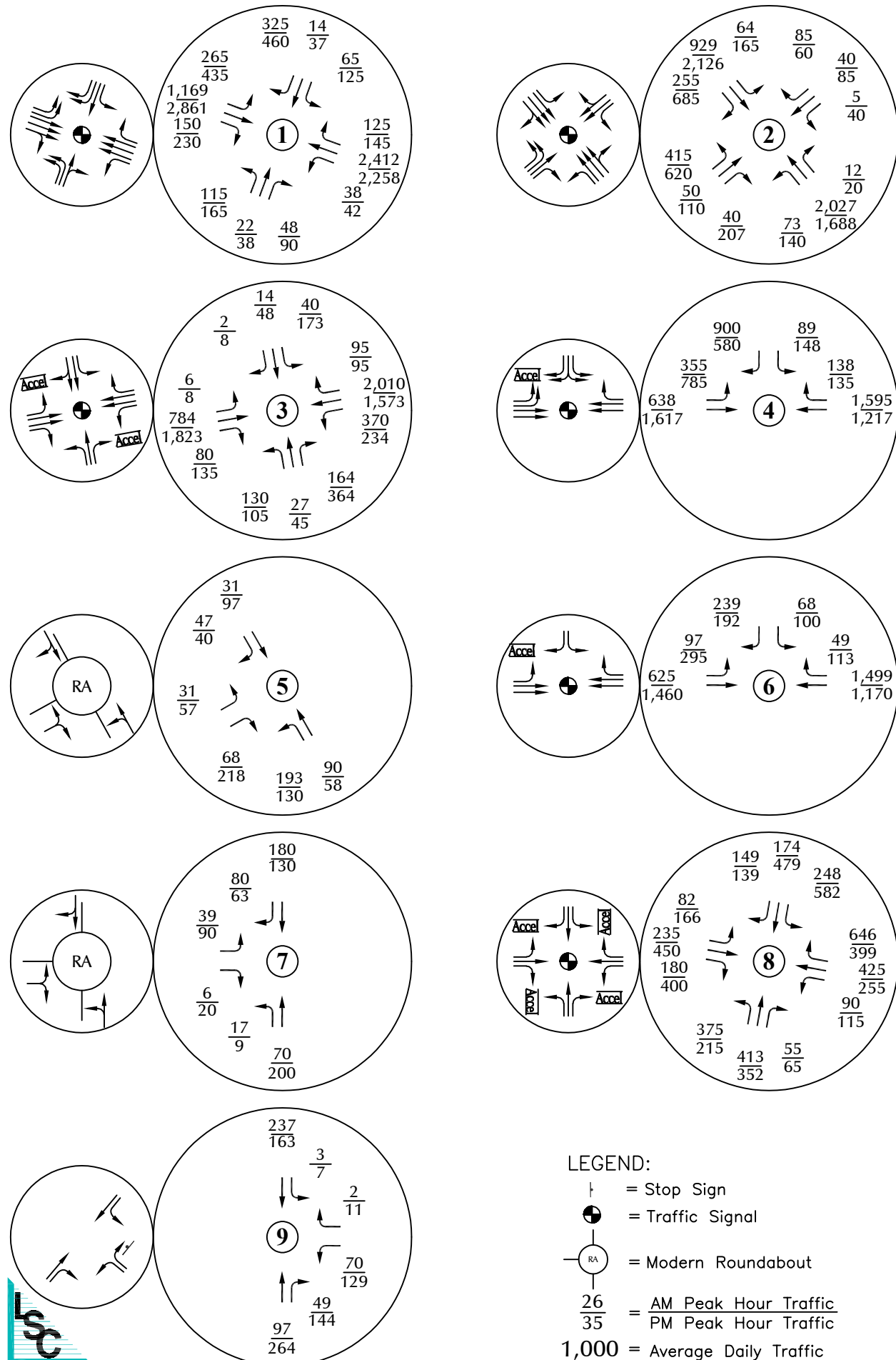
Figure 7f  
**Major Intersections -  
 Assignment of  
 Total Site-Generated Traffic**  
 Canyons South (LSC #210310)





LEGEND:  
 $\frac{26}{35}$  = AM Peak Hour Traffic  
 $\frac{35}{26}$  = PM Peak Hour Traffic  
 1,000 = Average Daily Traffic

Figure 7g  
 Access/Minor Intersections -  
 Assignment of  
 Total Site-Generated Traffic  
 Canyons South (LSC #210310)

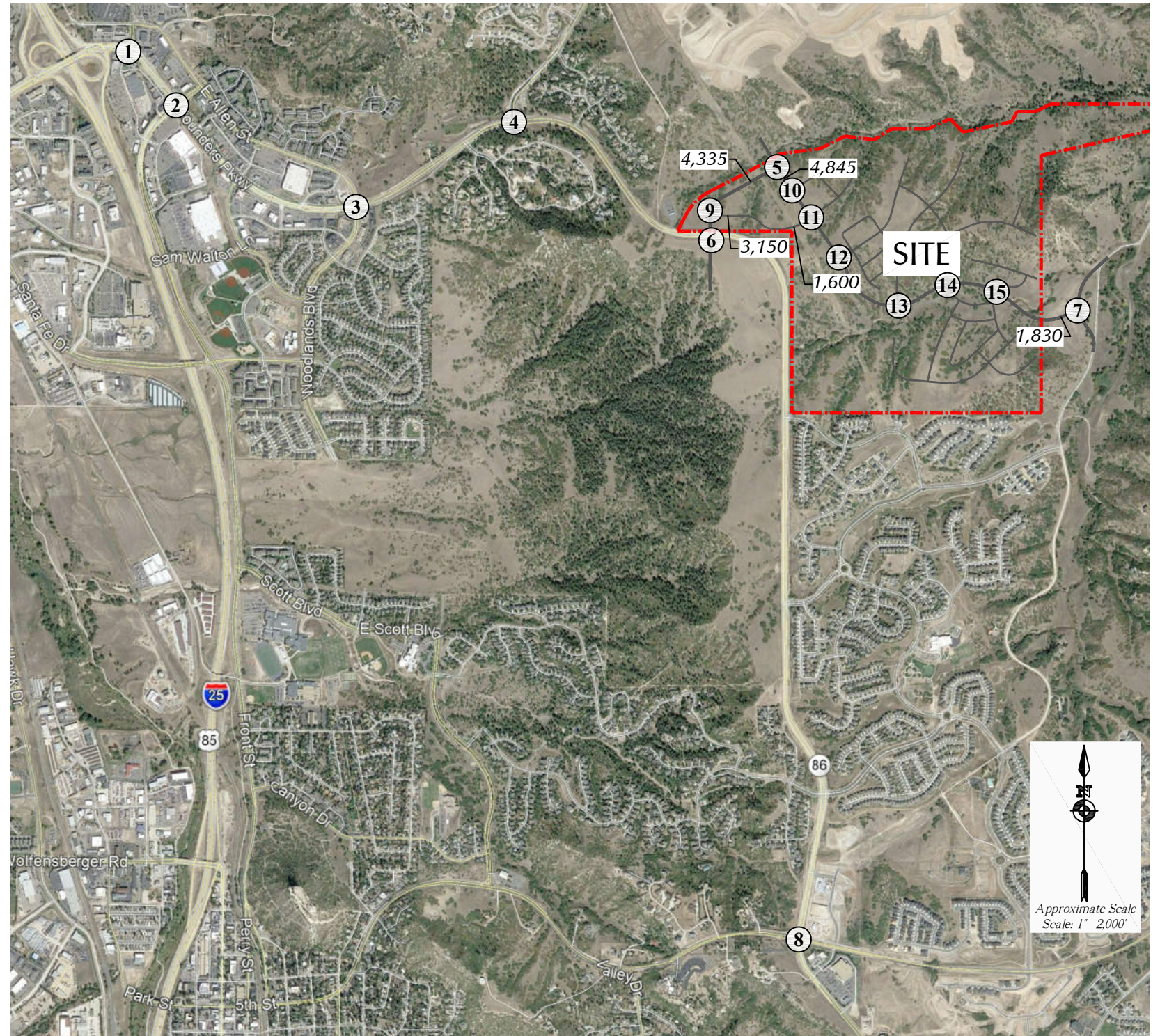
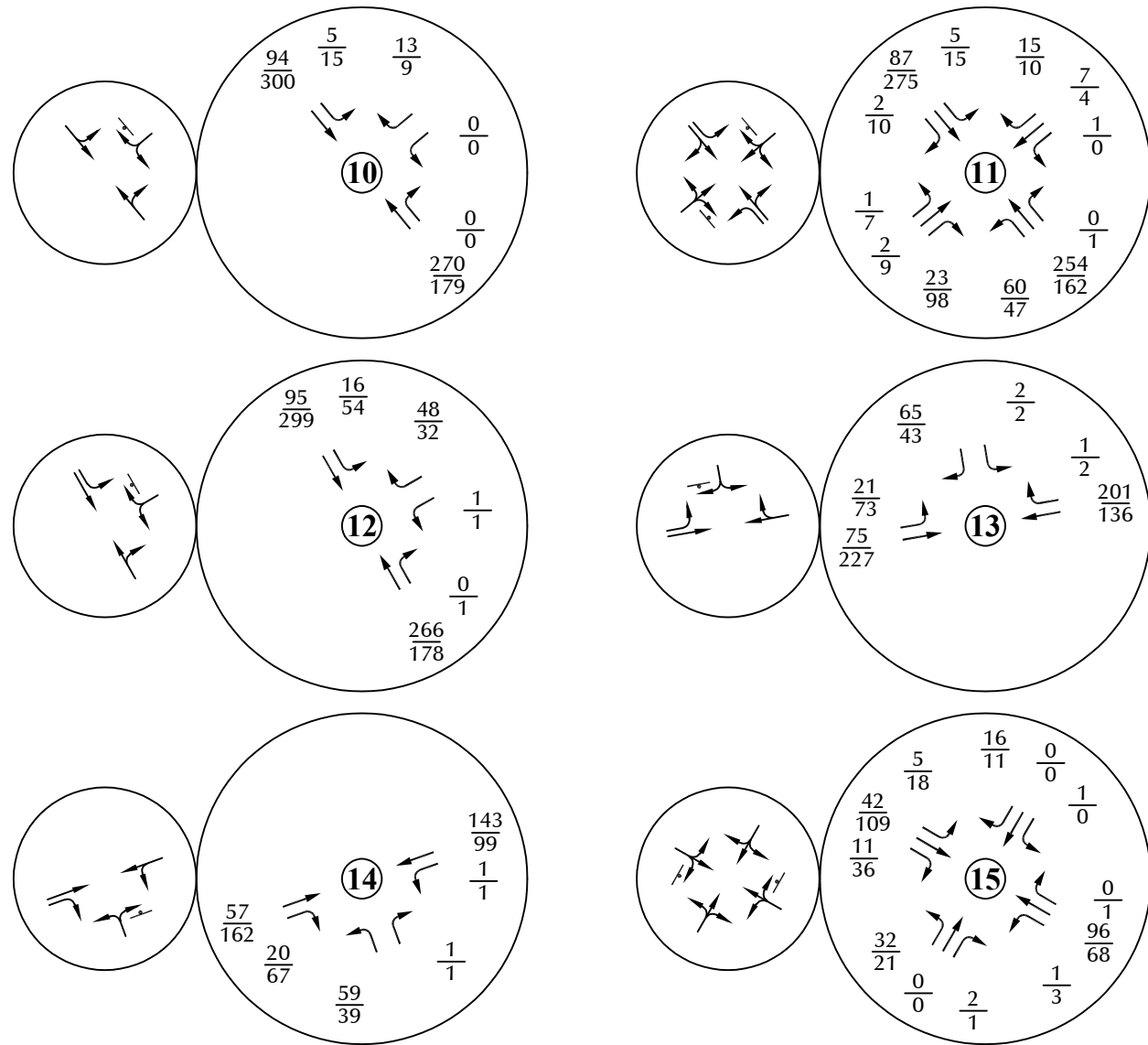


Note: These volumes are the sum of the volumes in Figure 4 and Figure 7f.

Figure 8a

# Major Intersections - Year 2025 Total Traffic, Lane Geometry and Traffic Control

Canyons South (LSC #210310)



Note: These volumes are the sum of the volumes in Figure 4 and Figure 7g.

LEGEND:

- ⊥ = Stop Sign
- = Traffic Signal
- ⊙ = Modern Roundabout
- $\frac{26}{35}$  = AM Peak Hour Traffic / PM Peak Hour Traffic
- 1,000 = Average Daily Traffic

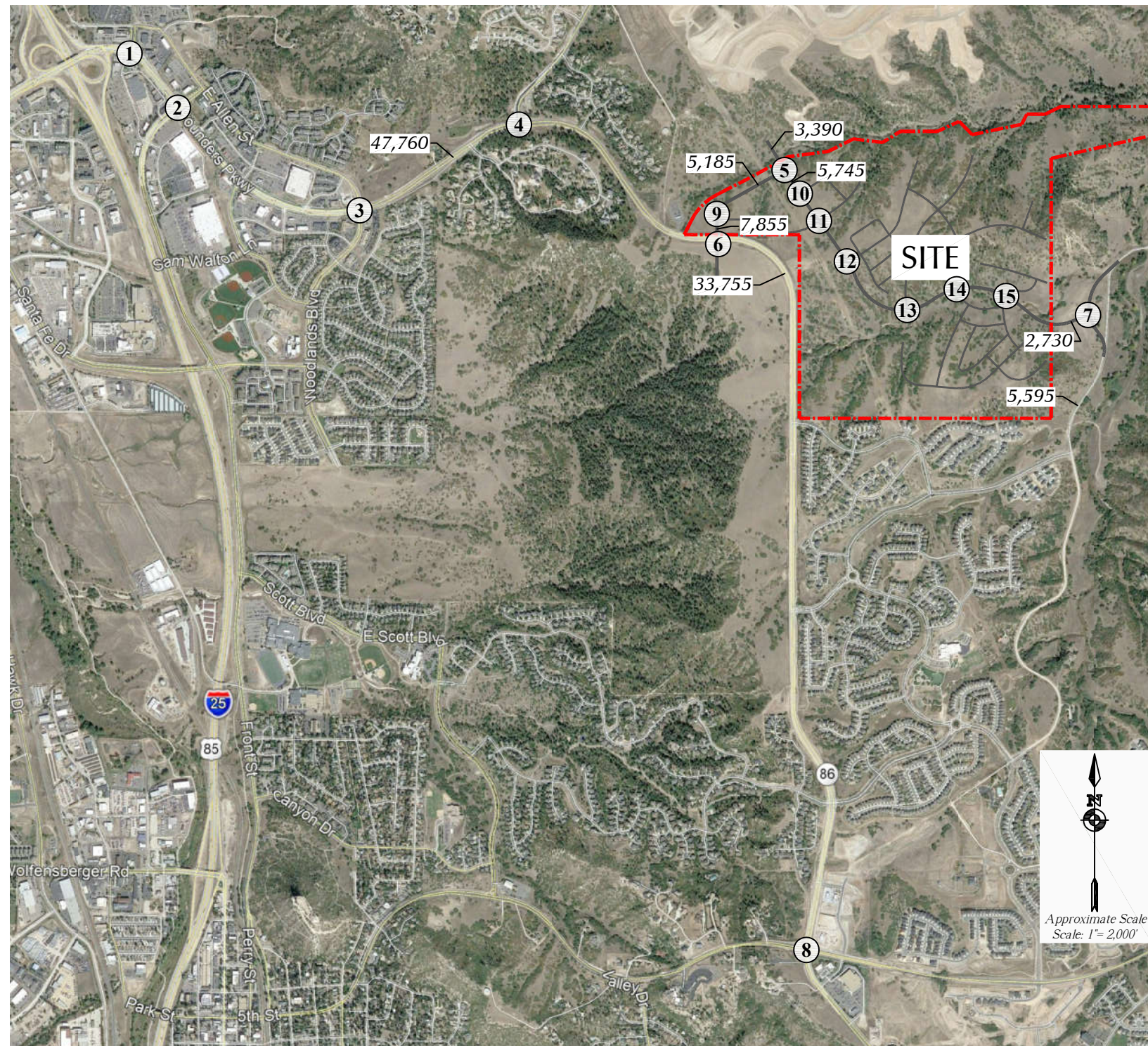
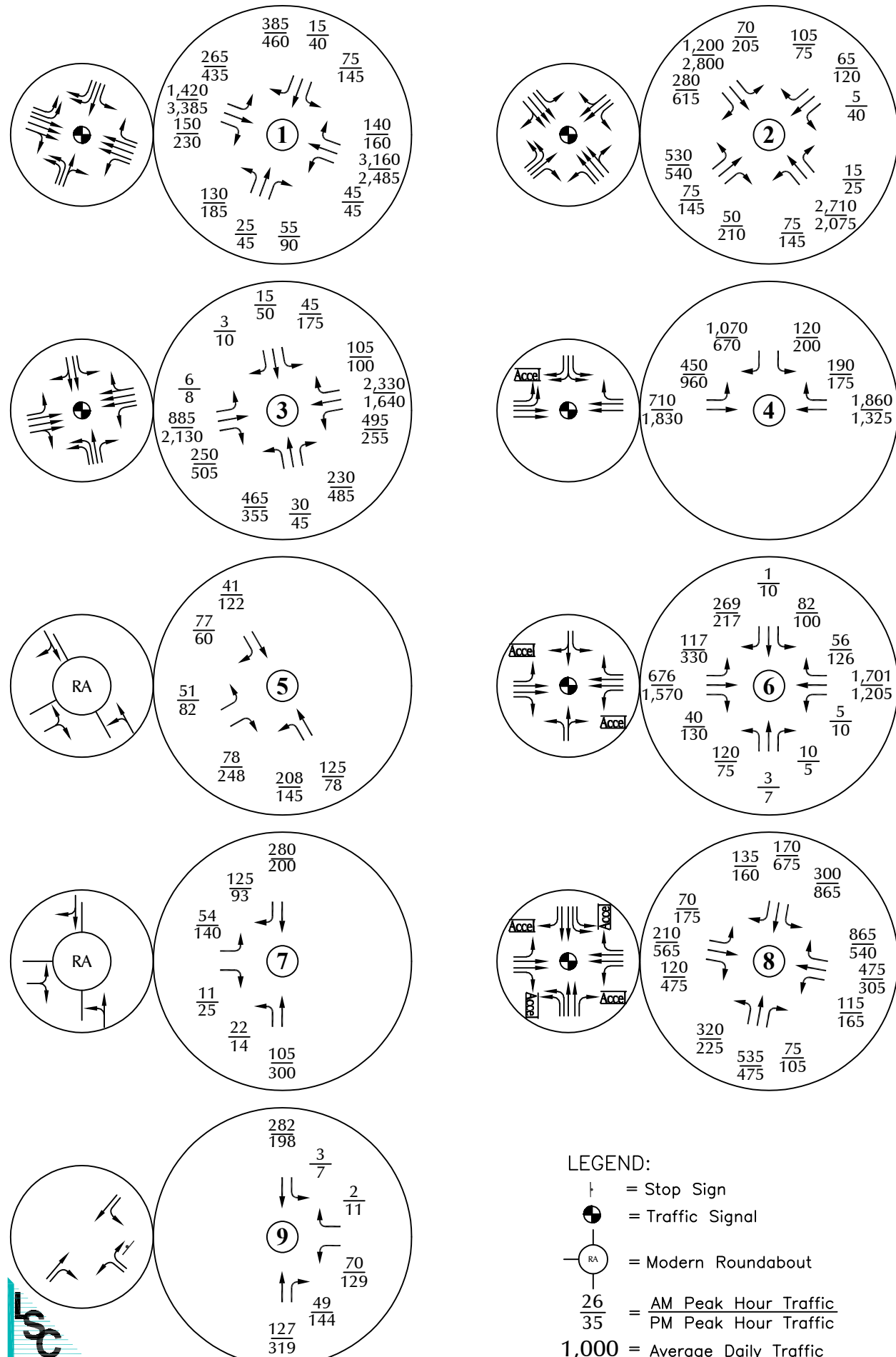


Figure 8b

Access/Minor Intersections -  
 Year 2025 Total Traffic,  
 Lane Geometry and Traffic Control

Canyons South (LSC #210310)



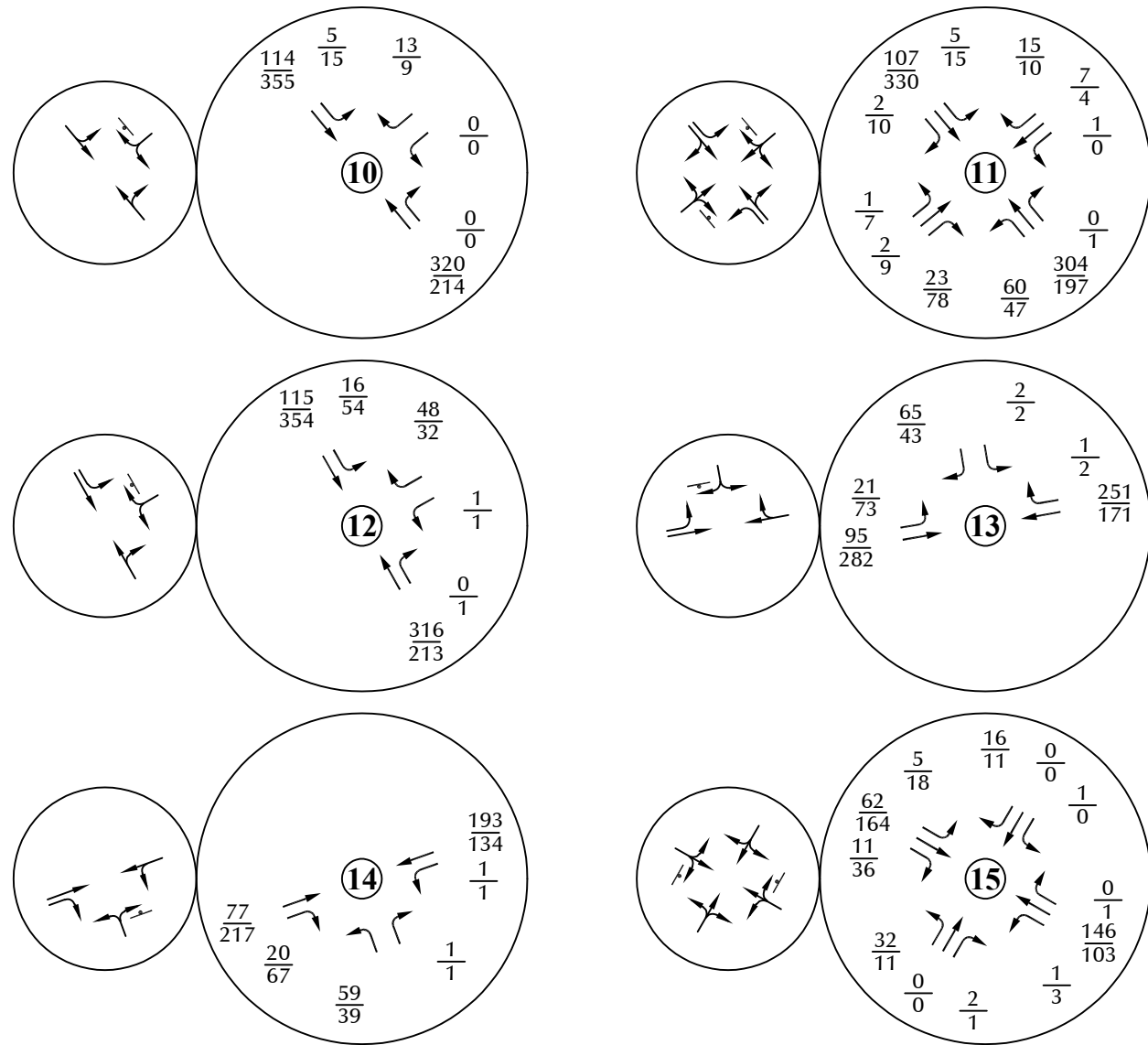


- Notes:
- #8 based on 2040 projections from Town grown for one year at an annual rate of three percent plus site-generated trips.
  - South leg of #6 based on build-out volumes from Figure 7a of the 2017 Pine Canyon Update TIA by LSC.
  - Side Road volumes at #1, #2, #3 and #4 are based on the 2040 total traffic volumes from Figure 12 of the 2020 Pine Canyon TIA by Kimley Horn with some adjustments based on the recent traffic counts.
  - Through traffic at #7 based on three percent annual growth rate.
  - These volumes are the sum of the volumes in Figure 5 and Figure 7f.

Figure 9a

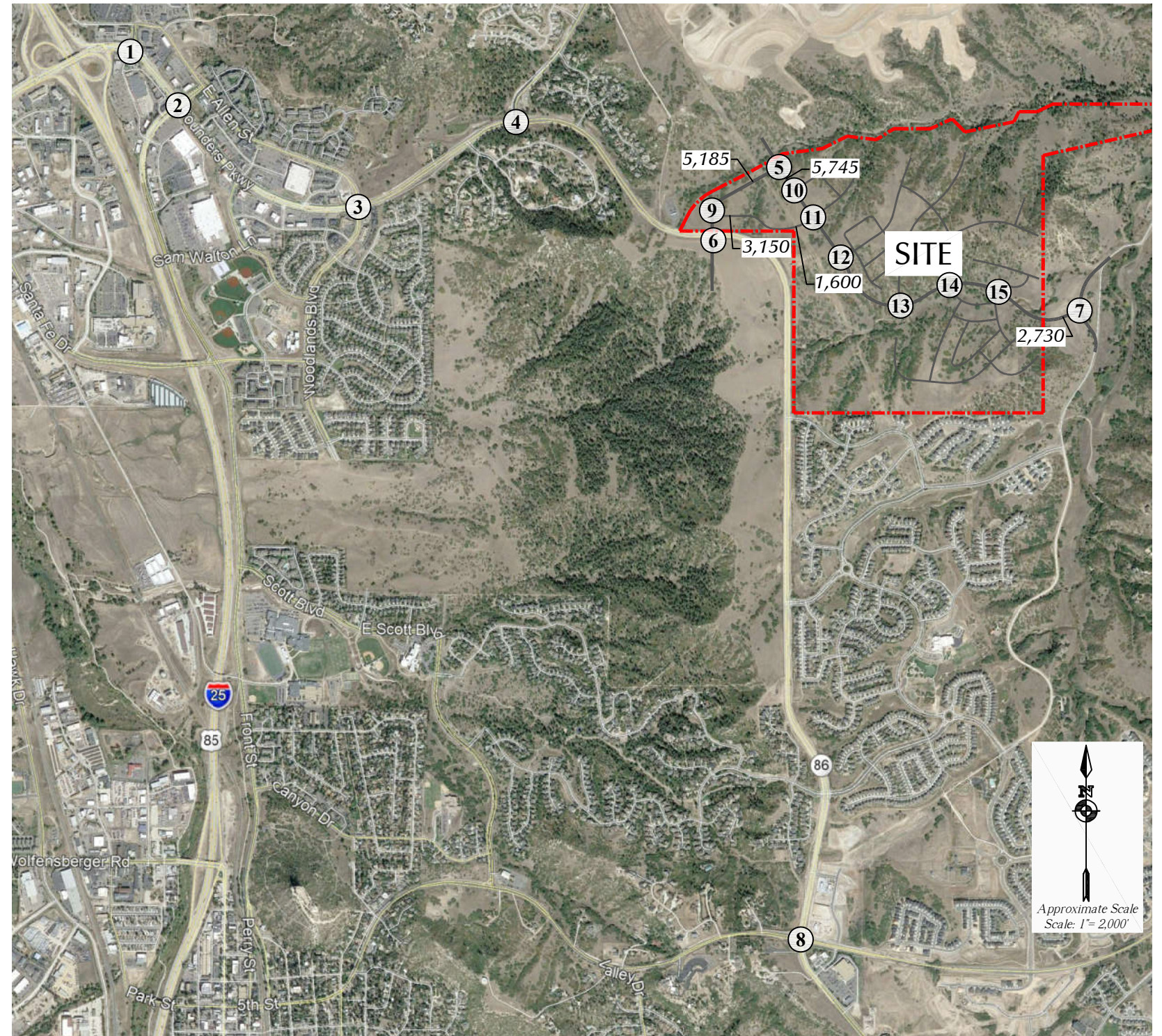
## Major Intersections - Year 2041 Total Traffic, Lane Geometry and Traffic Control

Canyons South (LSC #210310)



LEGEND:

- = Stop Sign
- = Traffic Signal
- = Modern Roundabout
- $\frac{26}{35}$  = AM Peak Hour Traffic / PM Peak Hour Traffic
- 1,000 = Average Daily Traffic



Note: These volumes are the sum of the volumes in Figure 5 and Figure 7g.

Figure 9b

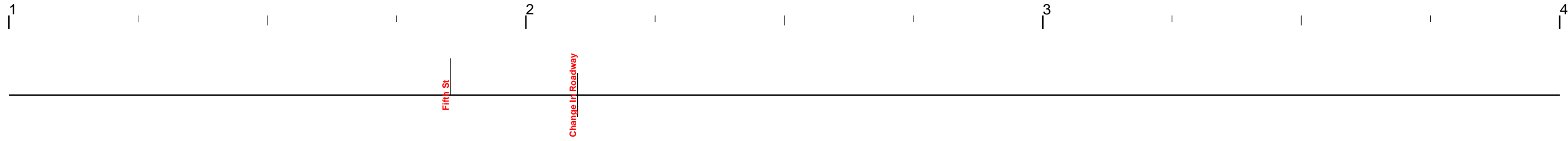
## Access/Minor Intersections - Year 2041 Total Traffic, Lane Geometry and Traffic Control

Canyons South (LSC #210310)



Route 086A  
From 1 To 4

- ◊ Ramps
- Overpass
- |- Underpass
- Structures



**CLASSIFICATION**

|                |                                   |  |
|----------------|-----------------------------------|--|
| Access Control | NR-A: Non-Rural Principal Highway |  |
|----------------|-----------------------------------|--|

**SAFETY**

|                     |    |    |
|---------------------|----|----|
| Primary Speed Limit | 45 | 55 |
|---------------------|----|----|

**TRAFFIC**

|                |       |      |
|----------------|-------|------|
| AADT           | 15000 | 9900 |
| V/C Ratio 20   | 0.97  | 0.47 |
| Year 20 Factor | 1.17  | 1.14 |

It may appear that information is missing from the straight line diagram. If so, reduce the number of miles/page and re-submit the request.

**COUNTER MEASURES INC.**

1889 YORK STREET  
DENVER.COLORADO  
303-333-7409

N/S STREET: ALLEN WAY  
E/W STREET: FOUNDERS PKWY  
CITY: CASTLE ROCK  
COUNTY: DOUGLAS

File Name : ALLEN WAY FOUNDERS PKWY 6-3-21  
Site Code : 00000022  
Start Date : 6/3/2021  
Page No : 1

Groups Printed- VEHICLES

| Start Time  | ALLEN WAY Southbound |      |       |      | FOUNDERS PKWY Westbound |      |       |      | ALLEN WAY Northbound |      |       |      | FOUNDERS PKWY Eastbound |      |       |      | Int. Total |
|-------------|----------------------|------|-------|------|-------------------------|------|-------|------|----------------------|------|-------|------|-------------------------|------|-------|------|------------|
|             | Left                 | Thru | Right | Peds | Left                    | Thru | Right | Peds | Left                 | Thru | Right | Peds | Left                    | Thru | Right | Peds |            |
| Factor      | 1.0                  | 1.0  | 1.0   | 1.0  | 1.0                     | 1.0  | 1.0   | 1.0  | 1.0                  | 1.0  | 1.0   | 1.0  | 1.0                     | 1.0  | 1.0   | 1.0  |            |
| 06:30 AM    | 15                   | 2    | 37    | 0    | 5                       | 292  | 28    | 0    | 14                   | 2    | 11    | 0    | 35                      | 131  | 18    | 0    | 590        |
| 06:45 AM    | 10                   | 3    | 47    | 0    | 11                      | 344  | 28    | 0    | 22                   | 0    | 11    | 0    | 60                      | 155  | 35    | 0    | 726        |
| Total       | 25                   | 5    | 84    | 0    | 16                      | 636  | 56    | 0    | 36                   | 2    | 22    | 0    | 95                      | 286  | 53    | 0    | 1316       |
| 07:00 AM    | 6                    | 2    | 73    | 0    | 10                      | 324  | 53    | 0    | 22                   | 7    | 14    | 0    | 37                      | 145  | 30    | 0    | 723        |
| 07:15 AM    | 13                   | 5    | 76    | 0    | 8                       | 352  | 43    | 1    | 19                   | 1    | 12    | 0    | 74                      | 167  | 20    | 0    | 791        |
| 07:30 AM    | 15                   | 3    | 72    | 0    | 3                       | 430  | 30    | 0    | 26                   | 1    | 12    | 0    | 64                      | 186  | 29    | 0    | 871        |
| 07:45 AM    | 17                   | 3    | 63    | 0    | 7                       | 402  | 26    | 0    | 20                   | 3    | 14    | 0    | 71                      | 279  | 55    | 0    | 960        |
| Total       | 51                   | 13   | 284   | 0    | 28                      | 1508 | 152   | 1    | 87                   | 12   | 52    | 0    | 246                     | 777  | 134   | 0    | 3345       |
| 08:00 AM    | 17                   | 2    | 80    | 0    | 5                       | 360  | 33    | 0    | 30                   | 5    | 12    | 1    | 64                      | 227  | 36    | 0    | 872        |
| 08:15 AM    | 11                   | 5    | 66    | 1    | 10                      | 356  | 31    | 0    | 28                   | 2    | 8     | 0    | 65                      | 233  | 30    | 0    | 846        |
| Total       | 28                   | 7    | 146   | 1    | 15                      | 716  | 64    | 0    | 58                   | 7    | 20    | 1    | 129                     | 460  | 66    | 0    | 1718       |
| 04:00 PM    | 35                   | 9    | 122   | 0    | 7                       | 399  | 45    | 1    | 39                   | 10   | 19    | 0    | 111                     | 513  | 74    | 0    | 1384       |
| 04:15 PM    | 20                   | 11   | 117   | 0    | 9                       | 449  | 37    | 0    | 43                   | 3    | 20    | 0    | 107                     | 440  | 50    | 0    | 1306       |
| 04:30 PM    | 23                   | 8    | 107   | 0    | 7                       | 363  | 34    | 0    | 40                   | 12   | 22    | 0    | 112                     | 504  | 54    | 0    | 1286       |
| 04:45 PM    | 33                   | 7    | 103   | 0    | 1                       | 458  | 31    | 0    | 35                   | 2    | 33    | 0    | 117                     | 517  | 55    | 0    | 1392       |
| Total       | 111                  | 35   | 449   | 0    | 24                      | 1669 | 147   | 1    | 157                  | 27   | 94    | 0    | 447                     | 1974 | 233   | 0    | 5368       |
| 05:00 PM    | 22                   | 13   | 137   | 0    | 14                      | 402  | 31    | 0    | 34                   | 5    | 19    | 0    | 111                     | 536  | 65    | 0    | 1389       |
| 05:15 PM    | 26                   | 7    | 108   | 0    | 17                      | 439  | 39    | 0    | 38                   | 1    | 14    | 0    | 96                      | 549  | 53    | 0    | 1387       |
| 05:30 PM    | 19                   | 7    | 121   | 0    | 10                      | 383  | 45    | 0    | 39                   | 11   | 11    | 0    | 89                      | 470  | 47    | 0    | 1252       |
| 05:45 PM    | 14                   | 13   | 114   | 0    | 8                       | 391  | 24    | 0    | 34                   | 10   | 14    | 0    | 105                     | 424  | 48    | 1    | 1200       |
| Total       | 81                   | 40   | 480   | 0    | 49                      | 1615 | 139   | 0    | 145                  | 27   | 58    | 0    | 401                     | 1979 | 213   | 1    | 5228       |
| Grand Total | 296                  | 100  | 1443  | 1    | 132                     | 6144 | 558   | 2    | 483                  | 75   | 246   | 1    | 1318                    | 5476 | 699   | 1    | 16975      |
| Apprch %    | 16.1                 | 5.4  | 78.4  | 0.1  | 1.9                     | 89.9 | 8.2   | 0.0  | 60.0                 | 9.3  | 30.6  | 0.1  | 17.6                    | 73.1 | 9.3   | 0.0  |            |
| Total %     | 1.7                  | 0.6  | 8.5   | 0.0  | 0.8                     | 36.2 | 3.3   | 0.0  | 2.8                  | 0.4  | 1.4   | 0.0  | 7.8                     | 32.3 | 4.1   | 0.0  |            |

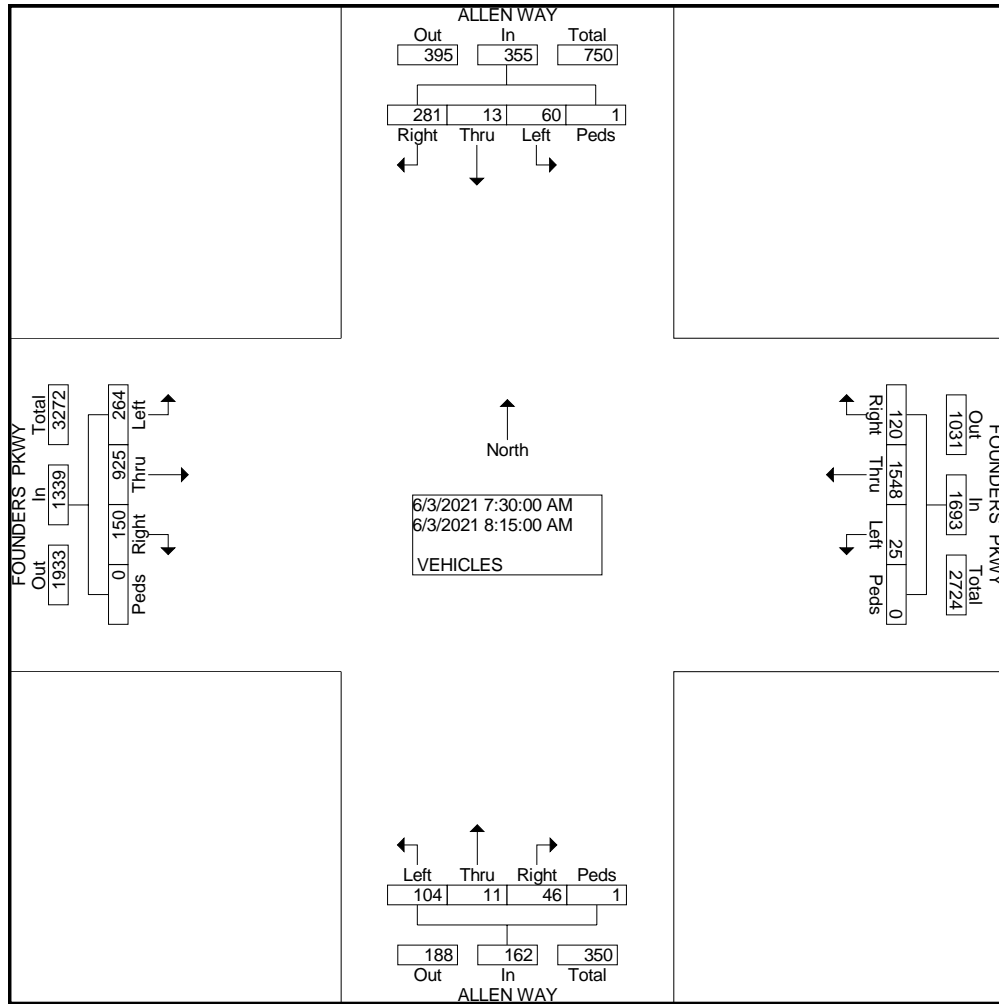
**COUNTER MEASURES INC.**

1889 YORK STREET  
DENVER.COLORADO  
303-333-7409

File Name : ALLEN WAY FOUNDERS PKWY 6-3-21  
Site Code : 00000022  
Start Date : 6/3/2021  
Page No : 2

N/S STREET: ALLEN WAY  
E/W STREET: FOUNDERS PKWY  
CITY: CASTLE ROCK  
COUNTY: DOUGLAS

| Start Time  | ALLEN WAY Southbound |      |       |      |            | FOUNDERS PKWY Westbound |      |       |      |            | ALLEN WAY Northbound |      |       |      |            | FOUNDERS PKWY Eastbound |      |       |      |            | 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 |            |
| Peak Hour From 07:30 AM to 08:15 AM - Peak 1 of 1 |                      |      |       |      |            |                         |      |       |      |            |                      |      |       |      |            |                         |      |       |      |            |            |
| Intersection                                      | 07:30 AM             |      |       |      |            |                         |      |       |      |            |                      |      |       |      |            |                         |      |       |      |            |            |
| Volume  | 60                   | 13   | 281   | 1    | 355        | 25                      | 154  | 120   | 0    | 1693       | 104                  | 11   | 46    | 1    | 162        | 264                     | 925  | 150   | 0    | 1339       | 3549       |
| Percent   | 16.9                 | 3.7  | 79.2  | 0.3  |            | 1.5                     | 91.4 | 7.1   | 0.0  |            | 64.2                 | 6.8  | 28.4  | 0.6  |            | 19.7                    | 69.1 | 11.2  | 0.0  |            |            |
| 07:45 Volume                                      | 17                   | 3    | 63    | 0    | 83         | 7                       | 402  | 26    | 0    | 435        | 20                   | 3    | 14    | 0    | 37         | 71                      | 279  | 55    | 0    | 405        | 960        |
| Peak Factor                                       |                      |      |       |      |            |                         |      |       |      |            |                      |      |       |      |            |                         |      |       |      |            |            |
| High Int. Volume                                  | 08:00 AM             |      |       |      |            | 07:30 AM                |      |       |      |            | 08:00 AM             |      |       |      |            | 07:45 AM                |      |       |      |            |            |
| Peak Factor                                       | 17                   | 2    | 80    | 0    | 99         | 3                       | 430  | 30    | 0    | 463        | 30                   | 5    | 12    | 1    | 48         | 71                      | 279  | 55    | 0    | 405        | 0.924      |
| Factor  | 0.89                 |      |       |      |            | 0.91                    |      |       |      |            | 0.84                 |      |       |      |            | 0.82                    |      |       |      |            | 7          |



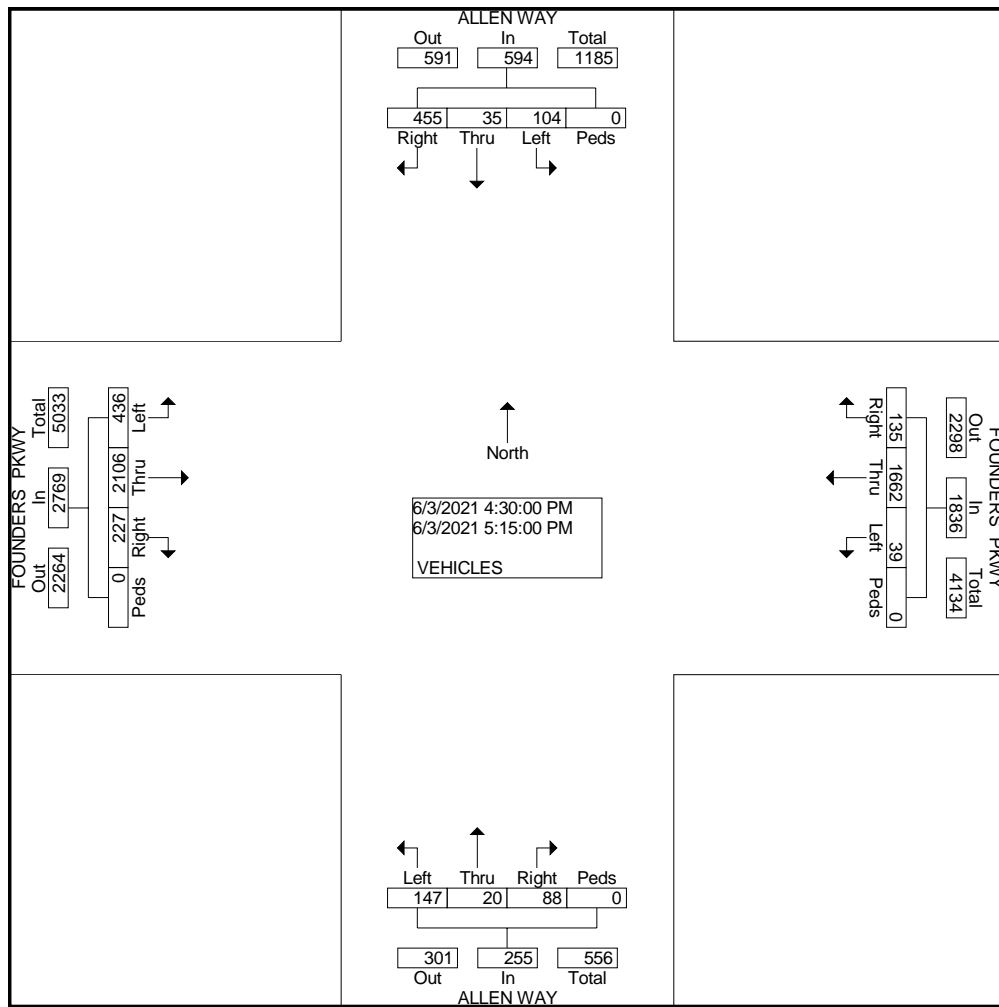
**COUNTER MEASURES INC.**

1889 YORK STREET  
DENVER, COLORADO  
303-333-7409

File Name : ALLEN WAY FOUNDERS PKWY 6-3-21  
Site Code : 00000022  
Start Date : 6/3/2021  
Page No : 2

N/S STREET: ALLEN WAY  
E/W STREET: FOUNDERS PKWY  
CITY: CASTLE ROCK  
COUNTY: DOUGLAS

| Start Time  | ALLEN WAY Southbound |      |       |      |            | FOUNDERS PKWY Westbound |      |       |      |            | ALLEN WAY Northbound |      |       |      |            | FOUNDERS PKWY Eastbound |      |       |      |            | 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 |            |
| Peak Hour From 04:30 PM to 05:15 PM - Peak 1 of 1 |                      |      |       |      |            |                         |      |       |      |            |                      |      |       |      |            |                         |      |       |      |            |            |
| Intersection                                      | 04:30 PM             |      |       |      |            |                         |      |       |      |            |                      |      |       |      |            |                         |      |       |      |            |            |
| Volume  | 104                  | 35   | 455   | 0    | 594        | 39                      | 166  | 135   | 0    | 1836       | 147                  | 20   | 88    | 0    | 255        | 436                     | 210  | 227   | 0    | 2769       | 5454       |
| Percent   | 17.5                 | 5.9  | 76.6  | 0.0  |            | 2.1                     | 90.5 | 7.4   | 0.0  |            | 57.6                 | 7.8  | 34.5  | 0.0  |            | 15.7                    | 76.1 | 8.2   | 0.0  |            |            |
| 04:45 Volume                                      | 33                   | 7    | 103   | 0    | 143        | 1                       | 458  | 31    | 0    | 490        | 35                   | 2    | 33    | 0    | 70         | 117                     | 517  | 55    | 0    | 689        | 1392       |
| Peak Factor                                       |                      |      |       |      |            |                         |      |       |      |            |                      |      |       |      |            |                         |      |       |      |            |            |
| High Int.   | 05:00 PM             |      |       |      |            | 05:15 PM                |      |       |      |            | 04:30 PM             |      |       |      |            | 05:00 PM                |      |       |      |            |            |
| Volume  | 22                   | 13   | 137   | 0    | 172        | 17                      | 439  | 39    | 0    | 495        | 40                   | 12   | 22    | 0    | 74         | 111                     | 536  | 65    | 0    | 712        | 0.980      |
| Peak Factor                                       | 0.86                 |      |       |      |            | 0.92                    |      |       |      |            | 0.86                 |      |       |      |            | 0.97                    |      |       |      |            |            |
| Factor  | 3                    |      |       |      |            | 7                       |      |       |      |            | 1                    |      |       |      |            | 2                       |      |       |      |            |            |



**COUNTER MEASURES INC.**

1889 YORK STREET  
DENVER.COLORADO  
303-333-7409

N/S STREET: FRONT STREET  
E/W STREET: FOUNDERS PARKWAY  
CITY: CASTLE ROCK  
COUNTY: DOUGLAS

File Name : FRONTFOUND  
Site Code : 00000020  
Start Date : 5/4/2021  
Page No : 1

Groups Printed- VEHICLES

| Start Time  | FRONT STREET<br>Southbound |      |       |      | FOUNDERS PARKWAY<br>Westbound |      |       |      | FRONT STREET<br>Northbound |      |       |      | FOUNDERS PARKWAY<br>Eastbound |      |       |      | Int.<br>Total |       |
|-------------|----------------------------|------|-------|------|-------------------------------|------|-------|------|----------------------------|------|-------|------|-------------------------------|------|-------|------|---------------|-------|
|             | Left                       | Thru | Right | Peds | Left                          | Thru | Right | Peds | Left                       | Thru | Right | Peds | Left                          | Thru | Right | Peds |               |       |
| Factor      | 1.0                        | 1.0  | 1.0   | 1.0  | 1.0                           | 1.0  | 1.0   | 1.0  | 1.0                        | 1.0  | 1.0   | 1.0  | 1.0                           | 1.0  | 1.0   | 1.0  | 1.0           |       |
| 06:30 AM    | 1                          | 2    | 13    | 0    | 8                             | 282  | 0     | 0    | 55                         | 3    | 4     | 0    | 7                             | 105  | 42    | 0    |               | 522   |
| 06:45 AM    | 0                          | 0    | 11    | 0    | 9                             | 339  | 0     | 0    | 62                         | 6    | 5     | 0    | 5                             | 148  | 49    | 4    |               | 638   |
| Total       | 1                          | 2    | 24    | 0    | 17                            | 621  | 0     | 0    | 117                        | 9    | 9     | 0    | 12                            | 253  | 91    | 4    |               | 1160  |
| 07:00 AM    | 0                          | 0    | 14    | 0    | 12                            | 343  | 0     | 0    | 78                         | 8    | 6     | 0    | 3                             | 126  | 44    | 0    |               | 634   |
| 07:15 AM    | 0                          | 11   | 11    | 0    | 13                            | 448  | 0     | 0    | 107                        | 12   | 5     | 0    | 10                            | 142  | 70    | 0    |               | 829   |
| 07:30 AM    | 0                          | 6    | 12    | 1    | 10                            | 458  | 1     | 0    | 106                        | 14   | 13    | 0    | 8                             | 180  | 51    | 0    |               | 860   |
| 07:45 AM    | 0                          | 6    | 10    | 0    | 11                            | 418  | 0     | 0    | 107                        | 9    | 6     | 0    | 26                            | 231  | 69    | 0    |               | 893   |
| Total       | 0                          | 23   | 47    | 1    | 46                            | 1667 | 1     | 0    | 398                        | 43   | 30    | 0    | 47                            | 679  | 234   | 0    |               | 3216  |
| 08:00 AM    | 0                          | 8    | 13    | 0    | 15                            | 345  | 0     | 0    | 91                         | 10   | 12    | 0    | 20                            | 220  | 63    | 0    |               | 797   |
| 08:15 AM    | 0                          | 9    | 17    | 0    | 8                             | 331  | 0     | 0    | 64                         | 9    | 8     | 0    | 12                            | 230  | 73    | 4    |               | 765   |
| Total       | 0                          | 17   | 30    | 0    | 23                            | 676  | 0     | 0    | 155                        | 19   | 20    | 0    | 32                            | 450  | 136   | 4    |               | 1562  |
| 04:00 PM    | 0                          | 20   | 14    | 0    | 25                            | 316  | 0     | 0    | 163                        | 30   | 38    | 0    | 41                            | 410  | 167   | 0    |               | 1224  |
| 04:15 PM    | 1                          | 18   | 12    | 1    | 37                            | 373  | 0     | 0    | 157                        | 34   | 50    | 0    | 38                            | 437  | 187   | 0    |               | 1345  |
| 04:30 PM    | 0                          | 22   | 9     | 0    | 31                            | 340  | 0     | 0    | 139                        | 20   | 44    | 0    | 33                            | 408  | 163   | 1    |               | 1210  |
| 04:45 PM    | 0                          | 17   | 15    | 1    | 33                            | 339  | 0     | 0    | 175                        | 23   | 49    | 0    | 48                            | 443  | 172   | 0    |               | 1315  |
| Total       | 1                          | 77   | 50    | 2    | 126                           | 1368 | 0     | 0    | 634                        | 107  | 181   | 0    | 160                           | 1698 | 689   | 1    |               | 5094  |
| 05:00 PM    | 0                          | 14   | 13    | 1    | 26                            | 349  | 0     | 0    | 148                        | 32   | 53    | 0    | 37                            | 453  | 164   | 0    |               | 1290  |
| 05:15 PM    | 0                          | 18   | 14    | 0    | 31                            | 317  | 0     | 0    | 143                        | 27   | 48    | 0    | 40                            | 400  | 173   | 0    |               | 1211  |
| 05:30 PM    | 0                          | 23   | 9     | 0    | 25                            | 279  | 0     | 0    | 176                        | 34   | 45    | 0    | 43                            | 514  | 169   | 0    |               | 1317  |
| 05:45 PM    | 0                          | 14   | 7     | 0    | 23                            | 306  | 0     | 0    | 126                        | 23   | 48    | 0    | 37                            | 410  | 145   | 0    |               | 1139  |
| Total       | 0                          | 69   | 43    | 1    | 105                           | 1251 | 0     | 0    | 593                        | 116  | 194   | 0    | 157                           | 1777 | 651   | 0    |               | 4957  |
| Grand Total | 2                          | 188  | 194   | 4    | 317                           | 5583 | 1     | 0    | 1897                       | 294  | 434   | 0    | 408                           | 4857 | 1801  | 9    |               | 15989 |
| Apprch %    | 0.5                        | 48.5 | 50.0  | 1.0  | 5.4                           | 94.6 | 0.0   | 0.0  | 72.3                       | 11.2 | 16.5  | 0.0  | 5.8                           | 68.7 | 25.5  | 0.1  |               |       |
| Total %     | 0.0                        | 1.2  | 1.2   | 0.0  | 2.0                           | 34.9 | 0.0   | 0.0  | 11.9                       | 1.8  | 2.7   | 0.0  | 2.6                           | 30.4 | 11.3  | 0.1  |               |       |



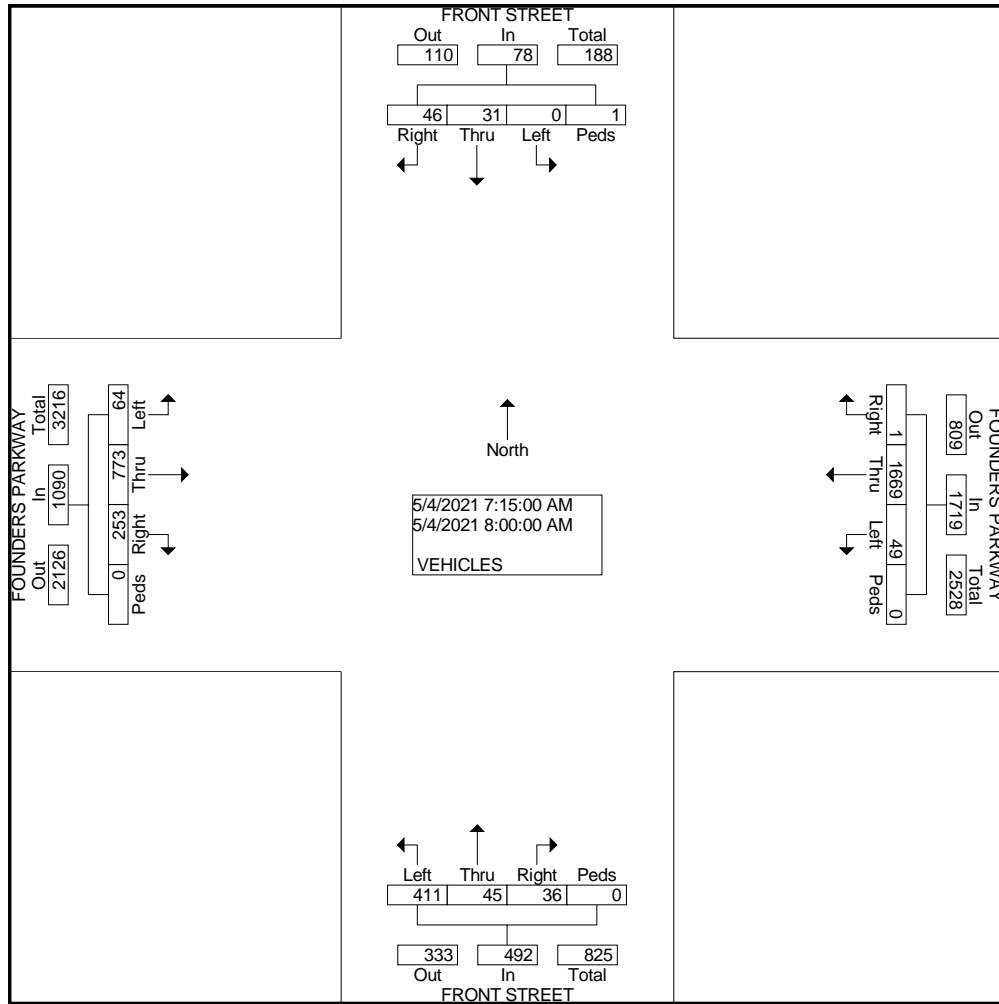
**COUNTER MEASURES INC.**

1889 YORK STREET  
DENVER, COLORADO  
303-333-7409

N/S STREET: FRONT STREET  
E/W STREET: FOUNDERS PARKWAY  
CITY: CASTLE ROCK  
COUNTY: DOUGLAS

File Name : FRONTFOUND  
Site Code : 00000020  
Start Date : 5/4/2021  
Page No : 2

| Start Time  | FRONT STREET Southbound |      |       |      |            | FOUNDERS PARKWAY Westbound |      |       |      |            | FRONT STREET Northbound |      |       |      |            | FOUNDERS PARKWAY Eastbound |      |       |      |            | 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 |            |
| Peak Hour From 06:30 AM to 08:15 AM - Peak 1 of 1 |                         |      |       |      |            |                            |      |       |      |            |                         |      |       |      |            |                            |      |       |      |            |            |
| Intersection                                      | 07:15 AM                |      |       |      |            |                            |      |       |      |            |                         |      |       |      |            |                            |      |       |      |            |            |
| Volume  | 0                       | 31   | 46    | 1    | 78         | 49                         | 1669 | 1     | 0    | 1719       | 411                     | 45   | 36    | 0    | 492        | 64                         | 773  | 253   | 0    | 1090       | 3379       |
| Percent   | 0.0                     | 39.7 | 59.0  | 1.3  |            | 2.9                        | 97.1 | 0.1   | 0.0  |            | 83.5                    | 9.1  | 7.3   | 0.0  |            | 5.9                        | 70.9 | 23.2  | 0.0  |            |            |
| 07:45 Volume Peak Factor                          | 0                       | 6    | 10    | 0    | 16         | 11                         | 418  | 0     | 0    | 429        | 107                     | 9    | 6     | 0    | 122        | 26                         | 231  | 69    | 0    | 326        | 893        |
| High Int. Volume Peak Factor                      | 07:15 AM                |      |       |      |            | 07:30 AM                   |      |       |      |            | 07:30 AM                |      |       |      |            | 07:45 AM                   |      |       |      |            | 0.946      |
|   | 0                       | 11   | 11    | 0    | 22         | 10                         | 458  | 1     | 0    | 469        | 106                     | 14   | 13    | 0    | 133        | 26                         | 231  | 69    | 0    | 326        |            |
|   | 0.88                    |      |       |      |            | 0.91                       |      |       |      |            | 0.92                    |      |       |      |            | 0.83                       |      |       |      |            |            |
|   | 6                       |      |       |      |            | 6                          |      |       |      |            | 5                       |      |       |      |            | 6                          |      |       |      |            |            |



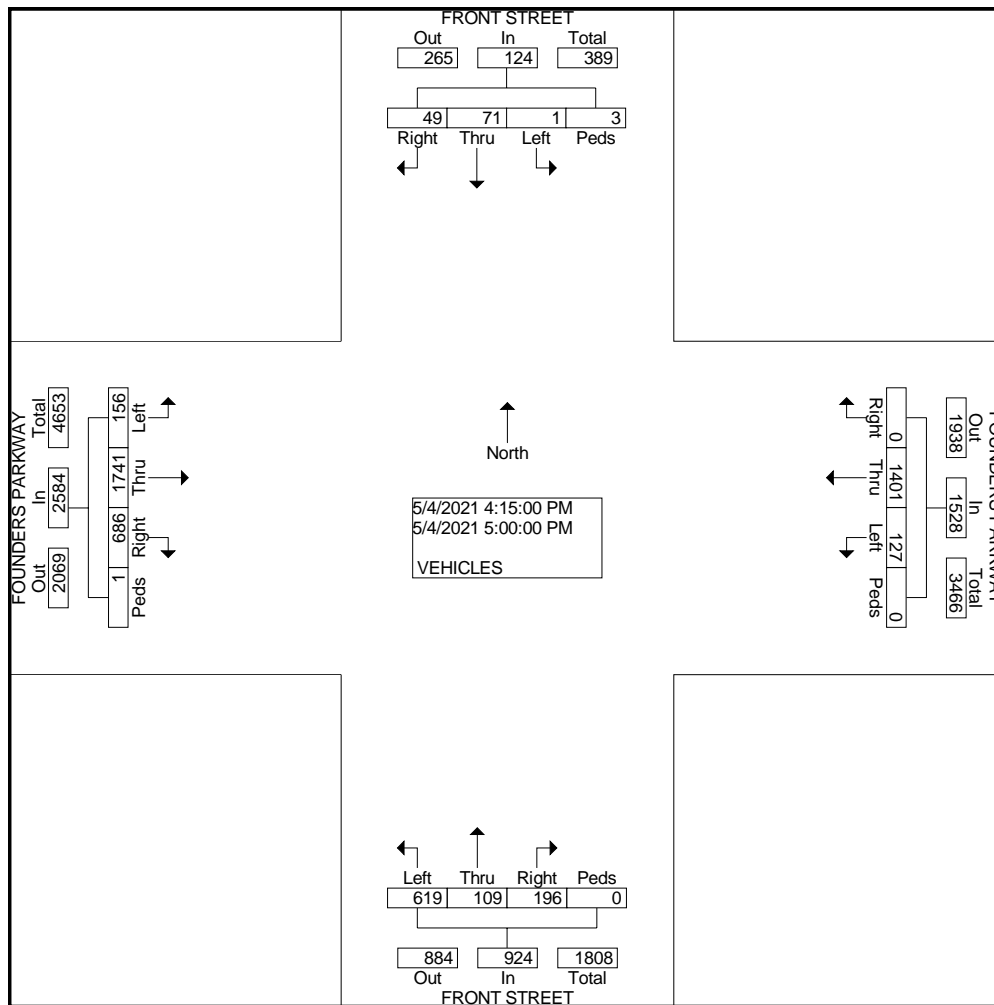
**COUNTER MEASURES INC.**

1889 YORK STREET  
DENVER, COLORADO  
303-333-7409

N/S STREET: FRONT STREET  
E/W STREET: FOUNDERS PARKWAY  
CITY: CASTLE ROCK  
COUNTY: DOUGLAS

File Name : FRONTFOUND  
Site Code : 00000020  
Start Date : 5/4/2021  
Page No : 2

| Start Time  | FRONT STREET Southbound |      |       |      |            | FOUNDERS PARKWAY Westbound |      |       |      |            | FRONT STREET Northbound |      |       |      |            | FOUNDERS PARKWAY Eastbound |      |       |      |            | 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 |            |
| Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1 |                         |      |       |      |            |                            |      |       |      |            |                         |      |       |      |            |                            |      |       |      |            |            |
| Intersection                                      | 04:15 PM                |      |       |      |            |                            |      |       |      |            |                         |      |       |      |            |                            |      |       |      |            |            |
| Volume  | 1                       | 71   | 49    | 3    | 124        | 127                        | 140  | 0     | 0    | 1528       | 619                     | 109  | 196   | 0    | 924        | 156                        | 174  | 686   | 1    | 2584       | 5160       |
| Percent   | 0.8                     | 57.3 | 39.5  | 2.4  |            | 8.3                        | 91.7 | 0.0   | 0.0  |            | 67.0                    | 11.8 | 21.2  | 0.0  |            | 6.0                        | 67.4 | 26.5  | 0.0  |            |            |
| 04:15 Volume                                      | 1                       | 18   | 12    | 1    | 32         | 37                         | 373  | 0     | 0    | 410        | 157                     | 34   | 50    | 0    | 241        | 38                         | 437  | 187   | 0    | 662        | 1345       |
| Peak Factor                                       |                         |      |       |      |            |                            |      |       |      |            |                         |      |       |      |            |                            |      |       |      |            |            |
| High Int. Volume                                  | 04:45 PM                |      |       |      |            | 04:15 PM                   |      |       |      |            | 04:45 PM                |      |       |      |            | 04:45 PM                   |      |       |      |            |            |
| Peak Factor                                       | 0                       | 17   | 15    | 1    | 33         | 37                         | 373  | 0     | 0    | 410        | 175                     | 23   | 49    | 0    | 247        | 48                         | 443  | 172   | 0    | 663        | 1345       |
| Factor  | 0.93                    |      |       |      |            | 0.93                       |      |       |      |            | 0.93                    |      |       |      |            | 0.97                       |      |       |      |            | 0.959      |
|   |                         |      |       |      |            |                            |      |       |      |            |                         |      |       |      |            |                            |      |       |      |            |            |



**COUNTER MEASURES INC.**

1889 YORK STREET  
DENVER.COLORADO  
303-333-7409

N/S STREET: CROWFOOT VALLEY ROAD  
E/W STREET: FOUNDERS PARKWAY  
CITY: CASTLE ROCK  
COUNTY: DOUGLAS

File Name : CROWFOUND  
Site Code : 00000016  
Start Date : 5/4/2021  
Page No : 1

Groups Printed- 1 - VEHICLES

|             | CROWFOOT VALLEY ROAD<br>Southbound |      |       |      | FOUNDERS PARKWAY<br>Westbound |      |       |      | Northbound |      |       |      | FOUNDERS PARKWAY<br>Eastbound |      |       |      | Int. Total |
|-------------|------------------------------------|------|-------|------|-------------------------------|------|-------|------|------------|------|-------|------|-------------------------------|------|-------|------|------------|
| Start Time  | Left                               | Thru | Right | Peds | Left                          | Thru | Right | Peds | Left       | Thru | Right | Peds | Left                          | Thru | Right | Peds |            |
| Factor      | 1.0                                | 1.0  | 1.0   | 1.0  | 1.0                           | 1.0  | 1.0   | 1.0  | 1.0        | 1.0  | 1.0   | 1.0  | 1.0                           | 1.0  | 1.0   | 1.0  |            |
| 06:30 AM    | 8                                  | 0    | 71    | 0    | 0                             | 252  | 11    | 0    | 0          | 0    | 0     | 0    | 50                            | 65   | 0     | 0    | 457        |
| 06:45 AM    | 15                                 | 0    | 122   | 0    | 0                             | 242  | 18    | 0    | 0          | 0    | 0     | 0    | 53                            | 92   | 0     | 0    | 542        |
| Total       | 23                                 | 0    | 193   | 0    | 0                             | 494  | 29    | 0    | 0          | 0    | 0     | 0    | 103                           | 157  | 0     | 0    | 999        |
| 07:00 AM    | 19                                 | 0    | 144   | 0    | 0                             | 273  | 26    | 0    | 0          | 0    | 0     | 0    | 61                            | 77   | 0     | 0    | 600        |
| 07:15 AM    | 10                                 | 0    | 187   | 0    | 0                             | 310  | 31    | 0    | 0          | 0    | 0     | 0    | 48                            | 87   | 0     | 0    | 673        |
| 07:30 AM    | 12                                 | 0    | 162   | 0    | 0                             | 389  | 46    | 0    | 0          | 0    | 0     | 0    | 91                            | 100  | 0     | 0    | 800        |
| 07:45 AM    | 23                                 | 0    | 154   | 1    | 0                             | 284  | 18    | 0    | 0          | 0    | 0     | 0    | 65                            | 121  | 0     | 0    | 666        |
| Total       | 64                                 | 0    | 647   | 1    | 0                             | 1256 | 121   | 0    | 0          | 0    | 0     | 0    | 265                           | 385  | 0     | 0    | 2739       |
| 08:00 AM    | 14                                 | 0    | 124   | 0    | 0                             | 301  | 21    | 0    | 0          | 0    | 0     | 0    | 87                            | 128  | 0     | 0    | 675        |
| 08:15 AM    | 28                                 | 0    | 108   | 0    | 0                             | 250  | 19    | 0    | 0          | 0    | 0     | 0    | 80                            | 137  | 0     | 0    | 622        |
| Total       | 42                                 | 0    | 232   | 0    | 0                             | 551  | 40    | 0    | 0          | 0    | 0     | 0    | 167                           | 265  | 0     | 0    | 1297       |
| 04:00 PM    | 22                                 | 0    | 109   | 0    | 0                             | 217  | 47    | 0    | 0          | 0    | 0     | 0    | 164                           | 286  | 0     | 0    | 845        |
| 04:15 PM    | 23                                 | 0    | 149   | 0    | 0                             | 271  | 27    | 0    | 0          | 0    | 0     | 0    | 129                           | 270  | 0     | 0    | 869        |
| 04:30 PM    | 20                                 | 1    | 130   | 0    | 0                             | 225  | 27    | 0    | 0          | 0    | 0     | 0    | 167                           | 344  | 0     | 0    | 914        |
| 04:45 PM    | 32                                 | 0    | 123   | 1    | 0                             | 226  | 25    | 0    | 0          | 0    | 0     | 0    | 137                           | 263  | 0     | 0    | 807        |
| Total       | 97                                 | 1    | 511   | 1    | 0                             | 939  | 126   | 0    | 0          | 0    | 0     | 0    | 597                           | 1163 | 0     | 0    | 3435       |
| 05:00 PM    | 16                                 | 0    | 113   | 0    | 0                             | 194  | 26    | 0    | 0          | 0    | 0     | 0    | 176                           | 350  | 0     | 0    | 875        |
| 05:15 PM    | 22                                 | 0    | 132   | 0    | 0                             | 199  | 25    | 0    | 0          | 0    | 0     | 0    | 167                           | 335  | 0     | 0    | 880        |
| 05:30 PM    | 30                                 | 0    | 119   | 0    | 0                             | 182  | 18    | 0    | 0          | 0    | 0     | 0    | 195                           | 336  | 0     | 0    | 880        |
| 05:45 PM    | 18                                 | 0    | 125   | 0    | 0                             | 191  | 21    | 0    | 0          | 0    | 0     | 0    | 132                           | 319  | 0     | 0    | 806        |
| Total       | 86                                 | 0    | 489   | 0    | 0                             | 766  | 90    | 0    | 0          | 0    | 0     | 0    | 670                           | 1340 | 0     | 0    | 3441       |
| Grand Total | 312                                | 1    | 2072  | 2    | 0                             | 4006 | 406   | 0    | 0          | 0    | 0     | 0    | 1802                          | 3310 | 0     | 0    | 11911      |
| Apprch %    | 13.1                               | 0.0  | 86.8  | 0.1  | 0.0                           | 90.8 | 9.2   | 0.0  | 0.0        | 0.0  | 0.0   | 0.0  | 35.3                          | 64.7 | 0.0   | 0.0  |            |
| Total %     | 2.6                                | 0.0  | 17.4  | 0.0  | 0.0                           | 33.6 | 3.4   | 0.0  | 0.0        | 0.0  | 0.0   | 0.0  | 15.1                          | 27.8 | 0.0   | 0.0  |            |





**COUNTER MEASURES INC.**

1889 YORK STREET  
DENVER.COLORADO  
303-333-7409

N/S STREET: CROWFOOT VALLEY ROAD  
E/W STREET: FOUNDERS PARKWAY  
CITY: CASTLE ROCK  
COUNTY: DOUGLAS

File Name : CROWFOUND  
Site Code : 00000016  
Start Date : 5/4/2021  
Page No : 1

Groups Printed- VEHICLES

| Start Time  | CROWFOOT VALLEY ROAD<br>Southbound |      |       |      | FOUNDERS PARKWAY<br>Westbound |      |       |      | Northbound |      |       |      | FOUNDERS PARKWAY<br>Eastbound |      |       |      | Int. Total |
|-------------|------------------------------------|------|-------|------|-------------------------------|------|-------|------|------------|------|-------|------|-------------------------------|------|-------|------|------------|
|             | Left                               | Thru | Right | Peds | Left                          | Thru | Right | Peds | Left       | Thru | Right | Peds | Left                          | Thru | Right | Peds |            |
| Factor      | 1.0                                | 1.0  | 1.0   | 1.0  | 1.0                           | 1.0  | 1.0   | 1.0  | 1.0        | 1.0  | 1.0   | 1.0  | 1.0                           | 1.0  | 1.0   | 1.0  |            |
| 06:30 AM    | 8                                  | 0    | 71    | 0    | 0                             | 252  | 11    | 0    | 0          | 0    | 0     | 0    | 50                            | 65   | 0     | 0    | 457        |
| 06:45 AM    | 15                                 | 0    | 122   | 0    | 0                             | 242  | 18    | 0    | 0          | 0    | 0     | 0    | 53                            | 92   | 0     | 0    | 542        |
| Total       | 23                                 | 0    | 193   | 0    | 0                             | 494  | 29    | 0    | 0          | 0    | 0     | 0    | 103                           | 157  | 0     | 0    | 999        |
| 07:00 AM    | 19                                 | 0    | 144   | 0    | 0                             | 273  | 26    | 0    | 0          | 0    | 0     | 0    | 61                            | 77   | 0     | 0    | 600        |
| 07:15 AM    | 10                                 | 0    | 187   | 0    | 0                             | 310  | 31    | 0    | 0          | 0    | 0     | 0    | 48                            | 87   | 0     | 0    | 673        |
| 07:30 AM    | 12                                 | 0    | 162   | 0    | 0                             | 389  | 46    | 0    | 0          | 0    | 0     | 0    | 91                            | 100  | 0     | 0    | 800        |
| 07:45 AM    | 23                                 | 0    | 154   | 1    | 0                             | 284  | 18    | 0    | 0          | 0    | 0     | 0    | 65                            | 121  | 0     | 0    | 666        |
| Total       | 64                                 | 0    | 647   | 1    | 0                             | 1256 | 121   | 0    | 0          | 0    | 0     | 0    | 265                           | 385  | 0     | 0    | 2739       |
| 08:00 AM    | 14                                 | 0    | 124   | 0    | 0                             | 301  | 21    | 0    | 0          | 0    | 0     | 0    | 87                            | 128  | 0     | 0    | 675        |
| 08:15 AM    | 28                                 | 0    | 108   | 0    | 0                             | 250  | 19    | 0    | 0          | 0    | 0     | 0    | 80                            | 137  | 0     | 0    | 622        |
| Total       | 42                                 | 0    | 232   | 0    | 0                             | 551  | 40    | 0    | 0          | 0    | 0     | 0    | 167                           | 265  | 0     | 0    | 1297       |
| 04:00 PM    | 22                                 | 0    | 109   | 0    | 0                             | 217  | 47    | 0    | 0          | 0    | 0     | 0    | 164                           | 286  | 0     | 0    | 845        |
| 04:15 PM    | 23                                 | 0    | 149   | 0    | 0                             | 271  | 27    | 0    | 0          | 0    | 0     | 0    | 129                           | 270  | 0     | 0    | 869        |
| 04:30 PM    | 20                                 | 1    | 130   | 0    | 0                             | 225  | 27    | 0    | 0          | 0    | 0     | 0    | 167                           | 344  | 0     | 0    | 914        |
| 04:45 PM    | 32                                 | 0    | 123   | 1    | 0                             | 226  | 25    | 0    | 0          | 0    | 0     | 0    | 137                           | 263  | 0     | 0    | 807        |
| Total       | 97                                 | 1    | 511   | 1    | 0                             | 939  | 126   | 0    | 0          | 0    | 0     | 0    | 597                           | 1163 | 0     | 0    | 3435       |
| 05:00 PM    | 16                                 | 0    | 113   | 0    | 0                             | 194  | 26    | 0    | 0          | 0    | 0     | 0    | 176                           | 350  | 0     | 0    | 875        |
| 05:15 PM    | 22                                 | 0    | 132   | 0    | 0                             | 199  | 25    | 0    | 0          | 0    | 0     | 0    | 167                           | 335  | 0     | 0    | 880        |
| 05:30 PM    | 30                                 | 0    | 119   | 0    | 0                             | 182  | 18    | 0    | 0          | 0    | 0     | 0    | 195                           | 336  | 0     | 0    | 880        |
| 05:45 PM    | 18                                 | 0    | 125   | 0    | 0                             | 191  | 21    | 0    | 0          | 0    | 0     | 0    | 132                           | 319  | 0     | 0    | 806        |
| Total       | 86                                 | 0    | 489   | 0    | 0                             | 766  | 90    | 0    | 0          | 0    | 0     | 0    | 670                           | 1340 | 0     | 0    | 3441       |
| Grand Total | 312                                | 1    | 2072  | 2    | 0                             | 4006 | 406   | 0    | 0          | 0    | 0     | 0    | 1802                          | 3310 | 0     | 0    | 11911      |
| Apprch %    | 13.1                               | 0.0  | 86.8  | 0.1  | 0.0                           | 90.8 | 9.2   | 0.0  | 0.0        | 0.0  | 0.0   | 0.0  | 35.3                          | 64.7 | 0.0   | 0.0  |            |
| Total %     | 2.6                                | 0.0  | 17.4  | 0.0  | 0.0                           | 33.6 | 3.4   | 0.0  | 0.0        | 0.0  | 0.0   | 0.0  | 15.1                          | 27.8 | 0.0   | 0.0  |            |

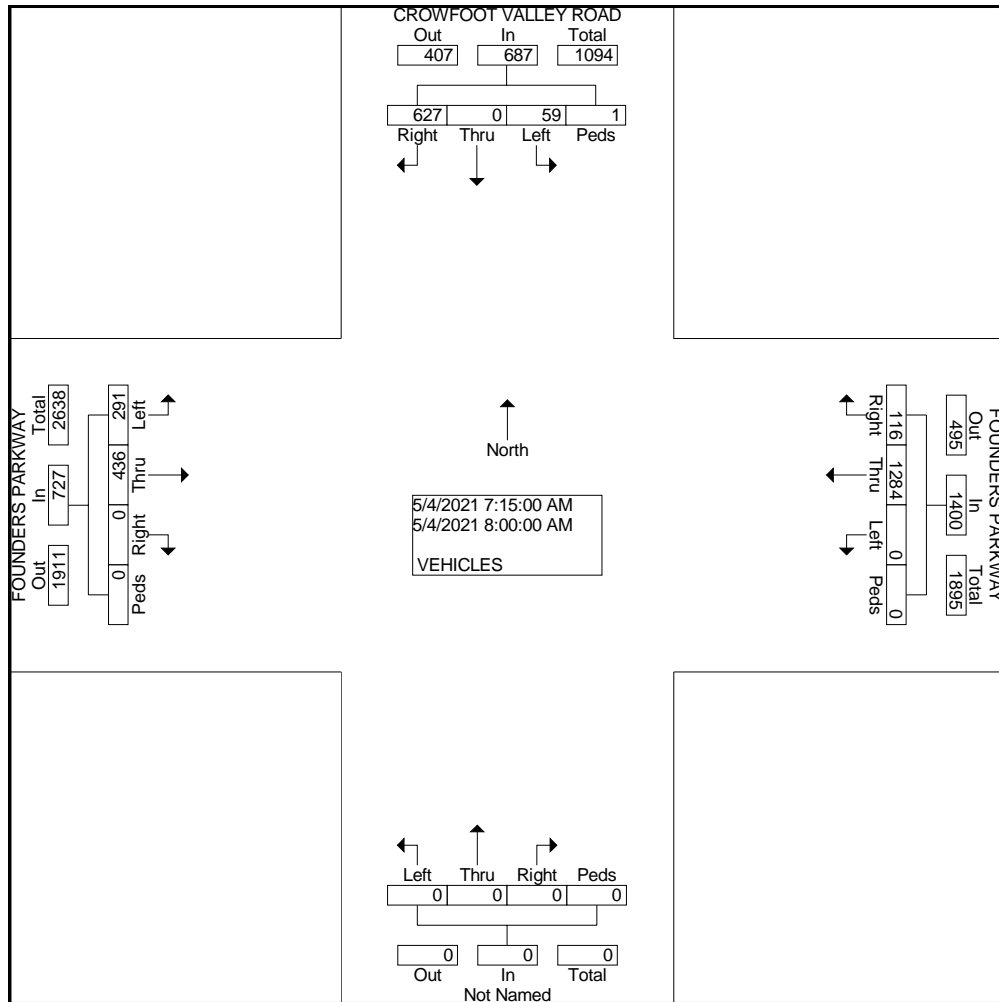
**COUNTER MEASURES INC.**

1889 YORK STREET  
DENVER, COLORADO  
303-333-7409

N/S STREET: CROWFOOT VALLEY ROAD  
E/W STREET: FOUNDERS PARKWAY  
CITY: CASTLE ROCK  
COUNTY: DOUGLAS

File Name : CROWFOUND  
Site Code : 00000016  
Start Date : 5/4/2021  
Page No : 2

| Start Time  | CROWFOOT VALLEY ROAD Southbound |      |       |      |            | FOUNDERS PARKWAY Westbound |      |       |      |            | Northbound |      |       |      |            | FOUNDERS PARKWAY Eastbound |      |       |      |            | 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 |            |
| Peak Hour From 07:15 AM to 08:00 AM - Peak 1 of 1 |                                 |      |       |      |            |                            |      |       |      |            |            |      |       |      |            |                            |      |       |      |            |            |
| Intersection                                      | 07:15 AM                        |      |       |      |            |                            |      |       |      |            |            |      |       |      |            |                            |      |       |      |            |            |
| Volume  | 59                              | 0    | 627   | 1    | 687        | 0                          | 1284 | 116   | 0    | 1400       | 0          | 0    | 0     | 0    | 0          | 291                        | 436  | 0     | 0    | 727        | 2814       |
| Percent   | 8.6                             | 0.0  | 91.3  | 0.1  |            | 0.0                        | 91.7 | 8.3   | 0.0  |            | 0.0        | 0.0  | 0.0   | 0.0  |            | 40.0                       | 60.0 | 0.0   | 0.0  |            |            |
| 07:30 Volume                                      | 12                              | 0    | 162   | 0    | 174        | 0                          | 389  | 46    | 0    | 435        | 0          | 0    | 0     | 0    | 0          | 91                         | 100  | 0     | 0    | 191        | 800        |
| Peak Factor                                       |                                 |      |       |      |            |                            |      |       |      |            |            |      |       |      |            |                            |      |       |      |            |            |
| High Int. Volume                                  | 07:15 AM                        |      |       |      |            | 07:30 AM                   |      |       |      |            | 08:00 AM   |      |       |      |            |                            |      |       |      |            |            |
| Peak Factor                                       | 10                              | 0    | 187   | 0    | 197        | 0                          | 389  | 46    | 0    | 435        | 0          | 0    | 0     | 0    | 0          | 87                         | 128  | 0     | 0    | 215        | 800        |
|   |                                 |      |       |      |            | 0.872                      |      |       |      |            |            |      |       |      |            | 0.845                      |      |       |      |            |            |







**COUNTER MEASURES INC.**

1889 YORK STREET  
DENVER, COLORADO  
303-333-7409

N/S STREET: ALLEN STREET  
E/W STREET: FOUNDERS PARKWAY  
CITY: CASTLE ROCK  
COUNTY: DOUGLAS

File Name : ALLENSTFOUND  
Site Code : 00000016  
Start Date : 4/29/2021  
Page No : 1

Groups Printed- VEHICLES

| Start Time  | ALLEN STREET<br>Southbound |      |       |      | FOUNDERS PARKWAY<br>Westbound |      |       |      | ALLEN STREET<br>Northbound |      |       |      | FOUNDERS PARKWAY<br>Eastbound |      |       |      | Int.<br>Total |
|-------------|----------------------------|------|-------|------|-------------------------------|------|-------|------|----------------------------|------|-------|------|-------------------------------|------|-------|------|---------------|
|             | Left                       | Thru | Right | Peds | Left                          | Thru | Right | Peds | Left                       | Thru | Right | Peds | Left                          | Thru | Right | Peds |               |
| Factor      | 1.0                        | 1.0  | 1.0   | 1.0  | 1.0                           | 1.0  | 1.0   | 1.0  | 1.0                        | 1.0  | 1.0   | 1.0  | 1.0                           | 1.0  | 1.0   | 1.0  |               |
| 06:30 AM    | 7                          | 1    | 1     | 0    | 17                            | 261  | 8     | 0    | 12                         | 1    | 19    | 0    | 1                             | 112  | 2     | 0    | 442           |
| 06:45 AM    | 13                         | 1    | 2     | 0    | 43                            | 339  | 19    | 0    | 11                         | 1    | 20    | 0    | 0                             | 106  | 4     | 0    | 559           |
| Total       | 20                         | 2    | 3     | 0    | 60                            | 600  | 27    | 0    | 23                         | 2    | 39    | 0    | 1                             | 218  | 6     | 0    | 1001          |
| 07:00 AM    | 8                          | 1    | 0     | 0    | 49                            | 311  | 15    | 0    | 13                         | 5    | 23    | 0    | 0                             | 124  | 6     | 0    | 555           |
| 07:15 AM    | 10                         | 0    | 0     | 0    | 91                            | 442  | 25    | 0    | 16                         | 1    | 23    | 0    | 1                             | 134  | 3     | 0    | 746           |
| 07:30 AM    | 5                          | 5    | 2     | 0    | 36                            | 434  | 22    | 0    | 23                         | 5    | 38    | 0    | 1                             | 165  | 5     | 0    | 741           |
| 07:45 AM    | 7                          | 4    | 0     | 0    | 64                            | 432  | 27    | 0    | 14                         | 5    | 19    | 0    | 3                             | 176  | 16    | 0    | 767           |
| Total       | 30                         | 10   | 2     | 0    | 240                           | 1619 | 89    | 0    | 66                         | 16   | 103   | 0    | 5                             | 599  | 30    | 0    | 2809          |
| 08:00 AM    | 15                         | 5    | 0     | 0    | 53                            | 299  | 13    | 0    | 24                         | 4    | 25    | 2    | 1                             | 184  | 22    | 0    | 647           |
| 08:15 AM    | 8                          | 7    | 1     | 0    | 71                            | 321  | 24    | 0    | 13                         | 3    | 41    | 0    | 1                             | 195  | 20    | 1    | 706           |
| Total       | 23                         | 12   | 1     | 0    | 124                           | 620  | 37    | 0    | 37                         | 7    | 66    | 2    | 2                             | 379  | 42    | 1    | 1353          |
| 04:00 PM    | 46                         | 15   | 2     | 0    | 43                            | 284  | 19    | 0    | 22                         | 9    | 100   | 2    | 4                             | 386  | 15    | 0    | 947           |
| 04:15 PM    | 45                         | 7    | 2     | 0    | 57                            | 330  | 23    | 0    | 16                         | 8    | 38    | 3    | 0                             | 371  | 5     | 2    | 907           |
| 04:30 PM    | 43                         | 12   | 0     | 0    | 43                            | 319  | 21    | 0    | 24                         | 12   | 90    | 0    | 3                             | 362  | 11    | 0    | 940           |
| 04:45 PM    | 28                         | 10   | 0     | 0    | 54                            | 302  | 20    | 0    | 21                         | 9    | 61    | 0    | 4                             | 363  | 26    | 0    | 898           |
| Total       | 162                        | 44   | 4     | 0    | 197                           | 1235 | 83    | 0    | 83                         | 38   | 289   | 5    | 11                            | 1482 | 57    | 2    | 3692          |
| 05:00 PM    | 55                         | 17   | 2     | 0    | 48                            | 268  | 26    | 1    | 21                         | 13   | 61    | 2    | 1                             | 372  | 10    | 0    | 897           |
| 05:15 PM    | 46                         | 18   | 0     | 0    | 38                            | 356  | 23    | 0    | 27                         | 13   | 51    | 0    | 2                             | 367  | 16    | 0    | 957           |
| 05:30 PM    | 36                         | 16   | 1     | 0    | 42                            | 279  | 27    | 0    | 19                         | 10   | 57    | 0    | 2                             | 337  | 27    | 0    | 853           |
| 05:45 PM    | 24                         | 7    | 0     | 0    | 44                            | 248  | 23    | 0    | 8                          | 4    | 38    | 0    | 3                             | 367  | 26    | 0    | 792           |
| Total       | 161                        | 58   | 3     | 0    | 172                           | 1151 | 99    | 1    | 75                         | 40   | 207   | 2    | 8                             | 1443 | 79    | 0    | 3499          |
| Grand Total | 396                        | 126  | 13    | 0    | 793                           | 5225 | 335   | 1    | 284                        | 103  | 704   | 9    | 27                            | 4121 | 214   | 3    | 12354         |
| Apprch %    | 74.0                       | 23.6 | 2.4   | 0.0  | 12.5                          | 82.2 | 5.3   | 0.0  | 25.8                       | 9.4  | 64.0  | 0.8  | 0.6                           | 94.4 | 4.9   | 0.1  |               |
| Total %     | 3.2                        | 1.0  | 0.1   | 0.0  | 6.4                           | 42.3 | 2.7   | 0.0  | 2.3                        | 0.8  | 5.7   | 0.1  | 0.2                           | 33.4 | 1.7   | 0.0  |               |

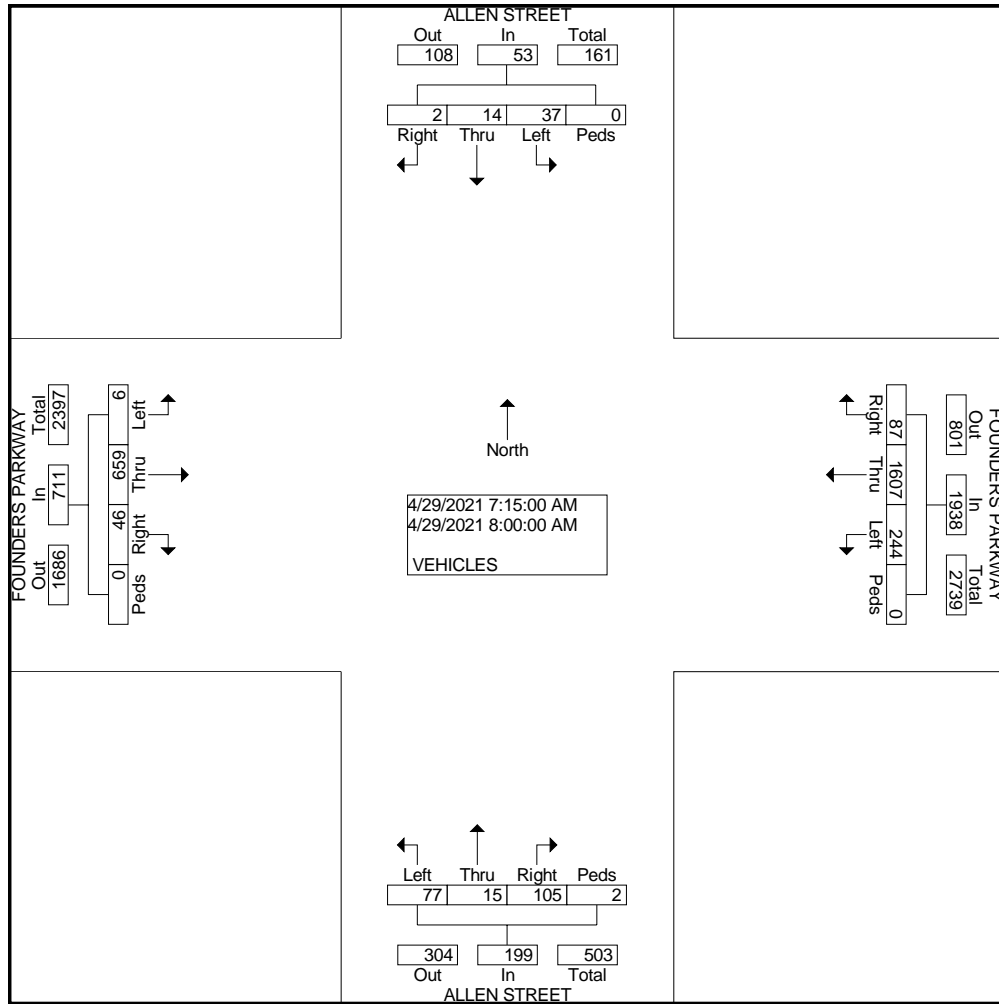
### COUNTER MEASURES INC.

