October 5, 2021

Oakwood Homes
4908 Tower Road
Denver, CO 80249

J·R ENGINEERING

**Re: Traffic Letter for Reunion Ridge Filing No.'s 2 and 3, a Supplement to Reunion Ridge South Traffic Impact Study in Commerce City, CO dated July 31, 2020**

To Whom It May Concern:

This Traffic Letter has been prepared to provide a supplement to the submitted *Reunion Ridge South Traffic Impact Study* (TIS) dated July 31, 2020, prepared by JR Engineering. The scope of this letter will be limited to the road network for Filings 2 and 3 and the effects of the anticipated trip generation.

The Reunion Ridge South development is located within the northeast quarter of Section 16 of Township 2 South, Range 66 West, 6th Principal Meridian, City of Commerce City, County of Adams, and State of Colorado.

As the latest site plan, Filings 2 and 3 are shown as Phase II in the *Reunion Ridge South Village Plan*, prepared by Terracina Design on June 26, 2020. The Phasing Plan and Transportation Plan figures are included in **Appendix C**.

Roadway improvements include the extension of Vaughn Way from E 100th Place to Reunion Ridge Way and the construction of Reunion Ridge Way (a major collector) from Vaughn Way to Revere Street/Peoria Parkway. Three accesses to Filings 2 and 3 will be built along Reunion Ridge Way. Residents will need to use Vaughn Way, Revere Street, Peoria Parkway, and Peoria Street until future filings of Reunion Ridge South are constructed. It is anticipated that construction will start in 2022, with an anticipated buildout date in the Year 2023. The intersection of E 104th Avenue and Vaughn Way was signalized with Reunion Ridge Filing 1.

It was assumed that the adjacent Turnberry South development will be complete by the Year 2023 as well. According to the *Turnberry Parcels P, Q, R, S, & T Traffic Impact Report*, prepared by Harris Kocher Smith (HKS) dated July 13, 2020, Revere Street/Peoria Parkway will be improved to a major collector between Peoria Street and E 104th Avenue with a posted speed of 30 mph. The intersection of 104th Avenue & Revere Street was recently signalized. Peoria Street will remain a two-lane gravel road with a posted speed of 40 mph.

This traffic letter will address the following:

- Trip Generation from Reunion Ridge Filings 2 and 3
- Level of Service at intersections:
  - E 104th Avenue and Revere Street (E1)
  - E 104th Avenue and Vaughn Way (E2)
  - E 104th Avenue and Potomac Street (E3)
  - E 96th Avenue and Peoria Street (E4)
  - Reunion Ridge Way and Revere Street/Peoria Parkway (P1)

**Background Traffic Summary**

The Year 2022 traffic from the *Turnberry Parcels P, Q, R, S, & T Traffic Impact Report* was used as part of the Year 2022 existing traffic for Reunion Ridge Filings 2 and 3. Additionally, the Year 2022 traffic was used from the *Reunion Ridge – Phase 1 TIS* by JR Engineering dated March 18, 2020. It should be noted that Reunion Ridge "Phase 1" is also known as Reunion Ridge "Filing 1". Growth rates were applied at 4.0% for E 104th Avenue thru movements and 2.0% for all other movements to estimate the Year 2023 Background Traffic.

**Trip Generation Summary**

Site generated traffic has been calculated from the latest data contained within the Institute of Transportation Engineers' (ITE) *Trip Generation Manual, 10th Edition.* Based on the land use and the guidelines within Volume 1 of the *Trip Generation Manual*, JR used the fitted equations for the AM and PM peak hours of adjacent street traffic.

The Carriage House, American Dream, and Porchlight lots were collectively studied as ITE Code 210 (Single-Family Detached Housing) with 147 dwelling units in Filing 2 and 105 dwelling units in Filing 3.

Filings 2 and 3 are expected to generate the approximate following number of trips:

- 2570 weekday trips
- 188 AM peak hour vehicle trips, split 47 entering (25%) and 141 exiting (75%)
- 253 PM peak hour vehicle trips, split 160 entering (63%) and 93 exiting (37%)

The trip generation reports are included in **Appendix A**. The reports show a summary of land use, trip generation rates, and the total volume added to the adjacent streets. No adjustments were made for internal capture trips or pass-by trips.

Based on the projected traffic volumes, the Year 2023 Background Traffic, Assignment of Site Generated Traffic, and Year 2023 Opening Day Traffic are shown in **Figure 1**, **Figure 2**, and **Figure 3**, respectively. Lane geometry is shown in **Figures 1 and 3**, while directional distribution of site generated traffic is shown in **Figure 2**.

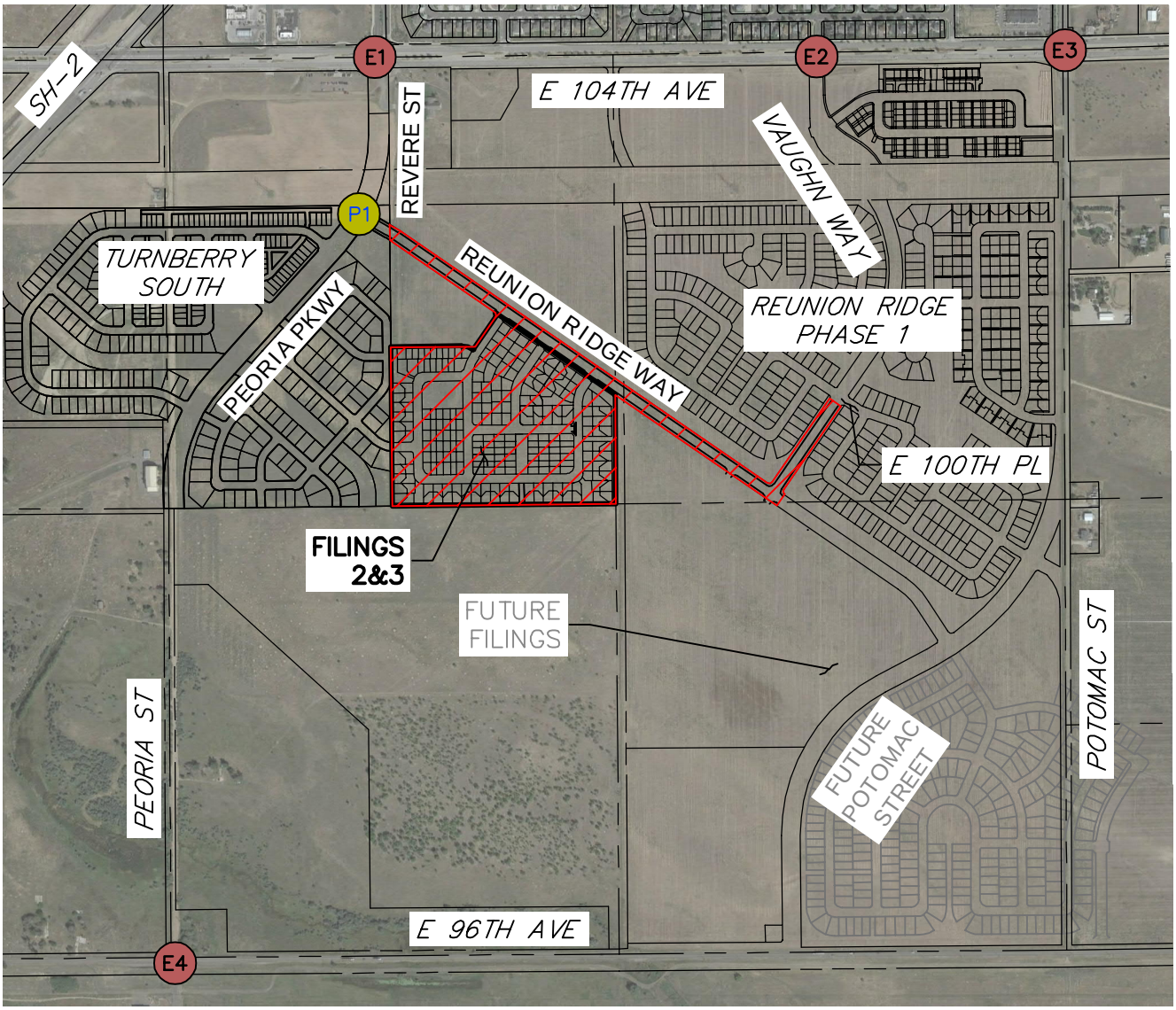
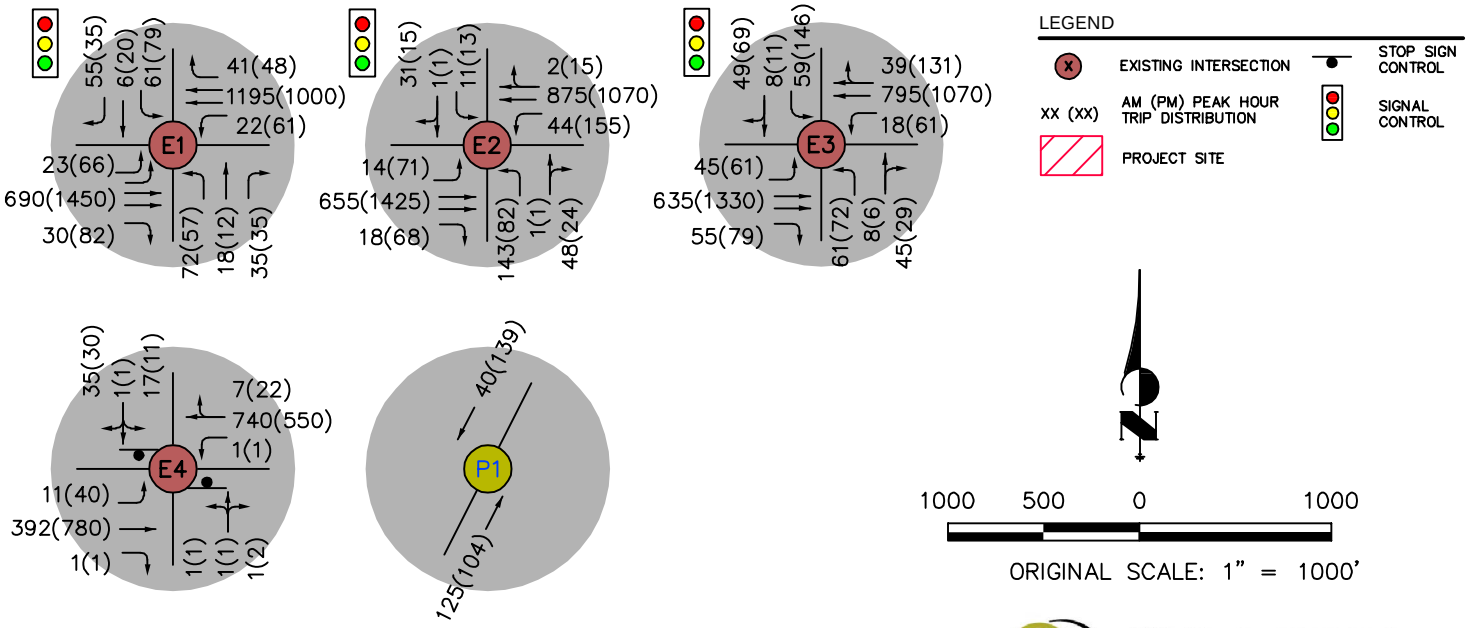



Figure 1 - Year 2023 Background Traffic

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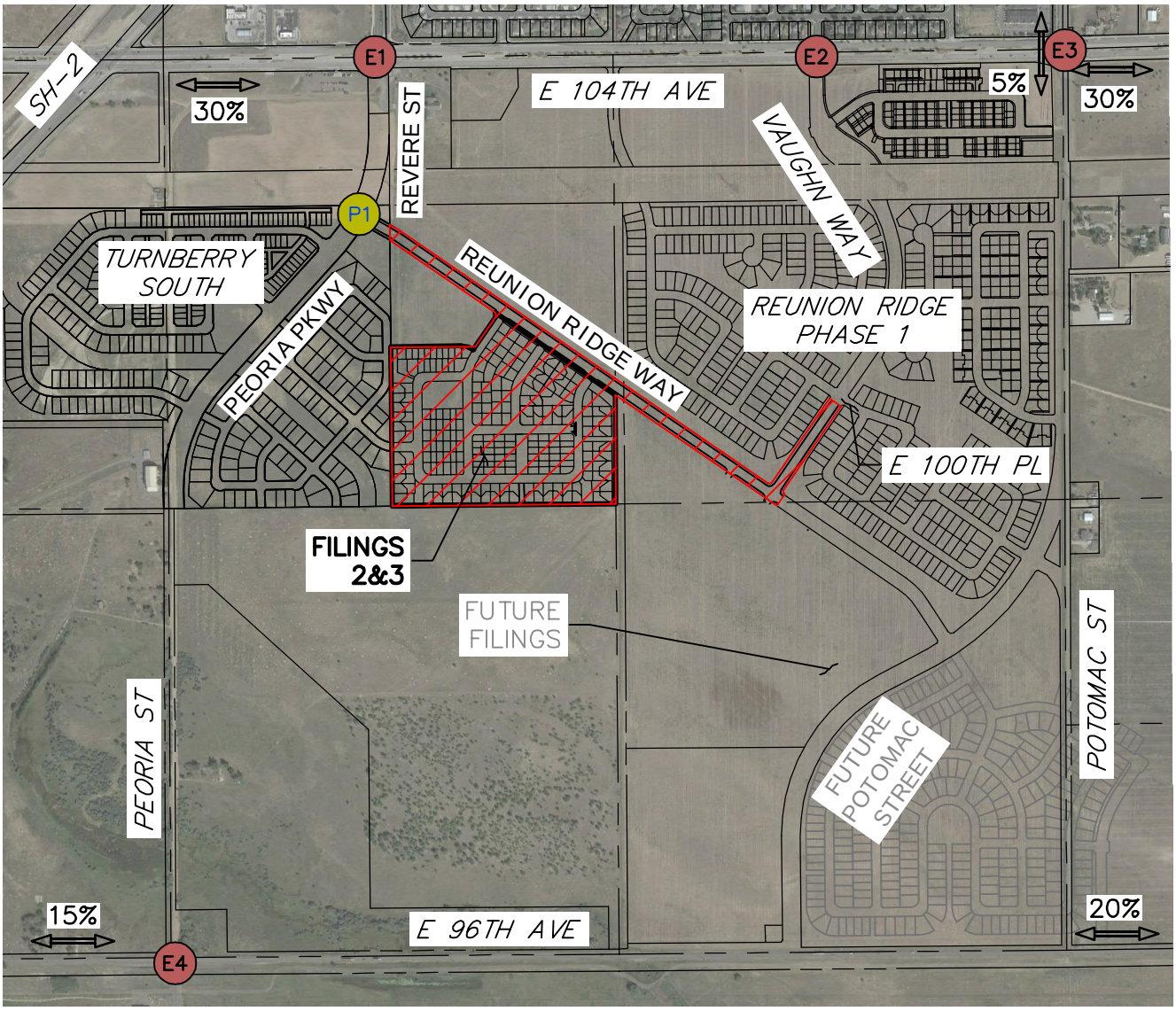
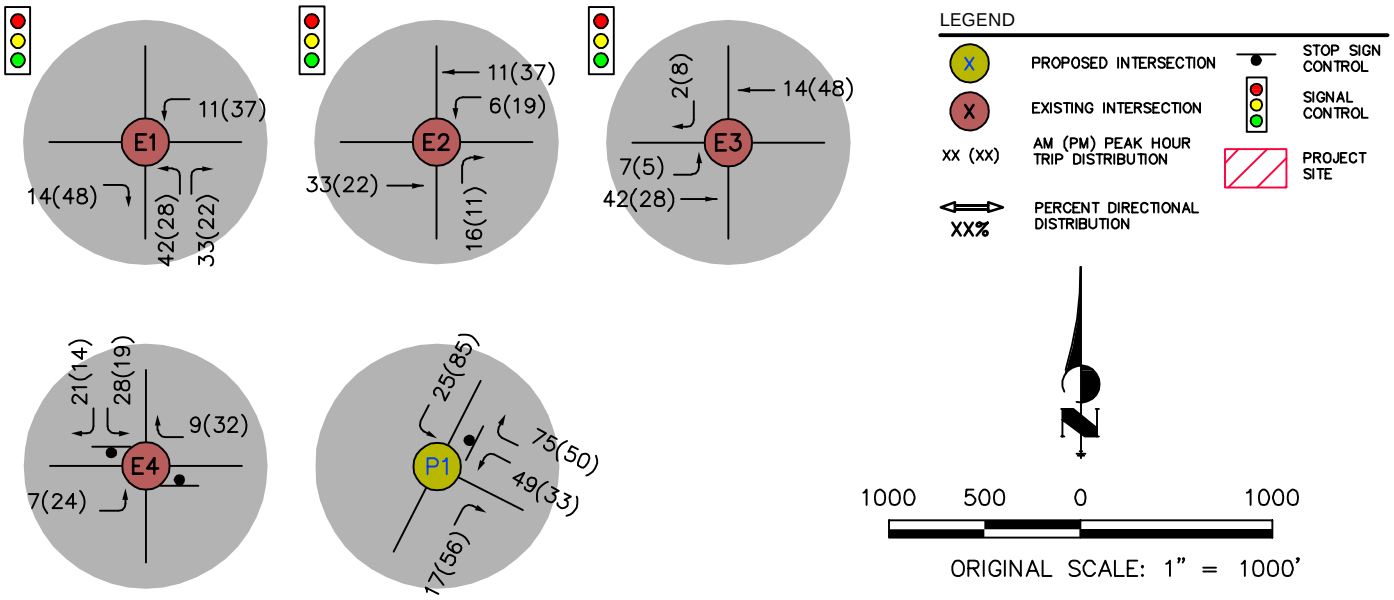



Figure 2 - Assignment of Site Generated Traffic



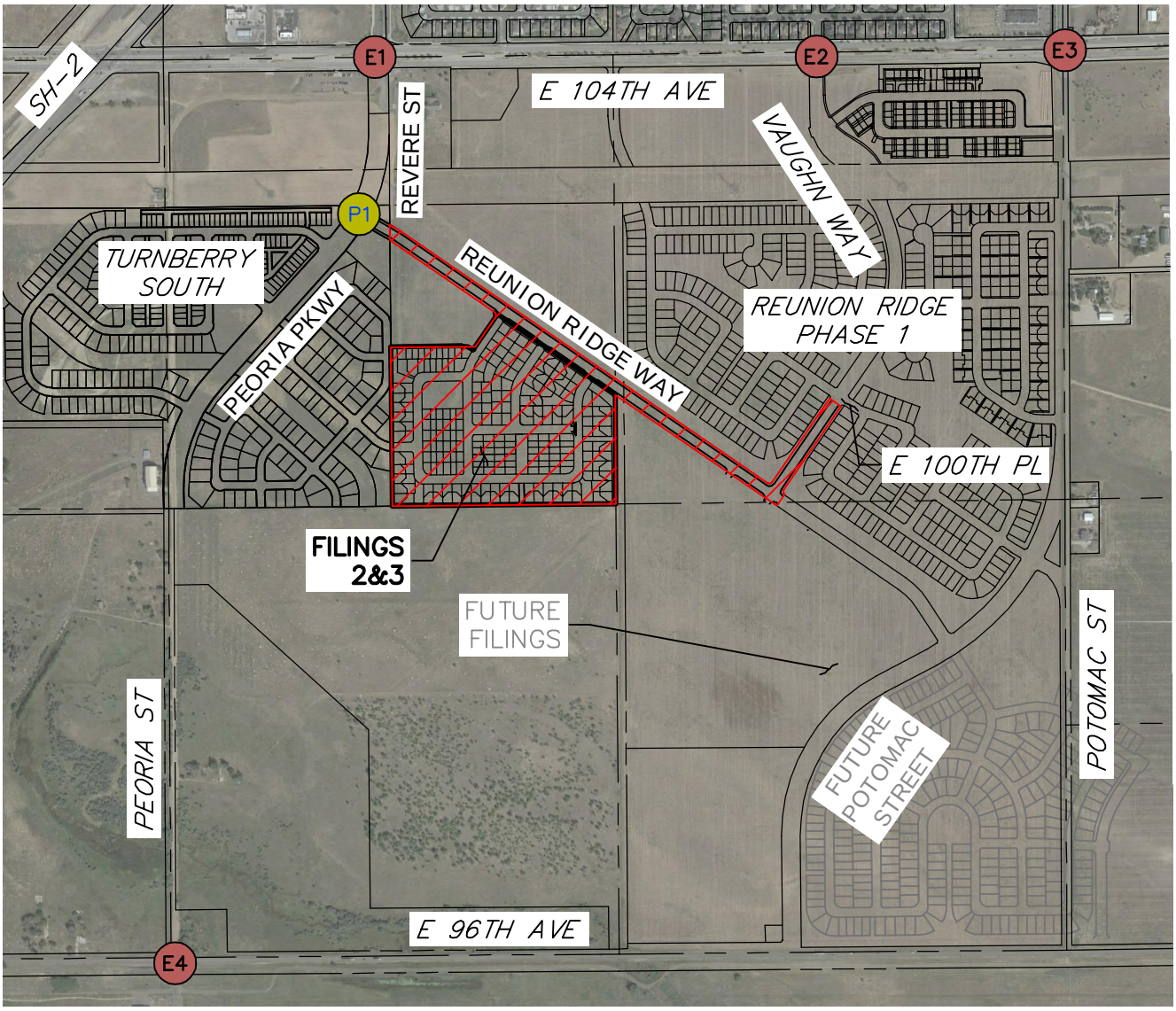
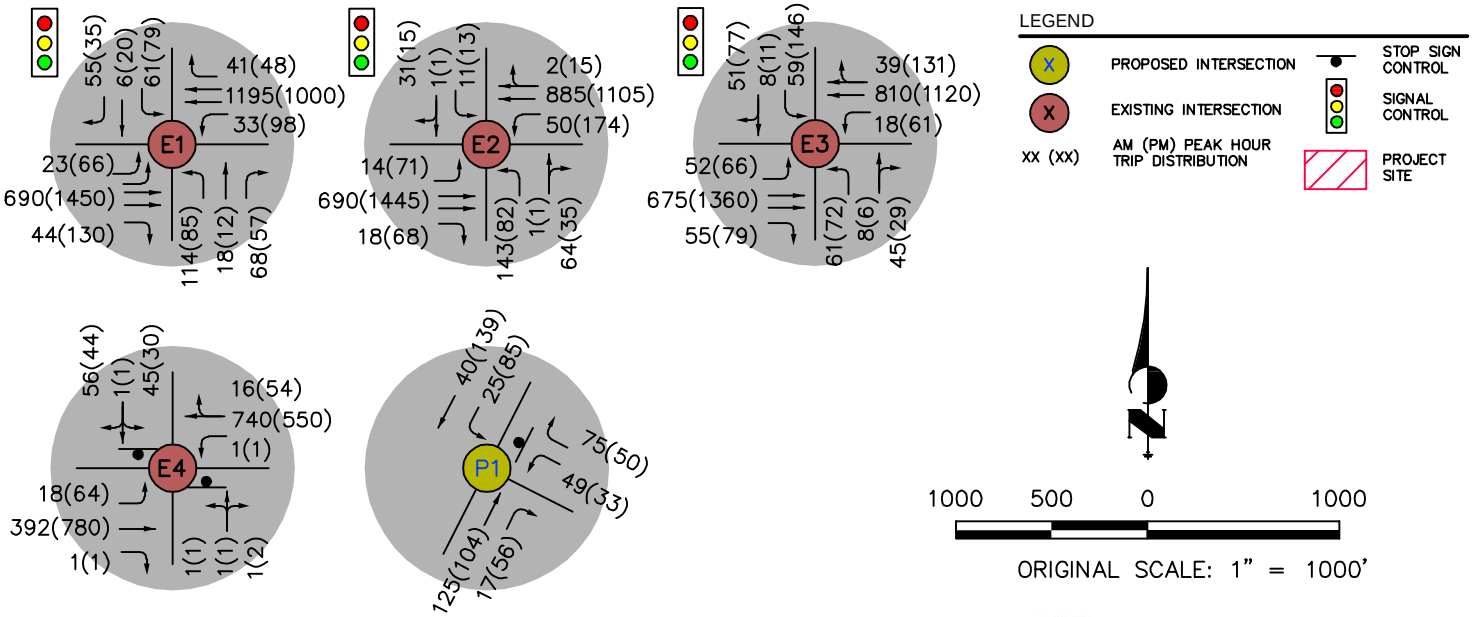



Figure 3 - Year 2023 Opening Day Traffic

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## Level of Service Results

Operational analyses were conducted in the Year 2023 AM and PM peak hours to determine the levels of service (LOS). The projected traffic volumes were input into *Synchro* software, along with the current signal timing received from the City along 104th Avenue. The intersections at Revere Street, Vaughn Way, and Potomac Street were signalized and coordinated. The level of service results are summarized in **Table 1** below.

**Table 1 – LOS for Year 2023 Traffic**

| Signalized Intersections | Movement | Background Traffic LOS | | Opening Day Traffic LOS | |
|---|---|---|---|---|---|
| | | AM Peak Hour | PM Peak Hour | AM Peak Hour | PM Peak Hour |
| E1 - 104th Ave & Revere St | EBL | C | E | C | E |
| | EBT | B | B | B | B |
| | EBR | A | A | A | A |
| | WBL | C | B | C | B |
| | WBT | C | C | C | C |
| | WBR | A | A | A | A |
| | NBL | D | D | D | D |
| | NBT | D | D | D | D |
| | NBR | D | D | D | D |
| | SBL | D | D | D | D |
| | SBT | D | D | D | D |
| | SBR | D | D | D | D |
| | **OVERALL** | **C** | **C** | **C** | **C** |
| E2 - 104th Ave & Vaughn Way | EBL | C | C | C | C |
| | EBT | E | C | E | C |
| | EBR | D | A | D | A |
| | WBL | A | C | A | C |
| | WBT | D | A | D | A |
| | WBR | D | A | D | A |
| | NBL | E | D | E | D |
| | NBTR | D | D | E | E |
| | SBL | D | D | D | D |
| | SBTR | D | D | D | D |
| | **OVERALL** | **D** | **B** | **D** | **B** |
| E3 - 104th Ave & Potomac St | EBL | B | C | B | C |
| | EBT | A | A | A | A |
| | EBR | A | A | A | A |
| | WBL | C | C | C | C |
| | WBTR | E | E | D | E |
| | NBL | D | E | D | E |
| | NBTR | D | D | D | D |
| | SBL | D | E | D | D |
| | SBTR | D | E | D | E |
| | **OVERALL** | **C** | **C** | **C** | **D** |

| TWSC Intersections | Movement | Background Traffic LOS | | Opening Day Traffic LOS | |
|---|---|---|---|---|---|
| | | AM Peak Hour | PM Peak Hour | AM Peak Hour | PM Peak Hour |
| A1 - Revere St & Reunion Ridge Way | WBL | N/A | N/A | B | B |
| | WBR | N/A | N/A | A | A |
| | SBL | N/A | N/A | A | A |
| E4 - 96th Ave & Peoria St | EBL | A | A | A | A |
| | WBL | A | A | A | A |
| | NBLTR | C | D | D | E |
| | SBLTR | D | D | E | F |

**Notes:**

1. EB=Eastbound, WB=Westbound, NB=Northbound, SB=Southbound, N/A=Not Applicable
2. L=Left, R=Right, T=Through
3. Yellow highlight exceeds Established Threshold of LOS D

As shown in **Table 1**, movements are not expected to degrade to failure due to site generated traffic, except for the following:

- (E2) E 104th Avenue and Vaughn Way
  - AM and PM Peak Hours: NBTR
- (E4) E 96th Avenue and Peoria Street
  - AM and PM Peak Hours: SBTLR
  - PM Peak Hour: NBLTR

The 95th percentile queue lengths for the northbound lane at 104th & Vaughn (E2) are 33 feet and 28 feet in the AM and PM peak hours, respectively. Because no upstream driveways are expected to be impeded, JR recommends the City accept this failing LOS.

The 95th percentile queue lengths for the southbound lane at 96th & Peoria (E4) are 93 feet and 90 feet in the AM and PM peak hours, respectively. The 95th percentile queue length for the northbound lane is 3 feet in the PM peak hour. Because no upstream driveways are expected to be impeded along this gravel road, JR recommends the City accept this failing LOS.

The *HCM 6th Edition* Level of Service reports are shown in **Appendix B**.

**Preliminary Traffic Signal Warrant**

Additionally, the southbound left-turn volumes at E 96th Avenue and Peoria Street do not meet peak hour warrants for a traffic signal per MUTCD Figure 4C-4: Warrant 3, Peak Hour (70% Factor), since E 96th Avenue posted speed limit is 45mph. Peoria Street is planned as a major collector, indicating a traffic signal would be planned at this intersection. JR recommends analyzing the signalization when Peoria Street is paved in the future.

**Conclusion**

This Traffic Letter has been prepared as a supplement to the *Reunion Ridge South Traffic Impact Study*, dated July 31, 2020 and prepared by JR Engineering. Based on the development described herein and the anticipated trip generation, JR Engineering is of the opinion that the adjacent and proposed roadway network will function satisfactorily with the development of Filings 2 and 3 within Reunion Ridge.

If you have any questions or comments, please feel free to contact me at efarney@jrengineering.com or 303-267-6183.

Sincerely,
JR Engineering, LLC

Eli Farney, PE, PTOE
Director of Public Works

Attachments: Appendix A: Trip Generation and Land Use Summary Reports
Appendix B: *HCM 6th Edition* Level of Service Reports
Appendix C: Figures from *Reunion Ridge South Village Plan*

# APPENDIX A

TRIP GENERATION AND LAND USE SUMMARY REPORTS

## Trip Generation Summary

Alternative: Filings 2 and 3
Phase:
Project: Reunion Ridge South

Open Date: 2/16/2021
Analysis Date: 2/16/2023

| ITE | Land Use | | Weekday Average Daily Trips * | Enter | Exit | Total | Weekday AM Peak Hour of Adjacent Street Traffic * | Enter | Exit | Total | Weekday PM Peak Hour of Adjacent Street Traffic * | Enter | Exit | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 210 | Filing 3 | | | 544 | 544 | 1088 | | 20 | 59 | 79 | | 67 | 39 | 106 |
| | 105 | Dwelling Units | | | | | | | | | | | | |
| 210 | Filing 2 | | | 741 | 741 | 1482 | | 27 | 82 | 109 | | 93 | 54 | 147 |
| | 147 | Dwelling Units | | | | | | | | | | | | |
| Unadjusted Volume | | | | 1285 | 1285 | 2570 | | 47 | 141 | 188 | | 160 | 93 | 253 |
| Internal Capture Trips | | | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 |
| Pass-By Trips | | | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 |
| Volume Added to Adjacent Streets | | | | 1285 | 1285 | 2570 | | 47 | 141 | 188 | | 160 | 93 | 253 |

Total Weekday Average Daily Trips Internal Capture = 0 Percent
Total Weekday AM Peak Hour of Adjacent Street Traffic Internal Capture = 0 Percent
Total Weekday PM Peak Hour of Adjacent Street Traffic Internal Capture = 0 Percent

* - Custom rate used for selected time period.

Source: Institute of Transportation Engineers, Trip Generation Manual 10th Edition

**Detailed Land Use Data**

For 147 Dwelling Units of Filing 2

( 210 ) Single-Family Detached Housing

Open Date: 2/16/2021

Project: Reunion Ridge South

Analysis Date: 2/16/2023

| Day / Period | Total Trips | Pass-By Trips | Avg Rate | Min Rate | Max Rate | Std Dev | Avg Size | % Enter | % Exit | Use Eq. | Equation | R2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Weekday Average Daily Trips | 1482 | 0 | 9.44 | 4.81 | 19.39 | 2.1 | 264 | 50 | 50 | True | Ln(T) = 0.92 Ln(X) + 2.71 | 0.95 |
| Source : Trip Generation Manual 10th Edition | | | | | | | | | | | | |
| Weekday AM Peak Hour of Adjacent Street Traffic | 109 | 0 | 0.74 | 0.33 | 2.27 | 0.27 | 219 | 25 | 75 | True | T = 0.71(X) + 4.8 | 0.89 |
| Source : Trip Generation Manual 10th Edition | | | | | | | | | | | | |
| Weekday PM Peak Hour of Adjacent Street Traffic | 147 | 0 | 0.99 | 0.44 | 2.98 | 0.31 | 242 | 63 | 37 | True | Ln(T) = 0.96 Ln(X) + 0.2 | 0.92 |
| Source : Trip Generation Manual 10th Edition | | | | | | | | | | | | |

**Detailed Land Use Data**

For 105 Dwelling Units of Filing 3

( 210 ) Single-Family Detached Housing

Open Date: 2/16/2021

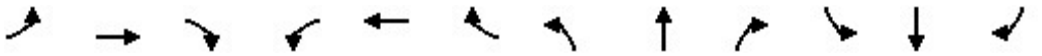
Project: Reunion Ridge South

Analysis Date: 2/16/2023

| Day / Period | Total Trips | Pass-By Trips | Avg Rate | Min Rate | Max Rate | Std Dev | Avg Size | % Enter | % Exit | Use Eq. | Equation | R2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Weekday Average Daily Trips | 1088 | 0 | 9.44 | 4.81 | 19.39 | 2.1 | 264 | 50 | 50 | True | Ln(T) = 0.92 Ln(X) + 2.71 | 0.95 |
| Source : Trip Generation Manual 10th Edition | | | | | | | | | | | | |
| Weekday AM Peak Hour of Adjacent Street Traffic | 79 | 0 | 0.74 | 0.33 | 2.27 | 0.27 | 219 | 25 | 75 | True | T = 0.71(X) + 4.8 | 0.89 |
| Source : Trip Generation Manual 10th Edition | | | | | | | | | | | | |
| Weekday PM Peak Hour of Adjacent Street Traffic | 106 | 0 | 0.99 | 0.44 | 2.98 | 0.31 | 242 | 63 | 37 | True | Ln(T) = 0.96 Ln(X) + 0.2 | 0.92 |
| Source : Trip Generation Manual 10th Edition | | | | | | | | | | | | |

# APPENDIX B

*HCM 6$^{TH}$ EDITION* LEVEL OF SERVICE REPORTS

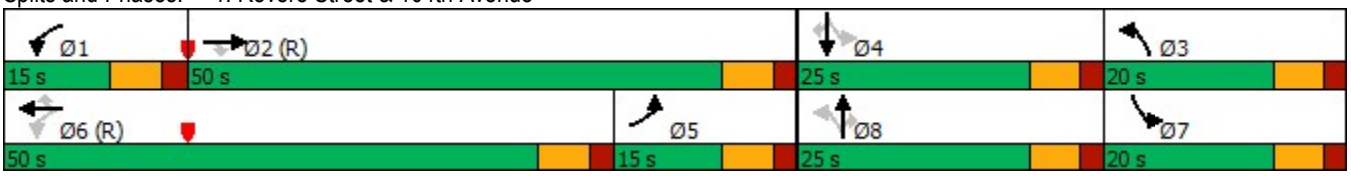


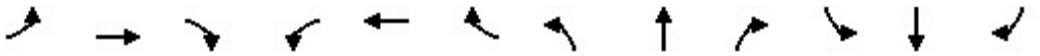
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 23 | 690 | 30 | 22 | 1195 | 41 | 72 | 18 | 35 | 61 | 6 | 55 |
| Future Volume (vph) | 23 | 690 | 30 | 22 | 1195 | 41 | 72 | 18 | 35 | 61 | 6 | 55 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 300 | | 300 | 300 | | 300 | 200 | | 200 | 150 | | 0 |
| Storage Lanes | 2 | | 1 | 1 | | 1 | 1 | | 1 | 1 | | 1 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.97 | 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) | 3433 | 3539 | 1583 | 1770 | 3539 | 1583 | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 |
| Flt Permitted | 0.950 | | | 0.299 | | | 0.752 | | | 0.742 | | |
| Satd. Flow (perm) | 3433 | 3539 | 1583 | 557 | 3539 | 1583 | 1401 | 1863 | 1583 | 1382 | 1863 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 152 | | | 152 | | | 217 | | | 217 |
| Link Speed (mph) | | 45 | | | 45 | | | 30 | | | 30 | |
| Link Distance (ft) | | 798 | | | 2575 | | | 954 | | | 614 | |
| Travel Time (s) | | 12.1 | | | 39.0 | | | 21.7 | | | 14.0 | |
| Peak Hour Factor | 0.78 | 0.92 | 0.78 | 0.78 | 0.93 | 0.78 | 0.80 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 |
| Adj. Flow (vph) | 29 | 750 | 38 | 28 | 1285 | 53 | 90 | 23 | 45 | 78 | 8 | 71 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 29 | 750 | 38 | 28 | 1285 | 53 | 90 | 23 | 45 | 78 | 8 | 71 |
| 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 | | | 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 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Detector Template | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Leading Detector (ft) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| 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) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| 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 |
| Turn Type | Prot | NA | Perm | pm+pt | NA | Perm | pm+pt | NA | Perm | pm+pt | NA | Perm |
| Protected Phases | 5 | 2 | | 1 | 6 | | 3 | 8 | | 7 | 4 | |
| Permitted Phases | | | 2 | 6 | | 6 | 8 | | 8 | 4 | | 4 |
| Detector Phase | 5 | 2 | 2 | 1 | 6 | 6 | 3 | 8 | 8 | 7 | 4 | 4 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | 5.0 | 10.0 | 10.0 | 8.0 | 8.0 | 8.0 | 8.0 | 8.0 | 8.0 |
| Minimum Split (s) | 12.0 | 20.0 | 20.0 | 12.0 | 20.0 | 20.0 | 14.0 | 14.0 | 14.0 | 14.0 | 14.0 | 14.0 |
| Total Split (s) | 15.0 | 50.0 | 50.0 | 15.0 | 50.0 | 50.0 | 20.0 | 25.0 | 25.0 | 20.0 | 25.0 | 25.0 |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Split (%) | 13.6% | 45.5% | 45.5% | 13.6% | 45.5% | 45.5% | 18.2% | 22.7% | 22.7% | 18.2% | 22.7% | 22.7% |
| Maximum Green (s) | 8.7 | 43.7 | 43.7 | 8.7 | 43.7 | 43.7 | 14.0 | 19.0 | 19.0 | 14.0 | 19.0 | 19.0 |
| Yellow Time (s) | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.0 | 4.0 | 4.0 | 4.0 | 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 | 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 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 6.3 | 6.3 | 6.3 | 6.3 | 6.3 | 6.3 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 |
| Lead/Lag | Lag | Lag | Lag | Lead | Lead | Lead | Lag | Lead | Lead | Lag | Lead | Lead |
| Lead-Lag Optimize? | Yes | 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 | 3.0 |
| Recall Mode | None | C-Min | C-Min | None | C-Min | C-Min | None | None | None | None | None | None |
| Act Effct Green (s) | 6.5 | 74.3 | 74.3 | 73.0 | 74.2 | 74.2 | 14.9 | 8.2 | 8.2 | 14.6 | 8.0 | 8.0 |
| Actuated g/C Ratio | 0.06 | 0.68 | 0.68 | 0.66 | 0.67 | 0.67 | 0.14 | 0.07 | 0.07 | 0.13 | 0.07 | 0.07 |
| v/c Ratio | 0.14 | 0.31 | 0.03 | 0.06 | 0.54 | 0.05 | 0.41 | 0.17 | 0.14 | 0.37 | 0.06 | 0.22 |
| Control Delay | 50.3 | 10.8 | 0.1 | 6.0 | 7.4 | 0.1 | 44.7 | 50.6 | 0.9 | 43.5 | 48.7 | 1.6 |
| 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 | 50.3 | 10.8 | 0.1 | 6.0 | 7.4 | 0.1 | 44.7 | 50.6 | 0.9 | 43.5 | 48.7 | 1.6 |
| LOS | D | B | A | A | A | A | D | D | A | D | D | A |
| Approach Delay | | 11.7 | | | 7.1 | | | 33.1 | | | 24.9 | |
| Approach LOS | | B | | | A | | | C | | | C | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 110 | | | |
| Actuated Cycle Length: 110 | | | |
| Offset: 36 (33%), Referenced to phase 2:EBT and 6:WBTL, Start of Green | | | |
| Natural Cycle: 75 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.54 | | | |
| Intersection Signal Delay: 11.3 | | Intersection LOS: B | |
| Intersection Capacity Utilization 61.6% | | ICU Level of Service B | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 1: Revere Street & 104th Avenue

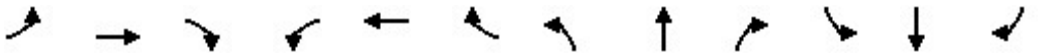




| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group Flow (vph) | 29 | 750 | 38 | 28 | 1285 | 53 | 90 | 23 | 45 | 78 | 8 | 71 |
| v/c Ratio | 0.14 | 0.31 | 0.03 | 0.06 | 0.54 | 0.05 | 0.41 | 0.17 | 0.14 | 0.37 | 0.06 | 0.22 |
| Control Delay | 50.3 | 10.8 | 0.1 | 6.0 | 7.4 | 0.1 | 44.7 | 50.6 | 0.9 | 43.5 | 48.7 | 1.6 |
| 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 | 50.3 | 10.8 | 0.1 | 6.0 | 7.4 | 0.1 | 44.7 | 50.6 | 0.9 | 43.5 | 48.7 | 1.6 |
| Queue Length 50th (ft) | 10 | 142 | 0 | 6 | 188 | 0 | 54 | 16 | 0 | 46 | 5 | 0 |
| Queue Length 95th (ft) | 21 | 191 | 0 | m9 | 165 | m0 | 88 | 36 | 0 | 76 | 18 | 0 |
| Internal Link Dist (ft) | | 718 | | | 2495 | | | 874 | | | 534 | |
| Turn Bay Length (ft) | 300 | | 300 | 300 | | 300 | 200 | | 200 | 150 | | |
| Base Capacity (vph) | 271 | 2391 | 1119 | 465 | 2387 | 1117 | 309 | 321 | 452 | 305 | 321 | 452 |
| 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 | 0.11 | 0.31 | 0.03 | 0.06 | 0.54 | 0.05 | 0.29 | 0.07 | 0.10 | 0.26 | 0.02 | 0.16 |

Intersection Summary

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



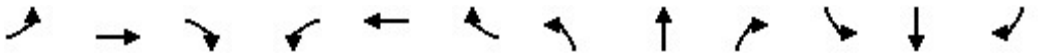
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 23 | 690 | 30 | 22 | 1195 | 41 | 72 | 18 | 35 | 61 | 6 | 55 |
| Future Volume (veh/h) | 23 | 690 | 30 | 22 | 1195 | 41 | 72 | 18 | 35 | 61 | 6 | 55 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 29 | 750 | 0 | 28 | 1285 | 0 | 90 | 23 | 45 | 78 | 8 | 71 |
| Peak Hour Factor | 0.78 | 0.92 | 0.78 | 0.78 | 0.93 | 0.78 | 0.80 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 905 | 2166 | | 244 | 1328 | | 277 | 136 | 115 | 268 | 136 | 115 |
| Arrive On Green | 0.26 | 0.61 | 0.00 | 0.05 | 0.75 | 0.00 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 |
| Sat Flow, veh/h | 3456 | 3554 | 1585 | 1781 | 3554 | 1585 | 1781 | 1870 | 1585 | 1781 | 1870 | 1585 |
| Grp Volume(v), veh/h | 29 | 750 | 0 | 28 | 1285 | 0 | 90 | 23 | 45 | 78 | 8 | 71 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1777 | 1585 | 1781 | 1777 | 1585 | 1781 | 1870 | 1585 | 1781 | 1870 | 1585 |
| Q Serve(g_s), s | 0.7 | 11.5 | 0.0 | 1.2 | 36.3 | 0.0 | 0.0 | 1.3 | 2.5 | 0.0 | 0.4 | 4.8 |
| Cycle Q Clear(g_c), s | 0.7 | 11.5 | 0.0 | 1.2 | 36.3 | 0.0 | 0.0 | 1.3 | 2.5 | 0.0 | 0.4 | 4.8 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 905 | 2166 | | 244 | 1328 | | 277 | 136 | 115 | 268 | 136 | 115 |
| V/C Ratio(X) | 0.03 | 0.35 | | 0.11 | 0.97 | | 0.32 | 0.17 | 0.39 | 0.29 | 0.06 | 0.62 |
| Avail Cap(c_a), veh/h | 905 | 2166 | | 339 | 1412 | | 383 | 323 | 274 | 374 | 323 | 274 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.00 | 0.90 | 0.90 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 30.2 | 10.6 | 0.0 | 24.9 | 13.3 | 0.0 | 44.0 | 47.9 | 35.3 | 44.3 | 47.5 | 49.5 |
| Incr Delay (d2), s/veh | 0.0 | 0.4 | 0.0 | 0.2 | 16.9 | 0.0 | 0.7 | 0.6 | 2.1 | 0.6 | 0.2 | 5.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.3 | 4.1 | 0.0 | 0.5 | 7.8 | 0.0 | 2.3 | 0.6 | 1.2 | 2.0 | 0.2 | 2.1 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 30.2 | 11.1 | 0.0 | 25.1 | 30.1 | 0.0 | 44.7 | 48.5 | 37.4 | 44.9 | 47.7 | 54.8 |
| LnGrp LOS | C | B | | C | C | | D | D | D | D | D | D |
| Approach Vol, veh/h | | 779 | A | | 1313 | A | | 158 | | | 157 | |
| Approach Delay, s/veh | | 11.8 | | | 30.0 | | | 43.2 | | | 49.5 | |
| Approach LOS | | B | | | C | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 9.2 | 73.3 | 13.5 | 14.0 | 35.1 | 47.4 | 13.5 | 14.0 |
| Change Period (Y+Rc), s | 6.3 | 6.3 | 6.0 | 6.0 | 6.3 | 6.3 | 6.0 | 6.0 |
| Max Green Setting (Gmax), s | 8.7 | 43.7 | 14.0 | 19.0 | 8.7 | 43.7 | 14.0 | 19.0 |
| Max Q Clear Time (g_c+I1), s | 3.2 | 13.5 | 2.0 | 6.8 | 2.7 | 38.3 | 2.0 | 4.5 |
| Green Ext Time (p_c), s | 0.0 | 3.2 | 0.2 | 0.2 | 0.0 | 2.8 | 0.1 | 0.1 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 26.3 |
| HCM 6th LOS | C |

**Notes**

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

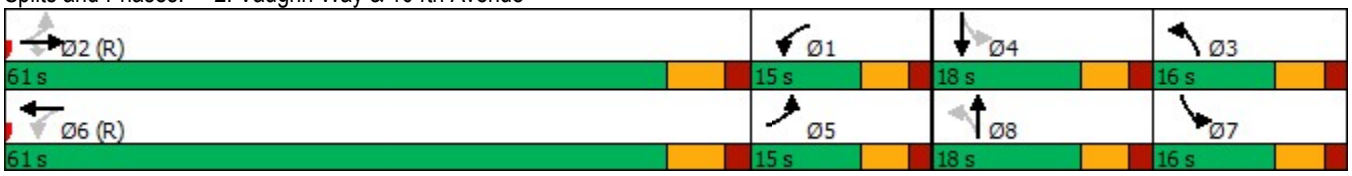


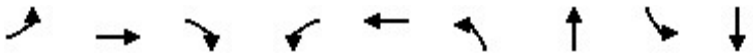
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 14 | 655 | 18 | 44 | 875 | 2 | 143 | 1 | 48 | 11 | 1 | 31 |
| Future Volume (vph) | 14 | 655 | 18 | 44 | 875 | 2 | 143 | 1 | 48 | 11 | 1 | 31 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 150 | | 150 | 150 | | 0 | 150 | | 0 | 100 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | | 0.850 | | | | | 0.852 | | | 0.854 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | 1770 | 3539 | 0 | 1770 | 1587 | 0 | 1770 | 1591 | 0 |
| Flt Permitted | 0.245 | | | 0.340 | | | 0.730 | | | 0.800 | | |
| Satd. Flow (perm) | 456 | 3539 | 1583 | 633 | 3539 | 0 | 1360 | 1587 | 0 | 1490 | 1591 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 149 | | | | | 62 | | | 40 | |
| Link Speed (mph) | | 45 | | | 45 | | | 30 | | | 30 | |
| Link Distance (ft) | | 2575 | | | 1450 | | | 2620 | | | 567 | |
| Travel Time (s) | | 39.0 | | | 22.0 | | | 59.5 | | | 12.9 | |
| Peak Hour Factor | 0.78 | 0.92 | 0.78 | 0.78 | 0.92 | 0.78 | 0.84 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 |
| Adj. Flow (vph) | 18 | 712 | 23 | 56 | 951 | 3 | 170 | 1 | 62 | 14 | 1 | 40 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 18 | 712 | 23 | 56 | 954 | 0 | 170 | 63 | 0 | 14 | 41 | 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 | 1 | 1 | 1 | 1 | | 1 | 1 | | 1 | 1 | |
| Detector Template | Left | Thru | Right | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 40 | 40 | 40 | 40 | 40 | | 40 | 40 | | 40 | 40 | |
| 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) | 40 | 40 | 40 | 40 | 40 | | 40 | 40 | | 40 | 40 | |
| 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 | |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 5 | 2 | | 1 | 6 | | 3 | 8 | | 7 | 4 | |
| Permitted Phases | 2 | | 2 | 6 | | | 8 | | | 4 | | |
| Detector Phase | 5 | 2 | 2 | 1 | 6 | | 3 | 8 | | 7 | 4 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 8.0 | 8.0 | 5.0 | 8.0 | | 6.0 | 8.0 | | 6.0 | 8.0 | |
| Minimum Split (s) | 12.0 | 20.0 | 20.0 | 12.0 | 20.0 | | 12.0 | 14.0 | | 12.0 | 14.0 | |
| Total Split (s) | 15.0 | 61.0 | 61.0 | 15.0 | 61.0 | | 16.0 | 18.0 | | 16.0 | 18.0 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Split (%) | 13.6% | 55.5% | 55.5% | 13.6% | 55.5% | | 14.5% | 16.4% | | 14.5% | 16.4% | |
| Maximum Green (s) | 9.0 | 54.2 | 54.2 | 9.0 | 54.2 | | 10.0 | 12.0 | | 10.0 | 12.0 | |
| Yellow Time (s) | 4.0 | 4.8 | 4.8 | 4.0 | 4.8 | | 4.0 | 4.0 | | 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 | |
| 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) | 6.0 | 6.8 | 6.8 | 6.0 | 6.8 | | 6.0 | 6.0 | | 6.0 | 6.0 | |
| Lead/Lag | Lag | Lead | Lead | Lag | Lead | | Lag | Lead | | Lag | Lead | |
| 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-Min | C-Min | None | C-Min | | None | None | | None | None | |
| Act Effct Green (s) | 72.5 | 66.1 | 66.1 | 80.0 | 73.4 | | 18.1 | 15.5 | | 12.2 | 8.2 | |
| Actuated g/C Ratio | 0.66 | 0.60 | 0.60 | 0.73 | 0.67 | | 0.16 | 0.14 | | 0.11 | 0.07 | |
| v/c Ratio | 0.05 | 0.34 | 0.02 | 0.10 | 0.40 | | 0.65 | 0.23 | | 0.08 | 0.27 | |
| Control Delay | 11.8 | 14.2 | 0.7 | 1.9 | 3.8 | | 53.5 | 13.6 | | 35.9 | 19.8 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 11.8 | 14.2 | 0.7 | 1.9 | 3.8 | | 53.5 | 13.6 | | 35.9 | 19.8 | |
| LOS | B | B | A | A | A | | D | B | | D | B | |
| Approach Delay | | 13.8 | | | 3.7 | | | 42.7 | | | 23.9 | |
| Approach LOS | | B | | | A | | | D | | | C | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 110 | | | |
| Actuated Cycle Length: 110 | | | |
| Offset: 106 (96%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green | | | |
| Natural Cycle: 60 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.65 | | | |
| Intersection Signal Delay: 12.4 | | Intersection LOS: B | |
| Intersection Capacity Utilization 58.7% | | ICU Level of Service B | |
| Analysis Period (min) 15 | | | |