1889 YORK STREET  
DENVER, COLORADO  
303-333-7409

N/S STREET: ALLEN STREET  
E/W STREET: FOUNDERS PARKWAY  
CITY: CASTLE ROCK  
COUNTY: DOUGLAS

File Name : ALLENSTFOUND  
Site Code : 00000016  
Start Date : 4/29/2021  
Page No : 2

| Start Time  | ALLEN STREET Southbound |      |       |      |            | FOUNDERS PARKWAY Westbound |      |       |      |            | ALLEN STREET Northbound |      |       |      |            | FOUNDERS PARKWAY Eastbound |      |       |      |            | 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 |            |
| Peak Hour From 07:15 AM to 08:00 AM - Peak 1 of 1 |                         |      |       |      |            |                            |      |       |      |            |                         |      |       |      |            |                            |      |       |      |            |            |
| Intersection                                      | 07:15 AM                |      |       |      |            |                            |      |       |      |            |                         |      |       |      |            |                            |      |       |      |            |            |
| Volume  | 37                      | 14   | 2     | 0    | 53         | 244                        | 160  | 87    | 0    | 1938       | 77                      | 15   | 105   | 2    | 199        | 6                          | 659  | 46    | 0    | 711        | 2901       |
| Percent   | 69.8                    | 26.4 | 3.8   | 0.0  |            | 12.6                       | 82.9 | 4.5   | 0.0  |            | 38.7                    | 7.5  | 52.8  | 1.0  |            | 0.8                        | 92.7 | 6.5   | 0.0  |            |            |
| 07:45 Volume                                      | 7                       | 4    | 0     | 0    | 11         | 64                         | 432  | 27    | 0    | 523        | 14                      | 5    | 19    | 0    | 38         | 3                          | 176  | 16    | 0    | 195        | 767        |
| Peak Factor                                       | 0.946                   |      |       |      |            |                            |      |       |      |            |                         |      |       |      |            |                            |      |       |      |            |            |
| High Int. Volume                                  | 08:00 AM                |      |       |      |            | 07:15 AM                   |      |       |      |            | 07:30 AM                |      |       |      |            | 08:00 AM                   |      |       |      |            |            |
| Peak Factor                                       | 15                      | 5    | 0     | 0    | 20         | 91                         | 442  | 25    | 0    | 558        | 23                      | 5    | 38    | 0    | 66         | 1                          | 184  | 22    | 0    | 207        |            |
|   | 0.66                    |      |       |      |            | 0.86                       |      |       |      |            | 0.75                    |      |       |      |            | 0.85                       |      |       |      |            |            |
|   | 3                       |      |       |      |            | 8                          |      |       |      |            | 4                       |      |       |      |            | 9                          |      |       |      |            |            |



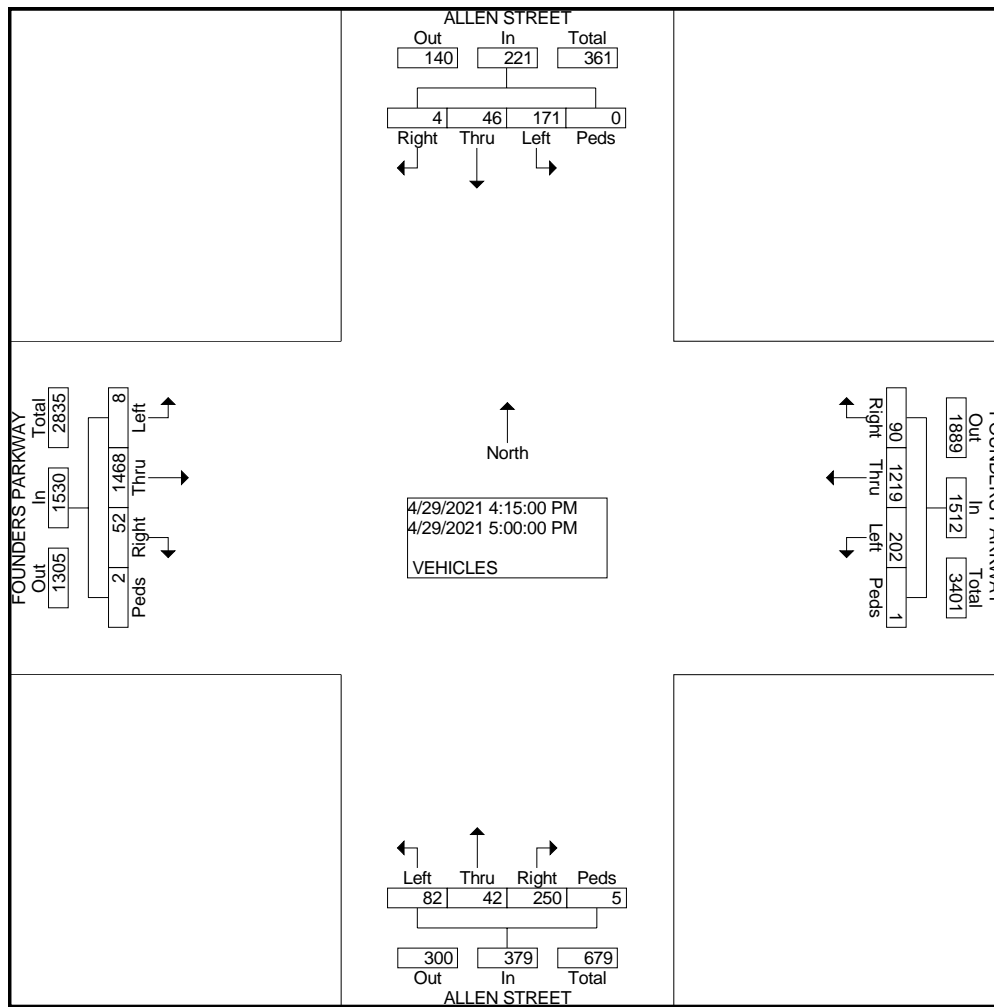
**COUNTER MEASURES INC.**

1889 YORK STREET  
DENVER, COLORADO  
303-333-7409

N/S STREET: ALLEN STREET  
E/W STREET: FOUNDERS PARKWAY  
CITY: CASTLE ROCK  
COUNTY: DOUGLAS

File Name : ALLENSTFOUND  
Site Code : 00000016  
Start Date : 4/29/2021  
Page No : 2

| Start Time  | ALLEN STREET Southbound |      |       |      |            | FOUNDERS PARKWAY Westbound |          |       |      |            | ALLEN STREET Northbound |      |          |      |            | FOUNDERS PARKWAY Eastbound |      |       |          |            | 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 |            |  |  |  |       |
| Peak Hour From 04:15 PM to 05:00 PM - Peak 1 of 1 |                         |      |       |      |            |                            |          |       |      |            |                         |      |          |      |            |                            |      |       |          |            |            |  |  |  |       |
| Intersection                                      | 04:15 PM                |      |       |      |            |                            |          |       |      |            |                         |      |          |      |            |                            |      |       |          |            |            |  |  |  |       |
| Volume  | 171                     | 46   | 4     | 0    | 221        | 202                        | 1219     | 90    | 1    | 1512       | 82                      | 42   | 250      | 5    | 379        | 8                          | 1468 | 52    | 2        | 1530       | 3642       |  |  |  |       |
| Percent   | 77.4                    | 20.8 | 1.8   | 0.0  |            | 13.4                       | 80.6     | 6.0   | 0.1  |            | 21.6                    | 11.1 | 66.0     | 1.3  |            | 0.5                        | 95.9 | 3.4   | 0.1      |            |            |  |  |  |       |
| 04:30 Volume Peak Factor                          | 43                      | 12   | 0     | 0    | 55         | 43                         | 319      | 21    | 0    | 383        | 24                      | 12   | 90       | 0    | 126        | 3                          | 362  | 11    | 0        | 376        | 940        |  |  |  |       |
| High Int. Volume Peak Factor                      | 05:00 PM                |      |       |      |            |                            | 04:15 PM |       |      |            |                         |      | 04:30 PM |      |            |                            |      |       | 04:45 PM |            |            |  |  |  | 0.969 |
| Volume  | 55                      | 17   | 2     | 0    | 74         | 57                         | 330      | 23    | 0    | 410        | 24                      | 12   | 90       | 0    | 126        | 4                          | 363  | 26    | 0        | 393        |            |  |  |  |       |
| Peak Factor                                       |                         |      |       |      | 0.74       |                            |          |       |      | 0.92       |                         |      |          |      | 0.75       |                            |      |       |          | 0.97       |            |  |  |  |       |
|   |                         |      |       |      | 7          |                            |          |       |      | 2          |                         |      |          |      | 2          |                            |      |       |          | 3          |            |  |  |  |       |



**COUNTER MEASURES INC.**

1889 YORK STREET  
DENVER.COLORADO  
303-333-7409

N/S STREET:FOUNDERS PARKWAY  
E/W STREET: 5TH ST/STATE ROAD 86  
CITY: CASTLE ROCK  
COUNTY: DOUGLAS

File Name : FOUNDRS86  
Site Code : 00000017  
Start Date : 4/27/2021  
Page No : 1

Groups Printed- VEHICLES

| Start Time  | FOUNDERS PARKWAY<br>Southbound |      |       |      | STATE ROAD 86<br>Westbound |      |       |      | RIDGE ROAD<br>Northbound |      |       |      | 5TH STREET<br>Eastbound |      |       |      | Int.<br>Total |
|-------------|--------------------------------|------|-------|------|----------------------------|------|-------|------|--------------------------|------|-------|------|-------------------------|------|-------|------|---------------|
|             | Left                           | Thru | Right | Peds | Left                       | Thru | Right | Peds | Left                     | Thru | Right | Peds | Left                    | Thru | Right | Peds |               |
| Factor      | 1.0                            | 1.0  | 1.0   | 1.0  | 1.0                        | 1.0  | 1.0   | 1.0  | 1.0                      | 1.0  | 1.0   | 1.0  | 1.0                     | 1.0  | 1.0   | 1.0  | 1.0           |
| 06:30 AM    | 41                             | 19   | 14    | 0    | 12                         | 75   | 107   | 0    | 37                       | 59   | 8     | 0    | 10                      | 24   | 22    | 0    | 428           |
| 06:45 AM    | 59                             | 17   | 18    | 0    | 11                         | 70   | 103   | 0    | 46                       | 68   | 7     | 0    | 14                      | 51   | 10    | 0    | 474           |
| Total       | 100                            | 36   | 32    | 0    | 23                         | 145  | 210   | 0    | 83                       | 127  | 15    | 0    | 24                      | 75   | 32    | 0    | 902           |
| 07:00 AM    | 75                             | 19   | 31    | 0    | 13                         | 86   | 100   | 0    | 81                       | 95   | 4     | 0    | 12                      | 37   | 21    | 0    | 574           |
| 07:15 AM    | 52                             | 37   | 39    | 0    | 22                         | 118  | 147   | 0    | 132                      | 95   | 9     | 0    | 15                      | 52   | 35    | 0    | 753           |
| 07:30 AM    | 60                             | 30   | 41    | 0    | 13                         | 109  | 167   | 0    | 87                       | 103  | 10    | 0    | 19                      | 49   | 51    | 0    | 739           |
| 07:45 AM    | 49                             | 30   | 22    | 0    | 24                         | 93   | 124   | 0    | 79                       | 81   | 13    | 0    | 17                      | 53   | 38    | 0    | 623           |
| Total       | 236                            | 116  | 133   | 0    | 72                         | 406  | 538   | 0    | 379                      | 374  | 36    | 0    | 63                      | 191  | 145   | 0    | 2689          |
| 08:00 AM    | 48                             | 46   | 20    | 0    | 22                         | 59   | 130   | 0    | 38                       | 81   | 15    | 0    | 15                      | 54   | 33    | 0    | 561           |
| 08:15 AM    | 49                             | 29   | 24    | 0    | 19                         | 77   | 129   | 0    | 58                       | 84   | 12    | 0    | 19                      | 42   | 28    | 0    | 570           |
| Total       | 97                             | 75   | 44    | 0    | 41                         | 136  | 259   | 0    | 96                       | 165  | 27    | 0    | 34                      | 96   | 61    | 0    | 1131          |
| 04:00 PM    | 123                            | 98   | 30    | 0    | 18                         | 62   | 98    | 0    | 39                       | 68   | 4     | 0    | 32                      | 89   | 76    | 0    | 737           |
| 04:15 PM    | 122                            | 108  | 17    | 0    | 32                         | 63   | 87    | 0    | 53                       | 85   | 15    | 0    | 35                      | 88   | 66    | 0    | 771           |
| 04:30 PM    | 116                            | 92   | 22    | 0    | 30                         | 56   | 88    | 0    | 44                       | 74   | 13    | 0    | 28                      | 91   | 86    | 0    | 740           |
| 04:45 PM    | 148                            | 121  | 22    | 0    | 22                         | 56   | 84    | 0    | 40                       | 69   | 14    | 0    | 36                      | 93   | 116   | 0    | 821           |
| Total       | 509                            | 419  | 91    | 0    | 102                        | 237  | 357   | 0    | 176                      | 296  | 46    | 0    | 131                     | 361  | 344   | 0    | 3069          |
| 05:00 PM    | 119                            | 87   | 18    | 0    | 17                         | 52   | 78    | 0    | 53                       | 66   | 14    | 0    | 31                      | 90   | 79    | 1    | 705           |
| 05:15 PM    | 114                            | 105  | 15    | 4    | 34                         | 62   | 60    | 0    | 49                       | 80   | 10    | 0    | 33                      | 89   | 97    | 0    | 752           |
| 05:30 PM    | 138                            | 93   | 11    | 0    | 19                         | 57   | 76    | 0    | 33                       | 69   | 16    | 0    | 25                      | 89   | 82    | 0    | 708           |
| 05:45 PM    | 96                             | 76   | 23    | 0    | 31                         | 57   | 56    | 0    | 38                       | 56   | 6     | 0    | 37                      | 79   | 62    | 0    | 617           |
| Total       | 467                            | 361  | 67    | 4    | 101                        | 228  | 270   | 0    | 173                      | 271  | 46    | 0    | 126                     | 347  | 320   | 1    | 2782          |
| Grand Total | 1409                           | 1007 | 367   | 4    | 339                        | 1152 | 1634  | 0    | 907                      | 1233 | 170   | 0    | 378                     | 1070 | 902   | 1    | 10573         |
| Apprch %    | 50.6                           | 36.1 | 13.2  | 0.1  | 10.8                       | 36.9 | 52.3  | 0.0  | 39.3                     | 53.4 | 7.4   | 0.0  | 16.1                    | 45.5 | 38.4  | 0.0  |               |
| Total %     | 13.3                           | 9.5  | 3.5   | 0.0  | 3.2                        | 10.9 | 15.5  | 0.0  | 8.6                      | 11.7 | 1.6   | 0.0  | 3.6                     | 10.1 | 8.5   | 0.0  |               |

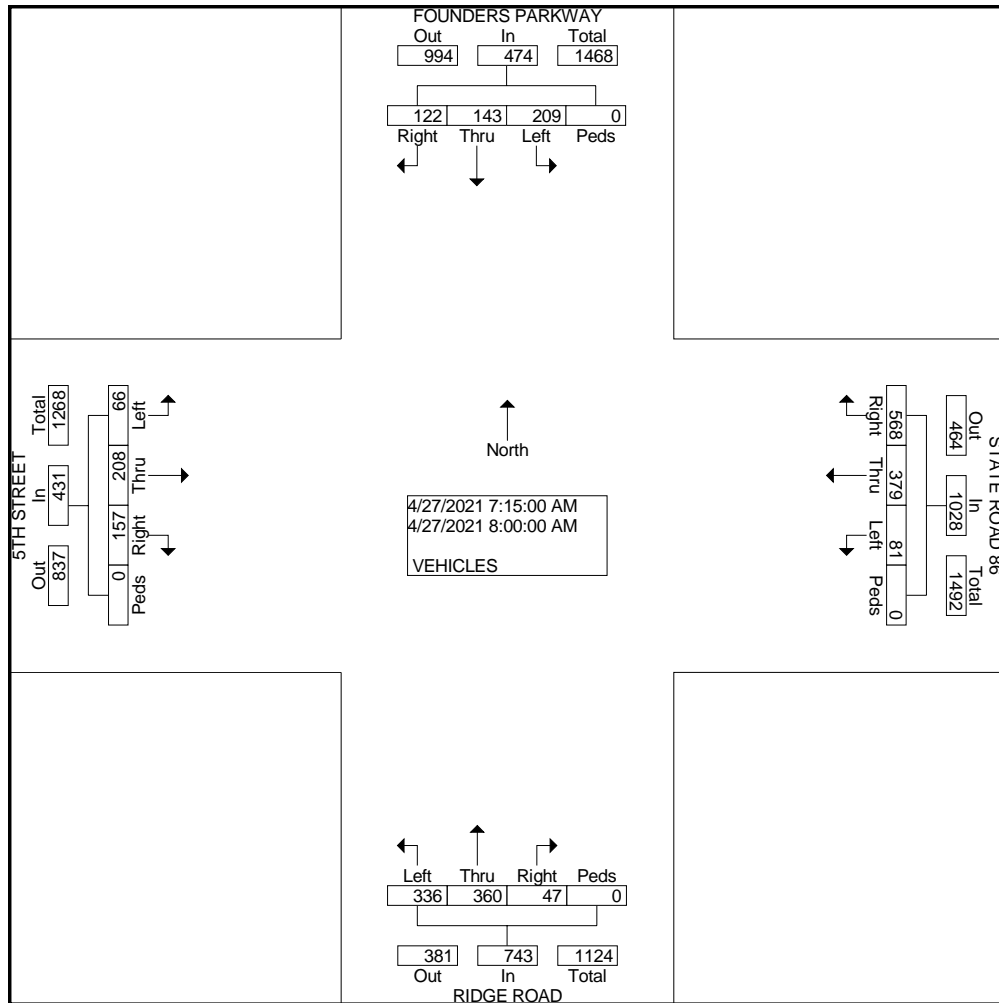
**COUNTER MEASURES INC.**

1889 YORK STREET  
DENVER, COLORADO  
303-333-7409

N/S STREET: FOUNDERS PARKWAY  
E/W STREET: 5TH ST/STATE ROAD 86  
CITY: CASTLE ROCK  
COUNTY: DOUGLAS

File Name : FOUNDRSR86  
Site Code : 00000017  
Start Date : 4/27/2021  
Page No : 2

| Start Time  | FOUNDERS PARKWAY Southbound |      |       |      |            | STATE ROAD 86 Westbound |      |       |      |            | RIDGE ROAD Northbound |      |       |      |            | 5TH STREET Eastbound |      |       |      |            | 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 |            |  |  |  |  |
| Peak Hour From 07:15 AM to 08:00 AM - Peak 1 of 1 |                             |      |       |      |            |                         |      |       |      |            |                       |      |       |      |            |                      |      |       |      |            |            |  |  |  |  |
| Intersection                                      | 07:15 AM                    |      |       |      |            |                         |      |       |      |            |                       |      |       |      |            |                      |      |       |      |            |            |  |  |  |  |
| Volume  | 209                         | 143  | 122   | 0    | 474        | 81                      | 379  | 568   | 0    | 1028       | 336                   | 360  | 47    | 0    | 743        | 66                   | 208  | 157   | 0    | 431        | 2676       |  |  |  |  |
| Percent   | 44.1                        | 30.2 | 25.7  | 0.0  |            | 7.9                     | 36.9 | 55.3  | 0.0  |            | 45.2                  | 48.5 | 6.3   | 0.0  |            | 15.3                 | 48.3 | 36.4  | 0.0  |            |            |  |  |  |  |
| 07:15 Volume Peak Factor                          | 52                          | 37   | 39    | 0    | 128        | 22                      | 118  | 147   | 0    | 287        | 132                   | 95   | 9     | 0    | 236        | 15                   | 52   | 35    | 0    | 102        | 753        |  |  |  |  |
| High Int. Factor                                  | 0.888                       |      |       |      |            |                         |      |       |      |            |                       |      |       |      |            |                      |      |       |      |            |            |  |  |  |  |
| Intersection                                      | 07:30 AM                    |      |       |      |            |                         |      |       |      |            |                       |      |       |      |            |                      |      |       |      |            |            |  |  |  |  |
| Volume  | 60                          | 30   | 41    | 0    | 131        | 13                      | 109  | 167   | 0    | 289        | 132                   | 95   | 9     | 0    | 236        | 19                   | 49   | 51    | 0    | 119        |            |  |  |  |  |
| Peak Factor                                       | 0.905                       |      |       |      |            |                         |      |       |      |            | 0.889                 |      |       |      |            | 0.787                |      |       |      |            | 0.905      |  |  |  |  |



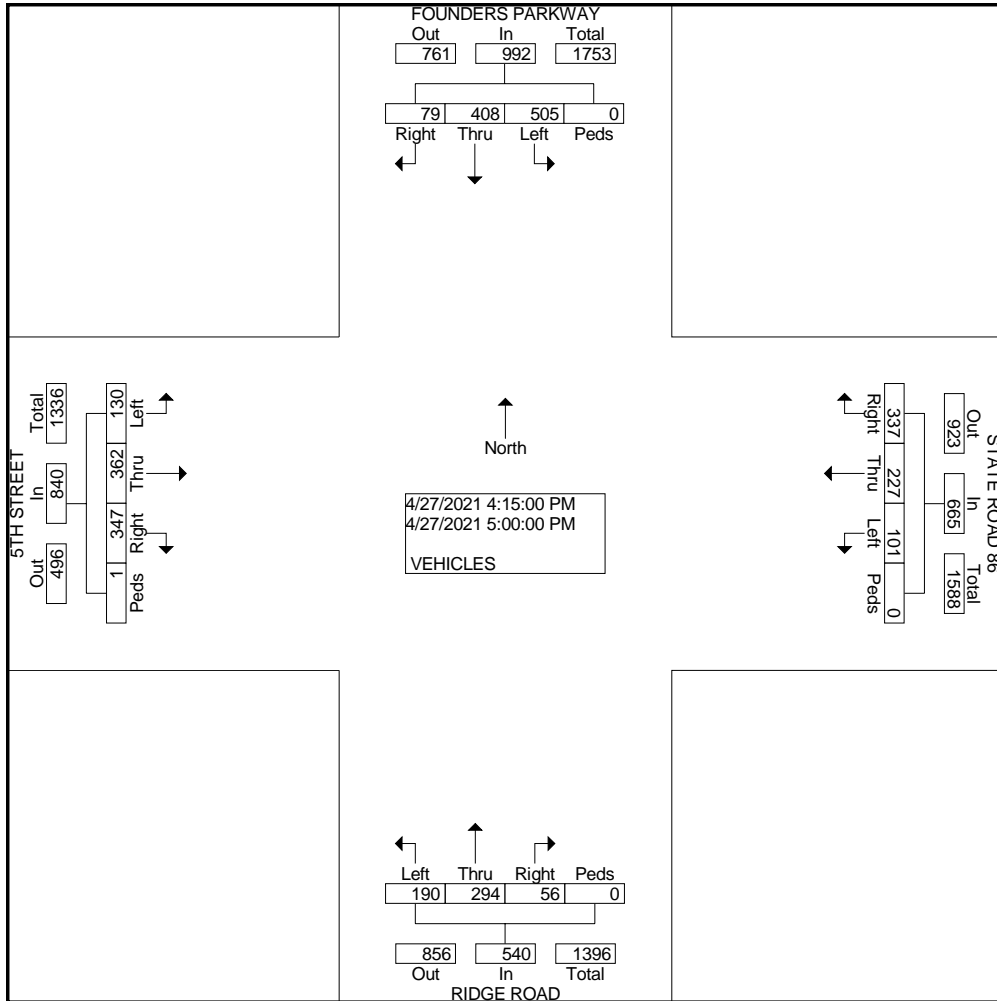
**COUNTER MEASURES INC.**

1889 YORK STREET  
DENVER, COLORADO  
303-333-7409

N/S STREET: FOUNDERS PARKWAY  
E/W STREET: 5TH ST/STATE ROAD 86  
CITY: CASTLE ROCK  
COUNTY: DOUGLAS

File Name : FOUNDRSR86  
Site Code : 00000017  
Start Date : 4/27/2021  
Page No : 2

| Start Time  | FOUNDERS PARKWAY Southbound |      |       |      |            | STATE ROAD 86 Westbound |      |       |      |            | RIDGE ROAD Northbound |      |       |      |            | 5TH STREET Eastbound |      |       |      |            | 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 |            |
| Peak Hour From 04:15 PM to 05:00 PM - Peak 1 of 1 |                             |      |       |      |            |                         |      |       |      |            |                       |      |       |      |            |                      |      |       |      |            |            |
| Intersection                                      | 04:15 PM                    |      |       |      |            |                         |      |       |      |            |                       |      |       |      |            |                      |      |       |      |            |            |
| Volume  | 505                         | 408  | 79    | 0    | 992        | 101                     | 227  | 337   | 0    | 665        | 190                   | 294  | 56    | 0    | 540        | 130                  | 362  | 347   | 1    | 840        | 3037       |
| Percent   | 50.9                        | 41.1 | 8.0   | 0.0  |            | 15.2                    | 34.1 | 50.7  | 0.0  |            | 35.2                  | 54.4 | 10.4  | 0.0  |            | 15.5                 | 43.1 | 41.3  | 0.1  |            |            |
| 04:45 Peak Factor                                 |                             |      |       |      |            |                         |      |       |      |            |                       |      |       |      |            |                      |      |       |      |            |            |
| High Int. Volume                                  | 148                         | 121  | 22    | 0    | 291        | 22                      | 56   | 84    | 0    | 162        | 40                    | 69   | 14    | 0    | 123        | 36                   | 93   | 116   | 0    | 245        | 821        |
| Peak Factor                                       |                             |      |       |      |            |                         |      |       |      |            |                       |      |       |      |            |                      |      |       |      |            |            |
| High Int. Volume                                  | 04:45 PM                    |      |       |      |            | 04:15 PM                |      |       |      |            | 04:15 PM              |      |       |      |            | 04:45 PM             |      |       |      |            |            |
| Peak Factor                                       | 148                         | 121  | 22    | 0    | 291        | 32                      | 63   | 87    | 0    | 182        | 53                    | 85   | 15    | 0    | 153        | 36                   | 93   | 116   | 0    | 245        | 0.925      |
|   | 0.85                        |      |       |      |            | 0.91                    |      |       |      |            | 0.88                  |      |       |      |            | 0.85                 |      |       |      |            | 7          |
|   | 2                           |      |       |      |            | 3                       |      |       |      |            | 2                     |      |       |      |            | 7                    |      |       |      |            |            |



**COUNTER MEASURES INC.**  
**1889 YORK STREET**  
**DENVER, COLORADO 80206**  
**303-333-7409**

Location: CASTLE OAKS DR S-O ROCKY VIEW RD  
 City: CASTLE ROCK  
 County: DOUGLAS  
 Direction: NORTH/SOUTH

Site Code: 210314  
 Station ID: 210314

| Start Time | 04-May-21<br>Tue | NORTHBOU   | SOUTHBOU   |   |   |   |   |   |   | Total      |
|------------|------------------|------------|------------|---|---|---|---|---|---|------------|
| 12:00 AM   |                  | 5          | 3          |   |   |   |   |   |   | 8          |
| 01:00      |                  | 1          | 1          |   |   |   |   |   |   | 2          |
| 02:00      |                  | 0          | 0          |   |   |   |   |   |   | 0          |
| 03:00      |                  | 1          | 3          |   |   |   |   |   |   | 4          |
| 04:00      |                  | 1          | 14         |   |   |   |   |   |   | 15         |
| 05:00      |                  | 3          | 47         |   |   |   |   |   |   | 50         |
| 06:00      |                  | 22         | 136        |   |   |   |   |   |   | 158        |
| 07:00      |                  | 70         | <b>202</b> |   |   |   |   |   |   | <b>272</b> |
| 08:00      |                  | 89         | 160        |   |   |   |   |   |   | 249        |
| 09:00      |                  | 91         | 117        |   |   |   |   |   |   | 208        |
| 10:00      |                  | 78         | 106        |   |   |   |   |   |   | 184        |
| 11:00      |                  | <b>105</b> | 137        |   |   |   |   |   |   | 242        |
| 12:00 PM   |                  | 121        | 120        |   |   |   |   |   |   | 241        |
| 01:00      |                  | 104        | 109        |   |   |   |   |   |   | 213        |
| 02:00      |                  | 121        | 116        |   |   |   |   |   |   | 237        |
| 03:00      |                  | 167        | 127        |   |   |   |   |   |   | 294        |
| 04:00      |                  | 203        | 132        |   |   |   |   |   |   | 335        |
| 05:00      |                  | <b>218</b> | <b>147</b> |   |   |   |   |   |   | <b>365</b> |
| 06:00      |                  | 177        | 105        |   |   |   |   |   |   | 282        |
| 07:00      |                  | 118        | 69         |   |   |   |   |   |   | 187        |
| 08:00      |                  | 97         | 44         |   |   |   |   |   |   | 141        |
| 09:00      |                  | 53         | 18         |   |   |   |   |   |   | 71         |
| 10:00      |                  | 23         | 9          |   |   |   |   |   |   | 32         |
| 11:00      |                  | 9          | 8          |   |   |   |   |   |   | 17         |
| Total      |                  | 1877       | 1930       |   |   |   |   |   |   | 3807       |
| Percent    |                  | 49.3%      | 50.7%      |   |   |   |   |   |   |            |
| AM Peak    | -                | 11:00      | 07:00      | - | - | - | - | - | - | 07:00      |
| Vol.       | -                | 105        | 202        | - | - | - | - | - | - | 272        |
| PM Peak    | -                | 17:00      | 17:00      | - | - | - | - | - | - | 17:00      |
| Vol.       | -                | 218        | 147        | - | - | - | - | - | - | 365        |

**COUNTER MEASURES INC.**  
**1889 YORK STREET**  
**DENVER, COLORADO 80206**  
**303-333-7409**

Location: CASTLE OAKS DR S-O ROCKY VIEW RD  
 City: CASTLE ROCK  
 County: DOUGLAS  
 Direction: NORTH/SOUTH

Site Code: 210314  
 Station ID: 210314

| Start Time  | 05-May-21<br>Wed | NORTHBOU  | SOUTHBOU   |   |   |   |   |   |   | Total |
|-------------|------------------|-----------|------------|---|---|---|---|---|---|-------|
| 12:00 AM    |                  | 6         | 5          |   |   |   |   |   |   | 11    |
| 01:00       |                  | 1         | 2          |   |   |   |   |   |   | 3     |
| 02:00       |                  | 1         | 1          |   |   |   |   |   |   | 2     |
| 03:00       |                  | 2         | 3          |   |   |   |   |   |   | 5     |
| 04:00       |                  | 2         | 9          |   |   |   |   |   |   | 11    |
| 05:00       |                  | 4         | 58         |   |   |   |   |   |   | 62    |
| 06:00       |                  | 29        | 136        |   |   |   |   |   |   | 165   |
| 07:00       |                  | 72        | 217        |   |   |   |   |   |   | 289   |
| 08:00       |                  | 99        | 183        |   |   |   |   |   |   | 282   |
| 09:00       |                  | 23        | 25         |   |   |   |   |   |   | 48    |
| 10:00       |                  | 0         | 0          |   |   |   |   |   |   | 0     |
| 11:00       |                  | 0         | 0          |   |   |   |   |   |   | 0     |
| 12:00 PM    |                  | 0         | 0          |   |   |   |   |   |   | 0     |
| 01:00       |                  | 0         | 0          |   |   |   |   |   |   | 0     |
| 02:00       |                  | 0         | 0          |   |   |   |   |   |   | 0     |
| 03:00       |                  | 0         | 0          |   |   |   |   |   |   | 0     |
| 04:00       |                  | 0         | 0          |   |   |   |   |   |   | 0     |
| 05:00       |                  | 0         | 0          |   |   |   |   |   |   | 0     |
| 06:00       |                  | 0         | 0          |   |   |   |   |   |   | 0     |
| 07:00       |                  | 0         | 0          |   |   |   |   |   |   | 0     |
| 08:00       |                  | 0         | 0          |   |   |   |   |   |   | 0     |
| 09:00       |                  | 0         | 0          |   |   |   |   |   |   | 0     |
| 10:00       |                  | 0         | 0          |   |   |   |   |   |   | 0     |
| 11:00       |                  | 0         | 0          |   |   |   |   |   |   | 0     |
| Total       |                  | 239       | 639        |   |   |   |   |   |   | 878   |
| Percent     |                  | 27.2%     | 72.8%      |   |   |   |   |   |   |       |
| AM Peak     | -                | 08:00     | 07:00      | - | - | - | - | - | - | 07:00 |
| Vol.        | -                | 99        | 217        | - | - | - | - | - | - | 289   |
| PM Peak     | -                | -         | -          | - | - | - | - | - | - | -     |
| Vol.        | -                | -         | -          | - | - | - | - | - | - | -     |
| Grand Total |                  | 2116      | 2569       |   |   |   |   |   |   | 4685  |
| Percent     |                  | 45.2%     | 54.8%      |   |   |   |   |   |   |       |
| ADT         |                  | ADT 2,342 | AADT 2,342 |   |   |   |   |   |   |       |



**COUNTER MEASURES INC.**  
**1889 YORK STREET**  
**DENVER, COLORADO 80206**  
**303-333-7409**

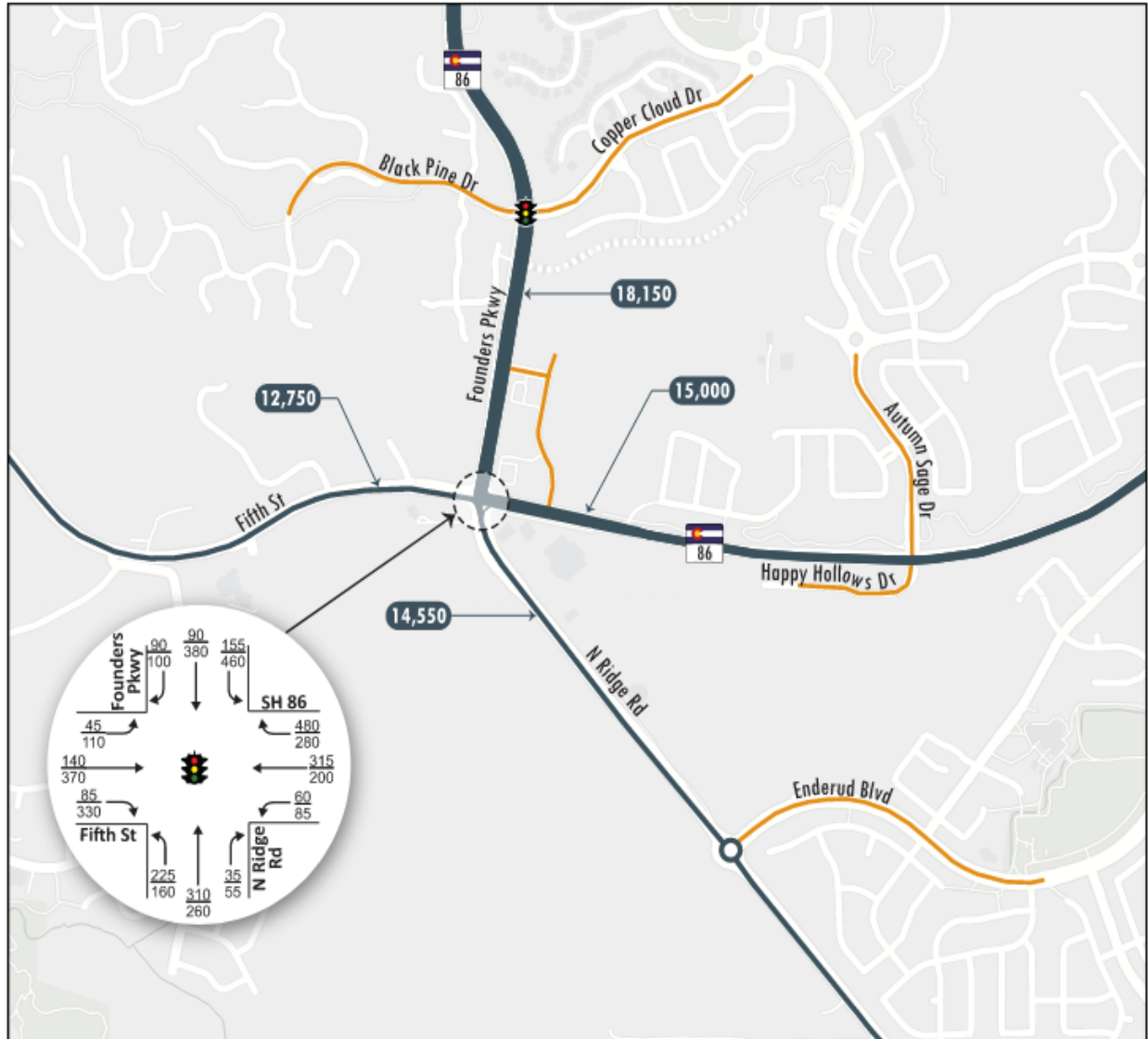
Location: FOUNDERS PKWY E-O CROWFOOT VALLEY RD  
 City: CASTLE ROCK  
 County: DOUGLAS  
 Direction: EAST/WEST

Site Code: 210310  
 Station ID: 210310





| Start Time  | 04-May-21<br>Tue | EASTBOUN    | WESTBOUN    | Total       |   |   |   |   |   |       |
|-------------|------------------|-------------|-------------|-------------|---|---|---|---|---|-------|
| 12:00 AM    |                  | 50          | 23          | 73          |   |   |   |   |   |       |
| 01:00       |                  | 15          | 12          | 27          |   |   |   |   |   |       |
| 02:00       |                  | 3           | 18          | 21          |   |   |   |   |   |       |
| 03:00       |                  | 12          | 48          | 60          |   |   |   |   |   |       |
| 04:00       |                  | 27          | 130         | 157         |   |   |   |   |   |       |
| 05:00       |                  | 46          | 394         | 440         |   |   |   |   |   |       |
| 06:00       |                  | 252         | 885         | 1137        |   |   |   |   |   |       |
| 07:00       |                  | 467         | <b>1360</b> | <b>1827</b> |   |   |   |   |   |       |
| 08:00       |                  | 632         | 1126        | 1758        |   |   |   |   |   |       |
| 09:00       |                  | 461         | 908         | 1369        |   |   |   |   |   |       |
| 10:00       |                  | 564         | 824         | 1388        |   |   |   |   |   |       |
| 11:00       |                  | <b>682</b>  | 856         | 1538        |   |   |   |   |   |       |
| 12:00 PM    |                  | 756         | 783         | 1539        |   |   |   |   |   |       |
| 01:00       |                  | 780         | 802         | 1582        |   |   |   |   |   |       |
| 02:00       |                  | 833         | 796         | 1629        |   |   |   |   |   |       |
| 03:00       |                  | 1141        | 826         | 1967        |   |   |   |   |   |       |
| 04:00       |                  | 1232        | <b>1056</b> | <b>2288</b> |   |   |   |   |   |       |
| 05:00       |                  | <b>1386</b> | 854         | 2240        |   |   |   |   |   |       |
| 06:00       |                  | 1002        | 634         | 1636        |   |   |   |   |   |       |
| 07:00       |                  | 700         | 377         | 1077        |   |   |   |   |   |       |
| 08:00       |                  | 534         | 279         | 813         |   |   |   |   |   |       |
| 09:00       |                  | 360         | 150         | 510         |   |   |   |   |   |       |
| 10:00       |                  | 176         | 61          | 237         |   |   |   |   |   |       |
| 11:00       |                  | 79          | 40          | 119         |   |   |   |   |   |       |
| Total       |                  | 12190       | 13242       | 25432       |   |   |   |   |   |       |
| Percent     |                  | 47.9%       | 52.1%       |             |   |   |   |   |   |       |
| AM Peak     | -                | 11:00       | 07:00       | -           | - | - | - | - | - | 07:00 |
| Vol.        | -                | 682         | 1360        | -           | - | - | - | - | - | 1827  |
| PM Peak     | -                | 17:00       | 16:00       | -           | - | - | - | - | - | 16:00 |
| Vol.        | -                | 1386        | 1056        | -           | - | - | - | - | - | 2288  |
| Grand Total |                  | 12190       | 13242       |             |   |   |   |   |   | 25432 |
| Percent     |                  | 47.9%       | 52.1%       |             |   |   |   |   |   |       |
| ADT         |                  | ADT 25,432  | AADT 25,432 |             |   |   |   |   |   |       |

# Traffic Data for Canyons Far South Proposal

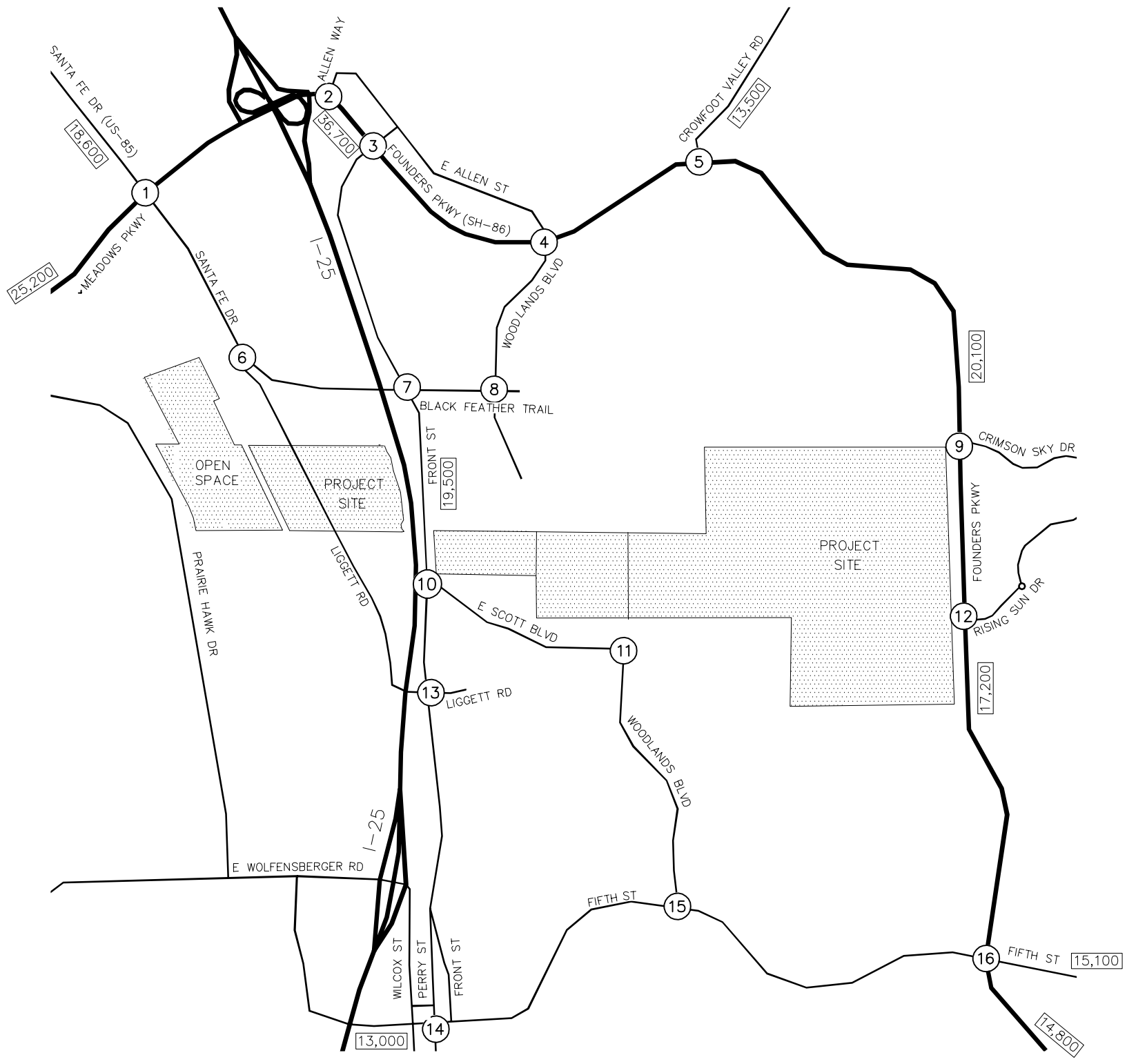
Figure 1: Existing 2019 counts from the Town's Founders/SH-86/Ridge Rd/5<sup>th</sup> St. intersection improvement project



## Legend

-  Traffic Signal
-  Roundabout
-  AM Peak Hour Traffic Volumes
-  PM Peak Hour Traffic Volumes





|  |   |   |  |
|--|---|---|--|
| <p>Tuesday, August 14, 2018<br/>AM 7:15-8:15   PM 4:15-5:15</p> <p>1</p> <p>127(193) →<br/>303(350) →<br/>353(372) →</p> <p>← 367(434)<br/>← 557(961)<br/>← 112(145)</p> <p>202(201) →<br/>845(772) →<br/>204(177) →</p> <p>148(217) →<br/>227(305) →<br/>87(100) →</p> <p>MEADOWS PKWY / HWY 85</p> | <p>Tuesday, August 14, 2018<br/>AM 7:15-8:15   PM 4:00-5:00</p> <p>2</p> <p>299(364) →<br/>12(31) →<br/>58(110) →</p> <p>← 105(125)<br/>← 1833(1358)<br/>← 35(34)</p> <p>192(303) →<br/>790(1912) →<br/>113(184) →</p> <p>102(149) →<br/>16(35) →<br/>42(66) →</p> <p>FOUNDERS PKWY / ALLEN WAY</p> | <p>Tuesday, August 14, 2018<br/>AM 7:00-8:00   PM 4:15-5:15</p> <p>3</p> <p>82(59) →<br/>38(83) →<br/>3(39) →</p> <p>← 11(18)<br/>← 1652(1239)<br/>← 60(102)</p> <p>54(163) →<br/>657(1586) →<br/>137(344) →</p> <p>285(281) →<br/>46(103) →<br/>38(165) →</p> <p>FOUNDERS PKWY / FRONT ST</p>          | <p>Tuesday, August 14, 2018<br/>AM 7:00-8:00   PM 4:30-5:30</p> <p>4</p> <p>2(7) →<br/>10(31) →<br/>35(141) →</p> <p>← 82(77)<br/>← 1598(905)<br/>← 317(147)</p> <p>1(2) →<br/>470(1415) →<br/>64(114) →</p> <p>107(87) →<br/>22(35) →<br/>132(305) →</p> <p>FOUNDERS PKWY / WOODLANDS BLVD</p>      |
| <p>Tuesday, August 14, 2018<br/>AM 7:00-8:00   PM 4:30-5:30</p> <p>5</p> <p>754(465) →<br/>70(115) →</p> <p>← 110(104)<br/>← 1237(668)</p> <p>296(665) →<br/>332(1159) →</p> <p>FOUNDERS PKWY / CROWFOOT VALLEY RD</p>   | <p>Tuesday, August 14, 2018<br/>AM 7:15-8:15   PM 4:14-5:15</p> <p>6</p> <p>172(192) →<br/>380(510) →</p> <p>← 130(144)</p> <p>12(18) →</p> <p>26(14) →<br/>321(448) →</p> <p>LIGGETT RD / HWY 85</p>   | <p>Tuesday, August 14, 2018<br/>AM 7:00-8:00   PM 4:30-5:30</p> <p>7</p> <p>39(103) →<br/>191(525) →<br/>10(49) →</p> <p>← 41(38)<br/>← 170(151)<br/>← 249(232)</p> <p>40(95) →<br/>110(221) →<br/>179(405) →</p> <p>294(180) →<br/>378(408) →<br/>169(196) →</p> <p>BLACK FEATHER TRAIL / FRONT ST</p> | <p>Tuesday, August 14, 2018<br/>AM 7:00-8:00   PM 4:30-5:30</p> <p>8</p> <p>257(186) →<br/>13(19) →<br/>5(26) →</p> <p>← 21(21)<br/>← 77(49)</p> <p>143(243) →<br/>23(47) →<br/>25(45) →</p> <p>44(35) →<br/>27(16) →<br/>0(1) →</p> <p>BLACK FEATHER TRAIL / WOODLANDS BLVD</p>                     |
| <p>Tuesday, August 14, 2018<br/>AM 7:00-8:00   PM 4:30-5:30</p> <p>9</p> <p>375(1092) →<br/>46(150) →</p> <p>← 196(89)<br/>← 9(10)</p> <p>1135(676) →<br/>8(17) →</p> <p>FOUNDERS PKWY / CRIMSON SKY DR</p>  | <p>Tuesday, August 14, 2018<br/>AM 7:00-8:00   PM 4:30-5:30</p> <p>10</p> <p>493(786) →<br/>128(391) →</p> <p>← 296(169)<br/>← 128(37)</p> <p>527(607) →<br/>90(41) →</p> <p>E SCOTT BLVD / FRONT ST</p>  | <p>Tuesday, August 14, 2018<br/>AM 7:00-8:00   PM 4:30-5:30</p> <p>11</p> <p>168(366) →</p> <p>415(144) →</p> <p>E SCOTT BLVD / WOODLANDS BLVD</p>  | <p>Tuesday, August 14, 2018<br/>AM 7:00-8:00   PM 4:30-5:30</p> <p>12</p> <p>334(993) →<br/>44(127) →</p> <p>← 127(88)<br/>← 61(47)</p> <p>1009(614) →<br/>30(61) →</p> <p>RISING SUN DR / FOUNDERS PKWY</p>   |
| <p>Tuesday, August 14, 2018<br/>AM 7:00-8:00   PM 4:30-5:30</p> <p>13</p> <p>7(5) →<br/>356(785) →<br/>94(27) →</p> <p>← 89(63)<br/>← 14(6)<br/>← 55(33)</p> <p>16(4) →<br/>24(6) →<br/>96(208) →</p> <p>134(95) →<br/>541(568) →<br/>184(31) →</p> <p>LIGGETT RD / FRONT ST</p>                     | <p>Thursday, April 26, 2018<br/>AM 7:30-8:30   PM 4:45-5:45</p> <p>14</p> <p>93(131) →<br/>123(250) →<br/>15(58) →</p> <p>← 16(9)<br/>← 578(384)<br/>← 50(71)</p> <p>47(114) →<br/>234(567) →<br/>44(49) →</p> <p>26(45) →<br/>139(257) →<br/>27(119) →</p> <p>FIFTH ST / PERRY ST</p>              | <p>Tuesday, August 14, 2018<br/>AM 7:00-8:00   PM 4:30-5:30</p> <p>15</p> <p>50(41) →</p> <p>← 393(121)<br/>← 607(351)</p> <p>37(56) →<br/>212(648) →</p> <p>FIFTH ST / WOODLANDS BLVD</p>  | <p>Tuesday, August 14, 2018<br/>AM 7:00-8:00   PM 4:45-5:45</p> <p>16</p> <p>136(103) →<br/>115(454) →<br/>191(506) →</p> <p>← 541(292)<br/>← 411(196)<br/>← 65(86)</p> <p>63(121) →<br/>190(372) →<br/>146(423) →</p> <p>407(187) →<br/>406(278) →<br/>41(54) →</p> <p>FIFTH ST / FOUNDERS PKWY</p> |

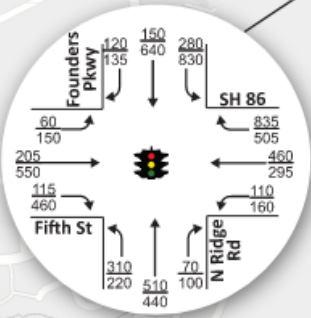
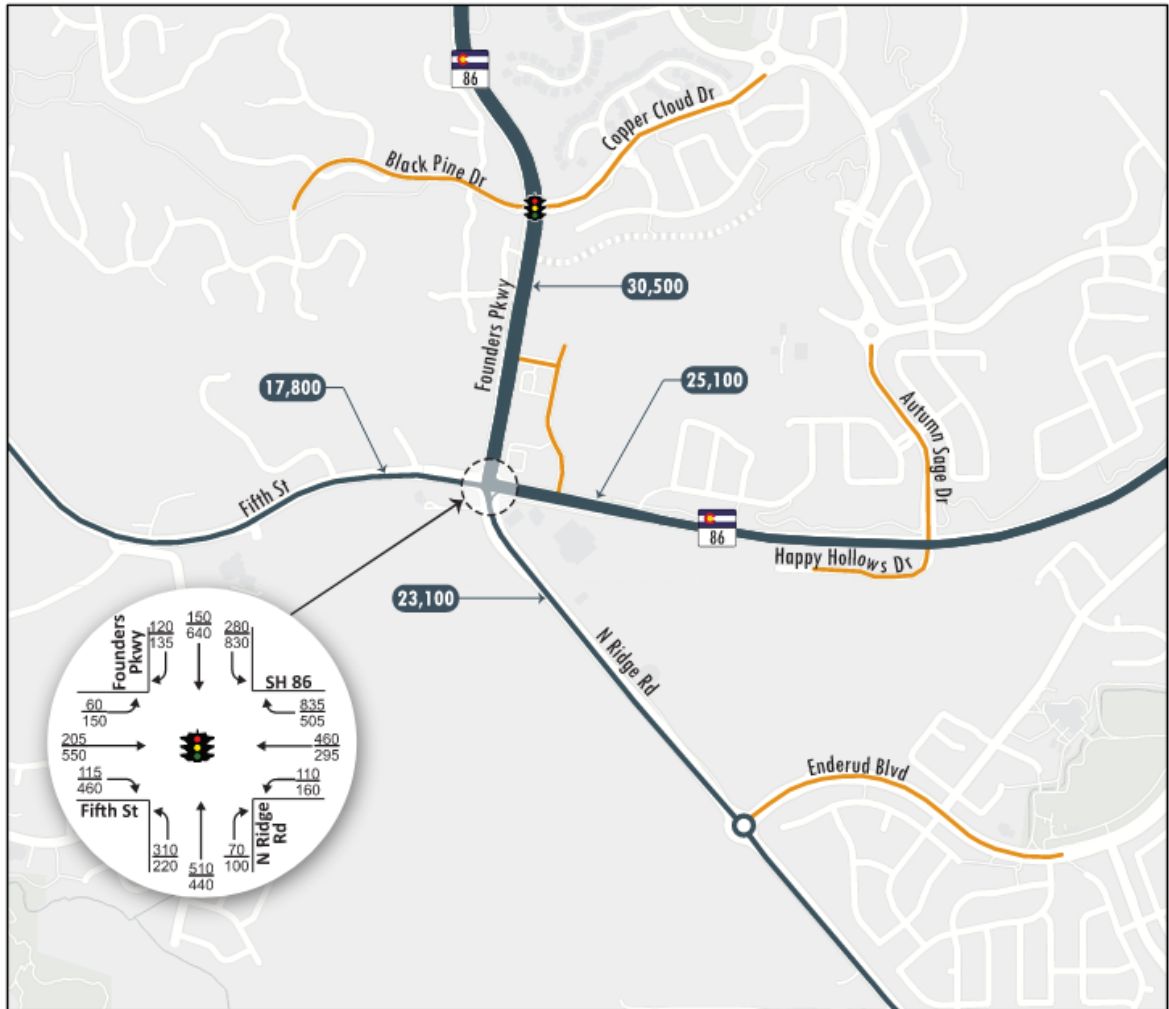
**LEGEND**

- (X) Study Area Key Intersection
- XXX(XXX) Weekday AM(PM) Peak Hour Traffic Volumes
- XX,X00 Estimated Daily Traffic Volume



PINE CANYON  
 DOUGLAS COUNTY, CO  
 EXISTING TRAFFIC VOLUMES

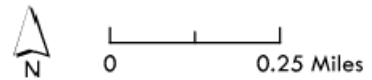
FIGURE 3

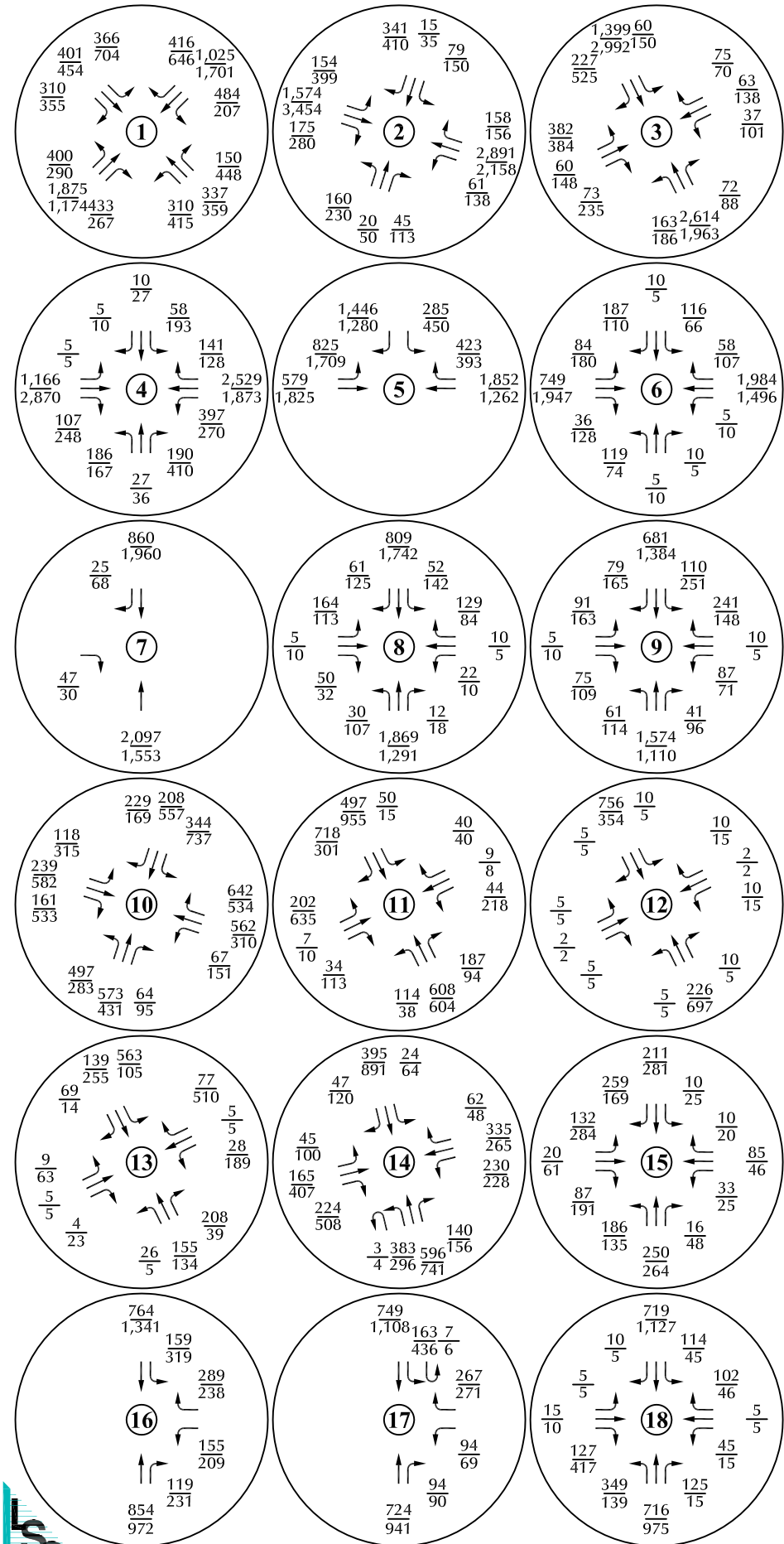
Figure 2: 2040 counts from the Town's Founders/SH-86/Ridge Rd/5<sup>th</sup> St. intersection improvement project



**Legend**

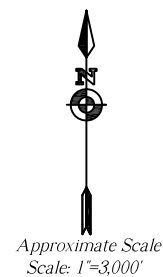
-  Traffic Signal
-  Roundabout
- xx AM Peak Hour Traffic Volumes
- xx PM Peak Hour Traffic Volumes





LEGEND:

- ① = Intersection Location
- $\frac{26}{35}$  = AM Peak Hour Traffic / PM Peak Hour Traffic
- 2,500 = Average Daily Traffic



Approximate Scale  
Scale: 1"=3,000'

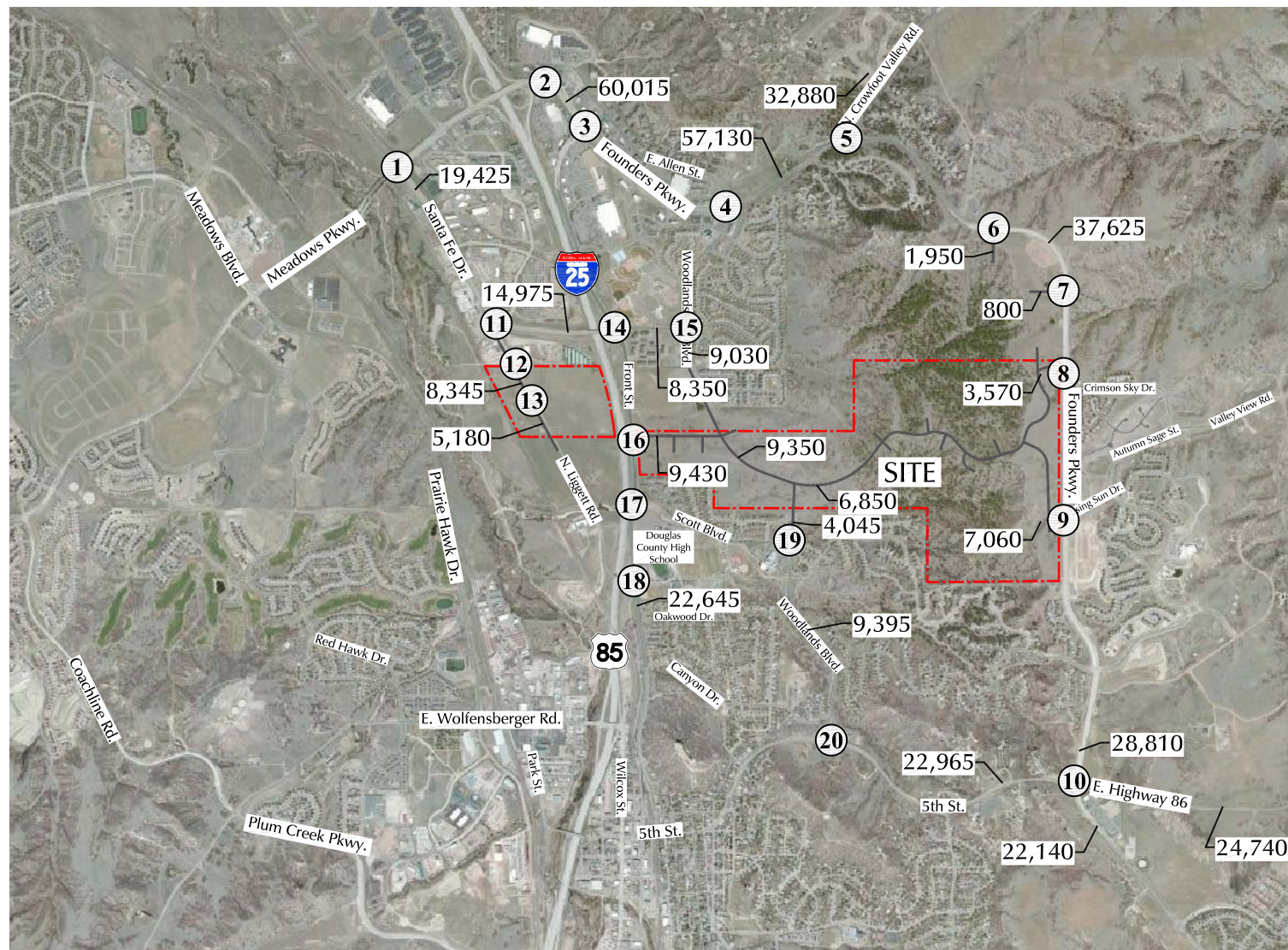


Figure 7a  
**Year 2035  
Total Traffic Volumes**  
Pine Canyon Update (LSC #160590)



Founders Pkwy

Ridge Rd



|   |  |  |  |
|---|--|--|--|
| <p>1</p> <p>158(240)<br/>485(516)<br/>482(567)</p> <p>251(250)<br/>1121(1130)<br/>408(326)</p> <p>MEADOWS PKWY / HWY 85</p> | <p>2</p> <p>387(468)<br/>15(99)<br/>76(144)</p> <p>244(391)<br/>1419(3229)<br/>141(229)</p> <p>FOUNDERS PKWY / ALLEN WAY</p> | <p>3</p> <p>102(73)<br/>63(119)<br/>4(49)</p> <p>67(203)<br/>1151(2636)<br/>278(612)</p> <p>FOUNDERS PKWY / FRONT ST</p>       | <p>4</p> <p>2(9)<br/>12(99)<br/>44(176)</p> <p>1(2)<br/>716(2096)<br/>247(504)</p> <p>FOUNDERS PKWY / WOODLANDS BLVD</p>           |
| <p>5</p> <p>1038(650)<br/>114(191)</p> <p>435(934)<br/>544(1778)</p> <p>FOUNDERS PKWY / CROWFOOT VALLEY RD</p>              | <p>6</p> <p>633(401)<br/>601(918)</p> <p>324(548)<br/>41(94)</p> <p>LIGGETT RD / HWY 85</p>                                  | <p>7</p> <p>49(128)<br/>384(807)<br/>24(82)</p> <p>63(154)<br/>189(380)<br/>242(538)</p> <p>BLACK FEATHER TRAIL / FRONT ST</p> | <p>8</p> <p>397(257)<br/>205(432)<br/>6(32)</p> <p>204(374)<br/>29(59)<br/>81(145)</p> <p>BLACK FEATHER TRAIL / WOODLANDS BLVD</p> |
| <p>9</p> <p>57(120)<br/>502(1406)<br/>57(187)</p> <p>106(80)<br/>98(82)</p> <p>FOUNDERS PKWY / CRIMSON SKY DR</p>           | <p>10</p> <p>690(1076)<br/>119(397)</p> <p>258(120)<br/>159(46)</p> <p>E SCOTT BLVD / FRONT ST</p>                           | <p>11</p> <p>10(5)<br/>251(316)</p> <p>5(10)</p> <p>E SCOTT BLVD / WOODLANDS BLVD</p>  | <p>12</p> <p>15(27)<br/>539(1343)<br/>55(158)</p> <p>28(18)<br/>21(14)</p> <p>RISING SUN DR / FOUNDERS PKWY</p>                    |
| <p>13</p> <p>9(6)<br/>519(1075)<br/>117(34)</p> <p>20(5)<br/>30(7)<br/>145(331)</p> <p>LIGGETT RD / FRONT ST</p>            | <p>14</p> <p>204(308)<br/>168(338)<br/>19(72)</p> <p>194(242)<br/>383(916)<br/>55(61)</p> <p>FIFTH ST / PERRY ST</p>         | <p>15</p> <p>196(162)<br/>275(476)</p> <p>592(233)<br/>807(481)</p> <p>FIFTH ST / WOODLANDS BLVD</p>                           | <p>16</p> <p>225(177)<br/>191(603)<br/>279(664)</p> <p>105(217)<br/>278(523)<br/>217(583)</p> <p>FIFTH ST / FOUNDERS PKWY</p>      |
| <p>17</p> <p>38(12)<br/>246(256)<br/>380(150)</p> <p>13(36)<br/>5(14)</p> <p>SITE ACCESS / LIGGETT RD</p>                   | <p>18</p> <p>161(62)<br/>750(1400)<br/>120(252)</p> <p>42(115)<br/>45(106)<br/>18(50)</p> <p>SITE ACCESS / FRONT ST</p>      |  |  |

**LEGEND**

(X) Study Area Key Intersection

XXX(XXX) Weekday AM(PM)  
Peak Hour Traffic Volumes

XX,X00 Estimated Daily Traffic Volume

PINE CANYON  
 DOUGLAS COUNTY, CO  
 2040 TOTAL TRAFFIC VOLUMES

FIGURE 12

## LEVEL OF SERVICE DEFINITIONS

From *Highway Capacity Manual*, Transportation Research Board, 2016, 6th Edition

### SIGNALIZED INTERSECTION LEVEL OF SERVICE (LOS)

| <u>LOS</u> | <u>Average<br/>Vehicle Delay</u><br>sec/vehicle | <u>Operational Characteristics</u>   |
|------------|---|--|
| <b>A</b>   | <10 seconds                                     | Describes operations with low control delay, up to 10 sec/veh. This LOS occurs when progression is extremely favorable and most vehicles arrive during the green phase. Many vehicles do not stop at all. Short cycle lengths may tend to contribute to low delay values.  |
| <b>B</b>   | 10 to 20 seconds                                | Describes operations with control delay greater than 10 seconds and up to 20 sec/veh. This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of delay.   |
| <b>C</b>   | 20 to 35 seconds                                | Describes operations with control delay greater than 20 and up to 35 sec/veh. These higher delays may result from only fair progression, longer cycle length, or both. Individual cycle failures may begin to appear at this level. Cycle failure occurs when a given green phase does not serve queued vehicles, and overflows occur. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping. |
| <b>D</b>   | 35 to 55 seconds                                | Describes operations with control delay greater than 35 and up to 55 sec/veh. At LOS D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, and high v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.   |
| <b>E</b>   | 55 to 80 seconds                                | Describes operations with control delay greater than 55 and up to 80 sec/veh. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent.  |
| <b>F</b>   | >80 seconds                                     | Describes operations with control delay in excess of 80 sec/veh. This level, considered unacceptable to most drivers, often occurs with over-saturation, that is, when arrival flow rates exceed the capacity of lane groups. It may also occur at high v/c ratios with many individual cycle failures. Poor progression and long cycle lengths may also contribute significantly to high delay levels.  |



## LEVEL OF SERVICE DEFINITIONS

From *Highway Capacity Manual*, Transportation Research Board, 2016, 6th Edition
































### UNSIGNALIZED INTERSECTION LEVEL OF SERVICE (LOS)

Applicable to Two-Way Stop Control, All-Way Stop Control, and Roundabouts

| LOS | Average Vehicle Control Delay | <u>Operational Characteristics</u>  |
|-----|-------------------------------|---|
| A   | <10 seconds                   | Normally, vehicles on the stop-controlled approach only have to wait up to 10 seconds before being able to clear the intersection. Left-turning vehicles on the uncontrolled street do not have to wait to make their turn.   |
| B   | 10 to 15 seconds              | Vehicles on the stop-controlled approach will experience delays before being able to clear the intersection. <u>The delay could be up to 15 seconds.</u> Left-turning vehicles on the uncontrolled street may have to wait to make their turn.  |
| C   | 15 to 25 seconds              | Vehicles on the stop-controlled approach can expect delays in the range of 15 to 25 seconds before clearing the intersection. Motorists may begin to take chances due to the long delays, thereby posing a safety risk to through traffic. <u>Left-turning vehicles on the uncontrolled street will now be required to wait to make their turn causing a queue to be created in the turn lane.</u>  |
| D   | 25 to 35 seconds              | <u>This is the point at which a traffic signal may be warranted for this intersection.</u> The delays for the stop-controlled intersection are not considered to be excessive. The length of the queue may begin to block other public and private access points.   |
| E   | 35 to 50 seconds              | The delays for all critical traffic movements are considered to be unacceptable. The length of the queues for the stop-controlled approaches as well as the left-turn movements are extremely long. <u>There is a high probability that this intersection will meet traffic signal warrants.</u> The ability to install a traffic signal is affected by the location of other existing traffic signals. Consideration may be given to restricting the accesses by eliminating the left-turn movements from and to the stop-controlled approach. |
| F   | >50 seconds                   | The delay for the critical traffic movements are probably in excess of 100 seconds. The length of the queues are extremely long. Motorists are selecting alternative routes due to the long delays. <u>The only remedy for these long delays is installing a traffic signal or restricting the accesses.</u> The potential for accidents at this intersection are extremely high due to motorist taking more risky chances. If the median permits, motorists begin making two-stage left-turns.   |

Lanes, Volumes, Timings  
1: Allen Way & Founder Pkwy

Existing  
AM Peak

|                            |    |    |  |  |    |  |   |  |  |    |    |    |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations        |   |    |   |  |    |  |  |  |  |   |   |   |
| Traffic Volume (vph)       | 265   | 990   | 150   | 35  | 2015  | 120   | 105   | 20  | 45  | 60  | 13  | 300   |
| Future Volume (vph)        | 265   | 990   | 150   | 35  | 2015  | 120   | 105   | 20  | 45  | 60  | 13  | 300   |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 300   |   | 0   | 330   |   | 200   | 0   |   | 0   | 125   |   | 0   |
| Storage Lanes              | 2   |   | 0   | 1   |   | 1   | 1   |   | 0   | 1   |   | 2   |
| Taper Length (ft)          | 100   |   |   | 100   |   |   | 100   |   |   | 100   |   |   |
| Lane Util. Factor          | 0.97  | 0.91  | 0.91  | 1.00  | 0.91  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 0.88  |
| Frt                        |   | 0.980   |   |   |   | 0.850   |   | 0.896   |   |   |   | 0.850   |
| Flt Protected              | 0.950   |   |   | 0.950   |   |   | 0.950   |   |   | 0.950   |   |   |
| Satd. Flow (prot)          | 3433  | 4984  | 0   | 1770  | 5085  | 1583  | 1770  | 1669  | 0   | 1770  | 1863  | 2787  |
| Flt Permitted              | 0.950   |   |   | 0.209   |   |   | 0.569   |   |   | 0.711   |   |   |
| Satd. Flow (perm)          | 3433  | 4984  | 0   | 389   | 5085  | 1583  | 1060  | 1669  | 0   | 1324  | 1863  | 2787  |
| Right Turn on Red          |   |   | Yes   |   |   | Yes   |   |   | Yes   |   |   | Yes   |
| Satd. Flow (RTOR)          |   | 47  |   |   |   | 118   |   | 49  |   |   |   | 192   |
| Link Speed (mph)           |   | 35  |   |   | 35  |   |   | 30  |   |   |   | 30  |
| Link Distance (ft)         |   | 533   |   |   | 1095  |   |   | 278   |   |   |   | 392   |
| Travel Time (s)            |   | 10.4  |   |   | 21.3  |   |   | 6.3   |   |   |   | 8.9   |
| Peak Hour Factor           | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 288   | 1076  | 163   | 38  | 2190  | 130   | 114   | 22  | 49  | 65  | 14  | 326   |
| Shared Lane Traffic (%)    |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)      | 288   | 1239  | 0   | 38  | 2190  | 130   | 114   | 71  | 0   | 65  | 14  | 326   |
| Enter Blocked Intersection | No  | No  | No  | No  | No  | No  | No  | No  | No  | No  | No  | No  |
| Lane Alignment             | Left  | Left  | Right   | Left  | Left  | Right   | Left  | Left  | Right   | Left  | Left  | Right   |
| Median Width(ft)           |   | 20  |   |   | 20  |   |   | 12  |   |   |   | 20  |
| Link Offset(ft)            |   | 0   |   |   | 0   |   |   | 0   |   |   |   | 0   |
| Crosswalk Width(ft)        |   | 16  |   |   | 16  |   |   | 16  |   |   |   | 16  |
| Two way Left Turn Lane     |   |   |   |   |   |   |   |   |   |   |   |   |
| Headway 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  |
| Turning Speed (mph)        | 15  |   | 9   | 15  |   | 9   | 15  |   | 9   | 15  |   | 9   |
| Number of Detectors        | 1   | 2   |   | 1   | 2   | 1   | 1   | 2   |   | 1   | 2   | 1   |
| Detector Template          | Left  | Thru  |   | Left  | Thru  | Right   | Left  | Thru  |   | Left  | Thru  | Right   |
| Leading Detector (ft)      | 20  | 100   |   | 20  | 100   | 20  | 20  | 100   |   | 20  | 100   | 20  |
| Trailing Detector (ft)     | 0   | 0   |   | 0   | 0   | 0   | 0   | 0   |   | 0   | 0   | 0   |
| Detector 1 Position(ft)    | 0   | 0   |   | 0   | 0   | 0   | 0   | 0   |   | 0   | 0   | 0   |
| Detector 1 Size(ft)        | 20  | 6   |   | 20  | 6   | 20  | 20  | 6   |   | 20  | 6   | 20  |
| Detector 1 Type            | Cl+Ex   | Cl+Ex   |   | Cl+Ex   | Cl+Ex   | Cl+Ex   | Cl+Ex   | Cl+Ex   |   | Cl+Ex   | Cl+Ex   | Cl+Ex   |
| Detector 1 Channel         |   |   |   |   |   |   |   |   |   |   |   |   |
| Detector 1 Extend (s)      | 0.0   | 0.0   |   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |   | 0.0   | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |   | 0.0   | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |   | 0.0   | 0.0   | 0.0   |
| Detector 2 Position(ft)    |   | 94  |   |   | 94  |   |   | 94  |   |   |   | 94  |
| Detector 2 Size(ft)        |   | 6   |   |   | 6   |   |   | 6   |   |   |   | 6   |
| Detector 2 Type            |   | Cl+Ex   |   |   | Cl+Ex   |   |   | Cl+Ex   |   |   |   | Cl+Ex   |
| Detector 2 Channel         |   |   |   |   |   |   |   |   |   |   |   |   |
| Detector 2 Extend (s)      |   | 0.0   |   |   | 0.0   |   |   | 0.0   |   |   |   | 0.0   |
| Turn Type                  | Prot  | NA  |   | pm+pt   | NA  | Perm  | pm+pt   | NA  |   | pm+pt   | NA  | Perm  |
| Protected Phases           | 5   | 2   |   | 1   | 6   |   | 3   | 8   |   | 7   | 4   |   |
| Permitted Phases           |   |   |   | 6   |   | 6   | 8   |   |   | 4   |   | 4   |

Lanes, Volumes, Timings  
1: Allen Way & Founder Pkwy

Existing  
AM Peak

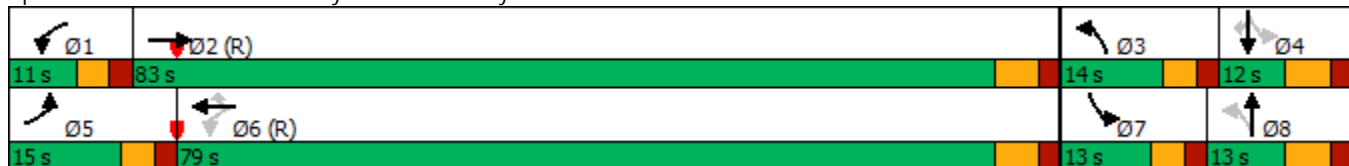


| Lane Group            | EBL   | EBT   | EBR | WBL  | WBT   | WBR   | NBL   | NBT   | NBR | SBL   | SBT   | SBR   |
|-----------------------|-------|-------|-----|------|-------|-------|-------|-------|-----|-------|-------|-------|
| Detector Phase        | 5     | 2     |     | 1    | 6     | 6     | 3     | 8     |     | 7     | 4     | 4     |
| Switch Phase          |       |       |     |      |       |       |       |       |     |       |       |       |
| Minimum Initial (s)   | 4.0   | 4.0   |     | 4.0  | 4.0   | 4.0   | 4.0   | 4.0   |     | 4.0   | 4.0   | 4.0   |
| Minimum Split (s)     | 11.0  | 21.0  |     | 9.5  | 21.0  | 21.0  | 9.0   | 21.0  |     | 9.0   | 21.0  | 21.0  |
| Total Split (s)       | 15.0  | 83.0  |     | 11.0 | 79.0  | 79.0  | 14.0  | 13.0  |     | 13.0  | 12.0  | 12.0  |
| Total Split (%)       | 12.5% | 69.2% |     | 9.2% | 65.8% | 65.8% | 11.7% | 10.8% |     | 10.8% | 10.0% | 10.0% |
| Maximum Green (s)     | 10.0  | 77.0  |     | 6.0  | 73.0  | 73.0  | 9.0   | 7.0   |     | 8.0   | 6.0   | 6.0   |
| Yellow Time (s)       | 3.0   | 4.0   |     | 3.0  | 4.0   | 4.0   | 3.0   | 4.0   |     | 3.0   | 4.0   | 4.0   |
| All-Red Time (s)      | 2.0   | 2.0   |     | 2.0  | 2.0   | 2.0   | 2.0   | 2.0   |     | 2.0   | 2.0   | 2.0   |
| Lost Time Adjust (s)  | -2.0  | 0.0   |     | 0.0  | 0.0   | -1.0  | 0.0   | 0.0   |     | 0.0   | -2.0  | -1.0  |
| Total Lost Time (s)   | 3.0   | 6.0   |     | 5.0  | 6.0   | 5.0   | 5.0   | 6.0   |     | 5.0   | 4.0   | 5.0   |
| Lead/Lag              | Lead  | Lag   |     | Lead | Lag   | Lag   | Lead  | Lag   |     | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?    | Yes   | Yes   |     | Yes  | Yes   | Yes   | Yes   | Yes   |     | Yes   | Yes   | Yes   |
| Vehicle Extension (s) | 3.0   | 3.0   |     | 3.0  | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0   | 3.0   | 3.0   |
| Recall Mode           | None  | C-Max |     | None | C-Max | C-Max | None  | None  |     | None  | None  | None  |
| Act Effect Green (s)  | 12.0  | 81.4  |     | 79.9 | 73.0  | 74.0  | 17.8  | 9.6   |     | 14.8  | 8.3   | 7.3   |
| Actuated g/C Ratio    | 0.10  | 0.68  |     | 0.67 | 0.61  | 0.62  | 0.15  | 0.08  |     | 0.12  | 0.07  | 0.06  |
| v/c Ratio             | 0.84  | 0.36  |     | 0.12 | 0.71  | 0.13  | 0.55  | 0.40  |     | 0.34  | 0.11  | 0.93  |
| Control Delay         | 74.6  | 8.7   |     | 8.6  | 24.3  | 7.1   | 54.6  | 29.7  |     | 47.9  | 54.8  | 57.6  |
| Queue Delay           | 0.0   | 0.0   |     | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.0   | 0.0   | 0.0   |
| Total Delay           | 74.6  | 8.7   |     | 8.6  | 24.3  | 7.1   | 54.6  | 29.7  |     | 47.9  | 54.8  | 57.6  |
| LOS                   | E     | A     |     | A    | C     | A     | D     | C     |     | D     | D     | E     |
| Approach Delay        |       | 21.1  |     |      | 23.1  |       |       | 45.1  |     |       | 56.0  |       |
| Approach LOS          |       | C     |     |      | C     |       |       | D     |     |       | E     |       |

Intersection Summary






















|                                    |   |
|------------------------------------|---|
| Area Type:                         | Other   |
| Cycle Length:                      | 120   |
| Actuated Cycle Length:             | 120   |
| Offset:                            | 119 (99%), Referenced to phase 2:EBT and 6:WBTL, Start of Green |
| Natural Cycle:                     | 80  |
| Control Type:                      | Actuated-Coordinated  |
| Maximum v/c Ratio:                 | 0.93  |
| Intersection Signal Delay:         | 26.3  |
| Intersection LOS:                  | C   |
| Intersection Capacity Utilization: | 71.5%   |
| ICU Level of Service:              | C   |
| Analysis Period (min):             | 15  |

Splits and Phases: 1: Allen Way & Founder Pkwy



Lanes, Volumes, Timings  
2: Front St & Founder Pkwy

Existing  
AM Peak

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group                 | SEL   | SET   | SER   | NWL   | NWT   | NWR   | NEL  | NET   | NER   | SWL   | SWT   | SWR   |
| Lane Configurations        |  |  |   |  |  |   |  |  |  |  |  |   |
| Traffic Volume (vph)       | 64  | 775   | 255   | 60  | 1670  | 12  | 415  | 50  | 40  | 5   | 40  | 85  |
| Future Volume (vph)        | 64  | 775   | 255   | 60  | 1670  | 12  | 415  | 50  | 40  | 5   | 40  | 85  |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900   | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 460   |   | 0   | 200   |   | 0   | 285  |   | 0   | 210   |   | 0   |
| Storage Lanes              | 1   |   | 0   | 1   |   | 0   | 1  |   | 1   | 1   |   | 0   |
| Taper Length (ft)          | 100   |   |   | 100   |   |   | 100  |   |   | 100   |   |   |
| Lane Util. Factor          | 1.00  | 0.91  | 0.91  | 1.00  | 0.91  | 0.91  | 0.97   | 1.00  | 1.00  | 1.00  | 0.95  | 0.95  |
| Frt                        |   | 0.963   |   |   | 0.999   |   |  |   | 0.850   |   | 0.898   |   |
| Flt Protected              | 0.950   |   |   | 0.950   |   |   | 0.950  |   |   | 0.950   |   |   |
| Satd. Flow (prot)          | 1770  | 4897  | 0   | 1770  | 5080  | 0   | 3433   | 1863  | 1583  | 1770  | 3178  | 0   |
| Flt Permitted              | 0.077   |   |   | 0.214   |   |   | 0.443  |   |   | 0.722   |   |   |
| Satd. Flow (perm)          | 143   | 4897  | 0   | 399   | 5080  | 0   | 1601   | 1863  | 1583  | 1345  | 3178  | 0   |
| Right Turn on Red          |   |   | Yes   |   |   | Yes   |  |   | Yes   |   |   | Yes   |
| Satd. Flow (RTOR)          |   | 129   |   |   | 2   |   |  |   | 73  |   | 81  |   |
| Link Speed (mph)           |   | 35  |   |   | 35  |   |  | 30  |   |   | 30  |   |
| Link Distance (ft)         |   | 1095  |   |   | 488   |   |  | 556   |   |   | 397   |   |
| Travel Time (s)            |   | 21.3  |   |   | 9.5   |   |  | 12.6  |   |   | 9.0   |   |
| Peak Hour Factor           | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92   | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 70  | 842   | 277   | 65  | 1815  | 13  | 451  | 54  | 43  | 5   | 43  | 92  |
| Shared Lane Traffic (%)    |   |   |   |   |   |   |  |   |   |   |   |   |
| Lane Group Flow (vph)      | 70  | 1119  | 0   | 65  | 1828  | 0   | 451  | 54  | 43  | 5   | 135   | 0   |
| Enter Blocked Intersection | No  | No  | No  | No  | No  | No  | No   | No  | No  | No  | No  | No  |
| Lane Alignment             | Left  | Left  | Right   | Left  | Left  | Right   | Left   | Left  | Right   | Left  | Left  | Right   |
| Median Width(ft)           |   | 12  |   |   | 12  |   |  | 40  |   |   | 24  |   |
| Link Offset(ft)            |   | 0   |   |   | 0   |   |  | 0   |   |   | 0   |   |
| Crosswalk Width(ft)        |   | 16  |   |   | 16  |   |  | 16  |   |   | 16  |   |
| Two way Left Turn Lane     |   |   |   |   |   |   |  |   |   |   |   |   |
| Headway 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  |
| Turning Speed (mph)        | 15  |   | 9   | 15  |   | 9   | 15   |   | 9   | 15  |   | 9   |
| Number of Detectors        | 1   | 2   |   | 1   | 2   |   | 1  | 2   | 1   | 1   | 2   |   |
| Detector Template          | Left  | Thru  |   | Left  | Thru  |   | Left   | Thru  | Right   | Left  | Thru  |   |
| Leading Detector (ft)      | 20  | 100   |   | 20  | 100   |   | 20   | 100   | 20  | 20  | 100   |   |
| Trailing Detector (ft)     | 0   | 0   |   | 0   | 0   |   | 0  | 0   | 0   | 0   | 0   |   |
| Detector 1 Position(ft)    | 0   | 0   |   | 0   | 0   |   | 0  | 0   | 0   | 0   | 0   |   |
| Detector 1 Size(ft)        | 20  | 6   |   | 20  | 6   |   | 20   | 6   | 20  | 20  | 6   |   |
| Detector 1 Type            | Cl+Ex   | Cl+Ex   |   | Cl+Ex   | Cl+Ex   |   | Cl+Ex  | Cl+Ex   | Cl+Ex   | Cl+Ex   | Cl+Ex   |   |
| Detector 1 Channel         |   |   |   |   |   |   |  |   |   |   |   |   |
| Detector 1 Extend (s)      | 0.0   | 0.0   |   | 0.0   | 0.0   |   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |   | 0.0   | 0.0   |   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |   | 0.0   | 0.0   |   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |   |
| Detector 2 Position(ft)    |   | 94  |   |   | 94  |   |  | 94  |   |   | 94  |   |
| Detector 2 Size(ft)        |   | 6   |   |   | 6   |   |  | 6   |   |   | 6   |   |
| Detector 2 Type            |   | Cl+Ex   |   |   | Cl+Ex   |   |  | Cl+Ex   |   |   | Cl+Ex   |   |
| Detector 2 Channel         |   |   |   |   |   |   |  |   |   |   |   |   |
| Detector 2 Extend (s)      |   | 0.0   |   |   | 0.0   |   |  | 0.0   |   |   | 0.0   |   |
| Turn Type                  | pm+pt   | NA  |   | pm+pt   | NA  |   | pm+pt  | NA  | pm+ov   | pm+pt   | NA  |   |
| Protected Phases           | 5   | 2   |   | 1   | 6   |   | 3  | 8   | 1   | 7   | 4   |   |
| Permitted Phases           | 2   |   |   | 6   |   |   | 8  |   | 8   | 4   |   |   |

Lanes, Volumes, Timings  
2: Front St & Founder Pkwy

Existing  
AM Peak

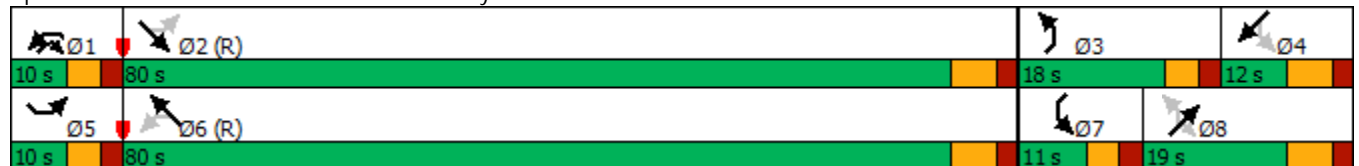


| Lane Group            | SEL  | SET   | SER | NWL  | NWT   | NWR | NEL   | NET   | NER  | SWL  | SWT   | SWR |
|-----------------------|------|-------|-----|------|-------|-----|-------|-------|------|------|-------|-----|
| Detector Phase        | 5    | 2     |     | 1    | 6     |     | 3     | 8     | 1    | 7    | 4     |     |
| Switch Phase          |      |       |     |      |       |     |       |       |      |      |       |     |
| Minimum Initial (s)   | 4.0  | 4.0   |     | 4.0  | 4.0   |     | 4.0   | 4.0   | 4.0  | 4.0  | 4.0   |     |
| Minimum Split (s)     | 9.0  | 21.0  |     | 9.0  | 21.0  |     | 9.0   | 21.0  | 9.0  | 10.0 | 21.0  |     |
| Total Split (s)       | 10.0 | 80.0  |     | 10.0 | 80.0  |     | 18.0  | 19.0  | 10.0 | 11.0 | 12.0  |     |
| Total Split (%)       | 8.3% | 66.7% |     | 8.3% | 66.7% |     | 15.0% | 15.8% | 8.3% | 9.2% | 10.0% |     |
| Maximum Green (s)     | 5.0  | 74.0  |     | 5.0  | 74.0  |     | 13.0  | 13.0  | 5.0  | 6.0  | 6.0   |     |
| Yellow Time (s)       | 3.0  | 4.0   |     | 3.0  | 4.0   |     | 3.0   | 4.0   | 3.0  | 3.0  | 4.0   |     |
| All-Red Time (s)      | 2.0  | 2.0   |     | 2.0  | 2.0   |     | 2.0   | 2.0   | 2.0  | 2.0  | 2.0   |     |
| Lost Time Adjust (s)  | 0.0  | 0.0   |     | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   |     |
| Total Lost Time (s)   | 5.0  | 6.0   |     | 5.0  | 6.0   |     | 5.0   | 6.0   | 5.0  | 5.0  | 6.0   |     |
| Lead/Lag              | Lead | Lag   |     | Lead | Lag   |     | Lead  | Lag   | Lead | Lead | Lag   |     |
| Lead-Lag Optimize?    | Yes  | Yes   |     | Yes  | Yes   |     | Yes   | Yes   | Yes  | Yes  | Yes   |     |
| Vehicle Extension (s) | 3.0  | 3.0   |     | 3.0  | 3.0   |     | 3.0   | 3.0   | 3.0  | 3.0  | 3.0   |     |
| Recall Mode           | None | C-Max |     | None | C-Max |     | None  | None  | None | None | None  |     |
| Act Effect Green (s)  | 81.1 | 76.1  |     | 81.1 | 76.1  |     | 24.9  | 21.7  | 32.8 | 12.6 | 5.9   |     |
| Actuated g/C Ratio    | 0.68 | 0.63  |     | 0.68 | 0.63  |     | 0.21  | 0.18  | 0.27 | 0.10 | 0.05  |     |
| v/c Ratio             | 0.42 | 0.36  |     | 0.20 | 0.57  |     | 0.85  | 0.16  | 0.09 | 0.03 | 0.58  |     |
| Control Delay         | 12.8 | 13.0  |     | 6.8  | 13.8  |     | 59.8  | 45.0  | 3.2  | 38.8 | 34.9  |     |
| Queue Delay           | 0.0  | 0.0   |     | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0  | 0.0  | 0.0   |     |
| Total Delay           | 12.8 | 13.0  |     | 6.8  | 13.8  |     | 59.8  | 45.0  | 3.2  | 38.8 | 34.9  |     |
| LOS                   | B    | B     |     | A    | B     |     | E     | D     | A    | D    | C     |     |
| Approach Delay        |      | 13.0  |     |      | 13.5  |     |       | 53.9  |      |      | 35.0  |     |
| Approach LOS          |      | B     |     |      | B     |     |       | D     |      |      | D     |     |

Intersection Summary

Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 42 (35%), Referenced to phase 2:SETL and 6:NWTL, Start of Green  
 Natural Cycle: 70  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.85  
 Intersection Signal Delay: 20.0  
 Intersection LOS: C  
 Intersection Capacity Utilization 70.1%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 2: Front St & Founder Pkwy



Lanes, Volumes, Timings  
3: Woodlands Blvd & Founders Pkwy

Existing  
AM Peak



| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |       |       |       |       |       |       |
| Traffic Volume (vph)       | 6     | 650   | 70    | 325   | 1650  | 87    | 115   | 25    | 140   | 37    | 14    | 2     |
| Future Volume (vph)        | 6     | 650   | 70    | 325   | 1650  | 87    | 115   | 25    | 140   | 37    | 14    | 2     |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 450   |       | 0     | 500   |       | 400   | 220   |       | 0     | 120   |       | 140   |
| Storage Lanes              | 1     |       | 1     | 1     |       | 1     | 1     |       | 1     | 1     |       | 0     |
| Taper Length (ft)          | 100   |       |       | 100   |       |       | 100   |       |       | 100   |       |       |
| Lane Util. Factor          | 1.00  | 0.95  | 1.00  | 1.00  | 0.95  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 0.95  | 0.95  |
| Frt                        |       |       | 0.850 |       |       | 0.850 |       |       | 0.850 |       | 0.982 |       |
| Flt Protected              | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       |
| Satd. Flow (prot)          | 1770  | 3539  | 1583  | 1770  | 3539  | 1583  | 1770  | 1863  | 1583  | 1770  | 3476  | 0     |
| Flt Permitted              | 0.075 |       |       | 0.328 |       |       | 0.541 |       |       |       |       |       |
| Satd. Flow (perm)          | 140   | 3539  | 1583  | 611   | 3539  | 1583  | 1008  | 1863  | 1583  | 1863  | 3476  | 0     |
| Right Turn on Red          |       |       | Yes   |       |       | Yes   |       |       | Yes   |       |       | Yes   |
| Satd. Flow (RTOR)          |       |       | 164   |       |       | 164   |       |       | 152   |       |       | 2     |
| Link Speed (mph)           |       | 50    |       |       | 50    |       |       | 30    |       |       |       | 30    |
| Link Distance (ft)         |       | 721   |       |       | 782   |       |       | 419   |       |       |       | 497   |
| Travel Time (s)            |       | 9.8   |       |       | 10.7  |       |       | 9.5   |       |       |       | 11.3  |
| Peak Hour Factor           | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 7     | 707   | 76    | 353   | 1793  | 95    | 125   | 27    | 152   | 40    | 15    | 2     |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 7     | 707   | 76    | 353   | 1793  | 95    | 125   | 27    | 152   | 40    | 17    | 0     |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right |
| Median Width(ft)           |       | 24    |       |       | 24    |       |       | 30    |       |       |       | 12    |
| Link Offset(ft)            |       | 0     |       |       | 0     |       |       | 0     |       |       |       | 0     |
| Crosswalk Width(ft)        |       | 16    |       |       | 16    |       |       | 16    |       |       |       | 16    |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |       |       |       |       |       |
| Headway 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  |
| Turning Speed (mph)        | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     |
| Number of Detectors        | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     |       |
| Detector Template          | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  |       |
| Leading Detector (ft)      | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   |       |
| Trailing Detector (ft)     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |       |
| Detector 1 Position(ft)    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |       |
| Detector 1 Size(ft)        | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     |       |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |       |
| Detector 1 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       |
| Detector 2 Position(ft)    |       | 94    |       |       | 94    |       |       | 94    |       |       |       | 94    |
| Detector 2 Size(ft)        |       | 6     |       |       | 6     |       |       | 6     |       |       |       | 6     |
| Detector 2 Type            |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |       |       | Cl+Ex |
| Detector 2 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |       |       | 0.0   |
| Turn Type                  | pm+pt | NA    | Perm  | pm+pt | NA    | Perm  | pm+pt | NA    | Perm  | pm+pt | NA    |       |
| Protected Phases           | 5     | 2     |       | 1     | 6     |       | 3     | 8     |       | 7     |       | 4     |
| Permitted Phases           | 2     |       | 2     | 6     |       | 6     | 8     |       | 8     | 4     |       |       |

# Lanes, Volumes, Timings

## 3: Woodlands Blvd & Founders Pkwy

Existing  
AM Peak

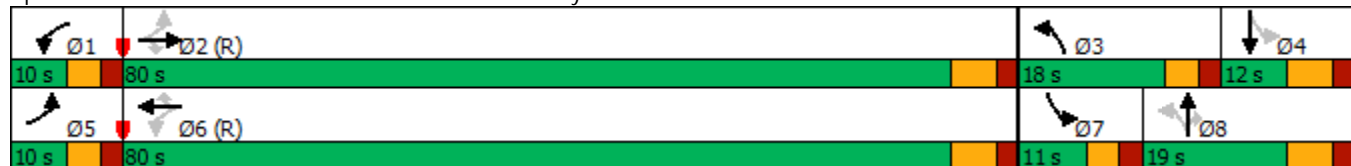


| Lane Group            | EBL  | EBT   | EBR   | WBL  | WBT   | WBR   | NBL   | NBT   | NBR   | SBL  | SBT   | SBR  |
|-----------------------|------|-------|-------|------|-------|-------|-------|-------|-------|------|-------|------|
| Detector Phase        | 5    | 2     | 2     | 1    | 6     | 6     | 3     | 8     | 8     | 7    | 4     |      |
| Switch Phase          |      |       |       |      |       |       |       |       |       |      |       |      |
| Minimum Initial (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  |
| Minimum Split (s)     | 9.0  | 20.0  | 20.0  | 9.0  | 20.0  | 20.0  | 9.0   | 20.0  | 20.0  | 9.0  | 20.0  | 20.0 |
| Total Split (s)       | 10.0 | 80.0  | 80.0  | 10.0 | 80.0  | 80.0  | 18.0  | 19.0  | 19.0  | 11.0 | 12.0  |      |
| Total Split (%)       | 8.3% | 66.7% | 66.7% | 8.3% | 66.7% | 66.7% | 15.0% | 15.8% | 15.8% | 9.2% | 10.0% |      |
| Maximum Green (s)     | 5.0  | 74.0  | 74.0  | 5.0  | 74.0  | 74.0  | 13.0  | 13.0  | 13.0  | 6.0  | 6.0   |      |
| Yellow Time (s)       | 3.0  | 4.0   | 4.0   | 3.0  | 4.0   | 4.0   | 3.0   | 4.0   | 4.0   | 3.0  | 4.0   |      |
| All-Red Time (s)      | 2.0  | 2.0   | 2.0   | 2.0  | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0  | 2.0   |      |
| Lost Time Adjust (s)  | 0.0  | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | -1.0  | 0.0  | 0.0   |      |
| Total Lost Time (s)   | 5.0  | 6.0   | 6.0   | 5.0  | 6.0   | 6.0   | 5.0   | 6.0   | 5.0   | 5.0  | 6.0   |      |
| Lead/Lag              | Lead | Lag   | Lag   | Lead | Lag   | Lag   | Lead  | Lag   | Lag   | Lead | Lag   |      |
| Lead-Lag Optimize?    | Yes  | Yes   | Yes   | Yes  | Yes   | Yes   | Yes   | Yes   | Yes   | Yes  | Yes   |      |
| 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   |      |
| Recall Mode           | None | C-Max | C-Max | None | C-Max | C-Max | None  | None  | None  | None | None  |      |
| Act Effect Green (s)  | 83.1 | 76.8  | 76.8  | 89.9 | 87.9  | 87.9  | 19.1  | 9.3   | 10.3  | 8.7  | 5.8   |      |
| Actuated g/C Ratio    | 0.69 | 0.64  | 0.64  | 0.75 | 0.73  | 0.73  | 0.16  | 0.08  | 0.09  | 0.07 | 0.05  |      |
| v/c Ratio             | 0.04 | 0.31  | 0.07  | 0.66 | 0.69  | 0.08  | 0.50  | 0.19  | 0.55  | 0.31 | 0.10  |      |
| Control Delay         | 5.5  | 10.7  | 0.1   | 15.0 | 12.3  | 0.1   | 50.9  | 53.3  | 15.7  | 50.5 | 51.3  |      |
| Queue Delay           | 0.0  | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   |      |
| Total Delay           | 5.5  | 10.7  | 0.1   | 15.0 | 12.3  | 0.1   | 50.9  | 53.3  | 15.7  | 50.5 | 51.3  |      |
| LOS                   | A    | B     | A     | B    | B     | A     | D     | D     | B     | D    | D     |      |
| Approach Delay        |      | 9.6   |       |      | 12.2  |       |       | 33.5  |       |      | 50.8  |      |
| Approach LOS          |      | A     |       |      | B     |       |       | C     |       |      | D     |      |

### Intersection Summary

|                                   |   |
|-----------------------------------|---|
| Area Type:                        | Other   |
| Cycle Length:                     | 120   |
| Actuated Cycle Length:            | 120   |
| Offset:                           | 42 (35%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green |
| Natural Cycle:                    | 90  |
| Control Type:                     | Actuated-Coordinated  |
| Maximum v/c Ratio:                | 0.69  |
| Intersection Signal Delay:        | 14.2  |
| Intersection LOS:                 | B   |
| Intersection Capacity Utilization | 76.1%   |
| ICU Level of Service              | D   |
| Analysis Period (min)             | 15  |

### Splits and Phases: 3: Woodlands Blvd & Founders Pkwy



Lanes, Volumes, Timings  
4: Founders Pkwy & Crowfoot Valley Rd

Existing  
AM Peak



| Lane Group                 | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |
| Traffic Volume (vph)       | 315   | 510   | 1260  | 116   | 75    | 800   |
| Future Volume (vph)        | 315   | 510   | 1260  | 116   | 75    | 800   |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 485   |       |       | 0     | 125   | 0     |
| Storage Lanes              | 2     |       |       | 1     | 2     | 1     |
| Taper Length (ft)          | 100   |       |       |       | 100   |       |
| Lane Util. Factor          | 0.97  | 0.95  | 0.95  | 1.00  | 0.97  | 0.91  |
| Frt                        |       |       |       | 0.850 | 0.874 | 0.850 |
| Flt Protected              | 0.950 |       |       |       | 0.992 |       |
| Satd. Flow (prot)          | 3433  | 3539  | 3539  | 1583  | 3133  | 1441  |
| Flt Permitted              | 0.950 |       |       |       | 0.992 |       |
| Satd. Flow (perm)          | 3433  | 3539  | 3539  | 1583  | 3133  | 1441  |
| Right Turn on Red          |       |       |       | Yes   |       | Yes   |
| Satd. Flow (RTOR)          |       |       |       | 126   | 279   | 341   |
| Link Speed (mph)           |       | 50    | 50    |       | 35    |       |
| Link Distance (ft)         |       | 641   | 617   |       | 595   |       |
| Travel Time (s)            |       | 8.7   | 8.4   |       | 11.6  |       |
| Peak Hour Factor           | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 342   | 554   | 1370  | 126   | 82    | 870   |
| Shared Lane Traffic (%)    |       |       |       |       |       | 50%   |
| Lane Group Flow (vph)      | 342   | 554   | 1370  | 126   | 517   | 435   |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Left  | Right | Left  | Right |
| Median Width(ft)           |       | 24    | 24    |       | 24    |       |
| Link Offset(ft)            |       | 0     | 0     |       | 0     |       |
| Crosswalk Width(ft)        |       | 16    | 16    |       | 16    |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |
| Headway Factor             | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| Turning Speed (mph)        | 15    |       |       | 9     | 15    | 9     |
| Number of Detectors        | 1     | 2     | 2     | 1     | 1     | 1     |
| Detector Template          | Left  | Thru  | Thru  | Right | Left  | Right |
| Leading Detector (ft)      | 20    | 100   | 100   | 20    | 20    | 20    |
| Trailing Detector (ft)     | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Position(ft)    | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Size(ft)        | 20    | 6     | 6     | 20    | 20    | 20    |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 2 Position(ft)    |       | 94    | 94    |       |       |       |
| Detector 2 Size(ft)        |       | 6     | 6     |       |       |       |
| Detector 2 Type            |       | Cl+Ex | Cl+Ex |       |       |       |
| Detector 2 Channel         |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   | 0.0   |       |       |       |
| Turn Type                  | Prot  | NA    | NA    | Perm  | Prot  | Free  |
| Protected Phases           | 5     | 2     | 6     |       | 4     |       |
| Permitted Phases           |       |       |       | 6     |       | Free  |



# Lanes, Volumes, Timings

## 4: Founders Pkwy & Crowfoot Valley Rd

Existing  
AM Peak

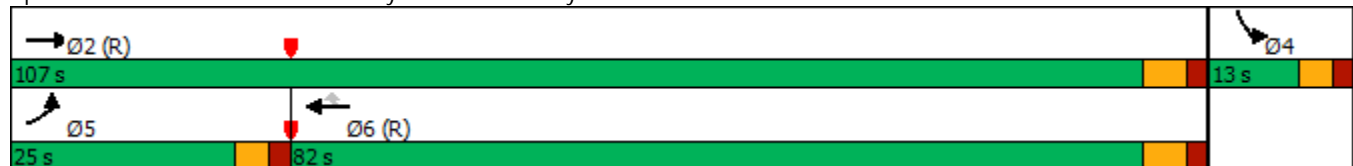


| Lane Group            | EBL   | EBT   | WBT   | WBR   | SBL    | SBR   |
|-----------------------|-------|-------|-------|-------|--------|-------|
| Detector Phase        | 5     | 2     | 6     | 6     | 4      |       |
| Switch Phase          |       |       |       |       |        |       |
| Minimum Initial (s)   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0    |       |
| Minimum Split (s)     | 9.0   | 10.0  | 10.0  | 10.0  | 9.0    |       |
| Total Split (s)       | 25.0  | 107.0 | 82.0  | 82.0  | 13.0   |       |
| Total Split (%)       | 20.8% | 89.2% | 68.3% | 68.3% | 10.8%  |       |
| Maximum Green (s)     | 20.0  | 101.0 | 76.0  | 76.0  | 8.0    |       |
| Yellow Time (s)       | 3.0   | 4.0   | 4.0   | 4.0   | 3.0    |       |
| All-Red Time (s)      | 2.0   | 2.0   | 2.0   | 2.0   | 2.0    |       |
| Lost Time Adjust (s)  | -2.0  | -2.0  | -2.0  | -2.0  | -2.0   |       |
| Total Lost Time (s)   | 3.0   | 4.0   | 4.0   | 4.0   | 3.0    |       |
| Lead/Lag              | Lead  |       | Lag   | Lag   |        |       |
| Lead-Lag Optimize?    | Yes   |       | Yes   | Yes   |        |       |
| Vehicle Extension (s) | 3.0   | 3.0   | 3.0   | 3.0   | 3.0    |       |
| Recall Mode           | None  | C-Max | C-Max | C-Max | None   |       |
| Act Effect Green (s)  | 18.8  | 103.0 | 81.2  | 81.2  | 10.0   | 120.0 |
| Actuated g/C Ratio    | 0.16  | 0.86  | 0.68  | 0.68  | 0.08   | 1.00  |
| v/c Ratio             | 0.64  | 0.18  | 0.57  | 0.11  | 1.12dr | 0.30  |
| Control Delay         | 52.8  | 1.6   | 11.7  | 1.5   | 65.6   | 0.5   |
| Queue Delay           | 0.0   | 0.0   | 0.0   | 0.0   | 0.0    | 0.0   |
| Total Delay           | 52.8  | 1.6   | 11.7  | 1.5   | 65.6   | 0.5   |
| LOS                   | D     | A     | B     | A     | E      | A     |
| Approach Delay        |       | 21.1  | 10.9  |       | 35.9   |       |
| Approach LOS          |       | C     | B     |       | D      |       |

### Intersection Summary

Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 93 (78%), Referenced to phase 2:EBT and 6:WBT, Start of Green  
 Natural Cycle: 55  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 1.00  
 Intersection Signal Delay: 20.7  
 Intersection LOS: C  
 Intersection Capacity Utilization 64.4%  
 ICU Level of Service C  
 Analysis Period (min) 15  
 dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 4: Founders Pkwy & Crowfoot Valley Rd



Lanes, Volumes, Timings  
8: Ridge Rd/Founders Pkwy & 5th St/SH 86

Existing  
AM Peak



| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |       |       |       |       |       |       |
| Traffic Volume (vph)       | 66    | 208   | 157   | 81    | 379   | 568   | 336   | 360   | 47    | 209   | 143   | 122   |
| Future Volume (vph)        | 66    | 208   | 157   | 81    | 379   | 568   | 336   | 360   | 47    | 209   | 143   | 122   |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 375   |       | 425   | 500   |       | 0     | 230   |       | 0     | 600   |       | 600   |
| Storage Lanes              | 1     |       | 1     | 1     |       | 1     | 1     |       | 1     | 1     |       | 1     |
| Taper Length (ft)          | 100   |       |       | 100   |       |       | 100   |       |       | 100   |       |       |
| 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  |
| Frt                        |       |       | 0.850 |       |       | 0.850 |       |       | 0.850 |       |       | 0.850 |
| Flt Protected              | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       |
| Satd. Flow (prot)          | 1770  | 1863  | 1583  | 1770  | 1863  | 1583  | 1770  | 1863  | 1583  | 1770  | 1863  | 1583  |
| Flt Permitted              | 0.375 |       |       | 0.535 |       |       | 0.492 |       |       | 0.231 |       |       |
| Satd. Flow (perm)          | 699   | 1863  | 1583  | 997   | 1863  | 1583  | 916   | 1863  | 1583  | 430   | 1863  | 1583  |
| Right Turn on Red          |       |       | Yes   |       |       | Yes   |       |       | Yes   |       |       | Yes   |
| Satd. Flow (RTOR)          |       |       | 173   |       |       | 510   |       |       | 173   |       |       | 173   |
| Link Speed (mph)           |       | 35    |       |       | 50    |       |       | 35    |       |       | 50    |       |
| Link Distance (ft)         |       | 450   |       |       | 848   |       |       | 659   |       |       | 865   |       |
| Travel Time (s)            |       | 8.8   |       |       | 11.6  |       |       | 12.8  |       |       | 11.8  |       |
| Peak Hour Factor           | 0.92  | 0.92  | 0.92  | 0.92  | 0.95  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 72    | 226   | 171   | 88    | 399   | 617   | 365   | 391   | 51    | 227   | 155   | 133   |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 72    | 226   | 171   | 88    | 399   | 617   | 365   | 391   | 51    | 227   | 155   | 133   |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right |
| Median Width(ft)           |       | 18    |       |       | 18    |       |       | 24    |       |       | 24    |       |
| Link Offset(ft)            |       | 0     |       |       | 0     |       |       | 0     |       |       | 0     |       |
| Crosswalk Width(ft)        |       | 16    |       |       | 16    |       |       | 16    |       |       | 16    |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |       |       |       |       |       |
| Headway 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  |
| Turning Speed (mph)        | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     |
| Number of Detectors        | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     | 1     |
| Detector Template          | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  | Right |
| Leading Detector (ft)      | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   | 20    |
| Trailing Detector (ft)     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Position(ft)    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Size(ft)        | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     | 20    |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 2 Position(ft)    |       | 94    |       |       | 94    |       |       | 94    |       |       | 94    |       |
| Detector 2 Size(ft)        |       | 6     |       |       | 6     |       |       | 6     |       |       | 6     |       |
| Detector 2 Type            |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |
| Detector 2 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |
| Turn Type                  | pm+pt | NA    | Free  | pm+pt | NA    | Free  | pm+pt | NA    | Free  | pm+pt | NA    | Free  |
| Protected Phases           | 5     | 2     |       | 1     | 6     |       | 3     | 8     |       | 7     | 4     |       |
| Permitted Phases           | 2     |       | Free  | 6     |       | Free  | 8     |       | Free  | 4     |       | Free  |

Lanes, Volumes, Timings  
 8: Ridge Rd/Founders Pkwy & 5th St/SH 86

Existing  
 AM Peak

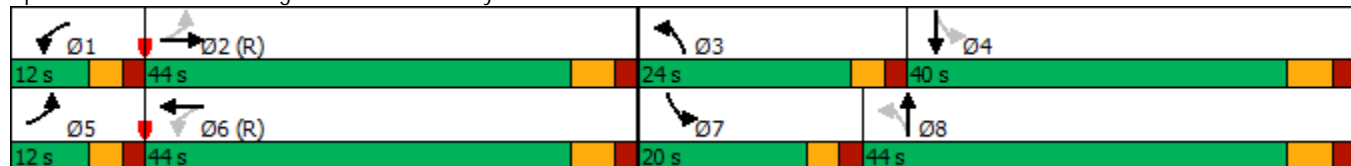


| Lane Group            | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Detector Phase        | 5     | 2     |       | 1     | 6     |       | 3     | 8     |       | 7     | 4     |       |
| Switch Phase          |       |       |       |       |       |       |       |       |       |       |       |       |
| Minimum Initial (s)   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |       |
| Minimum Split (s)     | 9.0   | 20.0  |       | 9.0   | 20.0  |       | 9.0   | 20.0  |       | 9.0   | 20.0  |       |
| Total Split (s)       | 12.0  | 44.0  |       | 12.0  | 44.0  |       | 24.0  | 44.0  |       | 20.0  | 40.0  |       |
| Total Split (%)       | 10.0% | 36.7% |       | 10.0% | 36.7% |       | 20.0% | 36.7% |       | 16.7% | 33.3% |       |
| Maximum Green (s)     | 7.0   | 38.0  |       | 7.0   | 38.0  |       | 19.0  | 38.0  |       | 15.0  | 34.0  |       |
| Yellow Time (s)       | 3.0   | 4.0   |       | 3.0   | 4.0   |       | 3.0   | 4.0   |       | 3.0   | 4.0   |       |
| All-Red Time (s)      | 2.0   | 2.0   |       | 2.0   | 2.0   |       | 2.0   | 2.0   |       | 2.0   | 2.0   |       |
| Lost Time Adjust (s)  | 0.0   | 0.0   |       | 0.0   | 0.0   |       | -1.0  | -1.0  |       | -1.0  | -1.0  |       |
| Total Lost Time (s)   | 5.0   | 6.0   |       | 5.0   | 6.0   |       | 4.0   | 5.0   |       | 4.0   | 5.0   |       |
| Lead/Lag              | Lead  | Lag   |       | Lead  | Lag   |       | Lead  | Lag   |       | Lead  | Lag   |       |
| Lead-Lag Optimize?    | Yes   | Yes   |       | Yes   | Yes   |       | Yes   | Yes   |       | Yes   | Yes   |       |
| Vehicle Extension (s) | 3.0   | 3.0   |       | 3.0   | 3.0   |       | 3.0   | 3.0   |       | 3.0   | 3.0   |       |
| Recall Mode           | None  | C-Max |       | None  | C-Max |       | None  | None  |       | None  | None  |       |
| Act Effect Green (s)  | 54.0  | 45.6  | 120.0 | 55.8  | 48.1  | 120.0 | 51.6  | 31.3  | 120.0 | 43.1  | 26.8  | 120.0 |
| Actuated g/C Ratio    | 0.45  | 0.38  | 1.00  | 0.46  | 0.40  | 1.00  | 0.43  | 0.26  | 1.00  | 0.36  | 0.22  | 1.00  |
| v/c Ratio             | 0.19  | 0.32  | 0.11  | 0.17  | 0.53  | 0.39  | 0.68  | 0.81  | 0.03  | 0.70  | 0.37  | 0.08  |
| Control Delay         | 19.6  | 29.9  | 0.1   | 19.2  | 33.6  | 0.7   | 30.8  | 54.3  | 0.0   | 34.0  | 40.6  | 0.1   |
| Queue Delay           | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay           | 19.6  | 29.9  | 0.1   | 19.2  | 33.6  | 0.7   | 30.8  | 54.3  | 0.0   | 34.0  | 40.6  | 0.1   |
| LOS                   | B     | C     | A     | B     | C     | A     | C     | D     | A     | C     | D     | A     |
| Approach Delay        |       | 17.5  |       |       | 14.1  |       |       | 40.2  |       |       | 27.2  |       |
| Approach LOS          |       | B     |       |       | B     |       |       | D     |       |       | C     |       |

Intersection Summary
































Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.81  
 Intersection Signal Delay: 24.3      Intersection LOS: C  
 Intersection Capacity Utilization 70.8%      ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 8: Ridge Rd/Founders Pkwy & 5th St/SH 86