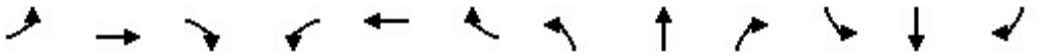
Splits and Phases: 2: Vaughn Way & 104th Avenue





| Lane Group | EBL | EBT | EBR | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|---|
| Lane Group Flow (vph) | 18 | 712 | 23 | 56 | 954 | 170 | 63 | 14 | 41 |
| v/c Ratio | 0.05 | 0.34 | 0.02 | 0.10 | 0.40 | 0.65 | 0.23 | 0.08 | 0.27 |
| Control Delay | 11.8 | 14.2 | 0.7 | 1.9 | 3.8 | 53.5 | 13.6 | 35.9 | 19.8 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 11.8 | 14.2 | 0.7 | 1.9 | 3.8 | 53.5 | 13.6 | 35.9 | 19.8 |
| Queue Length 50th (ft) | 4 | 155 | 0 | 2 | 26 | 110 | 1 | 8 | 1 |
| Queue Length 95th (ft) | 21 | 285 | 2 | 9 | 77 | 151 | 31 | 21 | 26 |
| Internal Link Dist (ft) | | 2495 | | | 1370 | | 2540 | | 487 |
| Turn Bay Length (ft) | 150 | | 150 | 150 | | 150 | | 100 | |
| Base Capacity (vph) | 422 | 2151 | 1020 | 580 | 2360 | 277 | 290 | 234 | 209 |
| 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 | 0.33 | 0.02 | 0.10 | 0.40 | 0.61 | 0.22 | 0.06 | 0.20 |

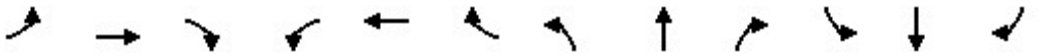
Intersection Summary



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 14 | 655 | 18 | 44 | 875 | 2 | 143 | 1 | 48 | 11 | 1 | 31 |
| Future Volume (veh/h) | 14 | 655 | 18 | 44 | 875 | 2 | 143 | 1 | 48 | 11 | 1 | 31 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 18 | 712 | 23 | 56 | 951 | 3 | 170 | 1 | 62 | 14 | 1 | 40 |
| Peak Hour Factor | 0.78 | 0.92 | 0.78 | 0.78 | 0.92 | 0.78 | 0.84 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 719 | 867 | 387 | 822 | 1039 | 3 | 225 | 2 | 114 | 202 | 3 | 110 |
| Arrive On Green | 0.12 | 0.08 | 0.08 | 0.81 | 0.57 | 0.57 | 0.05 | 0.07 | 0.07 | 0.05 | 0.07 | 0.07 |
| Sat Flow, veh/h | 1781 | 3554 | 1585 | 1781 | 3634 | 11 | 1781 | 25 | 1564 | 1781 | 39 | 1552 |
| Grp Volume(v), veh/h | 18 | 712 | 23 | 56 | 465 | 489 | 170 | 0 | 63 | 14 | 0 | 41 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1777 | 1585 | 1781 | 1777 | 1868 | 1781 | 0 | 1589 | 1781 | 0 | 1591 |
| Q Serve(g_s), s | 0.0 | 21.7 | 1.5 | 0.0 | 25.9 | 25.9 | 2.2 | 0.0 | 4.2 | 0.0 | 0.0 | 2.7 |
| Cycle Q Clear(g_c), s | 0.0 | 21.7 | 1.5 | 0.0 | 25.9 | 25.9 | 2.2 | 0.0 | 4.2 | 0.0 | 0.0 | 2.7 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.01 | 1.00 | | 0.98 | 1.00 | | 0.98 |
| Lane Grp Cap(c), veh/h | 719 | 867 | 387 | 822 | 508 | 534 | 225 | 0 | 116 | 202 | 0 | 113 |
| V/C Ratio(X) | 0.03 | 0.82 | 0.06 | 0.07 | 0.92 | 0.92 | 0.76 | 0.00 | 0.55 | 0.07 | 0.00 | 0.36 |
| Avail Cap(c_a), veh/h | 719 | 1751 | 781 | 822 | 875 | 921 | 290 | 0 | 173 | 271 | 0 | 174 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.96 | 0.96 | 0.96 | 0.92 | 0.92 | 0.92 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 30.7 | 48.2 | 38.9 | 5.4 | 22.4 | 22.4 | 48.5 | 0.0 | 49.2 | 46.6 | 0.0 | 48.7 |
| Incr Delay (d2), s/veh | 0.0 | 8.3 | 0.3 | 0.0 | 22.3 | 21.5 | 8.0 | 0.0 | 4.0 | 0.1 | 0.0 | 2.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.4 | 11.3 | 0.6 | 0.2 | 9.2 | 9.5 | 5.0 | 0.0 | 1.8 | 0.4 | 0.0 | 1.1 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 30.7 | 56.5 | 39.2 | 5.4 | 44.7 | 43.9 | 56.5 | 0.0 | 53.2 | 46.7 | 0.0 | 50.7 |
| LnGrp LOS | C | E | D | A | D | D | E | A | D | D | A | D |
| Approach Vol, veh/h | | 753 | | | 1010 | | | 233 | | | 55 | |
| Approach Delay, s/veh | | 55.4 | | | 42.1 | | | 55.6 | | | 49.7 | |
| Approach LOS | | E | | | D | | | E | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 50.6 | 33.6 | 12.0 | 13.8 | 46.0 | 38.2 | 11.8 | 14.0 |
| Change Period (Y+Rc), s | 6.0 | 6.8 | 6.0 | 6.0 | 6.0 | 6.8 | 6.0 | 6.0 |
| Max Green Setting (Gmax), s | 9.0 | 54.2 | 10.0 | 12.0 | 9.0 | 54.2 | 10.0 | 12.0 |
| Max Q Clear Time (g_c+I1), s | 2.0 | 23.7 | 4.2 | 4.7 | 2.0 | 27.9 | 2.0 | 6.2 |
| Green Ext Time (p_c), s | 0.1 | 3.1 | 0.3 | 0.0 | 0.0 | 3.6 | 0.0 | 0.1 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 48.7 |
| HCM 6th LOS | D |

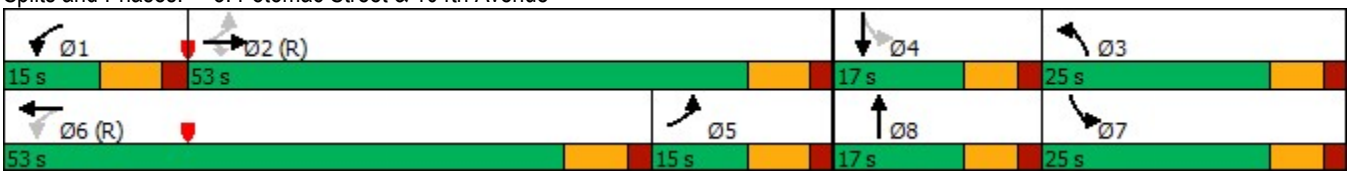


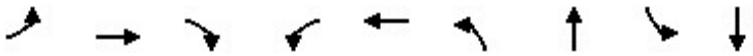
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 45 | 635 | 55 | 18 | 795 | 39 | 61 | 8 | 45 | 59 | 8 | 49 |
| Future Volume (vph) | 45 | 635 | 55 | 18 | 795 | 39 | 61 | 8 | 45 | 59 | 8 | 49 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 150 | | 150 | 150 | | 0 | 150 | | 0 | 150 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 2 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 | 0.97 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | | 0.850 | | 0.992 | | | 0.872 | | | 0.871 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | 1770 | 3511 | 0 | 3433 | 1624 | 0 | 1770 | 1622 | 0 |
| Flt Permitted | 0.308 | | | 0.315 | | | 0.950 | | | 0.713 | | |
| Satd. Flow (perm) | 574 | 3539 | 1583 | 587 | 3511 | 0 | 3433 | 1624 | 0 | 1328 | 1622 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 168 | | 7 | | | 58 | | | 63 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 1450 | | | 363 | | | 490 | | | 446 | |
| Travel Time (s) | | 33.0 | | | 8.3 | | | 11.1 | | | 10.1 | |
| Peak Hour Factor | 0.78 | 0.92 | 0.78 | 0.78 | 0.92 | 0.78 | 0.79 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 |
| Adj. Flow (vph) | 58 | 690 | 71 | 23 | 864 | 50 | 77 | 10 | 58 | 76 | 10 | 63 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 58 | 690 | 71 | 23 | 914 | 0 | 77 | 68 | 0 | 76 | 73 | 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 | | | 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) | 60 | | 60 | 60 | | 60 | 60 | | 60 | 60 | | 60 |
| Number of Detectors | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | | 1 | 1 | |
| Detector Template | Left | Thru | Right | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 40 | 40 | 40 | 40 | 40 | | 40 | 40 | | 40 | 40 | |
| 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) | 40 | 40 | 40 | 40 | 40 | | 40 | 40 | | 40 | 40 | |
| 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 | |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | | Prot | NA | | pm+pt | NA | |
| Protected Phases | 5 | 2 | | 1 | 6 | | 3 | 8 | | 7 | 4 | |
| Permitted Phases | 2 | | 2 | 6 | | | | | | 4 | | |
| Detector Phase | 5 | 2 | 2 | 1 | 6 | | 3 | 8 | | 7 | 4 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 8.0 | 9.0 | | 8.0 | 9.0 | |
| Minimum Split (s) | 13.0 | 20.0 | 20.0 | 13.0 | 20.0 | | 15.0 | 17.0 | | 15.0 | 17.0 | |
| Total Split (s) | 15.0 | 53.0 | 53.0 | 15.0 | 53.0 | | 25.0 | 17.0 | | 25.0 | 17.0 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Split (%) | 13.6% | 48.2% | 48.2% | 13.6% | 48.2% | | 22.7% | 15.5% | | 22.7% | 15.5% | |
| Maximum Green (s) | 7.9 | 45.9 | 45.9 | 7.9 | 45.9 | | 18.6 | 10.6 | | 18.6 | 10.6 | |
| Yellow Time (s) | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | | 4.4 | 4.4 | | 4.4 | 4.4 | |
| 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) | 7.1 | 7.1 | 7.1 | 7.1 | 7.1 | | 6.4 | 6.4 | | 6.4 | 6.4 | |
| Lead/Lag | Lag | Lag | Lag | Lead | Lead | | Lag | Lead | | Lag | Lead | |
| 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-Min | C-Min | None | C-Min | | None | None | | None | None | |
| Act Effct Green (s) | 74.1 | 74.1 | 74.1 | 68.2 | 69.6 | | 8.5 | 9.2 | | 16.1 | 9.3 | |
| Actuated g/C Ratio | 0.67 | 0.67 | 0.67 | 0.62 | 0.63 | | 0.08 | 0.08 | | 0.15 | 0.08 | |
| v/c Ratio | 0.13 | 0.29 | 0.06 | 0.05 | 0.41 | | 0.29 | 0.36 | | 0.33 | 0.38 | |
| Control Delay | 9.1 | 6.9 | 0.4 | 12.4 | 14.2 | | 50.7 | 21.2 | | 40.2 | 20.9 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 9.1 | 6.9 | 0.4 | 12.4 | 14.2 | | 50.7 | 21.2 | | 40.2 | 20.9 | |
| LOS | A | A | A | B | B | | D | C | | D | C | |
| Approach Delay | | 6.5 | | | 14.2 | | | 36.9 | | | 30.7 | |
| Approach LOS | | A | | | B | | | D | | | C | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 110 | | | |
| Actuated Cycle Length: 110 | | | |
| Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green, Master Intersection | | | |
| Natural Cycle: 70 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.41 | | | |
| Intersection Signal Delay: 13.9 | | Intersection LOS: B | |
| Intersection Capacity Utilization 54.5% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

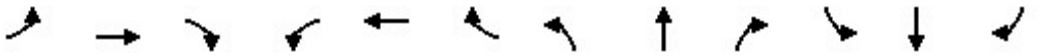
Splits and Phases: 3: Potomac Street & 104th Avenue





| Lane Group | EBL | EBT | EBR | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|---|
| Lane Group Flow (vph) | 58 | 690 | 71 | 23 | 914 | 77 | 68 | 76 | 73 |
| v/c Ratio | 0.13 | 0.29 | 0.06 | 0.05 | 0.41 | 0.29 | 0.36 | 0.33 | 0.38 |
| Control Delay | 9.1 | 6.9 | 0.4 | 12.4 | 14.2 | 50.7 | 21.2 | 40.2 | 20.9 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 9.1 | 6.9 | 0.4 | 12.4 | 14.2 | 50.7 | 21.2 | 40.2 | 20.9 |
| Queue Length 50th (ft) | 8 | 52 | 0 | 7 | 194 | 27 | 7 | 44 | 7 |
| Queue Length 95th (ft) | 21 | 92 | 0 | 18 | 265 | 44 | 38 | 71 | 38 |
| Internal Link Dist (ft) | | 1370 | | | 283 | | 410 | | 366 |
| Turn Bay Length (ft) | 150 | | 150 | 150 | | 150 | | 150 | |
| Base Capacity (vph) | 474 | 2383 | 1121 | 448 | 2224 | 580 | 208 | 389 | 213 |
| 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 | 0.12 | 0.29 | 0.06 | 0.05 | 0.41 | 0.13 | 0.33 | 0.20 | 0.34 |

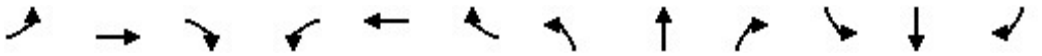
Intersection Summary



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 45 | 635 | 55 | 18 | 795 | 39 | 61 | 8 | 45 | 59 | 8 | 49 |
| Future Volume (veh/h) | 45 | 635 | 55 | 18 | 795 | 39 | 61 | 8 | 45 | 59 | 8 | 49 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 58 | 690 | 71 | 23 | 864 | 50 | 77 | 10 | 58 | 76 | 10 | 63 |
| Peak Hour Factor | 0.78 | 0.92 | 0.78 | 0.78 | 0.92 | 0.78 | 0.79 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 649 | 2076 | 926 | 259 | 990 | 57 | 227 | 19 | 113 | 238 | 18 | 114 |
| Arrive On Green | 0.63 | 1.00 | 1.00 | 0.02 | 0.29 | 0.29 | 0.07 | 0.08 | 0.08 | 0.07 | 0.08 | 0.08 |
| Sat Flow, veh/h | 1781 | 3554 | 1585 | 1781 | 3414 | 198 | 3456 | 238 | 1383 | 1781 | 222 | 1397 |
| Grp Volume(v), veh/h | 58 | 690 | 71 | 23 | 450 | 464 | 77 | 0 | 68 | 76 | 0 | 73 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1777 | 1585 | 1781 | 1777 | 1835 | 1728 | 0 | 1621 | 1781 | 0 | 1619 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 1.1 | 26.5 | 26.5 | 2.3 | 0.0 | 4.4 | 0.0 | 0.0 | 4.8 |
| Cycle Q Clear(g_c), s | 0.0 | 0.0 | 0.0 | 1.1 | 26.5 | 26.5 | 2.3 | 0.0 | 4.4 | 0.0 | 0.0 | 4.8 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.11 | 1.00 | | 0.85 | 1.00 | | 0.86 |
| Lane Grp Cap(c), veh/h | 649 | 2076 | 926 | 259 | 515 | 532 | 227 | 0 | 132 | 238 | 0 | 132 |
| V/C Ratio(X) | 0.09 | 0.33 | 0.08 | 0.09 | 0.87 | 0.87 | 0.34 | 0.00 | 0.51 | 0.32 | 0.00 | 0.55 |
| Avail Cap(c_a), veh/h | 649 | 2076 | 926 | 346 | 741 | 766 | 584 | 0 | 156 | 422 | 0 | 156 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 13.2 | 0.0 | 0.0 | 31.9 | 37.1 | 37.1 | 49.1 | 0.0 | 48.4 | 46.3 | 0.0 | 48.6 |
| Incr Delay (d2), s/veh | 0.1 | 0.4 | 0.2 | 0.1 | 18.1 | 17.7 | 0.9 | 0.0 | 3.1 | 0.8 | 0.0 | 3.6 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.6 | 0.1 | 0.0 | 0.5 | 13.9 | 14.3 | 1.0 | 0.0 | 1.9 | 2.0 | 0.0 | 2.1 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 13.2 | 0.4 | 0.2 | 32.0 | 55.2 | 54.8 | 50.0 | 0.0 | 51.5 | 47.1 | 0.0 | 52.1 |
| LnGrp LOS | B | A | A | C | E | D | D | A | D | D | A | D |
| Approach Vol, veh/h | | 819 | | | 937 | | | 145 | | | 149 | |
| Approach Delay, s/veh | | 1.3 | | | 54.4 | | | 50.7 | | | 49.6 | |
| Approach LOS | | A | | | D | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 9.6 | 71.3 | 13.6 | 15.4 | 42.0 | 39.0 | 13.6 | 15.4 |
| Change Period (Y+Rc), s | 7.1 | 7.1 | 6.4 | 6.4 | 7.1 | 7.1 | 6.4 | 6.4 |
| Max Green Setting (Gmax), s | 7.9 | 45.9 | 18.6 | 10.6 | 7.9 | 45.9 | 18.6 | 10.6 |
| Max Q Clear Time (g_c+I1), s | 3.1 | 2.0 | 4.3 | 6.8 | 2.0 | 28.5 | 2.0 | 6.4 |
| Green Ext Time (p_c), s | 0.0 | 3.6 | 0.2 | 0.1 | 0.1 | 3.5 | 0.2 | 0.1 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 32.6 |
| HCM 6th LOS | C |



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 11 | 392 | 1 | 1 | 740 | 7 | 1 | 1 | 1 | 17 | 1 | 35 |
| Future Volume (vph) | 11 | 392 | 1 | 1 | 740 | 7 | 1 | 1 | 1 | 17 | 1 | 35 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 150 | | 150 | 150 | | 0 | 0 | | 0 | 0 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 0 | | 0 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| 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 | | 0.998 | | | 0.955 | | | 0.911 | |
| Flt Protected | 0.950 | | | 0.950 | | | | 0.984 | | | 0.984 | |
| Satd. Flow (prot) | 1770 | 1863 | 1583 | 1770 | 1859 | 0 | 0 | 1750 | 0 | 0 | 1670 | 0 |
| Flt Permitted | 0.950 | | | 0.950 | | | | 0.984 | | | 0.984 | |
| Satd. Flow (perm) | 1770 | 1863 | 1583 | 1770 | 1859 | 0 | 0 | 1750 | 0 | 0 | 1670 | 0 |
| Link Speed (mph) | | 45 | | | 45 | | | 40 | | | 40 | |
| Link Distance (ft) | | 563 | | | 5275 | | | 411 | | | 2833 | |
| Travel Time (s) | | 8.5 | | | 79.9 | | | 7.0 | | | 48.3 | |
| Peak Hour Factor | 0.78 | 0.90 | 0.78 | 0.78 | 0.92 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 |
| Adj. Flow (vph) | 14 | 436 | 1 | 1 | 804 | 9 | 1 | 1 | 1 | 22 | 1 | 45 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 14 | 436 | 1 | 1 | 813 | 0 | 0 | 3 | 0 | 0 | 68 | 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 | | | 0 | | | 0 | |
| 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 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization 50.1% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

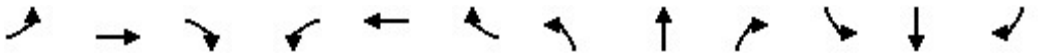
| Intersection | |
|---|---|
| Int Delay, s/veh | 1.5 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 11 | 392 | 1 | 1 | 740 | 7 | 1 | 1 | 1 | 17 | 1 | 35 |
| Future Vol, veh/h | 11 | 392 | 1 | 1 | 740 | 7 | 1 | 1 | 1 | 17 | 1 | 35 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 150 | - | 150 | 150 | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 78 | 90 | 78 | 78 | 92 | 78 | 78 | 78 | 78 | 78 | 78 | 78 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 14 | 436 | 1 | 1 | 804 | 9 | 1 | 1 | 1 | 22 | 1 | 45 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 813 | 0 | 0 | 437 | 0 | 0 | 1298 | 1279 | 436 | 1277 | 1276 | 809 |
| Stage 1 | - | - | - | - | - | - | 464 | 464 | - | 811 | 811 | - |
| Stage 2 | - | - | - | - | - | - | 834 | 815 | - | 466 | 465 | - |
| Critical Hdwy | 4.12 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 |
| 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 | 2.218 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 814 | - | - | 1123 | - | - | 139 | 166 | 620 | 143 | 167 | 380 |
| Stage 1 | - | - | - | - | - | - | 578 | 564 | - | 373 | 393 | - |
| Stage 2 | - | - | - | - | - | - | 362 | 391 | - | 577 | 563 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 814 | - | - | 1123 | - | - | 120 | 163 | 620 | 140 | 164 | 380 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 120 | 163 | - | 140 | 164 | - |
| Stage 1 | - | - | - | - | - | - | 568 | 554 | - | 367 | 393 | - |
| Stage 2 | - | - | - | - | - | - | 318 | 391 | - | 565 | 553 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.3 | 0 | 24.7 | 25.7 |
| HCM LOS | | | C | D |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 187 | 814 | - | - | 1123 | - | - | 241 |
| HCM Lane V/C Ratio | 0.021 | 0.017 | - | - | 0.001 | - | - | 0.282 |
| HCM Control Delay (s) | 24.7 | 9.5 | - | - | 8.2 | - | - | 25.7 |
| HCM Lane LOS | C | A | - | - | A | - | - | D |
| HCM 95th %tile Q(veh) | 0.1 | 0.1 | - | - | 0 | - | - | 1.1 |