Lanes, Volumes, Timings  
1: Allen Way & Founder Pkwy

Existing  
PM Peak

|                            |    |    |  |  |    |  |  |    |  |  |    |    |
|----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL  | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations        |   |    |   |  |    |  |  |   |   |  |   |    |
| Traffic Volume (vph)       | 435   | 2385  | 230   | 40  | 1905  | 135   | 150  | 35  | 90  | 115   | 35  | 450   |
| Future Volume (vph)        | 435   | 2385  | 230   | 40  | 1905  | 135   | 150  | 35  | 90  | 115   | 35  | 450   |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900   | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 300   |   | 0   | 330   |   | 200   | 0  |   | 0   | 125   |   | 0   |
| Storage Lanes              | 2   |   | 0   | 1   |   | 1   | 1  |   | 0   | 1   |   | 2   |
| Taper Length (ft)          | 100   |   |   | 100   |   |   | 100  |   |   | 100   |   |   |
| Lane Util. Factor          | 0.97  | 0.91  | 0.91  | 1.00  | 0.91  | 1.00  | 1.00   | 1.00  | 1.00  | 1.00  | 1.00  | 0.88  |
| Frt                        |   | 0.986   |   |   |   | 0.850   |  | 0.892   |   |   |   | 0.850   |
| Flt Protected              | 0.950   |   |   | 0.950   |   |   | 0.950  |   |   | 0.950   |   |   |
| Satd. Flow (prot)          | 3433  | 5014  | 0   | 1770  | 5085  | 1583  | 1770   | 1662  | 0   | 1770  | 1863  | 2787  |
| Flt Permitted              | 0.950   |   |   | 0.059   |   |   | 0.732  |   |   | 0.444   |   |   |
| Satd. Flow (perm)          | 3433  | 5014  | 0   | 110   | 5085  | 1583  | 1364   | 1662  | 0   | 827   | 1863  | 2787  |
| Right Turn on Red          |   |   | Yes   |   |   | Yes   |  |   | Yes   |   |   | Yes   |
| Satd. Flow (RTOR)          |   | 28  |   |   |   | 164   |  | 82  |   |   |   | 279   |
| Link Speed (mph)           |   | 35  |   |   | 35  |   |  | 30  |   |   |   | 30  |
| Link Distance (ft)         |   | 533   |   |   | 1095  |   |  | 278   |   |   |   | 392   |
| Travel Time (s)            |   | 10.4  |   |   | 21.3  |   |  | 6.3   |   |   |   | 8.9   |
| Peak Hour Factor           | 0.96  | 0.95  | 0.92  | 0.92  | 0.98  | 0.92  | 0.92   | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 453   | 2511  | 250   | 43  | 1944  | 147   | 163  | 38  | 98  | 125   | 38  | 489   |
| Shared Lane Traffic (%)    |   |   |   |   |   |   |  |   |   |   |   |   |
| Lane Group Flow (vph)      | 453   | 2761  | 0   | 43  | 1944  | 147   | 163  | 136   | 0   | 125   | 38  | 489   |
| Enter Blocked Intersection | No  | No  | No  | No  | No  | No  | No   | No  | No  | No  | No  | No  |
| Lane Alignment             | Left  | Left  | Right   | Left  | Left  | Right   | Left   | Left  | Right   | Left  | Left  | Right   |
| Median Width(ft)           |   | 20  |   |   | 20  |   |  | 12  |   |   |   | 20  |
| Link Offset(ft)            |   | 0   |   |   | 0   |   |  | 0   |   |   |   | 0   |
| Crosswalk Width(ft)        |   | 16  |   |   | 16  |   |  | 16  |   |   |   | 16  |
| Two way Left Turn Lane     |   |   |   |   |   |   |  |   |   |   |   |   |
| Headway 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  |
| Turning Speed (mph)        | 15  |   | 9   | 15  |   | 9   | 15   |   | 9   | 15  |   | 9   |
| Number of Detectors        | 1   | 2   |   | 1   | 2   | 1   | 1  | 2   |   | 1   | 2   | 1   |
| Detector Template          | Left  | Thru  |   | Left  | Thru  | Right   | Left   | Thru  |   | Left  | Thru  | Right   |
| Leading Detector (ft)      | 20  | 100   |   | 20  | 100   | 20  | 20   | 100   |   | 20  | 100   | 20  |
| Trailing Detector (ft)     | 0   | 0   |   | 0   | 0   | 0   | 0  | 0   |   | 0   | 0   | 0   |
| Detector 1 Position(ft)    | 0   | 0   |   | 0   | 0   | 0   | 0  | 0   |   | 0   | 0   | 0   |
| Detector 1 Size(ft)        | 20  | 6   |   | 20  | 6   | 20  | 20   | 6   |   | 20  | 6   | 20  |
| Detector 1 Type            | Cl+Ex   | Cl+Ex   |   | Cl+Ex   | Cl+Ex   | Cl+Ex   | Cl+Ex  | Cl+Ex   |   | Cl+Ex   | Cl+Ex   | Cl+Ex   |
| Detector 1 Channel         |   |   |   |   |   |   |  |   |   |   |   |   |
| Detector 1 Extend (s)      | 0.0   | 0.0   |   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   |   | 0.0   | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   |   | 0.0   | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   |   | 0.0   | 0.0   | 0.0   |
| Detector 2 Position(ft)    |   | 94  |   |   | 94  |   |  | 94  |   |   |   | 94  |
| Detector 2 Size(ft)        |   | 6   |   |   | 6   |   |  | 6   |   |   |   | 6   |
| Detector 2 Type            |   | Cl+Ex   |   |   | Cl+Ex   |   |  | Cl+Ex   |   |   |   | Cl+Ex   |
| Detector 2 Channel         |   |   |   |   |   |   |  |   |   |   |   |   |
| Detector 2 Extend (s)      |   | 0.0   |   |   | 0.0   |   |  | 0.0   |   |   |   | 0.0   |
| Turn Type                  | Prot  | NA  |   | pm+pt   | NA  | Perm  | pm+pt  | NA  |   | pm+pt   | NA  | Perm  |
| Protected Phases           | 5   | 2   |   | 1   | 6   |   | 3  | 8   |   | 7   | 4   |   |
| Permitted Phases           |   |   |   | 6   |   | 6   | 8  |   |   | 4   |   | 4   |

Lanes, Volumes, Timings  
1: Allen Way & Founder Pkwy

Existing  
PM Peak

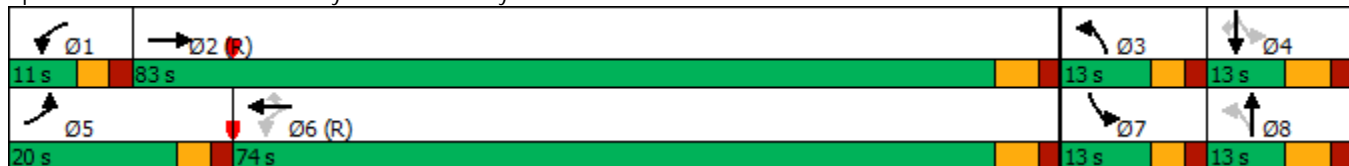


| Lane Group            | EBL   | EBT   | EBR | WBL  | WBT   | WBR   | NBL   | NBT   | NBR | SBL   | SBT   | SBR   |
|-----------------------|-------|-------|-----|------|-------|-------|-------|-------|-----|-------|-------|-------|
| Detector Phase        | 5     | 2     |     | 1    | 6     | 6     | 3     | 8     |     | 7     | 4     | 4     |
| Switch Phase          |       |       |     |      |       |       |       |       |     |       |       |       |
| Minimum Initial (s)   | 4.0   | 4.0   |     | 4.0  | 4.0   | 4.0   | 4.0   | 4.0   |     | 4.0   | 4.0   | 4.0   |
| Minimum Split (s)     | 11.0  | 21.0  |     | 9.5  | 21.0  | 21.0  | 9.0   | 13.0  |     | 9.0   | 13.0  | 13.0  |
| Total Split (s)       | 20.0  | 83.0  |     | 11.0 | 74.0  | 74.0  | 13.0  | 13.0  |     | 13.0  | 13.0  | 13.0  |
| Total Split (%)       | 16.7% | 69.2% |     | 9.2% | 61.7% | 61.7% | 10.8% | 10.8% |     | 10.8% | 10.8% | 10.8% |
| Maximum Green (s)     | 15.0  | 77.0  |     | 6.0  | 68.0  | 68.0  | 8.0   | 7.0   |     | 8.0   | 7.0   | 7.0   |
| Yellow Time (s)       | 3.0   | 4.0   |     | 3.0  | 4.0   | 4.0   | 3.0   | 4.0   |     | 3.0   | 4.0   | 4.0   |
| All-Red Time (s)      | 2.0   | 2.0   |     | 2.0  | 2.0   | 2.0   | 2.0   | 2.0   |     | 2.0   | 2.0   | 2.0   |
| Lost Time Adjust (s)  | -2.0  | 0.0   |     | 0.0  | 0.0   | -1.0  | -2.0  | 0.0   |     | -2.0  | -2.0  | -2.0  |
| Total Lost Time (s)   | 3.0   | 6.0   |     | 5.0  | 6.0   | 5.0   | 3.0   | 6.0   |     | 3.0   | 4.0   | 4.0   |
| Lead/Lag              | Lead  | Lag   |     | Lead | Lag   | Lag   | Lead  | Lag   |     | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?    | Yes   | Yes   |     | Yes  | Yes   | Yes   | Yes   | Yes   |     | Yes   | Yes   | Yes   |
| Vehicle Extension (s) | 3.0   | 3.0   |     | 3.0  | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0   | 3.0   | 3.0   |
| Recall Mode           | None  | C-Max |     | None | C-Max | C-Max | None  | None  |     | None  | None  | None  |
| Act Effect Green (s)  | 17.0  | 79.2  |     | 74.9 | 68.0  | 69.0  | 20.0  | 7.0   |     | 20.0  | 9.0   | 9.0   |
| Actuated g/C Ratio    | 0.14  | 0.66  |     | 0.62 | 0.57  | 0.58  | 0.17  | 0.06  |     | 0.17  | 0.08  | 0.08  |
| v/c Ratio             | 0.93  | 0.83  |     | 0.29 | 0.67  | 0.15  | 0.62  | 0.78  |     | 0.58  | 0.27  | 1.05  |
| Control Delay         | 78.2  | 18.7  |     | 9.3  | 19.5  | 3.2   | 55.3  | 53.4  |     | 54.0  | 57.8  | 77.6  |
| Queue Delay           | 0.0   | 0.0   |     | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.0   | 0.0   | 0.0   |
| Total Delay           | 78.2  | 18.7  |     | 9.3  | 19.5  | 3.2   | 55.3  | 53.4  |     | 54.0  | 57.8  | 77.6  |
| LOS                   | E     | B     |     | A    | B     | A     | E     | D     |     | D     | E     | E     |
| Approach Delay        |       | 27.1  |     |      | 18.2  |       |       | 54.4  |     |       | 72.0  |       |
| Approach LOS          |       | C     |     |      | B     |       |       | D     |     |       | E     |       |

Intersection Summary






















|                                    |  |
|------------------------------------|--|
| Area Type:                         | Other  |
| Cycle Length:                      | 120  |
| Actuated Cycle Length:             | 120  |
| Offset:                            | 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green |
| Natural Cycle:                     | 90   |
| Control Type:                      | Actuated-Coordinated   |
| Maximum v/c Ratio:                 | 1.05   |
| Intersection Signal Delay:         | 30.0   |
| Intersection LOS:                  | C  |
| Intersection Capacity Utilization: | 85.8%  |
| ICU Level of Service:              | E  |
| Analysis Period (min):             | 15   |

Splits and Phases: 1: Allen Way & Founder Pkwy



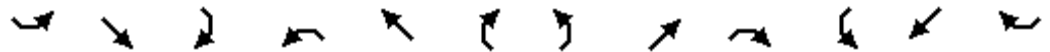
Lanes, Volumes, Timings  
2: Front St & Founder Pkwy

Existing  
PM Peak

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group                 | SEL   | SET   | SER   | NWL   | NWT   | NWR   | NEL  | NET   | NER   | SWL   | SWT   | SWR   |
| Lane Configurations        |  |  |   |  |  |   |  |  |  |  |  |   |
| Traffic Volume (vph)       | 165   | 1740  | 685   | 130   | 1400  | 20  | 620  | 110   | 200   | 40  | 85  | 60  |
| Future Volume (vph)        | 165   | 1740  | 685   | 130   | 1400  | 20  | 620  | 110   | 200   | 40  | 85  | 60  |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900   | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 460   |   | 0   | 200   |   | 0   | 285  |   | 0   | 210   |   | 0   |
| Storage Lanes              | 1   |   | 0   | 1   |   | 0   | 1  |   | 1   | 1   |   | 0   |
| Taper Length (ft)          | 100   |   |   | 100   |   |   | 100  |   |   | 100   |   |   |
| Lane Util. Factor          | 1.00  | 0.91  | 0.91  | 1.00  | 0.91  | 0.91  | 0.97   | 1.00  | 1.00  | 1.00  | 0.95  | 0.95  |
| Frt                        |   | 0.957   |   |   | 0.998   |   |  |   | 0.850   |   | 0.938   |   |
| Flt Protected              | 0.950   |   |   | 0.950   |   |   | 0.950  |   |   | 0.950   |   |   |
| Satd. Flow (prot)          | 1770  | 4867  | 0   | 1770  | 5075  | 0   | 3433   | 1863  | 1583  | 1770  | 3320  | 0   |
| Flt Permitted              | 0.133   |   |   | 0.055   |   |   | 0.546  |   |   | 0.519   |   |   |
| Satd. Flow (perm)          | 248   | 4867  | 0   | 102   | 5075  | 0   | 1973   | 1863  | 1583  | 967   | 3320  | 0   |
| Right Turn on Red          |   |   | Yes   |   |   | Yes   |  |   | Yes   |   |   | Yes   |
| Satd. Flow (RTOR)          |   | 170   |   |   | 3   |   |  |   | 164   |   | 65  |   |
| Link Speed (mph)           |   | 35  |   |   | 35  |   |  | 30  |   |   | 30  |   |
| Link Distance (ft)         |   | 1095  |   |   | 488   |   |  | 556   |   |   | 397   |   |
| Travel Time (s)            |   | 21.3  |   |   | 9.5   |   |  | 12.6  |   |   | 9.0   |   |
| Peak Hour Factor           | 0.92  | 0.95  | 0.92  | 0.92  | 0.98  | 0.92  | 0.92   | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 179   | 1832  | 745   | 141   | 1429  | 22  | 674  | 120   | 217   | 43  | 92  | 65  |
| Shared Lane Traffic (%)    |   |   |   |   |   |   |  |   |   |   |   |   |
| Lane Group Flow (vph)      | 179   | 2577  | 0   | 141   | 1451  | 0   | 674  | 120   | 217   | 43  | 157   | 0   |
| Enter Blocked Intersection | No  | No  | No  | No  | No  | No  | No   | No  | No  | No  | No  | No  |
| Lane Alignment             | Left  | Left  | Right   | Left  | Left  | Right   | Left   | Left  | Right   | Left  | Left  | Right   |
| Median Width(ft)           |   | 12  |   |   | 12  |   |  | 40  |   |   | 24  |   |
| Link Offset(ft)            |   | 0   |   |   | 0   |   |  | 0   |   |   | 0   |   |
| Crosswalk Width(ft)        |   | 16  |   |   | 16  |   |  | 16  |   |   | 16  |   |
| Two way Left Turn Lane     |   |   |   |   |   |   |  |   |   |   |   |   |
| Headway 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  |
| Turning Speed (mph)        | 15  |   | 9   | 15  |   | 9   | 15   |   | 9   | 15  |   | 9   |
| Number of Detectors        | 1   | 2   |   | 1   | 2   |   | 1  | 2   | 1   | 1   | 2   |   |
| Detector Template          | Left  | Thru  |   | Left  | Thru  |   | Left   | Thru  | Right   | Left  | Thru  |   |
| Leading Detector (ft)      | 20  | 100   |   | 20  | 100   |   | 20   | 100   | 20  | 20  | 100   |   |
| Trailing Detector (ft)     | 0   | 0   |   | 0   | 0   |   | 0  | 0   | 0   | 0   | 0   |   |
| Detector 1 Position(ft)    | 0   | 0   |   | 0   | 0   |   | 0  | 0   | 0   | 0   | 0   |   |
| Detector 1 Size(ft)        | 20  | 6   |   | 20  | 6   |   | 20   | 6   | 20  | 20  | 6   |   |
| Detector 1 Type            | Cl+Ex   | Cl+Ex   |   | Cl+Ex   | Cl+Ex   |   | Cl+Ex  | Cl+Ex   | Cl+Ex   | Cl+Ex   | Cl+Ex   |   |
| Detector 1 Channel         |   |   |   |   |   |   |  |   |   |   |   |   |
| Detector 1 Extend (s)      | 0.0   | 0.0   |   | 0.0   | 0.0   |   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |   | 0.0   | 0.0   |   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |   | 0.0   | 0.0   |   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |   |
| Detector 2 Position(ft)    |   | 94  |   |   | 94  |   |  | 94  |   |   | 94  |   |
| Detector 2 Size(ft)        |   | 6   |   |   | 6   |   |  | 6   |   |   | 6   |   |
| Detector 2 Type            |   | Cl+Ex   |   |   | Cl+Ex   |   |  | Cl+Ex   |   |   | Cl+Ex   |   |
| Detector 2 Channel         |   |   |   |   |   |   |  |   |   |   |   |   |
| Detector 2 Extend (s)      |   | 0.0   |   |   | 0.0   |   |  | 0.0   |   |   | 0.0   |   |
| Turn Type                  | pm+pt   | NA  |   | pm+pt   | NA  |   | pm+pt  | NA  | Perm  | pm+pt   | NA  |   |
| Protected Phases           | 5   | 2   |   | 1   | 6   |   | 3  | 8   |   | 7   | 4   |   |
| Permitted Phases           | 2   |   |   | 6   |   |   | 8  |   | 8   | 4   |   |   |

Lanes, Volumes, Timings  
2: Front St & Founder Pkwy

Existing  
PM Peak



| Lane Group            | SEL   | SET   | SER | NWL  | NWT   | NWR | NEL   | NET   | NER   | SWL   | SWT   | SWR |
|-----------------------|-------|-------|-----|------|-------|-----|-------|-------|-------|-------|-------|-----|
| Detector Phase        | 5     | 2     |     | 1    | 6     |     | 3     | 8     | 8     | 7     | 4     |     |
| Switch Phase          |       |       |     |      |       |     |       |       |       |       |       |     |
| Minimum Initial (s)   | 4.0   | 4.0   |     | 4.0  | 4.0   |     | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |     |
| Minimum Split (s)     | 9.0   | 21.0  |     | 9.0  | 21.0  |     | 9.0   | 21.0  | 21.0  | 10.0  | 21.0  |     |
| Total Split (s)       | 20.0  | 83.0  |     | 11.0 | 74.0  |     | 13.0  | 13.0  | 13.0  | 13.0  | 13.0  |     |
| Total Split (%)       | 16.7% | 69.2% |     | 9.2% | 61.7% |     | 10.8% | 10.8% | 10.8% | 10.8% | 10.8% |     |
| Maximum Green (s)     | 15.0  | 77.0  |     | 6.0  | 68.0  |     | 8.0   | 7.0   | 7.0   | 8.0   | 7.0   |     |
| Yellow Time (s)       | 3.0   | 4.0   |     | 3.0  | 4.0   |     | 3.0   | 4.0   | 4.0   | 3.0   | 4.0   |     |
| All-Red Time (s)      | 2.0   | 2.0   |     | 2.0  | 2.0   |     | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   |     |
| Lost Time Adjust (s)  | 0.0   | 0.0   |     | 0.0  | 0.0   |     | -2.0  | -2.0  | 0.0   | 0.0   | 0.0   |     |
| Total Lost Time (s)   | 5.0   | 6.0   |     | 5.0  | 6.0   |     | 3.0   | 4.0   | 6.0   | 5.0   | 6.0   |     |
| Lead/Lag              | Lead  | Lag   |     | Lead | Lag   |     | Lead  | Lag   | Lag   | Lead  | Lag   |     |
| Lead-Lag Optimize?    | Yes   | Yes   |     | Yes  | Yes   |     | Yes   | Yes   | Yes   | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0   | 3.0   |     | 3.0  | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |     |
| Recall Mode           | None  | C-Max |     | None | C-Max |     | None  | None  | None  | None  | None  |     |
| Act Effect Green (s)  | 86.9  | 77.0  |     | 81.1 | 73.8  |     | 20.6  | 11.6  | 9.6   | 15.0  | 6.7   |     |
| Actuated g/C Ratio    | 0.72  | 0.64  |     | 0.68 | 0.62  |     | 0.17  | 0.10  | 0.08  | 0.12  | 0.06  |     |
| v/c Ratio             | 0.60  | 0.81  |     | 0.90 | 0.46  |     | 1.47  | 0.67  | 0.79  | 0.26  | 0.64  |     |
| Control Delay         | 19.1  | 12.2  |     | 78.1 | 13.3  |     | 256.4 | 72.6  | 36.3  | 46.1  | 44.4  |     |
| Queue Delay           | 0.0   | 0.0   |     | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |     |
| Total Delay           | 19.1  | 12.2  |     | 78.1 | 13.3  |     | 256.4 | 72.6  | 36.3  | 46.1  | 44.4  |     |
| LOS                   | B     | B     |     | E    | B     |     | F     | E     | D     | D     | D     |     |
| Approach Delay        |       | 12.6  |     |      | 19.0  |     |       | 187.4 |       |       | 44.8  |     |
| Approach LOS          |       | B     |     |      | B     |     |       | F     |       |       | D     |     |

Intersection Summary

|                                   |  |
|-----------------------------------|--|
| Area Type:                        | Other  |
| Cycle Length:                     | 120  |
| Actuated Cycle Length:            | 120  |
| Offset:                           | 112 (93%), Referenced to phase 2:SETL and 6:NWTL, Start of Green |
| Natural Cycle:                    | 90   |
| Control Type:                     | Actuated-Coordinated   |
| Maximum v/c Ratio:                | 1.47   |
| Intersection Signal Delay:        | 47.4   |
| Intersection LOS:                 | D  |
| Intersection Capacity Utilization | 95.6%  |
| ICU Level of Service              | F  |
| Analysis Period (min)             | 15   |

Splits and Phases: 2: Front St & Founder Pkwy



Lanes, Volumes, Timings  
3: Woodlands Blvd & Founders Pkwy

Existing  
PM Peak



| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |       |       |       |       |       |       |
| Traffic Volume (vph)       | 8     | 1450  | 120   | 205   | 1320  | 90    | 90    | 45    | 315   | 171   | 46    | 7     |
| Future Volume (vph)        | 8     | 1450  | 120   | 205   | 1320  | 90    | 90    | 45    | 315   | 171   | 46    | 7     |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 450   |       | 0     | 500   |       | 400   | 220   |       | 0     | 120   |       | 140   |
| Storage Lanes              | 1     |       | 1     | 1     |       | 1     | 1     |       | 1     | 1     |       | 0     |
| Taper Length (ft)          | 100   |       |       | 100   |       |       | 100   |       |       | 100   |       |       |
| Lane Util. Factor          | 1.00  | 0.95  | 1.00  | 1.00  | 0.95  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 0.95  | 0.95  |
| Frt                        |       |       | 0.850 |       |       | 0.850 |       |       | 0.850 |       | 0.979 |       |
| Flt Protected              | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       |
| Satd. Flow (prot)          | 1770  | 3539  | 1583  | 1770  | 3539  | 1583  | 1770  | 1863  | 1583  | 1770  | 3465  | 0     |
| Flt Permitted              | 0.170 |       |       | 0.106 |       |       | 0.717 |       |       | 0.725 |       |       |
| Satd. Flow (perm)          | 317   | 3539  | 1583  | 197   | 3539  | 1583  | 1336  | 1863  | 1583  | 1350  | 3465  | 0     |
| Right Turn on Red          |       |       | Yes   |       |       | Yes   |       |       | Yes   |       |       | Yes   |
| Satd. Flow (RTOR)          |       |       | 130   |       |       | 164   |       |       | 218   |       | 8     |       |
| Link Speed (mph)           |       | 50    |       |       | 50    |       |       | 30    |       |       | 30    |       |
| Link Distance (ft)         |       | 721   |       |       | 782   |       |       | 419   |       |       | 497   |       |
| Travel Time (s)            |       | 9.8   |       |       | 10.7  |       |       | 9.5   |       |       | 11.3  |       |
| Peak Hour Factor           | 0.92  | 0.95  | 0.92  | 0.92  | 0.98  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 9     | 1526  | 130   | 223   | 1347  | 98    | 98    | 49    | 342   | 186   | 50    | 8     |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 9     | 1526  | 130   | 223   | 1347  | 98    | 98    | 49    | 342   | 186   | 58    | 0     |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right |
| Median Width(ft)           |       | 24    |       |       | 24    |       |       | 30    |       |       | 12    |       |
| Link Offset(ft)            |       | 0     |       |       | 0     |       |       | 0     |       |       | 0     |       |
| Crosswalk Width(ft)        |       | 16    |       |       | 16    |       |       | 16    |       |       | 16    |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |       |       |       |       |       |
| Headway 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  |
| Turning Speed (mph)        | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     |
| Number of Detectors        | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     |       |
| Detector Template          | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  |       |
| Leading Detector (ft)      | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   |       |
| Trailing Detector (ft)     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |       |
| Detector 1 Position(ft)    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |       |
| Detector 1 Size(ft)        | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     |       |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |       |
| Detector 1 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       |
| Detector 2 Position(ft)    |       | 94    |       |       | 94    |       |       | 94    |       |       | 94    |       |
| Detector 2 Size(ft)        |       | 6     |       |       | 6     |       |       | 6     |       |       | 6     |       |
| Detector 2 Type            |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |
| Detector 2 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |
| Turn Type                  | pm+pt | NA    | Perm  | pm+pt | NA    | Perm  | pm+pt | NA    | Free  | pm+pt | NA    |       |
| Protected Phases           | 5     | 2     |       | 1     | 6     |       | 3     | 8     |       | 7     | 4     |       |
| Permitted Phases           | 2     |       | 2     | 6     |       | 6     | 8     |       | Free  | 4     |       |       |



# Lanes, Volumes, Timings

## 3: Woodlands Blvd & Founders Pkwy

Existing  
PM Peak



| Lane Group            | EBL   | EBT   | EBR   | WBL  | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR |
|-----------------------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-----|
| Detector Phase        | 5     | 2     | 2     | 1    | 6     | 6     | 3     | 8     |       | 7     | 4     |     |
| Switch Phase          |       |       |       |      |       |       |       |       |       |       |       |     |
| Minimum Initial (s)   | 4.0   | 4.0   | 4.0   | 4.0  | 4.0   | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |     |
| Minimum Split (s)     | 9.0   | 20.0  | 20.0  | 9.0  | 20.0  | 20.0  | 9.0   | 13.0  |       | 9.0   | 13.0  |     |
| Total Split (s)       | 20.0  | 83.0  | 83.0  | 11.0 | 74.0  | 74.0  | 13.0  | 13.0  |       | 13.0  | 13.0  |     |
| Total Split (%)       | 16.7% | 69.2% | 69.2% | 9.2% | 61.7% | 61.7% | 10.8% | 10.8% |       | 10.8% | 10.8% |     |
| Maximum Green (s)     | 15.0  | 77.0  | 77.0  | 6.0  | 68.0  | 68.0  | 8.0   | 7.0   |       | 8.0   | 7.0   |     |
| Yellow Time (s)       | 3.0   | 4.0   | 4.0   | 3.0  | 4.0   | 4.0   | 3.0   | 4.0   |       | 3.0   | 4.0   |     |
| All-Red Time (s)      | 2.0   | 2.0   | 2.0   | 2.0  | 2.0   | 2.0   | 2.0   | 2.0   |       | 2.0   | 2.0   |     |
| Lost Time Adjust (s)  | 0.0   | 0.0   | 0.0   | -2.0 | 0.0   | 0.0   | -2.0  | -1.0  |       | -2.0  | -2.0  |     |
| Total Lost Time (s)   | 5.0   | 6.0   | 6.0   | 3.0  | 6.0   | 6.0   | 3.0   | 5.0   |       | 3.0   | 4.0   |     |
| Lead/Lag              | Lead  | Lag   | Lag   | Lead | Lag   | Lag   | Lead  | Lag   |       | Lead  | Lag   |     |
| Lead-Lag Optimize?    | Yes   | Yes   | Yes   | Yes  | Yes   | Yes   | Yes   | Yes   |       | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   | 3.0   | 3.0   |       | 3.0   | 3.0   |     |
| Recall Mode           | None  | C-Max | C-Max | None | C-Max | C-Max | None  | None  |       | None  | None  |     |
| Act Effect Green (s)  | 85.7  | 79.0  | 79.0  | 93.0 | 88.4  | 88.4  | 18.0  | 7.7   | 120.0 | 18.0  | 8.7   |     |
| Actuated g/C Ratio    | 0.71  | 0.66  | 0.66  | 0.78 | 0.74  | 0.74  | 0.15  | 0.06  | 1.00  | 0.15  | 0.07  |     |
| v/c Ratio             | 0.03  | 0.65  | 0.12  | 0.84 | 0.52  | 0.08  | 0.42  | 0.41  | 0.22  | 0.78  | 0.22  |     |
| Control Delay         | 4.4   | 14.5  | 1.6   | 41.6 | 8.6   | 0.2   | 48.1  | 64.5  | 0.3   | 68.9  | 47.8  |     |
| Queue Delay           | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |     |
| Total Delay           | 4.4   | 14.5  | 1.6   | 41.6 | 8.6   | 0.2   | 48.1  | 64.5  | 0.3   | 68.9  | 47.8  |     |
| LOS                   | A     | B     | A     | D    | A     | A     | D     | E     | A     | E     | D     |     |
| Approach Delay        |       | 13.4  |       |      | 12.5  |       |       | 16.3  |       |       | 63.9  |     |
| Approach LOS          |       | B     |       |      | B     |       |       | B     |       |       | E     |     |

### Intersection Summary

|                                   |  |
|-----------------------------------|--|
| Area Type:                        | Other  |
| Cycle Length:                     | 120  |
| Actuated Cycle Length:            | 120  |
| Offset:                           | 112 (93%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green |
| Natural Cycle:                    | 70   |
| Control Type:                     | Actuated-Coordinated   |
| Maximum v/c Ratio:                | 0.84   |
| Intersection Signal Delay:        | 16.4   |
| Intersection LOS:                 | B  |
| Intersection Capacity Utilization | 79.2%  |
| ICU Level of Service              | D  |
| Analysis Period (min)             | 15   |

### Splits and Phases: 3: Woodlands Blvd & Founders Pkwy



# Lanes, Volumes, Timings

## 4: Founders Pkwy & Crowfoot Valley Rd

Existing  
PM Peak



| Lane Group                 | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |
| Traffic Volume (vph)       | 700   | 1240  | 990   | 110   | 120   | 515   |
| Future Volume (vph)        | 700   | 1240  | 990   | 110   | 120   | 515   |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 485   |       |       | 0     | 125   | 0     |
| Storage Lanes              | 2     |       |       | 1     | 2     | 1     |
| Taper Length (ft)          | 100   |       |       |       | 100   |       |
| Lane Util. Factor          | 0.97  | 0.95  | 0.95  | 1.00  | 0.97  | 0.91  |
| Frt                        |       |       |       | 0.850 | 0.898 | 0.850 |
| Flt Protected              | 0.950 |       |       |       | 0.984 |       |
| Satd. Flow (prot)          | 3433  | 3539  | 3539  | 1583  | 3193  | 1441  |
| Flt Permitted              | 0.950 |       |       |       | 0.984 |       |
| Satd. Flow (perm)          | 3433  | 3539  | 3539  | 1583  | 3193  | 1441  |
| Right Turn on Red          |       |       |       | Yes   |       | Yes   |
| Satd. Flow (RTOR)          |       |       |       | 120   | 280   | 280   |
| Link Speed (mph)           |       | 50    | 50    |       | 35    |       |
| Link Distance (ft)         |       | 641   | 617   |       | 595   |       |
| Travel Time (s)            |       | 8.7   | 8.4   |       | 11.6  |       |
| Peak Hour Factor           | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 761   | 1348  | 1076  | 120   | 130   | 560   |
| Shared Lane Traffic (%)    |       |       |       |       |       | 50%   |
| Lane Group Flow (vph)      | 761   | 1348  | 1076  | 120   | 410   | 280   |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Left  | Right | Left  | Right |
| Median Width(ft)           |       | 24    | 24    |       | 24    |       |
| Link Offset(ft)            |       | 0     | 0     |       | 0     |       |
| Crosswalk Width(ft)        |       | 16    | 16    |       | 16    |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |
| Headway Factor             | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| Turning Speed (mph)        | 15    |       |       | 9     | 15    | 9     |
| Number of Detectors        | 1     | 2     | 2     | 1     | 1     | 1     |
| Detector Template          | Left  | Thru  | Thru  | Right | Left  | Right |
| Leading Detector (ft)      | 20    | 100   | 100   | 20    | 20    | 20    |
| Trailing Detector (ft)     | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Position(ft)    | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Size(ft)        | 20    | 6     | 6     | 20    | 20    | 20    |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 2 Position(ft)    |       | 94    | 94    |       |       |       |
| Detector 2 Size(ft)        |       | 6     | 6     |       |       |       |
| Detector 2 Type            |       | Cl+Ex | Cl+Ex |       |       |       |
| Detector 2 Channel         |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   | 0.0   |       |       |       |
| Turn Type                  | Prot  | NA    | NA    | Perm  | Prot  | Free  |
| Protected Phases           | 5     | 2     | 6     |       | 4     |       |
| Permitted Phases           |       |       |       | 6     |       | Free  |

# Lanes, Volumes, Timings

## 4: Founders Pkwy & Crowfoot Valley Rd

Existing  
PM Peak



| Lane Group            | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   |
|-----------------------|-------|-------|-------|-------|-------|-------|
| Detector Phase        | 5     | 2     | 6     | 6     | 4     |       |
| Switch Phase          |       |       |       |       |       |       |
| Minimum Initial (s)   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       |
| Minimum Split (s)     | 9.0   | 10.0  | 10.0  | 10.0  | 9.0   |       |
| Total Split (s)       | 37.0  | 92.0  | 55.0  | 55.0  | 28.0  |       |
| Total Split (%)       | 30.8% | 76.7% | 45.8% | 45.8% | 23.3% |       |
| Maximum Green (s)     | 32.0  | 86.0  | 49.0  | 49.0  | 23.0  |       |
| Yellow Time (s)       | 3.0   | 4.0   | 4.0   | 4.0   | 3.0   |       |
| All-Red Time (s)      | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   |       |
| Lost Time Adjust (s)  | -2.0  | -2.0  | -2.0  | -2.0  | -2.0  |       |
| Total Lost Time (s)   | 3.0   | 4.0   | 4.0   | 4.0   | 3.0   |       |
| Lead/Lag              | Lead  |       | Lag   | Lag   |       |       |
| Lead-Lag Optimize?    | Yes   |       | Yes   | Yes   |       |       |
| Vehicle Extension (s) | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |       |
| Recall Mode           | None  | C-Max | C-Max | C-Max | None  |       |
| Act Effect Green (s)  | 33.8  | 100.2 | 63.3  | 63.3  | 12.8  | 120.0 |
| Actuated g/C Ratio    | 0.28  | 0.84  | 0.53  | 0.53  | 0.11  | 1.00  |
| v/c Ratio             | 0.79  | 0.46  | 0.58  | 0.13  | 0.69  | 0.19  |
| Control Delay         | 45.8  | 3.5   | 22.4  | 3.8   | 22.4  | 0.3   |
| Queue Delay           | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay           | 45.8  | 3.5   | 22.4  | 3.8   | 22.4  | 0.3   |
| LOS                   | D     | A     | C     | A     | C     | A     |
| Approach Delay        |       | 18.8  | 20.5  |       | 13.4  |       |
| Approach LOS          |       | B     | C     |       | B     |       |

### Intersection Summary

|                                   |  |
|-----------------------------------|--|
| Area Type:                        | Other  |
| Cycle Length:                     | 120  |
| Actuated Cycle Length:            | 120  |
| Offset:                           | 101 (84%), Referenced to phase 2:EBT and 6:WBT, Start of Green |
| Natural Cycle:                    | 60   |
| Control Type:                     | Actuated-Coordinated   |
| Maximum v/c Ratio:                | 0.79   |
| Intersection Signal Delay:        | 18.4   |
| Intersection LOS:                 | B  |
| Intersection Capacity Utilization | 66.2%  |
| ICU Level of Service              | C  |
| Analysis Period (min)             | 15   |

### Splits and Phases: 4: Founders Pkwy & Crowfoot Valley Rd



Lanes, Volumes, Timings  
8: Ridge Rd/Founders Pkwy & 5th St/SH 86

Existing  
PM Peak



| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |       |       |       |       |       |       |
| Traffic Volume (vph)       | 130   | 400   | 357   | 101   | 227   | 337   | 190   | 294   | 59    | 505   | 411   | 108   |
| Future Volume (vph)        | 130   | 400   | 357   | 101   | 227   | 337   | 190   | 294   | 59    | 505   | 411   | 108   |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 375   |       | 425   | 500   |       | 0     | 230   |       | 0     | 600   |       | 600   |
| Storage Lanes              | 1     |       | 1     | 1     |       | 1     | 1     |       | 1     | 1     |       | 1     |
| Taper Length (ft)          | 100   |       |       | 100   |       |       | 100   |       |       | 100   |       |       |
| 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  |
| Frt                        |       |       | 0.850 |       |       | 0.850 |       |       | 0.850 |       |       | 0.850 |
| Flt Protected              | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       |
| Satd. Flow (prot)          | 1770  | 1863  | 1583  | 1770  | 1863  | 1583  | 1770  | 1863  | 1583  | 1770  | 1863  | 1583  |
| Flt Permitted              | 0.467 |       |       | 0.223 |       |       | 0.397 |       |       | 0.210 |       |       |
| Satd. Flow (perm)          | 870   | 1863  | 1583  | 415   | 1863  | 1583  | 740   | 1863  | 1583  | 391   | 1863  | 1583  |
| Right Turn on Red          |       |       | Yes   |       |       | Yes   |       |       | Yes   |       |       | Yes   |
| Satd. Flow (RTOR)          |       |       | 388   |       |       | 366   |       |       | 218   |       |       | 218   |
| Link Speed (mph)           |       | 35    |       |       | 50    |       |       | 35    |       |       |       | 50    |
| Link Distance (ft)         |       | 450   |       |       | 848   |       |       | 659   |       |       |       | 865   |
| Travel Time (s)            |       | 8.8   |       |       | 11.6  |       |       | 12.8  |       |       |       | 11.8  |
| Peak Hour Factor           | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.95  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 141   | 435   | 388   | 110   | 247   | 366   | 207   | 320   | 64    | 532   | 447   | 117   |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 141   | 435   | 388   | 110   | 247   | 366   | 207   | 320   | 64    | 532   | 447   | 117   |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right |
| Median Width(ft)           |       | 18    |       |       | 18    |       |       | 24    |       |       |       | 24    |
| Link Offset(ft)            |       | 0     |       |       | 0     |       |       | 0     |       |       |       | 0     |
| Crosswalk Width(ft)        |       | 16    |       |       | 16    |       |       | 16    |       |       |       | 16    |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |       |       |       |       |       |
| Headway 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  |
| Turning Speed (mph)        | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     |
| Number of Detectors        | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     | 1     |
| Detector Template          | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  | Right |
| Leading Detector (ft)      | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   | 20    |
| Trailing Detector (ft)     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Position(ft)    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Size(ft)        | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     | 20    |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 2 Position(ft)    |       | 94    |       |       | 94    |       |       | 94    |       |       |       | 94    |
| Detector 2 Size(ft)        |       | 6     |       |       | 6     |       |       | 6     |       |       |       | 6     |
| Detector 2 Type            |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |       |       | Cl+Ex |
| Detector 2 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |       |       | 0.0   |
| Turn Type                  | pm+pt | NA    | Free  | pm+pt | NA    | Free  | pm+pt | NA    | Free  | pm+pt | NA    | Free  |
| Protected Phases           | 5     | 2     |       | 1     | 6     |       | 3     | 8     |       | 7     | 4     |       |
| Permitted Phases           | 2     |       | Free  | 6     |       | Free  | 8     |       | Free  | 4     |       | Free  |

Lanes, Volumes, Timings  
8: Ridge Rd/Founders Pkwy & 5th St/SH 86

Existing  
PM Peak

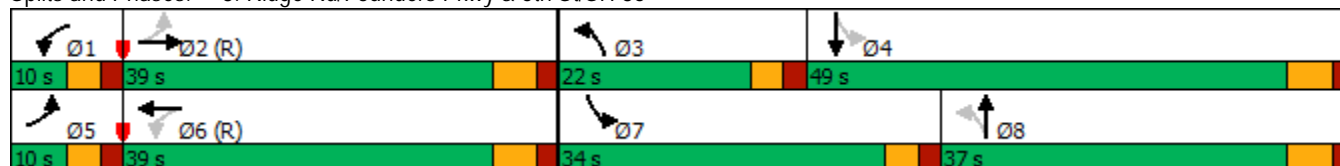


| Lane Group            | EBL  | EBT   | EBR   | WBL  | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|-----------------------|------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| Detector Phase        | 5    | 2     |       | 1    | 6     |       | 3     | 8     |       | 7     | 4     |       |
| Switch Phase          |      |       |       |      |       |       |       |       |       |       |       |       |
| Minimum Initial (s)   | 4.0  | 4.0   |       | 4.0  | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |       |
| Minimum Split (s)     | 9.0  | 20.0  |       | 9.0  | 20.0  |       | 9.0   | 20.0  |       | 9.0   | 20.0  |       |
| Total Split (s)       | 10.0 | 39.0  |       | 10.0 | 39.0  |       | 22.0  | 37.0  |       | 34.0  | 49.0  |       |
| Total Split (%)       | 8.3% | 32.5% |       | 8.3% | 32.5% |       | 18.3% | 30.8% |       | 28.3% | 40.8% |       |
| Maximum Green (s)     | 5.0  | 33.0  |       | 5.0  | 33.0  |       | 17.0  | 31.0  |       | 29.0  | 43.0  |       |
| Yellow Time (s)       | 3.0  | 4.0   |       | 3.0  | 4.0   |       | 3.0   | 4.0   |       | 3.0   | 4.0   |       |
| All-Red Time (s)      | 2.0  | 2.0   |       | 2.0  | 2.0   |       | 2.0   | 2.0   |       | 2.0   | 2.0   |       |
| Lost Time Adjust (s)  | -1.0 | -1.0  |       | -1.0 | -1.0  |       | -1.0  | -2.0  |       | -2.0  | -1.0  |       |
| Total Lost Time (s)   | 4.0  | 5.0   |       | 4.0  | 5.0   |       | 4.0   | 4.0   |       | 3.0   | 5.0   |       |
| Lead/Lag              | Lead | Lag   |       | Lead | Lag   |       | Lead  | Lag   |       | Lead  | Lag   |       |
| Lead-Lag Optimize?    | Yes  | Yes   |       | Yes  | Yes   |       | Yes   | Yes   |       | Yes   | Yes   |       |
| Vehicle Extension (s) | 3.0  | 3.0   |       | 3.0  | 3.0   |       | 3.0   | 3.0   |       | 3.0   | 3.0   |       |
| Recall Mode           | None | C-Max |       | None | C-Max |       | None  | None  |       | None  | None  |       |
| Act Effect Green (s)  | 47.4 | 37.5  | 120.0 | 46.6 | 37.1  | 120.0 | 41.6  | 27.2  | 120.0 | 62.0  | 41.6  | 120.0 |
| Actuated g/C Ratio    | 0.40 | 0.31  | 1.00  | 0.39 | 0.31  | 1.00  | 0.35  | 0.23  | 1.00  | 0.52  | 0.35  | 1.00  |
| v/c Ratio             | 0.34 | 0.75  | 0.25  | 0.43 | 0.43  | 0.23  | 0.54  | 0.76  | 0.04  | 0.96  | 0.69  | 0.07  |
| Control Delay         | 26.4 | 47.4  | 0.4   | 29.3 | 37.0  | 0.3   | 23.4  | 54.8  | 0.1   | 57.1  | 39.8  | 0.1   |
| Queue Delay           | 0.0  | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay           | 26.4 | 47.4  | 0.4   | 29.3 | 37.0  | 0.3   | 23.4  | 54.8  | 0.1   | 57.1  | 39.8  | 0.1   |
| LOS                   | C    | D     | A     | C    | D     | A     | C     | D     | A     | E     | D     | A     |
| Approach Delay        |      | 25.4  |       |      | 17.3  |       |       | 37.9  |       |       | 43.9  |       |
| Approach LOS          |      | C     |       |      | B     |       |       | D     |       |       | D     |       |

Intersection Summary

|                                    |   |
|------------------------------------|---|
| Area Type:                         | Other   |
| Cycle Length:                      | 120   |
| Actuated Cycle Length:             | 120   |
| Offset:                            | 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green |
| Natural Cycle:                     | 80  |
| Control Type:                      | Actuated-Coordinated  |
| Maximum v/c Ratio:                 | 0.96  |
| Intersection Signal Delay:         | 31.9  |
| Intersection LOS:                  | C   |
| Intersection Capacity Utilization: | 84.3%   |
| ICU Level of Service:              | E   |
| Analysis Period (min):             | 15  |

Splits and Phases: 8: Ridge Rd/Founders Pkwy & 5th St/SH 86



Lanes, Volumes, Timings  
1: Allen Way & Founder Pkwy

2025 Background  
AM Peak

| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |       |       |       |       |       |       |
| Traffic Volume (vph)       | 265   | 1115  | 150   | 38    | 2265  | 125   | 115   | 22    | 48    | 65    | 14    | 325   |
| Future Volume (vph)        | 265   | 1115  | 150   | 38    | 2265  | 125   | 115   | 22    | 48    | 65    | 14    | 325   |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 300   |       | 0     | 330   |       | 200   | 0     |       | 0     | 125   |       | 0     |
| Storage Lanes              | 2     |       | 0     | 1     |       | 1     | 2     |       | 0     | 1     |       | 2     |
| Taper Length (ft)          | 100   |       |       | 100   |       |       | 100   |       |       | 100   |       |       |
| Lane Util. Factor          | 0.97  | 0.91  | 0.91  | 1.00  | 0.91  | 1.00  | 0.97  | 1.00  | 1.00  | 1.00  | 1.00  | 0.88  |
| Frt                        |       | 0.982 |       |       |       | 0.850 |       | 0.897 |       |       |       | 0.850 |
| Flt Protected              | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       |
| Satd. Flow (prot)          | 3433  | 4994  | 0     | 1770  | 5085  | 1583  | 3433  | 1671  | 0     | 1770  | 1863  | 2787  |
| Flt Permitted              | 0.950 |       |       | 0.180 |       |       | 0.670 |       |       | 0.690 |       |       |
| Satd. Flow (perm)          | 3433  | 4994  | 0     | 335   | 5085  | 1583  | 2421  | 1671  | 0     | 1285  | 1863  | 2787  |
| Right Turn on Red          |       |       | Yes   |       |       | Yes   |       |       | Yes   |       |       | Yes   |
| Satd. Flow (RTOR)          |       | 31    |       |       |       | 109   |       | 52    |       |       |       | 277   |
| Link Speed (mph)           |       | 35    |       |       | 35    |       |       | 30    |       |       |       | 30    |
| Link Distance (ft)         |       | 533   |       |       | 1095  |       |       | 278   |       |       |       | 392   |
| Travel Time (s)            |       | 10.4  |       |       | 21.3  |       |       | 6.3   |       |       |       | 8.9   |
| Peak Hour Factor           | 0.92  | 0.92  | 0.92  | 0.92  | 0.95  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.95  |
| Adj. Flow (vph)            | 288   | 1212  | 163   | 41    | 2384  | 136   | 125   | 24    | 52    | 71    | 15    | 342   |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 288   | 1375  | 0     | 41    | 2384  | 136   | 125   | 76    | 0     | 71    | 15    | 342   |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right |
| Median Width(ft)           |       | 20    |       |       | 20    |       |       | 24    |       |       |       | 20    |
| Link Offset(ft)            |       | 0     |       |       | 0     |       |       | 0     |       |       |       | 0     |
| Crosswalk Width(ft)        |       | 16    |       |       | 16    |       |       | 16    |       |       |       | 16    |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |       |       |       |       |       |
| Headway 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  |
| Turning Speed (mph)        | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     |
| Number of Detectors        | 1     | 2     |       | 1     | 2     | 1     | 1     | 2     |       | 1     | 2     | 1     |
| Detector Template          | Left  | Thru  |       | Left  | Thru  | Right | Left  | Thru  |       | Left  | Thru  | Right |
| Leading Detector (ft)      | 20    | 100   |       | 20    | 100   | 20    | 20    | 100   |       | 20    | 100   | 20    |
| Trailing Detector (ft)     | 0     | 0     |       | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     | 0     |
| Detector 1 Position(ft)    | 0     | 0     |       | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     | 0     |
| Detector 1 Size(ft)        | 20    | 6     |       | 20    | 6     | 20    | 20    | 6     |       | 20    | 6     | 20    |
| Detector 1 Type            | Cl+Ex | Cl+Ex |       | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |       | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   |
| Detector 2 Position(ft)    |       | 94    |       |       | 94    |       |       | 94    |       |       |       | 94    |
| Detector 2 Size(ft)        |       | 6     |       |       | 6     |       |       | 6     |       |       |       | 6     |
| Detector 2 Type            |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |       |       | Cl+Ex |
| Detector 2 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |       |       | 0.0   |
| Turn Type                  | Prot  | NA    |       | pm+pt | NA    | Perm  | pm+pt | NA    |       | pm+pt | NA    | Perm  |
| Protected Phases           | 5     | 2     |       | 1     | 6     |       | 3     | 8     |       | 7     | 4     |       |
| Permitted Phases           |       |       |       | 6     |       | 6     | 8     |       |       | 4     |       | 4     |

Lanes, Volumes, Timings  
1: Allen Way & Founder Pkwy

2025 Background  
AM Peak

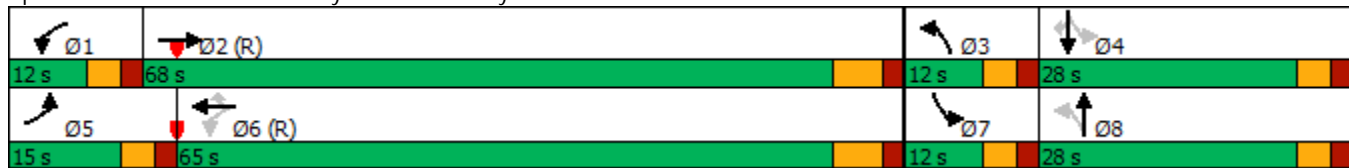


| Lane Group            | EBL   | EBT   | EBR | WBL   | WBT   | WBR   | NBL   | NBT   | NBR | SBL   | SBT   | SBR   |
|-----------------------|-------|-------|-----|-------|-------|-------|-------|-------|-----|-------|-------|-------|
| Detector Phase        | 5     | 2     |     | 1     | 6     | 6     | 3     | 8     |     | 7     | 4     | 4     |
| Switch Phase          |       |       |     |       |       |       |       |       |     |       |       |       |
| Minimum Initial (s)   | 4.0   | 4.0   |     | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |     | 4.0   | 4.0   | 4.0   |
| Minimum Split (s)     | 11.0  | 21.0  |     | 9.5   | 21.0  | 21.0  | 9.0   | 21.0  |     | 9.0   | 21.0  | 21.0  |
| Total Split (s)       | 15.0  | 68.0  |     | 12.0  | 65.0  | 65.0  | 12.0  | 28.0  |     | 12.0  | 28.0  | 28.0  |
| Total Split (%)       | 12.5% | 56.7% |     | 10.0% | 54.2% | 54.2% | 10.0% | 23.3% |     | 10.0% | 23.3% | 23.3% |
| Maximum Green (s)     | 10.0  | 61.5  |     | 7.0   | 58.5  | 58.5  | 7.0   | 23.0  |     | 7.0   | 23.0  | 23.0  |
| Yellow Time (s)       | 3.0   | 4.5   |     | 3.0   | 4.5   | 4.5   | 3.0   | 3.0   |     | 3.0   | 3.0   | 3.0   |
| All-Red Time (s)      | 2.0   | 2.0   |     | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   |     | 2.0   | 2.0   | 2.0   |
| Lost Time Adjust (s)  | -2.0  | -3.0  |     | -2.0  | -3.0  | -2.0  | -2.0  | -2.0  |     | -2.0  | -2.0  | -2.0  |
| Total Lost Time (s)   | 3.0   | 3.5   |     | 3.0   | 3.5   | 4.5   | 3.0   | 3.0   |     | 3.0   | 3.0   | 3.0   |
| Lead/Lag              | Lead  | Lag   |     | Lead  | Lag   | Lag   | Lead  | Lag   |     | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?    | Yes   | Yes   |     | Yes   | Yes   | Yes   | Yes   | Yes   |     | Yes   | Yes   | Yes   |
| Vehicle Extension (s) | 3.0   | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0   | 3.0   | 3.0   |
| Recall Mode           | None  | C-Max |     | None  | C-Max | C-Max | None  | None  |     | None  | None  | None  |
| Act Effect Green (s)  | 17.4  | 81.3  |     | 78.7  | 70.0  | 69.0  | 20.7  | 13.5  |     | 20.0  | 11.1  | 11.1  |
| Actuated g/C Ratio    | 0.14  | 0.68  |     | 0.66  | 0.58  | 0.58  | 0.17  | 0.11  |     | 0.17  | 0.09  | 0.09  |
| v/c Ratio             | 0.58  | 0.41  |     | 0.13  | 0.80  | 0.14  | 0.25  | 0.32  |     | 0.29  | 0.09  | 0.67  |
| Control Delay         | 52.4  | 9.7   |     | 5.3   | 21.4  | 2.0   | 40.9  | 23.6  |     | 42.5  | 48.3  | 18.1  |
| Queue Delay           | 0.0   | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.0   | 0.0   | 0.0   |
| Total Delay           | 52.4  | 9.7   |     | 5.3   | 21.4  | 2.0   | 40.9  | 23.6  |     | 42.5  | 48.3  | 18.1  |
| LOS                   | D     | A     |     | A     | C     | A     | D     | C     |     | D     | D     | B     |
| Approach Delay        |       | 17.1  |     |       | 20.1  |       |       | 34.4  |     |       | 23.2  |       |
| Approach LOS          |       | B     |     |       | C     |       |       | C     |     |       | C     |       |

Intersection Summary























|                                   |   |
|-----------------------------------|---|
| Area Type:                        | Other   |
| Cycle Length:                     | 120   |
| Actuated Cycle Length:            | 120   |
| Offset:                           | 119 (99%), Referenced to phase 2:EBT and 6:WBTL, Start of Green |
| Natural Cycle:                    | 90  |
| Control Type:                     | Actuated-Coordinated  |
| Maximum v/c Ratio:                | 0.80  |
| Intersection Signal Delay:        | 19.9  |
| Intersection LOS:                 | B   |
| Intersection Capacity Utilization | 71.6%   |
| ICU Level of Service              | C   |
| Analysis Period (min)             | 15  |

Splits and Phases: 1: Allen Way & Founder Pkwy



Lanes, Volumes, Timings  
2: Front St & Founder Pkwy

2025 Background  
AM Peak

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group                 | SEL   | SET   | SER   | NWL   | NWT   | NWR   | NEL  | NET   | NER   | SWL   | SWT   | SWR   |
| Lane Configurations        |  |  |   |  |  |   |  |  |  |  |  |  |
| Traffic Volume (vph)       | 64  | 875   | 255   | 66  | 1880  | 12  | 415  | 50  | 35  | 5   | 40  | 85  |
| Future Volume (vph)        | 64  | 875   | 255   | 66  | 1880  | 12  | 415  | 50  | 35  | 5   | 40  | 85  |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900   | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 460   |   | 0   | 200   |   | 0   | 285  |   | 0   | 210   |   | 0   |
| Storage Lanes              | 1   |   | 0   | 1   |   | 0   | 1  |   | 1   | 1   |   | 0   |
| Taper Length (ft)          | 100   |   |   | 100   |   |   | 100  |   |   | 100   |   |   |
| Lane Util. Factor          | 1.00  | 0.91  | 0.91  | 1.00  | 0.91  | 0.91  | 0.97   | 1.00  | 1.00  | 1.00  | 0.95  | 0.95  |
| Frt                        |   | 0.966   |   |   | 0.999   |   |  |   | 0.850   |   | 0.898   |   |
| Flt Protected              | 0.950   |   |   | 0.950   |   |   | 0.950  |   |   | 0.950   |   |   |
| Satd. Flow (prot)          | 1770  | 4912  | 0   | 1770  | 5080  | 0   | 3433   | 1863  | 1583  | 1770  | 3178  | 0   |
| Flt Permitted              | 0.058   |   |   | 0.181   |   |   | 0.487  |   |   | 0.722   |   |   |
| Satd. Flow (perm)          | 108   | 4912  | 0   | 337   | 5080  | 0   | 1760   | 1863  | 1583  | 1345  | 3178  | 0   |
| Right Turn on Red          |   |   | Yes   |   |   | Yes   |  |   | Yes   |   |   | Yes   |
| Satd. Flow (RTOR)          |   | 87  |   |   | 1   |   |  |   | 77  |   | 92  |   |
| Link Speed (mph)           |   | 35  |   |   | 35  |   |  | 30  |   |   | 30  |   |
| Link Distance (ft)         |   | 1095  |   |   | 488   |   |  | 556   |   |   | 397   |   |
| Travel Time (s)            |   | 21.3  |   |   | 9.5   |   |  | 12.6  |   |   | 9.0   |   |
| Peak Hour Factor           | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92   | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 70  | 951   | 277   | 72  | 2043  | 13  | 451  | 54  | 38  | 5   | 43  | 92  |
| Shared Lane Traffic (%)    |   |   |   |   |   |   |  |   |   |   |   |   |
| Lane Group Flow (vph)      | 70  | 1228  | 0   | 72  | 2056  | 0   | 451  | 54  | 38  | 5   | 135   | 0   |
| Enter Blocked Intersection | No  | No  | No  | No  | No  | No  | No   | No  | No  | No  | No  | No  |
| Lane Alignment             | Left  | Left  | Right   | Left  | Left  | Right   | Left   | Left  | Right   | Left  | Left  | Right   |
| Median Width(ft)           |   | 12  |   |   | 12  |   |  | 40  |   |   | 24  |   |
| Link Offset(ft)            |   | 0   |   |   | 0   |   |  | 0   |   |   | 0   |   |
| Crosswalk Width(ft)        |   | 16  |   |   | 16  |   |  | 16  |   |   | 16  |   |
| Two way Left Turn Lane     |   |   |   |   |   |   |  |   |   |   |   |   |
| Headway 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  |
| Turning Speed (mph)        | 15  |   | 9   | 15  |   | 9   | 15   |   | 9   | 15  |   | 9   |
| Number of Detectors        | 1   | 2   |   | 1   | 2   |   | 1  | 2   | 1   | 1   | 2   |   |
| Detector Template          | Left  | Thru  |   | Left  | Thru  |   | Left   | Thru  | Right   | Left  | Thru  |   |
| Leading Detector (ft)      | 20  | 100   |   | 20  | 100   |   | 20   | 100   | 20  | 20  | 100   |   |
| Trailing Detector (ft)     | 0   | 0   |   | 0   | 0   |   | 0  | 0   | 0   | 0   | 0   |   |
| Detector 1 Position(ft)    | 0   | 0   |   | 0   | 0   |   | 0  | 0   | 0   | 0   | 0   |   |
| Detector 1 Size(ft)        | 20  | 6   |   | 20  | 6   |   | 20   | 6   | 20  | 20  | 6   |   |
| Detector 1 Type            | Cl+Ex   | Cl+Ex   |   | Cl+Ex   | Cl+Ex   |   | Cl+Ex  | Cl+Ex   | Cl+Ex   | Cl+Ex   | Cl+Ex   |   |
| Detector 1 Channel         |   |   |   |   |   |   |  |   |   |   |   |   |
| Detector 1 Extend (s)      | 0.0   | 0.0   |   | 0.0   | 0.0   |   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |   | 0.0   | 0.0   |   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |   | 0.0   | 0.0   |   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |   |
| Detector 2 Position(ft)    |   | 94  |   |   | 94  |   |  | 94  |   |   | 94  |   |
| Detector 2 Size(ft)        |   | 6   |   |   | 6   |   |  | 6   |   |   | 6   |   |
| Detector 2 Type            |   | Cl+Ex   |   |   | Cl+Ex   |   |  | Cl+Ex   |   |   | Cl+Ex   |   |
| Detector 2 Channel         |   |   |   |   |   |   |  |   |   |   |   |   |
| Detector 2 Extend (s)      |   | 0.0   |   |   | 0.0   |   |  | 0.0   |   |   | 0.0   |   |
| Turn Type                  | pm+pt   | NA  |   | pm+pt   | NA  |   | pm+pt  | NA  | pm+ov   | pm+pt   | NA  |   |
| Protected Phases           | 5   | 2   |   | 1   | 6   |   | 3  | 8   | 1   | 7   | 4   |   |
| Permitted Phases           | 2   |   |   | 6   |   |   | 8  |   | 8   | 4   |   |   |



Lanes, Volumes, Timings  
2: Front St & Founder Pkwy

2025 Background  
AM Peak

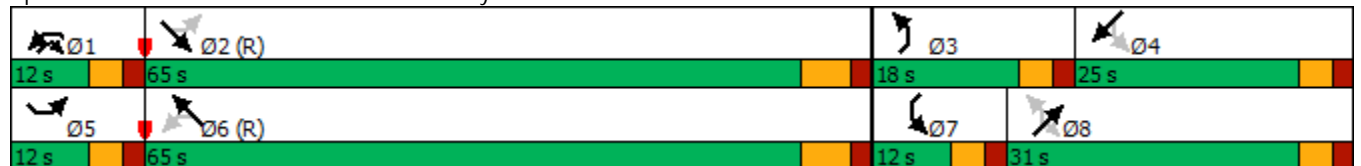


| Lane Group            | SEL   | SET   | SER | NWL   | NWT   | NWR | NEL   | NET   | NER   | SWL   | SWT   | SWR |
|-----------------------|-------|-------|-----|-------|-------|-----|-------|-------|-------|-------|-------|-----|
| Detector Phase        | 5     | 2     |     | 1     | 6     |     | 3     | 8     | 1     | 7     | 4     |     |
| Switch Phase          |       |       |     |       |       |     |       |       |       |       |       |     |
| Minimum Initial (s)   | 4.0   | 4.0   |     | 4.0   | 4.0   |     | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |     |
| Minimum Split (s)     | 9.0   | 21.0  |     | 9.0   | 21.0  |     | 9.0   | 21.0  | 9.0   | 10.0  | 21.0  |     |
| Total Split (s)       | 12.0  | 65.0  |     | 12.0  | 65.0  |     | 18.0  | 31.0  | 12.0  | 12.0  | 25.0  |     |
| Total Split (%)       | 10.0% | 54.2% |     | 10.0% | 54.2% |     | 15.0% | 25.8% | 10.0% | 10.0% | 20.8% |     |
| Maximum Green (s)     | 7.0   | 58.5  |     | 7.0   | 58.5  |     | 13.0  | 26.0  | 7.0   | 7.0   | 20.0  |     |
| Yellow Time (s)       | 3.0   | 4.5   |     | 3.0   | 4.5   |     | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |     |
| All-Red Time (s)      | 2.0   | 2.0   |     | 2.0   | 2.0   |     | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   |     |
| Lost Time Adjust (s)  | -1.0  | -1.0  |     | -1.0  | -1.0  |     | -1.0  | -1.0  | -1.0  | -1.0  | -1.0  |     |
| Total Lost Time (s)   | 4.0   | 5.5   |     | 4.0   | 5.5   |     | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |     |
| Lead/Lag              | Lead  | Lag   |     | Lead  | Lag   |     | Lead  | Lag   | Lead  | Lead  | Lag   |     |
| Lead-Lag Optimize?    | Yes   | Yes   |     | Yes   | Yes   |     | Yes   | Yes   | Yes   | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |     |
| Recall Mode           | None  | C-Max |     | None  | C-Max |     | None  | None  | None  | None  | None  |     |
| Act Effect Green (s)  | 82.5  | 74.3  |     | 82.3  | 74.2  |     | 26.4  | 24.1  | 36.1  | 15.2  | 8.4   |     |
| Actuated g/C Ratio    | 0.69  | 0.62  |     | 0.69  | 0.62  |     | 0.22  | 0.20  | 0.30  | 0.13  | 0.07  |     |
| v/c Ratio             | 0.38  | 0.40  |     | 0.22  | 0.65  |     | 0.78  | 0.14  | 0.07  | 0.03  | 0.44  |     |
| Control Delay         | 25.1  | 10.2  |     | 7.2   | 16.9  |     | 52.0  | 41.9  | 0.9   | 36.2  | 24.1  |     |
| Queue Delay           | 0.0   | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |     |
| Total Delay           | 25.1  | 10.2  |     | 7.2   | 16.9  |     | 52.0  | 41.9  | 0.9   | 36.2  | 24.1  |     |
| LOS                   | C     | B     |     | A     | B     |     | D     | D     | A     | D     | C     |     |
| Approach Delay        |       | 11.0  |     |       | 16.5  |     |       | 47.5  |       |       | 24.5  |     |
| Approach LOS          |       | B     |     |       | B     |     |       | D     |       |       | C     |     |

Intersection Summary

Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 96 (80%), Referenced to phase 2:SETL and 6:NWTL, Start of Green  
 Natural Cycle: 75  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.78  
 Intersection Signal Delay: 19.1      Intersection LOS: B  
 Intersection Capacity Utilization 70.4%      ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 2: Front St & Founder Pkwy



Lanes, Volumes, Timings  
3: Woodlands Blvd & Founders Pkwy

2025 Background  
AM Peak



| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |       |       |       |       |       |       |
| Traffic Volume (vph)       | 6     | 725   | 80    | 365   | 1850  | 95    | 130   | 27    | 160   | 40    | 14    | 2     |
| Future Volume (vph)        | 6     | 725   | 80    | 365   | 1850  | 95    | 130   | 27    | 160   | 40    | 14    | 2     |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 450   |       | 0     | 500   |       | 400   | 220   |       | 0     | 120   |       | 140   |
| Storage Lanes              | 1     |       | 1     | 1     |       | 1     | 1     |       | 1     | 1     |       | 0     |
| Taper Length (ft)          | 100   |       |       | 100   |       |       | 100   |       |       | 100   |       |       |
| Lane Util. Factor          | 1.00  | 0.95  | 1.00  | 1.00  | 0.95  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 0.95  | 0.95  |
| Frt                        |       |       | 0.850 |       |       | 0.850 |       |       | 0.850 |       | 0.982 |       |
| Flt Protected              | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       |
| Satd. Flow (prot)          | 1770  | 3539  | 1583  | 1770  | 3539  | 1583  | 1770  | 1863  | 1583  | 1770  | 3476  | 0     |
| Flt Permitted              | 0.061 |       |       | 0.278 |       |       | 0.513 |       |       |       |       |       |
| Satd. Flow (perm)          | 114   | 3539  | 1583  | 518   | 3539  | 1583  | 956   | 1863  | 1583  | 1863  | 3476  | 0     |
| Right Turn on Red          |       |       | Yes   |       |       | Yes   |       |       | Yes   |       |       | Yes   |
| Satd. Flow (RTOR)          |       |       | 109   |       |       | 109   |       |       | 174   |       |       | 2     |
| Link Speed (mph)           |       | 50    |       |       | 50    |       |       | 35    |       |       |       | 35    |
| Link Distance (ft)         |       | 721   |       |       | 782   |       |       | 419   |       |       |       | 497   |
| Travel Time (s)            |       | 9.8   |       |       | 10.7  |       |       | 8.2   |       |       |       | 9.7   |
| Peak Hour Factor           | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 7     | 788   | 87    | 397   | 2011  | 103   | 141   | 29    | 174   | 43    | 15    | 2     |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 7     | 788   | 87    | 397   | 2011  | 103   | 141   | 29    | 174   | 43    | 17    | 0     |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right |
| Median Width(ft)           |       | 24    |       |       | 24    |       |       | 30    |       |       |       | 12    |
| Link Offset(ft)            |       | 0     |       |       | 0     |       |       | 0     |       |       |       | 0     |
| Crosswalk Width(ft)        |       | 16    |       |       | 16    |       |       | 16    |       |       |       | 16    |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |       |       |       |       |       |
| Headway 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  |
| Turning Speed (mph)        | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     |
| Number of Detectors        | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     |       |
| Detector Template          | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  |       |
| Leading Detector (ft)      | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   |       |
| Trailing Detector (ft)     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |       |
| Detector 1 Position(ft)    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |       |
| Detector 1 Size(ft)        | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     |       |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |       |
| Detector 1 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       |
| Detector 2 Position(ft)    |       | 94    |       |       | 94    |       |       | 94    |       |       |       | 94    |
| Detector 2 Size(ft)        |       | 6     |       |       | 6     |       |       | 6     |       |       |       | 6     |
| Detector 2 Type            |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |       |       | Cl+Ex |
| Detector 2 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |       |       | 0.0   |
| Turn Type                  | pm+pt | NA    | Perm  | pm+pt | NA    | Perm  | pm+pt | NA    | Free  | pm+pt | NA    |       |
| Protected Phases           | 5     | 2     |       | 1     | 6     |       | 3     | 8     |       | 7     | 4     |       |
| Permitted Phases           | 2     |       | 2     | 6     |       | 6     | 8     |       | Free  | 4     |       |       |

Lanes, Volumes, Timings  
3: Woodlands Blvd & Founders Pkwy

2025 Background  
AM Peak

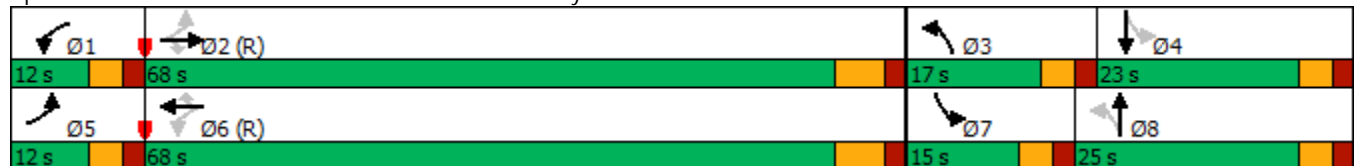


| Lane Group            | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| Detector Phase        | 5     | 2     | 2     | 1     | 6     | 6     | 3     | 8     |       | 7     | 4     |     |
| Switch Phase          |       |       |       |       |       |       |       |       |       |       |       |     |
| Minimum Initial (s)   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |     |
| Minimum Split (s)     | 9.0   | 20.0  | 20.0  | 9.0   | 20.0  | 20.0  | 9.0   | 20.0  |       | 9.0   | 20.0  |     |
| Total Split (s)       | 12.0  | 68.0  | 68.0  | 12.0  | 68.0  | 68.0  | 17.0  | 25.0  |       | 15.0  | 23.0  |     |
| Total Split (%)       | 10.0% | 56.7% | 56.7% | 10.0% | 56.7% | 56.7% | 14.2% | 20.8% |       | 12.5% | 19.2% |     |
| Maximum Green (s)     | 7.0   | 61.5  | 61.5  | 7.0   | 61.5  | 61.5  | 12.0  | 20.0  |       | 10.0  | 18.0  |     |
| Yellow Time (s)       | 3.0   | 4.5   | 4.5   | 3.0   | 4.5   | 4.5   | 3.0   | 3.0   |       | 3.0   | 3.0   |     |
| All-Red Time (s)      | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   |       | 2.0   | 2.0   |     |
| Lost Time Adjust (s)  | -1.0  | -1.0  | -1.0  | -1.0  | -1.0  | 0.0   | -1.0  | -1.0  |       | -1.0  | -1.0  |     |
| Total Lost Time (s)   | 4.0   | 5.5   | 5.5   | 4.0   | 5.5   | 6.5   | 4.0   | 4.0   |       | 4.0   | 4.0   |     |
| Lead/Lag              | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   | Lead  | Lag   |       | Lead  | Lag   |     |
| Lead-Lag Optimize?    | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |       | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |       | 3.0   | 3.0   |     |
| Recall Mode           | None  | C-Max | C-Max | None  | C-Max | C-Max | None  | None  |       | None  | None  |     |
| Act Effect Green (s)  | 76.5  | 68.3  | 68.3  | 93.0  | 89.3  | 88.3  | 18.4  | 9.4   | 120.0 | 13.2  | 7.2   |     |
| Actuated g/C Ratio    | 0.64  | 0.57  | 0.57  | 0.78  | 0.74  | 0.74  | 0.15  | 0.08  | 1.00  | 0.11  | 0.06  |     |
| v/c Ratio             | 0.04  | 0.39  | 0.09  | 0.66  | 0.76  | 0.09  | 0.58  | 0.20  | 0.11  | 0.22  | 0.08  |     |
| Control Delay         | 6.3   | 15.9  | 1.8   | 10.8  | 13.9  | 1.6   | 54.6  | 54.9  | 0.1   | 45.5  | 49.2  |     |
| Queue Delay           | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |     |
| Total Delay           | 6.3   | 15.9  | 1.8   | 10.8  | 13.9  | 1.6   | 54.6  | 54.9  | 0.1   | 45.5  | 49.2  |     |
| LOS                   | A     | B     | A     | B     | B     | A     | D     | D     | A     | D     | D     |     |
| Approach Delay        |       | 14.5  |       |       | 12.9  |       |       | 27.1  |       |       | 46.5  |     |
| Approach LOS          |       | B     |       |       | B     |       |       | C     |       |       | D     |     |

Intersection Summary

|                                   |   |
|-----------------------------------|---|
| Area Type:                        | Other   |
| Cycle Length:                     | 120   |
| Actuated Cycle Length:            | 120   |
| Offset:                           | 37 (31%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green |
| Natural Cycle:                    | 90  |
| Control Type:                     | Actuated-Coordinated  |
| Maximum v/c Ratio:                | 0.76  |
| Intersection Signal Delay:        | 15.1  |
| Intersection LOS:                 | B   |
| Intersection Capacity Utilization | 79.6%   |
| ICU Level of Service              | D   |
| Analysis Period (min)             | 15  |

Splits and Phases: 3: Woodlands Blvd & Founders Pkwy



Lanes, Volumes, Timings  
4: Founders Pkwy & Crowfoot Valley Rd

2025 Background  
AM Peak



| Lane Group                 | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |
| Traffic Volume (vph)       | 355   | 575   | 1430  | 130   | 85    | 900   |
| Future Volume (vph)        | 355   | 575   | 1430  | 130   | 85    | 900   |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 485   |       |       | 0     | 150   | 0     |
| Storage Lanes              | 2     |       |       | 1     | 2     | 1     |
| Taper Length (ft)          | 100   |       |       |       | 100   |       |
| Lane Util. Factor          | 0.97  | 0.95  | 0.95  | 1.00  | 0.97  | 0.91  |
| Frt                        |       |       |       | 0.850 | 0.874 | 0.850 |
| Flt Protected              | 0.950 |       |       |       | 0.992 |       |
| Satd. Flow (prot)          | 3433  | 3539  | 3539  | 1583  | 3133  | 1441  |
| Flt Permitted              | 0.950 |       |       |       | 0.992 |       |
| Satd. Flow (perm)          | 3433  | 3539  | 3539  | 1583  | 3133  | 1441  |
| Right Turn on Red          |       |       |       | Yes   |       | Yes   |
| Satd. Flow (RTOR)          |       |       |       | 109   | 303   | 489   |
| Link Speed (mph)           |       | 50    | 50    |       | 35    |       |
| Link Distance (ft)         |       | 641   | 617   |       | 595   |       |
| Travel Time (s)            |       | 8.7   | 8.4   |       | 11.6  |       |
| Peak Hour Factor           | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 386   | 625   | 1554  | 141   | 92    | 978   |
| Shared Lane Traffic (%)    |       |       |       |       |       | 50%   |
| Lane Group Flow (vph)      | 386   | 625   | 1554  | 141   | 581   | 489   |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Left  | Right | Left  | Right |
| Median Width(ft)           |       | 24    | 24    |       | 24    |       |
| Link Offset(ft)            |       | 0     | 0     |       | 0     |       |
| Crosswalk Width(ft)        |       | 16    | 16    |       | 16    |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |
| Headway Factor             | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| Turning Speed (mph)        | 15    |       |       | 9     | 15    | 9     |
| Number of Detectors        | 1     | 2     | 2     | 1     | 1     | 1     |
| Detector Template          | Left  | Thru  | Thru  | Right | Left  | Right |
| Leading Detector (ft)      | 20    | 100   | 100   | 20    | 20    | 20    |
| Trailing Detector (ft)     | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Position(ft)    | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Size(ft)        | 20    | 6     | 6     | 20    | 20    | 20    |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 2 Position(ft)    |       | 94    | 94    |       |       |       |
| Detector 2 Size(ft)        |       | 6     | 6     |       |       |       |
| Detector 2 Type            |       | Cl+Ex | Cl+Ex |       |       |       |
| Detector 2 Channel         |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   | 0.0   |       |       |       |
| Turn Type                  | Prot  | NA    | NA    | Perm  | Prot  | Free  |
| Protected Phases           | 5     | 2     | 6     |       | 4     |       |
| Permitted Phases           |       |       |       | 6     |       | Free  |



HCM 6th Roundabout  
 5: Connector Collector Roadway & Internal Collector Roadway

2025 Background  
 AM Peak

| Intersection                |       |       |       |
|-----------------------------|-------|-------|-------|
| Intersection Delay, s/veh   | 3.2   |       |       |
| Intersection LOS            | A     |       |       |
| Approach                    | EB    | WB    | NB    |
| Entry Lanes                 | 1     | 1     | 1     |
| Conflicting Circle Lanes    | 1     | 1     | 1     |
| Adj Approach Flow, veh/h    | 65    | 98    | 55    |
| Demand Flow Rate, veh/h     | 66    | 100   | 56    |
| Vehicles Circulating, veh/h | 50    | 34    | 16    |
| Vehicles Exiting, veh/h     | 84    | 38    | 100   |
| Ped Vol Crossing Leg, #/h   | 0     | 0     | 0     |
| Ped Cap Adj                 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh       | 3.2   | 3.4   | 3.0   |
| Approach LOS                | A     | A     | A     |
| Lane                        | Left  | Left  | Left  |
| Designated Moves            | TR    | LT    | LR    |
| Assumed Moves               | TR    | LT    | LR    |
| RT Channelized              |       |       |       |
| Lane Util                   | 1.000 | 1.000 | 1.000 |
| Follow-Up Headway, s        | 2.609 | 2.609 | 2.609 |
| Critical Headway, s         | 4.976 | 4.976 | 4.976 |
| Entry Flow, veh/h           | 66    | 100   | 56    |
| Cap Entry Lane, veh/h       | 1311  | 1333  | 1358  |
| Entry HV Adj Factor         | 0.980 | 0.980 | 0.982 |
| Flow Entry, veh/h           | 65    | 98    | 55    |
| Cap Entry, veh/h            | 1285  | 1306  | 1333  |
| V/C Ratio                   | 0.050 | 0.075 | 0.041 |
| Control Delay, s/veh        | 3.2   | 3.4   | 3.0   |
| LOS                         | A     | A     | A     |
| 95th %tile Queue, veh       | 0     | 0     | 0     |

Lanes, Volumes, Timings  
6: Founder Pkwy & Connector Collector Roadway

2025 Background  
AM Peak



| Lane Group                 | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   | Ø7 |
|----------------------------|-------|-------|-------|-------|-------|-------|----|
| Lane Configurations        |       |       |       |       |       |       |    |
| Traffic Volume (vph)       | 30    | 625   | 1500  | 20    | 25    | 65    |    |
| Future Volume (vph)        | 30    | 625   | 1500  | 20    | 25    | 65    |    |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |    |
| Lane Util. Factor          | 1.00  | 0.95  | 0.95  | 1.00  | 1.00  | 1.00  |    |
| Fr <sub>t</sub>            |       |       |       | 0.850 |       | 0.850 |    |
| Fl <sub>t</sub> Protected  | 0.950 |       |       |       | 0.950 |       |    |
| Satd. Flow (prot)          | 1770  | 3539  | 3539  | 1583  | 1770  | 1583  |    |
| Fl <sub>t</sub> Permitted  | 0.128 |       |       |       | 0.950 |       |    |
| Satd. Flow (perm)          | 238   | 3539  | 3539  | 1583  | 1770  | 1583  |    |
| Right Turn on Red          |       |       |       | Yes   |       | Yes   |    |
| Satd. Flow (RTOR)          |       |       |       | 22    |       | 71    |    |
| Link Speed (mph)           |       | 50    | 50    |       | 35    |       |    |
| Link Distance (ft)         |       | 483   | 546   |       | 1305  |       |    |
| Travel Time (s)            |       | 6.6   | 7.4   |       | 25.4  |       |    |
| Peak Hour Factor           | 0.92  | 0.92  | 0.95  | 0.92  | 0.92  | 0.92  |    |
| Adj. Flow (vph)            | 33    | 679   | 1579  | 22    | 27    | 71    |    |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |    |
| Lane Group Flow (vph)      | 33    | 679   | 1579  | 22    | 27    | 71    |    |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    |    |
| Lane Alignment             | Left  | Left  | Left  | Right | Left  | Right |    |
| Median Width(ft)           |       | 12    | 12    |       | 12    |       |    |
| Link Offset(ft)            |       | 0     | 0     |       | 0     |       |    |
| Crosswalk Width(ft)        |       | 16    | 16    |       | 16    |       |    |
| Two way Left Turn Lane     |       |       |       |       |       |       |    |
| Headway Factor             | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |    |
| Turning Speed (mph)        | 15    |       |       | 9     | 15    | 9     |    |
| Number of Detectors        | 1     | 2     | 2     | 1     | 1     | 1     |    |
| Detector Template          | Left  | Thru  | Thru  | Right | Left  | Right |    |
| Leading Detector (ft)      | 20    | 100   | 100   | 20    | 20    | 20    |    |
| Trailing Detector (ft)     | 0     | 0     | 0     | 0     | 0     | 0     |    |
| Detector 1 Position(ft)    | 0     | 0     | 0     | 0     | 0     | 0     |    |
| Detector 1 Size(ft)        | 20    | 6     | 6     | 20    | 20    | 20    |    |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |    |
| Detector 1 Channel         |       |       |       |       |       |       |    |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |    |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |    |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |    |
| Detector 2 Position(ft)    |       | 94    | 94    |       |       |       |    |
| Detector 2 Size(ft)        |       | 6     | 6     |       |       |       |    |
| Detector 2 Type            |       | Cl+Ex | Cl+Ex |       |       |       |    |
| Detector 2 Channel         |       |       |       |       |       |       |    |
| Detector 2 Extend (s)      |       | 0.0   | 0.0   |       |       |       |    |
| Turn Type                  | pm+pt | NA    | NA    | Perm  | pm+pt | Free  |    |
| Protected Phases           | 5     | 2     | 6     |       | 4     | 7     |    |
| Permitted Phases           | 2     |       |       | 6     | 7     | Free  |    |
| Detector Phase             | 5     | 2     | 6     | 6     | 4     |       |    |
| Switch Phase               |       |       |       |       |       |       |    |
| Minimum Initial (s)        | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |    |

Lanes, Volumes, Timings  
6: Founder Pkwy & Connector Collector Roadway

2025 Background  
AM Peak



| Lane Group            | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   | Ø7   |
|-----------------------|-------|-------|-------|-------|-------|-------|------|
| Minimum Split (s)     | 9.0   | 20.0  | 20.0  | 20.0  | 20.0  |       | 20.0 |
| Total Split (s)       | 12.0  | 90.0  | 78.0  | 78.0  | 30.0  |       | 30.0 |
| Total Split (%)       | 10.0% | 75.0% | 65.0% | 65.0% | 25.0% |       | 25%  |
| Maximum Green (s)     | 7.0   | 83.5  | 71.5  | 71.5  | 25.0  |       | 25.0 |
| Yellow Time (s)       | 3.0   | 4.5   | 4.5   | 4.5   | 3.0   |       | 3.0  |
| All-Red Time (s)      | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   |       | 2.0  |
| Lost Time Adjust (s)  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       |      |
| Total Lost Time (s)   | 5.0   | 6.5   | 6.5   | 6.5   | 5.0   |       |      |
| Lead/Lag              | Lead  |       | Lag   |       |       |       |      |
| Lead-Lag Optimize?    | Yes   |       | Yes   |       |       |       |      |
| Vehicle Extension (s) | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |       | 3.0  |
| Recall Mode           | None  | C-Max | C-Max | C-Max | None  |       | None |
| Act Effect Green (s)  | 107.0 | 108.1 | 101.5 | 101.5 | 7.3   | 120.0 |      |
| Actuated g/C Ratio    | 0.89  | 0.90  | 0.85  | 0.85  | 0.06  | 1.00  |      |
| v/c Ratio             | 0.12  | 0.21  | 0.53  | 0.02  | 0.25  | 0.04  |      |
| Control Delay         | 2.2   | 1.6   | 5.7   | 1.6   | 58.8  | 0.0   |      |
| Queue Delay           | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |      |
| Total Delay           | 2.2   | 1.6   | 5.7   | 1.6   | 58.8  | 0.0   |      |
| LOS                   | A     | A     | A     | A     | E     | A     |      |
| Approach Delay        |       | 1.6   | 5.7   |       | 16.2  |       |      |
| Approach LOS          |       | A     | A     |       | B     |       |      |

Intersection Summary

Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green  
 Natural Cycle: 65  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.53  
 Intersection Signal Delay: 4.9  
 Intersection LOS: A  
 Intersection Capacity Utilization 54.4%  
 ICU Level of Service A  
 Analysis Period (min) 15

Splits and Phases: 6: Founder Pkwy & Connector Collector Roadway





| Intersection                |       |       |       |
|-----------------------------|-------|-------|-------|
| Intersection Delay, s/veh   | 4.1   |       |       |
| Intersection LOS            | A     |       |       |
| Approach                    | EB    | NB    | SB    |
| Entry Lanes                 | 1     | 1     | 1     |
| Conflicting Circle Lanes    | 1     | 1     | 1     |
| Adj Approach Flow, veh/h    | 38    | 92    | 278   |
| Demand Flow Rate, veh/h     | 39    | 94    | 284   |
| Vehicles Circulating, veh/h | 200   | 34    | 16    |
| Vehicles Exiting, veh/h     | 100   | 205   | 112   |
| Ped Vol Crossing Leg, #/h   | 0     | 0     | 0     |
| Ped Cap Adj                 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh       | 3.6   | 3.3   | 4.5   |
| Approach LOS                | A     | A     | A     |
| Lane                        | Left  | Left  | Left  |
| Designated Moves            | LR    | LT    | TR    |
| Assumed Moves               | LR    | LT    | TR    |
| RT Channelized              |       |       |       |
| Lane Util                   | 1.000 | 1.000 | 1.000 |
| Follow-Up Headway, s        | 2.609 | 2.609 | 2.609 |
| Critical Headway, s         | 4.976 | 4.976 | 4.976 |
| Entry Flow, veh/h           | 39    | 94    | 284   |
| Cap Entry Lane, veh/h       | 1125  | 1333  | 1358  |
| Entry HV Adj Factor         | 0.974 | 0.984 | 0.979 |
| Flow Entry, veh/h           | 38    | 92    | 278   |
| Cap Entry, veh/h            | 1096  | 1311  | 1329  |
| V/C Ratio                   | 0.035 | 0.071 | 0.209 |
| Control Delay, s/veh        | 3.6   | 3.3   | 4.5   |
| LOS                         | A     | A     | A     |
| 95th %tile Queue, veh       | 0     | 0     | 1     |

Lanes, Volumes, Timings  
8: Ridge Rd/Founders Pkwy & 5th St/SH 86

2025 Background  
AM Peak



| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |       |       |       |       |       |       |
| Traffic Volume (vph)       | 75    | 235   | 180   | 90    | 425   | 640   | 375   | 405   | 55    | 235   | 160   | 135   |
| Future Volume (vph)        | 75    | 235   | 180   | 90    | 425   | 640   | 375   | 405   | 55    | 235   | 160   | 135   |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 375   |       | 425   | 500   |       | 0     | 230   |       | 0     | 600   |       | 600   |
| Storage Lanes              | 1     |       | 1     | 1     |       | 1     | 1     |       | 1     | 1     |       | 1     |
| Taper Length (ft)          | 100   |       |       | 100   |       |       | 100   |       |       | 100   |       |       |
| 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  |
| Frt                        |       |       | 0.850 |       |       | 0.850 |       |       | 0.850 |       |       | 0.850 |
| Flt Protected              | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       |
| Satd. Flow (prot)          | 1770  | 1863  | 1583  | 1770  | 1863  | 1583  | 1770  | 1863  | 1583  | 1770  | 1863  | 1583  |
| Flt Permitted              | 0.299 |       |       | 0.478 |       |       | 0.459 |       |       | 0.171 |       |       |
| Satd. Flow (perm)          | 557   | 1863  | 1583  | 890   | 1863  | 1583  | 855   | 1863  | 1583  | 319   | 1863  | 1583  |
| Right Turn on Red          |       |       | Yes   |       |       | Yes   |       |       | Yes   |       |       | Yes   |
| Satd. Flow (RTOR)          |       |       | 196   |       |       | 514   |       |       | 155   |       |       | 155   |
| Link Speed (mph)           |       | 35    |       |       | 50    |       |       | 35    |       |       | 50    |       |
| Link Distance (ft)         |       | 450   |       |       | 848   |       |       | 659   |       |       | 865   |       |
| Travel Time (s)            |       | 8.8   |       |       | 11.6  |       |       | 12.8  |       |       | 11.8  |       |
| Peak Hour Factor           | 0.92  | 0.92  | 0.92  | 0.92  | 0.95  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 82    | 255   | 196   | 98    | 447   | 696   | 408   | 440   | 60    | 255   | 174   | 147   |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 82    | 255   | 196   | 98    | 447   | 696   | 408   | 440   | 60    | 255   | 174   | 147   |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right |
| Median Width(ft)           |       | 18    |       |       | 18    |       |       | 24    |       |       | 24    |       |
| Link Offset(ft)            |       | 0     |       |       | 0     |       |       | 0     |       |       | 0     |       |
| Crosswalk Width(ft)        |       | 16    |       |       | 16    |       |       | 16    |       |       | 16    |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |       |       |       |       |       |
| Headway 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  |
| Turning Speed (mph)        | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     |
| Number of Detectors        | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     | 1     |
| Detector Template          | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  | Right |
| Leading Detector (ft)      | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   | 20    |
| Trailing Detector (ft)     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Position(ft)    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Size(ft)        | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     | 20    |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 2 Position(ft)    |       | 94    |       |       | 94    |       |       | 94    |       |       | 94    |       |
| Detector 2 Size(ft)        |       | 6     |       |       | 6     |       |       | 6     |       |       | 6     |       |
| Detector 2 Type            |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |
| Detector 2 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |
| Turn Type                  | pm+pt | NA    | Free  | pm+pt | NA    | Free  | pm+pt | NA    | Free  | pm+pt | NA    | Free  |
| Protected Phases           | 5     | 2     |       | 1     | 6     |       | 3     | 8     |       | 7     | 4     |       |
| Permitted Phases           | 2     |       | Free  | 6     |       | Free  | 8     |       | Free  | 4     |       | Free  |

Lanes, Volumes, Timings  
8: Ridge Rd/Founders Pkwy & 5th St/SH 86

2025 Background  
AM Peak

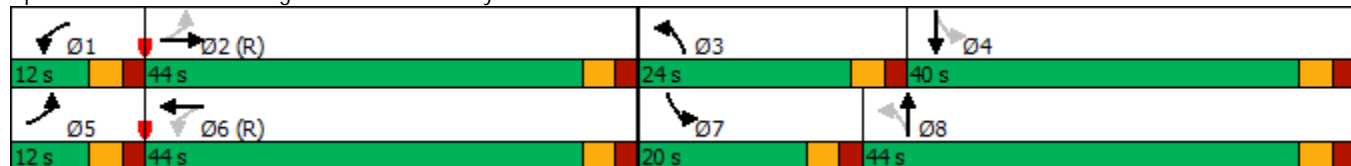


| Lane Group            | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Detector Phase        | 5     | 2     |       | 1     | 6     |       | 3     | 8     |       | 7     | 4     |       |
| Switch Phase          |       |       |       |       |       |       |       |       |       |       |       |       |
| Minimum Initial (s)   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |       |
| Minimum Split (s)     | 9.0   | 20.0  |       | 9.0   | 20.0  |       | 9.0   | 20.0  |       | 9.0   | 20.0  |       |
| Total Split (s)       | 12.0  | 44.0  |       | 12.0  | 44.0  |       | 24.0  | 44.0  |       | 20.0  | 40.0  |       |
| Total Split (%)       | 10.0% | 36.7% |       | 10.0% | 36.7% |       | 20.0% | 36.7% |       | 16.7% | 33.3% |       |
| Maximum Green (s)     | 7.0   | 39.0  |       | 7.0   | 39.0  |       | 19.0  | 39.0  |       | 15.0  | 35.0  |       |
| Yellow Time (s)       | 3.0   | 3.0   |       | 3.0   | 3.0   |       | 3.0   | 3.0   |       | 3.0   | 3.0   |       |
| All-Red Time (s)      | 2.0   | 2.0   |       | 2.0   | 2.0   |       | 2.0   | 2.0   |       | 2.0   | 2.0   |       |
| Lost Time Adjust (s)  | -1.0  | -1.0  |       | -1.0  | -1.0  |       | -1.0  | -1.0  |       | -1.0  | -1.0  |       |
| Total Lost Time (s)   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |       |
| Lead/Lag              | Lead  | Lag   |       | Lead  | Lag   |       | Lead  | Lag   |       | Lead  | Lag   |       |
| Lead-Lag Optimize?    | Yes   | Yes   |       | Yes   | Yes   |       | Yes   | Yes   |       | Yes   | Yes   |       |
| Vehicle Extension (s) | 3.0   | 3.0   |       | 3.0   | 3.0   |       | 3.0   | 3.0   |       | 3.0   | 3.0   |       |
| Recall Mode           | None  | C-Max |       | None  | C-Max |       | None  | None  |       | None  | None  |       |
| Act Effect Green (s)  | 54.3  | 45.8  | 120.0 | 55.6  | 48.2  | 120.0 | 53.4  | 33.8  | 120.0 | 45.0  | 29.4  | 120.0 |
| Actuated g/C Ratio    | 0.45  | 0.38  | 1.00  | 0.46  | 0.40  | 1.00  | 0.44  | 0.28  | 1.00  | 0.38  | 0.24  | 1.00  |
| v/c Ratio             | 0.24  | 0.36  | 0.12  | 0.21  | 0.60  | 0.44  | 0.77  | 0.84  | 0.04  | 0.83  | 0.38  | 0.09  |
| Control Delay         | 20.3  | 30.1  | 0.2   | 19.6  | 35.0  | 0.9   | 33.9  | 54.9  | 0.0   | 48.2  | 38.9  | 0.1   |
| Queue Delay           | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay           | 20.3  | 30.1  | 0.2   | 19.6  | 35.0  | 0.9   | 33.9  | 54.9  | 0.0   | 48.2  | 38.9  | 0.1   |
| LOS                   | C     | C     | A     | B     | C     | A     | C     | D     | A     | D     | D     | A     |
| Approach Delay        |       | 17.6  |       |       | 14.6  |       |       | 41.8  |       |       | 33.1  |       |
| Approach LOS          |       | B     |       |       | B     |       |       | D     |       |       | C     |       |

Intersection Summary

|                                    |   |
|------------------------------------|---|
| Area Type:                         | Other   |
| Cycle Length:                      | 120   |
| Actuated Cycle Length:             | 120   |
| Offset:                            | 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green |
| Natural Cycle:                     | 65  |
| Control Type:                      | Actuated-Coordinated  |
| Maximum v/c Ratio:                 | 0.84  |
| Intersection Signal Delay:         | 26.0  |
| Intersection LOS:                  | C   |
| Intersection Capacity Utilization: | 74.2%   |
| ICU Level of Service:              | D   |
| Analysis Period (min):             | 15  |

Splits and Phases: 8: Ridge Rd/Founders Pkwy & 5th St/SH 86



Lanes, Volumes, Timings  
1: Allen Way & Founder Pkwy

2025 Background  
PM Peak

| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |       |       |       |       |       |       |
| Traffic Volume (vph)       | 435   | 2685  | 230   | 42    | 2145  | 145   | 165   | 38    | 90    | 125   | 37    | 460   |
| Future Volume (vph)        | 435   | 2685  | 230   | 42    | 2145  | 145   | 165   | 38    | 90    | 125   | 37    | 460   |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 300   |       | 0     | 330   |       | 200   | 0     |       | 0     | 125   |       | 0     |
| Storage Lanes              | 2     |       | 0     | 1     |       | 1     | 2     |       | 0     | 1     |       | 2     |
| Taper Length (ft)          | 100   |       |       | 100   |       |       | 100   |       |       | 100   |       |       |
| Lane Util. Factor          | 0.97  | 0.91  | 0.91  | 1.00  | 0.91  | 1.00  | 0.97  | 1.00  | 1.00  | 1.00  | 1.00  | 0.88  |
| Frt                        |       | 0.988 |       |       |       | 0.850 |       | 0.894 |       |       |       | 0.850 |
| Flt Protected              | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       |
| Satd. Flow (prot)          | 3433  | 5024  | 0     | 1770  | 5085  | 1583  | 3433  | 1665  | 0     | 1770  | 1863  | 2787  |
| Flt Permitted              | 0.950 |       |       | 0.067 |       |       | 0.731 |       |       | 0.462 |       |       |
| Satd. Flow (perm)          | 3433  | 5024  | 0     | 125   | 5085  | 1583  | 2642  | 1665  | 0     | 861   | 1863  | 2787  |
| Right Turn on Red          |       |       | Yes   |       |       | Yes   |       |       | Yes   |       |       | Yes   |
| Satd. Flow (RTOR)          |       | 20    |       |       |       | 155   |       | 86    |       |       |       | 305   |
| Link Speed (mph)           |       | 35    |       |       | 35    |       |       | 30    |       |       |       | 30    |
| Link Distance (ft)         |       | 533   |       |       | 1095  |       |       | 278   |       |       |       | 392   |
| Travel Time (s)            |       | 10.4  |       |       | 21.3  |       |       | 6.3   |       |       |       | 8.9   |
| Peak Hour Factor           | 0.92  | 0.95  | 0.92  | 0.92  | 0.95  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 473   | 2826  | 250   | 46    | 2258  | 158   | 179   | 41    | 98    | 136   | 40    | 500   |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 473   | 3076  | 0     | 46    | 2258  | 158   | 179   | 139   | 0     | 136   | 40    | 500   |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right |
| Median Width(ft)           |       | 20    |       |       | 20    |       |       | 24    |       |       |       | 20    |
| Link Offset(ft)            |       | 0     |       |       | 0     |       |       | 0     |       |       |       | 0     |
| Crosswalk Width(ft)        |       | 16    |       |       | 16    |       |       | 16    |       |       |       | 16    |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |       |       |       |       |       |
| Headway 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  |
| Turning Speed (mph)        | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     |
| Number of Detectors        | 1     | 2     |       | 1     | 2     | 1     | 1     | 2     |       | 1     | 2     | 1     |
| Detector Template          | Left  | Thru  |       | Left  | Thru  | Right | Left  | Thru  |       | Left  | Thru  | Right |
| Leading Detector (ft)      | 20    | 100   |       | 20    | 100   | 20    | 20    | 100   |       | 20    | 100   | 20    |
| Trailing Detector (ft)     | 0     | 0     |       | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     | 0     |
| Detector 1 Position(ft)    | 0     | 0     |       | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     | 0     |
| Detector 1 Size(ft)        | 20    | 6     |       | 20    | 6     | 20    | 20    | 6     |       | 20    | 6     | 20    |
| Detector 1 Type            | Cl+Ex | Cl+Ex |       | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |       | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   |
| Detector 2 Position(ft)    |       | 94    |       |       | 94    |       |       | 94    |       |       |       | 94    |
| Detector 2 Size(ft)        |       | 6     |       |       | 6     |       |       | 6     |       |       |       | 6     |
| Detector 2 Type            |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |       |       | Cl+Ex |
| Detector 2 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |       |       | 0.0   |
| Turn Type                  | Prot  | NA    |       | pm+pt | NA    | Perm  | pm+pt | NA    |       | pm+pt | NA    | Perm  |
| Protected Phases           | 5     | 2     |       | 1     | 6     |       | 3     | 8     |       | 7     | 4     |       |
| Permitted Phases           |       |       |       | 6     |       | 6     | 8     |       |       | 4     |       | 4     |

Lanes, Volumes, Timings  
1: Allen Way & Founder Pkwy

2025 Background  
PM Peak

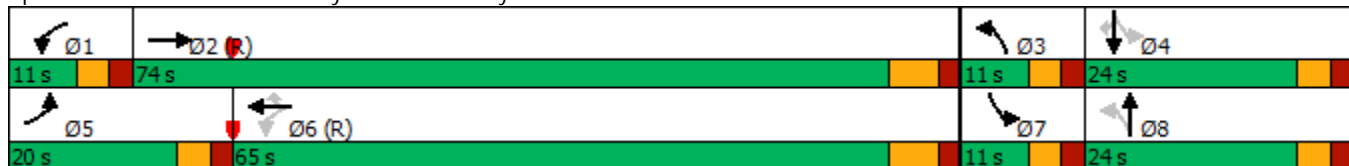


| Lane Group            | EBL   | EBT   | EBR | WBL  | WBT   | WBR   | NBL  | NBT   | NBR | SBL  | SBT   | SBR   |
|-----------------------|-------|-------|-----|------|-------|-------|------|-------|-----|------|-------|-------|
| Detector Phase        | 5     | 2     |     | 1    | 6     | 6     | 3    | 8     |     | 7    | 4     | 4     |
| Switch Phase          |       |       |     |      |       |       |      |       |     |      |       |       |
| Minimum Initial (s)   | 4.0   | 4.0   |     | 4.0  | 4.0   | 4.0   | 4.0  | 4.0   |     | 4.0  | 4.0   | 4.0   |
| Minimum Split (s)     | 11.0  | 21.0  |     | 9.5  | 21.0  | 21.0  | 9.0  | 21.0  |     | 9.0  | 21.0  | 21.0  |
| Total Split (s)       | 20.0  | 74.0  |     | 11.0 | 65.0  | 65.0  | 11.0 | 24.0  |     | 11.0 | 24.0  | 24.0  |
| Total Split (%)       | 16.7% | 61.7% |     | 9.2% | 54.2% | 54.2% | 9.2% | 20.0% |     | 9.2% | 20.0% | 20.0% |
| Maximum Green (s)     | 15.0  | 67.5  |     | 6.0  | 58.5  | 58.5  | 6.0  | 19.0  |     | 6.0  | 19.0  | 19.0  |
| Yellow Time (s)       | 3.0   | 4.5   |     | 3.0  | 4.5   | 4.5   | 3.0  | 3.0   |     | 3.0  | 3.0   | 3.0   |
| All-Red Time (s)      | 2.0   | 2.0   |     | 2.0  | 2.0   | 2.0   | 2.0  | 2.0   |     | 2.0  | 2.0   | 2.0   |
| Lost Time Adjust (s)  | -1.0  | -2.0  |     | -1.0 | -2.0  | -1.0  | -1.0 | -1.0  |     | -1.0 | -1.0  | -1.0  |
| Total Lost Time (s)   | 4.0   | 4.5   |     | 4.0  | 4.5   | 5.5   | 4.0  | 4.0   |     | 4.0  | 4.0   | 4.0   |
| Lead/Lag              | Lead  | Lag   |     | Lead | Lag   | Lag   | Lead | Lag   |     | Lead | Lag   | Lag   |
| Lead-Lag Optimize?    | Yes   | Yes   |     | Yes  | Yes   | Yes   | Yes  | Yes   |     | Yes  | Yes   | Yes   |
| Vehicle Extension (s) | 3.0   | 3.0   |     | 3.0  | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0  | 3.0   | 3.0   |
| Recall Mode           | None  | C-Max |     | None | C-Max | C-Max | None | None  |     | None | None  | None  |
| Act Effect Green (s)  | 20.0  | 76.1  |     | 68.6 | 61.1  | 60.1  | 22.4 | 15.4  |     | 22.4 | 15.4  | 15.4  |
| Actuated g/C Ratio    | 0.17  | 0.63  |     | 0.57 | 0.51  | 0.50  | 0.19 | 0.13  |     | 0.19 | 0.13  | 0.13  |
| v/c Ratio             | 0.83  | 0.96  |     | 0.28 | 0.87  | 0.18  | 0.33 | 0.48  |     | 0.64 | 0.17  | 0.80  |
| Control Delay         | 62.4  | 31.7  |     | 12.1 | 28.1  | 3.0   | 39.3 | 25.0  |     | 53.7 | 45.9  | 29.4  |
| Queue Delay           | 0.0   | 0.0   |     | 0.0  | 0.0   | 0.0   | 0.0  | 0.0   |     | 0.0  | 0.0   | 0.0   |
| Total Delay           | 62.4  | 31.7  |     | 12.1 | 28.1  | 3.0   | 39.3 | 25.0  |     | 53.7 | 45.9  | 29.4  |
| LOS                   | E     | C     |     | B    | C     | A     | D    | C     |     | D    | D     | C     |
| Approach Delay        |       | 35.8  |     |      | 26.2  |       |      | 33.1  |     |      | 35.3  |       |
| Approach LOS          |       | D     |     |      | C     |       |      | C     |     |      | D     |       |

Intersection Summary























Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 119 (99%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
 Natural Cycle: 110  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.96  
 Intersection Signal Delay: 32.2      Intersection LOS: C  
 Intersection Capacity Utilization 88.5%      ICU Level of Service E  
 Analysis Period (min) 15