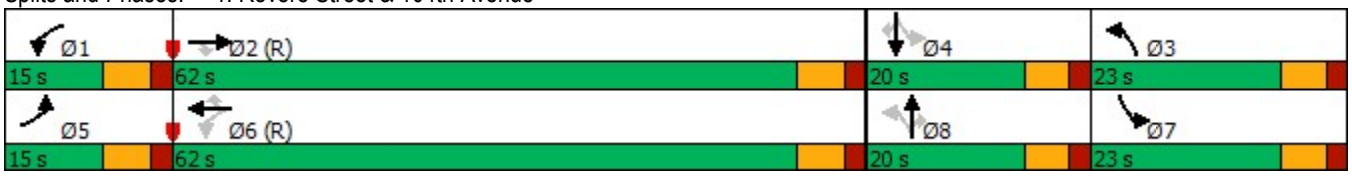


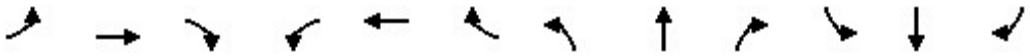
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 66 | 1450 | 82 | 61 | 1000 | 48 | 57 | 12 | 35 | 79 | 20 | 35 |
| Future Volume (vph) | 66 | 1450 | 82 | 61 | 1000 | 48 | 57 | 12 | 35 | 79 | 20 | 35 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 300 | | 300 | 300 | | 300 | 200 | | 200 | 150 | | 0 |
| Storage Lanes | 2 | | 1 | 1 | | 1 | 1 | | 1 | 1 | | 1 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.97 | 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) | 3433 | 3539 | 1583 | 1770 | 3539 | 1583 | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 |
| Flt Permitted | 0.950 | | | 0.094 | | | 0.740 | | | 0.748 | | |
| Satd. Flow (perm) | 3433 | 3539 | 1583 | 175 | 3539 | 1583 | 1378 | 1863 | 1583 | 1393 | 1863 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 139 | | | 139 | | | 142 | | | 142 |
| Link Speed (mph) | | 45 | | | 45 | | | 30 | | | 30 | |
| Link Distance (ft) | | 798 | | | 2575 | | | 954 | | | 614 | |
| Travel Time (s) | | 12.1 | | | 39.0 | | | 21.7 | | | 14.0 | |
| Peak Hour Factor | 0.78 | 0.93 | 0.81 | 0.79 | 0.93 | 0.78 | 0.78 | 0.78 | 0.78 | 0.80 | 0.78 | 0.78 |
| Adj. Flow (vph) | 85 | 1559 | 101 | 77 | 1075 | 62 | 73 | 15 | 45 | 99 | 26 | 45 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 85 | 1559 | 101 | 77 | 1075 | 62 | 73 | 15 | 45 | 99 | 26 | 45 |
| 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 | | | 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 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Detector Template | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Leading Detector (ft) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| 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) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| 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 |
| Turn Type | Prot | NA | Perm | pm+pt | NA | Perm | pm+pt | NA | Perm | pm+pt | NA | Perm |
| Protected Phases | 5 | 2 | | 1 | 6 | | 3 | 8 | | 7 | 4 | |
| Permitted Phases | | | 2 | 6 | | 6 | 8 | | 8 | 4 | | 4 |
| Detector Phase | 5 | 2 | 2 | 1 | 6 | 6 | 3 | 8 | 8 | 7 | 4 | 4 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | 5.0 | 10.0 | 10.0 | 8.0 | 8.0 | 8.0 | 8.0 | 8.0 | 8.0 |
| Minimum Split (s) | 12.0 | 20.0 | 20.0 | 12.0 | 20.0 | 20.0 | 14.0 | 14.0 | 14.0 | 14.0 | 14.0 | 14.0 |
| Total Split (s) | 15.0 | 62.0 | 62.0 | 15.0 | 62.0 | 62.0 | 23.0 | 20.0 | 20.0 | 23.0 | 20.0 | 20.0 |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Split (%) | 12.5% | 51.7% | 51.7% | 12.5% | 51.7% | 51.7% | 19.2% | 16.7% | 16.7% | 19.2% | 16.7% | 16.7% |
| Maximum Green (s) | 8.7 | 55.7 | 55.7 | 8.7 | 55.7 | 55.7 | 17.0 | 14.0 | 14.0 | 17.0 | 14.0 | 14.0 |
| Yellow Time (s) | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.0 | 4.0 | 4.0 | 4.0 | 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 | 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 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 6.3 | 6.3 | 6.3 | 6.3 | 6.3 | 6.3 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 |
| Lead/Lag | Lead | Lag | Lag | Lead | Lag | Lag | Lag | Lead | Lead | Lag | Lead | Lead |
| Lead-Lag Optimize? | Yes | 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 | 3.0 |
| Recall Mode | None | C-Min | C-Min | None | C-Min | C-Min | None | None | None | None | None | None |
| Act Effct Green (s) | 8.3 | 76.8 | 76.8 | 82.4 | 76.1 | 76.1 | 14.4 | 8.0 | 8.0 | 14.9 | 8.3 | 8.3 |
| Actuated g/C Ratio | 0.07 | 0.64 | 0.64 | 0.69 | 0.63 | 0.63 | 0.12 | 0.07 | 0.07 | 0.12 | 0.07 | 0.07 |
| v/c Ratio | 0.36 | 0.69 | 0.10 | 0.35 | 0.48 | 0.06 | 0.38 | 0.12 | 0.19 | 0.50 | 0.20 | 0.19 |
| Control Delay | 57.0 | 18.0 | 0.9 | 15.6 | 9.0 | 0.5 | 49.4 | 55.0 | 1.7 | 53.6 | 56.5 | 1.7 |
| 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 | 57.0 | 18.0 | 0.9 | 15.6 | 9.0 | 0.5 | 49.4 | 55.0 | 1.7 | 53.6 | 56.5 | 1.7 |
| LOS | E | B | A | B | A | A | D | D | A | D | E | A |
| Approach Delay | | 18.9 | | | 9.0 | | | 33.9 | | | 40.3 | |
| Approach LOS | | B | | | A | | | C | | | D | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 50 (42%), Referenced to phase 2:EBT and 6:WBTL, Start of Green | | | |
| Natural Cycle: 80 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.69 | | | |
| Intersection Signal Delay: 17.0 | | Intersection LOS: B | |
| Intersection Capacity Utilization 70.8% | | ICU Level of Service C | |
| Analysis Period (min) 15 | | | |

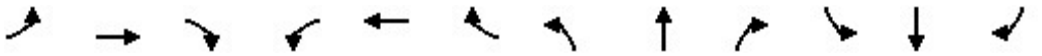
Splits and Phases: 1: Revere Street & 104th Avenue





| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group Flow (vph) | 85 | 1559 | 101 | 77 | 1075 | 62 | 73 | 15 | 45 | 99 | 26 | 45 |
| v/c Ratio | 0.36 | 0.69 | 0.10 | 0.35 | 0.48 | 0.06 | 0.38 | 0.12 | 0.19 | 0.50 | 0.20 | 0.19 |
| Control Delay | 57.0 | 18.0 | 0.9 | 15.6 | 9.0 | 0.5 | 49.4 | 55.0 | 1.7 | 53.6 | 56.5 | 1.7 |
| 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 | 57.0 | 18.0 | 0.9 | 15.6 | 9.0 | 0.5 | 49.4 | 55.0 | 1.7 | 53.6 | 56.5 | 1.7 |
| Queue Length 50th (ft) | 32 | 423 | 0 | 12 | 297 | 0 | 49 | 11 | 0 | 67 | 19 | 0 |
| Queue Length 95th (ft) | 50 | 570 | 6 | 24 | 277 | 5 | 79 | 29 | 0 | 104 | 42 | 0 |
| Internal Link Dist (ft) | | 718 | | | 2495 | | | 874 | | | 534 | |
| Turn Bay Length (ft) | 300 | | 300 | 300 | | 300 | 200 | | 200 | 150 | | |
| Base Capacity (vph) | 263 | 2264 | 1063 | 241 | 2243 | 1054 | 324 | 217 | 310 | 328 | 217 | 310 |
| 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 | 0.32 | 0.69 | 0.10 | 0.32 | 0.48 | 0.06 | 0.23 | 0.07 | 0.15 | 0.30 | 0.12 | 0.15 |

Intersection Summary



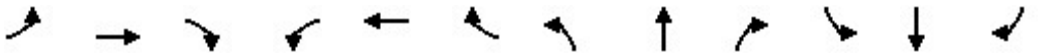
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 66 | 1450 | 82 | 61 | 1000 | 48 | 57 | 12 | 35 | 79 | 20 | 35 |
| Future Volume (veh/h) | 66 | 1450 | 82 | 61 | 1000 | 48 | 57 | 12 | 35 | 79 | 20 | 35 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 85 | 1559 | 0 | 77 | 1075 | 0 | 73 | 15 | 45 | 99 | 26 | 45 |
| Peak Hour Factor | 0.78 | 0.93 | 0.81 | 0.79 | 0.93 | 0.78 | 0.78 | 0.78 | 0.78 | 0.80 | 0.78 | 0.78 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 136 | 2224 | | 239 | 2221 | | 245 | 125 | 106 | 254 | 125 | 106 |
| Arrive On Green | 0.04 | 0.63 | 0.00 | 0.01 | 0.21 | 0.00 | 0.06 | 0.07 | 0.07 | 0.06 | 0.07 | 0.07 |
| Sat Flow, veh/h | 3456 | 3554 | 1585 | 1781 | 3554 | 1585 | 1781 | 1870 | 1585 | 1781 | 1870 | 1585 |
| Grp Volume(v), veh/h | 85 | 1559 | 0 | 77 | 1075 | 0 | 73 | 15 | 45 | 99 | 26 | 45 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1777 | 1585 | 1781 | 1777 | 1585 | 1781 | 1870 | 1585 | 1781 | 1870 | 1585 |
| Q Serve(g_s), s | 2.9 | 35.1 | 0.0 | 1.8 | 32.0 | 0.0 | 0.0 | 0.9 | 2.8 | 0.0 | 1.6 | 2.8 |
| Cycle Q Clear(g_c), s | 2.9 | 35.1 | 0.0 | 1.8 | 32.0 | 0.0 | 0.0 | 0.9 | 2.8 | 0.0 | 1.6 | 2.8 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 136 | 2224 | | 239 | 2221 | | 245 | 125 | 106 | 254 | 125 | 106 |
| V/C Ratio(X) | 0.63 | 0.70 | | 0.32 | 0.48 | | 0.30 | 0.12 | 0.43 | 0.39 | 0.21 | 0.43 |
| Avail Cap(c_a), veh/h | 251 | 2224 | | 299 | 2221 | | 383 | 218 | 185 | 392 | 218 | 185 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.00 | 0.85 | 0.85 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 56.8 | 15.0 | 0.0 | 14.2 | 30.6 | 0.0 | 49.4 | 52.7 | 38.8 | 49.7 | 53.0 | 38.7 |
| Incr Delay (d2), s/veh | 4.7 | 1.9 | 0.0 | 0.7 | 0.6 | 0.0 | 0.7 | 0.4 | 2.7 | 1.0 | 0.8 | 2.7 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.3 | 13.0 | 0.0 | 0.7 | 15.3 | 0.0 | 2.1 | 0.4 | 1.4 | 2.9 | 0.8 | 1.4 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 61.5 | 16.8 | 0.0 | 14.8 | 31.2 | 0.0 | 50.1 | 53.1 | 41.5 | 50.7 | 53.8 | 41.4 |
| LnGrp LOS | E | B | | B | C | | D | D | D | D | D | D |
| Approach Vol, veh/h | | 1644 | A | | 1152 | A | | 133 | | | 170 | |
| Approach Delay, s/veh | | 19.2 | | | 30.1 | | | 47.5 | | | 48.7 | |
| Approach LOS | | B | | | C | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 10.9 | 81.4 | 13.7 | 14.0 | 11.0 | 81.3 | 13.7 | 14.0 |
| Change Period (Y+Rc), s | 6.3 | 6.3 | 6.0 | 6.0 | 6.3 | 6.3 | 6.0 | 6.0 |
| Max Green Setting (Gmax), s | 8.7 | 55.7 | 17.0 | 14.0 | 8.7 | 55.7 | 17.0 | 14.0 |
| Max Q Clear Time (g_c+I1), s | 3.8 | 37.1 | 2.0 | 4.8 | 4.9 | 34.0 | 2.0 | 4.8 |
| Green Ext Time (p_c), s | 0.1 | 7.5 | 0.1 | 0.1 | 0.1 | 4.8 | 0.2 | 0.1 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 26.1 |
| HCM 6th LOS | C |

**Notes**

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

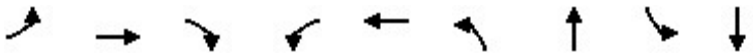


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 71 | 1425 | 68 | 155 | 1070 | 15 | 82 | 1 | 24 | 13 | 1 | 15 |
| Future Volume (vph) | 71 | 1425 | 68 | 155 | 1070 | 15 | 82 | 1 | 24 | 13 | 1 | 15 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 150 | | 150 | 150 | | 0 | 150 | | 0 | 100 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | | 0.850 | | 0.998 | | | 0.855 | | | 0.857 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | 1770 | 3532 | 0 | 1770 | 1593 | 0 | 1770 | 1596 | 0 |
| Flt Permitted | 0.155 | | | 0.120 | | | 0.744 | | | | | |
| Satd. Flow (perm) | 289 | 3539 | 1583 | 224 | 3532 | 0 | 1386 | 1593 | 0 | 1863 | 1596 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 144 | | 2 | | | 31 | | | 19 | |
| Link Speed (mph) | | 45 | | | 45 | | | 30 | | | 30 | |
| Link Distance (ft) | | 2575 | | | 1450 | | | 2620 | | | 567 | |
| Travel Time (s) | | 39.0 | | | 22.0 | | | 59.5 | | | 12.9 | |
| Peak Hour Factor | 0.80 | 0.93 | 0.79 | 0.85 | 0.93 | 0.78 | 0.81 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 |
| Adj. Flow (vph) | 89 | 1532 | 86 | 182 | 1151 | 19 | 101 | 1 | 31 | 17 | 1 | 19 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 89 | 1532 | 86 | 182 | 1170 | 0 | 101 | 32 | 0 | 17 | 20 | 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 | 1 | 1 | 1 | 1 | | 1 | 1 | | 1 | 1 | |
| Detector Template | Left | Thru | Right | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 40 | 40 | 40 | 40 | 40 | | 40 | 40 | | 40 | 40 | |
| 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) | 40 | 40 | 40 | 40 | 40 | | 40 | 40 | | 40 | 40 | |
| 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 | |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 5 | 2 | | 1 | 6 | | 3 | 8 | | 7 | 4 | |
| Permitted Phases | 2 | | 2 | 6 | | | 8 | | | 4 | | |
| Detector Phase | 5 | 2 | 2 | 1 | 6 | | 3 | 8 | | 7 | 4 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 8.0 | 8.0 | 5.0 | 8.0 | | 6.0 | 8.0 | | 6.0 | 8.0 | |
| Minimum Split (s) | 12.0 | 20.0 | 20.0 | 12.0 | 20.0 | | 12.0 | 14.0 | | 12.0 | 14.0 | |
| Total Split (s) | 15.0 | 69.0 | 69.0 | 15.0 | 69.0 | | 16.0 | 20.0 | | 16.0 | 20.0 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Split (%) | 12.5% | 57.5% | 57.5% | 12.5% | 57.5% | | 13.3% | 16.7% | | 13.3% | 16.7% | |
| Maximum Green (s) | 9.0 | 62.2 | 62.2 | 9.0 | 62.2 | | 10.0 | 14.0 | | 10.0 | 14.0 | |
| Yellow Time (s) | 4.0 | 4.8 | 4.8 | 4.0 | 4.8 | | 4.0 | 4.0 | | 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 | |
| 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) | 6.0 | 6.8 | 6.8 | 6.0 | 6.8 | | 6.0 | 6.0 | | 6.0 | 6.0 | |
| Lead/Lag | Lead | Lead | Lead | Lag | Lag | | Lag | Lead | | Lag | Lead | |
| 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-Min | C-Min | None | C-Min | | None | None | | None | None | |
| Act Effct Green (s) | 76.1 | 75.3 | 75.3 | 78.9 | 78.1 | | 12.8 | 9.1 | | 10.5 | 8.0 | |
| Actuated g/C Ratio | 0.63 | 0.63 | 0.63 | 0.66 | 0.65 | | 0.11 | 0.08 | | 0.09 | 0.07 | |
| v/c Ratio | 0.32 | 0.69 | 0.08 | 0.64 | 0.51 | | 0.57 | 0.21 | | 0.11 | 0.16 | |
| Control Delay | 5.6 | 10.6 | 0.5 | 26.1 | 4.7 | | 60.7 | 21.9 | | 44.4 | 25.2 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 5.6 | 10.6 | 0.5 | 26.1 | 4.7 | | 60.7 | 21.9 | | 44.4 | 25.2 | |
| LOS | A | B | A | C | A | | E | C | | D | C | |
| Approach Delay | | 9.8 | | | 7.6 | | | 51.4 | | | 34.0 | |
| Approach LOS | | A | | | A | | | D | | | C | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 111 (93%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green | | | |
| Natural Cycle: 80 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.69 | | | |
| Intersection Signal Delay: 10.9 | | Intersection LOS: B | |
| Intersection Capacity Utilization 74.9% | | ICU Level of Service D | |
| Analysis Period (min) 15 | | | |

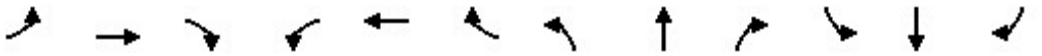
Splits and Phases: 2: Vaughn Way & 104th Avenue



| Lane Group | EBL | EBT | EBR | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|---|
| Lane Group Flow (vph) | 89 | 1532 | 86 | 182 | 1170 | 101 | 32 | 17 | 20 |
| v/c Ratio | 0.32 | 0.69 | 0.08 | 0.64 | 0.51 | 0.57 | 0.21 | 0.11 | 0.16 |
| Control Delay | 5.6 | 10.6 | 0.5 | 26.1 | 4.7 | 60.7 | 21.9 | 44.4 | 25.2 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 5.6 | 10.6 | 0.5 | 26.1 | 4.7 | 60.7 | 21.9 | 44.4 | 25.2 |
| Queue Length 50th (ft) | 5 | 47 | 0 | 40 | 66 | 76 | 1 | 13 | 1 |
| Queue Length 95th (ft) | m18 | 675 | m5 | #135 | 79 | 106 | 25 | 27 | 21 |
| Internal Link Dist (ft) | | 2495 | | | 1370 | | 2540 | | 487 |
| Turn Bay Length (ft) | 150 | | 150 | 150 | | 150 | | 100 | |
| Base Capacity (vph) | 298 | 2221 | 1047 | 291 | 2299 | 191 | 213 | 197 | 202 |
| 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 | 0.30 | 0.69 | 0.08 | 0.63 | 0.51 | 0.53 | 0.15 | 0.09 | 0.10 |

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.



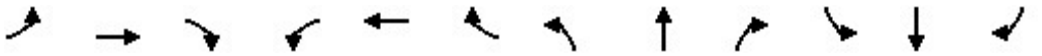
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 71 | 1425 | 68 | 155 | 1070 | 15 | 82 | 1 | 24 | 13 | 1 | 15 |
| Future Volume (veh/h) | 71 | 1425 | 68 | 155 | 1070 | 15 | 82 | 1 | 24 | 13 | 1 | 15 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 89 | 1532 | 86 | 182 | 1151 | 19 | 101 | 1 | 31 | 17 | 1 | 19 |
| Peak Hour Factor | 0.80 | 0.93 | 0.79 | 0.85 | 0.93 | 0.78 | 0.81 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 304 | 1561 | 696 | 501 | 2284 | 38 | 213 | 3 | 102 | 191 | 5 | 91 |
| Arrive On Green | 0.09 | 0.88 | 0.88 | 0.48 | 1.00 | 1.00 | 0.05 | 0.07 | 0.07 | 0.04 | 0.06 | 0.06 |
| Sat Flow, veh/h | 1781 | 3554 | 1585 | 1781 | 3578 | 59 | 1781 | 50 | 1543 | 1781 | 80 | 1517 |
| Grp Volume(v), veh/h | 89 | 1532 | 86 | 182 | 572 | 598 | 101 | 0 | 32 | 17 | 0 | 20 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1777 | 1585 | 1781 | 1777 | 1860 | 1781 | 0 | 1593 | 1781 | 0 | 1597 |
| Q Serve(g_s), s | 3.8 | 45.6 | 0.9 | 1.6 | 0.0 | 0.0 | 0.0 | 0.0 | 2.3 | 0.0 | 0.0 | 1.4 |
| Cycle Q Clear(g_c), s | 3.8 | 45.6 | 0.9 | 1.6 | 0.0 | 0.0 | 0.0 | 0.0 | 2.3 | 0.0 | 0.0 | 1.4 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.03 | 1.00 | | 0.97 | 1.00 | | 0.95 |
| Lane Grp Cap(c), veh/h | 304 | 1561 | 696 | 501 | 1134 | 1187 | 213 | 0 | 106 | 191 | 0 | 96 |
| V/C Ratio(X) | 0.29 | 0.98 | 0.12 | 0.36 | 0.50 | 0.50 | 0.47 | 0.00 | 0.30 | 0.09 | 0.00 | 0.21 |
| Avail Cap(c_a), veh/h | 355 | 1842 | 822 | 501 | 1134 | 1187 | 275 | 0 | 186 | 265 | 0 | 186 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.70 | 0.70 | 0.70 | 0.74 | 0.74 | 0.74 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 21.2 | 6.8 | 4.1 | 23.7 | 0.0 | 0.0 | 52.4 | 0.0 | 53.4 | 51.1 | 0.0 | 53.7 |
| Incr Delay (d2), s/veh | 0.4 | 15.1 | 0.3 | 0.3 | 1.2 | 1.1 | 1.6 | 0.0 | 1.6 | 0.2 | 0.0 | 1.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.5 | 6.0 | 0.3 | 2.8 | 0.4 | 0.4 | 3.0 | 0.0 | 1.0 | 0.5 | 0.0 | 0.6 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 21.6 | 22.0 | 4.4 | 24.0 | 1.2 | 1.1 | 54.1 | 0.0 | 55.0 | 51.3 | 0.0 | 54.8 |
| LnGrp LOS | C | C | A | C | A | A | D | A | D | D | A | D |
| Approach Vol, veh/h | | 1707 | | | 1352 | | | 133 | | | 37 | |
| Approach Delay, s/veh | | 21.1 | | | 4.2 | | | 54.3 | | | 53.2 | |
| Approach LOS | | C | | | A | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 34.6 | 60.4 | 11.8 | 13.2 | 11.6 | 83.5 | 11.0 | 14.0 |
| Change Period (Y+Rc), s | 6.8 | * 6.8 | 6.0 | 6.0 | 6.0 | 6.8 | 6.0 | 6.0 |
| Max Green Setting (Gmax), s | 9.0 | * 62 | 10.0 | 14.0 | 9.0 | 62.2 | 10.0 | 14.0 |
| Max Q Clear Time (g_c+I1), s | 3.6 | 47.6 | 2.0 | 3.4 | 5.8 | 2.0 | 2.0 | 4.3 |
| Green Ext Time (p_c), s | 0.2 | 6.9 | 0.2 | 0.0 | 0.1 | 5.0 | 0.0 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 15.8 |
| HCM 6th LOS | B |

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

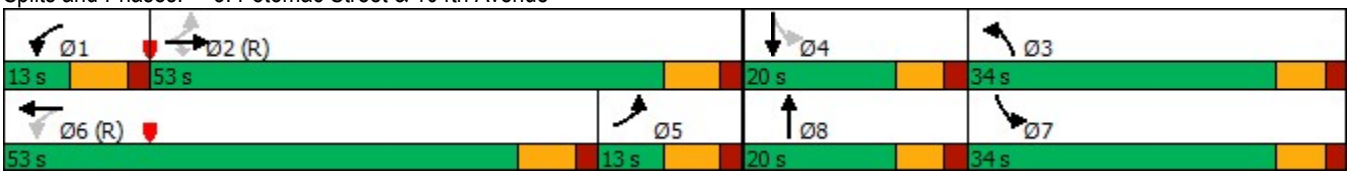


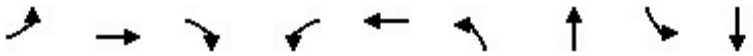
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 61 | 1330 | 79 | 61 | 1070 | 131 | 72 | 6 | 29 | 146 | 11 | 69 |
| Future Volume (vph) | 61 | 1330 | 79 | 61 | 1070 | 131 | 72 | 6 | 29 | 146 | 11 | 69 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 150 | | 150 | 150 | | 0 | 150 | | 0 | 150 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 2 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 | 0.97 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | | 0.850 | | 0.982 | | | 0.877 | | | 0.871 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | 1770 | 3476 | 0 | 3433 | 1634 | 0 | 1770 | 1622 | 0 |
| Flt Permitted | 0.168 | | | 0.067 | | | 0.950 | | | 0.728 | | |
| Satd. Flow (perm) | 313 | 3539 | 1583 | 125 | 3476 | 0 | 3433 | 1634 | 0 | 1356 | 1622 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 154 | | 14 | | | 37 | | | 87 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 1450 | | | 363 | | | 490 | | | 446 | |
| Travel Time (s) | | 33.0 | | | 8.3 | | | 11.1 | | | 10.1 | |
| Peak Hour Factor | 0.79 | 0.93 | 0.80 | 0.79 | 0.93 | 0.84 | 0.80 | 0.78 | 0.78 | 0.84 | 0.78 | 0.79 |
| Adj. Flow (vph) | 77 | 1430 | 99 | 77 | 1151 | 156 | 90 | 8 | 37 | 174 | 14 | 87 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 77 | 1430 | 99 | 77 | 1307 | 0 | 90 | 45 | 0 | 174 | 101 | 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 | | | 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) | 60 | | 60 | 60 | | 60 | 60 | | 60 | 60 | | 60 |
| Number of Detectors | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | | 1 | 1 | |
| Detector Template | Left | Thru | Right | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 40 | 40 | 40 | 40 | 40 | | 40 | 40 | | 40 | 40 | |
| 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) | 40 | 40 | 40 | 40 | 40 | | 40 | 40 | | 40 | 40 | |
| 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 | |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | | Prot | NA | | pm+pt | NA | |
| Protected Phases | 5 | 2 | | 1 | 6 | | 3 | 8 | | 7 | 4 | |
| Permitted Phases | 2 | | 2 | 6 | | | | | | 4 | | |
| Detector Phase | 5 | 2 | 2 | 1 | 6 | | 3 | 8 | | 7 | 4 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 8.0 | 9.0 | | 8.0 | 9.0 | |
| Minimum Split (s) | 13.0 | 20.0 | 20.0 | 13.0 | 20.0 | | 15.0 | 17.0 | | 15.0 | 17.0 | |
| Total Split (s) | 13.0 | 53.0 | 53.0 | 13.0 | 53.0 | | 34.0 | 20.0 | | 34.0 | 20.0 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Split (%) | 10.8% | 44.2% | 44.2% | 10.8% | 44.2% | | 28.3% | 16.7% | | 28.3% | 16.7% | |
| Maximum Green (s) | 5.9 | 45.9 | 45.9 | 5.9 | 45.9 | | 27.6 | 13.6 | | 27.6 | 13.6 | |
| Yellow Time (s) | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | | 4.4 | 4.4 | | 4.4 | 4.4 | |
| 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) | 7.1 | 7.1 | 7.1 | 7.1 | 7.1 | | 6.4 | 6.4 | | 6.4 | 6.4 | |
| Lead/Lag | Lag | Lag | Lag | Lead | Lead | | Lag | Lead | | Lag | Lead | |
| 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-Min | C-Min | None | C-Min | | None | None | | None | None | |
| Act Effct Green (s) | 67.8 | 67.8 | 67.8 | 69.3 | 69.3 | | 10.3 | 9.1 | | 21.6 | 9.6 | |
| Actuated g/C Ratio | 0.56 | 0.56 | 0.56 | 0.58 | 0.58 | | 0.09 | 0.08 | | 0.18 | 0.08 | |
| v/c Ratio | 0.30 | 0.72 | 0.10 | 0.43 | 0.65 | | 0.31 | 0.29 | | 0.60 | 0.48 | |
| Control Delay | 13.3 | 11.5 | 1.4 | 21.6 | 20.0 | | 53.7 | 25.3 | | 52.2 | 22.4 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 13.3 | 11.5 | 1.4 | 21.6 | 20.0 | | 53.7 | 25.3 | | 52.2 | 22.4 | |
| LOS | B | B | A | C | B | | D | C | | D | C | |
| Approach Delay | | 10.9 | | | 20.1 | | | 44.3 | | | 41.3 | |
| Approach LOS | | B | | | 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, Master Intersection | | | |
| Natural Cycle: 90 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.72 | | | |
| Intersection Signal Delay: 18.4 | | Intersection LOS: B | |
| Intersection Capacity Utilization 72.9% | | ICU Level of Service C | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 3: Potomac Street & 104th Avenue

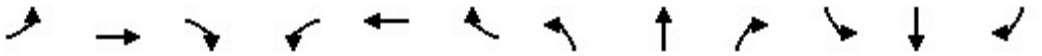




| Lane Group | EBL | EBT | EBR | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|---|
| Lane Group Flow (vph) | 77 | 1430 | 99 | 77 | 1307 | 90 | 45 | 174 | 101 |
| v/c Ratio | 0.30 | 0.72 | 0.10 | 0.43 | 0.65 | 0.31 | 0.29 | 0.60 | 0.48 |
| Control Delay | 13.3 | 11.5 | 1.4 | 21.6 | 20.0 | 53.7 | 25.3 | 52.2 | 22.4 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 13.3 | 11.5 | 1.4 | 21.6 | 20.0 | 53.7 | 25.3 | 52.2 | 22.4 |
| Queue Length 50th (ft) | 6 | 107 | 1 | 26 | 349 | 34 | 6 | 118 | 10 |
| Queue Length 95th (ft) | m31 | 233 | m10 | 47 | 466 | 53 | 34 | 166 | 47 |
| Internal Link Dist (ft) | | 1370 | | | 283 | | 410 | | 366 |
| Turn Bay Length (ft) | 150 | | 150 | 150 | | 150 | | 150 | |
| Base Capacity (vph) | 255 | 1998 | 961 | 181 | 2012 | 789 | 217 | 494 | 260 |
| 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 | 0.30 | 0.72 | 0.10 | 0.43 | 0.65 | 0.11 | 0.21 | 0.35 | 0.39 |

Intersection Summary

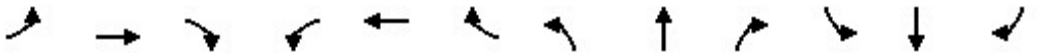
m Volume for 95th percentile queue is metered by upstream signal.



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 61 | 1330 | 79 | 61 | 1070 | 131 | 72 | 6 | 29 | 146 | 11 | 69 |
| Future Volume (veh/h) | 61 | 1330 | 79 | 61 | 1070 | 131 | 72 | 6 | 29 | 146 | 11 | 69 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 77 | 1430 | 99 | 77 | 1151 | 156 | 90 | 8 | 37 | 174 | 14 | 87 |
| Peak Hour Factor | 0.79 | 0.93 | 0.80 | 0.79 | 0.93 | 0.84 | 0.80 | 0.78 | 0.78 | 0.84 | 0.78 | 0.79 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 512 | 2096 | 935 | 241 | 1196 | 162 | 219 | 22 | 100 | 246 | 18 | 110 |
| Arrive On Green | 0.51 | 1.00 | 1.00 | 0.04 | 0.38 | 0.38 | 0.06 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 |
| Sat Flow, veh/h | 1781 | 3554 | 1585 | 1781 | 3146 | 425 | 3456 | 290 | 1340 | 1781 | 224 | 1395 |
| Grp Volume(v), veh/h | 77 | 1430 | 99 | 77 | 649 | 658 | 90 | 0 | 45 | 174 | 0 | 101 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1777 | 1585 | 1781 | 1777 | 1794 | 1728 | 0 | 1629 | 1781 | 0 | 1619 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 3.6 | 42.8 | 43.1 | 3.0 | 0.0 | 3.2 | 2.7 | 0.0 | 7.4 |
| Cycle Q Clear(g_c), s | 0.0 | 0.0 | 0.0 | 3.6 | 42.8 | 43.1 | 3.0 | 0.0 | 3.2 | 2.7 | 0.0 | 7.4 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.24 | 1.00 | | 0.82 | 1.00 | | 0.86 |
| Lane Grp Cap(c), veh/h | 512 | 2096 | 935 | 241 | 675 | 682 | 219 | 0 | 122 | 246 | 0 | 128 |
| V/C Ratio(X) | 0.15 | 0.68 | 0.11 | 0.32 | 0.96 | 0.97 | 0.41 | 0.00 | 0.37 | 0.71 | 0.00 | 0.79 |
| Avail Cap(c_a), veh/h | 512 | 2096 | 935 | 252 | 680 | 686 | 795 | 0 | 185 | 536 | 0 | 184 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.67 | 0.67 | 0.67 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 22.2 | 0.0 | 0.0 | 27.5 | 36.3 | 36.4 | 54.0 | 0.0 | 52.8 | 51.4 | 0.0 | 54.3 |
| Incr Delay (d2), s/veh | 0.1 | 1.2 | 0.2 | 0.8 | 26.2 | 26.9 | 1.2 | 0.0 | 1.8 | 3.7 | 0.0 | 13.8 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.1 | 0.4 | 0.0 | 1.6 | 23.1 | 23.6 | 1.3 | 0.0 | 1.4 | 5.2 | 0.0 | 3.5 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 22.3 | 1.2 | 0.2 | 28.3 | 62.5 | 63.3 | 55.3 | 0.0 | 54.6 | 55.1 | 0.0 | 68.1 |
| LnGrp LOS | C | A | A | C | E | E | E | A | D | E | A | E |
| Approach Vol, veh/h | | 1606 | | | 1384 | | | 135 | | | 275 | |
| Approach Delay, s/veh | | 2.2 | | | 61.0 | | | 55.1 | | | 59.9 | |
| Approach LOS | | A | | | E | | | E | | | E | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 12.3 | 77.9 | 14.0 | 15.9 | 37.4 | 52.7 | 14.5 | 15.4 |
| Change Period (Y+Rc), s | 7.1 | 7.1 | 6.4 | 6.4 | 7.1 | 7.1 | 6.4 | 6.4 |
| Max Green Setting (Gmax), s | 5.9 | 45.9 | 27.6 | 13.6 | 5.9 | 45.9 | 27.6 | 13.6 |
| Max Q Clear Time (g_c+I1), s | 5.6 | 2.0 | 5.0 | 9.4 | 2.0 | 45.1 | 4.7 | 5.2 |
| Green Ext Time (p_c), s | 0.0 | 9.8 | 0.3 | 0.1 | 0.1 | 0.5 | 0.6 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 32.9 |
| HCM 6th LOS | C |



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 40 | 780 | 1 | 1 | 550 | 22 | 1 | 1 | 2 | 11 | 1 | 30 |
| Future Volume (vph) | 40 | 780 | 1 | 1 | 550 | 22 | 1 | 1 | 2 | 11 | 1 | 30 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 150 | | 150 | 150 | | 0 | 0 | | 0 | 0 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 0 | | 0 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| 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 | | 0.993 | | | 0.919 | | | 0.903 | |
| Flt Protected | 0.950 | | | 0.950 | | | | 0.990 | | | 0.987 | |
| Satd. Flow (prot) | 1770 | 1863 | 1583 | 1770 | 1850 | 0 | 0 | 1695 | 0 | 0 | 1660 | 0 |
| Flt Permitted | 0.950 | | | 0.950 | | | | 0.990 | | | 0.987 | |
| Satd. Flow (perm) | 1770 | 1863 | 1583 | 1770 | 1850 | 0 | 0 | 1695 | 0 | 0 | 1660 | 0 |
| Link Speed (mph) | | 45 | | | 45 | | | 40 | | | 40 | |
| Link Distance (ft) | | 563 | | | 5275 | | | 411 | | | 2833 | |
| Travel Time (s) | | 8.5 | | | 79.9 | | | 7.0 | | | 48.3 | |
| Peak Hour Factor | 0.78 | 0.92 | 0.78 | 0.78 | 0.92 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 |
| Adj. Flow (vph) | 51 | 848 | 1 | 1 | 598 | 28 | 1 | 1 | 3 | 14 | 1 | 38 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 51 | 848 | 1 | 1 | 626 | 0 | 0 | 5 | 0 | 0 | 53 | 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 | | | 0 | | | 0 | |
| 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 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization 51.1% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

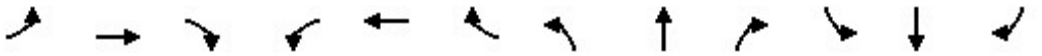
| Intersection | |
|---|---|
| Int Delay, s/veh | 1.3 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 40 | 780 | 1 | 1 | 550 | 22 | 1 | 1 | 2 | 11 | 1 | 30 |
| Future Vol, veh/h | 40 | 780 | 1 | 1 | 550 | 22 | 1 | 1 | 2 | 11 | 1 | 30 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 150 | - | 150 | 150 | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 78 | 92 | 78 | 78 | 92 | 78 | 78 | 78 | 78 | 78 | 78 | 78 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 51 | 848 | 1 | 1 | 598 | 28 | 1 | 1 | 3 | 14 | 1 | 38 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 626 | 0 | 0 | 849 | 0 | 0 | 1584 | 1578 | 848 | 1567 | 1565 | 612 |
| Stage 1 | - | - | - | - | - | - | 950 | 950 | - | 614 | 614 | - |
| Stage 2 | - | - | - | - | - | - | 634 | 628 | - | 953 | 951 | - |
| Critical Hdwy | 4.12 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 |
| 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 | 2.218 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 956 | - | - | 789 | - | - | 88 | 109 | 361 | 90 | 111 | 493 |
| Stage 1 | - | - | - | - | - | - | 312 | 339 | - | 479 | 483 | - |
| Stage 2 | - | - | - | - | - | - | 467 | 476 | - | 311 | 338 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 956 | - | - | 789 | - | - | 77 | 103 | 361 | 85 | 105 | 493 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 77 | 103 | - | 85 | 105 | - |
| Stage 1 | - | - | - | - | - | - | 295 | 321 | - | 454 | 483 | - |
| Stage 2 | - | - | - | - | - | - | 429 | 476 | - | 291 | 320 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.5 | 0 | 31.3 | 28 |
| HCM LOS | | | D | D |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 142 | 956 | - | - | 789 | - | - | 210 |
| HCM Lane V/C Ratio | 0.036 | 0.054 | - | - | 0.002 | - | - | 0.256 |
| HCM Control Delay (s) | 31.3 | 9 | - | - | 9.6 | - | - | 28 |
| HCM Lane LOS | D | A | - | - | A | - | - | D |
| HCM 95th %tile Q(veh) | 0.1 | 0.2 | - | - | 0 | - | - | 1 |

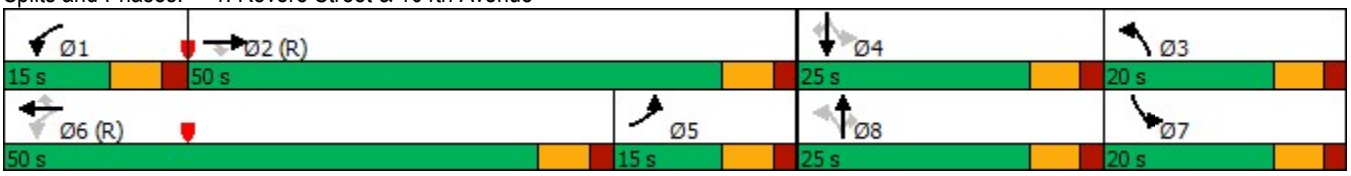


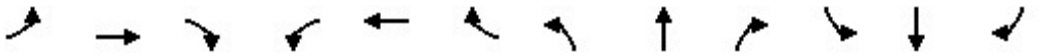
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 23 | 690 | 44 | 33 | 1195 | 41 | 114 | 18 | 68 | 61 | 6 | 55 |
| Future Volume (vph) | 23 | 690 | 44 | 33 | 1195 | 41 | 114 | 18 | 68 | 61 | 6 | 55 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 300 | | 300 | 300 | | 300 | 200 | | 200 | 150 | | 0 |
| Storage Lanes | 2 | | 1 | 1 | | 1 | 1 | | 1 | 1 | | 1 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.97 | 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) | 3433 | 3539 | 1583 | 1770 | 3539 | 1583 | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 |
| Flt Permitted | 0.950 | | | 0.290 | | | 0.752 | | | 0.742 | | |
| Satd. Flow (perm) | 3433 | 3539 | 1583 | 540 | 3539 | 1583 | 1401 | 1863 | 1583 | 1382 | 1863 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 152 | | | 152 | | | 217 | | | 217 |
| Link Speed (mph) | | 45 | | | 45 | | | 30 | | | 30 | |
| Link Distance (ft) | | 798 | | | 2575 | | | 954 | | | 614 | |
| Travel Time (s) | | 12.1 | | | 39.0 | | | 21.7 | | | 14.0 | |
| Peak Hour Factor | 0.78 | 0.92 | 0.78 | 0.78 | 0.93 | 0.78 | 0.83 | 0.78 | 0.79 | 0.79 | 0.78 | 0.78 |
| Adj. Flow (vph) | 29 | 750 | 56 | 42 | 1285 | 53 | 137 | 23 | 86 | 77 | 8 | 71 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 29 | 750 | 56 | 42 | 1285 | 53 | 137 | 23 | 86 | 77 | 8 | 71 |
| 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 | | | 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 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Detector Template | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Leading Detector (ft) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| 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) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| 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 |
| Turn Type | Prot | NA | Perm | pm+pt | NA | Perm | pm+pt | NA | Perm | pm+pt | NA | Perm |
| Protected Phases | 5 | 2 | | 1 | 6 | | 3 | 8 | | 7 | 4 | |
| Permitted Phases | | | 2 | 6 | | 6 | 8 | | 8 | 4 | | 4 |
| Detector Phase | 5 | 2 | 2 | 1 | 6 | 6 | 3 | 8 | 8 | 7 | 4 | 4 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | 5.0 | 10.0 | 10.0 | 8.0 | 8.0 | 8.0 | 8.0 | 8.0 | 8.0 |
| Minimum Split (s) | 12.0 | 20.0 | 20.0 | 12.0 | 20.0 | 20.0 | 14.0 | 14.0 | 14.0 | 14.0 | 14.0 | 14.0 |
| Total Split (s) | 15.0 | 50.0 | 50.0 | 15.0 | 50.0 | 50.0 | 20.0 | 25.0 | 25.0 | 20.0 | 25.0 | 25.0 |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Split (%) | 13.6% | 45.5% | 45.5% | 13.6% | 45.5% | 45.5% | 18.2% | 22.7% | 22.7% | 18.2% | 22.7% | 22.7% |
| Maximum Green (s) | 8.7 | 43.7 | 43.7 | 8.7 | 43.7 | 43.7 | 14.0 | 19.0 | 19.0 | 14.0 | 19.0 | 19.0 |
| Yellow Time (s) | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.0 | 4.0 | 4.0 | 4.0 | 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 | 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 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 6.3 | 6.3 | 6.3 | 6.3 | 6.3 | 6.3 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 |
| Lead/Lag | Lag | Lag | Lag | Lead | Lead | Lead | Lag | Lead | Lead | Lag | Lead | Lead |
| Lead-Lag Optimize? | Yes | 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 | 3.0 |
| Recall Mode | None | C-Min | C-Min | None | C-Min | C-Min | None | None | None | None | None | None |
| Act Effct Green (s) | 6.5 | 68.4 | 68.4 | 68.7 | 68.7 | 68.7 | 16.4 | 8.2 | 8.2 | 16.1 | 8.0 | 8.0 |
| Actuated g/C Ratio | 0.06 | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 | 0.15 | 0.07 | 0.07 | 0.15 | 0.07 | 0.07 |
| v/c Ratio | 0.14 | 0.34 | 0.05 | 0.10 | 0.58 | 0.05 | 0.57 | 0.17 | 0.27 | 0.33 | 0.06 | 0.22 |
| Control Delay | 50.3 | 12.4 | 0.1 | 6.9 | 9.0 | 0.1 | 49.2 | 50.6 | 2.1 | 40.4 | 48.7 | 1.6 |
| 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 | 50.3 | 12.4 | 0.1 | 6.9 | 9.0 | 0.1 | 49.2 | 50.6 | 2.1 | 40.4 | 48.7 | 1.6 |
| LOS | D | B | A | A | A | A | D | D | A | D | D | A |
| Approach Delay | | 12.9 | | | 8.6 | | | 32.9 | | | 23.2 | |
| Approach LOS | | B | | | A | | | C | | | C | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 110 | | | |
| Actuated Cycle Length: 110 | | | |
| Offset: 36 (33%), Referenced to phase 2:EBT and 6:WBTL, Start of Green | | | |
| Natural Cycle: 75 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.58 | | | |
| Intersection Signal Delay: 13.1 | | Intersection LOS: B | |
| Intersection Capacity Utilization 61.6% | | ICU Level of Service B | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 1: Revere Street & 104th Avenue

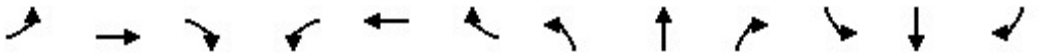




| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group Flow (vph) | 29 | 750 | 56 | 42 | 1285 | 53 | 137 | 23 | 86 | 77 | 8 | 71 |
| v/c Ratio | 0.14 | 0.34 | 0.05 | 0.10 | 0.58 | 0.05 | 0.57 | 0.17 | 0.27 | 0.33 | 0.06 | 0.22 |
| Control Delay | 50.3 | 12.4 | 0.1 | 6.9 | 9.0 | 0.1 | 49.2 | 50.6 | 2.1 | 40.4 | 48.7 | 1.6 |
| 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 | 50.3 | 12.4 | 0.1 | 6.9 | 9.0 | 0.1 | 49.2 | 50.6 | 2.1 | 40.4 | 48.7 | 1.6 |
| Queue Length 50th (ft) | 10 | 143 | 0 | 8 | 188 | 0 | 85 | 16 | 0 | 46 | 5 | 0 |
| Queue Length 95th (ft) | 21 | 212 | 0 | m14 | 170 | m0 | 125 | 36 | 0 | 73 | 18 | 0 |
| Internal Link Dist (ft) | | 718 | | | 2495 | | | 874 | | | 534 | |
| Turn Bay Length (ft) | 300 | | 300 | 300 | | 300 | 200 | | 200 | 150 | | |
| Base Capacity (vph) | 271 | 2201 | 1042 | 434 | 2209 | 1045 | 309 | 321 | 452 | 305 | 321 | 452 |
| 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 | 0.11 | 0.34 | 0.05 | 0.10 | 0.58 | 0.05 | 0.44 | 0.07 | 0.19 | 0.25 | 0.02 | 0.16 |

Intersection Summary

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



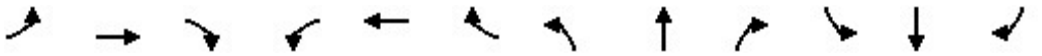
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 23 | 690 | 44 | 33 | 1195 | 41 | 114 | 18 | 68 | 61 | 6 | 55 |
| Future Volume (veh/h) | 23 | 690 | 44 | 33 | 1195 | 41 | 114 | 18 | 68 | 61 | 6 | 55 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 29 | 750 | 0 | 42 | 1285 | 0 | 137 | 23 | 86 | 77 | 8 | 71 |
| Peak Hour Factor | 0.78 | 0.92 | 0.78 | 0.78 | 0.93 | 0.78 | 0.83 | 0.78 | 0.79 | 0.79 | 0.78 | 0.78 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 893 | 2129 | | 250 | 1328 | | 284 | 136 | 115 | 272 | 136 | 115 |
| Arrive On Green | 0.26 | 0.60 | 0.00 | 0.07 | 0.75 | 0.00 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 |
| Sat Flow, veh/h | 3456 | 3554 | 1585 | 1781 | 3554 | 1585 | 1781 | 1870 | 1585 | 1781 | 1870 | 1585 |
| Grp Volume(v), veh/h | 29 | 750 | 0 | 42 | 1285 | 0 | 137 | 23 | 86 | 77 | 8 | 71 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1777 | 1585 | 1781 | 1777 | 1585 | 1781 | 1870 | 1585 | 1781 | 1870 | 1585 |
| Q Serve(g_s), s | 0.7 | 11.8 | 0.0 | 1.7 | 36.3 | 0.0 | 0.0 | 1.3 | 4.9 | 0.0 | 0.4 | 4.8 |
| Cycle Q Clear(g_c), s | 0.7 | 11.8 | 0.0 | 1.7 | 36.3 | 0.0 | 0.0 | 1.3 | 4.9 | 0.0 | 0.4 | 4.8 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 893 | 2129 | | 250 | 1328 | | 284 | 136 | 115 | 272 | 136 | 115 |
| V/C Ratio(X) | 0.03 | 0.35 | | 0.17 | 0.97 | | 0.48 | 0.17 | 0.75 | 0.28 | 0.06 | 0.62 |
| Avail Cap(c_a), veh/h | 893 | 2129 | | 332 | 1412 | | 383 | 323 | 274 | 371 | 323 | 274 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.00 | 0.90 | 0.90 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 30.5 | 11.2 | 0.0 | 25.0 | 13.3 | 0.0 | 44.9 | 47.9 | 35.6 | 44.0 | 47.5 | 49.5 |
| Incr Delay (d2), s/veh | 0.0 | 0.5 | 0.0 | 0.3 | 16.9 | 0.0 | 1.3 | 0.6 | 9.2 | 0.6 | 0.2 | 5.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.3 | 4.3 | 0.0 | 0.7 | 7.8 | 0.0 | 3.6 | 0.6 | 2.6 | 2.0 | 0.2 | 2.1 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 30.5 | 11.7 | 0.0 | 25.3 | 30.1 | 0.0 | 46.2 | 48.5 | 44.8 | 44.6 | 47.7 | 54.8 |
| LnGrp LOS | C | B | | C | C | | D | D | D | D | D | D |
| Approach Vol, veh/h | | 779 | A | | 1327 | A | | 246 | | | 156 | |
| Approach Delay, s/veh | | 12.4 | | | 30.0 | | | 45.9 | | | 49.4 | |
| Approach LOS | | B | | | C | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 9.9 | 72.2 | 13.9 | 14.0 | 34.7 | 47.4 | 13.9 | 14.0 |
| Change Period (Y+Rc), s | 6.3 | 6.3 | 6.0 | 6.0 | 6.3 | 6.3 | 6.0 | 6.0 |
| Max Green Setting (Gmax), s | 8.7 | 43.7 | 14.0 | 19.0 | 8.7 | 43.7 | 14.0 | 19.0 |
| Max Q Clear Time (g_c+I1), s | 3.7 | 13.8 | 2.0 | 6.8 | 2.7 | 38.3 | 2.0 | 6.9 |
| Green Ext Time (p_c), s | 0.0 | 3.2 | 0.3 | 0.2 | 0.0 | 2.8 | 0.1 | 0.2 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 27.3 |
| HCM 6th LOS | C |