Splits and Phases: 1: Allen Way & Founder Pkwy



Lanes, Volumes, Timings  
2: Front St & Founder Pkwy

2025 Background  
PM Peak

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group                 | SEL   | SET   | SER   | NWL   | NWT   | NWR   | NEL  | NET   | NER   | SWL   | SWT   | SWR   |
| Lane Configurations        |  |  |   |  |  |   |  |  |  |  |  |  |
| Traffic Volume (vph)       | 165   | 1950  | 685   | 130   | 1575  | 20  | 620  | 110   | 190   | 40  | 85  | 60  |
| Future Volume (vph)        | 165   | 1950  | 685   | 130   | 1575  | 20  | 620  | 110   | 190   | 40  | 85  | 60  |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900   | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 460   |   | 0   | 200   |   | 0   | 285  |   | 0   | 210   |   | 0   |
| Storage Lanes              | 1   |   | 0   | 1   |   | 0   | 1  |   | 1   | 1   |   | 0   |
| Taper Length (ft)          | 100   |   |   | 100   |   |   | 100  |   |   | 100   |   |   |
| Lane Util. Factor          | 1.00  | 0.91  | 0.91  | 1.00  | 0.91  | 0.91  | 0.97   | 1.00  | 1.00  | 1.00  | 0.95  | 0.95  |
| Frt                        |   | 0.959   |   |   | 0.998   |   |  |   | 0.850   |   | 0.938   |   |
| Flt Protected              | 0.950   |   |   | 0.950   |   |   | 0.950  |   |   | 0.950   |   |   |
| Satd. Flow (prot)          | 1770  | 4877  | 0   | 1770  | 5075  | 0   | 3433   | 1863  | 1583  | 1770  | 3320  | 0   |
| Flt Permitted              | 0.075   |   |   | 0.066   |   |   | 0.950  |   |   | 0.680   |   |   |
| Satd. Flow (perm)          | 140   | 4877  | 0   | 123   | 5075  | 0   | 3433   | 1863  | 1583  | 1267  | 3320  | 0   |
| Right Turn on Red          |   |   | Yes   |   |   | Yes   |  |   | Yes   |   |   | Yes   |
| Satd. Flow (RTOR)          |   | 121   |   |   | 2   |   |  |   | 91  |   | 65  |   |
| Link Speed (mph)           |   | 35  |   |   | 35  |   |  | 30  |   |   | 30  |   |
| Link Distance (ft)         |   | 1095  |   |   | 488   |   |  | 556   |   |   | 397   |   |
| Travel Time (s)            |   | 21.3  |   |   | 9.5   |   |  | 12.6  |   |   | 9.0   |   |
| Peak Hour Factor           | 0.92  | 0.98  | 0.92  | 0.92  | 0.95  | 0.92  | 0.92   | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 179   | 1990  | 745   | 141   | 1658  | 22  | 674  | 120   | 207   | 43  | 92  | 65  |
| Shared Lane Traffic (%)    |   |   |   |   |   |   |  |   |   |   |   |   |
| Lane Group Flow (vph)      | 179   | 2735  | 0   | 141   | 1680  | 0   | 674  | 120   | 207   | 43  | 157   | 0   |
| Enter Blocked Intersection | No  | No  | No  | No  | No  | No  | No   | No  | No  | No  | No  | No  |
| Lane Alignment             | Left  | Left  | Right   | Left  | Left  | Right   | Left   | Left  | Right   | Left  | Left  | Right   |
| Median Width(ft)           |   | 12  |   |   | 12  |   |  | 40  |   |   | 24  |   |
| Link Offset(ft)            |   | 0   |   |   | 0   |   |  | 0   |   |   | 0   |   |
| Crosswalk Width(ft)        |   | 16  |   |   | 16  |   |  | 16  |   |   | 16  |   |
| Two way Left Turn Lane     |   |   |   |   |   |   |  |   |   |   |   |   |
| Headway 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  |
| Turning Speed (mph)        | 15  |   | 9   | 15  |   | 9   | 15   |   | 9   | 15  |   | 9   |
| Number of Detectors        | 1   | 2   |   | 1   | 2   |   | 1  | 2   | 1   | 1   | 2   |   |
| Detector Template          | Left  | Thru  |   | Left  | Thru  |   | Left   | Thru  | Right   | Left  | Thru  |   |
| Leading Detector (ft)      | 20  | 100   |   | 20  | 100   |   | 20   | 100   | 20  | 20  | 100   |   |
| Trailing Detector (ft)     | 0   | 0   |   | 0   | 0   |   | 0  | 0   | 0   | 0   | 0   |   |
| Detector 1 Position(ft)    | 0   | 0   |   | 0   | 0   |   | 0  | 0   | 0   | 0   | 0   |   |
| Detector 1 Size(ft)        | 20  | 6   |   | 20  | 6   |   | 20   | 6   | 20  | 20  | 6   |   |
| Detector 1 Type            | Cl+Ex   | Cl+Ex   |   | Cl+Ex   | Cl+Ex   |   | Cl+Ex  | Cl+Ex   | Cl+Ex   | Cl+Ex   | Cl+Ex   |   |
| Detector 1 Channel         |   |   |   |   |   |   |  |   |   |   |   |   |
| Detector 1 Extend (s)      | 0.0   | 0.0   |   | 0.0   | 0.0   |   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |   | 0.0   | 0.0   |   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |   | 0.0   | 0.0   |   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |   |
| Detector 2 Position(ft)    |   | 94  |   |   | 94  |   |  | 94  |   |   | 94  |   |
| Detector 2 Size(ft)        |   | 6   |   |   | 6   |   |  | 6   |   |   | 6   |   |
| Detector 2 Type            |   | Cl+Ex   |   |   | Cl+Ex   |   |  | Cl+Ex   |   |   | Cl+Ex   |   |
| Detector 2 Channel         |   |   |   |   |   |   |  |   |   |   |   |   |
| Detector 2 Extend (s)      |   | 0.0   |   |   | 0.0   |   |  | 0.0   |   |   | 0.0   |   |
| Turn Type                  | pm+pt   | NA  |   | pm+pt   | NA  |   | Prot   | NA  | pm+ov   | pm+pt   | NA  |   |
| Protected Phases           | 5   | 2   |   | 1   | 6   |   | 3  | 8   | 1   | 7   | 4   |   |
| Permitted Phases           | 2   |   |   | 6   |   |   |  |   | 8   | 4   |   |   |

Lanes, Volumes, Timings  
2: Front St & Founder Pkwy

2025 Background  
PM Peak

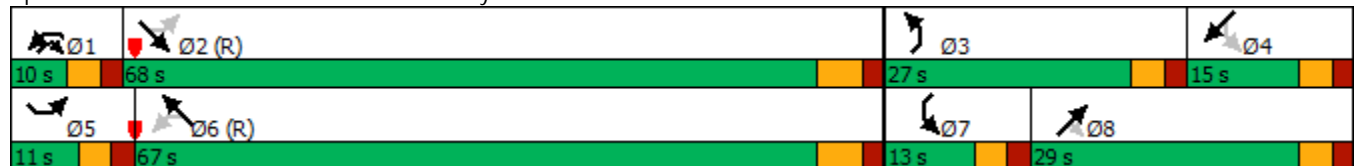


| Lane Group            | SEL  | SET   | SER | NWL  | NWT   | NWR | NEL   | NET   | NER  | SWL   | SWT   | SWR |
|-----------------------|------|-------|-----|------|-------|-----|-------|-------|------|-------|-------|-----|
| Detector Phase        | 5    | 2     |     | 1    | 6     |     | 3     | 8     | 1    | 7     | 4     |     |
| Switch Phase          |      |       |     |      |       |     |       |       |      |       |       |     |
| Minimum Initial (s)   | 4.0  | 4.0   |     | 4.0  | 4.0   |     | 4.0   | 4.0   | 4.0  | 4.0   | 4.0   |     |
| Minimum Split (s)     | 9.0  | 21.0  |     | 9.0  | 21.0  |     | 9.0   | 21.0  | 9.0  | 10.0  | 14.0  |     |
| Total Split (s)       | 11.0 | 68.0  |     | 10.0 | 67.0  |     | 27.0  | 29.0  | 10.0 | 13.0  | 15.0  |     |
| Total Split (%)       | 9.2% | 56.7% |     | 8.3% | 55.8% |     | 22.5% | 24.2% | 8.3% | 10.8% | 12.5% |     |
| Maximum Green (s)     | 6.0  | 62.0  |     | 5.0  | 61.0  |     | 22.0  | 24.0  | 5.0  | 8.0   | 10.0  |     |
| Yellow Time (s)       | 3.0  | 4.0   |     | 3.0  | 4.0   |     | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   |     |
| All-Red Time (s)      | 2.0  | 2.0   |     | 2.0  | 2.0   |     | 2.0   | 2.0   | 2.0  | 2.0   | 2.0   |     |
| Lost Time Adjust (s)  | -1.0 | -2.5  |     | -1.0 | -2.0  |     | -2.0  | -1.0  | -1.0 | -1.0  | -1.0  |     |
| Total Lost Time (s)   | 4.0  | 3.5   |     | 4.0  | 4.0   |     | 3.0   | 4.0   | 4.0  | 4.0   | 4.0   |     |
| Lead/Lag              | Lead | Lag   |     | Lead | Lag   |     | Lead  | Lag   | Lead | Lead  | Lag   |     |
| Lead-Lag Optimize?    | Yes  | Yes   |     | Yes  | Yes   |     | Yes   | Yes   | Yes  | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0  | 3.0   |     | 3.0  | 3.0   |     | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   |     |
| Recall Mode           | None | C-Max |     | None | C-Max |     | None  | None  | None | None  | None  |     |
| Act Effect Green (s)  | 72.6 | 64.5  |     | 70.6 | 63.0  |     | 24.0  | 26.4  | 38.0 | 17.5  | 9.4   |     |
| Actuated g/C Ratio    | 0.60 | 0.54  |     | 0.59 | 0.52  |     | 0.20  | 0.22  | 0.32 | 0.15  | 0.08  |     |
| v/c Ratio             | 0.89 | 1.02  |     | 0.80 | 0.63  |     | 0.98  | 0.29  | 0.37 | 0.20  | 0.49  |     |
| Control Delay         | 51.6 | 44.6  |     | 54.2 | 21.5  |     | 78.4  | 42.3  | 20.5 | 32.9  | 35.9  |     |
| Queue Delay           | 0.0  | 0.0   |     | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |     |
| Total Delay           | 51.6 | 44.6  |     | 54.2 | 21.5  |     | 78.4  | 42.3  | 20.5 | 32.9  | 35.9  |     |
| LOS                   | D    | D     |     | D    | C     |     | E     | D     | C    | C     | D     |     |
| Approach Delay        |      | 45.1  |     |      | 24.1  |     |       | 62.1  |      |       | 35.2  |     |
| Approach LOS          |      | D     |     |      | C     |     |       | E     |      |       | D     |     |

Intersection Summary

Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 96 (80%), Referenced to phase 2:SETL and 6:NWTL, Start of Green  
 Natural Cycle: 110  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 1.02  
 Intersection Signal Delay: 41.2      Intersection LOS: D  
 Intersection Capacity Utilization 95.5%      ICU Level of Service F  
 Analysis Period (min) 15

Splits and Phases: 2: Front St & Founder Pkwy



Lanes, Volumes, Timings  
3: Woodlands Blvd & Founders Pkwy

2025 Background  
PM Peak



| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |       |       |       |       |       |       |
| Traffic Volume (vph)       | 8     | 1630  | 135   | 225   | 1450  | 95    | 105   | 45    | 355   | 173   | 48    | 8     |
| Future Volume (vph)        | 8     | 1630  | 135   | 225   | 1450  | 95    | 105   | 45    | 355   | 173   | 48    | 8     |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 450   |       | 0     | 500   |       | 400   | 220   |       | 0     | 120   |       | 140   |
| Storage Lanes              | 1     |       | 1     | 1     |       | 1     | 1     |       | 1     | 1     |       | 0     |
| Taper Length (ft)          | 100   |       |       | 100   |       |       | 100   |       |       | 100   |       |       |
| Lane Util. Factor          | 1.00  | 0.95  | 1.00  | 1.00  | 0.95  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 0.95  | 0.95  |
| Frt                        |       |       | 0.850 |       |       | 0.850 |       |       | 0.850 |       | 0.978 |       |
| Flt Protected              | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       |
| Satd. Flow (prot)          | 1770  | 3539  | 1583  | 1770  | 3539  | 1583  | 1770  | 1863  | 1583  | 1770  | 3461  | 0     |
| Flt Permitted              | 0.135 |       |       | 0.060 |       |       | 0.615 |       |       | 0.725 |       |       |
| Satd. Flow (perm)          | 251   | 3539  | 1583  | 112   | 3539  | 1583  | 1146  | 1863  | 1583  | 1350  | 3461  | 0     |
| Right Turn on Red          |       |       | Yes   |       |       | Yes   |       |       | Yes   |       |       | Yes   |
| Satd. Flow (RTOR)          |       |       | 114   |       |       | 109   |       |       | 198   |       | 9     |       |
| Link Speed (mph)           |       | 50    |       |       | 50    |       |       | 35    |       |       | 35    |       |
| Link Distance (ft)         |       | 721   |       |       | 782   |       |       | 419   |       |       | 497   |       |
| Travel Time (s)            |       | 9.8   |       |       | 10.7  |       |       | 8.2   |       |       | 9.7   |       |
| Peak Hour Factor           | 0.92  | 0.95  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 9     | 1716  | 147   | 245   | 1576  | 103   | 114   | 49    | 386   | 188   | 52    | 9     |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 9     | 1716  | 147   | 245   | 1576  | 103   | 114   | 49    | 386   | 188   | 61    | 0     |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right |
| Median Width(ft)           |       | 24    |       |       | 24    |       |       | 30    |       |       | 12    |       |
| Link Offset(ft)            |       | 0     |       |       | 0     |       |       | 0     |       |       | 0     |       |
| Crosswalk Width(ft)        |       | 16    |       |       | 16    |       |       | 16    |       |       | 16    |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |       |       |       |       |       |
| Headway 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  |
| Turning Speed (mph)        | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     |
| Number of Detectors        | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     |       |
| Detector Template          | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  |       |
| Leading Detector (ft)      | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   |       |
| Trailing Detector (ft)     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |       |
| Detector 1 Position(ft)    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |       |
| Detector 1 Size(ft)        | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     |       |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |       |
| Detector 1 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       |
| Detector 2 Position(ft)    |       | 94    |       |       | 94    |       |       | 94    |       |       | 94    |       |
| Detector 2 Size(ft)        |       | 6     |       |       | 6     |       |       | 6     |       |       | 6     |       |
| Detector 2 Type            |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |
| Detector 2 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |
| Turn Type                  | pm+pt | NA    | Perm  | pm+pt | NA    | Perm  | pm+pt | NA    | Free  | pm+pt | NA    |       |
| Protected Phases           | 5     | 2     |       | 1     | 6     |       | 3     | 8     |       | 7     | 4     |       |
| Permitted Phases           | 2     |       | 2     | 6     |       | 6     | 8     |       | Free  | 4     |       |       |



Lanes, Volumes, Timings  
3: Woodlands Blvd & Founders Pkwy

2025 Background  
PM Peak

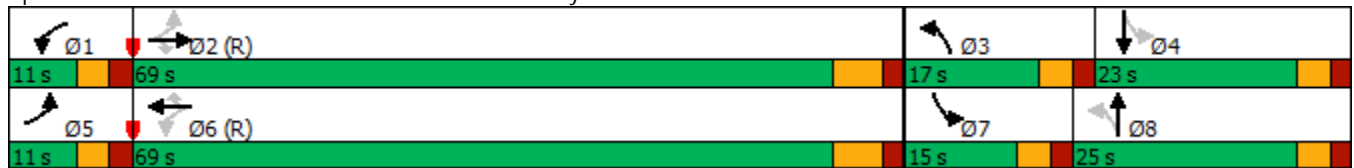


| Lane Group            | EBL  | EBT   | EBR   | WBL  | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR |
|-----------------------|------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-----|
| Detector Phase        | 5    | 2     | 2     | 1    | 6     | 6     | 3     | 8     |       | 7     | 4     |     |
| Switch Phase          |      |       |       |      |       |       |       |       |       |       |       |     |
| Minimum Initial (s)   | 4.0  | 4.0   | 4.0   | 4.0  | 4.0   | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |     |
| Minimum Split (s)     | 9.0  | 20.0  | 20.0  | 9.0  | 20.0  | 20.0  | 9.0   | 20.0  |       | 9.0   | 20.0  |     |
| Total Split (s)       | 11.0 | 69.0  | 69.0  | 11.0 | 69.0  | 69.0  | 17.0  | 25.0  |       | 15.0  | 23.0  |     |
| Total Split (%)       | 9.2% | 57.5% | 57.5% | 9.2% | 57.5% | 57.5% | 14.2% | 20.8% |       | 12.5% | 19.2% |     |
| Maximum Green (s)     | 6.0  | 62.5  | 62.5  | 6.0  | 62.5  | 62.5  | 12.0  | 20.0  |       | 10.0  | 18.0  |     |
| Yellow Time (s)       | 3.0  | 4.5   | 4.5   | 3.0  | 4.5   | 4.5   | 3.0   | 3.0   |       | 3.0   | 3.0   |     |
| All-Red Time (s)      | 2.0  | 2.0   | 2.0   | 2.0  | 2.0   | 2.0   | 2.0   | 2.0   |       | 2.0   | 2.0   |     |
| Lost Time Adjust (s)  | -1.0 | -2.0  | -1.0  | -1.0 | -2.0  | -1.0  | -1.0  | -2.0  |       | -1.0  | -1.0  |     |
| Total Lost Time (s)   | 4.0  | 4.5   | 5.5   | 4.0  | 4.5   | 5.5   | 4.0   | 3.0   |       | 4.0   | 4.0   |     |
| Lead/Lag              | Lead | Lag   | Lag   | Lead | Lag   | Lag   | Lead  | Lag   |       | Lead  | Lag   |     |
| Lead-Lag Optimize?    | Yes  | Yes   | Yes   | Yes  | Yes   | Yes   | Yes   | Yes   |       | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0  | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   | 3.0   | 3.0   |       | 3.0   | 3.0   |     |
| Recall Mode           | None | C-Max | C-Max | None | C-Max | C-Max | None  | None  |       | None  | None  |     |
| Act Effect Green (s)  | 71.7 | 64.5  | 63.5  | 89.4 | 86.7  | 85.7  | 20.7  | 10.7  | 120.0 | 18.2  | 8.5   |     |
| Actuated g/C Ratio    | 0.60 | 0.54  | 0.53  | 0.74 | 0.72  | 0.71  | 0.17  | 0.09  | 1.00  | 0.15  | 0.07  |     |
| v/c Ratio             | 0.04 | 0.90  | 0.16  | 0.67 | 0.62  | 0.09  | 0.44  | 0.30  | 0.24  | 0.77  | 0.24  |     |
| Control Delay         | 6.2  | 32.9  | 4.6   | 39.3 | 11.2  | 1.7   | 46.1  | 54.9  | 0.4   | 65.6  | 47.2  |     |
| Queue Delay           | 0.0  | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |     |
| Total Delay           | 6.2  | 32.9  | 4.6   | 39.3 | 11.2  | 1.7   | 46.1  | 54.9  | 0.4   | 65.6  | 47.2  |     |
| LOS                   | A    | C     | A     | D    | B     | A     | D     | D     | A     | E     | D     |     |
| Approach Delay        |      | 30.6  |       |      | 14.3  |       |       | 14.7  |       |       | 61.1  |     |
| Approach LOS          |      | C     |       |      | B     |       |       | B     |       |       | E     |     |

Intersection Summary

Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 37 (31%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.90  
 Intersection Signal Delay: 23.5  
 Intersection LOS: C  
 Intersection Capacity Utilization 84.2%  
 ICU Level of Service E  
 Analysis Period (min) 15

Splits and Phases: 3: Woodlands Blvd & Founders Pkwy



Lanes, Volumes, Timings  
4: Founders Pkwy & Crowfoot Valley Rd

2025 Background  
PM Peak



| Lane Group                 | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |
| Traffic Volume (vph)       | 785   | 1415  | 1085  | 125   | 135   | 580   |
| Future Volume (vph)        | 785   | 1415  | 1085  | 125   | 135   | 580   |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 485   |       |       | 0     | 150   | 0     |
| Storage Lanes              | 2     |       |       | 1     | 2     | 1     |
| Taper Length (ft)          | 100   |       |       |       | 100   |       |
| Lane Util. Factor          | 0.97  | 0.95  | 0.95  | 1.00  | 0.97  | 0.91  |
| Frt                        |       |       |       | 0.850 | 0.898 | 0.850 |
| Flt Protected              | 0.950 |       |       |       | 0.984 |       |
| Satd. Flow (prot)          | 3433  | 3539  | 3539  | 1583  | 3193  | 1441  |
| Flt Permitted              | 0.950 |       |       |       | 0.984 |       |
| Satd. Flow (perm)          | 3433  | 3539  | 3539  | 1583  | 3193  | 1441  |
| Right Turn on Red          |       |       |       | Yes   |       | Yes   |
| Satd. Flow (RTOR)          |       |       |       | 136   | 315   | 315   |
| Link Speed (mph)           |       | 50    | 50    |       | 35    |       |
| Link Distance (ft)         |       | 641   | 617   |       | 595   |       |
| Travel Time (s)            |       | 8.7   | 8.4   |       | 11.6  |       |
| Peak Hour Factor           | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 853   | 1538  | 1179  | 136   | 147   | 630   |
| Shared Lane Traffic (%)    |       |       |       |       |       | 50%   |
| Lane Group Flow (vph)      | 853   | 1538  | 1179  | 136   | 462   | 315   |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Left  | Right | Left  | Right |
| Median Width(ft)           |       | 24    | 24    |       | 24    |       |
| Link Offset(ft)            |       | 0     | 0     |       | 0     |       |
| Crosswalk Width(ft)        |       | 16    | 16    |       | 16    |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |
| Headway Factor             | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| Turning Speed (mph)        | 15    |       |       | 9     | 15    | 9     |
| Number of Detectors        | 1     | 2     | 2     | 1     | 1     | 1     |
| Detector Template          | Left  | Thru  | Thru  | Right | Left  | Right |
| Leading Detector (ft)      | 20    | 100   | 100   | 20    | 20    | 20    |
| Trailing Detector (ft)     | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Position(ft)    | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Size(ft)        | 20    | 6     | 6     | 20    | 20    | 20    |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 2 Position(ft)    |       | 94    | 94    |       |       |       |
| Detector 2 Size(ft)        |       | 6     | 6     |       |       |       |
| Detector 2 Type            |       | Cl+Ex | Cl+Ex |       |       |       |
| Detector 2 Channel         |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   | 0.0   |       |       |       |
| Turn Type                  | Prot  | NA    | NA    | Perm  | Prot  | Free  |
| Protected Phases           | 5     | 2     | 6     |       | 4     |       |
| Permitted Phases           |       |       |       | 6     |       | Free  |

Lanes, Volumes, Timings  
4: Founders Pkwy & Crowfoot Valley Rd

2025 Background  
PM Peak



| Lane Group            | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   |
|-----------------------|-------|-------|-------|-------|-------|-------|
| Detector Phase        | 5     | 2     | 6     | 6     | 4     |       |
| Switch Phase          |       |       |       |       |       |       |
| Minimum Initial (s)   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       |
| Minimum Split (s)     | 9.0   | 10.5  | 10.5  | 10.5  | 9.0   |       |
| Total Split (s)       | 26.0  | 90.0  | 64.0  | 64.0  | 30.0  |       |
| Total Split (%)       | 21.7% | 75.0% | 53.3% | 53.3% | 25.0% |       |
| Maximum Green (s)     | 21.0  | 83.5  | 57.5  | 57.5  | 25.0  |       |
| Yellow Time (s)       | 3.0   | 4.5   | 4.5   | 4.5   | 3.0   |       |
| All-Red Time (s)      | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   |       |
| Lost Time Adjust (s)  | -1.0  | 0.0   | -2.0  | 0.0   | 0.0   |       |
| Total Lost Time (s)   | 4.0   | 6.5   | 4.5   | 6.5   | 5.0   |       |
| Lead/Lag              | Lead  |       | Lag   | Lag   |       |       |
| Lead-Lag Optimize?    | Yes   |       | Yes   | Yes   |       |       |
| Vehicle Extension (s) | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |       |
| Recall Mode           | None  | C-Max | C-Max | C-Max | None  |       |
| Act Effect Green (s)  | 35.5  | 97.0  | 59.5  | 57.5  | 11.5  | 120.0 |
| Actuated g/C Ratio    | 0.30  | 0.81  | 0.50  | 0.48  | 0.10  | 1.00  |
| v/c Ratio             | 0.84  | 0.54  | 0.67  | 0.16  | 0.78  | 0.22  |
| Control Delay         | 49.1  | 5.2   | 25.3  | 3.3   | 26.0  | 0.3   |
| Queue Delay           | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay           | 49.1  | 5.2   | 25.3  | 3.3   | 26.0  | 0.3   |
| LOS                   | D     | A     | C     | A     | C     | A     |
| Approach Delay        |       | 20.8  | 23.0  |       | 15.6  |       |
| Approach LOS          |       | C     | C     |       | B     |       |

Intersection Summary

Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.84  
 Intersection Signal Delay: 20.6  
 Intersection LOS: C  
 Intersection Capacity Utilization 73.6%  
 ICU Level of Service D  
 Analysis Period (min) 15

Splits and Phases: 4: Founders Pkwy & Crowfoot Valley Rd



HCM 6th Roundabout  
 5: Connector Collector Roadway & Internal Collector Roadway

2025 Background  
 PM Peak

| Intersection                |       |       |       |
|-----------------------------|-------|-------|-------|
| Intersection Delay, s/veh   | 3.3   |       |       |
| Intersection LOS            | A     |       |       |
| Approach                    | EB    | WB    | NB    |
| Entry Lanes                 | 1     | 1     | 1     |
| Conflicting Circle Lanes    | 1     | 1     | 1     |
| Adj Approach Flow, veh/h    | 87    | 60    | 108   |
| Demand Flow Rate, veh/h     | 89    | 62    | 110   |
| Vehicles Circulating, veh/h | 34    | 55    | 50    |
| Vehicles Exiting, veh/h     | 83    | 105   | 73    |
| Ped Vol Crossing Leg, #/h   | 0     | 0     | 0     |
| Ped Cap Adj                 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh       | 3.3   | 3.2   | 3.5   |
| Approach LOS                | A     | A     | A     |
| Lane                        | Left  | Left  | Left  |
| Designated Moves            | TR    | LT    | LR    |
| Assumed Moves               | TR    | LT    | LR    |
| RT Channelized              |       |       |       |
| Lane Util                   | 1.000 | 1.000 | 1.000 |
| Follow-Up Headway, s        | 2.609 | 2.609 | 2.609 |
| Critical Headway, s         | 4.976 | 4.976 | 4.976 |
| Entry Flow, veh/h           | 89    | 62    | 110   |
| Cap Entry Lane, veh/h       | 1333  | 1305  | 1311  |
| Entry HV Adj Factor         | 0.978 | 0.975 | 0.982 |
| Flow Entry, veh/h           | 87    | 60    | 108   |
| Cap Entry, veh/h            | 1303  | 1272  | 1287  |
| V/C Ratio                   | 0.067 | 0.048 | 0.084 |
| Control Delay, s/veh        | 3.3   | 3.2   | 3.5   |
| LOS                         | A     | A     | A     |
| 95th %tile Queue, veh       | 0     | 0     | 0     |

Lanes, Volumes, Timings  
6: Founder Pkwy & Connector Collector Roadway

2025 Background  
PM Peak



| Lane Group                 | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   | Ø7 |
|----------------------------|-------|-------|-------|-------|-------|-------|----|
| Lane Configurations        |       |       |       |       |       |       |    |
| Traffic Volume (vph)       | 65    | 1475  | 1175  | 35    | 20    | 45    |    |
| Future Volume (vph)        | 65    | 1475  | 1175  | 35    | 20    | 45    |    |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |    |
| Lane Util. Factor          | 1.00  | 0.95  | 0.95  | 1.00  | 1.00  | 1.00  |    |
| Fr <sub>t</sub>            |       |       |       | 0.850 |       | 0.850 |    |
| Fl <sub>t</sub> Protected  | 0.950 |       |       |       | 0.950 |       |    |
| Satd. Flow (prot)          | 1770  | 3539  | 3539  | 1583  | 1770  | 1583  |    |
| Fl <sub>t</sub> Permitted  | 0.186 |       |       |       | 0.950 |       |    |
| Satd. Flow (perm)          | 346   | 3539  | 3539  | 1583  | 1770  | 1583  |    |
| Right Turn on Red          |       |       |       | Yes   |       | Yes   |    |
| Satd. Flow (RTOR)          |       |       |       | 38    |       | 49    |    |
| Link Speed (mph)           |       | 50    | 50    |       | 35    |       |    |
| Link Distance (ft)         |       | 483   | 546   |       | 1305  |       |    |
| Travel Time (s)            |       | 6.6   | 7.4   |       | 25.4  |       |    |
| Peak Hour Factor           | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |    |
| Adj. Flow (vph)            | 71    | 1603  | 1277  | 38    | 22    | 49    |    |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |    |
| Lane Group Flow (vph)      | 71    | 1603  | 1277  | 38    | 22    | 49    |    |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    |    |
| Lane Alignment             | Left  | Left  | Left  | Right | Left  | Right |    |
| Median Width(ft)           |       | 12    | 12    |       | 12    |       |    |
| Link Offset(ft)            |       | 0     | 0     |       | 0     |       |    |
| Crosswalk Width(ft)        |       | 16    | 16    |       | 16    |       |    |
| Two way Left Turn Lane     |       |       |       |       |       |       |    |
| Headway Factor             | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |    |
| Turning Speed (mph)        | 15    |       |       | 9     | 15    | 9     |    |
| Number of Detectors        | 1     | 2     | 2     | 1     | 1     | 1     |    |
| Detector Template          | Left  | Thru  | Thru  | Right | Left  | Right |    |
| Leading Detector (ft)      | 20    | 100   | 100   | 20    | 20    | 20    |    |
| Trailing Detector (ft)     | 0     | 0     | 0     | 0     | 0     | 0     |    |
| Detector 1 Position(ft)    | 0     | 0     | 0     | 0     | 0     | 0     |    |
| Detector 1 Size(ft)        | 20    | 6     | 6     | 20    | 20    | 20    |    |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |    |
| Detector 1 Channel         |       |       |       |       |       |       |    |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |    |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |    |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |    |
| Detector 2 Position(ft)    |       | 94    | 94    |       |       |       |    |
| Detector 2 Size(ft)        |       | 6     | 6     |       |       |       |    |
| Detector 2 Type            |       | Cl+Ex | Cl+Ex |       |       |       |    |
| Detector 2 Channel         |       |       |       |       |       |       |    |
| Detector 2 Extend (s)      |       | 0.0   | 0.0   |       |       |       |    |
| Turn Type                  | pm+pt | NA    | NA    | Perm  | pm+pt | Free  |    |
| Protected Phases           | 5     | 2     | 6     |       | 4     | 7     |    |
| Permitted Phases           | 2     |       |       | 6     | 7     | Free  |    |
| Detector Phase             | 5     | 2     | 6     | 6     | 4     |       |    |
| Switch Phase               |       |       |       |       |       |       |    |
| Minimum Initial (s)        | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |    |

Lanes, Volumes, Timings  
6: Founder Pkwy & Connector Collector Roadway

2025 Background  
PM Peak



| Lane Group            | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   | Ø7   |
|-----------------------|-------|-------|-------|-------|-------|-------|------|
| Minimum Split (s)     | 9.0   | 20.0  | 20.0  | 20.0  | 20.0  |       | 20.0 |
| Total Split (s)       | 12.0  | 90.0  | 78.0  | 78.0  | 30.0  |       | 30.0 |
| Total Split (%)       | 10.0% | 75.0% | 65.0% | 65.0% | 25.0% |       | 25%  |
| Maximum Green (s)     | 7.0   | 83.5  | 71.5  | 71.5  | 25.0  |       | 25.0 |
| Yellow Time (s)       | 3.0   | 4.5   | 4.5   | 4.5   | 3.0   |       | 3.0  |
| All-Red Time (s)      | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   |       | 2.0  |
| Lost Time Adjust (s)  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       |      |
| Total Lost Time (s)   | 5.0   | 6.5   | 6.5   | 6.5   | 5.0   |       |      |
| Lead/Lag              | Lead  |       | Lag   |       |       |       |      |
| Lead-Lag Optimize?    | Yes   |       | Yes   |       |       |       |      |
| Vehicle Extension (s) | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |       | 3.0  |
| Recall Mode           | None  | C-Max | C-Max | C-Max | None  |       | None |
| Act Effect Green (s)  | 107.3 | 108.4 | 98.0  | 98.0  | 7.0   | 120.0 |      |
| Actuated g/C Ratio    | 0.89  | 0.90  | 0.82  | 0.82  | 0.06  | 1.00  |      |
| v/c Ratio             | 0.19  | 0.50  | 0.44  | 0.03  | 0.21  | 0.03  |      |
| Control Delay         | 2.3   | 2.6   | 5.2   | 1.4   | 58.1  | 0.0   |      |
| Queue Delay           | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |      |
| Total Delay           | 2.3   | 2.6   | 5.2   | 1.4   | 58.1  | 0.0   |      |
| LOS                   | A     | A     | A     | A     | E     | A     |      |
| Approach Delay        |       | 2.6   | 5.1   |       | 18.0  |       |      |
| Approach LOS          |       | A     | A     |       | B     |       |      |

Intersection Summary

Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.50  
 Intersection Signal Delay: 4.0  
 Intersection LOS: A  
 Intersection Capacity Utilization 53.7%  
 ICU Level of Service A  
 Analysis Period (min) 15

Splits and Phases: 6: Founder Pkwy & Connector Collector Roadway



| Intersection                |       |       |       |
|-----------------------------|-------|-------|-------|
| Intersection Delay, s/veh   | 4.1   |       |       |
| Intersection LOS            | A     |       |       |
| Approach                    | EB    | NB    | SB    |
| Entry Lanes                 | 1     | 1     | 1     |
| Conflicting Circle Lanes    | 1     | 1     | 1     |
| Adj Approach Flow, veh/h    | 103   | 222   | 195   |
| Demand Flow Rate, veh/h     | 105   | 226   | 199   |
| Vehicles Circulating, veh/h | 144   | 89    | 5     |
| Vehicles Exiting, veh/h     | 60    | 160   | 310   |
| Ped Vol Crossing Leg, #/h   | 0     | 0     | 0     |
| Ped Cap Adj                 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh       | 3.8   | 4.4   | 3.9   |
| Approach LOS                | A     | A     | A     |
| Lane                        | Left  | Left  | Left  |
| Designated Moves            | LR    | LT    | TR    |
| Assumed Moves               | LR    | LT    | TR    |
| RT Channelized              |       |       |       |
| Lane Util                   | 1.000 | 1.000 | 1.000 |
| Follow-Up Headway, s        | 2.609 | 2.609 | 2.609 |
| Critical Headway, s         | 4.976 | 4.976 | 4.976 |
| Entry Flow, veh/h           | 105   | 226   | 199   |
| Cap Entry Lane, veh/h       | 1191  | 1260  | 1373  |
| Entry HV Adj Factor         | 0.981 | 0.981 | 0.981 |
| Flow Entry, veh/h           | 103   | 222   | 195   |
| Cap Entry, veh/h            | 1169  | 1236  | 1346  |
| V/C Ratio                   | 0.088 | 0.179 | 0.145 |
| Control Delay, s/veh        | 3.8   | 4.4   | 3.9   |
| LOS                         | A     | A     | A     |
| 95th %tile Queue, veh       | 0     | 1     | 1     |

Lanes, Volumes, Timings  
8: Ridge Rd/Founders Pkwy & 5th St/SH 86

2025 Background  
PM Peak



| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |       |       |       |       |       |       |
| Traffic Volume (vph)       | 145   | 450   | 400   | 115   | 255   | 380   | 215   | 330   | 65    | 570   | 460   | 120   |
| Future Volume (vph)        | 145   | 450   | 400   | 115   | 255   | 380   | 215   | 330   | 65    | 570   | 460   | 120   |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 375   |       | 425   | 500   |       | 0     | 230   |       | 0     | 600   |       | 600   |
| Storage Lanes              | 1     |       | 1     | 1     |       | 1     | 1     |       | 1     | 1     |       | 1     |
| Taper Length (ft)          | 100   |       |       | 100   |       |       | 100   |       |       | 100   |       |       |
| 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  |
| Frt                        |       |       | 0.850 |       |       | 0.850 |       |       | 0.850 |       |       | 0.850 |
| Flt Protected              | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       |
| Satd. Flow (prot)          | 1770  | 1863  | 1583  | 1770  | 1863  | 1583  | 1770  | 1863  | 1583  | 1770  | 1863  | 1583  |
| Flt Permitted              | 0.398 |       |       | 0.114 |       |       | 0.468 |       |       | 0.137 |       |       |
| Satd. Flow (perm)          | 741   | 1863  | 1583  | 212   | 1863  | 1583  | 872   | 1863  | 1583  | 255   | 1863  | 1583  |
| Right Turn on Red          |       |       | Yes   |       |       | Yes   |       |       | Yes   |       |       | Yes   |
| Satd. Flow (RTOR)          |       |       | 435   |       |       | 413   |       |       | 200   |       |       | 200   |
| Link Speed (mph)           |       | 35    |       |       | 50    |       |       | 35    |       |       |       | 50    |
| Link Distance (ft)         |       | 450   |       |       | 848   |       |       | 659   |       |       |       | 865   |
| Travel Time (s)            |       | 8.8   |       |       | 11.6  |       |       | 12.8  |       |       |       | 11.8  |
| Peak Hour Factor           | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 158   | 489   | 435   | 125   | 277   | 413   | 234   | 359   | 71    | 620   | 500   | 130   |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 158   | 489   | 435   | 125   | 277   | 413   | 234   | 359   | 71    | 620   | 500   | 130   |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right |
| Median Width(ft)           |       | 18    |       |       | 18    |       |       | 24    |       |       |       | 24    |
| Link Offset(ft)            |       | 0     |       |       | 0     |       |       | 0     |       |       |       | 0     |
| Crosswalk Width(ft)        |       | 16    |       |       | 16    |       |       | 16    |       |       |       | 16    |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |       |       |       |       |       |
| Headway 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  |
| Turning Speed (mph)        | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     |
| Number of Detectors        | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     | 1     |
| Detector Template          | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  | Right |
| Leading Detector (ft)      | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   | 20    |
| Trailing Detector (ft)     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Position(ft)    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Size(ft)        | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     | 20    |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 2 Position(ft)    |       | 94    |       |       | 94    |       |       | 94    |       |       |       | 94    |
| Detector 2 Size(ft)        |       | 6     |       |       | 6     |       |       | 6     |       |       |       | 6     |
| Detector 2 Type            |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |       |       | Cl+Ex |
| Detector 2 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |       |       | 0.0   |
| Turn Type                  | pm+pt | NA    | Free  | pm+pt | NA    | Free  | pm+pt | NA    | Free  | pm+pt | NA    | Free  |
| Protected Phases           | 5     | 2     |       | 1     | 6     |       | 3     | 8     |       | 7     | 4     |       |
| Permitted Phases           | 2     |       | Free  | 6     |       | Free  | 8     |       | Free  | 4     |       | Free  |



Lanes, Volumes, Timings  
 8: Ridge Rd/Founders Pkwy & 5th St/SH 86

2025 Background  
 PM Peak

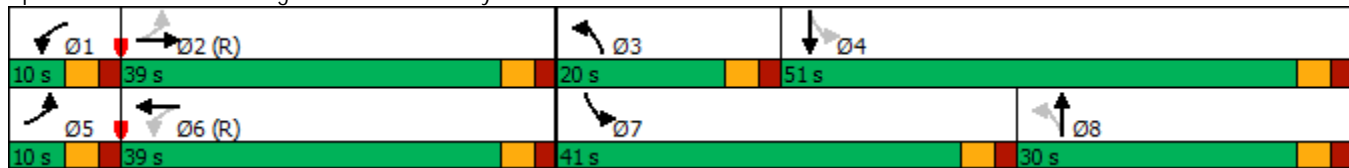


| Lane Group            | EBL  | EBT   | EBR   | WBL  | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|-----------------------|------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| Detector Phase        | 5    | 2     |       | 1    | 6     |       | 3     | 8     |       | 7     | 4     |       |
| Switch Phase          |      |       |       |      |       |       |       |       |       |       |       |       |
| Minimum Initial (s)   | 4.0  | 4.0   |       | 4.0  | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |       |
| Minimum Split (s)     | 9.0  | 20.0  |       | 9.0  | 20.0  |       | 9.0   | 20.0  |       | 9.0   | 20.0  |       |
| Total Split (s)       | 10.0 | 39.0  |       | 10.0 | 39.0  |       | 20.0  | 30.0  |       | 41.0  | 51.0  |       |
| Total Split (%)       | 8.3% | 32.5% |       | 8.3% | 32.5% |       | 16.7% | 25.0% |       | 34.2% | 42.5% |       |
| Maximum Green (s)     | 5.0  | 34.0  |       | 5.0  | 34.0  |       | 15.0  | 25.0  |       | 36.0  | 46.0  |       |
| Yellow Time (s)       | 3.0  | 3.0   |       | 3.0  | 3.0   |       | 3.0   | 3.0   |       | 3.0   | 3.0   |       |
| All-Red Time (s)      | 2.0  | 2.0   |       | 2.0  | 2.0   |       | 2.0   | 2.0   |       | 2.0   | 2.0   |       |
| Lost Time Adjust (s)  | -1.0 | -1.0  |       | -1.0 | -1.0  |       | -1.0  | -2.0  |       | -2.0  | -1.0  |       |
| Total Lost Time (s)   | 4.0  | 4.0   |       | 4.0  | 4.0   |       | 4.0   | 3.0   |       | 3.0   | 4.0   |       |
| Lead/Lag              | Lead | Lag   |       | Lead | Lag   |       | Lead  | Lag   |       | Lead  | Lag   |       |
| Lead-Lag Optimize?    | Yes  | Yes   |       | Yes  | Yes   |       | Yes   | Yes   |       | Yes   | Yes   |       |
| Vehicle Extension (s) | 3.0  | 3.0   |       | 3.0  | 3.0   |       | 3.0   | 3.0   |       | 3.0   | 3.0   |       |
| Recall Mode           | None | C-Max |       | None | C-Max |       | None  | None  |       | None  | None  |       |
| Act Effect Green (s)  | 41.7 | 35.0  | 120.0 | 41.8 | 35.1  | 120.0 | 39.3  | 26.2  | 120.0 | 67.2  | 48.2  | 120.0 |
| Actuated g/C Ratio    | 0.35 | 0.29  | 1.00  | 0.35 | 0.29  | 1.00  | 0.33  | 0.22  | 1.00  | 0.56  | 0.40  | 1.00  |
| v/c Ratio             | 0.50 | 0.90  | 0.27  | 0.78 | 0.51  | 0.26  | 0.60  | 0.88  | 0.04  | 1.00  | 0.67  | 0.08  |
| Control Delay         | 33.5 | 62.1  | 0.4   | 59.3 | 39.3  | 0.4   | 24.7  | 68.8  | 0.0   | 67.9  | 34.9  | 0.1   |
| Queue Delay           | 0.0  | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay           | 33.5 | 62.1  | 0.4   | 59.3 | 39.3  | 0.4   | 24.7  | 68.8  | 0.0   | 67.9  | 34.9  | 0.1   |
| LOS                   | C    | E     | A     | E    | D     | A     | C     | E     | A     | E     | C     | A     |
| Approach Delay        |      | 33.1  |       |      | 22.7  |       |       | 45.9  |       |       | 47.7  |       |
| Approach LOS          |      | C     |       |      | C     |       |       | D     |       |       | D     |       |

Intersection Summary































Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 1.00  
 Intersection Signal Delay: 37.9 Intersection LOS: D  
 Intersection Capacity Utilization 92.3% ICU Level of Service F  
 Analysis Period (min) 15

Splits and Phases: 8: Ridge Rd/Founders Pkwy & 5th St/SH 86



Lanes, Volumes, Timings  
1: Allen Way & Founder Pkwy

2025 Total  
AM Peak

|                            |    |    |  |  |    |  |    |  |  |  |    |    |
|----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL  | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations        |   |    |   |  |    |  |   |  |   |  |   |   |
| Traffic Volume (vph)       | 265   | 1169  | 150   | 38  | 2412  | 125   | 115  | 22  | 48  | 65  | 14  | 325   |
| Future Volume (vph)        | 265   | 1169  | 150   | 38  | 2412  | 125   | 115  | 22  | 48  | 65  | 14  | 325   |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900   | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 290   |   | 0   | 325   |   | 0   | 75   |   | 0   | 130   |   | 110   |
| Storage Lanes              | 2   |   | 0   | 1   |   | 1   | 2  |   | 0   | 1   |   | 2   |
| Taper Length (ft)          | 100   |   |   | 100   |   |   | 100  |   |   | 100   |   |   |
| Lane Util. Factor          | 0.97  | 0.91  | 0.91  | 1.00  | 0.91  | 1.00  | 0.97   | 1.00  | 1.00  | 1.00  | 1.00  | 0.88  |
| Frt                        |   | 0.983   |   |   |   | 0.850   |  | 0.897   |   |   |   | 0.850   |
| Flt Protected              | 0.950   |   |   | 0.950   |   |   | 0.950  |   |   | 0.950   |   |   |
| Satd. Flow (prot)          | 3433  | 4999  | 0   | 1770  | 5085  | 1583  | 3433   | 1671  | 0   | 1770  | 1863  | 2787  |
| Flt Permitted              | 0.950   |   |   | 0.158   |   |   | 0.950  |   |   | 0.708   |   |   |
| Satd. Flow (perm)          | 3433  | 4999  | 0   | 294   | 5085  | 1583  | 3433   | 1671  | 0   | 1319  | 1863  | 2787  |
| Right Turn on Red          |   |   | Yes   |   |   | Yes   |  |   | Yes   |   |   | Yes   |
| Satd. Flow (RTOR)          |   | 32  |   |   |   | 120   |  | 52  |   |   |   | 224   |
| Link Speed (mph)           |   | 35  |   |   | 35  |   |  | 30  |   |   |   | 30  |
| Link Distance (ft)         |   | 533   |   |   | 1095  |   |  | 278   |   |   |   | 392   |
| Travel Time (s)            |   | 10.4  |   |   | 21.3  |   |  | 6.3   |   |   |   | 8.9   |
| Peak Hour Factor           | 0.92  | 0.92  | 0.92  | 0.92  | 0.98  | 0.92  | 0.92   | 0.92  | 0.92  | 0.92  | 0.92  | 0.95  |
| Adj. Flow (vph)            | 288   | 1271  | 163   | 41  | 2461  | 136   | 125  | 24  | 52  | 71  | 15  | 342   |
| Shared Lane Traffic (%)    |   |   |   |   |   |   |  |   |   |   |   |   |
| Lane Group Flow (vph)      | 288   | 1434  | 0   | 41  | 2461  | 136   | 125  | 76  | 0   | 71  | 15  | 342   |
| Enter Blocked Intersection | No  | No  | No  | No  | No  | No  | No   | No  | No  | No  | No  | No  |
| Lane Alignment             | Left  | Left  | Right   | Left  | Left  | Right   | Left   | Left  | Right   | Left  | Left  | Right   |
| Median Width(ft)           |   | 20  |   |   | 20  |   |  | 24  |   |   |   | 20  |
| Link Offset(ft)            |   | 0   |   |   | 0   |   |  | 0   |   |   |   | 0   |
| Crosswalk Width(ft)        |   | 16  |   |   | 16  |   |  | 16  |   |   |   | 16  |
| Two way Left Turn Lane     |   |   |   |   |   |   |  |   |   |   |   |   |
| Headway 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  |
| Turning Speed (mph)        | 15  |   | 9   | 15  |   | 9   | 15   |   | 9   | 15  |   | 9   |
| Number of Detectors        | 1   | 2   |   | 1   | 2   | 1   | 1  | 2   |   | 1   | 2   | 1   |
| Detector Template          | Left  | Thru  |   | Left  | Thru  | Right   | Left   | Thru  |   | Left  | Thru  | Right   |
| Leading Detector (ft)      | 20  | 100   |   | 20  | 100   | 20  | 20   | 100   |   | 20  | 100   | 20  |
| Trailing Detector (ft)     | 0   | 0   |   | 0   | 0   | 0   | 0  | 0   |   | 0   | 0   | 0   |
| Detector 1 Position(ft)    | 0   | 0   |   | 0   | 0   | 0   | 0  | 0   |   | 0   | 0   | 0   |
| Detector 1 Size(ft)        | 20  | 6   |   | 20  | 6   | 20  | 20   | 6   |   | 20  | 6   | 20  |
| Detector 1 Type            | Cl+Ex   | Cl+Ex   |   | Cl+Ex   | Cl+Ex   | Cl+Ex   | Cl+Ex  | Cl+Ex   |   | Cl+Ex   | Cl+Ex   | Cl+Ex   |
| Detector 1 Channel         |   |   |   |   |   |   |  |   |   |   |   |   |
| Detector 1 Extend (s)      | 0.0   | 0.0   |   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   |   | 0.0   | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   |   | 0.0   | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   |   | 0.0   | 0.0   | 0.0   |
| Detector 2 Position(ft)    |   | 94  |   |   | 94  |   |  | 94  |   |   |   | 94  |
| Detector 2 Size(ft)        |   | 6   |   |   | 6   |   |  | 6   |   |   |   | 6   |
| Detector 2 Type            |   | Cl+Ex   |   |   | Cl+Ex   |   |  | Cl+Ex   |   |   |   | Cl+Ex   |
| Detector 2 Channel         |   |   |   |   |   |   |  |   |   |   |   |   |
| Detector 2 Extend (s)      |   | 0.0   |   |   | 0.0   |   |  | 0.0   |   |   |   | 0.0   |
| Turn Type                  | Prot  | NA  |   | pm+pt   | NA  | Perm  | Prot   | NA  |   | pm+pt   | NA  | Perm  |
| Protected Phases           | 5   | 2   |   | 1   | 6   |   | 3  | 8   |   | 7   | 4   |   |
| Permitted Phases           |   |   |   | 6   |   | 6   |  |   |   | 4   |   | 4   |

Lanes, Volumes, Timings  
1: Allen Way & Founder Pkwy

2025 Total  
AM Peak

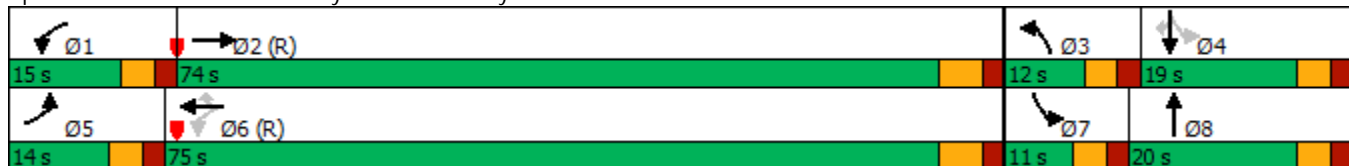


| Lane Group            | EBL   | EBT   | EBR | WBL   | WBT   | WBR   | NBL   | NBT   | NBR | SBL  | SBT   | SBR   |
|-----------------------|-------|-------|-----|-------|-------|-------|-------|-------|-----|------|-------|-------|
| Detector Phase        | 5     | 2     |     | 1     | 6     | 6     | 3     | 8     |     | 7    | 4     | 4     |
| Switch Phase          |       |       |     |       |       |       |       |       |     |      |       |       |
| Minimum Initial (s)   | 4.0   | 4.0   |     | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |     | 4.0  | 4.0   | 4.0   |
| Minimum Split (s)     | 11.0  | 21.0  |     | 9.5   | 21.0  | 21.0  | 9.0   | 21.0  |     | 9.0  | 21.0  | 21.0  |
| Total Split (s)       | 14.0  | 74.0  |     | 15.0  | 75.0  | 75.0  | 12.0  | 20.0  |     | 11.0 | 19.0  | 19.0  |
| Total Split (%)       | 11.7% | 61.7% |     | 12.5% | 62.5% | 62.5% | 10.0% | 16.7% |     | 9.2% | 15.8% | 15.8% |
| Maximum Green (s)     | 9.0   | 68.0  |     | 10.0  | 69.0  | 69.0  | 7.0   | 15.0  |     | 6.0  | 14.0  | 14.0  |
| Yellow Time (s)       | 3.0   | 4.0   |     | 3.0   | 4.0   | 4.0   | 3.0   | 3.0   |     | 3.0  | 3.0   | 3.0   |
| All-Red Time (s)      | 2.0   | 2.0   |     | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   |     | 2.0  | 2.0   | 2.0   |
| Lost Time Adjust (s)  | -2.0  | -1.0  |     | -1.0  | -2.0  | -1.0  | -1.0  | -1.0  |     | -1.0 | -1.0  | -1.0  |
| Total Lost Time (s)   | 3.0   | 5.0   |     | 4.0   | 4.0   | 5.0   | 4.0   | 4.0   |     | 4.0  | 4.0   | 4.0   |
| Lead/Lag              | Lead  | Lag   |     | Lead  | Lag   | Lag   | Lead  | Lag   |     | Lead | Lag   | Lag   |
| Lead-Lag Optimize?    | Yes   | Yes   |     | Yes   | Yes   | Yes   | Yes   | Yes   |     | Yes  | Yes   | Yes   |
| Vehicle Extension (s) | 3.0   | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0  | 3.0   | 3.0   |
| Recall Mode           | None  | C-Max |     | None  | C-Max | C-Max | None  | None  |     | None | None  | None  |
| Act Effect Green (s)  | 13.7  | 78.4  |     | 79.2  | 71.9  | 70.9  | 8.0   | 14.6  |     | 18.4 | 11.4  | 11.4  |
| Actuated g/C Ratio    | 0.11  | 0.65  |     | 0.66  | 0.60  | 0.59  | 0.07  | 0.12  |     | 0.15 | 0.10  | 0.10  |
| v/c Ratio             | 0.74  | 0.44  |     | 0.14  | 0.81  | 0.14  | 0.55  | 0.31  |     | 0.31 | 0.09  | 0.73  |
| Control Delay         | 64.0  | 11.2  |     | 4.4   | 17.2  | 1.2   | 63.8  | 22.9  |     | 43.3 | 48.5  | 27.6  |
| Queue Delay           | 0.0   | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.0  | 0.0   | 0.0   |
| Total Delay           | 64.0  | 11.2  |     | 4.4   | 17.2  | 1.2   | 63.8  | 22.9  |     | 43.3 | 48.5  | 27.6  |
| LOS                   | E     | B     |     | A     | B     | A     | E     | C     |     | D    | D     | C     |
| Approach Delay        |       | 20.0  |     |       | 16.2  |       |       | 48.3  |     |      | 31.0  |       |
| Approach LOS          |       | C     |     |       | B     |       |       | D     |     |      | C     |       |

Intersection Summary























Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 119 (99%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.81  
 Intersection Signal Delay: 20.1      Intersection LOS: C  
 Intersection Capacity Utilization 74.4%      ICU Level of Service D  
 Analysis Period (min) 15

Splits and Phases: 1: Allen Way & Founder Pkwy



Lanes, Volumes, Timings  
2: Front St & Founder Pkwy

2025 Total  
AM Peak

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group                 | SEL   | SET   | SER   | NWL   | NWT   | NWR   | NEL  | NET   | NER   | SWL   | SWT   | SWR   |
| Lane Configurations        |  |  |   |  |  |   |  |  |  |  |  |  |
| Traffic Volume (vph)       | 64  | 929   | 255   | 73  | 2027  | 12  | 415  | 50  | 40  | 5   | 40  | 85  |
| Future Volume (vph)        | 64  | 929   | 255   | 73  | 2027  | 12  | 415  | 50  | 40  | 5   | 40  | 85  |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900   | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 460   |   | 0   | 200   |   | 0   | 285  |   | 0   | 230   |   | 0   |
| Storage Lanes              | 1   |   | 0   | 1   |   | 0   | 1  |   | 1   | 1   |   | 0   |
| Taper Length (ft)          | 100   |   |   | 100   |   |   | 100  |   |   | 100   |   |   |
| Lane Util. Factor          | 1.00  | 0.91  | 0.91  | 1.00  | 0.91  | 0.91  | 0.97   | 1.00  | 1.00  | 1.00  | 0.95  | 0.95  |
| Frt                        |   | 0.968   |   |   | 0.999   |   |  |   | 0.850   |   | 0.898   |   |
| Flt Protected              | 0.950   |   |   | 0.950   |   |   | 0.950  |   |   | 0.950   |   |   |
| Satd. Flow (prot)          | 1770  | 4923  | 0   | 1770  | 5080  | 0   | 3433   | 1863  | 1583  | 1770  | 3178  | 0   |
| Flt Permitted              | 0.059   |   |   | 0.162   |   |   | 0.527  |   |   | 0.722   |   |   |
| Satd. Flow (perm)          | 110   | 4923  | 0   | 302   | 5080  | 0   | 1904   | 1863  | 1583  | 1345  | 3178  | 0   |
| Right Turn on Red          |   |   | Yes   |   |   | Yes   |  |   | Yes   |   |   | Yes   |
| Satd. Flow (RTOR)          |   | 80  |   |   | 1   |   |  |   | 118   |   | 92  |   |
| Link Speed (mph)           |   | 35  |   |   | 35  |   |  | 35  |   |   | 35  |   |
| Link Distance (ft)         |   | 1095  |   |   | 488   |   |  | 556   |   |   | 397   |   |
| Travel Time (s)            |   | 21.3  |   |   | 9.5   |   |  | 10.8  |   |   | 7.7   |   |
| Peak Hour Factor           | 0.92  | 0.92  | 0.92  | 0.92  | 0.95  | 0.92  | 0.92   | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 70  | 1010  | 277   | 79  | 2134  | 13  | 451  | 54  | 43  | 5   | 43  | 92  |
| Shared Lane Traffic (%)    |   |   |   |   |   |   |  |   |   |   |   |   |
| Lane Group Flow (vph)      | 70  | 1287  | 0   | 79  | 2147  | 0   | 451  | 54  | 43  | 5   | 135   | 0   |
| Enter Blocked Intersection | No  | No  | No  | No  | No  | No  | No   | No  | No  | No  | No  | No  |
| Lane Alignment             | Left  | Left  | Right   | Left  | Left  | Right   | Left   | Left  | Right   | Left  | Left  | Right   |
| Median Width(ft)           |   | 12  |   |   | 12  |   |  | 40  |   |   | 24  |   |
| Link Offset(ft)            |   | 0   |   |   | 0   |   |  | 0   |   |   | 0   |   |
| Crosswalk Width(ft)        |   | 16  |   |   | 16  |   |  | 16  |   |   | 16  |   |
| Two way Left Turn Lane     |   |   |   |   |   |   |  |   |   |   |   |   |
| Headway 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  |
| Turning Speed (mph)        | 15  |   | 9   | 15  |   | 9   | 15   |   | 9   | 15  |   | 9   |
| Number of Detectors        | 1   | 2   |   | 1   | 2   |   | 1  | 2   | 1   | 1   | 2   |   |
| Detector Template          | Left  | Thru  |   | Left  | Thru  |   | Left   | Thru  | Right   | Left  | Thru  |   |
| Leading Detector (ft)      | 20  | 100   |   | 20  | 100   |   | 20   | 100   | 20  | 20  | 100   |   |
| Trailing Detector (ft)     | 0   | 0   |   | 0   | 0   |   | 0  | 0   | 0   | 0   | 0   |   |
| Detector 1 Position(ft)    | 0   | 0   |   | 0   | 0   |   | 0  | 0   | 0   | 0   | 0   |   |
| Detector 1 Size(ft)        | 20  | 6   |   | 20  | 6   |   | 20   | 6   | 20  | 20  | 6   |   |
| Detector 1 Type            | Cl+Ex   | Cl+Ex   |   | Cl+Ex   | Cl+Ex   |   | Cl+Ex  | Cl+Ex   | Cl+Ex   | Cl+Ex   | Cl+Ex   |   |
| Detector 1 Channel         |   |   |   |   |   |   |  |   |   |   |   |   |
| Detector 1 Extend (s)      | 0.0   | 0.0   |   | 0.0   | 0.0   |   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |   | 0.0   | 0.0   |   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |   | 0.0   | 0.0   |   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |   |
| Detector 2 Position(ft)    |   | 94  |   |   | 94  |   |  | 94  |   |   | 94  |   |
| Detector 2 Size(ft)        |   | 6   |   |   | 6   |   |  | 6   |   |   | 6   |   |
| Detector 2 Type            |   | Cl+Ex   |   |   | Cl+Ex   |   |  | Cl+Ex   |   |   | Cl+Ex   |   |
| Detector 2 Channel         |   |   |   |   |   |   |  |   |   |   |   |   |
| Detector 2 Extend (s)      |   | 0.0   |   |   | 0.0   |   |  | 0.0   |   |   | 0.0   |   |
| Turn Type                  | pm+pt   | NA  |   | pm+pt   | NA  |   | pm+pt  | NA  | Perm  | pm+pt   | NA  |   |
| Protected Phases           | 5   | 2   |   | 1   | 6   |   | 3  | 8   |   | 7   | 4   |   |
| Permitted Phases           | 2   |   |   | 6   |   |   | 8  |   | 8   | 4   |   |   |

Lanes, Volumes, Timings  
2: Front St & Founder Pkwy

2025 Total  
AM Peak



| Lane Group            | SEL   | SET   | SER | NWL   | NWT   | NWR | NEL   | NET   | NER   | SWL   | SWT   | SWR |
|-----------------------|-------|-------|-----|-------|-------|-----|-------|-------|-------|-------|-------|-----|
| Detector Phase        | 5     | 2     |     | 1     | 6     |     | 3     | 8     | 8     | 7     | 4     |     |
| Switch Phase          |       |       |     |       |       |     |       |       |       |       |       |     |
| Minimum Initial (s)   | 4.0   | 4.0   |     | 4.0   | 4.0   |     | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |     |
| Minimum Split (s)     | 9.0   | 21.0  |     | 9.0   | 21.0  |     | 9.0   | 21.0  | 21.0  | 10.0  | 21.0  |     |
| Total Split (s)       | 12.0  | 63.0  |     | 12.0  | 63.0  |     | 20.0  | 33.0  | 33.0  | 12.0  | 25.0  |     |
| Total Split (%)       | 10.0% | 52.5% |     | 10.0% | 52.5% |     | 16.7% | 27.5% | 27.5% | 10.0% | 20.8% |     |
| Maximum Green (s)     | 7.0   | 57.0  |     | 7.0   | 57.0  |     | 15.0  | 28.0  | 28.0  | 7.0   | 20.0  |     |
| Yellow Time (s)       | 3.0   | 4.0   |     | 3.0   | 4.0   |     | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |     |
| All-Red Time (s)      | 2.0   | 2.0   |     | 2.0   | 2.0   |     | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   |     |
| Lost Time Adjust (s)  | -1.0  | -1.0  |     | -1.0  | -1.0  |     | -2.0  | -1.0  | -1.0  | -1.0  | -1.0  |     |
| Total Lost Time (s)   | 4.0   | 5.0   |     | 4.0   | 5.0   |     | 3.0   | 4.0   | 4.0   | 4.0   | 4.0   |     |
| Lead/Lag              | Lead  | Lag   |     | Lead  | Lag   |     | Lead  | Lag   | Lag   | Lead  | Lag   |     |
| Lead-Lag Optimize?    | Yes   | Yes   |     | Yes   | Yes   |     | Yes   | Yes   | Yes   | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |     |
| Recall Mode           | None  | C-Max |     | None  | C-Max |     | None  | None  | None  | None  | None  |     |
| Act Effect Green (s)  | 80.4  | 72.7  |     | 80.6  | 72.7  |     | 29.3  | 26.0  | 26.0  | 15.2  | 8.4   |     |
| Actuated g/C Ratio    | 0.67  | 0.61  |     | 0.67  | 0.61  |     | 0.24  | 0.22  | 0.22  | 0.13  | 0.07  |     |
| v/c Ratio             | 0.38  | 0.43  |     | 0.26  | 0.70  |     | 0.66  | 0.13  | 0.10  | 0.03  | 0.44  |     |
| Control Delay         | 24.6  | 14.0  |     | 8.3   | 18.7  |     | 44.5  | 40.1  | 0.5   | 34.8  | 24.1  |     |
| Queue Delay           | 0.0   | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |     |
| Total Delay           | 24.6  | 14.0  |     | 8.3   | 18.7  |     | 44.5  | 40.1  | 0.5   | 34.8  | 24.1  |     |
| LOS                   | C     | B     |     | A     | B     |     | D     | D     | A     | C     | C     |     |
| Approach Delay        |       | 14.6  |     |       | 18.3  |     |       | 40.6  |       |       | 24.5  |     |
| Approach LOS          |       | B     |     |       | B     |     |       | D     |       |       | C     |     |

Intersection Summary

Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 96 (80%), Referenced to phase 2:SETL and 6:NWTL, Start of Green  
 Natural Cycle: 80  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.70  
 Intersection Signal Delay: 20.2      Intersection LOS: C  
 Intersection Capacity Utilization 72.8%      ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 2: Front St & Founder Pkwy



Lanes, Volumes, Timings  
3: Woodlands Blvd & Founders Pkwy

2025 Total  
AM Peak



| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        | ↘     | ↑↑    | ↗     | ↘     | ↑↑    | ↗     | ↘↗    | ↑     | ↗     | ↘     | ↑↗    |       |
| Traffic Volume (vph)       | 6     | 784   | 80    | 370   | 2010  | 95    | 130   | 27    | 164   | 40    | 14    | 2     |
| Future Volume (vph)        | 6     | 784   | 80    | 370   | 2010  | 95    | 130   | 27    | 164   | 40    | 14    | 2     |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 450   |       | 0     | 500   |       | 0     | 300   |       | 0     | 150   |       | 0     |
| Storage Lanes              | 1     |       | 1     | 1     |       | 1     | 2     |       | 1     | 1     |       | 0     |
| Taper Length (ft)          | 100   |       |       | 100   |       |       | 100   |       |       | 100   |       |       |
| Lane Util. Factor          | 1.00  | 0.95  | 1.00  | 1.00  | 0.95  | 1.00  | 0.97  | 1.00  | 1.00  | 1.00  | 0.95  | 0.95  |
| Frt                        |       |       | 0.850 |       |       | 0.850 |       |       | 0.850 |       | 0.982 |       |
| Flt Protected              | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       |
| Satd. Flow (prot)          | 1770  | 3539  | 1583  | 1770  | 3539  | 1583  | 3433  | 1863  | 1583  | 1770  | 3476  | 0     |
| Flt Permitted              | 0.062 |       |       | 0.258 |       |       | 0.500 |       |       |       |       |       |
| Satd. Flow (perm)          | 115   | 3539  | 1583  | 481   | 3539  | 1583  | 1807  | 1863  | 1583  | 1863  | 3476  | 0     |
| Right Turn on Red          |       |       | Yes   |       |       | Yes   |       |       | Yes   |       |       | Yes   |
| Satd. Flow (RTOR)          |       |       | 118   |       |       | 118   |       |       | 178   |       |       | 2     |
| Link Speed (mph)           |       | 50    |       |       | 50    |       |       | 35    |       |       |       | 35    |
| Link Distance (ft)         |       | 721   |       |       | 782   |       |       | 419   |       |       |       | 497   |
| Travel Time (s)            |       | 9.8   |       |       | 10.7  |       |       | 8.2   |       |       |       | 9.7   |
| Peak Hour Factor           | 0.92  | 0.95  | 0.92  | 0.92  | 0.95  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 7     | 825   | 87    | 402   | 2116  | 103   | 141   | 29    | 178   | 43    | 15    | 2     |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 7     | 825   | 87    | 402   | 2116  | 103   | 141   | 29    | 178   | 43    | 17    | 0     |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right |
| Median Width(ft)           |       | 24    |       |       | 24    |       |       | 30    |       |       |       | 24    |
| Link Offset(ft)            |       | 0     |       |       | 0     |       |       | 0     |       |       |       | 0     |
| Crosswalk Width(ft)        |       | 16    |       |       | 16    |       |       | 16    |       |       |       | 16    |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |       |       |       |       |       |
| Headway 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  |
| Turning Speed (mph)        | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     |
| Number of Detectors        | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     |       |
| Detector Template          | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  |       |
| Leading Detector (ft)      | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   |       |
| Trailing Detector (ft)     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |       |
| Detector 1 Position(ft)    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |       |
| Detector 1 Size(ft)        | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     |       |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |       |
| Detector 1 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       |
| Detector 2 Position(ft)    |       | 94    |       |       | 94    |       |       | 94    |       |       |       | 94    |
| Detector 2 Size(ft)        |       | 6     |       |       | 6     |       |       | 6     |       |       |       | 6     |
| Detector 2 Type            |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |       |       | Cl+Ex |
| Detector 2 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |       |       | 0.0   |
| Turn Type                  | pm+pt | NA    | Perm  | pm+pt | NA    | Perm  | pm+pt | NA    | pm+ov | pm+pt | NA    |       |
| Protected Phases           | 5     | 2     |       | 1     | 6     |       | 3     | 8     | 1     | 7     | 4     |       |
| Permitted Phases           | 2     |       | 2     | 6     |       | 6     | 8     |       | 8     | 4     |       |       |

Lanes, Volumes, Timings  
 3: Woodlands Blvd & Founders Pkwy

2025 Total  
 AM Peak

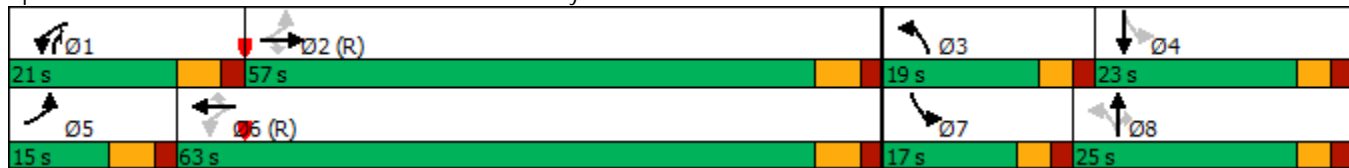


| Lane Group            | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| Detector Phase        | 5     | 2     | 2     | 1     | 6     | 6     | 3     | 8     | 1     | 7     | 4     |     |
| Switch Phase          |       |       |       |       |       |       |       |       |       |       |       |     |
| Minimum Initial (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 |
| Minimum Split (s)     | 10.0  | 20.0  | 20.0  | 10.0  | 20.0  | 20.0  | 9.0   | 20.0  | 10.0  | 9.0   | 20.0  |     |
| Total Split (s)       | 15.0  | 57.0  | 57.0  | 21.0  | 63.0  | 63.0  | 19.0  | 25.0  | 21.0  | 17.0  | 23.0  |     |
| Total Split (%)       | 12.5% | 47.5% | 47.5% | 17.5% | 52.5% | 52.5% | 15.8% | 20.8% | 17.5% | 14.2% | 19.2% |     |
| Maximum Green (s)     | 9.0   | 51.0  | 51.0  | 15.0  | 57.0  | 57.0  | 14.0  | 20.0  | 15.0  | 12.0  | 18.0  |     |
| Yellow Time (s)       | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 3.0   | 3.0   | 4.0   | 3.0   | 3.0   |     |
| All-Red Time (s)      | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   |     |
| Lost Time Adjust (s)  | -1.0  | -1.0  | -1.0  | -2.0  | -1.0  | -1.0  | -2.0  | -2.0  | -1.0  | -1.0  | -1.0  |     |
| Total Lost Time (s)   | 5.0   | 5.0   | 5.0   | 4.0   | 5.0   | 5.0   | 3.0   | 3.0   | 5.0   | 4.0   | 4.0   |     |
| Lead/Lag              | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   | Lead  | Lag   | Lead  | Lead  | Lag   |     |
| Lead-Lag Optimize?    | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |     |
| 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   |     |
| Recall Mode           | None  | C-Max | C-Max | None  | C-Max | C-Max | None  | None  | None  | None  | None  |     |
| Act Effect Green (s)  | 73.9  | 67.2  | 67.2  | 94.1  | 90.7  | 90.7  | 18.3  | 9.8   | 31.4  | 12.8  | 7.4   |     |
| Actuated g/C Ratio    | 0.62  | 0.56  | 0.56  | 0.78  | 0.76  | 0.76  | 0.15  | 0.08  | 0.26  | 0.11  | 0.06  |     |
| v/c Ratio             | 0.04  | 0.42  | 0.09  | 0.66  | 0.79  | 0.08  | 0.30  | 0.19  | 0.33  | 0.23  | 0.08  |     |
| Control Delay         | 8.2   | 18.2  | 1.7   | 11.2  | 14.5  | 1.3   | 44.1  | 54.1  | 5.7   | 46.0  | 48.9  |     |
| Queue Delay           | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |     |
| Total Delay           | 8.2   | 18.2  | 1.7   | 11.2  | 14.5  | 1.3   | 44.1  | 54.1  | 5.7   | 46.0  | 48.9  |     |
| LOS                   | A     | B     | A     | B     | B     | A     | D     | D     | A     | D     | D     |     |
| Approach Delay        |       | 16.6  |       |       | 13.4  |       |       | 25.3  |       |       | 46.8  |     |
| Approach LOS          |       | B     |       |       | B     |       |       | C     |       |       | D     |     |

Intersection Summary

Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 37 (31%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green  
 Natural Cycle: 100  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.79  
 Intersection Signal Delay: 15.7  
 Intersection LOS: B  
 Intersection Capacity Utilization 80.9%  
 ICU Level of Service D  
 Analysis Period (min) 15

Splits and Phases: 3: Woodlands Blvd & Founders Pkwy



Lanes, Volumes, Timings  
4: Founders Pkwy & Crowfoot Valley Rd

2025 Total  
AM Peak



| Lane Group                 | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |
| Traffic Volume (vph)       | 355   | 638   | 1595  | 138   | 89    | 900   |
| Future Volume (vph)        | 355   | 638   | 1595  | 138   | 89    | 900   |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 485   |       |       | 0     | 150   | 0     |
| Storage Lanes              | 2     |       |       | 1     | 2     | 1     |
| Taper Length (ft)          | 100   |       |       |       | 100   |       |
| Lane Util. Factor          | 0.97  | 0.95  | 0.95  | 1.00  | 0.97  | 0.91  |
| Frt                        |       |       |       | 0.850 | 0.875 | 0.850 |
| Flt Protected              | 0.950 |       |       |       | 0.992 |       |
| Satd. Flow (prot)          | 3433  | 3539  | 3539  | 1583  | 3137  | 1441  |
| Flt Permitted              | 0.950 |       |       |       | 0.992 |       |
| Satd. Flow (perm)          | 3433  | 3539  | 3539  | 1583  | 3137  | 1441  |
| Right Turn on Red          |       |       |       | Yes   |       | Yes   |
| Satd. Flow (RTOR)          |       |       |       | 120   | 246   | 443   |
| Link Speed (mph)           |       | 50    | 50    |       | 35    |       |
| Link Distance (ft)         |       | 641   | 617   |       | 595   |       |
| Travel Time (s)            |       | 8.7   | 8.4   |       | 11.6  |       |
| Peak Hour Factor           | 0.92  | 0.92  | 0.95  | 0.92  | 0.92  | 0.95  |
| Adj. Flow (vph)            | 386   | 693   | 1679  | 150   | 97    | 947   |
| Shared Lane Traffic (%)    |       |       |       |       |       | 50%   |
| Lane Group Flow (vph)      | 386   | 693   | 1679  | 150   | 571   | 473   |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Left  | Right | Left  | Right |
| Median Width(ft)           |       | 24    | 24    |       | 24    |       |
| Link Offset(ft)            |       | 0     | 0     |       | 0     |       |
| Crosswalk Width(ft)        |       | 16    | 16    |       | 16    |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |
| Headway Factor             | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| Turning Speed (mph)        | 15    |       |       | 9     | 15    | 9     |
| Number of Detectors        | 1     | 2     | 2     | 1     | 1     | 1     |
| Detector Template          | Left  | Thru  | Thru  | Right | Left  | Right |
| Leading Detector (ft)      | 20    | 100   | 100   | 20    | 20    | 20    |
| Trailing Detector (ft)     | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Position(ft)    | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Size(ft)        | 20    | 6     | 6     | 20    | 20    | 20    |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 2 Position(ft)    |       | 94    | 94    |       |       |       |
| Detector 2 Size(ft)        |       | 6     | 6     |       |       |       |
| Detector 2 Type            |       | Cl+Ex | Cl+Ex |       |       |       |
| Detector 2 Channel         |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   | 0.0   |       |       |       |
| Turn Type                  | Prot  | NA    | NA    | Perm  | Prot  | Free  |
| Protected Phases           | 5     | 2     | 6     |       | 4     |       |
| Permitted Phases           |       |       |       | 6     |       | Free  |





HCM 6th Roundabout  
 5: Internal Collector Roadway & Connector Collector Roadway

2025 Total  
 AM Peak

| Intersection                |       |       |       |
|-----------------------------|-------|-------|-------|
| Intersection Delay, s/veh   | 4.4   |       |       |
| Intersection LOS            | A     |       |       |
| Approach                    | EB    | NB    | SB    |
| Entry Lanes                 | 1     | 1     | 1     |
| Conflicting Circle Lanes    | 1     | 1     | 1     |
| Adj Approach Flow, veh/h    | 108   | 308   | 85    |
| Demand Flow Rate, veh/h     | 110   | 314   | 87    |
| Vehicles Circulating, veh/h | 35    | 35    | 214   |
| Vehicles Exiting, veh/h     | 266   | 110   | 135   |
| Ped Vol Crossing Leg, #/h   | 0     | 0     | 0     |
| Ped Cap Adj                 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh       | 3.4   | 4.8   | 4.0   |
| Approach LOS                | A     | A     | A     |
| Lane                        | Left  | Left  | Left  |
| Designated Moves            | LR    | LT    | TR    |
| Assumed Moves               | LR    | LT    | TR    |
| RT Channelized              |       |       |       |
| Lane Util                   | 1.000 | 1.000 | 1.000 |
| Follow-Up Headway, s        | 2.609 | 2.609 | 2.609 |
| Critical Headway, s         | 4.976 | 4.976 | 4.976 |
| Entry Flow, veh/h           | 110   | 314   | 87    |
| Cap Entry Lane, veh/h       | 1331  | 1331  | 1109  |
| Entry HV Adj Factor         | 0.982 | 0.981 | 0.981 |
| Flow Entry, veh/h           | 108   | 308   | 85    |
| Cap Entry, veh/h            | 1307  | 1306  | 1088  |
| V/C Ratio                   | 0.083 | 0.236 | 0.078 |
| Control Delay, s/veh        | 3.4   | 4.8   | 4.0   |
| LOS                         | A     | A     | A     |
| 95th %tile Queue, veh       | 0     | 1     | 0     |

Lanes, Volumes, Timings  
6: Founder Pkwy & Connector Collector Roadway

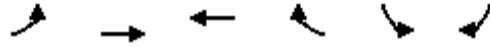
2025 Total  
AM Peak



| Lane Group                 | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   | Ø4 |
|----------------------------|-------|-------|-------|-------|-------|-------|----|
| Lane Configurations        |       |       |       |       |       |       |    |
| Traffic Volume (vph)       | 97    | 625   | 1499  | 49    | 68    | 239   |    |
| Future Volume (vph)        | 97    | 625   | 1499  | 49    | 68    | 239   |    |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |    |
| Storage Length (ft)        | 400   |       |       | 400   | 200   | 0     |    |
| Storage Lanes              | 1     |       |       | 1     | 0     | 1     |    |
| Taper Length (ft)          | 100   |       |       |       | 100   |       |    |
| Lane Util. Factor          | 1.00  | 0.95  | 0.95  | 1.00  | 1.00  | 1.00  |    |
| Frt                        |       |       |       | 0.850 |       | 0.850 |    |
| Flt Protected              | 0.950 |       |       |       | 0.950 |       |    |
| Satd. Flow (prot)          | 1770  | 3539  | 3539  | 1583  | 1770  | 1583  |    |
| Flt Permitted              | 0.097 |       |       |       | 0.950 |       |    |
| Satd. Flow (perm)          | 181   | 3539  | 3539  | 1583  | 1770  | 1583  |    |
| Right Turn on Red          |       |       |       | Yes   |       | Yes   |    |
| Satd. Flow (RTOR)          |       |       |       | 53    |       | 114   |    |
| Link Speed (mph)           |       | 50    | 50    |       | 35    |       |    |
| Link Distance (ft)         |       | 483   | 546   |       | 622   |       |    |
| Travel Time (s)            |       | 6.6   | 7.4   |       | 12.1  |       |    |
| Peak Hour Factor           | 0.92  | 0.92  | 0.95  | 0.92  | 0.92  | 0.92  |    |
| Adj. Flow (vph)            | 105   | 679   | 1578  | 53    | 74    | 260   |    |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |    |
| Lane Group Flow (vph)      | 105   | 679   | 1578  | 53    | 74    | 260   |    |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    |    |
| Lane Alignment             | Left  | Left  | Left  | Right | Left  | Right |    |
| Median Width(ft)           |       | 12    | 12    |       | 12    |       |    |
| Link Offset(ft)            |       | 0     | 0     |       | 0     |       |    |
| Crosswalk Width(ft)        |       | 16    | 16    |       | 16    |       |    |
| Two way Left Turn Lane     |       |       |       |       |       |       |    |
| Headway Factor             | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |    |
| Turning Speed (mph)        | 15    |       |       | 9     | 15    | 9     |    |
| Number of Detectors        | 1     | 2     | 2     | 1     | 1     | 1     |    |
| Detector Template          | Left  | Thru  | Thru  | Right | Left  | Right |    |
| Leading Detector (ft)      | 20    | 100   | 100   | 20    | 20    | 20    |    |
| Trailing Detector (ft)     | 0     | 0     | 0     | 0     | 0     | 0     |    |
| Detector 1 Position(ft)    | 0     | 0     | 0     | 0     | 0     | 0     |    |
| Detector 1 Size(ft)        | 20    | 6     | 6     | 20    | 20    | 20    |    |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |    |
| Detector 1 Channel         |       |       |       |       |       |       |    |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |    |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |    |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |    |
| Detector 2 Position(ft)    |       | 94    | 94    |       |       |       |    |
| Detector 2 Size(ft)        |       | 6     | 6     |       |       |       |    |
| Detector 2 Type            |       | Cl+Ex | Cl+Ex |       |       |       |    |
| Detector 2 Channel         |       |       |       |       |       |       |    |
| Detector 2 Extend (s)      |       | 0.0   | 0.0   |       |       |       |    |
| Turn Type                  | pm+pt | NA    | NA    | Perm  | pm+pt | Perm  |    |
| Protected Phases           | 5     | 2     | 6     |       | 7     |       | 4  |
| Permitted Phases           | 2     |       |       | 6     | 4     | 7     |    |

Lanes, Volumes, Timings  
6: Founder Pkwy & Connector Collector Roadway

2025 Total  
AM Peak

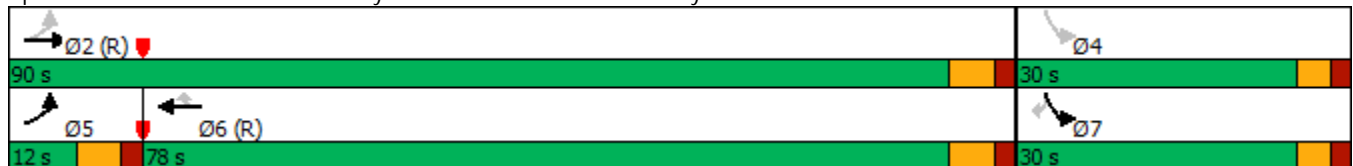


| Lane Group            | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   | Ø4   |
|-----------------------|-------|-------|-------|-------|-------|-------|------|
| Detector Phase        | 5     | 2     | 6     | 6     | 7     | 7     |      |
| Switch Phase          |       |       |       |       |       |       |      |
| Minimum Initial (s)   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0  |
| Minimum Split (s)     | 10.0  | 20.0  | 20.0  | 20.0  | 9.0   | 9.0   | 20.0 |
| Total Split (s)       | 12.0  | 90.0  | 78.0  | 78.0  | 30.0  | 30.0  | 30.0 |
| Total Split (%)       | 10.0% | 75.0% | 65.0% | 65.0% | 25.0% | 25.0% | 25%  |
| Maximum Green (s)     | 6.0   | 84.0  | 72.0  | 72.0  | 25.0  | 25.0  | 25.0 |
| Yellow Time (s)       | 4.0   | 4.0   | 4.0   | 4.0   | 3.0   | 3.0   | 3.0  |
| All-Red Time (s)      | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0  |
| Lost Time Adjust (s)  | -1.0  | -1.0  | -1.0  | -1.0  | -1.0  | -1.0  |      |
| Total Lost Time (s)   | 5.0   | 5.0   | 5.0   | 5.0   | 4.0   | 4.0   |      |
| Lead/Lag              | Lead  |       | Lag   | Lag   |       |       |      |
| Lead-Lag Optimize?    | Yes   |       | Yes   | Yes   |       |       |      |
| Vehicle Extension (s) | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0  |
| Recall Mode           | None  | C-Max | C-Max | C-Max | None  | None  | None |
| Act Effect Green (s)  | 93.1  | 93.1  | 80.4  | 80.4  | 17.9  | 17.9  |      |
| Actuated g/C Ratio    | 0.78  | 0.78  | 0.67  | 0.67  | 0.15  | 0.15  |      |
| v/c Ratio             | 0.43  | 0.25  | 0.67  | 0.05  | 0.28  | 0.78  |      |
| Control Delay         | 9.7   | 4.5   | 14.6  | 2.6   | 45.7  | 42.8  |      |
| Queue Delay           | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |      |
| Total Delay           | 9.7   | 4.5   | 14.6  | 2.6   | 45.7  | 42.8  |      |
| LOS                   | A     | A     | B     | A     | D     | D     |      |
| Approach Delay        |       | 5.2   | 14.2  |       | 43.4  |       |      |
| Approach LOS          |       | A     | B     |       | D     |       |      |

Intersection Summary

Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green  
 Natural Cycle: 65  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.78  
 Intersection Signal Delay: 15.2  
 Intersection LOS: B  
 Intersection Capacity Utilization 63.7%  
 ICU Level of Service B  
 Analysis Period (min) 15

Splits and Phases: 6: Founder Pkwy & Connector Collector Roadway



HCM 6th Roundabout  
 7: Castle Oaks Drive & Internal Community Collector

2025 Total  
 AM Peak

| Intersection                |       |       |       |
|-----------------------------|-------|-------|-------|
| Intersection Delay, s/veh   | 4.2   |       |       |
| Intersection LOS            | A     |       |       |
| Approach                    | EB    | NB    | SB    |
| Entry Lanes                 | 1     | 1     | 1     |
| Conflicting Circle Lanes    | 1     | 1     | 1     |
| Adj Approach Flow, veh/h    | 49    | 94    | 283   |
| Demand Flow Rate, veh/h     | 50    | 96    | 289   |
| Vehicles Circulating, veh/h | 200   | 43    | 18    |
| Vehicles Exiting, veh/h     | 107   | 207   | 121   |
| Ped Vol Crossing Leg, #/h   | 0     | 0     | 0     |
| Ped Cap Adj                 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh       | 3.6   | 3.4   | 4.5   |
| Approach LOS                | A     | A     | A     |
| Lane                        | Left  | Left  | Left  |
| Designated Moves            | LR    | LT    | TR    |
| Assumed Moves               | LR    | LT    | TR    |
| RT Channelized              |       |       |       |
| Lane Util                   | 1.000 | 1.000 | 1.000 |
| Follow-Up Headway, s        | 2.609 | 2.609 | 2.609 |
| Critical Headway, s         | 4.976 | 4.976 | 4.976 |
| Entry Flow, veh/h           | 50    | 96    | 289   |
| Cap Entry Lane, veh/h       | 1125  | 1321  | 1355  |
| Entry HV Adj Factor         | 0.980 | 0.984 | 0.980 |
| Flow Entry, veh/h           | 49    | 94    | 283   |
| Cap Entry, veh/h            | 1103  | 1300  | 1327  |
| V/C Ratio                   | 0.044 | 0.073 | 0.213 |
| Control Delay, s/veh        | 3.6   | 3.4   | 4.5   |
| LOS                         | A     | A     | A     |
| 95th %tile Queue, veh       | 0     | 0     | 1     |

Lanes, Volumes, Timings  
8: Ridge Rd/Founders Pkwy & 5th St/SH 86

2025 Total  
AM Peak



| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |       |       |       |       |       |       |
| Traffic Volume (vph)       | 82    | 235   | 180   | 90    | 425   | 646   | 375   | 413   | 55    | 248   | 174   | 149   |
| Future Volume (vph)        | 82    | 235   | 180   | 90    | 425   | 646   | 375   | 413   | 55    | 248   | 174   | 149   |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 300   |       | 425   | 250   |       | 0     | 250   |       | 0     | 600   |       | 500   |
| Storage Lanes              | 1     |       | 1     | 1     |       | 1     | 1     |       | 1     | 1     |       | 1     |
| Taper Length (ft)          | 100   |       |       | 100   |       |       | 100   |       |       | 100   |       |       |
| 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  |
| Frt                        |       |       | 0.850 |       |       | 0.850 |       |       | 0.850 |       |       | 0.850 |
| Flt Protected              | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       |
| Satd. Flow (prot)          | 1770  | 1863  | 1583  | 1770  | 1863  | 1583  | 1770  | 1863  | 1583  | 1770  | 1863  | 1583  |
| Flt Permitted              | 0.274 |       |       | 0.493 |       |       | 0.442 |       |       | 0.166 |       |       |
| Satd. Flow (perm)          | 510   | 1863  | 1583  | 918   | 1863  | 1583  | 823   | 1863  | 1583  | 309   | 1863  | 1583  |
| Right Turn on Red          |       |       | Yes   |       |       | Yes   |       |       | Yes   |       |       | Yes   |
| Satd. Flow (RTOR)          |       |       | 196   |       |       | 518   |       |       | 155   |       |       | 162   |
| Link Speed (mph)           |       | 35    |       |       | 50    |       |       | 35    |       |       | 50    |       |
| Link Distance (ft)         |       | 450   |       |       | 848   |       |       | 659   |       |       | 865   |       |
| Travel Time (s)            |       | 8.8   |       |       | 11.6  |       |       | 12.8  |       |       | 11.8  |       |
| Peak Hour Factor           | 0.92  | 0.92  | 0.92  | 0.92  | 0.95  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 89    | 255   | 196   | 98    | 447   | 702   | 408   | 449   | 60    | 270   | 189   | 162   |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 89    | 255   | 196   | 98    | 447   | 702   | 408   | 449   | 60    | 270   | 189   | 162   |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right |
| Median Width(ft)           |       | 18    |       |       | 18    |       |       | 24    |       |       | 24    |       |
| Link Offset(ft)            |       | 0     |       |       | 0     |       |       | 0     |       |       | 0     |       |
| Crosswalk Width(ft)        |       | 16    |       |       | 16    |       |       | 16    |       |       | 16    |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |       |       |       |       |       |
| Headway 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  |
| Turning Speed (mph)        | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     |
| Number of Detectors        | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     | 1     |
| Detector Template          | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  | Right |
| Leading Detector (ft)      | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   | 20    |
| Trailing Detector (ft)     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Position(ft)    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Size(ft)        | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     | 20    |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 2 Position(ft)    |       | 94    |       |       | 94    |       |       | 94    |       |       | 94    |       |
| Detector 2 Size(ft)        |       | 6     |       |       | 6     |       |       | 6     |       |       | 6     |       |
| Detector 2 Type            |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |
| Detector 2 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |
| Turn Type                  | pm+pt | NA    | Free  | pm+pt | NA    | Free  | pm+pt | NA    | Free  | pm+pt | NA    | Free  |
| Protected Phases           | 5     | 2     |       | 1     | 6     |       | 3     | 8     |       | 7     | 4     |       |
| Permitted Phases           | 2     |       | Free  | 6     |       | Free  | 8     |       | Free  | 4     |       | Free  |

Lanes, Volumes, Timings  
 8: Ridge Rd/Founders Pkwy & 5th St/SH 86

2025 Total  
 AM Peak

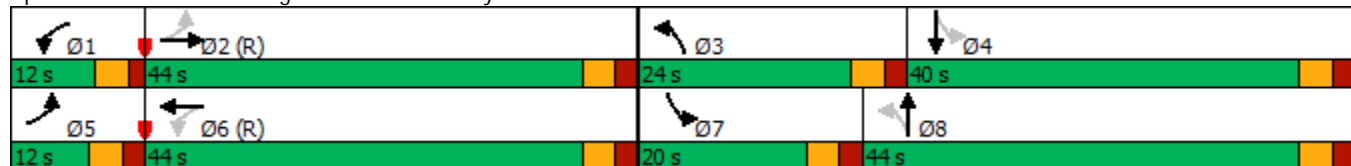


| Lane Group            | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Detector Phase        | 5     | 2     |       | 1     | 6     |       | 3     | 8     |       | 7     | 4     |       |
| Switch Phase          |       |       |       |       |       |       |       |       |       |       |       |       |
| Minimum Initial (s)   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |       |
| Minimum Split (s)     | 9.0   | 20.0  |       | 9.0   | 20.0  |       | 9.0   | 20.0  |       | 9.0   | 20.0  |       |
| Total Split (s)       | 12.0  | 44.0  |       | 12.0  | 44.0  |       | 24.0  | 44.0  |       | 20.0  | 40.0  |       |
| Total Split (%)       | 10.0% | 36.7% |       | 10.0% | 36.7% |       | 20.0% | 36.7% |       | 16.7% | 33.3% |       |
| Maximum Green (s)     | 7.0   | 39.0  |       | 7.5   | 39.0  |       | 19.0  | 39.0  |       | 15.0  | 35.0  |       |
| Yellow Time (s)       | 3.0   | 3.0   |       | 3.0   | 3.0   |       | 3.0   | 3.0   |       | 3.0   | 3.0   |       |
| All-Red Time (s)      | 2.0   | 2.0   |       | 1.5   | 2.0   |       | 2.0   | 2.0   |       | 2.0   | 2.0   |       |
| Lost Time Adjust (s)  | -1.0  | -1.0  |       | -1.0  | -1.0  |       | -1.0  | -1.0  |       | -1.0  | -1.0  |       |
| Total Lost Time (s)   | 4.0   | 4.0   |       | 3.5   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |       |
| Lead/Lag              | Lead  | Lag   |       | Lead  | Lag   |       | Lead  | Lag   |       | Lead  | Lag   |       |
| Lead-Lag Optimize?    | Yes   | Yes   |       | Yes   | Yes   |       | Yes   | Yes   |       | Yes   | Yes   |       |
| Vehicle Extension (s) | 3.0   | 3.0   |       | 3.0   | 3.0   |       | 3.0   | 3.0   |       | 3.0   | 3.0   |       |
| Recall Mode           | None  | C-Max |       | None  | C-Max |       | None  | None  |       | None  | None  |       |
| Act Effect Green (s)  | 54.0  | 45.6  | 120.0 | 54.7  | 45.4  | 120.0 | 54.1  | 34.4  | 120.0 | 45.9  | 30.1  | 120.0 |
| Actuated g/C Ratio    | 0.45  | 0.38  | 1.00  | 0.46  | 0.38  | 1.00  | 0.45  | 0.29  | 1.00  | 0.38  | 0.25  | 1.00  |
| v/c Ratio             | 0.28  | 0.36  | 0.12  | 0.20  | 0.63  | 0.44  | 0.77  | 0.84  | 0.04  | 0.87  | 0.40  | 0.10  |
| Control Delay         | 21.1  | 30.2  | 0.2   | 19.6  | 37.0  | 0.9   | 33.9  | 54.7  | 0.0   | 54.5  | 39.0  | 0.1   |
| Queue Delay           | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay           | 21.1  | 30.2  | 0.2   | 19.6  | 37.0  | 0.9   | 33.9  | 54.7  | 0.0   | 54.5  | 39.0  | 0.1   |
| LOS                   | C     | C     | A     | B     | D     | A     | C     | D     | A     | D     | D     | A     |
| Approach Delay        |       | 17.8  |       |       | 15.3  |       |       | 41.9  |       |       | 35.6  |       |
| Approach LOS          |       | B     |       |       | B     |       |       | D     |       |       | D     |       |

Intersection Summary

Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 12 (10%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green  
 Natural Cycle: 70  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.87  
 Intersection Signal Delay: 26.8      Intersection LOS: C  
 Intersection Capacity Utilization 75.7%      ICU Level of Service D  
 Analysis Period (min) 15

Splits and Phases: 8: Ridge Rd/Founders Pkwy & 5th St/SH 86



HCM 6th TWSC  
 9: Connector Collector Roadway & Commercial Access

2025 Total  
 AM Peak

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 1.8  |      |      |      |      |      |
| Movement                 | WBL  | WBR  | NBT  | NBR  | SBL  | SBT  |
| Lane Configurations      | ↘    | ↗    | ↑    | ↗    | ↘    | ↑    |
| Traffic Vol, veh/h       | 70   | 2    | 97   | 49   | 3    | 237  |
| Future Vol, veh/h        | 70   | 2    | 97   | 49   | 3    | 237  |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 100  | 0    | -    | 190  | 220  | -    |
| Veh in Median Storage, # | 0    | -    | 0    | -    | -    | 0    |
| Grade, %                 | 0    | -    | 0    | -    | -    | 0    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 76   | 2    | 105  | 53   | 3    | 258  |

| Major/Minor          | Minor1 | Major1 | Major2 |   |       |
|----------------------|--------|--------|--------|---|-------|
| Conflicting Flow All | 369    | 105    | 0      | 0 | 158   |
| Stage 1              | 105    | -      | -      | - | -     |
| Stage 2              | 264    | -      | -      | - | -     |
| Critical Hdwy        | 6.42   | 6.22   | -      | - | 4.12  |
| Critical Hdwy Stg 1  | 5.42   | -      | -      | - | -     |
| Critical Hdwy Stg 2  | 5.42   | -      | -      | - | -     |
| Follow-up Hdwy       | 3.518  | 3.318  | -      | - | 2.218 |
| Pot Cap-1 Maneuver   | 631    | 949    | -      | - | 1422  |
| Stage 1              | 919    | -      | -      | - | -     |
| Stage 2              | 780    | -      | -      | - | -     |
| Platoon blocked, %   |        |        | -      | - | -     |
| Mov Cap-1 Maneuver   | 630    | 949    | -      | - | 1422  |
| Mov Cap-2 Maneuver   | 630    | -      | -      | - | -     |
| Stage 1              | 919    | -      | -      | - | -     |
| Stage 2              | 778    | -      | -      | - | -     |

| Approach             | WB   | NB | SB  |
|----------------------|------|----|-----|
| HCM Control Delay, s | 11.4 | 0  | 0.1 |
| HCM LOS              | B    |    |     |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | WBLn2 | SBL   | SBT   |
|-----------------------|-----|----------|-------|-------|-------|
| Capacity (veh/h)      | -   | -        | 630   | 949   | 1422  |
| HCM Lane V/C Ratio    | -   | -        | 0.121 | 0.002 | 0.002 |
| HCM Control Delay (s) | -   | -        | 11.5  | 8.8   | 7.5   |
| HCM Lane LOS          | -   | -        | B     | A     | A     |
| HCM 95th %tile Q(veh) | -   | -        | 0.4   | 0     | 0     |



HCM 6th TWSC  
 10: Internal Collector Roadway & Site Access #10

2025 Total  
 AM Peak

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.4  |      |      |      |      |      |
| Movement                 | WBL  | WBR  | NBT  | NBR  | SBL  | SBT  |
| Lane Configurations      | W    |      | T    |      |      | T    |
| Traffic Vol, veh/h       | 0    | 13   | 270  | 0    | 5    | 94   |
| Future Vol, veh/h        | 0    | 13   | 270  | 0    | 5    | 94   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | 0    | -    | -    | 0    |
| Grade, %                 | 0    | -    | 0    | -    | -    | 0    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 14   | 293  | 0    | 5    | 102  |

| Major/Minor          | Minor1 | Major1 | Major2 |   |       |   |
|----------------------|--------|--------|--------|---|-------|---|
| Conflicting Flow All | 405    | 293    | 0      | 0 | 293   | 0 |
| Stage 1              | 293    | -      | -      | - | -     | - |
| Stage 2              | 112    | -      | -      | - | -     | - |
| Critical Hdwy        | 6.42   | 6.22   | -      | - | 4.12  | - |
| Critical Hdwy Stg 1  | 5.42   | -      | -      | - | -     | - |
| Critical Hdwy Stg 2  | 5.42   | -      | -      | - | -     | - |
| Follow-up Hdwy       | 3.518  | 3.318  | -      | - | 2.218 | - |
| Pot Cap-1 Maneuver   | 602    | 746    | -      | - | 1269  | - |
| Stage 1              | 757    | -      | -      | - | -     | - |
| Stage 2              | 913    | -      | -      | - | -     | - |
| Platoon blocked, %   |        |        | -      | - |       | - |
| Mov Cap-1 Maneuver   | 600    | 746    | -      | - | 1269  | - |
| Mov Cap-2 Maneuver   | 600    | -      | -      | - | -     | - |
| Stage 1              | 757    | -      | -      | - | -     | - |
| Stage 2              | 909    | -      | -      | - | -     | - |

| Approach             | WB  | NB | SB  |
|----------------------|-----|----|-----|
| HCM Control Delay, s | 9.9 | 0  | 0.4 |
| HCM LOS              | A   |    |     |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL   | SBT   |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h)      | -   | -        | 746   | 1269  |
| HCM Lane V/C Ratio    | -   | -        | 0.019 | 0.004 |
| HCM Control Delay (s) | -   | -        | 9.9   | 7.8   |
| HCM Lane LOS          | -   | -        | A     | A     |
| HCM 95th %tile Q(veh) | -   | -        | 0.1   | 0     |

HCM 6th TWSC  
 11: Internal Collector Roadway & Site Access #11

2025 Total  
 AM Peak

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.1  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      | ↕    | ↕    |      | ↕    | ↕    |      |
| Traffic Vol, veh/h       | 1    | 2    | 23   | 1    | 7    | 15   | 60   | 254  | 0    | 5    | 87   | 2    |
| Future Vol, veh/h        | 1    | 2    | 23   | 1    | 7    | 15   | 60   | 254  | 0    | 5    | 87   | 2    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | 0    | -    | -    | 0    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 1    | 2    | 25   | 1    | 8    | 16   | 65   | 276  | 0    | 5    | 95   | 2    |

| Major/Minor          | Minor2 |       | Minor1 |       | Major1 |       | Major2 |   |   |       |   |   |
|----------------------|--------|-------|--------|-------|--------|-------|--------|---|---|-------|---|---|
| Conflicting Flow All | 524    | 512   | 96     | 526   | 513    | 276   | 97     | 0 | 0 | 276   | 0 | 0 |
| Stage 1              | 106    | 106   | -      | 406   | 406    | -     | -      | - | - | -     | - | - |
| Stage 2              | 418    | 406   | -      | 120   | 107    | -     | -      | - | - | -     | - | - |
| Critical Hdwy        | 7.12   | 6.52  | 6.22   | 7.12  | 6.52   | 6.22  | 4.12   | - | - | 4.12  | - | - |
| Critical Hdwy Stg 1  | 6.12   | 5.52  | -      | 6.12  | 5.52   | -     | -      | - | - | -     | - | - |
| Critical Hdwy Stg 2  | 6.12   | 5.52  | -      | 6.12  | 5.52   | -     | -      | - | - | -     | - | - |
| Follow-up Hdwy       | 3.518  | 4.018 | 3.318  | 3.518 | 4.018  | 3.318 | 2.218  | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver   | 464    | 465   | 960    | 462   | 465    | 763   | 1496   | - | - | 1287  | - | - |
| Stage 1              | 900    | 807   | -      | 622   | 598    | -     | -      | - | - | -     | - | - |
| Stage 2              | 612    | 598   | -      | 884   | 807    | -     | -      | - | - | -     | - | - |
| Platoon blocked, %   |        |       |        |       |        |       |        | - | - | -     | - | - |
| Mov Cap-1 Maneuver   | 432    | 443   | 960    | 432   | 443    | 763   | 1496   | - | - | 1287  | - | - |
| Mov Cap-2 Maneuver   | 432    | 443   | -      | 432   | 443    | -     | -      | - | - | -     | - | - |
| Stage 1              | 861    | 804   | -      | 595   | 572    | -     | -      | - | - | -     | - | - |
| Stage 2              | 565    | 572   | -      | 855   | 804    | -     | -      | - | - | -     | - | - |

| Approach             | EB  |  | WB   |  | NB  |  | SB  |  |
|----------------------|-----|--|------|--|-----|--|-----|--|
| HCM Control Delay, s | 9.4 |  | 11.2 |  | 1.4 |  | 0.4 |  |
| HCM LOS              | A   |  | B    |  |     |  |     |  |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1WBLn1 | SBL   | SBT   | SBR |
|-----------------------|-------|-----|-----|------------|-------|-------|-----|
| Capacity (veh/h)      | 1496  | -   | -   | 844        | 609   | 1287  | -   |
| HCM Lane V/C Ratio    | 0.044 | -   | -   | 0.033      | 0.041 | 0.004 | -   |
| HCM Control Delay (s) | 7.5   | -   | -   | 9.4        | 11.2  | 7.8   | -   |
| HCM Lane LOS          | A     | -   | -   | A          | B     | A     | -   |
| HCM 95th %tile Q(veh) | 0.1   | -   | -   | 0.1        | 0.1   | 0     | -   |

HCM 6th TWSC  
 12: Internal Collector Roadway & Site Access #12

2025 Total  
 AM Peak

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 1.5  |      |      |      |      |      |
| Movement                 | WBL  | WBR  | NBT  | NBR  | SBL  | SBT  |
| Lane Configurations      |      |      |      |      |      |      |
| Traffic Vol, veh/h       | 1    | 48   | 266  | 0    | 16   | 95   |
| Future Vol, veh/h        | 1    | 48   | 266  | 0    | 16   | 95   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | 0    | -    | -    | 0    |
| Grade, %                 | 0    | -    | 0    | -    | -    | 0    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 1    | 52   | 289  | 0    | 17   | 103  |

| Major/Minor          | Minor1 | Major1 | Major2 |   |       |   |
|----------------------|--------|--------|--------|---|-------|---|
| Conflicting Flow All | 426    | 289    | 0      | 0 | 289   | 0 |
| Stage 1              | 289    | -      | -      | - | -     | - |
| Stage 2              | 137    | -      | -      | - | -     | - |
| Critical Hdwy        | 6.42   | 6.22   | -      | - | 4.12  | - |
| Critical Hdwy Stg 1  | 5.42   | -      | -      | - | -     | - |
| Critical Hdwy Stg 2  | 5.42   | -      | -      | - | -     | - |
| Follow-up Hdwy       | 3.518  | 3.318  | -      | - | 2.218 | - |
| Pot Cap-1 Maneuver   | 585    | 750    | -      | - | 1273  | - |
| Stage 1              | 760    | -      | -      | - | -     | - |
| Stage 2              | 890    | -      | -      | - | -     | - |
| Platoon blocked, %   |        |        | -      | - |       | - |
| Mov Cap-1 Maneuver   | 577    | 750    | -      | - | 1273  | - |
| Mov Cap-2 Maneuver   | 577    | -      | -      | - | -     | - |
| Stage 1              | 760    | -      | -      | - | -     | - |
| Stage 2              | 878    | -      | -      | - | -     | - |

| Approach             | WB   | NB | SB  |
|----------------------|------|----|-----|
| HCM Control Delay, s | 10.2 | 0  | 1.1 |
| HCM LOS              | B    |    |     |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL   | SBT   |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h)      | -   | -        | 745   | 1273  |
| HCM Lane V/C Ratio    | -   | -        | 0.071 | 0.014 |
| HCM Control Delay (s) | -   | -        | 10.2  | 7.9   |
| HCM Lane LOS          | -   | -        | B     | A     |
| HCM 95th %tile Q(veh) | -   | -        | 0.2   | 0     |

HCM 6th TWSC  
 13: Internal Collector Roadway & Site Access #13

2025 Total  
 AM Peak

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.3  |      |      |      |      |      |
| Movement                 | EBL  | EBT  | WBT  | WBR  | SBL  | SBR  |
| Lane Configurations      | ↙    | ↑    | ↘    |      | ↘    |      |
| Traffic Vol, veh/h       | 21   | 75   | 201  | 1    | 2    | 65   |
| Future Vol, veh/h        | 21   | 75   | 201  | 1    | 2    | 65   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | -    | 0    | 0    | -    | 0    | -    |
| Grade, %                 | -    | 0    | 0    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 23   | 82   | 218  | 1    | 2    | 71   |

| Major/Minor          | Major1 | Major2 | Minor2 |       |       |
|----------------------|--------|--------|--------|-------|-------|
| Conflicting Flow All | 219    | 0      | 0      | 347   | 219   |
| Stage 1              | -      | -      | -      | 219   | -     |
| Stage 2              | -      | -      | -      | 128   | -     |
| Critical Hdwy        | 4.12   | -      | -      | 6.42  | 6.22  |
| Critical Hdwy Stg 1  | -      | -      | -      | 5.42  | -     |
| Critical Hdwy Stg 2  | -      | -      | -      | 5.42  | -     |
| Follow-up Hdwy       | 2.218  | -      | -      | 3.518 | 3.318 |
| Pot Cap-1 Maneuver   | 1350   | -      | -      | 650   | 821   |
| Stage 1              | -      | -      | -      | 817   | -     |
| Stage 2              | -      | -      | -      | 898   | -     |
| Platoon blocked, %   | -      | -      | -      | -     | -     |
| Mov Cap-1 Maneuver   | 1350   | -      | -      | 639   | 821   |
| Mov Cap-2 Maneuver   | -      | -      | -      | 639   | -     |
| Stage 1              | -      | -      | -      | 803   | -     |
| Stage 2              | -      | -      | -      | 898   | -     |

| Approach             | EB  | WB | SB  |
|----------------------|-----|----|-----|
| HCM Control Delay, s | 1.7 | 0  | 9.9 |
| HCM LOS              |     |    | A   |

| Minor Lane/Major Mvmt | EBL   | EBT | WBT | WBR | SBLn1 |
|-----------------------|-------|-----|-----|-----|-------|
| Capacity (veh/h)      | 1350  | -   | -   | -   | 814   |
| HCM Lane V/C Ratio    | 0.017 | -   | -   | -   | 0.089 |
| HCM Control Delay (s) | 7.7   | -   | -   | -   | 9.9   |
| HCM Lane LOS          | A     | -   | -   | -   | A     |
| HCM 95th %tile Q(veh) | 0.1   | -   | -   | -   | 0.3   |

HCM 6th TWSC  
 14: Site Access #14 & Internal Collector Roadway

2025 Total  
 AM Peak

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.2  |      |      |      |      |      |
| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
| Lane Configurations      | ↑    | ↑    |      | ↑    | ↑    |      |
| Traffic Vol, veh/h       | 57   | 20   | 1    | 143  | 59   | 1    |
| Future Vol, veh/h        | 57   | 20   | 1    | 143  | 59   | 1    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | 0    | -    | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 62   | 22   | 1    | 155  | 64   | 1    |

| Major/Minor          | Major1 | Major2 | Minor1 |   |             |
|----------------------|--------|--------|--------|---|-------------|
| Conflicting Flow All | 0      | 0      | 84     | 0 | 219 62      |
| Stage 1              | -      | -      | -      | - | 62 -        |
| Stage 2              | -      | -      | -      | - | 157 -       |
| Critical Hdwy        | -      | -      | 4.12   | - | 6.42 6.22   |
| Critical Hdwy Stg 1  | -      | -      | -      | - | 5.42 -      |
| Critical Hdwy Stg 2  | -      | -      | -      | - | 5.42 -      |
| Follow-up Hdwy       | -      | -      | 2.218  | - | 3.518 3.318 |
| Pot Cap-1 Maneuver   | -      | -      | 1513   | - | 769 1003    |
| Stage 1              | -      | -      | -      | - | 961 -       |
| Stage 2              | -      | -      | -      | - | 871 -       |
| Platoon blocked, %   | -      | -      | -      | - | -           |
| Mov Cap-1 Maneuver   | -      | -      | 1513   | - | 768 1003    |
| Mov Cap-2 Maneuver   | -      | -      | -      | - | 768 -       |
| Stage 1              | -      | -      | -      | - | 961 -       |
| Stage 2              | -      | -      | -      | - | 870 -       |

| Approach             | EB | WB  | NB   |
|----------------------|----|-----|------|
| HCM Control Delay, s | 0  | 0.1 | 10.1 |
| HCM LOS              |    |     | B    |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 771   | -   | -   | 1513  | -   |
| HCM Lane V/C Ratio    | 0.085 | -   | -   | 0.001 | -   |
| HCM Control Delay (s) | 10.1  | -   | -   | 7.4   | 0   |
| HCM Lane LOS          | B     | -   | -   | A     | A   |
| HCM 95th %tile Q(veh) | 0.3   | -   | -   | 0     | -   |

HCM 6th TWSC  
 15: Site Access #15 & Internal Collector Roadway

2025 Total  
 AM Peak

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 8.8  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      |      | ↕    |      |      | ↕    |      |
| Traffic Vol, veh/h       | 5    | 42   | 11   | 1    | 96   | 0    | 32   | 0    | 2    | 1    | 0    | 16   |
| Future Vol, veh/h        | 5    | 42   | 11   | 1    | 96   | 0    | 32   | 0    | 2    | 1    | 0    | 16   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 5    | 46   | 12   | 1    | 104  | 0    | 35   | 0    | 2    | 1    | 0    | 17   |

































| Major/Minor          | Minor2 |       | Minor1 |       | Major1 |       | Major2 |   |   |       |   |   |
|----------------------|--------|-------|--------|-------|--------|-------|--------|---|---|-------|---|---|
| Conflicting Flow All | 134    | 83    | 9      | 111   | 90     | 1     | 17     | 0 | 0 | 2     | 0 | 0 |
| Stage 1              | 11     | 11    | -      | 71    | 71     | -     | -      | - | - | -     | - | - |
| Stage 2              | 123    | 72    | -      | 40    | 19     | -     | -      | - | - | -     | - | - |
| Critical Hdwy        | 7.12   | 6.52  | 6.22   | 7.12  | 6.52   | 6.22  | 4.12   | - | - | 4.12  | - | - |
| Critical Hdwy Stg 1  | 6.12   | 5.52  | -      | 6.12  | 5.52   | -     | -      | - | - | -     | - | - |
| Critical Hdwy Stg 2  | 6.12   | 5.52  | -      | 6.12  | 5.52   | -     | -      | - | - | -     | - | - |
| Follow-up Hdwy       | 3.518  | 4.018 | 3.318  | 3.518 | 4.018  | 3.318 | 2.218  | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver   | 838    | 807   | 1073   | 867   | 800    | 1084  | 1600   | - | - | 1620  | - | - |
| Stage 1              | 1010   | 886   | -      | 939   | 836    | -     | -      | - | - | -     | - | - |
| Stage 2              | 881    | 835   | -      | 975   | 880    | -     | -      | - | - | -     | - | - |
| Platoon blocked, %   |        |       |        |       |        |       |        | - | - | -     | - | - |
| Mov Cap-1 Maneuver   | 739    | 788   | 1073   | 805   | 782    | 1084  | 1600   | - | - | 1620  | - | - |
| Mov Cap-2 Maneuver   | 739    | 788   | -      | 805   | 782    | -     | -      | - | - | -     | - | - |
| Stage 1              | 988    | 885   | -      | 918   | 818    | -     | -      | - | - | -     | - | - |
| Stage 2              | 752    | 817   | -      | 913   | 879    | -     | -      | - | - | -     | - | - |

| Approach             | EB  |  | WB   |  | NB  |  | SB  |  |
|----------------------|-----|--|------|--|-----|--|-----|--|
| HCM Control Delay, s | 9.7 |  | 10.3 |  | 6.9 |  | 0.4 |  |
| HCM LOS              | A   |  | B    |  |     |  |     |  |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1WBLn1 | SBL   | SBT   | SBR |
|-----------------------|-------|-----|-----|------------|-------|-------|-----|
| Capacity (veh/h)      | 1600  | -   | -   | 825        | 782   | 1620  | -   |
| HCM Lane V/C Ratio    | 0.022 | -   | -   | 0.076      | 0.135 | 0.001 | -   |
| HCM Control Delay (s) | 7.3   | 0   | -   | 9.7        | 10.3  | 7.2   | 0   |
| HCM Lane LOS          | A     | A   | -   | A          | B     | A     | A   |
| HCM 95th %tile Q(veh) | 0.1   | -   | -   | 0.2        | 0.5   | 0     | -   |

Lanes, Volumes, Timings  
1: Allen Way & Founder Pkwy

2025 Total  
PM Peak

|                            |    |    |  |  |    |  |    |    |  |  |    |    |
|----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL  | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations        |   |    |   |  |    |  |   |   |   |  |   |    |
| Traffic Volume (vph)       | 435   | 2861  | 230   | 42  | 2258  | 145   | 165  | 38  | 90  | 125   | 37  | 460   |
| Future Volume (vph)        | 435   | 2861  | 230   | 42  | 2258  | 145   | 165  | 38  | 90  | 125   | 37  | 460   |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900   | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 290   |   | 0   | 325   |   | 0   | 75   |   | 0   | 130   |   | 110   |
| Storage Lanes              | 2   |   | 0   | 1   |   | 1   | 2  |   | 0   | 1   |   | 2   |
| Taper Length (ft)          | 100   |   |   | 100   |   |   | 100  |   |   | 100   |   |   |
| Lane Util. Factor          | 0.97  | 0.91  | 0.91  | 1.00  | 0.91  | 1.00  | 0.97   | 1.00  | 1.00  | 1.00  | 1.00  | 0.88  |
| Frt                        |   | 0.989   |   |   |   | 0.850   |  | 0.894   |   |   |   | 0.850   |
| Flt Protected              | 0.950   |   |   | 0.950   |   |   | 0.950  |   |   | 0.950   |   |   |
| Satd. Flow (prot)          | 3433  | 5029  | 0   | 1770  | 5085  | 1583  | 3433   | 1665  | 0   | 1770  | 1863  | 2787  |
| Flt Permitted              | 0.950   |   |   | 0.061   |   |   | 0.950  |   |   | 0.423   |   |   |
| Satd. Flow (perm)          | 3433  | 5029  | 0   | 114   | 5085  | 1583  | 3433   | 1665  | 0   | 788   | 1863  | 2787  |
| Right Turn on Red          |   |   | Yes   |   |   | Yes   |  |   | Yes   |   |   | Yes   |
| Satd. Flow (RTOR)          |   | 22  |   |   |   | 155   |  | 82  |   |   |   | 294   |
| Link Speed (mph)           |   | 35  |   |   | 35  |   |  | 30  |   |   |   | 30  |
| Link Distance (ft)         |   | 533   |   |   | 1095  |   |  | 278   |   |   |   | 392   |
| Travel Time (s)            |   | 10.4  |   |   | 21.3  |   |  | 6.3   |   |   |   | 8.9   |
| Peak Hour Factor           | 0.92  | 0.92  | 0.92  | 0.92  | 0.98  | 0.92  | 0.92   | 0.92  | 0.92  | 0.92  | 0.92  | 0.95  |
| Adj. Flow (vph)            | 473   | 3110  | 250   | 46  | 2304  | 158   | 179  | 41  | 98  | 136   | 40  | 484   |
| Shared Lane Traffic (%)    |   |   |   |   |   |   |  |   |   |   |   |   |
| Lane Group Flow (vph)      | 473   | 3360  | 0   | 46  | 2304  | 158   | 179  | 139   | 0   | 136   | 40  | 484   |
| Enter Blocked Intersection | No  | No  | No  | No  | No  | No  | No   | No  | No  | No  | No  | No  |
| Lane Alignment             | Left  | Left  | Right   | Left  | Left  | Right   | Left   | Left  | Right   | Left  | Left  | Right   |
| Median Width(ft)           |   | 20  |   |   | 20  |   |  | 24  |   |   |   | 20  |
| Link Offset(ft)            |   | 0   |   |   | 0   |   |  | 0   |   |   |   | 0   |
| Crosswalk Width(ft)        |   | 16  |   |   | 16  |   |  | 16  |   |   |   | 16  |
| Two way Left Turn Lane     |   |   |   |   |   |   |  |   |   |   |   |   |
| Headway 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  |
| Turning Speed (mph)        | 15  |   | 9   | 15  |   | 9   | 15   |   | 9   | 15  |   | 9   |
| Number of Detectors        | 1   | 2   |   | 1   | 2   | 1   | 1  | 2   |   | 1   | 2   | 1   |
| Detector Template          | Left  | Thru  |   | Left  | Thru  | Right   | Left   | Thru  |   | Left  | Thru  | Right   |
| Leading Detector (ft)      | 20  | 100   |   | 20  | 100   | 20  | 20   | 100   |   | 20  | 100   | 20  |
| Trailing Detector (ft)     | 0   | 0   |   | 0   | 0   | 0   | 0  | 0   |   | 0   | 0   | 0   |
| Detector 1 Position(ft)    | 0   | 0   |   | 0   | 0   | 0   | 0  | 0   |   | 0   | 0   | 0   |
| Detector 1 Size(ft)        | 20  | 6   |   | 20  | 6   | 20  | 20   | 6   |   | 20  | 6   | 20  |
| Detector 1 Type            | Cl+Ex   | Cl+Ex   |   | Cl+Ex   | Cl+Ex   | Cl+Ex   | Cl+Ex  | Cl+Ex   |   | Cl+Ex   | Cl+Ex   | Cl+Ex   |
| Detector 1 Channel         |   |   |   |   |   |   |  |   |   |   |   |   |
| Detector 1 Extend (s)      | 0.0   | 0.0   |   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   |   | 0.0   | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   |   | 0.0   | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   |   | 0.0   | 0.0   | 0.0   |
| Detector 2 Position(ft)    |   | 94  |   |   | 94  |   |  | 94  |   |   |   | 94  |
| Detector 2 Size(ft)        |   | 6   |   |   | 6   |   |  | 6   |   |   |   | 6   |
| Detector 2 Type            |   | Cl+Ex   |   |   | Cl+Ex   |   |  | Cl+Ex   |   |   |   | Cl+Ex   |
| Detector 2 Channel         |   |   |   |   |   |   |  |   |   |   |   |   |
| Detector 2 Extend (s)      |   | 0.0   |   |   | 0.0   |   |  | 0.0   |   |   |   | 0.0   |
| Turn Type                  | Prot  | NA  |   | pm+pt   | NA  | Perm  | Prot   | NA  |   | pm+pt   | NA  | Perm  |
| Protected Phases           | 5   | 2   |   | 1   | 6   |   | 3  | 8   |   | 7   | 4   |   |
| Permitted Phases           |   |   |   | 6   |   | 6   |  |   |   | 4   |   | 4   |

Lanes, Volumes, Timings  
1: Allen Way & Founder Pkwy

2025 Total  
PM Peak



| Lane Group            | EBL   | EBT   | EBR | WBL  | WBT   | WBR   | NBL   | NBT   | NBR | SBL  | SBT   | SBR   |
|-----------------------|-------|-------|-----|------|-------|-------|-------|-------|-----|------|-------|-------|
| Detector Phase        | 5     | 2     |     | 1    | 6     | 6     | 3     | 8     |     | 7    | 4     | 4     |
| Switch Phase          |       |       |     |      |       |       |       |       |     |      |       |       |
| Minimum Initial (s)   | 4.0   | 4.0   |     | 4.0  | 4.0   | 4.0   | 4.0   | 4.0   |     | 4.0  | 4.0   | 4.0   |
| Minimum Split (s)     | 11.0  | 21.0  |     | 9.5  | 21.0  | 21.0  | 9.0   | 21.0  |     | 9.0  | 21.0  | 21.0  |
| Total Split (s)       | 22.0  | 81.0  |     | 10.0 | 69.0  | 69.0  | 12.0  | 18.0  |     | 11.0 | 17.0  | 17.0  |
| Total Split (%)       | 18.3% | 67.5% |     | 8.3% | 57.5% | 57.5% | 10.0% | 15.0% |     | 9.2% | 14.2% | 14.2% |
| Maximum Green (s)     | 17.0  | 75.0  |     | 5.0  | 63.0  | 63.0  | 7.0   | 13.0  |     | 6.0  | 12.0  | 12.0  |
| Yellow Time (s)       | 3.0   | 4.0   |     | 3.0  | 4.0   | 4.0   | 3.0   | 3.0   |     | 3.0  | 3.0   | 3.0   |
| All-Red Time (s)      | 2.0   | 2.0   |     | 2.0  | 2.0   | 2.0   | 2.0   | 2.0   |     | 2.0  | 2.0   | 2.0   |
| Lost Time Adjust (s)  | -2.0  | -3.0  |     | -2.0 | -2.0  | -1.0  | -2.0  | -2.0  |     | -2.0 | -2.0  | -2.0  |
| Total Lost Time (s)   | 3.0   | 3.0   |     | 3.0  | 4.0   | 5.0   | 3.0   | 3.0   |     | 3.0  | 3.0   | 3.0   |
| Lead/Lag              | Lead  | Lag   |     | Lead | Lag   | Lag   | Lead  | Lag   |     | Lead | Lag   | Lag   |
| Lead-Lag Optimize?    | Yes   | Yes   |     | Yes  | Yes   | Yes   | Yes   | Yes   |     | Yes  | Yes   | Yes   |
| Vehicle Extension (s) | 3.0   | 3.0   |     | 3.0  | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0  | 3.0   | 3.0   |
| Recall Mode           | None  | C-Max |     | None | C-Max | C-Max | None  | None  |     | None | None  | None  |
| Act Effect Green (s)  | 19.0  | 80.8  |     | 73.9 | 65.8  | 64.8  | 9.0   | 14.2  |     | 21.2 | 13.2  | 13.2  |
| Actuated g/C Ratio    | 0.16  | 0.67  |     | 0.62 | 0.55  | 0.54  | 0.08  | 0.12  |     | 0.18 | 0.11  | 0.11  |
| v/c Ratio             | 0.87  | 0.99  |     | 0.28 | 0.83  | 0.17  | 0.70  | 0.52  |     | 0.67 | 0.20  | 0.85  |
| Control Delay         | 66.7  | 33.5  |     | 12.8 | 24.4  | 2.3   | 69.1  | 29.0  |     | 58.1 | 50.5  | 35.6  |
| Queue Delay           | 0.0   | 0.0   |     | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.0  | 0.0   | 0.0   |
| Total Delay           | 66.7  | 33.5  |     | 12.8 | 24.4  | 2.3   | 69.1  | 29.0  |     | 58.1 | 50.5  | 35.6  |
| LOS                   | E     | C     |     | B    | C     | A     | E     | C     |     | E    | D     | D     |
| Approach Delay        |       | 37.6  |     |      | 22.8  |       |       | 51.5  |     |      | 41.1  |       |
| Approach LOS          |       | D     |     |      | C     |       |       | D     |     |      | D     |       |

Intersection Summary

Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 119 (99%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
 Natural Cycle: 130  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.99  
 Intersection Signal Delay: 33.4      Intersection LOS: C  
 Intersection Capacity Utilization 91.5%      ICU Level of Service F  
 Analysis Period (min) 15


























Splits and Phases: 1: Allen Way & Founder Pkwy





Lanes, Volumes, Timings  
2: Front St & Founder Pkwy

2025 Total  
PM Peak

|                            |  |   |  |  |   |  |   |  |  |  |   |  |
|----------------------------|---|--|---|---|--|---|---|---|---|---|--|---|
| Lane Group                 | SEL   | SET  | SER   | NWL   | NWT  | NWR   | NEL   | NET   | NER   | SWL   | SWT  | SWR   |
| Lane Configurations        |  | <br> |   |  | <br> |   | <br> |  |  |  | <br> |   |
| Traffic Volume (vph)       | 165   | 2126   | 685   | 140   | 1688   | 20  | 620   | 110   | 207   | 40  | 85   | 60  |
| Future Volume (vph)        | 165   | 2126   | 685   | 140   | 1688   | 20  | 620   | 110   | 207   | 40  | 85   | 60  |
| Ideal Flow (vphp)          | 1900  | 1900   | 1900  | 1900  | 1900   | 1900  | 1900  | 1900  | 1900  | 1900  | 1900   | 1900  |
| Storage Length (ft)        | 460   |  | 0   | 200   |  | 0   | 285   |   | 0   | 230   |  | 0   |
| Storage Lanes              | 1   |  | 0   | 1   |  | 0   | 1   |   | 1   | 1   |  | 0   |
| Taper Length (ft)          | 100   |  |   | 100   |  |   | 100   |   |   | 100   |  |   |
| Lane Util. Factor          | 1.00  | 0.91   | 0.91  | 1.00  | 0.91   | 0.91  | 0.97  | 1.00  | 1.00  | 1.00  | 0.95   | 0.95  |
| Frt                        |   | 0.963  |   |   | 0.998  |   |   |   | 0.850   |   | 0.938  |   |
| Flt Protected              | 0.950   |  |   | 0.950   |  |   | 0.950   |   |   | 0.950   |  |   |
| Satd. Flow (prot)          | 1770  | 4897   | 0   | 1770  | 5075   | 0   | 3433  | 1863  | 1583  | 1770  | 3320   | 0   |
| Flt Permitted              | 0.070   |  |   | 0.057   |  |   | 0.359   |   |   | 0.680   |  |   |
| Satd. Flow (perm)          | 130   | 4897   | 0   | 106   | 5075   | 0   | 1297  | 1863  | 1583  | 1267  | 3320   | 0   |
| Right Turn on Red          |   |  | Yes   |   |  | Yes   |   |   | Yes   |   |  | Yes   |
| Satd. Flow (RTOR)          |   | 113  |   |   | 2  |   |   |   | 160   |   | 65   |   |
| Link Speed (mph)           |   | 35   |   |   | 35   |   |   | 35  |   |   | 35   |   |
| Link Distance (ft)         |   | 1095   |   |   | 488  |   |   | 556   |   |   | 397  |   |
| Travel Time (s)            |   | 21.3   |   |   | 9.5  |   |   | 10.8  |   |   | 7.7  |   |
| Peak Hour Factor           | 0.92  | 0.92   | 0.92  | 0.92  | 0.92   | 0.92  | 0.98  | 0.92  | 0.92  | 0.92  | 0.92   | 0.92  |
| Adj. Flow (vph)            | 179   | 2311   | 745   | 152   | 1835   | 22  | 633   | 120   | 225   | 43  | 92   | 65  |
| Shared Lane Traffic (%)    |   |  |   |   |  |   |   |   |   |   |  |   |
| Lane Group Flow (vph)      | 179   | 3056   | 0   | 152   | 1857   | 0   | 633   | 120   | 225   | 43  | 157  | 0   |
| Enter Blocked Intersection | No  | No   | No  | No  | No   | No  | No  | No  | No  | No  | No   | No  |
| Lane Alignment             | Left  | Left   | Right   | Left  | Left   | Right   | Left  | Left  | Right   | Left  | Left   | Right   |
| Median Width(ft)           |   | 12   |   |   | 12   |   |   | 40  |   |   | 24   |   |
| Link Offset(ft)            |   | 0  |   |   | 0  |   |   | 0   |   |   | 0  |   |
| Crosswalk Width(ft)        |   | 16   |   |   | 16   |   |   | 16  |   |   | 16   |   |
| Two way Left Turn Lane     |   |  |   |   |  |   |   |   |   |   |  |   |
| Headway 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  |
| Turning Speed (mph)        | 15  |  | 9   | 15  |  | 9   | 15  |   | 9   | 15  |  | 9   |
| Number of Detectors        | 1   | 2  |   | 1   | 2  |   | 1   | 2   | 1   | 1   | 2  |   |
| Detector Template          | Left  | Thru   |   | Left  | Thru   |   | Left  | Thru  | Right   | Left  | Thru   |   |
| Leading Detector (ft)      | 20  | 100  |   | 20  | 100  |   | 20  | 100   | 20  | 20  | 100  |   |
| Trailing Detector (ft)     | 0   | 0  |   | 0   | 0  |   | 0   | 0   | 0   | 0   | 0  |   |
| Detector 1 Position(ft)    | 0   | 0  |   | 0   | 0  |   | 0   | 0   | 0   | 0   | 0  |   |
| Detector 1 Size(ft)        | 20  | 6  |   | 20  | 6  |   | 20  | 6   | 20  | 20  | 6  |   |
| Detector 1 Type            | Cl+Ex   | Cl+Ex  |   | Cl+Ex   | Cl+Ex  |   | Cl+Ex   | Cl+Ex   | Cl+Ex   | Cl+Ex   | Cl+Ex  |   |
| Detector 1 Channel         |   |  |   |   |  |   |   |   |   |   |  |   |
| Detector 1 Extend (s)      | 0.0   | 0.0  |   | 0.0   | 0.0  |   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |   |
| Detector 1 Queue (s)       | 0.0   | 0.0  |   | 0.0   | 0.0  |   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |   |
| Detector 1 Delay (s)       | 0.0   | 0.0  |   | 0.0   | 0.0  |   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |   |
| Detector 2 Position(ft)    |   | 94   |   |   | 94   |   |   | 94  |   |   | 94   |   |
| Detector 2 Size(ft)        |   | 6  |   |   | 6  |   |   | 6   |   |   | 6  |   |
| Detector 2 Type            |   | Cl+Ex  |   |   | Cl+Ex  |   |   | Cl+Ex   |   |   | Cl+Ex  |   |
| Detector 2 Channel         |   |  |   |   |  |   |   |   |   |   |  |   |
| Detector 2 Extend (s)      |   | 0.0  |   |   | 0.0  |   |   | 0.0   |   |   | 0.0  |   |
| Turn Type                  | pm+pt   | NA   |   | pm+pt   | NA   |   | pm+pt   | NA  | Perm  | pm+pt   | NA   |   |
| Protected Phases           | 5   | 2  |   | 1   | 6  |   | 3   | 8   |   | 7   | 4  |   |
| Permitted Phases           | 2   |  |   | 6   |  |   | 8   |   | 8   | 4   |  |   |

Lanes, Volumes, Timings  
2: Front St & Founder Pkwy

2025 Total  
PM Peak

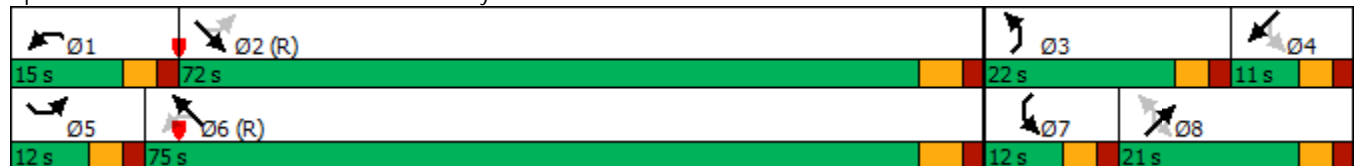


| Lane Group            | SEL   | SET   | SER | NWL   | NWT   | NWR | NEL   | NET   | NER   | SWL   | SWT  | SWR |
|-----------------------|-------|-------|-----|-------|-------|-----|-------|-------|-------|-------|------|-----|
| Detector Phase        | 5     | 2     |     | 1     | 6     |     | 3     | 8     | 8     | 7     | 4    |     |
| Switch Phase          |       |       |     |       |       |     |       |       |       |       |      |     |
| Minimum Initial (s)   | 4.0   | 4.0   |     | 4.0   | 4.0   |     | 4.0   | 4.0   | 4.0   | 4.0   | 4.0  |     |
| Minimum Split (s)     | 9.0   | 21.0  |     | 9.0   | 21.0  |     | 9.0   | 21.0  | 21.0  | 10.0  | 21.0 |     |
| Total Split (s)       | 12.0  | 72.0  |     | 15.0  | 75.0  |     | 22.0  | 21.0  | 21.0  | 12.0  | 11.0 |     |
| Total Split (%)       | 10.0% | 60.0% |     | 12.5% | 62.5% |     | 18.3% | 17.5% | 17.5% | 10.0% | 9.2% |     |
| Maximum Green (s)     | 7.0   | 66.0  |     | 10.0  | 69.0  |     | 17.0  | 16.0  | 16.0  | 7.0   | 6.0  |     |
| Yellow Time (s)       | 3.0   | 4.0   |     | 3.0   | 4.0   |     | 3.0   | 3.0   | 3.0   | 3.0   | 3.0  |     |
| All-Red Time (s)      | 2.0   | 2.0   |     | 2.0   | 2.0   |     | 2.0   | 2.0   | 2.0   | 2.0   | 2.0  |     |
| Lost Time Adjust (s)  | -1.0  | -2.6  |     | -2.0  | -2.0  |     | -2.0  | -1.0  | -2.0  | -2.0  | -2.0 |     |
| Total Lost Time (s)   | 4.0   | 3.4   |     | 3.0   | 4.0   |     | 3.0   | 4.0   | 3.0   | 3.0   | 3.0  |     |
| Lead/Lag              | Lead  | Lag   |     | Lead  | Lag   |     | Lead  | Lag   | Lag   | Lead  | Lag  |     |
| Lead-Lag Optimize?    | Yes   | Yes   |     | Yes   | Yes   |     | Yes   | Yes   | Yes   | Yes   | Yes  |     |
| Vehicle Extension (s) | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0   | 3.0  |     |
| Recall Mode           | None  | C-Max |     | None  | C-Max |     | None  | None  | None  | None  | None |     |
| Act Effect Green (s)  | 77.0  | 69.5  |     | 83.2  | 71.0  |     | 29.9  | 19.4  | 20.4  | 16.6  | 7.9  |     |
| Actuated g/C Ratio    | 0.64  | 0.58  |     | 0.69  | 0.59  |     | 0.25  | 0.16  | 0.17  | 0.14  | 0.07 |     |
| v/c Ratio             | 0.93  | 1.06  |     | 0.67  | 0.62  |     | 0.96  | 0.40  | 0.56  | 0.20  | 0.56 |     |
| Control Delay         | 48.9  | 54.9  |     | 37.5  | 16.9  |     | 68.3  | 51.1  | 21.0  | 38.0  | 39.8 |     |
| Queue Delay           | 0.0   | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |     |
| Total Delay           | 48.9  | 54.9  |     | 37.5  | 16.9  |     | 68.3  | 51.1  | 21.0  | 38.0  | 39.8 |     |
| LOS                   | D     | D     |     | D     | B     |     | E     | D     | C     | D     | D    |     |
| Approach Delay        |       | 54.5  |     |       | 18.4  |     |       | 55.3  |       |       | 39.4 |     |
| Approach LOS          |       | D     |     |       | B     |     |       | E     |       |       | D    |     |

Intersection Summary

Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 96 (80%), Referenced to phase 2:SETL and 6:NWTL, Start of Green  
 Natural Cycle: 140  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 1.06  
 Intersection Signal Delay: 42.9  
 Intersection LOS: D  
 Intersection Capacity Utilization 99.4%  
 ICU Level of Service F  
 Analysis Period (min) 15

Splits and Phases: 2: Front St & Founder Pkwy



Lanes, Volumes, Timings  
3: Woodlands Blvd & Founders Pkwy

2025 Total  
PM Peak



| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |       |       |       |       |       |       |
| Traffic Volume (vph)       | 8     | 1823  | 135   | 234   | 1573  | 95    | 105   | 45    | 364   | 173   | 48    | 8     |
| Future Volume (vph)        | 8     | 1823  | 135   | 234   | 1573  | 95    | 105   | 45    | 364   | 173   | 48    | 8     |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 450   |       | 0     | 500   |       | 0     | 300   |       | 0     | 150   |       | 0     |
| Storage Lanes              | 1     |       | 1     | 1     |       | 1     | 2     |       | 1     | 1     |       | 0     |
| Taper Length (ft)          | 100   |       |       | 100   |       |       | 100   |       |       | 100   |       |       |
| Lane Util. Factor          | 1.00  | 0.95  | 1.00  | 1.00  | 0.95  | 1.00  | 0.97  | 1.00  | 1.00  | 1.00  | 0.95  | 0.95  |
| Frt                        |       |       | 0.850 |       |       | 0.850 |       |       | 0.850 |       | 0.978 |       |
| Flt Protected              | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       |
| Satd. Flow (prot)          | 1770  | 3539  | 1583  | 1770  | 3539  | 1583  | 3433  | 1863  | 1583  | 1770  | 3461  | 0     |
| Flt Permitted              | 0.109 |       |       | 0.059 |       |       | 0.715 |       |       | 0.573 |       |       |
| Satd. Flow (perm)          | 203   | 3539  | 1583  | 110   | 3539  | 1583  | 2584  | 1863  | 1583  | 1067  | 3461  | 0     |
| Right Turn on Red          |       |       | Yes   |       |       | Yes   |       |       | Yes   |       |       | Yes   |
| Satd. Flow (RTOR)          |       |       | 173   |       |       | 118   |       |       | 73    |       | 9     |       |
| Link Speed (mph)           |       | 50    |       |       | 50    |       |       | 35    |       |       | 35    |       |
| Link Distance (ft)         |       | 721   |       |       | 782   |       |       | 419   |       |       | 497   |       |
| Travel Time (s)            |       | 9.8   |       |       | 10.7  |       |       | 8.2   |       |       | 9.7   |       |
| Peak Hour Factor           | 0.92  | 0.95  | 0.92  | 0.92  | 0.95  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 9     | 1919  | 147   | 254   | 1656  | 103   | 114   | 49    | 396   | 188   | 52    | 9     |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 9     | 1919  | 147   | 254   | 1656  | 103   | 114   | 49    | 396   | 188   | 61    | 0     |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right |
| Median Width(ft)           |       | 24    |       |       | 24    |       |       | 30    |       |       | 24    |       |
| Link Offset(ft)            |       | 0     |       |       | 0     |       |       | 0     |       |       | 0     |       |
| Crosswalk Width(ft)        |       | 16    |       |       | 16    |       |       | 16    |       |       | 16    |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |       |       |       |       |       |
| Headway 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  |
| Turning Speed (mph)        | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     |
| Number of Detectors        | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     |       |
| Detector Template          | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  |       |
| Leading Detector (ft)      | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   |       |
| Trailing Detector (ft)     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |       |
| Detector 1 Position(ft)    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |       |
| Detector 1 Size(ft)        | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     |       |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |       |
| Detector 1 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       |
| Detector 2 Position(ft)    |       | 94    |       |       | 94    |       |       | 94    |       |       | 94    |       |
| Detector 2 Size(ft)        |       | 6     |       |       | 6     |       |       | 6     |       |       | 6     |       |
| Detector 2 Type            |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |
| Detector 2 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |
| Turn Type                  | pm+pt | NA    | Perm  | pm+pt | NA    | Perm  | pm+pt | NA    | pm+ov | pm+pt | NA    |       |
| Protected Phases           | 5     | 2     |       | 1     | 6     |       | 3     | 8     | 1     | 7     | 4     |       |
| Permitted Phases           | 2     |       | 2     | 6     |       | 6     | 8     |       | 8     | 4     |       |       |

Lanes, Volumes, Timings  
3: Woodlands Blvd & Founders Pkwy

2025 Total  
PM Peak



| Lane Group            | EBL  | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR |
|-----------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| Detector Phase        | 5    | 2     | 2     | 1     | 6     | 6     | 3     | 8     | 1     | 7     | 4     |     |
| Switch Phase          |      |       |       |       |       |       |       |       |       |       |       |     |
| Minimum Initial (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 |
| Minimum Split (s)     | 10.0 | 20.0  | 20.0  | 10.0  | 20.0  | 20.0  | 9.0   | 20.0  | 10.0  | 9.0   | 20.0  |     |
| Total Split (s)       | 10.0 | 66.0  | 66.0  | 18.0  | 74.0  | 74.0  | 13.0  | 20.0  | 18.0  | 16.0  | 23.0  |     |
| Total Split (%)       | 8.3% | 55.0% | 55.0% | 15.0% | 61.7% | 61.7% | 10.8% | 16.7% | 15.0% | 13.3% | 19.2% |     |
| Maximum Green (s)     | 4.0  | 60.0  | 60.0  | 12.0  | 68.0  | 68.0  | 8.0   | 15.0  | 12.0  | 11.0  | 18.0  |     |
| Yellow Time (s)       | 4.0  | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 3.0   | 3.0   | 4.0   | 3.0   | 3.0   |     |
| All-Red Time (s)      | 2.0  | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   |     |
| Lost Time Adjust (s)  | -2.0 | -3.0  | -1.0  | -3.0  | -3.0  | -1.0  | -2.0  | -2.0  | -2.0  | -2.0  | -2.0  |     |
| Total Lost Time (s)   | 4.0  | 3.0   | 5.0   | 3.0   | 3.0   | 5.0   | 3.0   | 3.0   | 4.0   | 3.0   | 3.0   |     |
| Lead/Lag              | Lead | Lag   | Lag   | Lead  | Lag   | Lag   | Lead  | Lag   | Lead  | Lead  | Lag   |     |
| Lead-Lag Optimize?    | Yes  | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |     |
| 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   |     |
| Recall Mode           | None | C-Max | C-Max | None  | C-Max | C-Max | None  | None  | None  | None  | None  |     |
| Act Effect Green (s)  | 72.2 | 65.5  | 63.5  | 89.6  | 87.1  | 85.1  | 19.6  | 10.5  | 31.5  | 24.4  | 13.0  |     |
| Actuated g/C Ratio    | 0.60 | 0.55  | 0.53  | 0.75  | 0.73  | 0.71  | 0.16  | 0.09  | 0.26  | 0.20  | 0.11  |     |
| v/c Ratio             | 0.04 | 0.99  | 0.16  | 0.68  | 0.64  | 0.09  | 0.23  | 0.30  | 0.85  | 0.64  | 0.16  |     |
| Control Delay         | 6.6  | 46.9  | 1.8   | 39.3  | 11.6  | 1.5   | 39.0  | 55.2  | 50.9  | 52.1  | 41.4  |     |
| Queue Delay           | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |     |
| Total Delay           | 6.6  | 46.9  | 1.8   | 39.3  | 11.6  | 1.5   | 39.0  | 55.2  | 50.9  | 52.1  | 41.4  |     |
| LOS                   | A    | D     | A     | D     | B     | A     | D     | E     | D     | D     | D     |     |
| Approach Delay        |      | 43.5  |       |       | 14.6  |       |       | 48.9  |       |       | 49.4  |     |
| Approach LOS          |      | D     |       |       | B     |       |       | D     |       |       | D     |     |

Intersection Summary

|                                    |   |
|------------------------------------|---|
| Area Type:                         | Other   |
| Cycle Length:                      | 120   |
| Actuated Cycle Length:             | 120   |
| Offset:                            | 37 (31%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green |
| Natural Cycle:                     | 90  |
| Control Type:                      | Actuated-Coordinated  |
| Maximum v/c Ratio:                 | 0.99  |
| Intersection Signal Delay:         | 32.6  |
| Intersection LOS:                  | C   |
| Intersection Capacity Utilization: | 92.5%   |
| ICU Level of Service:              | F   |
| Analysis Period (min):             | 15  |

Splits and Phases: 3: Woodlands Blvd & Founders Pkwy



Lanes, Volumes, Timings  
4: Founders Pkwy & Crowfoot Valley Rd

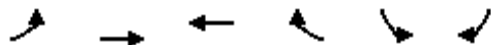
2025 Total  
PM Peak



| Lane Group                 | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |
| Traffic Volume (vph)       | 785   | 1617  | 1217  | 135   | 148   | 580   |
| Future Volume (vph)        | 785   | 1617  | 1217  | 135   | 148   | 580   |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 485   |       |       | 0     | 150   | 0     |
| Storage Lanes              | 2     |       |       | 1     | 2     | 1     |
| Taper Length (ft)          | 100   |       |       |       | 100   |       |
| Lane Util. Factor          | 0.97  | 0.95  | 0.95  | 1.00  | 0.97  | 0.91  |
| Frt                        |       |       |       | 0.850 | 0.902 | 0.850 |
| Flt Protected              | 0.950 |       |       |       | 0.983 |       |
| Satd. Flow (prot)          | 3433  | 3539  | 3539  | 1583  | 3204  | 1441  |
| Flt Permitted              | 0.950 |       |       |       | 0.983 |       |
| Satd. Flow (perm)          | 3433  | 3539  | 3539  | 1583  | 3204  | 1441  |
| Right Turn on Red          |       |       |       | Yes   |       | Yes   |
| Satd. Flow (RTOR)          |       |       |       | 123   | 306   | 305   |
| Link Speed (mph)           |       | 50    | 50    |       | 35    |       |
| Link Distance (ft)         |       | 641   | 617   |       | 595   |       |
| Travel Time (s)            |       | 8.7   | 8.4   |       | 11.6  |       |
| Peak Hour Factor           | 0.92  | 0.92  | 0.95  | 0.92  | 0.92  | 0.95  |
| Adj. Flow (vph)            | 853   | 1758  | 1281  | 147   | 161   | 611   |
| Shared Lane Traffic (%)    |       |       |       |       |       | 50%   |
| Lane Group Flow (vph)      | 853   | 1758  | 1281  | 147   | 467   | 305   |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Left  | Right | Left  | Right |
| Median Width(ft)           |       | 24    | 24    |       | 24    |       |
| Link Offset(ft)            |       | 0     | 0     |       | 0     |       |
| Crosswalk Width(ft)        |       | 16    | 16    |       | 16    |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |
| Headway Factor             | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| Turning Speed (mph)        | 15    |       |       | 9     | 15    | 9     |
| Number of Detectors        | 1     | 2     | 2     | 1     | 1     | 1     |
| Detector Template          | Left  | Thru  | Thru  | Right | Left  | Right |
| Leading Detector (ft)      | 20    | 100   | 100   | 20    | 20    | 20    |
| Trailing Detector (ft)     | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Position(ft)    | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Size(ft)        | 20    | 6     | 6     | 20    | 20    | 20    |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 2 Position(ft)    |       | 94    | 94    |       |       |       |
| Detector 2 Size(ft)        |       | 6     | 6     |       |       |       |
| Detector 2 Type            |       | Cl+Ex | Cl+Ex |       |       |       |
| Detector 2 Channel         |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   | 0.0   |       |       |       |
| Turn Type                  | Prot  | NA    | NA    | Perm  | Prot  | Free  |
| Protected Phases           | 5     | 2     | 6     |       | 4     |       |
| Permitted Phases           |       |       |       | 6     |       | Free  |

Lanes, Volumes, Timings  
4: Founders Pkwy & Crowfoot Valley Rd

2025 Total  
PM Peak

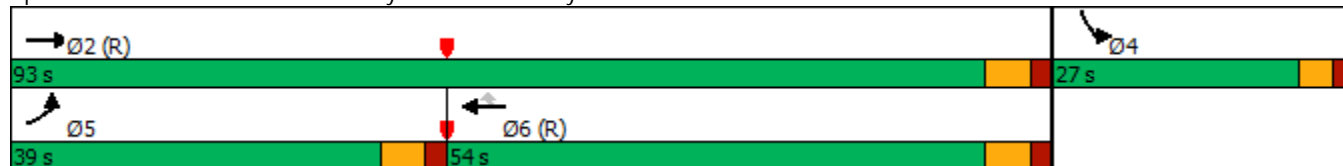


| Lane Group            | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   |
|-----------------------|-------|-------|-------|-------|-------|-------|
| Detector Phase        | 5     | 2     | 6     | 6     | 4     |       |
| Switch Phase          |       |       |       |       |       |       |
| Minimum Initial (s)   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       |
| Minimum Split (s)     | 10.0  | 10.5  | 10.0  | 10.0  | 10.0  |       |
| Total Split (s)       | 39.0  | 93.0  | 54.0  | 54.0  | 27.0  |       |
| Total Split (%)       | 32.5% | 77.5% | 45.0% | 45.0% | 22.5% |       |
| Maximum Green (s)     | 33.0  | 87.0  | 48.0  | 48.0  | 22.0  |       |
| Yellow Time (s)       | 4.0   | 4.0   | 4.0   | 4.0   | 3.0   |       |
| All-Red Time (s)      | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   |       |
| Lost Time Adjust (s)  | -2.0  | -2.0  | -2.0  | -2.0  | -2.0  |       |
| Total Lost Time (s)   | 4.0   | 4.0   | 4.0   | 4.0   | 3.0   |       |
| Lead/Lag              | Lead  |       | Lag   | Lag   |       |       |
| Lead-Lag Optimize?    | Yes   |       | Yes   | Yes   |       |       |
| Vehicle Extension (s) | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |       |
| Recall Mode           | None  | C-Max | C-Max | C-Max | None  |       |
| Act Effect Green (s)  | 36.3  | 99.0  | 58.7  | 58.7  | 14.0  | 120.0 |
| Actuated g/C Ratio    | 0.30  | 0.82  | 0.49  | 0.49  | 0.12  | 1.00  |
| v/c Ratio             | 0.82  | 0.60  | 0.74  | 0.18  | 0.73  | 0.21  |
| Control Delay         | 46.1  | 5.2   | 29.3  | 5.8   | 23.6  | 0.3   |
| Queue Delay           | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay           | 46.1  | 5.2   | 29.3  | 5.8   | 23.6  | 0.3   |
| LOS                   | D     | A     | C     | A     | C     | A     |
| Approach Delay        |       | 18.5  | 26.9  |       | 14.4  |       |
| Approach LOS          |       | B     | C     |       | B     |       |

Intersection Summary

|                                   |   |
|-----------------------------------|---|
| Area Type:                        | Other   |
| Cycle Length:                     | 120   |
| Actuated Cycle Length:            | 120   |
| Offset:                           | 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green |
| Natural Cycle:                    | 60  |
| Control Type:                     | Actuated-Coordinated  |
| Maximum v/c Ratio:                | 0.82  |
| Intersection Signal Delay:        | 20.4  |
| Intersection LOS:                 | C   |
| Intersection Capacity Utilization | 76.4%   |
| ICU Level of Service              | D   |
| Analysis Period (min)             | 15  |

Splits and Phases: 4: Founders Pkwy & Crowfoot Valley Rd



HCM 6th Roundabout  
 5: Internal Collector Roadway & Connector Collector Roadway

2025 Total  
 PM Peak

| Intersection                |       |       |       |
|-----------------------------|-------|-------|-------|
| Intersection Delay, s/veh   | 4.6   |       |       |
| Intersection LOS            | A     |       |       |
| Approach                    | EB    | NB    | SB    |
| Entry Lanes                 | 1     | 1     | 1     |
| Conflicting Circle Lanes    | 1     | 1     | 1     |
| Adj Approach Flow, veh/h    | 299   | 204   | 148   |
| Demand Flow Rate, veh/h     | 305   | 208   | 151   |
| Vehicles Circulating, veh/h | 107   | 63    | 144   |
| Vehicles Exiting, veh/h     | 188   | 349   | 127   |
| Ped Vol Crossing Leg, #/h   | 0     | 0     | 0     |
| Ped Cap Adj                 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh       | 5.2   | 4.2   | 4.2   |
| Approach LOS                | A     | A     | A     |
| Lane                        | Left  | Left  | Left  |
| Designated Moves            | LR    | LT    | TR    |
| Assumed Moves               | LR    | LT    | TR    |
| RT Channelized              |       |       |       |
| Lane Util                   | 1.000 | 1.000 | 1.000 |
| Follow-Up Headway, s        | 2.609 | 2.609 | 2.609 |
| Critical Headway, s         | 4.976 | 4.976 | 4.976 |
| Entry Flow, veh/h           | 305   | 208   | 151   |
| Cap Entry Lane, veh/h       | 1237  | 1294  | 1191  |
| Entry HV Adj Factor         | 0.980 | 0.980 | 0.979 |
| Flow Entry, veh/h           | 299   | 204   | 148   |
| Cap Entry, veh/h            | 1213  | 1268  | 1167  |
| V/C Ratio                   | 0.247 | 0.161 | 0.127 |
| Control Delay, s/veh        | 5.2   | 4.2   | 4.2   |
| LOS                         | A     | A     | A     |
| 95th %tile Queue, veh       | 1     | 1     | 0     |

Lanes, Volumes, Timings  
6: Founder Pkwy & Connector Collector Roadway

2025 Total  
PM Peak



| Lane Group                 | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |
| Traffic Volume (vph)       | 295   | 1460  | 1170  | 113   | 100   | 192   |
| Future Volume (vph)        | 295   | 1460  | 1170  | 113   | 100   | 192   |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 400   |       |       | 400   | 200   | 0     |
| Storage Lanes              | 1     |       |       | 1     | 0     | 1     |
| Taper Length (ft)          | 100   |       |       |       | 100   |       |
| Lane Util. Factor          | 1.00  | 0.95  | 0.95  | 1.00  | 1.00  | 1.00  |
| Frt                        |       |       |       | 0.850 |       | 0.850 |
| Flt Protected              | 0.950 |       |       |       | 0.950 |       |
| Satd. Flow (prot)          | 1770  | 3539  | 3539  | 1583  | 1770  | 1583  |
| Flt Permitted              | 0.159 |       |       |       | 0.950 |       |
| Satd. Flow (perm)          | 296   | 3539  | 3539  | 1583  | 1770  | 1583  |
| Right Turn on Red          |       |       |       | Yes   |       | Yes   |
| Satd. Flow (RTOR)          |       |       |       | 123   |       | 205   |
| Link Speed (mph)           |       | 50    | 50    |       | 35    |       |
| Link Distance (ft)         |       | 483   | 546   |       | 622   |       |
| Travel Time (s)            |       | 6.6   | 7.4   |       | 12.1  |       |
| Peak Hour Factor           | 0.92  | 0.92  | 0.95  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 321   | 1587  | 1232  | 123   | 109   | 209   |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 321   | 1587  | 1232  | 123   | 109   | 209   |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Left  | Right | Left  | Right |
| Median Width(ft)           |       | 12    | 12    |       | 12    |       |
| Link Offset(ft)            |       | 0     | 0     |       | 0     |       |
| Crosswalk Width(ft)        |       | 16    | 16    |       | 16    |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |
| Headway Factor             | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| Turning Speed (mph)        | 15    |       |       | 9     | 15    | 9     |
| Number of Detectors        | 1     | 2     | 2     | 1     | 1     | 1     |
| Detector Template          | Left  | Thru  | Thru  | Right | Left  | Right |
| Leading Detector (ft)      | 20    | 100   | 100   | 20    | 20    | 20    |
| Trailing Detector (ft)     | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Position(ft)    | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Size(ft)        | 20    | 6     | 6     | 20    | 20    | 20    |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 2 Position(ft)    |       | 94    | 94    |       |       |       |
| Detector 2 Size(ft)        |       | 6     | 6     |       |       |       |
| Detector 2 Type            |       | Cl+Ex | Cl+Ex |       |       |       |
| Detector 2 Channel         |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   | 0.0   |       |       |       |
| Turn Type                  | pm+pt | NA    | NA    | Perm  | Perm  | Perm  |
| Protected Phases           | 5     | 2     | 6     |       |       |       |
| Permitted Phases           | 2     |       |       | 6     | 4     | 7     |



Lanes, Volumes, Timings  
6: Founder Pkwy & Connector Collector Roadway

2025 Total  
PM Peak

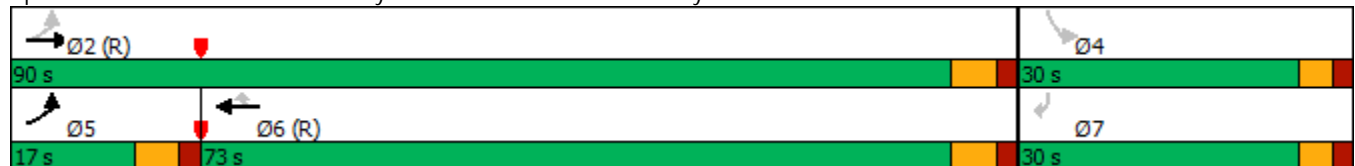


| Lane Group            | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   |
|-----------------------|-------|-------|-------|-------|-------|-------|
| Detector Phase        | 5     | 2     | 6     | 6     | 4     | 7     |
| Switch Phase          |       |       |       |       |       |       |
| Minimum Initial (s)   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |
| Minimum Split (s)     | 10.0  | 20.0  | 20.0  | 20.0  | 20.0  | 9.0   |
| Total Split (s)       | 17.0  | 90.0  | 73.0  | 73.0  | 30.0  | 30.0  |
| Total Split (%)       | 14.2% | 75.0% | 60.8% | 60.8% | 25.0% | 25.0% |
| Maximum Green (s)     | 11.0  | 84.0  | 67.0  | 67.0  | 25.0  | 25.0  |
| Yellow Time (s)       | 4.0   | 4.0   | 4.0   | 4.0   | 3.0   | 3.0   |
| All-Red Time (s)      | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   |
| Lost Time Adjust (s)  | -2.0  | -1.0  | -1.0  | -1.0  | -2.0  | -1.0  |
| Total Lost Time (s)   | 4.0   | 5.0   | 5.0   | 5.0   | 3.0   | 4.0   |
| Lead/Lag              | Lead  |       | Lag   | Lag   |       |       |
| Lead-Lag Optimize?    | Yes   |       | Yes   | Yes   |       |       |
| Vehicle Extension (s) | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode           | None  | C-Max | C-Max | C-Max | None  | None  |
| Act Effect Green (s)  | 98.3  | 97.3  | 75.3  | 75.3  | 14.7  | 13.7  |
| Actuated g/C Ratio    | 0.82  | 0.81  | 0.63  | 0.63  | 0.12  | 0.11  |
| v/c Ratio             | 0.69  | 0.55  | 0.56  | 0.12  | 0.50  | 0.58  |
| Control Delay         | 18.1  | 5.1   | 15.0  | 2.3   | 56.6  | 13.5  |
| Queue Delay           | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay           | 18.1  | 5.1   | 15.0  | 2.3   | 56.6  | 13.5  |
| LOS                   | B     | A     | B     | A     | E     | B     |
| Approach Delay        |       | 7.3   | 13.9  |       | 28.3  |       |
| Approach LOS          |       | A     | B     |       | C     |       |

Intersection Summary

Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.69  
 Intersection Signal Delay: 11.6  
 Intersection LOS: B  
 Intersection Capacity Utilization 65.1%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 6: Founder Pkwy & Connector Collector Roadway



HCM 6th Roundabout  
7: Castle Oaks Drive & Internal Community Collector

2025 Total  
PM Peak

| Intersection                |       |       |       |
|-----------------------------|-------|-------|-------|
| Intersection Delay, s/veh   | 4.2   |       |       |
| Intersection LOS            | A     |       |       |
| Approach                    | EB    | NB    | SB    |
| Entry Lanes                 | 1     | 1     | 1     |
| Conflicting Circle Lanes    | 1     | 1     | 1     |
| Adj Approach Flow, veh/h    | 120   | 227   | 209   |
| Demand Flow Rate, veh/h     | 122   | 231   | 213   |
| Vehicles Circulating, veh/h | 144   | 100   | 10    |
| Vehicles Exiting, veh/h     | 79    | 166   | 321   |
| Ped Vol Crossing Leg, #/h   | 0     | 0     | 0     |
| Ped Cap Adj                 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh       | 3.9   | 4.5   | 4.0   |
| Approach LOS                | A     | A     | A     |
| Lane                        | Left  | Left  | Left  |
| Designated Moves            | LR    | LT    | TR    |
| Assumed Moves               | LR    | LT    | TR    |
| RT Channelized              |       |       |       |
| Lane Util                   | 1.000 | 1.000 | 1.000 |
| Follow-Up Headway, s        | 2.609 | 2.609 | 2.609 |
| Critical Headway, s         | 4.976 | 4.976 | 4.976 |
| Entry Flow, veh/h           | 122   | 231   | 213   |
| Cap Entry Lane, veh/h       | 1191  | 1246  | 1366  |
| Entry HV Adj Factor         | 0.984 | 0.981 | 0.982 |
| Flow Entry, veh/h           | 120   | 227   | 209   |
| Cap Entry, veh/h            | 1172  | 1223  | 1341  |
| V/C Ratio                   | 0.102 | 0.185 | 0.156 |
| Control Delay, s/veh        | 3.9   | 4.5   | 4.0   |
| LOS                         | A     | A     | A     |
| 95th %tile Queue, veh       | 0     | 1     | 1     |

Lanes, Volumes, Timings  
8: Ridge Rd/Founders Pkwy & 5th St/SH 86

2025 Total  
PM Peak



| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |       |       |       |       |       |       |
| Traffic Volume (vph)       | 166   | 450   | 400   | 115   | 255   | 399   | 215   | 352   | 65    | 582   | 479   | 139   |
| Future Volume (vph)        | 166   | 450   | 400   | 115   | 255   | 399   | 215   | 352   | 65    | 582   | 479   | 139   |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 300   |       | 425   | 250   |       | 0     | 250   |       | 0     | 600   |       | 500   |
| Storage Lanes              | 1     |       | 1     | 1     |       | 1     | 1     |       | 1     | 1     |       | 1     |
| Taper Length (ft)          | 100   |       |       | 100   |       |       | 100   |       |       | 100   |       |       |
| Lane Util. Factor          | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 0.95  | 1.00  |
| Frt                        |       |       | 0.850 |       |       | 0.850 |       |       | 0.850 |       |       | 0.850 |
| Flt Protected              | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       |
| Satd. Flow (prot)          | 1770  | 1863  | 1583  | 1770  | 1863  | 1583  | 1770  | 1863  | 1583  | 1770  | 3539  | 1583  |
| Flt Permitted              | 0.397 |       |       | 0.119 |       |       | 0.459 |       |       | 0.132 |       |       |
| Satd. Flow (perm)          | 740   | 1863  | 1583  | 222   | 1863  | 1583  | 855   | 1863  | 1583  | 246   | 3539  | 1583  |
| Right Turn on Red          |       |       | Yes   |       |       | Yes   |       |       | Yes   |       |       | Yes   |
| Satd. Flow (RTOR)          |       |       | 435   |       |       | 434   |       |       | 214   |       |       | 214   |
| Link Speed (mph)           |       | 35    |       |       | 50    |       |       | 35    |       |       |       | 50    |
| Link Distance (ft)         |       | 450   |       |       | 848   |       |       | 659   |       |       |       | 865   |
| Travel Time (s)            |       | 8.8   |       |       | 11.6  |       |       | 12.8  |       |       |       | 11.8  |
| Peak Hour Factor           | 0.92  | 0.92  | 0.92  | 0.92  | 0.95  | 0.92  | 0.92  | 0.92  | 0.92  | 0.95  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 180   | 489   | 435   | 125   | 268   | 434   | 234   | 383   | 71    | 613   | 521   | 151   |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 180   | 489   | 435   | 125   | 268   | 434   | 234   | 383   | 71    | 613   | 521   | 151   |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right |
| Median Width(ft)           |       | 18    |       |       | 18    |       |       | 24    |       |       |       | 24    |
| Link Offset(ft)            |       | 0     |       |       | 0     |       |       | 0     |       |       |       | 0     |
| Crosswalk Width(ft)        |       | 16    |       |       | 16    |       |       | 16    |       |       |       | 16    |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |       |       |       |       |       |
| Headway 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  |
| Turning Speed (mph)        | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     |
| Number of Detectors        | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     | 1     |
| Detector Template          | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  | Right |
| Leading Detector (ft)      | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   | 20    |
| Trailing Detector (ft)     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Position(ft)    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Size(ft)        | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     | 20    |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 2 Position(ft)    |       | 94    |       |       | 94    |       |       | 94    |       |       |       | 94    |
| Detector 2 Size(ft)        |       | 6     |       |       | 6     |       |       | 6     |       |       |       | 6     |
| Detector 2 Type            |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |       |       | Cl+Ex |
| Detector 2 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |       |       | 0.0   |
| Turn Type                  | pm+pt | NA    | Free  | pm+pt | NA    | Free  | pm+pt | NA    | Free  | pm+pt | NA    | Free  |
| Protected Phases           | 5     | 2     |       | 1     | 6     |       | 3     | 8     |       | 7     | 4     |       |
| Permitted Phases           | 2     |       | Free  | 6     |       | Free  | 8     |       | Free  | 4     |       | Free  |

Lanes, Volumes, Timings  
 8: Ridge Rd/Founders Pkwy & 5th St/SH 86

2025 Total  
 PM Peak

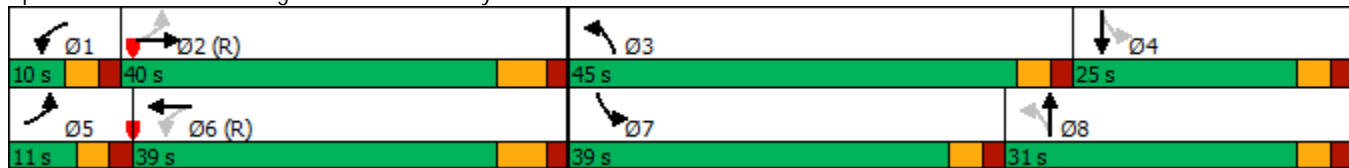


| Lane Group            | EBL  | EBT   | EBR   | WBL  | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|-----------------------|------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| Detector Phase        | 5    | 2     |       | 1    | 6     |       | 3     | 8     |       | 7     | 4     |       |
| Switch Phase          |      |       |       |      |       |       |       |       |       |       |       |       |
| Minimum Initial (s)   | 4.0  | 4.0   |       | 4.0  | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |       |
| Minimum Split (s)     | 9.0  | 20.0  |       | 9.0  | 20.0  |       | 9.0   | 20.0  |       | 9.0   | 20.0  |       |
| Total Split (s)       | 11.0 | 40.0  |       | 10.0 | 39.0  |       | 45.0  | 31.0  |       | 39.0  | 25.0  |       |
| Total Split (%)       | 9.2% | 33.3% |       | 8.3% | 32.5% |       | 37.5% | 25.8% |       | 32.5% | 20.8% |       |
| Maximum Green (s)     | 6.0  | 33.5  |       | 5.0  | 32.5  |       | 40.0  | 26.0  |       | 34.0  | 20.0  |       |
| Yellow Time (s)       | 3.0  | 4.5   |       | 3.0  | 4.5   |       | 3.0   | 3.0   |       | 3.0   | 3.0   |       |
| All-Red Time (s)      | 2.0  | 2.0   |       | 2.0  | 2.0   |       | 2.0   | 2.0   |       | 2.0   | 2.0   |       |
| Lost Time Adjust (s)  | -1.0 | -2.0  |       | -1.0 | -2.0  |       | -1.0  | -2.0  |       | -2.0  | -1.0  |       |
| Total Lost Time (s)   | 4.0  | 4.5   |       | 4.0  | 4.5   |       | 4.0   | 3.0   |       | 3.0   | 4.0   |       |
| Lead/Lag              | Lead | Lag   |       | Lead | Lag   |       | Lead  | Lag   |       | Lead  | Lag   |       |
| Lead-Lag Optimize?    | Yes  | Yes   |       | Yes  | Yes   |       | Yes   | Yes   |       | Yes   | Yes   |       |
| Vehicle Extension (s) | 3.0  | 3.0   |       | 3.0  | 3.0   |       | 3.0   | 3.0   |       | 3.0   | 3.0   |       |
| Recall Mode           | None | C-Max |       | None | C-Max |       | None  | None  |       | None  | None  |       |
| Act Effect Green (s)  | 43.6 | 35.5  | 120.0 | 41.6 | 34.5  | 120.0 | 44.3  | 27.4  | 120.0 | 66.4  | 43.4  | 120.0 |
| Actuated g/C Ratio    | 0.36 | 0.30  | 1.00  | 0.35 | 0.29  | 1.00  | 0.37  | 0.23  | 1.00  | 0.55  | 0.36  | 1.00  |
| v/c Ratio             | 0.54 | 0.89  | 0.27  | 0.77 | 0.50  | 0.27  | 0.52  | 0.90  | 0.04  | 1.03  | 0.41  | 0.10  |
| Control Delay         | 33.4 | 59.9  | 0.4   | 58.2 | 39.5  | 0.4   | 20.9  | 70.4  | 0.0   | 79.0  | 30.7  | 0.1   |
| Queue Delay           | 0.0  | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay           | 33.4 | 59.9  | 0.4   | 58.2 | 39.5  | 0.4   | 20.9  | 70.4  | 0.0   | 79.0  | 30.7  | 0.1   |
| LOS                   | C    | E     | A     | E    | D     | A     | C     | E     | A     | E     | C     | A     |
| Approach Delay        |      | 32.1  |       |      | 21.8  |       |       | 46.3  |       |       | 50.2  |       |
| Approach LOS          |      | C     |       |      | C     |       |       | D     |       |       | D     |       |

Intersection Summary

|                                   |   |
|-----------------------------------|---|
| Area Type:                        | Other   |
| Cycle Length:                     | 120   |
| Actuated Cycle Length:            | 120   |
| Offset:                           | 12 (10%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green |
| Natural Cycle:                    | 90  |
| Control Type:                     | Actuated-Coordinated  |
| Maximum v/c Ratio:                | 1.03  |
| Intersection Signal Delay:        | 38.4  |
| Intersection LOS:                 | D   |
| Intersection Capacity Utilization | 94.6%   |
| ICU Level of Service              | F   |
| Analysis Period (min)             | 15  |

Splits and Phases: 8: Ridge Rd/Founders Pkwy & 5th St/SH 86



HCM 6th TWSC  
 9: Connector Collector Roadway & Commercial Access

2025 Total  
 PM Peak

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.7  |      |      |      |      |      |
| Movement                 | WBL  | WBR  | NBT  | NBR  | SBL  | SBT  |
| Lane Configurations      | ↘    | ↗    | ↑    | ↗    | ↘    | ↑    |
| Traffic Vol, veh/h       | 129  | 11   | 264  | 144  | 7    | 163  |
| Future Vol, veh/h        | 129  | 11   | 264  | 144  | 7    | 163  |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 100  | 0    | -    | 190  | 220  | -    |
| Veh in Median Storage, # | 0    | -    | 0    | -    | -    | 0    |
| Grade, %                 | 0    | -    | 0    | -    | -    | 0    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 140  | 12   | 287  | 157  | 8    | 177  |

| Major/Minor          | Minor1 | Major1 | Major2 |   |       |
|----------------------|--------|--------|--------|---|-------|
| Conflicting Flow All | 480    | 287    | 0      | 0 | 444   |
| Stage 1              | 287    | -      | -      | - | -     |
| Stage 2              | 193    | -      | -      | - | -     |
| Critical Hdwy        | 6.42   | 6.22   | -      | - | 4.12  |
| Critical Hdwy Stg 1  | 5.42   | -      | -      | - | -     |
| Critical Hdwy Stg 2  | 5.42   | -      | -      | - | -     |
| Follow-up Hdwy       | 3.518  | 3.318  | -      | - | 2.218 |
| Pot Cap-1 Maneuver   | 545    | 752    | -      | - | 1116  |
| Stage 1              | 762    | -      | -      | - | -     |
| Stage 2              | 840    | -      | -      | - | -     |
| Platoon blocked, %   |        |        | -      | - | -     |
| Mov Cap-1 Maneuver   | 541    | 752    | -      | - | 1116  |
| Mov Cap-2 Maneuver   | 541    | -      | -      | - | -     |
| Stage 1              | 762    | -      | -      | - | -     |
| Stage 2              | 834    | -      | -      | - | -     |

| Approach             | WB   | NB | SB  |
|----------------------|------|----|-----|
| HCM Control Delay, s | 13.7 | 0  | 0.3 |
| HCM LOS              | B    |    |     |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | WBLn2 | SBL   | SBT   |
|-----------------------|-----|----------|-------|-------|-------|
| Capacity (veh/h)      | -   | -        | 541   | 752   | 1116  |
| HCM Lane V/C Ratio    | -   | -        | 0.259 | 0.016 | 0.007 |
| HCM Control Delay (s) | -   | -        | 14    | 9.9   | 8.2   |
| HCM Lane LOS          | -   | -        | B     | A     | A     |
| HCM 95th %tile Q(veh) | -   | -        | 1     | 0     | 0     |

HCM 6th TWSC  
 10: Internal Collector Roadway & Site Access #10

2025 Total  
 PM Peak

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.4  |      |      |      |      |      |
| Movement                 | WBL  | WBR  | NBT  | NBR  | SBL  | SBT  |
| Lane Configurations      |      |      |      |      |      |      |
| Traffic Vol, veh/h       | 0    | 9    | 179  | 0    | 15   | 300  |
| Future Vol, veh/h        | 0    | 9    | 179  | 0    | 15   | 300  |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | 0    | -    | -    | 0    |
| Grade, %                 | 0    | -    | 0    | -    | -    | 0    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 10   | 195  | 0    | 16   | 326  |

| Major/Minor          | Minor1 | Major1 | Major2 |   |       |
|----------------------|--------|--------|--------|---|-------|
| Conflicting Flow All | 553    | 195    | 0      | 0 | 195   |
| Stage 1              | 195    | -      | -      | - | -     |
| Stage 2              | 358    | -      | -      | - | -     |
| Critical Hdwy        | 6.42   | 6.22   | -      | - | 4.12  |
| Critical Hdwy Stg 1  | 5.42   | -      | -      | - | -     |
| Critical Hdwy Stg 2  | 5.42   | -      | -      | - | -     |
| Follow-up Hdwy       | 3.518  | 3.318  | -      | - | 2.218 |
| Pot Cap-1 Maneuver   | 494    | 846    | -      | - | 1378  |
| Stage 1              | 838    | -      | -      | - | -     |
| Stage 2              | 707    | -      | -      | - | -     |
| Platoon blocked, %   |        |        | -      | - | -     |
| Mov Cap-1 Maneuver   | 487    | 846    | -      | - | 1378  |
| Mov Cap-2 Maneuver   | 487    | -      | -      | - | -     |
| Stage 1              | 838    | -      | -      | - | -     |
| Stage 2              | 697    | -      | -      | - | -     |

| Approach             | WB  | NB | SB  |
|----------------------|-----|----|-----|
| HCM Control Delay, s | 9.3 | 0  | 0.4 |
| HCM LOS              | A   |    |     |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL   | SBT   |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h)      | -   | -        | 846   | 1378  |
| HCM Lane V/C Ratio    | -   | -        | 0.012 | 0.012 |
| HCM Control Delay (s) | -   | -        | 9.3   | 7.6   |
| HCM Lane LOS          | -   | -        | A     | A     |
| HCM 95th %tile Q(veh) | -   | -        | 0     | 0     |

HCM 6th TWSC  
 11: Internal Collector Roadway & Site Access #11

2025 Total  
 PM Peak

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 3.1  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      | ↕    | ↕    |      | ↕    | ↕    |      |
| Traffic Vol, veh/h       | 7    | 9    | 98   | 0    | 4    | 10   | 47   | 162  | 1    | 15   | 275  | 10   |
| Future Vol, veh/h        | 7    | 9    | 98   | 0    | 4    | 10   | 47   | 162  | 1    | 15   | 275  | 10   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | 0    | -    | -    | 0    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 8    | 10   | 107  | 0    | 4    | 11   | 51   | 176  | 1    | 16   | 299  | 11   |

| Major/Minor          | Minor2 |       | Minor1 |       | Major1 |       |       | Major2 |   |       |   |   |
|----------------------|--------|-------|--------|-------|--------|-------|-------|--------|---|-------|---|---|
| Conflicting Flow All | 623    | 616   | 305    | 674   | 621    | 177   | 310   | 0      | 0 | 177   | 0 | 0 |
| Stage 1              | 337    | 337   | -      | 279   | 279    | -     | -     | -      | - | -     | - | - |
| Stage 2              | 286    | 279   | -      | 395   | 342    | -     | -     | -      | - | -     | - | - |
| Critical Hdwy        | 7.12   | 6.52  | 6.22   | 7.12  | 6.52   | 6.22  | 4.12  | -      | - | 4.12  | - | - |
| Critical Hdwy Stg 1  | 6.12   | 5.52  | -      | 6.12  | 5.52   | -     | -     | -      | - | -     | - | - |
| Critical Hdwy Stg 2  | 6.12   | 5.52  | -      | 6.12  | 5.52   | -     | -     | -      | - | -     | - | - |
| Follow-up Hdwy       | 3.518  | 4.018 | 3.318  | 3.518 | 4.018  | 3.318 | 2.218 | -      | - | 2.218 | - | - |
| Pot Cap-1 Maneuver   | 398    | 406   | 735    | 368   | 403    | 866   | 1250  | -      | - | 1399  | - | - |
| Stage 1              | 677    | 641   | -      | 728   | 680    | -     | -     | -      | - | -     | - | - |
| Stage 2              | 721    | 680   | -      | 630   | 638    | -     | -     | -      | - | -     | - | - |
| Platoon blocked, %   |        |       |        |       |        |       |       | -      | - | -     | - | - |
| Mov Cap-1 Maneuver   | 374    | 385   | 735    | 296   | 382    | 866   | 1250  | -      | - | 1399  | - | - |
| Mov Cap-2 Maneuver   | 374    | 385   | -      | 296   | 382    | -     | -     | -      | - | -     | - | - |
| Stage 1              | 649    | 634   | -      | 698   | 652    | -     | -     | -      | - | -     | - | - |
| Stage 2              | 678    | 652   | -      | 524   | 631    | -     | -     | -      | - | -     | - | - |

| Approach             | EB   |  | WB   |  | NB  |  |  | SB  |  |  |
|----------------------|------|--|------|--|-----|--|--|-----|--|--|
| HCM Control Delay, s | 11.8 |  | 10.8 |  | 1.8 |  |  | 0.4 |  |  |
| HCM LOS              | B    |  | B    |  |     |  |  |     |  |  |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1WBLn1 | SBL   | SBT   | SBR |   |
|-----------------------|-------|-----|-----|------------|-------|-------|-----|---|
| Capacity (veh/h)      | 1250  | -   | -   | 650        | 636   | 1399  | -   | - |
| HCM Lane V/C Ratio    | 0.041 | -   | -   | 0.191      | 0.024 | 0.012 | -   | - |
| HCM Control Delay (s) | 8     | -   | -   | 11.8       | 10.8  | 7.6   | -   | - |
| HCM Lane LOS          | A     | -   | -   | B          | B     | A     | -   | - |
| HCM 95th %tile Q(veh) | 0.1   | -   | -   | 0.7        | 0.1   | 0     | -   | - |

HCM 6th TWSC  
 12: Internal Collector Roadway & Site Access #12

2025 Total  
 PM Peak

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 1.3  |      |      |      |      |      |
| Movement                 | WBL  | WBR  | NBT  | NBR  | SBL  | SBT  |
| Lane Configurations      |      |      |      |      |      |      |
| Traffic Vol, veh/h       | 1    | 32   | 178  | 1    | 54   | 299  |
| Future Vol, veh/h        | 1    | 32   | 178  | 1    | 54   | 299  |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | 0    | -    | -    | 0    |
| Grade, %                 | 0    | -    | 0    | -    | -    | 0    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 1    | 35   | 193  | 1    | 59   | 325  |

| Major/Minor          | Minor1 | Major1 | Major2 |   |       |
|----------------------|--------|--------|--------|---|-------|
| Conflicting Flow All | 637    | 194    | 0      | 0 | 194   |
| Stage 1              | 194    | -      | -      | - | -     |
| Stage 2              | 443    | -      | -      | - | -     |
| Critical Hdwy        | 6.42   | 6.22   | -      | - | 4.12  |
| Critical Hdwy Stg 1  | 5.42   | -      | -      | - | -     |
| Critical Hdwy Stg 2  | 5.42   | -      | -      | - | -     |
| Follow-up Hdwy       | 3.518  | 3.318  | -      | - | 2.218 |
| Pot Cap-1 Maneuver   | 441    | 847    | -      | - | 1379  |
| Stage 1              | 839    | -      | -      | - | -     |
| Stage 2              | 647    | -      | -      | - | -     |
| Platoon blocked, %   |        |        | -      | - | -     |
| Mov Cap-1 Maneuver   | 422    | 847    | -      | - | 1379  |
| Mov Cap-2 Maneuver   | 422    | -      | -      | - | -     |
| Stage 1              | 839    | -      | -      | - | -     |
| Stage 2              | 619    | -      | -      | - | -     |

| Approach             | WB  | NB | SB  |
|----------------------|-----|----|-----|
| HCM Control Delay, s | 9.6 | 0  | 1.2 |
| HCM LOS              | A   |    |     |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL   | SBT   |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h)      | -   | -        | 822   | 1379  |
| HCM Lane V/C Ratio    | -   | -        | 0.044 | 0.043 |
| HCM Control Delay (s) | -   | -        | 9.6   | 7.7   |
| HCM Lane LOS          | -   | -        | A     | A     |
| HCM 95th %tile Q(veh) | -   | -        | 0.1   | 0.1   |



HCM 6th TWSC  
 13: Internal Collector Roadway & Site Access #13

2025 Total  
 PM Peak

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.1  |      |      |      |      |      |
| Movement                 | EBL  | EBT  | WBT  | WBR  | SBL  | SBR  |
| Lane Configurations      |      |      |      |      |      |      |
| Traffic Vol, veh/h       | 73   | 227  | 136  | 2    | 2    | 43   |
| Future Vol, veh/h        | 73   | 227  | 136  | 2    | 2    | 43   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | -    | 0    | 0    | -    | 0    | -    |
| Grade, %                 | -    | 0    | 0    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 79   | 247  | 148  | 2    | 2    | 47   |

| Major/Minor          | Major1 | Major2 | Minor2 |   |             |
|----------------------|--------|--------|--------|---|-------------|
| Conflicting Flow All | 150    | 0      | -      | 0 | 554 149     |
| Stage 1              | -      | -      | -      | - | 149 -       |
| Stage 2              | -      | -      | -      | - | 405 -       |
| Critical Hdwy        | 4.12   | -      | -      | - | 6.42 6.22   |
| Critical Hdwy Stg 1  | -      | -      | -      | - | 5.42 -      |
| Critical Hdwy Stg 2  | -      | -      | -      | - | 5.42 -      |
| Follow-up Hdwy       | 2.218  | -      | -      | - | 3.518 3.318 |
| Pot Cap-1 Maneuver   | 1431   | -      | -      | - | 493 898     |
| Stage 1              | -      | -      | -      | - | 879 -       |
| Stage 2              | -      | -      | -      | - | 673 -       |
| Platoon blocked, %   |        | -      | -      | - |             |
| Mov Cap-1 Maneuver   | 1431   | -      | -      | - | 466 898     |
| Mov Cap-2 Maneuver   | -      | -      | -      | - | 466 -       |
| Stage 1              | -      | -      | -      | - | 831 -       |
| Stage 2              | -      | -      | -      | - | 673 -       |

| Approach             | EB  | WB | SB  |
|----------------------|-----|----|-----|
| HCM Control Delay, s | 1.9 | 0  | 9.4 |
| HCM LOS              |     |    | A   |

| Minor Lane/Major Mvmt | EBL   | EBT | WBT | WBR | SBLn1 |
|-----------------------|-------|-----|-----|-----|-------|
| Capacity (veh/h)      | 1431  | -   | -   | -   | 862   |
| HCM Lane V/C Ratio    | 0.055 | -   | -   | -   | 0.057 |
| HCM Control Delay (s) | 7.7   | -   | -   | -   | 9.4   |
| HCM Lane LOS          | A     | -   | -   | -   | A     |
| HCM 95th %tile Q(veh) | 0.2   | -   | -   | -   | 0.2   |

HCM 6th TWSC  
 14: Site Access #14 & Internal Collector Roadway

2025 Total  
 PM Peak

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 1.2  |      |      |      |      |      |
| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
| Lane Configurations      | ↑    | ↑    |      | ↑    | ↑    |      |
| Traffic Vol, veh/h       | 162  | 67   | 1    | 99   | 39   | 1    |
| Future Vol, veh/h        | 162  | 67   | 1    | 99   | 39   | 1    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | 0    | -    | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 176  | 73   | 1    | 108  | 42   | 1    |

| Major/Minor          | Major1 | Major2 | Minor1 |   |       |
|----------------------|--------|--------|--------|---|-------|
| Conflicting Flow All | 0      | 0      | 249    | 0 | 286   |
| Stage 1              | -      | -      | -      | - | 176   |
| Stage 2              | -      | -      | -      | - | 110   |
| Critical Hdwy        | -      | -      | 4.12   | - | 6.42  |
| Critical Hdwy Stg 1  | -      | -      | -      | - | 5.42  |
| Critical Hdwy Stg 2  | -      | -      | -      | - | 5.42  |
| Follow-up Hdwy       | -      | -      | 2.218  | - | 3.518 |
| Pot Cap-1 Maneuver   | -      | -      | 1317   | - | 704   |
| Stage 1              | -      | -      | -      | - | 855   |
| Stage 2              | -      | -      | -      | - | 915   |
| Platoon blocked, %   | -      | -      | -      | - | -     |
| Mov Cap-1 Maneuver   | -      | -      | 1317   | - | 703   |
| Mov Cap-2 Maneuver   | -      | -      | -      | - | 703   |
| Stage 1              | -      | -      | -      | - | 855   |
| Stage 2              | -      | -      | -      | - | 914   |

| Approach             | EB | WB  | NB   |
|----------------------|----|-----|------|
| HCM Control Delay, s | 0  | 0.1 | 10.4 |
| HCM LOS              |    |     | B    |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 706   | -   | -   | 1317  | -   |
| HCM Lane V/C Ratio    | 0.062 | -   | -   | 0.001 | -   |
| HCM Control Delay (s) | 10.4  | -   | -   | 7.7   | 0   |
| HCM Lane LOS          | B     | -   | -   | A     | A   |
| HCM 95th %tile Q(veh) | 0.2   | -   | -   | 0     | -   |

HCM 6th TWSC  
 15: Site Access #15 & Internal Collector Roadway

2025 Total  
 PM Peak

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 9.4  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      |      | ↕    |      |      | ↕    |      |
| Traffic Vol, veh/h       | 18   | 109  | 36   | 3    | 68   | 1    | 21   | 0    | 1    | 0    | 0    | 11   |
| Future Vol, veh/h        | 18   | 109  | 36   | 3    | 68   | 1    | 21   | 0    | 1    | 0    | 0    | 11   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 20   | 118  | 39   | 3    | 74   | 1    | 23   | 0    | 1    | 0    | 0    | 12   |
































| Major/Minor          | Minor2 |       | Minor1 |       | Major1 |       | Major2 |   |   |       |   |   |
|----------------------|--------|-------|--------|-------|--------|-------|--------|---|---|-------|---|---|
| Conflicting Flow All | 90     | 53    | 6      | 132   | 59     | 1     | 12     | 0 | 0 | 1     | 0 | 0 |
| Stage 1              | 6      | 6     | -      | 47    | 47     | -     | -      | - | - | -     | - | - |
| Stage 2              | 84     | 47    | -      | 85    | 12     | -     | -      | - | - | -     | - | - |
| Critical Hdwy        | 7.12   | 6.52  | 6.22   | 7.12  | 6.52   | 6.22  | 4.12   | - | - | 4.12  | - | - |
| Critical Hdwy Stg 1  | 6.12   | 5.52  | -      | 6.12  | 5.52   | -     | -      | - | - | -     | - | - |
| Critical Hdwy Stg 2  | 6.12   | 5.52  | -      | 6.12  | 5.52   | -     | -      | - | - | -     | - | - |
| Follow-up Hdwy       | 3.518  | 4.018 | 3.318  | 3.518 | 4.018  | 3.318 | 2.218  | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver   | 895    | 838   | 1077   | 840   | 832    | 1084  | 1607   | - | - | 1622  | - | - |
| Stage 1              | 1016   | 891   | -      | 967   | 856    | -     | -      | - | - | -     | - | - |
| Stage 2              | 924    | 856   | -      | 923   | 886    | -     | -      | - | - | -     | - | - |
| Platoon blocked, %   |        |       |        |       |        |       |        | - | - | -     | - | - |
| Mov Cap-1 Maneuver   | 823    | 826   | 1077   | 713   | 820    | 1084  | 1607   | - | - | 1622  | - | - |
| Mov Cap-2 Maneuver   | 823    | 826   | -      | 713   | 820    | -     | -      | - | - | -     | - | - |
| Stage 1              | 1002   | 891   | -      | 953   | 844    | -     | -      | - | - | -     | - | - |
| Stage 2              | 830    | 844   | -      | 771   | 886    | -     | -      | - | - | -     | - | - |

| Approach             | EB   |  | WB  |  | NB  |  | SB |  |
|----------------------|------|--|-----|--|-----|--|----|--|
| HCM Control Delay, s | 10.2 |  | 9.9 |  | 6.9 |  | 0  |  |
| HCM LOS              | B    |  | A   |  |     |  |    |  |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1WBLn1 | SBL   | SBT  | SBR |
|-----------------------|-------|-----|-----|------------|-------|------|-----|
| Capacity (veh/h)      | 1607  | -   | -   | 870        | 818   | 1622 | -   |
| HCM Lane V/C Ratio    | 0.014 | -   | -   | 0.204      | 0.096 | -    | -   |
| HCM Control Delay (s) | 7.3   | 0   | -   | 10.2       | 9.9   | 0    | -   |
| HCM Lane LOS          | A     | A   | -   | B          | A     | A    | -   |
| HCM 95th %tile Q(veh) | 0     | -   | -   | 0.8        | 0.3   | 0    | -   |

Lanes, Volumes, Timings  
1: Allen Way & Founder Pkwy

2041 Background  
AM Peak

|                            |    |    |  |  |    |  |    |    |  |  |    |    |
|----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL  | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations        |   |    |   |  |    |  |   |   |   |  |   |   |
| Traffic Volume (vph)       | 265   | 1366  | 150   | 45  | 3013  | 140   | 130  | 25  | 55  | 75  | 15  | 385   |
| Future Volume (vph)        | 265   | 1366  | 150   | 45  | 3013  | 140   | 130  | 25  | 55  | 75  | 15  | 385   |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900   | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 290   |   | 0   | 325   |   | 0   | 75   |   | 0   | 130   |   | 110   |
| Storage Lanes              | 2   |   | 0   | 1   |   | 1   | 2  |   | 0   | 1   |   | 2   |
| Taper Length (ft)          | 100   |   |   | 100   |   |   | 100  |   |   | 100   |   |   |
| Lane Util. Factor          | 0.97  | 0.91  | 0.91  | 1.00  | 0.91  | 1.00  | 0.97   | 1.00  | 1.00  | 1.00  | 1.00  | 0.88  |
| Frt                        |   | 0.985   |   |   |   | 0.850   |  | 0.897   |   |   |   | 0.850   |
| Flt Protected              | 0.950   |   |   | 0.950   |   |   | 0.950  |   |   | 0.950   |   |   |
| Satd. Flow (prot)          | 3433  | 5009  | 0   | 1770  | 5085  | 1583  | 3433   | 1671  | 0   | 1770  | 1863  | 2787  |
| Flt Permitted              | 0.950   |   |   | 0.119   |   |   | 0.950  |   |   | 0.701   |   |   |
| Satd. Flow (perm)          | 3433  | 5009  | 0   | 222   | 5085  | 1583  | 3433   | 1671  | 0   | 1306  | 1863  | 2787  |
| Right Turn on Red          |   |   | Yes   |   |   | Yes   |  |   | Yes   |   |   | Yes   |
| Satd. Flow (RTOR)          |   | 27  |   |   |   | 109   |  | 60  |   |   |   | 217   |
| Link Speed (mph)           |   | 35  |   |   | 35  |   |  | 30  |   |   |   | 30  |
| Link Distance (ft)         |   | 533   |   |   | 1095  |   |  | 278   |   |   |   | 392   |
| Travel Time (s)            |   | 10.4  |   |   | 21.3  |   |  | 6.3   |   |   |   | 8.9   |
| Peak Hour Factor           | 0.92  | 0.95  | 0.92  | 0.92  | 0.98  | 0.92  | 0.92   | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 288   | 1438  | 163   | 49  | 3074  | 152   | 141  | 27  | 60  | 82  | 16  | 418   |
| Shared Lane Traffic (%)    |   |   |   |   |   |   |  |   |   |   |   |   |
| Lane Group Flow (vph)      | 288   | 1601  | 0   | 49  | 3074  | 152   | 141  | 87  | 0   | 82  | 16  | 418   |
| Enter Blocked Intersection | No  | No  | No  | No  | No  | No  | No   | No  | No  | No  | No  | No  |
| Lane Alignment             | Left  | Left  | Right   | Left  | Left  | Right   | Left   | Left  | Right   | Left  | Left  | Right   |
| Median Width(ft)           |   | 20  |   |   | 20  |   |  | 24  |   |   |   | 20  |
| Link Offset(ft)            |   | 0   |   |   | 0   |   |  | 0   |   |   |   | 0   |
| Crosswalk Width(ft)        |   | 16  |   |   | 16  |   |  | 16  |   |   |   | 16  |
| Two way Left Turn Lane     |   |   |   |   |   |   |  |   |   |   |   |   |
| Headway 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  |
| Turning Speed (mph)        | 15  |   | 9   | 15  |   | 9   | 15   |   | 9   | 15  |   | 9   |
| Number of Detectors        | 1   | 2   |   | 1   | 2   | 1   | 1  | 2   |   | 1   | 2   | 1   |
| Detector Template          | Left  | Thru  |   | Left  | Thru  | Right   | Left   | Thru  |   | Left  | Thru  | Right   |
| Leading Detector (ft)      | 20  | 100   |   | 20  | 100   | 20  | 20   | 100   |   | 20  | 100   | 20  |
| Trailing Detector (ft)     | 0   | 0   |   | 0   | 0   | 0   | 0  | 0   |   | 0   | 0   | 0   |
| Detector 1 Position(ft)    | 0   | 0   |   | 0   | 0   | 0   | 0  | 0   |   | 0   | 0   | 0   |
| Detector 1 Size(ft)        | 20  | 6   |   | 20  | 6   | 20  | 20   | 6   |   | 20  | 6   | 20  |
| Detector 1 Type            | Cl+Ex   | Cl+Ex   |   | Cl+Ex   | Cl+Ex   | Cl+Ex   | Cl+Ex  | Cl+Ex   |   | Cl+Ex   | Cl+Ex   | Cl+Ex   |
| Detector 1 Channel         |   |   |   |   |   |   |  |   |   |   |   |   |
| Detector 1 Extend (s)      | 0.0   | 0.0   |   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   |   | 0.0   | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   |   | 0.0   | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   |   | 0.0   | 0.0   | 0.0   |
| Detector 2 Position(ft)    |   | 94  |   |   | 94  |   |  | 94  |   |   |   | 94  |
| Detector 2 Size(ft)        |   | 6   |   |   | 6   |   |  | 6   |   |   |   | 6   |
| Detector 2 Type            |   | Cl+Ex   |   |   | Cl+Ex   |   |  | Cl+Ex   |   |   |   | Cl+Ex   |
| Detector 2 Channel         |   |   |   |   |   |   |  |   |   |   |   |   |
| Detector 2 Extend (s)      |   | 0.0   |   |   | 0.0   |   |  | 0.0   |   |   |   | 0.0   |
| Turn Type                  | Prot  | NA  |   | pm+pt   | NA  | Perm  | Prot   | NA  |   | pm+pt   | NA  | Perm  |
| Protected Phases           | 5   | 2   |   | 1   | 6   |   | 3  | 8   |   | 7   | 4   |   |
| Permitted Phases           |   |   |   | 6   |   | 6   |  |   |   | 4   |   | 4   |

Lanes, Volumes, Timings  
1: Allen Way & Founder Pkwy

2041 Background  
AM Peak

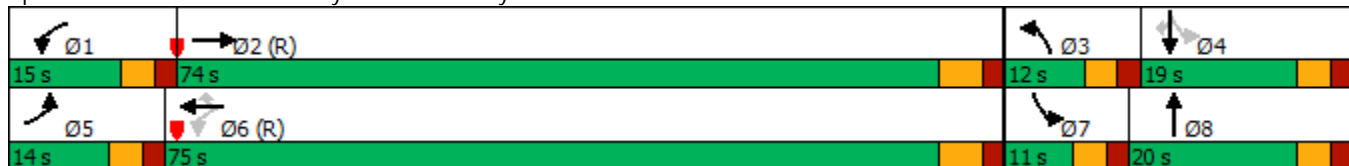


| Lane Group            | EBL   | EBT   | EBR | WBL   | WBT   | WBR   | NBL   | NBT   | NBR | SBL  | SBT   | SBR   |
|-----------------------|-------|-------|-----|-------|-------|-------|-------|-------|-----|------|-------|-------|
| Detector Phase        | 5     | 2     |     | 1     | 6     | 6     | 3     | 8     |     | 7    | 4     | 4     |
| Switch Phase          |       |       |     |       |       |       |       |       |     |      |       |       |
| Minimum Initial (s)   | 4.0   | 4.0   |     | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |     | 4.0  | 4.0   | 4.0   |
| Minimum Split (s)     | 11.0  | 21.0  |     | 9.5   | 21.0  | 21.0  | 9.0   | 21.0  |     | 9.0  | 21.0  | 21.0  |
| Total Split (s)       | 14.0  | 74.0  |     | 15.0  | 75.0  | 75.0  | 12.0  | 20.0  |     | 11.0 | 19.0  | 19.0  |
| Total Split (%)       | 11.7% | 61.7% |     | 12.5% | 62.5% | 62.5% | 10.0% | 16.7% |     | 9.2% | 15.8% | 15.8% |
| Maximum Green (s)     | 9.0   | 68.0  |     | 10.0  | 69.0  | 69.0  | 7.0   | 15.0  |     | 6.0  | 14.0  | 14.0  |
| Yellow Time (s)       | 3.0   | 4.0   |     | 3.0   | 4.0   | 4.0   | 3.0   | 3.0   |     | 3.0  | 3.0   | 3.0   |
| All-Red Time (s)      | 2.0   | 2.0   |     | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   |     | 2.0  | 2.0   | 2.0   |
| Lost Time Adjust (s)  | -2.0  | -1.0  |     | -1.0  | -2.0  | -1.0  | -1.0  | -1.0  |     | -1.0 | -1.0  | -1.0  |
| Total Lost Time (s)   | 3.0   | 5.0   |     | 4.0   | 4.0   | 5.0   | 4.0   | 4.0   |     | 4.0  | 4.0   | 4.0   |
| Lead/Lag              | Lead  | Lag   |     | Lead  | Lag   | Lag   | Lead  | Lag   |     | Lead | Lag   | Lag   |
| Lead-Lag Optimize?    | Yes   | Yes   |     | Yes   | Yes   | Yes   | Yes   | Yes   |     | Yes  | Yes   | Yes   |
| Vehicle Extension (s) | 3.0   | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0  | 3.0   | 3.0   |
| Recall Mode           | None  | C-Max |     | None  | C-Max | C-Max | None  | None  |     | None | None  | None  |
| Act Effect Green (s)  | 12.1  | 76.1  |     | 78.8  | 71.4  | 70.4  | 8.0   | 16.7  |     | 20.5 | 13.5  | 13.5  |
| Actuated g/C Ratio    | 0.10  | 0.63  |     | 0.66  | 0.60  | 0.59  | 0.07  | 0.14  |     | 0.17 | 0.11  | 0.11  |
| v/c Ratio             | 0.83  | 0.50  |     | 0.20  | 1.02  | 0.16  | 0.62  | 0.31  |     | 0.33 | 0.08  | 0.83  |
| Control Delay         | 73.9  | 12.9  |     | 4.8   | 36.5  | 1.2   | 66.8  | 21.5  |     | 42.6 | 47.5  | 39.1  |
| Queue Delay           | 0.0   | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.0  | 0.0   | 0.0   |
| Total Delay           | 73.9  | 12.9  |     | 4.8   | 36.5  | 1.2   | 66.8  | 21.5  |     | 42.6 | 47.5  | 39.1  |
| LOS                   | E     | B     |     | A     | D     | A     | E     | C     |     | D    | D     | D     |
| Approach Delay        |       | 22.2  |     |       | 34.4  |       |       | 49.6  |     |      | 39.9  |       |
| Approach LOS          |       | C     |     |       | C     |       |       | D     |     |      | D     |       |

Intersection Summary


























Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 119 (99%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
 Natural Cycle: 110  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 1.02  
 Intersection Signal Delay: 31.5      Intersection LOS: C  
 Intersection Capacity Utilization 86.6%      ICU Level of Service E  
 Analysis Period (min) 15

Splits and Phases: 1: Allen Way & Founder Pkwy



Lanes, Volumes, Timings  
2: Front St & Founder Pkwy

2041 Background  
AM Peak

|                            |  |   |  |  |   |  |   |  |  |  |   |  |
|----------------------------|---|--|---|---|--|---|---|---|---|---|--|---|
| Lane Group                 | SEL   | SET  | SER   | NWL   | NWT  | NWR   | NEL   | NET   | NER   | SWL   | SWT  | SWR   |
| Lane Configurations        |  | <br> |   |  | <br> |   | <br> |  |  |  | <br> |   |
| Traffic Volume (vph)       | 70  | 1146   | 280   | 62  | 2563   | 15  | 530   | 75  | 45  | 5   | 65   | 105   |
| Future Volume (vph)        | 70  | 1146   | 280   | 62  | 2563   | 15  | 530   | 75  | 45  | 5   | 65   | 105   |
| Ideal Flow (vphp)          | 1900  | 1900   | 1900  | 1900  | 1900   | 1900  | 1900  | 1900  | 1900  | 1900  | 1900   | 1900  |
| Storage Length (ft)        | 460   |  | 0   | 200   |  | 0   | 285   |   | 0   | 230   |  | 0   |
| Storage Lanes              | 1   |  | 0   | 1   |  | 0   | 1   |   | 1   | 1   |  | 0   |
| Taper Length (ft)          | 100   |  |   | 100   |  |   | 100   |   |   | 100   |  |   |
| Lane Util. Factor          | 1.00  | 0.91   | 0.91  | 1.00  | 0.91   | 0.91  | 0.97  | 1.00  | 1.00  | 1.00  | 0.95   | 0.95  |
| Frt                        |   | 0.970  |   |   | 0.999  |   |   |   | 0.850   |   | 0.908  |   |
| Flt Protected              | 0.950   |  |   | 0.950   |  |   | 0.950   |   |   | 0.950   |  |   |
| Satd. Flow (prot)          | 1770  | 4933   | 0   | 1770  | 5080   | 0   | 3433  | 1863  | 1583  | 1770  | 3214   | 0   |
| Flt Permitted              | 0.060   |  |   | 0.116   |  |   | 0.449   |   |   | 0.704   |  |   |
| Satd. Flow (perm)          | 112   | 4933   | 0   | 216   | 5080   | 0   | 1623  | 1863  | 1583  | 1311  | 3214   | 0   |
| Right Turn on Red          |   |  | Yes   |   |  | Yes   |   |   | Yes   |   |  | Yes   |
| Satd. Flow (RTOR)          |   | 71   |   |   | 1  |   |   |   | 118   |   | 109  |   |
| Link Speed (mph)           |   | 35   |   |   | 35   |   |   | 35  |   |   | 35   |   |
| Link Distance (ft)         |   | 1095   |   |   | 488  |   |   | 556   |   |   | 397  |   |
| Travel Time (s)            |   | 21.3   |   |   | 9.5  |   |   | 10.8  |   |   | 7.7  |   |
| Peak Hour Factor           | 0.92  | 0.95   | 0.92  | 0.92  | 0.98   | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92   | 0.92  |
| Adj. Flow (vph)            | 76  | 1206   | 304   | 67  | 2615   | 16  | 576   | 82  | 49  | 5   | 71   | 114   |
| Shared Lane Traffic (%)    |   |  |   |   |  |   |   |   |   |   |  |   |
| Lane Group Flow (vph)      | 76  | 1510   | 0   | 67  | 2631   | 0   | 576   | 82  | 49  | 5   | 185  | 0   |
| Enter Blocked Intersection | No  | No   | No  | No  | No   | No  | No  | No  | No  | No  | No   | No  |
| Lane Alignment             | Left  | Left   | Right   | Left  | Left   | Right   | Left  | Left  | Right   | Left  | Left   | Right   |
| Median Width(ft)           |   | 12   |   |   | 12   |   |   | 40  |   |   | 24   |   |
| Link Offset(ft)            |   | 0  |   |   | 0  |   |   | 0   |   |   | 0  |   |
| Crosswalk Width(ft)        |   | 16   |   |   | 16   |   |   | 16  |   |   | 16   |   |
| Two way Left Turn Lane     |   |  |   |   |  |   |   |   |   |   |  |   |
| Headway 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  |
| Turning Speed (mph)        | 15  |  | 9   | 15  |  | 9   | 15  |   | 9   | 15  |  | 9   |
| Number of Detectors        | 1   | 2  |   | 1   | 2  |   | 1   | 2   | 1   | 1   | 2  |   |
| Detector Template          | Left  | Thru   |   | Left  | Thru   |   | Left  | Thru  | Right   | Left  | Thru   |   |
| Leading Detector (ft)      | 20  | 100  |   | 20  | 100  |   | 20  | 100   | 20  | 20  | 100  |   |
| Trailing Detector (ft)     | 0   | 0  |   | 0   | 0  |   | 0   | 0   | 0   | 0   | 0  |   |
| Detector 1 Position(ft)    | 0   | 0  |   | 0   | 0  |   | 0   | 0   | 0   | 0   | 0  |   |
| Detector 1 Size(ft)        | 20  | 6  |   | 20  | 6  |   | 20  | 6   | 20  | 20  | 6  |   |
| Detector 1 Type            | Cl+Ex   | Cl+Ex  |   | Cl+Ex   | Cl+Ex  |   | Cl+Ex   | Cl+Ex   | Cl+Ex   | Cl+Ex   | Cl+Ex  |   |
| Detector 1 Channel         |   |  |   |   |  |   |   |   |   |   |  |   |
| Detector 1 Extend (s)      | 0.0   | 0.0  |   | 0.0   | 0.0  |   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |   |
| Detector 1 Queue (s)       | 0.0   | 0.0  |   | 0.0   | 0.0  |   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |   |
| Detector 1 Delay (s)       | 0.0   | 0.0  |   | 0.0   | 0.0  |   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |   |
| Detector 2 Position(ft)    |   | 94   |   |   | 94   |   |   | 94  |   |   | 94   |   |
| Detector 2 Size(ft)        |   | 6  |   |   | 6  |   |   | 6   |   |   | 6  |   |
| Detector 2 Type            |   | Cl+Ex  |   |   | Cl+Ex  |   |   | Cl+Ex   |   |   | Cl+Ex  |   |
| Detector 2 Channel         |   |  |   |   |  |   |   |   |   |   |  |   |
| Detector 2 Extend (s)      |   | 0.0  |   |   | 0.0  |   |   | 0.0   |   |   | 0.0  |   |
| Turn Type                  | pm+pt   | NA   |   | pm+pt   | NA   |   | pm+pt   | NA  | Perm  | pm+pt   | NA   |   |
| Protected Phases           | 5   | 2  |   | 1   | 6  |   | 3   | 8   |   | 7   | 4  |   |
| Permitted Phases           | 2   |  |   | 6   |  |   | 8   |   | 8   | 4   |  |   |