**Notes**

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

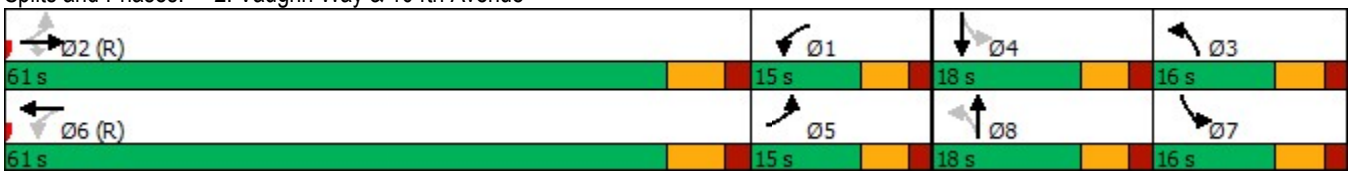


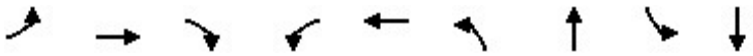
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 14 | 690 | 18 | 50 | 885 | 2 | 143 | 1 | 64 | 11 | 1 | 31 |
| Future Volume (vph) | 14 | 690 | 18 | 50 | 885 | 2 | 143 | 1 | 64 | 11 | 1 | 31 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 150 | | 150 | 150 | | 0 | 150 | | 0 | 100 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | | 0.850 | | | | | 0.852 | | | 0.854 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | 1770 | 3539 | 0 | 1770 | 1587 | 0 | 1770 | 1591 | 0 |
| Flt Permitted | 0.241 | | | 0.323 | | | 0.730 | | | 0.800 | | |
| Satd. Flow (perm) | 449 | 3539 | 1583 | 602 | 3539 | 0 | 1360 | 1587 | 0 | 1490 | 1591 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 149 | | | | | 81 | | | 40 | |
| Link Speed (mph) | | 45 | | | 45 | | | 30 | | | 30 | |
| Link Distance (ft) | | 2575 | | | 1450 | | | 2620 | | | 567 | |
| Travel Time (s) | | 39.0 | | | 22.0 | | | 59.5 | | | 12.9 | |
| Peak Hour Factor | 0.78 | 0.92 | 0.78 | 0.78 | 0.92 | 0.78 | 0.84 | 0.78 | 0.79 | 0.78 | 0.78 | 0.78 |
| Adj. Flow (vph) | 18 | 750 | 23 | 64 | 962 | 3 | 170 | 1 | 81 | 14 | 1 | 40 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 18 | 750 | 23 | 64 | 965 | 0 | 170 | 82 | 0 | 14 | 41 | 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 | 1 | 1 | 1 | 1 | | 1 | 1 | | 1 | 1 | |
| Detector Template | Left | Thru | Right | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 40 | 40 | 40 | 40 | 40 | | 40 | 40 | | 40 | 40 | |
| 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) | 40 | 40 | 40 | 40 | 40 | | 40 | 40 | | 40 | 40 | |
| 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 | |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 5 | 2 | | 1 | 6 | | 3 | 8 | | 7 | 4 | |
| Permitted Phases | 2 | | 2 | 6 | | | 8 | | | 4 | | |
| Detector Phase | 5 | 2 | 2 | 1 | 6 | | 3 | 8 | | 7 | 4 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 8.0 | 8.0 | 5.0 | 8.0 | | 6.0 | 8.0 | | 6.0 | 8.0 | |
| Minimum Split (s) | 12.0 | 20.0 | 20.0 | 12.0 | 20.0 | | 12.0 | 14.0 | | 12.0 | 14.0 | |
| Total Split (s) | 15.0 | 61.0 | 61.0 | 15.0 | 61.0 | | 16.0 | 18.0 | | 16.0 | 18.0 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Split (%) | 13.6% | 55.5% | 55.5% | 13.6% | 55.5% | | 14.5% | 16.4% | | 14.5% | 16.4% | |
| Maximum Green (s) | 9.0 | 54.2 | 54.2 | 9.0 | 54.2 | | 10.0 | 12.0 | | 10.0 | 12.0 | |
| Yellow Time (s) | 4.0 | 4.8 | 4.8 | 4.0 | 4.8 | | 4.0 | 4.0 | | 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 | |
| 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) | 6.0 | 6.8 | 6.8 | 6.0 | 6.8 | | 6.0 | 6.0 | | 6.0 | 6.0 | |
| Lead/Lag | Lag | Lead | Lead | Lag | Lead | | Lag | Lead | | Lag | Lead | |
| 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-Min | C-Min | None | C-Min | | None | None | | None | None | |
| Act Effct Green (s) | 72.9 | 66.5 | 66.5 | 80.0 | 73.5 | | 18.1 | 15.6 | | 11.9 | 8.2 | |
| Actuated g/C Ratio | 0.66 | 0.60 | 0.60 | 0.73 | 0.67 | | 0.16 | 0.14 | | 0.11 | 0.07 | |
| v/c Ratio | 0.05 | 0.35 | 0.02 | 0.12 | 0.41 | | 0.65 | 0.28 | | 0.08 | 0.27 | |
| Control Delay | 10.3 | 13.3 | 0.7 | 2.0 | 3.7 | | 53.7 | 12.4 | | 36.3 | 19.8 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 10.3 | 13.3 | 0.7 | 2.0 | 3.7 | | 53.7 | 12.4 | | 36.3 | 19.8 | |
| LOS | B | B | A | A | A | | D | B | | D | B | |
| Approach Delay | | 12.8 | | | 3.6 | | | 40.3 | | | 24.0 | |
| Approach LOS | | B | | | A | | | D | | | C | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 110 | | | |
| Actuated Cycle Length: 110 | | | |
| Offset: 106 (96%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green | | | |
| Natural Cycle: 60 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.65 | | | |
| Intersection Signal Delay: 11.9 | | Intersection LOS: B | |
| Intersection Capacity Utilization 58.9% | | ICU Level of Service B | |
| Analysis Period (min) 15 | | | |

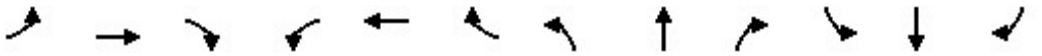
Splits and Phases: 2: Vaughn Way & 104th Avenue





| Lane Group | EBL | EBT | EBR | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|---|
| Lane Group Flow (vph) | 18 | 750 | 23 | 64 | 965 | 170 | 82 | 14 | 41 |
| v/c Ratio | 0.05 | 0.35 | 0.02 | 0.12 | 0.41 | 0.65 | 0.28 | 0.08 | 0.27 |
| Control Delay | 10.3 | 13.3 | 0.7 | 2.0 | 3.7 | 53.7 | 12.4 | 36.3 | 19.8 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 10.3 | 13.3 | 0.7 | 2.0 | 3.7 | 53.7 | 12.4 | 36.3 | 19.8 |
| Queue Length 50th (ft) | 4 | 166 | 0 | 3 | 24 | 110 | 1 | 8 | 1 |
| Queue Length 95th (ft) | 21 | 292 | 2 | 10 | 77 | 153 | 33 | 21 | 26 |
| Internal Link Dist (ft) | | 2495 | | | 1370 | | 2540 | | 487 |
| Turn Bay Length (ft) | 150 | | 150 | 150 | | 150 | | 100 | |
| Base Capacity (vph) | 419 | 2155 | 1022 | 556 | 2365 | 276 | 306 | 230 | 209 |
| 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 | 0.35 | 0.02 | 0.12 | 0.41 | 0.62 | 0.27 | 0.06 | 0.20 |

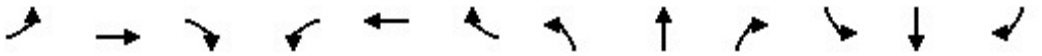
Intersection Summary



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 14 | 690 | 18 | 50 | 885 | 2 | 143 | 1 | 64 | 11 | 1 | 31 |
| Future Volume (veh/h) | 14 | 690 | 18 | 50 | 885 | 2 | 143 | 1 | 64 | 11 | 1 | 31 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 18 | 750 | 23 | 64 | 962 | 3 | 170 | 1 | 81 | 14 | 1 | 40 |
| Peak Hour Factor | 0.78 | 0.92 | 0.78 | 0.78 | 0.92 | 0.78 | 0.84 | 0.78 | 0.79 | 0.78 | 0.78 | 0.78 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 717 | 910 | 406 | 799 | 1049 | 3 | 226 | 1 | 114 | 188 | 3 | 111 |
| Arrive On Green | 0.12 | 0.08 | 0.08 | 0.79 | 0.58 | 0.58 | 0.05 | 0.07 | 0.07 | 0.05 | 0.07 | 0.07 |
| Sat Flow, veh/h | 1781 | 3554 | 1585 | 1781 | 3634 | 11 | 1781 | 19 | 1569 | 1781 | 39 | 1552 |
| Grp Volume(v), veh/h | 18 | 750 | 23 | 64 | 470 | 495 | 170 | 0 | 82 | 14 | 0 | 41 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1777 | 1585 | 1781 | 1777 | 1868 | 1781 | 0 | 1588 | 1781 | 0 | 1591 |
| Q Serve(g_s), s | 0.0 | 22.8 | 1.5 | 0.0 | 26.1 | 26.1 | 2.1 | 0.0 | 5.6 | 0.0 | 0.0 | 2.7 |
| Cycle Q Clear(g_c), s | 0.0 | 22.8 | 1.5 | 0.0 | 26.1 | 26.1 | 2.1 | 0.0 | 5.6 | 0.0 | 0.0 | 2.7 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.01 | 1.00 | | 0.99 | 1.00 | | 0.98 |
| Lane Grp Cap(c), veh/h | 717 | 910 | 406 | 799 | 513 | 539 | 226 | 0 | 115 | 188 | 0 | 114 |
| V/C Ratio(X) | 0.03 | 0.82 | 0.06 | 0.08 | 0.92 | 0.92 | 0.75 | 0.00 | 0.71 | 0.07 | 0.00 | 0.36 |
| Avail Cap(c_a), veh/h | 717 | 1751 | 781 | 799 | 875 | 921 | 292 | 0 | 173 | 255 | 0 | 174 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.95 | 0.95 | 0.95 | 0.92 | 0.92 | 0.92 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 30.4 | 47.9 | 38.1 | 6.3 | 22.1 | 22.1 | 48.4 | 0.0 | 49.9 | 47.6 | 0.0 | 48.7 |
| Incr Delay (d2), s/veh | 0.0 | 8.0 | 0.3 | 0.0 | 22.3 | 21.5 | 7.8 | 0.0 | 7.8 | 0.2 | 0.0 | 1.9 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.4 | 11.8 | 0.6 | 0.3 | 9.2 | 9.6 | 5.0 | 0.0 | 2.5 | 0.4 | 0.0 | 1.1 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 30.4 | 55.9 | 38.4 | 6.3 | 44.3 | 43.5 | 56.2 | 0.0 | 57.7 | 47.8 | 0.0 | 50.6 |
| LnGrp LOS | C | E | D | A | D | D | E | A | E | D | A | D |
| Approach Vol, veh/h | | 791 | | | 1029 | | | 252 | | | 55 | |
| Approach Delay, s/veh | | 54.8 | | | 41.6 | | | 56.7 | | | 49.9 | |
| Approach LOS | | D | | | D | | | E | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 49.2 | 35.0 | 12.0 | 13.9 | 45.6 | 38.6 | 11.8 | 14.0 |
| Change Period (Y+Rc), s | 6.0 | 6.8 | 6.0 | 6.0 | 6.0 | 6.8 | 6.0 | 6.0 |
| Max Green Setting (Gmax), s | 9.0 | 54.2 | 10.0 | 12.0 | 9.0 | 54.2 | 10.0 | 12.0 |
| Max Q Clear Time (g_c+I1), s | 2.0 | 24.8 | 4.1 | 4.7 | 2.0 | 28.1 | 2.0 | 7.6 |
| Green Ext Time (p_c), s | 0.1 | 3.3 | 0.3 | 0.0 | 0.0 | 3.6 | 0.0 | 0.1 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 48.5 |
| HCM 6th LOS | D |

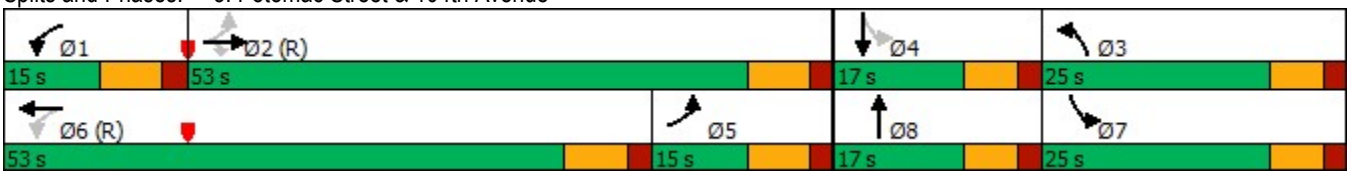


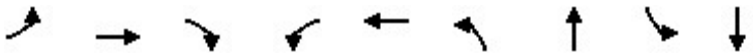
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 52 | 675 | 55 | 18 | 810 | 39 | 61 | 8 | 45 | 59 | 8 | 51 |
| Future Volume (vph) | 52 | 675 | 55 | 18 | 810 | 39 | 61 | 8 | 45 | 59 | 8 | 51 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 150 | | 150 | 150 | | 0 | 150 | | 0 | 150 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 2 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 | 0.97 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | | 0.850 | | 0.992 | | | 0.872 | | | 0.870 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | 1770 | 3511 | 0 | 3433 | 1624 | 0 | 1770 | 1621 | 0 |
| Flt Permitted | 0.301 | | | 0.296 | | | 0.950 | | | 0.713 | | |
| Satd. Flow (perm) | 561 | 3539 | 1583 | 551 | 3511 | 0 | 3433 | 1624 | 0 | 1328 | 1621 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 168 | | 6 | | | 58 | | | 65 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 1450 | | | 363 | | | 490 | | | 446 | |
| Travel Time (s) | | 33.0 | | | 8.3 | | | 11.1 | | | 10.1 | |
| Peak Hour Factor | 0.78 | 0.92 | 0.78 | 0.78 | 0.92 | 0.78 | 0.79 | 0.78 | 0.78 | 0.79 | 0.78 | 0.78 |
| Adj. Flow (vph) | 67 | 734 | 71 | 23 | 880 | 50 | 77 | 10 | 58 | 75 | 10 | 65 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 67 | 734 | 71 | 23 | 930 | 0 | 77 | 68 | 0 | 75 | 75 | 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 | | | 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) | 60 | | 60 | 60 | | 60 | 60 | | 60 | 60 | | 60 |
| Number of Detectors | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | | 1 | 1 | |
| Detector Template | Left | Thru | Right | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 40 | 40 | 40 | 40 | 40 | | 40 | 40 | | 40 | 40 | |
| 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) | 40 | 40 | 40 | 40 | 40 | | 40 | 40 | | 40 | 40 | |
| 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 | |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | | Prot | NA | | pm+pt | NA | |
| Protected Phases | 5 | 2 | | 1 | 6 | | 3 | 8 | | 7 | 4 | |
| Permitted Phases | 2 | | 2 | 6 | | | | | | 4 | | |
| Detector Phase | 5 | 2 | 2 | 1 | 6 | | 3 | 8 | | 7 | 4 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 8.0 | 9.0 | | 8.0 | 9.0 | |
| Minimum Split (s) | 13.0 | 20.0 | 20.0 | 13.0 | 20.0 | | 15.0 | 17.0 | | 15.0 | 17.0 | |
| Total Split (s) | 15.0 | 53.0 | 53.0 | 15.0 | 53.0 | | 25.0 | 17.0 | | 25.0 | 17.0 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Split (%) | 13.6% | 48.2% | 48.2% | 13.6% | 48.2% | | 22.7% | 15.5% | | 22.7% | 15.5% | |
| Maximum Green (s) | 7.9 | 45.9 | 45.9 | 7.9 | 45.9 | | 18.6 | 10.6 | | 18.6 | 10.6 | |
| Yellow Time (s) | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | | 4.4 | 4.4 | | 4.4 | 4.4 | |
| 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) | 7.1 | 7.1 | 7.1 | 7.1 | 7.1 | | 6.4 | 6.4 | | 6.4 | 6.4 | |
| Lead/Lag | Lag | Lag | Lag | Lead | Lead | | Lag | Lead | | Lag | Lead | |
| 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-Min | C-Min | None | C-Min | | None | None | | None | None | |
| Act Effct Green (s) | 74.1 | 74.1 | 74.1 | 68.2 | 69.6 | | 8.5 | 9.2 | | 16.1 | 9.3 | |
| Actuated g/C Ratio | 0.67 | 0.67 | 0.67 | 0.62 | 0.63 | | 0.08 | 0.08 | | 0.15 | 0.08 | |
| v/c Ratio | 0.15 | 0.31 | 0.06 | 0.06 | 0.42 | | 0.29 | 0.36 | | 0.33 | 0.38 | |
| Control Delay | 9.3 | 7.2 | 0.4 | 12.5 | 14.4 | | 50.7 | 21.2 | | 40.1 | 20.7 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 9.3 | 7.2 | 0.4 | 12.5 | 14.4 | | 50.7 | 21.2 | | 40.1 | 20.7 | |
| LOS | A | A | A | B | B | | D | C | | D | C | |
| Approach Delay | | 6.8 | | | 14.3 | | | 36.9 | | | 30.4 | |
| Approach LOS | | A | | | B | | | D | | | C | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 110 | | | |
| Actuated Cycle Length: 110 | | | |
| Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green, Master Intersection | | | |
| Natural Cycle: 70 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.42 | | | |
| Intersection Signal Delay: 13.9 | | Intersection LOS: B | |
| Intersection Capacity Utilization 54.9% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

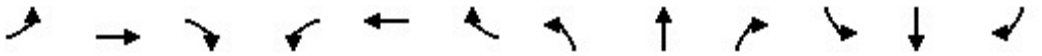
Splits and Phases: 3: Potomac Street & 104th Avenue





| Lane Group | EBL | EBT | EBR | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|---|
| Lane Group Flow (vph) | 67 | 734 | 71 | 23 | 930 | 77 | 68 | 75 | 75 |
| v/c Ratio | 0.15 | 0.31 | 0.06 | 0.06 | 0.42 | 0.29 | 0.36 | 0.33 | 0.38 |
| Control Delay | 9.3 | 7.2 | 0.4 | 12.5 | 14.4 | 50.7 | 21.2 | 40.1 | 20.7 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 9.3 | 7.2 | 0.4 | 12.5 | 14.4 | 50.7 | 21.2 | 40.1 | 20.7 |
| Queue Length 50th (ft) | 9 | 55 | 0 | 7 | 200 | 27 | 7 | 44 | 7 |
| Queue Length 95th (ft) | 23 | 107 | 0 | 18 | 271 | 44 | 38 | 71 | 38 |
| Internal Link Dist (ft) | | 1370 | | | 283 | | 410 | | 366 |
| Turn Bay Length (ft) | 150 | | 150 | 150 | | 150 | | 150 | |
| Base Capacity (vph) | 467 | 2383 | 1121 | 428 | 2223 | 580 | 208 | 389 | 214 |
| 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 | 0.14 | 0.31 | 0.06 | 0.05 | 0.42 | 0.13 | 0.33 | 0.19 | 0.35 |

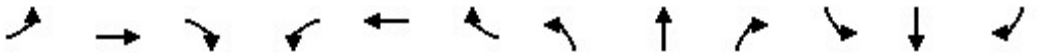
Intersection Summary



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 52 | 675 | 55 | 18 | 810 | 39 | 61 | 8 | 45 | 59 | 8 | 51 |
| Future Volume (veh/h) | 52 | 675 | 55 | 18 | 810 | 39 | 61 | 8 | 45 | 59 | 8 | 51 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 67 | 734 | 71 | 23 | 880 | 50 | 77 | 10 | 58 | 75 | 10 | 65 |
| Peak Hour Factor | 0.78 | 0.92 | 0.78 | 0.78 | 0.92 | 0.78 | 0.79 | 0.78 | 0.78 | 0.79 | 0.78 | 0.78 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 641 | 2076 | 926 | 256 | 1007 | 57 | 227 | 19 | 113 | 238 | 18 | 115 |
| Arrive On Green | 0.62 | 1.00 | 1.00 | 0.02 | 0.29 | 0.29 | 0.07 | 0.08 | 0.08 | 0.07 | 0.08 | 0.08 |
| Sat Flow, veh/h | 1781 | 3554 | 1585 | 1781 | 3418 | 194 | 3456 | 238 | 1383 | 1781 | 216 | 1402 |
| Grp Volume(v), veh/h | 67 | 734 | 71 | 23 | 457 | 473 | 77 | 0 | 68 | 75 | 0 | 75 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1777 | 1585 | 1781 | 1777 | 1835 | 1728 | 0 | 1621 | 1781 | 0 | 1618 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 1.1 | 26.9 | 26.9 | 2.3 | 0.0 | 4.4 | 0.0 | 0.0 | 4.9 |
| Cycle Q Clear(g_c), s | 0.0 | 0.0 | 0.0 | 1.1 | 26.9 | 26.9 | 2.3 | 0.0 | 4.4 | 0.0 | 0.0 | 4.9 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.11 | 1.00 | | 0.85 | 1.00 | | 0.87 |
| Lane Grp Cap(c), veh/h | 641 | 2076 | 926 | 256 | 523 | 541 | 227 | 0 | 133 | 238 | 0 | 132 |
| V/C Ratio(X) | 0.10 | 0.35 | 0.08 | 0.09 | 0.87 | 0.87 | 0.34 | 0.00 | 0.51 | 0.32 | 0.00 | 0.57 |
| Avail Cap(c_a), veh/h | 641 | 2076 | 926 | 343 | 741 | 766 | 584 | 0 | 156 | 422 | 0 | 156 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 13.7 | 0.0 | 0.0 | 31.5 | 36.9 | 36.9 | 49.1 | 0.0 | 48.4 | 46.3 | 0.0 | 48.6 |
| Incr Delay (d2), s/veh | 0.1 | 0.5 | 0.2 | 0.1 | 18.1 | 17.6 | 0.9 | 0.0 | 3.1 | 0.7 | 0.0 | 3.8 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.7 | 0.1 | 0.0 | 0.5 | 14.1 | 14.5 | 1.0 | 0.0 | 1.9 | 2.0 | 0.0 | 2.1 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 13.8 | 0.5 | 0.2 | 31.7 | 54.9 | 54.5 | 50.0 | 0.0 | 51.5 | 47.1 | 0.0 | 52.4 |
| LnGrp LOS | B | A | A | C | D | D | D | A | D | D | A | D |
| Approach Vol, veh/h | | 872 | | | 953 | | | 145 | | | 150 | |
| Approach Delay, s/veh | | 1.4 | | | 54.1 | | | 50.7 | | | 49.7 | |
| Approach LOS | | A | | | D | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 9.6 | 71.3 | 13.6 | 15.4 | 41.5 | 39.5 | 13.6 | 15.4 |
| Change Period (Y+Rc), s | 7.1 | 7.1 | 6.4 | 6.4 | 7.1 | 7.1 | 6.4 | 6.4 |
| Max Green Setting (Gmax), s | 7.9 | 45.9 | 18.6 | 10.6 | 7.9 | 45.9 | 18.6 | 10.6 |
| Max Q Clear Time (g_c+I1), s | 3.1 | 2.0 | 4.3 | 6.9 | 2.0 | 28.9 | 2.0 | 6.4 |
| Green Ext Time (p_c), s | 0.0 | 3.9 | 0.2 | 0.1 | 0.1 | 3.5 | 0.2 | 0.1 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 31.9 |
| HCM 6th LOS | C |



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 18 | 395 | 1 | 1 | 740 | 16 | 1 | 1 | 1 | 45 | 1 | 56 |
| Future Volume (vph) | 18 | 395 | 1 | 1 | 740 | 16 | 1 | 1 | 1 | 45 | 1 | 56 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 150 | | 150 | 150 | | 0 | 0 | | 0 | 0 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 0 | | 0 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| 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 | | 0.996 | | | 0.955 | | | 0.926 | |
| Flt Protected | 0.950 | | | 0.950 | | | | 0.984 | | | 0.978 | |
| Satd. Flow (prot) | 1770 | 1863 | 1583 | 1770 | 1855 | 0 | 0 | 1750 | 0 | 0 | 1687 | 0 |
| Flt Permitted | 0.950 | | | 0.950 | | | | 0.984 | | | 0.978 | |
| Satd. Flow (perm) | 1770 | 1863 | 1583 | 1770 | 1855 | 0 | 0 | 1750 | 0 | 0 | 1687 | 0 |
| Link Speed (mph) | | 45 | | | 45 | | | 40 | | | 40 | |
| Link Distance (ft) | | 563 | | | 5275 | | | 411 | | | 2833 | |
| Travel Time (s) | | 8.5 | | | 79.9 | | | 7.0 | | | 48.3 | |
| Peak Hour Factor | 0.78 | 0.90 | 0.78 | 0.78 | 0.92 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 |
| Adj. Flow (vph) | 23 | 439 | 1 | 1 | 804 | 21 | 1 | 1 | 1 | 58 | 1 | 72 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 23 | 439 | 1 | 1 | 825 | 0 | 0 | 3 | 0 | 0 | 131 | 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 | | | 0 | | | 0 | |
| 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 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization 55.4% | | ICU Level of Service B | |
| Analysis Period (min) 15 | | | |

| Intersection | |
|---|---|
| Int Delay, s/veh | 4.7 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 18 | 395 | 1 | 1 | 740 | 16 | 1 | 1 | 1 | 45 | 1 | 56 |
| Future Vol, veh/h | 18 | 395 | 1 | 1 | 740 | 16 | 1 | 1 | 1 | 45 | 1 | 56 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 150 | - | 150 | 150 | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 78 | 90 | 78 | 78 | 92 | 78 | 78 | 78 | 78 | 78 | 78 | 78 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 23 | 439 | 1 | 1 | 804 | 21 | 1 | 1 | 1 | 58 | 1 | 72 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 825 | 0 | 0 | 440 | 0 | 0 | 1338 | 1312 | 439 | 1304 | 1303 | 815 |
| Stage 1 | - | - | - | - | - | - | 485 | 485 | - | 817 | 817 | - |
| Stage 2 | - | - | - | - | - | - | 853 | 827 | - | 487 | 486 | - |
| Critical Hdwy | 4.12 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 |
| 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 | 2.218 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 805 | - | - | 1120 | - | - | 130 | 159 | 618 | 137 | 161 | 377 |
| Stage 1 | - | - | - | - | - | - | 563 | 552 | - | 370 | 390 | - |
| Stage 2 | - | - | - | - | - | - | 354 | 386 | - | 562 | 551 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 805 | - | - | 1120 | - | - | 102 | 154 | 618 | 133 | 156 | 377 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 102 | 154 | - | 133 | 156 | - |
| Stage 1 | - | - | - | - | - | - | 547 | 536 | - | 359 | 390 | - |
| Stage 2 | - | - | - | - | - | - | 285 | 386 | - | 544 | 535 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.5 | 0 | 27.1 | 48.2 |
| HCM LOS | | | D | E |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 167 | 805 | - | - | 1120 | - | - | 207 |
| HCM Lane V/C Ratio | 0.023 | 0.029 | - | - | 0.001 | - | - | 0.632 |
| HCM Control Delay (s) | 27.1 | 9.6 | - | - | 8.2 | - | - | 48.2 |
| HCM Lane LOS | D | A | - | - | A | - | - | E |
| HCM 95th %tile Q(veh) | 0.1 | 0.1 | - | - | 0 | - | - | 3.7 |

| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 49 | 75 | 125 | 17 | 25 | 40 |
| Future Volume (vph) | 49 | 75 | 125 | 17 | 25 | 40 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 200 | 0 | | 150 | 200 | |
| Storage Lanes | 1 | 1 | | 1 | 1 | |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | 0.850 | | 0.850 | | |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 1583 | 1863 | 1583 | 1770 | 1863 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 1770 | 1583 | 1863 | 1583 | 1770 | 1863 |
| Link Speed (mph) | 30 | | 30 | | | 30 |
| Link Distance (ft) | 2931 | | 2350 | | | 954 |
| Travel Time (s) | 66.6 | | 53.4 | | | 21.7 |
| Peak Hour Factor | 0.78 | 0.80 | 0.84 | 0.78 | 0.78 | 0.78 |
| Adj. Flow (vph) | 63 | 94 | 149 | 22 | 32 | 51 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 63 | 94 | 149 | 22 | 32 | 51 |
| Enter Blocked Intersection | No | No | No | No | No | No |
| Lane Alignment | Left | Right | Left | Right | Left | Left |
| 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 | | 9 | 15 | |
| Sign Control | Stop | | Free | | | Free |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization 23.2% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