Lanes, Volumes, Timings  
2: Front St & Founder Pkwy

2041 Background  
AM Peak



| Lane Group            | SEL   | SET   | SER | NWL   | NWT   | NWR | NEL   | NET   | NER   | SWL   | SWT   | SWR |
|-----------------------|-------|-------|-----|-------|-------|-----|-------|-------|-------|-------|-------|-----|
| Detector Phase        | 5     | 2     |     | 1     | 6     |     | 3     | 8     | 8     | 7     | 4     |     |
| Switch Phase          |       |       |     |       |       |     |       |       |       |       |       |     |
| Minimum Initial (s)   | 4.0   | 4.0   |     | 4.0   | 4.0   |     | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |     |
| Minimum Split (s)     | 9.0   | 21.0  |     | 9.0   | 21.0  |     | 9.0   | 21.0  | 21.0  | 10.0  | 21.0  |     |
| Total Split (s)       | 12.0  | 63.0  |     | 12.0  | 63.0  |     | 20.0  | 33.0  | 33.0  | 12.0  | 25.0  |     |
| Total Split (%)       | 10.0% | 52.5% |     | 10.0% | 52.5% |     | 16.7% | 27.5% | 27.5% | 10.0% | 20.8% |     |
| Maximum Green (s)     | 7.0   | 57.0  |     | 7.0   | 57.0  |     | 15.0  | 28.0  | 28.0  | 7.0   | 20.0  |     |
| Yellow Time (s)       | 3.0   | 4.0   |     | 3.0   | 4.0   |     | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |     |
| All-Red Time (s)      | 2.0   | 2.0   |     | 2.0   | 2.0   |     | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   |     |
| Lost Time Adjust (s)  | -1.0  | -1.0  |     | -1.0  | -1.0  |     | -2.0  | -1.0  | -1.0  | -1.0  | -1.0  |     |
| Total Lost Time (s)   | 4.0   | 5.0   |     | 4.0   | 5.0   |     | 3.0   | 4.0   | 4.0   | 4.0   | 4.0   |     |
| Lead/Lag              | Lead  | Lag   |     | Lead  | Lag   |     | Lead  | Lag   | Lag   | Lead  | Lag   |     |
| Lead-Lag Optimize?    | Yes   | Yes   |     | Yes   | Yes   |     | Yes   | Yes   | Yes   | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |     |
| Recall Mode           | None  | C-Max |     | None  | C-Max |     | None  | None  | None  | None  | None  |     |
| Act Effect Green (s)  | 79.8  | 71.7  |     | 79.0  | 71.4  |     | 30.4  | 27.1  | 27.1  | 16.3  | 9.4   |     |
| Actuated g/C Ratio    | 0.66  | 0.60  |     | 0.66  | 0.60  |     | 0.25  | 0.23  | 0.23  | 0.14  | 0.08  |     |
| v/c Ratio             | 0.40  | 0.51  |     | 0.27  | 0.87  |     | 0.86  | 0.19  | 0.11  | 0.02  | 0.53  |     |
| Control Delay         | 26.1  | 18.1  |     | 9.5   | 25.9  |     | 54.5  | 39.7  | 0.5   | 33.6  | 27.8  |     |
| Queue Delay           | 0.0   | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |     |
| Total Delay           | 26.1  | 18.1  |     | 9.5   | 25.9  |     | 54.5  | 39.7  | 0.5   | 33.6  | 27.8  |     |
| LOS                   | C     | B     |     | A     | C     |     | D     | D     | A     | C     | C     |     |
| Approach Delay        |       | 18.5  |     |       | 25.5  |     |       | 49.0  |       |       | 27.9  |     |
| Approach LOS          |       | B     |     |       | C     |     |       | D     |       |       | C     |     |

Intersection Summary

Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 96 (80%), Referenced to phase 2:SETL and 6:NWTL, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.87  
 Intersection Signal Delay: 26.6      Intersection LOS: C  
 Intersection Capacity Utilization 88.2%      ICU Level of Service E  
 Analysis Period (min) 15

Splits and Phases: 2: Front St & Founder Pkwy



Lanes, Volumes, Timings  
3: Woodlands Blvd & Founders Pkwy

2041 Background  
AM Peak



| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        | ↶     | ↶↶↶   |       | ↶     | ↶↶↶   |       | ↶↶    | ↶     |       | ↶     | ↶↶    |       |
| Traffic Volume (vph)       | 6     | 826   | 250   | 490   | 2170  | 105   | 465   | 30    | 226   | 45    | 15    | 3     |
| Future Volume (vph)        | 6     | 826   | 250   | 490   | 2170  | 105   | 465   | 30    | 226   | 45    | 15    | 3     |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 450   |       | 0     | 500   |       | 0     | 300   |       | 0     | 150   |       | 0     |
| Storage Lanes              | 1     |       | 0     | 1     |       | 0     | 2     |       | 0     | 1     |       | 0     |
| Taper Length (ft)          | 100   |       |       | 100   |       |       | 100   |       |       | 100   |       |       |
| Lane Util. Factor          | 1.00  | 0.91  | 0.91  | 1.00  | 0.91  | 0.91  | 0.97  | 1.00  | 1.00  | 1.00  | 0.95  | 0.95  |
| Frt                        |       | 0.964 |       |       | 0.993 |       |       | 0.868 |       |       | 0.976 |       |
| Flt Protected              | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       |
| Satd. Flow (prot)          | 1770  | 4902  | 0     | 1770  | 5050  | 0     | 3433  | 1617  | 0     | 1770  | 3454  | 0     |
| Flt Permitted              | 0.082 |       |       | 0.147 |       |       | 0.512 |       |       | 0.714 |       |       |
| Satd. Flow (perm)          | 153   | 4902  | 0     | 274   | 5050  | 0     | 1850  | 1617  | 0     | 1330  | 3454  | 0     |
| Right Turn on Red          |       |       | Yes   |       |       | Yes   |       |       | Yes   |       |       | Yes   |
| Satd. Flow (RTOR)          |       | 83    |       |       | 9     |       |       | 246   |       |       | 3     |       |
| Link Speed (mph)           |       | 50    |       |       | 50    |       |       | 35    |       |       | 35    |       |
| Link Distance (ft)         |       | 721   |       |       | 782   |       |       | 419   |       |       | 497   |       |
| Travel Time (s)            |       | 9.8   |       |       | 10.7  |       |       | 8.2   |       |       | 9.7   |       |
| Peak Hour Factor           | 0.92  | 0.95  | 0.92  | 0.92  | 0.98  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 7     | 869   | 272   | 533   | 2214  | 114   | 505   | 33    | 246   | 49    | 16    | 3     |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 7     | 1141  | 0     | 533   | 2328  | 0     | 505   | 279   | 0     | 49    | 19    | 0     |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right |
| Median Width(ft)           |       | 24    |       |       | 24    |       |       | 30    |       |       | 24    |       |
| Link Offset(ft)            |       | 0     |       |       | 0     |       |       | 0     |       |       | 0     |       |
| Crosswalk Width(ft)        |       | 16    |       |       | 16    |       |       | 16    |       |       | 16    |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |       |       |       |       |       |
| Headway 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  |
| Turning Speed (mph)        | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     |
| Number of Detectors        | 1     | 2     |       | 1     | 2     |       | 1     | 2     |       | 1     | 2     |       |
| Detector Template          | Left  | Thru  |       | Left  | Thru  |       | Left  | Thru  |       | Left  | Thru  |       |
| Leading Detector (ft)      | 20    | 100   |       | 20    | 100   |       | 20    | 100   |       | 20    | 100   |       |
| Trailing Detector (ft)     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |       | 0     | 0     |       |
| Detector 1 Position(ft)    | 0     | 0     |       | 0     | 0     |       | 0     | 0     |       | 0     | 0     |       |
| Detector 1 Size(ft)        | 20    | 6     |       | 20    | 6     |       | 20    | 6     |       | 20    | 6     |       |
| Detector 1 Type            | Cl+Ex | Cl+Ex |       | Cl+Ex | Cl+Ex |       | Cl+Ex | Cl+Ex |       | Cl+Ex | Cl+Ex |       |
| Detector 1 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |       |
| Detector 1 Queue (s)       | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |       |
| Detector 1 Delay (s)       | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |       |
| Detector 2 Position(ft)    |       | 94    |       |       | 94    |       |       | 94    |       |       | 94    |       |
| Detector 2 Size(ft)        |       | 6     |       |       | 6     |       |       | 6     |       |       | 6     |       |
| Detector 2 Type            |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |
| Detector 2 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |
| Turn Type                  | pm+pt | NA    |       | pm+pt | NA    |       | pm+pt | NA    |       | pm+pt | NA    |       |
| Protected Phases           | 5     | 2     |       | 1     | 6     |       | 3     | 8     |       | 7     | 4     |       |
| Permitted Phases           | 2     |       |       | 6     |       |       | 8     |       |       | 4     |       |       |



Lanes, Volumes, Timings  
3: Woodlands Blvd & Founders Pkwy

2041 Background  
AM Peak

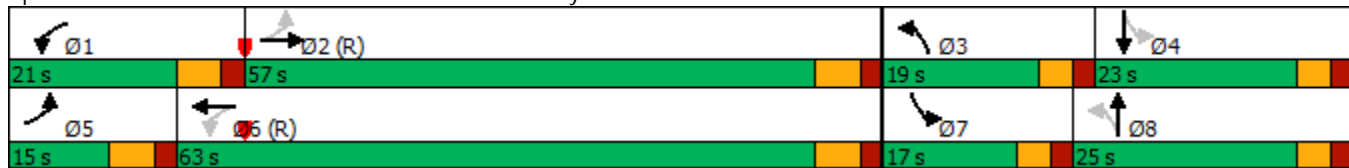


| Lane Group            | EBL   | EBT   | EBR | WBL   | WBT   | WBR | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
|-----------------------|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Detector Phase        | 5     | 2     |     | 1     | 6     |     | 3     | 8     |     | 7     | 4     |     |
| Switch Phase          |       |       |     |       |       |     |       |       |     |       |       |     |
| Minimum Initial (s)   | 4.0   | 4.0   |     | 4.0   | 4.0   |     | 4.0   | 4.0   |     | 4.0   | 4.0   |     |
| Minimum Split (s)     | 10.0  | 20.0  |     | 10.0  | 20.0  |     | 9.0   | 20.0  |     | 9.0   | 20.0  |     |
| Total Split (s)       | 15.0  | 57.0  |     | 21.0  | 63.0  |     | 19.0  | 25.0  |     | 17.0  | 23.0  |     |
| Total Split (%)       | 12.5% | 47.5% |     | 17.5% | 52.5% |     | 15.8% | 20.8% |     | 14.2% | 19.2% |     |
| Maximum Green (s)     | 9.0   | 51.0  |     | 15.0  | 57.0  |     | 14.0  | 20.0  |     | 12.0  | 18.0  |     |
| Yellow Time (s)       | 4.0   | 4.0   |     | 4.0   | 4.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| All-Red Time (s)      | 2.0   | 2.0   |     | 2.0   | 2.0   |     | 2.0   | 2.0   |     | 2.0   | 2.0   |     |
| Lost Time Adjust (s)  | -1.0  | -1.0  |     | -2.0  | -1.0  |     | -2.0  | -1.0  |     | -1.0  | -1.0  |     |
| Total Lost Time (s)   | 5.0   | 5.0   |     | 4.0   | 5.0   |     | 3.0   | 4.0   |     | 4.0   | 4.0   |     |
| Lead/Lag              | Lead  | Lag   |     | Lead  | Lag   |     | Lead  | Lag   |     | Lead  | Lag   |     |
| Lead-Lag Optimize?    | Yes   | Yes   |     | Yes   | Yes   |     | Yes   | Yes   |     | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| Recall Mode           | None  | C-Max |     | None  | C-Max |     | None  | None  |     | None  | None  |     |
| Act Effect Green (s)  | 58.7  | 52.0  |     | 88.1  | 84.6  |     | 24.9  | 12.7  |     | 14.3  | 9.0   |     |
| Actuated g/C Ratio    | 0.49  | 0.43  |     | 0.73  | 0.70  |     | 0.21  | 0.11  |     | 0.12  | 0.08  |     |
| v/c Ratio             | 0.04  | 0.53  |     | 0.91  | 0.65  |     | 0.81  | 0.71  |     | 0.26  | 0.07  |     |
| Control Delay         | 9.5   | 24.0  |     | 46.4  | 12.9  |     | 54.0  | 19.9  |     | 43.1  | 44.2  |     |
| Queue Delay           | 0.0   | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Delay           | 9.5   | 24.0  |     | 46.4  | 12.9  |     | 54.0  | 19.9  |     | 43.1  | 44.2  |     |
| LOS                   | A     | C     |     | D     | B     |     | D     | B     |     | D     | D     |     |
| Approach Delay        |       | 23.9  |     |       | 19.2  |     |       | 41.8  |     |       | 43.4  |     |
| Approach LOS          |       | C     |     |       | B     |     |       | D     |     |       | D     |     |

Intersection Summary

|                                    |   |
|------------------------------------|---|
| Area Type:                         | Other   |
| Cycle Length:                      | 120   |
| Actuated Cycle Length:             | 120   |
| Offset:                            | 37 (31%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green |
| Natural Cycle:                     | 80  |
| Control Type:                      | Actuated-Coordinated  |
| Maximum v/c Ratio:                 | 0.91  |
| Intersection Signal Delay:         | 24.3  |
| Intersection LOS:                  | C   |
| Intersection Capacity Utilization: | 81.7%   |
| ICU Level of Service:              | D   |
| Analysis Period (min):             | 15  |

Splits and Phases: 3: Woodlands Blvd & Founders Pkwy



Lanes, Volumes, Timings  
4: Founders Pkwy & Crowfoot Valley Rd

2041 Background  
AM Peak



| Lane Group                 | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |
| Traffic Volume (vph)       | 450   | 647   | 1695  | 182   | 116   | 1070  |
| Future Volume (vph)        | 450   | 647   | 1695  | 182   | 116   | 1070  |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 485   |       |       | 0     | 150   | 0     |
| Storage Lanes              | 2     |       |       | 1     | 2     | 1     |
| Taper Length (ft)          | 100   |       |       |       | 100   |       |
| Lane Util. Factor          | 0.97  | 0.95  | 0.95  | 1.00  | 0.97  | 0.91  |
| Frt                        |       |       |       | 0.850 | 0.877 | 0.850 |
| Flt Protected              | 0.950 |       |       |       | 0.991 |       |
| Satd. Flow (prot)          | 3433  | 3539  | 3539  | 1583  | 3141  | 1441  |
| Flt Permitted              | 0.950 |       |       |       | 0.991 |       |
| Satd. Flow (perm)          | 3433  | 3539  | 3539  | 1583  | 3141  | 1441  |
| Right Turn on Red          |       |       |       | Yes   |       | Yes   |
| Satd. Flow (RTOR)          |       |       |       | 144   | 242   | 440   |
| Link Speed (mph)           |       | 50    | 50    |       | 35    |       |
| Link Distance (ft)         |       | 641   | 617   |       | 595   |       |
| Travel Time (s)            |       | 8.7   | 8.4   |       | 11.6  |       |
| Peak Hour Factor           | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 489   | 703   | 1842  | 198   | 126   | 1163  |
| Shared Lane Traffic (%)    |       |       |       |       |       | 50%   |
| Lane Group Flow (vph)      | 489   | 703   | 1842  | 198   | 708   | 581   |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Left  | Right | Left  | Right |
| Median Width(ft)           |       | 24    | 24    |       | 24    |       |
| Link Offset(ft)            |       | 0     | 0     |       | 0     |       |
| Crosswalk Width(ft)        |       | 16    | 16    |       | 16    |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |
| Headway Factor             | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| Turning Speed (mph)        | 15    |       |       | 9     | 15    | 9     |
| Number of Detectors        | 1     | 2     | 2     | 1     | 1     | 1     |
| Detector Template          | Left  | Thru  | Thru  | Right | Left  | Right |
| Leading Detector (ft)      | 20    | 100   | 100   | 20    | 20    | 20    |
| Trailing Detector (ft)     | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Position(ft)    | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Size(ft)        | 20    | 6     | 6     | 20    | 20    | 20    |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 2 Position(ft)    |       | 94    | 94    |       |       |       |
| Detector 2 Size(ft)        |       | 6     | 6     |       |       |       |
| Detector 2 Type            |       | Cl+Ex | Cl+Ex |       |       |       |
| Detector 2 Channel         |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   | 0.0   |       |       |       |
| Turn Type                  | Prot  | NA    | NA    | Perm  | Prot  | Free  |
| Protected Phases           | 5     | 2     | 6     |       | 4     |       |
| Permitted Phases           |       |       |       | 6     |       | Free  |

Lanes, Volumes, Timings  
 4: Founders Pkwy & Crowfoot Valley Rd

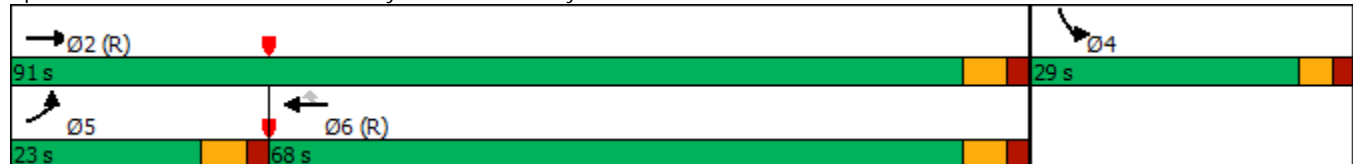


| Lane Group            | EBL   | EBT   | WBT   | WBR   | SBL    | SBR   |
|-----------------------|-------|-------|-------|-------|--------|-------|
| Detector Phase        | 5     | 2     | 6     | 6     | 4      |       |
| Switch Phase          |       |       |       |       |        |       |
| Minimum Initial (s)   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0    |       |
| Minimum Split (s)     | 10.0  | 10.5  | 10.0  | 10.0  | 10.0   |       |
| Total Split (s)       | 23.0  | 91.0  | 68.0  | 68.0  | 29.0   |       |
| Total Split (%)       | 19.2% | 75.8% | 56.7% | 56.7% | 24.2%  |       |
| Maximum Green (s)     | 17.0  | 85.0  | 62.0  | 62.0  | 24.0   |       |
| Yellow Time (s)       | 4.0   | 4.0   | 4.0   | 4.0   | 3.0    |       |
| All-Red Time (s)      | 2.0   | 2.0   | 2.0   | 2.0   | 2.0    |       |
| Lost Time Adjust (s)  | -2.0  | -2.0  | -2.0  | -2.0  | -2.0   |       |
| Total Lost Time (s)   | 4.0   | 4.0   | 4.0   | 4.0   | 3.0    |       |
| Lead/Lag              | Lead  |       | Lag   | Lag   |        |       |
| Lead-Lag Optimize?    | Yes   |       | Yes   | Yes   |        |       |
| Vehicle Extension (s) | 3.0   | 3.0   | 3.0   | 3.0   | 3.0    |       |
| Recall Mode           | None  | C-Max | C-Max | C-Max | None   |       |
| Act Effect Green (s)  | 19.7  | 88.9  | 65.2  | 65.2  | 24.1   | 120.0 |
| Actuated g/C Ratio    | 0.16  | 0.74  | 0.54  | 0.54  | 0.20   | 1.00  |
| v/c Ratio             | 0.87  | 0.27  | 0.96  | 0.21  | 1.14dr | 0.40  |
| Control Delay         | 65.7  | 5.5   | 39.8  | 5.0   | 41.4   | 0.8   |
| Queue Delay           | 0.0   | 0.0   | 0.0   | 0.0   | 0.0    | 0.0   |
| Total Delay           | 65.7  | 5.5   | 39.8  | 5.0   | 41.4   | 0.8   |
| LOS                   | E     | A     | D     | A     | D      | A     |
| Approach Delay        |       | 30.2  | 36.4  |       | 23.1   |       |
| Approach LOS          |       | C     | D     |       | C      |       |

Intersection Summary

Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.96  
 Intersection Signal Delay: 31.0 Intersection LOS: C  
 Intersection Capacity Utilization 84.3% ICU Level of Service E  
 Analysis Period (min) 15  
 dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 4: Founders Pkwy & Crowfoot Valley Rd



HCM 6th Roundabout  
 5: Connector Collector Roadway & Internal Collector Roadway

2041 Background  
 AM Peak

| Intersection                |       |       |       |
|-----------------------------|-------|-------|-------|
| Intersection Delay, s/veh   | 3.5   |       |       |
| Intersection LOS            | A     |       |       |
| Approach                    | EB    | WB    | NB    |
| Entry Lanes                 | 1     | 1     | 1     |
| Conflicting Circle Lanes    | 1     | 1     | 1     |
| Adj Approach Flow, veh/h    | 109   | 130   | 87    |
| Demand Flow Rate, veh/h     | 112   | 132   | 89    |
| Vehicles Circulating, veh/h | 66    | 55    | 28    |
| Vehicles Exiting, veh/h     | 121   | 62    | 150   |
| Ped Vol Crossing Leg, #/h   | 0     | 0     | 0     |
| Ped Cap Adj                 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh       | 3.6   | 3.6   | 3.3   |
| Approach LOS                | A     | A     | A     |
| Lane                        | Left  | Left  | Left  |
| Designated Moves            | TR    | LT    | LR    |
| Assumed Moves               | TR    | LT    | LR    |
| RT Channelized              |       |       |       |
| Lane Util                   | 1.000 | 1.000 | 1.000 |
| Follow-Up Headway, s        | 2.609 | 2.609 | 2.609 |
| Critical Headway, s         | 4.976 | 4.976 | 4.976 |
| Entry Flow, veh/h           | 112   | 132   | 89    |
| Cap Entry Lane, veh/h       | 1290  | 1305  | 1341  |
| Entry HV Adj Factor         | 0.977 | 0.983 | 0.978 |
| Flow Entry, veh/h           | 109   | 130   | 87    |
| Cap Entry, veh/h            | 1261  | 1282  | 1311  |
| V/C Ratio                   | 0.087 | 0.101 | 0.066 |
| Control Delay, s/veh        | 3.6   | 3.6   | 3.3   |
| LOS                         | A     | A     | A     |
| 95th %tile Queue, veh       | 0     | 0     | 0     |

Lanes, Volumes, Timings

2041 Background

6: Pioneer Ranch Access/Connector Collector Roadway & Founder Pkwy

AM Peak



| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |       |       |       |       |       |       |
| Traffic Volume (vph)       | 50    | 676   | 40    | 5     | 1702  | 30    | 120   | 0     | 10    | 40    | 0     | 95    |
| Future Volume (vph)        | 50    | 676   | 40    | 5     | 1702  | 30    | 120   | 0     | 10    | 40    | 0     | 95    |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 400   |       | 400   | 400   |       | 400   | 200   |       | 0     | 200   |       | 0     |
| Storage Lanes              | 1     |       | 1     | 1     |       | 1     | 1     |       | 0     | 1     |       | 0     |
| Taper Length (ft)          | 100   |       |       | 100   |       |       | 100   |       |       | 100   |       |       |
| Lane Util. Factor          | 1.00  | 0.95  | 1.00  | 1.00  | 0.95  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| Frt                        |       |       | 0.850 |       |       | 0.850 |       | 0.850 |       |       | 0.850 |       |
| Flt Protected              | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       |
| Satd. Flow (prot)          | 1770  | 3539  | 1583  | 1770  | 3539  | 1583  | 1770  | 1583  | 0     | 1770  | 1583  | 0     |
| Flt Permitted              | 0.051 |       |       | 0.361 |       |       | 0.520 |       |       | 0.750 |       |       |
| Satd. Flow (perm)          | 95    | 3539  | 1583  | 672   | 3539  | 1583  | 969   | 1583  | 0     | 1397  | 1583  | 0     |
| Right Turn on Red          |       |       | Yes   |       |       | Yes   |       |       | Yes   |       |       | Yes   |
| Satd. Flow (RTOR)          |       |       | 118   |       |       | 118   |       | 310   |       |       | 141   |       |
| Link Speed (mph)           |       | 50    |       |       | 50    |       |       | 35    |       |       | 35    |       |
| Link Distance (ft)         |       | 483   |       |       | 546   |       |       | 392   |       |       | 1305  |       |
| Travel Time (s)            |       | 6.6   |       |       | 7.4   |       |       | 7.6   |       |       | 25.4  |       |
| Peak Hour Factor           | 0.92  | 0.92  | 0.92  | 0.92  | 0.95  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 54    | 735   | 43    | 5     | 1792  | 33    | 130   | 0     | 11    | 43    | 0     | 103   |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 54    | 735   | 43    | 5     | 1792  | 33    | 130   | 11    | 0     | 43    | 103   | 0     |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right |
| Median Width(ft)           |       | 12    |       |       | 12    |       |       | 12    |       |       | 12    |       |
| Link Offset(ft)            |       | 0     |       |       | 0     |       |       | 0     |       |       | 0     |       |
| Crosswalk Width(ft)        |       | 16    |       |       | 16    |       |       | 16    |       |       | 16    |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |       |       |       |       |       |
| Headway 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  |
| Turning Speed (mph)        | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     |
| Number of Detectors        | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     |       | 1     | 2     |       |
| Detector Template          | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  |       | Left  | Thru  |       |
| Leading Detector (ft)      | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   |       | 20    | 100   |       |
| Trailing Detector (ft)     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     |       |
| Detector 1 Position(ft)    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     |       |
| Detector 1 Size(ft)        | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     |       | 20    | 6     |       |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |       | Cl+Ex | Cl+Ex |       |
| Detector 1 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |       |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |       |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |       |
| Detector 2 Position(ft)    |       | 94    |       |       | 94    |       |       | 94    |       |       | 94    |       |
| Detector 2 Size(ft)        |       | 6     |       |       | 6     |       |       | 6     |       |       | 6     |       |
| Detector 2 Type            |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |
| Detector 2 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |
| Turn Type                  | pm+pt | NA    | Perm  | pm+pt | NA    | Perm  | pm+pt | NA    |       | pm+pt | NA    |       |
| Protected Phases           | 5     | 2     |       | 1     | 6     |       | 3     | 8     |       | 7     | 4     |       |
| Permitted Phases           | 2     |       | 2     | 6     |       | 6     | 8     |       |       | 4     |       |       |

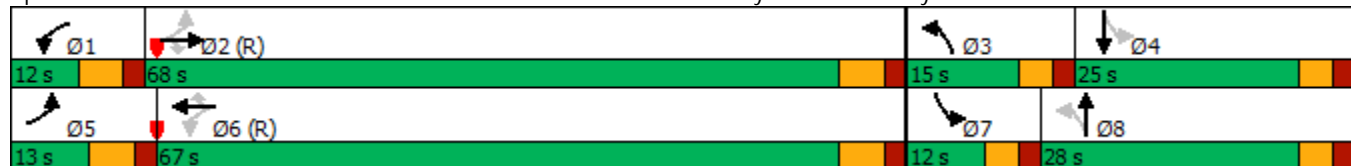


| Lane Group            | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-------|-------|-----|
| Detector Phase        | 5     | 2     | 2     | 1     | 6     | 6     | 3     | 8     |     | 7     | 4     |     |
| Switch Phase          |       |       |       |       |       |       |       |       |     |       |       |     |
| Minimum Initial (s)   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |     | 4.0   | 4.0   |     |
| Minimum Split (s)     | 10.0  | 20.0  | 20.0  | 10.0  | 20.0  | 20.0  | 20.0  | 20.0  |     | 9.0   | 20.0  |     |
| Total Split (s)       | 13.0  | 68.0  | 68.0  | 12.0  | 67.0  | 67.0  | 15.0  | 28.0  |     | 12.0  | 25.0  |     |
| Total Split (%)       | 10.8% | 56.7% | 56.7% | 10.0% | 55.8% | 55.8% | 12.5% | 23.3% |     | 10.0% | 20.8% |     |
| Maximum Green (s)     | 7.0   | 62.0  | 62.0  | 6.0   | 61.0  | 61.0  | 10.0  | 23.0  |     | 7.0   | 20.0  |     |
| Yellow Time (s)       | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| All-Red Time (s)      | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   |     | 2.0   | 2.0   |     |
| Lost Time Adjust (s)  | -1.0  | -1.0  | -1.0  | -1.0  | -1.0  | -1.0  | -1.0  | -1.0  |     | -1.0  | -1.0  |     |
| Total Lost Time (s)   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 4.0   | 4.0   |     | 4.0   | 4.0   |     |
| Lead/Lag              | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   | Lead  | Lag   |     | Lead  | Lag   |     |
| Lead-Lag Optimize?    | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |     | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| Recall Mode           | None  | C-Max | C-Max | None  | C-Max | C-Max | None  | None  |     | None  | None  |     |
| Act Effect Green (s)  | 88.7  | 87.0  | 87.0  | 84.5  | 79.2  | 79.2  | 17.2  | 13.2  |     | 17.4  | 6.9   |     |
| Actuated g/C Ratio    | 0.74  | 0.72  | 0.72  | 0.70  | 0.66  | 0.66  | 0.14  | 0.11  |     | 0.14  | 0.06  |     |
| v/c Ratio             | 0.31  | 0.29  | 0.04  | 0.01  | 0.77  | 0.03  | 0.62  | 0.02  |     | 0.18  | 0.46  |     |
| Control Delay         | 12.0  | 6.6   | 0.1   | 4.4   | 17.9  | 0.1   | 61.2  | 0.1   |     | 42.9  | 10.0  |     |
| Queue Delay           | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Delay           | 12.0  | 6.6   | 0.1   | 4.4   | 17.9  | 0.1   | 61.2  | 0.1   |     | 42.9  | 10.0  |     |
| LOS                   | B     | A     | A     | A     | B     | A     | E     | A     |     | D     | B     |     |
| Approach Delay        |       | 6.6   |       |       | 17.6  |       |       | 56.5  |     |       | 19.7  |     |
| Approach LOS          |       | A     |       |       | B     |       |       | E     |     |       | B     |     |

Intersection Summary

|                                    |   |
|------------------------------------|---|
| Area Type:                         | Other   |
| Cycle Length:                      | 120   |
| Actuated Cycle Length:             | 120   |
| Offset:                            | 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green |
| Natural Cycle:                     | 100   |
| Control Type:                      | Actuated-Coordinated  |
| Maximum v/c Ratio:                 | 0.77  |
| Intersection Signal Delay:         | 16.5  |
| Intersection LOS:                  | B   |
| Intersection Capacity Utilization: | 67.9%   |
| ICU Level of Service:              | C   |
| Analysis Period (min):             | 15  |

Splits and Phases: 6: Pioneer Ranch Access/Connector Collector Roadway & Founder Pkwy



| Intersection                |       |       |       |
|-----------------------------|-------|-------|-------|
| Intersection Delay, s/veh   | 5.1   |       |       |
| Intersection LOS            | A     |       |       |
| Approach                    | EB    | NB    | SB    |
| Entry Lanes                 | 1     | 1     | 1     |
| Conflicting Circle Lanes    | 1     | 1     | 1     |
| Adj Approach Flow, veh/h    | 60    | 136   | 434   |
| Demand Flow Rate, veh/h     | 61    | 138   | 443   |
| Vehicles Circulating, veh/h | 310   | 50    | 22    |
| Vehicles Exiting, veh/h     | 155   | 321   | 166   |
| Ped Vol Crossing Leg, #/h   | 0     | 0     | 0     |
| Ped Cap Adj                 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh       | 4.2   | 3.6   | 5.7   |
| Approach LOS                | A     | A     | A     |
| Lane                        | Left  | Left  | Left  |
| Designated Moves            | LR    | LT    | TR    |
| Assumed Moves               | LR    | LT    | TR    |
| RT Channelized              |       |       |       |
| Lane Util                   | 1.000 | 1.000 | 1.000 |
| Follow-Up Headway, s        | 2.609 | 2.609 | 2.609 |
| Critical Headway, s         | 4.976 | 4.976 | 4.976 |
| Entry Flow, veh/h           | 61    | 138   | 443   |
| Cap Entry Lane, veh/h       | 1006  | 1311  | 1349  |
| Entry HV Adj Factor         | 0.984 | 0.984 | 0.980 |
| Flow Entry, veh/h           | 60    | 136   | 434   |
| Cap Entry, veh/h            | 989   | 1290  | 1322  |
| V/C Ratio                   | 0.061 | 0.105 | 0.328 |
| Control Delay, s/veh        | 4.2   | 3.6   | 5.7   |
| LOS                         | A     | A     | A     |
| 95th %tile Queue, veh       | 0     | 0     | 1     |

Lanes, Volumes, Timings  
8: Ridge Rd/Founders Pkwy & 5th St/SH 86

2041 Background  
AM Peak



| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |       |       |       |       |       |       |
| Traffic Volume (vph)       | 63    | 210   | 120   | 115   | 475   | 859   | 320   | 527   | 75    | 287   | 156   | 121   |
| Future Volume (vph)        | 63    | 210   | 120   | 115   | 475   | 859   | 320   | 527   | 75    | 287   | 156   | 121   |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 300   |       | 425   | 250   |       | 0     | 250   |       | 0     | 600   |       | 500   |
| Storage Lanes              | 1     |       | 1     | 1     |       | 1     | 2     |       | 1     | 2     |       | 1     |
| Taper Length (ft)          | 100   |       |       | 100   |       |       | 100   |       |       | 100   |       |       |
| Lane Util. Factor          | 1.00  | 0.95  | 1.00  | 1.00  | 0.95  | 1.00  | 0.97  | 0.95  | 1.00  | 0.97  | 0.95  | 1.00  |
| Frt                        |       |       | 0.850 |       |       | 0.850 |       |       | 0.850 |       |       | 0.850 |
| Flt Protected              | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       |
| Satd. Flow (prot)          | 1770  | 3539  | 1583  | 1770  | 3539  | 1583  | 3433  | 3539  | 1583  | 3433  | 3539  | 1583  |
| Flt Permitted              | 0.448 |       |       | 0.588 |       |       | 0.950 |       |       | 0.950 |       |       |
| Satd. Flow (perm)          | 835   | 3539  | 1583  | 1095  | 3539  | 1583  | 3433  | 3539  | 1583  | 3433  | 3539  | 1583  |
| Right Turn on Red          |       |       | Yes   |       |       | Yes   |       |       | Yes   |       |       | Yes   |
| Satd. Flow (RTOR)          |       |       | 141   |       |       | 719   |       |       | 141   |       |       | 141   |
| Link Speed (mph)           |       | 35    |       |       | 50    |       |       | 35    |       |       | 50    |       |
| Link Distance (ft)         |       | 450   |       |       | 848   |       |       | 659   |       |       | 865   |       |
| Travel Time (s)            |       | 8.8   |       |       | 11.6  |       |       | 12.8  |       |       | 11.8  |       |
| Peak Hour Factor           | 0.92  | 0.92  | 0.92  | 0.92  | 0.95  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 68    | 228   | 130   | 125   | 500   | 934   | 348   | 573   | 82    | 312   | 170   | 132   |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 68    | 228   | 130   | 125   | 500   | 934   | 348   | 573   | 82    | 312   | 170   | 132   |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right |
| Median Width(ft)           |       | 18    |       |       | 18    |       |       | 24    |       |       | 24    |       |
| Link Offset(ft)            |       | 0     |       |       | 0     |       |       | 0     |       |       | 0     |       |
| Crosswalk Width(ft)        |       | 16    |       |       | 16    |       |       | 16    |       |       | 16    |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |       |       |       |       |       |
| Headway 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  |
| Turning Speed (mph)        | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     |
| Number of Detectors        | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     | 1     |
| Detector Template          | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  | Right |
| Leading Detector (ft)      | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   | 20    |
| Trailing Detector (ft)     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Position(ft)    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Size(ft)        | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     | 20    |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 2 Position(ft)    |       | 94    |       |       | 94    |       |       | 94    |       |       | 94    |       |
| Detector 2 Size(ft)        |       | 6     |       |       | 6     |       |       | 6     |       |       | 6     |       |
| Detector 2 Type            |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |
| Detector 2 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |
| Turn Type                  | pm+pt | NA    | Free  | pm+pt | NA    | Free  | Prot  | NA    | Free  | Prot  | NA    | Free  |
| Protected Phases           | 5     | 2     |       | 1     | 6     |       | 3     | 8     |       | 7     | 4     |       |
| Permitted Phases           | 2     |       | Free  | 6     |       | Free  |       |       | Free  |       |       | Free  |



Lanes, Volumes, Timings  
 8: Ridge Rd/Founders Pkwy & 5th St/SH 86

2041 Background  
 AM Peak

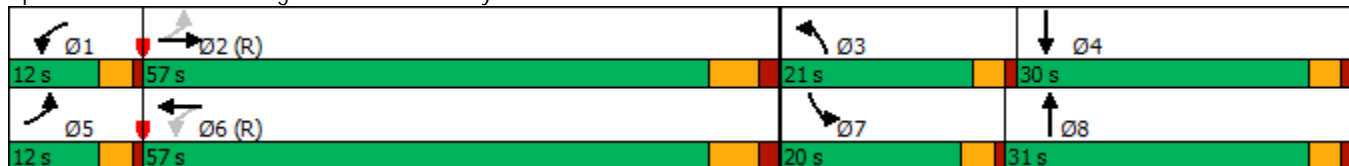


| Lane Group            | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Detector Phase        | 5     | 2     |       | 1     | 6     |       | 3     | 8     |       | 7     | 4     |       |
| Switch Phase          |       |       |       |       |       |       |       |       |       |       |       |       |
| Minimum Initial (s)   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |       |
| Minimum Split (s)     | 9.0   | 20.0  |       | 9.0   | 20.0  |       | 9.0   | 20.0  |       | 9.0   | 20.0  |       |
| Total Split (s)       | 12.0  | 57.0  |       | 12.0  | 57.0  |       | 21.0  | 31.0  |       | 20.0  | 30.0  |       |
| Total Split (%)       | 10.0% | 47.5% |       | 10.0% | 47.5% |       | 17.5% | 25.8% |       | 16.7% | 25.0% |       |
| Maximum Green (s)     | 8.0   | 50.5  |       | 8.0   | 50.5  |       | 17.0  | 27.0  |       | 16.0  | 26.0  |       |
| Yellow Time (s)       | 3.0   | 4.5   |       | 3.0   | 4.5   |       | 3.0   | 3.0   |       | 3.0   | 3.0   |       |
| All-Red Time (s)      | 1.0   | 2.0   |       | 1.0   | 2.0   |       | 1.0   | 1.0   |       | 1.0   | 1.0   |       |
| Lost Time Adjust (s)  | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |       |
| Total Lost Time (s)   | 4.0   | 6.5   |       | 4.0   | 6.5   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |       |
| Lead/Lag              | Lead  | Lag   |       | Lead  | Lag   |       | Lead  | Lag   |       | Lead  | Lag   |       |
| Lead-Lag Optimize?    | Yes   | Yes   |       | Yes   | Yes   |       | Yes   | Yes   |       | Yes   | Yes   |       |
| Vehicle Extension (s) | 3.0   | 3.0   |       | 3.0   | 3.0   |       | 3.0   | 3.0   |       | 3.0   | 3.0   |       |
| Recall Mode           | None  | C-Max |       | None  | C-Max |       | None  | None  |       | None  | None  |       |
| Act Effect Green (s)  | 64.2  | 54.5  | 120.0 | 66.5  | 57.3  | 120.0 | 15.9  | 24.1  | 120.0 | 14.9  | 23.1  | 120.0 |
| Actuated g/C Ratio    | 0.54  | 0.45  | 1.00  | 0.55  | 0.48  | 1.00  | 0.13  | 0.20  | 1.00  | 0.12  | 0.19  | 1.00  |
| v/c Ratio             | 0.14  | 0.14  | 0.08  | 0.19  | 0.30  | 0.59  | 0.77  | 0.81  | 0.05  | 0.74  | 0.25  | 0.08  |
| Control Delay         | 13.3  | 20.5  | 0.1   | 13.5  | 21.2  | 1.6   | 62.0  | 55.0  | 0.1   | 61.5  | 41.3  | 0.1   |
| Queue Delay           | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay           | 13.3  | 20.5  | 0.1   | 13.5  | 21.2  | 1.6   | 62.0  | 55.0  | 0.1   | 61.5  | 41.3  | 0.1   |
| LOS                   | B     | C     | A     | B     | C     | A     | E     | D     | A     | E     | D     | A     |
| Approach Delay        |       | 13.1  |       |       | 8.9   |       |       | 52.9  |       |       | 42.7  |       |
| Approach LOS          |       | B     |       |       | A     |       |       | D     |       |       | D     |       |

Intersection Summary
































|                                   |   |
|-----------------------------------|---|
| Area Type:                        | Other   |
| Cycle Length:                     | 120   |
| Actuated Cycle Length:            | 120   |
| Offset:                           | 12 (10%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green |
| Natural Cycle:                    | 60  |
| Control Type:                     | Actuated-Coordinated  |
| Maximum v/c Ratio:                | 0.81  |
| Intersection Signal Delay:        | 27.4  |
| Intersection LOS:                 | C   |
| Intersection Capacity Utilization | 54.8%   |
| ICU Level of Service              | A   |
| Analysis Period (min)             | 15  |

Splits and Phases: 8: Ridge Rd/Founders Pkwy & 5th St/SH 86



Lanes, Volumes, Timings  
1: Allen Way & Founder Pkwy

2041 Background  
PM Peak

|                            |    |    |  |  |    |  |    |    |  |  |    |    |
|----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL  | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations        |   |    |   |  |    |  |   |   |   |  |   |   |
| Traffic Volume (vph)       | 435   | 3209  | 230   | 45  | 2372  | 160   | 185  | 45  | 90  | 145   | 40  | 460   |
| Future Volume (vph)        | 435   | 3209  | 230   | 45  | 2372  | 160   | 185  | 45  | 90  | 145   | 40  | 460   |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900   | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 290   |   | 0   | 325   |   | 0   | 75   |   | 0   | 130   |   | 110   |
| Storage Lanes              | 2   |   | 0   | 1   |   | 1   | 2  |   | 0   | 1   |   | 2   |
| Taper Length (ft)          | 100   |   |   | 100   |   |   | 100  |   |   | 100   |   |   |
| Lane Util. Factor          | 0.97  | 0.91  | 0.91  | 1.00  | 0.91  | 1.00  | 0.97   | 1.00  | 1.00  | 1.00  | 1.00  | 0.88  |
| Frt                        |   | 0.990   |   |   |   | 0.850   |  | 0.900   |   |   |   | 0.850   |
| Flt Protected              | 0.950   |   |   | 0.950   |   |   | 0.950  |   |   | 0.950   |   |   |
| Satd. Flow (prot)          | 3433  | 5034  | 0   | 1770  | 5085  | 1583  | 3433   | 1676  | 0   | 1770  | 1863  | 2787  |
| Flt Permitted              | 0.950   |   |   | 0.061   |   |   | 0.950  |   |   | 0.397   |   |   |
| Satd. Flow (perm)          | 3433  | 5034  | 0   | 114   | 5085  | 1583  | 3433   | 1676  | 0   | 740   | 1863  | 2787  |
| Right Turn on Red          |   |   | Yes   |   |   | Yes   |  |   | Yes   |   |   | Yes   |
| Satd. Flow (RTOR)          |   | 20  |   |   |   | 155   |  | 69  |   |   |   | 291   |
| Link Speed (mph)           |   | 35  |   |   | 35  |   |  | 30  |   |   |   | 30  |
| Link Distance (ft)         |   | 533   |   |   | 1095  |   |  | 278   |   |   |   | 392   |
| Travel Time (s)            |   | 10.4  |   |   | 21.3  |   |  | 6.3   |   |   |   | 8.9   |
| Peak Hour Factor           | 0.92  | 0.95  | 0.92  | 0.92  | 0.98  | 0.92  | 0.92   | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 473   | 3378  | 250   | 49  | 2420  | 174   | 201  | 49  | 98  | 158   | 43  | 500   |
| Shared Lane Traffic (%)    |   |   |   |   |   |   |  |   |   |   |   |   |
| Lane Group Flow (vph)      | 473   | 3628  | 0   | 49  | 2420  | 174   | 201  | 147   | 0   | 158   | 43  | 500   |
| Enter Blocked Intersection | No  | No  | No  | No  | No  | No  | No   | No  | No  | No  | No  | No  |
| Lane Alignment             | Left  | Left  | Right   | Left  | Left  | Right   | Left   | Left  | Right   | Left  | Left  | Right   |
| Median Width(ft)           |   | 20  |   |   | 20  |   |  | 24  |   |   |   | 20  |
| Link Offset(ft)            |   | 0   |   |   | 0   |   |  | 0   |   |   |   | 0   |
| Crosswalk Width(ft)        |   | 16  |   |   | 16  |   |  | 16  |   |   |   | 16  |
| Two way Left Turn Lane     |   |   |   |   |   |   |  |   |   |   |   |   |
| Headway 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  |
| Turning Speed (mph)        | 15  |   | 9   | 15  |   | 9   | 15   |   | 9   | 15  |   | 9   |
| Number of Detectors        | 1   | 2   |   | 1   | 2   | 1   | 1  | 2   |   | 1   | 2   | 1   |
| Detector Template          | Left  | Thru  |   | Left  | Thru  | Right   | Left   | Thru  |   | Left  | Thru  | Right   |
| Leading Detector (ft)      | 20  | 100   |   | 20  | 100   | 20  | 20   | 100   |   | 20  | 100   | 20  |
| Trailing Detector (ft)     | 0   | 0   |   | 0   | 0   | 0   | 0  | 0   |   | 0   | 0   | 0   |
| Detector 1 Position(ft)    | 0   | 0   |   | 0   | 0   | 0   | 0  | 0   |   | 0   | 0   | 0   |
| Detector 1 Size(ft)        | 20  | 6   |   | 20  | 6   | 20  | 20   | 6   |   | 20  | 6   | 20  |
| Detector 1 Type            | Cl+Ex   | Cl+Ex   |   | Cl+Ex   | Cl+Ex   | Cl+Ex   | Cl+Ex  | Cl+Ex   |   | Cl+Ex   | Cl+Ex   | Cl+Ex   |
| Detector 1 Channel         |   |   |   |   |   |   |  |   |   |   |   |   |
| Detector 1 Extend (s)      | 0.0   | 0.0   |   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   |   | 0.0   | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   |   | 0.0   | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   |   | 0.0   | 0.0   | 0.0   |
| Detector 2 Position(ft)    |   | 94  |   |   | 94  |   |  | 94  |   |   |   | 94  |
| Detector 2 Size(ft)        |   | 6   |   |   | 6   |   |  | 6   |   |   |   | 6   |
| Detector 2 Type            |   | Cl+Ex   |   |   | Cl+Ex   |   |  | Cl+Ex   |   |   |   | Cl+Ex   |
| Detector 2 Channel         |   |   |   |   |   |   |  |   |   |   |   |   |
| Detector 2 Extend (s)      |   | 0.0   |   |   | 0.0   |   |  | 0.0   |   |   |   | 0.0   |
| Turn Type                  | Prot  | NA  |   | pm+pt   | NA  | Perm  | Prot   | NA  |   | pm+pt   | NA  | Perm  |
| Protected Phases           | 5   | 2   |   | 1   | 6   |   | 3  | 8   |   | 7   | 4   |   |
| Permitted Phases           |   |   |   | 6   |   | 6   |  |   |   | 4   |   | 4   |

Lanes, Volumes, Timings  
1: Allen Way & Founder Pkwy

2041 Background  
PM Peak

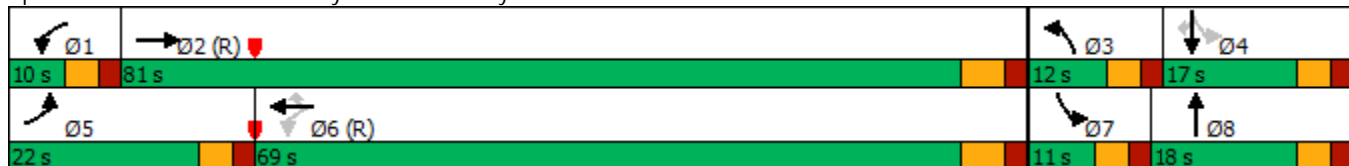


| Lane Group            | EBL   | EBT   | EBR | WBL  | WBT   | WBR   | NBL   | NBT   | NBR | SBL  | SBT   | SBR   |
|-----------------------|-------|-------|-----|------|-------|-------|-------|-------|-----|------|-------|-------|
| Detector Phase        | 5     | 2     |     | 1    | 6     | 6     | 3     | 8     |     | 7    | 4     | 4     |
| Switch Phase          |       |       |     |      |       |       |       |       |     |      |       |       |
| Minimum Initial (s)   | 4.0   | 4.0   |     | 4.0  | 4.0   | 4.0   | 4.0   | 4.0   |     | 4.0  | 4.0   | 4.0   |
| Minimum Split (s)     | 11.0  | 21.0  |     | 9.5  | 21.0  | 21.0  | 9.0   | 21.0  |     | 9.0  | 21.0  | 21.0  |
| Total Split (s)       | 22.0  | 81.0  |     | 10.0 | 69.0  | 69.0  | 12.0  | 18.0  |     | 11.0 | 17.0  | 17.0  |
| Total Split (%)       | 18.3% | 67.5% |     | 8.3% | 57.5% | 57.5% | 10.0% | 15.0% |     | 9.2% | 14.2% | 14.2% |
| Maximum Green (s)     | 17.0  | 75.0  |     | 5.0  | 63.0  | 63.0  | 7.0   | 13.0  |     | 6.0  | 12.0  | 12.0  |
| Yellow Time (s)       | 3.0   | 4.0   |     | 3.0  | 4.0   | 4.0   | 3.0   | 3.0   |     | 3.0  | 3.0   | 3.0   |
| All-Red Time (s)      | 2.0   | 2.0   |     | 2.0  | 2.0   | 2.0   | 2.0   | 2.0   |     | 2.0  | 2.0   | 2.0   |
| Lost Time Adjust (s)  | -2.0  | -3.0  |     | -2.0 | -2.0  | -1.0  | -2.0  | -2.0  |     | -2.0 | -2.0  | -2.0  |
| Total Lost Time (s)   | 3.0   | 3.0   |     | 3.0  | 4.0   | 5.0   | 3.0   | 3.0   |     | 3.0  | 3.0   | 3.0   |
| Lead/Lag              | Lead  | Lag   |     | Lead | Lag   | Lag   | Lead  | Lag   |     | Lead | Lag   | Lag   |
| Lead-Lag Optimize?    | Yes   | Yes   |     | Yes  | Yes   | Yes   | Yes   | Yes   |     | Yes  | Yes   | Yes   |
| Vehicle Extension (s) | 3.0   | 3.0   |     | 3.0  | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0  | 3.0   | 3.0   |
| Recall Mode           | None  | C-Max |     | None | C-Max | C-Max | None  | None  |     | None | None  | None  |
| Act Effect Green (s)  | 19.0  | 80.6  |     | 73.7 | 65.6  | 64.6  | 9.0   | 14.4  |     | 21.4 | 13.4  | 13.4  |
| Actuated g/C Ratio    | 0.16  | 0.67  |     | 0.61 | 0.55  | 0.54  | 0.08  | 0.12  |     | 0.18 | 0.11  | 0.11  |
| v/c Ratio             | 0.87  | 1.07  |     | 0.29 | 0.87  | 0.19  | 0.78  | 0.56  |     | 0.79 | 0.21  | 0.88  |
| Control Delay         | 66.7  | 59.6  |     | 11.6 | 23.8  | 2.1   | 75.6  | 35.4  |     | 69.8 | 50.8  | 39.4  |
| Queue Delay           | 0.0   | 0.0   |     | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.0  | 0.0   | 0.0   |
| Total Delay           | 66.7  | 59.6  |     | 11.6 | 23.8  | 2.1   | 75.6  | 35.4  |     | 69.8 | 50.8  | 39.4  |
| LOS                   | E     | E     |     | B    | C     | A     | E     | D     |     | E    | D     | D     |
| Approach Delay        |       | 60.4  |     |      | 22.2  |       |       | 58.6  |     |      | 46.9  |       |
| Approach LOS          |       | E     |     |      | C     |       |       | E     |     |      | D     |       |

Intersection Summary

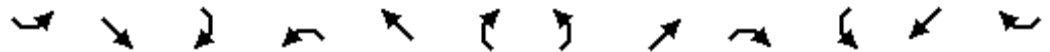
Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 119 (99%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
 Natural Cycle: 150  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 1.07  
 Intersection Signal Delay: 46.2      Intersection LOS: D  
 Intersection Capacity Utilization 99.7%      ICU Level of Service F  
 Analysis Period (min) 15

Splits and Phases: 1: Allen Way & Founder Pkwy



Lanes, Volumes, Timings  
2: Front St & Founder Pkwy

2041 Background  
PM Peak



| Lane Group                 | SEL   | SET   | SER   | NWL   | NWT   | NWR   | NEL   | NET   | NER   | SWL   | SWT   | SWR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |       |       |       |       |       |       |
| Traffic Volume (vph)       | 205   | 2624  | 615   | 135   | 1962  | 25    | 540   | 145   | 193   | 40    | 120   | 75    |
| Future Volume (vph)        | 205   | 2624  | 615   | 135   | 1962  | 25    | 540   | 145   | 193   | 40    | 120   | 75    |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 460   |       | 0     | 200   |       | 0     | 285   |       | 0     | 230   |       | 0     |
| Storage Lanes              | 1     |       | 0     | 1     |       | 0     | 1     |       | 1     | 1     |       | 0     |
| Taper Length (ft)          | 100   |       |       | 100   |       |       | 100   |       |       | 100   |       |       |
| Lane Util. Factor          | 1.00  | 0.91  | 0.91  | 1.00  | 0.91  | 0.91  | 0.97  | 1.00  | 1.00  | 1.00  | 0.95  | 0.95  |
| Frt                        |       | 0.971 |       |       | 0.998 |       |       |       | 0.850 |       | 0.942 |       |
| Flt Protected              | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       |
| Satd. Flow (prot)          | 1770  | 4938  | 0     | 1770  | 5075  | 0     | 3433  | 1863  | 1583  | 1770  | 3334  | 0     |
| Flt Permitted              | 0.055 |       |       | 0.056 |       |       | 0.333 |       |       | 0.657 |       |       |
| Satd. Flow (perm)          | 102   | 4938  | 0     | 104   | 5075  | 0     | 1203  | 1863  | 1583  | 1224  | 3334  | 0     |
| Right Turn on Red          |       |       | Yes   |       |       | Yes   |       |       | Yes   |       |       | Yes   |
| Satd. Flow (RTOR)          |       | 91    |       |       | 3     |       |       |       | 122   |       | 82    |       |
| Link Speed (mph)           |       | 35    |       |       | 35    |       |       | 35    |       |       | 35    |       |
| Link Distance (ft)         |       | 1095  |       |       | 488   |       |       | 556   |       |       | 397   |       |
| Travel Time (s)            |       | 21.3  |       |       | 9.5   |       |       | 10.8  |       |       | 7.7   |       |
| Peak Hour Factor           | 0.92  | 0.95  | 0.92  | 0.92  | 0.98  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 223   | 2762  | 668   | 147   | 2002  | 27    | 587   | 158   | 210   | 43    | 130   | 82    |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 223   | 3430  | 0     | 147   | 2029  | 0     | 587   | 158   | 210   | 43    | 212   | 0     |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right |
| Median Width(ft)           |       | 12    |       |       | 12    |       |       | 40    |       |       | 24    |       |
| Link Offset(ft)            |       | 0     |       |       | 0     |       |       | 0     |       |       | 0     |       |
| Crosswalk Width(ft)        |       | 16    |       |       | 16    |       |       | 16    |       |       | 16    |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |       |       |       |       |       |
| Headway 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  |
| Turning Speed (mph)        | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     |
| Number of Detectors        | 1     | 2     |       | 1     | 2     |       | 1     | 2     | 1     | 1     | 2     |       |
| Detector Template          | Left  | Thru  |       | Left  | Thru  |       | Left  | Thru  | Right | Left  | Thru  |       |
| Leading Detector (ft)      | 20    | 100   |       | 20    | 100   |       | 20    | 100   | 20    | 20    | 100   |       |
| Trailing Detector (ft)     | 0     | 0     |       | 0     | 0     |       | 0     | 0     | 0     | 0     | 0     |       |
| Detector 1 Position(ft)    | 0     | 0     |       | 0     | 0     |       | 0     | 0     | 0     | 0     | 0     |       |
| Detector 1 Size(ft)        | 20    | 6     |       | 20    | 6     |       | 20    | 6     | 20    | 20    | 6     |       |
| Detector 1 Type            | Cl+Ex | Cl+Ex |       | Cl+Ex | Cl+Ex |       | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |       |
| Detector 1 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       |
| Detector 1 Queue (s)       | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       |
| Detector 1 Delay (s)       | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       |
| Detector 2 Position(ft)    |       | 94    |       |       | 94    |       |       | 94    |       |       | 94    |       |
| Detector 2 Size(ft)        |       | 6     |       |       | 6     |       |       | 6     |       |       | 6     |       |
| Detector 2 Type            |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |
| Detector 2 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |
| Turn Type                  | pm+pt | NA    |       | pm+pt | NA    |       | pm+pt | NA    | Perm  | pm+pt | NA    |       |
| Protected Phases           | 5     | 2     |       | 1     | 6     |       | 3     | 8     |       | 7     | 4     |       |
| Permitted Phases           | 2     |       |       | 6     |       |       | 8     |       | 8     | 4     |       |       |

Lanes, Volumes, Timings  
2: Front St & Founder Pkwy

2041 Background  
PM Peak



| Lane Group            | SEL   | SET   | SER | NWL  | NWT   | NWR | NEL   | NET   | NER   | SWL  | SWT  | SWR |
|-----------------------|-------|-------|-----|------|-------|-----|-------|-------|-------|------|------|-----|
| Detector Phase        | 5     | 2     |     | 1    | 6     |     | 3     | 8     | 8     | 7    | 4    |     |
| Switch Phase          |       |       |     |      |       |     |       |       |       |      |      |     |
| Minimum Initial (s)   | 4.0   | 4.0   |     | 4.0  | 4.0   |     | 4.0   | 4.0   | 4.0   | 4.0  | 4.0  |     |
| Minimum Split (s)     | 9.0   | 21.0  |     | 9.0  | 21.0  |     | 9.0   | 21.0  | 21.0  | 10.0 | 21.0 |     |
| Total Split (s)       | 13.0  | 78.0  |     | 11.0 | 76.0  |     | 20.0  | 21.0  | 21.0  | 10.0 | 11.0 |     |
| Total Split (%)       | 10.8% | 65.0% |     | 9.2% | 63.3% |     | 16.7% | 17.5% | 17.5% | 8.3% | 9.2% |     |
| Maximum Green (s)     | 8.0   | 72.0  |     | 6.0  | 70.0  |     | 15.0  | 16.0  | 16.0  | 5.0  | 6.0  |     |
| Yellow Time (s)       | 3.0   | 4.0   |     | 3.0  | 4.0   |     | 3.0   | 3.0   | 3.0   | 3.0  | 3.0  |     |
| All-Red Time (s)      | 2.0   | 2.0   |     | 2.0  | 2.0   |     | 2.0   | 2.0   | 2.0   | 2.0  | 2.0  |     |
| Lost Time Adjust (s)  | -2.0  | -3.0  |     | -2.0 | -2.0  |     | -2.0  | -2.0  | -2.0  | -2.0 | -2.0 |     |
| Total Lost Time (s)   | 3.0   | 3.0   |     | 3.0  | 4.0   |     | 3.0   | 3.0   | 3.0   | 3.0  | 3.0  |     |
| Lead/Lag              | Lead  | Lag   |     | Lead | Lag   |     | Lead  | Lag   | Lag   | Lead | Lag  |     |
| Lead-Lag Optimize?    | Yes   | Yes   |     | Yes  | Yes   |     | Yes   | Yes   | Yes   | Yes  | Yes  |     |
| Vehicle Extension (s) | 3.0   | 3.0   |     | 3.0  | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0  | 3.0  |     |
| Recall Mode           | None  | C-Max |     | None | C-Max |     | None  | None  | None  | None | None |     |
| Act Effect Green (s)  | 85.0  | 75.0  |     | 81.0 | 72.0  |     | 28.0  | 20.0  | 20.0  | 15.0 | 8.0  |     |
| Actuated g/C Ratio    | 0.71  | 0.62  |     | 0.68 | 0.60  |     | 0.23  | 0.17  | 0.17  | 0.12 | 0.07 |     |
| v/c Ratio             | 1.06  | 1.10  |     | 0.81 | 0.67  |     | 0.98  | 0.51  | 0.58  | 0.23 | 0.71 |     |
| Control Delay         | 67.9  | 66.9  |     | 57.4 | 17.3  |     | 77.0  | 53.2  | 27.2  | 40.3 | 47.3 |     |
| Queue Delay           | 0.0   | 0.0   |     | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  |     |
| Total Delay           | 67.9  | 66.9  |     | 57.4 | 17.3  |     | 77.0  | 53.2  | 27.2  | 40.3 | 47.3 |     |
| LOS                   | E     | E     |     | E    | B     |     | E     | D     | C     | D    | D    |     |
| Approach Delay        |       | 66.9  |     |      | 20.0  |     |       | 62.1  |       |      | 46.1 |     |
| Approach LOS          |       | E     |     |      | C     |     |       | E     |       |      | D    |     |

Intersection Summary

Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 96 (80%), Referenced to phase 2:SETL and 6:NWTL, Start of Green  
 Natural Cycle: 140  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 1.10  
 Intersection Signal Delay: 51.0      Intersection LOS: D  
 Intersection Capacity Utilization 106.4%      ICU Level of Service G  
 Analysis Period (min) 15

Splits and Phases: 2: Front St & Founder Pkwy



Lanes, Volumes, Timings  
3: Woodlands Blvd & Founders Pkwy

2041 Background  
PM Peak



| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        | ↶     | ↶↶↶   |       | ↶     | ↶↶↶   |       | ↶↶    | ↶     |       | ↶     | ↶↶    |       |
| Traffic Volume (vph)       | 8     | 1937  | 505   | 246   | 1517  | 100   | 355   | 45    | 476   | 175   | 50    | 10    |
| Future Volume (vph)        | 8     | 1937  | 505   | 246   | 1517  | 100   | 355   | 45    | 476   | 175   | 50    | 10    |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 450   |       | 0     | 500   |       | 0     | 300   |       | 0     | 150   |       | 0     |
| Storage Lanes              | 1     |       | 0     | 1     |       | 0     | 2     |       | 0     | 1     |       | 0     |
| Taper Length (ft)          | 100   |       |       | 100   |       |       | 100   |       |       | 100   |       |       |
| Lane Util. Factor          | 1.00  | 0.91  | 0.91  | 1.00  | 0.91  | 0.91  | 0.97  | 1.00  | 1.00  | 1.00  | 0.95  | 0.95  |
| Frt                        |       | 0.968 |       |       | 0.990 |       |       | 0.863 |       |       | 0.975 |       |
| Flt Protected              | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       |
| Satd. Flow (prot)          | 1770  | 4923  | 0     | 1770  | 5034  | 0     | 3433  | 1608  | 0     | 1770  | 3451  | 0     |
| Flt Permitted              | 0.118 |       |       | 0.060 |       |       | 0.649 |       |       | 0.244 |       |       |
| Satd. Flow (perm)          | 220   | 4923  | 0     | 112   | 5034  | 0     | 2345  | 1608  | 0     | 455   | 3451  | 0     |
| Right Turn on Red          |       |       | Yes   |       |       | Yes   |       |       | Yes   |       |       | Yes   |
| Satd. Flow (RTOR)          |       | 88    |       |       | 17    |       |       | 107   |       |       | 11    |       |
| Link Speed (mph)           |       | 50    |       |       | 50    |       |       | 35    |       |       | 35    |       |
| Link Distance (ft)         |       | 721   |       |       | 782   |       |       | 419   |       |       | 497   |       |
| Travel Time (s)            |       | 9.8   |       |       | 10.7  |       |       | 8.2   |       |       | 9.7   |       |
| Peak Hour Factor           | 0.92  | 0.95  | 0.92  | 0.92  | 0.98  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 9     | 2039  | 549   | 267   | 1548  | 109   | 386   | 49    | 517   | 190   | 54    | 11    |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 9     | 2588  | 0     | 267   | 1657  | 0     | 386   | 566   | 0     | 190   | 65    | 0     |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right |
| Median Width(ft)           |       | 24    |       |       | 24    |       |       | 30    |       |       | 24    |       |
| Link Offset(ft)            |       | 0     |       |       | 0     |       |       | 0     |       |       | 0     |       |
| Crosswalk Width(ft)        |       | 16    |       |       | 16    |       |       | 16    |       |       | 16    |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |       |       |       |       |       |
| Headway 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  |
| Turning Speed (mph)        | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     |
| Number of Detectors        | 1     | 2     |       | 1     | 2     |       | 1     | 2     |       | 1     | 2     |       |
| Detector Template          | Left  | Thru  |       | Left  | Thru  |       | Left  | Thru  |       | Left  | Thru  |       |
| Leading Detector (ft)      | 20    | 100   |       | 20    | 100   |       | 20    | 100   |       | 20    | 100   |       |
| Trailing Detector (ft)     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |       | 0     | 0     |       |
| Detector 1 Position(ft)    | 0     | 0     |       | 0     | 0     |       | 0     | 0     |       | 0     | 0     |       |
| Detector 1 Size(ft)        | 20    | 6     |       | 20    | 6     |       | 20    | 6     |       | 20    | 6     |       |
| Detector 1 Type            | Cl+Ex | Cl+Ex |       | Cl+Ex | Cl+Ex |       | Cl+Ex | Cl+Ex |       | Cl+Ex | Cl+Ex |       |
| Detector 1 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |       |
| Detector 1 Queue (s)       | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |       |
| Detector 1 Delay (s)       | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |       |
| Detector 2 Position(ft)    |       | 94    |       |       | 94    |       |       | 94    |       |       | 94    |       |
| Detector 2 Size(ft)        |       | 6     |       |       | 6     |       |       | 6     |       |       | 6     |       |
| Detector 2 Type            |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |
| Detector 2 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |
| Turn Type                  | pm+pt | NA    |       | pm+pt | NA    |       | pm+pt | NA    |       | pm+pt | NA    |       |
| Protected Phases           | 5     | 2     |       | 1     | 6     |       | 3     | 8     |       | 7     | 4     |       |
| Permitted Phases           | 2     |       |       | 6     |       |       | 8     |       |       | 4     |       |       |

Lanes, Volumes, Timings  
3: Woodlands Blvd & Founders Pkwy

2041 Background  
PM Peak

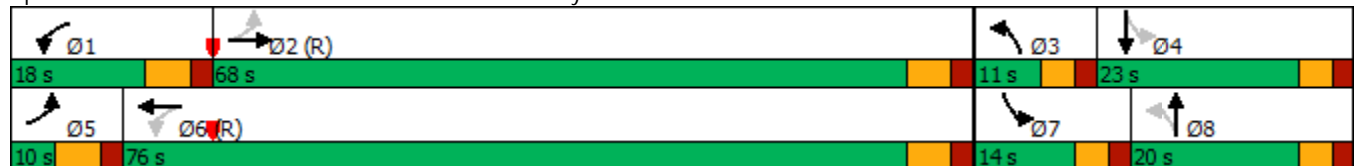


| Lane Group            | EBL  | EBT   | EBR | WBL   | WBT   | WBR | NBL  | NBT   | NBR | SBL   | SBT   | SBR |
|-----------------------|------|-------|-----|-------|-------|-----|------|-------|-----|-------|-------|-----|
| Detector Phase        | 5    | 2     |     | 1     | 6     |     | 3    | 8     |     | 7     | 4     |     |
| Switch Phase          |      |       |     |       |       |     |      |       |     |       |       |     |
| Minimum Initial (s)   | 4.0  | 4.0   |     | 4.0   | 4.0   |     | 4.0  | 4.0   |     | 4.0   | 4.0   |     |
| Minimum Split (s)     | 10.0 | 20.0  |     | 10.0  | 20.0  |     | 9.0  | 20.0  |     | 9.0   | 20.0  |     |
| Total Split (s)       | 10.0 | 68.0  |     | 18.0  | 76.0  |     | 11.0 | 20.0  |     | 14.0  | 23.0  |     |
| Total Split (%)       | 8.3% | 56.7% |     | 15.0% | 63.3% |     | 9.2% | 16.7% |     | 11.7% | 19.2% |     |
| Maximum Green (s)     | 4.0  | 62.0  |     | 12.0  | 70.0  |     | 6.0  | 15.0  |     | 9.0   | 18.0  |     |
| Yellow Time (s)       | 4.0  | 4.0   |     | 4.0   | 4.0   |     | 3.0  | 3.0   |     | 3.0   | 3.0   |     |
| All-Red Time (s)      | 2.0  | 2.0   |     | 2.0   | 2.0   |     | 2.0  | 2.0   |     | 2.0   | 2.0   |     |
| Lost Time Adjust (s)  | -2.0 | -3.0  |     | -3.0  | -3.0  |     | -2.0 | -2.0  |     | -2.0  | -2.0  |     |
| Total Lost Time (s)   | 4.0  | 3.0   |     | 3.0   | 3.0   |     | 3.0  | 3.0   |     | 3.0   | 3.0   |     |
| Lead/Lag              | Lead | Lag   |     | Lead  | Lag   |     | Lead | Lag   |     | Lead  | Lag   |     |
| Lead-Lag Optimize?    | Yes  | Yes   |     | Yes   | Yes   |     | Yes  | Yes   |     | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0  | 3.0   |     | 3.0   | 3.0   |     | 3.0  | 3.0   |     | 3.0   | 3.0   |     |
| Recall Mode           | None | C-Max |     | None  | C-Max |     | None | None  |     | None  | None  |     |
| Act Effect Green (s)  | 70.0 | 65.0  |     | 83.0  | 81.0  |     | 26.2 | 17.0  |     | 27.0  | 17.5  |     |
| Actuated g/C Ratio    | 0.58 | 0.54  |     | 0.69  | 0.68  |     | 0.22 | 0.14  |     | 0.22  | 0.15  |     |
| v/c Ratio             | 0.04 | 0.96  |     | 0.94  | 0.49  |     | 0.62 | 1.77  |     | 0.85  | 0.13  |     |
| Control Delay         | 7.1  | 35.4  |     | 74.0  | 10.3  |     | 44.3 | 386.5 |     | 72.2  | 36.3  |     |
| Queue Delay           | 0.0  | 0.0   |     | 0.0   | 0.0   |     | 0.0  | 0.0   |     | 0.0   | 0.0   |     |
| Total Delay           | 7.1  | 35.4  |     | 74.0  | 10.3  |     | 44.3 | 386.5 |     | 72.2  | 36.3  |     |
| LOS                   | A    | D     |     | E     | B     |     | D    | F     |     | E     | D     |     |
| Approach Delay        |      | 35.3  |     |       | 19.1  |     |      | 247.8 |     |       | 63.1  |     |
| Approach LOS          |      | D     |     |       | B     |     |      | F     |     |       | E     |     |

Intersection Summary

Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 37 (31%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 1.77  
 Intersection Signal Delay: 66.4  
 Intersection LOS: E  
 Intersection Capacity Utilization 117.1%  
 ICU Level of Service H  
 Analysis Period (min) 15

Splits and Phases: 3: Woodlands Blvd & Founders Pkwy



Lanes, Volumes, Timings  
4: Founders Pkwy & Crowfoot Valley Rd

2041 Background  
PM Peak



| Lane Group                 | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |
| Traffic Volume (vph)       | 960   | 1628  | 1193  | 165   | 187   | 670   |
| Future Volume (vph)        | 960   | 1628  | 1193  | 165   | 187   | 670   |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 485   |       |       | 0     | 150   | 0     |
| Storage Lanes              | 2     |       |       | 1     | 2     | 1     |
| Taper Length (ft)          | 100   |       |       |       | 100   |       |
| Lane Util. Factor          | 0.97  | 0.95  | 0.95  | 1.00  | 0.97  | 0.91  |
| Frt                        |       |       |       | 0.850 | 0.904 | 0.850 |
| Flt Protected              | 0.950 |       |       |       | 0.982 |       |
| Satd. Flow (prot)          | 3433  | 3539  | 3539  | 1583  | 3208  | 1441  |
| Flt Permitted              | 0.950 |       |       |       | 0.982 |       |
| Satd. Flow (perm)          | 3433  | 3539  | 3539  | 1583  | 3208  | 1441  |
| Right Turn on Red          |       |       |       | Yes   |       | Yes   |
| Satd. Flow (RTOR)          |       |       |       | 148   | 341   | 364   |
| Link Speed (mph)           |       | 50    | 50    |       | 35    |       |
| Link Distance (ft)         |       | 641   | 617   |       | 595   |       |
| Travel Time (s)            |       | 8.7   | 8.4   |       | 11.6  |       |
| Peak Hour Factor           | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 1043  | 1770  | 1297  | 179   | 203   | 728   |
| Shared Lane Traffic (%)    |       |       |       |       |       | 50%   |
| Lane Group Flow (vph)      | 1043  | 1770  | 1297  | 179   | 567   | 364   |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Left  | Right | Left  | Right |
| Median Width(ft)           |       | 24    | 24    |       | 24    |       |
| Link Offset(ft)            |       | 0     | 0     |       | 0     |       |
| Crosswalk Width(ft)        |       | 16    | 16    |       | 16    |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |
| Headway Factor             | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| Turning Speed (mph)        | 15    |       |       | 9     | 15    | 9     |
| Number of Detectors        | 1     | 2     | 2     | 1     | 1     | 1     |
| Detector Template          | Left  | Thru  | Thru  | Right | Left  | Right |
| Leading Detector (ft)      | 20    | 100   | 100   | 20    | 20    | 20    |
| Trailing Detector (ft)     | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Position(ft)    | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Size(ft)        | 20    | 6     | 6     | 20    | 20    | 20    |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 2 Position(ft)    |       | 94    | 94    |       |       |       |
| Detector 2 Size(ft)        |       | 6     | 6     |       |       |       |
| Detector 2 Type            |       | Cl+Ex | Cl+Ex |       |       |       |
| Detector 2 Channel         |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   | 0.0   |       |       |       |
| Turn Type                  | Prot  | NA    | NA    | Perm  | Prot  | Free  |
| Protected Phases           | 5     | 2     | 6     |       | 4     |       |
| Permitted Phases           |       |       |       | 6     |       | Free  |



Lanes, Volumes, Timings  
4: Founders Pkwy & Crowfoot Valley Rd

2041 Background  
PM Peak

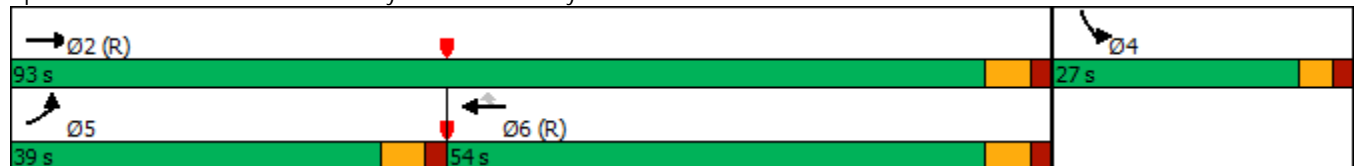


| Lane Group            | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   |
|-----------------------|-------|-------|-------|-------|-------|-------|
| Detector Phase        | 5     | 2     | 6     | 6     | 4     |       |
| Switch Phase          |       |       |       |       |       |       |
| Minimum Initial (s)   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       |
| Minimum Split (s)     | 10.0  | 10.5  | 10.0  | 10.0  | 10.0  |       |
| Total Split (s)       | 39.0  | 93.0  | 54.0  | 54.0  | 27.0  |       |
| Total Split (%)       | 32.5% | 77.5% | 45.0% | 45.0% | 22.5% |       |
| Maximum Green (s)     | 33.0  | 87.0  | 48.0  | 48.0  | 22.0  |       |
| Yellow Time (s)       | 4.0   | 4.0   | 4.0   | 4.0   | 3.0   |       |
| All-Red Time (s)      | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   |       |
| Lost Time Adjust (s)  | -2.0  | -2.0  | -2.0  | -2.0  | -2.0  |       |
| Total Lost Time (s)   | 4.0   | 4.0   | 4.0   | 4.0   | 3.0   |       |
| Lead/Lag              | Lead  |       | Lag   | Lag   |       |       |
| Lead-Lag Optimize?    | Yes   |       | Yes   | Yes   |       |       |
| Vehicle Extension (s) | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |       |
| Recall Mode           | None  | C-Max | C-Max | C-Max | None  |       |
| Act Effect Green (s)  | 42.2  | 96.2  | 50.0  | 50.0  | 16.8  | 120.0 |
| Actuated g/C Ratio    | 0.35  | 0.80  | 0.42  | 0.42  | 0.14  | 1.00  |
| v/c Ratio             | 0.86  | 0.62  | 0.88  | 0.24  | 0.76  | 0.25  |
| Control Delay         | 45.8  | 6.5   | 40.5  | 6.3   | 26.1  | 0.4   |
| Queue Delay           | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay           | 45.8  | 6.5   | 40.5  | 6.3   | 26.1  | 0.4   |
| LOS                   | D     | A     | D     | A     | C     | A     |
| Approach Delay        |       | 21.1  | 36.4  |       | 16.0  |       |
| Approach LOS          |       | C     | D     |       | B     |       |

Intersection Summary

Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green  
 Natural Cycle: 70  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.88  
 Intersection Signal Delay: 24.5  
 Intersection LOS: C  
 Intersection Capacity Utilization 82.8%  
 ICU Level of Service E  
 Analysis Period (min) 15

Splits and Phases: 4: Founders Pkwy & Crowfoot Valley Rd



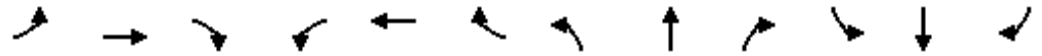
HCM 6th Roundabout  
 5: Connector Collector Roadway & Internal Collector Roadway

2041 Background  
 PM Peak

| Intersection                |       |       |       |
|-----------------------------|-------|-------|-------|
| Intersection Delay, s/veh   | 3.8   |       |       |
| Intersection LOS            | A     |       |       |
| Approach                    | EB    | WB    | NB    |
| Entry Lanes                 | 1     | 1     | 1     |
| Conflicting Circle Lanes    | 1     | 1     | 1     |
| Adj Approach Flow, veh/h    | 136   | 98    | 169   |
| Demand Flow Rate, veh/h     | 139   | 100   | 173   |
| Vehicles Circulating, veh/h | 50    | 84    | 78    |
| Vehicles Exiting, veh/h     | 134   | 167   | 111   |
| Ped Vol Crossing Leg, #/h   | 0     | 0     | 0     |
| Ped Cap Adj                 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh       | 3.7   | 3.5   | 4.0   |
| Approach LOS                | A     | A     | A     |
| Lane                        | Left  | Left  | Left  |
| Designated Moves            | TR    | LT    | LR    |
| Assumed Moves               | TR    | LT    | LR    |
| RT Channelized              |       |       |       |
| Lane Util                   | 1.000 | 1.000 | 1.000 |
| Follow-Up Headway, s        | 2.609 | 2.609 | 2.609 |
| Critical Headway, s         | 4.976 | 4.976 | 4.976 |
| Entry Flow, veh/h           | 139   | 100   | 173   |
| Cap Entry Lane, veh/h       | 1311  | 1267  | 1274  |
| Entry HV Adj Factor         | 0.982 | 0.980 | 0.977 |
| Flow Entry, veh/h           | 136   | 98    | 169   |
| Cap Entry, veh/h            | 1287  | 1241  | 1245  |
| V/C Ratio                   | 0.106 | 0.079 | 0.136 |
| Control Delay, s/veh        | 3.7   | 3.5   | 4.0   |
| LOS                         | A     | A     | A     |
| 95th %tile Queue, veh       | 0     | 0     | 0     |

Lanes, Volumes, Timings

6: Pioneer Ranch Access/Connector Collector Roadway & Founder Pkwy



| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |       |       |       |       |       |       |
| Traffic Volume (vph)       | 100   | 1585  | 130   | 10    | 1210  | 55    | 75    | 0     | 5     | 30    | 0     | 70    |
| Future Volume (vph)        | 100   | 1585  | 130   | 10    | 1210  | 55    | 75    | 0     | 5     | 30    | 0     | 70    |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 400   |       | 400   | 400   |       | 400   | 200   |       | 0     | 200   |       | 0     |
| Storage Lanes              | 1     |       | 1     | 1     |       | 1     | 1     |       | 0     | 1     |       | 0     |
| Taper Length (ft)          | 100   |       |       | 100   |       |       | 100   |       |       | 100   |       |       |
| Lane Util. Factor          | 1.00  | 0.95  | 1.00  | 1.00  | 0.95  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| Frt                        |       |       | 0.850 |       |       | 0.850 |       | 0.850 |       |       | 0.850 |       |
| Flt Protected              | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       |
| Satd. Flow (prot)          | 1770  | 3539  | 1583  | 1770  | 3539  | 1583  | 1770  | 1583  | 0     | 1770  | 1583  | 0     |
| Flt Permitted              | 0.146 |       |       | 0.095 |       |       | 0.714 |       |       | 0.503 |       |       |
| Satd. Flow (perm)          | 272   | 3539  | 1583  | 177   | 3539  | 1583  | 1330  | 1583  | 0     | 937   | 1583  | 0     |
| Right Turn on Red          |       |       | Yes   |       |       | Yes   |       |       | Yes   |       |       | Yes   |
| Satd. Flow (RTOR)          |       |       | 141   |       |       | 173   |       | 185   |       |       | 219   |       |
| Link Speed (mph)           |       | 50    |       |       | 50    |       |       | 35    |       |       | 35    |       |
| Link Distance (ft)         |       | 483   |       |       | 546   |       |       | 392   |       |       | 1305  |       |
| Travel Time (s)            |       | 6.6   |       |       | 7.4   |       |       | 7.6   |       |       | 25.4  |       |
| Peak Hour Factor           | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 109   | 1723  | 141   | 11    | 1315  | 60    | 82    | 0     | 5     | 33    | 0     | 76    |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 109   | 1723  | 141   | 11    | 1315  | 60    | 82    | 5     | 0     | 33    | 76    | 0     |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right |
| Median Width(ft)           |       | 12    |       |       | 12    |       |       | 12    |       |       | 12    |       |
| Link Offset(ft)            |       | 0     |       |       | 0     |       |       | 0     |       |       | 0     |       |
| Crosswalk Width(ft)        |       | 16    |       |       | 16    |       |       | 16    |       |       | 16    |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |       |       |       |       |       |
| Headway 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  |
| Turning Speed (mph)        | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     |
| Number of Detectors        | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     |       | 1     | 2     |       |
| Detector Template          | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  |       | Left  | Thru  |       |
| Leading Detector (ft)      | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   |       | 20    | 100   |       |
| Trailing Detector (ft)     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     |       |
| Detector 1 Position(ft)    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     |       |
| Detector 1 Size(ft)        | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     |       | 20    | 6     |       |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |       | Cl+Ex | Cl+Ex |       |
| Detector 1 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |       |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |       |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |       |
| Detector 2 Position(ft)    |       | 94    |       |       | 94    |       |       | 94    |       |       | 94    |       |
| Detector 2 Size(ft)        |       | 6     |       |       | 6     |       |       | 6     |       |       | 6     |       |
| Detector 2 Type            |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |
| Detector 2 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |
| Turn Type                  | pm+pt | NA    | Perm  | pm+pt | NA    | Perm  | pm+pt | NA    |       | pm+pt | NA    |       |
| Protected Phases           | 5     | 2     |       | 1     | 6     |       | 3     | 8     |       | 7     | 4     |       |
| Permitted Phases           | 2     |       | 2     | 6     |       | 6     | 8     |       |       | 4     |       |       |



| Lane Group            | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-------|-------|-----|
| Detector Phase        | 5     | 2     | 2     | 1     | 6     | 6     | 3     | 8     |     | 7     | 4     |     |
| Switch Phase          |       |       |       |       |       |       |       |       |     |       |       |     |
| Minimum Initial (s)   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |     | 4.0   | 4.0   |     |
| Minimum Split (s)     | 10.0  | 20.0  | 20.0  | 10.0  | 20.0  | 20.0  | 20.0  | 20.0  |     | 9.0   | 20.0  |     |
| Total Split (s)       | 21.0  | 71.0  | 71.0  | 12.0  | 62.0  | 62.0  | 12.0  | 25.0  |     | 12.0  | 25.0  |     |
| Total Split (%)       | 17.5% | 59.2% | 59.2% | 10.0% | 51.7% | 51.7% | 10.0% | 20.8% |     | 10.0% | 20.8% |     |
| Maximum Green (s)     | 15.0  | 65.0  | 65.0  | 6.0   | 56.0  | 56.0  | 7.0   | 20.0  |     | 7.0   | 20.0  |     |
| Yellow Time (s)       | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| All-Red Time (s)      | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   |     | 2.0   | 2.0   |     |
| Lost Time Adjust (s)  | -2.0  | -1.0  | -1.0  | -1.0  | -1.0  | -1.0  | -1.0  | -1.0  |     | -1.0  | -1.0  |     |
| Total Lost Time (s)   | 4.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 4.0   | 4.0   |     | 4.0   | 4.0   |     |
| Lead/Lag              | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   | Lead  | Lag   |     | Lead  | Lag   |     |
| Lead-Lag Optimize?    | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |     | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| Recall Mode           | None  | C-Max | C-Max | None  | C-Max | C-Max | None  | None  |     | None  | None  |     |
| Act Effect Green (s)  | 98.0  | 95.6  | 95.6  | 90.0  | 83.3  | 83.3  | 11.3  | 8.9   |     | 14.4  | 6.5   |     |
| Actuated g/C Ratio    | 0.82  | 0.80  | 0.80  | 0.75  | 0.69  | 0.69  | 0.09  | 0.07  |     | 0.12  | 0.05  |     |
| v/c Ratio             | 0.32  | 0.61  | 0.11  | 0.05  | 0.54  | 0.05  | 0.53  | 0.02  |     | 0.17  | 0.26  |     |
| Control Delay         | 5.4   | 8.2   | 1.1   | 4.0   | 11.3  | 0.1   | 63.3  | 0.2   |     | 46.2  | 2.2   |     |
| Queue Delay           | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Delay           | 5.4   | 8.2   | 1.1   | 4.0   | 11.3  | 0.1   | 63.3  | 0.2   |     | 46.2  | 2.2   |     |
| LOS                   | A     | A     | A     | A     | B     | A     | E     | A     |     | D     | A     |     |
| Approach Delay        |       | 7.6   |       |       | 10.8  |       |       | 59.7  |     |       | 15.5  |     |
| Approach LOS          |       | A     |       |       | B     |       |       | E     |     |       | B     |     |

Intersection Summary

Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green  
 Natural Cycle: 100  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.61  
 Intersection Signal Delay: 10.3  
 Intersection LOS: B  
 Intersection Capacity Utilization 69.6%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 6: Pioneer Ranch Access/Connector Collector Roadway & Founder Pkwy



| Intersection                |       |       |       |
|-----------------------------|-------|-------|-------|
| Intersection Delay, s/veh   | 5.1   |       |       |
| Intersection LOS            | A     |       |       |
| Approach                    | EB    | NB    | SB    |
| Entry Lanes                 | 1     | 1     | 1     |
| Conflicting Circle Lanes    | 1     | 1     | 1     |
| Adj Approach Flow, veh/h    | 163   | 337   | 304   |
| Demand Flow Rate, veh/h     | 166   | 344   | 310   |
| Vehicles Circulating, veh/h | 221   | 144   | 11    |
| Vehicles Exiting, veh/h     | 100   | 243   | 477   |
| Ped Vol Crossing Leg, #/h   | 0     | 0     | 0     |
| Ped Cap Adj                 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh       | 4.7   | 5.8   | 4.6   |
| Approach LOS                | A     | A     | A     |
| Lane                        | Left  | Left  | Left  |
| Designated Moves            | LR    | LT    | TR    |
| Assumed Moves               | LR    | LT    | TR    |
| RT Channelized              |       |       |       |
| Lane Util                   | 1.000 | 1.000 | 1.000 |
| Follow-Up Headway, s        | 2.609 | 2.609 | 2.609 |
| Critical Headway, s         | 4.976 | 4.976 | 4.976 |
| Entry Flow, veh/h           | 166   | 344   | 310   |
| Cap Entry Lane, veh/h       | 1101  | 1191  | 1364  |
| Entry HV Adj Factor         | 0.982 | 0.981 | 0.980 |
| Flow Entry, veh/h           | 163   | 337   | 304   |
| Cap Entry, veh/h            | 1081  | 1169  | 1337  |
| V/C Ratio                   | 0.151 | 0.289 | 0.227 |
| Control Delay, s/veh        | 4.7   | 5.8   | 4.6   |
| LOS                         | A     | A     | A     |
| 95th %tile Queue, veh       | 1     | 1     | 1     |

Lanes, Volumes, Timings  
8: Ridge Rd/Founders Pkwy & 5th St/SH 86

2041 Background  
PM Peak



| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |       |       |       |       |       |       |
| Traffic Volume (vph)       | 154   | 565   | 475   | 165   | 305   | 521   | 225   | 453   | 105   | 853   | 656   | 141   |
| Future Volume (vph)        | 154   | 565   | 475   | 165   | 305   | 521   | 225   | 453   | 105   | 853   | 656   | 141   |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 300   |       | 425   | 250   |       | 0     | 250   |       | 0     | 600   |       | 500   |
| Storage Lanes              | 1     |       | 1     | 1     |       | 1     | 2     |       | 1     | 2     |       | 1     |
| Taper Length (ft)          | 100   |       |       | 100   |       |       | 100   |       |       | 100   |       |       |
| Lane Util. Factor          | 1.00  | 0.95  | 1.00  | 1.00  | 0.95  | 1.00  | 0.97  | 0.95  | 1.00  | 0.97  | 0.95  | 1.00  |
| Frt                        |       |       | 0.850 |       |       | 0.850 |       |       | 0.850 |       |       | 0.850 |
| Flt Protected              | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       |
| Satd. Flow (prot)          | 1770  | 3539  | 1583  | 1770  | 3539  | 1583  | 3433  | 3539  | 1583  | 3433  | 3539  | 1583  |
| Flt Permitted              | 0.505 |       |       | 0.234 |       |       | 0.950 |       |       | 0.950 |       |       |
| Satd. Flow (perm)          | 941   | 3539  | 1583  | 436   | 3539  | 1583  | 3433  | 3539  | 1583  | 3433  | 3539  | 1583  |
| Right Turn on Red          |       |       | Yes   |       |       | Yes   |       |       | Yes   |       |       | Yes   |
| Satd. Flow (RTOR)          |       |       | 516   |       |       | 566   |       |       | 168   |       |       | 168   |
| Link Speed (mph)           |       | 35    |       |       | 50    |       |       | 35    |       |       | 50    |       |
| Link Distance (ft)         |       | 450   |       |       | 848   |       |       | 659   |       |       | 865   |       |
| Travel Time (s)            |       | 8.8   |       |       | 11.6  |       |       | 12.8  |       |       | 11.8  |       |
| Peak Hour Factor           | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 167   | 614   | 516   | 179   | 332   | 566   | 245   | 492   | 114   | 927   | 713   | 153   |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 167   | 614   | 516   | 179   | 332   | 566   | 245   | 492   | 114   | 927   | 713   | 153   |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right |
| Median Width(ft)           |       | 18    |       |       | 18    |       |       | 24    |       |       | 24    |       |
| Link Offset(ft)            |       | 0     |       |       | 0     |       |       | 0     |       |       | 0     |       |
| Crosswalk Width(ft)        |       | 16    |       |       | 16    |       |       | 16    |       |       | 16    |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |       |       |       |       |       |
| Headway 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  |
| Turning Speed (mph)        | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     |
| Number of Detectors        | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     | 1     |
| Detector Template          | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  | Right |
| Leading Detector (ft)      | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   | 20    |
| Trailing Detector (ft)     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Position(ft)    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Size(ft)        | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     | 20    |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 2 Position(ft)    |       | 94    |       |       | 94    |       |       | 94    |       |       | 94    |       |
| Detector 2 Size(ft)        |       | 6     |       |       | 6     |       |       | 6     |       |       | 6     |       |
| Detector 2 Type            |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |
| Detector 2 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |
| Turn Type                  | pm+pt | NA    | Free  | pm+pt | NA    | Free  | Prot  | NA    | Free  | Prot  | NA    | Free  |
| Protected Phases           | 5     | 2     |       | 1     | 6     |       | 3     | 8     |       | 7     | 4     |       |
| Permitted Phases           | 2     |       | Free  | 6     |       | Free  |       |       | Free  |       |       | Free  |

Lanes, Volumes, Timings  
 8: Ridge Rd/Founders Pkwy & 5th St/SH 86

2041 Background  
 PM Peak

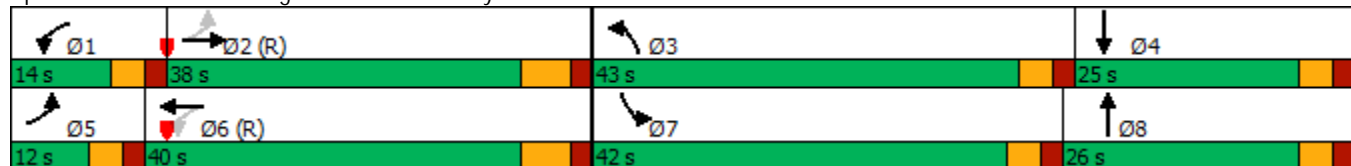


| Lane Group            | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Detector Phase        | 5     | 2     |       | 1     | 6     |       | 3     | 8     |       | 7     | 4     |       |
| Switch Phase          |       |       |       |       |       |       |       |       |       |       |       |       |
| Minimum Initial (s)   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |       |
| Minimum Split (s)     | 9.0   | 20.0  |       | 9.0   | 20.0  |       | 9.0   | 20.0  |       | 9.0   | 20.0  |       |
| Total Split (s)       | 12.0  | 38.0  |       | 14.0  | 40.0  |       | 43.0  | 26.0  |       | 42.0  | 25.0  |       |
| Total Split (%)       | 10.0% | 31.7% |       | 11.7% | 33.3% |       | 35.8% | 21.7% |       | 35.0% | 20.8% |       |
| Maximum Green (s)     | 7.0   | 31.5  |       | 9.0   | 33.5  |       | 38.0  | 21.0  |       | 37.0  | 20.0  |       |
| Yellow Time (s)       | 3.0   | 4.5   |       | 3.0   | 4.5   |       | 3.0   | 3.0   |       | 3.0   | 3.0   |       |
| All-Red Time (s)      | 2.0   | 2.0   |       | 2.0   | 2.0   |       | 2.0   | 2.0   |       | 2.0   | 2.0   |       |
| Lost Time Adjust (s)  | -1.0  | -2.0  |       | -1.0  | -2.0  |       | -1.0  | -2.0  |       | -2.0  | -1.0  |       |
| Total Lost Time (s)   | 4.0   | 4.5   |       | 4.0   | 4.5   |       | 4.0   | 3.0   |       | 3.0   | 4.0   |       |
| Lead/Lag              | Lead  | Lag   |       | Lead  | Lag   |       | Lead  | Lag   |       | Lead  | Lag   |       |
| Lead-Lag Optimize?    | Yes   | Yes   |       | Yes   | Yes   |       | Yes   | Yes   |       | Yes   | Yes   |       |
| Vehicle Extension (s) | 3.0   | 3.0   |       | 3.0   | 3.0   |       | 3.0   | 3.0   |       | 3.0   | 3.0   |       |
| Recall Mode           | None  | C-Max |       | None  | C-Max |       | None  | None  |       | None  | None  |       |
| Act Effect Green (s)  | 44.4  | 35.0  | 120.0 | 47.5  | 36.5  | 120.0 | 14.9  | 22.7  | 120.0 | 37.3  | 43.1  | 120.0 |
| Actuated g/C Ratio    | 0.37  | 0.29  | 1.00  | 0.40  | 0.30  | 1.00  | 0.12  | 0.19  | 1.00  | 0.31  | 0.36  | 1.00  |
| v/c Ratio             | 0.41  | 0.60  | 0.33  | 0.62  | 0.31  | 0.36  | 0.57  | 0.74  | 0.07  | 0.87  | 0.56  | 0.10  |
| Control Delay         | 27.6  | 39.7  | 0.5   | 34.2  | 33.4  | 0.6   | 54.6  | 53.2  | 0.1   | 48.7  | 33.0  | 0.1   |
| Queue Delay           | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay           | 27.6  | 39.7  | 0.5   | 34.2  | 33.4  | 0.6   | 54.6  | 53.2  | 0.1   | 48.7  | 33.0  | 0.1   |
| LOS                   | C     | D     | A     | C     | C     | A     | D     | D     | A     | D     | C     | A     |
| Approach Delay        |       | 22.6  |       |       | 16.3  |       |       | 46.5  |       |       | 38.3  |       |
| Approach LOS          |       | C     |       |       | B     |       |       | D     |       |       | D     |       |

Intersection Summary

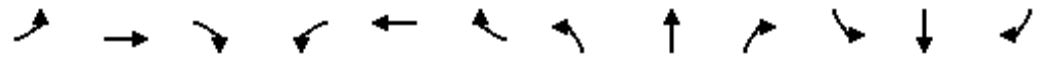
Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 12 (10%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green  
 Natural Cycle: 70  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.87  
 Intersection Signal Delay: 30.9      Intersection LOS: C  
 Intersection Capacity Utilization 75.4%      ICU Level of Service D  
 Analysis Period (min) 15

Splits and Phases: 8: Ridge Rd/Founders Pkwy & 5th St/SH 86



Lanes, Volumes, Timings  
3: Woodlands Blvd & Founders Pkwy

2041 Background - mitigated  
AM Peak



| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        | ↶     | ↶↶↶   |       | ↶     | ↶↶↶   |       | ↶↶    | ↶     | ↶     | ↶     | ↶↶    |       |
| Traffic Volume (vph)       | 6     | 826   | 250   | 490   | 2170  | 105   | 465   | 30    | 226   | 45    | 15    | 3     |
| Future Volume (vph)        | 6     | 826   | 250   | 490   | 2170  | 105   | 465   | 30    | 226   | 45    | 15    | 3     |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 450   |       | 0     | 500   |       | 0     | 300   |       | 75    | 150   |       | 0     |
| Storage Lanes              | 1     |       | 0     | 1     |       | 0     | 2     |       | 1     | 1     |       | 0     |
| Taper Length (ft)          | 100   |       |       | 100   |       |       | 100   |       |       | 100   |       |       |
| Lane Util. Factor          | 1.00  | 0.91  | 0.91  | 1.00  | 0.91  | 0.91  | 0.97  | 1.00  | 1.00  | 1.00  | 0.95  | 0.95  |
| Frt                        |       | 0.964 |       |       | 0.993 |       |       |       | 0.850 |       | 0.976 |       |
| Flt Protected              | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       |
| Satd. Flow (prot)          | 1770  | 4902  | 0     | 1770  | 5050  | 0     | 3433  | 1863  | 1583  | 1770  | 3454  | 0     |
| Flt Permitted              | 0.082 |       |       | 0.147 |       |       | 0.519 |       |       |       |       |       |
| Satd. Flow (perm)          | 153   | 4902  | 0     | 274   | 5050  | 0     | 1876  | 1863  | 1583  | 1863  | 3454  | 0     |
| Right Turn on Red          |       |       | Yes   |       |       | Yes   |       |       | Yes   |       |       | Yes   |
| Satd. Flow (RTOR)          |       | 83    |       |       | 9     |       |       |       | 227   |       |       | 3     |
| Link Speed (mph)           |       | 50    |       |       | 50    |       |       | 35    |       |       |       | 35    |
| Link Distance (ft)         |       | 721   |       |       | 782   |       |       | 419   |       |       |       | 497   |
| Travel Time (s)            |       | 9.8   |       |       | 10.7  |       |       | 8.2   |       |       |       | 9.7   |
| Peak Hour Factor           | 0.92  | 0.95  | 0.92  | 0.92  | 0.98  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 7     | 869   | 272   | 533   | 2214  | 114   | 505   | 33    | 246   | 49    | 16    | 3     |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 7     | 1141  | 0     | 533   | 2328  | 0     | 505   | 33    | 246   | 49    | 19    | 0     |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right |
| Median Width(ft)           |       | 24    |       |       | 24    |       |       | 30    |       |       |       | 24    |
| Link Offset(ft)            |       | 0     |       |       | 0     |       |       | 0     |       |       |       | 0     |
| Crosswalk Width(ft)        |       | 16    |       |       | 16    |       |       | 16    |       |       |       | 16    |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |       |       |       |       |       |
| Headway 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  |
| Turning Speed (mph)        | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     |
| Number of Detectors        | 1     | 2     |       | 1     | 2     |       | 1     | 2     | 1     | 1     |       | 2     |
| Detector Template          | Left  | Thru  |       | Left  | Thru  |       | Left  | Thru  | Right | Left  |       | Thru  |
| Leading Detector (ft)      | 20    | 100   |       | 20    | 100   |       | 20    | 100   | 20    | 20    |       | 100   |
| Trailing Detector (ft)     | 0     | 0     |       | 0     | 0     |       | 0     | 0     | 0     | 0     |       | 0     |
| Detector 1 Position(ft)    | 0     | 0     |       | 0     | 0     |       | 0     | 0     | 0     | 0     |       | 0     |
| Detector 1 Size(ft)        | 20    | 6     |       | 20    | 6     |       | 20    | 6     | 20    | 20    |       | 6     |
| Detector 1 Type            | Cl+Ex | Cl+Ex |       | Cl+Ex | Cl+Ex |       | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |       | Cl+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   |
| Detector 2 Position(ft)    |       | 94    |       |       | 94    |       |       | 94    |       |       |       | 94    |
| Detector 2 Size(ft)        |       | 6     |       |       | 6     |       |       | 6     |       |       |       | 6     |
| Detector 2 Type            |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |       |       | Cl+Ex |
| Detector 2 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |       |       | 0.0   |
| Turn Type                  | pm+pt | NA    |       | pm+pt | NA    |       | pm+pt | NA    | pm+ov | pm+pt |       | NA    |
| Protected Phases           | 5     | 2     |       | 1     | 6     |       | 3     | 8     | 1     | 7     |       | 4     |
| Permitted Phases           | 2     |       |       | 6     |       |       | 8     |       | 8     | 4     |       |       |



Lanes, Volumes, Timings  
3: Woodlands Blvd & Founders Pkwy

2041 Background - mitigated  
AM Peak

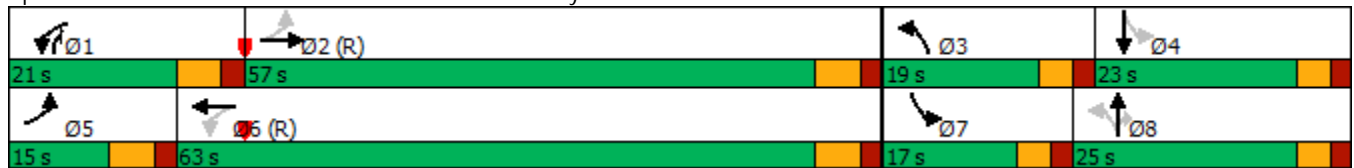


| Lane Group            | EBL   | EBT   | EBR | WBL   | WBT   | WBR | NBL   | NBT   | NBR   | SBL   | SBT   | SBR |
|-----------------------|-------|-------|-----|-------|-------|-----|-------|-------|-------|-------|-------|-----|
| Detector Phase        | 5     | 2     |     | 1     | 6     |     | 3     | 8     | 1     | 7     | 4     |     |
| Switch Phase          |       |       |     |       |       |     |       |       |       |       |       |     |
| Minimum Initial (s)   | 4.0   | 4.0   |     | 4.0   | 4.0   |     | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |     |
| Minimum Split (s)     | 10.0  | 20.0  |     | 10.0  | 20.0  |     | 9.0   | 20.0  | 10.0  | 9.0   | 20.0  |     |
| Total Split (s)       | 15.0  | 57.0  |     | 21.0  | 63.0  |     | 19.0  | 25.0  | 21.0  | 17.0  | 23.0  |     |
| Total Split (%)       | 12.5% | 47.5% |     | 17.5% | 52.5% |     | 15.8% | 20.8% | 17.5% | 14.2% | 19.2% |     |
| Maximum Green (s)     | 9.0   | 51.0  |     | 15.0  | 57.0  |     | 14.0  | 20.0  | 15.0  | 12.0  | 18.0  |     |
| Yellow Time (s)       | 4.0   | 4.0   |     | 4.0   | 4.0   |     | 3.0   | 3.0   | 4.0   | 3.0   | 3.0   |     |
| All-Red Time (s)      | 2.0   | 2.0   |     | 2.0   | 2.0   |     | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   |     |
| Lost Time Adjust (s)  | -1.0  | -1.0  |     | -2.0  | -1.0  |     | -2.0  | -1.0  | -1.0  | -1.0  | -1.0  |     |
| Total Lost Time (s)   | 5.0   | 5.0   |     | 4.0   | 5.0   |     | 3.0   | 4.0   | 5.0   | 4.0   | 4.0   |     |
| Lead/Lag              | Lead  | Lag   |     | Lead  | Lag   |     | Lead  | Lag   | Lead  | Lead  | Lag   |     |
| Lead-Lag Optimize?    | Yes   | Yes   |     | Yes   | Yes   |     | Yes   | Yes   | Yes   | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |     |
| Recall Mode           | None  | C-Max |     | None  | C-Max |     | None  | None  | None  | None  | None  |     |
| Act Effect Green (s)  | 58.7  | 52.0  |     | 90.9  | 87.5  |     | 22.1  | 10.9  | 45.4  | 13.7  | 7.1   |     |
| Actuated g/C Ratio    | 0.49  | 0.43  |     | 0.76  | 0.73  |     | 0.18  | 0.09  | 0.38  | 0.11  | 0.06  |     |
| v/c Ratio             | 0.04  | 0.53  |     | 0.85  | 0.63  |     | 0.88  | 0.20  | 0.33  | 0.24  | 0.09  |     |
| Control Delay         | 9.0   | 24.0  |     | 37.8  | 10.6  |     | 64.3  | 53.9  | 5.8   | 44.8  | 48.1  |     |
| Queue Delay           | 0.0   | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |     |
| Total Delay           | 9.0   | 24.0  |     | 37.8  | 10.6  |     | 64.3  | 53.9  | 5.8   | 44.8  | 48.1  |     |
| LOS                   | A     | C     |     | D     | B     |     | E     | D     | A     | D     | D     |     |
| Approach Delay        |       | 23.9  |     |       | 15.6  |     |       | 45.5  |       |       | 45.7  |     |
| Approach LOS          |       | C     |     |       | B     |     |       | D     |       |       | D     |     |

Intersection Summary























|                                   |   |
|-----------------------------------|---|
| Area Type:                        | Other   |
| Cycle Length:                     | 120   |
| Actuated Cycle Length:            | 120   |
| Offset:                           | 37 (31%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green |
| Natural Cycle:                    | 80  |
| Control Type:                     | Actuated-Coordinated  |
| Maximum v/c Ratio:                | 0.88  |
| Intersection Signal Delay:        | 22.8  |
| Intersection LOS:                 | C   |
| Intersection Capacity Utilization | 79.5%   |
| ICU Level of Service              | D   |
| Analysis Period (min)             | 15  |

Splits and Phases: 3: Woodlands Blvd & Founders Pkwy



Lanes, Volumes, Timings  
3: Woodlands Blvd & Founders Pkwy

2041 Background - mitigated  
PM Peak

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL  | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations        |  |  |   |  |  |   |  |  |  |  |  |  |
| Traffic Volume (vph)       | 8   | 1937  | 505   | 246   | 1517  | 100   | 355  | 45  | 476   | 175   | 50  | 10  |
| Future Volume (vph)        | 8   | 1937  | 505   | 246   | 1517  | 100   | 355  | 45  | 476   | 175   | 50  | 10  |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900   | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 450   |   | 0   | 500   |   | 0   | 300  |   | 0   | 150   |   | 0   |
| Storage Lanes              | 1   |   | 0   | 1   |   | 0   | 2  |   | 1   | 1   |   | 0   |
| Taper Length (ft)          | 100   |   |   | 100   |   |   | 100  |   |   | 100   |   |   |
| Lane Util. Factor          | 1.00  | 0.91  | 0.91  | 1.00  | 0.91  | 0.91  | 0.97   | 1.00  | 1.00  | 1.00  | 0.95  | 0.95  |
| Frt                        |   | 0.968   |   |   | 0.990   |   |  |   | 0.850   |   | 0.975   |   |
| Flt Protected              | 0.950   |   |   | 0.950   |   |   | 0.950  |   |   | 0.950   |   |   |
| Satd. Flow (prot)          | 1770  | 4923  | 0   | 1770  | 5034  | 0   | 3433   | 1863  | 1583  | 1770  | 3451  | 0   |
| Flt Permitted              | 0.137   |   |   | 0.060   |   |   | 0.712  |   |   | 0.572   |   |   |
| Satd. Flow (perm)          | 255   | 4923  | 0   | 112   | 5034  | 0   | 2573   | 1863  | 1583  | 1065  | 3451  | 0   |
| Right Turn on Red          |   |   | Yes   |   |   | Yes   |  |   | Yes   |   |   | Yes   |
| Satd. Flow (RTOR)          |   | 88  |   |   | 17  |   |  |   | 73  |   | 11  |   |
| Link Speed (mph)           |   | 50  |   |   | 50  |   |  | 35  |   |   | 35  |   |
| Link Distance (ft)         |   | 721   |   |   | 782   |   |  | 419   |   |   | 497   |   |
| Travel Time (s)            |   | 9.8   |   |   | 10.7  |   |  | 8.2   |   |   | 9.7   |   |
| Peak Hour Factor           | 0.92  | 0.95  | 0.92  | 0.92  | 0.98  | 0.92  | 0.92   | 0.92  | 0.95  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 9   | 2039  | 549   | 267   | 1548  | 109   | 386  | 49  | 501   | 190   | 54  | 11  |
| Shared Lane Traffic (%)    |   |   |   |   |   |   |  |   |   |   |   |   |
| Lane Group Flow (vph)      | 9   | 2588  | 0   | 267   | 1657  | 0   | 386  | 49  | 501   | 190   | 65  | 0   |
| Enter Blocked Intersection | No  | No  | No  | No  | No  | No  | No   | No  | No  | No  | No  | No  |
| Lane Alignment             | Left  | Left  | Right   | Left  | Left  | Right   | Left   | Left  | Right   | Left  | Left  | Right   |
| Median Width(ft)           |   | 24  |   |   | 24  |   |  | 30  |   |   | 24  |   |
| Link Offset(ft)            |   | 0   |   |   | 0   |   |  | 0   |   |   | 0   |   |
| Crosswalk Width(ft)        |   | 16  |   |   | 16  |   |  | 16  |   |   | 16  |   |
| Two way Left Turn Lane     |   |   |   |   |   |   |  |   |   |   |   |   |
| Headway 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  |
| Turning Speed (mph)        | 15  |   | 9   | 15  |   | 9   | 15   |   | 9   | 15  |   | 9   |
| Number of Detectors        | 1   | 2   |   | 1   | 2   |   | 1  | 2   | 1   | 1   | 2   |   |
| Detector Template          | Left  | Thru  |   | Left  | Thru  |   | Left   | Thru  | Right   | Left  | Thru  |   |
| Leading Detector (ft)      | 20  | 100   |   | 20  | 100   |   | 20   | 100   | 20  | 20  | 100   |   |
| Trailing Detector (ft)     | 0   | 0   |   | 0   | 0   |   | 0  | 0   | 0   | 0   | 0   |   |
| Detector 1 Position(ft)    | 0   | 0   |   | 0   | 0   |   | 0  | 0   | 0   | 0   | 0   |   |
| Detector 1 Size(ft)        | 20  | 6   |   | 20  | 6   |   | 20   | 6   | 20  | 20  | 6   |   |
| Detector 1 Type            | Cl+Ex   | Cl+Ex   |   | Cl+Ex   | Cl+Ex   |   | Cl+Ex  | Cl+Ex   | Cl+Ex   | Cl+Ex   | Cl+Ex   |   |
| Detector 1 Channel         |   |   |   |   |   |   |  |   |   |   |   |   |
| Detector 1 Extend (s)      | 0.0   | 0.0   |   | 0.0   | 0.0   |   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |   | 0.0   | 0.0   |   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |   | 0.0   | 0.0   |   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |   |
| Detector 2 Position(ft)    |   | 94  |   |   | 94  |   |  | 94  |   |   | 94  |   |
| Detector 2 Size(ft)        |   | 6   |   |   | 6   |   |  | 6   |   |   | 6   |   |
| Detector 2 Type            |   | Cl+Ex   |   |   | Cl+Ex   |   |  | Cl+Ex   |   |   | Cl+Ex   |   |
| Detector 2 Channel         |   |   |   |   |   |   |  |   |   |   |   |   |
| Detector 2 Extend (s)      |   | 0.0   |   |   | 0.0   |   |  | 0.0   |   |   | 0.0   |   |
| Turn Type                  | pm+pt   | NA  |   | pm+pt   | NA  |   | pm+pt  | NA  | pm+ov   | pm+pt   | NA  |   |
| Protected Phases           | 5   | 2   |   | 1   | 6   |   | 3  | 8   | 1   | 7   | 4   |   |
| Permitted Phases           | 2   |   |   | 6   |   |   | 8  |   | 8   | 4   |   |   |

Lanes, Volumes, Timings  
3: Woodlands Blvd & Founders Pkwy

2041 Background - mitigated  
PM Peak

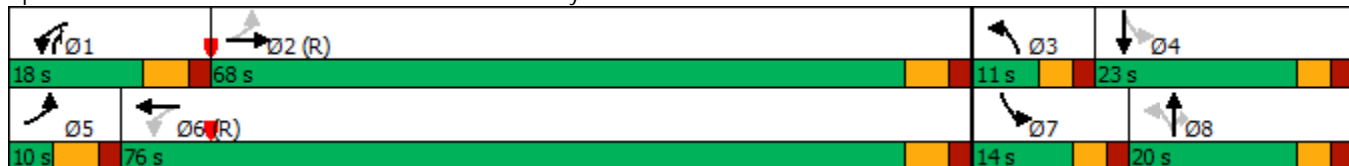


| Lane Group            | EBL  | EBT   | EBR | WBL   | WBT   | WBR | NBL  | NBT   | NBR   | SBL   | SBT   | SBR |
|-----------------------|------|-------|-----|-------|-------|-----|------|-------|-------|-------|-------|-----|
| Detector Phase        | 5    | 2     |     | 1     | 6     |     | 3    | 8     | 1     | 7     | 4     |     |
| Switch Phase          |      |       |     |       |       |     |      |       |       |       |       |     |
| Minimum Initial (s)   | 4.0  | 4.0   |     | 4.0   | 4.0   |     | 4.0  | 4.0   | 4.0   | 4.0   | 4.0   |     |
| Minimum Split (s)     | 10.0 | 20.0  |     | 10.0  | 20.0  |     | 9.0  | 20.0  | 10.0  | 9.0   | 20.0  |     |
| Total Split (s)       | 10.0 | 68.0  |     | 18.0  | 76.0  |     | 11.0 | 20.0  | 18.0  | 14.0  | 23.0  |     |
| Total Split (%)       | 8.3% | 56.7% |     | 15.0% | 63.3% |     | 9.2% | 16.7% | 15.0% | 11.7% | 19.2% |     |
| Maximum Green (s)     | 4.0  | 62.0  |     | 12.0  | 70.0  |     | 6.0  | 15.0  | 12.0  | 9.0   | 18.0  |     |
| Yellow Time (s)       | 4.0  | 4.0   |     | 4.0   | 4.0   |     | 3.0  | 3.0   | 4.0   | 3.0   | 3.0   |     |
| All-Red Time (s)      | 2.0  | 2.0   |     | 2.0   | 2.0   |     | 2.0  | 2.0   | 2.0   | 2.0   | 2.0   |     |
| Lost Time Adjust (s)  | -2.0 | -3.0  |     | -3.0  | -3.0  |     | -2.0 | -2.0  | -2.0  | -2.0  | -2.0  |     |
| Total Lost Time (s)   | 4.0  | 3.0   |     | 3.0   | 3.0   |     | 3.0  | 3.0   | 4.0   | 3.0   | 3.0   |     |
| Lead/Lag              | Lead | Lag   |     | Lead  | Lag   |     | Lead | Lag   | Lead  | Lead  | Lag   |     |
| Lead-Lag Optimize?    | Yes  | Yes   |     | Yes   | Yes   |     | Yes  | Yes   | Yes   | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0  | 3.0   |     | 3.0   | 3.0   |     | 3.0  | 3.0   | 3.0   | 3.0   | 3.0   |     |
| Recall Mode           | None | C-Max |     | None  | C-Max |     | None | None  | None  | None  | None  |     |
| Act Effect Green (s)  | 71.7 | 65.0  |     | 91.6  | 89.2  |     | 17.6 | 10.5  | 34.0  | 22.4  | 12.9  |     |
| Actuated g/C Ratio    | 0.60 | 0.54  |     | 0.76  | 0.74  |     | 0.15 | 0.09  | 0.28  | 0.19  | 0.11  |     |
| v/c Ratio             | 0.04 | 0.96  |     | 0.65  | 0.44  |     | 0.88 | 0.30  | 1.00  | 0.72  | 0.17  |     |
| Control Delay         | 6.0  | 35.4  |     | 37.5  | 7.4   |     | 67.7 | 55.2  | 78.0  | 59.5  | 40.5  |     |
| Queue Delay           | 0.0  | 0.0   |     | 0.0   | 0.0   |     | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |     |
| Total Delay           | 6.0  | 35.4  |     | 37.5  | 7.4   |     | 67.7 | 55.2  | 78.0  | 59.5  | 40.5  |     |
| LOS                   | A    | D     |     | D     | A     |     | E    | E     | E     | E     | D     |     |
| Approach Delay        |      | 35.3  |     |       | 11.6  |     |      | 72.5  |       |       | 54.7  |     |
| Approach LOS          |      | D     |     |       | B     |     |      | E     |       |       | D     |     |

Intersection Summary
































|                                    |   |
|------------------------------------|---|
| Area Type:                         | Other   |
| Cycle Length:                      | 120   |
| Actuated Cycle Length:             | 120   |
| Offset:                            | 37 (31%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green |
| Natural Cycle:                     | 90  |
| Control Type:                      | Actuated-Coordinated  |
| Maximum v/c Ratio:                 | 1.00  |
| Intersection Signal Delay:         | 34.2  |
| Intersection LOS:                  | C   |
| Intersection Capacity Utilization: | 97.9%   |
| ICU Level of Service:              | F   |
| Analysis Period (min):             | 15  |

Splits and Phases: 3: Woodlands Blvd & Founders Pkwy



Lanes, Volumes, Timings  
1: Allen Way & Founder Pkwy

2041 Total  
AM Peak

|                            |    |    |  |  |    |  |    |    |  |  |    |    |
|----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL  | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations        |   |    |   |  |    |  |   |   |   |  |   |   |
| Traffic Volume (vph)       | 265   | 1420  | 150   | 45  | 3160  | 140   | 130  | 25  | 55  | 75  | 15  | 385   |
| Future Volume (vph)        | 265   | 1420  | 150   | 45  | 3160  | 140   | 130  | 25  | 55  | 75  | 15  | 385   |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900   | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 290   |   | 0   | 325   |   | 0   | 75   |   | 0   | 130   |   | 110   |
| Storage Lanes              | 2   |   | 0   | 1   |   | 1   | 2  |   | 0   | 1   |   | 2   |
| Taper Length (ft)          | 100   |   |   | 100   |   |   | 100  |   |   | 100   |   |   |
| Lane Util. Factor          | 0.97  | 0.91  | 0.91  | 1.00  | 0.91  | 1.00  | 0.97   | 1.00  | 1.00  | 1.00  | 1.00  | 0.88  |
| Frt                        |   | 0.986   |   |   |   | 0.850   |  | 0.897   |   |   |   | 0.850   |
| Flt Protected              | 0.950   |   |   | 0.950   |   |   | 0.950  |   |   | 0.950   |   |   |
| Satd. Flow (prot)          | 3433  | 5014  | 0   | 1770  | 5085  | 1583  | 3433   | 1671  | 0   | 1770  | 1863  | 2787  |
| Flt Permitted              | 0.950   |   |   | 0.103   |   |   | 0.950  |   |   | 0.701   |   |   |
| Satd. Flow (perm)          | 3433  | 5014  | 0   | 192   | 5085  | 1583  | 3433   | 1671  | 0   | 1306  | 1863  | 2787  |
| Right Turn on Red          |   |   | Yes   |   |   | Yes   |  |   | Yes   |   |   | Yes   |
| Satd. Flow (RTOR)          |   | 25  |   |   |   | 109   |  | 60  |   |   |   | 217   |
| Link Speed (mph)           |   | 35  |   |   | 35  |   |  | 30  |   |   |   | 30  |
| Link Distance (ft)         |   | 533   |   |   | 1095  |   |  | 278   |   |   |   | 392   |
| Travel Time (s)            |   | 10.4  |   |   | 21.3  |   |  | 6.3   |   |   |   | 8.9   |
| Peak Hour Factor           | 0.92  | 0.92  | 0.92  | 0.92  | 0.98  | 0.92  | 0.92   | 0.92  | 0.92  | 0.92  | 0.92  | 0.95  |
| Adj. Flow (vph)            | 288   | 1543  | 163   | 49  | 3224  | 152   | 141  | 27  | 60  | 82  | 16  | 405   |
| Shared Lane Traffic (%)    |   |   |   |   |   |   |  |   |   |   |   |   |
| Lane Group Flow (vph)      | 288   | 1706  | 0   | 49  | 3224  | 152   | 141  | 87  | 0   | 82  | 16  | 405   |
| Enter Blocked Intersection | No  | No  | No  | No  | No  | No  | No   | No  | No  | No  | No  | No  |
| Lane Alignment             | Left  | Left  | Right   | Left  | Left  | Right   | Left   | Left  | Right   | Left  | Left  | Right   |
| Median Width(ft)           |   | 20  |   |   | 20  |   |  | 24  |   |   |   | 20  |
| Link Offset(ft)            |   | 0   |   |   | 0   |   |  | 0   |   |   |   | 0   |
| Crosswalk Width(ft)        |   | 16  |   |   | 16  |   |  | 16  |   |   |   | 16  |
| Two way Left Turn Lane     |   |   |   |   |   |   |  |   |   |   |   |   |
| Headway 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  |
| Turning Speed (mph)        | 15  |   | 9   | 15  |   | 9   | 15   |   | 9   | 15  |   | 9   |
| Number of Detectors        | 1   | 2   |   | 1   | 2   | 1   | 1  | 2   |   | 1   | 2   | 1   |
| Detector Template          | Left  | Thru  |   | Left  | Thru  | Right   | Left   | Thru  |   | Left  | Thru  | Right   |
| Leading Detector (ft)      | 20  | 100   |   | 20  | 100   | 20  | 20   | 100   |   | 20  | 100   | 20  |
| Trailing Detector (ft)     | 0   | 0   |   | 0   | 0   | 0   | 0  | 0   |   | 0   | 0   | 0   |
| Detector 1 Position(ft)    | 0   | 0   |   | 0   | 0   | 0   | 0  | 0   |   | 0   | 0   | 0   |
| Detector 1 Size(ft)        | 20  | 6   |   | 20  | 6   | 20  | 20   | 6   |   | 20  | 6   | 20  |
| Detector 1 Type            | Cl+Ex   | Cl+Ex   |   | Cl+Ex   | Cl+Ex   | Cl+Ex   | Cl+Ex  | Cl+Ex   |   | Cl+Ex   | Cl+Ex   | Cl+Ex   |
| Detector 1 Channel         |   |   |   |   |   |   |  |   |   |   |   |   |
| Detector 1 Extend (s)      | 0.0   | 0.0   |   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   |   | 0.0   | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   |   | 0.0   | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   |   | 0.0   | 0.0   | 0.0   |
| Detector 2 Position(ft)    |   | 94  |   |   | 94  |   |  | 94  |   |   |   | 94  |
| Detector 2 Size(ft)        |   | 6   |   |   | 6   |   |  | 6   |   |   |   | 6   |
| Detector 2 Type            |   | Cl+Ex   |   |   | Cl+Ex   |   |  | Cl+Ex   |   |   |   | Cl+Ex   |
| Detector 2 Channel         |   |   |   |   |   |   |  |   |   |   |   |   |
| Detector 2 Extend (s)      |   | 0.0   |   |   | 0.0   |   |  | 0.0   |   |   |   | 0.0   |
| Turn Type                  | Prot  | NA  |   | pm+pt   | NA  | Perm  | Prot   | NA  |   | pm+pt   | NA  | Perm  |
| Protected Phases           | 5   | 2   |   | 1   | 6   |   | 3  | 8   |   | 7   | 4   |   |
| Permitted Phases           |   |   |   | 6   |   | 6   |  |   |   | 4   |   | 4   |

Lanes, Volumes, Timings  
1: Allen Way & Founder Pkwy

2041 Total  
AM Peak

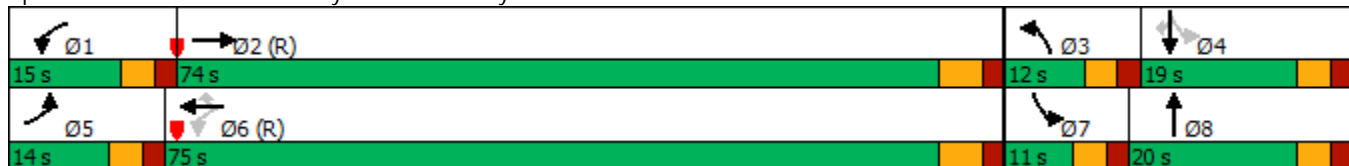


| Lane Group            | EBL   | EBT   | EBR | WBL   | WBT   | WBR   | NBL   | NBT   | NBR | SBL  | SBT   | SBR   |
|-----------------------|-------|-------|-----|-------|-------|-------|-------|-------|-----|------|-------|-------|
| Detector Phase        | 5     | 2     |     | 1     | 6     | 6     | 3     | 8     |     | 7    | 4     | 4     |
| Switch Phase          |       |       |     |       |       |       |       |       |     |      |       |       |
| Minimum Initial (s)   | 4.0   | 4.0   |     | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |     | 4.0  | 4.0   | 4.0   |
| Minimum Split (s)     | 11.0  | 21.0  |     | 9.5   | 21.0  | 21.0  | 9.0   | 21.0  |     | 9.0  | 21.0  | 21.0  |
| Total Split (s)       | 14.0  | 74.0  |     | 15.0  | 75.0  | 75.0  | 12.0  | 20.0  |     | 11.0 | 19.0  | 19.0  |
| Total Split (%)       | 11.7% | 61.7% |     | 12.5% | 62.5% | 62.5% | 10.0% | 16.7% |     | 9.2% | 15.8% | 15.8% |
| Maximum Green (s)     | 9.0   | 68.0  |     | 10.0  | 69.0  | 69.0  | 7.0   | 15.0  |     | 6.0  | 14.0  | 14.0  |
| Yellow Time (s)       | 3.0   | 4.0   |     | 3.0   | 4.0   | 4.0   | 3.0   | 3.0   |     | 3.0  | 3.0   | 3.0   |
| All-Red Time (s)      | 2.0   | 2.0   |     | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   |     | 2.0  | 2.0   | 2.0   |
| Lost Time Adjust (s)  | -2.0  | -1.0  |     | -1.0  | -2.0  | -1.0  | -1.0  | -1.0  |     | -1.0 | -1.0  | -1.0  |
| Total Lost Time (s)   | 3.0   | 5.0   |     | 4.0   | 4.0   | 5.0   | 4.0   | 4.0   |     | 4.0  | 4.0   | 4.0   |
| Lead/Lag              | Lead  | Lag   |     | Lead  | Lag   | Lag   | Lead  | Lag   |     | Lead | Lag   | Lag   |
| Lead-Lag Optimize?    | Yes   | Yes   |     | Yes   | Yes   | Yes   | Yes   | Yes   |     | Yes  | Yes   | Yes   |
| Vehicle Extension (s) | 3.0   | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0  | 3.0   | 3.0   |
| Recall Mode           | None  | C-Max |     | None  | C-Max | C-Max | None  | None  |     | None | None  | None  |
| Act Effect Green (s)  | 12.3  | 76.4  |     | 79.0  | 71.5  | 70.5  | 8.0   | 16.4  |     | 20.2 | 13.2  | 13.2  |
| Actuated g/C Ratio    | 0.10  | 0.64  |     | 0.66  | 0.60  | 0.59  | 0.07  | 0.14  |     | 0.17 | 0.11  | 0.11  |
| v/c Ratio             | 0.82  | 0.53  |     | 0.22  | 1.06  | 0.16  | 0.62  | 0.31  |     | 0.33 | 0.08  | 0.81  |
| Control Delay         | 72.7  | 13.3  |     | 4.6   | 52.4  | 0.9   | 66.8  | 21.6  |     | 42.8 | 47.6  | 37.1  |
| Queue Delay           | 0.0   | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.0  | 0.0   | 0.0   |
| Total Delay           | 72.7  | 13.3  |     | 4.6   | 52.4  | 0.9   | 66.8  | 21.6  |     | 42.8 | 47.6  | 37.1  |
| LOS                   | E     | B     |     | A     | D     | A     | E     | C     |     | D    | D     | D     |
| Approach Delay        |       | 21.9  |     |       | 49.4  |       |       | 49.6  |     |      | 38.3  |       |
| Approach LOS          |       | C     |     |       | D     |       |       | D     |     |      | D     |       |

Intersection Summary























Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 119 (99%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
 Natural Cycle: 130  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 1.06  
 Intersection Signal Delay: 39.6      Intersection LOS: D  
 Intersection Capacity Utilization 89.4%      ICU Level of Service E  
 Analysis Period (min) 15

Splits and Phases: 1: Allen Way & Founder Pkwy



Lanes, Volumes, Timings  
2: Front St & Founder Pkwy

2041 Total  
AM Peak

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group                 | SEL   | SET   | SER   | NWL   | NWT   | NWR   | NEL  | NET   | NER   | SWL   | SWT   | SWR   |
| Lane Configurations        |  |  |   |  |  |   |  |  |  |  |  |  |
| Traffic Volume (vph)       | 70  | 1200  | 280   | 75  | 2710  | 15  | 530  | 75  | 50  | 5   | 65  | 105   |
| Future Volume (vph)        | 70  | 1200  | 280   | 75  | 2710  | 15  | 530  | 75  | 50  | 5   | 65  | 105   |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900   | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 460   |   | 0   | 200   |   | 0   | 285  |   | 0   | 230   |   | 0   |
| Storage Lanes              | 1   |   | 0   | 1   |   | 0   | 1  |   | 1   | 1   |   | 0   |
| Taper Length (ft)          | 100   |   |   | 100   |   |   | 100  |   |   | 100   |   |   |
| Lane Util. Factor          | 1.00  | 0.91  | 0.91  | 1.00  | 0.91  | 0.91  | 0.97   | 1.00  | 1.00  | 1.00  | 0.95  | 0.95  |
| Frt                        |   | 0.972   |   |   | 0.999   |   |  |   | 0.850   |   | 0.908   |   |
| Flt Protected              | 0.950   |   |   | 0.950   |   |   | 0.950  |   |   | 0.950   |   |   |
| Satd. Flow (prot)          | 1770  | 4943  | 0   | 1770  | 5080  | 0   | 3433   | 1863  | 1583  | 1770  | 3214  | 0   |
| Flt Permitted              | 0.061   |   |   | 0.098   |   |   | 0.450  |   |   | 0.704   |   |   |
| Satd. Flow (perm)          | 114   | 4943  | 0   | 183   | 5080  | 0   | 1626   | 1863  | 1583  | 1311  | 3214  | 0   |
| Right Turn on Red          |   |   | Yes   |   |   | Yes   |  |   | Yes   |   |   | Yes   |
| Satd. Flow (RTOR)          |   | 62  |   |   | 1   |   |  |   | 118   |   | 109   |   |
| Link Speed (mph)           |   | 35  |   |   | 35  |   |  | 35  |   |   | 35  |   |
| Link Distance (ft)         |   | 1095  |   |   | 488   |   |  | 556   |   |   | 397   |   |
| Travel Time (s)            |   | 21.3  |   |   | 9.5   |   |  | 10.8  |   |   | 7.7   |   |
| Peak Hour Factor           | 0.92  | 0.92  | 0.92  | 0.92  | 0.95  | 0.92  | 0.92   | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 76  | 1304  | 304   | 82  | 2853  | 16  | 576  | 82  | 54  | 5   | 71  | 114   |
| Shared Lane Traffic (%)    |   |   |   |   |   |   |  |   |   |   |   |   |
| Lane Group Flow (vph)      | 76  | 1608  | 0   | 82  | 2869  | 0   | 576  | 82  | 54  | 5   | 185   | 0   |
| Enter Blocked Intersection | No  | No  | No  | No  | No  | No  | No   | No  | No  | No  | No  | No  |
| Lane Alignment             | Left  | Left  | Right   | Left  | Left  | Right   | Left   | Left  | Right   | Left  | Left  | Right   |
| Median Width(ft)           |   | 12  |   |   | 12  |   |  | 40  |   |   | 24  |   |
| Link Offset(ft)            |   | 0   |   |   | 0   |   |  | 0   |   |   | 0   |   |
| Crosswalk Width(ft)        |   | 16  |   |   | 16  |   |  | 16  |   |   | 16  |   |
| Two way Left Turn Lane     |   |   |   |   |   |   |  |   |   |   |   |   |
| Headway 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  |
| Turning Speed (mph)        | 15  |   | 9   | 15  |   | 9   | 15   |   | 9   | 15  |   | 9   |
| Number of Detectors        | 1   | 2   |   | 1   | 2   |   | 1  | 2   | 1   | 1   | 2   |   |
| Detector Template          | Left  | Thru  |   | Left  | Thru  |   | Left   | Thru  | Right   | Left  | Thru  |   |
| Leading Detector (ft)      | 20  | 100   |   | 20  | 100   |   | 20   | 100   | 20  | 20  | 100   |   |
| Trailing Detector (ft)     | 0   | 0   |   | 0   | 0   |   | 0  | 0   | 0   | 0   | 0   |   |
| Detector 1 Position(ft)    | 0   | 0   |   | 0   | 0   |   | 0  | 0   | 0   | 0   | 0   |   |
| Detector 1 Size(ft)        | 20  | 6   |   | 20  | 6   |   | 20   | 6   | 20  | 20  | 6   |   |
| Detector 1 Type            | Cl+Ex   | Cl+Ex   |   | Cl+Ex   | Cl+Ex   |   | Cl+Ex  | Cl+Ex   | Cl+Ex   | Cl+Ex   | Cl+Ex   |   |
| Detector 1 Channel         |   |   |   |   |   |   |  |   |   |   |   |   |
| Detector 1 Extend (s)      | 0.0   | 0.0   |   | 0.0   | 0.0   |   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |   | 0.0   | 0.0   |   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |   | 0.0   | 0.0   |   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |   |
| Detector 2 Position(ft)    |   | 94  |   |   | 94  |   |  | 94  |   |   | 94  |   |
| Detector 2 Size(ft)        |   | 6   |   |   | 6   |   |  | 6   |   |   | 6   |   |
| Detector 2 Type            |   | Cl+Ex   |   |   | Cl+Ex   |   |  | Cl+Ex   |   |   | Cl+Ex   |   |
| Detector 2 Channel         |   |   |   |   |   |   |  |   |   |   |   |   |
| Detector 2 Extend (s)      |   | 0.0   |   |   | 0.0   |   |  | 0.0   |   |   | 0.0   |   |
| Turn Type                  | pm+pt   | NA  |   | pm+pt   | NA  |   | pm+pt  | NA  | Perm  | pm+pt   | NA  |   |
| Protected Phases           | 5   | 2   |   | 1   | 6   |   | 3  | 8   |   | 7   | 4   |   |
| Permitted Phases           | 2   |   |   | 6   |   |   | 8  |   | 8   | 4   |   |   |

Lanes, Volumes, Timings  
2: Front St & Founder Pkwy

2041 Total  
AM Peak



| Lane Group            | SEL   | SET   | SER | NWL   | NWT   | NWR | NEL   | NET   | NER   | SWL   | SWT   | SWR |
|-----------------------|-------|-------|-----|-------|-------|-----|-------|-------|-------|-------|-------|-----|
| Detector Phase        | 5     | 2     |     | 1     | 6     |     | 3     | 8     | 8     | 7     | 4     |     |
| Switch Phase          |       |       |     |       |       |     |       |       |       |       |       |     |
| Minimum Initial (s)   | 4.0   | 4.0   |     | 4.0   | 4.0   |     | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |     |
| Minimum Split (s)     | 9.0   | 21.0  |     | 9.0   | 21.0  |     | 9.0   | 21.0  | 21.0  | 10.0  | 21.0  |     |
| Total Split (s)       | 12.0  | 63.0  |     | 12.0  | 63.0  |     | 20.0  | 33.0  | 33.0  | 12.0  | 25.0  |     |
| Total Split (%)       | 10.0% | 52.5% |     | 10.0% | 52.5% |     | 16.7% | 27.5% | 27.5% | 10.0% | 20.8% |     |
| Maximum Green (s)     | 7.0   | 57.0  |     | 7.0   | 57.0  |     | 15.0  | 28.0  | 28.0  | 7.0   | 20.0  |     |
| Yellow Time (s)       | 3.0   | 4.0   |     | 3.0   | 4.0   |     | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |     |
| All-Red Time (s)      | 2.0   | 2.0   |     | 2.0   | 2.0   |     | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   |     |
| Lost Time Adjust (s)  | -1.0  | -1.0  |     | -1.0  | -1.0  |     | -2.0  | -1.0  | -1.0  | -1.0  | -1.0  |     |
| Total Lost Time (s)   | 4.0   | 5.0   |     | 4.0   | 5.0   |     | 3.0   | 4.0   | 4.0   | 4.0   | 4.0   |     |
| Lead/Lag              | Lead  | Lag   |     | Lead  | Lag   |     | Lead  | Lag   | Lag   | Lead  | Lag   |     |
| Lead-Lag Optimize?    | Yes   | Yes   |     | Yes   | Yes   |     | Yes   | Yes   | Yes   | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |     |
| Recall Mode           | None  | C-Max |     | None  | C-Max |     | None  | None  | None  | None  | None  |     |
| Act Effect Green (s)  | 79.2  | 71.2  |     | 79.5  | 71.3  |     | 30.5  | 27.2  | 27.2  | 16.3  | 9.5   |     |
| Actuated g/C Ratio    | 0.66  | 0.59  |     | 0.66  | 0.59  |     | 0.25  | 0.23  | 0.23  | 0.14  | 0.08  |     |
| v/c Ratio             | 0.40  | 0.54  |     | 0.35  | 0.95  |     | 0.86  | 0.19  | 0.12  | 0.02  | 0.52  |     |
| Control Delay         | 25.4  | 20.1  |     | 10.9  | 32.5  |     | 54.3  | 39.7  | 0.5   | 33.6  | 27.7  |     |
| Queue Delay           | 0.0   | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |     |
| Total Delay           | 25.4  | 20.1  |     | 10.9  | 32.5  |     | 54.3  | 39.7  | 0.5   | 33.6  | 27.7  |     |
| LOS                   | C     | C     |     | B     | C     |     | D     | D     | A     | C     | C     |     |
| Approach Delay        |       | 20.3  |     |       | 31.9  |     |       | 48.5  |       |       | 27.9  |     |
| Approach LOS          |       | C     |     |       | C     |     |       | D     |       |       | C     |     |

Intersection Summary

Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 96 (80%), Referenced to phase 2:SETL and 6:NWTL, Start of Green  
 Natural Cycle: 100  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.95  
 Intersection Signal Delay: 30.4      Intersection LOS: C  
 Intersection Capacity Utilization 91.0%      ICU Level of Service F  
 Analysis Period (min) 15

Splits and Phases: 2: Front St & Founder Pkwy



Lanes, Volumes, Timings  
3: Woodlands Blvd & Founders Pkwy

2041 Total  
AM Peak



| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        | ↖     | ↕↕↕↗  |       | ↖     | ↕↕↕↗  |       | ↖↖    | ↕     | ↖     | ↖     | ↕↕    |       |
| Traffic Volume (vph)       | 6     | 885   | 250   | 495   | 2330  | 105   | 465   | 30    | 230   | 45    | 15    | 3     |
| Future Volume (vph)        | 6     | 885   | 250   | 495   | 2330  | 105   | 465   | 30    | 230   | 45    | 15    | 3     |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 450   |       | 0     | 500   |       | 0     | 300   |       | 0     | 150   |       | 0     |
| Storage Lanes              | 1     |       | 0     | 1     |       | 0     | 2     |       | 1     | 1     |       | 0     |
| Taper Length (ft)          | 100   |       |       | 100   |       |       | 100   |       |       | 100   |       |       |
| Lane Util. Factor          | 1.00  | 0.91  | 0.91  | 1.00  | 0.91  | 0.91  | 0.97  | 1.00  | 1.00  | 1.00  | 0.95  | 0.95  |
| Frt                        |       | 0.966 |       |       | 0.993 |       |       |       | 0.850 |       | 0.976 |       |
| Flt Protected              | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       |
| Satd. Flow (prot)          | 1770  | 4912  | 0     | 1770  | 5050  | 0     | 3433  | 1863  | 1583  | 1770  | 3454  | 0     |
| Flt Permitted              | 0.082 |       |       | 0.131 |       |       | 0.519 |       |       |       |       |       |
| Satd. Flow (perm)          | 153   | 4912  | 0     | 244   | 5050  | 0     | 1876  | 1863  | 1583  | 1863  | 3454  | 0     |
| Right Turn on Red          |       |       | Yes   |       |       | Yes   |       |       | Yes   |       |       | Yes   |
| Satd. Flow (RTOR)          |       | 77    |       |       | 8     |       |       |       | 216   |       |       | 3     |
| Link Speed (mph)           |       | 50    |       |       | 50    |       |       | 35    |       |       |       | 35    |
| Link Distance (ft)         |       | 721   |       |       | 782   |       |       | 419   |       |       |       | 497   |
| Travel Time (s)            |       | 9.8   |       |       | 10.7  |       |       | 8.2   |       |       |       | 9.7   |
| Peak Hour Factor           | 0.92  | 0.95  | 0.92  | 0.92  | 0.95  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 7     | 932   | 272   | 538   | 2453  | 114   | 505   | 33    | 250   | 49    | 16    | 3     |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 7     | 1204  | 0     | 538   | 2567  | 0     | 505   | 33    | 250   | 49    | 19    | 0     |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right |
| Median Width(ft)           |       | 24    |       |       | 24    |       |       | 30    |       |       |       | 24    |
| Link Offset(ft)            |       | 0     |       |       | 0     |       |       | 0     |       |       |       | 0     |
| Crosswalk Width(ft)        |       | 16    |       |       | 16    |       |       | 16    |       |       |       | 16    |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |       |       |       |       |       |
| Headway 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  |
| Turning Speed (mph)        | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     |
| Number of Detectors        | 1     | 2     |       | 1     | 2     |       | 1     | 2     | 1     | 1     |       | 2     |
| Detector Template          | Left  | Thru  |       | Left  | Thru  |       | Left  | Thru  | Right | Left  |       | Thru  |
| Leading Detector (ft)      | 20    | 100   |       | 20    | 100   |       | 20    | 100   | 20    | 20    |       | 100   |
| Trailing Detector (ft)     | 0     | 0     |       | 0     | 0     |       | 0     | 0     | 0     | 0     |       | 0     |
| Detector 1 Position(ft)    | 0     | 0     |       | 0     | 0     |       | 0     | 0     | 0     | 0     |       | 0     |
| Detector 1 Size(ft)        | 20    | 6     |       | 20    | 6     |       | 20    | 6     | 20    | 20    |       | 6     |
| Detector 1 Type            | Cl+Ex | Cl+Ex |       | Cl+Ex | Cl+Ex |       | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |       | Cl+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   |
| Detector 2 Position(ft)    |       | 94    |       |       | 94    |       |       | 94    |       |       |       | 94    |
| Detector 2 Size(ft)        |       | 6     |       |       | 6     |       |       | 6     |       |       |       | 6     |
| Detector 2 Type            |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |       |       | Cl+Ex |
| Detector 2 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |       |       | 0.0   |
| Turn Type                  | pm+pt | NA    |       | pm+pt | NA    |       | pm+pt | NA    | pm+ov | pm+pt |       | NA    |
| Protected Phases           | 5     | 2     |       | 1     | 6     |       | 3     | 8     | 1     | 7     |       | 4     |
| Permitted Phases           | 2     |       |       | 6     |       |       | 8     |       | 8     | 4     |       |       |



Lanes, Volumes, Timings  
3: Woodlands Blvd & Founders Pkwy

2041 Total  
AM Peak

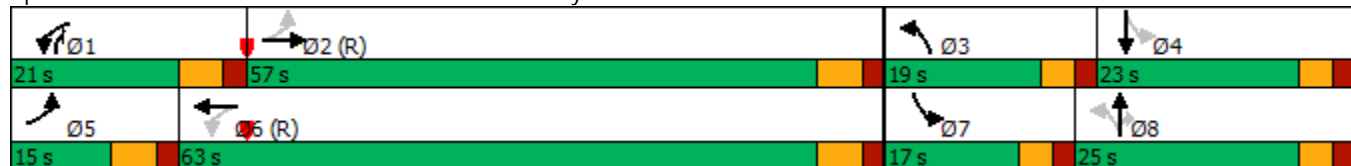


| Lane Group            | EBL   | EBT   | EBR | WBL   | WBT   | WBR | NBL   | NBT   | NBR   | SBL   | SBT   | SBR |
|-----------------------|-------|-------|-----|-------|-------|-----|-------|-------|-------|-------|-------|-----|
| Detector Phase        | 5     | 2     |     | 1     | 6     |     | 3     | 8     | 1     | 7     | 4     |     |
| Switch Phase          |       |       |     |       |       |     |       |       |       |       |       |     |
| Minimum Initial (s)   | 4.0   | 4.0   |     | 4.0   | 4.0   |     | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |     |
| Minimum Split (s)     | 10.0  | 20.0  |     | 10.0  | 20.0  |     | 9.0   | 20.0  | 10.0  | 9.0   | 20.0  |     |
| Total Split (s)       | 15.0  | 57.0  |     | 21.0  | 63.0  |     | 19.0  | 25.0  | 21.0  | 17.0  | 23.0  |     |
| Total Split (%)       | 12.5% | 47.5% |     | 17.5% | 52.5% |     | 15.8% | 20.8% | 17.5% | 14.2% | 19.2% |     |
| Maximum Green (s)     | 9.0   | 51.0  |     | 15.0  | 57.0  |     | 14.0  | 20.0  | 15.0  | 12.0  | 18.0  |     |
| Yellow Time (s)       | 4.0   | 4.0   |     | 4.0   | 4.0   |     | 3.0   | 3.0   | 4.0   | 3.0   | 3.0   |     |
| All-Red Time (s)      | 2.0   | 2.0   |     | 2.0   | 2.0   |     | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   |     |
| Lost Time Adjust (s)  | -1.0  | -1.0  |     | -2.0  | -1.0  |     | -2.0  | -1.0  | -1.0  | -1.0  | -1.0  |     |
| Total Lost Time (s)   | 5.0   | 5.0   |     | 4.0   | 5.0   |     | 3.0   | 4.0   | 5.0   | 4.0   | 4.0   |     |
| Lead/Lag              | Lead  | Lag   |     | Lead  | Lag   |     | Lead  | Lag   | Lead  | Lead  | Lag   |     |
| Lead-Lag Optimize?    | Yes   | Yes   |     | Yes   | Yes   |     | Yes   | Yes   | Yes   | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |     |
| Recall Mode           | None  | C-Max |     | None  | C-Max |     | None  | None  | None  | None  | None  |     |
| Act Effect Green (s)  | 58.7  | 52.0  |     | 90.9  | 87.5  |     | 22.1  | 10.9  | 45.4  | 13.7  | 7.1   |     |
| Actuated g/C Ratio    | 0.49  | 0.43  |     | 0.76  | 0.73  |     | 0.18  | 0.09  | 0.38  | 0.11  | 0.06  |     |
| v/c Ratio             | 0.04  | 0.55  |     | 0.87  | 0.70  |     | 0.88  | 0.20  | 0.34  | 0.24  | 0.09  |     |
| Control Delay         | 9.0   | 24.7  |     | 42.9  | 11.9  |     | 64.3  | 53.9  | 6.8   | 44.8  | 48.1  |     |
| Queue Delay           | 0.0   | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |     |
| Total Delay           | 9.0   | 24.7  |     | 42.9  | 11.9  |     | 64.3  | 53.9  | 6.8   | 44.8  | 48.1  |     |
| LOS                   | A     | C     |     | D     | B     |     | E     | D     | A     | D     | D     |     |
| Approach Delay        |       | 24.6  |     |       | 17.3  |     |       | 45.6  |       |       | 45.7  |     |
| Approach LOS          |       | C     |     |       | B     |     |       | D     |       |       | D     |     |

Intersection Summary

|                                    |   |
|------------------------------------|---|
| Area Type:                         | Other   |
| Cycle Length:                      | 120   |
| Actuated Cycle Length:             | 120   |
| Offset:                            | 37 (31%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green |
| Natural Cycle:                     | 90  |
| Control Type:                      | Actuated-Coordinated  |
| Maximum v/c Ratio:                 | 0.88  |
| Intersection Signal Delay:         | 23.7  |
| Intersection LOS:                  | C   |
| Intersection Capacity Utilization: | 82.3%   |
| ICU Level of Service:              | E   |
| Analysis Period (min):             | 15  |

Splits and Phases: 3: Woodlands Blvd & Founders Pkwy



Lanes, Volumes, Timings  
4: Founders Pkwy & Crowfoot Valley Rd

2041 Total  
AM Peak



| Lane Group                 | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |
| Traffic Volume (vph)       | 450   | 710   | 1860  | 190   | 120   | 1070  |
| Future Volume (vph)        | 450   | 710   | 1860  | 190   | 120   | 1070  |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 485   |       |       | 0     | 150   | 0     |
| Storage Lanes              | 2     |       |       | 1     | 2     | 1     |
| Taper Length (ft)          | 100   |       |       |       | 100   |       |
| Lane Util. Factor          | 0.97  | 0.95  | 0.95  | 1.00  | 0.97  | 0.91  |
| Frt                        |       |       |       | 0.850 | 0.878 | 0.850 |
| Flt Protected              | 0.950 |       |       |       | 0.991 |       |
| Satd. Flow (prot)          | 3433  | 3539  | 3539  | 1583  | 3144  | 1441  |
| Flt Permitted              | 0.950 |       |       |       | 0.991 |       |
| Satd. Flow (perm)          | 3433  | 3539  | 3539  | 1583  | 3144  | 1441  |
| Right Turn on Red          |       |       |       | Yes   |       | Yes   |
| Satd. Flow (RTOR)          |       |       |       | 142   | 240   | 438   |
| Link Speed (mph)           |       | 50    | 50    |       | 35    |       |
| Link Distance (ft)         |       | 641   | 617   |       | 595   |       |
| Travel Time (s)            |       | 8.7   | 8.4   |       | 11.6  |       |
| Peak Hour Factor           | 0.92  | 0.92  | 0.95  | 0.92  | 0.92  | 0.95  |
| Adj. Flow (vph)            | 489   | 772   | 1958  | 207   | 130   | 1126  |
| Shared Lane Traffic (%)    |       |       |       |       |       | 50%   |
| Lane Group Flow (vph)      | 489   | 772   | 1958  | 207   | 693   | 563   |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Left  | Right | Left  | Right |
| Median Width(ft)           |       | 24    | 24    |       | 24    |       |
| Link Offset(ft)            |       | 0     | 0     |       | 0     |       |
| Crosswalk Width(ft)        |       | 16    | 16    |       | 16    |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |
| Headway Factor             | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| Turning Speed (mph)        | 15    |       |       | 9     | 15    | 9     |
| Number of Detectors        | 1     | 2     | 2     | 1     | 1     | 1     |
| Detector Template          | Left  | Thru  | Thru  | Right | Left  | Right |
| Leading Detector (ft)      | 20    | 100   | 100   | 20    | 20    | 20    |
| Trailing Detector (ft)     | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Position(ft)    | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Size(ft)        | 20    | 6     | 6     | 20    | 20    | 20    |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 2 Position(ft)    |       | 94    | 94    |       |       |       |
| Detector 2 Size(ft)        |       | 6     | 6     |       |       |       |
| Detector 2 Type            |       | Cl+Ex | Cl+Ex |       |       |       |
| Detector 2 Channel         |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   | 0.0   |       |       |       |
| Turn Type                  | Prot  | NA    | NA    | Perm  | Prot  | Free  |
| Protected Phases           | 5     | 2     | 6     |       | 4     |       |
| Permitted Phases           |       |       |       | 6     |       | Free  |

Lanes, Volumes, Timings  
 4: Founders Pkwy & Crowfoot Valley Rd

2041 Total  
 AM Peak

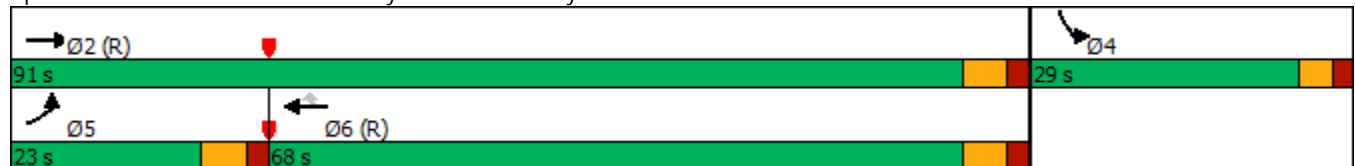


| Lane Group            | EBL   | EBT   | WBT   | WBR   | SBL    | SBR   |
|-----------------------|-------|-------|-------|-------|--------|-------|
| Detector Phase        | 5     | 2     | 6     | 6     | 4      |       |
| Switch Phase          |       |       |       |       |        |       |
| Minimum Initial (s)   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0    |       |
| Minimum Split (s)     | 10.0  | 10.5  | 10.0  | 10.0  | 10.0   |       |
| Total Split (s)       | 23.0  | 91.0  | 68.0  | 68.0  | 29.0   |       |
| Total Split (%)       | 19.2% | 75.8% | 56.7% | 56.7% | 24.2%  |       |
| Maximum Green (s)     | 17.0  | 85.0  | 62.0  | 62.0  | 24.0   |       |
| Yellow Time (s)       | 4.0   | 4.0   | 4.0   | 4.0   | 3.0    |       |
| All-Red Time (s)      | 2.0   | 2.0   | 2.0   | 2.0   | 2.0    |       |
| Lost Time Adjust (s)  | -2.0  | -2.0  | -2.0  | -2.0  | -2.0   |       |
| Total Lost Time (s)   | 4.0   | 4.0   | 4.0   | 4.0   | 3.0    |       |
| Lead/Lag              | Lead  |       | Lag   | Lag   |        |       |
| Lead-Lag Optimize?    | Yes   |       | Yes   | Yes   |        |       |
| Vehicle Extension (s) | 3.0   | 3.0   | 3.0   | 3.0   | 3.0    |       |
| Recall Mode           | None  | C-Max | C-Max | C-Max | None   |       |
| Act Effect Green (s)  | 19.9  | 89.2  | 65.3  | 65.3  | 23.8   | 120.0 |
| Actuated g/C Ratio    | 0.17  | 0.74  | 0.54  | 0.54  | 0.20   | 1.00  |
| v/c Ratio             | 0.86  | 0.29  | 1.02  | 0.22  | 1.11dr | 0.39  |
| Control Delay         | 64.7  | 5.6   | 52.8  | 5.5   | 40.6   | 0.8   |
| Queue Delay           | 0.0   | 0.0   | 0.0   | 0.0   | 0.0    | 0.0   |
| Total Delay           | 64.7  | 5.6   | 52.8  | 5.5   | 40.6   | 0.8   |
| LOS                   | E     | A     | D     | A     | D      | A     |
| Approach Delay        |       | 28.5  | 48.3  |       | 22.8   |       |
| Approach LOS          |       | C     | D     |       | C      |       |

Intersection Summary

Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 1.02  
 Intersection Signal Delay: 36.1  
 Intersection LOS: D  
 Intersection Capacity Utilization 89.0%  
 ICU Level of Service E  
 Analysis Period (min) 15  
 dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 4: Founders Pkwy & Crowfoot Valley Rd



HCM 6th Roundabout  
 5: Internal Collector Roadway & Connector Collector Roadway

2041 Total  
 AM Peak

| Intersection                |       |       |       |
|-----------------------------|-------|-------|-------|
| Intersection Delay, s/veh   | 4.8   |       |       |
| Intersection LOS            | A     |       |       |
| Approach                    | EB    | NB    | SB    |
| Entry Lanes                 | 1     | 1     | 1     |
| Conflicting Circle Lanes    | 1     | 1     | 1     |
| Adj Approach Flow, veh/h    | 129   | 362   | 140   |
| Demand Flow Rate, veh/h     | 132   | 370   | 143   |
| Vehicles Circulating, veh/h | 56    | 46    | 231   |
| Vehicles Exiting, veh/h     | 318   | 142   | 185   |
| Ped Vol Crossing Leg, #/h   | 0     | 0     | 0     |
| Ped Cap Adj                 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh       | 3.7   | 5.3   | 4.5   |
| Approach LOS                | A     | A     | A     |
| Lane                        | Left  | Left  | Left  |
| Designated Moves            | LR    | LT    | TR    |
| Assumed Moves               | LR    | LT    | TR    |
| RT Channelized              |       |       |       |
| Lane Util                   | 1.000 | 1.000 | 1.000 |
| Follow-Up Headway, s        | 2.609 | 2.609 | 2.609 |
| Critical Headway, s         | 4.976 | 4.976 | 4.976 |
| Entry Flow, veh/h           | 132   | 370   | 143   |
| Cap Entry Lane, veh/h       | 1303  | 1317  | 1090  |
| Entry HV Adj Factor         | 0.977 | 0.979 | 0.978 |
| Flow Entry, veh/h           | 129   | 362   | 140   |
| Cap Entry, veh/h            | 1274  | 1289  | 1067  |
| V/C Ratio                   | 0.101 | 0.281 | 0.131 |
| Control Delay, s/veh        | 3.7   | 5.3   | 4.5   |
| LOS                         | A     | A     | A     |
| 95th %tile Queue, veh       | 0     | 1     | 0     |

Lanes, Volumes, Timings

2041 Total

6: Pioneer Ranch Access/Connector Collector Roadway & Founder Pkwy

AM Peak



| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |       |       |       |       |       |       |
| Traffic Volume (vph)       | 118   | 675   | 40    | 5     | 1700  | 55    | 120   | 3     | 10    | 83    | 1     | 270   |
| Future Volume (vph)        | 118   | 675   | 40    | 5     | 1700  | 55    | 120   | 3     | 10    | 83    | 1     | 270   |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 400   |       | 400   | 400   |       | 400   | 200   |       | 0     | 200   |       | 0     |
| Storage Lanes              | 1     |       | 1     | 1     |       | 1     | 1     |       | 0     | 1     |       | 0     |
| Taper Length (ft)          | 100   |       |       | 100   |       |       | 100   |       |       | 100   |       |       |
| Lane Util. Factor          | 1.00  | 0.95  | 1.00  | 1.00  | 0.95  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| Frt                        |       |       | 0.850 |       |       | 0.850 |       | 0.882 |       |       | 0.851 |       |
| Flt Protected              | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       |
| Satd. Flow (prot)          | 1770  | 3539  | 1583  | 1770  | 3539  | 1583  | 1770  | 1643  | 0     | 1770  | 1585  | 0     |
| Flt Permitted              | 0.060 |       |       | 0.354 |       |       | 0.267 |       |       | 0.591 |       |       |
| Satd. Flow (perm)          | 112   | 3539  | 1583  | 659   | 3539  | 1583  | 497   | 1643  | 0     | 1101  | 1585  | 0     |
| Right Turn on Red          |       |       | Yes   |       |       | Yes   |       |       | Yes   |       |       | Yes   |
| Satd. Flow (RTOR)          |       |       | 118   |       |       | 118   |       | 11    |       |       | 129   |       |
| Link Speed (mph)           |       | 50    |       |       | 50    |       |       | 35    |       |       | 35    |       |
| Link Distance (ft)         |       | 483   |       |       | 546   |       |       | 392   |       |       | 622   |       |
| Travel Time (s)            |       | 6.6   |       |       | 7.4   |       |       | 7.6   |       |       | 12.1  |       |
| Peak Hour Factor           | 0.92  | 0.92  | 0.92  | 0.92  | 0.95  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 128   | 734   | 43    | 5     | 1789  | 60    | 130   | 3     | 11    | 90    | 1     | 293   |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 128   | 734   | 43    | 5     | 1789  | 60    | 130   | 14    | 0     | 90    | 294   | 0     |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right |
| Median Width(ft)           |       | 12    |       |       | 12    |       |       | 12    |       |       | 12    |       |
| Link Offset(ft)            |       | 0     |       |       | 0     |       |       | 0     |       |       | 0     |       |
| Crosswalk Width(ft)        |       | 16    |       |       | 16    |       |       | 16    |       |       | 16    |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |       |       |       |       |       |
| Headway 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  |
| Turning Speed (mph)        | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     |
| Number of Detectors        | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     |       | 1     | 2     |       |
| Detector Template          | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  |       | Left  | Thru  |       |
| Leading Detector (ft)      | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   |       | 20    | 100   |       |
| Trailing Detector (ft)     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     |       |
| Detector 1 Position(ft)    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     |       |
| Detector 1 Size(ft)        | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     |       | 20    | 6     |       |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |       | Cl+Ex | Cl+Ex |       |
| Detector 1 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |       |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |       |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |       |
| Detector 2 Position(ft)    |       | 94    |       |       | 94    |       |       | 94    |       |       | 94    |       |
| Detector 2 Size(ft)        |       | 6     |       |       | 6     |       |       | 6     |       |       | 6     |       |
| Detector 2 Type            |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |
| Detector 2 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |
| Turn Type                  | pm+pt | NA    | Perm  | pm+pt | NA    | Perm  | pm+pt | NA    |       | pm+pt | NA    |       |
| Protected Phases           | 5     | 2     |       | 1     | 6     |       | 3     | 8     |       | 7     | 4     |       |
| Permitted Phases           | 2     |       | 2     | 6     |       | 6     | 8     |       |       | 4     |       |       |

Lanes, Volumes, Timings

2041 Total

6: Pioneer Ranch Access/Connector Collector Roadway & Founder Pkwy

AM Peak



| Lane Group            | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-------|-------|-----|
| Detector Phase        | 5     | 2     | 2     | 1     | 6     | 6     | 3     | 8     |     | 7     | 4     |     |
| Switch Phase          |       |       |       |       |       |       |       |       |     |       |       |     |
| Minimum Initial (s)   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |     | 4.0   | 4.0   |     |
| Minimum Split (s)     | 10.0  | 20.0  | 20.0  | 10.0  | 20.0  | 20.0  | 20.0  | 20.0  |     | 9.0   | 20.0  |     |
| Total Split (s)       | 13.0  | 68.0  | 68.0  | 12.0  | 67.0  | 67.0  | 15.0  | 28.0  |     | 12.0  | 25.0  |     |
| Total Split (%)       | 10.8% | 56.7% | 56.7% | 10.0% | 55.8% | 55.8% | 12.5% | 23.3% |     | 10.0% | 20.8% |     |
| Maximum Green (s)     | 7.0   | 62.0  | 62.0  | 6.0   | 61.0  | 61.0  | 10.0  | 23.0  |     | 7.0   | 20.0  |     |
| Yellow Time (s)       | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| All-Red Time (s)      | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   |     | 2.0   | 2.0   |     |
| Lost Time Adjust (s)  | -1.0  | -1.0  | -1.0  | -1.0  | -1.0  | -1.0  | -1.0  | -1.0  |     | -1.0  | -1.0  |     |
| Total Lost Time (s)   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 4.0   | 4.0   |     | 4.0   | 4.0   |     |
| Lead/Lag              | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   | Lead  | Lag   |     | Lead  | Lag   |     |
| Lead-Lag Optimize?    | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |     | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| Recall Mode           | None  | C-Max | C-Max | None  | C-Max | C-Max | None  | None  |     | None  | None  |     |
| Act Effect Green (s)  | 77.2  | 75.6  | 75.6  | 71.4  | 64.7  | 64.7  | 23.4  | 17.3  |     | 29.0  | 18.2  |     |
| Actuated g/C Ratio    | 0.64  | 0.63  | 0.63  | 0.60  | 0.54  | 0.54  | 0.20  | 0.14  |     | 0.24  | 0.15  |     |
| v/c Ratio             | 0.69  | 0.33  | 0.04  | 0.01  | 0.94  | 0.07  | 0.62  | 0.06  |     | 0.24  | 0.84  |     |
| Control Delay         | 40.2  | 11.9  | 0.1   | 8.6   | 37.2  | 0.1   | 53.2  | 22.8  |     | 34.0  | 48.3  |     |
| Queue Delay           | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Delay           | 40.2  | 11.9  | 0.1   | 8.6   | 37.2  | 0.1   | 53.2  | 22.8  |     | 34.0  | 48.3  |     |
| LOS                   | D     | B     | A     | A     | D     | A     | D     | C     |     | C     | D     |     |
| Approach Delay        |       | 15.4  |       |       | 36.0  |       |       | 50.3  |     |       | 44.9  |     |
| Approach LOS          |       | B     |       |       | D     |       |       | D     |     |       | D     |     |

Intersection Summary

Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green  
 Natural Cycle: 100  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.94  
 Intersection Signal Delay: 32.0  
 Intersection LOS: C  
 Intersection Capacity Utilization 91.9%  
 ICU Level of Service F  
 Analysis Period (min) 15

Splits and Phases: 6: Pioneer Ranch Access/Connector Collector Roadway & Founder Pkwy



HCM 6th Roundabout  
 7: Castle Oaks Drive & Internal Community Collector

2041 Total  
 AM Peak

| Intersection                |       |       |       |
|-----------------------------|-------|-------|-------|
| Intersection Delay, s/veh   | 5.2   |       |       |
| Intersection LOS            | A     |       |       |
| Approach                    | EB    | NB    | SB    |
| Entry Lanes                 | 1     | 1     | 1     |
| Conflicting Circle Lanes    | 1     | 1     | 1     |
| Adj Approach Flow, veh/h    | 71    | 138   | 440   |
| Demand Flow Rate, veh/h     | 72    | 140   | 449   |
| Vehicles Circulating, veh/h | 310   | 60    | 24    |
| Vehicles Exiting, veh/h     | 163   | 322   | 176   |
| Ped Vol Crossing Leg, #/h   | 0     | 0     | 0     |
| Ped Cap Adj                 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh       | 4.3   | 3.7   | 5.8   |
| Approach LOS                | A     | A     | A     |
| Lane                        | Left  | Left  | Left  |
| Designated Moves            | LR    | LT    | TR    |
| Assumed Moves               | LR    | LT    | TR    |
| RT Channelized              |       |       |       |
| Lane Util                   | 1.000 | 1.000 | 1.000 |
| Follow-Up Headway, s        | 2.609 | 2.609 | 2.609 |
| Critical Headway, s         | 4.976 | 4.976 | 4.976 |
| Entry Flow, veh/h           | 72    | 140   | 449   |
| Cap Entry Lane, veh/h       | 1006  | 1298  | 1346  |
| Entry HV Adj Factor         | 0.986 | 0.984 | 0.980 |
| Flow Entry, veh/h           | 71    | 138   | 440   |
| Cap Entry, veh/h            | 992   | 1277  | 1319  |
| V/C Ratio                   | 0.072 | 0.108 | 0.333 |
| Control Delay, s/veh        | 4.3   | 3.7   | 5.8   |
| LOS                         | A     | A     | A     |
| 95th %tile Queue, veh       | 0     | 0     | 1     |

Lanes, Volumes, Timings  
8: Ridge Rd/Founders Pkwy & 5th St/SH 86

2041 Total  
AM Peak



| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |       |       |       |       |       |       |
| Traffic Volume (vph)       | 70    | 210   | 120   | 115   | 475   | 865   | 320   | 535   | 75    | 300   | 170   | 135   |
| Future Volume (vph)        | 70    | 210   | 120   | 115   | 475   | 865   | 320   | 535   | 75    | 300   | 170   | 135   |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 300   |       | 425   | 250   |       | 0     | 250   |       | 0     | 600   |       | 500   |
| Storage Lanes              | 1     |       | 1     | 1     |       | 1     | 2     |       | 1     | 2     |       | 1     |
| Taper Length (ft)          | 100   |       |       | 100   |       |       | 100   |       |       | 100   |       |       |
| Lane Util. Factor          | 1.00  | 0.95  | 1.00  | 1.00  | 0.95  | 1.00  | 0.97  | 0.95  | 1.00  | 0.97  | 0.95  | 1.00  |
| Frt                        |       |       | 0.850 |       |       | 0.850 |       |       | 0.850 |       |       | 0.850 |
| Flt Protected              | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       |
| Satd. Flow (prot)          | 1770  | 3539  | 1583  | 1770  | 3539  | 1583  | 3433  | 3539  | 1583  | 3433  | 3539  | 1583  |
| Flt Permitted              | 0.445 |       |       | 0.590 |       |       | 0.950 |       |       | 0.950 |       |       |
| Satd. Flow (perm)          | 829   | 3539  | 1583  | 1099  | 3539  | 1583  | 3433  | 3539  | 1583  | 3433  | 3539  | 1583  |
| Right Turn on Red          |       |       | Yes   |       |       | Yes   |       |       | Yes   |       |       | Yes   |
| Satd. Flow (RTOR)          |       |       | 141   |       |       | 708   |       |       | 141   |       |       | 147   |
| Link Speed (mph)           |       | 35    |       |       | 50    |       |       | 35    |       |       | 50    |       |
| Link Distance (ft)         |       | 450   |       |       | 848   |       |       | 659   |       |       | 865   |       |
| Travel Time (s)            |       | 8.8   |       |       | 11.6  |       |       | 12.8  |       |       | 11.8  |       |
| Peak Hour Factor           | 0.92  | 0.92  | 0.92  | 0.92  | 0.95  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 76    | 228   | 130   | 125   | 500   | 940   | 348   | 582   | 82    | 326   | 185   | 147   |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 76    | 228   | 130   | 125   | 500   | 940   | 348   | 582   | 82    | 326   | 185   | 147   |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right |
| Median Width(ft)           |       | 18    |       |       | 18    |       |       | 24    |       |       | 24    |       |
| Link Offset(ft)            |       | 0     |       |       | 0     |       |       | 0     |       |       | 0     |       |
| Crosswalk Width(ft)        |       | 16    |       |       | 16    |       |       | 16    |       |       | 16    |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |       |       |       |       |       |
| Headway 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  |
| Turning Speed (mph)        | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     |
| Number of Detectors        | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     | 1     |
| Detector Template          | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  | Right |
| Leading Detector (ft)      | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   | 20    |
| Trailing Detector (ft)     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Position(ft)    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Size(ft)        | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     | 20    |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 2 Position(ft)    |       | 94    |       |       | 94    |       |       | 94    |       |       | 94    |       |
| Detector 2 Size(ft)        |       | 6     |       |       | 6     |       |       | 6     |       |       | 6     |       |
| Detector 2 Type            |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |
| Detector 2 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |
| Turn Type                  | pm+pt | NA    | Free  | pm+pt | NA    | Free  | Prot  | NA    | Free  | Prot  | NA    | Free  |
| Protected Phases           | 5     | 2     |       | 1     | 6     |       | 3     | 8     |       | 7     | 4     |       |
| Permitted Phases           | 2     |       | Free  | 6     |       | Free  |       |       | Free  |       |       | Free  |



Lanes, Volumes, Timings  
8: Ridge Rd/Founders Pkwy & 5th St/SH 86

2041 Total  
AM Peak

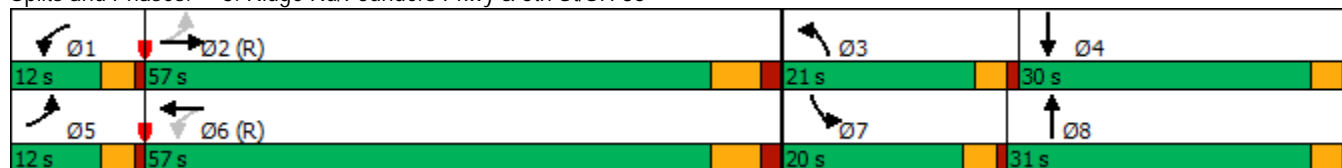


| Lane Group            | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Detector Phase        | 5     | 2     |       | 1     | 6     |       | 3     | 8     |       | 7     | 4     |       |
| Switch Phase          |       |       |       |       |       |       |       |       |       |       |       |       |
| Minimum Initial (s)   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |       |
| Minimum Split (s)     | 9.0   | 20.0  |       | 9.0   | 20.0  |       | 9.0   | 20.0  |       | 9.0   | 20.0  |       |
| Total Split (s)       | 12.0  | 57.0  |       | 12.0  | 57.0  |       | 21.0  | 31.0  |       | 20.0  | 30.0  |       |
| Total Split (%)       | 10.0% | 47.5% |       | 10.0% | 47.5% |       | 17.5% | 25.8% |       | 16.7% | 25.0% |       |
| Maximum Green (s)     | 8.0   | 50.5  |       | 8.0   | 50.5  |       | 17.0  | 27.0  |       | 16.0  | 26.0  |       |
| Yellow Time (s)       | 3.0   | 4.5   |       | 3.0   | 4.5   |       | 3.0   | 3.0   |       | 3.0   | 3.0   |       |
| All-Red Time (s)      | 1.0   | 2.0   |       | 1.0   | 2.0   |       | 1.0   | 1.0   |       | 1.0   | 1.0   |       |
| Lost Time Adjust (s)  | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |       |
| Total Lost Time (s)   | 4.0   | 6.5   |       | 4.0   | 6.5   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |       |
| Lead/Lag              | Lead  | Lag   |       | Lead  | Lag   |       | Lead  | Lag   |       | Lead  | Lag   |       |
| Lead-Lag Optimize?    | Yes   | Yes   |       | Yes   | Yes   |       | Yes   | Yes   |       | Yes   | Yes   |       |
| Vehicle Extension (s) | 3.0   | 3.0   |       | 3.0   | 3.0   |       | 3.0   | 3.0   |       | 3.0   | 3.0   |       |
| Recall Mode           | None  | C-Max |       | None  | C-Max |       | None  | None  |       | None  | None  |       |
| Act Effect Green (s)  | 63.8  | 54.0  | 120.0 | 65.9  | 56.7  | 120.0 | 15.9  | 24.4  | 120.0 | 15.0  | 23.6  | 120.0 |
| Actuated g/C Ratio    | 0.53  | 0.45  | 1.00  | 0.55  | 0.47  | 1.00  | 0.13  | 0.20  | 1.00  | 0.12  | 0.20  | 1.00  |
| v/c Ratio             | 0.15  | 0.14  | 0.08  | 0.19  | 0.30  | 0.59  | 0.77  | 0.81  | 0.05  | 0.76  | 0.27  | 0.09  |
| Control Delay         | 13.5  | 20.6  | 0.1   | 13.7  | 21.5  | 1.6   | 62.0  | 54.8  | 0.1   | 62.8  | 41.3  | 0.1   |
| Queue Delay           | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay           | 13.5  | 20.6  | 0.1   | 13.7  | 21.5  | 1.6   | 62.0  | 54.8  | 0.1   | 62.8  | 41.3  | 0.1   |
| LOS                   | B     | C     | A     | B     | C     | A     | E     | D     | A     | E     | D     | A     |
| Approach Delay        |       | 13.2  |       |       | 9.0   |       |       | 52.9  |       |       | 42.8  |       |
| Approach LOS          |       | B     |       |       | A     |       |       | D     |       |       | D     |       |

Intersection Summary

|                                   |   |
|-----------------------------------|---|
| Area Type:                        | Other   |
| Cycle Length:                     | 120   |
| Actuated Cycle Length:            | 120   |
| Offset:                           | 12 (10%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green |
| Natural Cycle:                    | 60  |
| Control Type:                     | Actuated-Coordinated  |
| Maximum v/c Ratio:                | 0.81  |
| Intersection Signal Delay:        | 27.6  |
| Intersection LOS:                 | C   |
| Intersection Capacity Utilization | 55.8%   |
| ICU Level of Service              | B   |
| Analysis Period (min)             | 15  |

Splits and Phases: 8: Ridge Rd/Founders Pkwy & 5th St/SH 86



HCM 6th TWSC  
 9: Connector Collector Roadway & Commercial Access

2041 Total  
 AM Peak

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 1.7  |      |      |      |      |      |
| Movement                 | WBL  | WBR  | NBT  | NBR  | SBL  | SBT  |
| Lane Configurations      | ↘    | ↗    | ↑    | ↗    | ↘    | ↑    |
| Traffic Vol, veh/h       | 70   | 2    | 127  | 49   | 3    | 282  |
| Future Vol, veh/h        | 70   | 2    | 127  | 49   | 3    | 282  |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 100  | 0    | -    | 190  | 220  | -    |
| Veh in Median Storage, # | 0    | -    | 0    | -    | -    | 0    |
| Grade, %                 | 0    | -    | 0    | -    | -    | 0    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 76   | 2    | 138  | 53   | 3    | 307  |

| Major/Minor          | Minor1 | Major1 | Major2 |   |       |   |
|----------------------|--------|--------|--------|---|-------|---|
| Conflicting Flow All | 451    | 138    | 0      | 0 | 191   | 0 |
| Stage 1              | 138    | -      | -      | - | -     | - |
| Stage 2              | 313    | -      | -      | - | -     | - |
| Critical Hdwy        | 6.42   | 6.22   | -      | - | 4.12  | - |
| Critical Hdwy Stg 1  | 5.42   | -      | -      | - | -     | - |
| Critical Hdwy Stg 2  | 5.42   | -      | -      | - | -     | - |
| Follow-up Hdwy       | 3.518  | 3.318  | -      | - | 2.218 | - |
| Pot Cap-1 Maneuver   | 566    | 910    | -      | - | 1383  | - |
| Stage 1              | 889    | -      | -      | - | -     | - |
| Stage 2              | 741    | -      | -      | - | -     | - |
| Platoon blocked, %   |        |        | -      | - | -     | - |
| Mov Cap-1 Maneuver   | 565    | 910    | -      | - | 1383  | - |
| Mov Cap-2 Maneuver   | 565    | -      | -      | - | -     | - |
| Stage 1              | 889    | -      | -      | - | -     | - |
| Stage 2              | 740    | -      | -      | - | -     | - |

| Approach             | WB   | NB | SB  |
|----------------------|------|----|-----|
| HCM Control Delay, s | 12.3 | 0  | 0.1 |
| HCM LOS              | B    |    |     |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL   | SBT |
|-----------------------|-----|-----|-------|-------|-------|-----|
| Capacity (veh/h)      | -   | -   | 565   | 910   | 1383  | -   |
| HCM Lane V/C Ratio    | -   | -   | 0.135 | 0.002 | 0.002 | -   |
| HCM Control Delay (s) | -   | -   | 12.4  | 9     | 7.6   | -   |
| HCM Lane LOS          | -   | -   | B     | A     | A     | -   |
| HCM 95th %tile Q(veh) | -   | -   | 0.5   | 0     | 0     | -   |

HCM 6th TWSC  
 10: Internal Collector Roadway & Site Access #10

2041 Total  
 AM Peak

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.4  |      |      |      |      |      |
| Movement                 | WBL  | WBR  | NBT  | NBR  | SBL  | SBT  |
| Lane Configurations      | TT   |      | TT   |      |      | TT   |
| Traffic Vol, veh/h       | 0    | 13   | 320  | 0    | 5    | 114  |
| Future Vol, veh/h        | 0    | 13   | 320  | 0    | 5    | 114  |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | 0    | -    | -    | 0    |
| Grade, %                 | 0    | -    | 0    | -    | -    | 0    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 14   | 348  | 0    | 5    | 124  |

| Major/Minor          | Minor1 | Major1 | Major2 |   |       |
|----------------------|--------|--------|--------|---|-------|
| Conflicting Flow All | 482    | 348    | 0      | 0 | 348   |
| Stage 1              | 348    | -      | -      | - | -     |
| Stage 2              | 134    | -      | -      | - | -     |
| Critical Hdwy        | 6.42   | 6.22   | -      | - | 4.12  |
| Critical Hdwy Stg 1  | 5.42   | -      | -      | - | -     |
| Critical Hdwy Stg 2  | 5.42   | -      | -      | - | -     |
| Follow-up Hdwy       | 3.518  | 3.318  | -      | - | 2.218 |
| Pot Cap-1 Maneuver   | 543    | 695    | -      | - | 1211  |
| Stage 1              | 715    | -      | -      | - | -     |
| Stage 2              | 892    | -      | -      | - | -     |
| Platoon blocked, %   |        |        | -      | - | -     |
| Mov Cap-1 Maneuver   | 541    | 695    | -      | - | 1211  |
| Mov Cap-2 Maneuver   | 541    | -      | -      | - | -     |
| Stage 1              | 715    | -      | -      | - | -     |
| Stage 2              | 888    | -      | -      | - | -     |

| Approach             | WB   | NB | SB  |
|----------------------|------|----|-----|
| HCM Control Delay, s | 10.3 | 0  | 0.3 |
| HCM LOS              | B    |    |     |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL  | SBT   |
|-----------------------|-----|----------|------|-------|
| Capacity (veh/h)      | -   | -        | 695  | 1211  |
| HCM Lane V/C Ratio    | -   | -        | 0.02 | 0.004 |
| HCM Control Delay (s) | -   | -        | 10.3 | 8     |
| HCM Lane LOS          | -   | -        | B    | A     |
| HCM 95th %tile Q(veh) | -   | -        | 0.1  | 0     |

HCM 6th TWSC  
 11: Internal Collector Roadway & Site Access #11

2041 Total  
 AM Peak

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 1.9  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      | ↕    | ↕    |      | ↕    | ↕    |      |
| Traffic Vol, veh/h       | 1    | 2    | 23   | 1    | 7    | 15   | 60   | 304  | 0    | 5    | 107  | 2    |
| Future Vol, veh/h        | 1    | 2    | 23   | 1    | 7    | 15   | 60   | 304  | 0    | 5    | 107  | 2    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | 0    | -    | -    | 0    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 1    | 2    | 25   | 1    | 8    | 16   | 65   | 330  | 0    | 5    | 116  | 2    |

| Major/Minor          | Minor2 |       | Minor1 |       | Major1 |       |       | Major2 |   |       |   |   |
|----------------------|--------|-------|--------|-------|--------|-------|-------|--------|---|-------|---|---|
| Conflicting Flow All | 599    | 587   | 117    | 601   | 588    | 330   | 118   | 0      | 0 | 330   | 0 | 0 |
| Stage 1              | 127    | 127   | -      | 460   | 460    | -     | -     | -      | - | -     | - | - |
| Stage 2              | 472    | 460   | -      | 141   | 128    | -     | -     | -      | - | -     | - | - |
| Critical Hdwy        | 7.12   | 6.52  | 6.22   | 7.12  | 6.52   | 6.22  | 4.12  | -      | - | 4.12  | - | - |
| Critical Hdwy Stg 1  | 6.12   | 5.52  | -      | 6.12  | 5.52   | -     | -     | -      | - | -     | - | - |
| Critical Hdwy Stg 2  | 6.12   | 5.52  | -      | 6.12  | 5.52   | -     | -     | -      | - | -     | - | - |
| Follow-up Hdwy       | 3.518  | 4.018 | 3.318  | 3.518 | 4.018  | 3.318 | 2.218 | -      | - | 2.218 | - | - |
| Pot Cap-1 Maneuver   | 413    | 422   | 935    | 412   | 421    | 712   | 1470  | -      | - | 1229  | - | - |
| Stage 1              | 877    | 791   | -      | 581   | 566    | -     | -     | -      | - | -     | - | - |
| Stage 2              | 573    | 566   | -      | 862   | 790    | -     | -     | -      | - | -     | - | - |
| Platoon blocked, %   |        |       |        |       |        |       |       | -      | - | -     | - | - |
| Mov Cap-1 Maneuver   | 383    | 402   | 935    | 385   | 401    | 712   | 1470  | -      | - | 1229  | - | - |
| Mov Cap-2 Maneuver   | 383    | 402   | -      | 385   | 401    | -     | -     | -      | - | -     | - | - |
| Stage 1              | 838    | 788   | -      | 555   | 541    | -     | -     | -      | - | -     | - | - |
| Stage 2              | 528    | 541   | -      | 833   | 787    | -     | -     | -      | - | -     | - | - |

| Approach             | EB  |  | WB   |  | NB  |  | SB  |  |
|----------------------|-----|--|------|--|-----|--|-----|--|
| HCM Control Delay, s | 9.6 |  | 11.7 |  | 1.2 |  | 0.3 |  |
| HCM LOS              | A   |  | B    |  |     |  |     |  |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1WBLn1 | SBL   | SBT   | SBR |
|-----------------------|-------|-----|-----|------------|-------|-------|-----|
| Capacity (veh/h)      | 1470  | -   | -   | 808        | 559   | 1229  | -   |
| HCM Lane V/C Ratio    | 0.044 | -   | -   | 0.035      | 0.045 | 0.004 | -   |
| HCM Control Delay (s) | 7.6   | -   | -   | 9.6        | 11.7  | 7.9   | -   |
| HCM Lane LOS          | A     | -   | -   | A          | B     | A     | -   |
| HCM 95th %tile Q(veh) | 0.1   | -   | -   | 0.1        | 0.1   | 0     | -   |

HCM 6th TWSC  
 12: Internal Collector Roadway & Site Access #12

2041 Total  
 AM Peak

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 1.3  |      |      |      |      |      |
| Movement                 | WBL  | WBR  | NBT  | NBR  | SBL  | SBT  |
| Lane Configurations      |      |      |      |      |      |      |
| Traffic Vol, veh/h       | 1    | 48   | 316  | 0    | 16   | 115  |
| Future Vol, veh/h        | 1    | 48   | 316  | 0    | 16   | 115  |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | 0    | -    | -    | 0    |
| Grade, %                 | 0    | -    | 0    | -    | -    | 0    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 1    | 52   | 343  | 0    | 17   | 125  |

| Major/Minor          | Minor1 | Major1 | Major2 |   |       |
|----------------------|--------|--------|--------|---|-------|
| Conflicting Flow All | 502    | 343    | 0      | 0 | 343   |
| Stage 1              | 343    | -      | -      | - | -     |
| Stage 2              | 159    | -      | -      | - | -     |
| Critical Hdwy        | 6.42   | 6.22   | -      | - | 4.12  |
| Critical Hdwy Stg 1  | 5.42   | -      | -      | - | -     |
| Critical Hdwy Stg 2  | 5.42   | -      | -      | - | -     |
| Follow-up Hdwy       | 3.518  | 3.318  | -      | - | 2.218 |
| Pot Cap-1 Maneuver   | 529    | 700    | -      | - | 1216  |
| Stage 1              | 719    | -      | -      | - | -     |
| Stage 2              | 870    | -      | -      | - | -     |
| Platoon blocked, %   |        |        | -      | - | -     |
| Mov Cap-1 Maneuver   | 522    | 700    | -      | - | 1216  |
| Mov Cap-2 Maneuver   | 522    | -      | -      | - | -     |
| Stage 1              | 719    | -      | -      | - | -     |
| Stage 2              | 858    | -      | -      | - | -     |

| Approach             | WB   | NB | SB |
|----------------------|------|----|----|
| HCM Control Delay, s | 10.6 | 0  | 1  |
| HCM LOS              | B    |    |    |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL   | SBT   |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h)      | -   | -        | 695   | 1216  |
| HCM Lane V/C Ratio    | -   | -        | 0.077 | 0.014 |
| HCM Control Delay (s) | -   | -        | 10.6  | 8     |
| HCM Lane LOS          | -   | -        | B     | A     |
| HCM 95th %tile Q(veh) | -   | -        | 0.2   | 0     |

HCM 6th TWSC  
 13: Internal Collector Roadway & Site Access #13

2041 Total  
 AM Peak

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2    |      |      |      |      |      |
| Movement                 | EBL  | EBT  | WBT  | WBR  | SBL  | SBR  |
| Lane Configurations      |      |      |      |      |      |      |
| Traffic Vol, veh/h       | 21   | 95   | 251  | 1    | 2    | 65   |
| Future Vol, veh/h        | 21   | 95   | 251  | 1    | 2    | 65   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | -    | 0    | 0    | -    | 0    | -    |
| Grade, %                 | -    | 0    | 0    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 23   | 103  | 273  | 1    | 2    | 71   |

| Major/Minor          | Major1 | Major2 | Minor2 |   |       |
|----------------------|--------|--------|--------|---|-------|
| Conflicting Flow All | 274    | 0      | -      | 0 | 423   |
| Stage 1              | -      | -      | -      | - | 274   |
| Stage 2              | -      | -      | -      | - | 149   |
| Critical Hdwy        | 4.12   | -      | -      | - | 6.42  |
| Critical Hdwy Stg 1  | -      | -      | -      | - | 5.42  |
| Critical Hdwy Stg 2  | -      | -      | -      | - | 5.42  |
| Follow-up Hdwy       | 2.218  | -      | -      | - | 3.518 |
| Pot Cap-1 Maneuver   | 1289   | -      | -      | - | 588   |
| Stage 1              | -      | -      | -      | - | 772   |
| Stage 2              | -      | -      | -      | - | 879   |
| Platoon blocked, %   |        | -      | -      | - |       |
| Mov Cap-1 Maneuver   | 1289   | -      | -      | - | 577   |
| Mov Cap-2 Maneuver   | -      | -      | -      | - | 577   |
| Stage 1              | -      | -      | -      | - | 758   |
| Stage 2              | -      | -      | -      | - | 879   |

| Approach             | EB  | WB | SB   |
|----------------------|-----|----|------|
| HCM Control Delay, s | 1.4 | 0  | 10.3 |
| HCM LOS              |     |    | B    |

| Minor Lane/Major Mvmt | EBL   | EBT | WBT | WBR | SBLn1 |
|-----------------------|-------|-----|-----|-----|-------|
| Capacity (veh/h)      | 1289  | -   | -   | -   | 758   |
| HCM Lane V/C Ratio    | 0.018 | -   | -   | -   | 0.096 |
| HCM Control Delay (s) | 7.8   | -   | -   | -   | 10.3  |
| HCM Lane LOS          | A     | -   | -   | -   | B     |
| HCM 95th %tile Q(veh) | 0.1   | -   | -   | -   | 0.3   |

HCM 6th TWSC  
 14: Site Access #14 & Internal Collector Roadway

2041 Total  
 AM Peak

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 1.8  |      |      |      |      |      |
| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
| Lane Configurations      | ↑    | ↑    |      | ↑    | ↑    |      |
| Traffic Vol, veh/h       | 77   | 20   | 1    | 193  | 59   | 1    |
| Future Vol, veh/h        | 77   | 20   | 1    | 193  | 59   | 1    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | 0    | -    | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 84   | 22   | 1    | 210  | 64   | 1    |

| Major/Minor          | Major1 | Major2 | Minor1 | Minor2 | Minor3 |
|----------------------|--------|--------|--------|--------|--------|
| Conflicting Flow All | 0      | 0      | 106    | 0      | 296    |
| Stage 1              | -      | -      | -      | -      | 84     |
| Stage 2              | -      | -      | -      | -      | 212    |
| Critical Hdwy        | -      | -      | 4.12   | -      | 6.42   |
| Critical Hdwy Stg 1  | -      | -      | -      | -      | 5.42   |
| Critical Hdwy Stg 2  | -      | -      | -      | -      | 5.42   |
| Follow-up Hdwy       | -      | -      | 2.218  | -      | 3.518  |
| Pot Cap-1 Maneuver   | -      | -      | 1485   | -      | 695    |
| Stage 1              | -      | -      | -      | -      | 939    |
| Stage 2              | -      | -      | -      | -      | 823    |
| Platoon blocked, %   | -      | -      | -      | -      | -      |
| Mov Cap-1 Maneuver   | -      | -      | 1485   | -      | 694    |
| Mov Cap-2 Maneuver   | -      | -      | -      | -      | 694    |
| Stage 1              | -      | -      | -      | -      | 939    |
| Stage 2              | -      | -      | -      | -      | 822    |

| Approach             | EB | WB | NB   |
|----------------------|----|----|------|
| HCM Control Delay, s | 0  | 0  | 10.7 |
| HCM LOS              |    |    | B    |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 697   | -   | -   | 1485  | -   |
| HCM Lane V/C Ratio    | 0.094 | -   | -   | 0.001 | -   |
| HCM Control Delay (s) | 10.7  | -   | -   | 7.4   | 0   |
| HCM Lane LOS          | B     | -   | -   | A     | A   |
| HCM 95th %tile Q(veh) | 0.3   | -   | -   | 0     | -   |

HCM 6th TWSC  
 15: Site Access #15 & Internal Collector Roadway

2041 Total  
 AM Peak

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 9.5  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      |      | ↕    |      |      | ↕    |      |
| Traffic Vol, veh/h       | 5    | 62   | 11   | 1    | 146  | 0    | 32   | 0    | 2    | 1    | 0    | 16   |
| Future Vol, veh/h        | 5    | 62   | 11   | 1    | 146  | 0    | 32   | 0    | 2    | 1    | 0    | 16   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 5    | 67   | 12   | 1    | 159  | 0    | 35   | 0    | 2    | 1    | 0    | 17   |

| Major/Minor          | Minor2 |       | Minor1 |       | Major1 |       | Major2 |   |   |       |   |   |
|----------------------|--------|-------|--------|-------|--------|-------|--------|---|---|-------|---|---|
| Conflicting Flow All | 162    | 83    | 9      | 121   | 90     | 1     | 17     | 0 | 0 | 2     | 0 | 0 |
| Stage 1              | 11     | 11    | -      | 71    | 71     | -     | -      | - | - | -     | - | - |
| Stage 2              | 151    | 72    | -      | 50    | 19     | -     | -      | - | - | -     | - | - |
| Critical Hdwy        | 7.12   | 6.52  | 6.22   | 7.12  | 6.52   | 6.22  | 4.12   | - | - | 4.12  | - | - |
| Critical Hdwy Stg 1  | 6.12   | 5.52  | -      | 6.12  | 5.52   | -     | -      | - | - | -     | - | - |
| Critical Hdwy Stg 2  | 6.12   | 5.52  | -      | 6.12  | 5.52   | -     | -      | - | - | -     | - | - |
| Follow-up Hdwy       | 3.518  | 4.018 | 3.318  | 3.518 | 4.018  | 3.318 | 2.218  | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver   | 803    | 807   | 1073   | 854   | 800    | 1084  | 1600   | - | - | 1620  | - | - |
| Stage 1              | 1010   | 886   | -      | 939   | 836    | -     | -      | - | - | -     | - | - |
| Stage 2              | 851    | 835   | -      | 963   | 880    | -     | -      | - | - | -     | - | - |
| Platoon blocked, %   |        |       |        |       |        |       |        | - | - | -     | - | - |
| Mov Cap-1 Maneuver   | 666    | 788   | 1073   | 775   | 782    | 1084  | 1600   | - | - | 1620  | - | - |
| Mov Cap-2 Maneuver   | 666    | 788   | -      | 775   | 782    | -     | -      | - | - | -     | - | - |
| Stage 1              | 988    | 885   | -      | 918   | 818    | -     | -      | - | - | -     | - | - |
| Stage 2              | 671    | 817   | -      | 879   | 879    | -     | -      | - | - | -     | - | - |






























| Approach             | EB |  | WB   |  | NB  |  | SB  |  |
|----------------------|----|--|------|--|-----|--|-----|--|
| HCM Control Delay, s | 10 |  | 10.8 |  | 6.9 |  | 0.4 |  |
| HCM LOS              | B  |  | B    |  |     |  |     |  |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1WBLn1 | SBL   | SBT   | SBR |
|-----------------------|-------|-----|-----|------------|-------|-------|-----|
| Capacity (veh/h)      | 1600  | -   | -   | 809        | 782   | 1620  | -   |
| HCM Lane V/C Ratio    | 0.022 | -   | -   | 0.105      | 0.204 | 0.001 | -   |
| HCM Control Delay (s) | 7.3   | 0   | -   | 10         | 10.8  | 7.2   | 0   |
| HCM Lane LOS          | A     | A   | -   | B          | B     | A     | A   |
| HCM 95th %tile Q(veh) | 0.1   | -   | -   | 0.3        | 0.8   | 0     | -   |



Lanes, Volumes, Timings  
1: Allen Way & Founder Pkwy

2041 Total  
PM Peak

|                            |    |    |  |  |    |  |    |  |  |  |  |    |
|----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL  | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations        |   |    |   |  |    |  |   |  |   |  |  |   |
| Traffic Volume (vph)       | 435   | 3385  | 230   | 45  | 2485  | 160   | 185  | 45  | 90  | 145   | 40  | 460   |
| Future Volume (vph)        | 435   | 3385  | 230   | 45  | 2485  | 160   | 185  | 45  | 90  | 145   | 40  | 460   |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900   | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 290   |   | 0   | 325   |   | 0   | 75   |   | 0   | 130   |   | 110   |
| Storage Lanes              | 2   |   | 0   | 1   |   | 1   | 2  |   | 0   | 1   |   | 2   |
| Taper Length (ft)          | 100   |   |   | 100   |   |   | 100  |   |   | 100   |   |   |
| Lane Util. Factor          | 0.97  | 0.91  | 0.91  | 1.00  | 0.91  | 1.00  | 0.97   | 1.00  | 1.00  | 1.00  | 1.00  | 0.88  |
| Frt                        |   | 0.990   |   |   |   | 0.850   |  | 0.900   |   |   |   | 0.850   |
| Flt Protected              | 0.950   |   |   | 0.950   |   |   | 0.950  |   |   | 0.950   |   |   |
| Satd. Flow (prot)          | 3433  | 5034  | 0   | 1770  | 5085  | 1583  | 3433   | 1676  | 0   | 1770  | 1863  | 2787  |
| Flt Permitted              | 0.950   |   |   | 0.061   |   |   | 0.950  |   |   | 0.392   |   |   |
| Satd. Flow (perm)          | 3433  | 5034  | 0   | 114   | 5085  | 1583  | 3433   | 1676  | 0   | 730   | 1863  | 2787  |
| Right Turn on Red          |   |   | Yes   |   |   | Yes   |  |   | Yes   |   |   | Yes   |
| Satd. Flow (RTOR)          |   | 19  |   |   |   | 155   |  | 69  |   |   |   | 290   |
| Link Speed (mph)           |   | 35  |   |   | 35  |   |  | 30  |   |   |   | 30  |
| Link Distance (ft)         |   | 533   |   |   | 1095  |   |  | 278   |   |   |   | 392   |
| Travel Time (s)            |   | 10.4  |   |   | 21.3  |   |  | 6.3   |   |   |   | 8.9   |
| Peak Hour Factor           | 0.92  | 0.98  | 0.92  | 0.92  | 0.98  | 0.92  | 0.92   | 0.92  | 0.92  | 0.92  | 0.92  | 0.95  |
| Adj. Flow (vph)            | 473   | 3454  | 250   | 49  | 2536  | 174   | 201  | 49  | 98  | 158   | 43  | 484   |
| Shared Lane Traffic (%)    |   |   |   |   |   |   |  |   |   |   |   |   |
| Lane Group Flow (vph)      | 473   | 3704  | 0   | 49  | 2536  | 174   | 201  | 147   | 0   | 158   | 43  | 484   |
| Enter Blocked Intersection | No  | No  | No  | No  | No  | No  | No   | No  | No  | No  | No  | No  |
| Lane Alignment             | Left  | Left  | Right   | Left  | Left  | Right   | Left   | Left  | Right   | Left  | Left  | Right   |
| Median Width(ft)           |   | 20  |   |   | 20  |   |  | 24  |   |   |   | 20  |
| Link Offset(ft)            |   | 0   |   |   | 0   |   |  | 0   |   |   |   | 0   |
| Crosswalk Width(ft)        |   | 16  |   |   | 16  |   |  | 16  |   |   |   | 16  |
| Two way Left Turn Lane     |   |   |   |   |   |   |  |   |   |   |   |   |
| Headway 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  |
| Turning Speed (mph)        | 15  |   | 9   | 15  |   | 9   | 15   |   | 9   | 15  |   | 9   |
| Number of Detectors        | 1   | 2   |   | 1   | 2   | 1   | 1  | 2   |   | 1   | 2   | 1   |
| Detector Template          | Left  | Thru  |   | Left  | Thru  | Right   | Left   | Thru  |   | Left  | Thru  | Right   |
| Leading Detector (ft)      | 20  | 100   |   | 20  | 100   | 20  | 20   | 100   |   | 20  | 100   | 20  |
| Trailing Detector (ft)     | 0   | 0   |   | 0   | 0   | 0   | 0  | 0   |   | 0   | 0   | 0   |
| Detector 1 Position(ft)    | 0   | 0   |   | 0   | 0   | 0   | 0  | 0   |   | 0   | 0   | 0   |
| Detector 1 Size(ft)        | 20  | 6   |   | 20  | 6   | 20  | 20   | 6   |   | 20  | 6   | 20  |
| Detector 1 Type            | Cl+Ex   | Cl+Ex   |   | Cl+Ex   | Cl+Ex   | Cl+Ex   | Cl+Ex  | Cl+Ex   |   | Cl+Ex   | Cl+Ex   | Cl+Ex   |
| Detector 1 Channel         |   |   |   |   |   |   |  |   |   |   |   |   |
| Detector 1 Extend (s)      | 0.0   | 0.0   |   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   |   | 0.0   | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   |   | 0.0   | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   |   | 0.0   | 0.0   | 0.0   |
| Detector 2 Position(ft)    |   | 94  |   |   | 94  |   |  | 94  |   |   |   | 94  |
| Detector 2 Size(ft)        |   | 6   |   |   | 6   |   |  | 6   |   |   |   | 6   |
| Detector 2 Type            |   | Cl+Ex   |   |   | Cl+Ex   |   |  | Cl+Ex   |   |   |   | Cl+Ex   |
| Detector 2 Channel         |   |   |   |   |   |   |  |   |   |   |   |   |
| Detector 2 Extend (s)      |   | 0.0   |   |   | 0.0   |   |  | 0.0   |   |   |   | 0.0   |
| Turn Type                  | Prot  | NA  |   | pm+pt   | NA  | Perm  | Prot   | NA  |   | pm+pt   | NA  | Perm  |
| Protected Phases           | 5   | 2   |   | 1   | 6   |   | 3  | 8   |   | 7   | 4   |   |
| Permitted Phases           |   |   |   | 6   |   | 6   |  |   |   | 4   |   | 4   |

Lanes, Volumes, Timings  
1: Allen Way & Founder Pkwy

2041 Total  
PM Peak

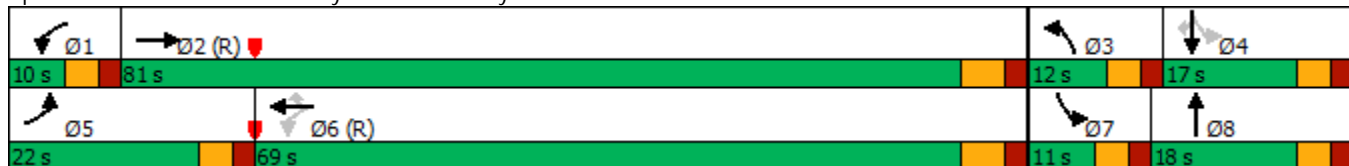


| Lane Group            | EBL   | EBT   | EBR | WBL  | WBT   | WBR   | NBL   | NBT   | NBR | SBL  | SBT   | SBR   |
|-----------------------|-------|-------|-----|------|-------|-------|-------|-------|-----|------|-------|-------|
| Detector Phase        | 5     | 2     |     | 1    | 6     | 6     | 3     | 8     |     | 7    | 4     | 4     |
| Switch Phase          |       |       |     |      |       |       |       |       |     |      |       |       |
| Minimum Initial (s)   | 4.0   | 4.0   |     | 4.0  | 4.0   | 4.0   | 4.0   | 4.0   |     | 4.0  | 4.0   | 4.0   |
| Minimum Split (s)     | 11.0  | 21.0  |     | 9.5  | 21.0  | 21.0  | 9.0   | 21.0  |     | 9.0  | 21.0  | 21.0  |
| Total Split (s)       | 22.0  | 81.0  |     | 10.0 | 69.0  | 69.0  | 12.0  | 18.0  |     | 11.0 | 17.0  | 17.0  |
| Total Split (%)       | 18.3% | 67.5% |     | 8.3% | 57.5% | 57.5% | 10.0% | 15.0% |     | 9.2% | 14.2% | 14.2% |
| Maximum Green (s)     | 17.0  | 75.0  |     | 5.0  | 63.0  | 63.0  | 7.0   | 13.0  |     | 6.0  | 12.0  | 12.0  |
| Yellow Time (s)       | 3.0   | 4.0   |     | 3.0  | 4.0   | 4.0   | 3.0   | 3.0   |     | 3.0  | 3.0   | 3.0   |
| All-Red Time (s)      | 2.0   | 2.0   |     | 2.0  | 2.0   | 2.0   | 2.0   | 2.0   |     | 2.0  | 2.0   | 2.0   |
| Lost Time Adjust (s)  | -2.0  | -3.0  |     | -2.0 | -2.0  | -1.0  | -2.0  | -2.0  |     | -2.0 | -2.0  | -2.0  |
| Total Lost Time (s)   | 3.0   | 3.0   |     | 3.0  | 4.0   | 5.0   | 3.0   | 3.0   |     | 3.0  | 3.0   | 3.0   |
| Lead/Lag              | Lead  | Lag   |     | Lead | Lag   | Lag   | Lead  | Lag   |     | Lead | Lag   | Lag   |
| Lead-Lag Optimize?    | Yes   | Yes   |     | Yes  | Yes   | Yes   | Yes   | Yes   |     | Yes  | Yes   | Yes   |
| Vehicle Extension (s) | 3.0   | 3.0   |     | 3.0  | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0  | 3.0   | 3.0   |
| Recall Mode           | None  | C-Max |     | None | C-Max | C-Max | None  | None  |     | None | None  | None  |
| Act Effect Green (s)  | 19.0  | 80.8  |     | 73.9 | 65.8  | 64.8  | 9.0   | 14.2  |     | 21.2 | 13.2  | 13.2  |
| Actuated g/C Ratio    | 0.16  | 0.67  |     | 0.62 | 0.55  | 0.54  | 0.08  | 0.12  |     | 0.18 | 0.11  | 0.11  |
| v/c Ratio             | 0.87  | 1.09  |     | 0.29 | 0.91  | 0.19  | 0.78  | 0.57  |     | 0.80 | 0.21  | 0.86  |
| Control Delay         | 66.7  | 67.9  |     | 10.8 | 23.8  | 1.6   | 75.6  | 35.6  |     | 70.9 | 50.8  | 36.4  |
| Queue Delay           | 0.0   | 0.0   |     | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.0  | 0.0   | 0.0   |
| Total Delay           | 66.7  | 67.9  |     | 10.8 | 23.8  | 1.6   | 75.6  | 35.6  |     | 70.9 | 50.8  | 36.4  |
| LOS                   | E     | E     |     | B    | C     | A     | E     | D     |     | E    | D     | D     |
| Approach Delay        |       | 67.8  |     |      | 22.2  |       |       | 58.7  |     |      | 45.3  |       |
| Approach LOS          |       | E     |     |      | C     |       |       | E     |     |      | D     |       |

Intersection Summary




























|                                    |   |
|------------------------------------|---|
| Area Type:                         | Other   |
| Cycle Length:                      | 120   |
| Actuated Cycle Length:             | 120   |
| Offset:                            | 119 (99%), Referenced to phase 2:EBT and 6:WBTL, Start of Green |
| Natural Cycle:                     | 150   |
| Control Type:                      | Actuated-Coordinated  |
| Maximum v/c Ratio:                 | 1.09  |
| Intersection Signal Delay:         | 49.7  |
| Intersection LOS:                  | D   |
| Intersection Capacity Utilization: | 103.1%  |
| ICU Level of Service:              | G   |
| Analysis Period (min):             | 15  |

Splits and Phases: 1: Allen Way & Founder Pkwy



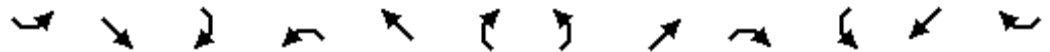
Lanes, Volumes, Timings  
2: Front St & Founder Pkwy

2041 Total  
PM Peak

|                            |  |    |  |  |    |  |    |  |  |  |   |  |
|----------------------------|---|---|---|---|---|---|--|---|---|---|--|---|
| Lane Group                 | SEL   | SET   | SER   | NWL   | NWT   | NWR   | NEL  | NET   | NER   | SWL   | SWT  | SWR   |
| Lane Configurations        |  | <br><br> |   |  | <br><br> |   | <br> |  |  |  | <br> |   |
| Traffic Volume (vph)       | 205   | 2800  | 615   | 145   | 2075  | 25  | 540  | 145   | 210   | 40  | 120  | 75  |
| Future Volume (vph)        | 205   | 2800  | 615   | 145   | 2075  | 25  | 540  | 145   | 210   | 40  | 120  | 75  |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900   | 1900  | 1900  | 1900  | 1900   | 1900  |
| Storage Length (ft)        | 460   |   | 0   | 200   |   | 0   | 285  |   | 0   | 230   |  | 0   |
| Storage Lanes              | 1   |   | 0   | 1   |   | 0   | 1  |   | 1   | 1   |  | 0   |
| Taper Length (ft)          | 100   |   |   | 100   |   |   | 100  |   |   | 100   |  |   |
| Lane Util. Factor          | 1.00  | 0.91  | 0.91  | 1.00  | 0.91  | 0.91  | 0.97   | 1.00  | 1.00  | 1.00  | 0.95   | 0.95  |
| Frt                        |   | 0.972   |   |   | 0.998   |   |  |   | 0.850   |   | 0.942  |   |
| Flt Protected              | 0.950   |   |   | 0.950   |   |   | 0.950  |   |   | 0.950   |  |   |
| Satd. Flow (prot)          | 1770  | 4943  | 0   | 1770  | 5075  | 0   | 3433   | 1863  | 1583  | 1770  | 3334   | 0   |
| Flt Permitted              | 0.054   |   |   | 0.056   |   |   | 0.364  |   |   | 0.657   |  |   |
| Satd. Flow (perm)          | 101   | 4943  | 0   | 104   | 5075  | 0   | 1315   | 1863  | 1583  | 1224  | 3334   | 0   |
| Right Turn on Red          |   |   | Yes   |   |   | Yes   |  |   | Yes   |   |  | Yes   |
| Satd. Flow (RTOR)          |   | 88  |   |   | 3   |   |  |   | 118   |   | 82   |   |
| Link Speed (mph)           |   | 35  |   |   | 35  |   |  | 35  |   |   | 35   |   |
| Link Distance (ft)         |   | 1095  |   |   | 488   |   |  | 556   |   |   | 397  |   |
| Travel Time (s)            |   | 21.3  |   |   | 9.5   |   |  | 10.8  |   |   | 7.7  |   |
| Peak Hour Factor           | 0.92  | 0.98  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92   | 0.92  | 0.92  | 0.92  | 0.92   | 0.92  |
| Adj. Flow (vph)            | 223   | 2857  | 668   | 158   | 2255  | 27  | 587  | 158   | 228   | 43  | 130  | 82  |
| Shared Lane Traffic (%)    |   |   |   |   |   |   |  |   |   |   |  |   |
| Lane Group Flow (vph)      | 223   | 3525  | 0   | 158   | 2282  | 0   | 587  | 158   | 228   | 43  | 212  | 0   |
| Enter Blocked Intersection | No  | No  | No  | No  | No  | No  | No   | No  | No  | No  | No   | No  |
| Lane Alignment             | Left  | Left  | Right   | Left  | Left  | Right   | Left   | Left  | Right   | Left  | Left   | Right   |
| Median Width(ft)           |   | 12  |   |   | 12  |   |  | 40  |   |   | 24   |   |
| Link Offset(ft)            |   | 0   |   |   | 0   |   |  | 0   |   |   | 0  |   |
| Crosswalk Width(ft)        |   | 16  |   |   | 16  |   |  | 16  |   |   | 16   |   |
| Two way Left Turn Lane     |   |   |   |   |   |   |  |   |   |   |  |   |
| Headway 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  |
| Turning Speed (mph)        | 15  |   | 9   | 15  |   | 9   | 15   |   | 9   | 15  |  | 9   |
| Number of Detectors        | 1   | 2   |   | 1   | 2   |   | 1  | 2   | 1   | 1   | 2  |   |
| Detector Template          | Left  | Thru  |   | Left  | Thru  |   | Left   | Thru  | Right   | Left  | Thru   |   |
| Leading Detector (ft)      | 20  | 100   |   | 20  | 100   |   | 20   | 100   | 20  | 20  | 100  |   |
| Trailing Detector (ft)     | 0   | 0   |   | 0   | 0   |   | 0  | 0   | 0   | 0   | 0  |   |
| Detector 1 Position(ft)    | 0   | 0   |   | 0   | 0   |   | 0  | 0   | 0   | 0   | 0  |   |
| Detector 1 Size(ft)        | 20  | 6   |   | 20  | 6   |   | 20   | 6   | 20  | 20  | 6  |   |
| Detector 1 Type            | Cl+Ex   | Cl+Ex   |   | Cl+Ex   | Cl+Ex   |   | Cl+Ex  | Cl+Ex   | Cl+Ex   | Cl+Ex   | Cl+Ex  |   |
| Detector 1 Channel         |   |   |   |   |   |   |  |   |   |   |  |   |
| Detector 1 Extend (s)      | 0.0   | 0.0   |   | 0.0   | 0.0   |   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0  |   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |   | 0.0   | 0.0   |   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0  |   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |   | 0.0   | 0.0   |   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0  |   |
| Detector 2 Position(ft)    |   | 94  |   |   | 94  |   |  | 94  |   |   | 94   |   |
| Detector 2 Size(ft)        |   | 6   |   |   | 6   |   |  | 6   |   |   | 6  |   |
| Detector 2 Type            |   | Cl+Ex   |   |   | Cl+Ex   |   |  | Cl+Ex   |   |   | Cl+Ex  |   |
| Detector 2 Channel         |   |   |   |   |   |   |  |   |   |   |  |   |
| Detector 2 Extend (s)      |   | 0.0   |   |   | 0.0   |   |  | 0.0   |   |   | 0.0  |   |
| Turn Type                  | pm+pt   | NA  |   | pm+pt   | NA  |   | pm+pt  | NA  | Perm  | pm+pt   | NA   |   |
| Protected Phases           | 5   | 2   |   | 1   | 6   |   | 3  | 8   |   | 7   | 4  |   |
| Permitted Phases           | 2   |   |   | 6   |   |   | 8  |   | 8   | 4   |  |   |