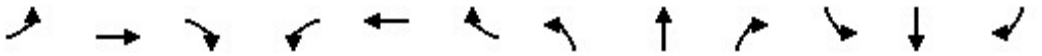
| Intersection | |
|---|---|
| Int Delay, s/veh | 4.4 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 49 | 75 | 125 | 17 | 25 | 40 |
| Future Vol, veh/h | 49 | 75 | 125 | 17 | 25 | 40 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 200 | 0 | - | 150 | 200 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 78 | 80 | 84 | 78 | 78 | 78 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 63 | 94 | 149 | 22 | 32 | 51 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 264 | 149 | 0 | 0 | 171 | 0 |
| Stage 1 | 149 | - | - | - | - | - |
| Stage 2 | 115 | - | - | - | - | - |
| 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 | 725 | 898 | - | - | 1406 | - |
| Stage 1 | 879 | - | - | - | - | - |
| Stage 2 | 910 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 708 | 898 | - | - | 1406 | - |
| Mov Cap-2 Maneuver | 708 | - | - | - | - | - |
| Stage 1 | 879 | - | - | - | - | - |
| Stage 2 | 889 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 9.9 | 0 | 2.9 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 708 | 898 | 1406 | - |
| HCM Lane V/C Ratio | - | - | 0.089 | 0.104 | 0.023 | - |
| HCM Control Delay (s) | - | - | 10.6 | 9.5 | 7.6 | - |
| HCM Lane LOS | - | - | B | A | A | - |
| HCM 95th %tile Q(veh) | - | - | 0.3 | 0.3 | 0.1 | - |

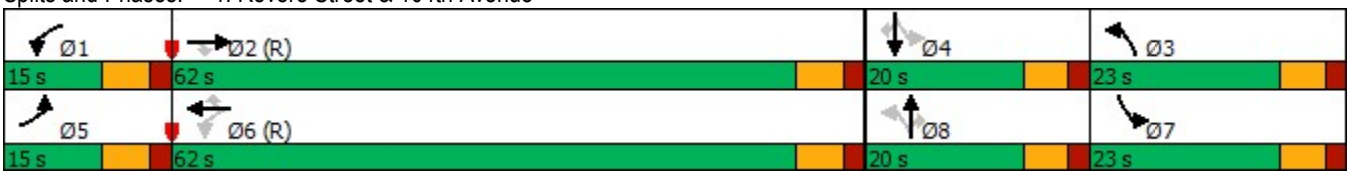


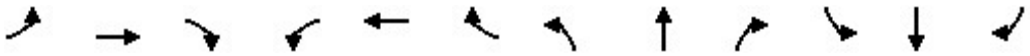
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 66 | 1450 | 130 | 98 | 1000 | 48 | 85 | 12 | 57 | 79 | 20 | 35 |
| Future Volume (vph) | 66 | 1450 | 130 | 98 | 1000 | 48 | 85 | 12 | 57 | 79 | 20 | 35 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 300 | | 300 | 300 | | 300 | 200 | | 200 | 150 | | 0 |
| Storage Lanes | 2 | | 1 | 1 | | 1 | 1 | | 1 | 1 | | 1 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.97 | 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) | 3433 | 3539 | 1583 | 1770 | 3539 | 1583 | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 |
| Flt Permitted | 0.950 | | | 0.079 | | | 0.740 | | | 0.748 | | |
| Satd. Flow (perm) | 3433 | 3539 | 1583 | 147 | 3539 | 1583 | 1378 | 1863 | 1583 | 1393 | 1863 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 139 | | | 139 | | | 142 | | | 142 |
| Link Speed (mph) | | 45 | | | 45 | | | 30 | | | 30 | |
| Link Distance (ft) | | 798 | | | 2575 | | | 954 | | | 614 | |
| Travel Time (s) | | 12.1 | | | 39.0 | | | 21.7 | | | 14.0 | |
| Peak Hour Factor | 0.79 | 0.93 | 0.84 | 0.83 | 0.93 | 0.78 | 0.81 | 0.78 | 0.78 | 0.80 | 0.78 | 0.78 |
| Adj. Flow (vph) | 84 | 1559 | 155 | 118 | 1075 | 62 | 105 | 15 | 73 | 99 | 26 | 45 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 84 | 1559 | 155 | 118 | 1075 | 62 | 105 | 15 | 73 | 99 | 26 | 45 |
| 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 | | | 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 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Detector Template | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Leading Detector (ft) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| 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) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| 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 |
| Turn Type | Prot | NA | Perm | pm+pt | NA | Perm | pm+pt | NA | Perm | pm+pt | NA | Perm |
| Protected Phases | 5 | 2 | | 1 | 6 | | 3 | 8 | | 7 | 4 | |
| Permitted Phases | | | 2 | 6 | | 6 | 8 | | 8 | 4 | | 4 |
| Detector Phase | 5 | 2 | 2 | 1 | 6 | 6 | 3 | 8 | 8 | 7 | 4 | 4 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | 5.0 | 10.0 | 10.0 | 8.0 | 8.0 | 8.0 | 8.0 | 8.0 | 8.0 |
| Minimum Split (s) | 12.0 | 20.0 | 20.0 | 12.0 | 20.0 | 20.0 | 14.0 | 14.0 | 14.0 | 14.0 | 14.0 | 14.0 |
| Total Split (s) | 15.0 | 62.0 | 62.0 | 15.0 | 62.0 | 62.0 | 23.0 | 20.0 | 20.0 | 23.0 | 20.0 | 20.0 |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Split (%) | 12.5% | 51.7% | 51.7% | 12.5% | 51.7% | 51.7% | 19.2% | 16.7% | 16.7% | 19.2% | 16.7% | 16.7% |
| Maximum Green (s) | 8.7 | 55.7 | 55.7 | 8.7 | 55.7 | 55.7 | 17.0 | 14.0 | 14.0 | 17.0 | 14.0 | 14.0 |
| Yellow Time (s) | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.0 | 4.0 | 4.0 | 4.0 | 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 | 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 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 6.3 | 6.3 | 6.3 | 6.3 | 6.3 | 6.3 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 |
| Lead/Lag | Lead | Lag | Lag | Lead | Lag | Lag | Lag | Lead | Lead | Lag | Lead | Lead |
| Lead-Lag Optimize? | Yes | 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 | 3.0 |
| Recall Mode | None | C-Min | C-Min | None | C-Min | C-Min | None | None | None | None | None | None |
| Act Effct Green (s) | 8.3 | 71.7 | 71.7 | 83.8 | 75.4 | 75.4 | 15.1 | 8.0 | 8.0 | 15.6 | 8.3 | 8.3 |
| Actuated g/C Ratio | 0.07 | 0.60 | 0.60 | 0.70 | 0.63 | 0.63 | 0.13 | 0.07 | 0.07 | 0.13 | 0.07 | 0.07 |
| v/c Ratio | 0.35 | 0.74 | 0.15 | 0.51 | 0.48 | 0.06 | 0.52 | 0.12 | 0.31 | 0.47 | 0.20 | 0.19 |
| Control Delay | 57.0 | 21.9 | 3.4 | 28.2 | 8.6 | 0.6 | 54.1 | 55.0 | 3.3 | 51.4 | 56.5 | 1.7 |
| 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 | 57.0 | 21.9 | 3.4 | 28.2 | 8.6 | 0.6 | 54.1 | 55.0 | 3.3 | 51.4 | 56.5 | 1.7 |
| LOS | E | C | A | C | A | A | D | D | A | D | E | A |
| Approach Delay | | 21.9 | | | 10.0 | | | 35.0 | | | 39.0 | |
| Approach LOS | | C | | | B | | | C | | | D | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 50 (42%), Referenced to phase 2:EBT and 6:WBTL, Start of Green | | | |
| Natural Cycle: 80 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.74 | | | |
| Intersection Signal Delay: 19.1 | | Intersection LOS: B | |
| Intersection Capacity Utilization 72.4% | | ICU Level of Service C | |
| Analysis Period (min) 15 | | | |

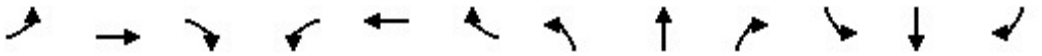
Splits and Phases: 1: Revere Street & 104th Avenue





| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group Flow (vph) | 84 | 1559 | 155 | 118 | 1075 | 62 | 105 | 15 | 73 | 99 | 26 | 45 |
| v/c Ratio | 0.35 | 0.74 | 0.15 | 0.51 | 0.48 | 0.06 | 0.52 | 0.12 | 0.31 | 0.47 | 0.20 | 0.19 |
| Control Delay | 57.0 | 21.9 | 3.4 | 28.2 | 8.6 | 0.6 | 54.1 | 55.0 | 3.3 | 51.4 | 56.5 | 1.7 |
| 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 | 57.0 | 21.9 | 3.4 | 28.2 | 8.6 | 0.6 | 54.1 | 55.0 | 3.3 | 51.4 | 56.5 | 1.7 |
| Queue Length 50th (ft) | 32 | 445 | 5 | 23 | 273 | 1 | 71 | 11 | 0 | 67 | 19 | 0 |
| Queue Length 95th (ft) | 51 | 655 | 33 | 48 | 328 | 7 | 107 | 29 | 0 | 100 | 42 | 0 |
| Internal Link Dist (ft) | | 718 | | | 2495 | | | 874 | | | 534 | |
| Turn Bay Length (ft) | 300 | | 300 | 300 | | 300 | 200 | | 200 | 150 | | |
| Base Capacity (vph) | 261 | 2114 | 1001 | 242 | 2224 | 1046 | 324 | 217 | 310 | 328 | 217 | 310 |
| 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 | 0.32 | 0.74 | 0.15 | 0.49 | 0.48 | 0.06 | 0.32 | 0.07 | 0.24 | 0.30 | 0.12 | 0.15 |

Intersection Summary



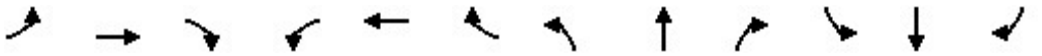
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 66 | 1450 | 130 | 98 | 1000 | 48 | 85 | 12 | 57 | 79 | 20 | 35 |
| Future Volume (veh/h) | 66 | 1450 | 130 | 98 | 1000 | 48 | 85 | 12 | 57 | 79 | 20 | 35 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 84 | 1559 | 0 | 118 | 1075 | 0 | 105 | 15 | 73 | 99 | 26 | 45 |
| Peak Hour Factor | 0.79 | 0.93 | 0.84 | 0.83 | 0.93 | 0.78 | 0.81 | 0.78 | 0.78 | 0.80 | 0.78 | 0.78 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 135 | 2213 | | 241 | 2219 | | 246 | 125 | 106 | 253 | 125 | 106 |
| Arrive On Green | 0.04 | 0.62 | 0.00 | 0.01 | 0.21 | 0.00 | 0.06 | 0.07 | 0.07 | 0.06 | 0.07 | 0.07 |
| Sat Flow, veh/h | 3456 | 3554 | 1585 | 1781 | 3554 | 1585 | 1781 | 1870 | 1585 | 1781 | 1870 | 1585 |
| Grp Volume(v), veh/h | 84 | 1559 | 0 | 118 | 1075 | 0 | 105 | 15 | 73 | 99 | 26 | 45 |
| Grp Sat Flow(s),veh/h/ln | 1728 | 1777 | 1585 | 1781 | 1777 | 1585 | 1781 | 1870 | 1585 | 1781 | 1870 | 1585 |
| Q Serve(g_s), s | 2.9 | 35.4 | 0.0 | 2.8 | 32.0 | 0.0 | 0.0 | 0.9 | 4.6 | 0.0 | 1.6 | 2.8 |
| Cycle Q Clear(g_c), s | 2.9 | 35.4 | 0.0 | 2.8 | 32.0 | 0.0 | 0.0 | 0.9 | 4.6 | 0.0 | 1.6 | 2.8 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 135 | 2213 | | 241 | 2219 | | 246 | 125 | 106 | 253 | 125 | 106 |
| V/C Ratio(X) | 0.62 | 0.70 | | 0.49 | 0.48 | | 0.43 | 0.12 | 0.69 | 0.39 | 0.21 | 0.43 |
| Avail Cap(c_a), veh/h | 251 | 2213 | | 298 | 2219 | | 383 | 218 | 185 | 390 | 218 | 185 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.00 | 0.84 | 0.84 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 56.8 | 15.2 | 0.0 | 15.9 | 30.6 | 0.0 | 50.3 | 52.7 | 39.3 | 49.7 | 53.0 | 38.7 |
| Incr Delay (d2), s/veh | 4.6 | 1.9 | 0.0 | 1.3 | 0.6 | 0.0 | 1.2 | 0.4 | 7.8 | 1.0 | 0.8 | 2.7 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.3 | 13.1 | 0.0 | 1.3 | 15.3 | 0.0 | 3.1 | 0.4 | 2.4 | 2.9 | 0.8 | 1.4 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 61.4 | 17.1 | 0.0 | 17.2 | 31.2 | 0.0 | 51.5 | 53.1 | 47.0 | 50.7 | 53.8 | 41.4 |
| LnGrp LOS | E | B | | B | C | | D | D | D | D | D | D |
| Approach Vol, veh/h | | 1643 | A | | 1193 | A | | 193 | | | 170 | |
| Approach Delay, s/veh | | 19.4 | | | 29.8 | | | 49.9 | | | 48.7 | |
| Approach LOS | | B | | | C | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 11.2 | 81.0 | 13.8 | 14.0 | 11.0 | 81.2 | 13.8 | 14.0 |
| Change Period (Y+Rc), s | 6.3 | 6.3 | 6.0 | 6.0 | 6.3 | 6.3 | 6.0 | 6.0 |
| Max Green Setting (Gmax), s | 8.7 | 55.7 | 17.0 | 14.0 | 8.7 | 55.7 | 17.0 | 14.0 |
| Max Q Clear Time (g_c+I1), s | 4.8 | 37.4 | 2.0 | 4.8 | 4.9 | 34.0 | 2.0 | 6.6 |
| Green Ext Time (p_c), s | 0.1 | 7.5 | 0.2 | 0.1 | 0.1 | 4.8 | 0.2 | 0.1 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 26.7 |
| HCM 6th LOS | C |

**Notes**

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

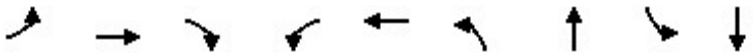


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 71 | 1445 | 68 | 174 | 1105 | 15 | 82 | 1 | 35 | 13 | 1 | 15 |
| Future Volume (vph) | 71 | 1445 | 68 | 174 | 1105 | 15 | 82 | 1 | 35 | 13 | 1 | 15 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 150 | | 150 | 150 | | 0 | 150 | | 0 | 100 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | | 0.850 | | 0.998 | | | 0.853 | | | 0.857 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | 1770 | 3532 | 0 | 1770 | 1589 | 0 | 1770 | 1596 | 0 |
| Flt Permitted | 0.141 | | | 0.107 | | | 0.744 | | | | | |
| Satd. Flow (perm) | 263 | 3539 | 1583 | 199 | 3532 | 0 | 1386 | 1589 | 0 | 1863 | 1596 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 144 | | 2 | | | 45 | | | 19 | |
| Link Speed (mph) | | 45 | | | 45 | | | 30 | | | 30 | |
| Link Distance (ft) | | 2575 | | | 1450 | | | 2620 | | | 567 | |
| Travel Time (s) | | 39.0 | | | 22.0 | | | 59.5 | | | 12.9 | |
| Peak Hour Factor | 0.80 | 0.93 | 0.79 | 0.86 | 0.93 | 0.78 | 0.81 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 |
| Adj. Flow (vph) | 89 | 1554 | 86 | 202 | 1188 | 19 | 101 | 1 | 45 | 17 | 1 | 19 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 89 | 1554 | 86 | 202 | 1207 | 0 | 101 | 46 | 0 | 17 | 20 | 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 | 1 | 1 | 1 | 1 | | 1 | 1 | | 1 | 1 | |
| Detector Template | Left | Thru | Right | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 40 | 40 | 40 | 40 | 40 | | 40 | 40 | | 40 | 40 | |
| 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) | 40 | 40 | 40 | 40 | 40 | | 40 | 40 | | 40 | 40 | |
| 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 | |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 5 | 2 | | 1 | 6 | | 3 | 8 | | 7 | 4 | |
| Permitted Phases | 2 | | 2 | 6 | | | 8 | | | 4 | | |
| Detector Phase | 5 | 2 | 2 | 1 | 6 | | 3 | 8 | | 7 | 4 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 8.0 | 8.0 | 5.0 | 8.0 | | 6.0 | 8.0 | | 6.0 | 8.0 | |
| Minimum Split (s) | 12.0 | 20.0 | 20.0 | 12.0 | 20.0 | | 12.0 | 14.0 | | 12.0 | 14.0 | |
| Total Split (s) | 15.0 | 69.0 | 69.0 | 15.0 | 69.0 | | 16.0 | 20.0 | | 16.0 | 20.0 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Split (%) | 12.5% | 57.5% | 57.5% | 12.5% | 57.5% | | 13.3% | 16.7% | | 13.3% | 16.7% | |
| Maximum Green (s) | 9.0 | 62.2 | 62.2 | 9.0 | 62.2 | | 10.0 | 14.0 | | 10.0 | 14.0 | |
| Yellow Time (s) | 4.0 | 4.8 | 4.8 | 4.0 | 4.8 | | 4.0 | 4.0 | | 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 | |
| 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) | 6.0 | 6.8 | 6.8 | 6.0 | 6.8 | | 6.0 | 6.0 | | 6.0 | 6.0 | |
| Lead/Lag | Lead | Lead | Lead | Lag | Lag | | Lag | Lead | | Lag | Lead | |
| 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-Min | C-Min | None | C-Min | | None | None | | None | None | |
| Act Effct Green (s) | 73.6 | 72.8 | 72.8 | 78.8 | 78.0 | | 12.9 | 9.3 | | 10.3 | 8.0 | |
| Actuated g/C Ratio | 0.61 | 0.61 | 0.61 | 0.66 | 0.65 | | 0.11 | 0.08 | | 0.09 | 0.07 | |
| v/c Ratio | 0.34 | 0.72 | 0.08 | 0.66 | 0.53 | | 0.56 | 0.28 | | 0.11 | 0.16 | |
| Control Delay | 5.6 | 8.9 | 0.3 | 28.9 | 4.4 | | 60.5 | 20.4 | | 44.7 | 25.2 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 5.6 | 8.9 | 0.3 | 28.9 | 4.4 | | 60.5 | 20.4 | | 44.7 | 25.2 | |
| LOS | A | A | A | C | A | | E | C | | D | C | |
| Approach Delay | | 8.3 | | | 7.9 | | | 47.9 | | | 34.2 | |
| Approach LOS | | A | | | A | | | D | | | C | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 111 (93%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green | | | |
| Natural Cycle: 90 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.72 | | | |
| Intersection Signal Delay: 10.2 | | Intersection LOS: B | |
| Intersection Capacity Utilization 76.5% | | ICU Level of Service D | |
| Analysis Period (min) 15 | | | |

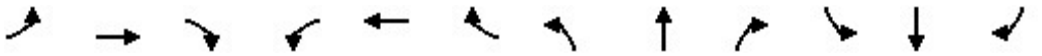
Splits and Phases: 2: Vaughn Way & 104th Avenue



| Lane Group | EBL | EBT | EBR | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|---|
| Lane Group Flow (vph) | 89 | 1554 | 86 | 202 | 1207 | 101 | 46 | 17 | 20 |
| v/c Ratio | 0.34 | 0.72 | 0.08 | 0.66 | 0.53 | 0.56 | 0.28 | 0.11 | 0.16 |
| Control Delay | 5.6 | 8.9 | 0.3 | 28.9 | 4.4 | 60.5 | 20.4 | 44.7 | 25.2 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 5.6 | 8.9 | 0.3 | 28.9 | 4.4 | 60.5 | 20.4 | 44.7 | 25.2 |
| Queue Length 50th (ft) | 6 | 58 | 0 | 57 | 54 | 76 | 1 | 13 | 1 |
| Queue Length 95th (ft) | m5 | 311 | m0 | #194 | 80 | 107 | 28 | 27 | 21 |
| Internal Link Dist (ft) | | 2495 | | | 1370 | | 2540 | | 487 |
| Turn Bay Length (ft) | 150 | | 150 | 150 | | 150 | | 100 | |
| Base Capacity (vph) | 278 | 2145 | 1016 | 305 | 2297 | 191 | 225 | 197 | 202 |
| 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 | 0.32 | 0.72 | 0.08 | 0.66 | 0.53 | 0.53 | 0.20 | 0.09 | 0.10 |

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.



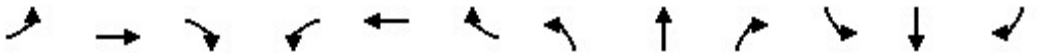
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 71 | 1445 | 68 | 174 | 1105 | 15 | 82 | 1 | 35 | 13 | 1 | 15 |
| Future Volume (veh/h) | 71 | 1445 | 68 | 174 | 1105 | 15 | 82 | 1 | 35 | 13 | 1 | 15 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 89 | 1554 | 86 | 202 | 1188 | 19 | 101 | 1 | 45 | 17 | 1 | 19 |
| Peak Hour Factor | 0.80 | 0.93 | 0.79 | 0.86 | 0.93 | 0.78 | 0.81 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 298 | 1555 | 693 | 500 | 2276 | 36 | 216 | 2 | 103 | 186 | 5 | 95 |
| Arrive On Green | 0.09 | 0.87 | 0.87 | 0.48 | 1.00 | 1.00 | 0.05 | 0.07 | 0.07 | 0.04 | 0.06 | 0.06 |
| Sat Flow, veh/h | 1781 | 3554 | 1585 | 1781 | 3580 | 57 | 1781 | 35 | 1556 | 1781 | 80 | 1517 |
| Grp Volume(v), veh/h | 89 | 1554 | 86 | 202 | 590 | 617 | 101 | 0 | 46 | 17 | 0 | 20 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1777 | 1585 | 1781 | 1777 | 1860 | 1781 | 0 | 1590 | 1781 | 0 | 1597 |
| Q Serve(g_s), s | 3.8 | 52.3 | 0.9 | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 | 3.3 | 0.0 | 0.0 | 1.4 |
| Cycle Q Clear(g_c), s | 3.8 | 52.3 | 0.9 | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 | 3.3 | 0.0 | 0.0 | 1.4 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.03 | 1.00 | | 0.98 | 1.00 | | 0.95 |
| Lane Grp Cap(c), veh/h | 298 | 1555 | 693 | 500 | 1130 | 1183 | 216 | 0 | 106 | 186 | 0 | 100 |
| V/C Ratio(X) | 0.30 | 1.00 | 0.12 | 0.40 | 0.52 | 0.52 | 0.47 | 0.00 | 0.44 | 0.09 | 0.00 | 0.20 |
| Avail Cap(c_a), veh/h | 349 | 1842 | 822 | 500 | 1130 | 1183 | 279 | 0 | 186 | 256 | 0 | 186 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.64 | 0.64 | 0.64 | 0.72 | 0.72 | 0.72 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 21.4 | 7.5 | 4.3 | 23.9 | 0.0 | 0.0 | 52.2 | 0.0 | 53.9 | 51.5 | 0.0 | 53.4 |
| Incr Delay (d2), s/veh | 0.4 | 18.2 | 0.2 | 0.4 | 1.2 | 1.2 | 1.6 | 0.0 | 2.8 | 0.2 | 0.0 | 1.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.5 | 6.8 | 0.4 | 3.1 | 0.4 | 0.4 | 3.0 | 0.0 | 1.4 | 0.5 | 0.0 | 0.6 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 21.7 | 25.7 | 4.5 | 24.2 | 1.2 | 1.2 | 53.8 | 0.0 | 56.7 | 51.7 | 0.0 | 54.4 |
| LnGrp LOS | C | C | A | C | A | A | D | A | E | D | A | D |
| Approach Vol, veh/h | | 1729 | | | 1409 | | | 147 | | | 37 | |
| Approach Delay, s/veh | | 24.4 | | | 4.5 | | | 54.7 | | | 53.2 | |
| Approach LOS | | C | | | A | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 32.2 | 62.5 | 11.8 | 13.5 | 11.6 | 83.1 | 11.3 | 14.0 |
| Change Period (Y+Rc), s | 6.8 | * 6.8 | 6.0 | 6.0 | 6.0 | 6.8 | 6.0 | 6.0 |
| Max Green Setting (Gmax), s | 9.0 | * 62 | 10.0 | 14.0 | 9.0 | 62.2 | 10.0 | 14.0 |
| Max Q Clear Time (g_c+I1), s | 4.6 | 54.3 | 2.0 | 3.4 | 5.8 | 2.0 | 2.0 | 5.3 |
| Green Ext Time (p_c), s | 0.2 | 4.7 | 0.2 | 0.0 | 0.1 | 5.2 | 0.0 | 0.1 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 17.6 |
| HCM 6th LOS | B |