Lanes, Volumes, Timings  
2: Front St & Founder Pkwy

2041 Total  
PM Peak

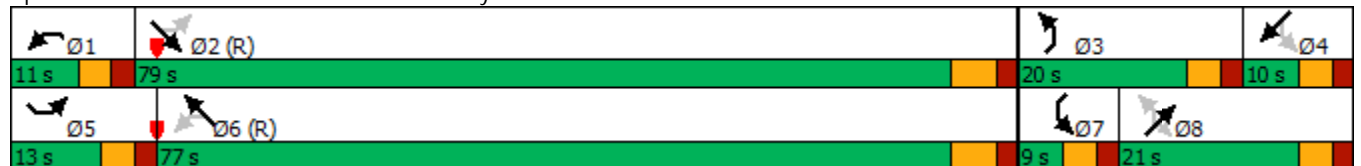


| Lane Group            | SEL   | SET   | SER | NWL  | NWT   | NWR | NEL   | NET   | NER   | SWL  | SWT  | SWR |
|-----------------------|-------|-------|-----|------|-------|-----|-------|-------|-------|------|------|-----|
| Detector Phase        | 5     | 2     |     | 1    | 6     |     | 3     | 8     | 8     | 7    | 4    |     |
| Switch Phase          |       |       |     |      |       |     |       |       |       |      |      |     |
| Minimum Initial (s)   | 4.0   | 4.0   |     | 4.0  | 4.0   |     | 4.0   | 4.0   | 4.0   | 4.0  | 4.0  |     |
| Minimum Split (s)     | 9.0   | 21.0  |     | 9.0  | 21.0  |     | 9.0   | 21.0  | 21.0  | 10.0 | 21.0 |     |
| Total Split (s)       | 13.0  | 79.0  |     | 11.0 | 77.0  |     | 20.0  | 21.0  | 21.0  | 9.0  | 10.0 |     |
| Total Split (%)       | 10.8% | 65.8% |     | 9.2% | 64.2% |     | 16.7% | 17.5% | 17.5% | 7.5% | 8.3% |     |
| Maximum Green (s)     | 8.0   | 73.0  |     | 6.0  | 71.0  |     | 15.0  | 16.0  | 16.0  | 4.0  | 5.0  |     |
| Yellow Time (s)       | 3.0   | 4.0   |     | 3.0  | 4.0   |     | 3.0   | 3.0   | 3.0   | 3.0  | 3.0  |     |
| All-Red Time (s)      | 2.0   | 2.0   |     | 2.0  | 2.0   |     | 2.0   | 2.0   | 2.0   | 2.0  | 2.0  |     |
| Lost Time Adjust (s)  | -2.0  | -3.0  |     | -2.0 | -2.0  |     | -2.0  | -2.0  | -2.0  | -2.0 | -2.0 |     |
| Total Lost Time (s)   | 3.0   | 3.0   |     | 3.0  | 4.0   |     | 3.0   | 3.0   | 3.0   | 3.0  | 3.0  |     |
| Lead/Lag              | Lead  | Lag   |     | Lead | Lag   |     | Lead  | Lag   | Lag   | Lead | Lag  |     |
| Lead-Lag Optimize?    | Yes   | Yes   |     | Yes  | Yes   |     | Yes   | Yes   | Yes   | Yes  | Yes  |     |
| Vehicle Extension (s) | 3.0   | 3.0   |     | 3.0  | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0  | 3.0  |     |
| Recall Mode           | None  | C-Max |     | None | C-Max |     | None  | None  | None  | None | None |     |
| Act Effect Green (s)  | 86.0  | 76.0  |     | 82.0 | 73.0  |     | 27.0  | 19.8  | 19.8  | 13.0 | 7.0  |     |
| Actuated g/C Ratio    | 0.72  | 0.63  |     | 0.68 | 0.61  |     | 0.22  | 0.16  | 0.16  | 0.11 | 0.06 |     |
| v/c Ratio             | 1.06  | 1.11  |     | 0.87 | 0.74  |     | 0.99  | 0.51  | 0.64  | 0.27 | 0.78 |     |
| Control Delay         | 67.7  | 73.2  |     | 66.8 | 18.6  |     | 78.2  | 53.4  | 31.7  | 42.4 | 54.2 |     |
| Queue Delay           | 0.0   | 0.0   |     | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  |     |
| Total Delay           | 67.7  | 73.2  |     | 66.8 | 18.6  |     | 78.2  | 53.4  | 31.7  | 42.4 | 54.2 |     |
| LOS                   | E     | E     |     | E    | B     |     | E     | D     | C     | D    | D    |     |
| Approach Delay        |       | 72.9  |     |      | 21.7  |     |       | 63.3  |       |      | 52.2 |     |
| Approach LOS          |       | E     |     |      | C     |     |       | E     |       |      | D    |     |

Intersection Summary

Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 96 (80%), Referenced to phase 2:SETL and 6:NWTL, Start of Green  
 Natural Cycle: 140  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 1.11  
 Intersection Signal Delay: 54.1      Intersection LOS: D  
 Intersection Capacity Utilization 110.3%      ICU Level of Service H  
 Analysis Period (min) 15

Splits and Phases: 2: Front St & Founder Pkwy



Lanes, Volumes, Timings  
3: Woodlands Blvd & Founders Pkwy

2041 Total  
PM Peak



| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        | ↖     | ↕↕↕   |       | ↖     | ↕↕↕   |       | ↖↖    | ↕     | ↗     | ↖     | ↕↕    |       |
| Traffic Volume (vph)       | 8     | 2130  | 505   | 255   | 1640  | 100   | 355   | 45    | 485   | 175   | 50    | 10    |
| Future Volume (vph)        | 8     | 2130  | 505   | 255   | 1640  | 100   | 355   | 45    | 485   | 175   | 50    | 10    |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 450   |       | 0     | 500   |       | 0     | 300   |       | 0     | 150   |       | 0     |
| Storage Lanes              | 1     |       | 0     | 1     |       | 0     | 2     |       | 1     | 1     |       | 0     |
| Taper Length (ft)          | 100   |       |       | 100   |       |       | 100   |       |       | 100   |       |       |
| Lane Util. Factor          | 1.00  | 0.91  | 0.91  | 1.00  | 0.91  | 0.91  | 0.97  | 1.00  | 1.00  | 1.00  | 0.95  | 0.95  |
| Frt                        |       | 0.970 |       |       | 0.991 |       |       |       | 0.850 |       | 0.975 |       |
| Flt Protected              | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       |
| Satd. Flow (prot)          | 1770  | 4933  | 0     | 1770  | 5040  | 0     | 3433  | 1863  | 1583  | 1770  | 3451  | 0     |
| Flt Permitted              | 0.113 |       |       | 0.060 |       |       | 0.712 |       |       | 0.572 |       |       |
| Satd. Flow (perm)          | 210   | 4933  | 0     | 112   | 5040  | 0     | 2573  | 1863  | 1583  | 1065  | 3451  | 0     |
| Right Turn on Red          |       |       | Yes   |       |       | Yes   |       |       | Yes   |       |       | Yes   |
| Satd. Flow (RTOR)          |       | 76    |       |       | 15    |       |       |       | 73    |       | 11    |       |
| Link Speed (mph)           |       | 50    |       |       | 50    |       |       | 35    |       |       | 35    |       |
| Link Distance (ft)         |       | 721   |       |       | 782   |       |       | 419   |       |       | 497   |       |
| Travel Time (s)            |       | 9.8   |       |       | 10.7  |       |       | 8.2   |       |       | 9.7   |       |
| Peak Hour Factor           | 0.92  | 0.95  | 0.92  | 0.92  | 0.95  | 0.92  | 0.92  | 0.92  | 0.95  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 9     | 2242  | 549   | 277   | 1726  | 109   | 386   | 49    | 511   | 190   | 54    | 11    |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 9     | 2791  | 0     | 277   | 1835  | 0     | 386   | 49    | 511   | 190   | 65    | 0     |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right |
| Median Width(ft)           |       | 24    |       |       | 24    |       |       | 30    |       |       | 24    |       |
| Link Offset(ft)            |       | 0     |       |       | 0     |       |       | 0     |       |       | 0     |       |
| Crosswalk Width(ft)        |       | 16    |       |       | 16    |       |       | 16    |       |       | 16    |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |       |       |       |       |       |
| Headway 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  |
| Turning Speed (mph)        | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     |
| Number of Detectors        | 1     | 2     |       | 1     | 2     |       | 1     | 2     | 1     | 1     | 2     |       |
| Detector Template          | Left  | Thru  |       | Left  | Thru  |       | Left  | Thru  | Right | Left  | Thru  |       |
| Leading Detector (ft)      | 20    | 100   |       | 20    | 100   |       | 20    | 100   | 20    | 20    | 100   |       |
| Trailing Detector (ft)     | 0     | 0     |       | 0     | 0     |       | 0     | 0     | 0     | 0     | 0     |       |
| Detector 1 Position(ft)    | 0     | 0     |       | 0     | 0     |       | 0     | 0     | 0     | 0     | 0     |       |
| Detector 1 Size(ft)        | 20    | 6     |       | 20    | 6     |       | 20    | 6     | 20    | 20    | 6     |       |
| Detector 1 Type            | Cl+Ex | Cl+Ex |       | Cl+Ex | Cl+Ex |       | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |       |
| Detector 1 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       |
| Detector 1 Queue (s)       | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       |
| Detector 1 Delay (s)       | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       |
| Detector 2 Position(ft)    |       | 94    |       |       | 94    |       |       | 94    |       |       | 94    |       |
| Detector 2 Size(ft)        |       | 6     |       |       | 6     |       |       | 6     |       |       | 6     |       |
| Detector 2 Type            |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |
| Detector 2 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |
| Turn Type                  | pm+pt | NA    |       | pm+pt | NA    |       | pm+pt | NA    | pm+ov | pm+pt | NA    |       |
| Protected Phases           | 5     | 2     |       | 1     | 6     |       | 3     | 8     | 1     | 7     | 4     |       |
| Permitted Phases           | 2     |       |       | 6     |       |       | 8     |       | 8     | 4     |       |       |

Lanes, Volumes, Timings  
3: Woodlands Blvd & Founders Pkwy

2041 Total  
PM Peak

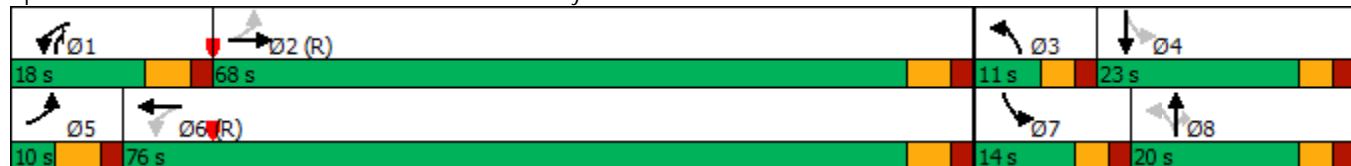


| Lane Group            | EBL  | EBT   | EBR | WBL   | WBT   | WBR | NBL  | NBT   | NBR   | SBL   | SBT   | SBR |
|-----------------------|------|-------|-----|-------|-------|-----|------|-------|-------|-------|-------|-----|
| Detector Phase        | 5    | 2     |     | 1     | 6     |     | 3    | 8     | 1     | 7     | 4     |     |
| Switch Phase          |      |       |     |       |       |     |      |       |       |       |       |     |
| Minimum Initial (s)   | 4.0  | 4.0   |     | 4.0   | 4.0   |     | 4.0  | 4.0   | 4.0   | 4.0   | 4.0   |     |
| Minimum Split (s)     | 10.0 | 20.0  |     | 10.0  | 20.0  |     | 9.0  | 20.0  | 10.0  | 9.0   | 20.0  |     |
| Total Split (s)       | 10.0 | 68.0  |     | 18.0  | 76.0  |     | 11.0 | 20.0  | 18.0  | 14.0  | 23.0  |     |
| Total Split (%)       | 8.3% | 56.7% |     | 15.0% | 63.3% |     | 9.2% | 16.7% | 15.0% | 11.7% | 19.2% |     |
| Maximum Green (s)     | 4.0  | 62.0  |     | 12.0  | 70.0  |     | 6.0  | 15.0  | 12.0  | 9.0   | 18.0  |     |
| Yellow Time (s)       | 4.0  | 4.0   |     | 4.0   | 4.0   |     | 3.0  | 3.0   | 4.0   | 3.0   | 3.0   |     |
| All-Red Time (s)      | 2.0  | 2.0   |     | 2.0   | 2.0   |     | 2.0  | 2.0   | 2.0   | 2.0   | 2.0   |     |
| Lost Time Adjust (s)  | -2.0 | -3.0  |     | -3.0  | -3.0  |     | -2.0 | -2.0  | -3.0  | -2.0  | -2.0  |     |
| Total Lost Time (s)   | 4.0  | 3.0   |     | 3.0   | 3.0   |     | 3.0  | 3.0   | 3.0   | 3.0   | 3.0   |     |
| Lead/Lag              | Lead | Lag   |     | Lead  | Lag   |     | Lead | Lag   | Lead  | Lead  | Lag   |     |
| Lead-Lag Optimize?    | Yes  | Yes   |     | Yes   | Yes   |     | Yes  | Yes   | Yes   | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0  | 3.0   |     | 3.0   | 3.0   |     | 3.0  | 3.0   | 3.0   | 3.0   | 3.0   |     |
| Recall Mode           | None | C-Max |     | None  | C-Max |     | None | None  | None  | None  | None  |     |
| Act Effect Green (s)  | 71.7 | 65.0  |     | 91.6  | 89.2  |     | 17.6 | 10.5  | 35.0  | 22.4  | 12.9  |     |
| Actuated g/C Ratio    | 0.60 | 0.54  |     | 0.76  | 0.74  |     | 0.15 | 0.09  | 0.29  | 0.19  | 0.11  |     |
| v/c Ratio             | 0.04 | 1.03  |     | 0.68  | 0.49  |     | 0.88 | 0.30  | 1.00  | 0.72  | 0.17  |     |
| Control Delay         | 6.1  | 53.0  |     | 39.1  | 7.9   |     | 67.7 | 55.2  | 75.7  | 59.5  | 40.5  |     |
| Queue Delay           | 0.0  | 0.0   |     | 0.0   | 0.0   |     | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |     |
| Total Delay           | 6.1  | 53.0  |     | 39.1  | 7.9   |     | 67.7 | 55.2  | 75.7  | 59.5  | 40.5  |     |
| LOS                   | A    | D     |     | D     | A     |     | E    | E     | E     | E     | D     |     |
| Approach Delay        |      | 52.9  |     |       | 12.0  |     |      | 71.4  |       |       | 54.7  |     |
| Approach LOS          |      | D     |     |       | B     |     |      | E     |       |       | D     |     |

Intersection Summary

Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 37 (31%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green  
 Natural Cycle: 120  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 1.03  
 Intersection Signal Delay: 41.7  
 Intersection LOS: D  
 Intersection Capacity Utilization 102.1%  
 ICU Level of Service G  
 Analysis Period (min) 15

Splits and Phases: 3: Woodlands Blvd & Founders Pkwy



Lanes, Volumes, Timings  
4: Founders Pkwy & Crowfoot Valley Rd

2041 Total  
PM Peak



| Lane Group                 | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |
| Traffic Volume (vph)       | 960   | 1830  | 1325  | 175   | 200   | 670   |
| Future Volume (vph)        | 960   | 1830  | 1325  | 175   | 200   | 670   |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 485   |       |       | 0     | 150   | 0     |
| Storage Lanes              | 2     |       |       | 1     | 2     | 1     |
| Taper Length (ft)          | 100   |       |       |       | 100   |       |
| Lane Util. Factor          | 0.97  | 0.95  | 0.95  | 1.00  | 0.97  | 0.91  |
| Frt                        |       |       |       | 0.850 | 0.907 | 0.850 |
| Flt Protected              | 0.950 |       |       |       | 0.981 |       |
| Satd. Flow (prot)          | 3433  | 3539  | 3539  | 1583  | 3215  | 1441  |
| Flt Permitted              | 0.950 |       |       |       | 0.981 |       |
| Satd. Flow (perm)          | 3433  | 3539  | 3539  | 1583  | 3215  | 1441  |
| Right Turn on Red          |       |       |       | Yes   |       | Yes   |
| Satd. Flow (RTOR)          |       |       |       | 146   | 308   | 352   |
| Link Speed (mph)           |       | 50    | 50    |       | 35    |       |
| Link Distance (ft)         |       | 641   | 617   |       | 595   |       |
| Travel Time (s)            |       | 8.7   | 8.4   |       | 11.6  |       |
| Peak Hour Factor           | 0.92  | 0.92  | 0.95  | 0.92  | 0.92  | 0.95  |
| Adj. Flow (vph)            | 1043  | 1989  | 1395  | 190   | 217   | 705   |
| Shared Lane Traffic (%)    |       |       |       |       |       | 50%   |
| Lane Group Flow (vph)      | 1043  | 1989  | 1395  | 190   | 570   | 352   |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Left  | Right | Left  | Right |
| Median Width(ft)           |       | 24    | 24    |       | 24    |       |
| Link Offset(ft)            |       | 0     | 0     |       | 0     |       |
| Crosswalk Width(ft)        |       | 16    | 16    |       | 16    |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |
| Headway Factor             | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| Turning Speed (mph)        | 15    |       |       | 9     | 15    | 9     |
| Number of Detectors        | 1     | 2     | 2     | 1     | 1     | 1     |
| Detector Template          | Left  | Thru  | Thru  | Right | Left  | Right |
| Leading Detector (ft)      | 20    | 100   | 100   | 20    | 20    | 20    |
| Trailing Detector (ft)     | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Position(ft)    | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Size(ft)        | 20    | 6     | 6     | 20    | 20    | 20    |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 2 Position(ft)    |       | 94    | 94    |       |       |       |
| Detector 2 Size(ft)        |       | 6     | 6     |       |       |       |
| Detector 2 Type            |       | Cl+Ex | Cl+Ex |       |       |       |
| Detector 2 Channel         |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   | 0.0   |       |       |       |
| Turn Type                  | Prot  | NA    | NA    | Perm  | Prot  | Free  |
| Protected Phases           | 5     | 2     | 6     |       | 4     |       |
| Permitted Phases           |       |       |       | 6     |       | Free  |

Lanes, Volumes, Timings  
 4: Founders Pkwy & Crowfoot Valley Rd

2041 Total  
 PM Peak



| Lane Group            | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   |
|-----------------------|-------|-------|-------|-------|-------|-------|
| Detector Phase        | 5     | 2     | 6     | 6     | 4     |       |
| Switch Phase          |       |       |       |       |       |       |
| Minimum Initial (s)   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       |
| Minimum Split (s)     | 10.0  | 10.5  | 10.0  | 10.0  | 10.0  |       |
| Total Split (s)       | 39.0  | 93.0  | 54.0  | 54.0  | 27.0  |       |
| Total Split (%)       | 32.5% | 77.5% | 45.0% | 45.0% | 22.5% |       |
| Maximum Green (s)     | 33.0  | 87.0  | 48.0  | 48.0  | 22.0  |       |
| Yellow Time (s)       | 4.0   | 4.0   | 4.0   | 4.0   | 3.0   |       |
| All-Red Time (s)      | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   |       |
| Lost Time Adjust (s)  | -2.0  | -2.0  | -2.0  | -2.0  | -2.0  |       |
| Total Lost Time (s)   | 4.0   | 4.0   | 4.0   | 4.0   | 3.0   |       |
| Lead/Lag              | Lead  |       | Lag   | Lag   |       |       |
| Lead-Lag Optimize?    | Yes   |       | Yes   | Yes   |       |       |
| Vehicle Extension (s) | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |       |
| Recall Mode           | None  | C-Max | C-Max | C-Max | None  |       |
| Act Effect Green (s)  | 41.1  | 95.1  | 50.0  | 50.0  | 17.9  | 120.0 |
| Actuated g/C Ratio    | 0.34  | 0.79  | 0.42  | 0.42  | 0.15  | 1.00  |
| v/c Ratio             | 0.89  | 0.71  | 0.95  | 0.26  | 0.77  | 0.24  |
| Control Delay         | 48.4  | 8.4   | 47.9  | 7.2   | 29.1  | 0.4   |
| Queue Delay           | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay           | 48.4  | 8.4   | 47.9  | 7.2   | 29.1  | 0.4   |
| LOS                   | D     | A     | D     | A     | C     | A     |
| Approach Delay        |       | 22.1  | 43.0  |       | 18.1  |       |
| Approach LOS          |       | C     | D     |       | B     |       |

Intersection Summary

Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green  
 Natural Cycle: 80  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.95  
 Intersection Signal Delay: 27.4  
 Intersection LOS: C  
 Intersection Capacity Utilization 86.8%  
 ICU Level of Service E  
 Analysis Period (min) 15

Splits and Phases: 4: Founders Pkwy & Crowfoot Valley Rd





HCM 6th Roundabout  
 5: Internal Collector Roadway & Connector Collector Roadway

2041 Total  
 PM Peak

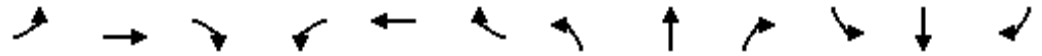
| Intersection                |       |       |       |
|-----------------------------|-------|-------|-------|
| Intersection Delay, s/veh   | 5.2   |       |       |
| Intersection LOS            | A     |       |       |
| Approach                    | EB    | NB    | SB    |
| Entry Lanes                 | 1     | 1     | 1     |
| Conflicting Circle Lanes    | 1     | 1     | 1     |
| Adj Approach Flow, veh/h    | 359   | 243   | 198   |
| Demand Flow Rate, veh/h     | 366   | 248   | 202   |
| Vehicles Circulating, veh/h | 136   | 91    | 161   |
| Vehicles Exiting, veh/h     | 227   | 411   | 178   |
| Ped Vol Crossing Leg, #/h   | 0     | 0     | 0     |
| Ped Cap Adj                 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh       | 5.9   | 4.6   | 4.6   |
| Approach LOS                | A     | A     | A     |
| Lane                        | Left  | Left  | Left  |
| Designated Moves            | LR    | LT    | TR    |
| Assumed Moves               | LR    | LT    | TR    |
| RT Channelized              |       |       |       |
| Lane Util                   | 1.000 | 1.000 | 1.000 |
| Follow-Up Headway, s        | 2.609 | 2.609 | 2.609 |
| Critical Headway, s         | 4.976 | 4.976 | 4.976 |
| Entry Flow, veh/h           | 366   | 248   | 202   |
| Cap Entry Lane, veh/h       | 1201  | 1258  | 1171  |
| Entry HV Adj Factor         | 0.981 | 0.981 | 0.982 |
| Flow Entry, veh/h           | 359   | 243   | 198   |
| Cap Entry, veh/h            | 1178  | 1234  | 1150  |
| V/C Ratio                   | 0.305 | 0.197 | 0.173 |
| Control Delay, s/veh        | 5.9   | 4.6   | 4.6   |
| LOS                         | A     | A     | A     |
| 95th %tile Queue, veh       | 1     | 1     | 1     |

Lanes, Volumes, Timings

2041 Total

6: Pioneer Ranch Access/Connector Collector Roadway & Founder Pkwy

PM Peak



| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |       |       |       |       |       |       |
| Traffic Volume (vph)       | 330   | 1570  | 130   | 10    | 1205  | 126   | 75    | 7     | 5     | 100   | 10    | 217   |
| Future Volume (vph)        | 330   | 1570  | 130   | 10    | 1205  | 126   | 75    | 7     | 5     | 100   | 10    | 217   |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 400   |       | 400   | 400   |       | 400   | 200   |       | 0     | 200   |       | 0     |
| Storage Lanes              | 1     |       | 1     | 1     |       | 1     | 1     |       | 0     | 1     |       | 0     |
| Taper Length (ft)          | 100   |       |       | 100   |       |       | 100   |       |       | 100   |       |       |
| Lane Util. Factor          | 1.00  | 0.95  | 1.00  | 1.00  | 0.95  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| Frt                        |       |       | 0.850 |       |       | 0.850 |       | 0.942 |       |       | 0.857 |       |
| Flt Protected              | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       |
| Satd. Flow (prot)          | 1770  | 3539  | 1583  | 1770  | 3539  | 1583  | 1770  | 1755  | 0     | 1770  | 1596  | 0     |
| Flt Permitted              | 0.091 |       |       | 0.109 |       |       | 0.548 |       |       | 0.484 |       |       |
| Satd. Flow (perm)          | 170   | 3539  | 1583  | 203   | 3539  | 1583  | 1021  | 1755  | 0     | 902   | 1596  | 0     |
| Right Turn on Red          |       |       | Yes   |       |       | Yes   |       |       | Yes   |       |       | Yes   |
| Satd. Flow (RTOR)          |       |       | 141   |       |       | 173   |       | 5     |       |       | 216   |       |
| Link Speed (mph)           |       | 50    |       |       | 50    |       |       | 35    |       |       | 35    |       |
| Link Distance (ft)         |       | 483   |       |       | 546   |       |       | 392   |       |       | 622   |       |
| Travel Time (s)            |       | 6.6   |       |       | 7.4   |       |       | 7.6   |       |       | 12.1  |       |
| Peak Hour Factor           | 0.92  | 0.92  | 0.92  | 0.92  | 0.95  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 359   | 1707  | 141   | 11    | 1268  | 137   | 82    | 8     | 5     | 109   | 11    | 236   |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 359   | 1707  | 141   | 11    | 1268  | 137   | 82    | 13    | 0     | 109   | 247   | 0     |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right |
| Median Width(ft)           |       | 12    |       |       | 12    |       |       | 12    |       |       | 12    |       |
| Link Offset(ft)            |       | 0     |       |       | 0     |       |       | 0     |       |       | 0     |       |
| Crosswalk Width(ft)        |       | 16    |       |       | 16    |       |       | 16    |       |       | 16    |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |       |       |       |       |       |
| Headway 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  |
| Turning Speed (mph)        | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     |
| Number of Detectors        | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     |       | 1     | 2     |       |
| Detector Template          | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  |       | Left  | Thru  |       |
| Leading Detector (ft)      | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   |       | 20    | 100   |       |
| Trailing Detector (ft)     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     |       |
| Detector 1 Position(ft)    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     |       |
| Detector 1 Size(ft)        | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     |       | 20    | 6     |       |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |       | Cl+Ex | Cl+Ex |       |
| Detector 1 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |       |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |       |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |       |
| Detector 2 Position(ft)    |       | 94    |       |       | 94    |       |       | 94    |       |       | 94    |       |
| Detector 2 Size(ft)        |       | 6     |       |       | 6     |       |       | 6     |       |       | 6     |       |
| Detector 2 Type            |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |
| Detector 2 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |
| Turn Type                  | pm+pt | NA    | Perm  | pm+pt | NA    | Perm  | pm+pt | NA    |       | pm+pt | NA    |       |
| Protected Phases           | 5     | 2     |       | 1     | 6     |       | 3     | 8     |       | 7     | 4     |       |
| Permitted Phases           | 2     |       | 2     | 6     |       | 6     | 8     |       |       | 4     |       |       |

Lanes, Volumes, Timings

2041 Total

6: Pioneer Ranch Access/Connector Collector Roadway & Founder Pkwy

PM Peak



| Lane Group            | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-------|-------|-----|
| Detector Phase        | 5     | 2     | 2     | 1     | 6     | 6     | 3     | 8     |     | 7     | 4     |     |
| Switch Phase          |       |       |       |       |       |       |       |       |     |       |       |     |
| Minimum Initial (s)   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |     | 4.0   | 4.0   |     |
| Minimum Split (s)     | 10.0  | 20.0  | 20.0  | 10.0  | 20.0  | 20.0  | 20.0  | 20.0  |     | 9.0   | 20.0  |     |
| Total Split (s)       | 21.0  | 71.0  | 71.0  | 12.0  | 62.0  | 62.0  | 12.0  | 25.0  |     | 12.0  | 25.0  |     |
| Total Split (%)       | 17.5% | 59.2% | 59.2% | 10.0% | 51.7% | 51.7% | 10.0% | 20.8% |     | 10.0% | 20.8% |     |
| Maximum Green (s)     | 15.0  | 65.0  | 65.0  | 6.0   | 56.0  | 56.0  | 7.0   | 20.0  |     | 7.0   | 20.0  |     |
| Yellow Time (s)       | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| All-Red Time (s)      | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   |     | 2.0   | 2.0   |     |
| Lost Time Adjust (s)  | -2.0  | -1.0  | -1.0  | -1.0  | -1.0  | -1.0  | -1.0  | -1.0  |     | -1.0  | -1.0  |     |
| Total Lost Time (s)   | 4.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 4.0   | 4.0   |     | 4.0   | 4.0   |     |
| Lead/Lag              | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   | Lead  | Lag   |     | Lead  | Lag   |     |
| Lead-Lag Optimize?    | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |     | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| Recall Mode           | None  | C-Max | C-Max | None  | C-Max | C-Max | None  | None  |     | None  | None  |     |
| Act Effect Green (s)  | 90.8  | 87.3  | 87.3  | 66.7  | 60.0  | 60.0  | 14.6  | 10.7  |     | 19.6  | 11.6  |     |
| Actuated g/C Ratio    | 0.76  | 0.73  | 0.73  | 0.56  | 0.50  | 0.50  | 0.12  | 0.09  |     | 0.16  | 0.10  |     |
| v/c Ratio             | 0.76  | 0.66  | 0.12  | 0.06  | 0.72  | 0.16  | 0.47  | 0.08  |     | 0.45  | 0.71  |     |
| Control Delay         | 38.3  | 12.8  | 1.9   | 8.1   | 27.0  | 1.5   | 52.6  | 36.0  |     | 47.3  | 21.1  |     |
| Queue Delay           | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Delay           | 38.3  | 12.8  | 1.9   | 8.1   | 27.0  | 1.5   | 52.6  | 36.0  |     | 47.3  | 21.1  |     |
| LOS                   | D     | B     | A     | A     | C     | A     | D     | D     |     | D     | C     |     |
| Approach Delay        |       | 16.2  |       |       | 24.4  |       |       | 50.4  |     |       | 29.1  |     |
| Approach LOS          |       | B     |       |       | C     |       |       | D     |     |       | C     |     |

Intersection Summary

|                                    |   |
|------------------------------------|---|
| Area Type:                         | Other   |
| Cycle Length:                      | 120   |
| Actuated Cycle Length:             | 120   |
| Offset:                            | 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green |
| Natural Cycle:                     | 100   |
| Control Type:                      | Actuated-Coordinated  |
| Maximum v/c Ratio:                 | 0.76  |
| Intersection Signal Delay:         | 21.0  |
| Intersection LOS:                  | C   |
| Intersection Capacity Utilization: | 83.9%   |
| ICU Level of Service:              | E   |
| Analysis Period (min):             | 15  |

Splits and Phases: 6: Pioneer Ranch Access/Connector Collector Roadway & Founder Pkwy



HCM 6th Roundabout  
 7: Castle Oaks Drive & Internal Community Collector

2041 Total  
 PM Peak

| Intersection                |       |       |       |
|-----------------------------|-------|-------|-------|
| Intersection Delay, s/veh   | 5.2   |       |       |
| Intersection LOS            | A     |       |       |
| Approach                    | EB    | NB    | SB    |
| Entry Lanes                 | 1     | 1     | 1     |
| Conflicting Circle Lanes    | 1     | 1     | 1     |
| Adj Approach Flow, veh/h    | 179   | 341   | 318   |
| Demand Flow Rate, veh/h     | 183   | 348   | 324   |
| Vehicles Circulating, veh/h | 221   | 155   | 15    |
| Vehicles Exiting, veh/h     | 118   | 249   | 488   |
| Ped Vol Crossing Leg, #/h   | 0     | 0     | 0     |
| Ped Cap Adj                 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh       | 4.8   | 5.9   | 4.7   |
| Approach LOS                | A     | A     | A     |
| Lane                        | Left  | Left  | Left  |
| Designated Moves            | LR    | LT    | TR    |
| Assumed Moves               | LR    | LT    | TR    |
| RT Channelized              |       |       |       |
| Lane Util                   | 1.000 | 1.000 | 1.000 |
| Follow-Up Headway, s        | 2.609 | 2.609 | 2.609 |
| Critical Headway, s         | 4.976 | 4.976 | 4.976 |
| Entry Flow, veh/h           | 183   | 348   | 324   |
| Cap Entry Lane, veh/h       | 1101  | 1178  | 1359  |
| Entry HV Adj Factor         | 0.978 | 0.981 | 0.980 |
| Flow Entry, veh/h           | 179   | 341   | 318   |
| Cap Entry, veh/h            | 1077  | 1156  | 1332  |
| V/C Ratio                   | 0.166 | 0.295 | 0.238 |
| Control Delay, s/veh        | 4.8   | 5.9   | 4.7   |
| LOS                         | A     | A     | A     |
| 95th %tile Queue, veh       | 1     | 1     | 1     |

Lanes, Volumes, Timings  
8: Ridge Rd/Founders Pkwy & 5th St/SH 86

2041 Total  
PM Peak



| Lane Group                 | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |       |       |       |       |       |       |
| Traffic Volume (vph)       | 175   | 565   | 475   | 165   | 305   | 540   | 225   | 475   | 105   | 865   | 675   | 160   |
| Future Volume (vph)        | 175   | 565   | 475   | 165   | 305   | 540   | 225   | 475   | 105   | 865   | 675   | 160   |
| Ideal Flow (vphp)          | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Storage Length (ft)        | 300   |       | 425   | 250   |       | 0     | 250   |       | 0     | 600   |       | 500   |
| Storage Lanes              | 1     |       | 1     | 1     |       | 1     | 2     |       | 1     | 2     |       | 1     |
| Taper Length (ft)          | 100   |       |       | 100   |       |       | 100   |       |       | 100   |       |       |
| Lane Util. Factor          | 1.00  | 0.95  | 1.00  | 1.00  | 0.95  | 1.00  | 0.97  | 0.95  | 1.00  | 0.97  | 0.95  | 1.00  |
| Frt                        |       |       | 0.850 |       |       | 0.850 |       |       | 0.850 |       |       | 0.850 |
| Flt Protected              | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       | 0.950 |       |       |
| Satd. Flow (prot)          | 1770  | 3539  | 1583  | 1770  | 3539  | 1583  | 3433  | 3539  | 1583  | 3433  | 3539  | 1583  |
| Flt Permitted              | 0.513 |       |       | 0.226 |       |       | 0.950 |       |       | 0.950 |       |       |
| Satd. Flow (perm)          | 956   | 3539  | 1583  | 421   | 3539  | 1583  | 3433  | 3539  | 1583  | 3433  | 3539  | 1583  |
| Right Turn on Red          |       |       | Yes   |       |       | Yes   |       |       | Yes   |       |       | Yes   |
| Satd. Flow (RTOR)          |       |       | 516   |       |       | 587   |       |       | 168   |       |       | 174   |
| Link Speed (mph)           |       | 35    |       |       | 50    |       |       | 35    |       |       |       | 50    |
| Link Distance (ft)         |       | 450   |       |       | 848   |       |       | 659   |       |       |       | 865   |
| Travel Time (s)            |       | 8.8   |       |       | 11.6  |       |       | 12.8  |       |       |       | 11.8  |
| Peak Hour Factor           | 0.92  | 0.92  | 0.92  | 0.92  | 0.95  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)            | 190   | 614   | 516   | 179   | 321   | 587   | 245   | 516   | 114   | 940   | 734   | 174   |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 190   | 614   | 516   | 179   | 321   | 587   | 245   | 516   | 114   | 940   | 734   | 174   |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right | Left  | Left  | Right |
| Median Width(ft)           |       | 18    |       |       | 18    |       |       | 24    |       |       |       | 24    |
| Link Offset(ft)            |       | 0     |       |       | 0     |       |       | 0     |       |       |       | 0     |
| Crosswalk Width(ft)        |       | 16    |       |       | 16    |       |       | 16    |       |       |       | 16    |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |       |       |       |       |       |
| Headway 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  |
| Turning Speed (mph)        | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     | 15    |       | 9     |
| Number of Detectors        | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     | 1     | 1     | 2     | 1     |
| Detector Template          | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  | Right | Left  | Thru  | Right |
| Leading Detector (ft)      | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   | 20    | 20    | 100   | 20    |
| Trailing Detector (ft)     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Position(ft)    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| Detector 1 Size(ft)        | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     | 20    | 20    | 6     | 20    |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 2 Position(ft)    |       | 94    |       |       | 94    |       |       | 94    |       |       |       | 94    |
| Detector 2 Size(ft)        |       | 6     |       |       | 6     |       |       | 6     |       |       |       | 6     |
| Detector 2 Type            |       | Cl+Ex |       |       | Cl+Ex |       |       | Cl+Ex |       |       |       | Cl+Ex |
| Detector 2 Channel         |       |       |       |       |       |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   |       |       | 0.0   |       |       | 0.0   |       |       |       | 0.0   |
| Turn Type                  | pm+pt | NA    | Free  | pm+pt | NA    | Free  | Prot  | NA    | Free  | Prot  | NA    | Free  |
| Protected Phases           | 5     | 2     |       | 1     | 6     |       | 3     | 8     |       | 7     | 4     |       |
| Permitted Phases           | 2     |       | Free  | 6     |       | Free  |       |       | Free  |       |       | Free  |

Lanes, Volumes, Timings  
 8: Ridge Rd/Founders Pkwy & 5th St/SH 86

2041 Total  
 PM Peak

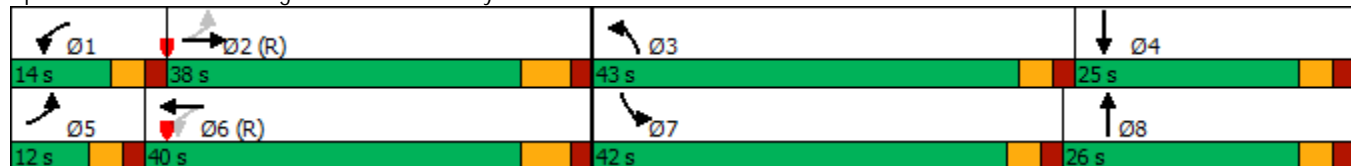


| Lane Group            | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Detector Phase        | 5     | 2     |       | 1     | 6     |       | 3     | 8     |       | 7     | 4     |       |
| Switch Phase          |       |       |       |       |       |       |       |       |       |       |       |       |
| Minimum Initial (s)   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |       |
| Minimum Split (s)     | 9.0   | 20.0  |       | 9.0   | 20.0  |       | 9.0   | 20.0  |       | 9.0   | 20.0  |       |
| Total Split (s)       | 12.0  | 38.0  |       | 14.0  | 40.0  |       | 43.0  | 26.0  |       | 42.0  | 25.0  |       |
| Total Split (%)       | 10.0% | 31.7% |       | 11.7% | 33.3% |       | 35.8% | 21.7% |       | 35.0% | 20.8% |       |
| Maximum Green (s)     | 7.0   | 31.5  |       | 9.0   | 33.5  |       | 38.0  | 21.0  |       | 37.0  | 20.0  |       |
| Yellow Time (s)       | 3.0   | 4.5   |       | 3.0   | 4.5   |       | 3.0   | 3.0   |       | 3.0   | 3.0   |       |
| All-Red Time (s)      | 2.0   | 2.0   |       | 2.0   | 2.0   |       | 2.0   | 2.0   |       | 2.0   | 2.0   |       |
| Lost Time Adjust (s)  | -1.0  | -2.0  |       | -1.0  | -2.0  |       | -1.0  | -2.0  |       | -2.0  | -1.0  |       |
| Total Lost Time (s)   | 4.0   | 4.5   |       | 4.0   | 4.5   |       | 4.0   | 3.0   |       | 3.0   | 4.0   |       |
| Lead/Lag              | Lead  | Lag   |       | Lead  | Lag   |       | Lead  | Lag   |       | Lead  | Lag   |       |
| Lead-Lag Optimize?    | Yes   | Yes   |       | Yes   | Yes   |       | Yes   | Yes   |       | Yes   | Yes   |       |
| Vehicle Extension (s) | 3.0   | 3.0   |       | 3.0   | 3.0   |       | 3.0   | 3.0   |       | 3.0   | 3.0   |       |
| Recall Mode           | None  | C-Max |       | None  | C-Max |       | None  | None  |       | None  | None  |       |
| Act Effect Green (s)  | 43.4  | 34.1  | 120.0 | 46.5  | 35.7  | 120.0 | 14.9  | 23.5  | 120.0 | 37.6  | 44.1  | 120.0 |
| Actuated g/C Ratio    | 0.36  | 0.28  | 1.00  | 0.39  | 0.30  | 1.00  | 0.12  | 0.20  | 1.00  | 0.31  | 0.37  | 1.00  |
| v/c Ratio             | 0.47  | 0.61  | 0.33  | 0.64  | 0.31  | 0.37  | 0.57  | 0.75  | 0.07  | 0.88  | 0.56  | 0.11  |
| Control Delay         | 29.6  | 40.5  | 0.5   | 35.8  | 33.6  | 0.7   | 54.6  | 53.2  | 0.1   | 49.1  | 32.7  | 0.1   |
| Queue Delay           | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay           | 29.6  | 40.5  | 0.5   | 35.8  | 33.6  | 0.7   | 54.6  | 53.2  | 0.1   | 49.1  | 32.7  | 0.1   |
| LOS                   | C     | D     | A     | D     | C     | A     | D     | D     | A     | D     | C     | A     |
| Approach Delay        |       | 23.3  |       |       | 16.2  |       |       | 46.7  |       |       | 38.0  |       |
| Approach LOS          |       | C     |       |       | B     |       |       | D     |       |       | D     |       |

Intersection Summary

Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 12 (10%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green  
 Natural Cycle: 70  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.88  
 Intersection Signal Delay: 31.1      Intersection LOS: C  
 Intersection Capacity Utilization 76.3%      ICU Level of Service D  
 Analysis Period (min) 15

Splits and Phases: 8: Ridge Rd/Founders Pkwy & 5th St/SH 86



HCM 6th TWSC  
 9: Connector Collector Roadway & Commercial Access

2041 Total  
 PM Peak

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.7  |      |      |      |      |      |
| Movement                 | WBL  | WBR  | NBT  | NBR  | SBL  | SBT  |
| Lane Configurations      | ↘    | ↗    | ↑    | ↗    | ↘    | ↑    |
| Traffic Vol, veh/h       | 129  | 11   | 319  | 144  | 7    | 198  |
| Future Vol, veh/h        | 129  | 11   | 319  | 144  | 7    | 198  |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 100  | 0    | -    | 190  | 220  | -    |
| Veh in Median Storage, # | 0    | -    | 0    | -    | -    | 0    |
| Grade, %                 | 0    | -    | 0    | -    | -    | 0    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 140  | 12   | 347  | 157  | 8    | 215  |

| Major/Minor          | Minor1 | Major1 | Major2 |   |       |
|----------------------|--------|--------|--------|---|-------|
| Conflicting Flow All | 578    | 347    | 0      | 0 | 504   |
| Stage 1              | 347    | -      | -      | - | -     |
| Stage 2              | 231    | -      | -      | - | -     |
| Critical Hdwy        | 6.42   | 6.22   | -      | - | 4.12  |
| Critical Hdwy Stg 1  | 5.42   | -      | -      | - | -     |
| Critical Hdwy Stg 2  | 5.42   | -      | -      | - | -     |
| Follow-up Hdwy       | 3.518  | 3.318  | -      | - | 2.218 |
| Pot Cap-1 Maneuver   | 478    | 696    | -      | - | 1061  |
| Stage 1              | 716    | -      | -      | - | -     |
| Stage 2              | 807    | -      | -      | - | -     |
| Platoon blocked, %   |        |        | -      | - | -     |
| Mov Cap-1 Maneuver   | 474    | 696    | -      | - | 1061  |
| Mov Cap-2 Maneuver   | 474    | -      | -      | - | -     |
| Stage 1              | 716    | -      | -      | - | -     |
| Stage 2              | 801    | -      | -      | - | -     |

| Approach             | WB   | NB | SB  |
|----------------------|------|----|-----|
| HCM Control Delay, s | 15.4 | 0  | 0.3 |
| HCM LOS              | C    |    |     |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | WBLn2 | SBL   | SBT   |
|-----------------------|-----|----------|-------|-------|-------|
| Capacity (veh/h)      | -   | -        | 474   | 696   | 1061  |
| HCM Lane V/C Ratio    | -   | -        | 0.296 | 0.017 | 0.007 |
| HCM Control Delay (s) | -   | -        | 15.8  | 10.3  | 8.4   |
| HCM Lane LOS          | -   | -        | C     | B     | A     |
| HCM 95th %tile Q(veh) | -   | -        | 1.2   | 0.1   | 0     |

HCM 6th TWSC  
 10: Internal Collector Roadway & Site Access #10

2041 Total  
 PM Peak

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.3  |      |      |      |      |      |
| Movement                 | WBL  | WBR  | NBT  | NBR  | SBL  | SBT  |
| Lane Configurations      | W    |      | T    |      |      | T    |
| Traffic Vol, veh/h       | 0    | 9    | 214  | 0    | 15   | 355  |
| Future Vol, veh/h        | 0    | 9    | 214  | 0    | 15   | 355  |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | 0    | -    | -    | 0    |
| Grade, %                 | 0    | -    | 0    | -    | -    | 0    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 10   | 233  | 0    | 16   | 386  |

| Major/Minor          | Minor1 | Major1 | Major2 |   |       |   |
|----------------------|--------|--------|--------|---|-------|---|
| Conflicting Flow All | 651    | 233    | 0      | 0 | 233   | 0 |
| Stage 1              | 233    | -      | -      | - | -     | - |
| Stage 2              | 418    | -      | -      | - | -     | - |
| Critical Hdwy        | 6.42   | 6.22   | -      | - | 4.12  | - |
| Critical Hdwy Stg 1  | 5.42   | -      | -      | - | -     | - |
| Critical Hdwy Stg 2  | 5.42   | -      | -      | - | -     | - |
| Follow-up Hdwy       | 3.518  | 3.318  | -      | - | 2.218 | - |
| Pot Cap-1 Maneuver   | 433    | 806    | -      | - | 1335  | - |
| Stage 1              | 806    | -      | -      | - | -     | - |
| Stage 2              | 664    | -      | -      | - | -     | - |
| Platoon blocked, %   |        |        | -      | - |       | - |
| Mov Cap-1 Maneuver   | 427    | 806    | -      | - | 1335  | - |
| Mov Cap-2 Maneuver   | 427    | -      | -      | - | -     | - |
| Stage 1              | 806    | -      | -      | - | -     | - |
| Stage 2              | 654    | -      | -      | - | -     | - |

| Approach             | WB  | NB | SB  |
|----------------------|-----|----|-----|
| HCM Control Delay, s | 9.5 | 0  | 0.3 |
| HCM LOS              | A   |    |     |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL   | SBT   |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h)      | -   | -        | 806   | 1335  |
| HCM Lane V/C Ratio    | -   | -        | 0.012 | 0.012 |
| HCM Control Delay (s) | -   | -        | 9.5   | 7.7   |
| HCM Lane LOS          | -   | -        | A     | A     |
| HCM 95th %tile Q(veh) | -   | -        | 0     | 0     |



HCM 6th TWSC  
 11: Internal Collector Roadway & Site Access #11

2041 Total  
 PM Peak

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.6  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      | ↕    | ↕    |      | ↕    | ↕    |      |
| Traffic Vol, veh/h       | 7    | 9    | 78   | 0    | 4    | 10   | 47   | 197  | 1    | 15   | 330  | 10   |
| Future Vol, veh/h        | 7    | 9    | 78   | 0    | 4    | 10   | 47   | 197  | 1    | 15   | 330  | 10   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | 0    | -    | -    | 0    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 8    | 10   | 85   | 0    | 4    | 11   | 51   | 214  | 1    | 16   | 359  | 11   |

| Major/Minor          | Minor2 |       | Minor1 |       | Major1 |       |       | Major2 |   |       |   |   |
|----------------------|--------|-------|--------|-------|--------|-------|-------|--------|---|-------|---|---|
| Conflicting Flow All | 721    | 714   | 365    | 761   | 719    | 215   | 370   | 0      | 0 | 215   | 0 | 0 |
| Stage 1              | 397    | 397   | -      | 317   | 317    | -     | -     | -      | - | -     | - | - |
| Stage 2              | 324    | 317   | -      | 444   | 402    | -     | -     | -      | - | -     | - | - |
| Critical Hdwy        | 7.12   | 6.52  | 6.22   | 7.12  | 6.52   | 6.22  | 4.12  | -      | - | 4.12  | - | - |
| Critical Hdwy Stg 1  | 6.12   | 5.52  | -      | 6.12  | 5.52   | -     | -     | -      | - | -     | - | - |
| Critical Hdwy Stg 2  | 6.12   | 5.52  | -      | 6.12  | 5.52   | -     | -     | -      | - | -     | - | - |
| Follow-up Hdwy       | 3.518  | 4.018 | 3.318  | 3.518 | 4.018  | 3.318 | 2.218 | -      | - | 2.218 | - | - |
| Pot Cap-1 Maneuver   | 343    | 357   | 680    | 322   | 354    | 825   | 1189  | -      | - | 1355  | - | - |
| Stage 1              | 629    | 603   | -      | 694   | 654    | -     | -     | -      | - | -     | - | - |
| Stage 2              | 688    | 654   | -      | 593   | 600    | -     | -     | -      | - | -     | - | - |
| Platoon blocked, %   |        |       |        |       |        |       |       | -      | - | -     | - | - |
| Mov Cap-1 Maneuver   | 321    | 338   | 680    | 264   | 335    | 825   | 1189  | -      | - | 1355  | - | - |
| Mov Cap-2 Maneuver   | 321    | 338   | -      | 264   | 335    | -     | -     | -      | - | -     | - | - |
| Stage 1              | 602    | 596   | -      | 664   | 626    | -     | -     | -      | - | -     | - | - |
| Stage 2              | 645    | 626   | -      | 505   | 593    | -     | -     | -      | - | -     | - | - |

| Approach             | EB   |  | WB   |  | NB  |  | SB  |  |
|----------------------|------|--|------|--|-----|--|-----|--|
| HCM Control Delay, s | 12.6 |  | 11.4 |  | 1.6 |  | 0.3 |  |
| HCM LOS              | B    |  | B    |  |     |  |     |  |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1WBLn1 | SBL   | SBT   | SBR |
|-----------------------|-------|-----|-----|------------|-------|-------|-----|
| Capacity (veh/h)      | 1189  | -   | -   | 576        | 582   | 1355  | -   |
| HCM Lane V/C Ratio    | 0.043 | -   | -   | 0.177      | 0.026 | 0.012 | -   |
| HCM Control Delay (s) | 8.2   | -   | -   | 12.6       | 11.4  | 7.7   | -   |
| HCM Lane LOS          | A     | -   | -   | B          | B     | A     | -   |
| HCM 95th %tile Q(veh) | 0.1   | -   | -   | 0.6        | 0.1   | 0     | -   |

HCM 6th TWSC  
 12: Internal Collector Roadway & Site Access #12

2041 Total  
 PM Peak

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 1.1  |      |      |      |      |      |
| Movement                 | WBL  | WBR  | NBT  | NBR  | SBL  | SBT  |
| Lane Configurations      | ↘↗   |      | ↖↗   |      | ↘↗   | ↖↗   |
| Traffic Vol, veh/h       | 1    | 32   | 213  | 1    | 54   | 354  |
| Future Vol, veh/h        | 1    | 32   | 213  | 1    | 54   | 354  |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | 0    | -    | -    | 0    |
| Grade, %                 | 0    | -    | 0    | -    | -    | 0    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 1    | 35   | 232  | 1    | 59   | 385  |

| Major/Minor          | Minor1 | Major1 | Major2 |   |       |
|----------------------|--------|--------|--------|---|-------|
| Conflicting Flow All | 736    | 233    | 0      | 0 | 233   |
| Stage 1              | 233    | -      | -      | - | -     |
| Stage 2              | 503    | -      | -      | - | -     |
| Critical Hdwy        | 6.42   | 6.22   | -      | - | 4.12  |
| Critical Hdwy Stg 1  | 5.42   | -      | -      | - | -     |
| Critical Hdwy Stg 2  | 5.42   | -      | -      | - | -     |
| Follow-up Hdwy       | 3.518  | 3.318  | -      | - | 2.218 |
| Pot Cap-1 Maneuver   | 386    | 806    | -      | - | 1335  |
| Stage 1              | 806    | -      | -      | - | -     |
| Stage 2              | 607    | -      | -      | - | -     |
| Platoon blocked, %   |        |        | -      | - | -     |
| Mov Cap-1 Maneuver   | 369    | 806    | -      | - | 1335  |
| Mov Cap-2 Maneuver   | 369    | -      | -      | - | -     |
| Stage 1              | 806    | -      | -      | - | -     |
| Stage 2              | 580    | -      | -      | - | -     |

| Approach             | WB  | NB | SB |
|----------------------|-----|----|----|
| HCM Control Delay, s | 9.9 | 0  | 1  |
| HCM LOS              | A   |    |    |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL   | SBT   |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h)      | -   | -        | 778   | 1335  |
| HCM Lane V/C Ratio    | -   | -        | 0.046 | 0.044 |
| HCM Control Delay (s) | -   | -        | 9.9   | 7.8   |
| HCM Lane LOS          | -   | -        | A     | A     |
| HCM 95th %tile Q(veh) | -   | -        | 0.1   | 0.1   |

HCM 6th TWSC  
 13: Internal Collector Roadway & Site Access #13

2041 Total  
 PM Peak

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 1.8  |      |      |      |      |      |
| Movement                 | EBL  | EBT  | WBT  | WBR  | SBL  | SBR  |
| Lane Configurations      |      |      |      |      |      |      |
| Traffic Vol, veh/h       | 73   | 282  | 171  | 2    | 2    | 43   |
| Future Vol, veh/h        | 73   | 282  | 171  | 2    | 2    | 43   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | -    | 0    | 0    | -    | 0    | -    |
| Grade, %                 | -    | 0    | 0    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 79   | 307  | 186  | 2    | 2    | 47   |

| Major/Minor          | Major1 | Major2 | Minor2 |   |             |
|----------------------|--------|--------|--------|---|-------------|
| Conflicting Flow All | 188    | 0      | -      | 0 | 652 187     |
| Stage 1              | -      | -      | -      | - | 187 -       |
| Stage 2              | -      | -      | -      | - | 465 -       |
| Critical Hdwy        | 4.12   | -      | -      | - | 6.42 6.22   |
| Critical Hdwy Stg 1  | -      | -      | -      | - | 5.42 -      |
| Critical Hdwy Stg 2  | -      | -      | -      | - | 5.42 -      |
| Follow-up Hdwy       | 2.218  | -      | -      | - | 3.518 3.318 |
| Pot Cap-1 Maneuver   | 1386   | -      | -      | - | 433 855     |
| Stage 1              | -      | -      | -      | - | 845 -       |
| Stage 2              | -      | -      | -      | - | 632 -       |
| Platoon blocked, %   |        | -      | -      | - |             |
| Mov Cap-1 Maneuver   | 1386   | -      | -      | - | 408 855     |
| Mov Cap-2 Maneuver   | -      | -      | -      | - | 408 -       |
| Stage 1              | -      | -      | -      | - | 797 -       |
| Stage 2              | -      | -      | -      | - | 632 -       |

| Approach             | EB  | WB | SB  |
|----------------------|-----|----|-----|
| HCM Control Delay, s | 1.6 | 0  | 9.7 |
| HCM LOS              |     |    | A   |

| Minor Lane/Major Mvmt | EBL   | EBT | WBT | WBR | SBLn1 |
|-----------------------|-------|-----|-----|-----|-------|
| Capacity (veh/h)      | 1386  | -   | -   | -   | 815   |
| HCM Lane V/C Ratio    | 0.057 | -   | -   | -   | 0.06  |
| HCM Control Delay (s) | 7.8   | -   | -   | -   | 9.7   |
| HCM Lane LOS          | A     | -   | -   | -   | A     |
| HCM 95th %tile Q(veh) | 0.2   | -   | -   | -   | 0.2   |

HCM 6th TWSC  
 14: Site Access #14 & Internal Collector Roadway

2041 Total  
 PM Peak

Intersection

Int Delay, s/veh 1

| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
|--------------------------|------|------|------|------|------|------|
| Lane Configurations      | ↑    | ↗    |      | ↖    | ↘    |      |
| Traffic Vol, veh/h       | 217  | 67   | 1    | 134  | 39   | 1    |
| Future Vol, veh/h        | 217  | 67   | 1    | 134  | 39   | 1    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | 0    | -    | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 236  | 73   | 1    | 146  | 42   | 1    |

| Major/Minor          | Major1 | Major2 | Minor1 | Minor2 | Minor3 |
|----------------------|--------|--------|--------|--------|--------|
| Conflicting Flow All | 0      | 0      | 309    | 0      | 384    |
| Stage 1              | -      | -      | -      | -      | 236    |
| Stage 2              | -      | -      | -      | -      | 148    |
| Critical Hdwy        | -      | -      | 4.12   | -      | 6.42   |
| Critical Hdwy Stg 1  | -      | -      | -      | -      | 5.42   |
| Critical Hdwy Stg 2  | -      | -      | -      | -      | 5.42   |
| Follow-up Hdwy       | -      | -      | 2.218  | -      | 3.518  |
| Pot Cap-1 Maneuver   | -      | -      | 1252   | -      | 619    |
| Stage 1              | -      | -      | -      | -      | 803    |
| Stage 2              | -      | -      | -      | -      | 880    |
| Platoon blocked, %   | -      | -      | -      | -      | -      |
| Mov Cap-1 Maneuver   | -      | -      | 1252   | -      | 618    |
| Mov Cap-2 Maneuver   | -      | -      | -      | -      | 618    |
| Stage 1              | -      | -      | -      | -      | 803    |
| Stage 2              | -      | -      | -      | -      | 879    |

| Approach             | EB | WB  | NB   |
|----------------------|----|-----|------|
| HCM Control Delay, s | 0  | 0.1 | 11.2 |
| HCM LOS              |    |     | B    |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 622   | -   | -   | 1252  | -   |
| HCM Lane V/C Ratio    | 0.07  | -   | -   | 0.001 | -   |
| HCM Control Delay (s) | 11.2  | -   | -   | 7.9   | 0   |
| HCM Lane LOS          | B     | -   | -   | A     | A   |
| HCM 95th %tile Q(veh) | 0.2   | -   | -   | 0     | -   |

HCM 6th TWSC  
 15: Site Access #15 & Internal Collector Roadway

2041 Total  
 PM Peak

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 9.9  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      |      | ↕    |      |      | ↕    |      |
| Traffic Vol, veh/h       | 18   | 164  | 36   | 3    | 103  | 1    | 11   | 0    | 1    | 0    | 0    | 11   |
| Future Vol, veh/h        | 18   | 164  | 36   | 3    | 103  | 1    | 11   | 0    | 1    | 0    | 0    | 11   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 20   | 178  | 39   | 3    | 112  | 1    | 12   | 0    | 1    | 0    | 0    | 12   |

| Major/Minor          | Minor2 |       | Minor1 |       | Major1 |       | Major2 |   |   |       |   |   |
|----------------------|--------|-------|--------|-------|--------|-------|--------|---|---|-------|---|---|
| Conflicting Flow All | 87     | 31    | 6      | 140   | 37     | 1     | 12     | 0 | 0 | 1     | 0 | 0 |
| Stage 1              | 6      | 6     | -      | 25    | 25     | -     | -      | - | - | -     | - | - |
| Stage 2              | 81     | 25    | -      | 115   | 12     | -     | -      | - | - | -     | - | - |
| Critical Hdwy        | 7.12   | 6.52  | 6.22   | 7.12  | 6.52   | 6.22  | 4.12   | - | - | 4.12  | - | - |
| Critical Hdwy Stg 1  | 6.12   | 5.52  | -      | 6.12  | 5.52   | -     | -      | - | - | -     | - | - |
| Critical Hdwy Stg 2  | 6.12   | 5.52  | -      | 6.12  | 5.52   | -     | -      | - | - | -     | - | - |
| Follow-up Hdwy       | 3.518  | 4.018 | 3.318  | 3.518 | 4.018  | 3.318 | 2.218  | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver   | 899    | 862   | 1077   | 830   | 855    | 1084  | 1607   | - | - | 1622  | - | - |
| Stage 1              | 1016   | 891   | -      | 993   | 874    | -     | -      | - | - | -     | - | - |
| Stage 2              | 927    | 874   | -      | 890   | 886    | -     | -      | - | - | -     | - | - |
| Platoon blocked, %   |        |       |        |       |        |       |        | - | - | -     | - | - |
| Mov Cap-1 Maneuver   | 803    | 856   | 1077   | 668   | 849    | 1084  | 1607   | - | - | 1622  | - | - |
| Mov Cap-2 Maneuver   | 803    | 856   | -      | 668   | 849    | -     | -      | - | - | -     | - | - |
| Stage 1              | 1009   | 891   | -      | 986   | 868    | -     | -      | - | - | -     | - | - |
| Stage 2              | 801    | 868   | -      | 686   | 886    | -     | -      | - | - | -     | - | - |

| Approach             | EB   |  | WB  |  | NB  |  | SB |  |
|----------------------|------|--|-----|--|-----|--|----|--|
| HCM Control Delay, s | 10.6 |  | 9.9 |  | 6.7 |  | 0  |  |
| HCM LOS              | B    |  | A   |  |     |  |    |  |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1WBLn1 | SBL   | SBT  | SBR |
|-----------------------|-------|-----|-----|------------|-------|------|-----|
| Capacity (veh/h)      | 1607  | -   | -   | 881        | 844   | 1622 | -   |
| HCM Lane V/C Ratio    | 0.007 | -   | -   | 0.269      | 0.138 | -    | -   |
| HCM Control Delay (s) | 7.3   | 0   | -   | 10.6       | 9.9   | 0    | -   |
| HCM Lane LOS          | A     | A   | -   | B          | A     | A    | -   |
| HCM 95th %tile Q(veh) | 0     | -   | -   | 1.1        | 0.5   | 0    | -   |

Queues

2025 Total

1: Allen Way & Founder Pkwy

AM Peak



| Lane Group              | EBL  | EBT  | WBL  | WBT  | WBR  | NBL  | NBT  | SBL  | SBT  | SBR  |
|-------------------------|------|------|------|------|------|------|------|------|------|------|
| Lane Group Flow (vph)   | 288  | 1434 | 41   | 2622 | 136  | 125  | 76   | 71   | 15   | 353  |
| v/c Ratio               | 0.60 | 0.44 | 0.14 | 0.92 | 0.15 | 0.27 | 0.33 | 0.30 | 0.09 | 0.71 |
| Control Delay           | 53.8 | 11.2 | 5.5  | 26.4 | 1.7  | 41.4 | 24.0 | 43.3 | 48.6 | 21.3 |
| Queue Delay             | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| Total Delay             | 53.8 | 11.2 | 5.5  | 26.4 | 1.7  | 41.4 | 24.0 | 43.3 | 48.6 | 21.3 |
| Queue Length 50th (ft)  | 108  | 183  | 6    | 710  | 4    | 42   | 18   | 47   | 11   | 34   |
| Queue Length 95th (ft)  | 154  | 263  | m9   | #910 | m6   | 65   | 63   | 84   | 31   | 83   |
| Internal Link Dist (ft) |      | 453  |      | 1015 |      |      | 198  |      | 312  |      |
| Turn Bay Length (ft)    | 300  |      | 330  |      | 200  |      |      | 125  |      |      |
| Base Capacity (vph)     | 481  | 3285 | 298  | 2839 | 931  | 459  | 375  | 235  | 372  | 775  |
| 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       | 0.60 | 0.44 | 0.14 | 0.92 | 0.15 | 0.27 | 0.20 | 0.30 | 0.04 | 0.46 |

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues

2025 Total

2: Front St & Founder Pkwy

AM Peak



| Lane Group              | SEL  | SET  | NWL  | NWT  | NEL  | NET  | NER  | SWL  | SWT  |
|-------------------------|------|------|------|------|------|------|------|------|------|
| Lane Group Flow (vph)   | 70   | 1287 | 79   | 2216 | 451  | 54   | 43   | 5    | 135  |
| v/c Ratio               | 0.38 | 0.42 | 0.25 | 0.71 | 0.78 | 0.14 | 0.08 | 0.03 | 0.44 |
| Control Delay           | 25.7 | 10.5 | 7.6  | 18.1 | 52.0 | 41.9 | 2.1  | 36.2 | 24.1 |
| Queue Delay             | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| Total Delay             | 25.7 | 10.5 | 7.6  | 18.1 | 52.0 | 41.9 | 2.1  | 36.2 | 24.1 |
| Queue Length 50th (ft)  | 21   | 127  | 16   | 415  | 163  | 34   | 0    | 3    | 16   |
| Queue Length 95th (ft)  | 76   | 150  | 34   | 530  | 210  | 77   | 9    | 14   | 48   |
| Internal Link Dist (ft) |      | 1015 |      | 408  |      | 476  |      |      | 317  |
| Turn Bay Length (ft)    | 460  |      | 200  |      | 285  |      |      | 210  |      |
| Base Capacity (vph)     | 191  | 3073 | 315  | 3141 | 581  | 420  | 536  | 211  | 632  |
| Starvation Cap Reductn  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Spillback Cap Reductn   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Storage Cap Reductn     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced v/c Ratio       | 0.37 | 0.42 | 0.25 | 0.71 | 0.78 | 0.13 | 0.08 | 0.02 | 0.21 |

Intersection Summary

Queues  
3: Woodlands Blvd & Founders Pkwy

2025 Total  
AM Peak



| Lane Group              | EBL  | EBT  | EBR  | WBL  | WBT   | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  |
|-------------------------|------|------|------|------|-------|------|------|------|------|------|------|
| Lane Group Flow (vph)   | 7    | 852  | 87   | 402  | 2185  | 103  | 141  | 29   | 178  | 43   | 17   |
| v/c Ratio               | 0.04 | 0.44 | 0.10 | 0.67 | 0.83  | 0.09 | 0.58 | 0.20 | 0.11 | 0.22 | 0.08 |
| Control Delay           | 6.3  | 17.9 | 1.8  | 13.0 | 16.2  | 1.6  | 54.6 | 54.9 | 0.1  | 45.5 | 49.2 |
| Queue Delay             | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| Total Delay             | 6.3  | 17.9 | 1.8  | 13.0 | 16.2  | 1.6  | 54.6 | 54.9 | 0.1  | 45.5 | 49.2 |
| Queue Length 50th (ft)  | 1    | 211  | 0    | 85   | 525   | 0    | 98   | 22   | 0    | 32   | 5    |
| Queue Length 95th (ft)  | 6    | 264  | 17   | 192  | #1066 | 20   | 157  | 52   | 0    | 59   | 18   |
| Internal Link Dist (ft) |      | 641  |      |      | 702   |      |      | 339  |      |      | 417  |
| Turn Bay Length (ft)    | 450  |      |      | 500  |       | 400  | 220  |      |      | 120  |      |
| Base Capacity (vph)     | 185  | 1917 | 907  | 598  | 2634  | 1193 | 250  | 326  | 1583 | 218  | 552  |
| Starvation Cap Reductn  | 0    | 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0    |
| Spillback Cap Reductn   | 0    | 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0    |
| Storage Cap Reductn     | 0    | 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced v/c Ratio       | 0.04 | 0.44 | 0.10 | 0.67 | 0.83  | 0.09 | 0.56 | 0.09 | 0.11 | 0.20 | 0.03 |

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

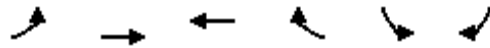


Queues

2025 Total

4: Founders Pkwy & Crowfoot Valley Rd

AM Peak



| Lane Group              | EBL  | EBT  | WBT  | WBR  | SBL    | SBR  |
|-------------------------|------|------|------|------|--------|------|
| Lane Group Flow (vph)   | 386  | 693  | 1734 | 150  | 586    | 489  |
| v/c Ratio               | 0.70 | 0.26 | 0.84 | 0.16 | 1.01dr | 0.34 |
| Control Delay           | 54.9 | 5.1  | 27.0 | 5.9  | 33.9   | 0.6  |
| Queue Delay             | 0.0  | 0.0  | 0.0  | 0.0  | 0.0    | 0.0  |
| Total Delay             | 54.9 | 5.1  | 27.0 | 5.9  | 33.9   | 0.6  |
| Queue Length 50th (ft)  | 146  | 72   | 554  | 15   | 114    | 0    |
| Queue Length 95th (ft)  | 195  | 122  | #865 | 56   | 168    | 0    |
| Internal Link Dist (ft) |      | 561  | 537  |      | 515    |      |
| Turn Bay Length (ft)    | 485  |      |      |      | 150    |      |
| Base Capacity (vph)     | 629  | 2683 | 2059 | 939  | 889    | 1441 |
| Starvation Cap Reductn  | 0    | 0    | 0    | 0    | 0      | 0    |
| Spillback Cap Reductn   | 0    | 0    | 0    | 0    | 0      | 0    |
| Storage Cap Reductn     | 0    | 0    | 0    | 0    | 0      | 0    |
| Reduced v/c Ratio       | 0.61 | 0.26 | 0.84 | 0.16 | 0.66   | 0.34 |

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

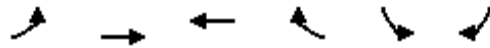
dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Queues

2025 Total

6: Founder Pkwy & Connector Collector Roadway

AM Peak



| Lane Group              | EBL  | EBT  | WBT  | WBR  | SBL  | SBR  |
|-------------------------|------|------|------|------|------|------|
| Lane Group Flow (vph)   | 107  | 326  | 1628 | 49   | 74   | 261  |
| v/c Ratio               | 0.40 | 0.11 | 0.63 | 0.04 | 0.49 | 0.16 |
| Control Delay           | 6.6  | 2.3  | 10.6 | 2.2  | 62.5 | 0.2  |
| Queue Delay             | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| Total Delay             | 6.6  | 2.3  | 10.6 | 2.2  | 62.5 | 0.2  |
| Queue Length 50th (ft)  | 11   | 21   | 304  | 0    | 56   | 0    |
| Queue Length 95th (ft)  | 25   | 36   | 476  | 14   | 103  | 0    |
| Internal Link Dist (ft) |      | 403  | 466  |      | 1225 |      |
| Turn Bay Length (ft)    |      |      |      |      |      |      |
| Base Capacity (vph)     | 271  | 3002 | 2594 | 1173 | 368  | 1583 |
| Starvation Cap Reductn  | 0    | 0    | 0    | 0    | 0    | 0    |
| Spillback Cap Reductn   | 0    | 0    | 0    | 0    | 0    | 0    |
| Storage Cap Reductn     | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced v/c Ratio       | 0.39 | 0.11 | 0.63 | 0.04 | 0.20 | 0.16 |
| Intersection Summary    |      |      |      |      |      |      |

Queues  
8: Ridge Rd/Founders Pkwy & 5th St/SH 86

2025 Total  
AM Peak



| Lane Group              | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Group Flow (vph)   | 89   | 255  | 196  | 98   | 462  | 702  | 408  | 449  | 60   | 270  | 189  | 162  |
| v/c Ratio               | 0.29 | 0.36 | 0.12 | 0.21 | 0.66 | 0.44 | 0.77 | 0.84 | 0.04 | 0.87 | 0.40 | 0.10 |
| Control Delay           | 21.3 | 30.4 | 0.2  | 20.0 | 37.7 | 0.9  | 33.9 | 54.7 | 0.0  | 54.5 | 39.0 | 0.1  |
| Queue Delay             | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| Total Delay             | 21.3 | 30.4 | 0.2  | 20.0 | 37.7 | 0.9  | 33.9 | 54.7 | 0.0  | 54.5 | 39.0 | 0.1  |
| Queue Length 50th (ft)  | 37   | 147  | 0    | 41   | 303  | 0    | 217  | 324  | 0    | 137  | 121  | 0    |
| Queue Length 95th (ft)  | 74   | 229  | 0    | 80   | 444  | 0    | 285  | 429  | 0    | #265 | 180  | 0    |
| Internal Link Dist (ft) |      | 370  |      |      | 768  |      |      | 579  |      |      | 785  |      |
| Turn Bay Length (ft)    | 375  |      | 425  | 500  |      |      | 230  |      |      | 600  |      | 600  |
| Base Capacity (vph)     | 309  | 702  | 1583 | 473  | 705  | 1583 | 529  | 621  | 1583 | 313  | 558  | 1583 |
| Starvation Cap Reductn  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Spillback Cap Reductn   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Storage Cap Reductn     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced v/c Ratio       | 0.29 | 0.36 | 0.12 | 0.21 | 0.66 | 0.44 | 0.77 | 0.72 | 0.04 | 0.86 | 0.34 | 0.10 |

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

Queues

2025 Total

1: Allen Way & Founder Pkwy

PM Peak



| Lane Group              | EBL  | EBT   | WBL  | WBT  | WBR  | NBL  | NBT  | SBL  | SBT  | SBR  |
|-------------------------|------|-------|------|------|------|------|------|------|------|------|
| Lane Group Flow (vph)   | 473  | 3262  | 46   | 2377 | 158  | 179  | 139  | 136  | 40   | 500  |
| v/c Ratio               | 0.83 | 1.02  | 0.28 | 0.92 | 0.18 | 0.33 | 0.48 | 0.64 | 0.17 | 0.80 |
| Control Delay           | 62.4 | 44.7  | 11.9 | 29.3 | 2.5  | 39.3 | 25.0 | 53.7 | 45.9 | 29.5 |
| Queue Delay             | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| Total Delay             | 62.4 | 44.7  | 11.9 | 29.3 | 2.5  | 39.3 | 25.0 | 53.7 | 45.9 | 29.5 |
| Queue Length 50th (ft)  | 185  | ~1026 | 10   | 655  | 8    | 58   | 37   | 88   | 28   | 82   |
| Queue Length 95th (ft)  | #309 | #1146 | m15  | m712 | m18  | 87   | 98   | 143  | 60   | 147  |
| Internal Link Dist (ft) |      | 453   |      | 1015 |      |      | 198  |      | 312  |      |
| Turn Bay Length (ft)    | 300  |       | 330  |      | 200  |      |      | 125  |      |      |
| Base Capacity (vph)     | 571  | 3196  | 169  | 2588 | 870  | 539  | 349  | 213  | 310  | 717  |
| 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       | 0.83 | 1.02  | 0.27 | 0.92 | 0.18 | 0.33 | 0.40 | 0.64 | 0.13 | 0.70 |

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

## Queues

2025 Total

## 2: Front St &amp; Founder Pkwy

PM Peak



| Lane Group              | SEL   | SET   | NWL  | NWT  | NEL  | NET  | NER  | SWL  | SWT  |
|-------------------------|-------|-------|------|------|------|------|------|------|------|
| Lane Group Flow (vph)   | 179   | 2868  | 152  | 1799 | 646  | 120  | 225  | 43   | 157  |
| v/c Ratio               | 0.94  | 1.05  | 0.86 | 0.67 | 0.98 | 0.30 | 0.41 | 0.20 | 0.49 |
| Control Delay           | 55.1  | 54.8  | 64.7 | 22.1 | 79.8 | 42.7 | 24.4 | 33.8 | 35.9 |
| Queue Delay             | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| Total Delay             | 55.1  | 54.8  | 64.7 | 22.1 | 79.8 | 42.7 | 24.4 | 33.8 | 35.9 |
| Queue Length 50th (ft)  | 115   | ~544  | 65   | 357  | 259  | 80   | 90   | 24   | 36   |
| Queue Length 95th (ft)  | m#132 | m#544 | #207 | 411  | #381 | 136  | 166  | 52   | 71   |
| Internal Link Dist (ft) |       | 1015  |      | 408  |      | 476  |      |      | 317  |
| Turn Bay Length (ft)    | 460   |       | 200  |      | 285  |      |      | 210  |      |
| Base Capacity (vph)     | 191   | 2721  | 176  | 2686 | 657  | 412  | 547  | 217  | 363  |
| Starvation Cap Reductn  | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Spillback Cap Reductn   | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Storage Cap Reductn     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced v/c Ratio       | 0.94  | 1.05  | 0.86 | 0.67 | 0.98 | 0.29 | 0.41 | 0.20 | 0.43 |

## Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues

2025 Total

3: Woodlands Blvd & Founders Pkwy

PM Peak



| Lane Group              | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Group Flow (vph)   | 9    | 1919 | 147  | 254  | 1710 | 103  | 114  | 49   | 396  | 188  | 61   |
| v/c Ratio               | 0.04 | 1.01 | 0.17 | 0.70 | 0.67 | 0.09 | 0.44 | 0.30 | 0.25 | 0.77 | 0.24 |
| Control Delay           | 6.4  | 50.9 | 5.0  | 41.1 | 12.3 | 1.7  | 46.1 | 54.9 | 0.4  | 65.6 | 47.2 |
| Queue Delay             | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| Total Delay             | 6.4  | 50.9 | 5.0  | 41.1 | 12.3 | 1.7  | 46.1 | 54.9 | 0.4  | 65.6 | 47.2 |
| Queue Length 50th (ft)  | 2    | ~773 | 14   | 136  | 335  | 0    | 75   | 36   | 0    | 130  | 20   |
| Queue Length 95th (ft)  | 7    | #960 | 46   | #290 | 600  | 20   | 127  | 74   | 0    | 201  | 42   |
| Internal Link Dist (ft) |      | 641  |      |      | 702  |      |      | 339  |      |      | 417  |
| Turn Bay Length (ft)    | 450  |      |      | 500  |      | 400  | 220  |      |      | 120  |      |
| Base Capacity (vph)     | 209  | 1902 | 888  | 364  | 2555 | 1161 | 272  | 341  | 1583 | 243  | 555  |
| Starvation Cap Reductn  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Spillback Cap Reductn   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Storage Cap Reductn     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced v/c Ratio       | 0.04 | 1.01 | 0.17 | 0.70 | 0.67 | 0.09 | 0.42 | 0.14 | 0.25 | 0.77 | 0.11 |

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

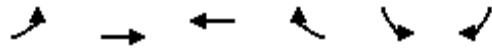
Queue shown is maximum after two cycles.

Queues

2025 Total

4: Founders Pkwy & Crowfoot Valley Rd

PM Peak



| Lane Group              | EBL  | EBT  | WBT  | WBR  | SBL  | SBR  |
|-------------------------|------|------|------|------|------|------|
| Lane Group Flow (vph)   | 853  | 1758 | 1323 | 147  | 476  | 315  |
| v/c Ratio               | 0.86 | 0.62 | 0.75 | 0.18 | 0.79 | 0.22 |
| Control Delay           | 50.6 | 6.3  | 27.8 | 4.2  | 27.2 | 0.3  |
| Queue Delay             | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| Total Delay             | 50.6 | 6.3  | 27.8 | 4.2  | 27.2 | 0.3  |
| Queue Length 50th (ft)  | 321  | 224  | 421  | 5    | 62   | 0    |
| Queue Length 95th (ft)  | #494 | 367  | 510  | 40   | 115  | 0    |
| Internal Link Dist (ft) |      | 561  | 537  |      | 515  |      |
| Turn Bay Length (ft)    | 485  |      |      |      | 150  |      |
| Base Capacity (vph)     | 997  | 2842 | 1754 | 828  | 914  | 1441 |
| Starvation Cap Reductn  | 0    | 0    | 0    | 0    | 0    | 0    |
| Spillback Cap Reductn   | 0    | 0    | 0    | 0    | 0    | 0    |
| Storage Cap Reductn     | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced v/c Ratio       | 0.86 | 0.62 | 0.75 | 0.18 | 0.52 | 0.22 |

Intersection Summary

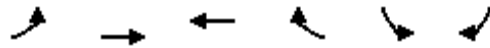
# 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Queues

2025 Total

6: Founder Pkwy & Connector Collector Roadway

PM Peak



| Lane Group              | EBL  | EBT  | WBT  | WBR  | SBL  | SBR  |
|-------------------------|------|------|------|------|------|------|
| Lane Group Flow (vph)   | 326  | 1582 | 1266 | 121  | 103  | 214  |
| v/c Ratio               | 0.70 | 0.56 | 0.60 | 0.12 | 0.58 | 0.14 |
| Control Delay           | 22.6 | 5.4  | 16.8 | 2.1  | 63.5 | 0.2  |
| Queue Delay             | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| Total Delay             | 22.6 | 5.4  | 16.8 | 2.1  | 63.5 | 0.2  |
| Queue Length 50th (ft)  | 86   | 185  | 306  | 0    | 77   | 0    |
| Queue Length 95th (ft)  | #247 | 281  | 372  | 24   | 131  | 0    |
| Internal Link Dist (ft) |      | 403  | 466  |      | 1225 |      |
| Turn Bay Length (ft)    |      |      |      |      |      |      |
| Base Capacity (vph)     | 464  | 2840 | 2108 | 992  | 368  | 1583 |
| Starvation Cap Reductn  | 0    | 0    | 0    | 0    | 0    | 0    |
| Spillback Cap Reductn   | 0    | 0    | 0    | 0    | 0    | 0    |
| Storage Cap Reductn     | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced v/c Ratio       | 0.70 | 0.56 | 0.60 | 0.12 | 0.28 | 0.14 |

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.



Queues  
8: Ridge Rd/Founders Pkwy & 5th St/SH 86

2025 Total  
PM Peak



| Lane Group              | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Group Flow (vph)   | 180  | 489  | 435  | 125  | 277  | 434  | 234  | 383  | 71   | 613  | 521  | 151  |
| v/c Ratio               | 0.59 | 0.90 | 0.27 | 0.81 | 0.51 | 0.27 | 0.62 | 0.92 | 0.04 | 0.99 | 0.69 | 0.10 |
| Control Delay           | 37.1 | 62.1 | 0.4  | 65.5 | 39.3 | 0.4  | 25.4 | 74.7 | 0.0  | 65.1 | 35.5 | 0.1  |
| Queue Delay             | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| Total Delay             | 37.1 | 62.1 | 0.4  | 65.5 | 39.3 | 0.4  | 25.4 | 74.7 | 0.0  | 65.1 | 35.5 | 0.1  |
| Queue Length 50th (ft)  | 96   | 364  | 0    | 64   | 179  | 0    | 88   | 291  | 0    | 415  | 329  | 0    |
| Queue Length 95th (ft)  | 153  | #560 | 0    | #154 | 265  | 0    | 135  | #473 | 0    | #661 | 469  | 0    |
| Internal Link Dist (ft) |      | 370  |      |      | 768  |      |      | 579  |      |      | 785  |      |
| Turn Bay Length (ft)    | 375  |      | 425  | 500  |      |      | 230  |      |      | 600  |      | 600  |
| Base Capacity (vph)     | 307  | 543  | 1583 | 154  | 543  | 1583 | 408  | 419  | 1583 | 622  | 756  | 1583 |
| Starvation Cap Reductn  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Spillback Cap Reductn   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Storage Cap Reductn     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced v/c Ratio       | 0.59 | 0.90 | 0.27 | 0.81 | 0.51 | 0.27 | 0.57 | 0.91 | 0.04 | 0.99 | 0.69 | 0.10 |

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

Queues

2041 Total

1: Allen Way & Founder Pkwy

AM Peak



| Lane Group              | EBL  | EBT  | WBL  | WBT   | WBR  | NBL  | NBT  | SBL  | SBT  | SBR  |
|-------------------------|------|------|------|-------|------|------|------|------|------|------|
| Lane Group Flow (vph)   | 288  | 1706 | 49   | 3224  | 152  | 141  | 87   | 82   | 16   | 405  |
| v/c Ratio               | 0.82 | 0.53 | 0.22 | 1.06  | 0.16 | 0.62 | 0.31 | 0.33 | 0.08 | 0.81 |
| Control Delay           | 72.7 | 13.3 | 4.6  | 52.4  | 0.9  | 66.8 | 21.6 | 42.8 | 47.6 | 37.1 |
| Queue Delay             | 0.0  | 0.0  | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| Total Delay             | 72.7 | 13.3 | 4.6  | 52.4  | 0.9  | 66.8 | 21.6 | 42.8 | 47.6 | 37.1 |
| Queue Length 50th (ft)  | 115  | 267  | 5    | ~1018 | 5    | 55   | 19   | 52   | 11   | 80   |
| Queue Length 95th (ft)  | #198 | 317  | m6   | #1107 | m1   | 90   | 68   | 98   | 33   | 143  |
| Internal Link Dist (ft) |      | 453  |      | 1015  |      |      | 198  |      | 312  |      |
| Turn Bay Length (ft)    | 290  |      | 325  |       |      | 75   |      | 130  |      | 110  |
| Base Capacity (vph)     | 350  | 3201 | 276  | 3029  | 974  | 228  | 287  | 247  | 232  | 538  |
| 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       | 0.82 | 0.53 | 0.18 | 1.06  | 0.16 | 0.62 | 0.30 | 0.33 | 0.07 | 0.75 |

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Queues

2041 Total

2: Front St & Founder Pkwy

AM Peak



| Lane Group              | SEL  | SET  | NWL  | NWT  | NEL  | NET  | NER  | SWL  | SWT  |
|-------------------------|------|------|------|------|------|------|------|------|------|
| Lane Group Flow (vph)   | 76   | 1608 | 82   | 2869 | 576  | 82   | 54   | 5    | 185  |
| v/c Ratio               | 0.40 | 0.54 | 0.35 | 0.95 | 0.86 | 0.19 | 0.12 | 0.02 | 0.52 |
| Control Delay           | 25.4 | 20.1 | 10.9 | 32.5 | 54.3 | 39.7 | 0.5  | 33.6 | 27.7 |
| Queue Delay             | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| Total Delay             | 25.4 | 20.1 | 10.9 | 32.5 | 54.3 | 39.7 | 0.5  | 33.6 | 27.7 |
| Queue Length 50th (ft)  | 34   | 275  | 19   | 744  | 207  | 50   | 0    | 3    | 30   |
| Queue Length 95th (ft)  | 82   | 357  | 39   | #993 | 258  | 103  | 0    | 13   | 65   |
| Internal Link Dist (ft) |      | 1015 |      | 408  |      | 476  |      |      | 317  |
| Turn Bay Length (ft)    | 460  |      | 200  |      | 285  |      |      | 230  |      |
| Base Capacity (vph)     | 195  | 2956 | 238  | 3018 | 668  | 456  | 477  | 221  | 652  |
| Starvation Cap Reductn  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Spillback Cap Reductn   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Storage Cap Reductn     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced v/c Ratio       | 0.39 | 0.54 | 0.34 | 0.95 | 0.86 | 0.18 | 0.11 | 0.02 | 0.28 |

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Queues

2041 Total

3: Woodlands Blvd & Founders Pkwy

AM Peak



| Lane Group              | EBL  | EBT  | WBL  | WBT  | NBL  | NBT  | NBR  | SBL  | SBT  |
|-------------------------|------|------|------|------|------|------|------|------|------|
| Lane Group Flow (vph)   | 7    | 1204 | 538  | 2567 | 505  | 33   | 250  | 49   | 19   |
| v/c Ratio               | 0.04 | 0.55 | 0.87 | 0.70 | 0.88 | 0.20 | 0.34 | 0.24 | 0.09 |
| Control Delay           | 9.0  | 24.7 | 42.9 | 11.9 | 64.3 | 53.9 | 6.8  | 44.8 | 48.1 |
| Queue Delay             | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| Total Delay             | 9.0  | 24.7 | 42.9 | 11.9 | 64.3 | 53.9 | 6.8  | 44.8 | 48.1 |
| Queue Length 50th (ft)  | 1    | 234  | 297  | 334  | 192  | 25   | 17   | 36   | 6    |
| Queue Length 95th (ft)  | 6    | 279  | #564 | 629  | 240  | 57   | 77   | 65   | 19   |
| Internal Link Dist (ft) |      | 641  |      | 702  |      | 339  |      |      | 417  |
| Turn Bay Length (ft)    | 450  |      | 500  |      | 300  |      |      | 150  |      |
| Base Capacity (vph)     | 213  | 2172 | 615  | 3683 | 571  | 326  | 733  | 245  | 549  |
| Starvation Cap Reductn  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Spillback Cap Reductn   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Storage Cap Reductn     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced v/c Ratio       | 0.03 | 0.55 | 0.87 | 0.70 | 0.88 | 0.10 | 0.34 | 0.20 | 0.03 |

Intersection Summary

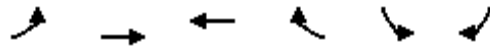
# 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Queues

2041 Total

4: Founders Pkwy & Crowfoot Valley Rd

AM Peak



| Lane Group              | EBL  | EBT  | WBT  | WBR  | SBL    | SBR  |
|-------------------------|------|------|------|------|--------|------|
| Lane Group Flow (vph)   | 489  | 772  | 1958 | 207  | 693    | 563  |
| v/c Ratio               | 0.86 | 0.29 | 1.02 | 0.22 | 1.11dr | 0.39 |
| Control Delay           | 64.7 | 5.6  | 52.8 | 5.5  | 40.6   | 0.8  |
| Queue Delay             | 0.0  | 0.0  | 0.0  | 0.0  | 0.0    | 0.0  |
| Total Delay             | 64.7 | 5.6  | 52.8 | 5.5  | 40.6   | 0.8  |
| Queue Length 50th (ft)  | 193  | 96   | ~860 | 24   | 176    | 0    |
| Queue Length 95th (ft)  | #288 | 122  | #998 | 62   | 249    | 0    |
| Internal Link Dist (ft) |      | 561  | 537  |      | 515    |      |
| Turn Bay Length (ft)    | 485  |      |      |      | 150    |      |
| Base Capacity (vph)     | 569  | 2630 | 1925 | 926  | 869    | 1441 |
| Starvation Cap Reductn  | 0    | 0    | 0    | 0    | 0      | 0    |
| Spillback Cap Reductn   | 0    | 0    | 0    | 0    | 0      | 0    |
| Storage Cap Reductn     | 0    | 0    | 0    | 0    | 0      | 0    |
| Reduced v/c Ratio       | 0.86 | 0.29 | 1.02 | 0.22 | 0.80   | 0.39 |

Intersection Summary

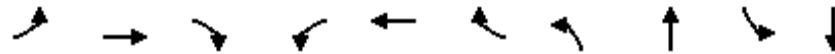
- ~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.
- dr Defacto Right Lane. Recode with 1 though lane as a right lane.

## Queues

2041 Total

## 6: Pioneer Ranch Access/Connector Collector Roadway &amp; Founder Pkwy

AM Peak



| Lane Group              | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | SBL  | SBT  |
|-------------------------|------|------|------|------|------|------|------|------|------|------|
| Lane Group Flow (vph)   | 128  | 734  | 43   | 5    | 1789 | 60   | 130  | 14   | 90   | 294  |
| v/c Ratio               | 0.68 | 0.33 | 0.04 | 0.01 | 0.93 | 0.07 | 0.62 | 0.06 | 0.25 | 0.85 |
| Control Delay           | 39.3 | 11.8 | 0.1  | 8.6  | 36.5 | 0.1  | 53.3 | 22.8 | 34.3 | 50.1 |
| Queue Delay             | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| Total Delay             | 39.3 | 11.8 | 0.1  | 8.6  | 36.5 | 0.1  | 53.3 | 22.8 | 34.3 | 50.1 |
| Queue Length 50th (ft)  | 45   | 129  | 0    | 1    | 688  | 0    | 100  | 2    | 52   | 125  |
| Queue Length 95th (ft)  | #143 | 218  | 0    | 6    | #881 | 0    | 129  | 20   | 94   | #252 |
| Internal Link Dist (ft) |      | 403  |      |      | 466  |      |      | 312  |      | 1225 |
| Turn Bay Length (ft)    | 400  |      | 400  | 400  |      | 400  | 200  |      | 200  |      |
| Base Capacity (vph)     | 188  | 2242 | 1046 | 461  | 1918 | 911  | 213  | 338  | 363  | 383  |
| 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       | 0.68 | 0.33 | 0.04 | 0.01 | 0.93 | 0.07 | 0.61 | 0.04 | 0.25 | 0.77 |

## Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues  
8: Ridge Rd/Founders Pkwy & 5th St/SH 86

2041 Total  
AM Peak



| Lane Group              | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Group Flow (vph)   | 76   | 228  | 130  | 125  | 500  | 940  | 348  | 582  | 82   | 326  | 185  | 147  |
| v/c Ratio               | 0.15 | 0.14 | 0.08 | 0.19 | 0.30 | 0.59 | 0.77 | 0.81 | 0.05 | 0.76 | 0.27 | 0.09 |
| Control Delay           | 13.5 | 20.6 | 0.1  | 13.7 | 21.5 | 1.6  | 62.0 | 54.8 | 0.1  | 62.8 | 41.3 | 0.1  |
| Queue Delay             | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| Total Delay             | 13.5 | 20.6 | 0.1  | 13.7 | 21.5 | 1.6  | 62.0 | 54.8 | 0.1  | 62.8 | 41.3 | 0.1  |
| Queue Length 50th (ft)  | 26   | 56   | 0    | 45   | 132  | 0    | 134  | 224  | 0    | 126  | 63   | 0    |
| Queue Length 95th (ft)  | 52   | 83   | 0    | 78   | 178  | 0    | 186  | 287  | 0    | 176  | 96   | 0    |
| Internal Link Dist (ft) |      | 370  |      |      | 768  |      |      | 579  |      |      | 785  |      |
| Turn Bay Length (ft)    | 300  |      | 425  | 250  |      |      | 250  |      |      | 600  |      | 500  |
| Base Capacity (vph)     | 508  | 1593 | 1583 | 650  | 1672 | 1583 | 486  | 796  | 1583 | 457  | 766  | 1583 |
| Starvation Cap Reductn  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Spillback Cap Reductn   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Storage Cap Reductn     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced v/c Ratio       | 0.15 | 0.14 | 0.08 | 0.19 | 0.30 | 0.59 | 0.72 | 0.73 | 0.05 | 0.71 | 0.24 | 0.09 |

Intersection Summary

Queues

2041 Total

1: Allen Way & Founder Pkwy

PM Peak



| Lane Group              | EBL  | EBT   | WBL  | WBT  | WBR  | NBL  | NBT  | SBL  | SBT  | SBR  |
|-------------------------|------|-------|------|------|------|------|------|------|------|------|
| Lane Group Flow (vph)   | 458  | 3704  | 49   | 2616 | 174  | 201  | 147  | 158  | 43   | 484  |
| v/c Ratio               | 0.85 | 1.09  | 0.29 | 0.94 | 0.19 | 0.78 | 0.57 | 0.80 | 0.21 | 0.86 |
| Control Delay           | 64.7 | 67.9  | 11.1 | 26.5 | 1.6  | 75.6 | 35.6 | 70.9 | 50.8 | 36.4 |
| Queue Delay             | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| Total Delay             | 64.7 | 67.9  | 11.1 | 26.5 | 1.6  | 75.6 | 35.6 | 70.9 | 50.8 | 36.4 |
| Queue Length 50th (ft)  | 179  | ~1221 | 8    | 718  | 4    | 80   | 56   | 106  | 31   | 84   |
| Queue Length 95th (ft)  | #260 | #1295 | m11  | m780 | m9   | #139 | 125  | #210 | 67   | #175 |
| Internal Link Dist (ft) |      | 453   |      | 1015 |      |      | 198  |      | 312  |      |
| Turn Bay Length (ft)    | 290  |       | 325  |      |      | 75   |      | 130  |      | 110  |
| Base Capacity (vph)     | 543  | 3395  | 167  | 2792 | 927  | 257  | 269  | 198  | 217  | 581  |
| 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       | 0.84 | 1.09  | 0.29 | 0.94 | 0.19 | 0.78 | 0.55 | 0.80 | 0.20 | 0.83 |

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.



Queues  
2: Front St & Founder Pkwy

2041 Total  
PM Peak



| Lane Group              | SEL  | SET   | NWL  | NWT  | NEL  | NET  | NER  | SWL  | SWT  |
|-------------------------|------|-------|------|------|------|------|------|------|------|
| Lane Group Flow (vph)   | 223  | 3525  | 158  | 2211 | 563  | 158  | 228  | 43   | 212  |
| v/c Ratio               | 1.06 | 1.11  | 0.87 | 0.72 | 0.99 | 0.51 | 0.64 | 0.25 | 0.71 |
| Control Delay           | 67.7 | 73.2  | 66.8 | 18.0 | 79.9 | 53.4 | 31.7 | 41.7 | 47.3 |
| Queue Delay             | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| Total Delay             | 67.7 | 73.2  | 66.8 | 18.0 | 79.9 | 53.4 | 31.7 | 41.7 | 47.3 |
| Queue Length 50th (ft)  | ~155 | ~1127 | 69   | 408  | 209  | 115  | 80   | 27   | 52   |
| Queue Length 95th (ft)  | m135 | m#522 | #195 | 464  | #297 | 187  | 171  | 59   | #102 |
| Internal Link Dist (ft) |      | 1015  |      | 408  |      | 476  |      |      | 317  |
| Turn Bay Length (ft)    | 460  |       | 200  |      | 285  |      |      | 230  |      |
| Base Capacity (vph)     | 211  | 3162  | 182  | 3088 | 568  | 307  | 359  | 170  | 298  |
| Starvation Cap Reductn  | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Spillback Cap Reductn   | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Storage Cap Reductn     | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced v/c Ratio       | 1.06 | 1.11  | 0.87 | 0.72 | 0.99 | 0.51 | 0.64 | 0.25 | 0.71 |

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Queues

2041 Total

3: Woodlands Blvd & Founders Pkwy

PM Peak



| Lane Group              | EBL  | EBT  | WBL  | WBT  | NBL  | NBT  | NBR  | SBL  | SBT  |
|-------------------------|------|------|------|------|------|------|------|------|------|
| Lane Group Flow (vph)   | 9    | 2722 | 274  | 1835 | 386  | 49   | 505  | 190  | 65   |
| v/c Ratio               | 0.04 | 1.01 | 0.67 | 0.49 | 0.88 | 0.30 | 1.01 | 0.72 | 0.17 |
| Control Delay           | 6.1  | 45.5 | 38.6 | 7.9  | 67.7 | 55.2 | 79.8 | 59.5 | 40.5 |
| Queue Delay             | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| Total Delay             | 6.1  | 45.5 | 38.6 | 7.9  | 67.7 | 55.2 | 79.8 | 59.5 | 40.5 |
| Queue Length 50th (ft)  | 2    | ~742 | 146  | 178  | 139  | 36   | ~353 | 132  | 20   |
| Queue Length 95th (ft)  | 6    | #887 | #293 | 331  | 184  | 74   | #582 | 202  | 41   |
| Internal Link Dist (ft) |      | 641  |      | 702  |      | 339  |      |      | 417  |
| Turn Bay Length (ft)    | 450  |      | 500  |      | 300  |      |      | 150  |      |
| Base Capacity (vph)     | 225  | 2708 | 410  | 3748 | 439  | 263  | 500  | 263  | 584  |
| Starvation Cap Reductn  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Spillback Cap Reductn   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Storage Cap Reductn     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced v/c Ratio       | 0.04 | 1.01 | 0.67 | 0.49 | 0.88 | 0.19 | 1.01 | 0.72 | 0.11 |

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

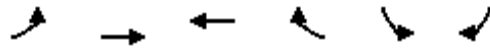
Queue shown is maximum after two cycles.

Queues

2041 Total

4: Founders Pkwy & Crowfoot Valley Rd

PM Peak



| Lane Group              | EBL  | EBT  | WBT  | WBR  | SBL  | SBR  |
|-------------------------|------|------|------|------|------|------|
| Lane Group Flow (vph)   | 1011 | 1926 | 1440 | 190  | 657  | 352  |
| v/c Ratio               | 0.96 | 0.72 | 0.98 | 0.26 | 0.84 | 0.24 |
| Control Delay           | 61.4 | 10.1 | 53.3 | 7.5  | 41.6 | 0.4  |
| Queue Delay             | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| Total Delay             | 61.4 | 10.1 | 53.3 | 7.5  | 41.6 | 0.4  |
| Queue Length 50th (ft)  | ~411 | 386  | 568  | 22   | 170  | 0    |
| Queue Length 95th (ft)  | #553 | 466  | #735 | 69   | 240  | 0    |
| Internal Link Dist (ft) |      | 561  | 537  |      | 515  |      |
| Turn Bay Length (ft)    | 485  |      |      |      | 150  |      |
| Base Capacity (vph)     | 1052 | 2677 | 1474 | 742  | 825  | 1441 |
| Starvation Cap Reductn  | 0    | 0    | 0    | 0    | 0    | 0    |
| Spillback Cap Reductn   | 0    | 0    | 0    | 0    | 0    | 0    |
| Storage Cap Reductn     | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced v/c Ratio       | 0.96 | 0.72 | 0.98 | 0.26 | 0.80 | 0.24 |

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

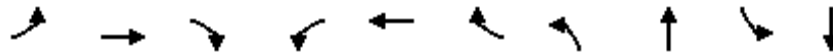
Queue shown is maximum after two cycles.

Queues

2041 Total

6: Pioneer Ranch Access/Connector Collector Roadway & Founder Pkwy

PM Peak



| Lane Group              | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | SBL  | SBT  |
|-------------------------|------|------|------|------|------|------|------|------|------|------|
| Lane Group Flow (vph)   | 364  | 1701 | 141  | 11   | 1304 | 142  | 82   | 13   | 114  | 252  |
| v/c Ratio               | 0.76 | 0.66 | 0.12 | 0.05 | 0.76 | 0.17 | 0.47 | 0.08 | 0.47 | 0.72 |
| Control Delay           | 41.6 | 12.8 | 1.9  | 8.1  | 28.9 | 1.8  | 52.5 | 35.8 | 47.9 | 22.9 |
| Queue Delay             | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| Total Delay             | 41.6 | 12.8 | 1.9  | 8.1  | 28.9 | 1.8  | 52.5 | 35.8 | 47.9 | 22.9 |
| Queue Length 50th (ft)  | 198  | 303  | 0    | 2    | 430  | 0    | 63   | 6    | 78   | 29   |
| Queue Length 95th (ft)  | #443 | 676  | 28   | 9    | 521  | 21   | 92   | 24   | 121  | 109  |
| Internal Link Dist (ft) |      | 403  |      |      | 466  |      |      | 312  |      | 1225 |
| Turn Bay Length (ft)    | 400  |      | 400  | 400  |      | 400  | 200  |      | 200  |      |
| Base Capacity (vph)     | 476  | 2571 | 1189 | 206  | 1724 | 859  | 175  | 311  | 242  | 455  |
| 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       | 0.76 | 0.66 | 0.12 | 0.05 | 0.76 | 0.17 | 0.47 | 0.04 | 0.47 | 0.55 |

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Queues  
8: Ridge Rd/Founders Pkwy & 5th St/SH 86

2041 Total  
PM Peak



| Lane Group              | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Group Flow (vph)   | 190  | 614  | 516  | 179  | 332  | 587  | 245  | 516  | 114  | 911  | 734  | 174  |
| v/c Ratio               | 0.47 | 0.61 | 0.33 | 0.63 | 0.32 | 0.37 | 0.57 | 0.77 | 0.07 | 0.86 | 0.57 | 0.11 |
| Control Delay           | 29.7 | 40.4 | 0.5  | 35.1 | 33.8 | 0.7  | 54.6 | 54.9 | 0.1  | 48.0 | 32.8 | 0.1  |
| Queue Delay             | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| Total Delay             | 29.7 | 40.4 | 0.5  | 35.1 | 33.8 | 0.7  | 54.6 | 54.9 | 0.1  | 48.0 | 32.8 | 0.1  |
| Queue Length 50th (ft)  | 98   | 218  | 0    | 91   | 105  | 0    | 93   | 203  | 0    | 332  | 233  | 0    |
| Queue Length 95th (ft)  | 155  | 281  | 0    | 146  | 146  | 0    | 131  | 266  | 0    | 414  | 311  | 0    |
| Internal Link Dist (ft) |      | 370  |      |      | 768  |      |      | 579  |      |      | 785  |      |
| Turn Bay Length (ft)    | 300  |      | 425  | 250  |      |      | 250  |      |      | 600  |      | 500  |
| Base Capacity (vph)     | 402  | 1007 | 1583 | 283  | 1051 | 1583 | 1115 | 675  | 1583 | 1115 | 1294 | 1583 |
| Starvation Cap Reductn  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Spillback Cap Reductn   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Storage Cap Reductn     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced v/c Ratio       | 0.47 | 0.61 | 0.33 | 0.63 | 0.32 | 0.37 | 0.22 | 0.76 | 0.07 | 0.82 | 0.57 | 0.11 |

Intersection Summary