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

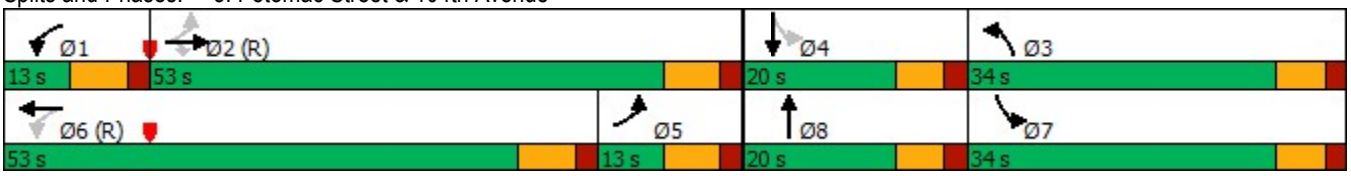


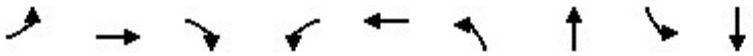
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 66 | 1360 | 79 | 61 | 1120 | 131 | 72 | 6 | 29 | 146 | 11 | 77 |
| Future Volume (vph) | 66 | 1360 | 79 | 61 | 1120 | 131 | 72 | 6 | 29 | 146 | 11 | 77 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 150 | | 150 | 150 | | 0 | 150 | | 0 | 150 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 2 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 | 0.97 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | | 0.850 | | 0.983 | | | 0.877 | | | 0.869 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | 1770 | 3479 | 0 | 3433 | 1634 | 0 | 1770 | 1619 | 0 |
| Flt Permitted | 0.154 | | | 0.066 | | | 0.950 | | | 0.728 | | |
| Satd. Flow (perm) | 287 | 3539 | 1583 | 123 | 3479 | 0 | 3433 | 1634 | 0 | 1356 | 1619 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 154 | | 14 | | | 37 | | | 96 | |
| Link Speed (mph) | | 45 | | | 45 | | | 40 | | | 40 | |
| Link Distance (ft) | | 1450 | | | 363 | | | 490 | | | 446 | |
| Travel Time (s) | | 22.0 | | | 5.5 | | | 8.4 | | | 7.6 | |
| Peak Hour Factor | 0.79 | 0.93 | 0.80 | 0.79 | 0.93 | 0.84 | 0.80 | 0.78 | 0.78 | 0.84 | 0.78 | 0.80 |
| Adj. Flow (vph) | 84 | 1462 | 99 | 77 | 1204 | 156 | 90 | 8 | 37 | 174 | 14 | 96 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 84 | 1462 | 99 | 77 | 1360 | 0 | 90 | 45 | 0 | 174 | 110 | 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 | | | 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 | 1 | 1 | 1 | 1 | | 1 | 1 | | 1 | 1 | |
| Detector Template | Left | Thru | Right | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 40 | 40 | 40 | 40 | 40 | | 40 | 40 | | 40 | 40 | |
| 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) | 40 | 40 | 40 | 40 | 40 | | 40 | 40 | | 40 | 40 | |
| 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 | |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | | Prot | NA | | pm+pt | NA | |
| Protected Phases | 5 | 2 | | 1 | 6 | | 3 | 8 | | 7 | 4 | |
| Permitted Phases | 2 | | 2 | 6 | | | | | | 4 | | |
| Detector Phase | 5 | 2 | 2 | 1 | 6 | | 3 | 8 | | 7 | 4 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 8.0 | 9.0 | | 8.0 | 9.0 | |
| Minimum Split (s) | 13.0 | 20.0 | 20.0 | 13.0 | 20.0 | | 15.0 | 17.0 | | 15.0 | 17.0 | |
| Total Split (s) | 13.0 | 53.0 | 53.0 | 13.0 | 53.0 | | 34.0 | 20.0 | | 34.0 | 20.0 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Split (%) | 10.8% | 44.2% | 44.2% | 10.8% | 44.2% | | 28.3% | 16.7% | | 28.3% | 16.7% | |
| Maximum Green (s) | 5.9 | 45.9 | 45.9 | 5.9 | 45.9 | | 27.6 | 13.6 | | 27.6 | 13.6 | |
| Yellow Time (s) | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | | 4.4 | 4.4 | | 4.4 | 4.4 | |
| 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) | 7.1 | 7.1 | 7.1 | 7.1 | 7.1 | | 6.4 | 6.4 | | 6.4 | 6.4 | |
| Lead/Lag | Lag | Lag | Lag | Lead | Lead | | Lag | Lead | | Lag | Lead | |
| 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-Min | C-Min | None | C-Min | | None | None | | None | None | |
| Act Effct Green (s) | 67.9 | 67.9 | 67.9 | 69.9 | 69.9 | | 10.1 | 9.1 | | 21.6 | 9.6 | |
| Actuated g/C Ratio | 0.57 | 0.57 | 0.57 | 0.58 | 0.58 | | 0.08 | 0.08 | | 0.18 | 0.08 | |
| v/c Ratio | 0.36 | 0.73 | 0.10 | 0.43 | 0.67 | | 0.31 | 0.29 | | 0.60 | 0.50 | |
| Control Delay | 8.8 | 8.3 | 0.3 | 21.7 | 20.1 | | 54.1 | 25.3 | | 52.4 | 21.9 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 8.8 | 8.3 | 0.3 | 21.7 | 20.1 | | 54.1 | 25.3 | | 52.4 | 21.9 | |
| LOS | A | A | A | C | C | | D | C | | D | C | |
| Approach Delay | | 7.8 | | | 20.2 | | | 44.5 | | | 40.6 | |
| Approach LOS | | A | | | 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, Master Intersection | | | |
| Natural Cycle: 90 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.73 | | | |
| Intersection Signal Delay: 17.0 | | Intersection LOS: B | |
| Intersection Capacity Utilization 73.7% | | ICU Level of Service D | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 3: Potomac Street & 104th Avenue

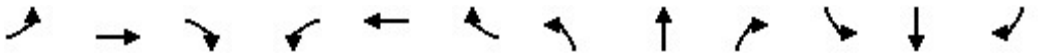




| Lane Group | EBL | EBT | EBR | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|---|
| Lane Group Flow (vph) | 84 | 1462 | 99 | 77 | 1360 | 90 | 45 | 174 | 110 |
| v/c Ratio | 0.36 | 0.73 | 0.10 | 0.43 | 0.67 | 0.31 | 0.29 | 0.60 | 0.50 |
| Control Delay | 8.8 | 8.3 | 0.3 | 21.7 | 20.1 | 54.1 | 25.3 | 52.4 | 21.9 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 8.8 | 8.3 | 0.3 | 21.7 | 20.1 | 54.1 | 25.3 | 52.4 | 21.9 |
| Queue Length 50th (ft) | 6 | 281 | 0 | 26 | 372 | 34 | 6 | 118 | 10 |
| Queue Length 95th (ft) | m16 | 118 | m0 | 46 | 492 | 53 | 34 | 167 | 46 |
| Internal Link Dist (ft) | | 1370 | | | 283 | | 410 | | 366 |
| Turn Bay Length (ft) | 150 | | 150 | 150 | | 150 | | 150 | |
| Base Capacity (vph) | 235 | 2002 | 962 | 180 | 2033 | 789 | 217 | 495 | 268 |
| 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 | 0.36 | 0.73 | 0.10 | 0.43 | 0.67 | 0.11 | 0.21 | 0.35 | 0.41 |

Intersection Summary

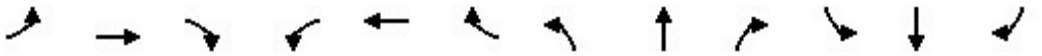
m Volume for 95th percentile queue is metered by upstream signal.



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 66 | 1360 | 79 | 61 | 1120 | 131 | 72 | 6 | 29 | 146 | 11 | 77 |
| Future Volume (veh/h) | 66 | 1360 | 79 | 61 | 1120 | 131 | 72 | 6 | 29 | 146 | 11 | 77 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 84 | 1462 | 99 | 77 | 1204 | 156 | 90 | 8 | 37 | 174 | 14 | 96 |
| Peak Hour Factor | 0.79 | 0.93 | 0.80 | 0.79 | 0.93 | 0.84 | 0.80 | 0.78 | 0.78 | 0.84 | 0.78 | 0.80 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 496 | 2077 | 926 | 229 | 1211 | 156 | 219 | 22 | 100 | 256 | 17 | 119 |
| Arrive On Green | 0.49 | 1.00 | 1.00 | 0.04 | 0.38 | 0.38 | 0.06 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 |
| Sat Flow, veh/h | 1781 | 3554 | 1585 | 1781 | 3165 | 409 | 3456 | 290 | 1340 | 1781 | 206 | 1411 |
| Grp Volume(v), veh/h | 84 | 1462 | 99 | 77 | 674 | 686 | 90 | 0 | 45 | 174 | 0 | 110 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1777 | 1585 | 1781 | 1777 | 1797 | 1728 | 0 | 1629 | 1781 | 0 | 1616 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 3.6 | 45.3 | 45.8 | 3.0 | 0.0 | 3.2 | 2.6 | 0.0 | 8.0 |
| Cycle Q Clear(g_c), s | 0.0 | 0.0 | 0.0 | 3.6 | 45.3 | 45.8 | 3.0 | 0.0 | 3.2 | 2.6 | 0.0 | 8.0 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.23 | 1.00 | | 0.82 | 1.00 | | 0.87 |
| Lane Grp Cap(c), veh/h | 496 | 2077 | 926 | 229 | 680 | 687 | 219 | 0 | 122 | 256 | 0 | 136 |
| V/C Ratio(X) | 0.17 | 0.70 | 0.11 | 0.34 | 0.99 | 1.00 | 0.41 | 0.00 | 0.37 | 0.68 | 0.00 | 0.81 |
| Avail Cap(c_a), veh/h | 496 | 2077 | 926 | 240 | 680 | 687 | 795 | 0 | 185 | 536 | 0 | 183 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.63 | 0.63 | 0.63 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 23.1 | 0.0 | 0.0 | 27.3 | 36.9 | 37.0 | 54.0 | 0.0 | 52.8 | 50.7 | 0.0 | 54.0 |
| Incr Delay (d2), s/veh | 0.1 | 1.3 | 0.1 | 0.9 | 32.6 | 33.9 | 1.2 | 0.0 | 1.8 | 3.2 | 0.0 | 17.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.2 | 0.4 | 0.0 | 1.5 | 24.6 | 25.3 | 1.3 | 0.0 | 1.3 | 5.1 | 0.0 | 3.9 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 23.2 | 1.3 | 0.1 | 28.2 | 69.5 | 70.9 | 55.3 | 0.0 | 54.6 | 53.9 | 0.0 | 71.2 |
| LnGrp LOS | C | A | A | C | E | E | E | A | D | D | A | E |
| Approach Vol, veh/h | | 1645 | | | 1437 | | | 135 | | | 284 | |
| Approach Delay, s/veh | | 2.3 | | | 67.9 | | | 55.1 | | | 60.6 | |
| Approach LOS | | A | | | E | | | E | | | E | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 12.3 | 77.2 | 14.0 | 16.5 | 36.5 | 53.0 | 15.1 | 15.4 |
| Change Period (Y+Rc), s | 7.1 | 7.1 | 6.4 | 6.4 | 7.1 | 7.1 | 6.4 | 6.4 |
| Max Green Setting (Gmax), s | 5.9 | 45.9 | 27.6 | 13.6 | 5.9 | 45.9 | 27.6 | 13.6 |
| Max Q Clear Time (g_c+I1), s | 5.6 | 2.0 | 5.0 | 10.0 | 2.0 | 47.8 | 4.6 | 5.2 |
| Green Ext Time (p_c), s | 0.0 | 9.2 | 0.3 | 0.1 | 0.1 | 0.0 | 0.5 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 36.0 |
| HCM 6th LOS | D |



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 64 | 780 | 1 | 1 | 550 | 54 | 1 | 1 | 2 | 30 | 1 | 44 |
| Future Volume (vph) | 64 | 780 | 1 | 1 | 550 | 54 | 1 | 1 | 2 | 30 | 1 | 44 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 150 | | 150 | 150 | | 0 | 0 | | 0 | 0 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 0 | | 0 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| 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 | | 0.984 | | | 0.919 | | | 0.920 | |
| Flt Protected | 0.950 | | | 0.950 | | | | 0.990 | | | 0.980 | |
| Satd. Flow (prot) | 1770 | 1863 | 1583 | 1770 | 1833 | 0 | 0 | 1695 | 0 | 0 | 1679 | 0 |
| Flt Permitted | 0.950 | | | 0.950 | | | | 0.990 | | | 0.980 | |
| Satd. Flow (perm) | 1770 | 1863 | 1583 | 1770 | 1833 | 0 | 0 | 1695 | 0 | 0 | 1679 | 0 |
| Link Speed (mph) | | 45 | | | 45 | | | 40 | | | 40 | |
| Link Distance (ft) | | 563 | | | 5275 | | | 411 | | | 2833 | |
| Travel Time (s) | | 8.5 | | | 79.9 | | | 7.0 | | | 48.3 | |
| Peak Hour Factor | 0.79 | 0.92 | 0.78 | 0.78 | 0.92 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 |
| Adj. Flow (vph) | 81 | 848 | 1 | 1 | 598 | 69 | 1 | 1 | 3 | 38 | 1 | 56 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 81 | 848 | 1 | 1 | 667 | 0 | 0 | 5 | 0 | 0 | 95 | 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 | | | 0 | | | 0 | |
| 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 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization | 61.6% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |

| Intersection | |
|---|---|
| Int Delay, s/veh | 4.5 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 64 | 780 | 1 | 1 | 550 | 54 | 1 | 1 | 2 | 30 | 1 | 44 |
| Future Vol, veh/h | 64 | 780 | 1 | 1 | 550 | 54 | 1 | 1 | 2 | 30 | 1 | 44 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 150 | - | 150 | 150 | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 79 | 92 | 78 | 78 | 92 | 78 | 78 | 78 | 78 | 78 | 78 | 78 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 81 | 848 | 1 | 1 | 598 | 69 | 1 | 1 | 3 | 38 | 1 | 56 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 667 | 0 | 0 | 849 | 0 | 0 | 1673 | 1679 | 848 | 1648 | 1646 | 633 |
| Stage 1 | - | - | - | - | - | - | 1010 | 1010 | - | 635 | 635 | - |
| Stage 2 | - | - | - | - | - | - | 663 | 669 | - | 1013 | 1011 | - |
| Critical Hdwy | 4.12 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 |
| 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 | 2.218 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 923 | - | - | 789 | - | - | 76 | 95 | 361 | 79 | 99 | 480 |
| Stage 1 | - | - | - | - | - | - | 289 | 317 | - | 467 | 472 | - |
| Stage 2 | - | - | - | - | - | - | 450 | 456 | - | 288 | 317 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 923 | - | - | 789 | - | - | 62 | 87 | 361 | 72 | 90 | 480 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 62 | 87 | - | 72 | 90 | - |
| Stage 1 | - | - | - | - | - | - | 264 | 289 | - | 426 | 472 | - |
| Stage 2 | - | - | - | - | - | - | 396 | 456 | - | 260 | 289 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.8 | 0 | 36.1 | 69.7 |
| HCM LOS | | | E | F |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 121 | 923 | - | - | 789 | - | - | 144 |
| HCM Lane V/C Ratio | 0.042 | 0.088 | - | - | 0.002 | - | - | 0.668 |
| HCM Control Delay (s) | 36.1 | 9.3 | - | - | 9.6 | - | - | 69.7 |
| HCM Lane LOS | E | A | - | - | A | - | - | F |
| HCM 95th %tile Q(veh) | 0.1 | 0.3 | - | - | 0 | - | - | 3.7 |

| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 33 | 50 | 104 | 56 | 85 | 139 |
| Future Volume (vph) | 33 | 50 | 104 | 56 | 85 | 139 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 200 | 0 | | 150 | 200 | |
| Storage Lanes | 1 | 1 | | 1 | 1 | |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | 0.850 | | 0.850 | | |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 1583 | 1863 | 1583 | 1770 | 1863 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 1770 | 1583 | 1863 | 1583 | 1770 | 1863 |
| Link Speed (mph) | 30 | | 30 | | | 30 |
| Link Distance (ft) | 2931 | | 2350 | | | 954 |
| Travel Time (s) | 66.6 | | 53.4 | | | 21.7 |
| Peak Hour Factor | 0.78 | 0.78 | 0.83 | 0.78 | 0.81 | 0.84 |
| Adj. Flow (vph) | 42 | 64 | 125 | 72 | 105 | 165 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 42 | 64 | 125 | 72 | 105 | 165 |
| Enter Blocked Intersection | No | No | No | No | No | No |
| Lane Alignment | Left | Right | Left | Right | Left | Left |
| 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 | | 9 | 15 | |
| Sign Control | Stop | | Free | | | Free |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization | 21.4% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |

| Intersection | |
|---|---|
| Int Delay, s/veh | 3.4 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 33 | 50 | 104 | 56 | 85 | 139 |
| Future Vol, veh/h | 33 | 50 | 104 | 56 | 85 | 139 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 200 | 0 | - | 150 | 200 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 78 | 78 | 83 | 78 | 81 | 84 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 42 | 64 | 125 | 72 | 105 | 165 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 500 | 125 | 0 | 0 | 197 | 0 |
| Stage 1 | 125 | - | - | - | - | - |
| Stage 2 | 375 | - | - | - | - | - |
| 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 | 530 | 926 | - | - | 1376 | - |
| Stage 1 | 901 | - | - | - | - | - |
| Stage 2 | 695 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 490 | 926 | - | - | 1376 | - |
| Mov Cap-2 Maneuver | 490 | - | - | - | - | - |
| Stage 1 | 901 | - | - | - | - | - |
| Stage 2 | 642 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 10.7 | 0 | 3 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 490 | 926 | 1376 | - |
| HCM Lane V/C Ratio | - | - | 0.086 | 0.069 | 0.076 | - |
| HCM Control Delay (s) | - | - | 13 | 9.2 | 7.8 | - |
| HCM Lane LOS | - | - | B | A | A | - |
| HCM 95th %tile Q(veh) | - | - | 0.3 | 0.2 | 0.2 | - |

# APPENDIX C

FIGURES FROM *REUNION RIDGE SOUTH VILLAGE PLAN*

| DEVELOPMENT SUMMARY | | | | | |
|---|---|---|---|---|---|
| LAND USE | ACRES | % ACRES | UNITS | % UNITS | DU/AC |
| **FILING #2 / PHASE II** | | | | | |
| CARRIAGE HOUSE | | | 150 | 50.0% | |
| AMERICAN DREAM | | | 100 | 33.3% | |
| PORCHLIGHT | | | 50 | 16.7% | |
| ***SUBTOTAL*** | 28.5 | 18.9% | 300 | 100.0% | 10.5 |
| **FILING #3 / PHASE III** | | | | | |
| 46' x 110' | | | 50 | 33.3% | |
| 51' x 110' | | | 100 | 66.7% | |
| ***SUBTOTAL*** | 31.0 | 20.6% | 150 | 100.0% | 4.8 |
| **FILING #4 / PHASE IV** | | | | | |
| 46' x 110' | | | 75 | 37.5% | |
| 51' x 110' | | | 125 | 62.5% | |
| ***SUBTOTAL*** | 48.3 | 32.1% | 200 | 100.0% | 4.1 |
| **FILING #5 / PHASE V & VI** | | | | | |
| 46' x 110' | | | 100 | 50.0% | |
| 51' x 110' | | | 100 | 50.0% | |
| ***SUBTOTAL*** | 42.8 | 28.4% | 200 | 100.0% | 4.7 |
| **TOTAL** | **150.6** | **100.0%** | **850** | | **5.6** |

DETENTION
13.2Ac

DETENTION
4.9Ac

PHASE II

ACCESS TO
TURNBERRY
PROPERTY

REUNION RIDGE WAY

18.0 Ac

RAGWEED DRAW

FILING 1
PHASE I

22.4 Ac

VAUGHN WAY

18.1 Ac

8.3 Ac

28.8 Ac

POTOMAC STREET

HISTORIC
SCHOOL

100TH AVENUE

3.9 Ac

PHASE III
59.7 Ac

AMENDMENT 1

SCHOOL/PARK
30.0 Ac

SABLE BOULEVARD

PHASE V
23.7 Ac

First Creek

PHASE IV
48.2 Ac

FUTURE DEVELOPMENT
59.8 Ac

FIRST CREEK
REGIONAL TRAIL

OIL &
GAS

PHASE VI
18.9 Ac

FUTURE DEVELOPMENT
28.4 Ac

96TH AVENUE

ROCKY MOUNTAIN NATIONAL WILDLIFE REFUGE

CITY STAFF CERTIFICATE

APPROVED BY THE DEPARTMENT OF COMMUNITY DEVELOPMENT OF THE CITY OF COMMERCE CITY, THIS _____ DAY OF _____, 2020.

_____
DEPARTMENT OF COMMUNITY DEVELOPMENT

OAKWOOD HOMES
A Berkshire Hathaway Company

terracina design

# REUNION

REAL HOMETOWN

REUNION RIDGE SOUTH - PHASING PLAN

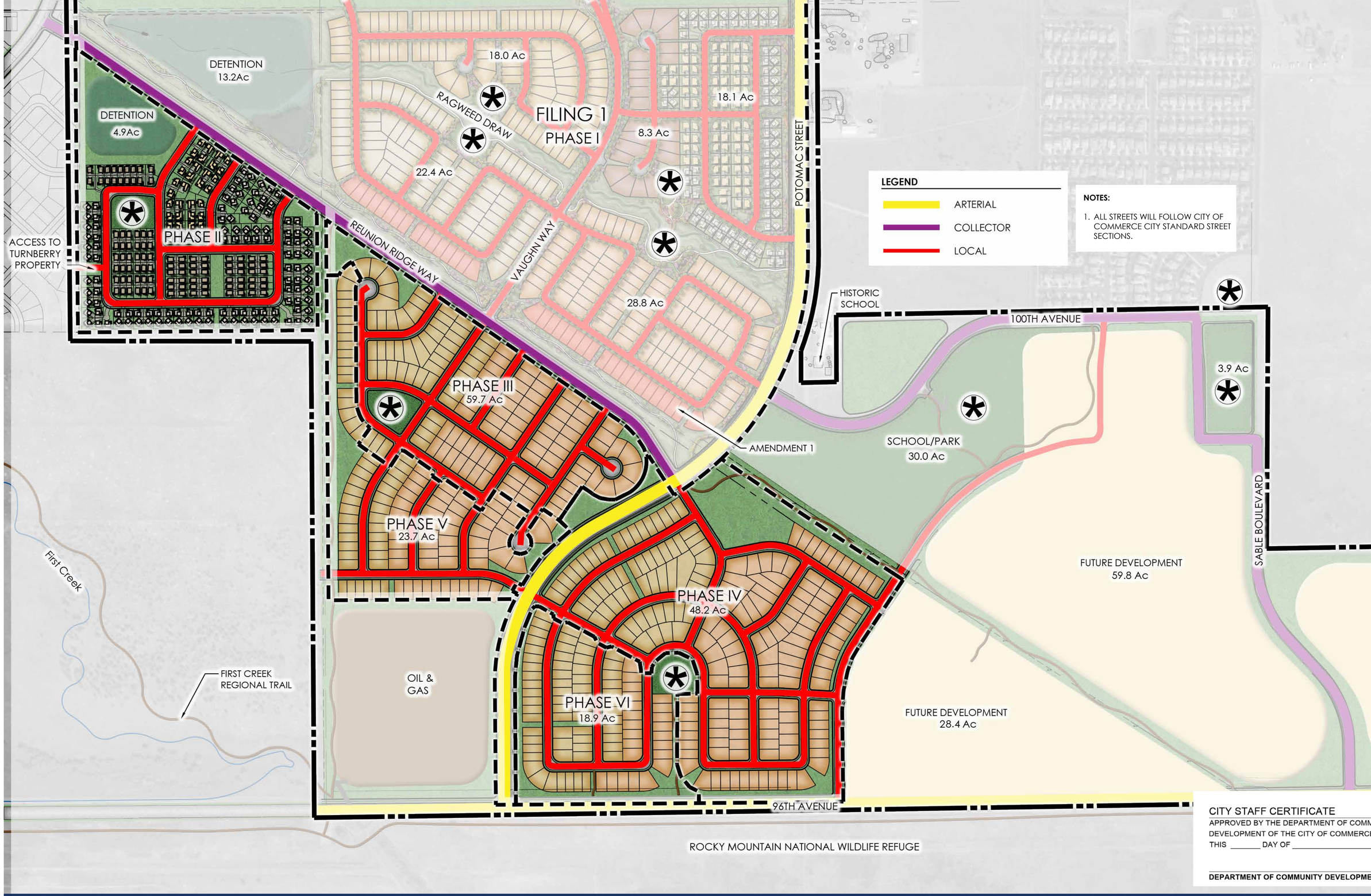
P. 4

N

Scale: 1" = 400'

0 400 800 1600

JUNE 26, 2020




**LEGEND**

- ARTERIAL
- COLLECTOR
- LOCAL

**NOTES:**

1. ALL STREETS WILL FOLLOW CITY OF COMMERCE CITY STANDARD STREET SECTIONS.

**CITY STAFF CERTIFICATE**

APPROVED BY THE DEPARTMENT OF COMMUNITY DEVELOPMENT OF THE CITY OF COMMERCE CITY, THIS _____ DAY OF _____, 2020.

_____
**DEPARTMENT OF COMMUNITY DEVELOPMENT**

OAKWOOD HOMES
A Berkshire Hathaway Company

terracina design

# REUNION
REAL HOMETOWN

REUNION RIDGE SOUTH - TRANSPORTATION PLAN



N

Scale: 1" = 400'

0 400 800 1600

JUNE 26, 2020